



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

August 18, 2021



Site Drone Map
July 28, 2021





Construction Progress – Intake Pump Station (IPS)

- Installing water booster skid
- Installing metal soffit panels
- Overhead door and double door installed at Building 152



Installing water booster skid



Installing metal soffit panels



Overhead door and double door installed at Building 152





Construction Progress – Site Electrical

- Placement of 401 Switches
- Cable Pulling at 401 Switches
- Third Party Testing at 111/271
- Third Party Testing at 152

Placement of 401 Switches



Cable Pulling at 401 Switches



Third Party Testing



Third Party Testing

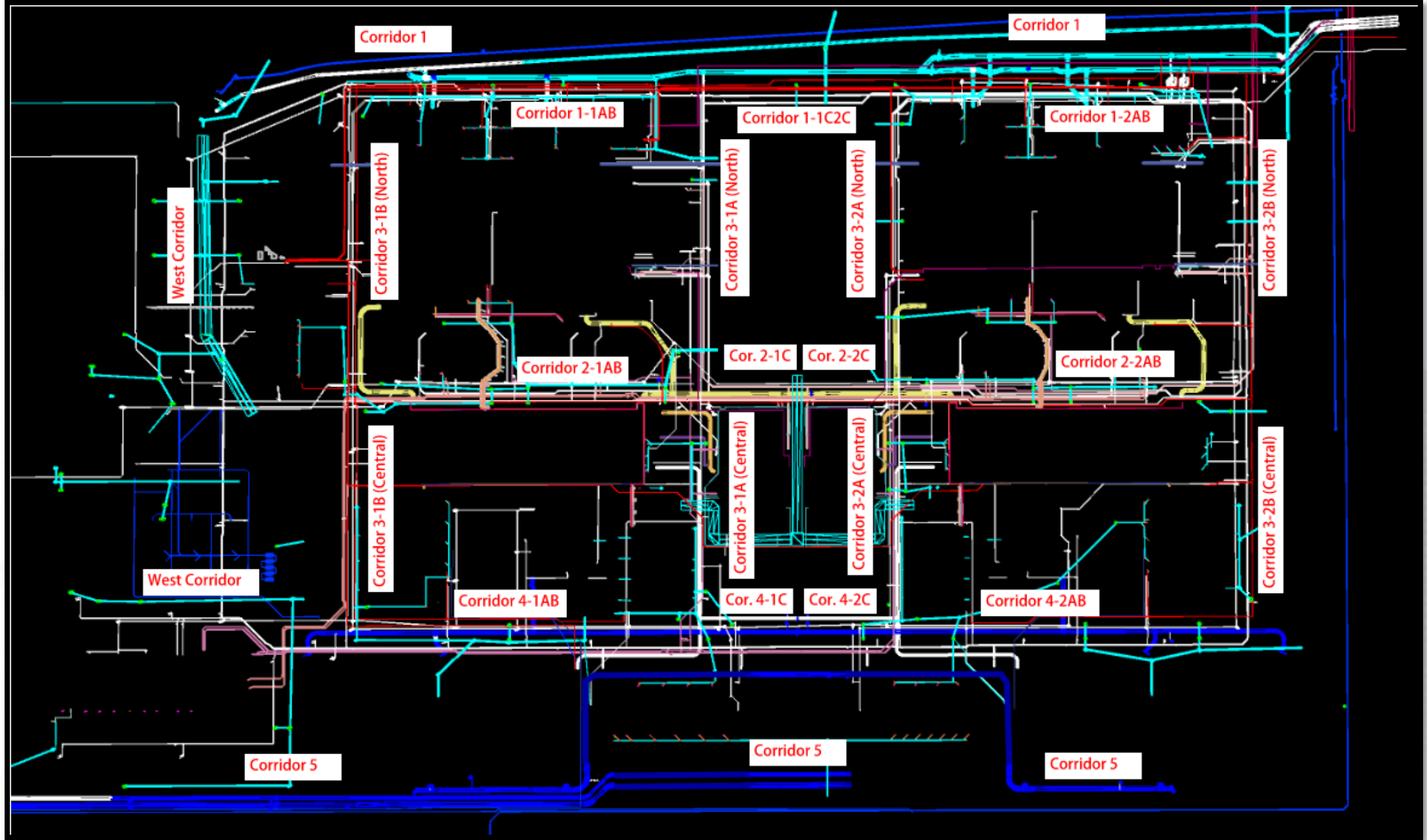




Construction Progress – Yard Piping

- Fusion welding and stringing the 42” HDPE bypass piping for RW tie-ins along north fence in Corridor 1
- Installing dual 108” RW line in Corridor 1
- Welding butt-straps on 108” RW wye in Corridor 1
- Set 78” BFV on RW line in Corridor 1-1AB
- Installing 4” Natural Gas (NG) line in Corridor 1-1AB
- Installing 12” PW pipe south of Admin Bldg in West Corridor
- Installing 24” Storm RCP west of Maintenance Bldg, in West Corridor
- Welding and grouting the 120” FW distribution line in Corridor 5
- Constructing the bypass road and truck staging area for the 120” FW distribution line installation
- Installing the dewatering system for the 120” FW distribution line in Corridor 5
- Reinforced and formed the encasement around 120” FW line in Corridor 5 – Phase 2
- Placed concrete encasement around 120” FW line in Corridor 5 – Phase 2





Fusion welding and stringing the 42" HDPE bypass piping for RW tie-ins along north fence in Corridor 1



Installing dual 108" RW lines in Corridor 1



Welding butt-straps on 108" RW wye in Corridor 1



Set 78" BFV on RW line in Corridor 1-1AB



Installing 4" Natural Gas (NG) line in Corridor 1-1AB



Installing 12" PW pipe south of Admin Bldg in West Corridor



Installing 24" Storm RCP west of Maintenance Bldg, in West Corridor



Welding and grouting the 120" FW distribution line in Corridor 5



Constructing the bypass road and truck staging area for the 120" FW distribution line installation



Installing the dewatering system for the 120" FW distribution line in Corridor 5



Reinforced and formed the encasement around the 120" FW line in Corridor 5 – Phase 2



Placed concrete encasement around the 120" FW line in Corridor 5 – Phase 2





Construction Progress – Central Plant 1

281-FILTER MODULE 1 :

- Installing UD Anchor Rods & Blocks
- Slide Gates Installation
- Skylight Curb Louver Installation
- Pulling Cable
- Valve Installation in Bypass Vault

291-TRANSFER PUMP STATION 1:

- FRP Sample Pumps Slabs & East Concrete Stair Landing
- Conduit Installation ongoing
- Pulling Wire at Electrical Room ongoing
- Deliver and Set Mixers ASDs

282 -FILTER MODULE 2:

- Reinforcing/Pouring East Tall Walls.
- Setting Shoring for Top Deck
- Setting Storm Water Pump Station

292-TRANSFER PUMP STATION 2:

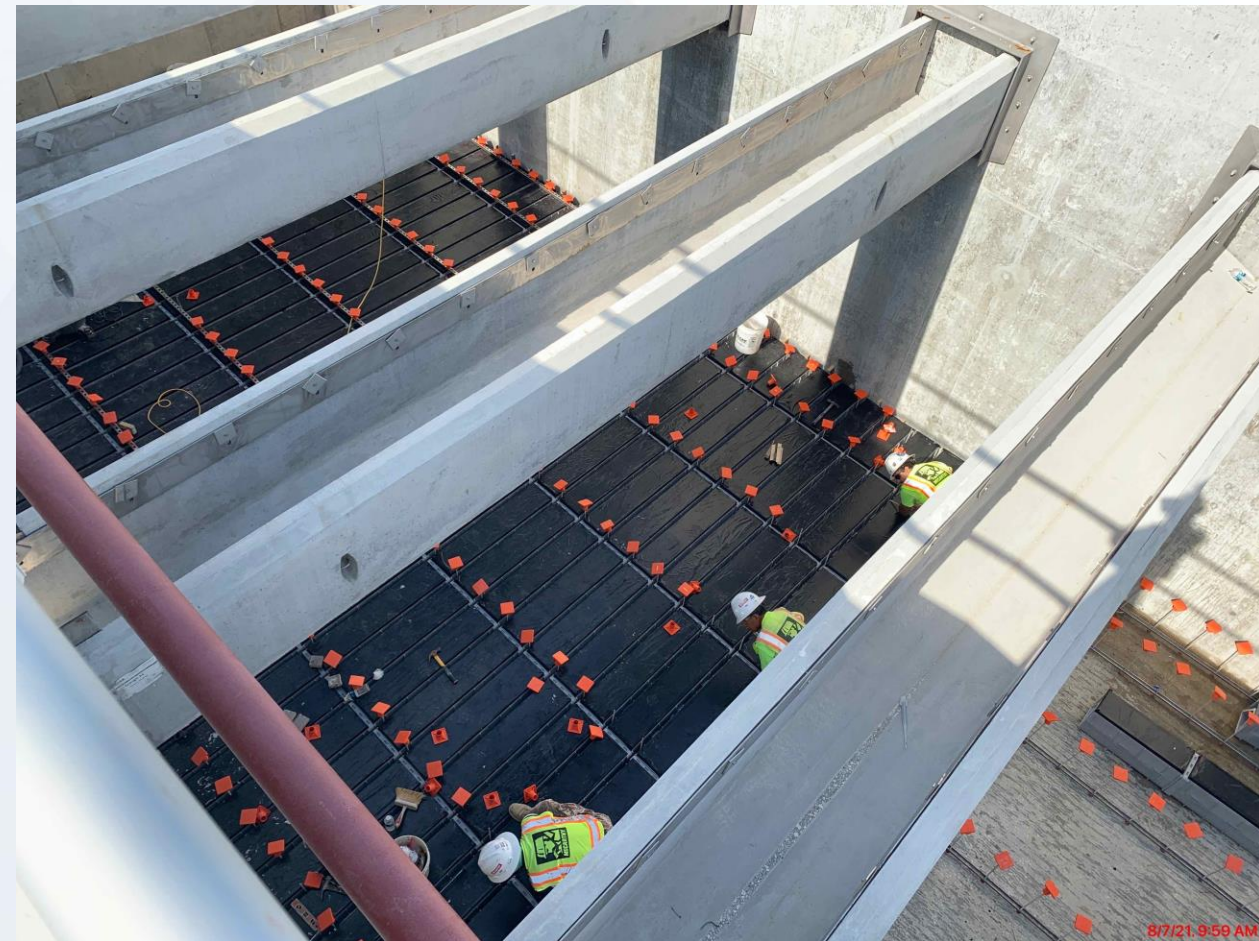
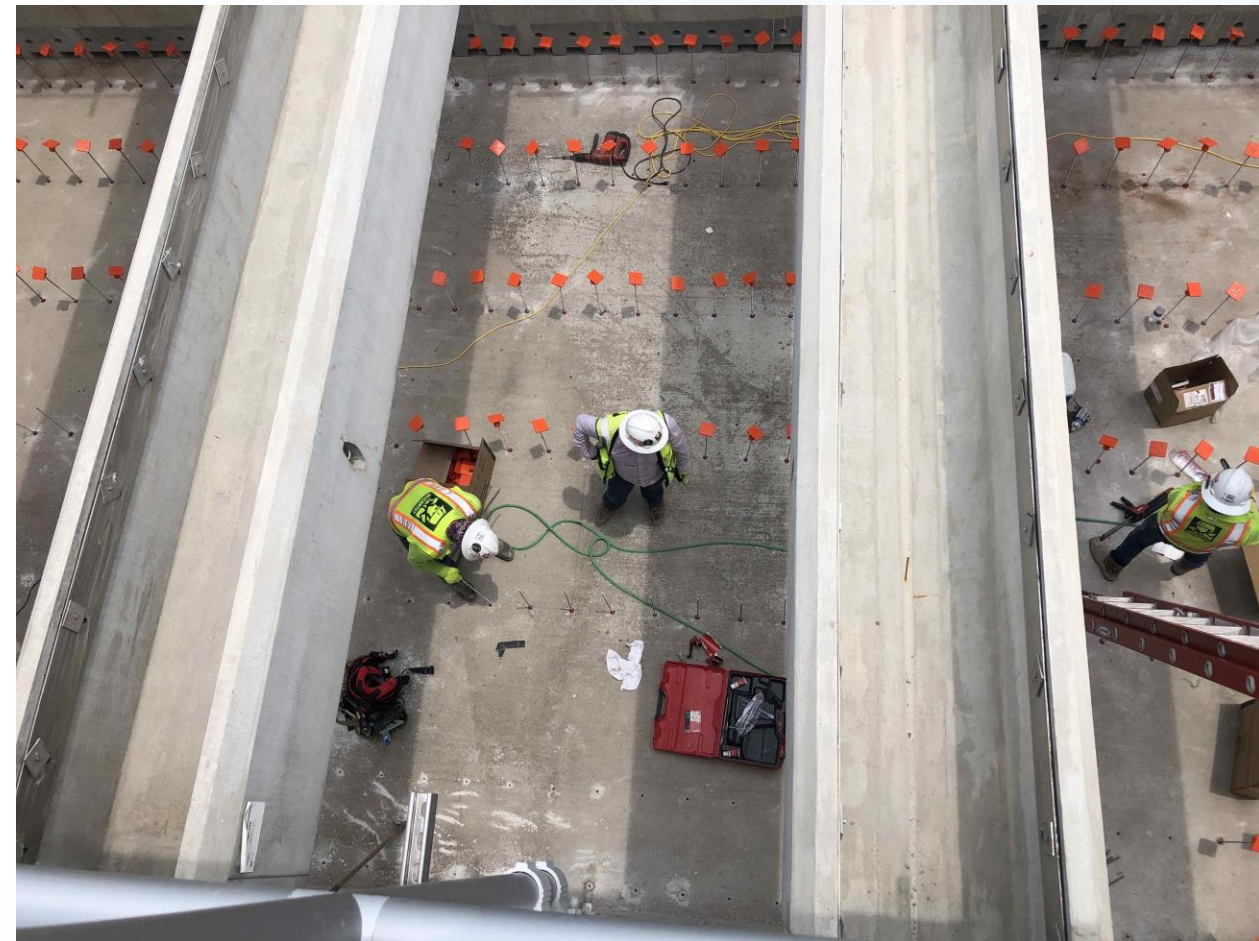
- Delivery and Installation of East Exterior 84" BFV
- Overflow Channel Slab Concrete Pour
- Form Up Mid-Level Pump Can Encasement



