



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

May 19, 2021



Houston Waterworks Team



Site Drone Map
May 6, 2021

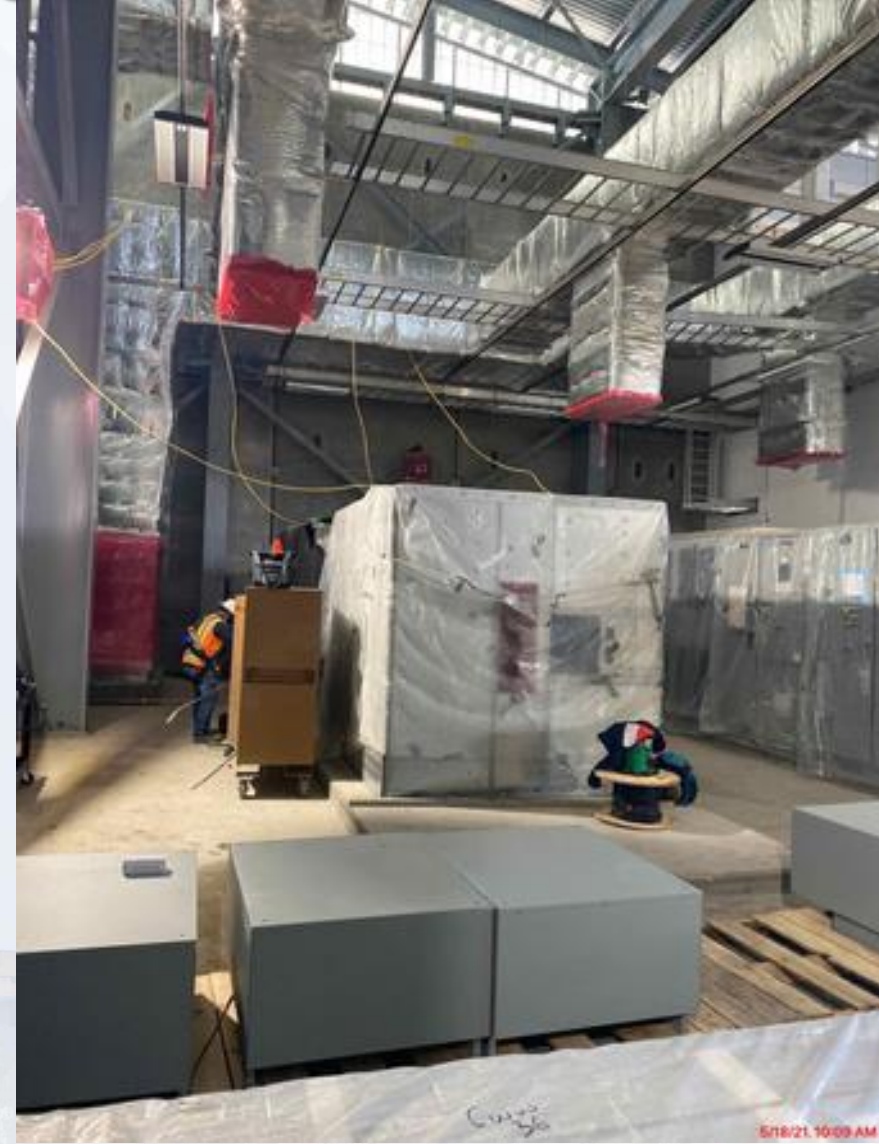


Construction Progress – Intake Pump Station (IPS)

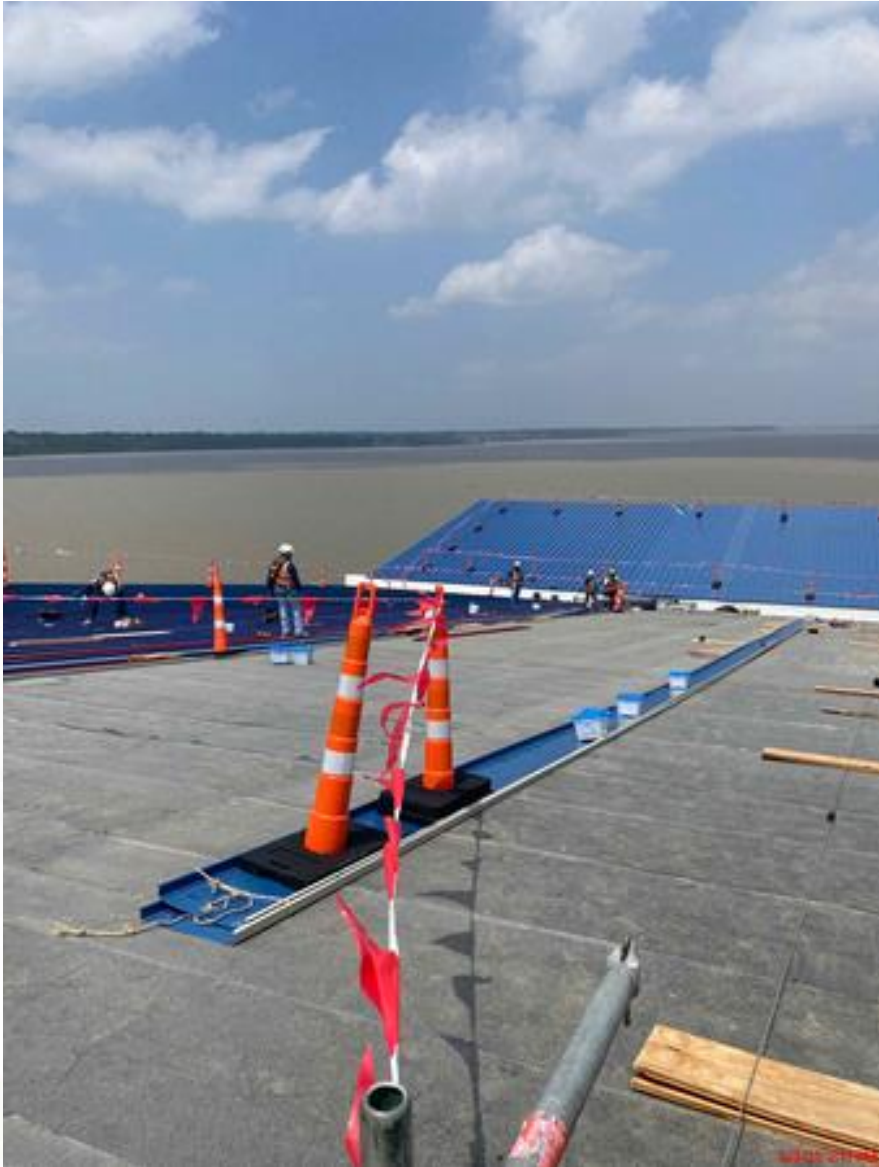
- Installing electrical gears at the IPS
- Roof installation at the IPS
- HVAC duct installation in the IPS pump room
- Installing chlorine dioxide pipe on the bridge
- CMU installation at the electrical building 152



