

PREFABRICATED GRINDER PUMP STATION SPECIFICATIONS

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1. DESCRIPTION

This work shall include all required excavation and backfill, the disposal of any excess excavated material, installation of the grinder pump assembly, installation of the electrical control/alarm panel, electrical connection between grinder pump and control panel, grinder pump connection to service pipe and stub out with tee and plunger assembly for house drain pipe.

A. Submittals

Furnish shop drawings and guarantees covering the items included under this section of the work.

B. Operation and Maintenance Instructions

The station manufacturer shall submit to the Engineer, through the Contractor, two copies of a manual giving operation and maintenance instruction.

C. Basis of Payment

Payment for prefabricated grinder pump station supplied will be on the basis of the lump sum price as stated on the bid sheet for each size and type delivered.

The Contractor shall buy the pump station from the manufacturer or local representative and indicate that the pump station is for use on an Oakland County Water Resources Commissioner project with pre-negotiated prices, and the cost for material as stated on the bid sheet is thereby guaranteed.

Included in the lump sum price for grinder pump as supplied by the manufacturer shall be: the pump station of model and size as stated, alarm/control panel of model stated, electrical quick disconnects and pump station freight cost delivery to the Contractor.

The lump sum price for grinder pump installation as stated on the bid sheet shall include; excavation, sheeting or bracing, draining or dewatering, normal or special bedding, concrete anchor, backfilling, disposal of surplus excavated material, 10 foot of 4 inch PVC stub with plunger assembly for house drain connection, alarm/control panel installation, including electrical wiring, connections and wire protection between the alarm panel and pump station, clean-up, restoration and all costs associated with transporting, handling and storage of equipment and materials prior to installation.

Equipment and supplies for testing of the pump station shall be included in the installation cost. Revisits by the manufacturer's representative will be at the contractor's expense.

2. MATERIALS

A. Pump Station

The pump station shall be a factory built grinder pump station consisting of grinder pump(s), suitably mounted in a H.D.P.E. basin, with integral watertight access way, pump removal system, inlet for 4 inch DWV pipe, remote alarm/control panel and all necessary internal wiring with Electrical Quick Disconnects as manufactured by Environment/One Corporation, Niakayuna, New York, Model 2010, 2012 or 2014, dependent on the service application as approved by the Engineer.

2. MATERIALS (continued)

B. Electrical Control/Alarm Panel

Control/alarm panel shall be factory built and supplied by the pump station manufacturer.

C. Plunger Assembly

Plunger assembly for installation on the 4 inch DWV inlet pipe to grinder pump shall be made of PVC Schedule 40 material and include Tee, stand pipe with cap and plunger assembly as manufactured by Elder Valve, Inc. or approved equal.

3. INSTALLATION

- A.** The pump station shall be installed in accordance with the manufacturer's recommendations, with the 4" DWV inlet aligned toward the planned house drain connection. Contractor should fill the pump basin with water prior to backfill and placement of concrete anchor.

Pump station installation includes 10 foot of 4 inch stub with plunger assembly for house drain connection.

At the time of pump station installation, the Contractor shall affix the electrical quick disconnects to the upper part of the pump station to prevent potential damage from water infiltration into the pump station.

B. Electrical Control/Alarm Panel

Contractor shall install the control panel, located on the outside wall of the house as shown on the plan and as verified by the property owner.

Control panel installation includes the electrical wiring and connections between the panel and the pump station. Wiring shall be direct bury cable in accordance with electrical code. Wiring riser run to the control panel shall be in steel conduit. Riser run into pump station shall be protected with external cover placed along with the manufacturer's watertight seal at the wire penetration into pump station.

C. Installation Check and Start-Up

An authorized representative of the manufacturer or supplier of each item of equipment shall visit the site of the work after installation to inspect, check, adjust if necessary, and approve the equipment's installation.

Each equipment supplier's representative shall furnish to the Owner, through the Engineer, a written report certifying that the equipment (1) has been properly installed; (2) is in accurate alignment; (3) is free from any undue stress imposed by connecting piping or anchor bolts; (4) has been operated under full load condition and that it operated satisfactorily to the Engineer; (5) that the Owner's representative has been instructed in the proper maintenance and operation of the equipment; (6) furnish the Owner a copy of all test data recorded during the installation check.