CENTRAL PLANT- PHASE 1



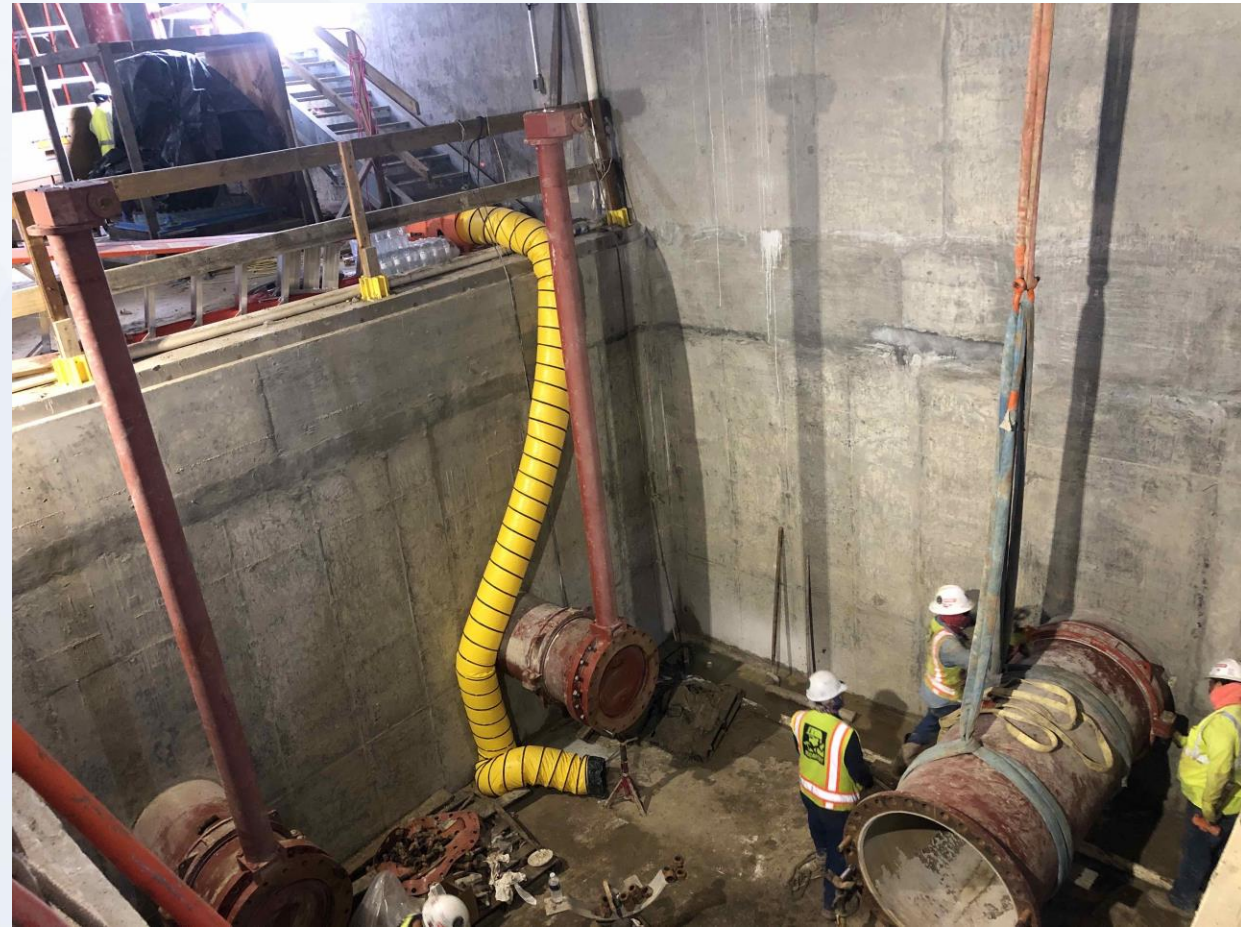
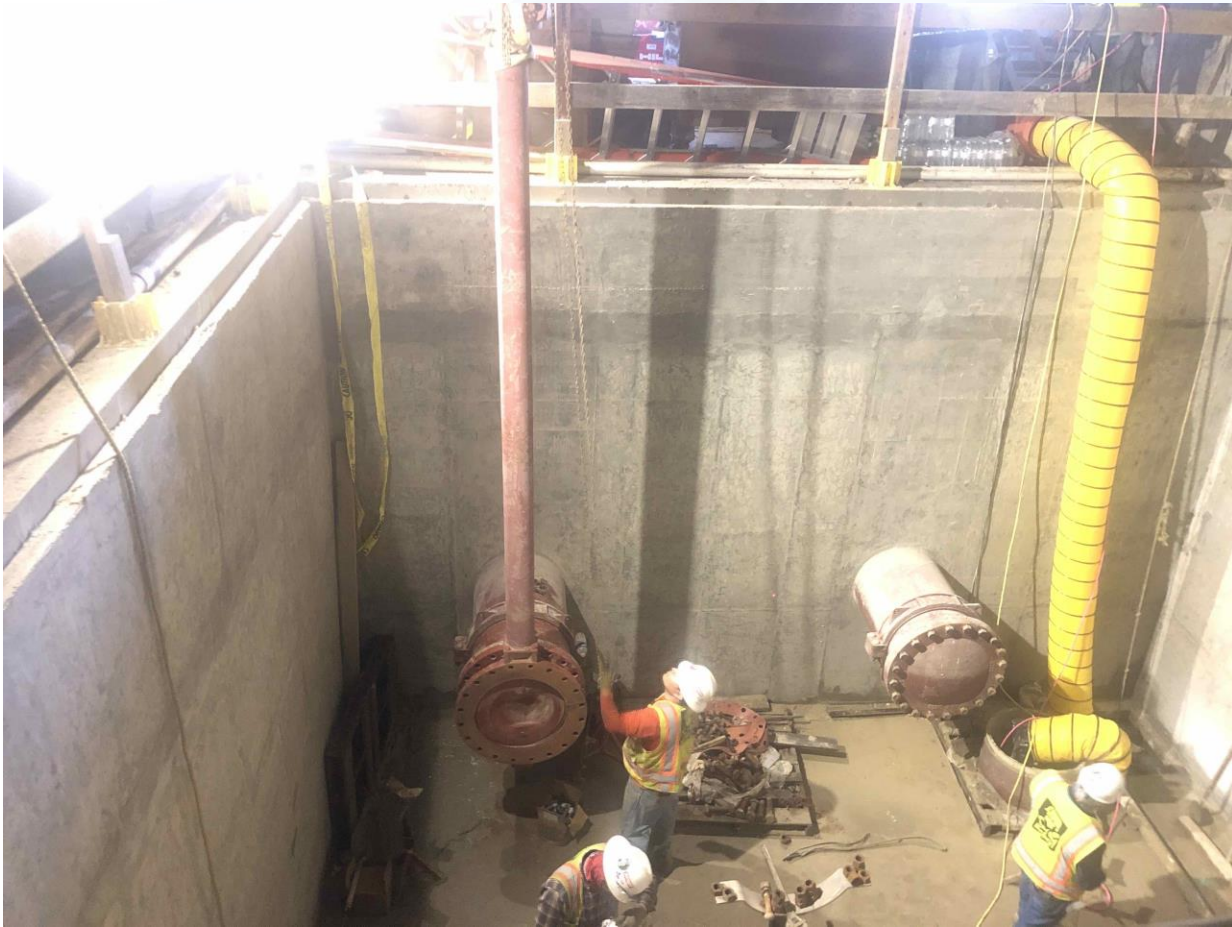
281-FILTER MODULE- Installing UD Anchor Rods & Blocks



281-FILTER MODULE – Slide Gates Installation



281-FILTER MODULE- Valve Installation in Bypass Vault



281-FILTER MODULE- Pulling Cable into building



281-FILTER MODULE- Installing Louvers



291-TPS – Aerial View (08/03/2021)



291-TPS – FRP Sample Pumps Slabs and East Concrete Stair Landing



291-TPS – Conduit Installation



291-TPS – Pulling Wire at Electrical Room



291-TPS – Deliver and Set Mixers ASDs





Construction Progress – Central Plant 2

311 – POST CHEMICAL FACILITY SH/CS :

- F/R/P Concrete pedestal supports.
- Installation of FRP Duct Work.
- Installation of Chemical Metering Pumps.
- Installation of above ground electrical conduits.