Installing electrical gears at the IPS



Roof installation at the IPS



Houston Waterworks Team



HVAC duct installation in the IPS pump room



Installing chlorine dioxide pipe on the bridge



CMU installation at the electrical building 152

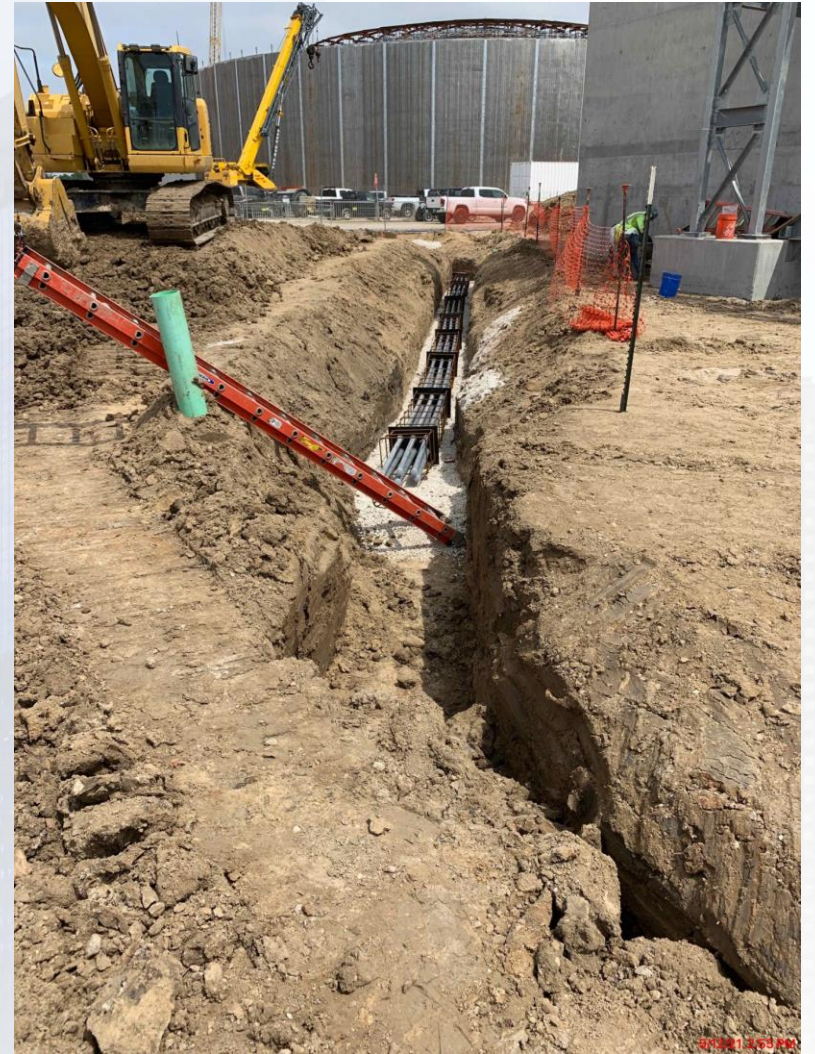




Construction Progress – Site Electrical

- 520 Fiber Duct Bank
- SHERMCO 520 Transformers and Feeder Cable Testing
- 401/312 Fiber Duct Bank

520 Fiber Duct Bank



SHERMCO 520 Transformers and Feeder Cable Testing



401/312 Fiber Duct Bank

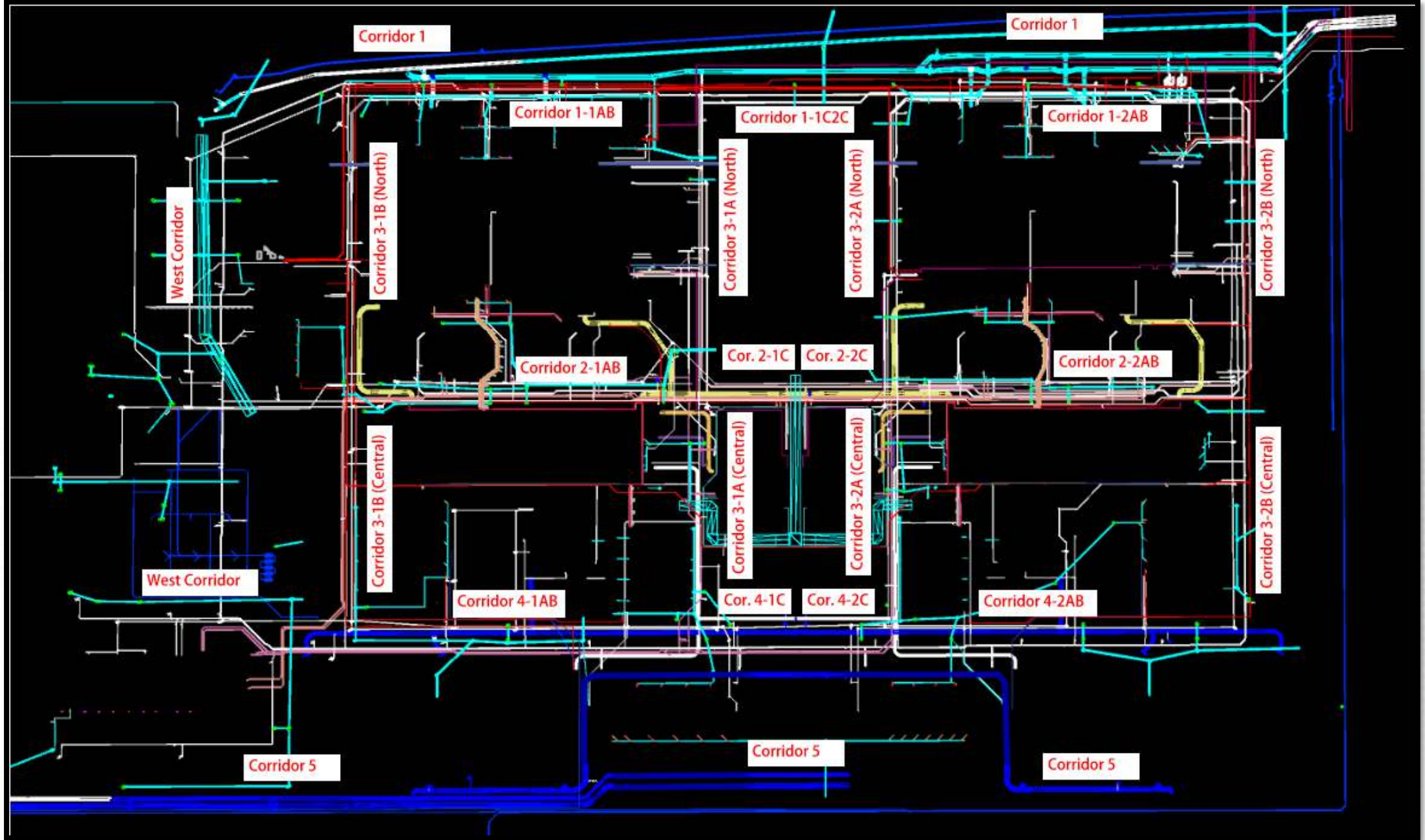




Construction Progress – Yard Piping

- **Installing and welding the 60” OF from Fac 241 in Corridor 3-1B North**
- **Installing 24” PW line in West Corridor (North)**
- **Installing 8” PW line in C2-1C and 6” PW in C2-1AB**
- **Installing 24” RCP & 12” PVC Storm piping and manhole in Corridor 1-1AB**
- **Installing 4” PDR piping in Corridor 1-1AB**
- **Installing 6” SSG line in Corridor 1-1AB, and 8” in C3-1A North**
- **Installing the 36” CRCY lines in Corridor 1-2AB**
- **Tie-in 72” RW to Fac. 222 in Corridor 1-1AB**
- **Removing the buttstrap and realigning the 108” Wye on the RW line in Corridor 1**
- **Installing 2-14” TSL lines and blow-offs in Corridor 2-1C**
- **Set the 96” BFV on the OZW line in Corridor 2-1C**
- **Installing the 120” FW header piping in Corridor 5 – Phase 2**





