

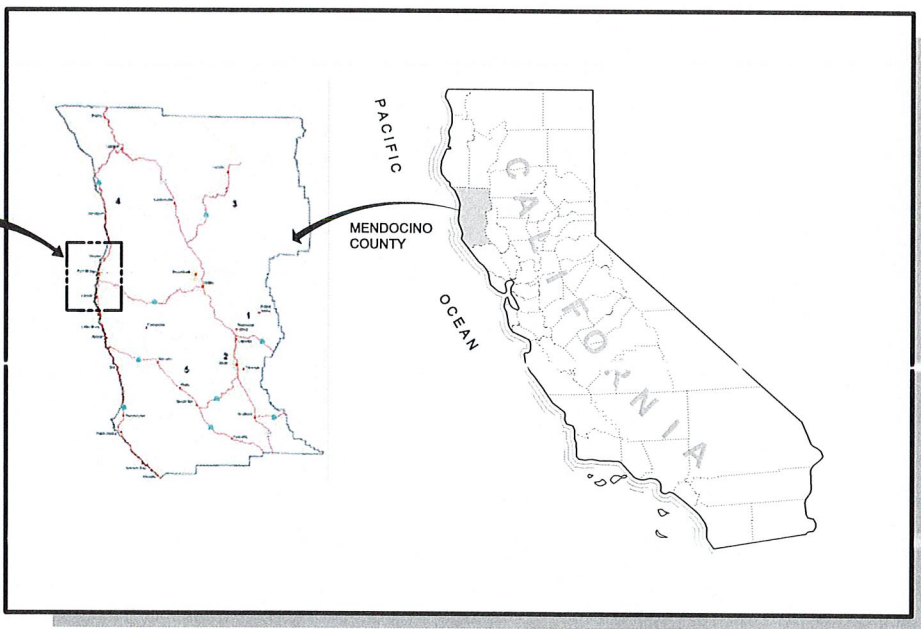
CITY OF FORT BRAGG

WATER TREATMENT PLANT REHABILITATION PROJECT



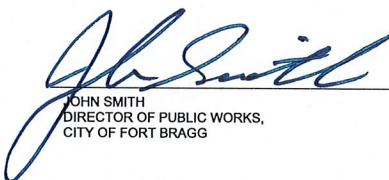
ISSUED FOR BID
NOVEMBER 2023

VICINITY
MAP

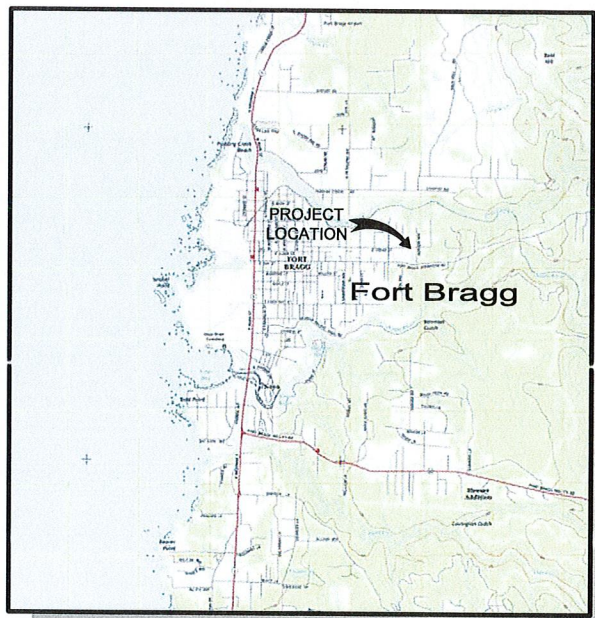


LOCATION MAP




JOHN SMITH
DIRECTOR OF PUBLIC WORKS,
CITY OF FORT BRAGG


ARASHDEEP SINGH, P.E.
PROJECT MANAGER,
HDR ENGINEERING



VICINITY MAP



ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

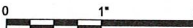
PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

GENERAL

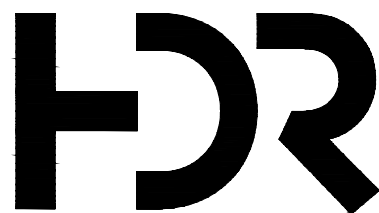
COVER SHEET AND LOCATION MAPS



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SHEET
G01

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DATE: 08/10/23 02:20:22pm JKAMBOJ

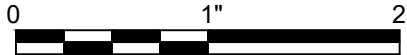


0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER		ARASHDEEP SINGH
DESIGNED	A. SINGH	
DESIGNED		
CHECKED	T. KONTONICKAS	
DRAWN	P. VAN MEURS	
DATE	08/2023	
PROJECT NUMBER	10276484	



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



GENERAL	
SHEET LIST	
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SHEET
G02

SHEET LIST

GENERAL

1.	G01	COVER SHEET AND LOCATION MAPS
2.	G02	SHEET LIST
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4.	G04	SYMBOLS LEGEND
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10.	X05	WATER TREATMENT BUILDING SECTIONS AND PHOTOS
11.	X06	WATER TREATMENT BUILDING PHOTOS
12.	X07	REACTOR CLARIFIER PLAN AND SECTIONS
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39.	R02	FILTER TREATMENT UNITS NO. 1 AND NO. 2 REHAB PREPARATION PLANS AND SECTIONS
40.	R03	FILTER TREATMENT UNITS NO. 1 AND NO. 2 REHAB PREPARATION SECTIONS AND DETAILS
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50.	E06	CONTROL DIAGRAMS 1
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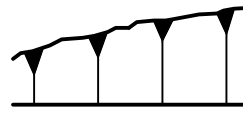
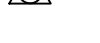
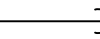
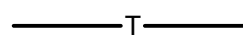
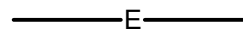
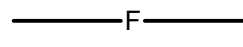
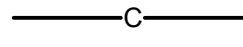
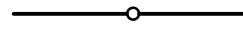
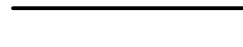
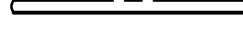
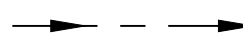
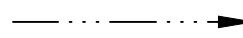
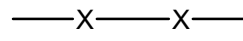
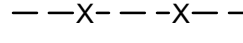
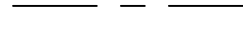
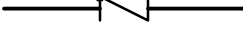
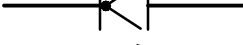
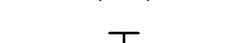
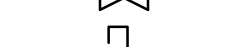
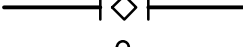
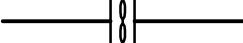
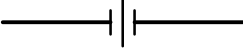
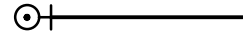
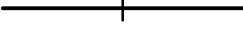
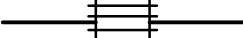
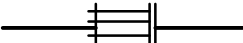
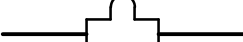
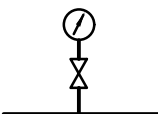
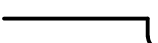
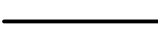
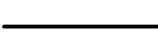
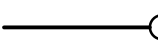
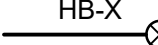
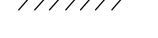
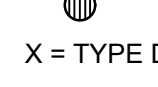
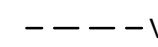
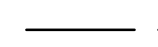
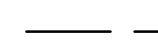
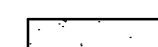
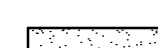
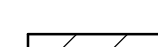
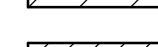
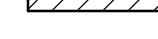
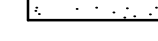
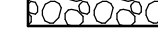
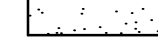
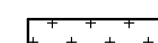
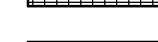
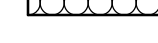
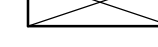
INSTRUMENTATION

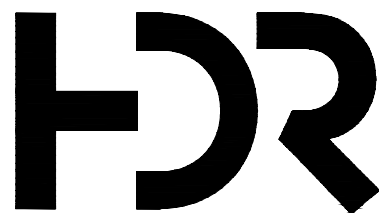
53.	I01	GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS
54.	I02	BLOWERS AND TREATMENT UNITS PROCESS AND INSTRUMENTATION DIAGRAM

			DESIGNED	A. SINGH
			DESIGNED	
			CHECKED	T. KONTONICKAS
			DRAWN	P. VAN MEURS
			DATE	08/2023
0	08/2023	ISSUED FOR BID		
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	10276484

**G03**

FILE: C:\pwworking\wse01\4243094\G04.dwg
DATE: 08/10/23 02:21:05pm - JKAMBOJ

1	2	3	4	5	6	7	8
SITE PLAN SYMBOLOGY		PIPING SYMBOLOGY		GENERAL SYMBOLOGY		IDENTIFICATION SYMBOLOGY	
 EMBANKMENT SLOPE  50.5 CONTOUR  VEGETATION  CO CLEAN OUT  MH MANHOLE  MW MONITORING WELL  PZ PIEZOMETER  CB STORM DRAIN CATCH BASIN  UV UTILITY VAULT  PP POWER POLE  TP TELEPHONE POLE  FH FIRE HYDRANT  YH-X YARD HYDRANT  X 75.5 EXISTING SPOT ELEVATION  75.8 FINISHED SPOT ELEVATION  HORIZONTAL CP-X, CONTROL POINT  BENCHMARK  TH-"X" IDENTIFICATION AND APPROXIMATE LOCATION OF SOIL TEST HOLE  DOWNGUY NOTES: 1. UTILITIES THAT ARE SUSPENDED ABOVE GRADE ARE DESIGNATED BY THE PREFIX "OH".  T TELEPHONE LINE  E ELECTRIC LINE  F FIBER OPTIC  C COMMUNICATION  HANDRAIL  PIPELINE  LARGE PIPELINE  PIPELINE BENEATH CONCRETE OR STRUCTURE  RAILROAD  DRAINAGE FLOW  NATURAL WATERWAY  X-X CHAINLINK FENCE  -X-X- FIELD FENCE  - - - - - PROPERTY LINE  - - - - - CENTERLINE  RB ROCK BERM  SF SILT FENCE		NOTES: 1. VALVE TYPES FOR VALVES 4" AND LARGER ARE INDICATED BY SYMBOLOGY SHOWN BELOW. VALVES 3-1/2" AND SMALLER MAY BE SHOWN WITH GATE VALVE SYMBOL  REGARDLESS OF VALVE TYPE - REFER TO SPECIFICATIONS FOR REQUIREMENTS. 2. SYMBOLOGY SHOWN IS FOR SINGLE LINE PIPING. DOUBLE LINE PIPING SYMBOLS ARE SIMILAR. VALVES  GATE VALVE  GLOBE VALVE  BALL VALVE  CHECK VALVE  DOUBLE DISK CHECK VALVE  BALL CHECK VALVE  BUTTERFLY VALVE  DIAPHRAGM VALVE  PINCH VALVE  BALLANCING VALVE  KNIFE GATE VALVE  OR PRESSURE RELIEF VALVE  PLUG VALVE  NEEDLE VALVE  PRESSURE REDUCING VALVE  X AIR RELIEF / VACUUM VALVE A = AIR RELIEF V = VACUUM  PRESSURE REGULATING VALVE  THREE WAY BALL VALVE  THREE WAY PLUG VALVE  GAS PRESSURE REGULATING VALVE MISCELLANEOUS  ROTAMETER  PROPELLOR FLOW METER  UNION  WYE-STRAINER  FLEXIBLE HOSE OR TUBING  LINE SIZE CHANGE (CONCENTRIC REDUCER)  LINE SIZE CHANGE (ECCENTRIC REDUCER)  G+ LINE TURNING DOWN  O+ LINE TURNING UP  BLIND FLANGE  PIPE JOINT (SEE SPECS FOR REQUIREMENTS)  GROOVED COUPLING (VICTAULIC OR EQUAL)  SLEEVE TYPE COUPLING  FLANGED COUPLING ADAPTER (FCA)  FLEXIBLE CONNECTION  HARNESSED MECHANICAL COUPLING	MISCELLANEOUS (CONTINUED)  PRESSURE GAGE (W/COCK)  TRAP  QUICK DISCONNECT CAM & GROOVE COUPLING  CAP or PLUG  CO INTERIOR CLEANOUT  HB-X HOSE VALVE, HOSE BIBB OR FLUSHING CONNECTION  HR-X HOSE RACK  FD-X FLOOR DRAIN X = TYPE DESIGNATED IN SPECIFICATIONS  PIPE IN SECTION  BU BELL UP (PLAN)  BU BELL UP (SECTION OR SCHEMATIC)  D DRAIN (SECTION OR SCHEMATIC)  ATA AIR TOOL ASSEMBLY  AVS AUTOMATIC VALVE STATION  PRS PRESSURE REDUCING STATION PLUMBING PIPING:  - - - - - VT - - - - - VENT (VT)  - - - - - POTABLE WATER, COLD (PWC)  - - - - - POTABLE WATER, HOT (PWH) MATERIALS IN PLAN/SECTION  DEMOLITION  CONCRETE  CONCRETE FILL  MASONRY (CMU)  BRICK (SECTION)  ASPHALT  GRANULAR FILL  SAND  EARTH  METAL (SECTION)  GRATING (PLAN)  CHECKERED PLATE  BRICK (PLAN)  RIGID INSULATION  BATT INSULATION  WOOD - CONTINUOUS  WOOD - NON CONTINUOUS  PLYWOOD	PLAN 1/4" = 1'-0" ARROW INDICATES DIRECTION OF PLAN NORTH SECTION LETTER FLAG INDICATES DIRECTION OF SECTION CUT * SHEET WHERE SECTION VIEW IS LOCATED SECTION CUT MARKER SECTION LETTER 3/8" = 1'-0" * SHEET WHERE SECTION VIEW IS FIRST CUT DETAIL NUMBER * SHEET WHERE DETAIL IS LOCATED DETAIL MARKER DETAIL NUMBER 1" = 1'-0" * SHEET WHERE DETAIL WAS TAKEN SINGLE ELEVATION OR PHOTO MARKER ELEVATION LETTER ARROW INDICATES POINT OF VIEW INDICATES SHEET WHERE ELEVATION IS LOCATED MULTIPLE ELEVATION OR PHOTO MARKER ELEVATION IDENTIFICATION LETTER 1/4" = 1'-0" * SHEET WHERE POINT OF VIEW MARKER CAN BE FOUND * IF PLAN AND SECTION, OR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON SAME SHEET, DRAWING NUMBER IS REPLACED BY A LINE (-). KEYNOTE NUMBER KEYNOTE DESIGNATION	EQUIPMENT TAG NUMBERS: FIGURE NPWP-23 EXAMPLE SERVICE ABBREVIATION EQUIPMENT ABBREVIATION SEQUENCE NUMBER INDICATES NON POTABLE WATER INDICATES PUMP PUMP 23 EQUIPMENT ABBREVIATIONS: ABSP AERATION BASIN STOP PLATE AC AIR COMPRESSOR B BLOWER BLR BOILER CBSG CONTACT BASIN STOP GATE CBSLG CONTACT BASIN SLUICE GATE CBWG CONTACT BASIN WEIR GATE CST CONDENSATE & SEDIMENT TRAP DM DAMPER MOTOR DMXP DIGESTER MIXING PUMP EC EVAPORATIVE COOLER EF EXHAUST FAN EXPT EXPANSION TANK FA FLAME ARRESTER FE FLOW ELEMENT FM FLOW METER FS FLOW SWITCH FZ FREEZE STAT GPR GAS PRESSURE REGULATOR GUH GAS UNIT HEATER HC HEATING COIL HEX HEAT EXCHANGER HOA HAND OFF AUTO HWBP HOT WATER BOOSTER PUMP HWLP HOT WATER LOOP PUMP HWP HOT WATER PUMP HWRP HOT WATER BOILER RECIRCULATION PUMP HWUH HOT WATER UNIT HEATER L LOUVER MAU MAKE-UP AIR UNIT MOV MOTOR OPERATED VALVE MS MOTOR STARTER P PUMP PF POLYMER FEED UNIT PI PRESSURE INDICATOR PRV PRESSURE REDUCING VALVE SD SMOKE DETECTOR SEP SEPARATOR (AIR) SF SUPPLY FAN SG SLIDE GATE SMP SUMP PUMP T THERMOSTAT or TANK TC TEMPERATURE CONTROLLER TCV TEMPERATURE CONTROL VALVE TF TRANSFER FAN TI TEMPERATURE INDICATOR TP TRANSFER PUMP TT TEMPERATURE TRANSMITTER	PIPING: FIGURE 30"-SCI EXAMPLE LINE SIZE SERVICE 30" DIAMETER SECONDARY CLARIFIER INFLUENT PIPE SERVICES: AS AIR SCOUR BWS BACKWASH SUPPLY BWW BACKWASH WASTE CD CLARIFIER DRAIN CLS CHLORINE SOLUTION D DRAIN FTW FILTER-TO-WASTE FW FINISH WATER G NATURAL GAS HPA HIGH PRESSURE AIR HWR HOT WATER RETURN HWS HOT WATER SUPPLY LPA LOW PRESSURE AIR NaOCl SODIUM HYPOCHLORITE NG NATURAL GAS NPW NON-POTABLE WATER OF OVERFLOW PW POTABLE WATER RR RECLAIM RETURN RW RAW WATER SAM SAMPLE SD STORM DRAIN SS SANITARY SEWER TW TREATED WATER V VENT W WATER MAIN ARCHITECTURAL: XX-XX ROOM NUMBER XXXX DOOR NUMBER X COLUMN GRID LINE X WALL TYPE X WINDOW TYPE L XX LOUVER GENERAL NOTES: NOTES: 1. THIS IS A STANDARD DRAWING SHOWING COMMON SYMBOLOGY. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT. 2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DEEMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH DRAWING FOR USAGE.	

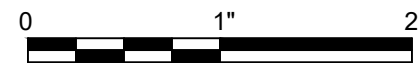


ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

PROJECT MANAGER		ARASHDEEP SINGH
DESIGNED		A. SINGH
CHECKED		T. KONTONICKAS
DRAWN		P. VAN MEURS
DATE		08/2023
PROJECT NUMBER		10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



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SCALE | NONE

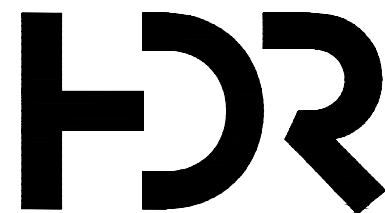
SHEET

G04

GENERAL

SYMBOLS LEGEND

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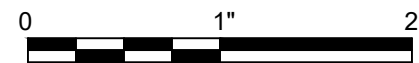


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City of Fort Bragg
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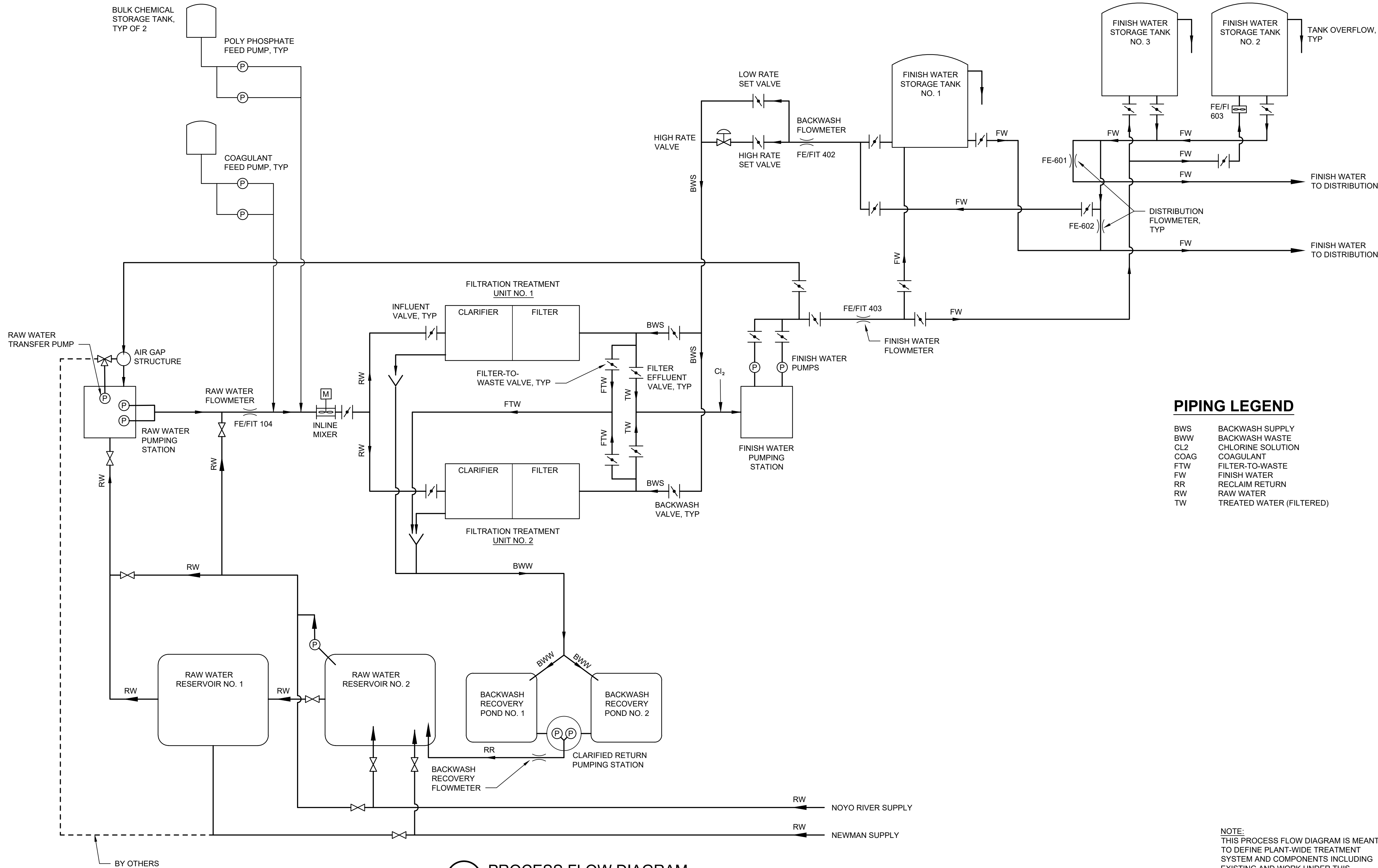
GENERAL

PROCESS FLOW DIAGRAM

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SCALE	NONE

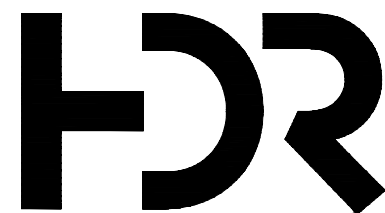
SHEET

G05



1 PROCESS FLOW DIAGRAM
- NO SCALE

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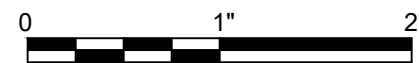


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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



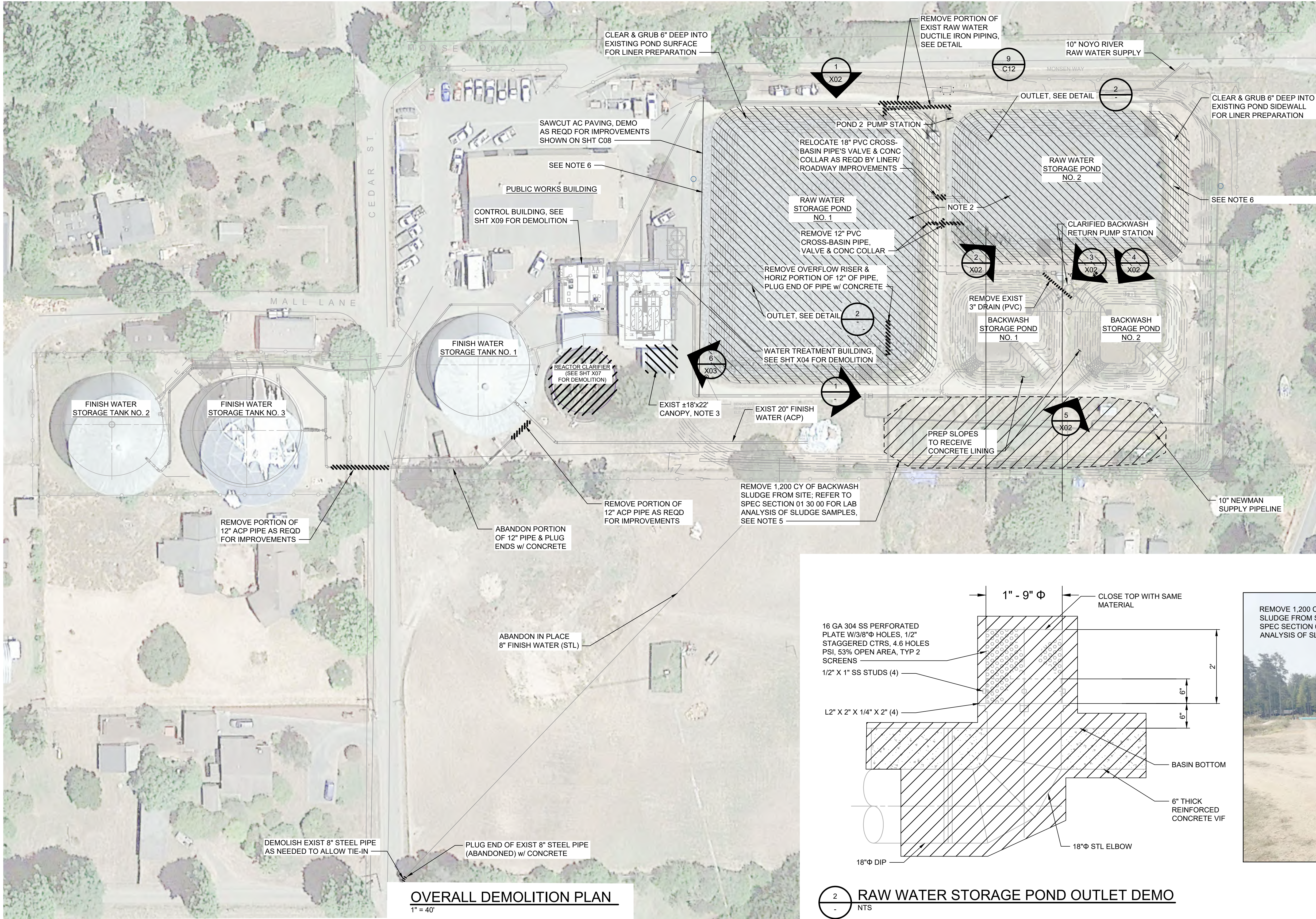
FILENAME | 2X01.dwg
SCALE | 1" = 40'

SHEET

X01

CIVIL

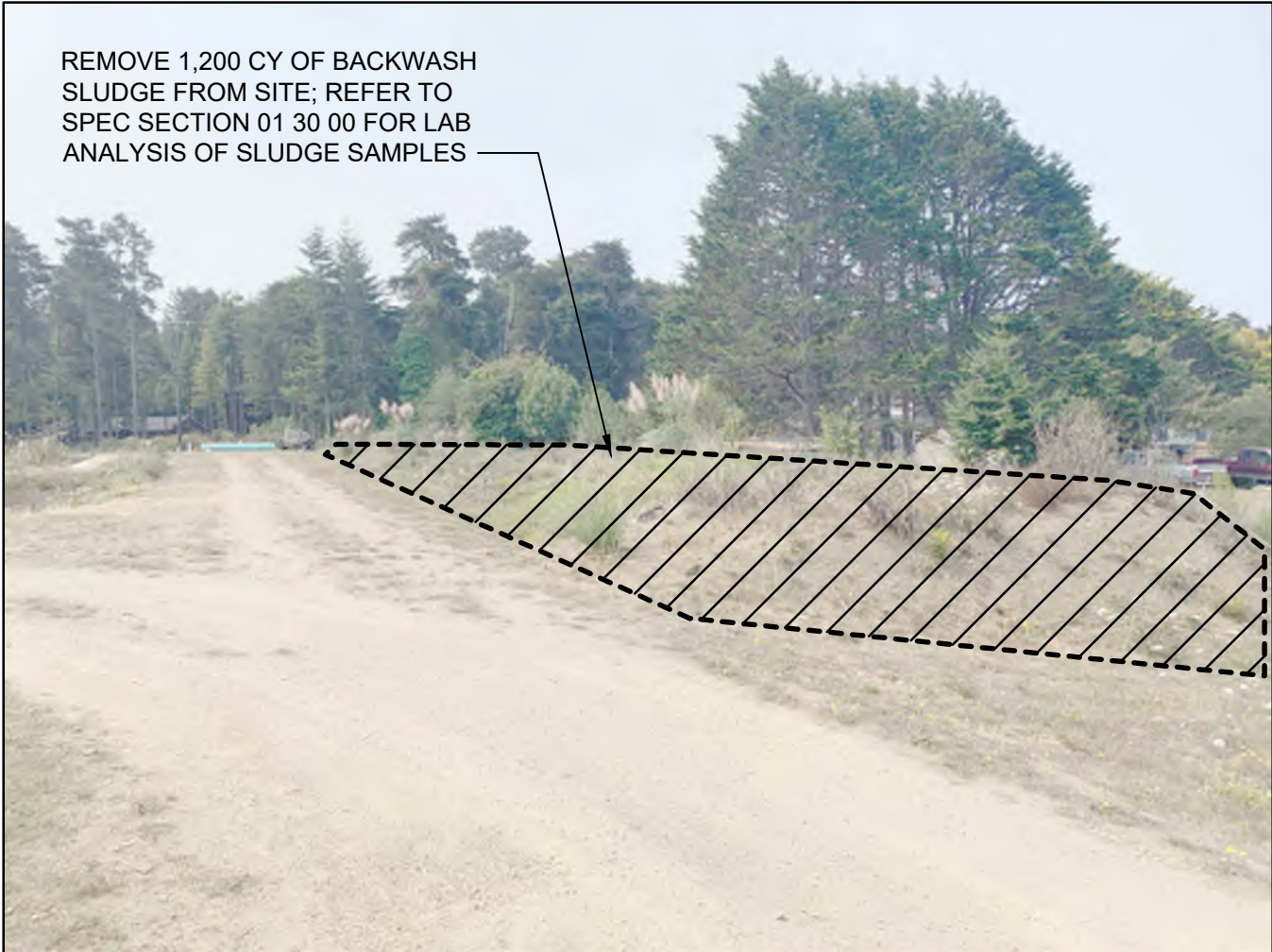
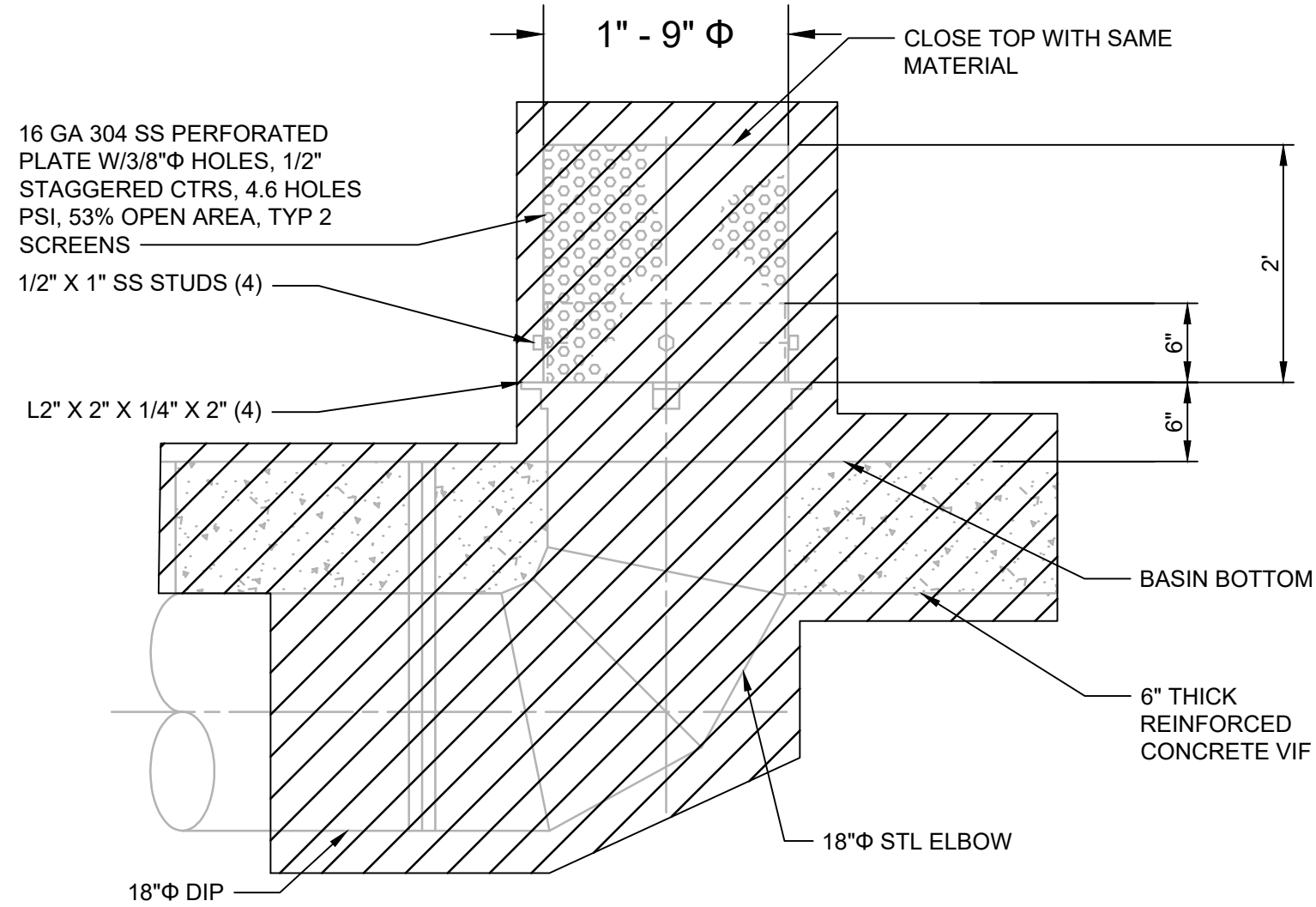
OVERALL SITE DEMOLITION PLAN



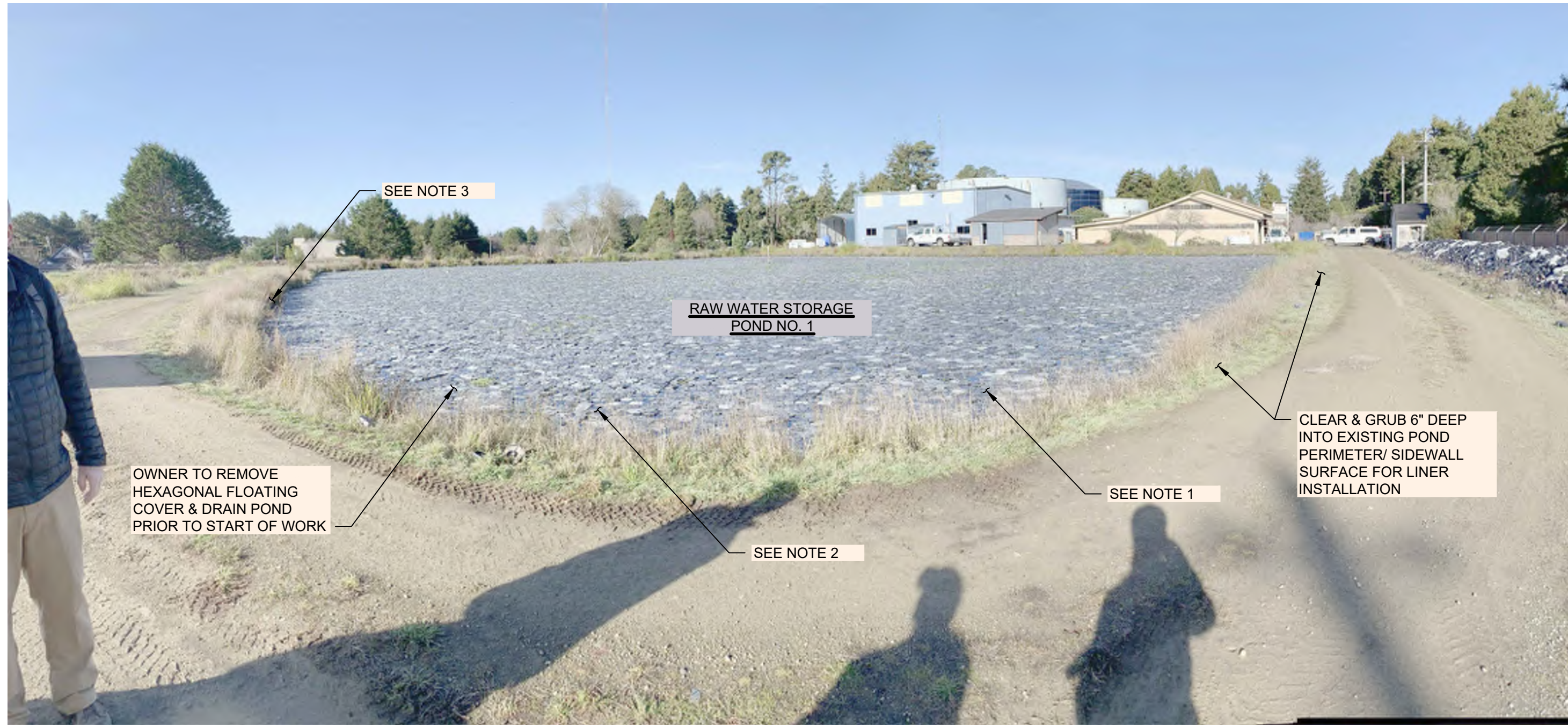
NOTES:

- AT LIMITS OF PIPE DEMOLITION SHOWN, CONTRACTOR SHALL CAP EXISTING PIPE FOR PIPES TO BE LEFT IN SERVICE, OR PLUG PIPE AND FILL WITH CONTROLLED LOW STRENGTH MATERIAL. IF REMAINING PIPE IS TO BE ABANDONED IN PLACE.
- OWNER WILL REMOVE POND HEXAGONAL FLOATING COVER SYSTEM PRIOR TO WORK IN THE RAW WATER STORAGE PONDS.
- CONTRACTOR SHALL REMOVE AND SALVAGE CARPORT AND DELIVER TO ONSITE LOCATION AS DIRECTED BY OWNER. CONTRACTOR SHALL COMPLETELY DEMOLISH ALL CONCRETE STRIP CANOPY FOOTINGS. OWNER TO COMPLETELY REMOVE ALL DESALINATION EQUIPMENT PRIOR TO CONTRACTOR DEMOLITION.
- FOR EQUIPMENT TO BE DEMOLISHED, REMOVE ELECTRICAL CONDUCTORS BACK TO SOURCE AND LEAVE CONDUITS IN PLACE. TYPICAL FOR ALL DEMOLITION.
- AFTER SLUDGE REMOVAL CONTRACTOR SHALL REGRADE THE AREA TO MATCH SURROUNDING TOPOGRAPHY AND ENSURE IT IS SLOPED ADEQUATELY FOR DRAINAGE AND HYDROSEED.
- CONTRACTOR SHALL PERFORM SURVEYING, AS NECESSARY, TO PROVIDE RELEVANT AS-BUILT INFORMATION TO POND LINER MANUFACTURER. COORDINATE WITH LINER MANUFACTURER TO UNDERSTAND THEIR SURVEYING NEEDS.

