

Z063-09478

ADDENDUM NUMBER 2

MILWAUKEE COUNTY ZOOLOGICAL GARDENS  
WINTER QUARTERS ROOF AND ASPHALT DRIVEWAY REPLACEMENT  
Site #355, Bldg. #4670  
10001 West Blue Mound Road  
Milwaukee, WI 53226

Project Number: Z063-09478

Date of Addendum: June 13, 2013

This Addendum to the Contract Documents is issued to modify, explain or correct the original documents, dated May 29, 2013, and is hereby made part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form, or bid may be rejected.

PROJECT BIDDING DOCUMENTS

CHANGE Bid Due Date to June 19, 2013 at 2:00 P.M.

SPECIFICATIONS

REPLACE Section 02740 with new section 02741 attached to and issued as part of this Addendum 2.

Section 07135: THERMOPLASTIC (PVC) SHEET WATERPROOFING SYSTEM  
Part 3 Execution

3.03 SUBSTRATE PREPARATION

ADD to statement "Reseal existing membrane with a coat of asphaltic emulsion" with "and a layer of 6 mil polyethylene barrier with all seams, laps and transitions sealed with multi-purpose adhesive sealant tape."

3.10 ELECTRONIC LEAK DETECTION

ADD the following statement:

"Contractor shall provide products required by membrane manufacturer for conducting electronic leak detection, including but not necessarily limited to conductive mats, whether such material shall be part of the permanent installation or shall be removed upon the completion of leak detection."

DRAWINGS

Sheet A1

1. Note "I" :  
CHANGE the weight limit from "2.5 TONS" to "5 TONS FOR BIDDING PURPOSES".

End of Addendum No. 2

SECTION 02741

POLYMER MODIFIED ASPHALTIC CONCRETE PAVING  
(ROOF TOP PLAZA APPLICATION)

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Asphaltic concrete paving over basement area of building.

1.02 RELATED SECTIONS

- A. Section 02270: Erosion Control
- B. Section 02300: Earth Work

1.03 REFERENCES

- A. The specifications for work covered under this portion of the Contract shall be the State of Wisconsin Department of Transportation (DOT), Division of Highways, Standard Specifications for Highway and Structure Construction; 2003 edition unless otherwise provided for in these specifications and special provisions.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with the Asphalt Institute Manual MS-4 and the State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction.
- B. Mixing Plant shall conform to State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction.

C. ASPHALT TICKET REQUIREMENTS

1. Delivery tickets for loads delivered to the project shall be immediately placed on a clipboard on the paving machine. Alternately, the tickets shall be placed in a location on the job site which is acceptable to the County Construction Coordinator.  
Tickets given to the County representative after the fact will not be accepted.
2. Each ticket shall include the following information:
  - a. Name, plant number and location of the plant.
  - b. Name of contractor purchasing the material.
  - c. Project location.
  - d. Date.
  - e. Type of mixture.
  - f. Maximum size of aggregate.
  - g. Truck number.
  - h. Net weight of load. Each ticket shall have the weight stamped by an automatic type register beam platform scale or marked by a bonded weighmaster.

## 1.05 ENVIRONMENTAL REQUIREMENTS

- A. Do not place asphalt when base surface temperature is less than 40 degrees F or surface is wet or frozen.
- B. Do not place asphalt upper layer when air temperature is less than 50 degrees F.

## 1.06 JOB CONDITIONS

- A. Do not work during freezing weather or on wet or frozen subgrade or subbase.
- B. Protect other finished work from splatter of or spray of asphalt, etc.
- C. Visit site to verify existing conditions.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Materials and Workmanship: Conform to following Sections of the WDOT Standard Specifications for Highway and Structure Construction, 2003 Edition.
- B. Composition of Mixture
  - 1. The mixture shall be composed of course and fine aggregates, mineral filler, asphalt cement, and virgin polymeric concentrate. The final job mix design will be according to the polymer modifier manufacturer's requirements and approved by the Engineer.
- C. Fine and Course Aggregate.
  - 1. The fine and course aggregate shall conform to the requirements of Subsection 401.2. Mineral Aggregates, which are inherently porous, such as blast furnace, expanded shale, porous limestone, and lightweight aggregates, shall not be utilized in this mixture. The final blend will be in accordance with the polymer modifier manufacturer's requirements and approved by the Engineer.
- D. Mineral Filler.
  - 1. Mineral filler, if utilized, shall meet the requirements of Subsection 401.2.
- E. Asphalt Cement.
  - 1. The asphalt cement shall conform to the requirements of Subsection 401.3. The final blend will be in accordance with the polymer modifier manufacturer's requirements and approved by the Engineer.
- F. Polymer Modifier Additive.
  - 1. The polymer modifier additive shall be a polymer modifier packaged in 10.1kg(22.5 pound) units in meltable polyethylene bags, with a minimum of 45 pounds of polymer modifier. The meltable bags can be tossed into the pug mill without opening, and will melt to disperse the additive through the normal mixing action of the pug mill. The final blend will be in accordance with the polymer modifier manufacturer's requirements and approved by the Engineer. The modifier shall be concentrated thermoplastic virgin polymeric material that is waterproof, has a melting point of 250 degrees Fahrenheit and an embrittlement point of -34 degrees Fahrenheit.

