

Technical Outline Specifications

Wastewater Treatment Facilities

Summit Woods Subdivision Town of East Fishkill, Dutchess County, NY

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Scope

The Contractor shall furnish and install all materials, tools, labor and equipment to construct the complete wastewater treatment facilities as described in the Engineering Report and as shown on the drawings.

This project consists of an eight inch sewer line from MH 20B, comminutor chamber with bypass bar screen, flow equalization tank with three pumps and aeration system, external valve pit, primary clarifier inlet flow splitter box, primary clarifier with 2 sludge pumps, rotating biological contactor with two influent points and first stage aeration facilities, secondary clarifier with 2 sludge pumps, a packaged rapid sand filter system, a chlorine contact chamber with flow meter, chlorine and sodium metabisulfite chemical feed pumps with 30 gallon crocks, sludge digester with aeration system, sludge thickener with sludge air lift pumps, ventilation and odor control system, two treatment buildings, a heated operator's room with sanitary facilities and sink, protected potable water system, frost free yard hydrants, controls, piping valves, electrical wiring and outlets, power supply for an external pumping station, stand-by emergency generator with automatic transfer switch for the treatment facilities and external pumping station, access roadway/parking area, and other similar, related or incidental work as required for a complete and operating system.

Plans and Specifications

These specifications, the Engineering report, and the drawings, herein referred to, are complimentary and it is intended that all items of labor, material, and equipment required and necessary to complete the work be furnished and installed, even though some items or work, materials, and/or equipment may not be specifically mentioned or may have been inadvertently omitted from these documents.

These specifications are intended to be general but still have certain specific references where the Design Engineer believes that certain products or methods are necessary for the successful completion and operation of the facilities.

Changes and Substitutions

In those cases where the Design Engineer has no preferences, the requirements are stated as performance specifications. The Contractor must submit shop drawings/manufacturer cuts to the Project Engineer for approval prior to ordering/constructing the item.

In those cases where the Design Engineer has general preference, an "or equal" phrase is included to permit the Contractor to propose his preferred item to the Project Engineer for the Project Engineer's consideration for acceptance. Specific reference to a manufacturer is made to indicate the quality of equipment/materials and is not meant to be limiting.

In those cases where the Design Engineer has a specific preference for a particular item, an "or equal" phrase is not included.

Shop drawing approval, substitutions, or approval of any changes will be made in writing by the Project Engineer.

Discrepancies

In case of discrepancies between these specifications and the drawings, interpretation shall be given preference in the following order:

1. Addenda (later dates to take precedence over earlier dates)
2. Specifications
3. Drawings (schedule or notes to take precedence over specific data shown on the drawings).

In the event of any discrepancies, the Project Engineer shall be consulted for a final interpretation.

The Documents and designs are based on field data and information as reported by others. Contractor is not to proceed with construction without approval of the Project Engineer if groundwater, rock or unstable soil is encountered.

Buildings

Unless separate building plans are provided by the Owner, the Contractor shall submit plans for both treatment buildings to the Owner for approval. All materials shall be suitable for service in a high humidity area. The buildings will have the minimum dimensions as shown on the drawings. A minimum inside height of 7' over the top of the rapid sand filter and a minimum inside height of 4' over the top of the RBC shall be provided.

The buildings and grounds must be architecturally compatible with proposed nearby residential living units with finished landscaping consisting of grassed lawns, foundation plantings, and specimen bushes and trees. The Owner shall approve the architectural and landscaping plans.

Poured concrete shall conform to ASTM C-94 (latest) with an approximate air content of 6% and shall have a minimum strength of 4000 psi at 28 days. All concrete block work shall conform to ASTM C-90, Grade A. All blocks shall be laid with mortar similar or equal to "Brixment", with standard running bond with vertical joints struck flush.

Reinforcement shall be installed with the ACI Building Code requirements for Reinforced Concrete except where superseded by the New York State or Town of East Fishkill Building Code.

Personnel doors, air louvers and frames shall be fiberglass as manufactured by Chem-Pruf or equal. Doors to the outside shall be insulated and include a key lock.

Overhead garage doors shall be insulated and fabricated from fiberglass or vinyl. Doors shall be Dutchess Overhead Doors, Inc. or equal.

Heat shall be provided only for the operator's room and shall be provided by baseboard electric heaters, Grainger 3E220 and/or 3E223 with thermostat 2E173 or equal.