



CITY OF HOUSTON
Houston Public Works

DESIGN-BUILD SERVICES

Northeast Water Purification Plant Expansion

Feb 12, 2020



Drone Site Map: Jan 27, 2020





Construction Progress – EWP 1/3 & 6 Site Development

HWT Site Crew

- Managing soils and sand stockpiles
- Maintaining Roads
- Stripped forms from concrete pads for safety bollards around holding tanks, water meter, and fire hydrants at Trailer City 2.0
- Tying-in temp construction water line

DCN-04/Pond 1 Expansion:

- Clearing and grubbing the existing NEWPP detention pond
- Installing the dual 24-inch RCP and double headwall
- Installing the 24-inch RCP to Pond 1



Trailer City 2.0 – Stripped forms for water meter and hydrant pads



DCN-04/Pond 1 – Cleared & grubbed existing NEWPP storm detention Pond



DCN-04/Pond 1 – Cutting and demolishing road for pipe trench



DCN-04/Pond 1 – Installing dual 24” RCP through road



DCN-04/Pond 1 – Poured road section and installed headwall



DCN-04/Pond 1 – Installing 24” RCP to Pond 1





Construction Progress – Site Electrical

- **Hydro Excavating In-Plant (Zones 1 & 2) with Manhole Placement**
- **Facility 111 Under Slab Conduit Completion**
- **MV Manhole placement near HWT Construction Trailer**



Facility 111 Under slab Conduit Installation



Hydro Excavating in Existing Plant



MV Manhole Placement Near HWT Trailer





Construction Progress – EWP 4 Raw Water Corridor

- **Trench shoring installation and excavation in East Corridor**
- **CLSM Placement**
- **Lay pipe**
- **Manhole Installation**
- **Welding and grouting joints**
- **ARV Prefabrication**



Sta 142+50 CLSM Backfill



Tunnel Receiving Shaft Demo and Backfill



2/11/20 11:27 AM

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Sta 134+00 CLSM Placement



2/11/20, 11:29 AM

Sta 128+50 Deep Manhole Installation



2/11/20 11:39 AM

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Sta 128+50 Pipe Installation



Sta 128+50 Pipe Installation



2/11/20, 11:40 AM

Prefabrication of Valve Assemblies



3/11/20 11:27 AM



Construction Progress – Central Plant

281-FILTER MODULE 1 :

- Forming/Reinforcing Base Slab A1A.
- Backfilling for OZW Channel Slab.
- Reinforcing/Forming/Pouring Wall.
- Laying out shoring for Area C Gallery Deck.
- Gallery Deck D2 pour.

291-TRANSFER PUMP STATION 1:

- FRP Top Deck Curbs over Contact Basins
- Removed Sheet Piles
- Forming 60" Suction pipes Block-outs

282 -FILTER MODULE 2:

- Interconnect Vault Slab Work.
- Tower Crane foundation Rebar.
- Pouring Seal Slabs.

292-TRANSFER PUMP STATION 2:

- Mass Excavation



281-FILTER MODULE- Forming/Reinforcing Base Slab A1A



281-FILTER MODULE- Backfilling for OZW channel slab



281-FILTER MODULE- Reinforcing/Forming/Pouring Walls



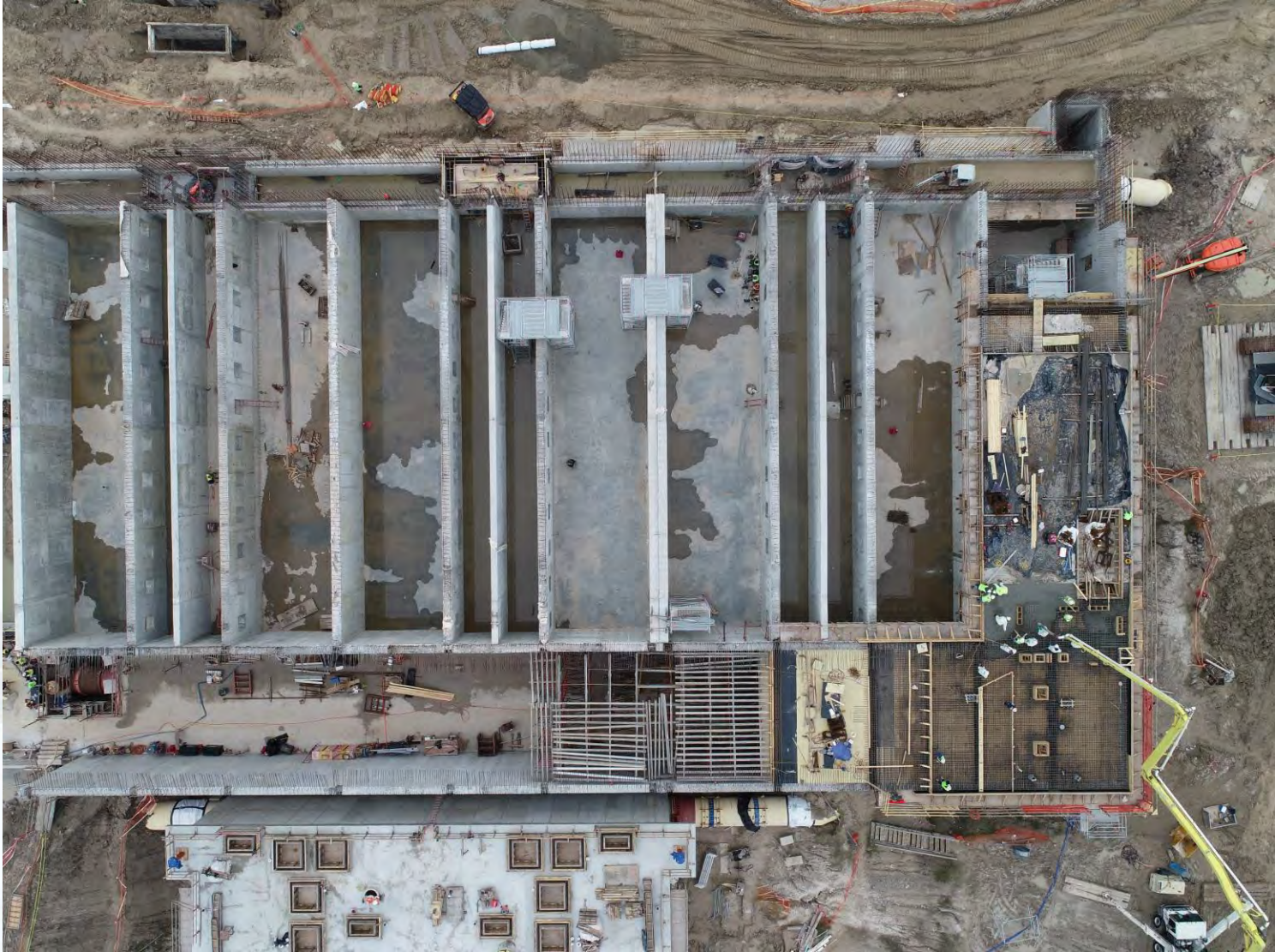
281-FILTER MODULE- Laying out Shoring for Area C Gallery Deck



