## LAWRENCE SMITH MEMORIAL AIRPORT (LRY) HARRISONVILLE, MISSOURI

#### MoDOT PROJECT NO. 21-110C-2 / AIR 216-110C-1

# Reconstruct Runway 17-35 (4,000' x 75'), Runway 35 Turnaround, and Apron Connecting Taxiways

#### ADDENDUM NO. 3

June 16th, 2023

#### TO ALL PROSPECTIVE BIDDERS:

- A. You are hereby notified of the following amendments to the Contract Documents / Specifications for the subject project.
  - 1. Section 20, Item P-501 CRM, <u>Cement Concrete Pavement</u>. The restrictions on the available coarse aggregate requirements have been removed. Please note that if using stone, crushed or uncrushed gravel, air cooled iron blast furnace slag, crushed recycled concrete pavement, or a combination, the materials shall be tested in accordance with ASTM C666 with a durability factor result of ≥ 95 in addition to meeting all other quality tests specified in Item P-501.

Revised Page 20-2 of Section 20, Item P-501 CRM, <u>Cement Concrete Pavement</u> is included with this addendum for reference.

B. All bidders must acknowledge receipt of this addendum in the space provided on Page 5 of 13 of the Official Bid Form. Failure to acknowledge receipt of an addendum may be cause for rejection of the bid.



Fine Aggregate Material Requirements			
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss after 5 cycles: 10% maximum using Sodium sulfate - or - 15% maximum using magnesium sulfate	ASTM C88	
Sand Equivalent	[ 45 ] minimum	ASTM D2419	
Fineness Modulus (FM)	$2.50 \le \text{FM} \le 3.40$	ASTM C136	
Limits for Deleterious Substances in Fine Aggregate for Concrete			
Clay lumps and friable particles	1.0% maximum	ASTM C142	
Coal and lignite	0.5% using a medium with a density of Sp. Gr. of 2.0	ASTM C123	
Total Deleterious Material	1.0% maximum		

c. Coarse aggregate. The maximum size coarse aggregate shall be 3/4-inch.

Aggregates delivered to the mixer shall be clean, hard, uncoated aggregates consisting of granite, calcite cemented sandstone, quartzite, basalt, diabase, rhyolite or trap rock stone, crushed or uncrushed gravel, air-cooled iron blast furnace slag, crushed recycled concrete pavement, or a combination. (*Revised per Addendum No. 3*) The aggregates shall have no known history of detrimental pavement staining. Steel blast furnace slag shall not be permitted. Coarse aggregate material requirements and deleterious limits are shown in the table below; washing may be required to meet aggregate requirements.

### **Coarse Aggregate Material Requirements**

Material Test	Requirement	Standard	
Resistance to Degradation	Loss: 40% maximum	ASTM C131	
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss after 5 cycles: 12% maximum using Sodium sulfate - or - 18% maximum using magnesium sulfate	ASTM C88	
Flat, Elongated, or Flat and Elongated Particles	8% maximum, by weight, of flat, elongated, or flat and elongated particles at 5:1 for any size group coarser than 3/8 (9.5 mm) sieve <sup>1</sup>	ASTM D4791	
Bulk density of slag <sup>2</sup>	Weigh not less than 70 pounds per cubic foot (1.12 Mg/cubic meter)	ASTM C29	
D-Cracking (Freeze-Thaw)	Durability factor ≥ 95	ASTM C666	
(Added Per Addendum No. 3)			

A flat particle is one having a ratio of width to thickness greater than five (5); an elongated particle is one having a ratio of length to width greater than five (5).

Crushed granite, calcite cemented sandstone, quartzite, basalt, diabase, rhyolite or trap rock are considered to meet the D-cracking test requirements but must meet all other quality tests specified in Item P-501.

<sup>&</sup>lt;sup>2</sup> Only required if slag is specified.