

Johnson County Commission

William H. Gabel Presiding Commissioner

John L. Marr Commissioner, Eastern District

Charles Kavanaugh Commissioner, Western District

> Diane Thompson County Clerk

> > August 6, 2019

BID SPECIFICATIONS: Johnson County Road and Bridge – Truck Mounted Spray Injection Road Repair Machine

<u>BID INVITATION:</u> The Johnson County Commission – Road and Bridge Department is requesting proposals for a new and current model Truck Mounted Spray Injection Road Repair Machine; also known as an aggregate spray pothole patcher.

AGGREGATE SPRAY POTHOLE PATCHER, TRUCK MOUNTED, NEW AND OF CURRENT MODEL, EQUIPPED AS ADVERTISED BY MANUFACTURER, TO MEET OR EXCEED FOLLOWING MINIMUM SPECIFICATION:

GENERAL: Shall be a self-contained unit to be mounted on a truck chassis. Minimum 6 yd capacity rectangular shaped aggregate hopper. Unit must produce a minimum of 135 lbs. Of mix per minute under normal patching operation. Minimum 10" channel on main frame. Aggregate hopper opening minimum 9' x 7' for safe and easy loading. Directional arrow board on rear for safety. Vibrator on aggregate hopper. Patcher shall be capable of delivering aggregate size ½" down in a continuous flow by a pressurized air stream system. Shall be equipped with a light weight vent flow nozzle. Operator control for asphalt nozzle and aggregate control shall be conveniently located and easy to operate. Rear mounted round aggregate hoppers will not be accepted. Aggregate hopper shall be equipped with a vibrator that is controlled from the operator's station. Manufacturer's standard color. Manufacturer's standard warranty. Manufacturer of the equipment being bid must have been manufacturing the truck mount patcher for a minimum of five (5) years to assure the customer of receiving a product that is proven in the market place.

BLOWER-VAC AIR CONVEYOR: Dual air operated slide gates for safety and inspection. One to allow aggregate from the 6 YD hopper into a small hopper box. The second to allow aggregate into the air stream from the small hopper box. Slide gate operated by 12 volt air solenoid and one dual acting air ram to allow aggregate into air stream by remote switch at control handle. Hopper box shall have safety shield in place, shall handle aggregate from ¼" – ½" grade allowing aggregate up to 2 ½" size to pass through without clogging the aggregate system.

ENGINE: John Deere Diesel, Water Cooled 74 Bhp (Minimum) Final Tier 4 Compliant

BLOWER: Produce 450 c.f.m. with 7 psi at 1,500 r.p.m.'s using approximately 42 BHP driven directly off engine fly wheel eliminating belt drive, maximum blower temperature is 275 F. Normal operations is under 230 F.

<u>AIR FILTERS</u>: Engine: paper element blower: paper element with foam precleaner. Minimum 300 sq. In of filtration area Compressor: paper element or may use engine filter

<u>COMPRESSOR</u>: Heavy duty continuous use dual stage with governor. Bolt directly to engine auxiliary drive eliminating belt. No belt driven compressors will be accepted.

TANKS: Emulsion tank: 250 gallon, 200 psi working pressure at 500 f. Must have 12" t-bolt closure. Insulation: r-15 rated covered by a weatherproof FRP (fiber reinforced plastic) cover that is fire retardant. Has two 1,500 watt, 120 volt heater blankets thermostatically controlled. Heating system must be capable of heating an empty tank without damage to the heating system. Has pressure relief valve set between 100 psi and 110 psi pressurized emulsion line clean out tank: 15 gal. Pressurized diesel tank. 200 psi working at 450 f. Safety pressure relief valve set between 100 psi and 110 spi. Engine fuel tank: 18 gallons. No machine using heat probes inside the tank will be accepted. 2 way rotary valve will not be accepted.

HOSES: Aggregate hose: 3 ½" i d schedule 40 pipe 10' long connected to 3 1/2" i d non-kinking, plastic wire reinforced rubber neoprene lined hose 16'4" long for a total length of 26'4". Emulsion line: 3/8" i d hose, 250 psi rated, 20' long. Diesel clean-up line for cleaning emulsion line out. 15' long.

VENT FLO NOZZLE: 3 ½" lightweight, perforated tube 13" long. Has a ½" by 1/16" spray slot for 100% coating of aggregate. Has perforated holes to relieve air when aggregate exits nozzle to repaired area. This prevents repair material from being blown out of repair area. Nozzle will not use spray rings to coat aggregate. Spray slot outside nozzle and held on by a hose clamp will not be accepted. Spray nozzle will have a 12 nozzle heater for cold weather use.

HOT OIL HEAT EXCHANGER: 12-volt circulator pump, circulates heated oil through a 2" diameter 4' long pipe inside emulsion tank then through a 3/8" diameter hose to the emulsion nozzle and back to heat exchanger. This keeps the emulsion tank, emulsion line and nozzle at an average temperature of 140F for cold weather use down to 5F. Machines circulating engine coolant from engine will not be accepted.

<u>SWING HOSE CARRIER</u>: To hold complete aggregate hose off ground to provide easier control for operator. No fatigue design. Tri-flex design. Lock to side of machine during transport for safety. Machines with the boom locked to the rear during transport be accepted.

<u>CONTROLS:</u> All functions emulsion, engine rpm, aggregate, vibrator on hopper and horn will be controlled from operator's station at end of hose.

<u>SERVICE</u>: Equipment to be delivered fully assembled ready to operate Johnson County Road and Bridge Department at 335 E. North Street, Warrensburg, Missouri (contact Road and Bridge Supervisor to arrange). Factory or dealer representative is to check equipment on delivery, give Road and Bridge Supervisor information on operation and service requirements and provide training for the operators.

PARTS AVAILABILITY: Dealer name and location where parts and service are available.

<u>LITERATURE</u>: One (1) set of operator's manual, repair manual and parts book to be furnished with each unit.

FAIR EMPLOYMENT PRACTICES: The Approved Bidder agrees they will not discriminate against any employee or applicant for employment, to be employed in the performance of this contract with respect to their hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment because of their age, (except when based on a bona fide occupation qualification), or because of their race, color, religion, national origin, ancestry, sex, height, weight, marital status, veteran status or handicap unrelated to the ability to perform the duties of a particular job. (Act No. 251 P.A. 1955, as amended).

OPTIONS TO BE INCLUDED IN THE BID PRICE:

- Aggregate hopper heater
- Pull tarp for aggregate hopper
- Rear view camera

BID SUBMISSION The bid submittal should be submitted on the provided Bid Form and include: make, model, machine descriptive literature, machine price, options pricing, agreement to meet specifications. Sealed proposals will be accepted in the County Clerk's Office (County Courthouse, 300 N. Holden, Suite 205, Warrensburg, MO 64093) no later than 1:30 p.m. on Thursday, August 29, 2019 at which time proposals will be opened in the Commissioner's Office. The words "POTHOLE PATCHER—DO NOT OPEN" must be clearly marked on the outside of the envelope containing said proposal.

<u>BID AWARD</u> The County Commission reserves the right to reject any and/or all bids and may select the bid which they determine to be most advantageous.

JOHNSON COUNTY COMMISSION

William H. Gabel, Presiding Commissioner

ABSENT

John L. Marr, Eastern Commissioner

Charles Kavanaugh, Wistern Commissioner