



**CITY OF HOUSTON**  
Houston Public Works

# DESIGN-BUILD SERVICES

# Northeast Water Purification Plant Expansion

**Houston Waterworks Team**





# Site Wide Safety Meeting - Active Shooter Training





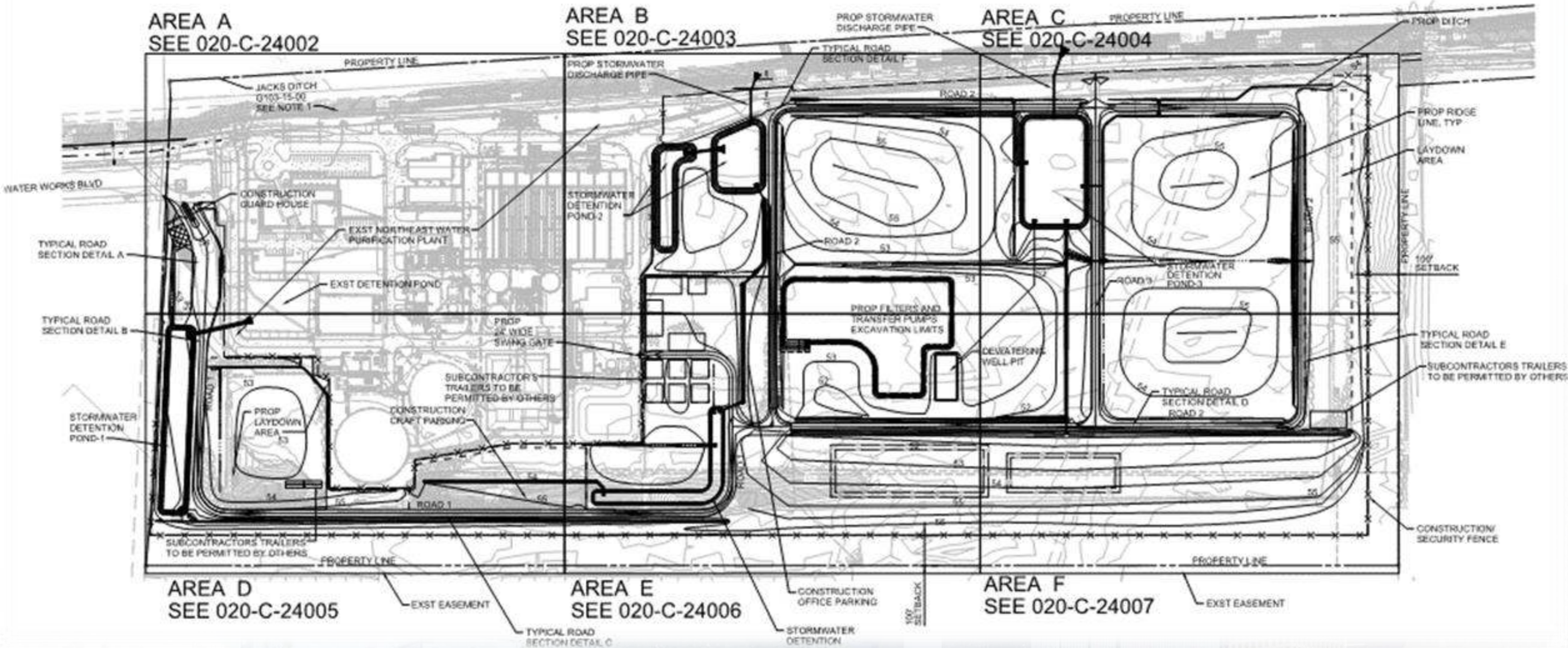
# Construction Progress – EWP 1 MAIN PLANT

## July 18, 2018

- **Cutting/excavating Pond 3**
- **Turned over the Transfer pump station excavation**
- **Hydroseeded slopes of TPS and filter excavations**
- **Final graded and laid base on 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**









