

MECOSTA COUNTY ROAD COMMISSION

REQUEST FOR PROPOSAL

2024 COUNTY-WIDE BITUMINOUS MIX PAVING

INTENT:

The Mecosta County Board of Road Commissioners is requesting proposals to provide bituminous paving material (Bituminous Mix Specifications 13A Tier I, 13A Tier II, 4E1, 13A Tier II road widening and labor, including temporary pavement markings, at various locations within the county. Sealed bids will be received by the Mecosta County Road Commission administrative staff at 120 N. DeKrafft Ave., Big Rapids, Michigan, 49307 **until 3:00 p.m. Friday, February 16, 2024**, for Annual Bids. All bids will be opened Tuesday, February 20, 2024, 10:00 a.m. Your proposal must be sealed with the envelope clearly marked with your company name and the words “County-Wide Bituminous Mix Paving” on the outside.

INSURANCE REQUIREMENTS:

Contractors working within the road right-of-way shall have valid proof of Auto Liability, Worker’s Compensation and Commercial General Liability Insurance. Certificates shall be on file with the Road Commission prior to the start of any work, and **must** name the Mecosta County Road Commission, its Board of Road Commissioners, its Officers; it’s Agents, its Employees, and The Michigan Department of Transportation as “additional insured” and be endorsed as such on the liability insurance.

INDEMNIFICATION:

“To the fullest extent permitted by law, the (Contractor/Engineer/Architect) shall indemnify and hold harmless the Mecosta County Road Commission (or “Owner” or other designation used in the remainder of the Contract), its board of road commissioners, agents, employees, and the Michigan Department of Transportation from and against all claims, damages, losses, and expenses including, but not limited to, attorneys’ fees, arising out of or resulting from the performance of this Contract (or “Agreement” or other designation used in the remainder of the Contract) including claims, damages, losses, and expenses attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, but only to the extent caused by the fault, negligent acts, or omissions of the (Contractor/Engineer/Architect), a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by the parties indemnified hereunder. This obligation does not include an obligation to indemnify the parties indemnified hereunder for their sole negligence and shall not be construed to negate or modify other rights or obligations of indemnity that otherwise exist as to the parties or persons described herein.”

GENERAL

The **Contractor** will provide all traffic control necessary.

All material, furnished labor, equipment, temporary pavement markings and services provided for in this bid must be in accordance with the current applicable Michigan Department of Transportation Specifications and Guidelines **as well as the attached Special Provision for Acceptance of HMA Mixture dated 01/02/2024**. Wedging will be paid for as 13A Tier II unless otherwise specified by the Road Commission.

NOTICE

The Mecosta County Road Commission reserves the right to accept or reject any and all bids, or portions of bids, as deemed in the best interest of the Mecosta County Road Commission. The Board of Road Commissioners may waive any irregularities in any bid if it is in the best interest of the Road Commission to do so. The indicated quantity is approximate only and may be subject to change based on the financial circumstance of the Road Commission.

MECOSTA COUNTY ROAD COMMISSION

REQUEST FOR PROPOSAL

2024 COUNTY-WIDE BITUMINOUS MIX PAVING

ESTIMATED QUANTITY

30,000 combined Tons (more or less)

PER TON UNIT PRICE FOR 13A TIER I: _____

PER TON UNIT PRICE FOR 13A TIER II: _____

PER TON UNIT PRICE FOR MDOT 4EL: _____

PER TON UNIT PRICE FOR MDOT 4EML: _____

PER TON UNIT PRICE FOR MDOT 5EML: _____

PER TON UNITS PRICE FOR 13A TIER II ROAD WIDENING: _____
(e.g., Shoulder Paving, Paving Bike Lanes)

The undersigned understands and agrees that this document will constitute a contract if accepted by the Mecosta County Board of Road Commissioners and by signing agrees with everything from pages 1 and 2 of this document as well as the attached Special Provision for Acceptance of HMA Mixture dated 01/02/2024.

NOTE: If it is agreed upon by both parties, this bid may be extended for up to 36 months.

