



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

Janet T. Mills  
GOVERNOR

Bruce A. Van Note  
COMMISSIONER

October 30, 2023  
Subject: Marsh Bridge Deck Replacement  
State WIN: 026440.00  
Location: **Prospect**  
**Amendment No. 1**

Dear Sir/Ms.:

Make the following Changes to the Bid documents:

In the Bid book

**Insert** the attached SPECIAL PROVISION SECTION 502 STRUCTURAL CONCRETE (Combined Aggregate Grading for Concrete) totaling one page

**Insert** the attached SPECIAL PROVISION SECTION 703 AGGREGATES (Combined Aggregate Grading for Concrete) totaling one page.

**Insert** the attached SPECIAL PROVISION SECTION 502 STRUCTURAL CONCRETE (Hydration Stabilizing Admixture) totaling one page.

Consider these changes and information prior to submitting your bid on **November 8, 2023**.

Sincerely,

A handwritten signature in blue ink that reads "George Macdougall".

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

SPECIAL PROVISION  
SECTION 502  
STRUCTURAL CONCRETE  
(Combined Aggregate Grading for Concrete)

502.03 Materials Add the following:

**Combined Aggregate Grading for Concrete**

**703.03**

502.1701 Quality Control, Method A and B Amend the paragraph before Table 4 as follows:

The Contractor shall maintain records of all QC tests and calculations. The gradation test data and results shall be reported to the Department before the placement they represent. The Contractor or supplier shall retain split samples of the most recent QC gradations for possible ~~Verification~~ testing by the Department. In addition, the Department will sample the aggregates at the plant monthly to determine ~~specification~~ **compliance with 703.03 Combined Aggregate Grading for Concrete. The Combined Aggregate Grading will be calculated by mathematically blending the individual aggregate gradations using the batch percentages from the approved mix design.** If the Department's gradation tests determine that the aggregate does not meet the specified gradation limits, corrective action shall be required before additional concrete may be supplied to the project. The compressive strength test results shall be reported to the Department by 10:00 A.M. of the first working day following the test. All QC test data shall be signed by the person who performed the test. The Contractor shall record all onsite QC test data and calculations at the time of the placement and present this information, on a form acceptable to the Department, to the Department by 10:00 A.M. of the first working day following the concrete placement. All Method A and B QC testing shall meet the minimum requirements found in Table 4.

SPECIAL PROVISION  
SECTION 703  
AGGREGATES  
(Combined Aggregate Grading for Concrete)

SECTION 703 – AGGREGATES Add the following:

**703.03 Combined Aggregate Grading for Concrete** The combined gradation of the fine and coarse aggregates when mathematically blended using the mix design percentages shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves			
	A	AA	S	LATEX
Aggregate Size	1 inch	¾ inch	1½ inch	½ inch
2 inch			100	
1½ inch	100		95-100	
1 inch	95-100	100	85-100	
¾ inch	90-100	93 - 100	55-90	100
½ inch	55-78	60 - 90	45-75	90-100
⅜ inch	40-65	50 - 75	40-65	55-85
No. 4	35-50	35 - 50	35-55	30-60
No. 8	28-45	30 - 47	25-50	25-55
No. 16	18-35	19 - 37	15-40	18-50
No. 30	9-25	10 - 26	7-25	8-30
No. 50	4-14	4 - 14	3-14	3-15
No. 100	0-5	1 - 6	0-5	0-6
No. 200	0-3.0*	0 - 3.0*	0-3.0*	0 - 3.0*

\*The percent passing the No. 200 sieve shall not exceed 5.0 percent for any fine aggregate. The percent passing the No. 200 sieve shall not exceed 1.5 percent for any single coarse aggregate.

SPECIAL PROVISION  
SECTION 502  
STRUCTURAL CONCRETE  
(Hydration Stabilizing Admixture)

502.07 Mixing and Delivery Replace the last sentence in paragraph “A” with the following:

**“An approved hydration stabilizing admixture may be used to increase the discharge time. Justification for the need for a hydration stabilizing admixture shall be provided in the QC Plan. When a hydration stabilizing admixture is used, the manufacturer, dosage rate and discharge time, from the time cement is added to the aggregate, shall be documented in the approved QC Plan. The proposed discharge time(s) shall be based on the manufacturer’s written recommendations, the anticipated concrete temperatures and anticipated ambient conditions at the time of placement(s). Discharge time(s) shall be adjusted when conditions change or are not as anticipated as outlined in the approved QC Plan. The discharge time(s) approved by the Department shall be subject to change at any time, and discharge of concrete into the permanent Work shall cease immediately if the concrete is determined to have attained Accelerated Hydration Gain. Accelerated Hydration Gain being the condition where the fresh concrete has hydrated to the point where the workability and finishability is detrimental to the quality of the final product. Determination of when concrete has attained Accelerated Hydration Gain shall be made by the Contractor’s Quality Control Technician(s) and shall be based on parameters proposed by the Contractor in the QC Plan, such as, but not limited to, loss of slump, plasticity, or workability, an increase in concrete temperature, or a change in the percentage of entrained air.”**

502.1701 Quality Control, Method A and B Under the list with the heading, “The QCP shall address all elements that affect the quality of the structural concrete including, but not limited to, the following:”:

Revise “F” to read: “Mix and Transportation, including Time from Batching to Completion of Delivery, as well as manufacturer, product name, proposed dosage(s) and discharge time(s) if a hydration stabilizing admixture is used.”

Revise “H” to read: “Process QC Testing, including monitoring for attainment of Accelerated Hydration Gain when a hydration stabilizing admixture is used.”

502.1702 Quality Control, Method C Revise to read:

“The Contractor shall submit a QCP listing the mix design(s) to be used, the name and location of the production facility, a brief description of the placement and curing process and the name and qualifications of any QCT to be used. **When a hydration stabilizing admixture is proposed for use, the manufacturer, product name, dosage rate and discharge time, from the time cement is added to the aggregate, shall be included, as well as procedures for monitoring attainment of Accelerated Hydration Gain.** A QCT will be required. The Contractor shall provide a Certificate of Compliance for each truckload of concrete to the Department at the time of the load placement.”