



**CITY OF HOUSTON**  
Houston Public Works

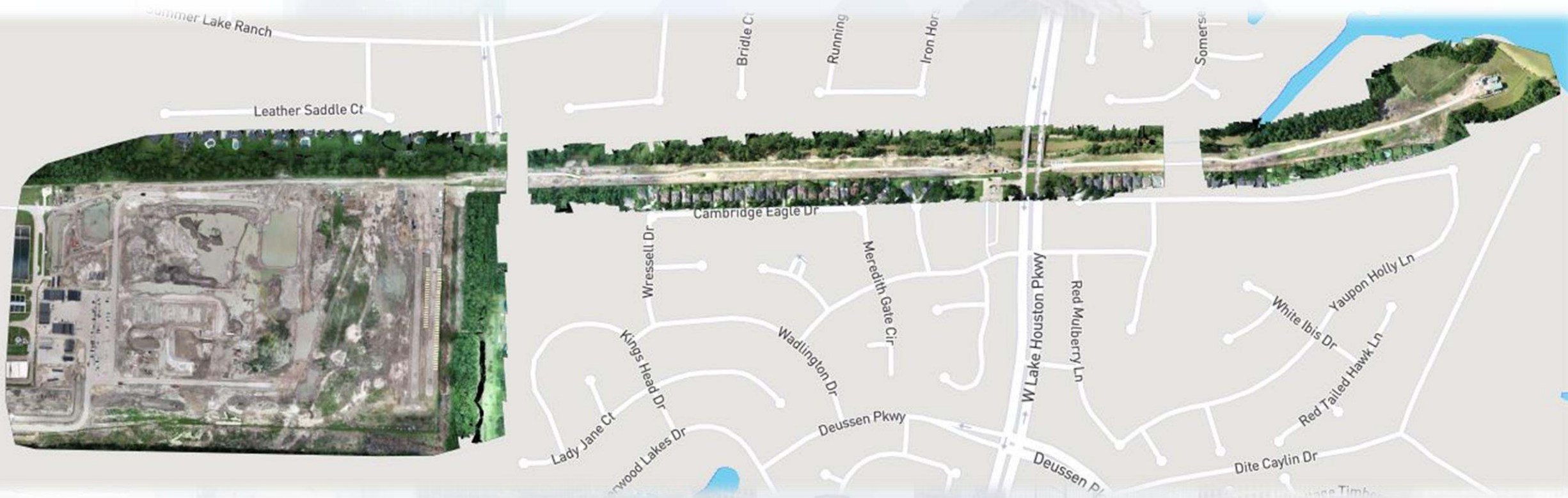
# DESIGN-BUILD SERVICES

# Northeast Water Purification Plant Expansion


**Houston Waterworks Team**



# Aerial Map of Overall Site – July 6, 2018





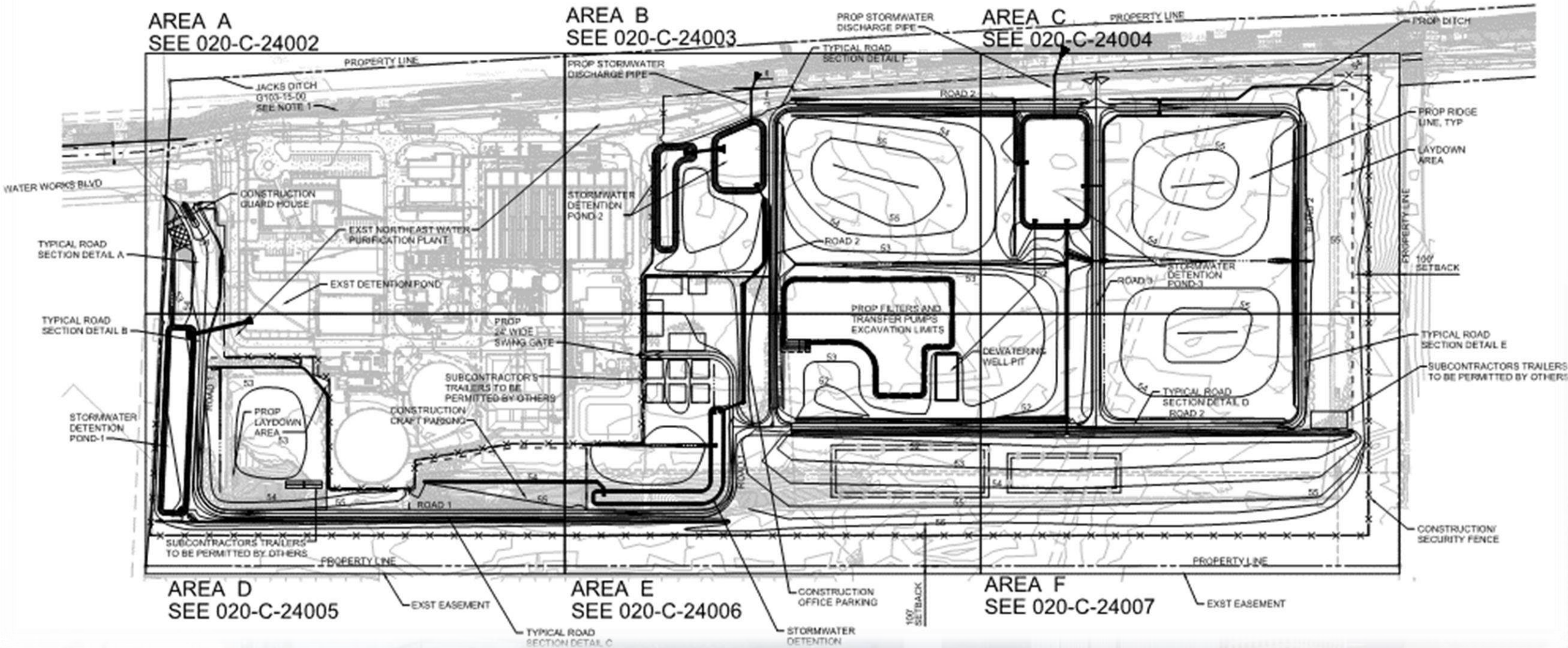


# Construction Progress – EWP 1 MAIN PLANT

## July 11, 2018

- **Cutting/excavating Pond 3**
- **Excavating Transfer pump station**
- **Installed dewatering wells and pumps in TPS**
- **Cut/fill and stabilizing craft parking lot and ditch**
- **Clearing and grubbing East sides of Area C & F (East of existing fence)**
- **Installing storm drains**
- **Potholing 66” for 20”RW reroute install**







# Grading and laying craft parking lot and ditch





# Installed Dewatering system in TPS, and excavated





# Cutting Pond 3, & Dewatering after rain storms






# Clearing Trees East of Existing Fence





# Aerial View of Main Site – July 6, 2018





# Construction Progress – EWP 3 & 1 – Electrical

## July 11, 2018

- **Wiring panel boxes at trailer city for land power**
- **Clean up and completing preliminary punch-list items**
- **Installed fence around new electrical equipment**
- **Demolished existing power lines and poles**
- **Installing light poles and fixtures**





# Demolished power lines





# Demolished power poles





# Installing light poles and fixtures







# Construction Progress – EWP 4 – Raw Water Corridor

## July 11, 2018

- **Installing fence posts in East corridor, South side**
- **Maintaining dewatering system**
- **Excavating shaft and installing shoring**
- **Grading swales and installing drain pipe for positive drainage in West Corridor**
- **Driving H-Piles**