Installing and welding the 60" OF from Fac 241 in Corridor 3-1B North



Installing 24" PW line in West Corridor (North)



Installing 8" PW line in C2-1C and 6" PW in C2-1AB



Installing 24" RCP & 12" PVC Stormpiping and Manhole in Corridor 1-1AB



Installing 4" PDR piping in Corridor 1-1AB



Installing 6" SSG line in Corridor 1-1AB, and 8" in C3-1A North



Installing the 36" CRCY lines in Corridor 1-2AB



Tie-in 72" RW to Fac. 222 in Corridor 1-1AB



Removing the buttstrap and realigning the 108" Wye on the RW line in Corridor 1



Installing 2-14" TSL lines and blow-offs in Corridor 2-1C



Set the 96" BFV on the OZW line in Corridor 2-1C



Installing the 120" FW header piping in Corridor 5 – Phase 2





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- Preparing to Install UD Blocks.
- Installing HVAC Ducts/Pipes
- Installing Cable Tray & Supports

291-TRANSFER PUMP STATION 1:

- FRP Electrical Room Equipment Pads
- Install Access Hatch Grating Covers
- Install West 6" PPW UG Piping
- Install Cable Tray Supports in Electrical Room

292-TRANSFER PUMP STATION 2:

- Pour Baffle Walls BW1, BW3, BW4, and BW6
- Form Up Baffle Walls BW2 and BW5

311-POST CHEMICAL FACILITY 1 SH/CS :

- Final Inspection Chem Tanks.
- CMU Placement for Chemical Bldgs.
- Installing Deck and Ledger System

312 – POST CHEMICAL FACILITY 2 FA/LAS/PEC/SB

- CMU Placement for Chem Bldgs.
- Leak Test Containment Areas.

314 – POST CHEMICAL FACILITY 4 SH/CS :

- Installation of Underground Conduits Containment.
- F/R/P Building Footings and Stem Walls.

282 -FILTER MODULE 2:

- Reinforcing /Pouring Interior Tall Walls.
- Finish Pouring Last UMD.



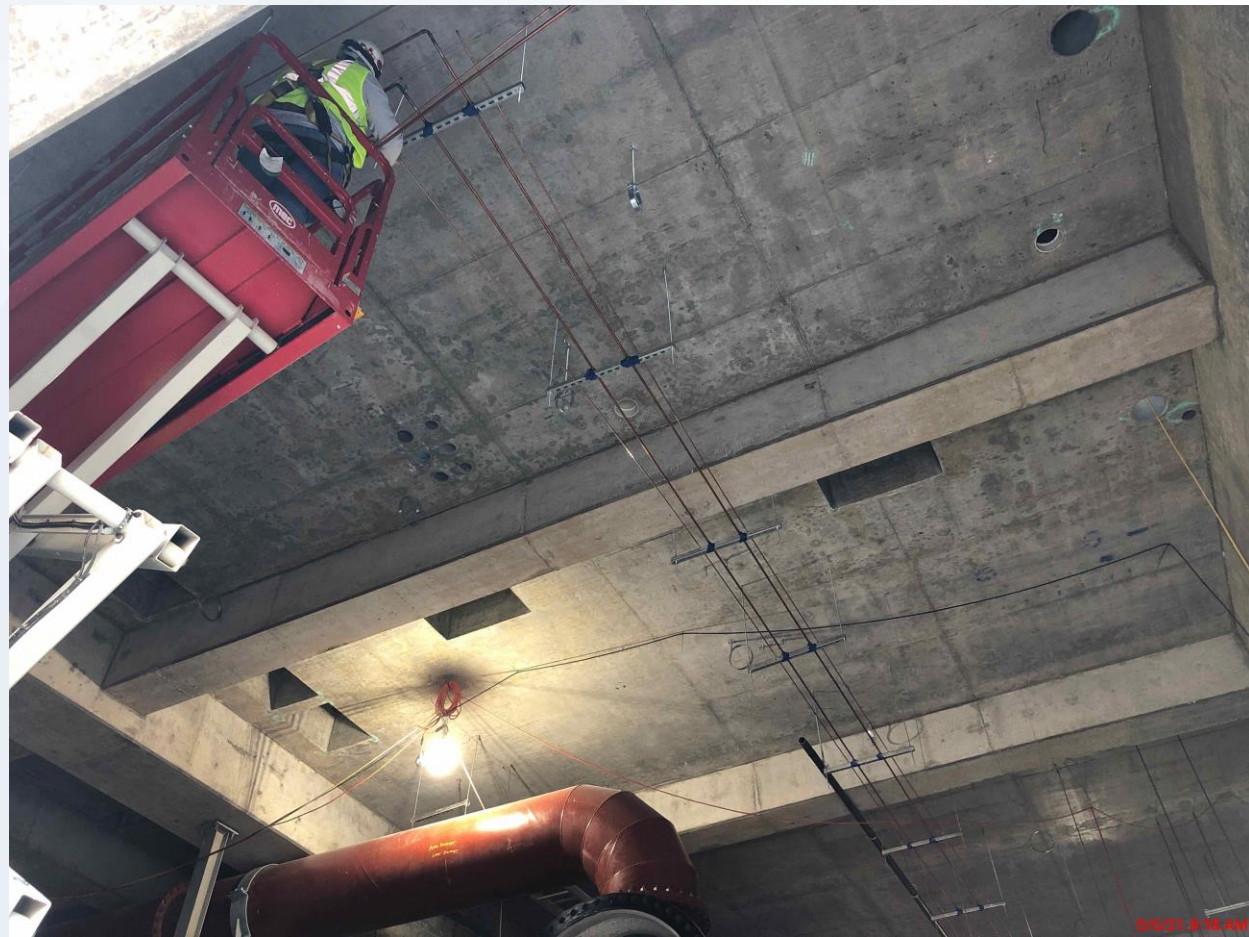
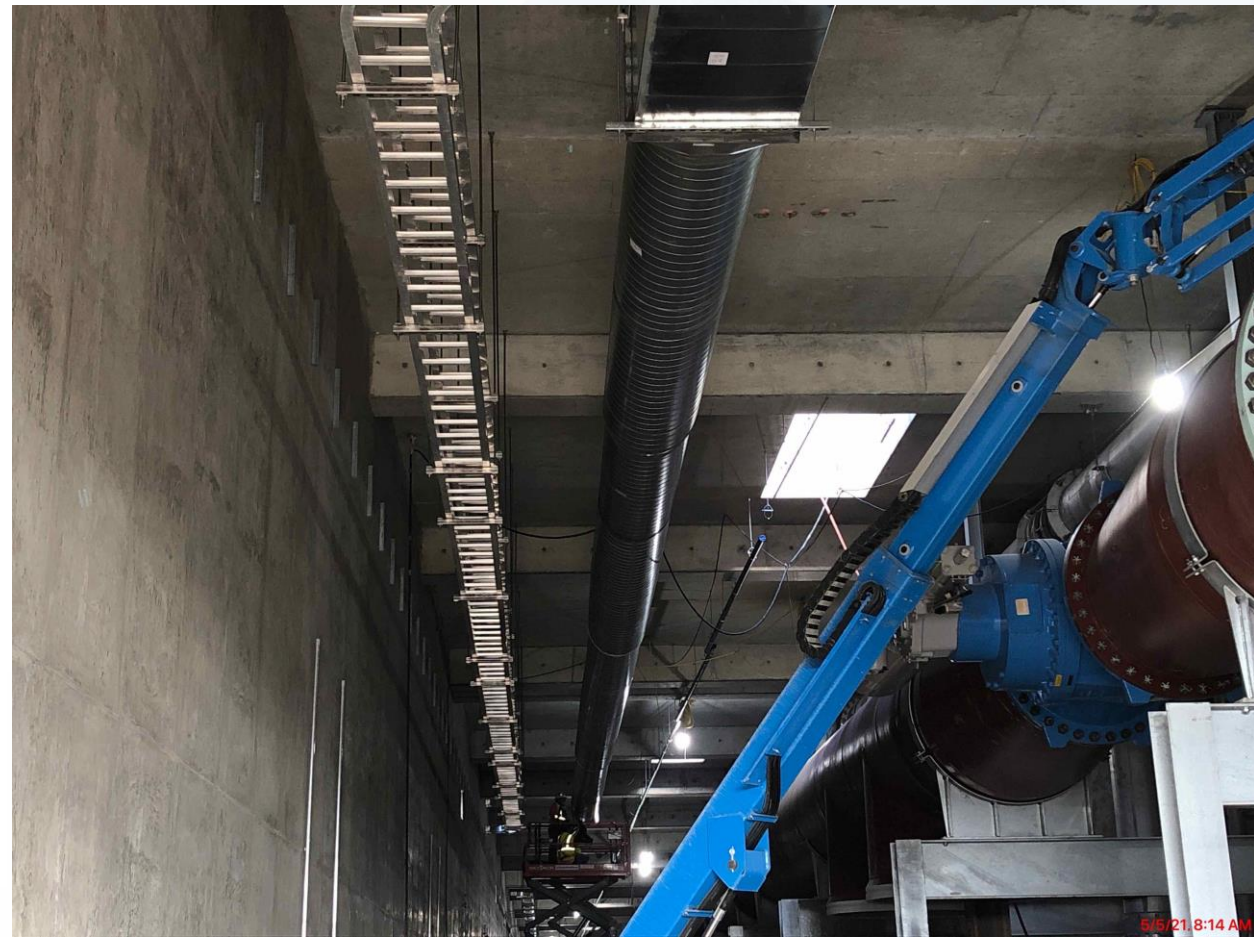
CENTRAL PLANT- 1st PHASE OVERALL