# Cut and laid rock in craft parking lot ditch





# Dewatering, and cutting/excavating Pond 3





# Installing storm drains





# Hydroseeded TPS Excavation slopes





# Hydroseeded Filter Excavation slopes





# Clearing & Grubbing East of Existing Fence







# Construction Progress – EWP 3 & 1 – Electrical

## July 18, 2018

- **Clean up and completing preliminary punch-list items**
- **Installing light poles and fixtures**
- **Trenching, and installing conduit to TPS area**
- **Poured duct banks**





# Installing light poles and fixtures







# Construction Progress – EWP 4 – Raw Water Corridor

## July 18, 2018

- **Installing fence posts in East corridor, South side**
- **Installing barbed wire on fence in East corridor, North Side**
- **Maintaining dewatering system**
- **Excavating shaft and installing shoring**
- **Grading swales and installing drain pipe for positive drainage in West Corridor**
- **Driving H-Piles**
- **Cutting pipeline excavation**





# Excavating Shaft Entry, and installing shoring





# Installing Fence Posts in East Corridor (South side)





# Installing Net & Barbed wire on fence in East Corridor (North side)





# Cutting Pipeline excavation, and grading temp road





# Drilling & Driving H-Piles







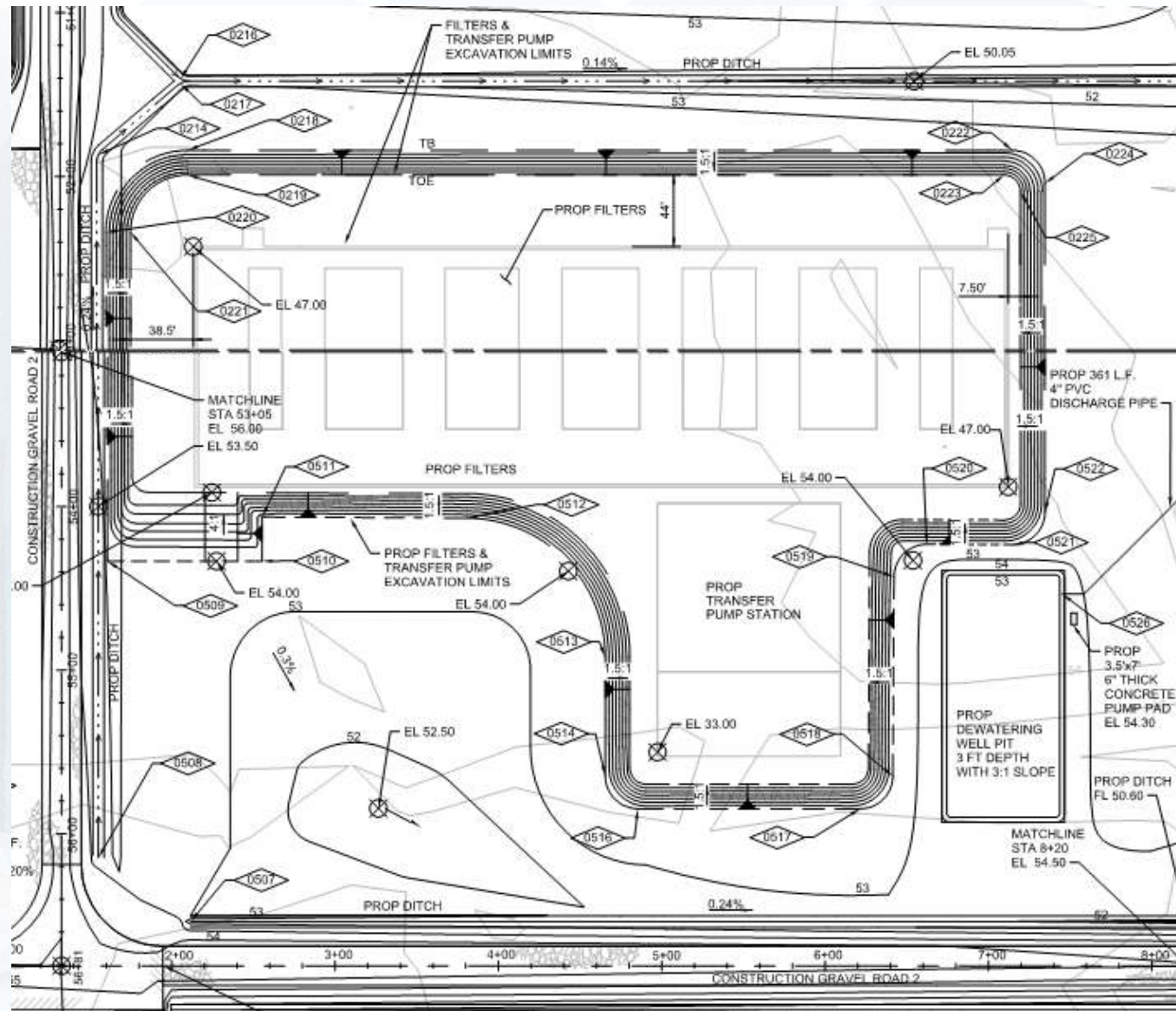
# Construction Progress – EWP 2 Filter Structure & TPS

