

Project Summary

Project History

Unable to meet Illinois Environmental Protection Agency (IEPA) effluent limits and enforcement action looming, The City of Woodstock's Southside wastewater treatment plant needed upgrading and expansion. When bids for the original design came in substantially over budget, Baxter & Woodman was hired to redesign the project.

Cost Saving Measures

B&W received IEPA concurrence for a revised treatment process scheme that avoided the need for tertiary sand filters. This process change, along with other redesigned elements reduced the construction costs by approximately \$1.2 million dollars.

After J.J. Henderson & Son was hired as the construction contractor, the City and B&W negotiated with them to further reduce the construction cost. J.J. Henderson prepared and submitted a checklist of approximately 12 changes that would lower the construction cost. When all the necessary change orders associated with the construction were executed, the City saved close to \$170,000.

Treatment Plant Description

Woodstock's redesigned wastewater treatment plant is an activated sludge oxidation ditch with sewage screening for preliminary treatment. The plant has a design life of 50 years and the capacity for 1.75 million gallons per day.

Owner
 City of Woodstock
 326 Washington Street
 Woodstock, Illinois 60098
 815.338.6118

Consultant
 Baxter & Woodman, Inc.
 Consulting Engineers
 8678 Ridgfield Road
 Crystal Lake, Illinois 60012
 815.459.1260

General Contractor
 Joseph J. Henderson & Son, Inc.
 4288 Grand Avenue
 Gurnee, Illinois 60031
 847.244.3222





Consulting Engineers



*Kishwaukee River photograph courtesy of:
 Nancy Ellison - Friends of the Kishwaukee River.*

City of Woodstock

Southside Wastewater Treatment Plant Expansion Project



Proud Recipient of APWA's:
1999 Project of the Year
Category: Environmental
Division: \$2 - \$10 Million

Environmental Considerations

The Southside wastewater treatment plant is a well operated plant. The City does an exceptional job of running the plant and assuring that it consistently meets effluent limits for discharge to the Kishwaukee River, a major environmental goal. Current ammonia-nitrogen discharge limits for the plant are 1.5 mg/l for April through November and 3.8 mg/l for November through May.

Negotiations between the City of Woodstock, McHenry County Defenders, and the IEPA resulted in a settlement to further reduce ammonia nitrogen effluent concentrations by the year 2000, with minimal plant modifications needed to meet the more stringent standards. The newly agreed upon effluent limits that will go into effect on April 1, 2000 are as follows; 1.1 mg/l for April through October and 2.1 mg/l for November through May.

Maintaining stringent discharge levels to the Kishwaukee River will help assure the river water quality is preserved and the animal life that inhabit the river continue to thrive.



Woodstock WWTP 15 Month Operating Results