SUBMITTED BY: _____

COMPANY NAME: _____

COMPANY ADDRESS: _____

CITY, STATE, ZIP CODE _____

TELEPHONE/FAX #: _____

EMAIL ADDRESS: _____

SIGNATURE: _____

CONTACT PERSON: _____

DATE: _____

MECOSTA COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
ACCEPTANCE OF HMA MIXTURE
(non Federal)

MCRC: TCN

01/02/2024

DESCRIPTION

This special provision provides acceptance-testing requirements for use on 2024 paving projects. The HMA mixture and mixture quality assurance and acceptance shall conform to section 501 of the Michigan Department of Transportation 2020 Standard Specifications for Construction except where modified herein. The MDOT HMA Production Manual, current edition, applies to this work.

SUBMITTALS

Submit a mix for the CRC review and approval. The Contractor shall not place any HMA without an approved mix design by the CRC.

MATERIALS

Aggregates, mineral filler (if required), and asphalt binder shall be combined as necessary to produce a mixture proportioned within the master gradation limits called for in the project and meeting the uniformity tolerances listed in Table 1 of this special provision and the quality assurance testing tolerances in the MDOT Special Provision for Acceptance of Hot Mix Asphalt Mixture on Local Agency Projects dated 02-26-20. The master gradation range is to be used for establishing mix design only. Topsoil, clay, or loam shall not be added to aggregates which are to be used in plant mixed HMA mixtures.

ASPHALT BINDER

Liquid asphalt binder shall be a PG 58-28 for 13A & 4EL Mixes.
Liquid asphalt binder shall be a PG 64-28 for 5EML & 4EML Mixes.

AIR VOIDS

Design air voids will be 3.5%.

RECYCLED ASPHALT PAVEMENT

Recycled asphalt pavement (RAP) percentage that represents the contribution of the RAP binder toward the total binder, by weight, SHALL NOT EXCEED the MDOT (17%) spec in 13A Tier 1 and the MDOT (27%) spec in 13A Tier 2. No binder grade adjustment is required to compensate for the stiffness of the asphalt binder in RAP.

RECYCLED ASPHALT SHINGLES

Recycled asphalt shingles will NOT be allowed.

CONSTRUCTION

After the job-mix-formula is established, the aggregate gradation and the binder content of the HMA mixture furnished for the work shall be maintained within the Range 1 uniformity tolerance limits permitted for the job-mix-formula specified in Table 1. However, if deviations are predominantly either below or above the job-mix-formula, the Engineer may order alterations in the plant to bring the mixture to the job-mix-formula. If two consecutive aggregate gradations on one sieve, or binder contents as determined by the field tests, are outside Range 1 but within Range 2 tolerance limits, the Contractor shall suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor shall propose, for the Engineer's approval, all necessary alterations to the materials or plant so that the job-mix-formula can be maintained. The Engineer, after evaluating for effects on AWI and mix design properties, will approve or disapprove such alterations.

At no time shall the asphalt binder content fall below 5.5% regardless of the tolerance listed.

Random liquid asphalt binder samples will be taken by the Engineer. The Engineer reserves the right to test any or all samples taken.

The crushed particle content of the aggregate used in the HMA mixture shall fall within the limits listed in Table 1 below.

The CRC will perform quality assurance sampling and testing, using the sampling and testing option selected by the CRC. Mixture QA testing may be performed at the Contractor's facility, using the Contractor's equipment, at no additional cost to the Owner. Quality control measures to ensure job control are the responsibility of the Contractor. Quality assurance and acceptance testing will be as follows:

1. Sampling

Acceptance sampling and testing will be performed by the CRC using the sampling method and testing option selected by the CRC. Each day of production, random samples may be obtained for each mix type. Acceptance testing will be performed at a frequency specified by the CRC.

2. Mixture Testing

Mixture samples will be tested to verify gradation, binder content and volumetric properties.

3. Density

Option 1 – Direct Density Method

Use of a nuclear density gauge requires measuring the pavement density using Gmm from the JMF for the density control target. The required in-

place density of the HMA mixture must be 92.0 to 98.0 percent of the density control target. Nuclear density testing and frequency will be in accordance with the MDOT Density Testing and Inspection Manual.

