331300 DISINFECTION OF WATER DISTRIBUTION SYSTEM

PART 1: GENERAL

1.01 SUBMITTALS

A. Disinfection plan, which shall include location of taps, sampling points, and schedule. Plan shall describe the method and rate of chlorine addition and the anticipated flow through the main being disinfected.

1.02 REGULATORY REQUIREMENTS

A. Submit proof of testing and disinfection as required by county and/or state Health Departments to appropriate water purveyor (Cornell Utilities, City of Ithaca, Bolton Point) prior to placing the main in service.

1.03 FIELD MEASUREMENTS

A. Measurements required to complete Disinfection, Testing and Flushing Datasheet, provided by Utilities Water Distribution Manager.

B. Measurements required by county and/or state Health Departments.

1.04 COORDINATION

A. Provide 48-hour notice to appropriate water purveyor when water for flushing and disinfection is required.

PART 2: PRODUCTS

Not applicable.

PART 3: EXECUTION

3.01 DISINFECTION

A. The continuous feed method shall be used for chlorine application.

B. The introduction of solid hypochlorite (granules) directly into the system is prohibited.

C. Injection point shall be within 10 feet of the water source.
D. The new water main shall be filled with not less than 50 mg/L, nor more than 100 mg/L of available chlorine and retained in the system for not less than 24 hours.

1. When filling water main with chlorinated water, each hydrant (in consecutive order) shall be flushed until the required residual is measured.

E. At the end of the 24-hour period, the disinfected water shall contain no less than 25 mg/L available chlorine throughout the system.

F. Disinfection shall be repeated as often as necessary at the Contractor’s cost until the minimum residual chlorine of 25 mg/L has been maintained.

G. Flushing: De-chlorination is required when flushing water from hydrants.

3.02 TOTAL COLIFORM TESTING

A. After final flushing and before the water main is placed in service, a water sample or samples shall be collected from the new main. At least one set of samples shall be collected from every 1,200 feet of the new water main, plus one set from the end of the line, and at least one set from each branch. All samples shall be tested for bacteriological quality by a certified laboratory, showing the absence of coliform organisms, in accordance with the local and/or state Health Department procedures.

3.03 SERVICES

A. After construction of services, but prior to connection to building service line, the service shall be thoroughly flushed to remove any contaminant and to disinfect the new service, coordinate with Utilities Water Distribution Manager.