



CITY OF WARRENTON
CLATSOP COUNTY, OREGON

REQUEST FOR PROPOSALS

**Low Pressure Sewer
Grinder Pump System
Equipment Pre-Selection**

April 2024

BACKGROUND

The City of Warrenton owns and operates a wastewater collection and treatment system which serves its approximately 6,357 residents. The wastewater system collects sewage from Fort Stevens State Park in the northwest to the Warrenton-Astoria Regional Airport in the east. Much of the developed area served by the collection system is at a relatively similar elevation (flat), resulting in the need for a wastewater collection system that presently includes nearly 40 lift stations.

As the City continues to grow, development in areas that cannot be easily serviced by conventional gravity collection systems is becoming more likely. The potential for development is high within the Warrenton Urban Growth Boundary (UGB), and to provide wastewater service to these areas, the City intends to develop standardized grinder pump criteria with the grinder pumps pumping to a shared, public low-pressure sewer force main or directly into an adjacent gravity collection system. This RFP intends to identify a grinder pump system provider to standardize this potential growth.

PROJECT DESCRIPTION

The City intends to identify a grinder pump system as part of their Low-Pressure Sewer System Policy.

The grinder pump, wet well, controller, alarm, and associated appurtenances are to be installed typically in the front yard of the residences they serve. The preference is for a system that was designed for this type of residential installation.

EQUIPMENT PROVIDED BY SUPPLIER

Proposed grinder pump low pressure systems should include the following elements:

- Grinder Pump and Wet well
- Alarm
- Control Panel
- Installation mounting hardware and all required appurtenances
- O&M Manual

PRELIMINARY PROJECT SCHEDULE

- Issue RFP April 15, 2024
- Proposals Due May 23, 2024
- Notice of Intent to Award May 30, 2024
- Issue Notice of Award to Supplier June 26, 2024

PROPOSAL REQUIREMENTS

1. Proposals in response to this request shall include all the information regarding the equipment and controls necessary to provide a complete system considering the requirements listed herein. The Proposal Form bound herein shall be utilized and turned in with this complete document and all other required supporting data and information.
2. Supplier shall include the location and extent of support services available to service the proposed equipment.

PROPOSAL EVALUATIONS AND AWARD

1. Proposals will be accepted until the time and date specified. The City reserves the right to extend by Addendum the period for submission of Proposals. Proposals may be withdrawn only prior to the due date. The City will not read proposals aloud. Notification of the results will be made at such time as deemed appropriate by the City.
2. Proposals will be ranked and scored on the following criteria:
 - Overall pumping system performance
 - Pump and motor reliability
 - Capital costs
 - Maintenance costs
 - Ease of customer maintenance

- Proximity and responsiveness of local service providers
- Manufacturer support and in general responsiveness to inquiries

The system with the highest score will be pre-selected as the standard equipment in the City's Low Pressure Sewer system policy.

3. When the Supplier is chosen, that Supplier will be the most responsive, responsible Proposer submitting the best Proposal, provided the Proposal complies with the specified requirements, is reasonable, and is in the best interest of the City to accept.

TECHNICAL SPECIFICATIONS

PART ONE - GENERAL

1.01 GENERAL

This Section covers the general requirements of a residential type grinder pump wastewater storage and conveyance system. The grinder pump system is intended to pump residential wastewater through a service lateral connected to a shared low pressure forcemain, both elements to be installed by others.

- A. Grinder pump stations, complete with all appurtenances, form an integral system, and as such, shall be supplied by a company experienced in the design and manufacture of grinder pumps for specific use in low pressure sewage systems. The proposed grinder pump system shall be complete with all required appurtenances necessary for the installation and operation of the grinder pump system to pump into the service lateral and the shared forcemain.
- B. The supplier shall submit detailed installation and user instructions for its product, submit evidence of an established service program including complete parts and service manuals, and be responsible for maintaining a continuing inventory of grinder pump replacement parts.
- C. All equipment manufacturers must have been in the business of manufacturing grinder pumps or related appurtenances for a minimum of ten years. Supplier must demonstrate to the satisfaction of the Engineer that the proposed pumping equipment will meet system flows and heads required, and that the ancillary equipment being proposed meets or exceeds all performance and safety requirements, materials of construction and user benefits of the specified equipment.
- D. Available power supply is standard residential power, 115 Volts, 60 Hz, 1-phase, 20 amp.

1.02 WORK INCLUDED

- A. The work includes submission of a proposal to provide a complete residential grinder pump station.

1.03 WARRANTY

- A. Proposed equipment shall be warranted for 24 months from date of valid start-up, or 30 months from date of delivery, whichever comes first.
- B. Warranty shall include full replacement of any and all parts supplied by supplier and labor to perform the repair.

1.04 SUBMITTALS

- A. All proposed materials shall be new and a standard product of a reputable manufacturer. Proposal shall include delivery to site in original factory cartons with full manufacturer's warranty.
- B. Proposal shall include the following submittals for grinder pump vault stations:
 - 1. Drawings illustrating details of package pump station with discharge elevation, basin diameter and depth with side and top view.
 - 2. Grinder pump spec sheet with motor and performance curve.
 - 3. Control panel and alarm drawing, wire schematic and spare parts list. Individual electrical control panel components cut sheets.
 - 4. Statement of warranty conditions.

1.05 WARRANTY

- A. The proposed grinder pump manufacturer shall provide a part(s) and labor warranty on the complete station and accessories, including, but not limited to, the panel for a period of 24 months after notice of Owner's acceptance, but no greater than 30 months after receipt of shipment.