# Excavating Shaft Entry, and installing shoring





# Installing storm drains in swales in West Corridor





# Drilling & Driving H-Piles





# Aerial View of West Corridor – July 6, 2018







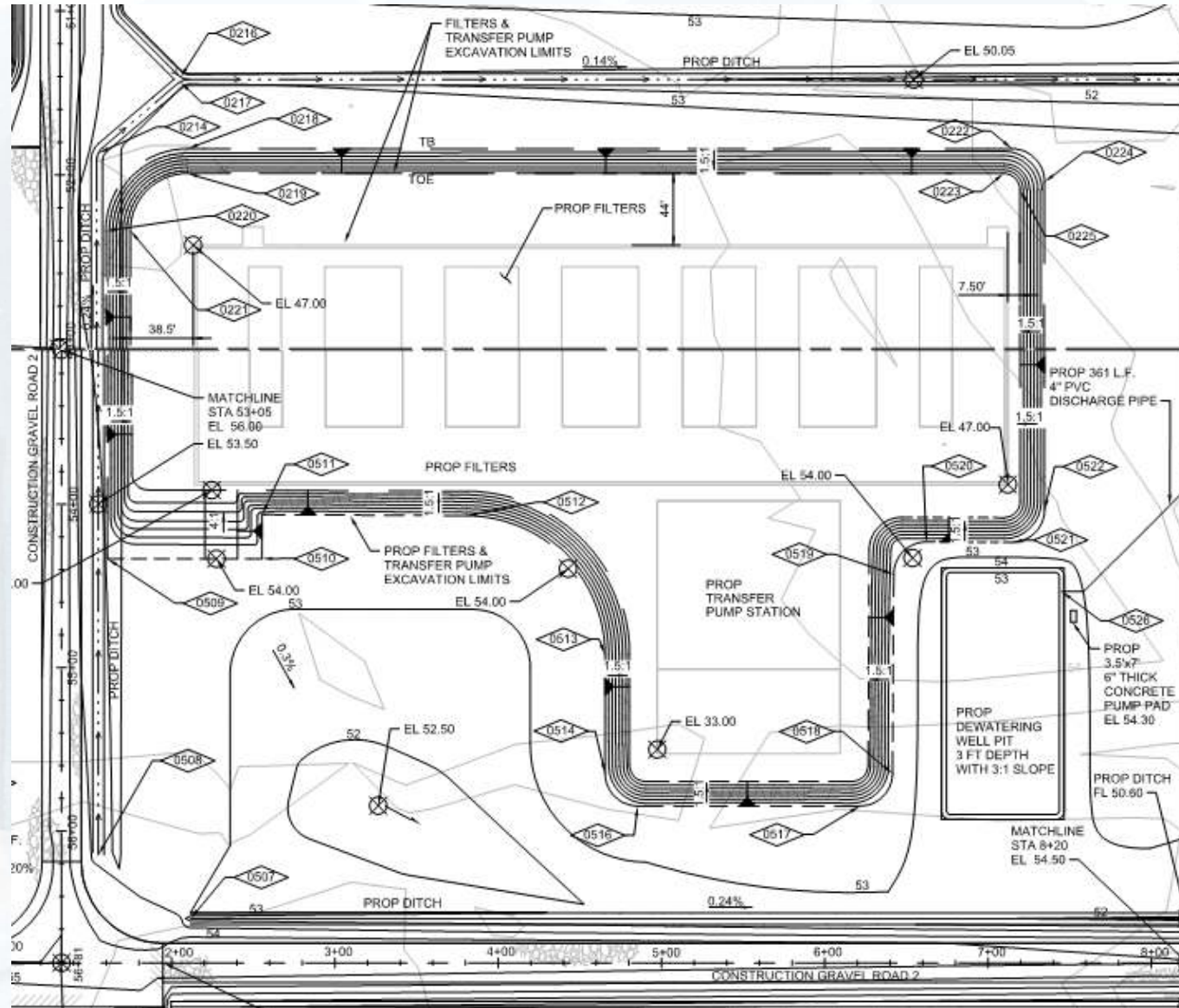
# Construction Progress – EWP 2 Filter Structure & TPS

