

KIWWTP – Wet Weather Treatment Project – Design Amendment

Lehigh County
Authority Wastewater...

LCA BOARD MEETING

August 25, 2025

International
Polymers Corp

Allentown Family Paving

Diamond D

Project Plan:

- **Replacement of four (4) existing Main Pump Station (MPS) vacuum primed pumps with four 20 MGD vertical turbine pumps, new motors and VFDs**
- **Replacement of two (2) existing Auxiliary Pump Station (APS) pumps with larger 40 MGD vertical turbine pumps, includes increased motor size and new VFDs**
- **Replacement of five (5) existing Primary effluent pumps at the Intermediate Pump Station (IPS) with increased design capacity including new motors and VFDs.**
- **Installation of a new tertiary bypass line to allow temporary diversion of biologically treated flow around the KIWWTP's tertiary treatment system during severe wet weather events.**

Project Timeline



Amendment Request:

- Risk Based Replacement of PLCs
- Test Pit Survey
- Screen Chamber Concrete Repairs
- Bridge Crane Manufacturer CAD file
- Evaluation of Trickling Filter Parallel Line
- Soil Erosion and Control Plan Permit Application
- Pre-Purchase Equipment Procurement Assistance
- Influent Gate Replacement Design

PLC Replacement Locations:

Auxiliary
Pump Station
(PLC 12)

Intermediate
Pump Station
(PLC 9)



Test Pit Survey Locations:

Main Pump Station
(Location of
Screening and
Influent Gates)