PART TWO - PRODUCTS

2.01 GENERAL

- A. The pumps and equipment covered by this Section are intended to be of robust design and proven ability as manufactured by reputable firms having extensive experience in the production of such pumps and equipment. The pumps and equipment proposed shall be designed and constructed in accordance with best practices and methods.
- B. The pumps shall be capable of delivering a minimum of 10 GPM against a rated total dynamic head of 35 feet. The pumps shall be suitable for any operation along its performance curve in the application.

2.02 PRODUCTS

- A. All proposed materials shall be new, and free from defects. They shall be designed to ensure satisfactory operation and operating life in the environmental conditions which will prevail where they are being installed.
- B. All of the equipment proposed shall be the product of a manufacturer experienced in the design and manufacture of grinder pump equipment and pumping stations designed for use in low pressure sewer collection systems.
- C. Proposed fixtures and equipment shall be current models for which replacement items or component parts are readily available.

2.03 PUMP VAULTS

- A. The pump vault shall be of robust and corrosion resistant materials such as: High Density Polyethylene (HDPE), Fiberglass Reinforced Polyester Resin or an approved equal.
 - 1. Pump Vault Construction
 - a. The tank shall be a wetwell design made of a high-grade material selected for environmental stress cracking resistance.
 - b. Any tank seams created during tank construction are to be sealed factory tested for leak tightness.
 - c. Tank wall and bottom must withstand the pressure exerted by saturated soil loading at maximum burial depth. All station components must function normally when exposed to maximum external soil and hydrostatic pressure.
 - d. The tank shall include a lockable cover assembly providing low profile mounting and watertight capability. The cover shall have a minimum load rating of 150 lbs. per square foot.
 - e. All vault penetrations shall be watertight and not jeopardize the structural integrity of the basin.

B. Wiring

1. All electrical cables penetrating or passing through the conduit flange of the pump station must be water-tight and sealed.
2. Wire between control and/or alarm panel and valve vault shall be installed in conduit. Conduit shall terminate or be sealed at the vault to prevent hazardous gas entry into the conduit. Direct burial cable will NOT be allowed between the control or alarm panel and valve vault.
3. All conduit entrances shall be made in a NEC approved manner. The conduits to the wet well shall have approved seal-off fittings installed and properly sealed to protect the control panel from adverse damage from the wet well.

C. Check Valve

1. Pump discharge pipe shall be equipped with a gravity-operated check valve. Working parts shall be corrosion resistant and built to provide repeatability and dimensional stability.

2.04 GRINDER PUMP

- A. Each grinder pump shall be a heavy duty type pump. Each grinder pump shall be capable of reducing all components in normal domestic sewage to finely-divided particles which will pass freely through the passages of the pump and the discharge piping.

2.05 ELECTRICAL MOTOR

- A. The electrical motor shall conform to the following style:
1. Grinder pump shall be equipped with a submersible electric motor rated for operation on 115 volts, 1 phase, 60 hertz, 3 wire service, with a sufficient length of submersible cable (SUBCAB) suitable for submersible pump applications.

2.06 CABLE ENTRY SYSTEM

- A. The cable entry seal design shall insure a watertight and submersible seal. The assembly shall provide ease of changing the cable when necessary using the same entry seal.

2.07 AUTOMATIC CONTROL/ALARM PANEL

- A. The pump controls and/or alarm panel shall be housed in a NEMA 4X rated enclosure.
- B. The control panel shall include an external audible and visual alarm.

2.08 PUMP MOTOR / CONTROL CIRCUIT BREAKERS AND ELECTRICAL COMPONENTS

- A. The pump breakers shall provide for individual motor disconnect and overload / short circuit protection as required for motor branch circuit protection. The voltage rating shall match that of the panel incoming service.

2.09 CORROSION PROTECTION

- A. All materials exposed to wastewater shall have inherent corrosion protection: i.e., coated cast iron, fiberglass, polyethylene, engineered polypropylene copolymer, stainless steel, bronze, PVC, CPVC or approved equal.

END OF SECTION

PROPOSAL FORM

To the City of Warrenton (City):

The Proposer has carefully examined the Request for Proposals and all inclusions therein (Contract Documents), and all addenda. All provisions of the Contract Documents are hereby accepted.

The Proposer represents that it is properly licensed and adequately experienced, equipped, organized, and financed to furnish, and deliver the equipment specified.

The Proposer has carefully reviewed for accuracy all statements in this Proposal and attachments, and agrees that the City will not be responsible for any errors or omissions of the Proposer in preparing this Proposal. The Proposer agrees that this Proposal may not be revoked or withdrawn for sixty (60) calendar days after the date on which Proposals are received.

Addenda

The Proposer acknowledges that it has received the following Addenda No(s): _____ and agrees that all addenda issued are a part of the Contract Documents and have been considered in preparing this Proposal. (Proposer: insert the number of each addendum received; if no addenda were received, write "NONE" in the space).

BID FORM

LOW PRESSURE GRINDER PUMP SYSTEM

MANUFACTURER:

MODEL:

RATED PERFORMANCE, (GPM @ TDH):

CAPITAL COST:

20-YEARS MAINTENANCE COST (please detail required maintenance costs including replacement parts for a period of twenty years after the date of installation):

LOCAL SERVICE PROVIDER:

DISTANCE TO WARRENTON FROM LOCAL PROVIDER:

LOCAL PROVIDER RESPONSE TIME:

STANDARD WARRANTY TERMS:

OWNER:

ADDRESS:

PHONE NUMBER:

EQUIPMENT USED:

DATE OF INSTALLATION:

MAINTENANCE HISTORY/OPERATIONAL ISSUES:

OWNER:

ADDRESS:

PHONE NUMBER:

EQUIPMENT USED:

DATE OF INSTALLATION:

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