## July 11, 2018

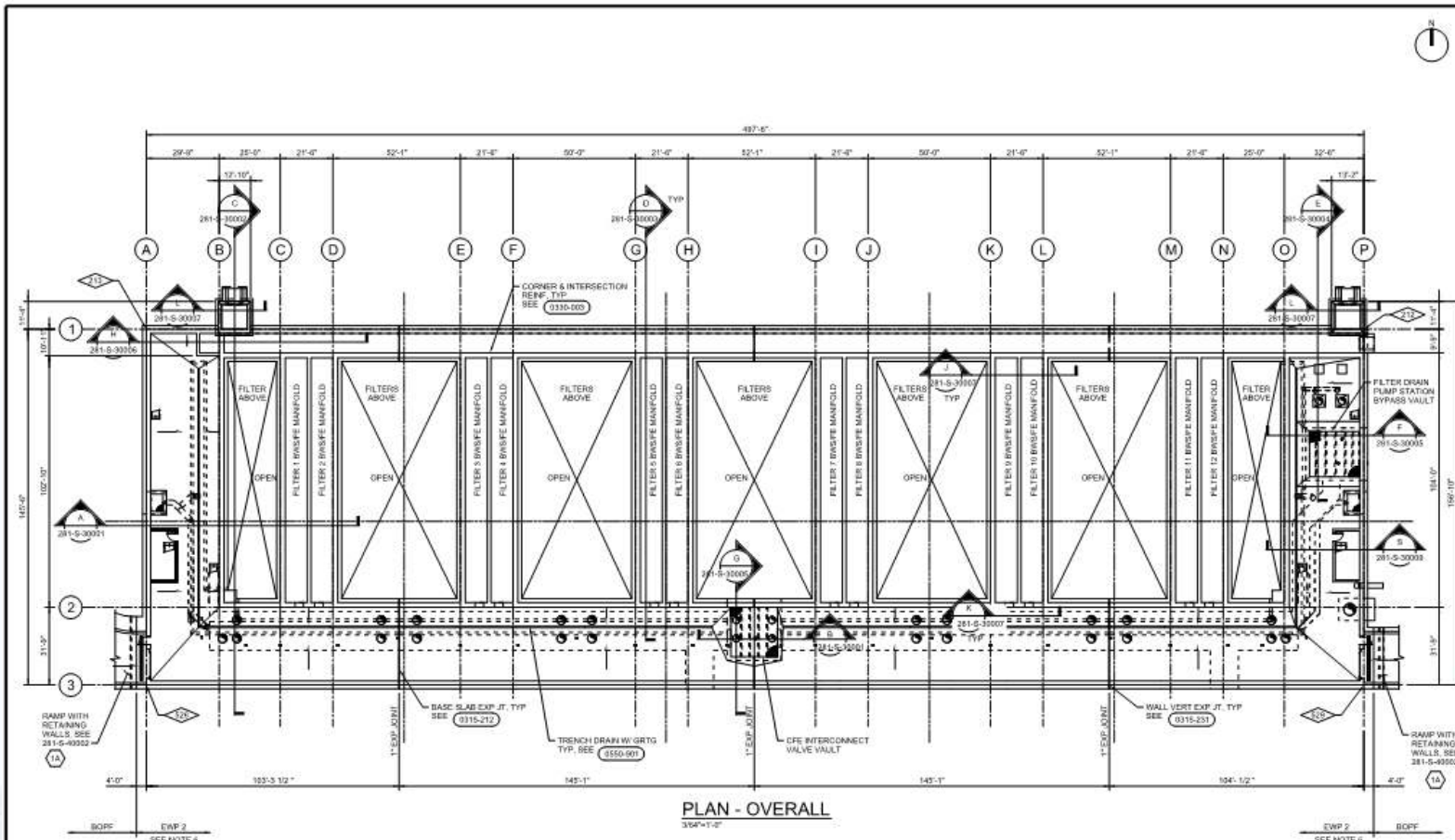
- **McCarthy mobilizing equipment and trailer to site**
- **Cutting filter structure to grade**
- **Lime stabilizing underslab**
- **Laying crushed aggregate**
- **Dewatering after rain storms**











PLAN - OVERALL  
354'-11 1/2"

**FOUNDATION NOTE**

ITEM ON HOLD: SUBGRADE PREPARATION WILL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. AS A MINIMUM BACKFILL BELOW FOUNDATIONS WILL BE COMPACTED TO MINIMUM 95% OF MAXIMUM DRY DENSITY PER ASTM D698 UNLESS SPECIFIC GEOTECHNICAL ENGINEERING WRITTEN RECOMMENDATIONS ARE PROVIDED.