281-FILTER MODULE- Gallery Deck D2 Pour



281-FILTER MODULE- Phase 1 (East Half)



TPS – FRP Top Deck Curbs over Contact Basins



TPS – Removed Sheet Piles



TPS – Forming 60" Suction Pipes Block-outs



282-FILTER MODULE 2- Interconnect Vault Slab



282-FILTER MODULE 2- Tying Tower Crane foundations



282-FILTER MODULE 2- Pouring Seal Slabs



2/1/20, 10:18 AM

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Construction Progress – EWP 6 North Plant

- **Facility 213 Walls and Slab-on-grade F/R/P**
- **Facility 241 PDR and USL Piping**
- **Facility 242 PDR and USL Piping**
- **Facility 242 Walls and Slab-on-grade F/R/P**
- **Facility 611 RCYS Valve Vault and Overflow Sump F/R/P**
- **Facility 252 Inlet and Outlet Boxes F/R/P**
- **Facility 502 Excavation and Dewatering Installation**



Facility 241/242 (2) 16 inch USL Encasement



Facility 242 Exterior Wall Rebar



Facility 241/242 PRD and USL Piping



2/11/20, 12:43 PM
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Facility 242 Slab-on-Grade F/R/P



Facility 252 Inlet Box F/R/P and 96" Thimble



2/4/20 3:05 PM

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Facility 502 Excavation



Facility 502 Dewatering Installation





Construction Progress – EWP 6 IPS

- **Completion Of Bridge Piles**
- **Completion of beam pour 3.**
- **Delivery of pump can #1**



Continuation of Bridge Piles

Beam Pour #3



Pump Can Delivery





Construction Progress – EWP 6 Substation Facility 102

- **Installation of Static Mast**
- **Continue Yard Foundations**
- **Site Prep to begin Building Foundation**



Installation of Static Mast




Installation of A-Frames and Bus Duct



Site Prep to begin Building Foundation





Construction Progress – BOP LREQ Basins Facilities 601/602

- **Facility 601/602 Excavation Progress**
- **Mass Excavation at Facility 601**
- **Installation of formwork and water stop for Facility 601/602 Base Slab**



Facility 601 Excavation Progress



Mass Excavation at Facility 601



Installation of formwork and water stop for Facility 601/602 Base Slab





Construction Progress – Yard Piping

- **Installing and welding 66” RW steel pipe line in Corridor 1**
- **Installing and welding 108” RW steel pipe line in Corridor 1**
- **Installing 84” & 96” FW steel pipe in Corridor 4**
- **Installing two 16” TSL ductile iron pipe lines in Corridor 2**
- **Installing Double 8’x4’ storm box culverts in Admin area**
- **Installing 12” PW in Corridor 3**



Installing 66" RW steel pipe line in Corridor 1



Installing 108-in RW steel pipe line in Corridor 1



Installing 96" FW steel pipe in Corridor 4



Installing two 16" TSL ductile iron pipe lines in Corridor 2



Installing Double 8'x4' storm box culverts in Admin area



Installing 12" PW in Corridor 3





Construction Progress – Administration Building

- **Achieved Backfill to EL 49**
- **Completed Density Tests on 12 Lifts**



Achieved Backfill to EL 49



Completed Density Tests and Proof Roll on 8" Lifts





Construction Progress – South Plant

- **Placing 84" pipe at GST 361**
- **Continuing 102" pipe encasement at GST 362**
- **Mud mat and sump pit poured at Facility 520**
- **Electric conduit installation completed at Facility 111**
- **Pump can foundation reinforcing at HSPS 401**



Placing 84" pipe at GST 361



Continuing 102" pipe encasement at GST 362



Mud mat and sump pit poured at Facility 520



Electric conduit installation completed at Facility 111



Pump can foundation reinforcing at HSPS 401



