

## 39<sup>th</sup> Street Lift Station Improvements

Constructed in 1969, the aging 39th Street Lift Station in Moline had approached the end of its effective service life. With a new condominium complex under construction next to the pump station, the City of Moline decided to schedule the necessary improvements to the lift station to coincide with the new condominium development.



RJN Group, Inc. was retained to design the improvements, which included abandoning the existing dry well and providing submersible pumps in the wet well to be consistent with the City's other operating lift stations. RJN engineering services included the following features:

- Preliminary design and layout schedule for:
  - Demolition of three existing buildings
  - New lift station building
  - Site grading with access to perimeter fencing
  - Aesthetic improvements for residential neighborhood
- Capacity evaluation
- Design
- Bidding and construction phase services

Improvements to the lift station included the following features:

- The exterior finish of the new lift station control building was designed to blend with the exterior finish on the new condominiums
- Triplex variable-speed submersible pumps
- A new access road to the site
- An electric crane for submersible pump / valve retrieval



- A new control building with a restroom
- Utilization of the existing back-up generator
- Abandonment of the existing dry well, bar screen and comminutor
- Structural modifications to the wet well
- 1.6 mgd design flow

RJN designed the improvements so that any future maintenance will not require confined space entry. The new access road was

designed in conjunction with the condominium development driveway.