

REQUEST FOR PROPOSAL

Apparatus Exhaust Ventilation System

Contractor Name: _____

- **Total System and Installation** \$ _____

Proposals due: 2:00 p.m. on Tuesday, February 11, 2020

The Village of Broadview is soliciting proposals from qualified firms for the installation of a vehicle exhaust extraction system. The system should accommodate eight (8) fire apparatus.

Scope of Work

1.0 Specifications:

Provide all labor, materials, and equipment necessary to put in working operation a complete turnkey system that will ventilate diesel and gasoline exhaust from the vehicle's tailpipes to the outside of the fire station. All necessary controls, motors, fittings, ductwork, blowers, labor and all other equipment and materials specified shall be part of the work. Tailpipe modifications are to be performed by the bidder and included in bid pricing.

All items of equipment and materials described in these specifications are to be furnished installed and placed into proper operating condition in accordance with best practices and the manufacturer's written or published instructions.

1.1. The exhaust system shall be source capture system designed to vent 100% of exhaust gases from diesel engines and particulate safely to the outside of the fire station. System to be installed as a turnkey project with all labor, tailpipe modifications and duct material included in the scope of work. Electrical connections and Disconnect Switch shall be part of electrical contractor's project scope.

1.2. The system shall not affect personnel boarding the apparatus. The hose assembly shall not come into contact with the vehicle other than one connection point to the vehicle's tailpipe. The hose assembly shall not touch or drag on the bay floor.

1.3. The exhaust system shall not block doorways, exits, and aisles in the apparatus bay, which could endanger the welfare of fire personnel or visitors.

1.4. The department shall be able to use the exhaust system for performing engine and pumper checks indoors.

1.5. The system must be designed for high-temperature vehicle exhaust fire rescue applications. The system shall automatically activate, disconnect, shutdown, and reactivate upon return.

1.6. The system shall under no circumstances allow exhaust leakage or bypass the nozzle.

1.7. No tailpipe adapter shall extend past the side of the apparatus in compliance with NFPA 1901.

1.8. Exceptions and Variances from any of the specifications outlined in these bid specifications must be acknowledged and listed.

2.0 Quality Standard Assurance and Experience:

2.1. All standards of quality are met and adhered to UL, NFPA, AMCA, IMC, ASME, UMC, NEC and all local and state building codes. The product is to be supplied by the manufacturer with a current ISO-9001-2008 certificate in manufacturing, design, layout, and sales functions.

2.2. Manufacturing Experience: System manufacturer must have experience manufacturing automatic vehicle exhaust removal systems for the fire/rescue market. References must be made available upon request.

2.3. Submittals indicating rated capacities and product features must be included for the following:

- a. Fan power ratings with blower curves provided
- b. Motor ratings and electrical characteristics
- c. Hose Ratings and testing verifications
- d. Controller
- e. Rail and Track information as specified

2.4. Shop Drawings: a full and complete drawing showing detailed layout of the system including elevations, length of the track assembly, duct layout with detail, fan location and any other relevant information.

3.0 Air Volume and Fan Requirements:

3.1. The exhaust fan shall provide an appropriate CFM to avoid pressure loss in the duct system but also limit noise disturbance.

3.2. Fans shall be tested and balanced prior to installation, be manufactured in an ISO Certified Facility in accordance to AMCA Certification Standards.

3.3. A safety disconnect in the vicinity of the blower fan motor must be provided.

3.4. Fan motor shall be a totally enclosed, fan cooled and comply with UL 705 and NEMA Standards.

4.0 Installation and Duct Connections:

4.1. Complete exhaust system with all equipment and installation including the exhaust fan, control box, ductwork, track, hose and nozzle connection must be completed. Electrical work is not included in this scope of work. Tailpipe modifications from the muffler out that are required to ensure proper system operation are to be included in the scope of the work by the contractor.

4.2. All penetration through walls and ceilings and roof shall be properly sealed. If a fire rated wall is penetrated, the fire rated wall shall be sealed with the proper rated sealant.

4.3. All duct material installed as part of this project shall conform to Class II SMACNA Standards. An appropriate rain cap shall be provided on the building exterior.

4.4. All system components shall be labeled with manufacturer identification.

4.5. Installation of the system shall be accomplished by a factory authorized installer that has experience installing emergency response exhaust systems.