Auxiliary
Pump Station

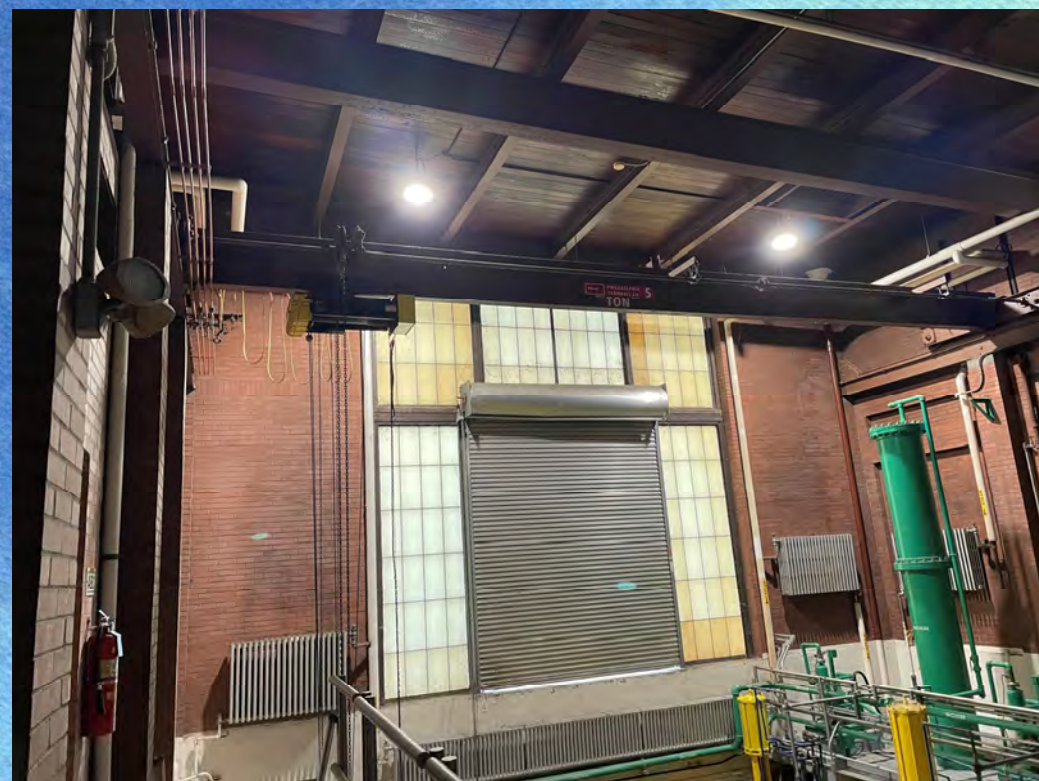
Proposed in
plant RMTF
bypass
location



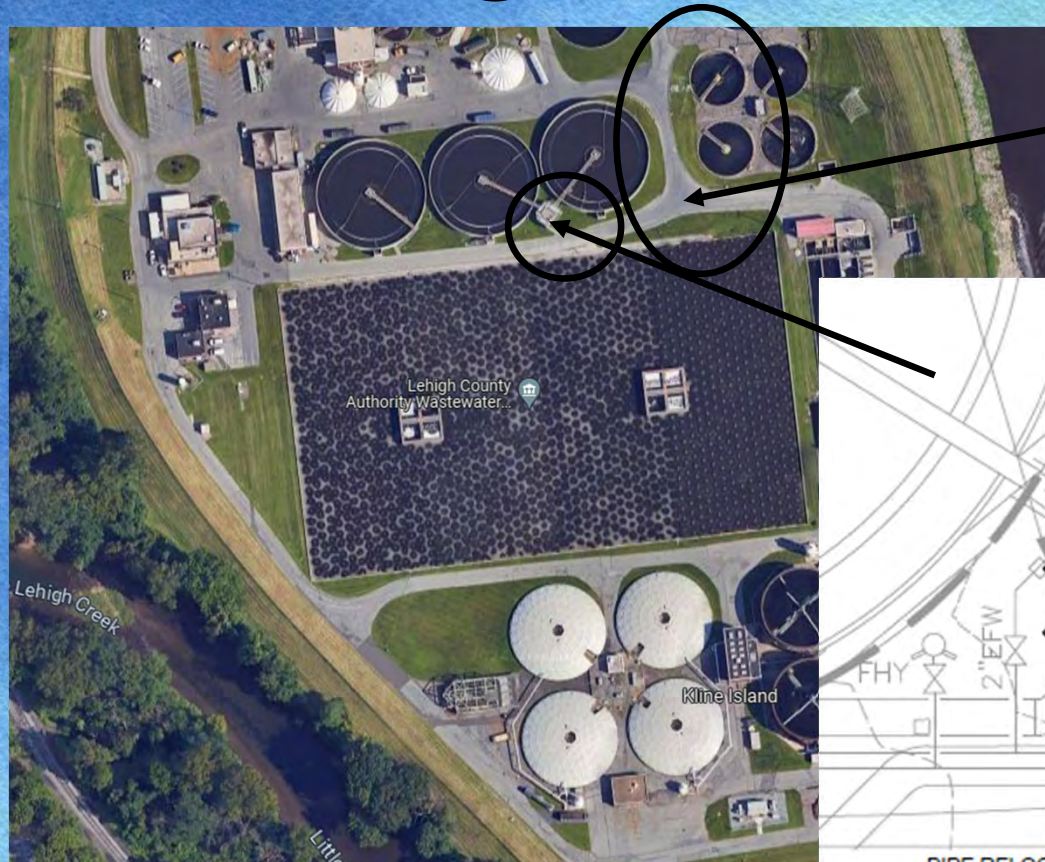
Screen Chamber Concrete Repair:



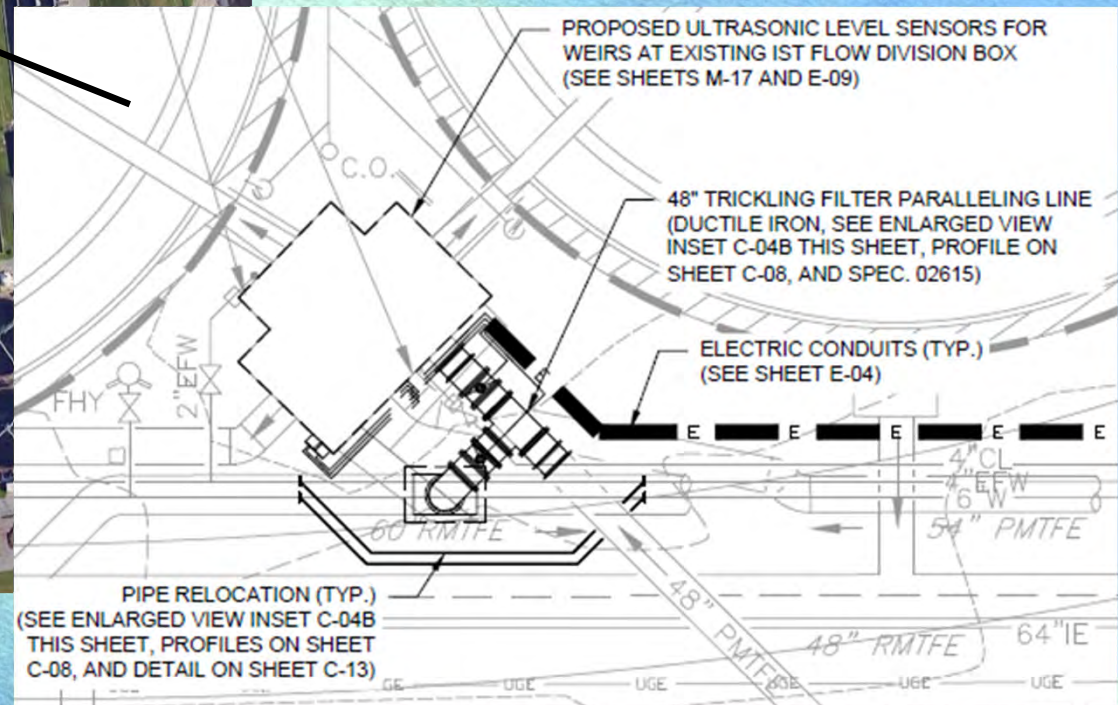
Bridge Crane:



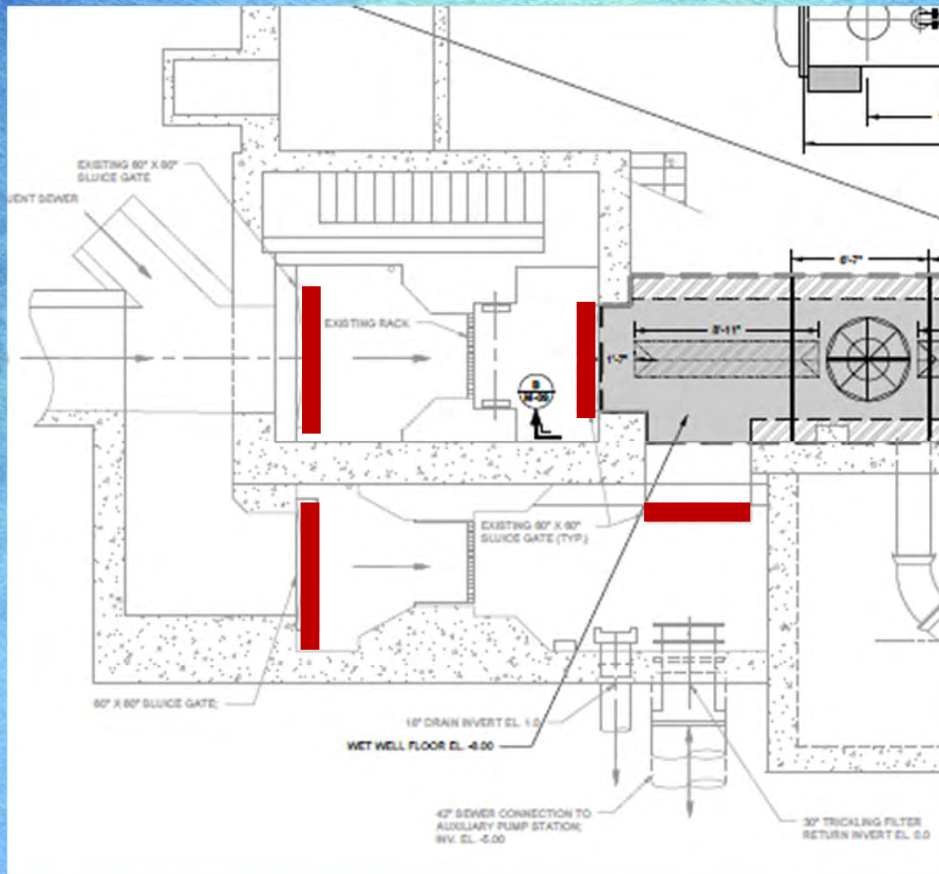
Trickling Filter Parallel line:



Original Area of
Proposed in
plant Bypass



Influent Gate Replacement:



Approval Request:

- *Prior Authorization for Final Design & Bidding Phase with Kleinfelder, Inc.* = \$994,450
- Amendment Request - Additional Final Design Services (Kleinfelder, Inc.) = **\$253,090**

New Design & Bidding Phase Total (Kleinfelder, Inc.) = \$1,247,540