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

- Installation of Fire Sprinkler System.
- Application of Chemical Resistant coatings.

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

- Underground Electrical Conduit Installation

314 – POST CHEMICAL FACILITY 4 SH/CS :

- F/R/P Concrete Slabs for containment and building.



311 – Aerial view –08/03/2021



311 – F/R/P Concrete Pedestal Support



311 – Install FRP Ductwork



311 –Chemical Metering Pumps Mock up and Installation



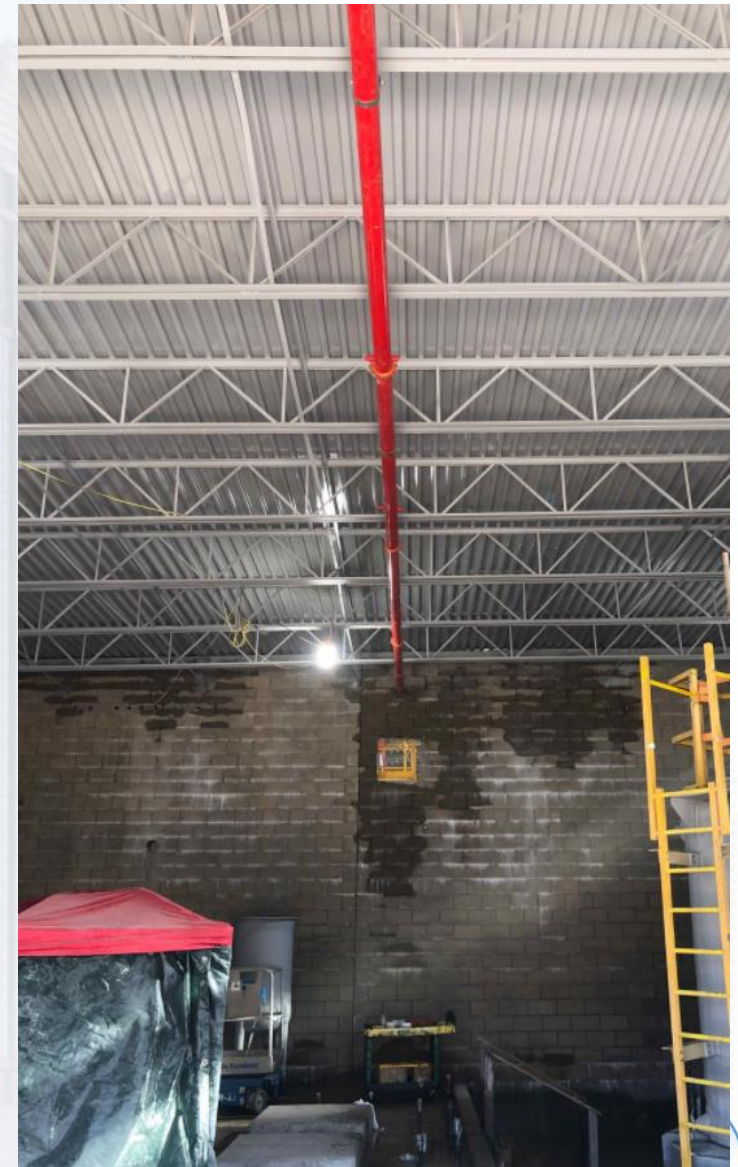
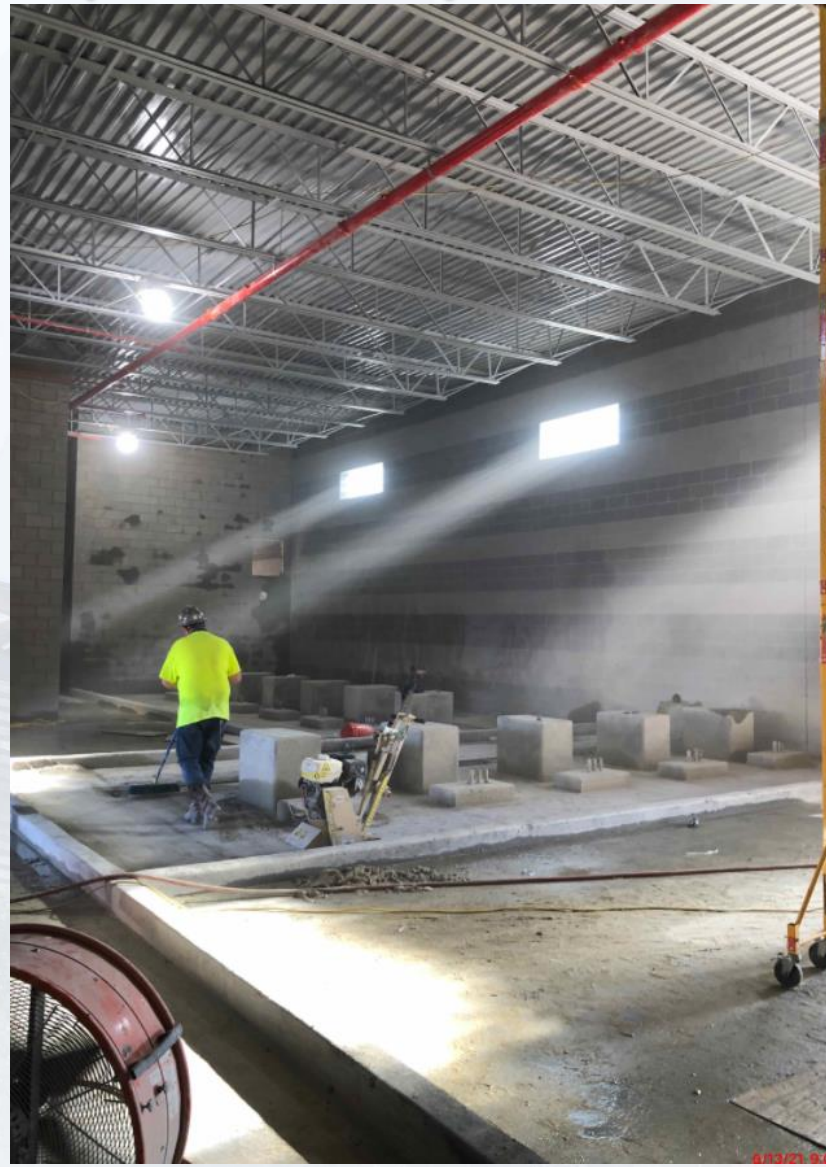
311 –Above Ground Conduit Installation