2 RAW WATER STORAGE POND OUTLET DEMO
NTS



1 PHOTOGRAPH
NO SCALE

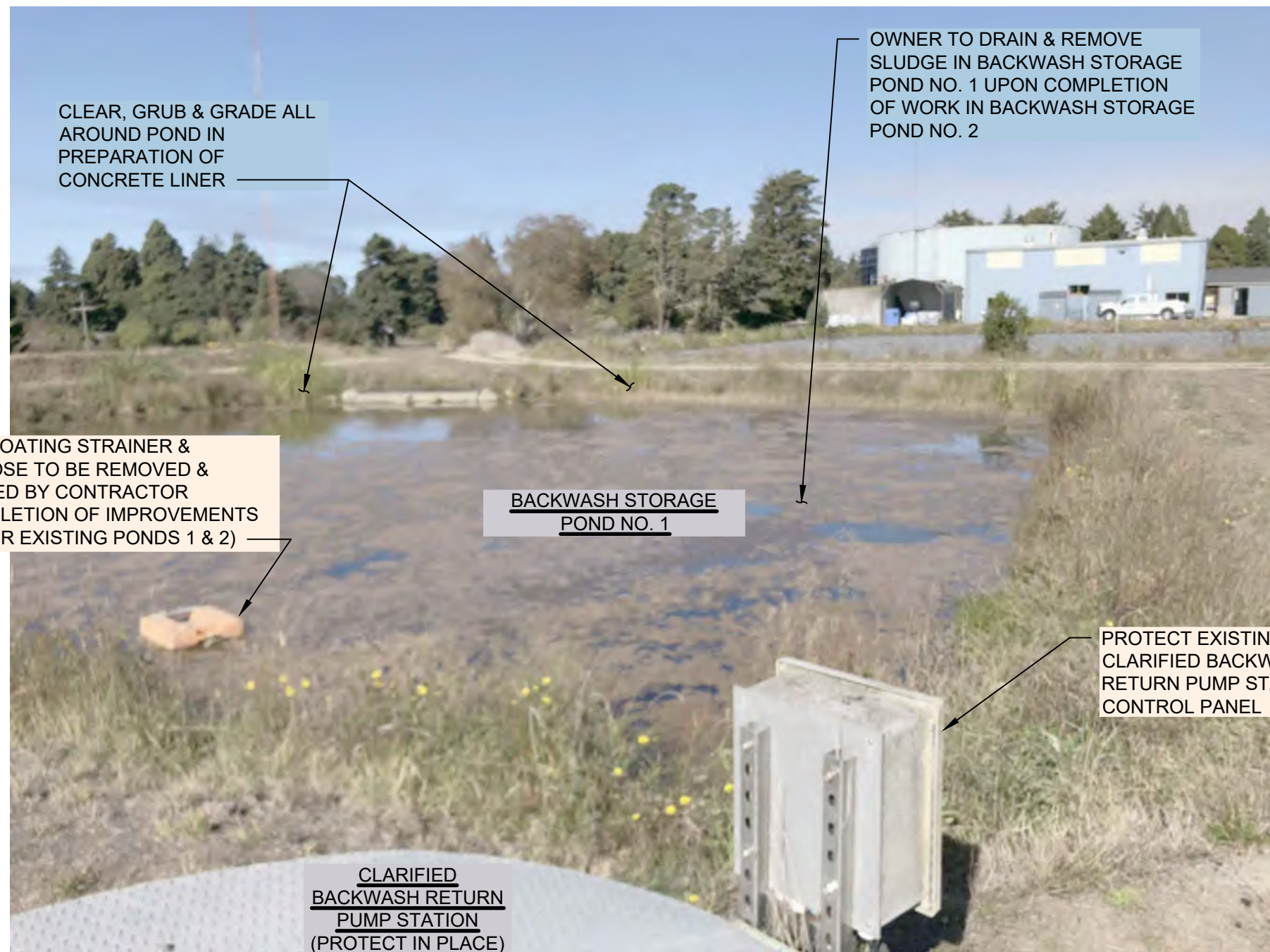


1 PHOTOGRAPH
X01 NO SCALE

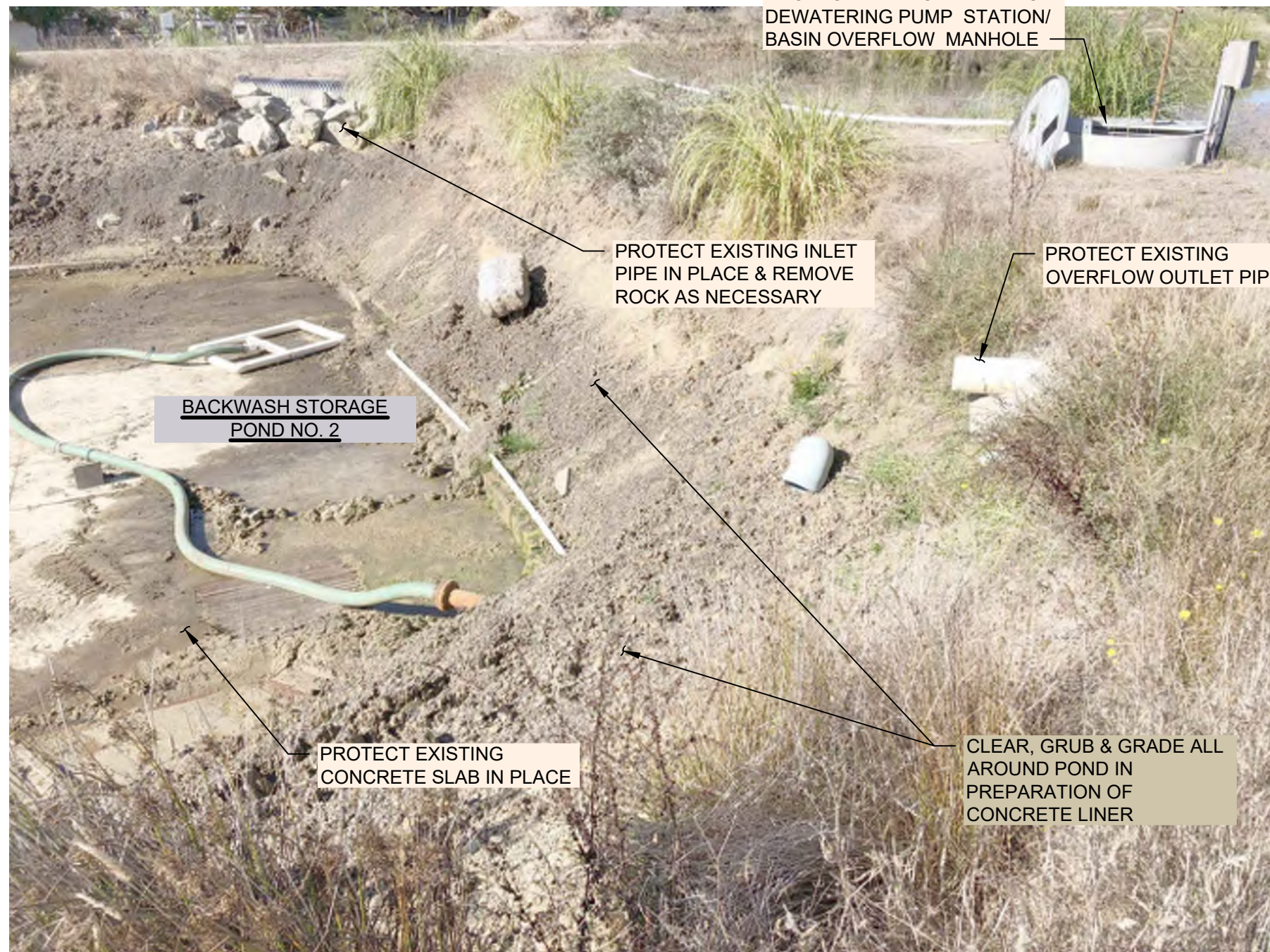


2 PHOTOGRAPH
X01 NO SCALE

- NOTES:
1. CONTRACTOR SHALL PERFORM SURVEYING, AS NECESSARY, TO PROVIDE RELEVANT AS-BUILT INFORMATION TO POND LINER MANUFACTURER. COORDINATE WITH LINER MANUFACTURER TO UNDERSTAND THEIR SURVEYING NEEDS.
 2. CONTRACTOR IS RESPONSIBLE FOR DRAINING THE LAST 12-INCHES OF WATER AND PREPARING THE SUBGRADE AS NECESSARY TO FACILITATE LINER INSTALLATION.
 3. CONTRACTOR SHALL EXPECT WATER SEEPAGE IN THE EMBANKMENT AND POND BOTTOM. CONTRACTOR IS RESPONSIBLE FOR MAKING NECESSARY ACCOMMODATIONS FOR SATISFACTORY LINER INSTALLATION, WHICH MAY INCLUDE DEWATERING APPARATUS AND SUBSURFACE DRAINAGE SUCH AS WRAPPED CRUSHED ROCK TO CONVEY WATER AWAY FROM THE LINER SURFACE.



3 PHOTOGRAPH
X01 NO SCALE

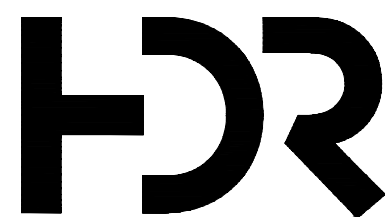


4 PHOTOGRAPH
X01 NO SCALE



5 PHOTOGRAPH
X01 NO SCALE

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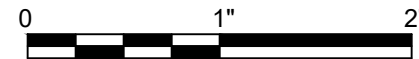


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PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

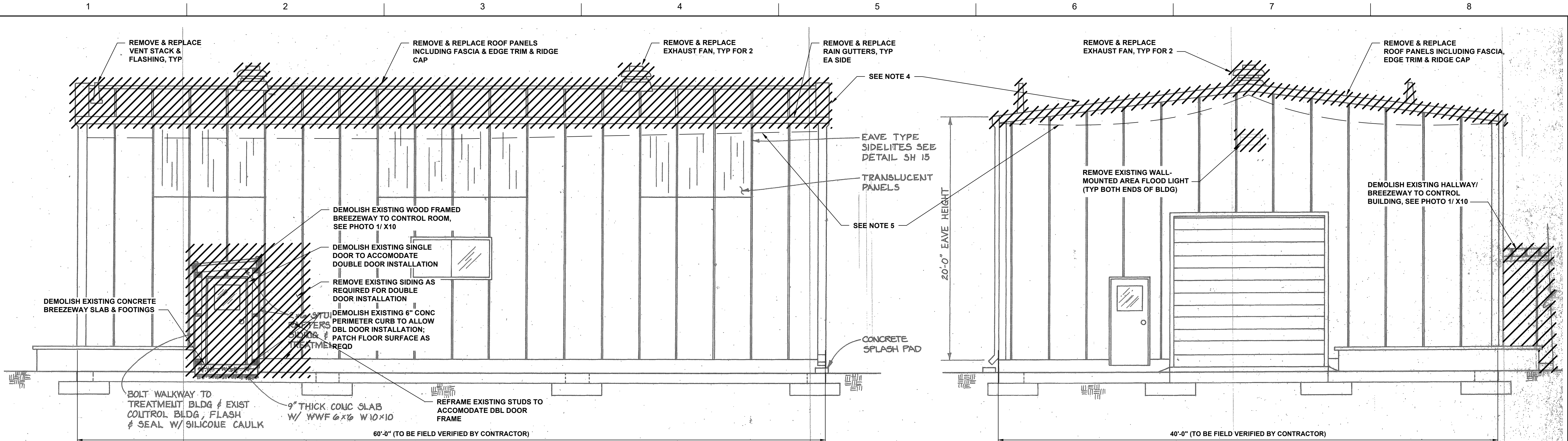


DEMOLITION
SITE PHOTOS

FILENAME | 2X02.dwg
SCALE | AS NOTED

SHEET
X02

FILE: C:\pwworking\wse01\2024\304\2X03.dwg
DATE: 08/10/23 02:22:11pm JKAMBQJ



NORTH ELEVATION

1/4" = 1'-0"

EAST ELEVATION

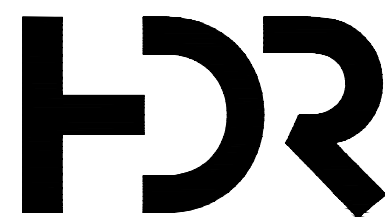
1/4" = 1'-0"



6
X01 PHOTOGRAPH
NO SCALE

NOTES:

- EXISTING METAL BUILDING WAS SUPPLIED BY VARCO PRUDEN BUILDINGS.
- COORDINATE WITH METAL BUILDING SUPPLIER TO INSURE STABILITY OF EXISTING BUILDING DURING REMOVAL OF EXISTING ROOF SYSTEM.
- INSPECT EXISTING BUILDING AND SUBMIT DEMOLITION PLAN FOR REVIEW PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL MINIMIZE THE COMPLETE ROOF WORK TO NO MORE THAN FIVE CALENDAR DAYS. THIS TIME INCLUDES DEMOLITION AND INSTALLATION. ALL ROOFING MATERIALS SHALL BE PROCURED AND STORED ONSITE PRIOR TO DEMOLITION.
- CONTRACTOR SHALL PROVIDE A CONTRACTOR-DESIGNED TEMPORARY DEBRIS BARRIER TO PREVENT POLLUTION OF OPEN WATER IN THE OPERATIONAL FILTER TREATMENT UNITS. SUBMIT DEBRIS BARRIER DESIGN TO CITY FOR REVIEW AND APPROVAL.



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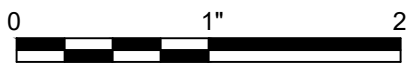
PROJECT MANAGER	ARASHDEEP SINGH
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

DEMOLITION

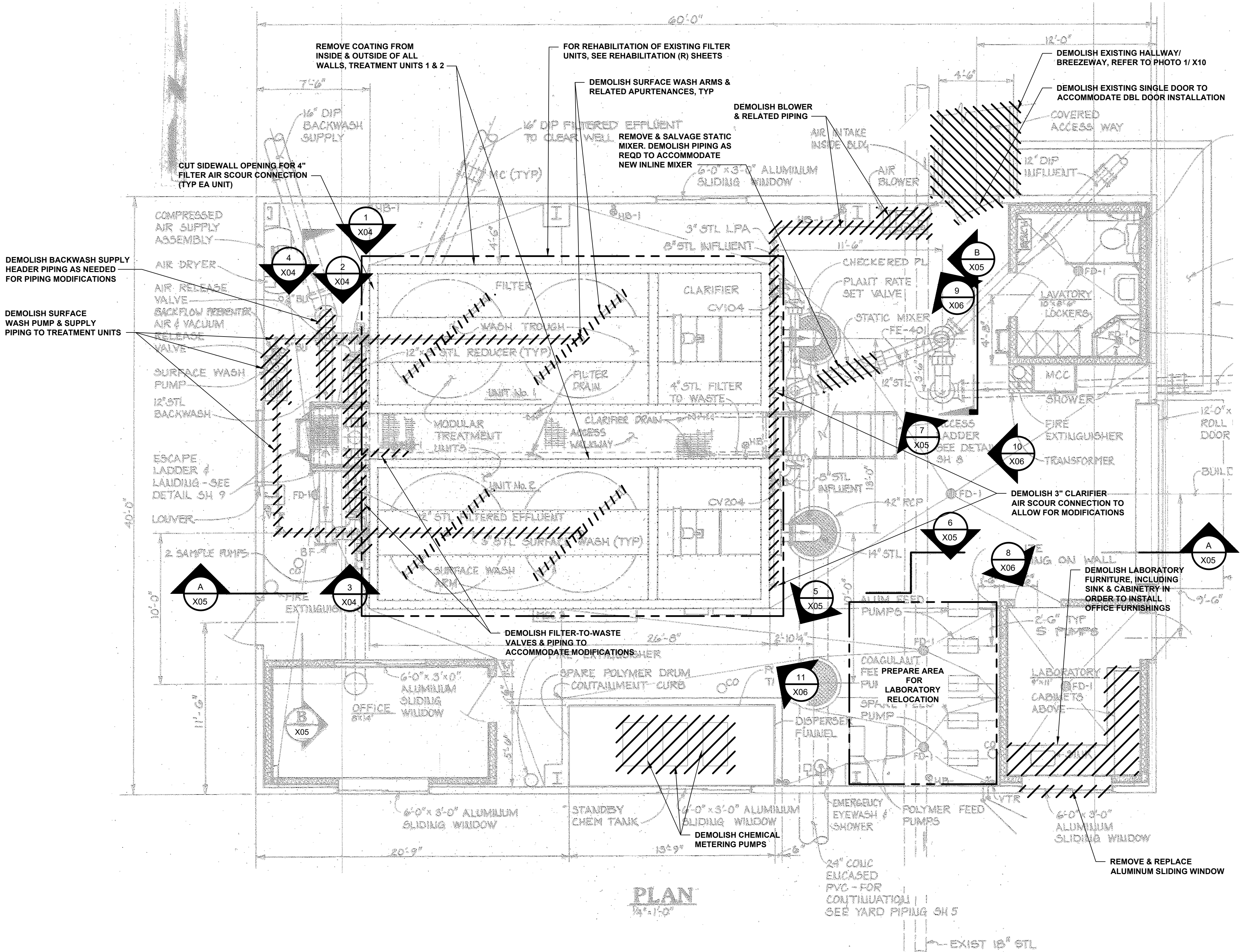
WATER TREATMENT BUILDING ELEVATIONS AND PHOTOS



FILENAME | 2X03.dwg
SCALE | AS NOTED

SHEET

X03



1 PHOTOGRAPH
NO SCALE

2 PHOTOGRAPH
NO SCALE

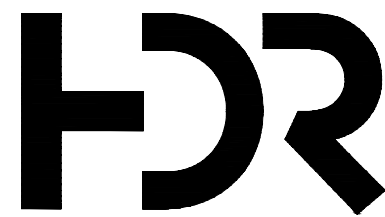


3 PHOTOGRAPH
NO SCALE

4 PHOTOGRAPH
NO SCALE

GENERAL NOTE:
PHOTOGRAPHS ARE INCLUDED FOR
INFORMATIONAL PURPOSES ONLY. THEY DO NOT
SHOW DEMOLITION. REFER TO PIPING SHEET P01
FOR PLAN AND SECTION SHOWING CONNECTIONS
TO EXISTING PIPING.

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ISSUE	DATE	DESCRIPTION

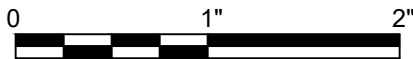
PROJECT MANAGER	ARASHDEEP SINGH
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

DEMOLITION

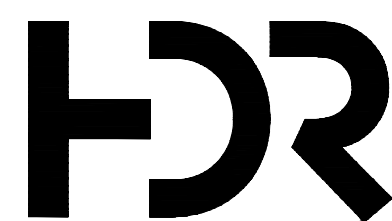
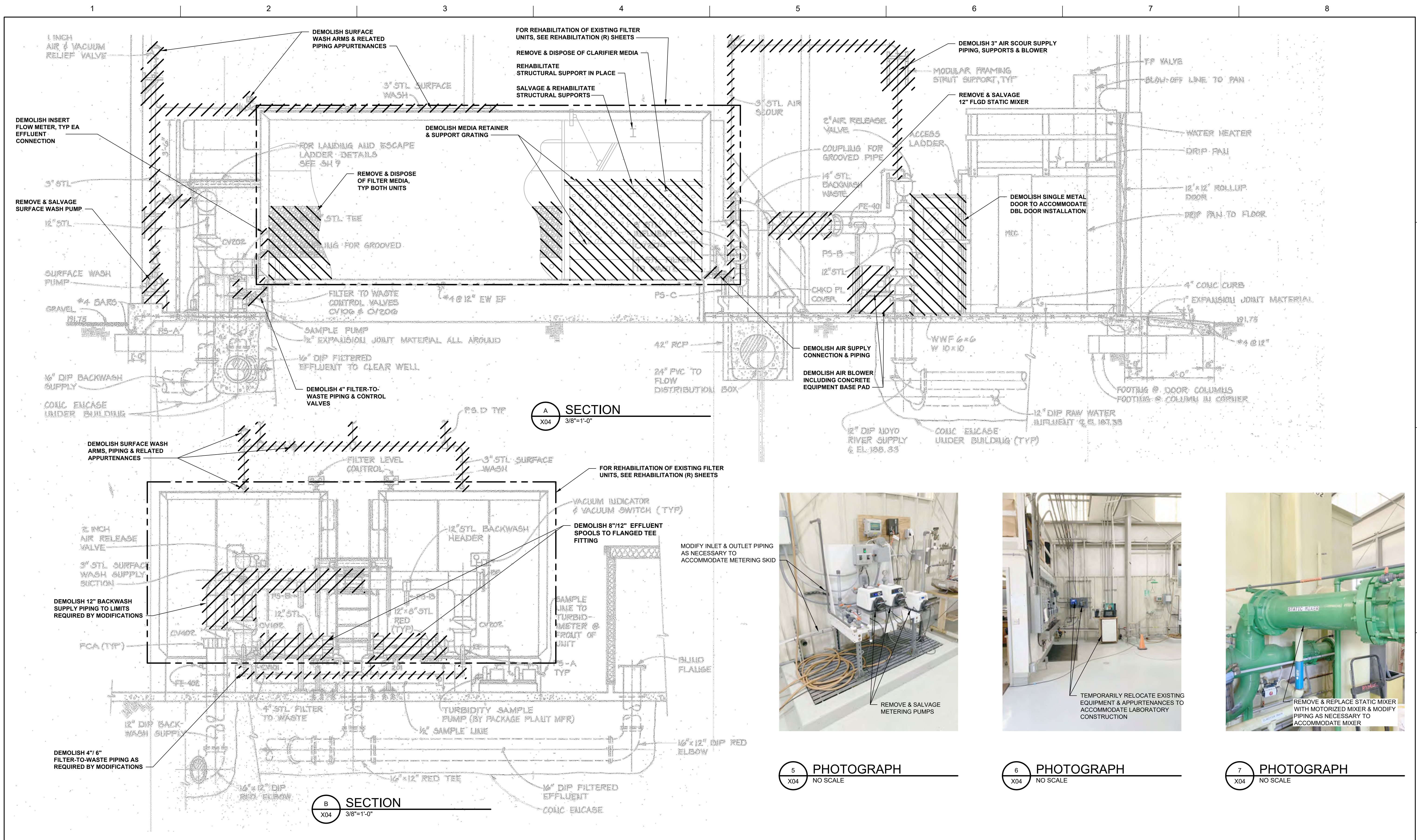
WATER TREATMENT BUILDING
PLAN AND PHOTOS



FILENAME 2X04.dwg
SCALE 1/4" = 1'-0"

SHEET

X04



			DESIGNED	A. SINGH
			DESIGNED	
			CHECKED	T. KONTONICKAS
			DRAWN	P. VAN MEURS
			DATE	08/2023
0	08/2023	ISSUED FOR BID		
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	10276484



City of Fort Bragg Water Treatment Plant Rehabilitation Project

DEMOLITION

WATER TREATMENT BUILDING SECTIONS AND PHOTOS



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SCALE	1/4" = 1'-0"

| SHEET

X05



8 PHOTOGRAPH
X04 NO SCALE



9 PHOTOGRAPH
X04 NO SCALE

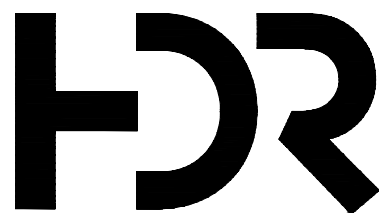


10 PHOTOGRAPH
X04 NO SCALE



11 PHOTOGRAPH
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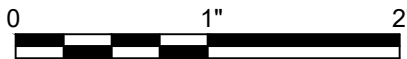
0	08/2023	ISSUED FOR BID
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

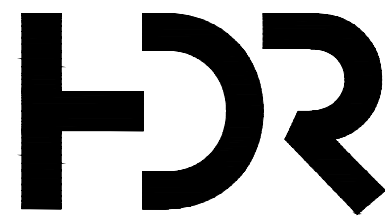
DEMOLITION
WATER TREATMENT BUILDING PHOTOS



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SHEET
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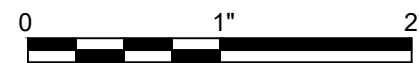


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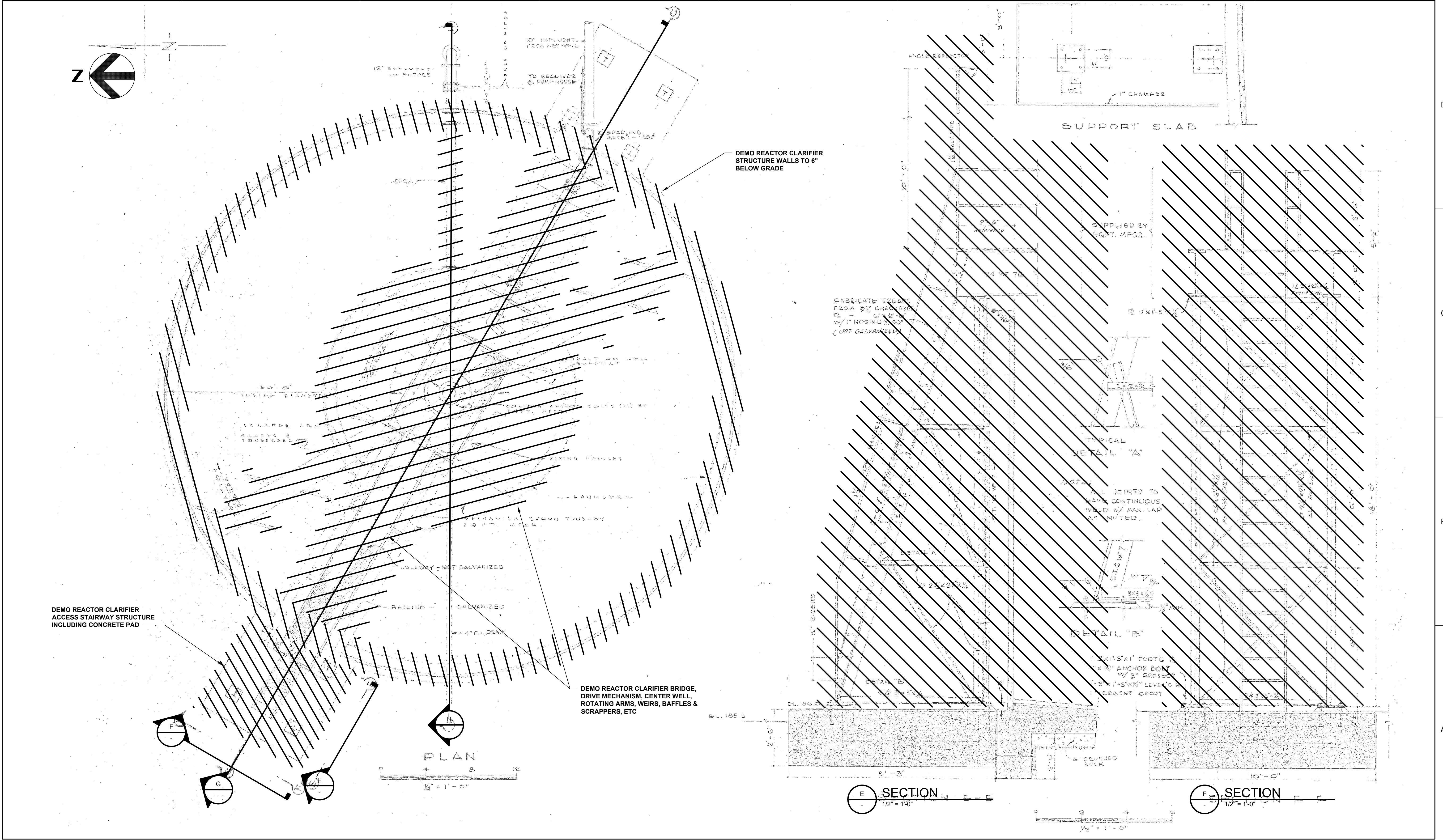
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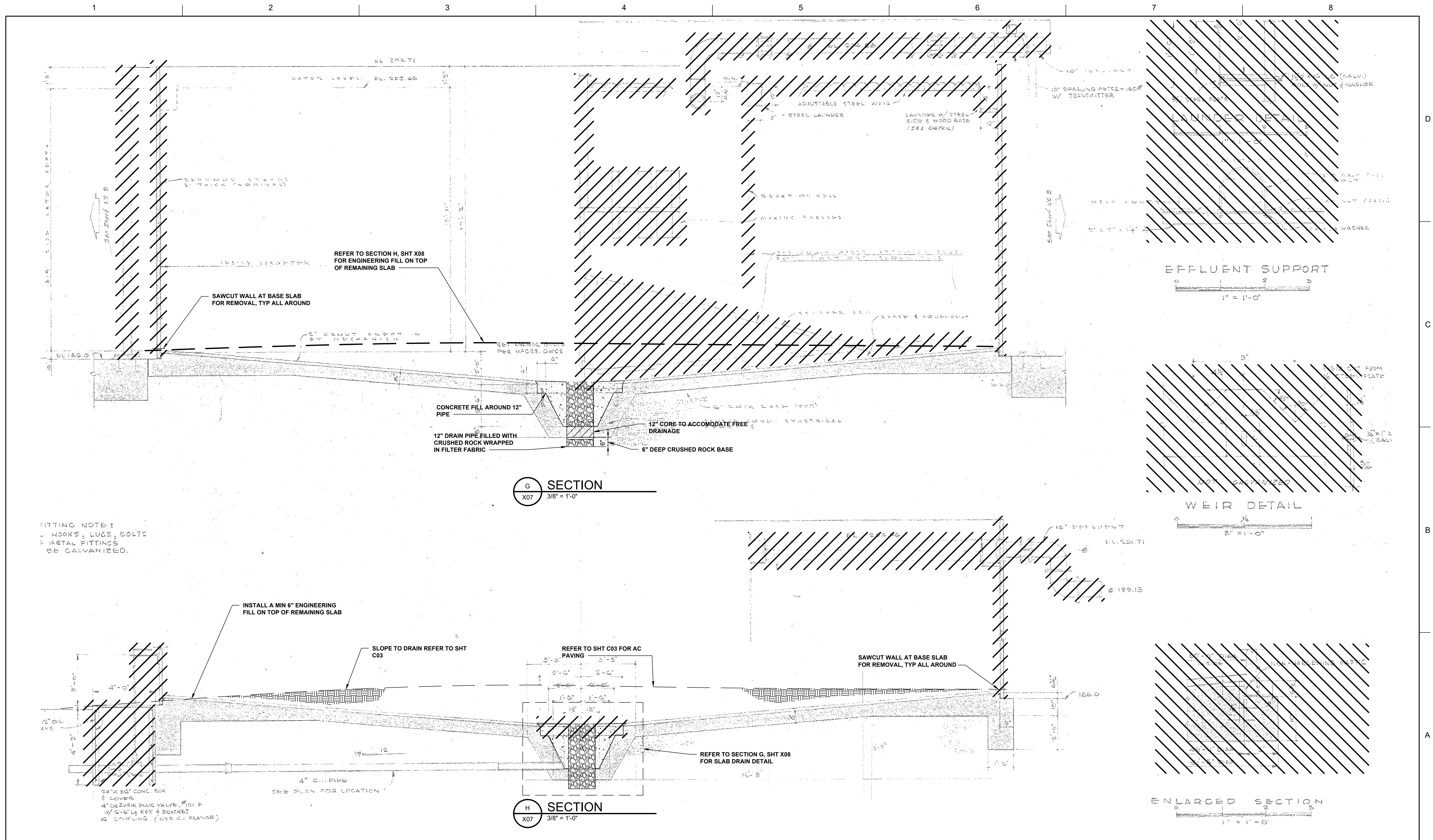
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X07

DEMOLITION

REACTOR CLARIFIER
PLAN AND SECTIONS





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**City of Fort Bragg
Water Treatment Plant
Rehabilitation Project**

DEMOLITION

REACTOR CLARIFIER SECTIONS AND PHOTOS



FILENAME	2X08.dwg
SCALE	AS NOTED

| SHEET

X08

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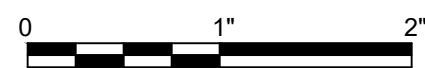


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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



FILENAME | 2X09.dwg
SCALE | NONE

SHEET
X09

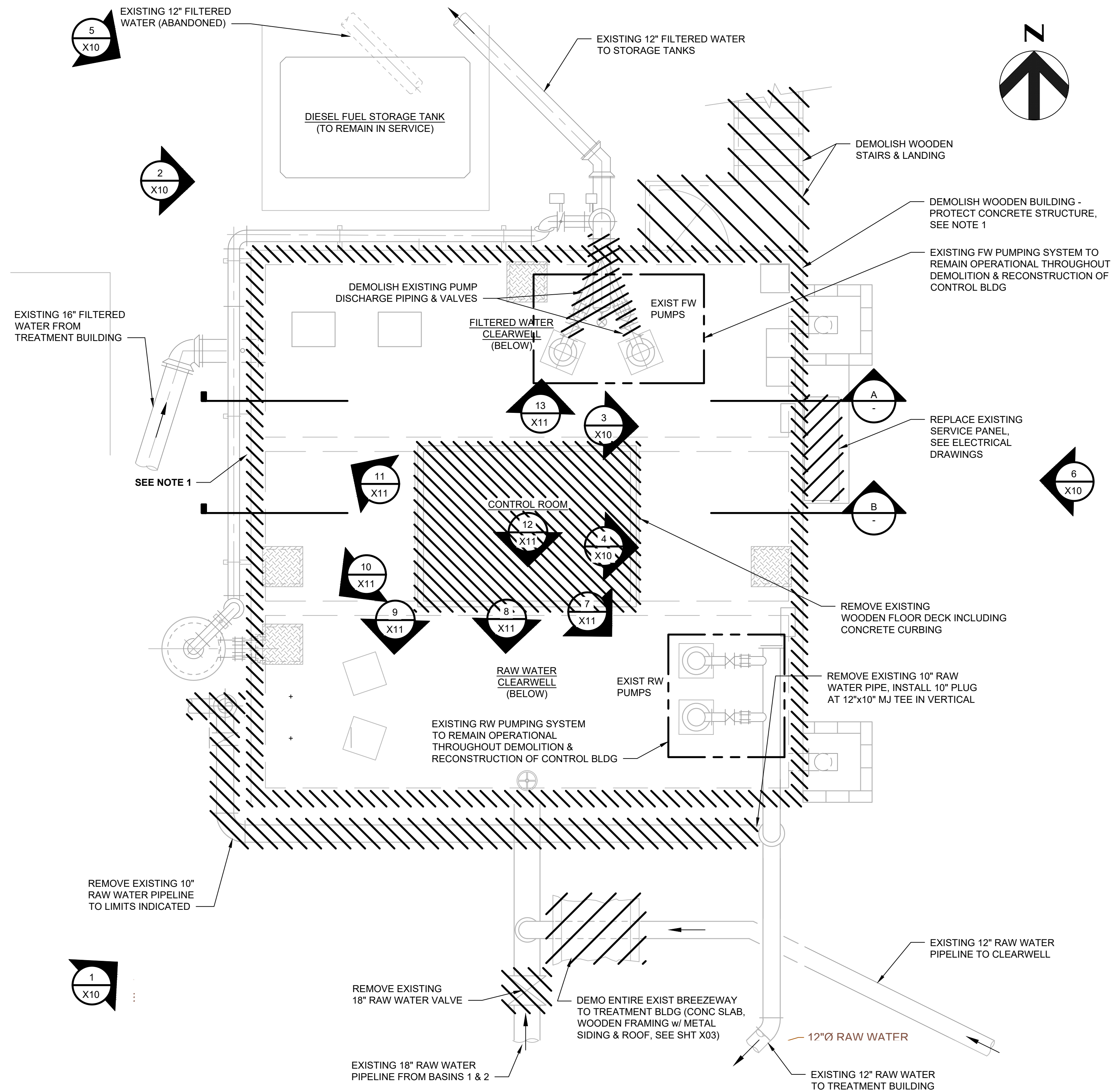
DEMOLITION

CONTROL BUILDING PLANS AND SECTIONS

- NOTES:
- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR LIGHTING, ELECTRICAL CONDUITS, PIPING, PUMPING EQPT AND OTHER ITEMS TO REMAIN OR NECESSARY FOR PLANT OPERATIONS DURING DEMOLITION. THE TEMPORARY SUPPORTS SHALL SUBSTITUTE THE FUNCTION OF THE PORTIONS OF THE CONTROL BLDG WHICH WILL BE DEMOLISHED. THE TEMPORARY SUPPORTS SHALL REMAIN IN USE UNTIL THE NEW CONTROL BLDG IS READY FOR FUNCTIONAL USE.

