

## REQUEST TO CONSTRUCT, MODIFY A PUBLIC PUMP STATION

Description: Prior to the construction of new or modification of an existing public pump station, approval must be secured from the Westchester County Department of Health.

Applicable Codes: Part 5, Subpart 5-1 Section 5-1.22 of the New York State Sanitary Code and Chapter 873, Article VII, Section 873.707.1 of the Laws of Westchester County.

Fees: Chapter 873, Article XXI of the Laws of Westchester County.

Submittal: The submittal shall be forwarded to the Westchester County Department of Health, 145 Huguenot Street, 7<sup>th</sup> Floor, New Rochelle, NY 10801, Attention: Program Administrator. When requesting Approval of Plans for a project pursuant to the above provisions, the following list serves as minimum filing requirements:

- (1) One (1) original form DOH-348 with all items completed. This form must be dated and bear the original signature of the applicant.
- (2) One (1) original Engineer's Report bearing the original signature and seal of a Professional Engineer licensed and registered in the State of New York. The Engineer's Report must provide a narrative of the scope, details and specifications of the project and must be forwarded with copies of the supplier's records indicating existing water pressure in the project area.
- (3) A minimum of three (3) sets of construction plans (one (1) set of plans will be retained by the Department) that are prepared by a Professional Engineer licensed and registered in the State of New York. These plans must bear the professional's original signature and seal, be prepared pursuant to Title VIII Article 145, Section 7209 of the New York State Education Law and signed by the Municipal Engineer when applicable.
  - (A) Engineer's Report Content
    - (I) The Following must be included in the Engineer's Report.
      1. Provide calculation to support six (6) air exchanges per hour where applicable.
      2. Support adequate lighting @ 30 ft. candles.
      3. For a non-manned station, provide a discussion as to the notification system to be used during an upset condition.
      4. Provide a discussion, where needed, regarding auxiliary power that will automatically activate during a power outage or the procedure that

will be used to manually activate the auxiliary power within two (2) hours after the outage.

5. Provide a minimum of two (2) pumps, with one pump designated as the back-up pump.
6. At least two (2) pumps shall be provided, justification for such design must be supplied, a discussion and calculation supporting that, with any one pump out of service, the remaining pump(s) must be capable of providing maximum daily demand.
7. The pumping capacity must support the requirement that such capacity must be equal to or exceed peak demand.
8. Provide pump performance curves and head loss calculation for the system.
9. For booster pump stations, provide calculations in support that the intake pressure to the pump will be maintained at a minimum of 20 psig during operation.
10. For booster pump stations, provide calculations in support for preventing excessive pump cycling of more than four (4) cycles per hour.
11. Clearly indicate the activation of the pump station: ground or elevated storage tanks or hydropneumatic tank design for approximately 150 living units or less.
12. For a hydropneumatic tank design, support by calculations that the pump(s) serving this station have the design capacity for 10 times the average daily consumption rate.
13. For a hydropneumatic tank design, the volume of the tank is 10 times the capacity of the “largest pump”. In the event that more than one pump is cycling at the same time, the sum of capacities of all these cycling pumps is to be used as the capacity of the largest pump.
14. Refer to Part 6 of the Recommended Standards for Water Works, RSWW, for other related discussion topics.

(B) Plan Contents:

(I) Minimum requirement to be included in the plans:

1. Location Map.
2. Site plan of the project denoting all applicable appurtenances including profile views.
3. Provide specification of the piping network, pipe diameter, material of construction, and class of pipe.
4. Provide a note on the plans indicating that disinfection and bacteriological testing (E-Coli, HPC) will be performed in accordance with AWWA Standard C651-05 except for Section 4.4.2.
5. Provide a note on the plan that supplier’s records indicate adequate/inadequate pressure and capacity is available for the area. In the event that this project will address inadequate pressure and/or capacity, clearly indicate such in the notes. This note is to be included when the project results in increased demand.

6. Illustrate the heating and ventilation system insuring that there will be six (6) air exchanges per hour in all areas below ground floor level and in all areas where there may be excessive heat.
7. Show location of lights to insure 30 ft. candles.
8. Provide applicable notes for an automatic station to insure notification and a response by staff during an upset condition.
9. Denote all pumps and their intended use.
10. Locate all gauges, pressure gauge on the discharge line of pump, compound gauge on the suction lines.
11. Locate the totalizer on the discharge side of the pump.
12. If hydropneumatic tank is to be designed, provide details of such and indicate the capacity of the tank which is a minimum 10 times the capacity of the largest pump or pumps required to meet capacity of the station.
13. Refer to Part 6 of the Recommended Standards for Water Works for other related details.
14. All other applicable specifications can be provided in a specification book which bears the original seal and signature of the licensed and registered professional engineer in the State of New York.

# **ISSUANCE OF COMPLETED WORKS APPROVAL FOR A PUMP STATION**

**Description:** Prior to the activation of a new or modified pump station, approval must be secured from the Westchester County Department of Health.

**Applicable Codes:** Part 5, Subpart 5-1 Section 5-1.22 of the New York State Sanitary Code and Chapter 873, Article VII, Section 873.707.5 of the Laws of Westchester County.

**Fees:** Chapter 873, Article XXI of the Laws of Westchester County.

**Submittal:** The submittal shall be forwarded to the Westchester County Department of Health, 145 Huguenot Street, 7<sup>th</sup> Floor, New Rochelle, NY 10801, Attention: Program Administrator. When requesting Approval of Completed Works pursuant to the above provisions, the following list serves as minimum filing requirements:

- (1) A minimum of two (2) sets of “As-Built” plans (one (1) set being retained by the Department) bearing the original signature and seal of the construction supervising Professional Engineer licensed and registered in the State of New York. This plan must reflect any changes from the original approved plan by “Bubbling” these changes. Note: all deviation from the original plan approval must have received prior approval from this Department.
- (2) That a copy of an acceptable Bacteriological Water Analysis (E-Coli, HPC) of the water in the new or modified water main be submitted for review. This water sample must be taken after the Pressure Test, and after the main has been disinfected in accordance with AWWA Standards C-651-05 except for Section 4.4.2.
- (3) That the construction supervising Professional Engineer licensed and registered in the State of New York provides a Certification Letter bearing the professional’s original seal and signature which will be forwarded with the bacteriological results, and “As-Built” plans. This letter shall provide a statement that the undersigned has supervised or witnessed construction, and that there are no construction changes from the original Departmental approval. In the event that construction changes do exist and have received prior Departmental approval, this letter must reflect such changes.