312 - Overall view 08/03/21



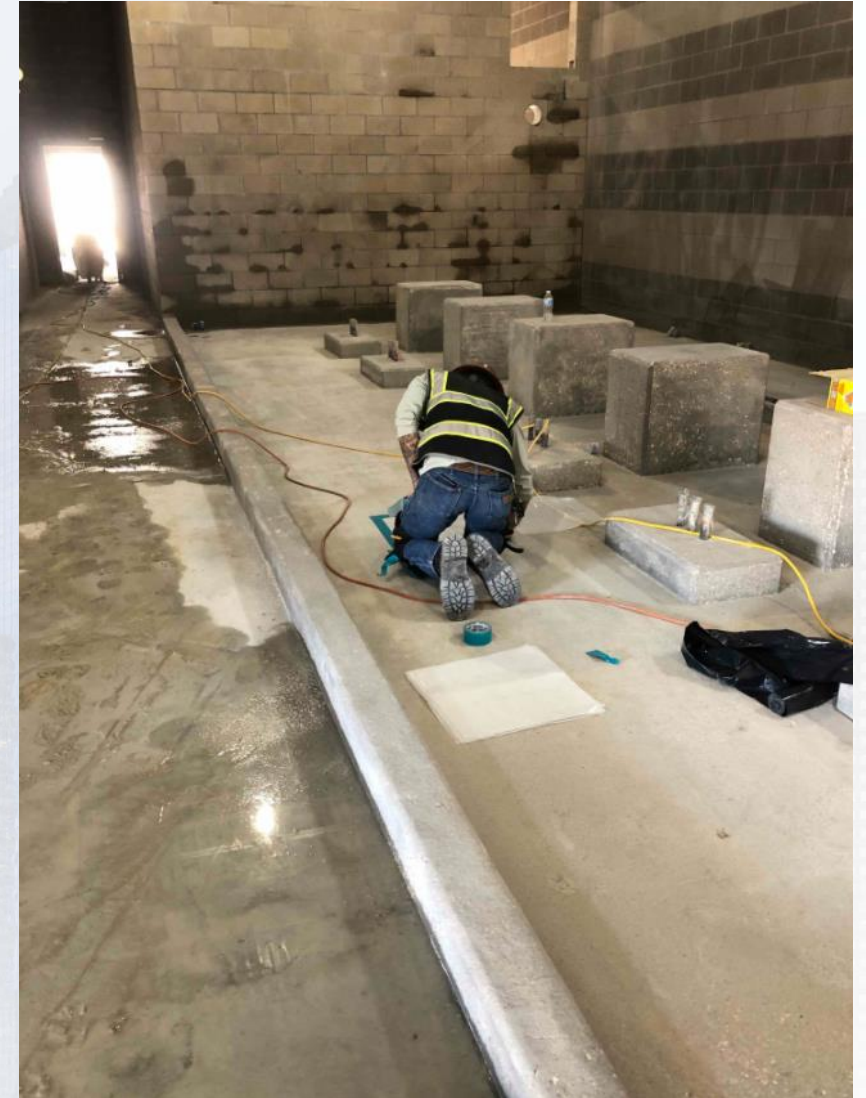
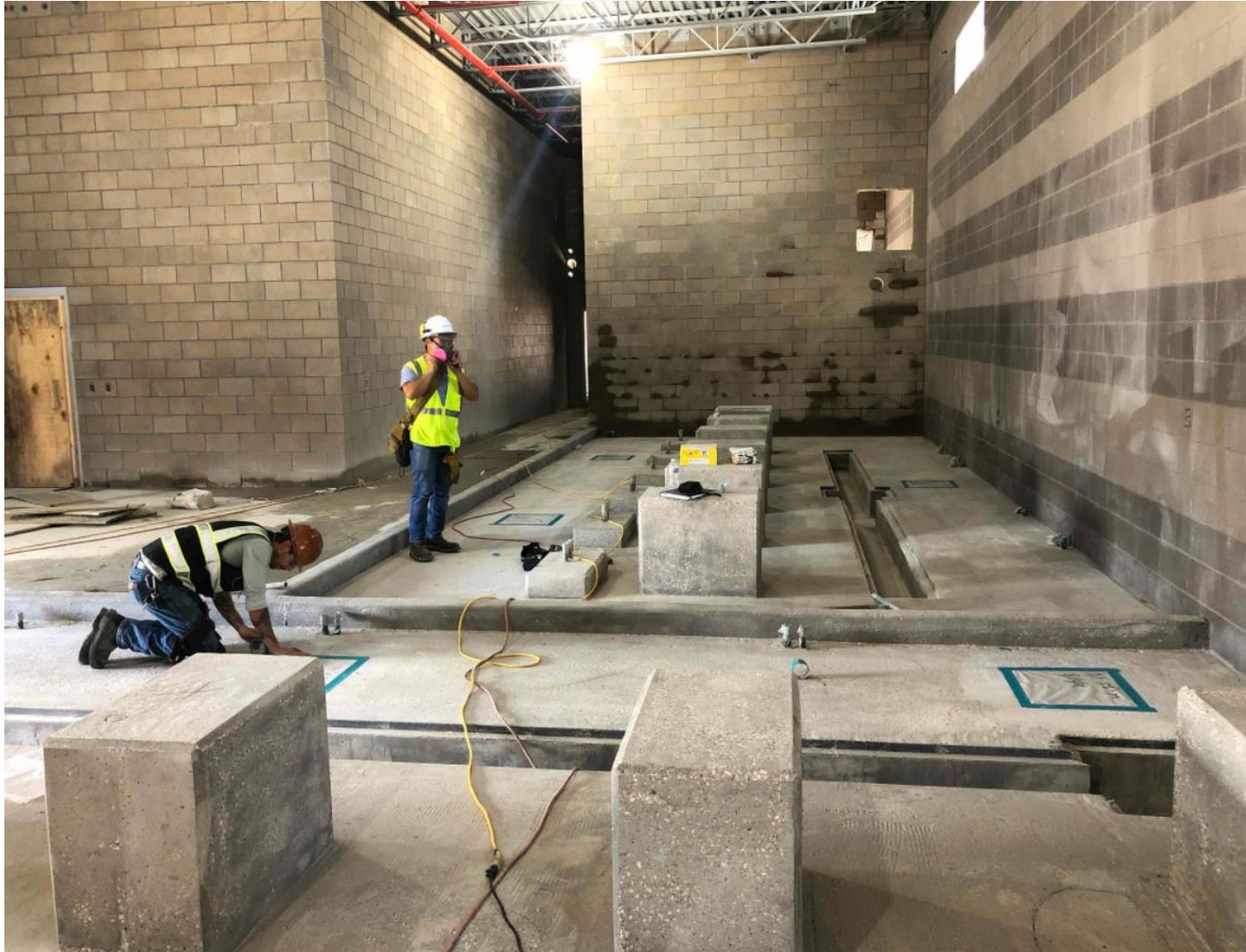
312 – Fire Sprinkler System Installation



