<u>As-Built Drawing Requirements for Public Water Mains in the Bolton Point/Municipal Water System</u>

In accordance with local law, new public water mains shall not be put into service until Southern Cayuga Lake Intermunicipal water Commission (SCLIWC) accepts as-built drawings for such mains. As-built drawings must be accepted before any testing of new water mains is performed. This document describes the minimum requirements for as-built drawings. Information to be included in as-builts, for example, GPS coordinates and offsets, must be collected as the project progresses rather than after the components have been backfilled.

The Commission and municipality reserve the right to require the contractor to expose selected water main components after backfill and before acceptance, using only the as-built drawings, to demonstrate the effectiveness of the as-builts.

The Commission will require as-built drawings to be submitted in printed and electronic format.

Printed As-Built Drawings

- As-builts must be certified "as-built" or "as-constructed" by the engineer of record.
- North arrow
- Scale
- Dates of installation
- All lot lines
- Addresses and or tax parcel numbers
- Street names
- Right of ways and easements
- Crossings of other underground utilities
- Depth of cover
- Pipe information, including material, class, diameter, and joint type
- Valves—type, manufacturer, and date of manufacture
- Hydrants—type, manufacturer, date of manufacture
- Measurements—all valves; all fittings, including service taps and curb valves, caps, plugs, blowoffs, and vaults must be measured 90 degrees from the road centerline and along the main from the nearest hydrant. Measurements must be reproducible in the field.

Electronic As-Built Drawings

- A variety of formats are acceptable including DWG, DGN, Shapefile and PDF.
- Fully specify the coordinate system used. The preferred coordinate system is the New York State Plane, Central, NAD 1983 (FIPS 3102).
- Electronic as-builts must contain the same information specified above for printed as builts.
- GPS locations for all valves. Hydrants, fittings and connections must be taken using mapping or survey grade GPS equipment.