281-FILTER MODULE- Preparing to Install UD Blocks- Filter 11



281-FILTER MODULE- Installing HVAC Ducts/Pipes



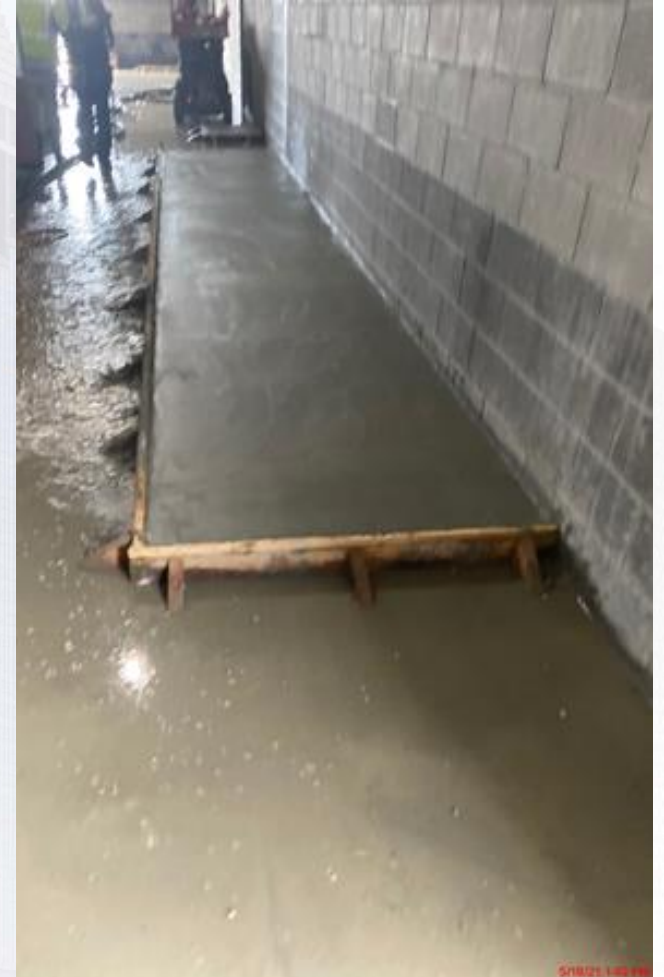
281-FILTER MODULE – Installing Cable Trays-Gallery



291-TPS – Aerial View (03/23/2021)



