MICHIGAN CONCRETE ASSOCIATION

STRUCTURAL WTP/WWTP

MASON WASTEWATER TREATMENT PLANT

345 N. JEFFERSON ST, MASON, MI

Concrete Contractor: Christman Constructors, Inc.
Concrete Supplier: Shafer Redi-Mix
Project Owner: City of Mason
QC Consultant: Metro Consulting Associates

The Mason Wastewater Treatment Plant improvements, delivered with Christman Constructors Inc., are worthy of recognition for their scale, technical complexity, and critical community impact. This multi-million-dollar infrastructure investment was driven by the need to modernize aging systems, improve operational reliability, and maintain compliance with environmental discharge requirements while protecting local groundwater and surface waters.

Concrete construction played a central role in the project's success, with approximately 6,500 cubic yards placed across the facility. Of that total, 3,600 cubic yards were dedicated to tank foundations and walls incorporating Xypex to enhance waterproofing and long-term durability in a highly aggressive wastewater environment. These specialized mix designs were essential to achieving long-term structural integrity and resistance to chemical exposure.

A major portion of the work focused on the oxidation ditch and settling tank walls, requiring precise planning and execution. The oxidation ditch included 29 wall placements at a height of 13 feet 3 inches, while the settling tanks required 12 wall placements reaching 16 feet in height. Construction efficiency and dimensional consistency were achieved by utilizing three full sets of jobsite radius forms, pre-assembled prior to delivery.

All tank foundation and wall construction was completed through peak summer conditions, demanding disciplined scheduling, close coordination, and rigorous quality control. The completed facility delivers a resilient, high-performance treatment system that strengthens reliability, protects public health, and supports long-term environmental stewardship.