



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

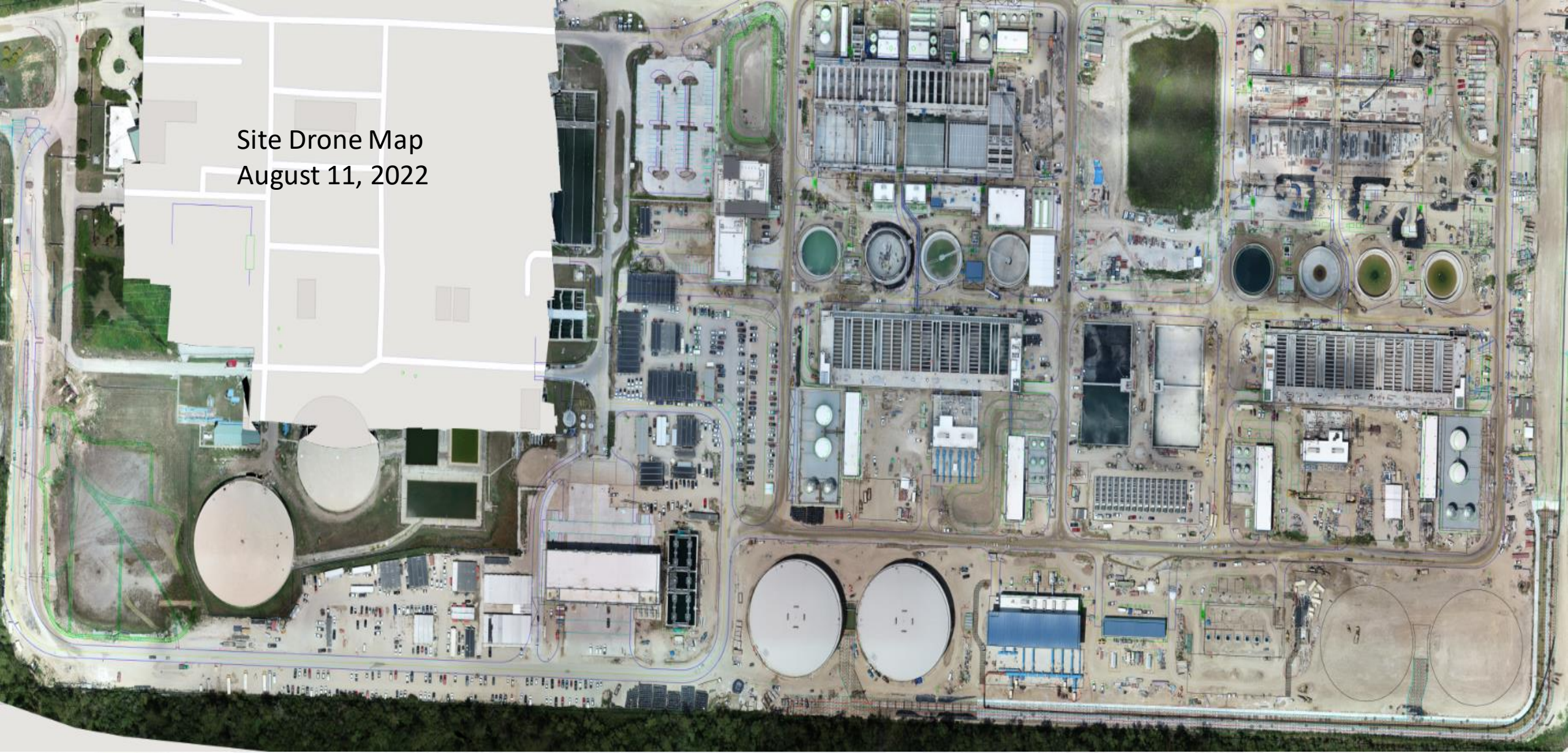
August 17, 2022



Houston Waterworks Team



Site Drone Map
August 11, 2022





Construction Progress – Site Electrical

- **261 BLTI Terminating Valve Actuators**
- **252 BLTI Terminating In 252 RIO B**
- **261 Fisk Pulling Wire To PLC 261**
- **261 Fisk Terminating PLC-MOCP-261-A**



