



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

July 29, 2020

Houston Waterworks Team



Drone Site Map: July 9, 2020



Pix4D | © Mapbox | © OpenStreetMap | Improve this map



Construction Progress – Intake Pump Station (IPS)

- Setting up the first pump can
- Installing bridge piping on span 6



Setting up the first pump can



Installing bridge piping on span 6





Construction Progress – Site Electrical

- 152 Duct Bank & Manhole Installation South of 111
- Existing Plant South Road Progress
- Existing Plant – Finish Road Resurface



152 Duct Bank Installation & Manhole Placement South of 111




Existing Plant South Road (Zone 2)



Existing Plant – Finish Road Resurface





Construction Progress – Substation Facility 102

- **Block installation on West side of building**
- **Continue installation of block and door frames**

Block installation on West side of Building



Continue installation of block and door frames

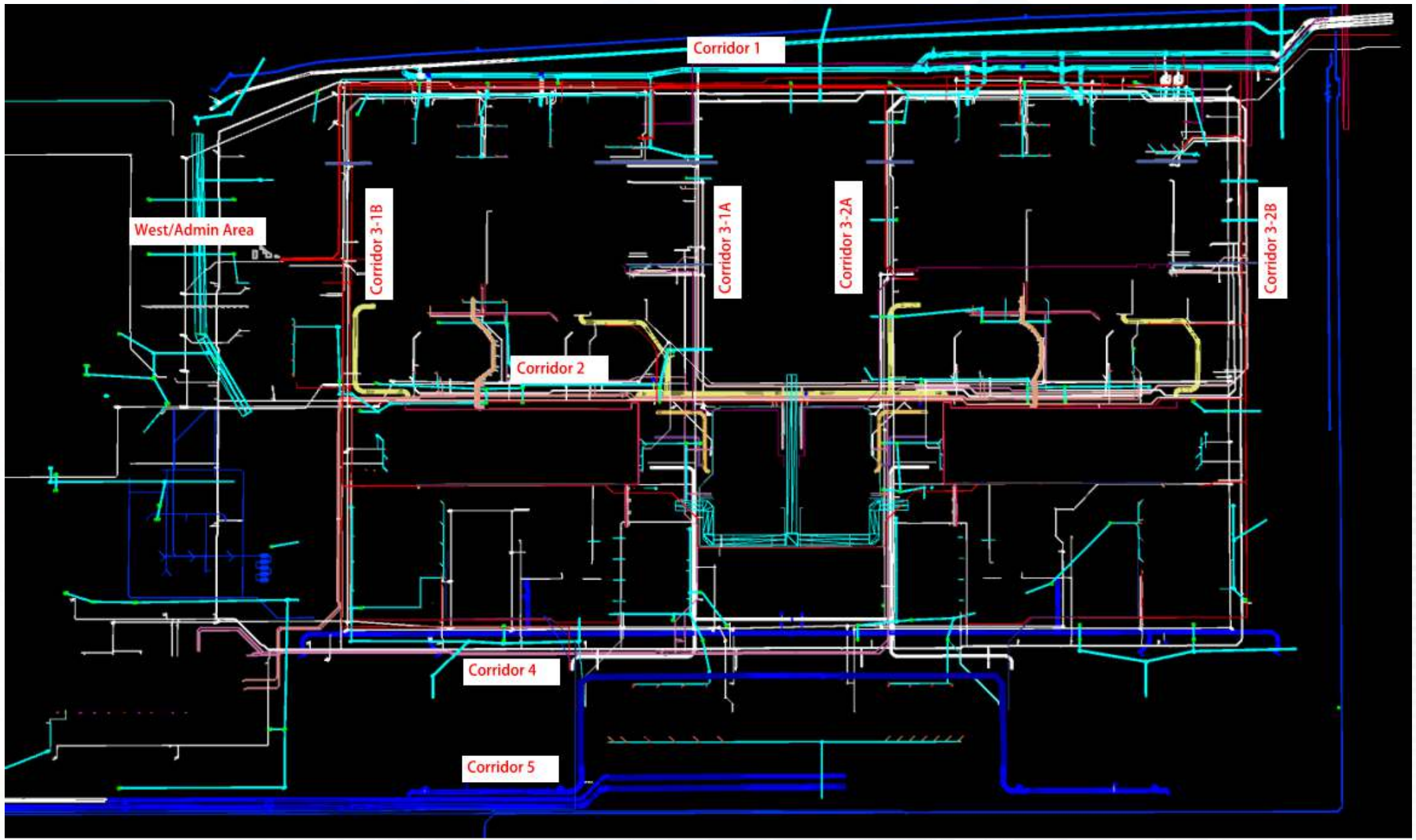




Construction Progress – Yard Piping

- **Lifting and setting 108” Knife Gate Valve in Corridor 1**
- **Set and bolt up RW 78” and 66” BFs in Corridor 1**
- **Installing 36” CRCY and 24” PW ductile iron pipe in Corridor 1**
- **Installing 16” CEN line crossing Road 1 in Corridor 4**
- **Installing 6” PW crossing Road 1 in Corridor 4, and 12” PW in Corridor 3**
- **Installing 24” RCP STM in Corridor 4**
- **Setting 78” BFV and 120”x78” Tee on FW header in Corridor 5**
- **Installing 84” and 120” FW steel pipe in Corridor 5**