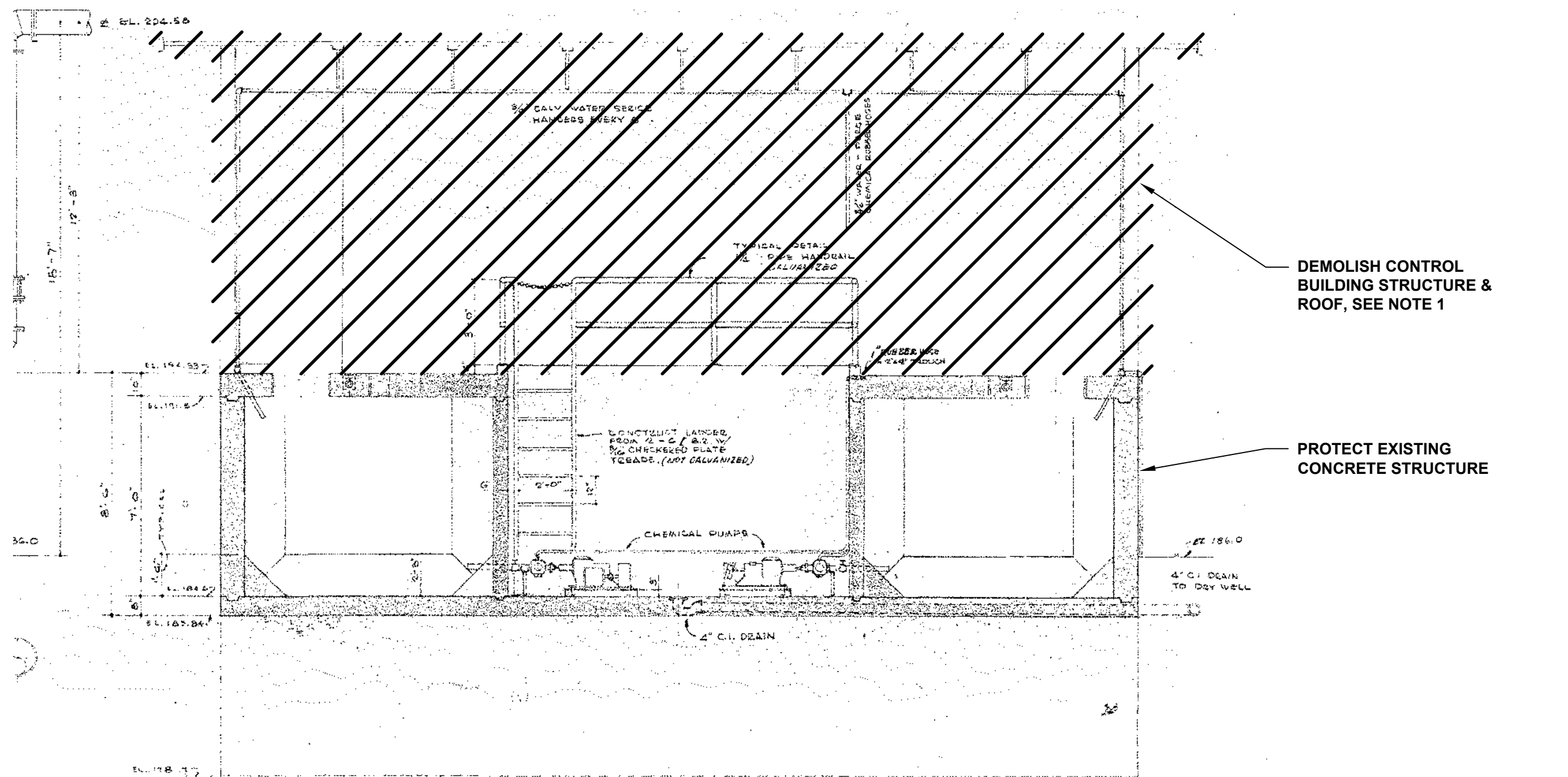
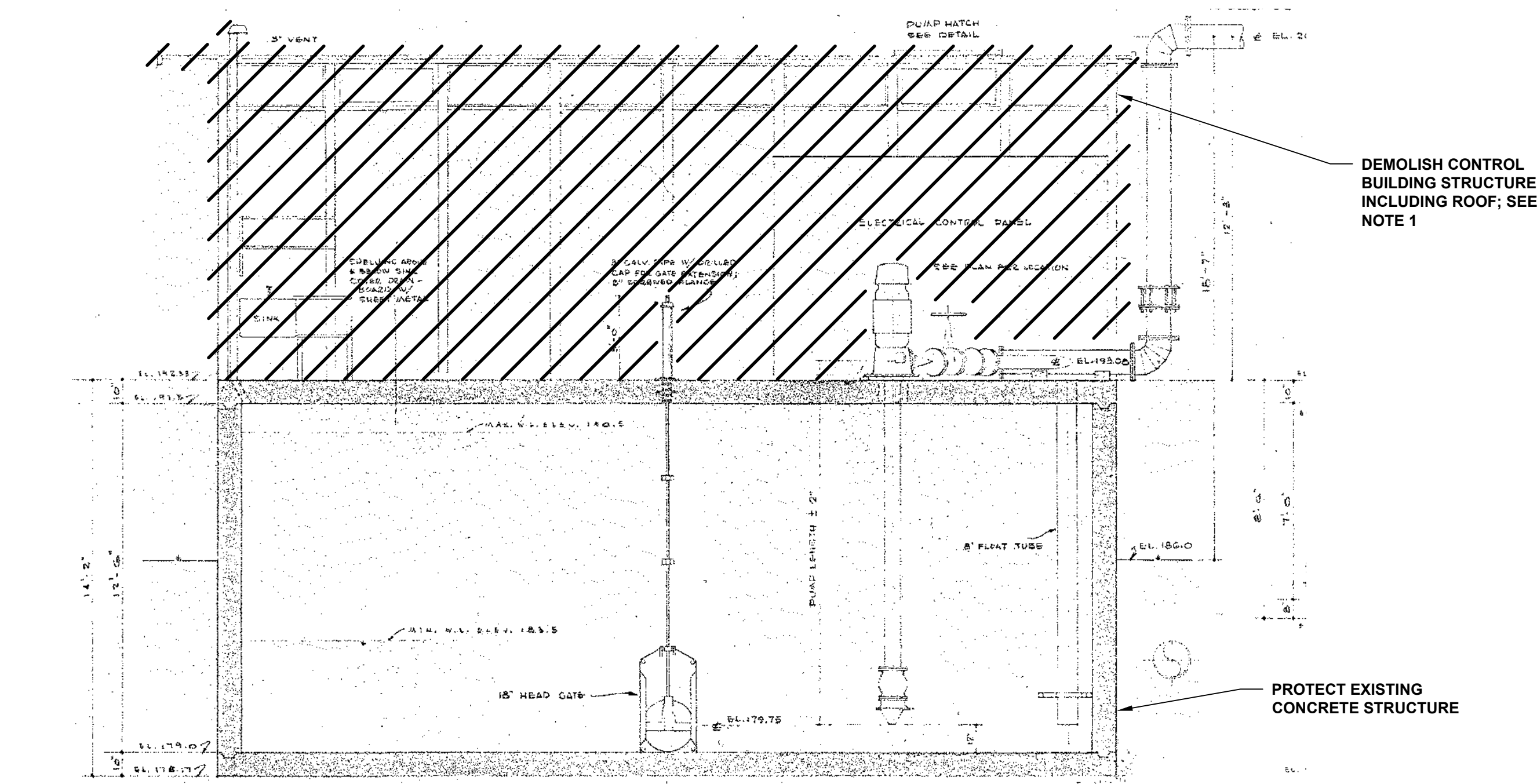
CONTROL BUILDING DEMOLITION PLAN

1/4" = 1'-0"



CONTROL BUILDING
SECTION
A
1/4" = 1'-0"

CONTROL BUILDING
SECTION
B
1/4" = 1'-0"





1 PHOTOGRAPH
X09 NO SCALE



2 PHOTOGRAPH
X09 NO SCALE



3 PHOTOGRAPH
X09 NO SCALE



4 PHOTOGRAPH
X09 NO SCALE

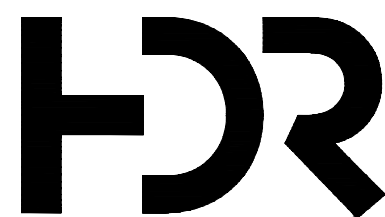


5 PHOTOGRAPH
X09 NO SCALE



6 PHOTOGRAPH
X09 NO SCALE

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DATE: 08/10/23 02:24:54pm - JKAMBOJ

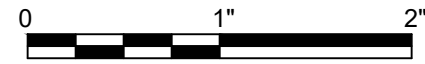


0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
DESIGNED	T. KONTONICKAS
CHECKED	P. VAN MEURS
DRAWN	08/2023
DATE	
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



DEMOLITION

CONTROL BUILDING PHOTOS I

FILENAME | 2X10.dwg
SCALE | AS NOTED

SHEET

X10



7 PHOTOGRAPH
X09 NO SCALE



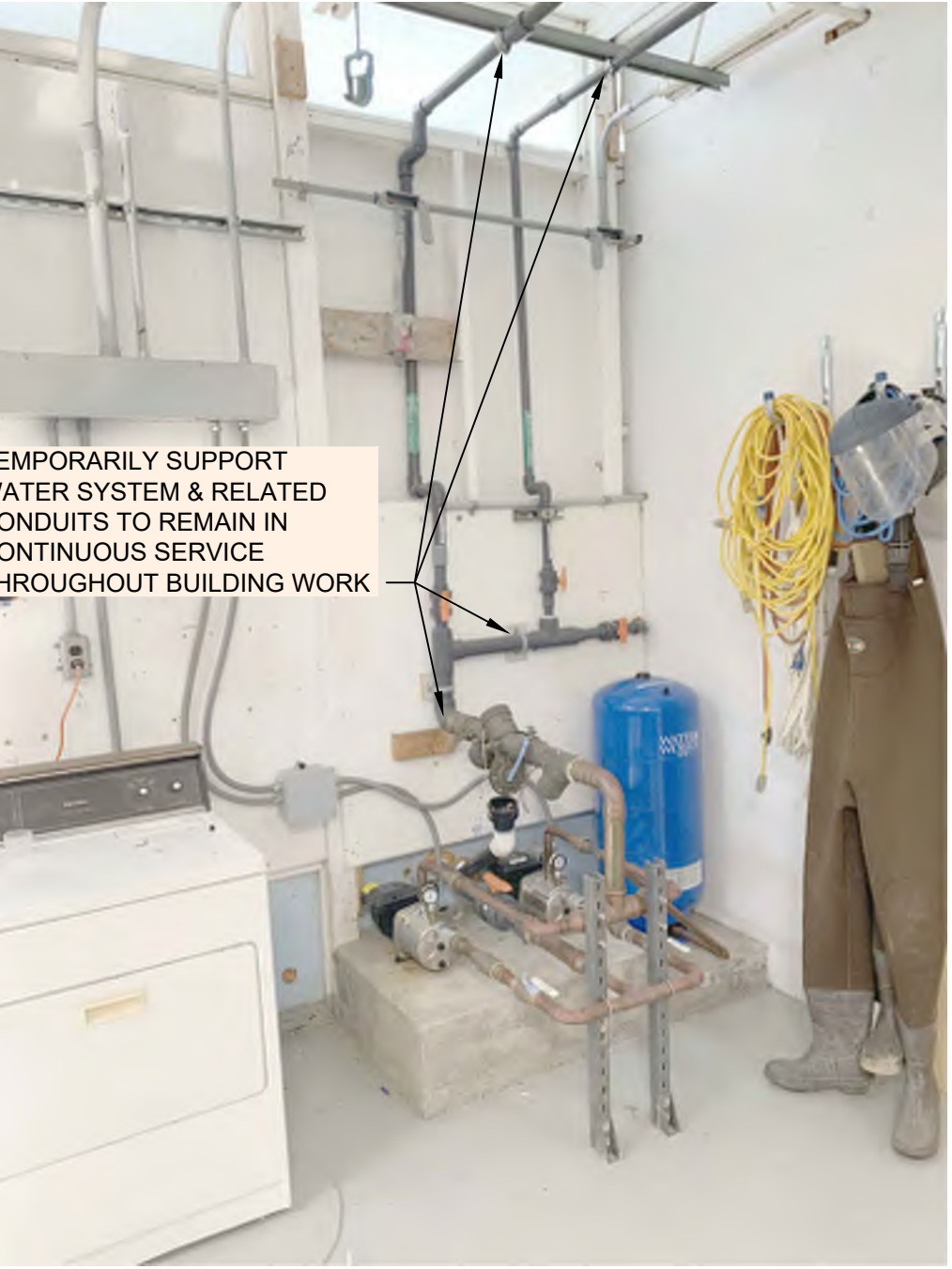
8 PHOTOGRAPH
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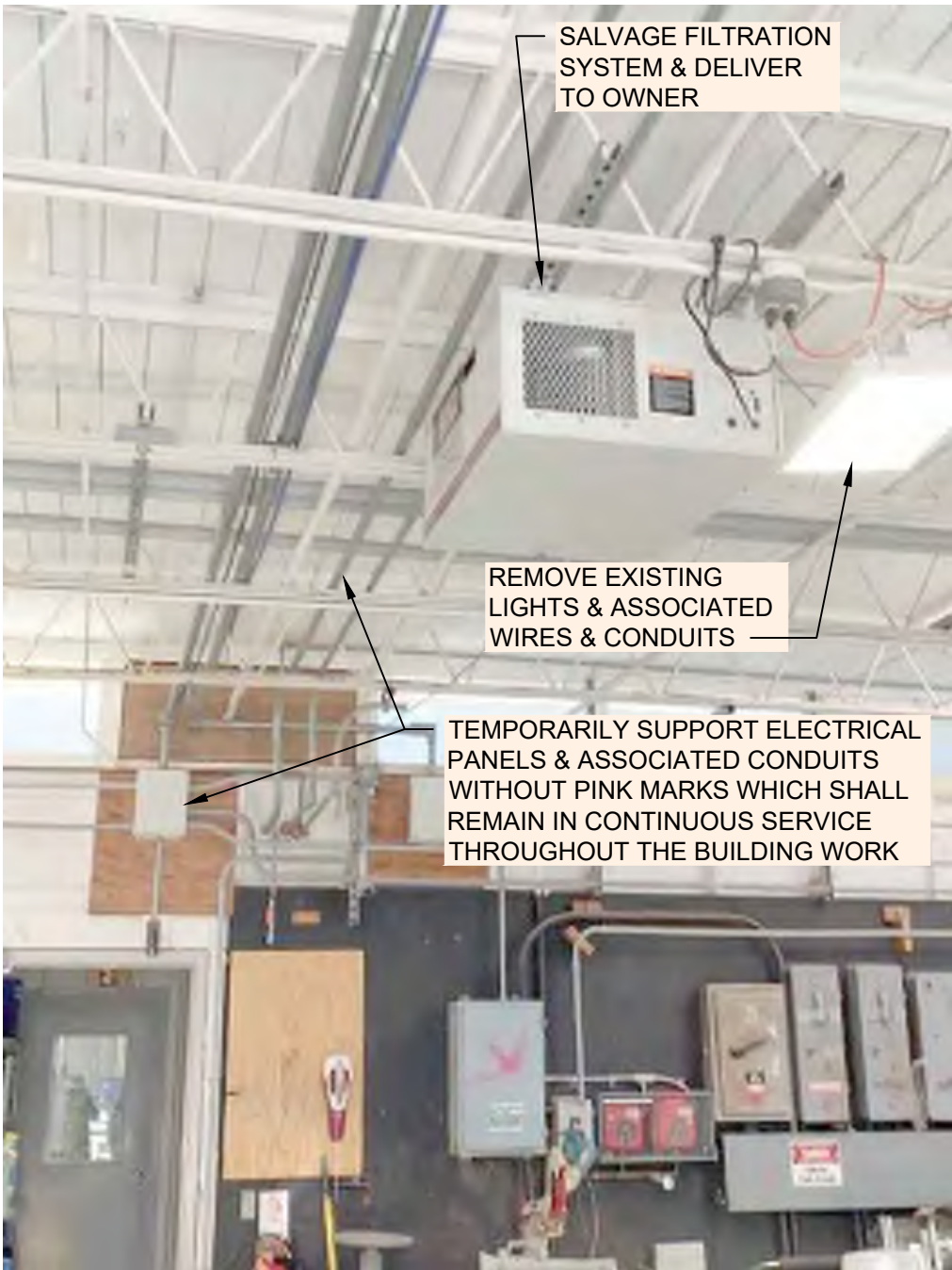
9 PHOTOGRAPH
X09 NO SCALE



10 PHOTOGRAPH
X09 NO SCALE



11 PHOTOGRAPH
X09 NO SCALE



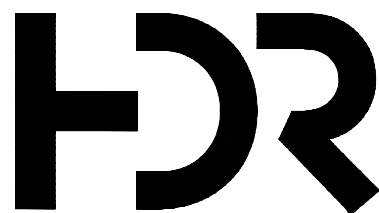
12 PHOTOGRAPH
X09 NO SCALE



13 PHOTOGRAPH
X09 NO SCALE

- NOTES:
- OWNER WILL MARK ALL PANELS AND CONDUITS TO BE REMOVED WITH PINK MARKINGS. REMOVE ALL MARKED EQUIPMENT, CONDUIT, ACCESSORIES, FITTINGS, AND ASSOCIATED SUPPORTS. UNMARKED EQUIPMENT AND CONDUIT TO REMAIN IN SERVICE AND BE TEMPORARILY SUPPORTED THROUGHOUT DEMOLITION.

FILE: C:\pwworking\lives01\2024\3094\2X11.dwg
DATE: 08/10/23 02:25:08pm - JKA\MBQJ

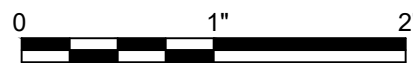


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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



DEMOLITION

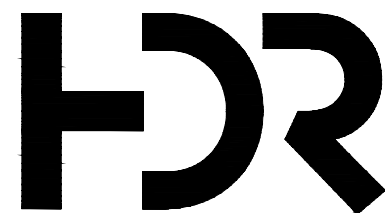
CONTROL BUILDING PHOTOS II

FILENAME | 2X11.dwg
SCALE | AS NOTED

SHEET

X11

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DATE: 09/25/23 03:50:46pm JKAMBQJ

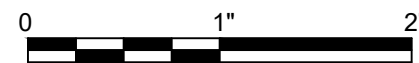


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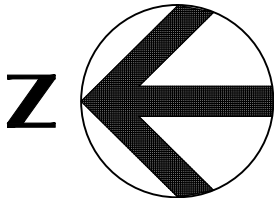
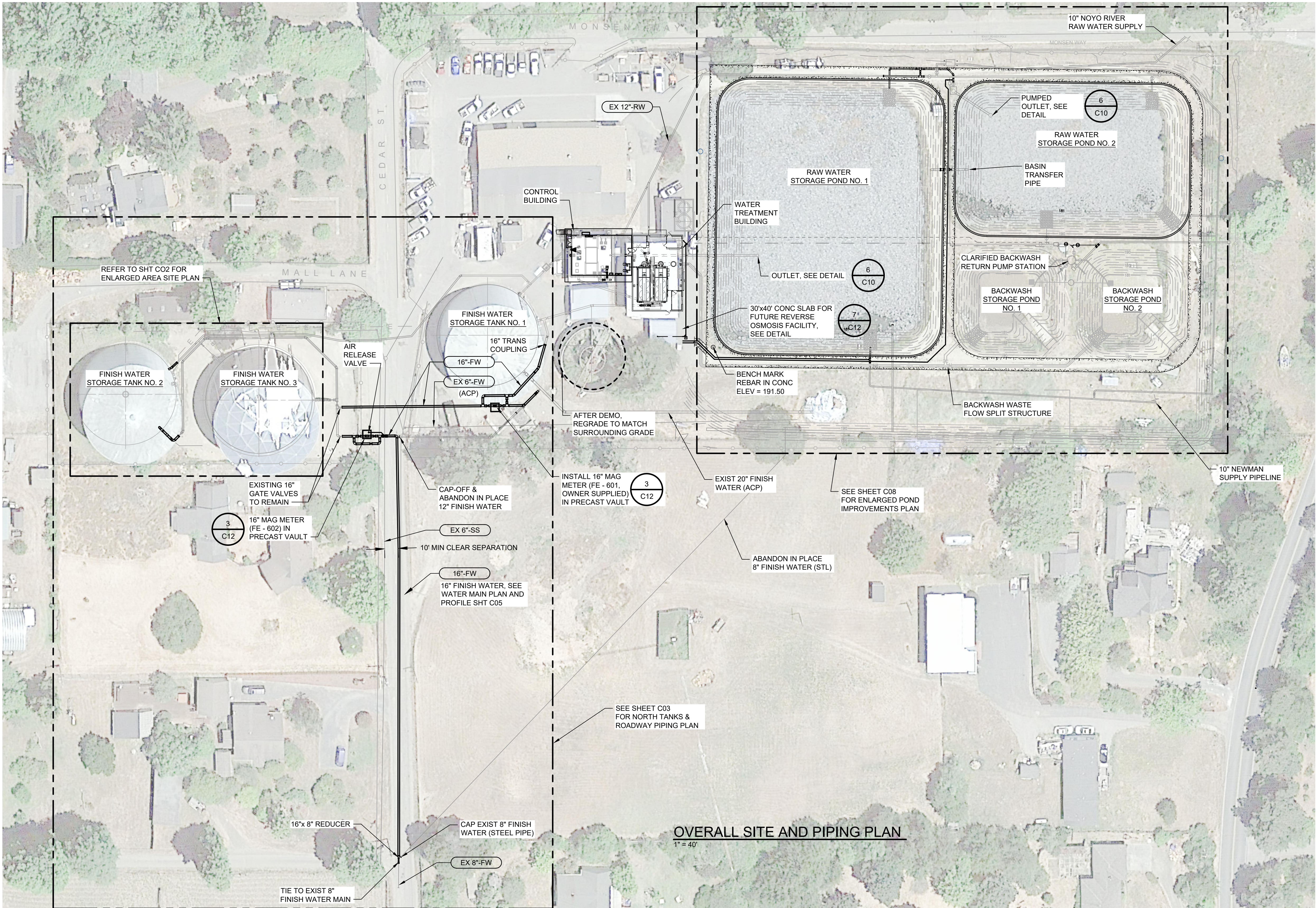
City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



FILENAME	3C01.dwg
SCALE	1" = 40'

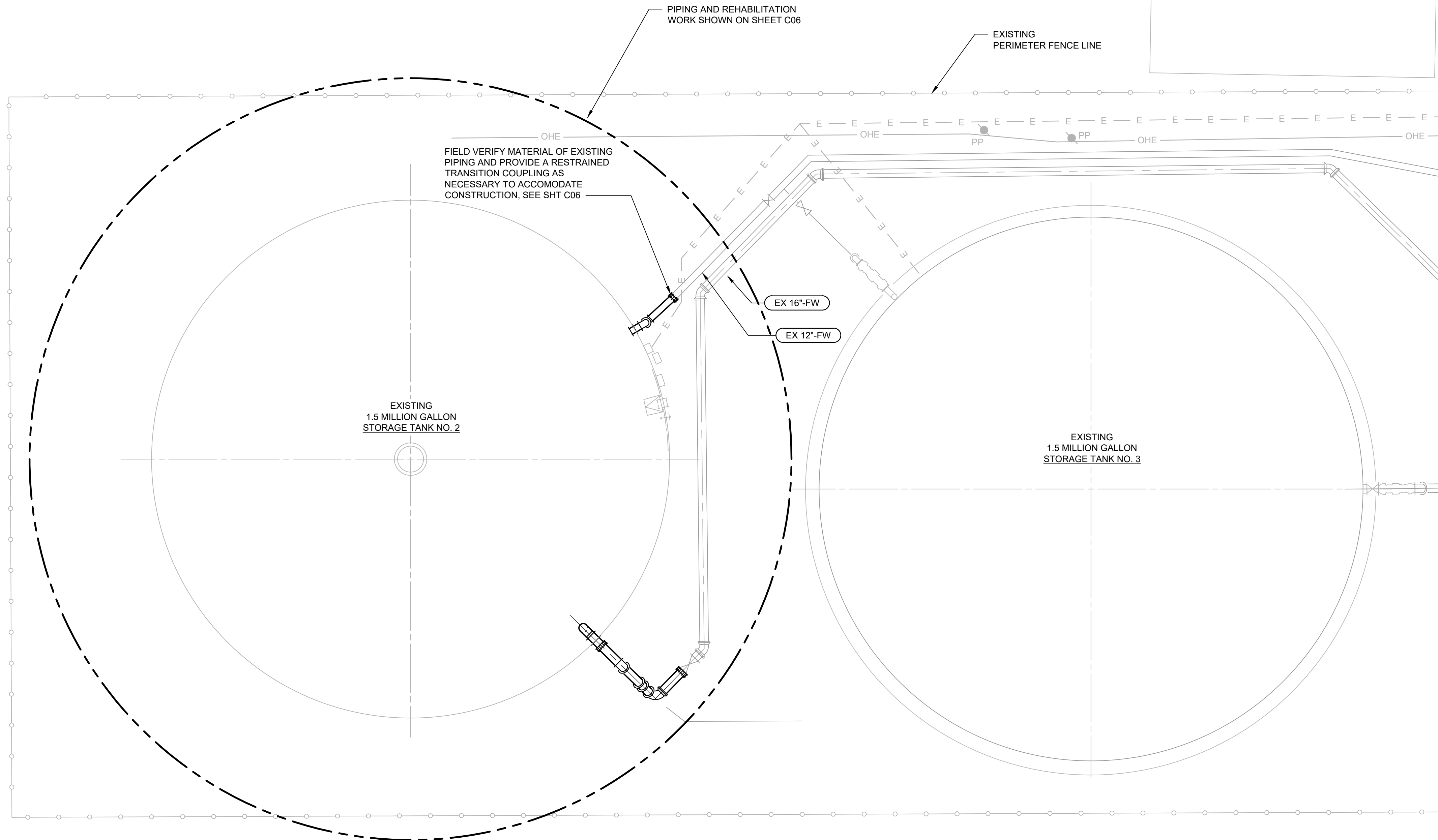
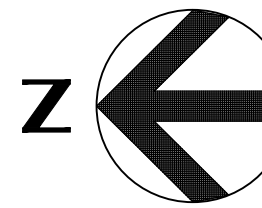
SHEET

C01



GENERAL NOTES:

- THE TYPES, LOCATIONS, SIZES, AND DEPTHS OF EXISTING UNDERGROUND FACILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND FACILITIES. HOWEVER, THE OWNER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND FACILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR FACILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THOSE FACILITIES SHOWN AND ANY WHICH MAY EXIST AND ARE NOT SHOWN PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO OR THAT ARE IN THE PATH OF THE PROPOSED IMPROVEMENTS FOR VERIFICATION OF LOCATION AND ELEVATION. THE CONTRACTOR SHALL DETERMINE LOCATION OF CONFLICTS, IF ANY, PRIOR TO COMMENCING CONSTRUCTION OF THAT PORTION OF THE WORK THAT WOULD BE AFFECTED BY A CONFLICT WITH THE EXISTING FACILITIES. MINOR CHANGES, (< 5 FEET HORIZONTAL < 1 FEET VERTICAL), IN THE ACTUAL LOCATION, DEPTH AND CONFIGURATION OF EXISTING PIPING SYSTEMS DO NOT CONSTITUTE A CHANGED SITE CONDITION, AND THEREFORE NO EXTRA PAYMENT WILL BE ALLOWED.
- LOCATIONS SHOWN FOR ALL YARD PIPING ARE APPROXIMATE AND DEPEND ON LOCATION AND DEPTH OF EXISTING PIPING AND OTHER IMPROVEMENTS. THE CONTRACTOR IS REQUIRED TO FOLLOW THE ALIGNMENT SHOWN AS CLOSELY AS POSSIBLE AFTER DETERMINING EXACT LOCATION OF EXISTING FACILITIES.
- COORDINATE ALL YARD PIPING WITH SITE ELECTRICAL WORK, (SEE ELECTRICAL "RECORD" DRAWINGS). DO NOT START YARD PIPING UNTIL YARD EXISTING ELECTRICAL CONDUITS ARE LOCATED.
- SMALL DIAMETER (<4") WATER, IRRIGATION AND OTHER MISCELLANEOUS PIPING EXIST THROUGHOUT THE PLANT AREA. THE CONTRACTOR IS REQUIRED TO REPAIR PIPING DAMAGED BY CONSTRUCTION AND/OR REALIGN PIPING AS REQUIRED TO CONSTRUCT THE IMPROVEMENTS UNDER THIS CONTRACT. NO ADDITIONAL COMPENSATION WILL BE GRANTED TO THE CONTRACTOR FOR THE REPAIR OF THIS SMALL DIAMETER PIPING.
- ALL PAVING, LANDSCAPING, PIPING, AND OTHER EXISTING FACILITIES NOT DESIGNATED FOR REMOVAL/DEMOLITION DURING CONSTRUCTION OF FACILITIES TO BE PROTECTED IN PLACE OR REPLACED IN KIND AT COMPLETION OF CONSTRUCTION.
- ALL PAVING TO BE REMOVED SHALL BE SAWCUT PRIOR TO REMOVAL. MATCH EXISTING PAVEMENT ELEVATIONS AT SAWCUT LINES. SLOPE PAVEMENT TO DRAIN IN DIRECTION SHOWN (). MINIMUM SLOPE = 0.5%.
- EXISTING SPOT ELEVATION INFORMATION SHOWN ON THESE PLANS WAS DETERMINED USING PHOTOGRAMMETRIC METHODS. IT IS ACCURATE TO WITHIN ±0.3 FEET OF ELEVATION SHOWN.
- CONTRACTOR TO VERIFY BENCHMARKS PRIOR TO BEGINNING WORK.
- THIS WATER TREATMENT PLANT IS A CONTINUOUSLY OPERATING FACILITY. THERE IS NO ABILITY TO BYPASS OR INTERRUPT ANY PROCESS. ANY NEEDED SHUTDOWNS TO BE COORDINATED WITH OWNER.
- MAINTAIN 3'-0" MINIMUM COVER ON ALL PIPING UNLESS SPECIFICALLY SHOWN OTHERWISE.



TANK 2 AREA SITE PLAN

1" = 10'

GENERAL NOTES:

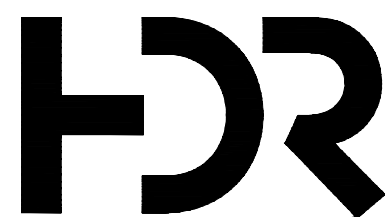
1. THE WATER TREATMENT PLANT MUST BE KEPT IN CONTINUOUS OPERATION THROUGHOUT THE CONSTRUCTION PERIOD.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DEVELOPING A DETAILED SEQUENCE OF WORK.
3. THE CONTRACTOR SHALL DRAIN AND CLEAN ALL WORK AREAS AS REQUIRED TO PERFORM WORK AND PROVIDE ANY TEMPORARY PUMPING, PIPING AND OTHER APPURTENANCES, AND DISPOSE ALL WASTE MATERIALS GENERATED.