261 BLTI Terminating Valve Actuators



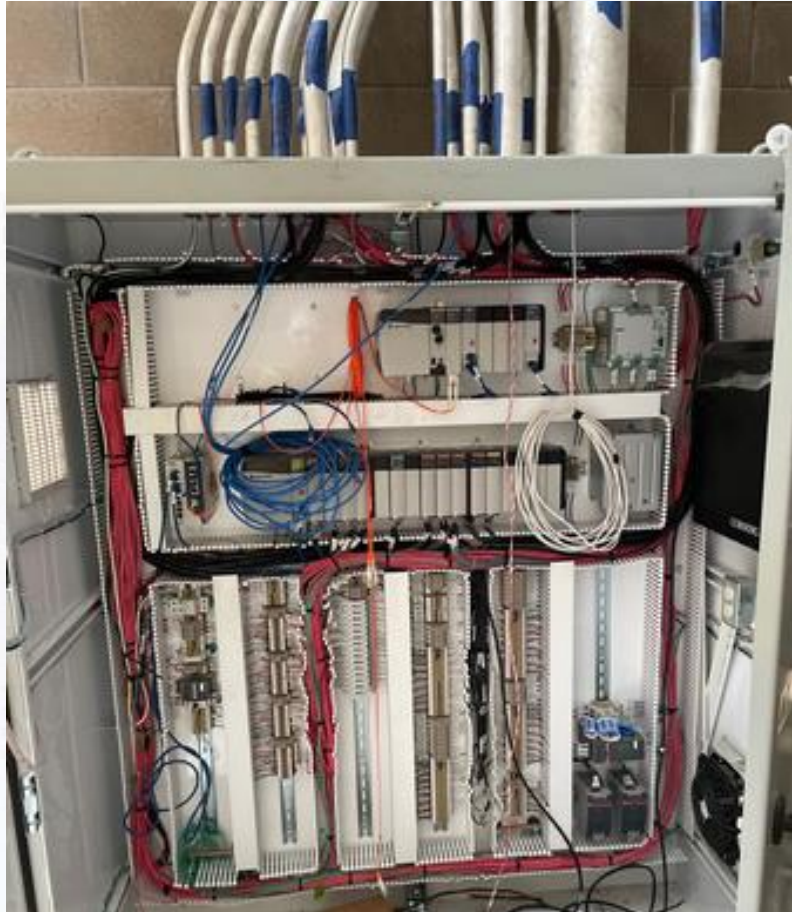
252 BLTI Terminating In 252 RIO B



261 Fisk Pulling Wire To PLC 261



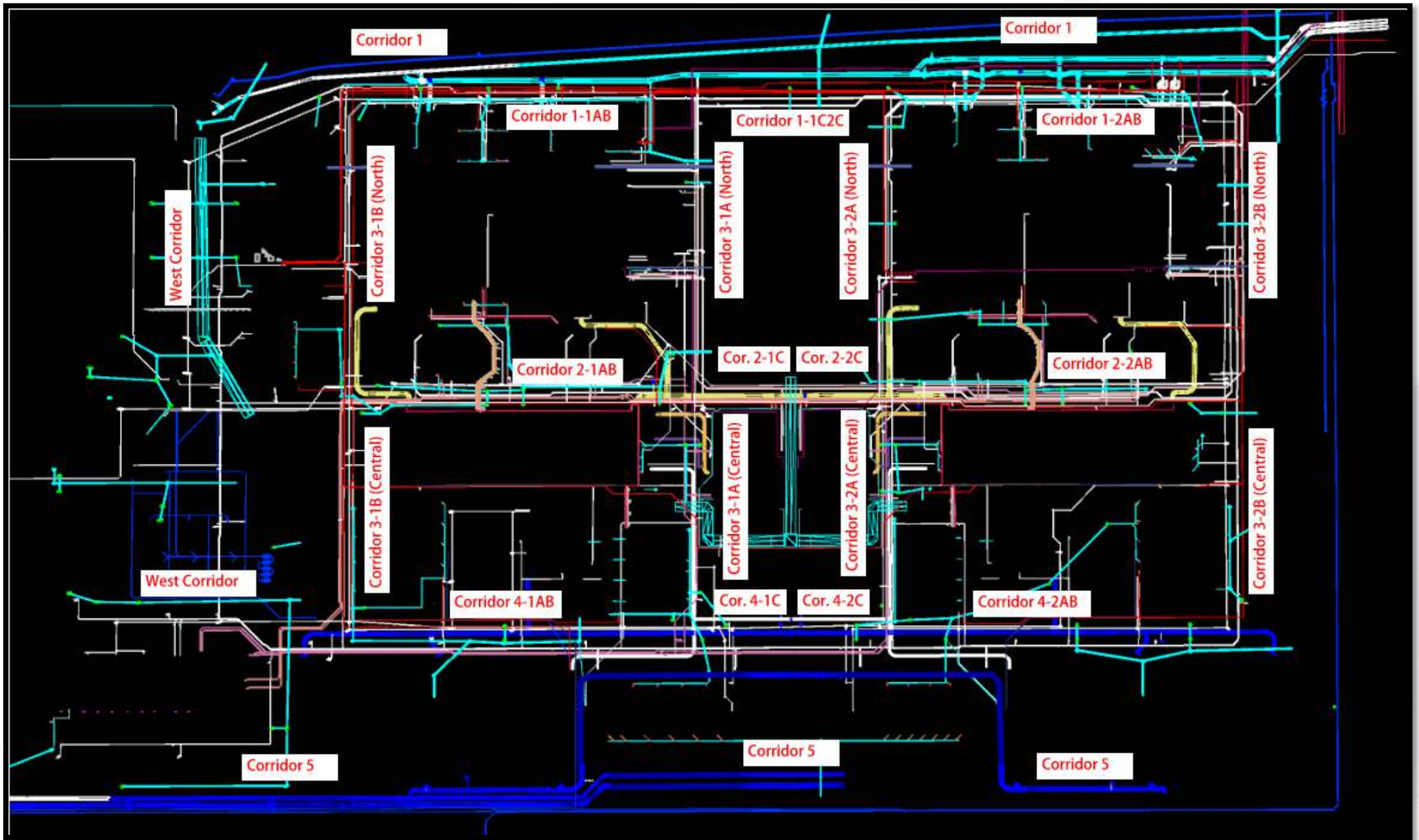
261 Fisk Terminating PLC-MOCP-261-A





Construction Progress – Yard Piping

- **Sheeprolling The Top Grading Of The Dual 108inch Pipes In The Corridor**
- **Backfilling The Dual 108inch Pipes In The Corridor**
- **Continue completing Restrictor 2 at Pond 4**



Sheeprolling The Top Grading Of The Dual 108inch Pipes In The Corridor



Backfilling The Dual 108inch Pipes In The Corridor



Continue completing Restrictor 2 at Pond 4





Construction Progress – Central Plant 1

281-FILTER MODULE 1 :

- Profibus/Equipment Testing and setup.
- Clean Water Loop startup

291-TRANSFER PUMP STATION 1:

- E&S Testing for clean water loop

311 – POST CHEMICAL FACILITY SH/CS :

- Process Mechanical Piping system coating.
- Vertical Pipe installation

312 – POST CHEMICAL FACILITY FA/LAS/PEC/SB :

- Chemical Pumps E&S in progress.