312 – Chemical Resistant Coating application



312 – CRC coating application



CENTRAL PLANT- Phase 2



313- Overall view 08/03/21



313 – Underground Electrical Conduit



314- Aerial view 08/03/21



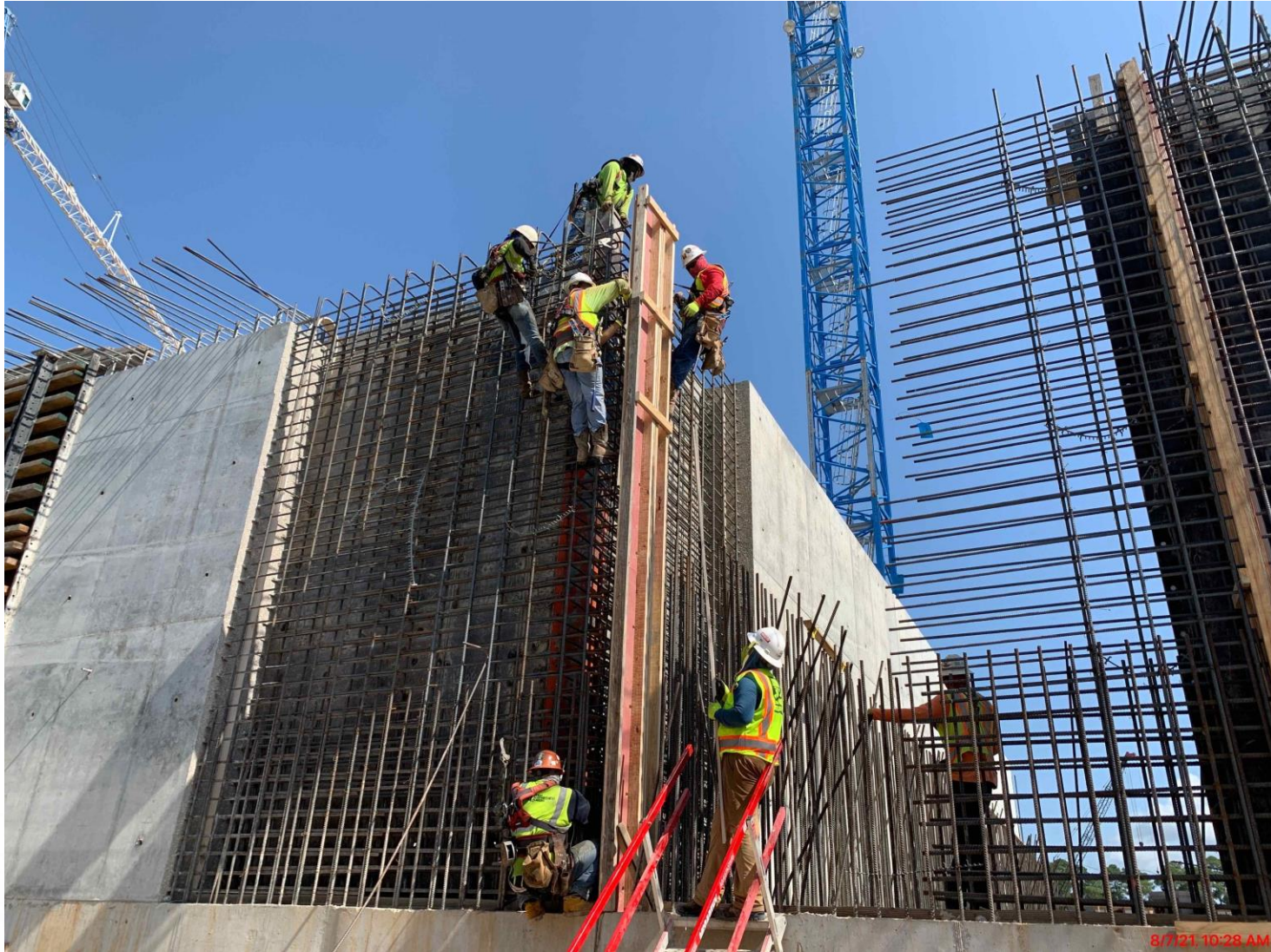
314-F/R/P SOG A3 Concrete Pour and A4 Rebar



314-F/R/P C4 Concrete Pour



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



282-FILTER MODULE 2- Setting Top Deck Shoring



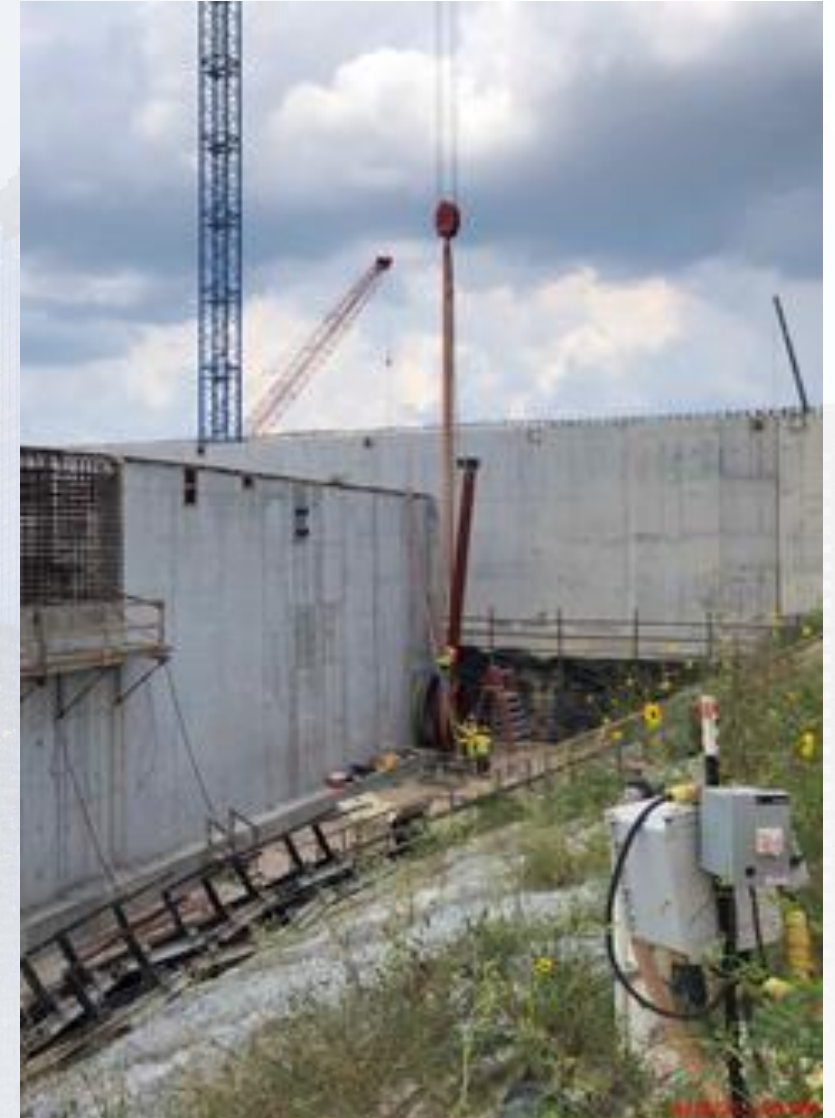
282-FILTER MODULE 2- Setting Storm Water Pump Station(West)



292-TPS – Aerial View (08-03-2021)



292-TPS – Delivery and Installation of East Exterior 84" BFV



292-TPS – Overflow Channel Slab Concrete Pour



292-TPS – Form Up Mid-Level Pump Can Encasement





Construction Progress – LREQ Basins Facilities 601/602

- **601 – Installation of 24" DEC and 42" FTW**
- **602 – Formwork on walls P4 and P8**
- **602 – Concrete placement on walls P4 and P8**
- **602 – Formwork on walls P12 and P16**



601 – Installation of 24" DEC and 42" FTW



602 – Formwork on walls P4 and P8



602 – Concrete placement on walls P4 and P8



602 – Formwork on walls P12 and P16





Construction Progress – North Plant

201-Chlorine Dioxide Facility 1:

- Area-A Containment Area Perimeter Backfill

213-Pretreatment Chemical Facility 3:

- Area-A Excavation

214-Pretreatment Chemical Facility 4:

- Area-B West-South Wall CMU

215-Pretreatment Chemical Facility 5:

- Excavation & Sump Mudmat

241-Flocculation & Sedimentation Train 1:

- Flocculation-Sedimentation Walkway F/R/P

242-Flocculation & Sedimentation Train 2:

- Flocculation Basin Mixers

261-Ozone Generation Facility 1:

- Area-A Internal Wall East side CMU

272-Pretreatment Service Building 2:

- Roof Steel Decking

501-Gravity Thickener Complex 1:

- Service Building ESL F/R/P

503-Gravity Thickener Complex 3:

- GT-5 Mudmat



201-Chlorine Dioxide Facility 1: Area-A Containment Area Perimeter Backfill



8/9/21 4:40 PM

213-Pretreatment Chemical Facility 3: Area-A Excavation



8/19/21 3:36 PM

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214-Pretreatment Chemical Facility 4: Area-B West-South Wall CMU



8/9/21 4:35 PM

215-Pretreatment Chemical Facility 5: Excavation & Sump Mudmat

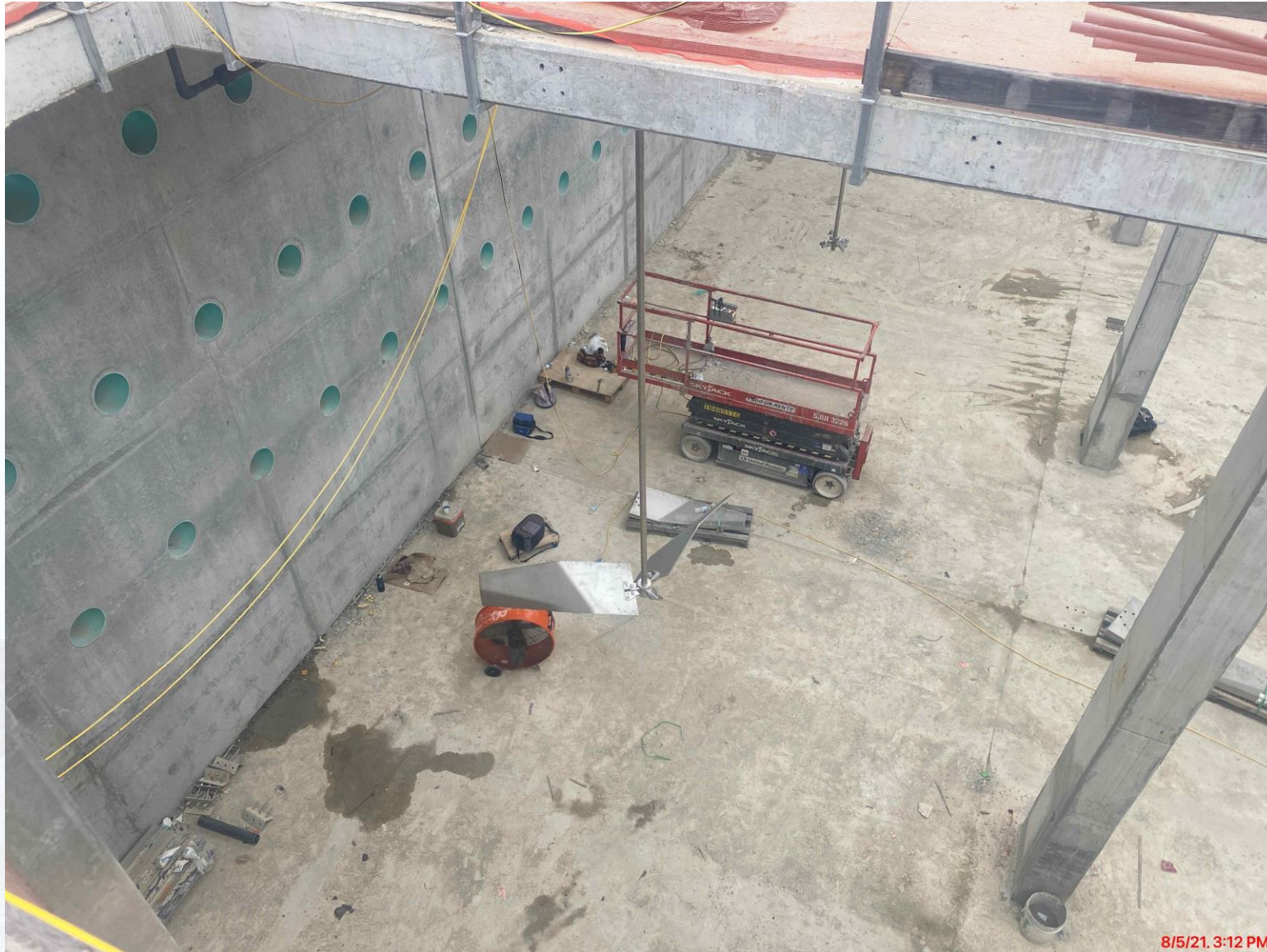


241-Flocculation & Sedimentation Train 1: Walkway F/R/P



8/5/21 4:56 PM

242-Flocculation & Sedimentation Train 2: Flocculation Basin Mixers



8/5/21. 3:12 PM

261-Ozone Generation Facility 1: Area-A Internal Wall East side CMU



8/9/21, 3:54 PM
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272-Pretreatment Service Building 2: Roof Steel Decking



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501-Gravity Thickener Complex 1: Service Building ESL F/R/P



