Conceptual, Preliminary and detailed design, as well as construction contract administration services were provided by Associated Engineering to expand and upgrade this 18,200 m³/day (4.0MIGD) water treatment plant. The expanded plant supplies the Town of Lakeshore with 27,300 m³/day (6.0MIGD) from Lake St. Clair to meet the demand for a 20-year projected population. A number of plant components were sized to meet the projected 40-year demand of 36,400 m³/day (8.0MIGD).

The proposed expansion included the following electrical and instrumentation upgrades:

- Outdoor high voltage 1500kVA transformer, disconnect switch, and indoor switchgear
- Three new MCC line ups for Water Treatment Plant, High Lift Pumping Station and Low Lift Pumping Station
- HVAC and lighting design through the plant
- Process control systems including 10 new PLCs.

Preliminary design was completed in September 2004 and detailed design in November 2005. Construction of this project was completed by the fall of 2008 at a capital cost of $30 million.