## July 18, 2018

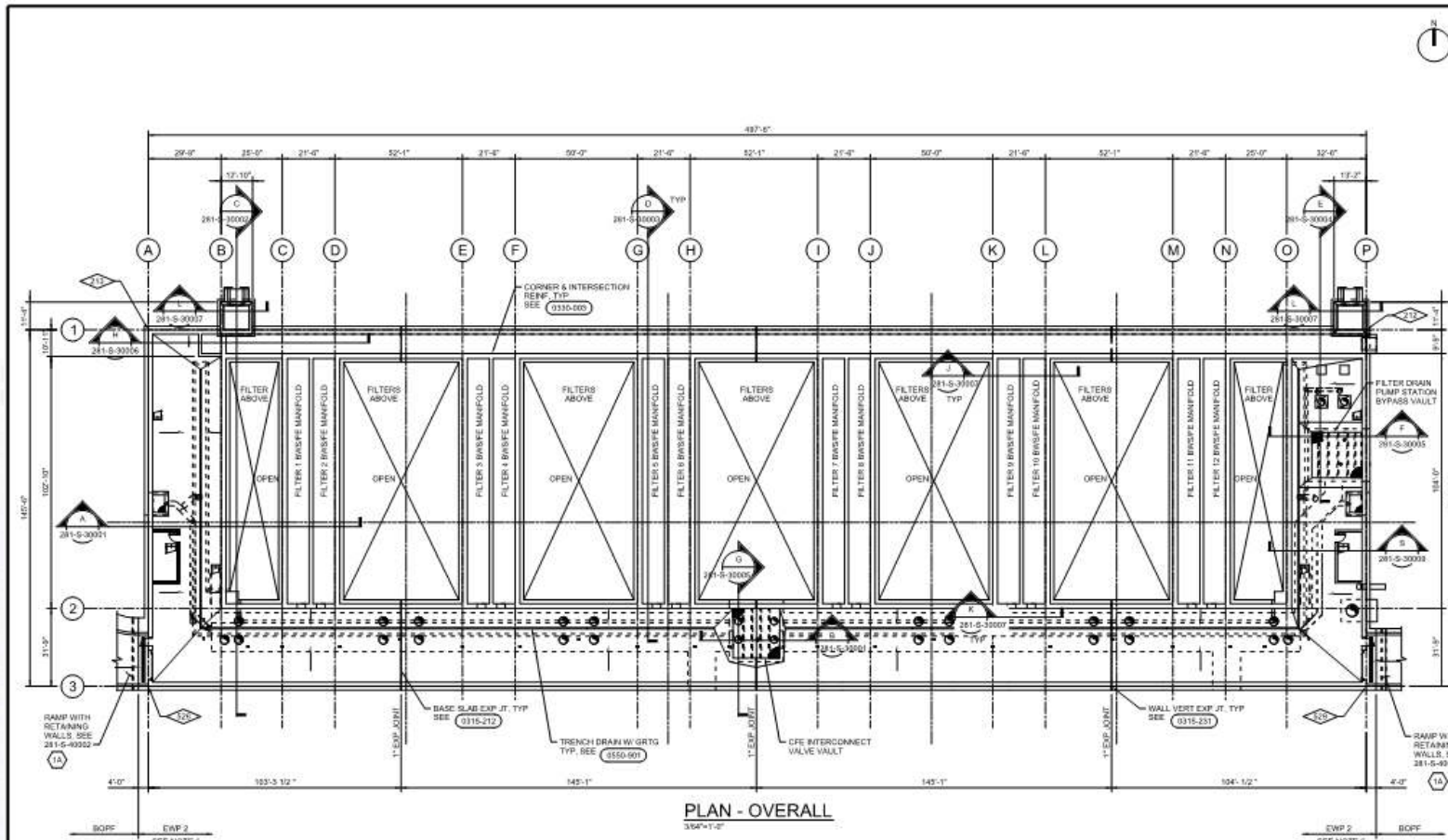
- **Cutting and compacting filter structure to grade**
- **Laying crushed aggregate**
- **Pouring mud slabs**
- **Assembling crane**