503-Gravity Thickener Complex 3: GT-5 Mudmat



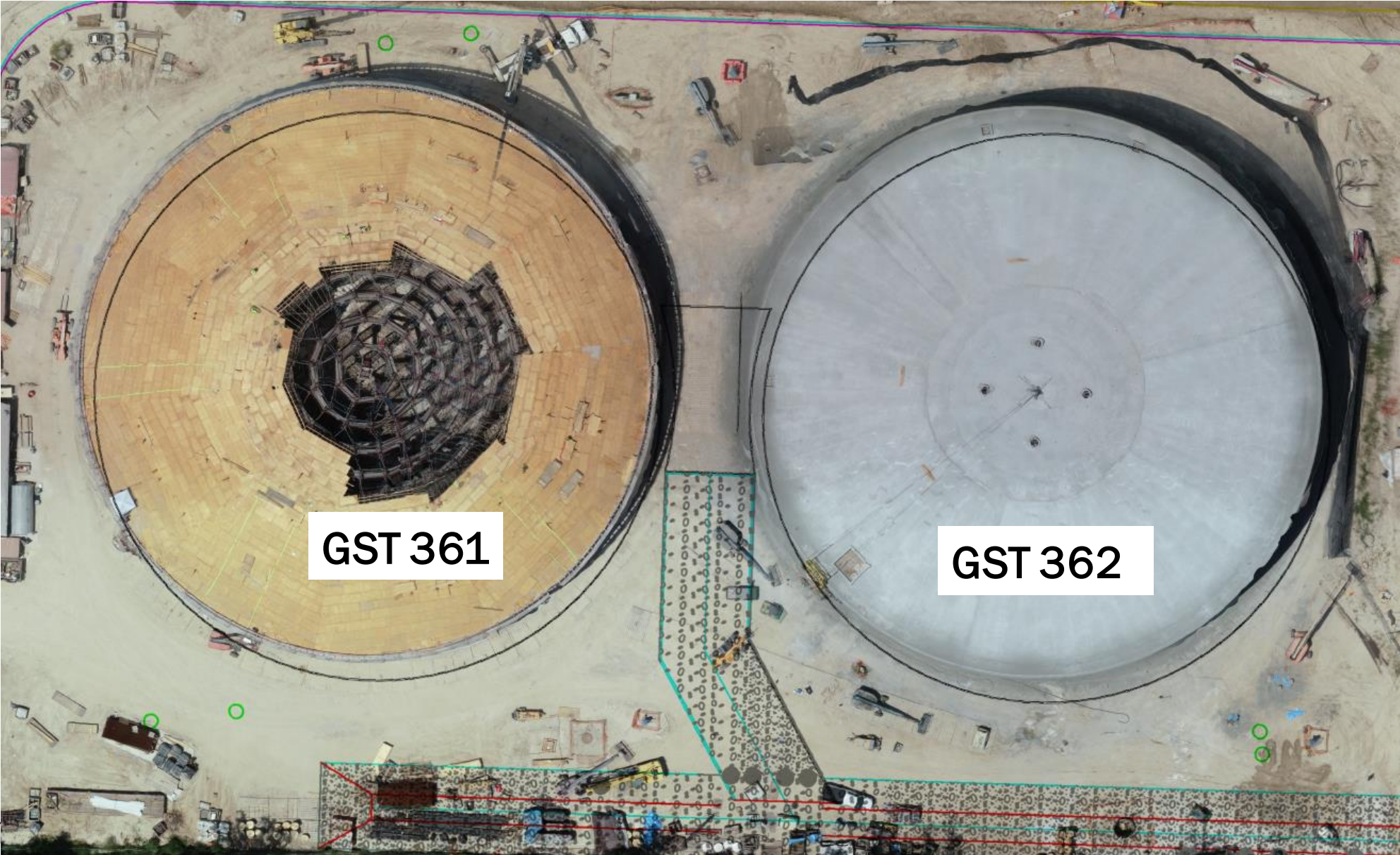


Construction Progress – South Plant

- 361 - Continued shotcrete of the diaphragm.
- 361 – Completed dome pour.
- 362 - Continued prestress and shotcrete.
- 362 – Commenced stripping formwork.
- 401 – Bolts & detailing of structural steel.
- 401 – Continued installation of CMU.
- 402 – Continued installation of 78” buried pipe laterals to cans.
- 402 – Commenced pipe encasement of 78” buried pipe laterals to cans.
- 520 - Continued cleaning CMU at the electrical, mechanical, and other rooms.
- 520 – Continued process pipe installation.
- 520 – Continued installation of translucent wall panels.
- 520 – Commenced installation of metal wall panels.
- 520 – Continued electrical support & conduit installation at 1st & 2nd floor.
- 510 – Continued process pipe installation.
- 510 – Completed handrail installation.



GST 361 & 362 AERIAL VIEW



GST 361

GST 362

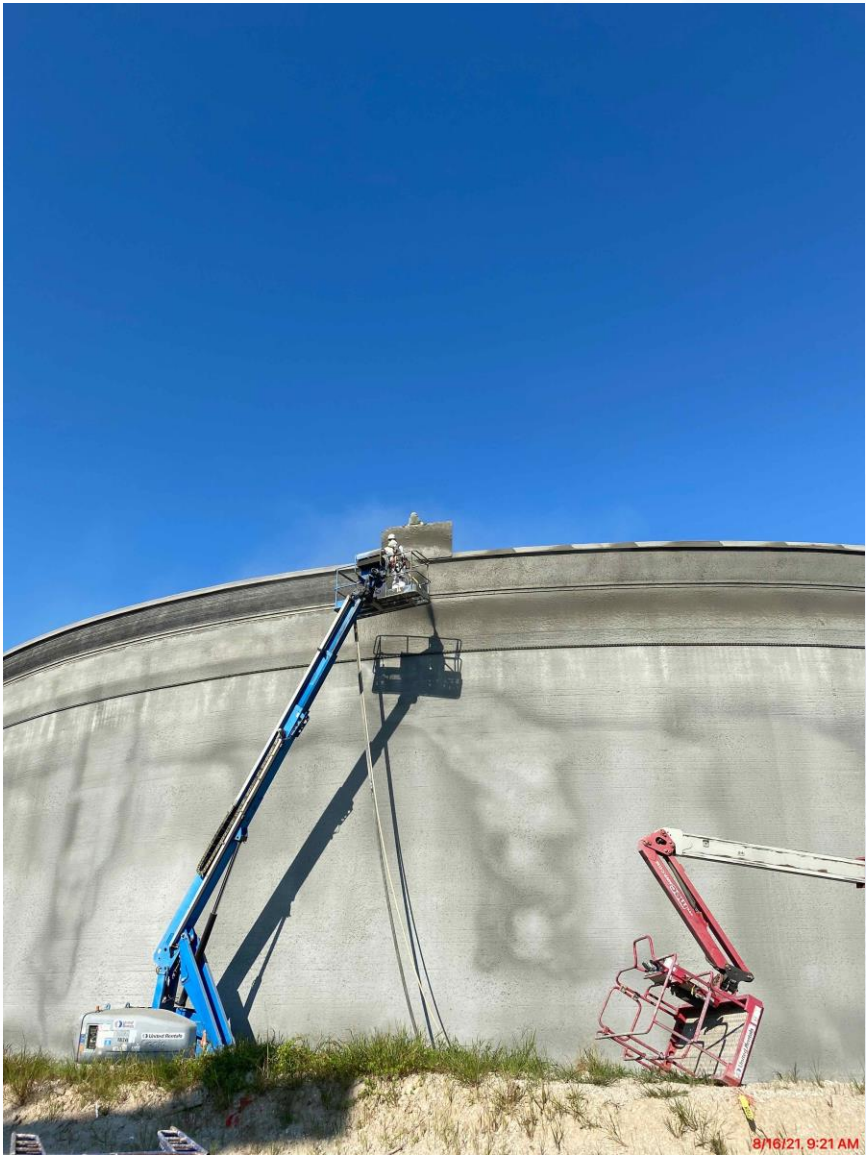


GROUND STORAGE TANK 361



361 – Completed dome pour

GROUND STORAGE TANK 362



361 - Continued prestress and shotcrete

HSPS 401, MSB 111, HSPS 402 AERIAL VIEW



HSPS 401

MSB 111

HSPS 402

HIGH SERVICE PUMP STATION 401



401 – Bolts & detailing of structural steel

HIGH SERVICE PUMP STATION 401



401 – Continued installation of CMU

HIGH SERVICE PUMP STATION 402



402 – Continued installation of 78” buried pipe laterals to cans & commenced pipe encasement

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DEWATERING BUILDING 520 & THICKENED SLUDGE EQUALIZATION TANK 510 AERIAL VIEW



DEWATERING BUILDING 520



520 - Continued electrical support & conduit installation at the 1st & 2nd floor



520 – Continued installation of translucent wall panels

DEWATERING BUILDING 520



520 – Continued process pipe installation

THICKENED SLUDGE & EQ BASIN 510




510 – Completed handrail installation

THICKENED SLUDGE & EQ BASIN 510



510 – Continued process pipe installation



Construction Progress – Administration & Maintenance Building

- Start up of HVAC units
- Installed Curtain Wall System Framing
- Installed Ceiling Grid
- Painted & Primed Walls
- Pulled Telecom Wires

Start up of HVAC Units



Installed Curtain Wall System Framing



Installed Ceiling Grid



Painted & Primed Walls



Pulled Telecom/Data Wires