291-TPS – FRP Electrical Room Equipment Pads



291-TPS – Install Access Hatches Grating Covers



291-TPS – Install West 6" PPW UG Piping



291-TPS – Install Cable Tray Supports in Electrical Room



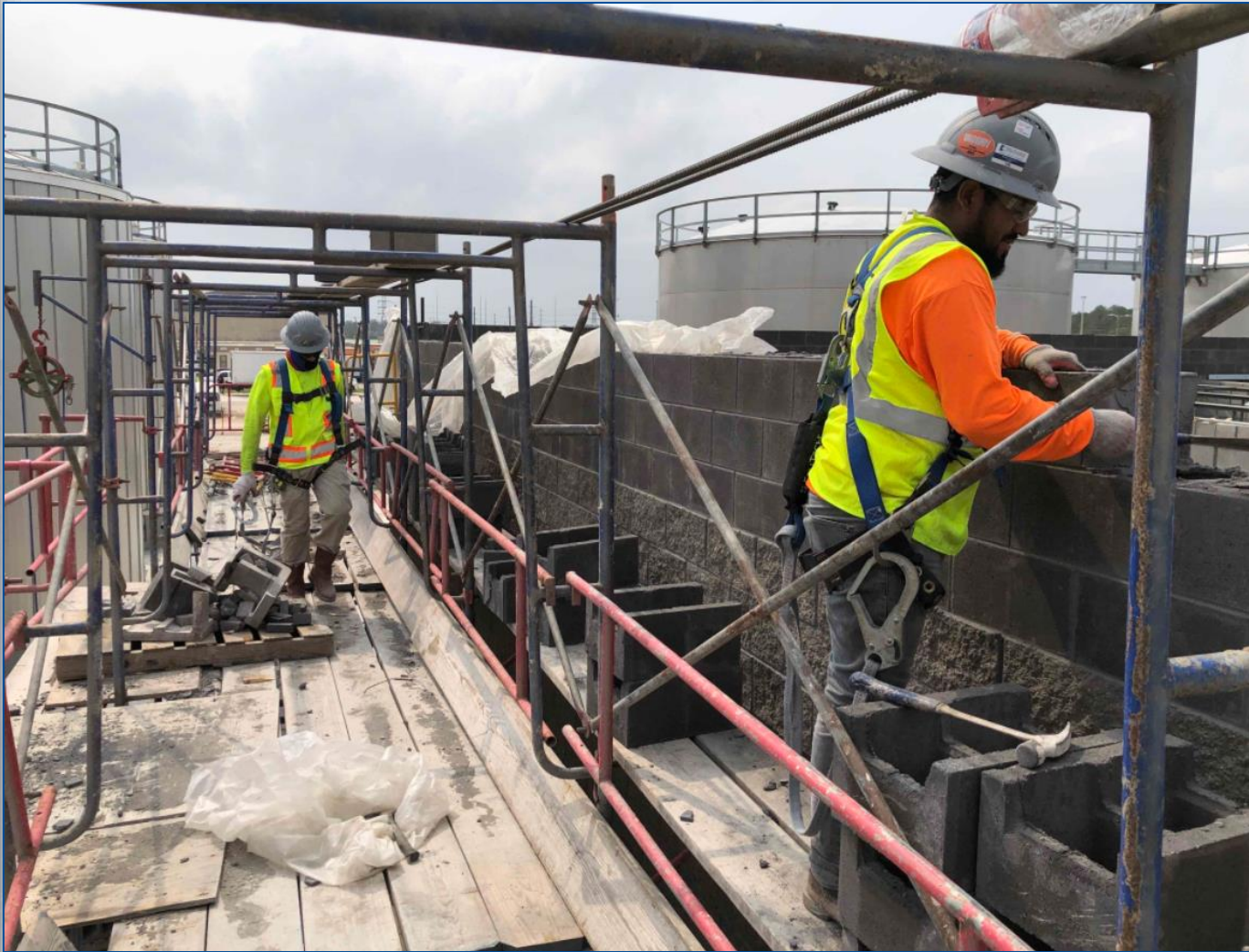
311 – Aerial view –03/23/2021



311 – Chem Tanks Final Inspection Walkthrough



311 – CMU Placement for Chemical Bldg. Top Course



311 – Installing Deck System



312 - Overall view 03/23/21



312 –Building – CMU Installation



312 – Containment Area Leak Test.



CENTRAL PLANT- 2nd Phase Overall



314 – Installation of Underground Conduits tank farm



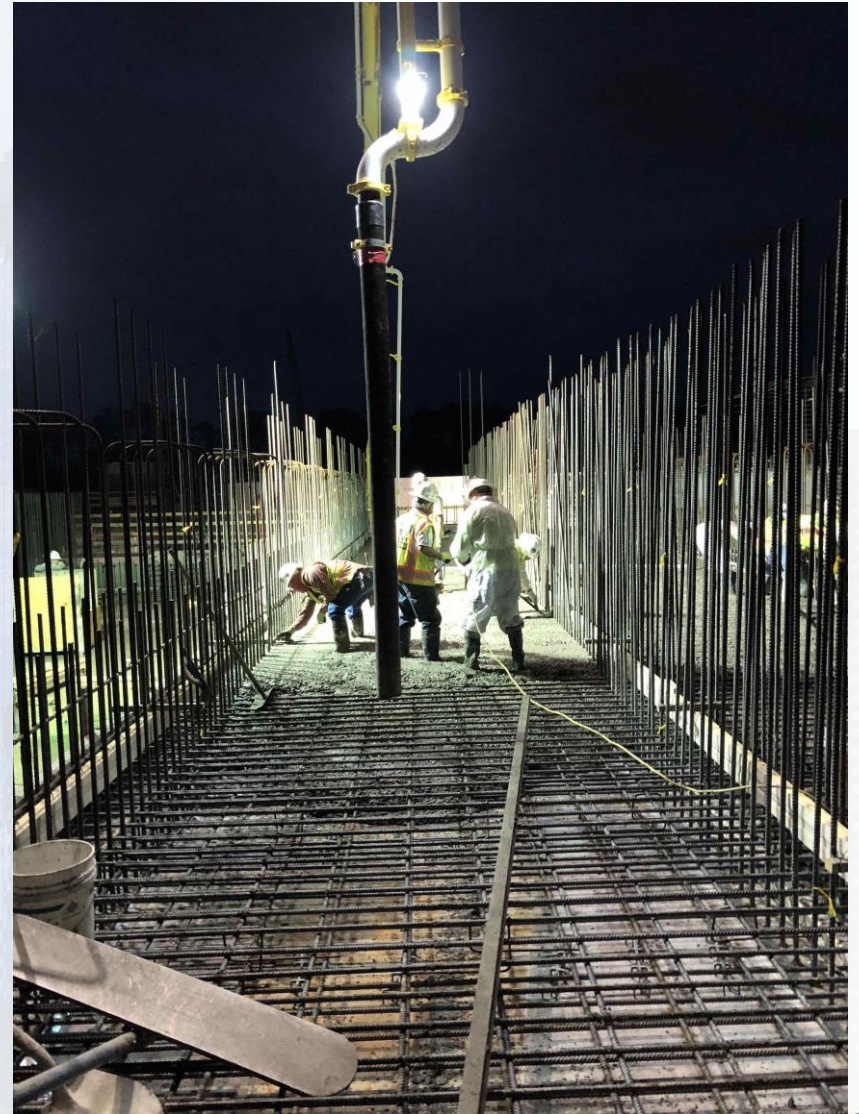
- 314 – F/R/P Building Footings and stem walls.



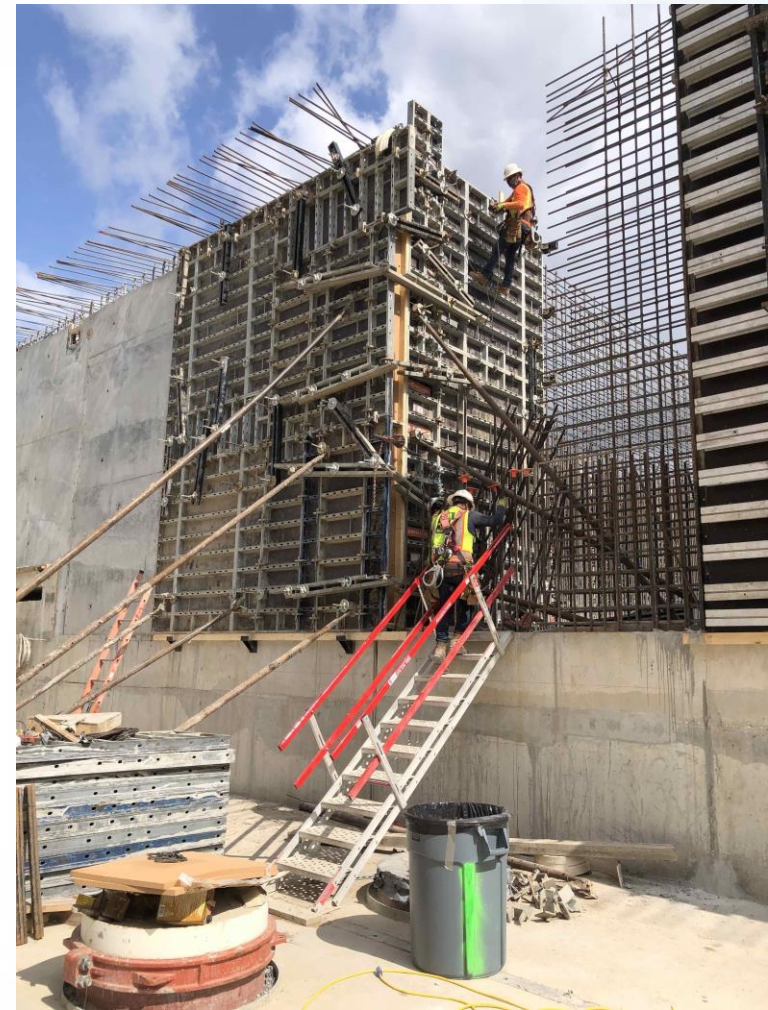
282-FILTER MODULE 2- Reinforcing/Forming Walls