**GENERAL NOTES (CONT'D)**

7. FOR WALL CONSTR. JT SPACING, SEE STANDARD DET 0315-131. SLAB CONSTR. JT SHALL BE LOCATED AT WALL CONSTR. JT LOCATIONS. SUBCONTRACTOR SHALL SUBMIT PROPOSED CONSTR. JT LAYOUT TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO REBAR SHOP DRAWING SUBMITTAL.
8. SEE 001-G-00007A THRU 001-G-00007E FOR OTHER STRUCTURAL NOTES.
9. ALL DOOR OPENINGS' SIZE AND LOCATION SHALL BE COORDINATED WITH ARCHITECTURAL BOFP DRAWINGS PRIOR TO FORMING THE OPENING. DESIGNER SHALL BE NOTIFIED TO DO INSPECTION OF FORMWORK PRIOR TO CONCRETE POUR.
10. DENOTES SITE CONTROL POINTS. SEE SITE CIVIL DWGS IN EARLY WORK PACKAGE 1 (EWP-1) FOR SITE COORDINATES.

**SHEET KEYNOTES**



**GENERAL NOTES**

1. DENOTES SLAB DOWNWARD SLOPE DIRECTION.
2. SEE CIVIL DRAWINGS IN EARLY WORK PACKAGE 1 (EWP-1) FOR FINISHED GRADE ELEVATIONS AND SITE LAYOUT INFORMATION.
3. COORDINATE ALL SLAB AND WALL OPENINGS' SIZE, TYPE AND LOCATION WITH MECHANICAL, HVAC, ELECTRICAL, AND ARCHITECTURAL DRAWINGS. REFER TO STRUCTURAL STANDARD DETAILS 000-001 AND 000-002 FOR ADDITIONAL REINFORCEMENT AROUND CONCRETE OPENINGS.
4. COORDINATE ALL CONDUIT AND PIPE PENETRATIONS' EXACT SIZE, ELEVATION AND LOCATIONS WITH ELECTRICAL AND MECHANICAL DRAWINGS.
5. COORDINATE EXACT DIMENSIONS AND THICKNESS FOR ALL EQUIPMENT PADS WITH EQUIPMENT MANUFACTURER.
6. IN EARLY WORK PACKAGE 2 (EWP-2) CONTRACT, WORK INCLUDES ALL CONCRETE CONSTRUCTION INCLUDING ALL SUBBERMENT'S WITHIN THE CONCRETE FROM 4'-0" TO THE WEST OF GRID LINE "A" TO 4'-0" TO THE EAST OF GRID LINE "P". THE FOLLOWING WILL BE INSTALLED AT A LATER DATE UNDER THE BALANCE OF PROJECT FACILITIES (BOFP) AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY:
  - A. ALL STEEL CONSTRUCTION (CATWALK SYSTEM, GRATING, SUPPORT BEAMS, PRE-ENGINEERED METAL STAIRS, PIPE SUPPORTS, ETC.)
  - B. ALL ALUMINUM CONSTRUCTION (GRATING, RAILINGS, GRATING SUPPORT BEAMS, ETC.)
  - C. ALL MASONRY CONSTRUCTION
  - D. EAST AND WEST RAMP CONSTRUCTION SHOWN IN 211-S-00022
  - E. CONCRETE EQUIPMENT PADS AND CONCRETE PIPE SUPPORTS DOWELED INTO SLAB USING POST-INSTALLED EPOXY DOWELS.

(SEE BELOW FOR ADDL GENERAL NOTES)

1	21/18	ISSUED FOR CONSTRUCTION	PR
APPROVED BY:	R. ROGERS	DATE:	DECEMBER 2017
DESIGNED BY:	BARBOLINO	DRAWN BY:	B. BENNETT
CHECKED BY:	CHYZANOWSKI	X-CHECK BY:	B. FINNEGAN

**Houston Waterworks Team**  
 1000 WATER PARK PLACE 2  
 HOUSTON, TX 77058

PREPARED BY: BRONES PR NO. P-0809  
**CITY OF HOUSTON**  
 DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

NORTHEAST WATER PURIFICATION PLANT EXPANSION

FILTER MODULE 1  
 STRUCTURAL FOUNDATION PLAN  
 OVERALL

WBS NO.	S-000065-0005-4
DRAWING SCALE	3/64" = 1'-0"
CITY OF HOUSTON PW	RAJINDER SINGH
SHEET NO.	36 OF 111



DWG. NO. 281-S-20200  
 PLOT DATE: 11/20/2017



# Laying crushed aggregate in foundation



06.29.2018 11:44



# Dewatering excavations





# Aerial View of Filter & TPS July 6, 2018