* CLOSE COORDINATION AND COLLABORATION WITH OWNER REQUIRED

GENERAL SEQUENCING NOTES:

1. PROCURE ALL MATERIALS REQUIRED FOR CONSTRUCTION AND STORE ON-SITE.
2. DRAIN THE TANK. *
3. INSTALL WATERTIGHT PLUGS ON ALL OPENINGS IN THE TANK EXCEPT FOR THE VENT.
4. CLEAN THE TANK.
5. REMOVE EXISTING COATINGS TO BARE METAL.
6. INSTALL AND TEST PIPING AND OTHER MODIFICATIONS.
7. APPLY COATINGS.
8. INSPECT AND TEST COATING AND MAKE REPAIRS.
9. CLEAN THE TANK.
10. PERFORM WATER LEAKAGE TEST AND VOLATILE ORGANIC TESTING.
11. DISINFECT THE TANK AND RELATED APPURTENANCES PER AWWA C652.
12. COMMISSION THE TANK. *

FILE: C:\pwworking\west01\2024\3094\3C02.dwg
DATE: 08/10/23 02:28:03pm - JKAMBOJ



0	08/2023	ISSUED FOR BID
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PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
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DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

CIVIL

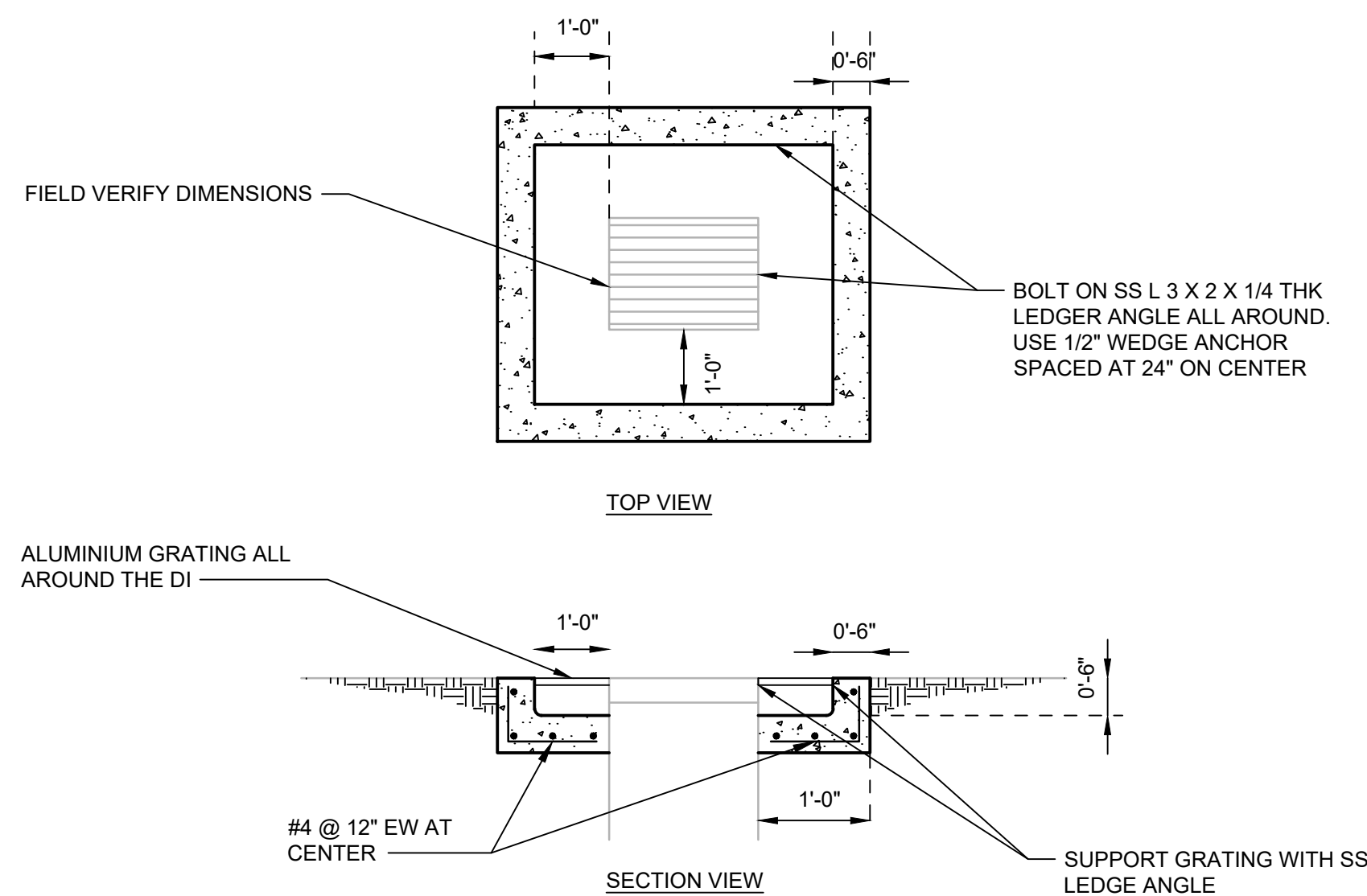
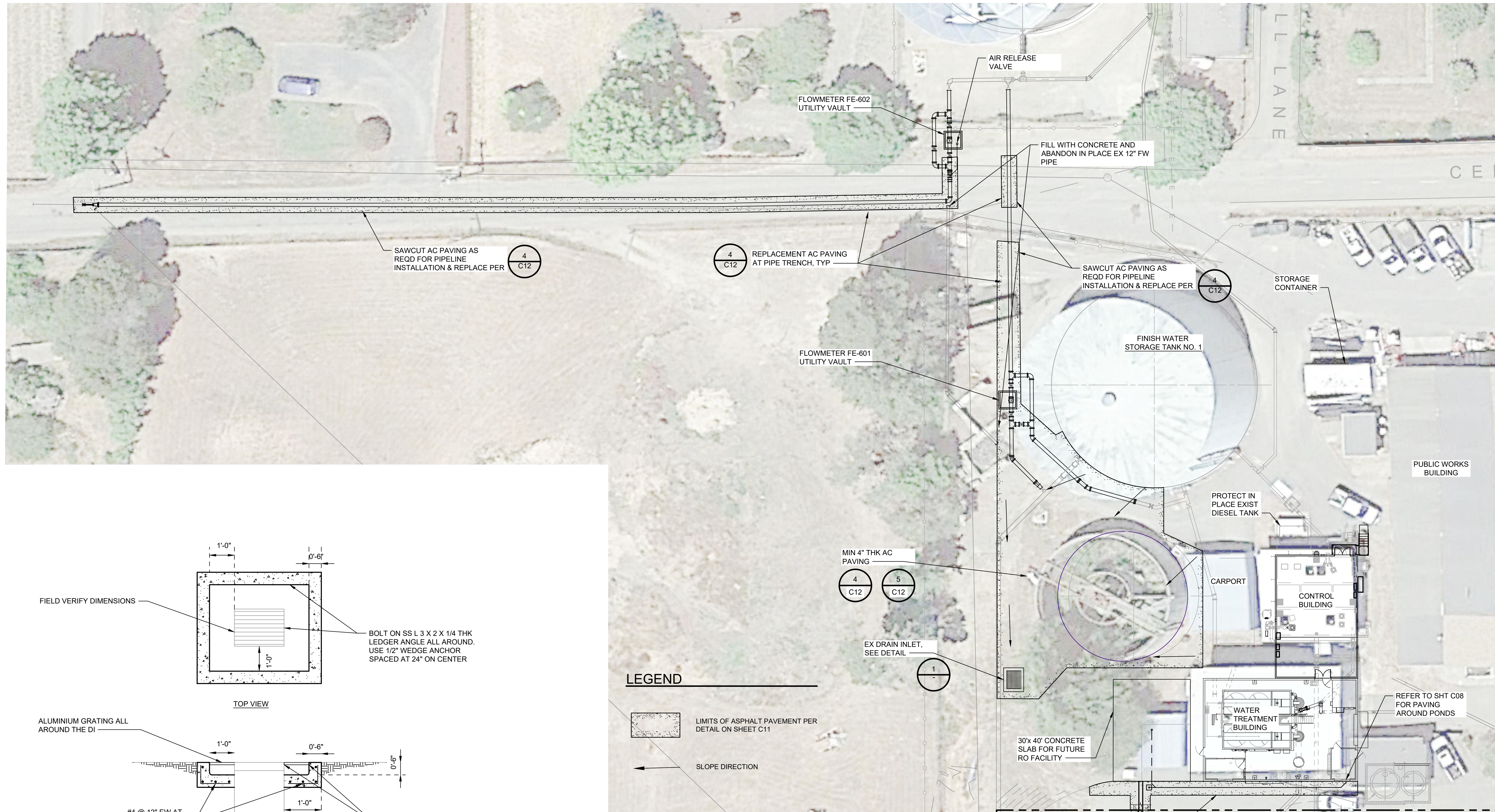
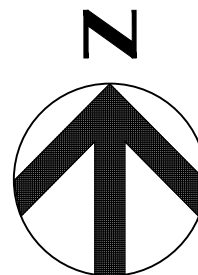
STORAGE TANK NO. 2 SITE PLAN



FILENAME | 3C02.dwg
SCALE | AS NOTED

SHEET

C02



1
-
NTS

EXISTING DRAIN INLET DETAIL

LEGEND



LIMITS OF ASPHALT PAVEMENT PER
DETAIL ON SHEET C11



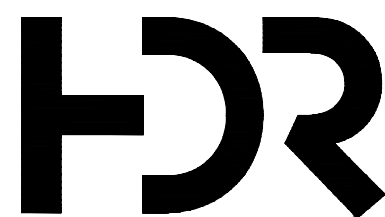
SLOPE DIRECTION

PAVING PLAN

1" = 20'

NOTE:
YARD PIPING INDICATED ONLY TO
DESCRIBE REQUIRED LIMITS OF
PAVEMENT EXTENTS. SEE YARD
PIPING PLAN, SHEET C04 FOR
ADDITIONAL PIPING INFORMATION.

FILE: C:\pwworking\lives01\2024\3094\3C03.dwg
DATE: 11/13/23 09:13:31 am, JKAMBOJ



ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

CIVIL

PAVING PLAN



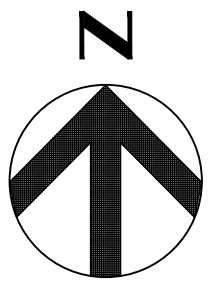
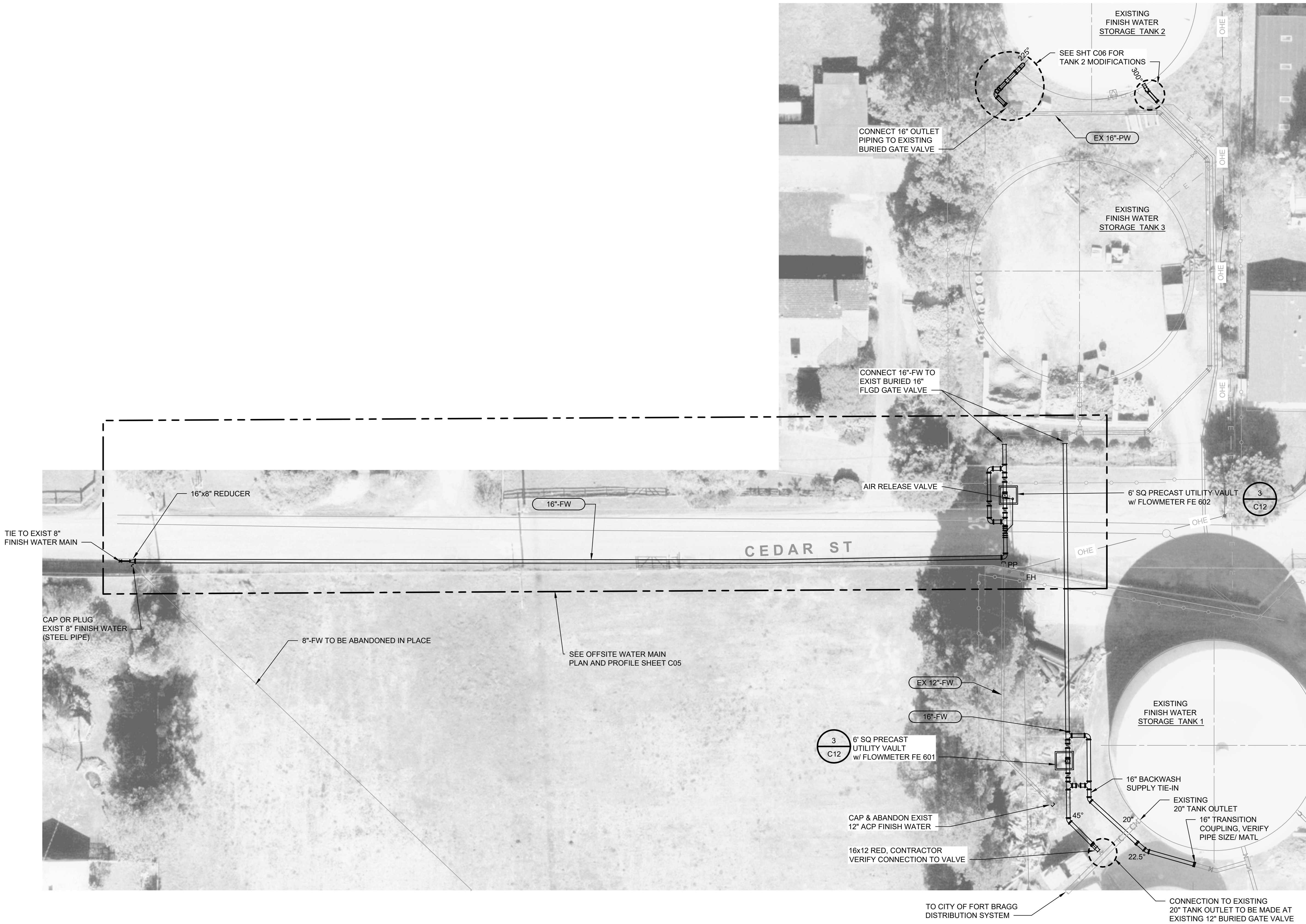
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SHEET

C03

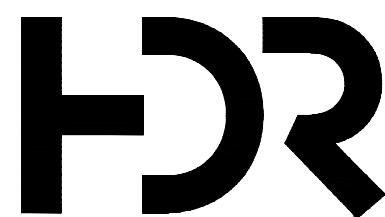
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DATE: 11/13/23 09:16:31am, JKAMBDJ



NORTH TANKS SITE PLAN

1" = 20'

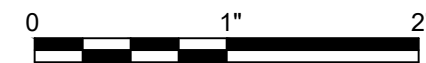


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**City of Fort Bragg
Water Treatment Plant
Rehabilitation Project**

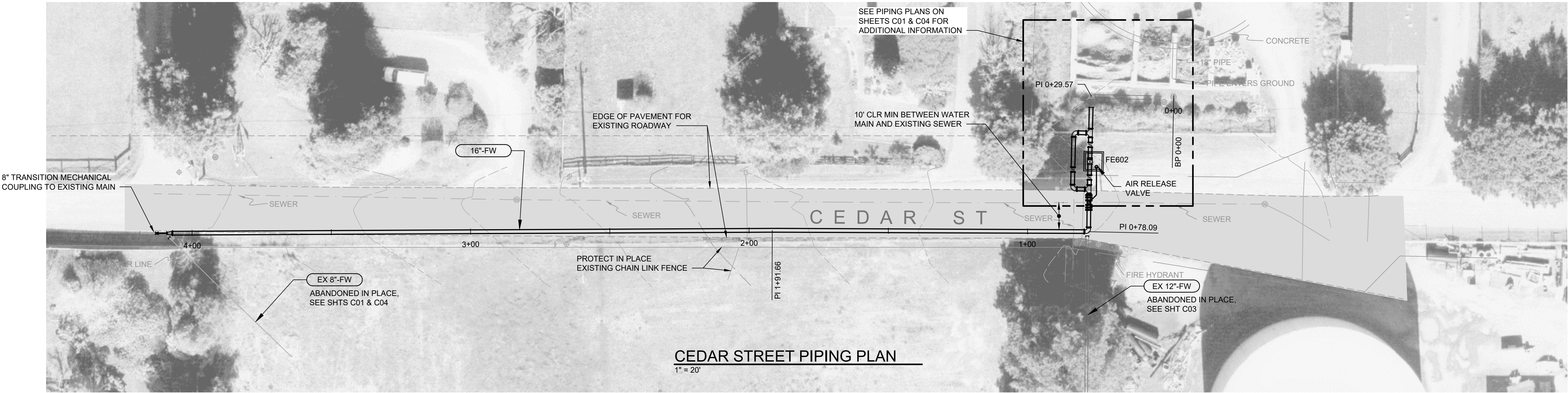


**CIVIL
PIPING PLAN**

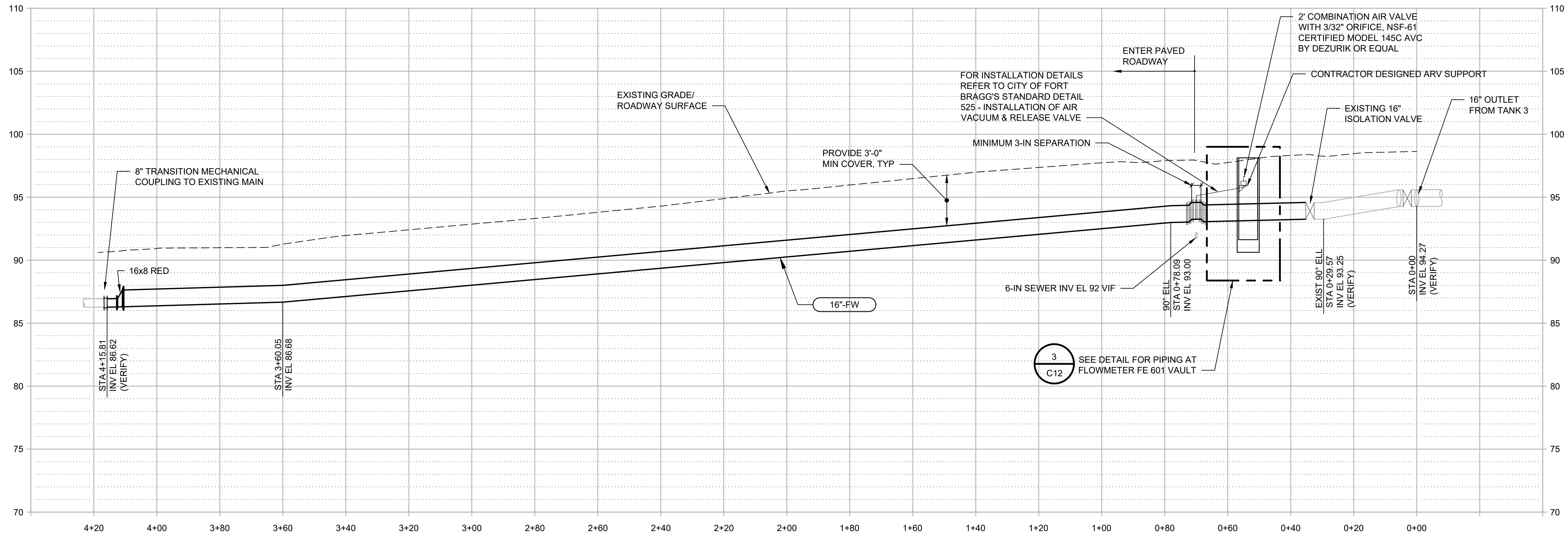
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SHEET

C04

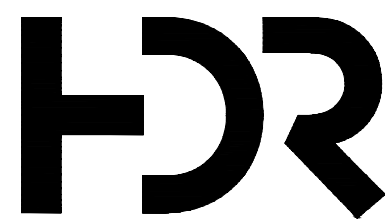


CEDAR STREET PIPING PLAN
1" = 20'



PIPING PROFILE
HORIZ. 1" = 20'; VERT. 1" = 5'

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DATE: 11/13/23 09:18:09am JKAMBOJ

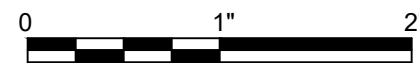


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City of Fort Bragg
Water Treatment Plant
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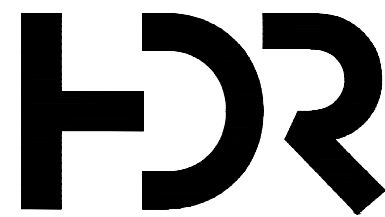


FILENAME | 3C05.dwg
SCALE | AS NOTED

SHEET
C05

CIVIL
OFFSITE WATER MAIN
PLAN AND PROFILE

FILE: C:\pwworking\mes01\2024\3094\3C06.dwg
DATE: 08/10/23 02:27:12pm - JKAMBQJ



ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

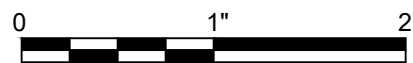
PROJECT MANAGER	ARASHDEEP SINGH
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City of Fort Bragg
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CIVIL

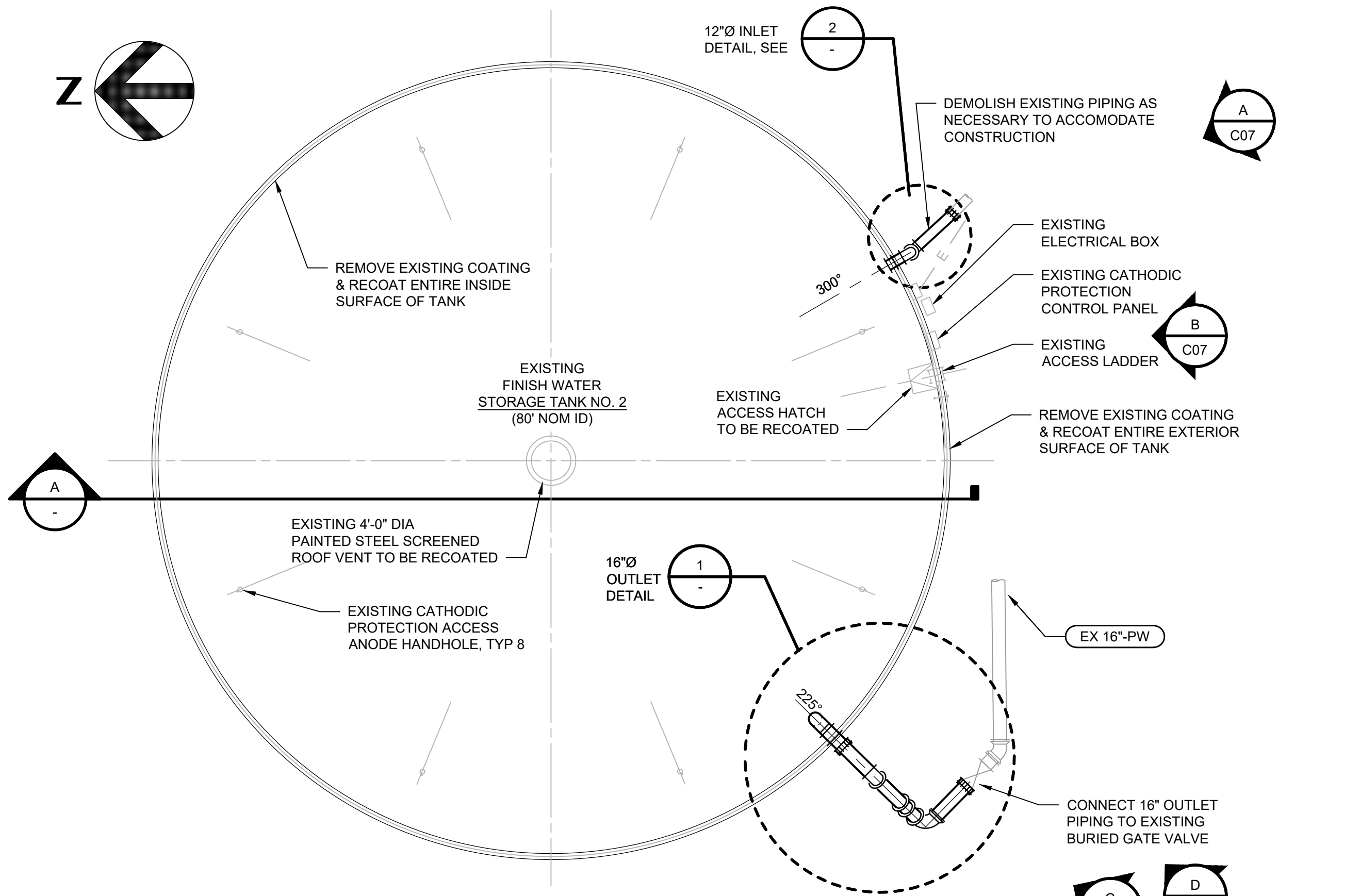
TANK 2 REHABILITATION PLAN,
SECTION, AND DETAILS



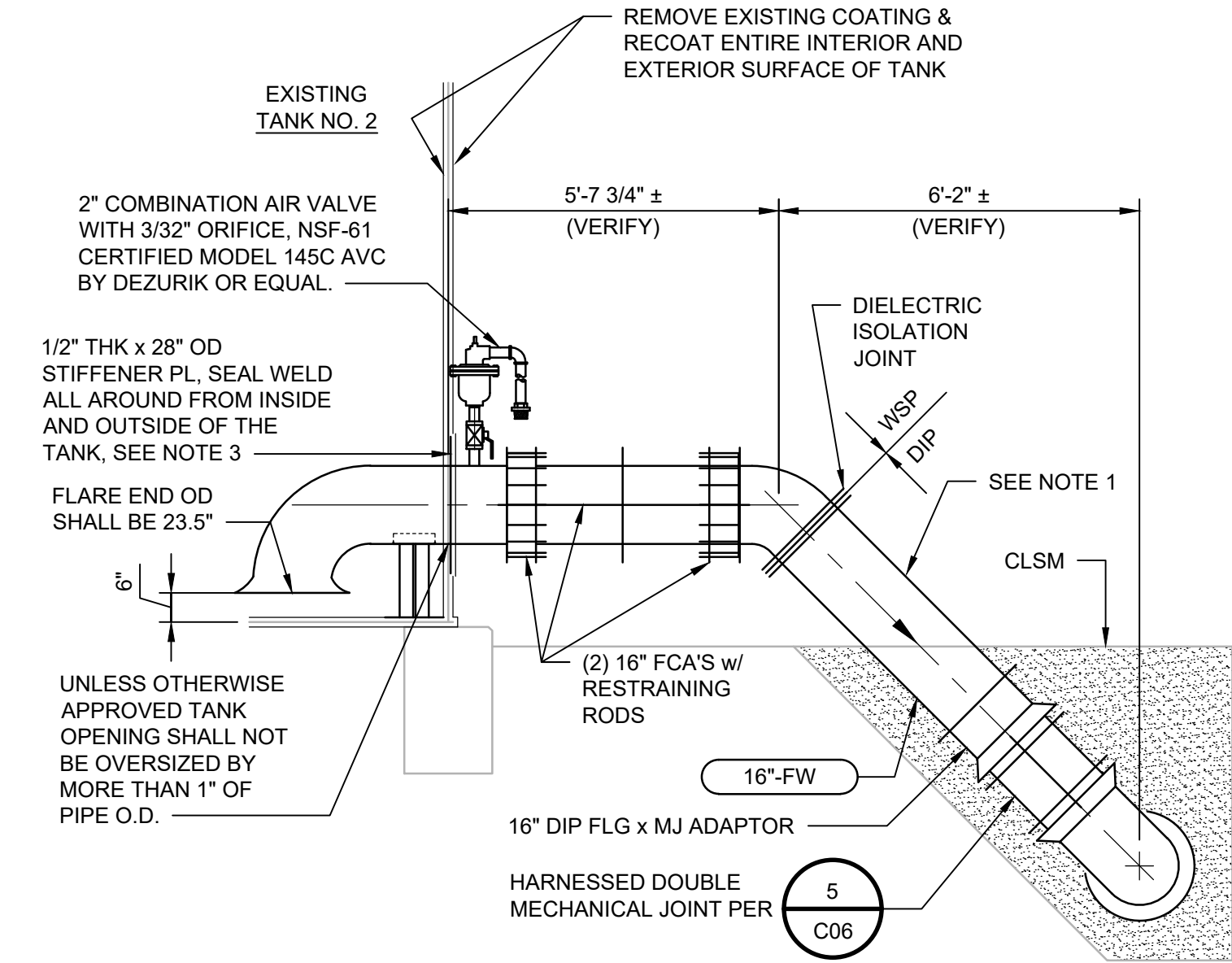
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SCALE | AS NOTED

SHEET

C06

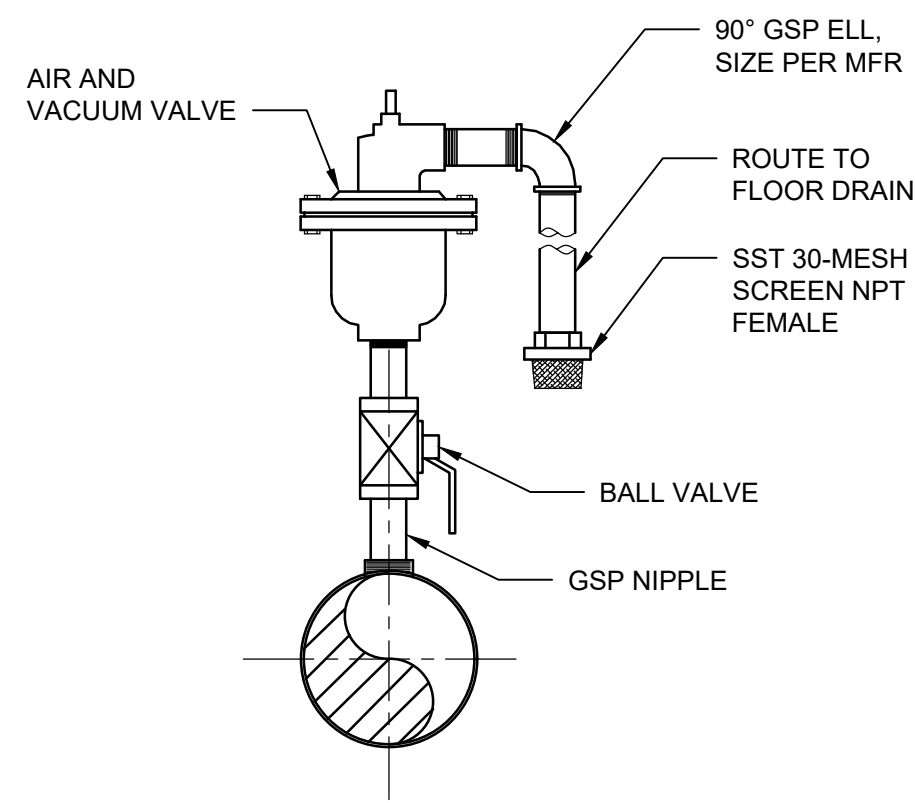


TANK NO. 2 PLAN
1" = 10'

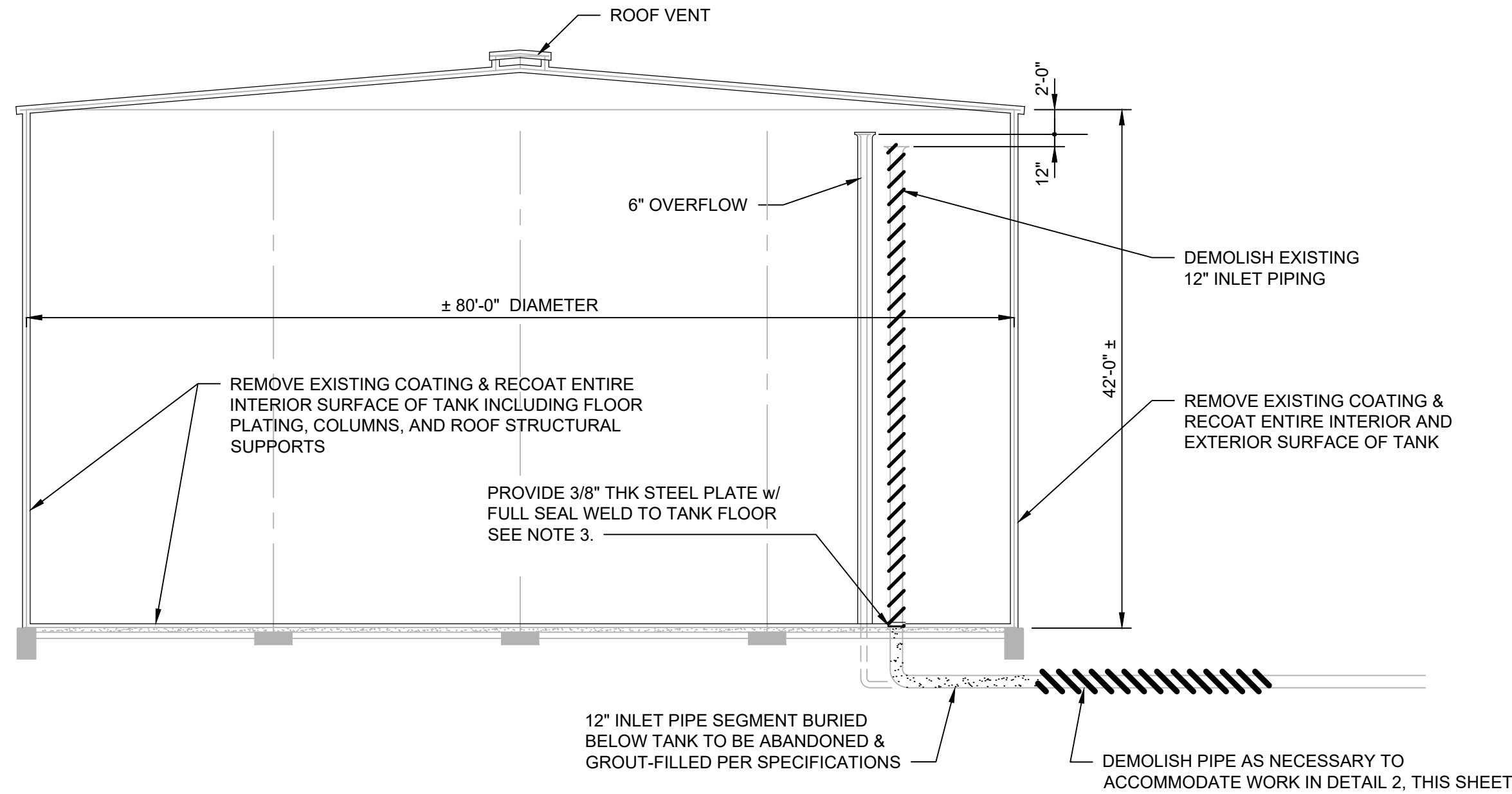


1
-
3/8" = 1'-0"

