

2009-18
LAPEER COUNTY ROAD COMMISSION
ANNUAL BID
BITUMINOUS SURFACE TREATMENT

DESCRIPTION

This work shall consist of one or more applications of bituminous material applied to the prepared surface and one or more coverings of either course or fine aggregate applied to the bituminous material. The work shall be done in accordance with this specification.

MATERIAL

The material shall be as follows:

Aggregate for Cover Material – Slag or as specified by Engineer

Bituminous Prime Coat – SS1H

Bituminous Surface coat – HFRS-2

CONSTRUCTION EQUIPMENT

All equipment used shall be sufficient size and in such mechanical condition as to produce a satisfactory job.

1. **PRESSURE DISTRIBUTORS** – The distributor shall be mounted upon a vehicle, which is capable of maintaining the uniform speeds required for proper applications of the bituminous material. The vehicle shall be equipped with an accurate tachometer, which is calibrated to indicate speed in feet per minute.

It shall be equipped with heating facilities capable of maintaining the bituminous material at the specified temperature. A positive displacement type pump, installed so as to permit circulation of the material in the tank and between the tank and the spray bar, shall be provided. The pump power shall be independent of the vehicle power, in order to provide a uniform distribution of the bituminous material, at the rate specified. The distributor shall be equipped with a tachometer calibrated in revolutions per minute or gallons of 3 to 24 feet, in one-foot increments.

The nozzles shall produce a uniform fan spray and shutoff shall be instantaneous with no dripping. Nozzles in various sizes between 1/8 and 1/4 inch, inclusive, shall be available and the size used shall meet with the approval of the Engineer.

The spray bar shall be set with the proper height to provide a uniform application at the specified coverage rate.

2. **CHIP SPREADER** - The chip spreader shall be self-propelled and shall be equipped with pneumatic tires.

The spreader shall be equipped with a screen mounted below the metering gage.

The spreader shall be capable of spreading the cover material uniformly at widths of 3 to 12 feet. The rate of discharge of the spreader shall be adjustable to spread uniform layers of 5 to 50 pounds per square yard.

3. **COMPACTING EQUIPMENT** – Shall be self-propelled, rubber tired or tandem rollers. Rollers shall weigh not less than 8 ton.
4. **MISCELLANEOUS EQUIPMENT** – Sufficient equipment for hauling cover material shall be provided to insure continuous covering of bituminous material. A self-propelled power broom and all necessary hand tools, thermometers, etc. shall be provided. A drag shall be available for use when required by the Engineer.

RATE OF APPLICATION

1. **BITUMINOUS SURFACE COAT**
 - a. The first bituminous surface coat of HFRS-2 shall be applied at the rate of 0.30 gallon per square yard.
 - b. The second bituminous surface coat of HFRS-2 shall be applied at a rate of 0.35 gallon per square yard.
2. **BITUMINOUS PRIME COAT**

The prime coat over gravel of SS1H shall be applied at a rate of 0.20 to 0.30 gallon per square yard.
3. **AGGREGATE FOR COVER MATERIAL**
 - a. First application of cover material shall be applied at the rate of 18 to 22 pounds per square yard.
 - b. Second application of cover material shall be applied at the rate of 18 to 22 pounds per square yard.

PREPARATION

Work required on existing surface such as base repairs, patching and sweeping shall be done by the owner.

Work required on existing gravel road, prior to priming, such as grading, shaping and rolling shall be done by the owner.

Contractor shall find suitable stockpile locations for stone and bituminous storage during the operation and shall restore area upon completion of contract.

CONSTRUCTION

1. **EXISTING SURFACE** - The bituminous material shall be applied at the rate specified and covered immediately with the aggregate. In no instance shall the chipper be more than 400 feet behind the distributor. The aggregate should be compacted into the bituminous material by a self-propelled roller directly behind the chipper. At no time shall the aggregate cover material be left unrolled for more than 10 minutes. The second seal coat application shall be applied as soon as possible.
2. **GRAVEL SURFACE** - The seal coating operation shall not be started until the prime coat has properly cured. Twenty-four (24) hours curing time may be required depending on existing conditions. The seal coating construction procedure over prime shall be the same as described in the above paragraph.

WEATHER LIMITATIONS

No bituminous material shall be applied during rainy weather or when the air temperature in the shade is less than 50 degrees except by the approval of the contracting officer.

METHOD OF MEASUREMENT

Field measurements of the areas seal coated in square yards shall be determined by the Engineer in the presence of the contractor and or with his concurrence.

BASIS OF PAYMENT

Double seal coat will be paid for at the contract price per square yard, which price shall be payment in full for furnishing, heating, hauling and apply the bituminous material, furnishing, hauling and placing the cover material dragging, rolling, replacing disturbed material and constructing the surface complete.

ALTERNATE A

The undersigned bidder agrees that he will contract with the owner to furnish all material, labor, equipment and all things necessary to complete the work in accordance with plans, specifications and related documents.

DESCRIPTION	QUANTITY	UNIT
Single Surface Treatment	Square Yard	\$ _____
Double Surface Treatment	Square Yard	\$ _____
Prime Coat	Square Yard	\$ _____

ALTERNATE B

County will pay for stone and bituminous materials and contractor will order materials. Contractor is responsible for all demurrage charges.

DESCRIPTION	QUANTITY	UNIT
Single Surface Treatment	Square Yard	\$ _____
Double Surface Treatment	Square Yard	\$ _____
Prime Coat	Square Yard	\$ _____

DAMAGE LIABILITY AND INSURANCE

The contractor shall save harmless and indemnify the Board of County Road Commissioners of the County of Lapeer against all claims for damages to public or private property and for injuries to persons arising out of and during the progress and to the completion of the work.

The contractor shall, prior to execution of the contract, file with the Road Commission a certificate that he carries Worker's Compensation Insurance, with a 10-day notice of cancellation.

The contractor, prior to execution of the contract, shall file with the department, copies of completed certificates of insurance as evidence that he carries adequate insurance satisfactory to the Road Commission, to afford protection against all claims for damages to property and injuries to persons arising out of and during the progress of the work.

The Road Commission shall be added to these policies as additionally insured, with a 10-day notice of cancellation clause.

Minimum property damage and bodily injury liability covering each contract shall be:

Bodily Injury Liability		Property Damage Liability	
Each Person	Each Accident	Each Person	Each Accident
\$1,000,000	\$2,000,000	\$1,000,000	\$1,000,000

Operations shall not commence until insurance is in force and will cease if it is cancelled.

COMPANY: _____

CONTACT PERSON: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: (_____) _____

By my signature on this document, I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have not communicated with, nor otherwise colluded with any other bidder, nor have I mad any agreement with, nor offered or accepted anything of value from any official or employee of the Lapeer County Road Commission.

SIGNATURE: _____

DATE: _____