

## **CITY OF WAUKESHA – WASTEWATER TREATMENT PLANT IMPROVEMENTS**

### Overview

The Department of Public Works has hired CD Smith Construction to construct process, structural, mechanical, and electrical improvements site-wide at the Waukesha Wastewater Treatment Plant (WWTP). In general, the project includes equipment replacement, structural repairs, HVAC upgrades, power distribution and control improvements, site improvements, remodeling of the Administration Building, and construction of a new structure for anaerobic digestion. The entire project cost is \$41,800,000.

Items for Planning Commission approval are:

1. Building 500 – Administration Building
  - a. Addition - 4,697 SF
2. Building 410 – Primary Digester Complex
  - a. New egg-shaped digester – 2,567 SF
  - b. South digester building expansion – 401 SF
  - c. Boiler room expansion – 240 SF
3. Site work
  - a. New roadways and stormwater bioretention facilities

Total building expansion = 7,905 SF

Net new impervious = reduction of 13,000 SF

### Building 500 – Administration Building

A 4,697 SF addition will be added to the south side of the existing Administration Building. The one-story addition contains an enlarged training room, a new SCADA room and break room, and an area for indoor vehicle storage. A new two-story atrium allows visitors to directly access the relocated reception area on the second floor of the existing structure. The entire floorplan of the existing structure will be renovated to tie into the new addition. The addition will be clad in brick and concrete to match the existing building. Renderings of the new addition are included in the submittal package.

### Building 410 – Primary Digester Complex

The heart of the renovations at the primary digester complex will be a new egg-shaped digester which will replace the existing southwest digester that will be demolished. The egg digester will be 79.1 feet high and set back about 820 feet from Sentry Drive. For reference, the existing water tower on site is approximately 82 feet high and is set back about 1,300 feet from Sentry Drive. The only direction from which the egg will be clearly visible will be Sentry Drive as development to the north and south consists of the City Garage and the City Drop-Off Center respectively. The Fox River is immediately to the west and mature trees block the view from W. St. Paul Avenue which at its closest point is over 1,200 feet

away. On June 3, 2013, the Board of Zoning Appeals permitted a variance from Section 22.39(6) of the Zoning Code to allow a structure of this height. The egg will be clad in foam and will be painted a tan color. Pictures of an existing egg structure in Grandville, Michigan are included with the submittal package. The proposed Waukesha egg will be identical but will not include the smaller silo tank or the bridge.

A 401 SF building addition will also be constructed on the south side of the primary digester complex. This building is related to the egg digester construction. The outside building wall will be concrete and will be finished with a cementitious coating to match the existing digester complex. A photo of the exterior of the existing digester complex is included with the submittal package.

The east side of the primary digester complex will also have a small 240 SF addition to the boiler room. The outside building wall will be concrete and will be finished with a cementitious coating to match the existing digester complex. A photo of the exterior of the existing digester complex is included with the submittal package.