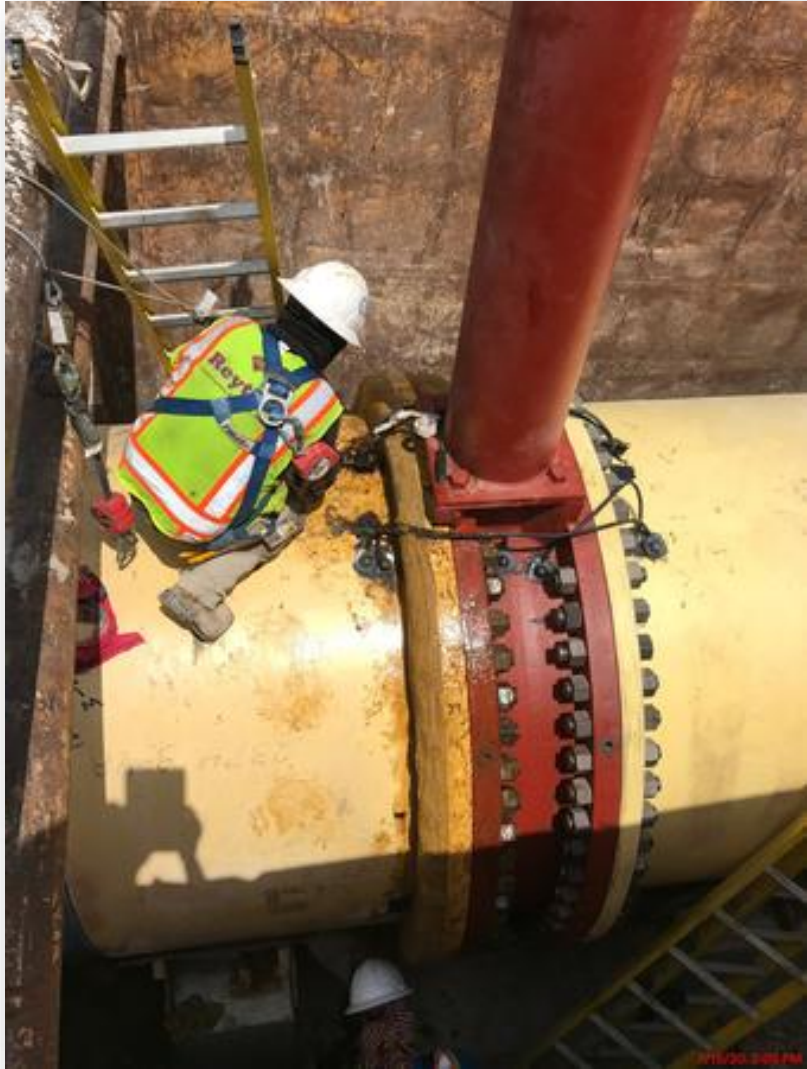




Lifting and setting 108" Knife Gate Valve in Corridor 1



Set and bolt up RW 78" and 66" BFVs in Corridor 1



Installing 36" CRCY and 24" PW pipe in Corridor 1



Installing 16" CEN line crossing Road 1 in Corridor 4



Installing 6" PW crossing Road 1 in Corridor 4, and 12" PW in Corridor 3



Installing 24" RCP Storm in Corridor 4



Setting 78" BFV and 120"x78" Tee on FW header in Corridor 5



Installing 84" and 120" FW steel pipe in Corridor 5





Construction Progress – Central Plant

281-FILTER MODULE 1 :

- Forming/Reinforcing Walls.
- Pouring Walls.
- Setting BWA Pipe supports (Manifolds 5/6)
- Setting Scaffolding & Starting Masonry

291-TRANSFER PUMP STATION 1:

- Top Deck Sections A3 and C3 Concrete Pour
- Pump Can Area Backfill and Compaction

311-POST CHEMICAL FACILITY 1 SH/CS :

- Underground Conduit Installation –Building Area
- Installation of Rebar for SOG A3 & A4

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

- Installation of Underground Conduit –Building Area

282 -FILTER MODULE 2:

- Pouring Under-slab CFE/FTW Pipe Encasement (Final Lift)
- Stripping/Backfilling Under-slab Pipe encasement.