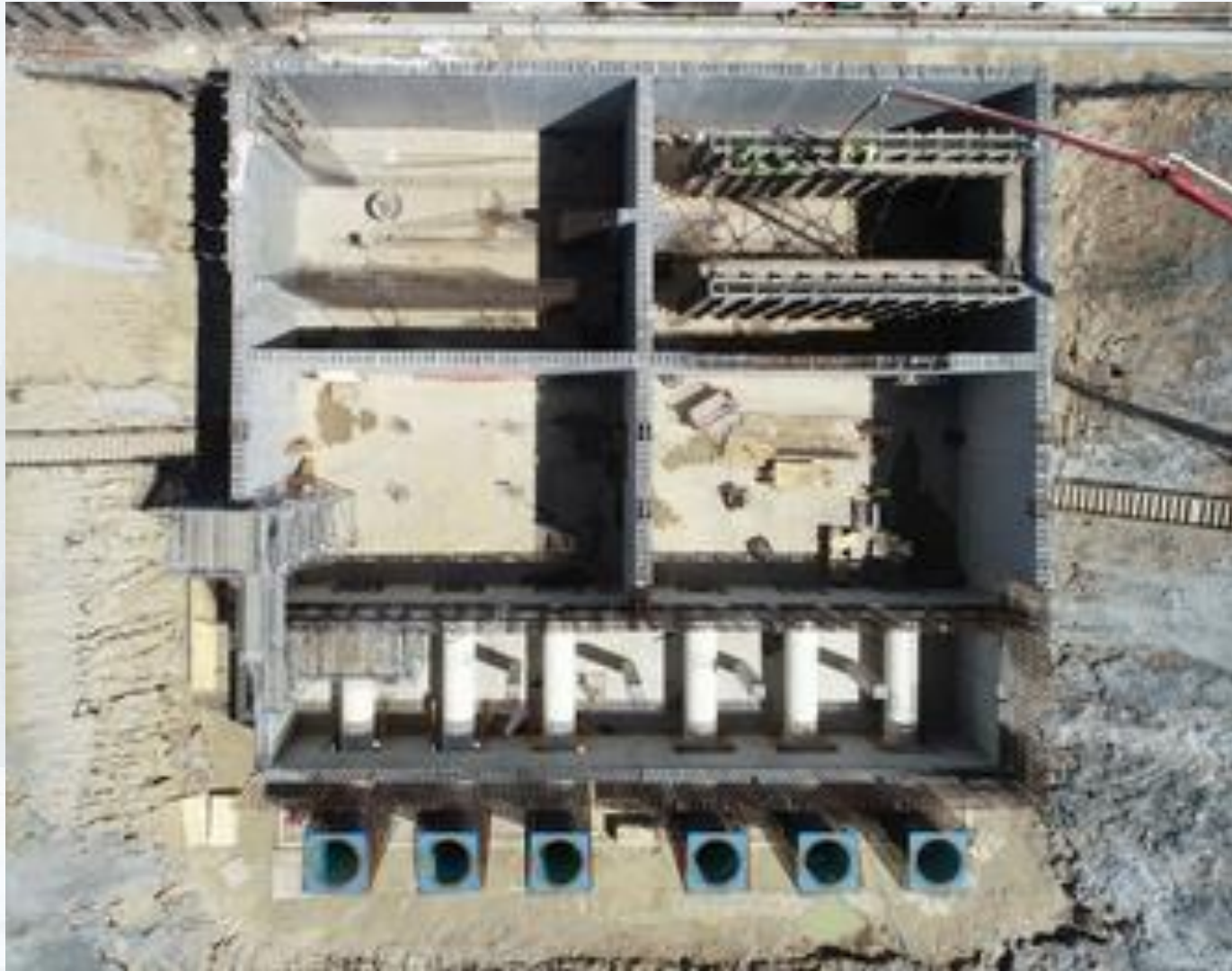
282-FILTER MODULE 2- Finish Pouring Upper Manifold Decks



282-FILTER MODULE 2- Reinforcing/Pouring Exterior Tall Walls



292-TPS – Aerial View (05-06-2021)



292-TPS – Pour Baffle Walls BW1, BW3, BW4, and BW6



292-TPS – Form up and Reinforce Baffle Walls BW2 and BW5





Construction Progress – LREQ Basins Facilities 601/602

- **601 – Continue installation of handrails**
- **601 – Removing material from basin 3 for leak test**
- **602 – Rebar Installation for south walls**



601 – Continue installation of handrails



5/5/21 2:57 PM

601 – Removing material from basin 3 for leak test



602 – Rebar Installation for south walls





Construction Progress – North Plant

201-Chlorine Dioxide Facility 1:

- Area-B Backfill

212-Pretreatment Chemical Facility 2:

- Area-B Excavation

214-Pretreatment Chemical Facility 4:

- Sandblasting PC Tank-1

221-Rapid Mix Train 1:

- 78” RW Pipe Spool Piece Installation

241-Flocculation & Sedimentation Train 1:

- Flocculation Basin-2 East Walls Curing

242-Flocculation & Sedimentation Train 2:

- CWC to OZ Inlet Blind Flange Work

252-Ozone Contactor 1:

- Roof F/R/P

501-Gravity Thickener Complex 1:

- TSSB Walls Formwork

502-Gravity Thickener Complex 2:

- Backfill

611-Liquid Residuals Clarifier Facility 1:

- Drilling Holes for Handrails



201-Chlorine Dioxide Facility 1: Area-B Backfill



212-Pretreatment Chemical Facility 2: Area-B Excavation



214-Pretreatment Chemical Facility 4: Sandblasting PC Tank-1



221-Rapid Mix Train 1: 78" RW Pipe Spool Piece Installation



5/15/21, 9:05 AM

241-Flocculation & Sedimentation Train 1: Flocculation Basin-2 East Walls Curing



242-Flocculation & Sedimentation Train 2: CWC to OZ Inlet Blind Flange Work



252-Ozone Contactor 1: Roof F/R/P



5/15/21, 9:39 AM

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501-Gravity Thickener Complex 1: TSSB Walls Formwork



