

**SPECIFICATION/PRICE SHEET
ONE (1) TRAILER MOUNTED, DIESEL POWERED, TRASH PUMP**

INTENT:

It is the intent of the City of Marquette to contract with a vendor to establish pricing for furnishing **ONE (1) TRAILER MOUNTED, DIESEL POWERED, TRASH PUMP.**

DELIVERY:

The complete and assembled unit is to be bid F.O.B. the Wastewater Plant 1930 US 41 South, Marquette, MI 49855.

GENERAL REQUIREMENTS:

These specifications, by content and intent, are meant to describe a complete, well designed and well-constructed unit. All components of the entire unit shall be of such size and capacity to assure the maximum utilization of the entire unit. The interpretation of these specifications shall be made upon the basis of this concept.

The unit must be equipped with all equipment required for the unit to meet or exceed all applicable State and Federal Motor Vehicle regulations and all State and Federal Occupational Health and Safety Standards.

Only new, current model year units shall be considered for the proposal. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and shall be furnished.

All manufacturer's specifications, factory parts, service, and repair manuals shall be provided for each component of the entire unit. There shall be two (2) complete copies of operation manuals for the entire unit. In the event the manuals are not available at delivery, \$150.00 will be retained pending receipt of each manual.

SERVICE AND WARRANTY

The vendor shall furnish a manufacturer's service and warranty policy and shall pay any costs of inspection and adjustment that may be necessary in accordance with the warranty. The unit and all accessories shall be covered by a full parts and labor warranty for a minimum of one (1) full year.

FACTORY TRAINING

The manufacturer shall furnish the services of a competent representative to inspect the system prior to delivery, supervise the startup and testing of the system, and certify the system has been properly furnished and is ready for operation. In addition, instruct the City's operating personnel in the proper operation and maintenance of the system as required.

GENERAL INFORMATION:

Use column marked "Compliance" to indicate compliance with the specifications. Write "Yes" in the blank if the component is in compliance. If not, so indicate and provide detailed

manufacturer's specifications for substitute component. Bidders must fill in compliance for each line item as the City reserves the right to delete individual items.

CLARIFICATIONS:

Questions regarding ambiguities or the propriety of these specifications shall be addressed, in writing, to the Wastewater Treatment Plant Director, Mark O'Neill, no later than three (3) days prior to the formal bid opening. Such questions will not be entertained after this time.

SPECIFICATION/PRICE SHEET

ONE (1) TRAILER MOUNTED, DIESEL POWERED, TRASH PUMP

The city is interested in purchasing an 8" trailer mounted, auto prime, diesel-powered trash pump meeting the following criteria, The diesel driven pump set must be of a heavy duty construction such as the type used within the construction, mining, and the pump rental industry, with the ability to work continuously.

The priming system should be an integral part of the pump with the ability to switch on and off automatically on demand and be capable of priming automatically from dry conditions at a 28-foot vertical suction lift to be fully operational within 20 seconds.

The pump shall be capable of running dry without damage for long periods and capable of passing 3" solids, fibrous material, gaseous sewage and sludge that can be found in emergency flood conditions.

Bids will be accepted for consideration by the city on any make and model that is equal to or superior to a Global Pump 8GST, eight-inch, trailer mounted pump as interpreted by the city.

COMPLIANCE

1. The diesel-powered engine shall be minimum 4 cylinders with easily accessible engine fluid inspection/fill openings. The cooling system, engine air intake and exhaust shall be designed for optimum performance and operator safety as approved by the City. _____

2. The pump shall be a non-clog, enclosed impeller type with Replaceable wear rings on both impeller and suction Cover. The separate suction cover shall be removable without disturbing the pump casing. _____

3. The throttle shall be operator adjustable to set governed engine speed at any range between minimum and maximum design speed. _____

4. Please provide speed and flow rates for the proposed pump, set up @ 750' MSL with a suction head of 15' and a TDH of 25' utilizing 8" suction and discharge hose at 50°F.
Minimum _____ rpm with a flow rate of _____ gpm
Maximum _____ rpm with a flow rate of _____ gpm _____

5. ~~The pump shall be capable of operating at any speed~~ between the minimum and maximum for extended periods of time without restrictions or damage to the pump, priming system and/or engine _____

6. The pump shall be capable to run completely dry for extended periods of time (24 hr) without adverse effect on the pump/priming system and/or engine as approved by _____

COMPLIANCE

the city. The mechanical seal shall be constantly lubricated without influence of the product being pumped, requiring no maintenance or adjustment. Please describe the drive/seals/lubrication systems employed to deliver these characteristics.

7. Gauges shall be provided to monitor engine oil pressure, voltage, coolant temperature, hour meter and tachometer. The hour meter shall indicate actual hours of engine running time.