5.0 Nozzle Details and Attachment:

5.1. The system must provide complete exhaust removal at the source from vehicle start-up to exit of the apparatus from the station. Nozzles should sufficiently seal to vent to the outside even in the event that fan does not properly activate.

5.2. 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 the system to the vehicle. A rigid lower hose section with handle shall be provided to allow for easy hose connection.

5.3. Tailpipe adapter plate shall be an appropriate diameter to provide sufficient ground clearance.

5.4. The tailpipe adapter and nozzle shall be uniform in size to allow vehicles to move freely from bay to bay.

5.5. Pneumatic and magnetic nozzle designs will be considered.

6.0 Sliding/Expandable Hose Track:

6.1. The exhaust system shall use a track support system to convey the exhaust hose from the vehicle's parked position all the way to the door threshold.

6.2. Rail and track system must be supported using adjustable, telescopic support legs allowing for future adjustment and changes to the system.

7.0 Suction Rail:

7.1. To best facilitate possible situations where vehicles are parked in tandem and exited in the same direction, a suction rail system must be used to provide a neat, clean installation, complete with shock absorber assembly and rubber bumpers.

8.0 The System Balancer:

8.1. The System balancer shall retract and keep the hose and nozzle from dangling on the floor.

8.2. Hose shall be supported by the balancer using a lifting elbow.

9.0 Extraction System Exhaust Hose:

9.1. The flexible exhaust hose is manufactured for the sole purpose of venting high-temperature exhaust gases which are produced by internal combustion engines.

10.0 Auto-Start Control System:

10.1. Control system shall be designed to sense the output pressure normally generated by an internal combustion engine. When the nozzle is connected to the vehicle's exhaust tailpipe and the vehicle is started by the operator an automatic controller, the increased output pressure shall be detected by a pressure sensor and activate the exhaust fan. A low voltage timer will keep the exhaust fan operating for a period of time designated by fire department procedures. As an option, ignition start activation may be also offered for consideration.

11.0 System Warranty:

11.1 Complete exhaust system parts warranty shall be for a minimum of 1 year. A warranty certificate describing the warranty to be provided must be included. Location and name of nearest service outlet should be listed. Location of parts inventory shall be indicated as well.

General Information

Award of Contract: The Board of Trustees of the Village of Broadview, will review the proposals and make the final selection. The Village of Broadview reserves the right to reject any, all, or portions of proposals or accept the proposal the Village deems to be in its best interest, regardless of the lowest proposal amount. The Village reserves the right to request additional data or information or a presentation in support of written proposals, however, the Village may award a contract based on the offers received, without additional submissions. The proposal should be submitted on the most favorable terms, from all aspects, which the contractor can submit. The Village reserves all rights to negotiate with the contractor of its choice based not solely upon cost alone but on the qualifications and ability of the contractor to perform, consistent with the Village's intent, requirements, time schedule, and funds availability.

Tied Proposal: When identical low proposals are received with respect to price, delivery, and quality, preference may be given to the local respondent. Any respondent having a local agent who is a bona fide resident of the Village is considered to be local.

Work Guarantees and Warranties: The contractor will guarantee the work and materials and the work and the materials of all subcontractors for a period of one (1) year from the date of acceptance of the work by the Village and agree to leave the work in perfect order at completion. Neither the final certificate of payment nor any provision in the Contract documents shall relieve the contractor of responsibility for negligence, or faulty materials, or workmanship within the extent and period provided by laws, and upon written notice, they shall remedy any defaults due thereto and pay all expenses for any damage to work resulting therefrom. It is hereby specifically agreed and understood that this guarantee shall not include any cause or causes other than defective work or materials. It is further understood that the Board of Trustees shall be the final judge as to whether or not any defect is a defect in workmanship and/or materials, which is the contractor's responsibility. All manufacturers' warranties shall apply.

Liquidated Damages Clause: If the contractor shall neglect, fail, or refuse to complete the work within the time specified for substantial completion of the contract, then the contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Village, as liquidated damages and not as a penalty, the sum of \$1,000 per day for each calendar day beyond the dates set forth in the agreement that the contractor fails to achieve substantial completion of the project. Said amount is agreed to be a reasonable estimate of the amount of damages which the owner will sustain and said amount shall be deducted from any monies due or that may become due to the contractor, and if said monies are insufficient to cover said damages, then the contractor shall pay the amount of the difference.

Pricing: All prices should include all labor, material costs, shipping and any discounts offered.

