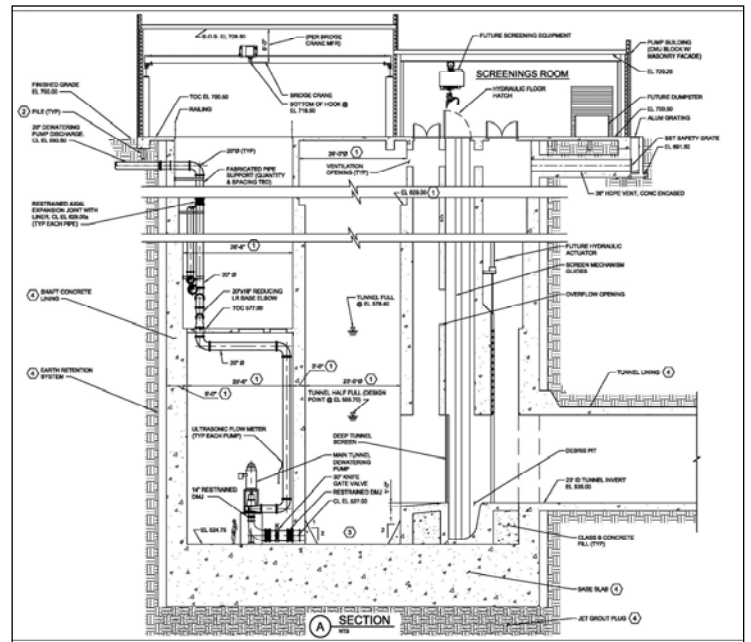
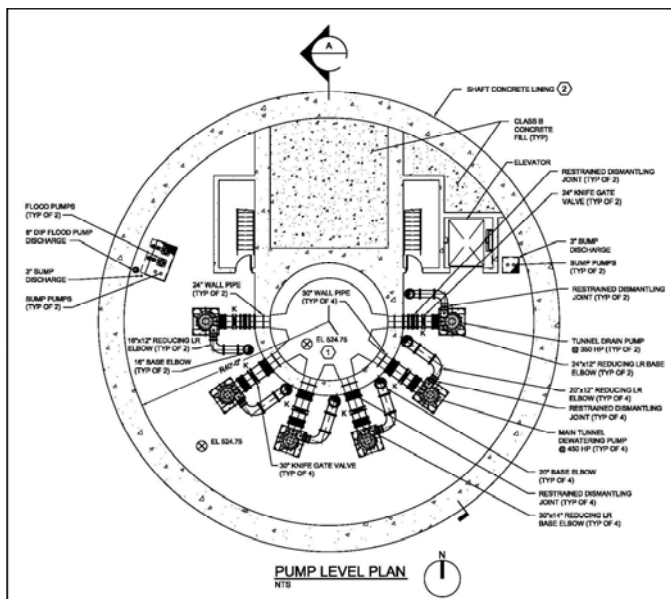


SOUTHERLY TUNNEL DEWATERING PUMP

DESCRIPTION

The Southerly Tunnel Dewatering Pump Station project (STDPS) is associated with the Southerly Storage Tunnel project (SOT), and is part of Project Clean Lake, a \$3B, 25-year program NEORSRD began in 2011 designed to meet Clean Water Act standards and address water quality issues. STDPS is downstream and connected to the SOT, which is the 6th of seven new large diameter tunnels and other projects that the NEORSRD will use to reduce the 4.5 Billion Gallons of wet weather combined sewer overflows (CSOs) released into Lake Erie and its tributaries in the Greater Cleveland area.

The STDPS is planned to be a dry pit pump station with a firm dewatering rate of 56 MGD. With its six tunnel drain pumps in the 175-ft deep, 80-ft diameter station, it will send CSOs stored in SOT to the existing treatment plant via the nearby Southwest Interceptor. An advanced planning-level (20%) design configuration of the pump station shaft is



Southerly Tunnel Dewatering Pump Station: Pump Level Plan (left) and Vertical Section (above)

shown in the figures. The expected project schedule is shown at right.

PROJECT BENEFITS

As a system, SOT and STDPS will control overflows at 6 permitted CSO locations along the Cuyahoga River and will reduce CSO volumes discharged into the river by 750 million gallons each year, providing:

- Improved water quality in the Cuyahoga River;
- A reduction in public health risks associated with CSOs;
- A cleaner Lake Erie for drinking water, boating, beach-going, and other recreational purposes; and
- Wet weather flood relief mitigation.

STDPS Project Schedule								
Project Phase	Year							
	2021	2022	2023	2024	2027	2028	2029
Design								
Bidding								
Construction								

CONSTRUCTION COST: \$29.8 Million (Est.)

STATUS: Advanced Planning (20%) Complete, Design Start Q2 2021, Construction Award ex-