8. Shall come equipped with automatic low engine oil pressure and high engine temperature shut down system.

9. Shall come equipped with three ignition keys.

10. The engine shall come equipped with spin on fuel and engine oil filters.

11. The fuel tank shall be sized for a minimum 24 hours of operation at full throttle and load as approved by the City. The fuel tank shall come equipped with an accurate, easily accessible fuel gauge as well as vandal proof fill and vent openings as approved by the City. The fuel tank shall be constructed of corrosion resistant materials and openings shall be provided for inspection and cleaning as approved by the City.

Consumption per hour under full load ___ gals
Fuel tank capacity ___ gals
Fuel tank composition ___ gals

12. The pump shall be designed to be easily maintained, to pump at manufacturers published capacity over years of use. Please describe in detail the procedure to keep the pump end at optimum performance with shims, replacement wear components, adjustment, etc. Also provide estimated operating hours and costs per service interval over a 5,000-hour utilization period.

COMPLIANCE

13. The pump shall be fitted with a fully automatic, compressor driven venturi, air ejector priming system. The compressor shall be engine driven. The priming/air ejection system shall start and stop on demand while continuously sensing suction conditions and air/liquid level on the suction side of the pump as approved by the City. The pump shall have the ability to repeatedly cycle from pump-snore-reprime-pump. The air/water separation shall be designed to eliminate the possibility of water being drawn into the air source as approved by the City.

14. The pump set shall be capable of operating automatic engine start-stop-start cycles in conjunction with a set of remote float switches. Please describe and indicate costs to provide this feature.

15. The pump shall be designed to easily drain the entire casing and any wet cavities which may become frozen during cold weather as approved by the city.

16. Please describe the nature of the inlet/outlets and the manufacturer and model of the fittings required for connections. The suction flow path shall be in axial alignment with the impeller eye, free of sharp turns or other features that may create suction turbulence.

17. A non-return check valve and shut off valve shall be provided between the venturi and the venturi hat to maintain engine prime after engine shutdown and to allow isolation of the priming system.

18. The entire trailer mounted pump set shall come equipped with a single point lift eye located at the vertical center of gravity to lift the entire unit evenly. Please indicate total weight of the unit as specified including fuel. _____ lbs.

TRAILER

COMPLIANCE

1. The complete structural trailer assembly including the axle and wheel rims shall be hot dipped galvanized or another City approved method of corrosion protection.
2. The axle, suspension, wheels and tires shall be rated for at least 25% more than the actual unit weight.
3. Fenders shall be provided that protect the unit from overspray as well as under spray as approved by the city.
4. The towing connection shall be a commercial duty 2 5/8" ball coupler with a minimum adjustment range from 15" to 20" tow height.
5. All wiring shall be protected with conduit and terminated with waterproof/salt proof connectors. The sealed modular LED lighting system shall be of the recessed design, mounted in rubber bushings and connected to the wiring system with the aforementioned connectors.
6. The fore and aft zinc plated jacks shall be of the side-wind, quick-release, spring-loaded, 4 position swivel design with a minimum capacity of 1000 lbs. each.
7. The trailer shall include all applicable equipment and lighting required for DOT compliance. Including electric brakes.

BID ATTACHMENTS

The following information shall be included with the bid:

- Head/capacity curve
- Pump absorbed power curve (flow, head, horsepower)
- Capacities at suction lifts
- Solids handling capability @ variable flow rates
- A drawing illustrating priming system
- A drawing with operational dimensions

DEALER SUGGESTED OPTIONS OR ACCESSORIES

Available options or accessories not covered elsewhere in the bid specifications which may contribute to greater safety, productivity or convenience will be considered by the city. Please describe any additional suggested items for your proposed pump set and provide costs.

Please specifically address fittings and hose/pipe connections for both suction and discharge plumbing.

Do not include the cost for these extra items in your bid price on the proposal sheet.

ONE (1) TRAILER MOUNTED; DIESEL POWERED TRASH PUMP
BP23-01

Lump sum bid consisting of the purchase of One (1) Trailer Mounted, Diesel Powered Trash Pump.

Lump Sum Bid: \$ _____

Signed: _____

Title: _____

Firm: _____

Address: _____

Phone No: _____

**BIDS SHALL BE SUBMITTED ON THIS FORM IN DUPLICATE IN
SEALED ENVELOPES CLEARLY IDENTIFYING THE BID TITLE**

BIDDERS LIST

BP23-01

TRAILER MOUNTED, DIESEL POWERED, TRASH PUMP

Mersino
10162 Coldwater Rd.
Davison, MI 48423
866-637-7466

Miller Power & Pump
1700 Fireline Drive
Green Bay, WI 54311
920-406-1951

Lincoln Contractor Supply, Inc.
11111 W. Hayse Avenue
Milwaukee, WI 53227
414-541-1327

AIS Rental Sales Corp.
4600 AIS Drive
Bridgeport, MI 48722
989-777-0090

Crane Engineering
707 Ford St.
Kimberly, WI 54136