Client Needs: The City had an existing application that allowed them to:

- Scan engineering plans and drawings.
- Enter relevant data such as Engineer, Drawing Name, Drawing Date, and Subdivision Name for use in later retrieval.
- View scanned drawings at any node on the City network, using installed client software integrated with AutoVue® software from Cimmetry Systems, Inc.

The system needed updating to add additional features, but the original vendor was no longer in business. They wished to continue using the AutoVue part of the system for the viewing and printing of the stored documents, but wanted to update the database portion from the older dBase format to the City's currently supported Microsoft Access® format.

Since the current drawings and data would need to be migrated to the new system, we were to provide data conversion as well. The existing database contained approximately 3,000 projects with 32,000 related drawings.

Approach: We met with the client to review their current system including the software and the process used to scan and store the drawings, enter relevant data, and view stored drawings. The City's project manager provided us with information regarding the new features required, and the shortcomings of the current system. The staff member doing the current scanning and data entry also participated so that we understood the process and her wish list.

We copied a sampling of the scanned drawings and the entire existing database to our office, then began creating the new application. Upon completion of a basic front end menu and data display screens (not operable at this point), we revisited the client for feedback on "look and feel" as well as features. Some changes were made as new details of the existing procedure came to light following a procedural review while viewing the sample screens. These changes were incorporated and a Beta version of the new software was created. Data conversion was also initiated at this point.

The Beta software was installed on a workstation at the City for testing by City staff. The testing revealed some minor issues and also elicited some additional changes as staff began to see that we could go beyond the original "wish list" and really improve the functionality of the system.

Final changes were made and data conversion was completed on site. The old system was allowed to remain in place while the new software was deployed across the City and end-users were trained in its use. Minimal training was required as the system resembled the old software in many ways.

Results: The new system not only provides the functionality of the original system, but also contains many new features for greater efficiency, uses updated Windows functionality, and now stores its data in a modernized database structure. Integration with the existing AutoVue viewing software was also accomplished with no major problems.