292-TRANSFER PUMP STATION 2:

- 36" Flap Gates Delivery



281-FILTER MODULE-Forming/Reinforcing Walls



281-FILTER MODULE-Pouring Walls



281-FILTER MODULE- Installing BWA supports (Manifolds 5/6)



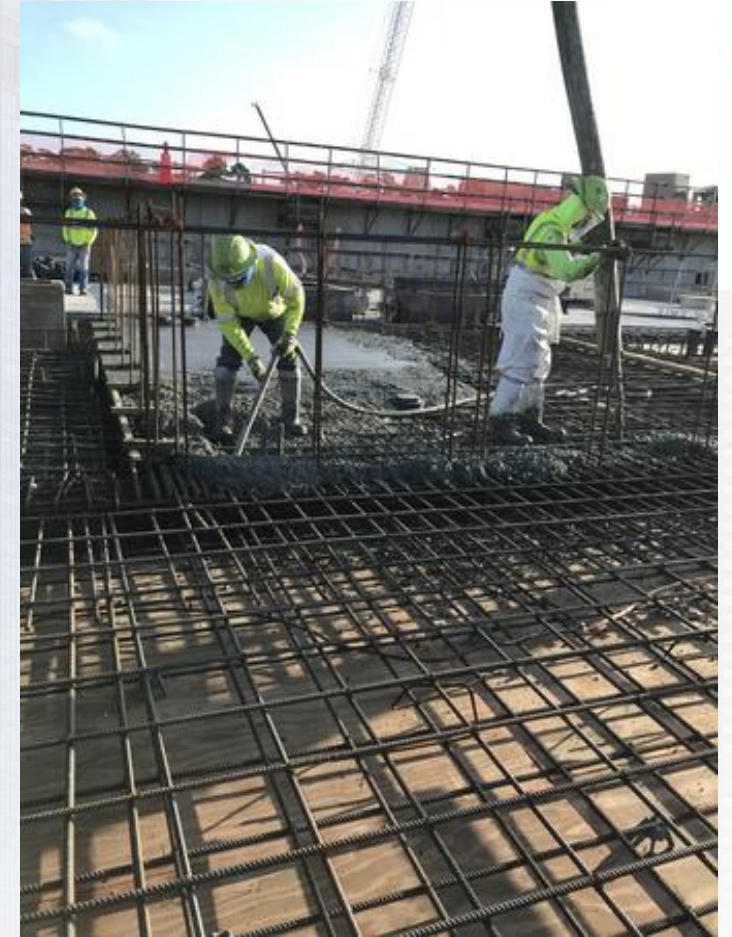
281-FILTER MODULE- Setting Scaffolding & Starting Masonry



291– Top View



291– Top Deck Sections A3 and C3 Concrete Pour



291– Pump Can Area Backfill and Compaction



311-Post Chemical Building: Underground Conduit installation



311-Post Chemical Tank Farm: Installation of Rebar Slab A3, A4



312-Post Chemical Building: Installation of underground Conduit



282- FILTER MODULE 2- Pouring Under-slab Pipe Encasement (Final Lift)



282-FILTER MODULE 2- Stripping/Backfilling Under-slab Pipe Encasement



292 – 36" Flap Gates Delivery





Construction Progress – LREQ Basins Facilities 601/602

- **601 - Formwork Installation for walls P11 and P15**
- **601 - Concrete Pour for walls P11 and P15**
- **601 - Formwork and Concrete pour for walls P16 and P17**



601 – Formwork Installation for walls P11 and P15



601 – Concrete Pour for walls P11 and P15



601 – Formwork and Concrete pour for walls P16 and P17





Construction Progress – North Plant

213-Pretreatment Chemical Facility 3:

- Structural Concrete Work with Galan
- U/G Electrical

214-Pretreatment Chemical Facility 4:

- Structural Concrete Work with Galan
- U/G Electrical

221-Rapid Mix Train 1:

- RM-WL-1 F/R/P
- 78 inch RW pipe Installation

222-Rapid Mix Train 2:

- RM-WM-4B F/R/P

242-FlocSed Train 2

- Slab-on-Grade
- Elevated Slab Column Formwork
- Ported Wall F/R/P

244-FlocSed Train4

- East/West Corridor Excavation
- 8 inch RCYS and 24 inch PDR Installation

252-Ozone Contractor Train 2:

- Structural Concrete Work on OZ WL-1

502-Gravity Thickener Complex 2

- Basin #4 Slab-On-Grade and Walls F/R/P
- Service Bldg Walls F/R/P
- Basin #3 Mud Mat Placement

