



STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 3 TO PROJECT NO. 44294

**CONSTRUCTION WORK
REHABILITATE AIRPORT AND JUDD ROAD INTERSECTION
STATE PREPAREDNESS TRAINING CENTER
5900 AIRPORT ROAD
ORISKANY, NEW YORK**

October 31, 2012

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATIONS

1. TABLE OF CONTENTS
 - a. Add section 320200 Micro-Surfacing.
2. SPECIFICATION SECTION 320200: Add the accompanying section (pages 320200-1 through 320200-5) to the Project Manual.

DRAWINGS

3. DRAWING NO. C-110 – SIGNAL PLAN
 - a. Delete text “680.8120 TYP.” from the plan view.
 - b. Delete text “680.8120” and “Traffic Signal Disconnect Hanger” from the Table of Signal Items.
 - c. In the Table of Signal Items, delete text “Overhead Mandatory Movement Lane Control Sign” associated with item 680.8201 and replace it with “Overhead Sign Assembly – Type A (back to back)”.
 - d. Add the following note “12. Overhead Sign Assembly should be installed and connected to the nearest signal head as per NYSDOT Standard Sheet 680.05.”
4. DRAWING NO. C-504 - EVOC TRAINING COURSE ASPHALT REPAIR DETAILS, DETAIL 2/C-504 – TAXIWAY REPAIR DETAIL
 - a. Add the following detail note “Apply micro-surfacing over new asphalt at a rate of 22 +/- LBS/SY. Overlap existing micro-surfaced pavement a minimum of 6 inches and taper application thickness to existing grade.”

ADDENDUM NO. 3

5. DRAWING NO. C-504 - EVOC TRAINING COURSE ASPHALT REPAIR DETAILS,
DETAIL 3/C-504 – RUNWAY REPAIR DETAIL
 - a. Add the following detail note “Apply micro-surfacing over new asphalt at a rate of 22 +/- LBS/SY. Overlap existing micro-surfaced pavement a minimum of 6 inches and taper application thickness to existing grade.”

James Dirolf, Jr., P.E.
Director of Design

END OF ADDENDUM

SECTION 320200
MICRO-SURFACING

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Asphalt Concrete Paving: Section 321216

1.02 SUBMITTALS

- A. Product Data: Manufacturer's catalog cuts, specifications, installation instructions, for each item specified.
- B. Product Data: Quality Control Submittals:
 - 1. Mixture Designs

1.03 PROJECT CONDITIONS

- A. Environmental Conditions:
 - 1. The requirements of NYSDOT Standard Specifications §402-3.01 Weather and Seasonal Limitations apply, except as modified herein. Do not place micro-surfacing in the rain, fog, or if the air temperature is expected to fall below freezing within 24 hours after application. Application shall not occur unless pavement and ambient temperatures are above 50° F. When applying with temperatures below 60° F, the Contractor shall use a mix design specifically designed for cold weather application. Stop micro-surfacing if the surface or air temperature drops below 50° F.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Asphalt Emulsion: In accordance with NYSDOT Standard Specifications § 702 - Bituminous Materials, CQS-1hp, Item 702-4801.
- B. Aggregates: In accordance with NYSDOT Standard Specifications §703-02, Coarse Aggregate, except as modified by Materials Procedure 09-01, "Micro-surfacing."
- C. Friction Aggregate: Refer to Chapter 6 of the NYSDOT Comprehensive Pavement Design Manual for selection of appropriate friction requirements: F1, F2 or F3. Requirements for F1, F2, and F3 aggregate are listed in §401-2.02 A., §401-2.02 B., §401-2.02 C. respectively.
- D. Water: In accordance with NYSDOT Standard Specifications § 712-01, Water.

E. Mineral Filler: In accordance with NYSDOT § 703-08, Mineral Filler.

2.02 MATERIAL SAMPLING AND TESTING

A. Stockpile: Build an aggregate stockpile at a location approved by the Director’s Representative. When blending multiple aggregates, use automated proportioning and blending equipment to produce a uniformly graded stockpile. Screen the aggregate at the stockpile, prior to delivering it to the micro-surfacing equipment.

1. Testing: Take three samples, according to Materials Method 5, “Plant Inspector’s Manual for Bituminous Concrete Mix Production” and test for gradation, according to AASHTO T 11, “Materials Finer than #200 Sieve in Mineral Aggregates by Washing,” and AASHTO T 27, “Sieve Analysis of Fine and Coarse Aggregates.” Each sample must contain material from each face of the stockpile.

Sample and test the aggregate in accordance with Materials Method 28, “Friction Aggregate Control and Test Procedures;” Appendix C, Table C1 – Minimum Testing Frequencies for Micro-Surfacing Aggregates. Submit the test results to the Director’s Representative for approval before using material from the stockpile. At least one sample for friction aggregate analysis according to Materials Method 28.

B. Tolerance: The maximum stockpile tolerances are given in Table 1 - Maximum Stockpile Tolerances. The design value plus the stockpile tolerance cannot exceed the mix design gradation limits.