CENTRAL PLANT- PHASE 1 OVERALL



281 FILTER MODULE- Chemical Piping Testing



281 FILTER MODULE- Water Loop Startup



291-TPS – E&S Testing for Clean water loop



291-TPS – Outdoor lights and security Cameras installed



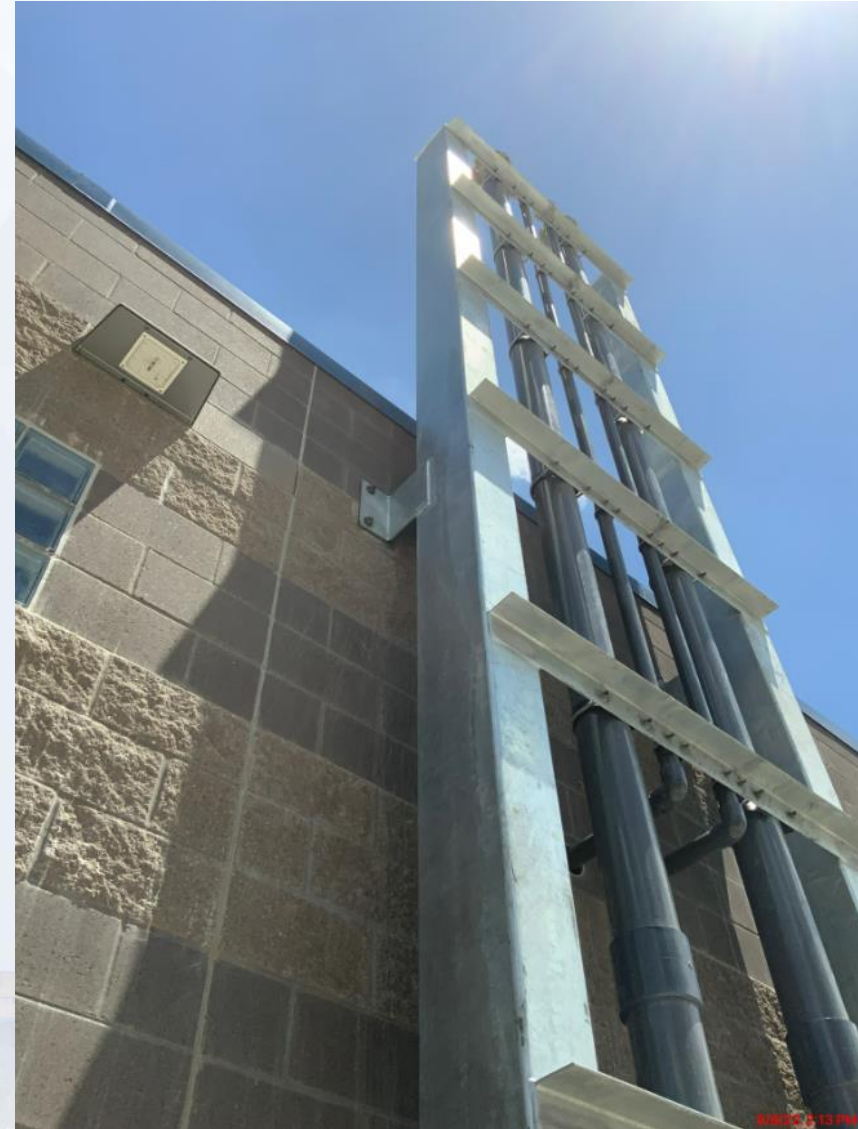
311 – Aerial view –06/14/2022



311 –Chemical Process Mechanical Pipe coating



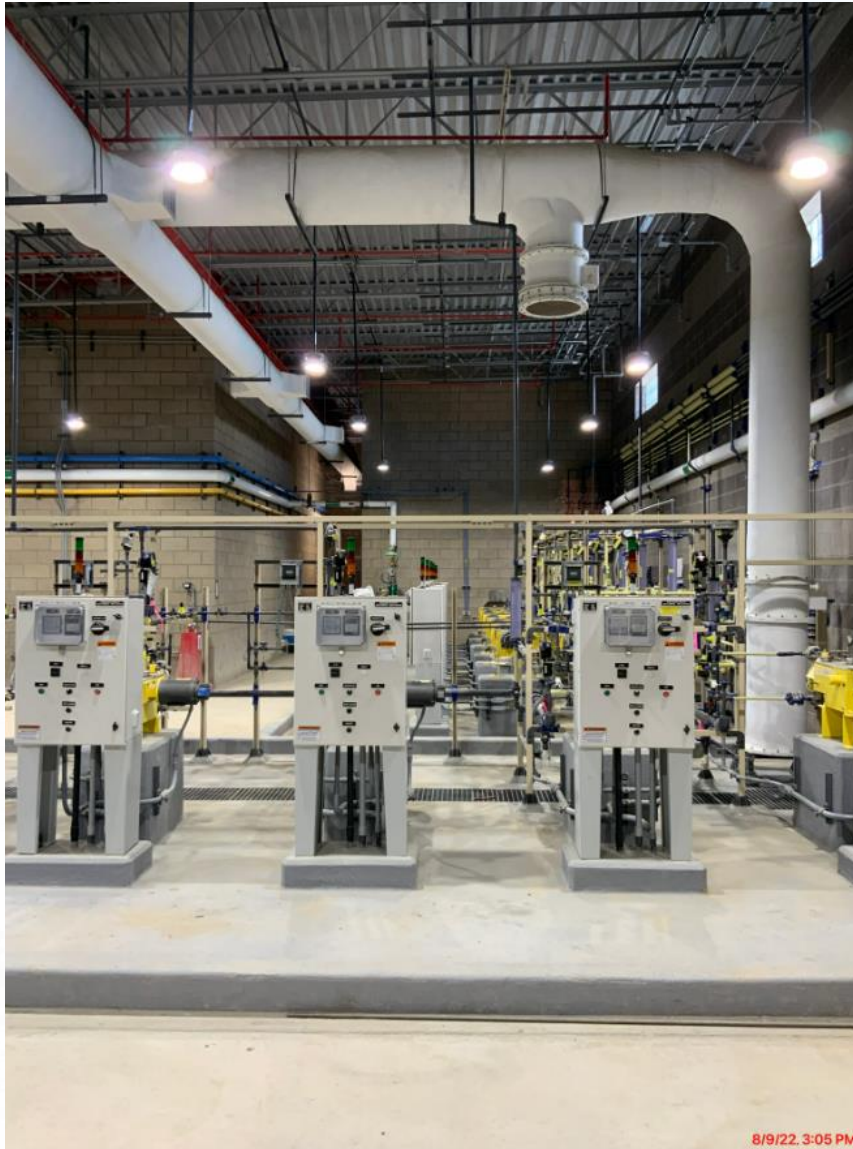
311 –Process Mechanical Vertical Pipe installation



312 - Overall view 06/14/22



312 – Chemical Process Pump E&S





Construction Progress – Central Plant 2

● 282 -FILTER MODULE 2:

- Filter underdrain anchor block installation.
- Gallery Process Mechanical installation.

● 292-TRANSFER PUMP STATION 2:

- 96-inch Pipe installation.
- CMU block Installation
- Metal Roof joist installation.

● 313 – POST CHEMICAL FACILITY 3 FA/LAS/PEC/SB :

- Under Metal Roof coating.
- FRP Tanks installation.

● 314 – POST CHEMICAL FACILITY 4 SH/CS :