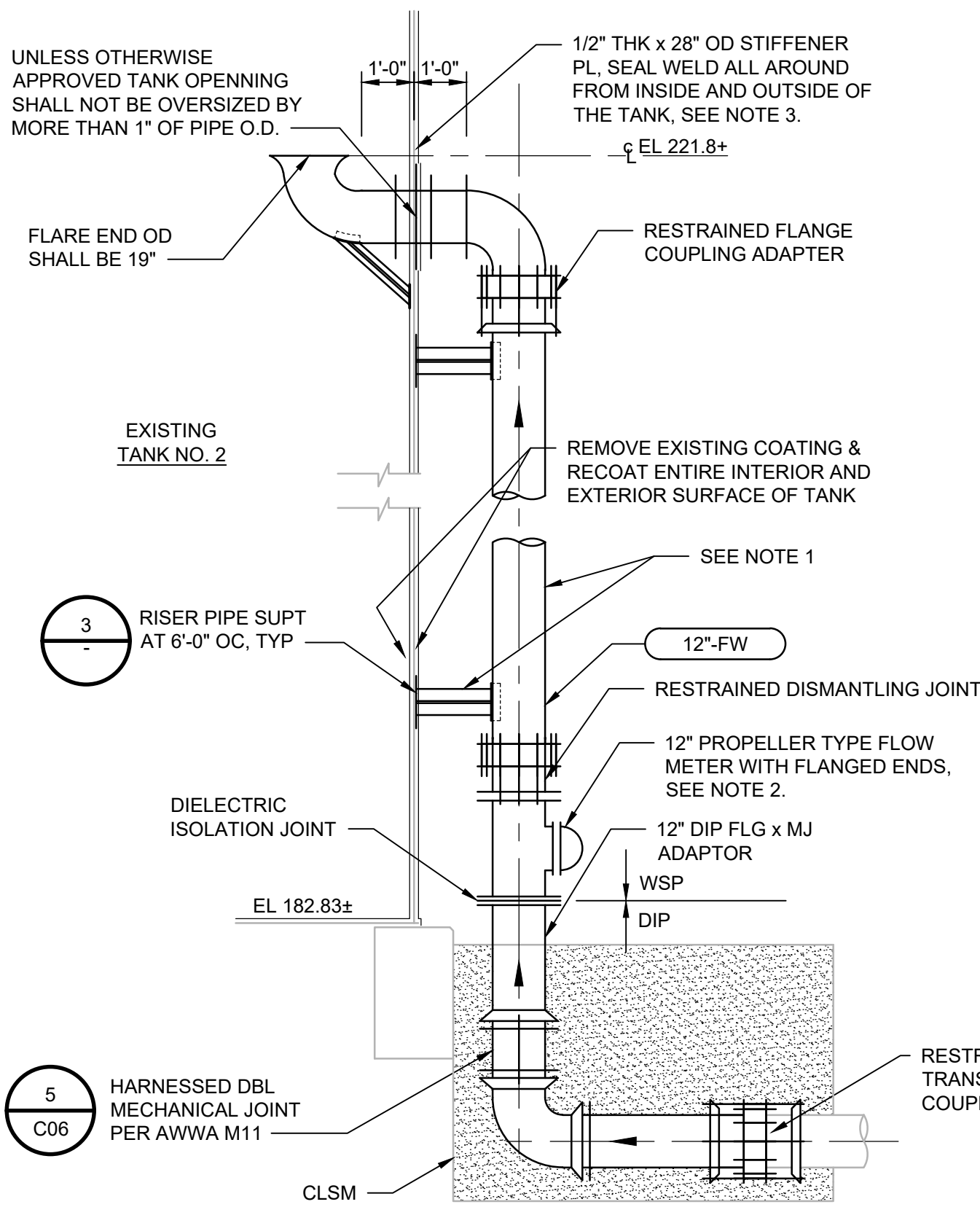
TANK 2 OUTLET CONNECTION



AIR VACUUM RELEASE VALVE
NTS

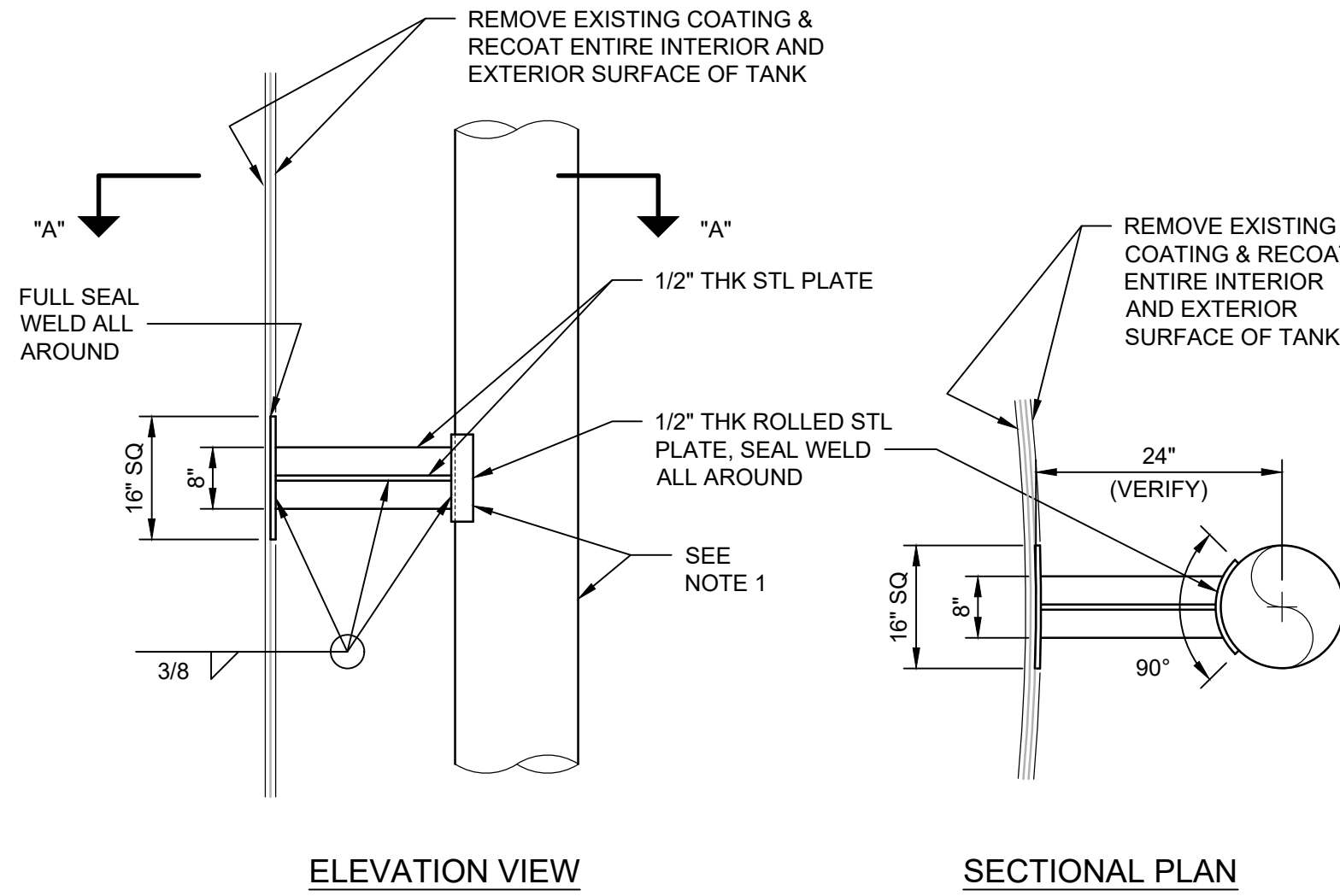


TYPICAL
TANK NO. 2 CROSS-SECTION
1" = 10'



2
-
3/8" = 1'-0"

TANK 2 INLET CONNECTION



3
-
NTS

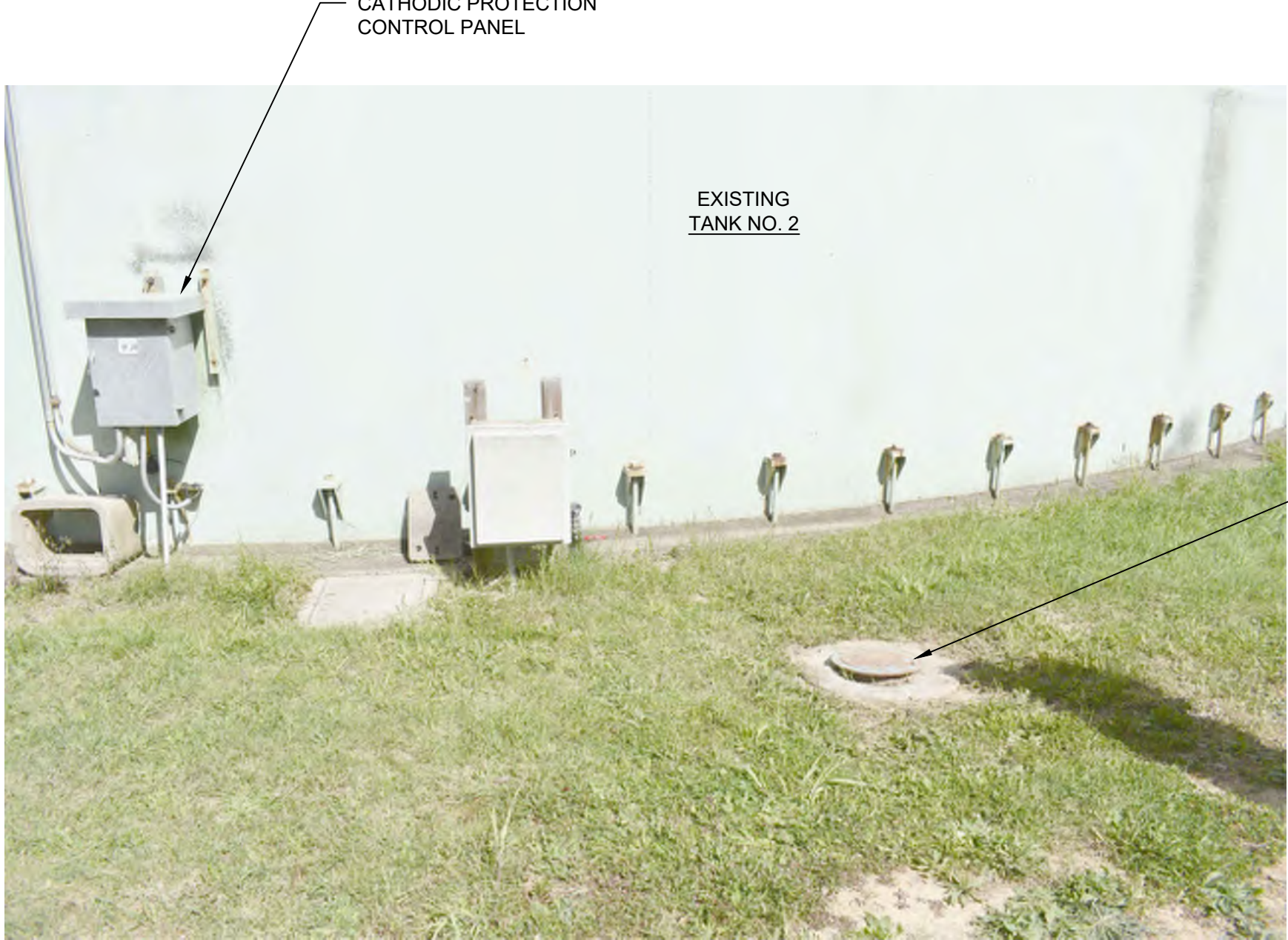
TYPICAL WELDED STEEL
TANK 2 INLET SUPPORT

- NOTES:
- ALTHOUGH NOT SPECIFICALLY DELINEATED, ALL METALLIC PIPING AND RELATED APPURTENANCES SHALL BE COATED PER SPECIFICATIONS.
 - PROVIDE PROPELLER-TYPE FLOW METER, FE/ FI 603, SEE SPECIFICATIONS.
 - CONTRACTOR SHALL WATER/LEAKAGE TEST THE STORAGE TANK UP TO THE STANDARD OPERATING WATER LEVEL AFTER ALL WORK IS EXECUTED AND PRIOR TO THE COMMISSIONING OF THE TANK. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING REPAIRS AS NECESSARY TO SATISFY THE WATER/LEAKAGE TEST.

FILE: C:\pwworking\res0114204309413C07.dwg
DATE: 08/10/23 02:27:28pm -JKA\MBQJ



A
-
TANK 2 PHOTO
NO SCALE



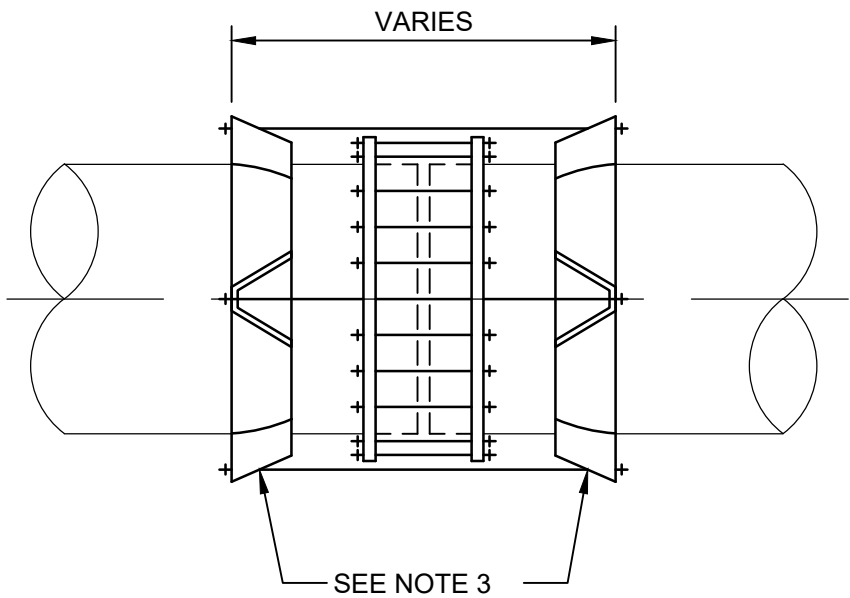
B
-
TANK 2 PHOTO
NO SCALE



C
-
TANK 2 PHOTO
NO SCALE

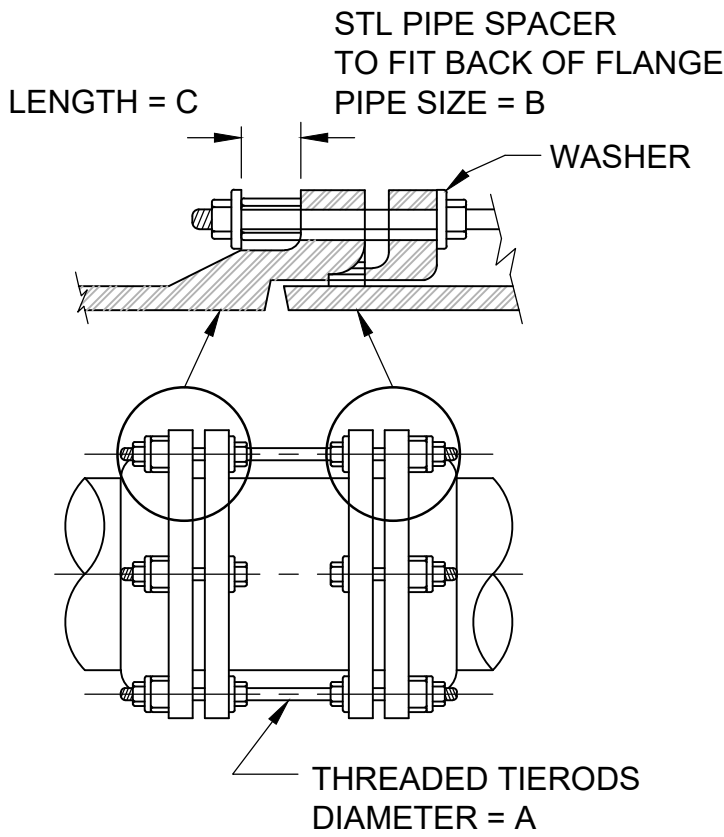


D
-
TANK 2 PHOTO
NO SCALE



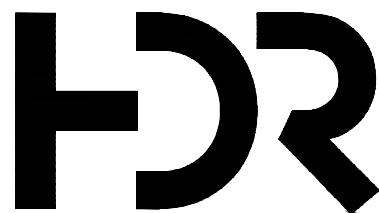
- NOTES:
1. PROVIDE COUPLING WHERE NOTED ON DRAWINGS.
 2. DESIGN HARNESS IN ACCORDANCE WITH AWWA M-11 MANUAL FOR STEEL PIPE.
 3. LUGS FOR PIPE < 14" AND HARNESS RINGS FOR PIPE > 14". EXISTING PIPES MAY UTILIZE BOLT-ON HARNESSING RINGS WITH ENGINEERS APPROVAL.

4
-
HARNESSED MECHANICAL
COUPLING FOR STEEL PIPE
NTS



MECHANICAL JOINT SCHEDULE				
PIPE SIZE	NO. OF TIE RODS	A TIE ROD DIA.	B SPACER NOM. SIZE	C SPACER LENGTH
4"-10"	2	3/4"	1"	2 1/2"
12"-24"	4	3/4"	1"	3 1/2"

5
-
DOUBLE MECHANICAL
JOINT (DMJ) DETAIL
NTS

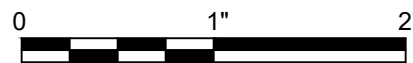


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City of Fort Bragg
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Rehabilitation Project

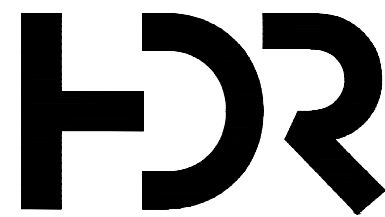


FILENAME | 3C07.dwg
SCALE | AS NOTED

SHEET
C07

CIVIL
TANK 2 PHOTOGRAPHS AND DETAILS

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DATE: 08/11/23 11:42:33am, JKAMBOJ

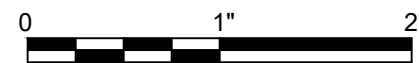


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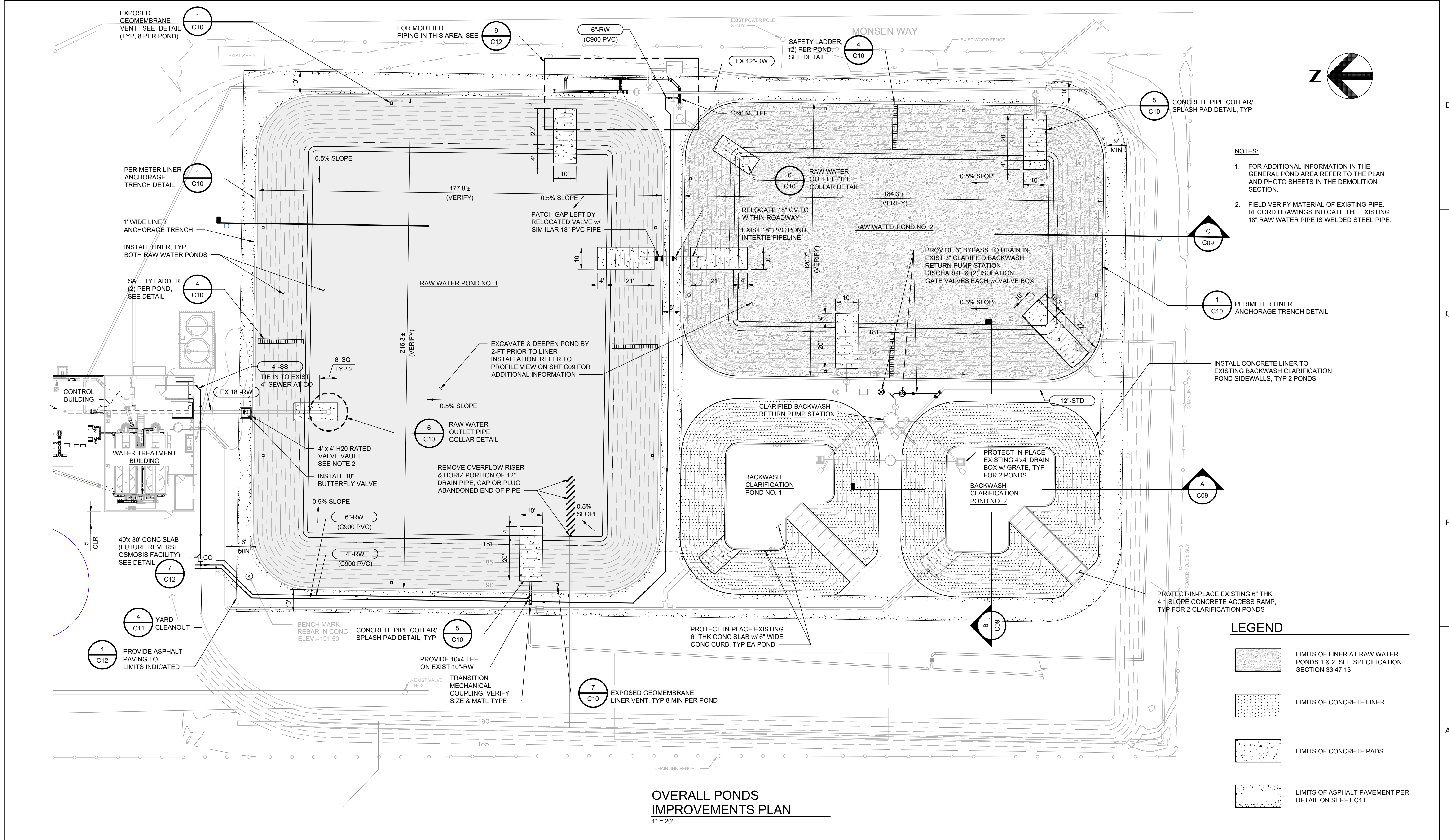
City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



FILENAME 3C08.dwg
SCALE 1" = 20'

SHEET

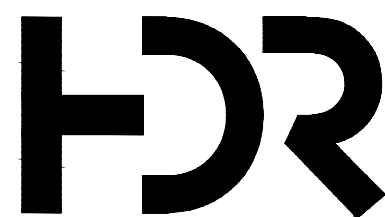
C08



CIVIL

OVERALL PONDS IMPROVEMENTS PLAN

FILE: C:\pwworking\wse01\2024\309\3C09.dwg
DATE: 08/11/23 02:36:14pm JKAMBQJ



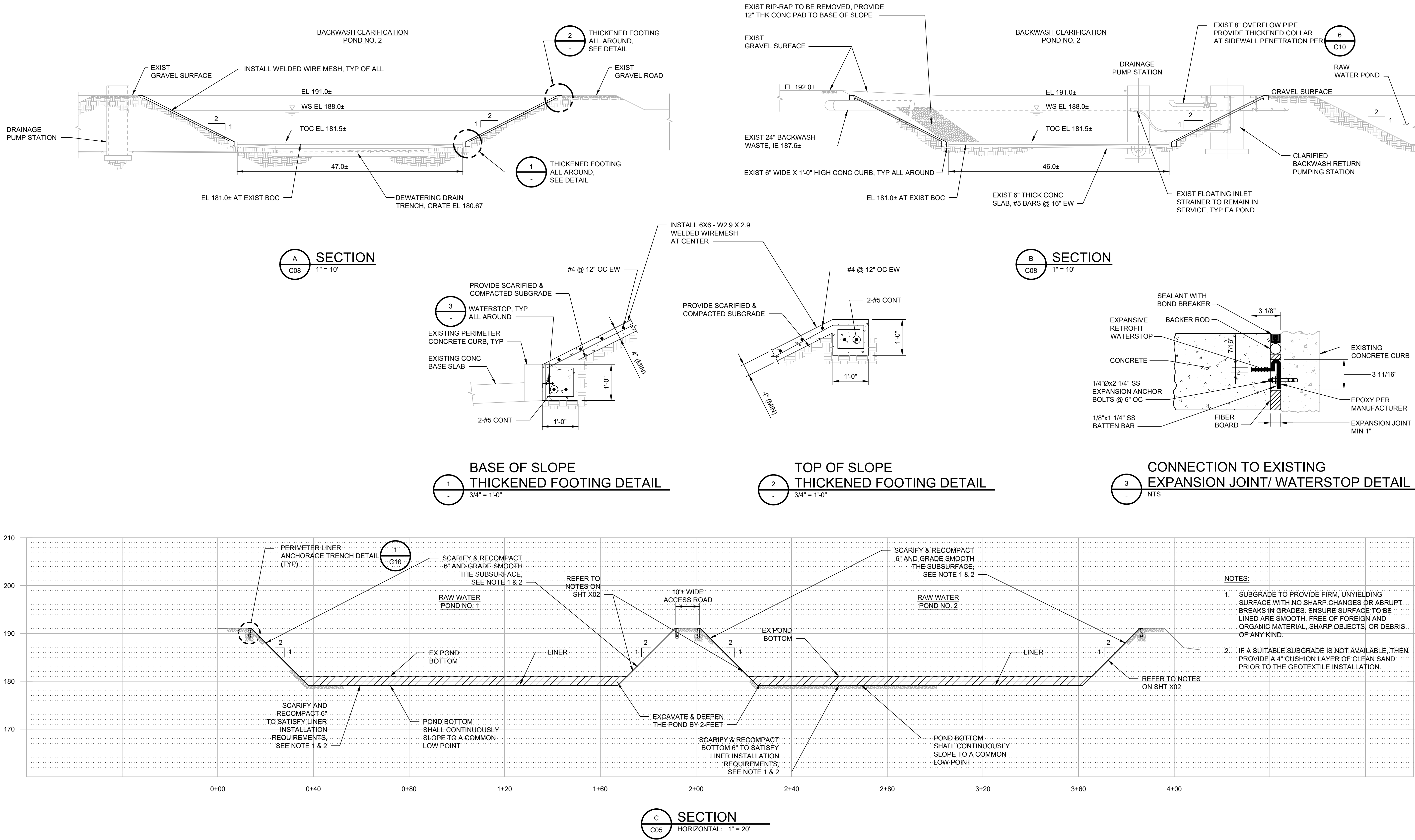
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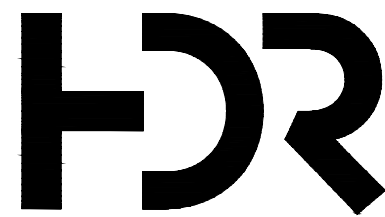


City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

CIVIL		
BACKWASH CLARIFICATION AND RAW WATER POND SECTIONS		
0 1" 2"		FILENAME 3C09.dwg
SCALE 1" = 20'		SHEET C09



FILE: C:\pwworking\lives01\243094\3C10.dwg
DATE: 08/11/23 02:38:48pm - JKAMBOJ



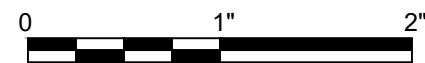
ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

POND IMPROVEMENTS SECTIONS AND DETAILS

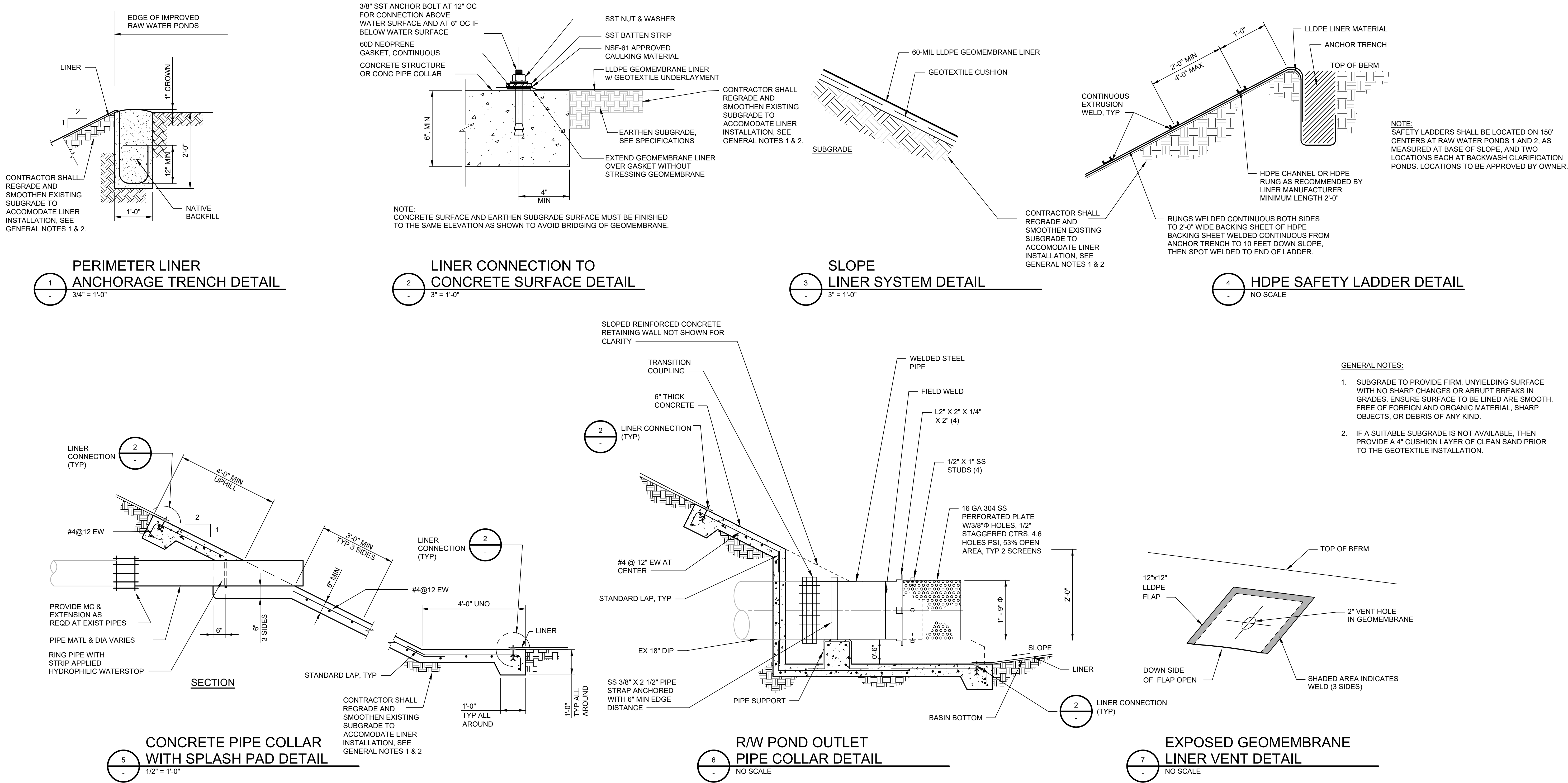


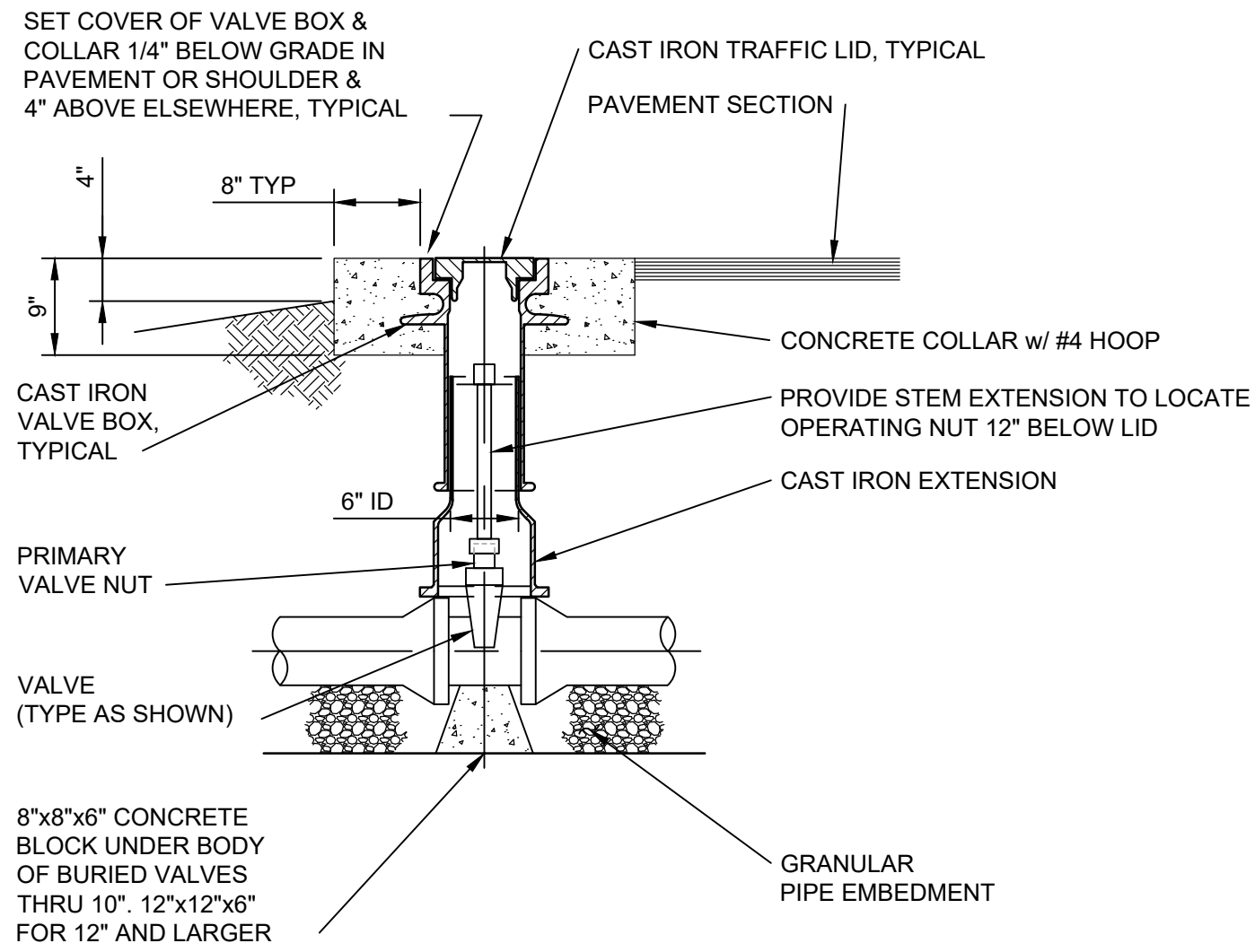
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SCALE | AS NOTED