**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 STANDARDS DETAILS 0301-01 AND 0301-02 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) CONTRACTOR WORK INCLUDES ALL CONCRETE CONSTRUCTION INCLUDING ALL EMBEDMENTS (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 (SFP) 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 281-S-40302
  - E. CONCRETE EQUIPMENT PADS AND CONCRETE PIPE SUPPORTS DOWNED INTO SLAB USING POST-INSTALLED EPOXY DOWELS.

(SEE BELOW FOR ADDL GENERAL NOTES)

1	21/18 ISSUED FOR CONSTRUCTION	PROJ	281-S-20200
APPROVED:	R. ROGERS	DATE:	DECEMBER 2017
DESIGNED BY:	BJORKLUND	DRAWN BY:	B. BENNETT
CHECKED BY:	CHYZANOWSKI	X-CMD BY:	B. FINEGAN



SURVEYED BY: BROOKS    PD NO. P-5009

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

NORTHEAST WATER PURIFICATION PLANT EXPANSION  
FILTER MODULE 1  
STRUCTURAL FOUNDATION PLAN OVERALL

**FOUNDATION NOTE**

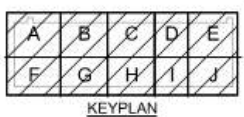
ITEM ON HOLD: SUBGRADE PREPARATION WILL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AS A MINIMUM BACKFILL BELOW EXCAVATIONS WILL BE COMPACTED TO MINIMUM 95% OF MAXIMUM DRY DENSITY PER ASTM D698 UNLESS SPECIFIC GEOTECHNICAL ENGINEERING WRITTEN RECOMMENDATIONS ARE PROVIDED.

**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-03507A THRU 001-G-00037E FOR OTHER STRUCTURAL NOTES.
9. ALL DOOR OPENINGS' SIZE AND LOCATION SHALL BE COORDINATED WITH ARCHITECTURAL BOPF 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**

- 1A. COMPONENT INSTALLED AS PART OF BOPF.



WDS NO. 5-00000-0005-4
DRAWING SCALE 3/64" = 1'-0"
CITY OF HOUSTON PW
RAJINDER SINGH
SHEET NO. 16 OF 113

FILENAME: 281-S-20200\_073737.dwg    PLOT DATE: 12/05/2017    PLOT TIME: 11:02:50 AM

EWP-2 - ISSUED FOR CONSTRUCTION





# Pouring mud slabs in filter





# Pouring mud slabs in filter





# Cutting and compacting underslab of filter





# Laying crushed concrete in filter





# Assembled and setup crane

