

TOWN OF COLONIE

DEPARTMENT OF PUBLIC WORKS DIVISION OF PURE WATERS 347 Old Niskayuna Road Latham, New York 12110

Telephone: (518) 783-2766 Fax: (518) 783-2883 Website:www.colonie.org/departments/purewaters

COMMERCIAL GRINDER PUMP REQUIREMENTS

- 1. A duplex pump system must be designed in accordance with the manufacturer's recommendations. Request for a single pump installation must be in writing to the department for review and approval.
- 2. The pump control panel must include an alarm circuit with an audible horn, warning light and reset button. A non-resettable elapsed hour meter must be installed for each pump to record pump run time. Simplex pump units will not require hour meter installation.
- 3. All electrical wiring for pump installation shall conform to applicable code requirements and manufacturers recommended procedures.
- 4. Sizing of pump discharge piping is the responsibility of the design engineer or pump manufacturer. For 1 ½" discharge piping, pipe type shall be PVC Schedule 40 or 80, or PVC SDR 21 using PVC rubber gasketed compression couplings. For 1 ½" pipe and larger, pipe type shall be PVC SDR 21 with rubber gasketed bell and spigot or HDPE. Pump design specifications along with discharge pipe sizing must be submitted for our review.
- 5. Discharge piping shall be installed with a minimum of 48" cover to prevent freezing. Suitable bedding and backfill material shall be placed to a minimum of 12" above crown of pipe. A single #12 gauge insulated tracer wire, continuous length, shall be installed with the pipe and terminated above grade at the pump control panel for future use in locating the pipe.
- 6. Where bends are required, PVC Schedule 40 or 80 socket type bends are to be used. Bends should be glued to barrel of pipe outside of trench. 90° Bends are not acceptable. Two 45° bends with 2 foot nipple are to be used to make 90° turn. For pipe larger than 2", mechanical joint DIP or rubber gasketed PVC fittings should be utilized.
- 7. Connection to an existing manhole shall be core and seal boot type.
- 8. Burial tape labeled "Caution Buried Sewer Below" to be installed 18"± below finish grade in pipe trench line centered over pipe.
- 9. A hydrostatic (water) test must be performed on installed force main pipe prior to pump connection. Pipe shall be tested at 90 psi and witnessed by Division of Pure Waters inspector.
- 10. All pump installations shall include a fresh air inlet, double hand hole trap, and exterior cleanout in the building drain piping upstream of the pump.

COMMERCIAL GRINDER PUMP REQUIREMENTS (con't)

- 11. Prior to final approval of the grinder pump installation, the following documentation must be submitted to the Pure Waters Office:
 - a. For existing structures (not new construction), a copy of the UL inspection for all electrical work associated with the pump installation. Copy of UL inspection not required for new construction.
 - b. Documentation by a pump manufacturer representative that the grinder pump was installed in accordance with the manufacturer's requirements and that the system was startup tested with verification of proper alarm activation.

Latest Revision 01/02/2008