SHEET

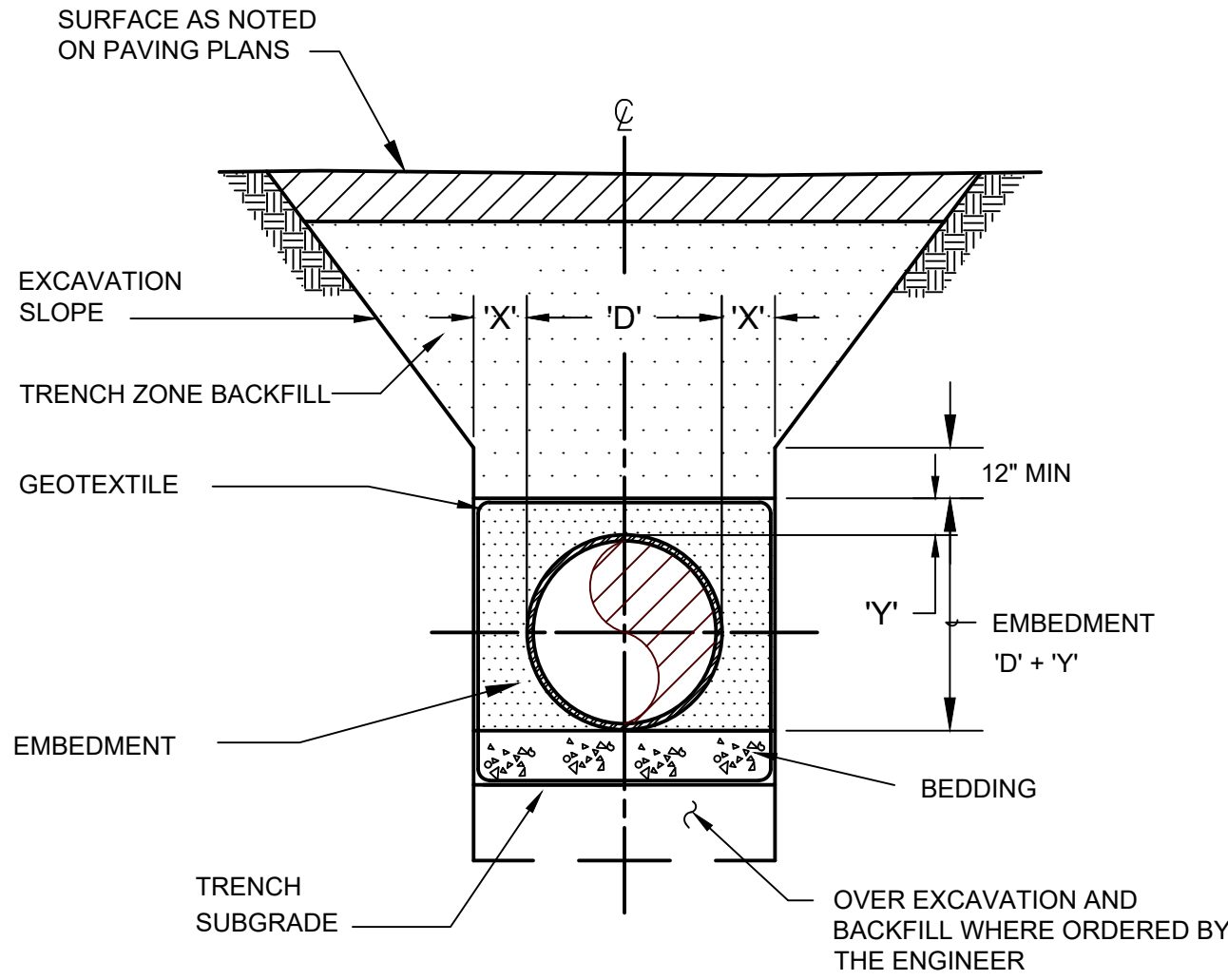
C10

CIVIL





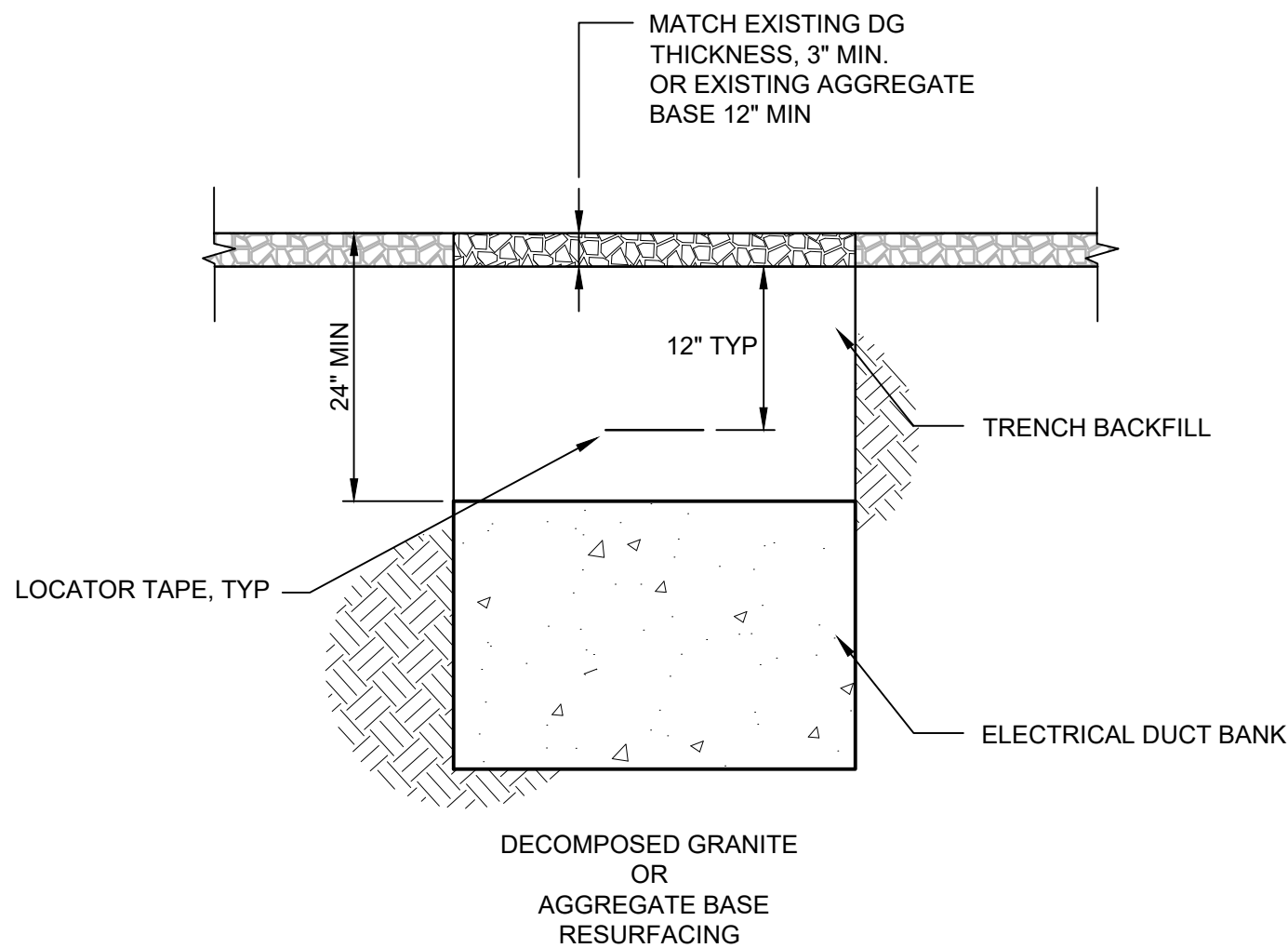
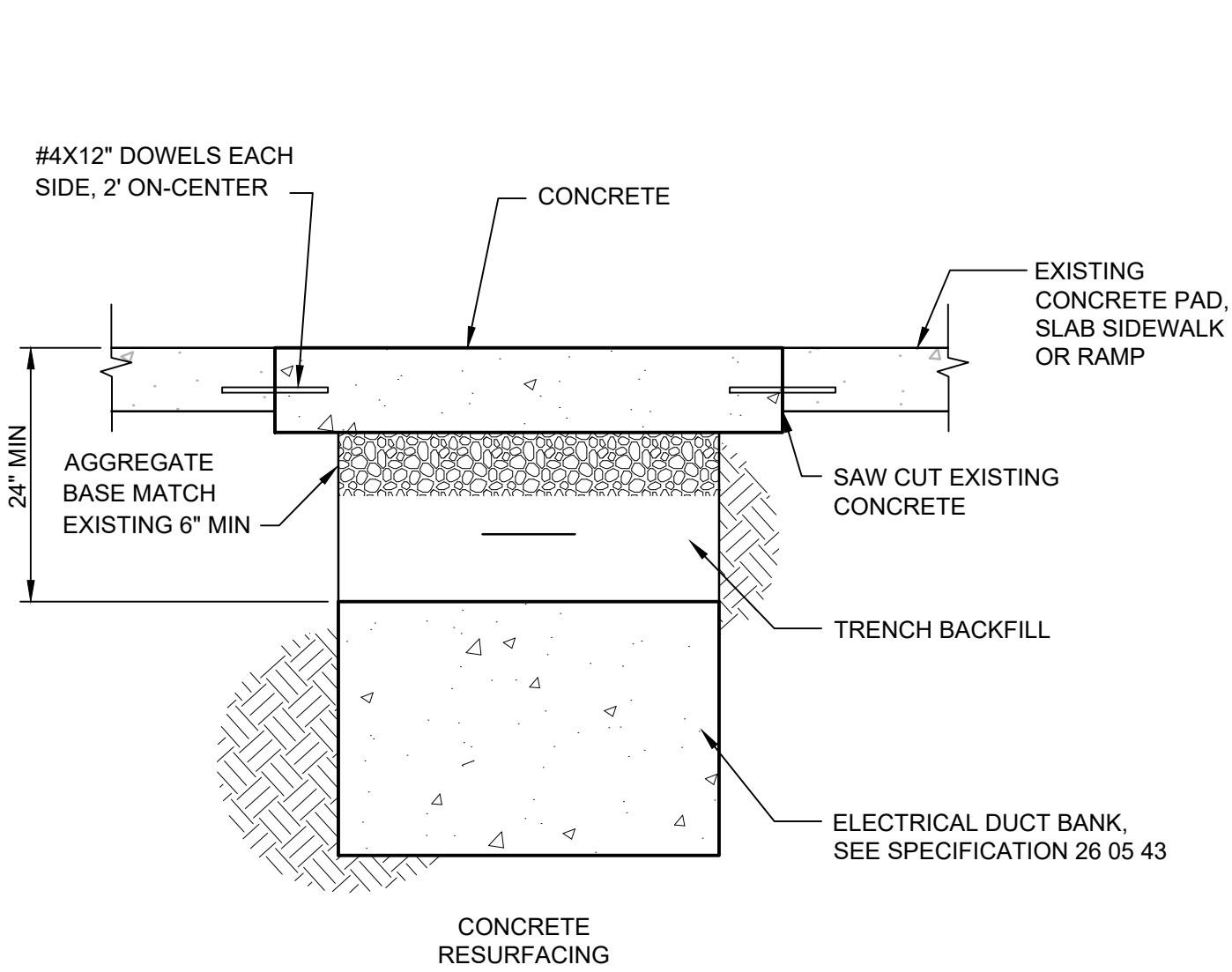
1 BURIED VALVE BOX
- NTS



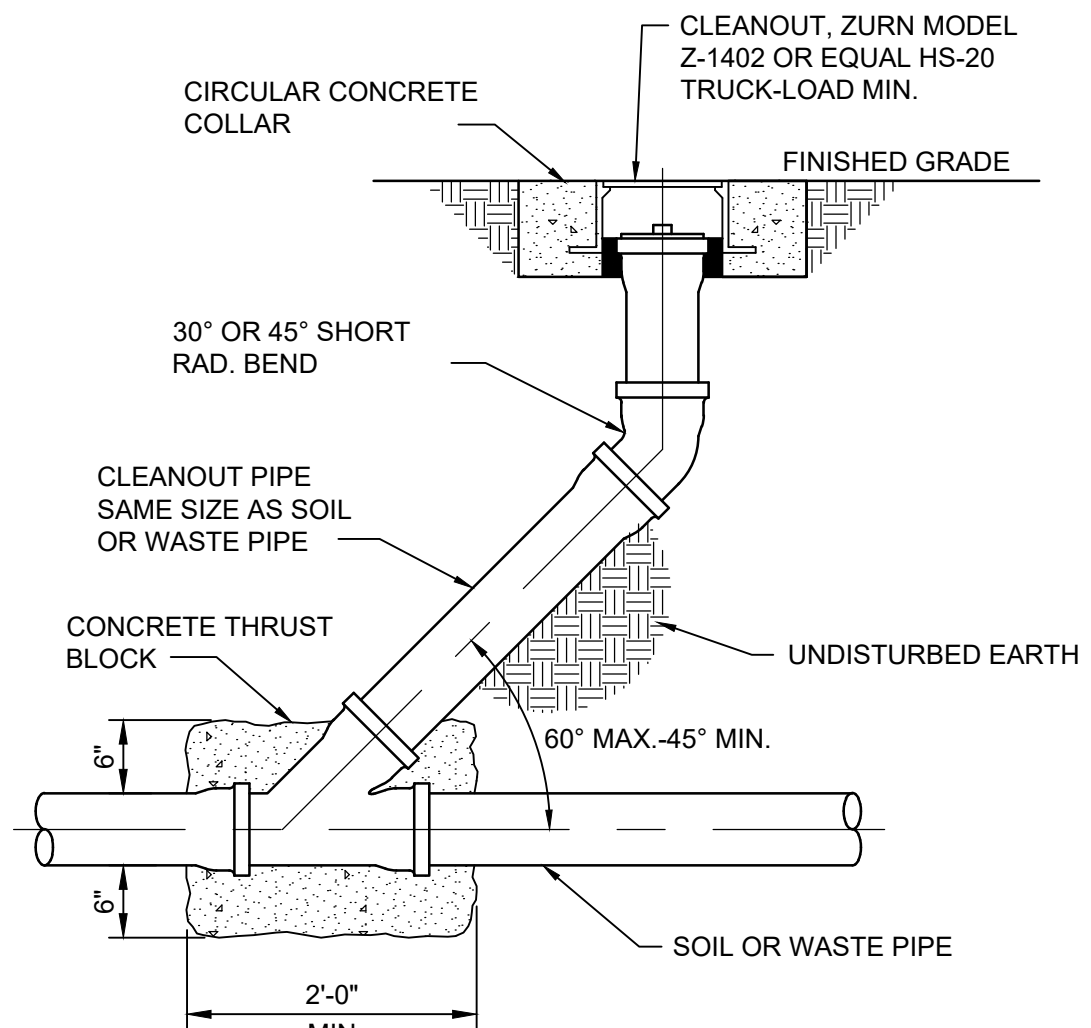
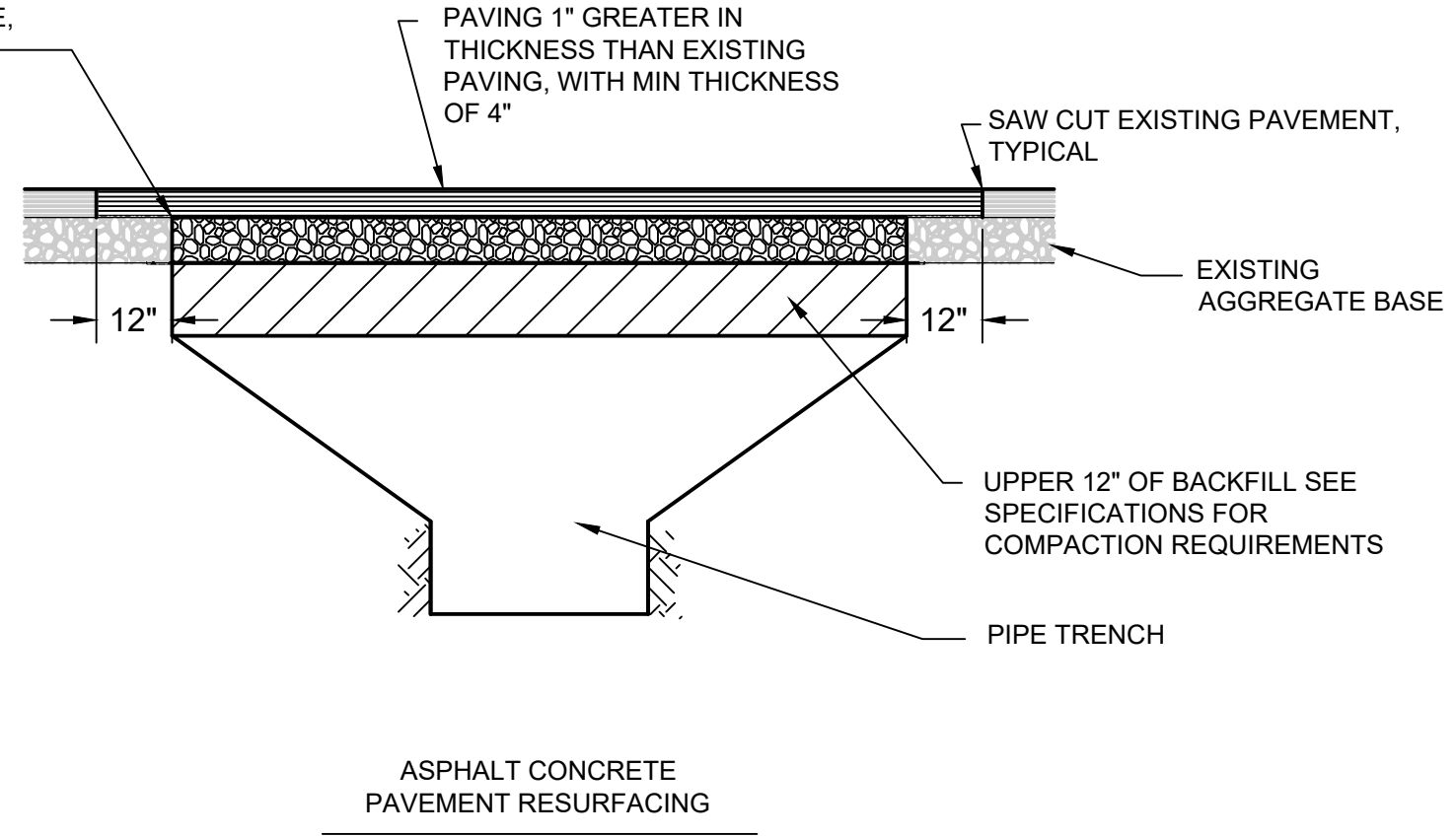
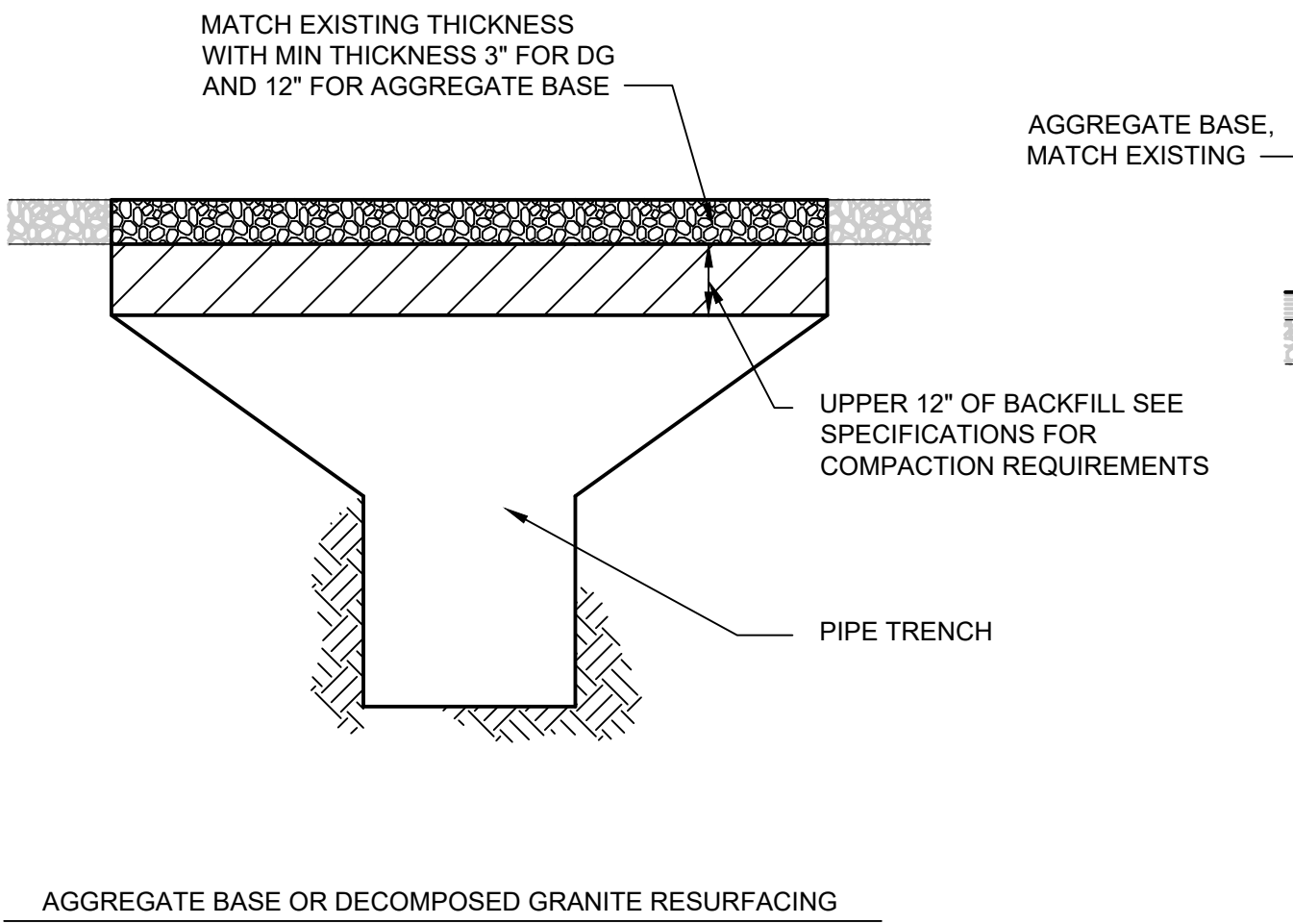
NOTES:

- EXCAVATION SLOPES SHOWN ARE FOR ILLUSTRATIVE PURPOSE ONLY. ACTUAL TRENCH SIDEWALLS MAY BE VERTICAL, SLOPED, OR A COMBINATION THEREOF, DEPENDING ON THE SOIL AND EXCAVATION CONDITIONS, CONSTRUCTION METHODS AND SAFETY REGULATIONS.
- CLEARANCE DIMENSION 'X' SHALL BE A MAXIMUM OF 12" AND A MINIMUM OF 9".
- DIMENSION 'Y' SHALL BE A MINIMUM OF 12" FOR PIPE SIZES GREATER THAN 24" AND A MINIMUM OF 6" FOR PIPE SIZES LESS THAN OR EQUAL TO 24".
- BEDDING SHALL BE A MINIMUM OF 12" IN THICKNESS FOR PIPE SIZES GREATER THAN 36" AND A MINIMUM OF 6" IN THICKNESS FOR PIPE SIZES LESS THAN OR EQUAL TO 36".
- 'D' IS THE PIPE OUTSIDE DIAMETER.
- COMPLETELY WRAP BEDDING AND EMBEDMENT MATERIAL IN GEOTEXTILE
- SEE SPECIFICATIONS FOR MATERIAL REQUIRED FOR BEDDING, EMBEDMENT AND TRENCH ZONE BACKFILL; COMPACTION AND OTHER TRENCHING REQUIREMENTS.

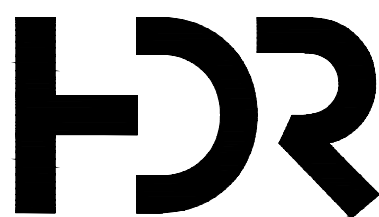
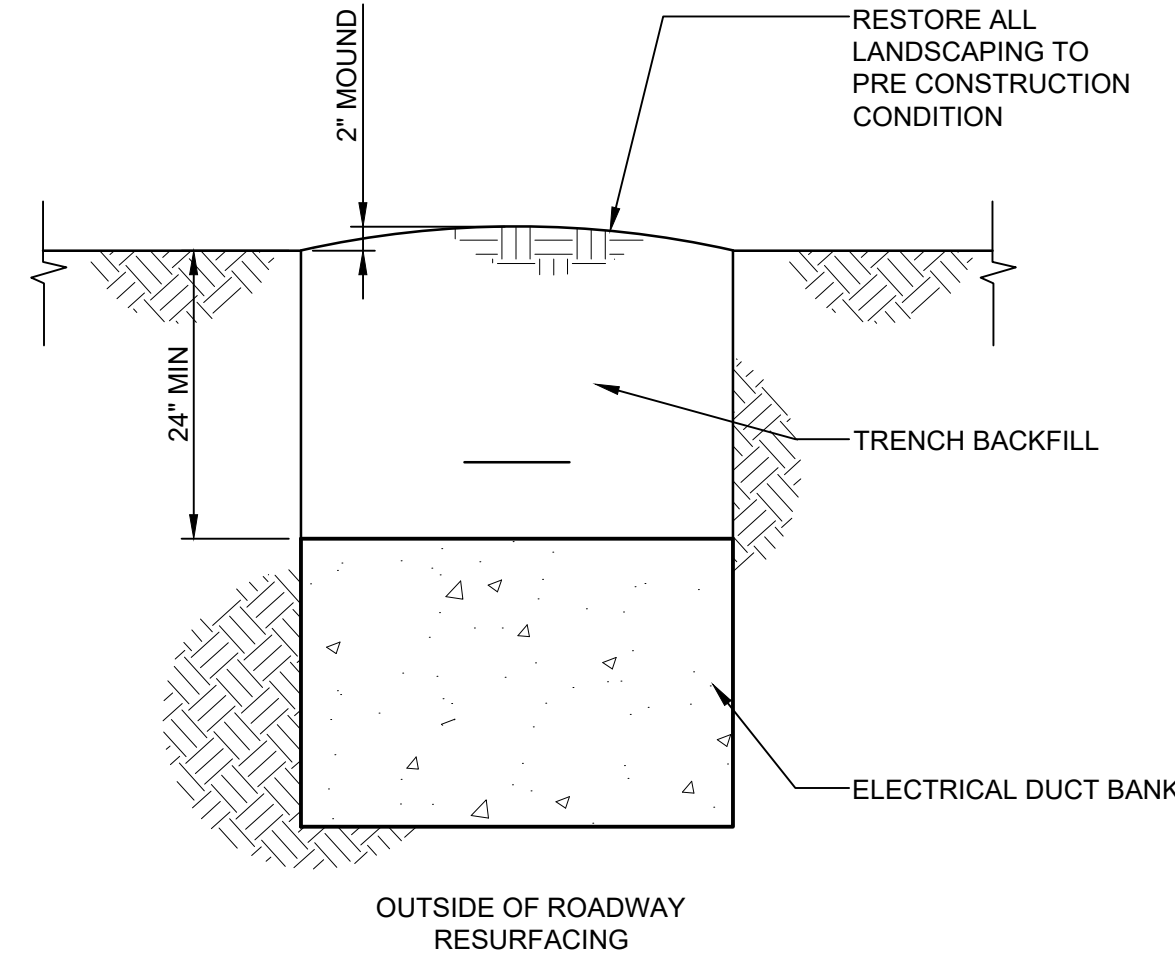
2 TYPICAL PIPE TRENCH DETAILS
- NTS



3 TYPICAL DUCT BANK DETAILS
- NTS



4 CLEANOUT AT GRADE DETAIL
- NTS

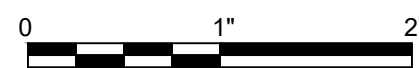


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DESIGNED	A. SINGH
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

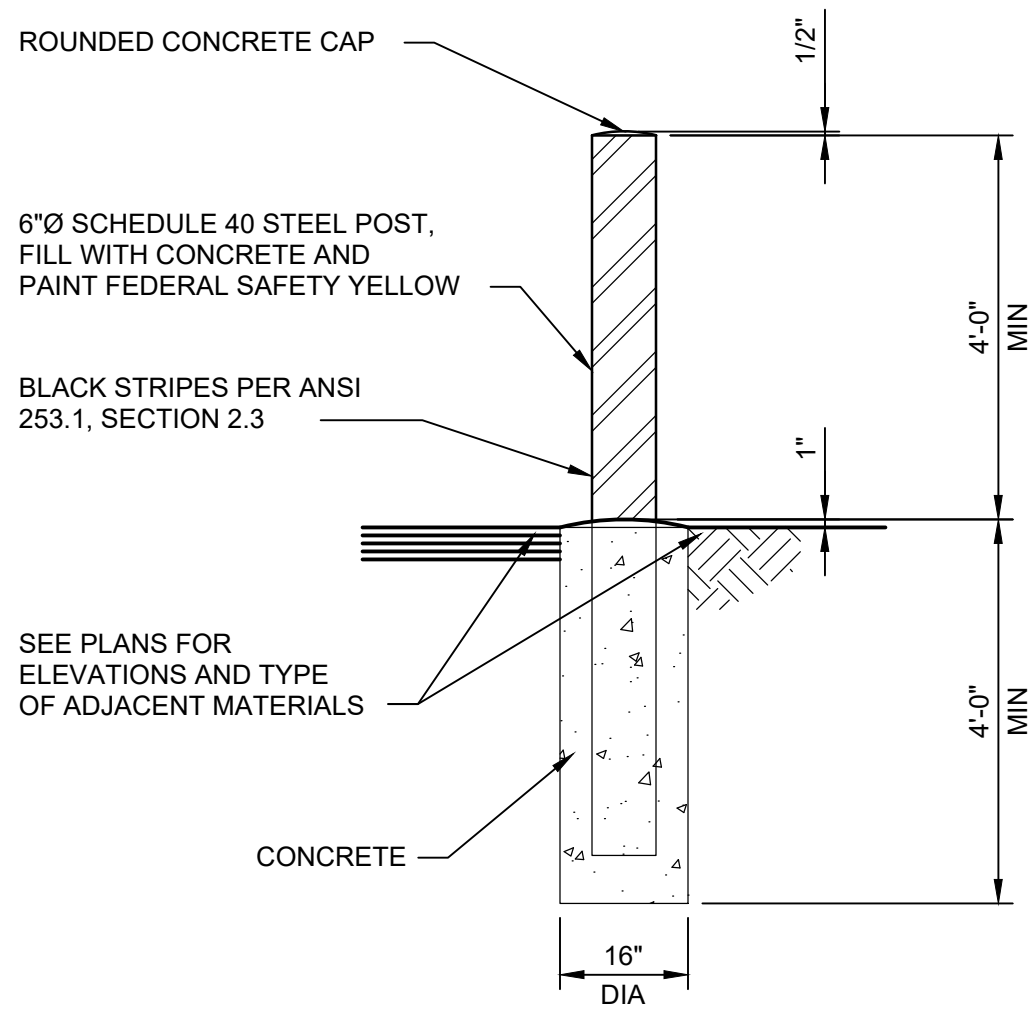


CIVIL
DETAILS 1
FILENAME | 3C11.dwg
SCALE | AS NOTED

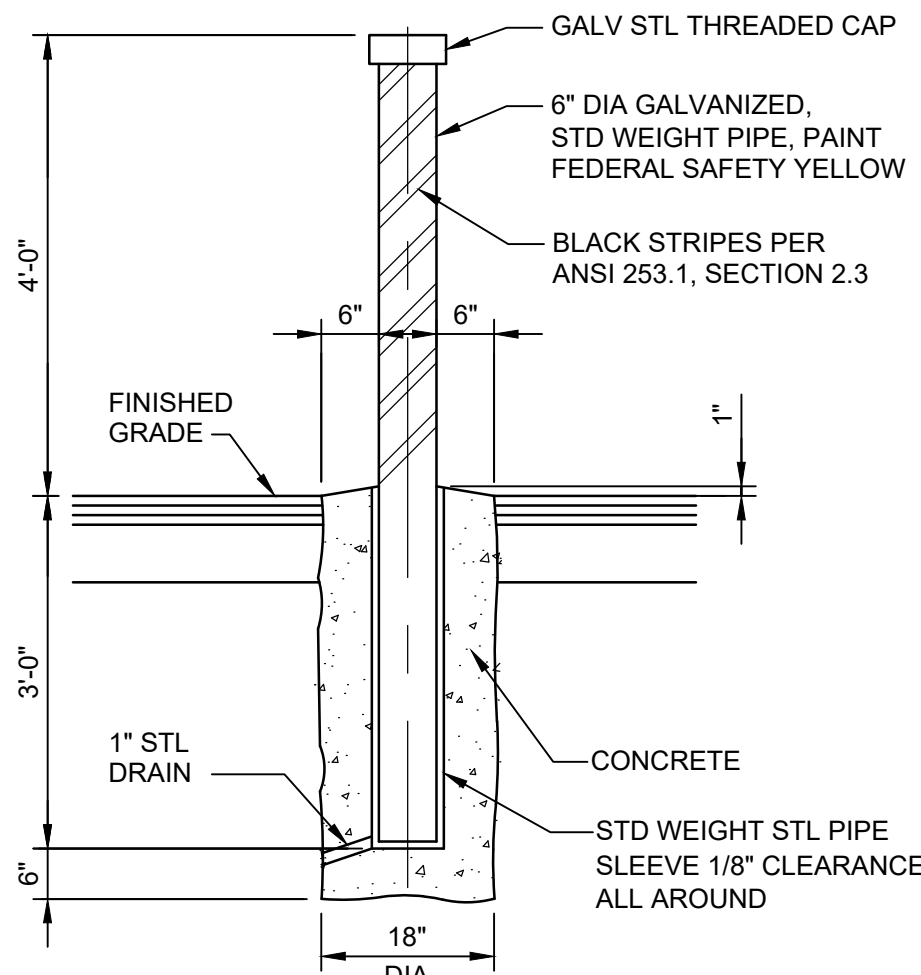
SHEET

C11

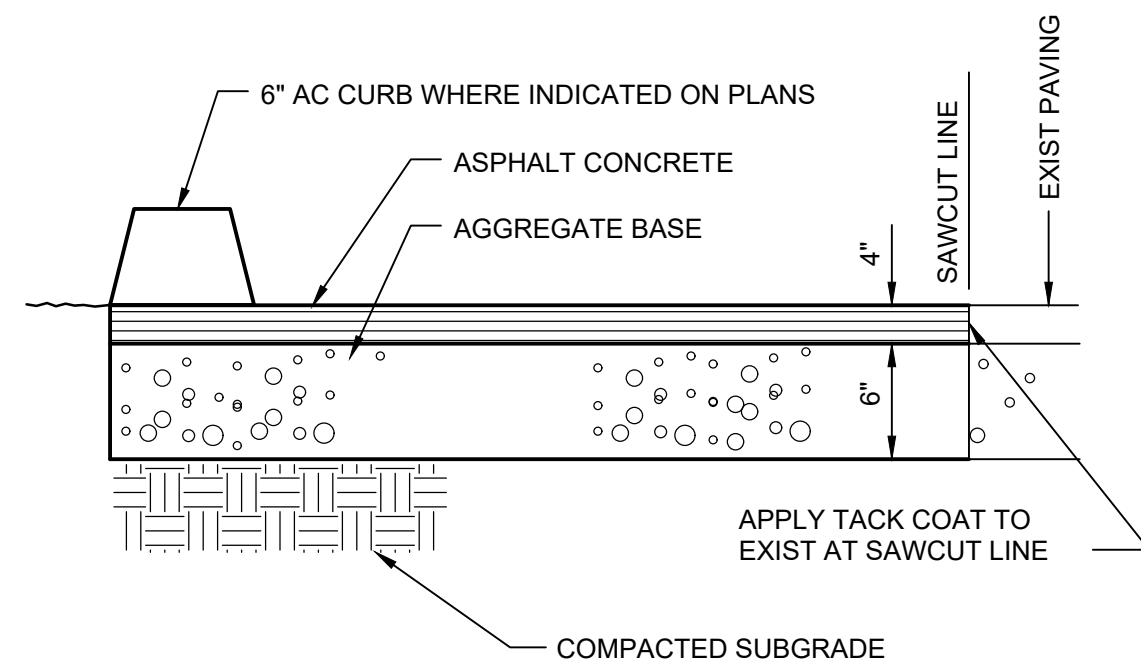
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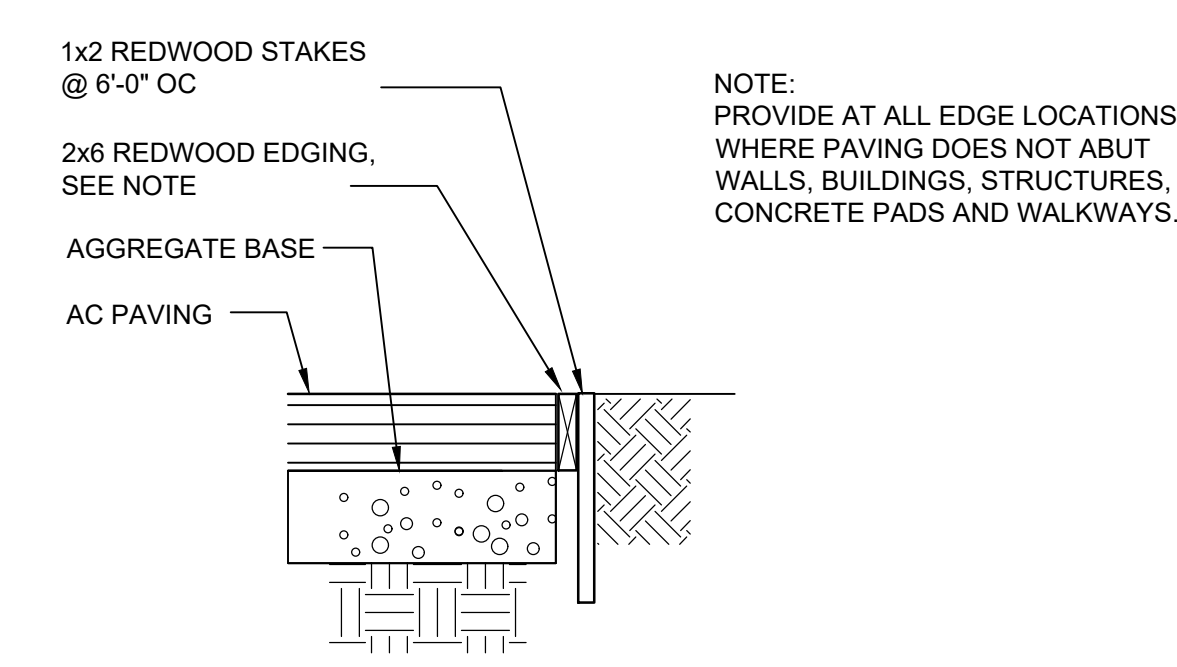
1 FIXED BOLLARD DETAIL



