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GOVERNOR

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

David Bernhardt
COMMISSIONER

April 7, 2014
Subject: **Presque Isle & Mapleton**
Federal Project No: STP-2043(300)
& STP-2044(300)
State WIN: 020433.00 & 020443.00
Amendment No. 2

Dear Sir/Ms:

Make the following change to the Bid document:

In the Bid Book (pages 102 thru 105) **REMOVE** "SPECIAL PROVISION, SECTION 304, AGGREGATE BASE AND SUBBASE COURSE" 4 pages dated April 19, 2013 and **REPLACE** with the attached new "SPECIAL PROVISION, SECTION 304, AGGREGATE BASE AND SUBBASE COURSE" 4 pages dated April 4, 2014.

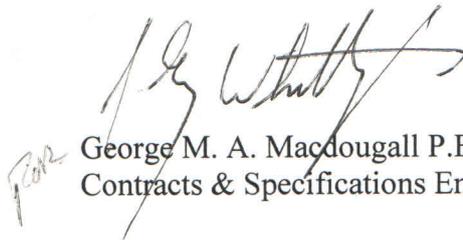
The following question has been received:

Question: The Special Provision for Dense Graded Crushed Subbase appears to be for another project. Please advise.

Response: Please see the above change.

Consider this change and information prior to submitting your bid on April 16, 2014.

Sincerely,



George M. A. Macdougall P.E.
Contracts & Specifications Engineer



PRINTED ON RECYCLED PAPER

SPECIAL PROVISION
SECTION 304
AGGREGATE BASE AND SUBBASE COURSE
 (Dense Graded Crushed Aggregate Subbase with Salvaged Bituminous Pavement)

Description This work shall consist of manufacturing, placing, grading and compacting of dense graded crushed aggregate sub-base and the removal, salvaging and reuse of existing pavement within the project limits as per plans and construction notes. The salvaged bituminous pavement shall be used for the top 3” (75mm) of dense graded crushed aggregate subbase for the travel lanes. The depth of salvaged bituminous pavement to be used as the top layer in shoulder areas will be 3” (75 mm). The maximum lift thickness for any salvaged pavement layer placed shall not exceed 3” (75mm).

In transition areas identified in the contract where the total depth of dense graded crushed material is less than 6”, the Contractor shall utilize materials meeting 703.12 - Crushed Stone Surface.

MATERIALS

Dense graded crushed aggregate sub-base may be manufactured from ledge or natural aggregates and shall be obtained from a source approved by the Resident. When tested by the Los Angeles wear test, the percent loss shall not exceed 25. The material will be tested before being used and retested at intervals of approximately 25%, 50%, and 75% completion of the course.

At least 50 percent by weight of the material coarser than the No. 4 sieve shall have at least one fractured face as tested by ASTM D5821.

The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
90 mm (3 ½ inches)	100
75 mm (3 inches)	90-100
50 mm (2 inches)	75-100
25 mm (1 inch)	50-80
13 mm (½ inch)	30-60
No. 4	15-40
No. 200	0-6

CONSTRUCTION REQUIREMENTS

The existing pavement shall all be removed, processed (crushed or screened) so that 100% of the material will pass a 1” (25mm) square mesh screen. The salvaged pavement shall be stockpiled at an approved site for later reuse as the final layer of dense graded crushed aggregate subbase. The depth of the layer will be 3” (75 mm) on mainline and/or shoulders.

Traffic will not be allowed on the dense graded crushed aggregate subbase (natural aggregate or ledge options) within the traveled way width until the salvaged bituminous pavement has been placed.

The surface of the dense graded crushed aggregate subbase shall be fine graded to +/- 19mm (¾”) and compacted prior to placing the layer of salvaged pavement. Density of the dense graded crushed aggregate subbase shall be as required by the Standard Specifications. Placing, shaping, compacting and surface tolerance for the salvaged bituminous pavement shall be in accordance with the Standard Specifications, except that compaction will be in accordance with the process described in this specification.

Testing and Monitoring Plan The Contractor shall operate in accordance with an approved Testing and Monitoring Plan (TMP) to assure a final product meeting the contract requirements. The TMP shall meet the requirements of this Section. The Contractor shall not begin the dense graded crushed aggregate subbase placement until the Department approves the TMP in writing.

The TMP shall address any items that affect the quality of the recycling process including, but not limited to, the following:

- a. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers if used.
- b. Methods of monitoring compaction efforts.
- c. Methods for any necessary corrective action.
- d. Examples of TMP and logbook forms.
- e. Method for calibration/verification of density gauge.

The Project Superintendent shall be named in the TMP, and the responsibilities for successful implementation of the TMP shall be outlined.

The Contractor shall test in accordance with the following procedures and minimum frequencies:

MINIMUM TMP FREQUENCIES

Test or Action	Frequency	Test Method
Density	1 per 1000 ft / lane	ASTM D 2950

The Contractor shall submit TMP reports and summaries in writing, signed by the appropriate technician, and present them to the Department’s onsite representative by 1:00 P.M. on the next working day, except when otherwise noted in the TMP due to local restrictions. The Contractor shall make all test results, including randomly sampled densities, available to the Department onsite.

The Contractor shall cease recycling operations whenever one of the following occurs:

- a. The Contractor fails to follow the approved TMP.
- b. The Contractor fails to achieve 95%, or over 102% of the established field density after corrective action has been taken.
- c. The finished product is visually segregated, unstable, or otherwise defective, as determined by the Resident.

Establishment of Test Strip / Field Proctor The Contractor shall construct a test strip for the project at a location approved by the Resident. The test strip section is required to:

- a. Determine the sequence and manner of rolling necessary to obtain optimum compaction requirements; and;
- b. Establish the number of roller passes per roller.

The test strip shall be full lane-width and at least 300 feet in length. After the test strip materials have been placed, it will be compacted with rollers as directed until density readings show an increase in density of less than 1 pcf for the final four roller passes. The number of passes for each roller shall be recorded and become part of the process control.

During the construction and compaction of the dense graded crushed aggregate subbase, should three consecutive test results for density fail to meet a minimum of 95.0% of the field established TMD, or exceed the maximum of 102.0% of field established TMD, a new test strip shall be constructed.

Acceptance Acceptance density testing of the dense graded crushed aggregate subbase will be performed by the Department using the nuclear method. The target TMD from the test strip will be used as the target TMD for the dense graded crushed aggregate subbase.

ACCEPTANCE TEST FREQUENCY

Property	Frequency	Test Method
In-place Density	1 per 600 m [2000 ft] / lane	AASHTO T 310

Method of Measurement The removal, salvaging and stockpiling of existing bituminous pavement will be paid as noted on typical sections. The processing, placing, grading and compacting of existing bituminous pavement will be measured and paid for as item 304.13 Dense graded crushed aggregate sub-base.

Dense graded crushed aggregate subbase will be measured as provided in Section 304.06.

Basis of Payment Section 304.07 is amended by addition of the following: The cost of salvaging existing bituminous pavement will be included for payment under the applicable pay items, with no additional allowances made, which will be full compensation for removing, temporarily stockpiling and rehandling, if necessary. This will also include the loading and trucking of excess salvaged bituminous pavement.

The reuse of salvage bituminous pavement will be measured and paid for under the applicable pay items for which it was removed and reused.

The accepted quantity of dense graded crushed aggregate subbase will be paid for at the contract unit price per cubic yard (meter) complete in place.

Payment will be made under:

Pay Item

Pay Unit

304.13 Dense Graded Crushed Aggregate Subbase

Cubic Yard [Cubic Meter]