5/15/21 8:59 AM

502-Gravity Thickener Complex 2: Backfill



611-Liquid Residuals Clarifier Facility 1: Drilling Holes for Handrails



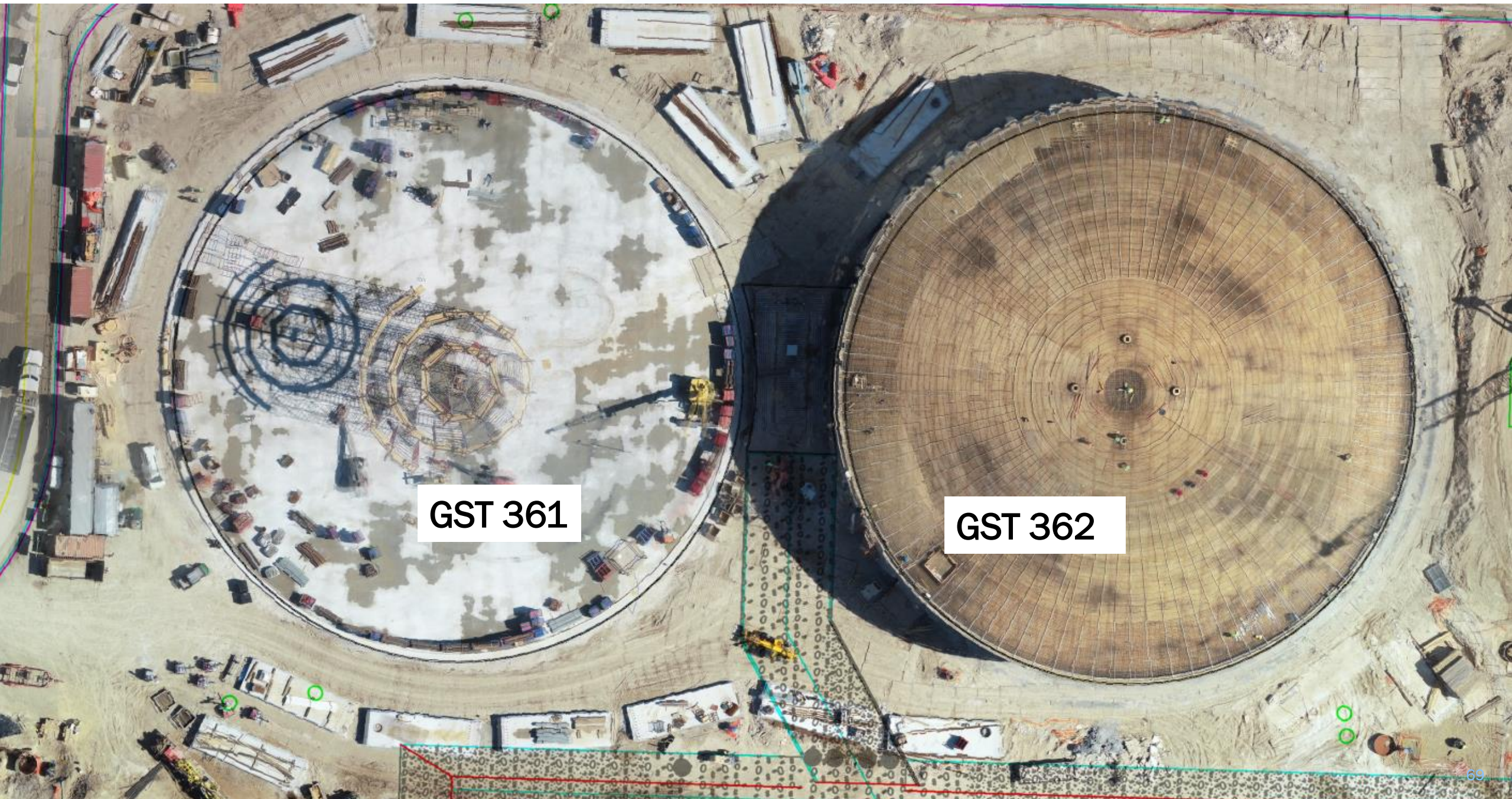
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Construction Progress – South Plant

- Completed precast wall panel installation at GST 361.
- Continued shoring erection at GST 361.
- Continued removing wall braces.
- Completed assembling and installing pump 3 at Fac 401.
- Completed re-coating pump cans 1,2,3,4 and 5 at Fac 401.
- Vertical turbine pump delivery at Fac 401.
- Continued installing under slab electrical & plumbing utilities at Fac 401.
- Installation of the 78" pipe at Fac 402.
- Only punch list items remain for Fac 111.
- Continued installation of HVAC at 1st, 2nd & 3rd floor at Fac 520.
- Continued CMU at the 1st, 2nd, and 3rd floor at Fac 520.
- Continued installation of cold metal framing at Fac 520
- Continued installation of interior process piping at Fac 520.
- Completed slope fillet pours and commenced water testing at Fac 510.
- Commenced ductile iron process piping at facility 510 & 520.
- Continued electrical raceway at fac 510.

GST 361 & 362 AERIAL VIEW



GST 361

GST 362

GROUND STORAGE TANK 361



Commenced shoring erection at GST 361

GROUND STORAGE TANK 361



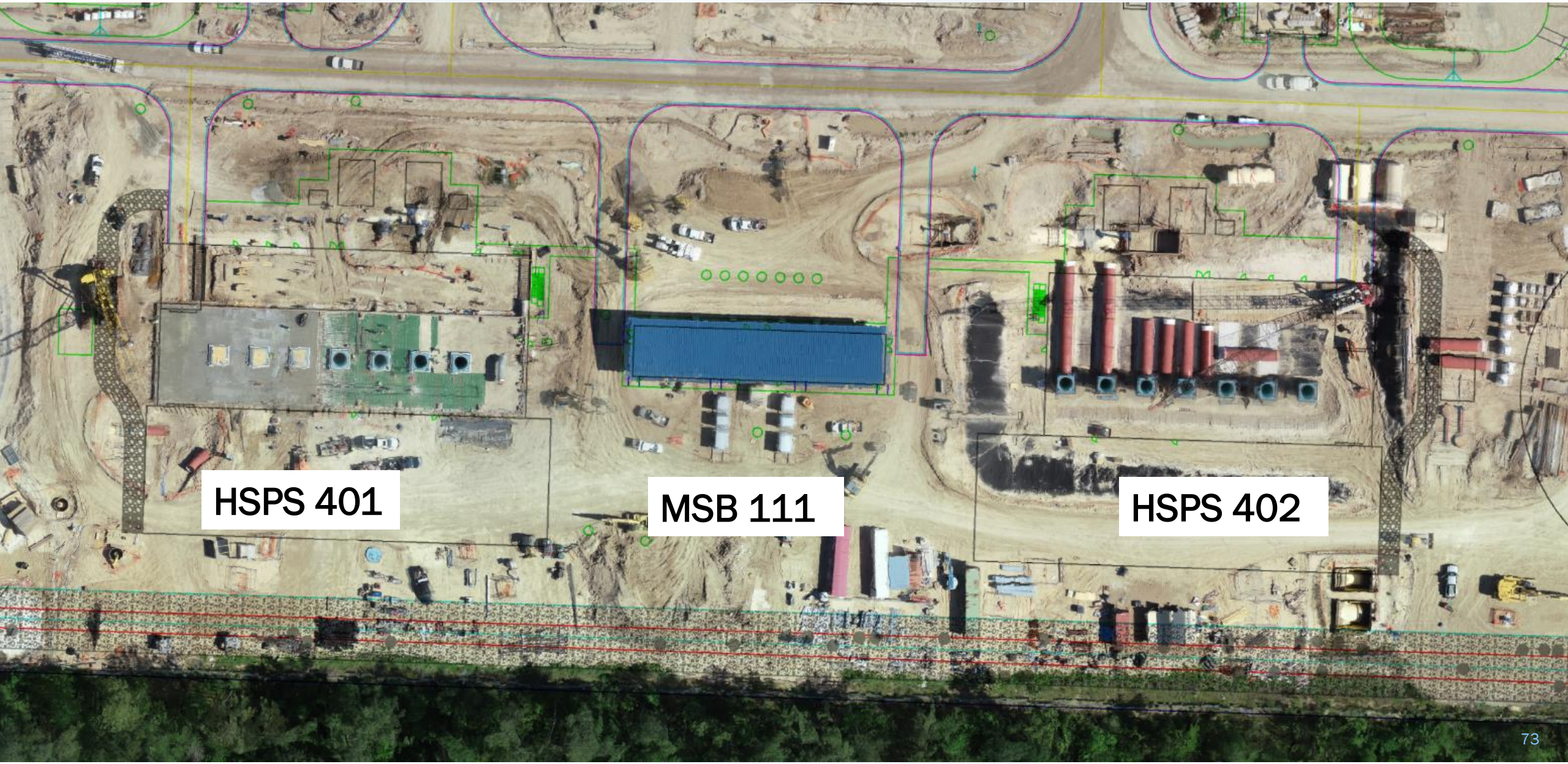
Commenced precast wall panel installation at GST 361