504-Gravity Thickener Complex 4

- Service Building SL-2 Placement
- Service Building W-1 F/R/P

611-Liquid Residuals Clarifier Facility 1:

- Slab-On-Grade F/R/P
- Pump Station Walls F/R/P

612-Liquid Residuals Clarifier Facility 2:

- RCYS and PDR Excavation



Facility 213 U/G Electrical and Mud Mat



7/18/20, 7:17 AM

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Facility 214 Slab-on-Grade F/R/P



Facility 221 78 inch RW Encasement



Facility 222 RM-WL-4B Formwork Erection



Facility 242 Ported Wall and FDBC Walls F/R/P



Facility 244 24 inch PDR



Facility 252 SL-2 and WL-1 F/R/P



Facility 502 Basin #4 Slab-on-Grade and Wall F/R/P



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Facility 502 Basin #3 Mud Mat



Facility 504 SL-2 Placement



Facility 611 Pump Station Walls F/R/P



Facility 612 24 inch PDR Encasement



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Construction Progress – South Plant

- **Backfilling of 102” Outlet Pipe at GST 361**
- **Load Transfer Platform Installation at GST 362**
- **Switchgear Pads Formwork and CMU Installation at MSB 111**
- **Backfilling up to elevation 38 at HSPS 401**
- **Stem Wall Placement at Sludge Equalization Building 510**
- **Installation of Polymer Tanks & Structural Steel Sequence 03 & 04 at Dewatering Building 520**



Backfilling of 102" Outlet Pipe at GST 361



Load Transfer Platform Installation at GST 362



Switchgear Pads Formwork and CMU Installation at MSB 111



Backfilling up to elevation 38 at HSPS 401



Stem Wall Placement at Sludge Equalization Building 510



Installation of Polymer Tanks & Structural Steel Sequence 03 & 04 at Dewatering Building 520

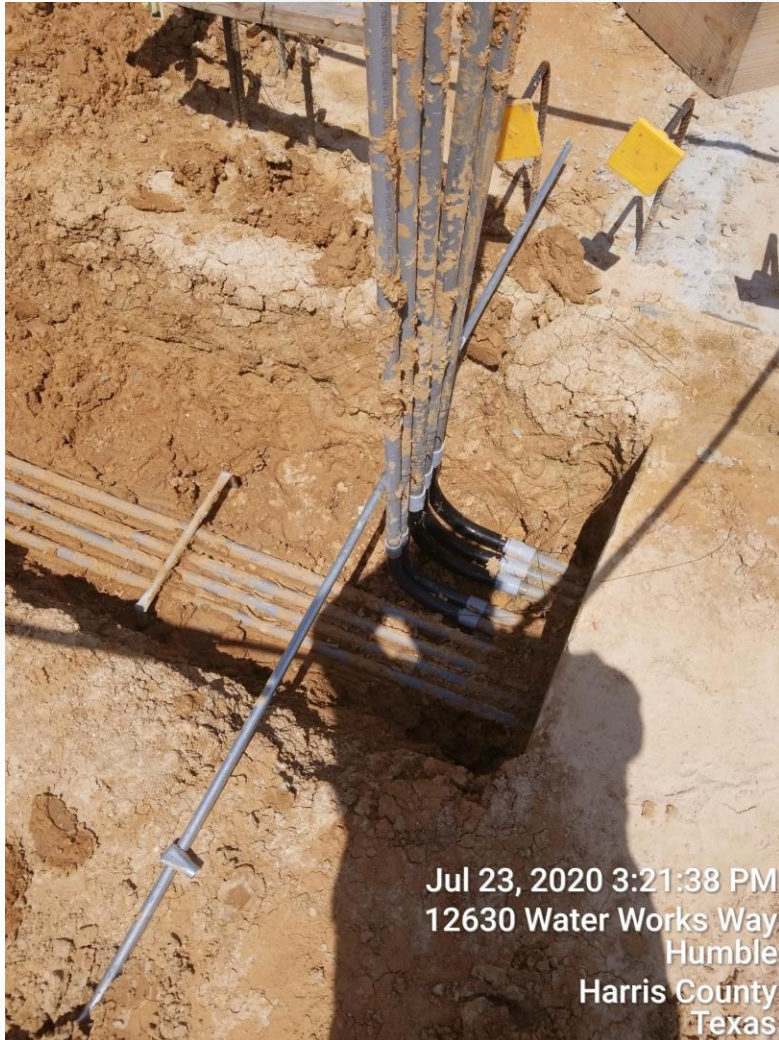




Construction Progress – Administration Building

- Installed Phase 2 conduit in at the MB
- Placed CLSM for conduit at the MB
- Placed Leave out at the AB

Installation of Phase 2 Conduit above EL 52'



Placement of CLSM for Phase 2 Conduit



Placement of Leave out at the AB