Payment: The contractor will be responsible for invoicing the Village. Invoicing will be based on the completion or percentage of completion of major, well-defined tasks as defined in the proposals of unit prices. Final payment will be made upon final acceptance by the Village of the project. Upon receipt of the invoice, the Fire Chief will make the determination of whether or not

work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished. The Village of Broadview reserves the right to withhold twenty percent (20%) of the total contract amount until a final inspection of the project is completed by the Village and all work and material are determined to be completed satisfactorily.

Governing Law and Venue: Any contracts entered into by the Village and the successful respondent shall be governed by the laws of the County of Cook, State of Illinois, as well as all applicable Federal and State laws, regulations, Village ordinances and the rules and regulations of all authorities having jurisdiction over the project, and these shall apply to the contract the same as though written out herein in full, and the contractor shall indemnify the Village and its representatives against any claim or liability arising from or based on any such law, ordinance, rules and regulation by themselves or by their employees.

Insurance: The successful contractor or bidder shall maintain, at least, the following specific levels of coverage and shall further, upon execution of any negotiated agreements, name the Village of Broadview as an additional insured on all applicable policies. The minimum coverage levels are as follows:

- a. A General Liability insurance limit of not less than \$1,000,000 each occurrence; and
- b. A \$2,000,000 General Aggregate limit on a per project basis; and
- c. Shall include the Village of Broadview, as an Additional Insured; and
- d. Business Automobile Liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and property damage covering all vehicles used in connection with contractor's work; and
- e. Workers Compensation and Occupational Disease insurance in accordance with all applicable state and federal laws, with Employers Liability insurance in accordance with all applicable state and federal laws, with Employers Liability insurance limits of at least \$500,000/\$500,000/\$500,000.

Prevailing Wage Act Compliance: Prevailing Wage Act: To the extent that this proposal calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.* ("the Prevailing Wage Act"). The Prevailing Wage Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All contractors and subcontractors rendering services to the Village in response to this request and subject to successful contract negotiations must comply with all requirements of the Prevailing Wage Act, including but not limited to, all wage requirements and notice and record keeping duties.

Submission Information

All Respondents shall provide one original and four (4) copies of the following:

1. A cover letter explaining the contractor’s qualifications and ability to perform the Scope of Work outlined in the Request for Proposals, signed by an executive or employee of the contractor that is authorized to bind the contractor; and
2. Return a signed copy of the Request for Proposal document; and
3. Provide a certificate of insurance naming The Village of Broadview as additionally insured to cover the insurance requirements stated herein under General Information; and
4. Include shop drawings: a drawing showing detailed layout of the system including elevations, length of the track assembly, duct layout with detail and fan location;
5. Submit a proposed installation schedule; and
6. Supply the Village with the company’s qualifications, experience, and three references. Municipal or Fire Protection District references are preferred; and
7. Provide a copy of contractor’s local business license and a signed sworn statement that you are authorized and not otherwise prohibited for conducting business with public entities in the State of Illinois; and
8. Provide a signed and sworn statement that the contractor acknowledges and will fulfill its obligations under the Prevailing Wage Act.

Proposal

COMPANY INFORMATION

Company Name: _____

Mailing Address: _____

Contact Person: _____

Phone Number: _____

Email: _____

Additional information: _____

[SIGNATURE PAGE TO FOLLOW]

By signing below the company certifies the cost and a full understanding of the project as proposed and outlined in the summary of work and the project's timeline. This Request for Proposal and all clauses herein, if accepted, will be considered a binding contract for work approved by the Village's board.

Name and Title of Authorized Signatory: _____

Signature _____ Date: _____

One original and four (4) copies of sealed proposals clearly marked "Apparatus Exhaust Ventilation System" should be mailed to:

**Village Administrator
2350 South 25th Avenue
Broadview, IL 60155**

The deadline to submit a Proposal is 2:00 p.m. Tuesday, February 11, 2020. All Proposals will be opened at 2:30 p.m. in the Village Hall Chambers.

All proposal submittals will be considered public documents under NH RSA 91-A. The criteria for selection will be primarily based on experience, cost, and the quality of the proposal in the multiple engineering disciplines encompassed in the scope of service.

The Village of Broadview assumes no responsibility for any costs associated with the preparation of proposals or participation in the selection process in response to this RFP.

Questions regarding this Request for Proposal should be addressed to Tracy Kenny, Fire Chief at (708) 343-6124, or tkenny@broadview-il.gov