TABLE 1 - MAXIMUM STOCKPILE TOLERANCES	
SIEVE	Stockpile Tolerance
3/8	-
4	+/- 5.0%
8	+/- 5.0%
16	+/- 5.0%
30	+/- 5.0%
50	+/- 4.0%
100	+/- 3.0%
200	+/- 2.0%

C. Approval: Stockpile approval is valid until new material is added to the stockpile. Approval will be based on the average of three gradation tests. If the percent passing exceeds the stockpile tolerance or is outside the gradation limits for any sieve, or alternates between the upper and lower gradation limit for any two consecutive sieves, the stockpile will be rejected.

All micro-surfacing previously placed with material from a stockpile rejected for non-carbonate or acid insoluble residue content will be rejected pending evaluation of the pavement in accordance with Materials Method 28.

- D. Equipment: Equipment must be designed and manufactured specifically for mixing and placing micro-surfacing. The equipment must be capable of accurately proportioning the constituent materials, thoroughly mixing those materials, and placing the micro-surfacing in conformance with this specification.

Calibrate each mixing unit according to Materials Procedure 09-01. Calibration must be performed using the aggregate sources listed in the mix design. Calibrations are valid for 90 days. Submit a copy of the mix design and equipment calibration to the Director's Representative prior to the start of work.

The emulsion, aggregate and mineral filler counters must be accessible to the Director's Representative. Adjust the material delivery settings on the micro-surfacing equipment to produce the mix design. When required, a pneumatic rubber tired roller meeting the requirements of NYSDOT Standard Specifications Section §402-3.04 C., shall be used.

- E. Emulsion: Minimally, the Director's Representative will sample every truck delivery to the site. The Contractor shall also submit a sample from each certified lot produced to the Director's Representative.

PART 3 EXECUTION

3.01 PREPARATION

- A. Remove all dust, dirt, salt, paint, loose pavement markings, and other foreign matter.
- B. Cover all manhole covers, water boxes, catch basins, and other such utility structures within the area being paved with plastic, building felt, or other material approved by the Director's Representative. Remove the covers each day.
- C. Apply a tack coat emulsion to the pavement surface before applying micro-surfacing.

3.02 APPLICATION

- A. Weather and Seasonal Limitations. The requirements of §402-3.01 Weather and Seasonal Limitations apply, except as modified herein. Do not place micro-surfacing in the rain, fog, or if the air temperature is expected to fall below freezing within 24 hours after application. Application shall not occur unless pavement and ambient temperatures are above 50° F. When applying with temperatures below 60° F, the Contractor shall use a mix design specifically designed for cold weather application. Stop micro-surfacing if the surface or air temperature drops below 50° F.
- B. Mixture Consistency. Produce a homogeneous mixture, without lumps, balls, unmixed aggregate, segregation, excess water, or excess emulsion. The maximum allowable adjustment of the mineral filler is 1.0%. Report all mixture adjustments to the Director's Representative before they are made.

- C. Application Rate. Use one application with a rate of 22+/- pounds per square yard. Application rate limits are given in Table 2 - Application Limits.

TABLE 2 - APPLICATION LIMITS			
Gradation	Maximum Single Pass Application Rate (lb/y2)	Total Application Tolerance (lb/y2)	Total Application Rate Range (lb/y2)
Type II	22 ±	4.0	30-45

- D. Coverage. Apply the micro-surfacing to the pavement evenly across the entire width of the asphalt pavement repair to produce a smooth riding surface with no streaks, excess buildup, thin or uncovered areas. Micro-surfacing should overlap the existing micro-surface by a minimum of 6 inches and taper to match existing grade.
- E. Joints. Minimize the number of joints. Construct joints such that no gap is present between adjacent applications. Place longitudinal joints at the edges of traffic lanes. Other longitudinal joint arrangements require the Director's Representative's approval. Measure the difference in grade across joints by laying a 10 foot straight edge centered on the joint perpendicular to the direction of the joint. Joint overlap and grade difference requirements are given in Table 3 – Joint Requirements.

TABLE 3 - JOINT REQUIREMENTS		
Requirement	Maximum (in.)	Maximum (in.)
Difference in Grade	-	¼
Longitudinal Joint Overlap	2	6
Transverse Joint Overlap	2	12

- F. Variable-Width Passes. Apply no more than one variable-width pass. Variable-width passes will not be permitted as the last pass unless approved otherwise.
- G. Hand Finishing. Use hand held squeegees to finish areas which cannot be reached with the spreader box, and to produce straight lines along curbs, shoulders, and through intersections. Apply the same type of finish to the surface as is applied by the spreader box.
- H. Excess Material. Remove all excess material in areas such as driveways, gutters, intersections, etc. each day.
- I. Rolling. For work performed after September 15th a roller shall be required. The mat shall be rolled with an approved pneumatic tired roller. A minimum of 3 passes of the pneumatic tired roller shall be required. One pass is defined as one movement of the roller over any point of the pavement in either direction. The rolling of the surface shall not cause the stone to stick to the wheels of the roller.
- J. Curing. Allow each coat to cure sufficiently to resist damage from the micro-surfacing equipment, before applying the next coat. Protect the micro-surfacing from

traffic until the mixture has cured sufficiently to resist damage. The time required will vary based on the mix design and environmental conditions. Repair damage from micro-surfacing equipment or traffic to the Director's Representative satisfaction.

END OF SECTION