GROUND STORAGE TANK 362



Completed dome Concrete at GST 362

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 401



Completed concrete slab pour at the pump room at Fac 401



Continued forming footers for the electrical room at Fac 401

HIGH SERVICE PUMP STATION 401



Vertical turbine pump delivery at Fac 401



Continued installing under slab electrical & plumbing utilities at Fac 401

HIGH SERVICE PUMP STATION 402



4/29/21 8:21:39 AM CDT

Installation of the 78" pipe at Fac 402

DEWATERING BUILDING 520 & THICKENED SLUDGE EQUALIZATION TANK 510 AERIAL VIEW

March 29, 2021



DEWATERING BUILDING 520



Continued installation of HVAC at the 1st, 2nd & 3rd floor at Fac 520

DEWATERING BUILDING 520



4/29/21 7:49:51 AM CDT

Continued CMU at the 1st, 2nd, and 3rd floor at Fac 520

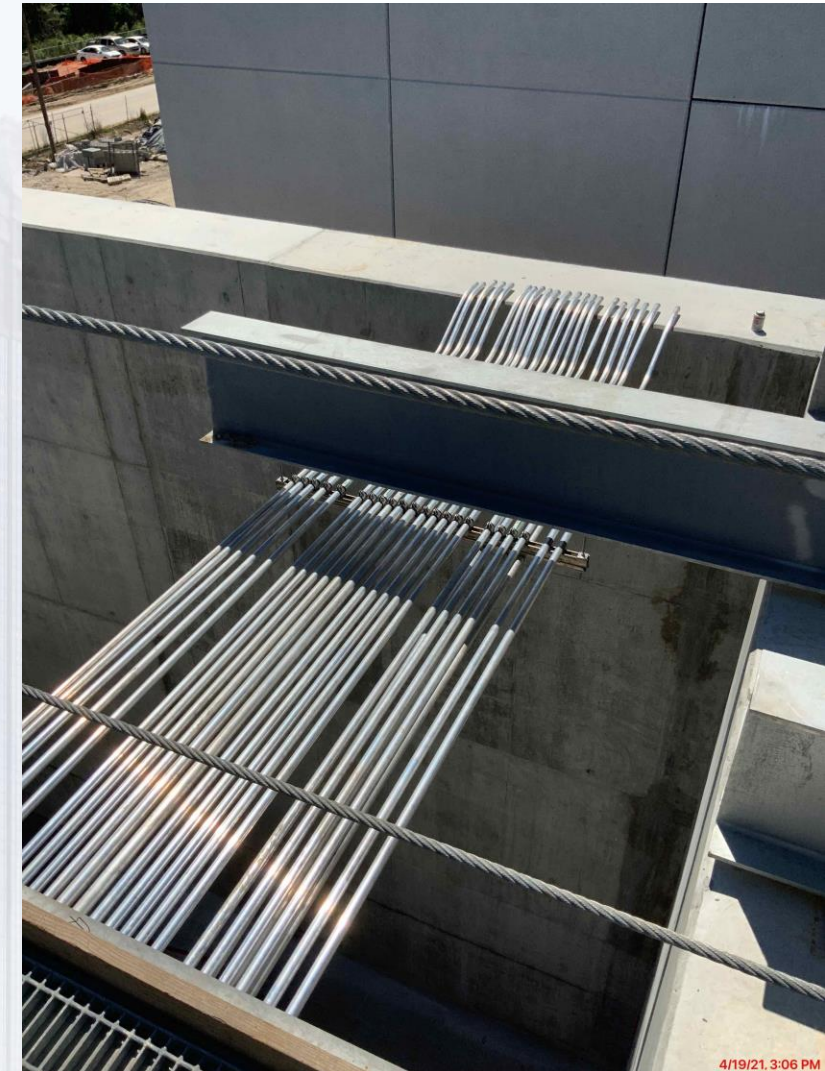


Continued installation of cold metal framing at Fac 520

Sludge Equalization Tank 510



Commenced slope fillet pour at Fac 510



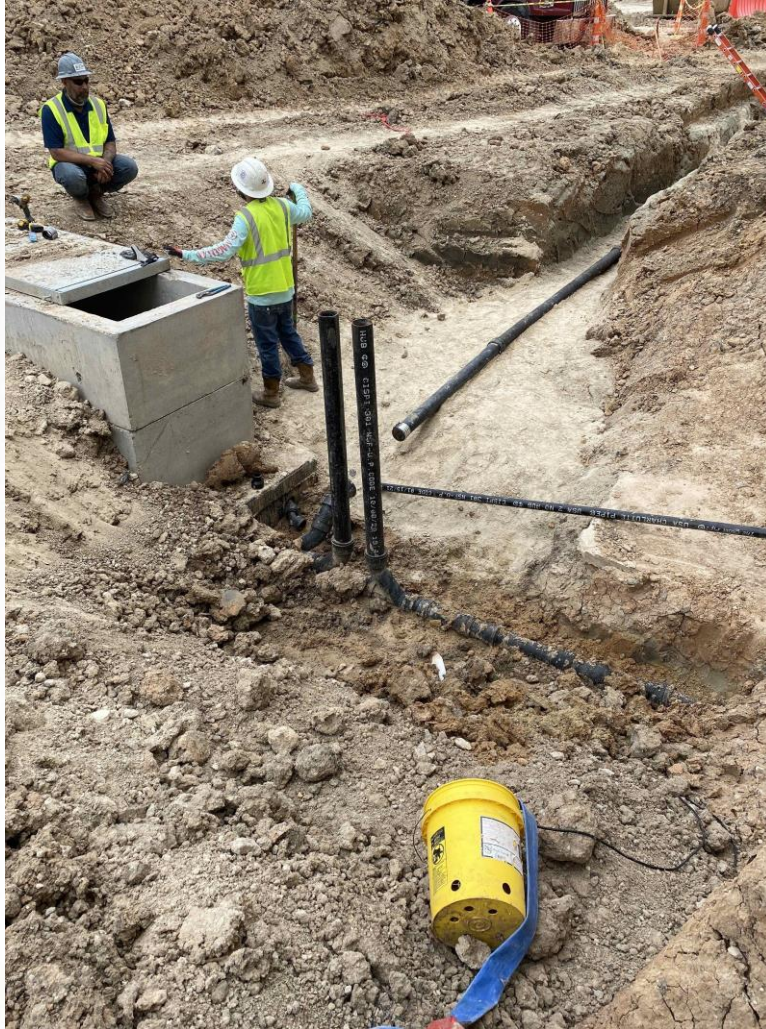
Continued electrical raceway at
fac 510



Construction Progress – Administration & Maintenance Building

- Backfilled Oil and Water Separator
- Installed Aboveground Sample Lines
- Installed Glazing for Storefront
- Float and Finished Gypsum Walls

Backfill of Oil and Water Separator



Installation of Sample Lines



Installation of Storefront Glazing



Float and Finished Gypsum Walls

