

III. Pump Station and Force Main Technical Information
February 8, 2022

A. Pump Station:

NOTE: Any proposed pump stations that are planned to become the responsibility of the Town of Avon / Avon Water Pollution Control Authority will require significant review by the Town. It is likely that the Town will utilize a consultant to perform a detailed review of pump station specifics. Such a review will be at the expense of the Developer

1. Design capacity of proposed pump station_____
2. Number of pumps in the proposed pump station: _____
3. Telemetry compatible with the Town of Avon SCADA YES____ NO____
4. Pump specifications:
 - a) Number of pumps:_____
 - b) Type of pump: _____
 - c) Pump capacity: _____
 - d) Total Dynamic Head: _____
 - e) Diameter of Suction Line: _____
 - f) Provisions for wet well mixing to remove all solids and grease in wastewater?
 - g) Even flow distribution of wastewater to pumps? YES____ NO____
 - h) Is force main "holding time" excessive, thereby causing an odor issue? YES____ NO____
 - i) Odor control measures considered? YES____ NO____
 - j) Pump shut off(s) is available and/or lock out tag out considered? YES____ NO____
 - k) Wet well vent(s) made of corrosion proof materials with carbon filter? YES____ NO____
 - l) Has a pump station O&M agreement been submitted for Town approval? YES____ NO____
 - m) Have appropriate valves been incorporated i.e., gate, check and air vent valves (air release, vacuum break, air/vacuum etc.)? YES____ NO____
 - n) Pumps can be removed without dewatering or manually disconnecting any piping in the well? YES____ NO____
 - o) Pump Station includes a crane system to lift pumps? YES____ NO____
 - p) Pumps, motors, and other mechanical and electrical equipment can be easily removed without entering the wet well? YES____ NO____
 - q) Pumps are capable of passing a three (3) inch sphere? YES____ NO____
 - r) Pumps are submersible? YES____ NO____
 - s) Electrical equipment and controls located in enclosed areas meets National Electrical Code for hazardous conditions? YES____ NO____
 - t) Pumps automatically alternate? YES____ NO____
 - u) Shut-off valves are located on discharge lines of each pump between the pump and the valve? YES____ NO____
 - v) Check valves are located on discharge lines of each pump? YES____ NO____
 - w) Valving is located in a separate pit? YES____ NO____
 - x) A vent has been provided, 3 feet above proposed surrounding grade, to accommodate for snow accumulation? YES____ NO____
 - y) Wet well floor has a minimum slope of 1 to 1 to the pump inlets? YES____ NO____
 - z) Is the pump station protected from high groundwater? YES____ NO____
 - 1.If yes, cathodic protection has been provided? YES____ NO____
 2. If yes, buoyancy forces have been incorporated into the design and copies of calculations have been provided? YES____ NO____
5. Has an emergency generator been included in the design? YES____ NO____
6. What are the specifics of the emergency generator proposed?
 - Manufacturer_____
 - Model number_____
 - KW rating_____
 - Fuel type_____
 - Fuel storage/provisions_____

B. Force Main:

1. Diameter of force main: _____
2. Length of force main: _____
3. Force main material: _____
4. Calculated velocity in force main (ft/sec): _____
5. Hydrostatic Pressure testing is specified for all pipe? YES____ NO____
6. Air relief valves are positioned at the high points in the force main? YES____ NO____
7. Force main joint restraint is provided? YES____ NO____
8. Force main terminates in the receiving manhole with piped drop? YES____ NO____
9. Proposed Profile of force main provided? YES____ NO____

Professional Engineer's Certification:

I certify that all the information provided in this engineering report form is correct and no significant information necessary for a proper evaluation of the project has been intentionally omitted:

Signature of Professional Engineer: _____ Date: _____

Name of Professional Engineer: _____

State of Connecticut Professional Engineer No: _____

Phone No.: (____) _____

Affix P.E. Stamp and Seal

