

SPECIFICATIONS  
FOR  
BITUMINOUS ASPHALT MATERIALS

Tuscarawas County Road & Bridge Department

GENERAL SPECIFICATIONS

1. Materials to be bid will be Bituminous Asphalt Emulsions as well as bidder provided Pug Mill and Mobilization for Cold Mix production operation. Prices will be good for the period of April 1, 2023 to March 31, 2024 with no escalator clause.
2. The usage of the CRS-2, HFRS-2 and/or HFRS-2P materials will be for chip and sealing and hand patching. The usage of Permacoat 250 will be for on-site production of cold mix asphalt for blade patching and pothole patching. The successful bidder shall have available and furnish to the County, upon request, an engineer or technician skilled in the proper proportioning and manipulation of the materials used and to advise the County on the proper usage. This service will be required at the beginning of the work and at other times of special problems. The cost of this service shall be included in the unit prices bid for the materials furnished.
3. All materials furnished, must meet or exceed the following specifications:

CRS-2:	In accordance with ASTM D 2397.
HFRS-2:	In accordance with ASTM D 977 except that the residue by distillation must be a minimum of 65%.
HFRS-2P:	Polymerized Emulsion - Bidder to furnish specification with their bid, along with references to its usage
Permacoat 250:	In accordance with the following:

<b>Test Method</b>	<b>Specifications</b>	
Flash Point, COC °C, ASTM D 3143	65.6+	
Viscosity, Kinematic @ 60° C, ASTM D 2170	400-600	
Distillate Test: ASTM D402	volume % total to 225°C	0-10
	volume % total to 260°C	0-45
	volume % total to 315.5°C	50-87
Residue from distillate to 360°C % volume by difference, min	70+	

***Residue Tests***

Ductility of Residue ASTM D 113	100+
Spot Test of Reside	Neg
Water, % ASTM D 95	0.20%
Solubility in TCE, ASTM D 2042-01, %	99.5+

4. The bidder must submit proof of certification with a State Department of Transportation for the materials bid at the time of the bid opening for CRS-2, HFRS-2 and HFRS-2P.
5. The bidder shall be required to perform monthly certification compliance testing of all products used by Tuscarawas County. Bidder shall submit the results on a monthly basis for all months in which products are being delivered to the County.
6. The County reserves the right to accept either the F.O.B. plant bid and/or the F.O.B. Tuscarawas County bid.
7. The County reserves the right to have the option for pick-up of materials by their own equipment or their designated haulers. The County also reserves the right to consider the relative location of each supplier with respect for the prompt delivery of materials to Tuscarawas County along with the distance of travel for pick-up by the County or its designated haulers in awarding this bid. As nearly as practical, all material ordered F.O.B. Tuscarawas County, will be in loads of approximately 6,000 gallons.
8. Estimated quantities listed in the proposal for CRS-2 and/or HFRS-2, HFRS-2P and Permacoat 250 is strictly an estimate of the amount which may be used this season. Neither is a guarantee that quantities listed will be purchased. The County reserves the right to increase or decrease quantity purchased based upon actual needs without penalty or adjustment of unit prices bid.
9. The mixing unit shall have as a minimum two (2) 6-cubic yard capacity hoppers and vibrators on the hopper walls to assist in the free flow of material. The proportioning of materials shall be controlled by means of mechanically adjustable gate at the point of discharge to a variable speed belt conveyor, equipped with a belt scale for continuous weighting of the aggregate. The aggregate belt scale shall be coupled/interlocked with two microprocessor-controlled systems, complete with two independent pumping systems and spray bars, to regulate the application of bituminous material.

The mixing unit shall be an on-board completely self-contained counter rotating twin shaft pugmill. A metering device shall be capable of automatically adjusting the flow of bituminous material to compensate for any variation in the weight of the aggregate introduced into the pugmill. Bituminous material shall be metered by weight of aggregate using a mass flow, Coriolis Effect, type meter that will accurately measure the amount to within 0.5 percent of the amount required by the JMF or as adjusted by the Engineer.

Control of the plant shall be fully automatic via the microprocessors. Control functions shall include: batch production, automatic plant startup, monitoring of individual drive systems, warning signals in case of material shortage, monitoring of filling leveling, temperatures and pressures, pre-selection of tonnage, automatic plant shut down. A current setting of the mixing unit shall be continuously displayed.

10. Bids **must be submitted in a sealed envelope marked "BITUMINOUS ASPHALT MATERIALS"** to the Tuscarawas County Commissioners at 125 East High Avenue, New Philadelphia, Ohio 44663.

PAYMENT OF QUANTITIES:

Method of computing tank truck gallonage from net weight:

It is understood that the gallons delivered to and accepted by the County shall be converted by the following procedure and formula.

All shipments of bituminous materials in tank trucks must be weighed to determine the net weight of the material and the net weight converted to gallons.

All shipments must state the shipping temperature on weight slips.

The gallons to be paid for shall be calculated by using the following formula:

COMPUTING GALLONS FROM NET WEIGHT

Whereas:

NW	=	Net Weight of material from weight slip
K	=	8.245 (Emulsions)
SG	=	Specific Gravity shown on laboratory reports*
GD	=	Net Gallons Delivered

Formula:

$NW \text{ divided by } (K \times SG) = GD$

\* The specific gravity of samples, taken by the County shall be averaged for the material delivered within that pay cycle.

TERMINATION OF CONTRACT:

If the supplier should default in any of the terms of this contract, then the County may, at its option, terminate the contract upon giving the supplier twenty-four (24) hours written notice. Upon the occurrence of such termination, the County shall then be entitled to purchase said Asphalt Materials from the next lowest bidder and the supplier shall be liable to the County for any additional costs to the County in purchasing said Asphalt from the next lowest bidder above the contract price herein contained. Sampling will be done randomly by the County. As an alternate or in addition to terminating the contract, the County may invoke a 30% penalty for any materials that do not meet specifications.