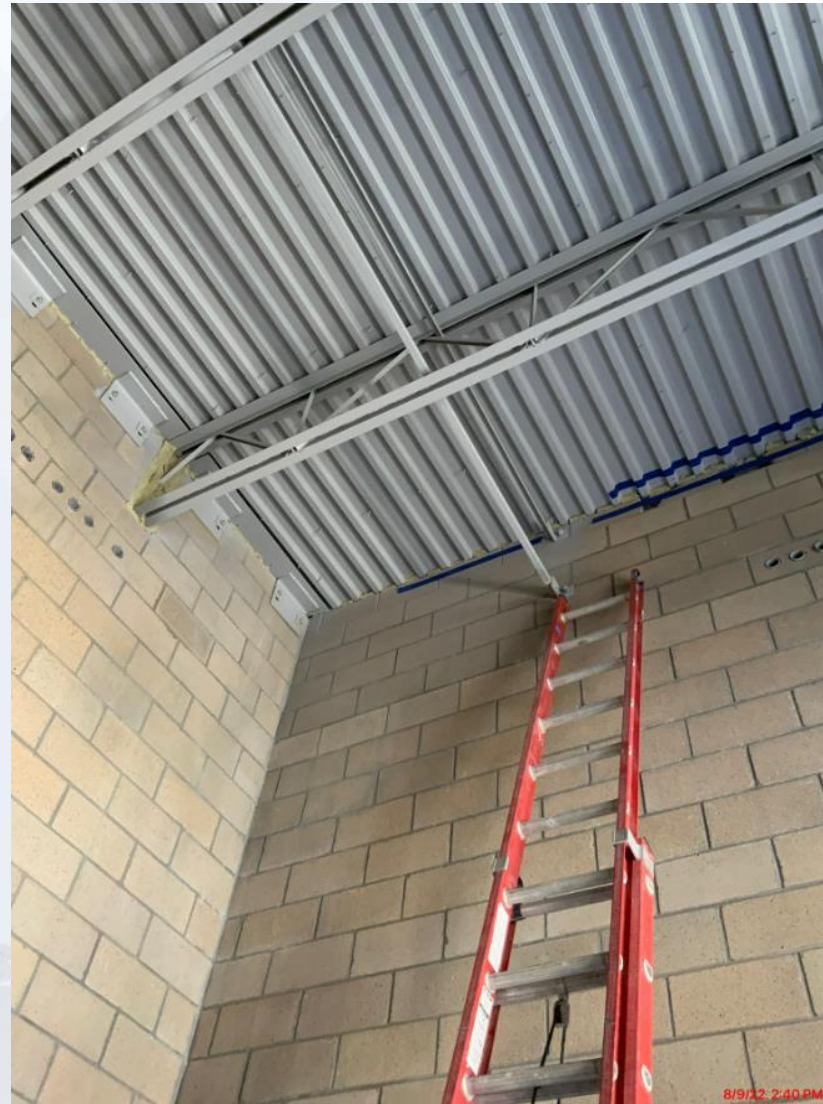
- Metering Pumps Installation.
- 6-inch STM Pipe installation.
- HVAC Outside unit Installation.