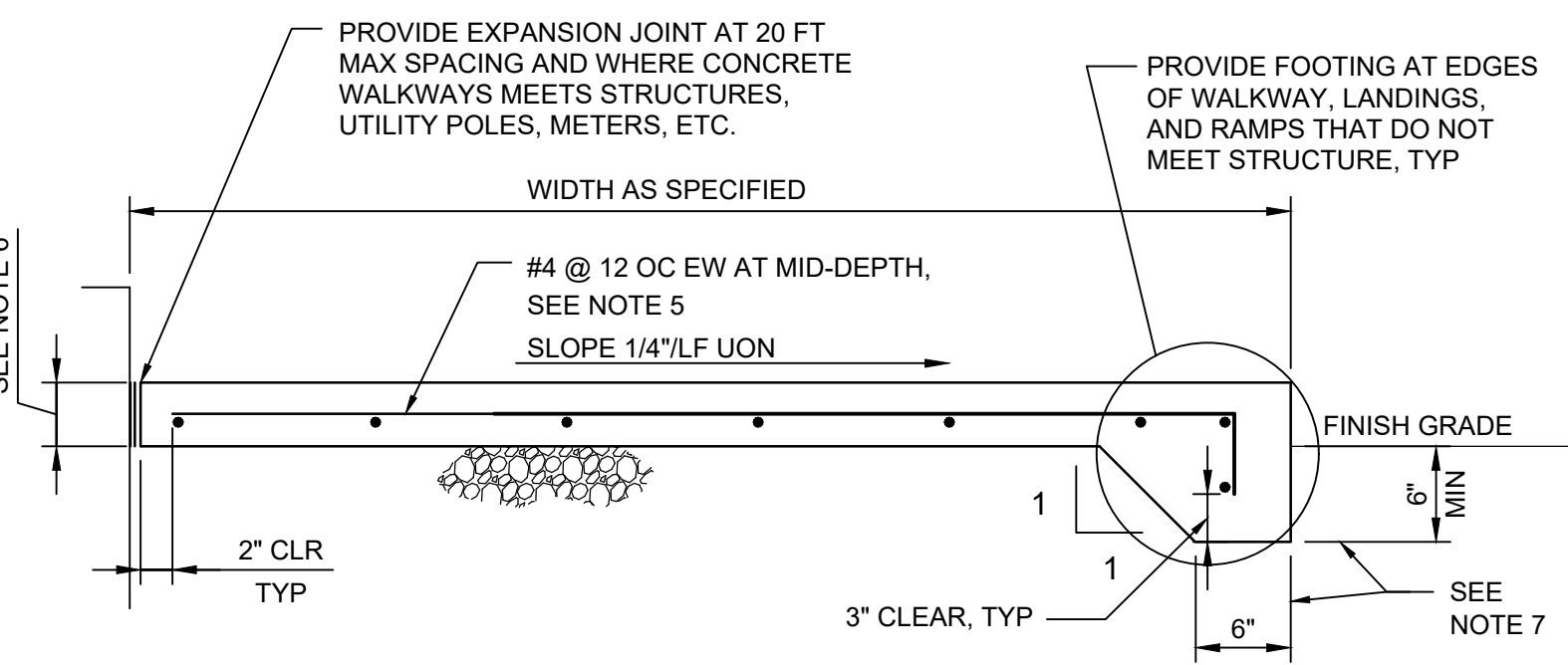
2 REMOVABLE BOLLARD DETAIL



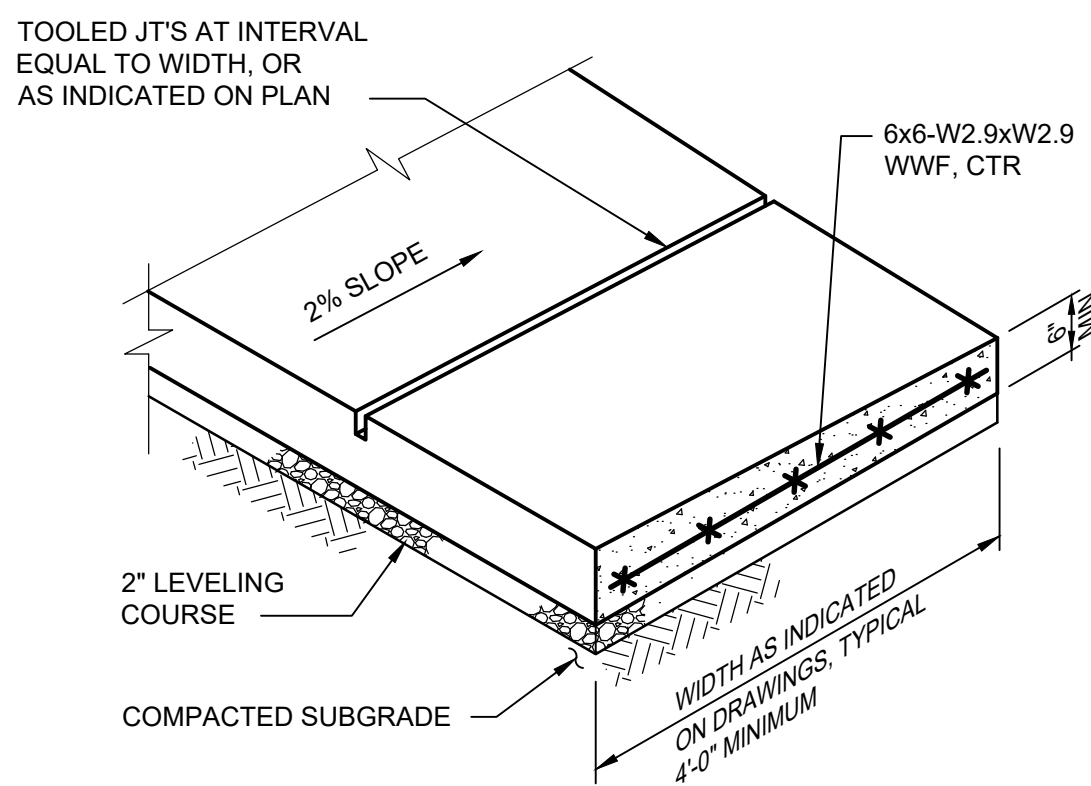
4 PAVING DETAIL



5 PAVEMENT EDGING

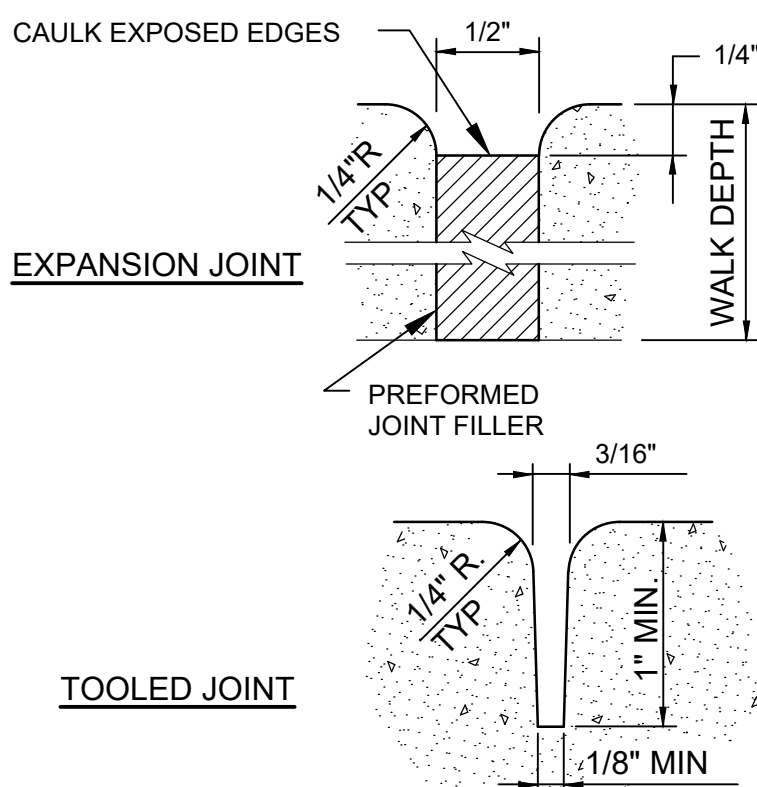
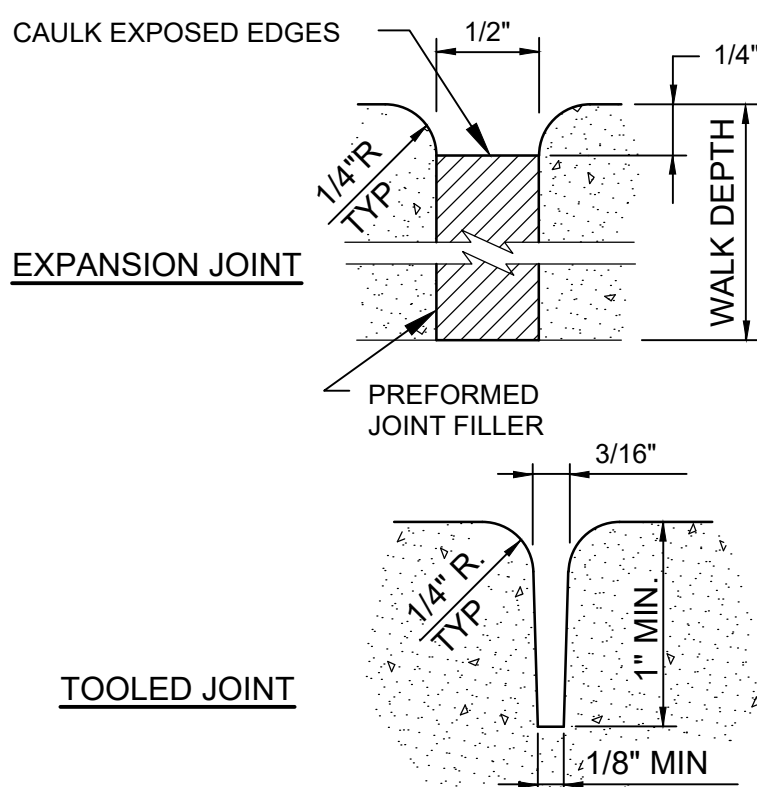
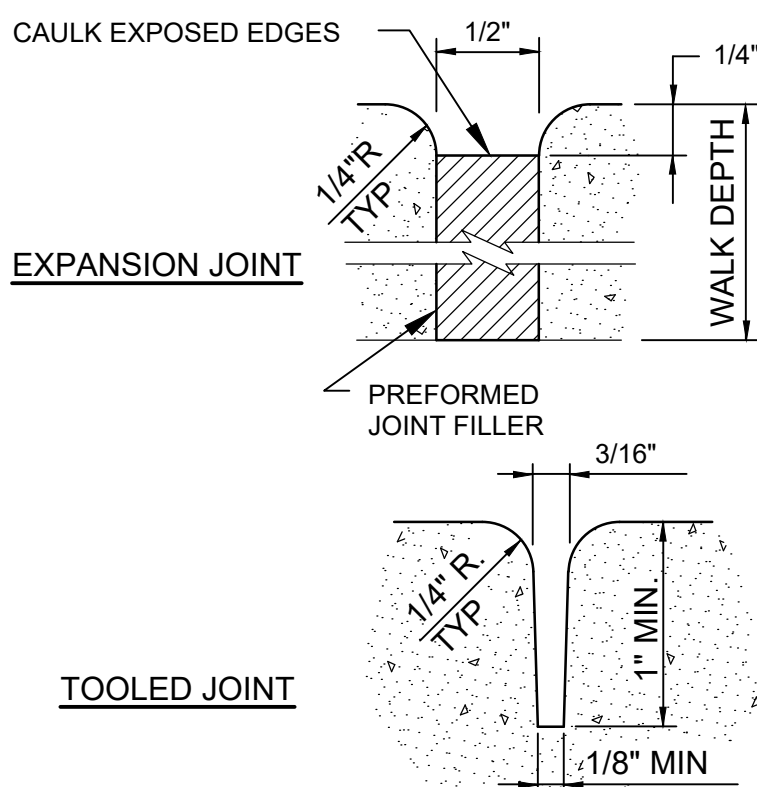
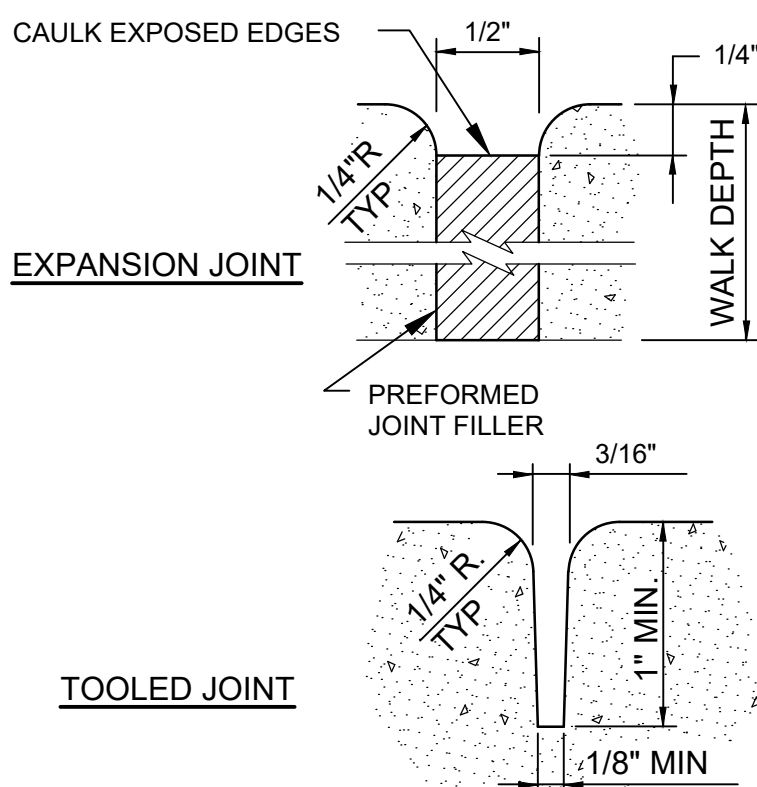
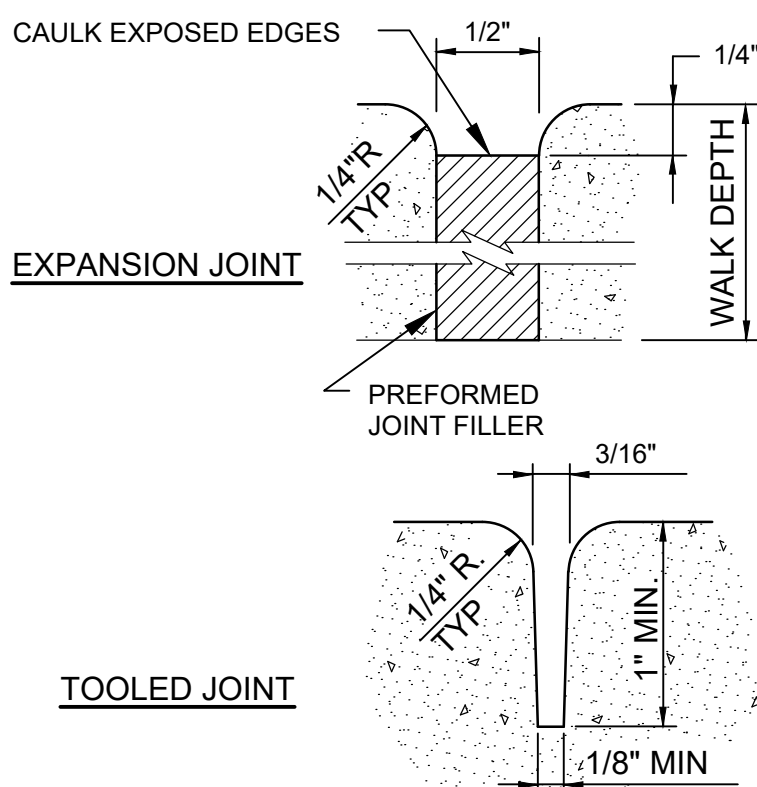
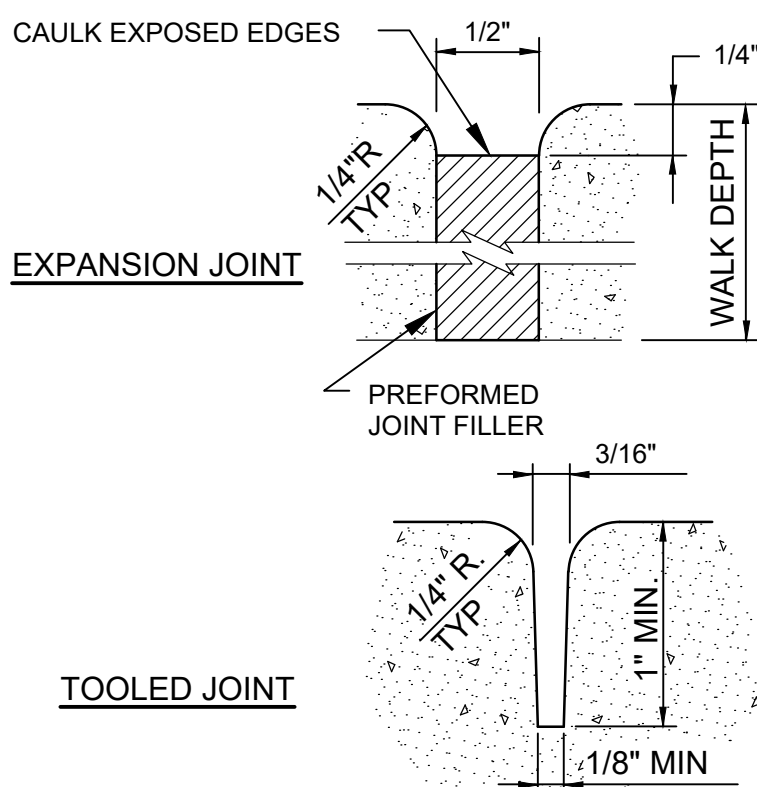
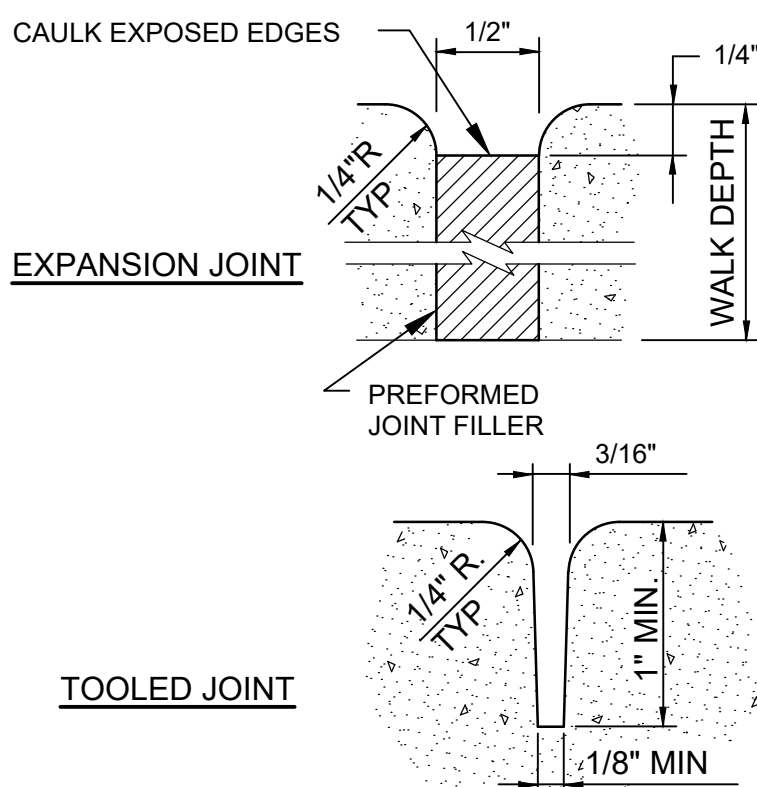
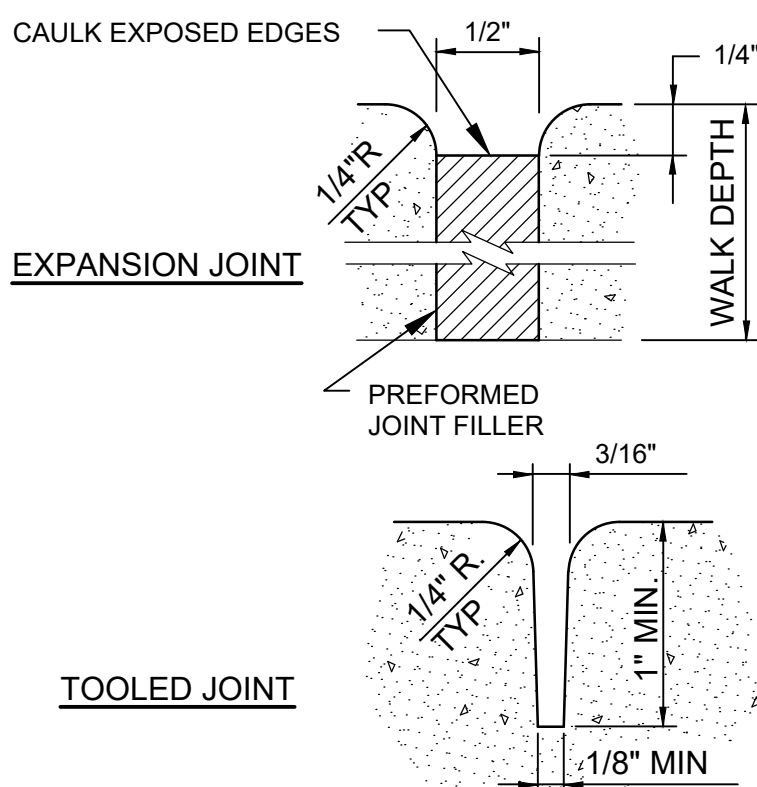
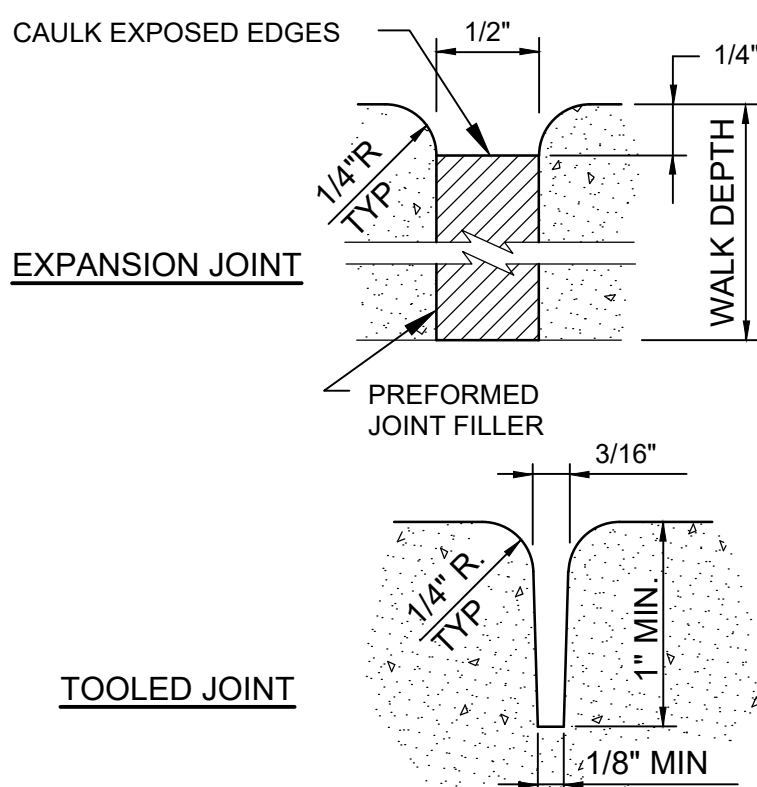
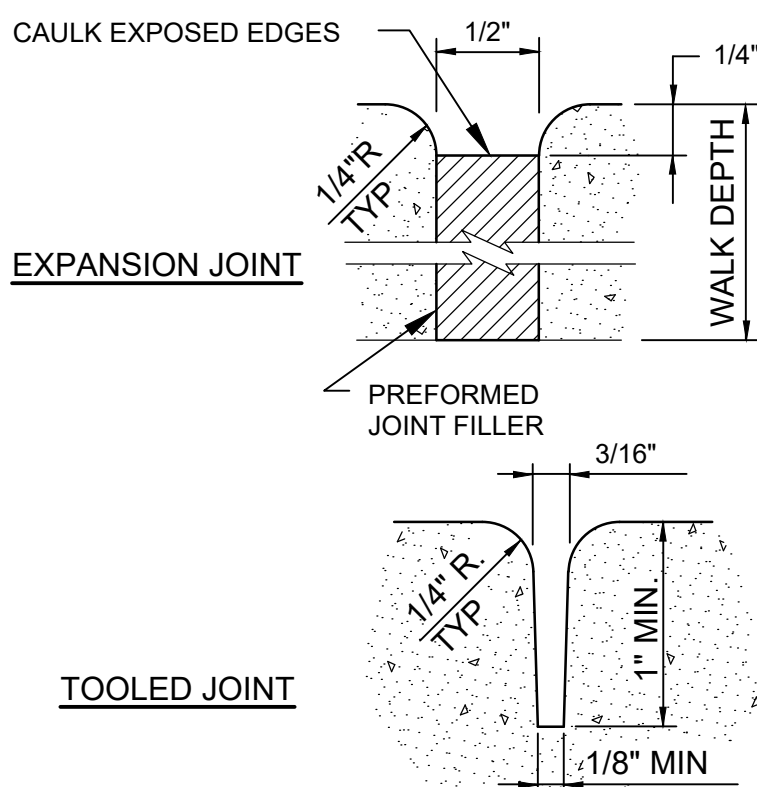
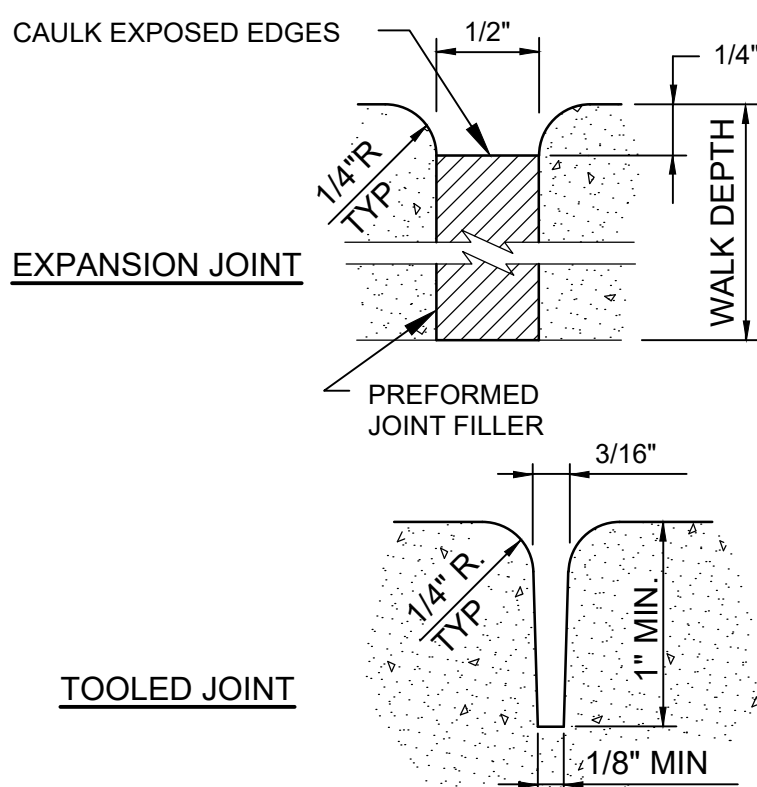
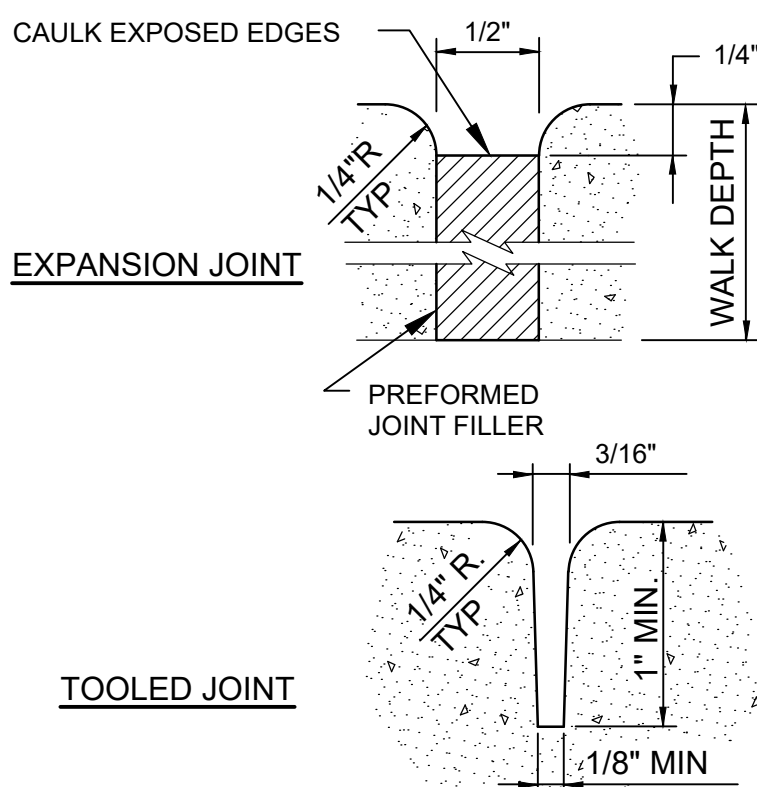
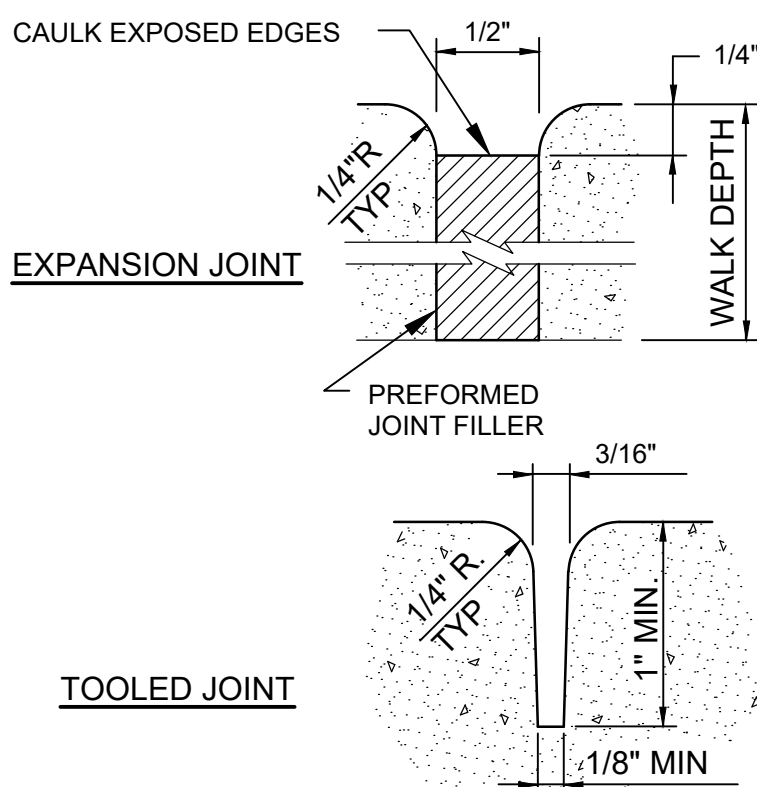
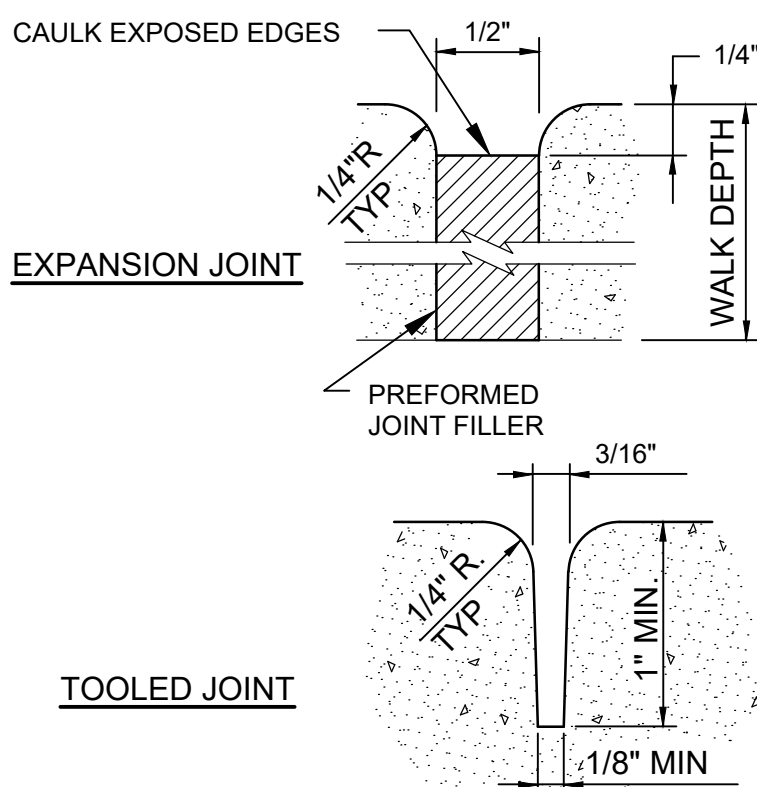
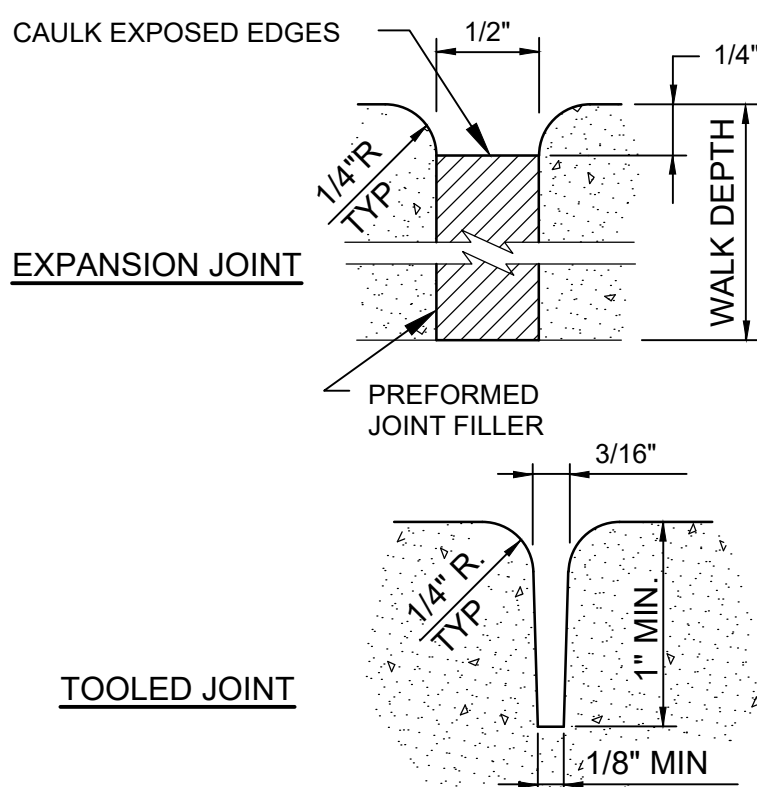