Option 2 – Roller method

The engineer may use the Roller Method with a nuclear or non-nuclear density gauge to document achieving optimal density as discussed in MDOT Special Provision for Acceptance of Hot Mix Asphalt Mixture on Local Agency Projects dated 02-26-20.

Parameter		Top and Leveling Course		Base Course		
Number	Description	Range 1 (a)	Range 2	Range 1 (a)	Range 2	
1	% Binder Content	-0.30 to +040	± 0.50	-030 to +040	± 0.50	
2	% Passing	# 8 and Larger Sieves	± 5.0	± 8.0	± 7.0	± 9.0
		# 30 Sieve	± 4.0	± 6.0	± 6.0	± 9.0
		# 200 Sieve	± 1.0	± 2.0	± 2.0	± 3.0
3	Crushed Particle Content (b)	Below 10%	Below 15%	Below 10%	Below 15%	
a. This range allows for normal mixture and testing variations. The mixture must be proportioned to test closely as possible to the Job-Mix-Formula (JMF). b. Deviation from JMF.						

Table 1: Uniformity Tolerance Limits for HMA Mixtures

Parameter number 2 as shown in Table 1 is aggregate gradation. Each sieve will be evaluated on one of the three gradation tolerance categories. If more than one sieve is exceeding Range 1 or Range 2 tolerances, only the one with the largest exceedance will be counted as the gradation parameter

REJECTED MIXTURES

1. Gradation

The mixture will be considered out-of-specification, as determined by the acceptance tests, if for any one mixture, two consecutive tests per parameter, (for Parameter 2, two consecutive aggregate gradations on one sieve) are outside Range 1 or Range 2 tolerance limits. If a parameter is outside of Range 1 tolerance limits and the second consecutive test shows that the parameter is outside of Range 2, then it will be considered to be a Range 1 out-of-specification. Consecutive refers to the production order and not necessarily the testing order. If such mixtures are placed in a pavement, the remaining portions of the failing field samples (split sample) will be sent to an independent laboratory to confirm the field test results. If the laboratory’s results do not confirm the field test results and there are no price

adjustments required due to test failures on the asphalt binder, then no price adjustments will be made for the mixture involved. If the laboratory's results confirm the field test results and if, in the Engineer's judgment, the defective mixture can remain in place and there are no price adjustments required due to test failures on the asphalt binder, the contract unit price for the defective mixture involved, as determined from field tests, will be decreased on the following basis:

The contract unit price for material outside of Range 2 or with a crushed particle content below that specified in the project documents will be decreased 25 percent.

If three consecutive aggregate gradations on one sieve, or asphalt binder contents as determined by field tests are outside Range 1 but within Range 2 tolerance limits, the mixture produced from the time the third sample was taken until the gradation, or asphalt binder content is corrected back into Range 1 will be decreased in contract unit price by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed in the same manner as mixtures subject to the 25 percent penalty as described herein.

If a liquid asphalt binder sample does not meet the required specification, the mix produced from the point of the last liquid asphalt binder sample meeting specification to the failed sample shall be considered defective and shall be replaced at the sole expense of the contractor. This may also result in the termination of the contract and/or the right to bid on any future work.

2. Volumetric Properties

Acceptability tolerance for Air Void, VMA Gmm and Binder Content are to follow the MDOT Special Provision For Acceptance of Hot Mix Asphalt Mixture On Local Agency Projects dated 02-26-20.

3. Pavement Density

A negative 10% adjustment in the HMA mixture unit contract price will be imposed on the lot or subplot if either the lot pavement density (average of all lot gauge readings or core results) is less than 92%, but equal to or greater than 91%; or if 2 or more readings or cores in any given subplot are less than 91%.

A negative 25% adjustment in the HMA mixture unit contract price will be imposed on the lot or subplot if either the lot pavement density (average of all lot gauge readings or core results) is less than 91%, but equal to or greater than 90%; or if 2 or more readings or cores in any given subplot are less than 90%.

If any subplot has an average density of less than 90%, the Contractor shall remove and replace the entire subplot at no cost to the owner.