CENTRAL PLANT- Phase 2



313 – Under Metal Roof Coating



313 – FRP Tanks Installation



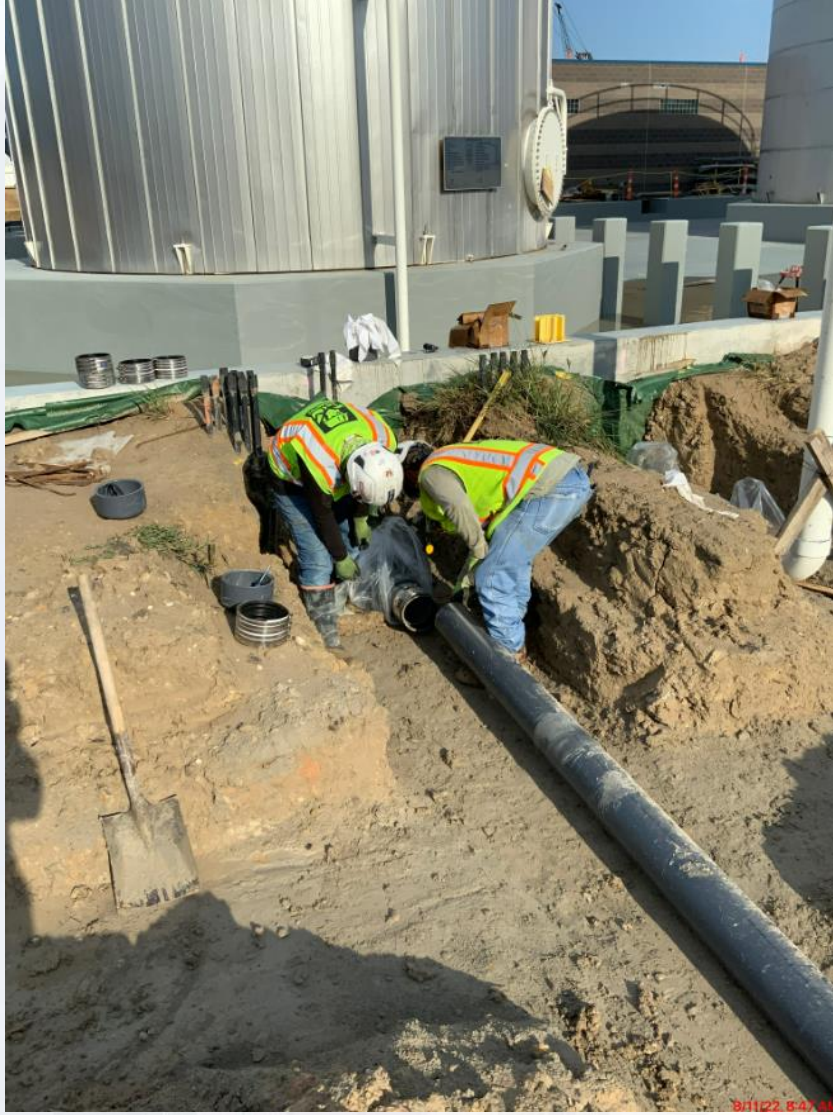
314 – HVAC Unit Installation



314 – Metering Pumps Installation



314 – 6-inch STM Pipe installation



282-FILTER MODULE 2 - Gallery Process Mechanical Installation



282-Underdrain installation – West Half



292-TPS – 96-inch FW Pipe installation



292-TPS – Joist Metal Roof installation



292-TPS – CMU Installation





Construction Progress – LREQ Basins Facilities 601/602

- **601 – SECO LCP Installation**
- **601 – Process Mechanical Pipe Installation**
- **602 – Pipe Coating**
- **602 – 72-inch Pipe backfilling**

601/602 Overall view 06/14/2022



601 – SECO Conduit Installation



601 – Process Mechanical Pipe Installation



602 – Coating Process Pipe



602 – 72-inch Pipe Backfilling





Construction Progress – North Plant

- **201-Chlorine Dioxide Facility 1:**
- **Continued Mechanical Work**
- **212-Pretreatment Chemical Facility 2:**
- **Continued Electrical equipment install/preparing for equipment pads**
- **213-Pretreatment Chemical Facility 3:**
- **Continued Mechanical Work / Fill station ongoing work**
- **214-Pretreatment Chemical Facility 4:**
- **Continued Mechanical Work/ Air Pad Room pipe install**
- **222-Rapid Mix Train 2**
- **Ongoing Mechanical and Instrumentation install**
- **241-Flocculation & Sedimentation Train 1: Install Plate Settlers in Basin 2/Install Columns and Beams Basin 1**
- **242-Flocculation & Sedimentation Train 2:Chain & Flight Testing**
- **252-Ozone Contactor 2:Continued Installation of instrumentation, East Stairs, and pipe**
- **261-Ozone Generation Facility 1:**
- **Ongoing Mechanical install / Electrical Cable Pulling and HVAC**
- **215-Pretreatment Chemical Facility 6: Continued Tank Install**
- **218-Pretreatment Chemical Facility 8:**
- **Continued erecting Steel Tanks**
- **243-Flocculation & Sedimentation Train 3:**
- **Continued Concrete Placements for Vertical Walls / Tower Crane**
- **244-Flocculation & Sedimentation Train 4:**
- **Concrete Placement for Vertical Walls**
- **502-Gravity Sludge Thickener Complex 2:**
- **Installation of Stairs and Walkway**



201-Chlorine Dioxide Facility 1: Continued Mechanical Work



212-Pretreatment Chemical Facility 2: Continued Electrical equipment install/preparing for equipment pads



213-Pretreatment Chemical Facility 3: Continued Mechanical Work / Fill Station ongoing work



214-Pretreatment Chemical Facility 4: Continued Mechanical Work/ Air Pad Room pipe install



222-Rapid Mix Train 2: Ongoing Mechanical and Instrumentation install



241-Flocculation & Sedimentation Train 1: Install Plate Settlers in Basin 2/Install Columns and Beams Basin 1