G. Edge Sealer.

1. The edge sealer shall be in accordance with the polymer modifier manufacturer's requirements and approved by the Engineer.

H. Construction Joint Sealer.

1. Asphalt joint sealer for saw cut construction joints shall be rubberized asphalt joint sealer certified to be in accordance with ASTM D3405 of AASHTO M301-85 specifications. Substitution of a 500-mm (20 inch) wide strip of Geotextile Paving Fabric installed in accordance with the manufacturer's recommendations, such as Pave Prep, Dow Corning, Royston or approved equal, may be used at no additional cost if approved by the Engineer.

PART 3 – EXECUTION

3.01 DECK PREPARATION

- A. Roof Deck Areas: Verify that all roofing materials are installed and in a condition suitable for paving work.

B. Ground Pavement Areas:

1. Where paving meets existing pavement, saw-cut existing pavement and remove existing pavement minimum of 2 inches deep for application of new topping. Feather edging of topping will not be permitted. Also, saw-cut straight line where pavement butts existing.
2. Verify that compacted subgrade and soil is dry and ready to support paving loads.
3. Verify gradients and elevations of base are correct.
4. Excavated and removed asphalt shall be removed from site.

3.02 CONSTRUCTION METHODS

- A. Using the mix design, the proper quantities of aggregate are preheated to a temperature of at least 232°C (450°F) and dropped into the pug mill. The proper amount of Polymer Modifier is added (45 pounds per ton of mix or 2.25% of total weight per batch). Then the AC-binder is introduced which will have a temperature of 149°C-162°C (300°-325°F). After the 90 second wet mix time, the mix is dropped into a truck or silo fed.
- B. The drop temperature must be above 410°F (210°C) but not hotter than 450°F (232°C). If the mix drop temperature is outside this range, the material will be rejected. To assure adequate delivery temperatures, the contractor, or his sub-contractor shall completely cover all delivery trucks at all times with a non-porous tarp.
- C. Asphaltic concrete pavement shall be placed on surfaces that have been tack coated and allowed to cure for a period of 40 minutes. The material shall be placed at a temperature between 375°F to 390°F.
- D. Lift thickness: Thickness shall be as shown on drawings with the lower lift being 1-1/2 inch to 2 inches thick.

3.03 COMPACTION.

- A. Full compaction is required and shall be achieved by utilizing steel double drum drive rollers used in the static mode. A roller will be utilized to do the compaction with a static weight not exceeding 3 tons. The roller's water system shall be in perfect working order, and apply even water coverage to the asphalt mat. The Polymer

Modified Asphalt is much hotter than conventional mixes and requires more water to keep the material from sticking to the steel rolls. No pneumatic tire rollers will be used on the Polymer Modified asphalt mat. A representative of the polymer modifier manufacturer shall be present at all times during the placement of the modified asphalt material and compaction operations, at no additional cost to the contractor. The Contractor may use other compaction means in the areas where the specified roller cannot get.

- B. The use of an asphalt vibrator wacker is acceptable as long as it's in good working order, including the water system. The breakdown rolling will be done closely behind the spreading operations. The finish roller will follow break down and be used to remove imperfections in the mat. The rolling pattern will be straight with the paving directions, with no turning except what is necessary to move from pass to pass. The polymer modifier manufacturer's representative will indicate the rolling pattern and the frequency of passes. Any changes to the paving and rolling procedures must be approved by the polymer modifier manufacturer's representative.

### 3.04 APPLICATION OF SEALANTS

- A. Butt joints made during paving operations that have cooled below 150° F must have Edge Sealer applied to the butt surface before the joining asphalt lift. The polymer modifier manufacturer will oversee the applications of Edge Sealer, wherever it is used. Construction joint shall be saw cut to a 12.7mm (1/2 inch) width and filled to within 3 mm (1/8 inch) of the surface with the rubberized asphalt joint sealer previously specified.
- B. Extreme care shall be taken so as not to overfill these sawed joints since excess joint sealer material will cause ripples in the surface course necessitating corrective work by the Contractor.

END OF SECTION