

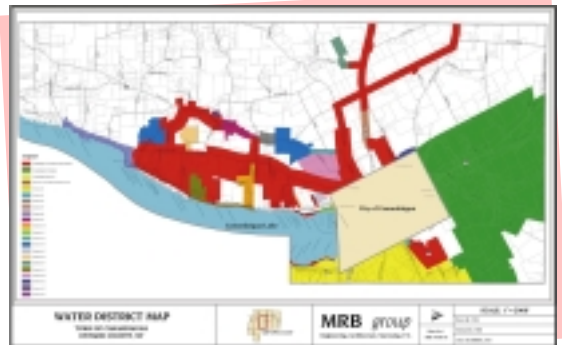
GIS Preserves Aging Maps

by Carl Schoenthal, PE

The Town of Canandaigua will no longer need to rely on aging maps to reference their water system at the conclusion of a comprehensive Geographic Information System (GIS) conversion project. In a joint effort with local surveyor, Venezia & Associates, MRB Group is converting the Town's maps to digital format, while field verifying the accuracy of each map. Some maps are 50-years old and many features shown no longer exist, adding to the difficulty of providing accurate field stakeouts.

Project Manager, Steve Savage, PE, heads up the MRB Group team with assistance from Canandaigua Highway Superintendent, Jim Hecker, and members of the Water Department. The team is preparing a digital map of the entire water system and verifying the location of all water services, valves, and watermains with survey-grade GPS equipment so future generations of water system operators will have an accurate map of the entire system. GPS is quickly becoming an efficient tool used to find the exact location of each feature during data collection and recording. The accuracy has improved so that field crews can now utilize coordinate data to retrace their steps within inches. Using the GPS equipment was a great fit for Canandaigua as there are many instances when snow covered surfaces force crews to rely on ties to features that no longer exist in the field. In the future, handheld equipment will allow operators to read maps, track maintenance records, and get real-time access to archived record maps that are being digitally preserved.

As part of the project scope, MRB Group is coordinating our efforts with current initiatives set forth by Ontario County and the Town. This is demonstrated in our use of the County's digital tax parcel database as the base for a Water District boundary map we are creating. This coordination effort will benefit the highway and other departments within the Town organization. One example is Don Collins, Town Assessor, who recently implemented a software



New water system map using GIS technology.

solution to track parcel records with links to the database of property images. This same software will be used to organize the record maps and GIS mapping, thus avoiding additional software purchases. As summarized by Savage, "seeking cost-effective solutions while applying available, user-friendly technology is our key objective. This approach mirrors our company's objective of building trust with our client communities as we work with them to develop solutions to everyday problems." ▲