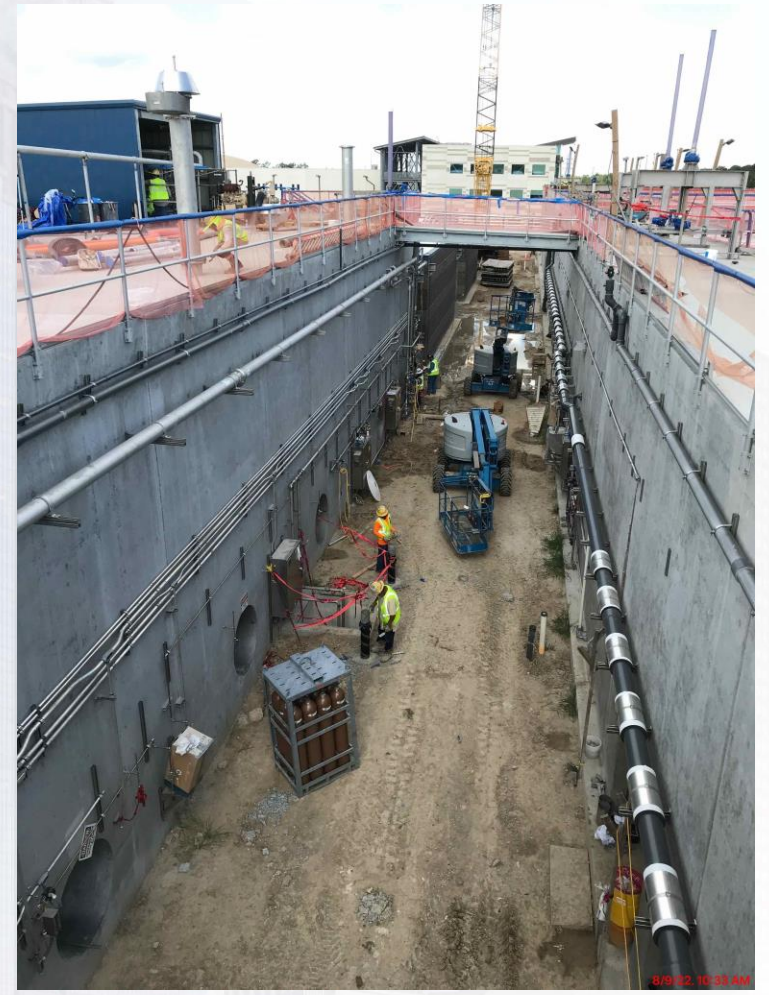


242-Flocculation & Sedimentation Train 2: Chain and Flight 200 Hours test



8/9/22, 10:29 AM

252-Ozone Contactor 2: Continued Installation of instrumentation, East Stairs, and pipe



261-Ozone Generation Facility 1: Ongoing Mechanical install / Electrical Cable Pulling/ HVAC



215 Pretreatment Chemical Facility 5: Continued Tank Install



218 Pretreatment Chemical Facility 8: Continued Erecting the Steel Tanks



243-Flocculation & Sedimentation Train 3: Continued Concrete Placements for Vertical Walls / Tower Crane



244-Flocculation & Sedimentation Train 4: Concrete Placement for Vertical Walls



Facility 216-Pretreatment Chemical Facility 6: Continued Slab placements



502-Gravity Sludge Thickener Complex 2: Installation of Stairs and Walkway





Construction Progress – South Plant

363 & 364:

- Surveying

111, 401, & 402:

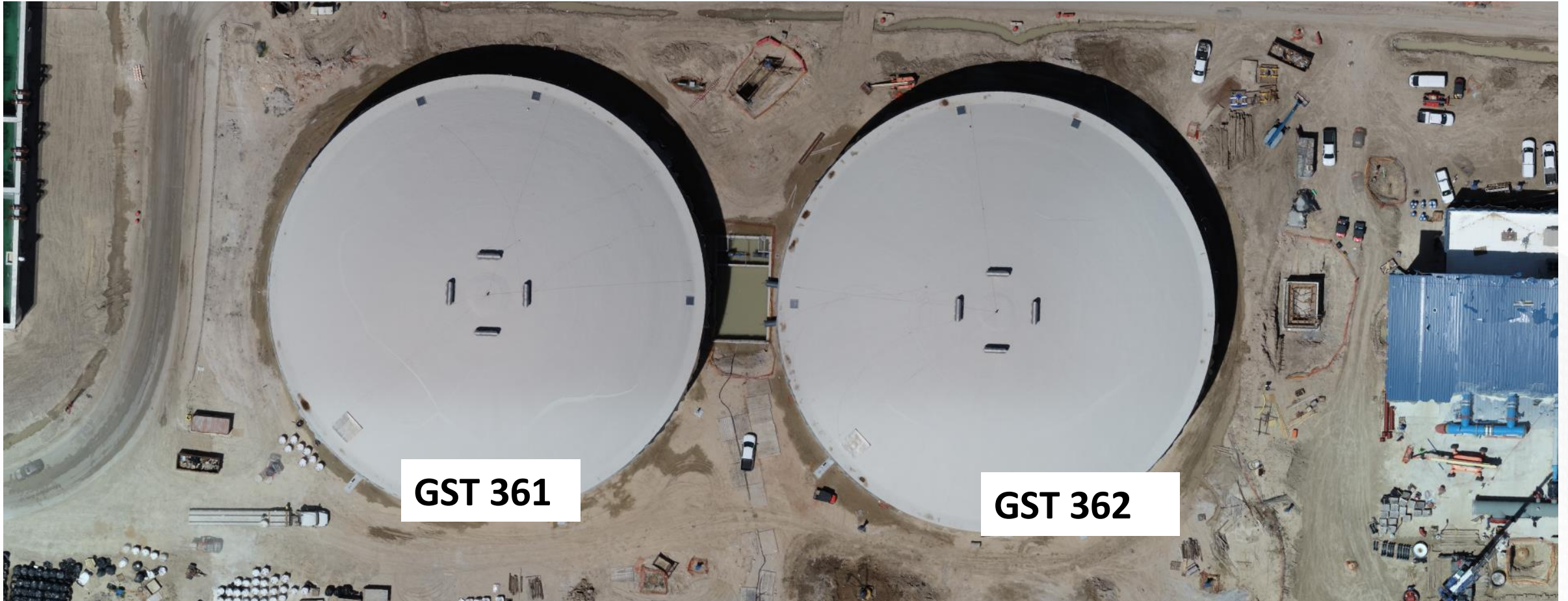
- AS-Builds model for FAC 111
- Installation of exterior stairs at FAC 401
- Continued pulling overhead branch wire at the Analyzer Room at Fac 401.
- Pump couple & uncouple testing at FAC 401
- Hydro Testing of header pipe and pump cans at FAC 401
- Undergoing temp water loop at FAC 401
- Installed translucent Pannels at FAC 401
- Chem Vault coating at FAC 401
- Backfilling at FAC 402
- FRP footing concrete Pour for ramp at 402
- Trench Drain and Plumbing installation at FAC 402
- Conduit installation at FAC 402
- Continued Backfilling and compacting at FAC 402

