ADVERTISEMENT FOR BIDS
CITY OF MANDAN

Proposal for Source Capture Exhaust Systems

The Mandan Fire Department will be accepting sealed bids at its Headquarters Fire Station located at 110 Collins Avenue Mandan, North Dakota, 58554 until September 9th 2024 at 10 a.m. CST at which time bids will be publicly opened and reviewed at that location. All bidders are invited to be present at the opening of the proposals.

All bids shall be sealed and clearly marked "Bid for Source Capture Exhaust Systems" with the name of the person, firm or corporation submitting the bid. Each bid must be accompanied by a separate envelope containing the contractors license and bid security. Bids must be submitted on forms provided by the City of Mandan Fire Department and in accordance with detailed specifications and conditions therein contained. Copies of the bid proposal forms and detailed specifications may be obtained from the Mandan Fire Department at 110 Collins Avenue, Mandan, ND or at www.cityofmandan.com.

Work will be completed at Mandan Fire Station 1 located at 110 Collins Avenue and Fire Station 2 located at 2009 40th Avenue SE in Mandan, ND and consists of installing all electrical, structural, and mechanical components of a source capture exhaust system.

Any inquiries regarding this bid shall be made in writing via E-Mail to Shane Weltikol with Mandan Fire Department.
sweltikol@cityofmandan.com

The Mandan Fire Department reserves the right to hold all bids for a period of thirty (30) days after the date fixed for opening thereof and to reject any and or all bids and to waive irregularities whenever it is for the best interest of the City of Mandan.

Date: August 7th, 2024

City of Mandan
Jim Neubauer
City Administrator

Legal Publications: August 16th 2024 and August 23rd 2024

Extraction System Overview

The exhaust system shall be designed to vent 100 % of exhaust gases and particulate safely to the outside of the fire station. The exhaust system shall be designed and installed by factory trained and authorized personnel, which have been certified by the manufacturer of the exhaust system. Manufacturers shall be required to have a minimum of five years of proven manufacturing experience in the manufacture of emergency vehicle exhaust extraction equipment. The department shall be able to use the exhaust system for performing engine and pumper checks indoors.

Comply_____ Do Not Comply_____

System Description

The exhaust system shall be a source capture system designed to handle exhaust fumes from diesel engines. The system shall be flexible and allow movement of apparatus from bay to bay. A total of 3 capture points in Fire Station #1 and a total of 1 capture point in Fire Station #2. Only systems designed with a suction rail or expandable hose track shall be considered. All equipment and material of this exhaust system package must be of standard product of the prime manufacturer. No products not found in manufacturer's catalog from other secondary companies shall be offered. Product shall have proven history longevity and service.

Comply_____ Do Not Comply_____

Overall System Performance

System must be designed for high temperature vehicle exhaust fire rescue applications. The system shall automatically activate, disconnect, shutdown, and reactivate upon return without human intervention.

Comply_____ Do Not Comply_____

System Warranty and Repairs

Complete exhaust system parts warranty shall be for a minimum of 3 years from the system manufacturer. Provide details of length of warranty and coverage specifications. In addition, a three year parts warranty shall be extended as well. A warranty certificate describing the warranty to be provided must be included in the bid. Location and name of nearest service outlet should be listed in the bid. Location of parts inventory shall be indicated as well. The company will list expected response times for emergency repairs.

Comply _____ Do Not Comply_____

Turnkey Installation

Complete exhaust system installation including the exhaust fan, control box, ductwork, track hose and nozzle connection must be completed. All electrical work from the panel out is included in this scope of work. These exhaust systems are to be incorporated into the emergency generator supplied electrical system. Tailpipe modifications that are required to ensure proper system operation are to be included in the scope of the work. Any modifications or relocation of ceiling mounted heaters required to install the exhaust system in the apparatus bay should be included in the bid. Vehicle mounted activation equipment shall be included in the bid.

Comply _____ Do Not Comply_____

Method of Nozzle Attachment

The system shall be designed so that attachment to exhaust hose is accomplished by the operator standing erect and with one simple motion to connect system to the vehicle. A rigid lower hose section with handle shall be provided to allow for easy hose connection and have an extreme high temperature rating of 950 degrees or greater. The lower section hose shall be constructed using engineered materials that allow hose to maintain its shape and rigidity.

Comply_____ Do Not Comply_____

Method of Nozzle Release/Universal Nozzle

The release of the nozzle shall occur by a forward motion of an apparatus. The separation shall be accomplished by a simple mechanical release. Preference will be given for systems which do not require support systems for nozzle separation such as pneumatics or electronics. The nozzle shall not allow for the potential escaping of diesel exhaust into the bay area. It is required that the nozzle seal around the tailpipe to prevent the possibility of diesel fume escaping back into the bay area. Adapters that have opening that allow gases to escape are not acceptable. The nozzle may allow for the introduction of ambient air to significantly cool the air stream inside the hose and prolong the life of the equipment. The disconnection of the nozzle shall be accomplished by the forward motion of the apparatus. The disconnection of the hose shall not be speed dependent. The nozzle must separate from the tailpipe at the same point each time regardless of the speed of the vehicle.

Comply_____ Do Not Comply_____

Sliding Tracks

Horizontal tracks shall be made of lightweight corrosion resistant materials designed to support the hose drops, suction hoses and retraction systems. All tracks shall be mounted in such a way as to allow for future adjusting.

Comply_____ Do Not Comply_____

Exhaust Collection

Collection Rails/Hose shall be of a lightweight corrosion resistant material designed to withstand exhaust gases and temperatures. Sizing shall be capable of enough CFM to evacuate the exhaust gasses produced by the connected vehicles running @1500 RPM. All trolley assemblies shall be externally mounted outside of the exhaust air stream. Impact dampening devices shall be used to reduce impact of forward moving assemblies. At no time shall metal to metal contact be allowed. If filters are used in the collections system, the manufacture will provide one additional set of filters.

Comply _____ Do Not Comply _____

Control System

The control system shall be designed to automatically turn on the fan when a running vehicle is connected, or a connected vehicle is started. The system shall continue to run for a time period determined by the fire department. Preference will be given for fully automated start and stop systems, however, other control options may be considered.

Comply _____ Do Not Comply _____

Quality Standard Assurance and Experience:

All standards of quality are met and adhered to: UL, NFPA, AMCA, IMC, ASME, UMC, NEC and all local and state building codes. Independent System testing information documenting the overall the effectiveness of the proposed system in a fire station must be included.

Comply_____ Do Not Comply_____

Work Completion:

The entirety of the project can be completed by February 1st, 2025.

Comply _____ Do Not Comply_____

Source Capture Exhaust System Bid Form

For The City of Mandan, ND

Bid Opening: 10:00 A.M. C.S.T.
September 9th 2024
Mandan Fire Department
110 Collins Avenue
Mandan, ND 58554

Company Name_____

Address_____

City, State_____

Name and Title_____

Authorized Signature_____

Phone #_____

E-Mail Address_____

Date_____

Does your proposal meet all bid specs as advertised and without exception? (circle one) Yes or No

Please provide detailed explanation of exceptions on a separate sheet if no is selected

Please provide separate sheet with available options or deducts (do not include options or deducts in base price)

Contractor License Included: (circle one) Yes or No

Bid security of 10% included (circle one) Yes or No

Acknowledgement of specifications version 8.29.2024 (circle one) Yes or No

Expected Completion Date: _____
Make and Model: _____

Base Price: $_____