510 & 520:

- Continued installing plumbing, process pipe, and electrical conduit on levels 1, 2, and 3 at Fac 520.
- Continued mechanical and structural coatings installation at Fac 520.
- Continued fire-resistant joint system installation at Fac 520.
- Continued process pipe installation at Fac 510.
- Commenced terminating power to wiring sludge mixers, LCP's, and MCS's at Fac 510.
- Concrete driveway pouring North side of 520
- Continued wire pulling and terminations
- Installed truck scales and related conduit
- Lightning protection continued installation



GST 361 & 362 AERIAL VIEW



GST 361

GST 362

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 402



Pump room piping and embedded conduit installation

HIGH SERVICE PUMP STATION 401



Installation of exterior stairs

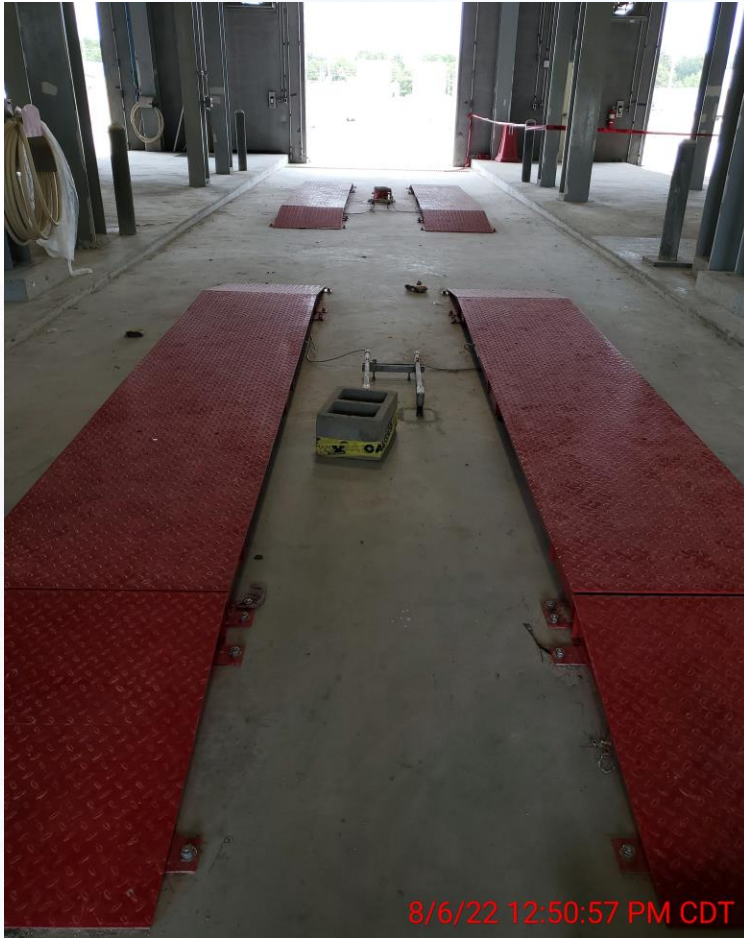


Pump testing of HSP-1

DEWATERING BUILDING 520 & THICKENED SLUDGE EQUALIZATION TANK 510 AERIAL VIEW



DEWATERING BUILDING 520



Truck Scales installation and conduit at Fac 520



Wire Terminations in centrifuge electrical room

THICKENED SLUDGE & EQ BASIN 510



E&S testing & maintenance at Fac 510.



Construction Progress – Administration & Maintenance Building

- Installation of Furniture
- Compaction of SP Lot
- Forming of SP Lot
- Forming of Transformers Pad Extension



Installation of Furniture



Compaction of SP Lot



Forming of SP Lot



Forming of Transformer Pad Extension





Construction Progress – Site Civil

- **Continue rebar installation at the North driveway at the Dewatering Building**
- **Grading the bottom of Pond 8**
- **CO2 Tank concrete pad formwork**



Continue rebar installation at the North driveway at the Dewatering Building



Grading the bottom of Pond 8



CO2 Tank concrete pad formwork