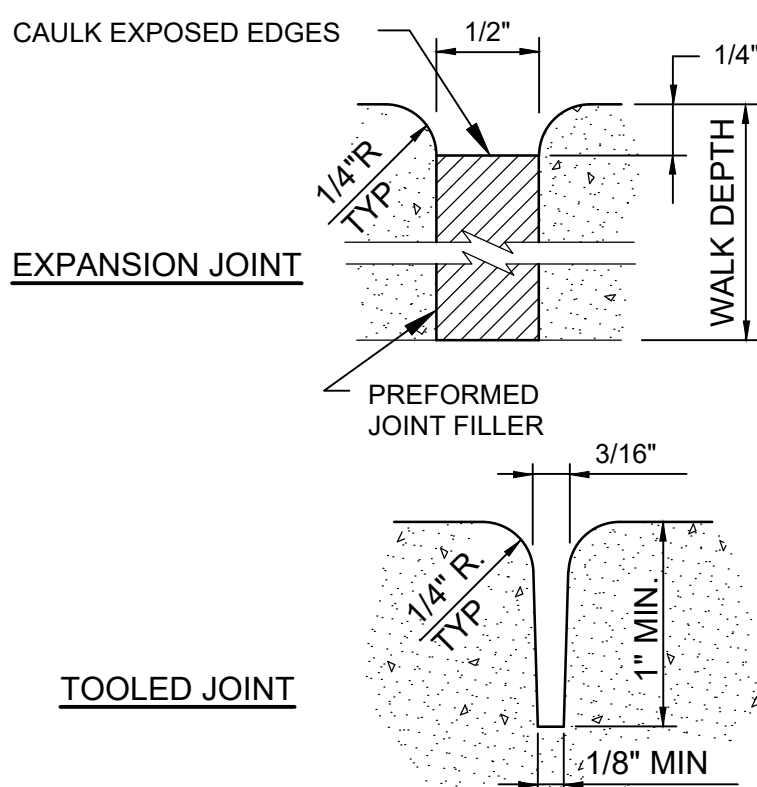
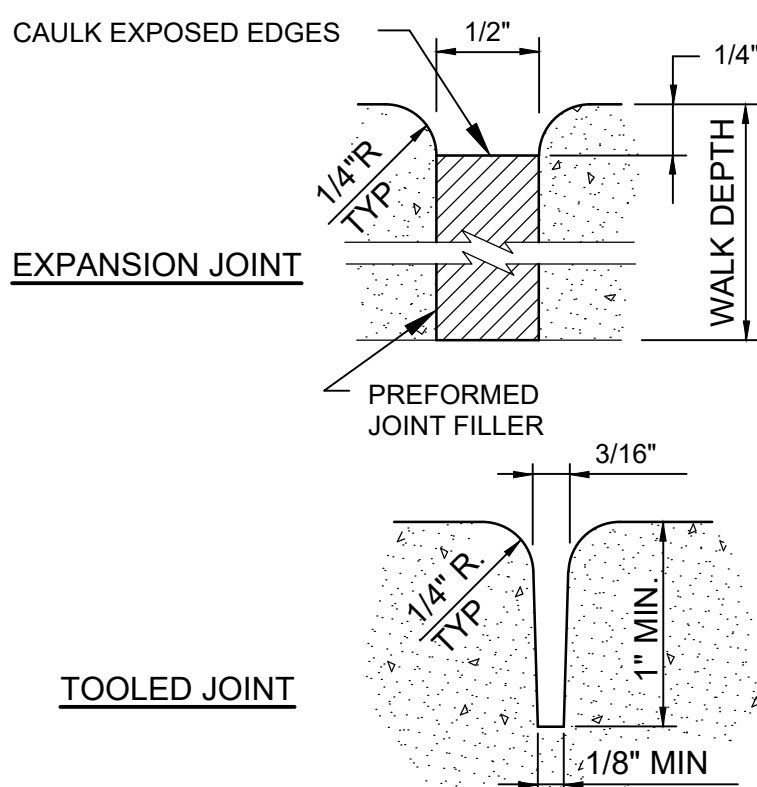
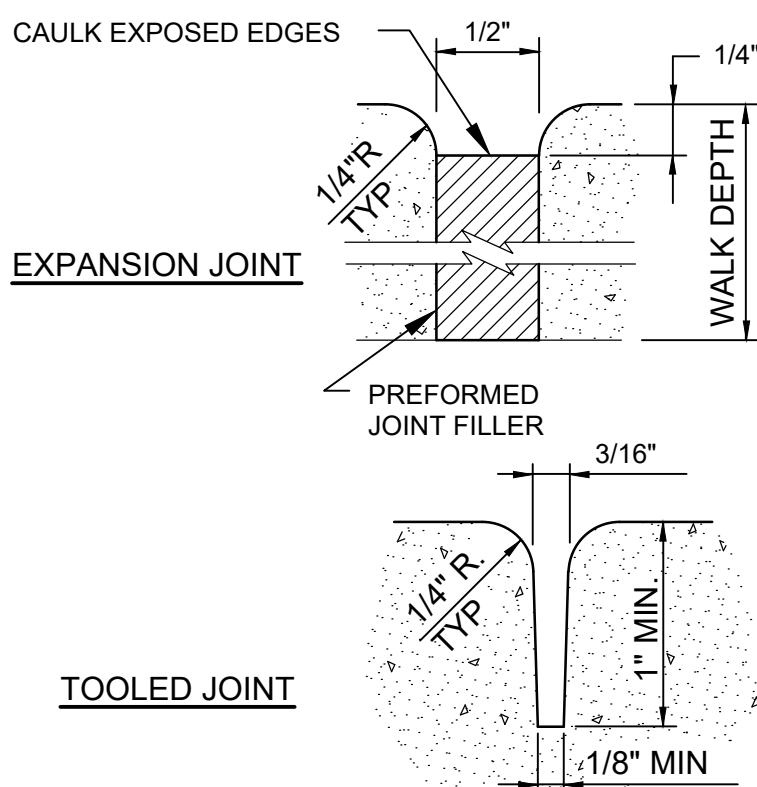
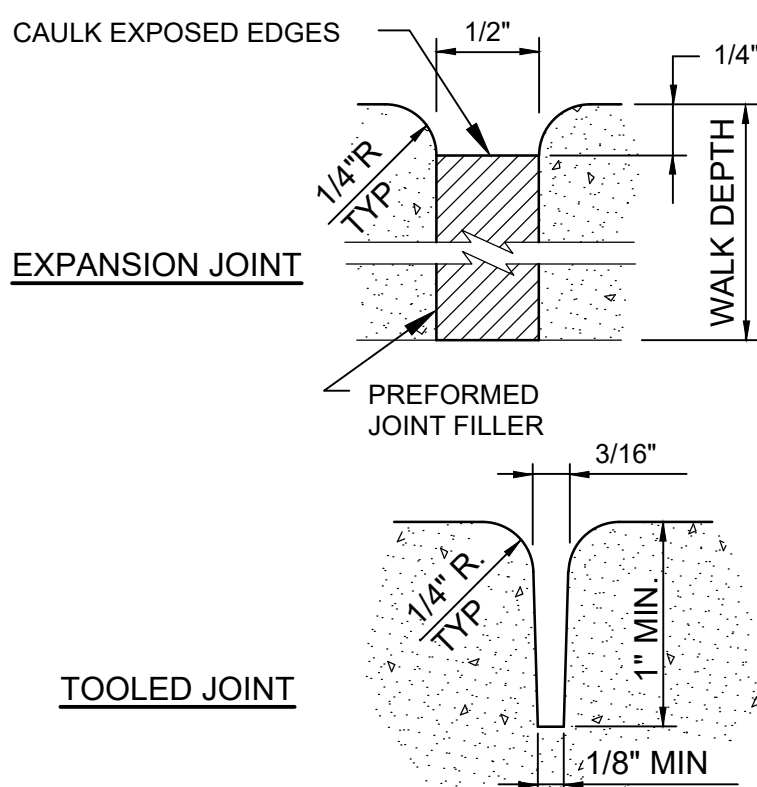
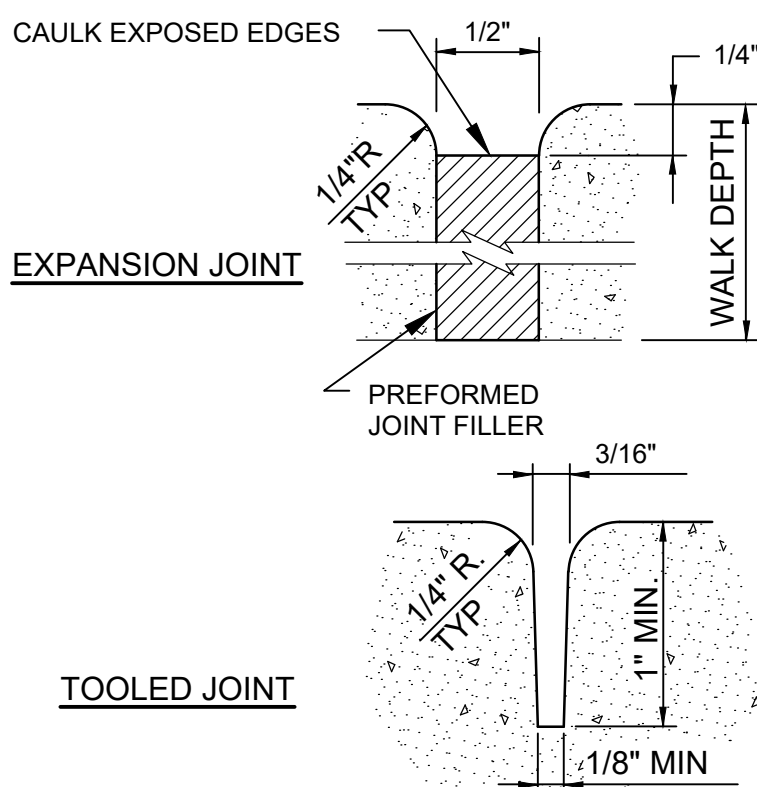
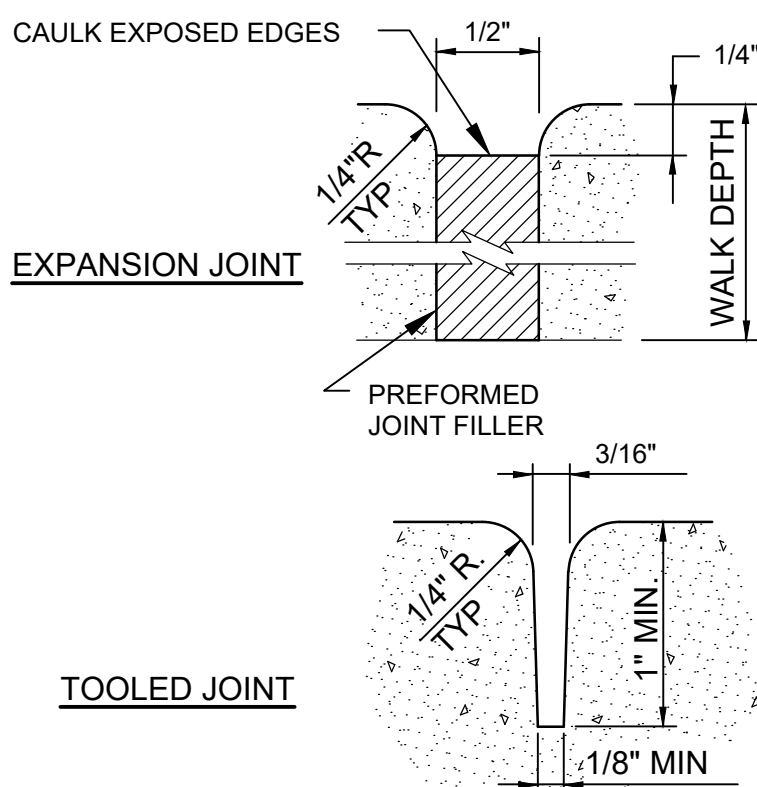
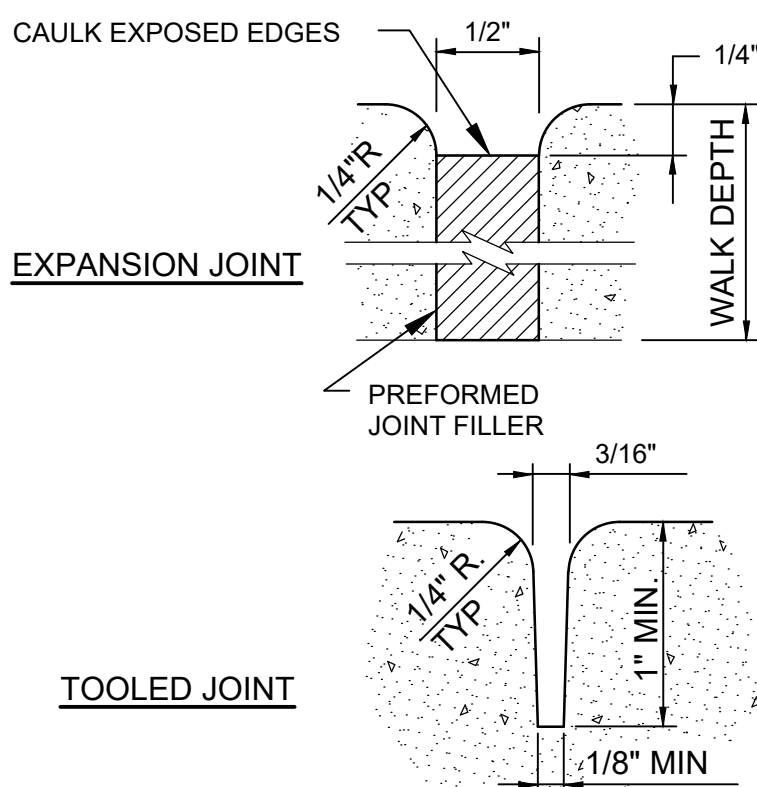
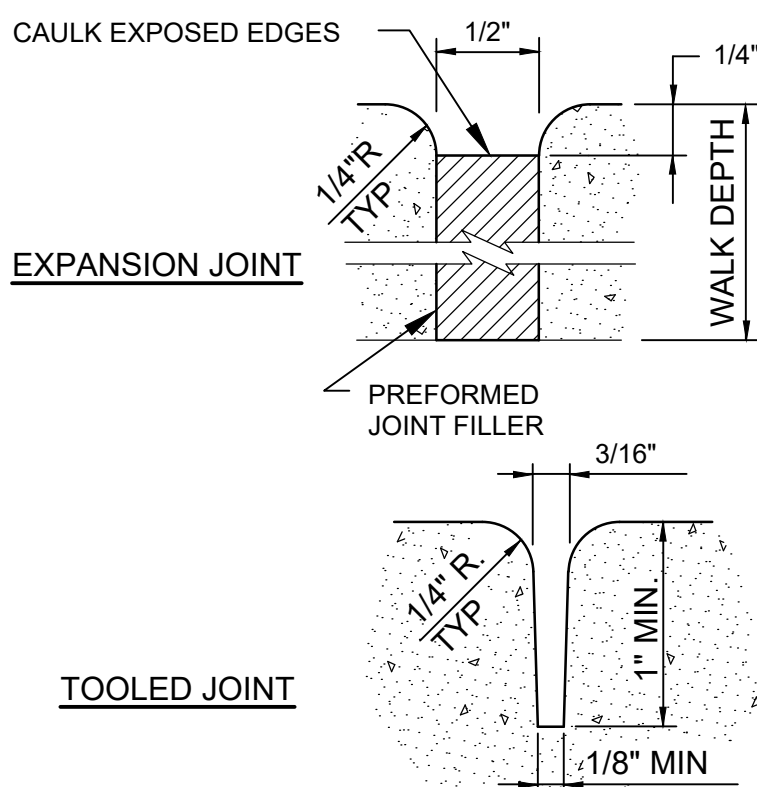
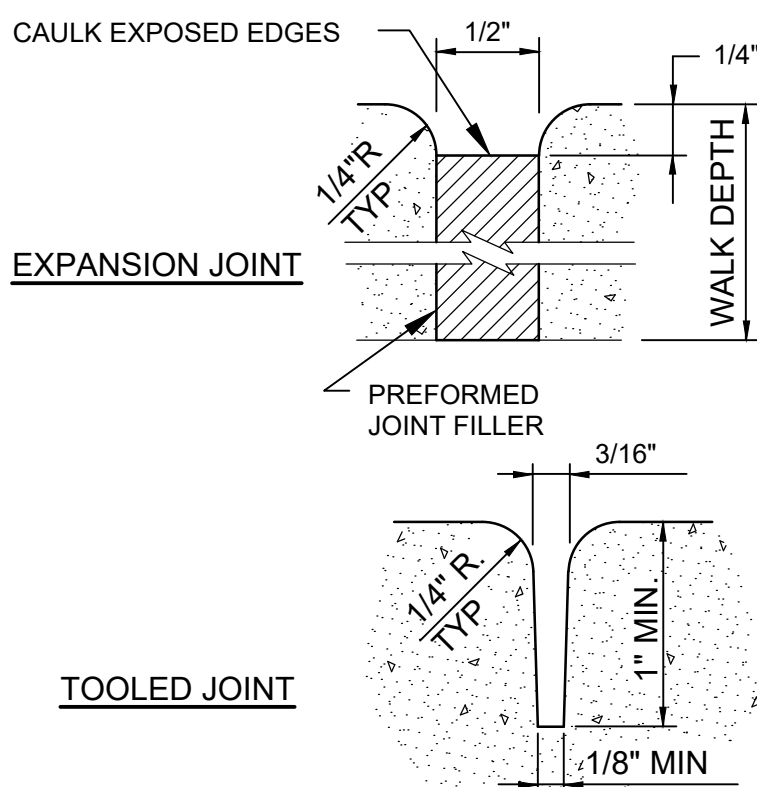
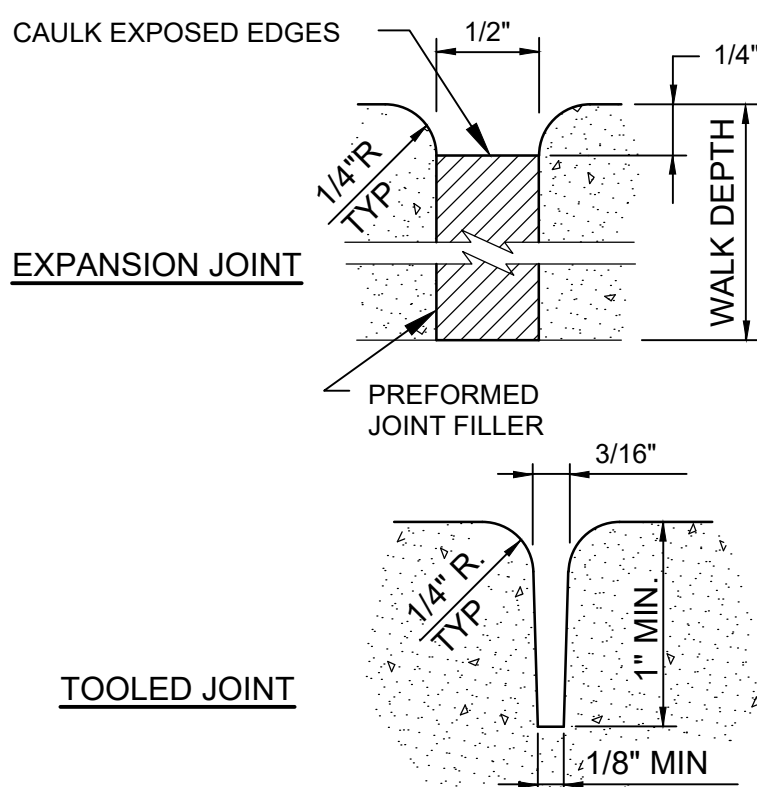
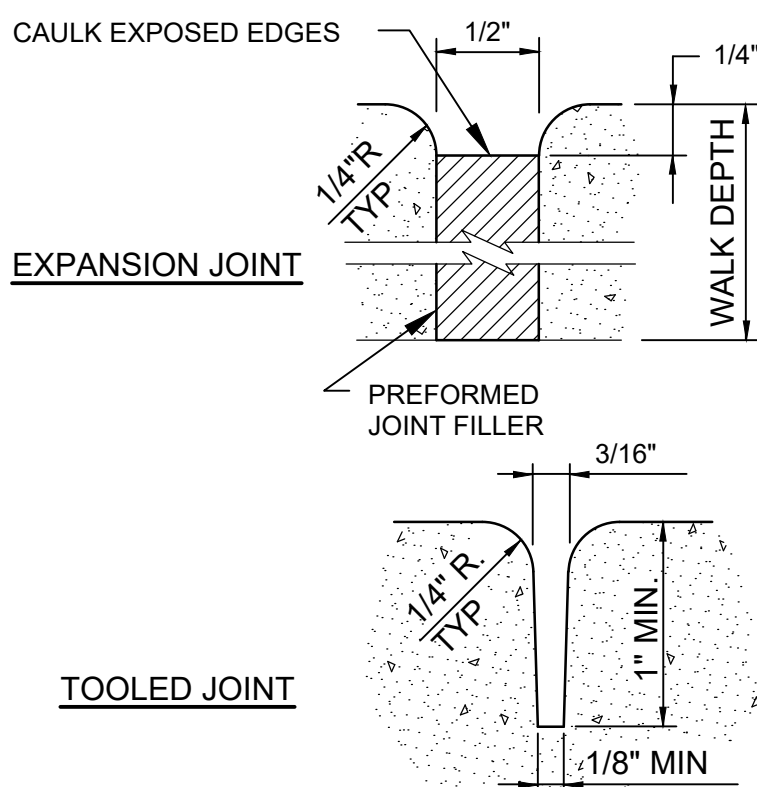
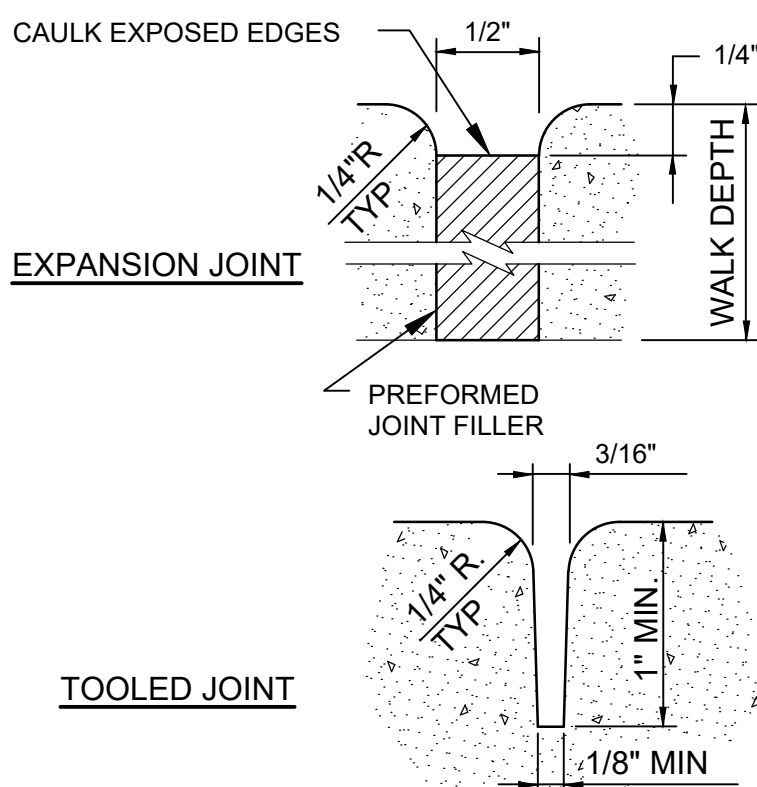
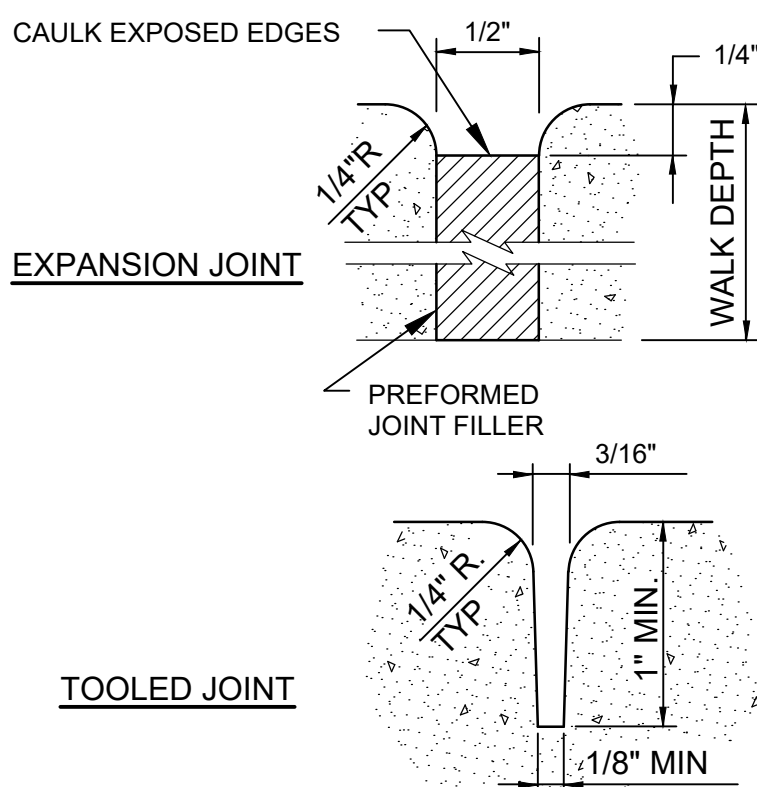
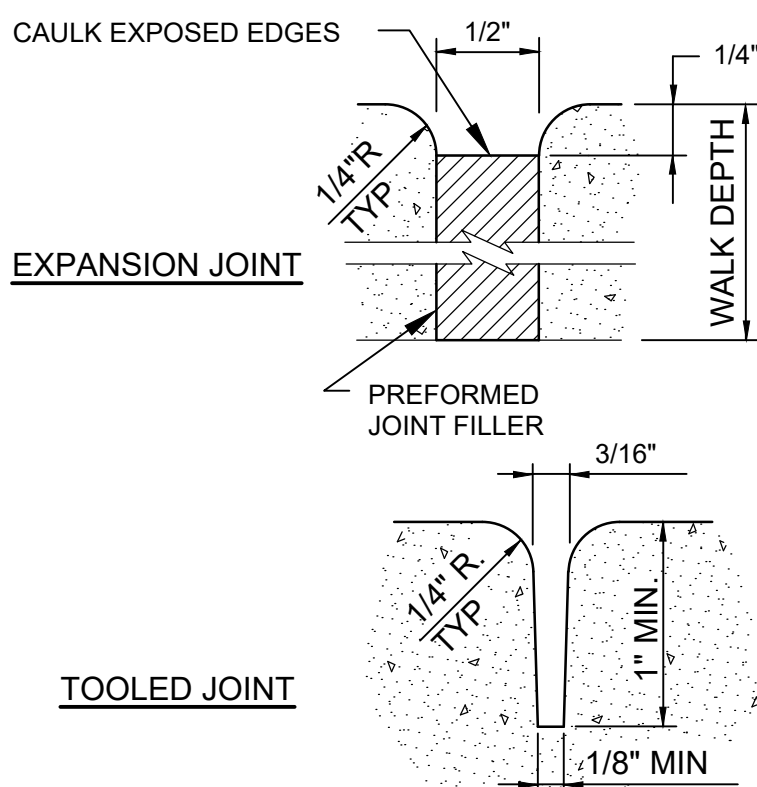
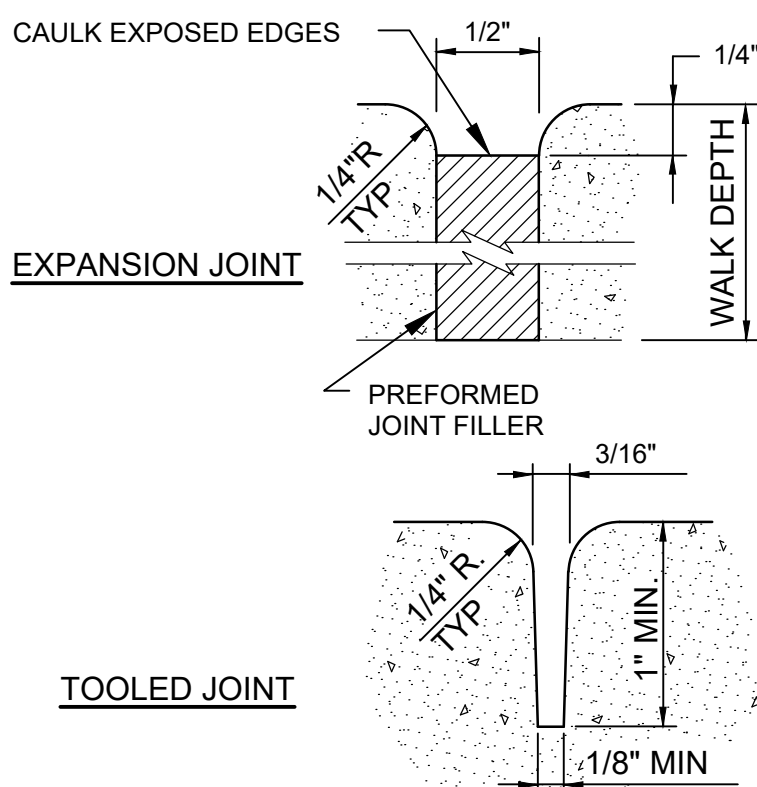
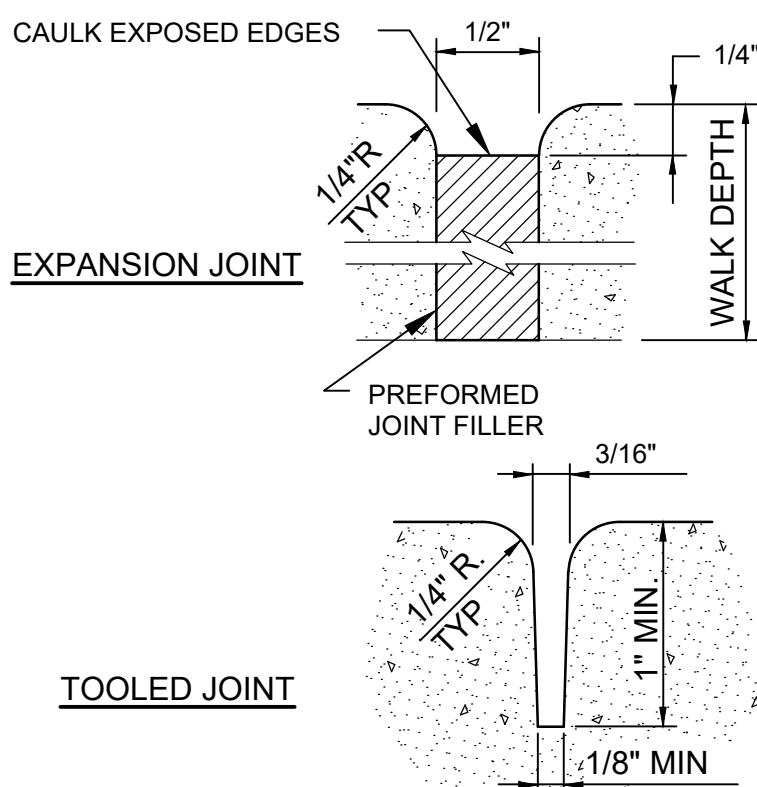
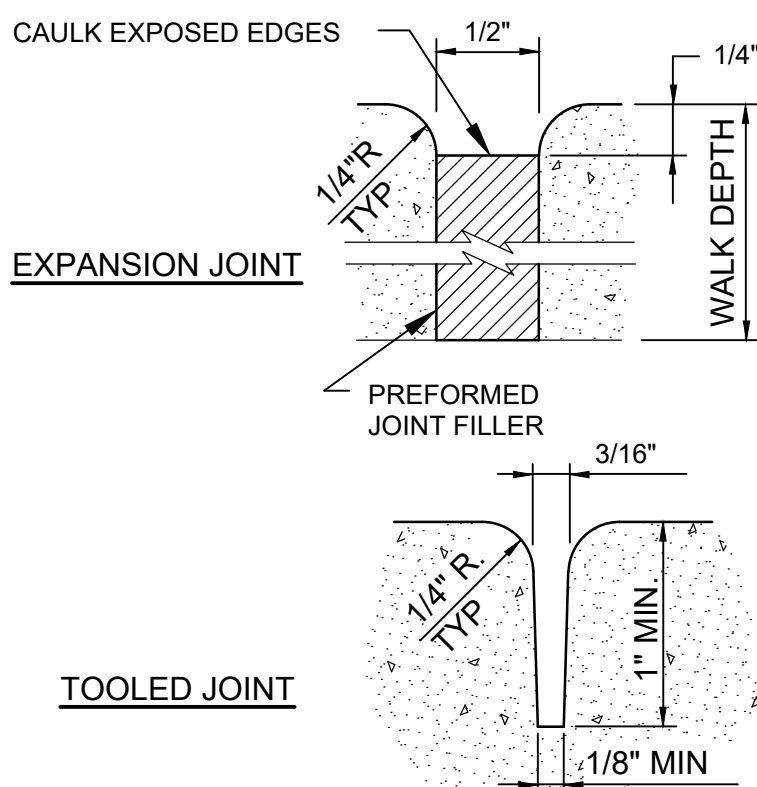
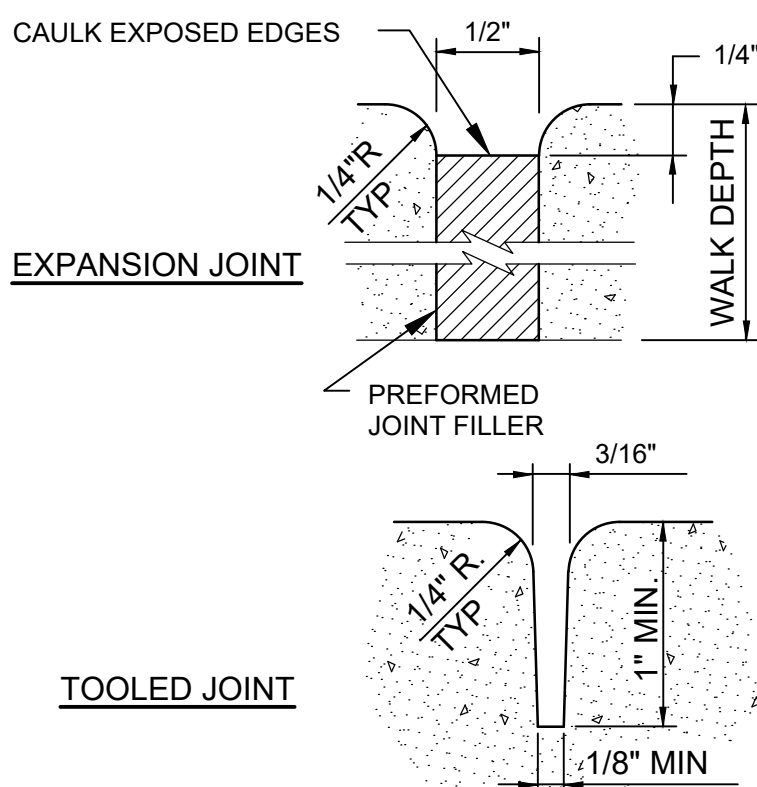
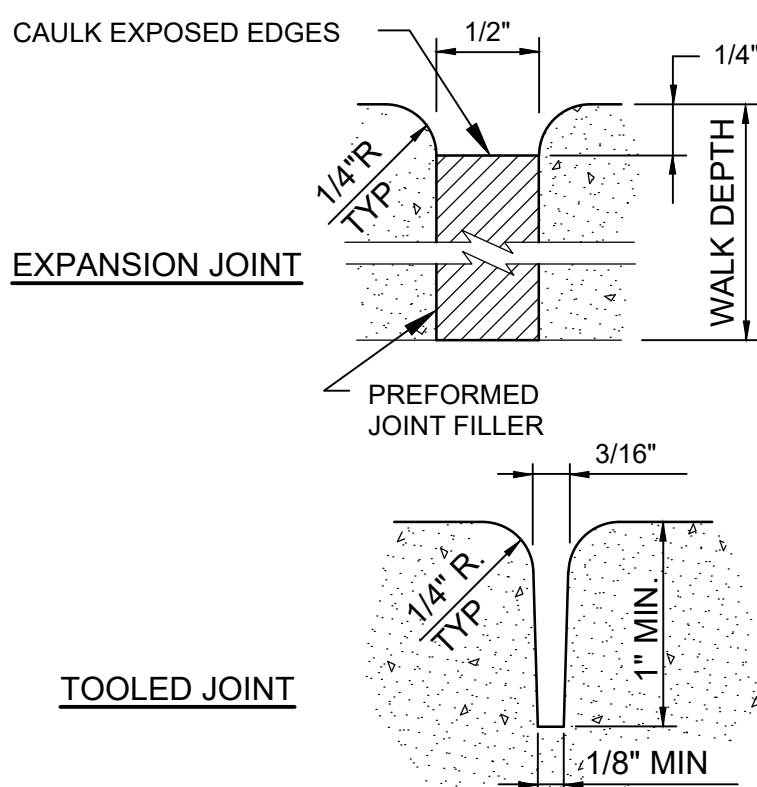
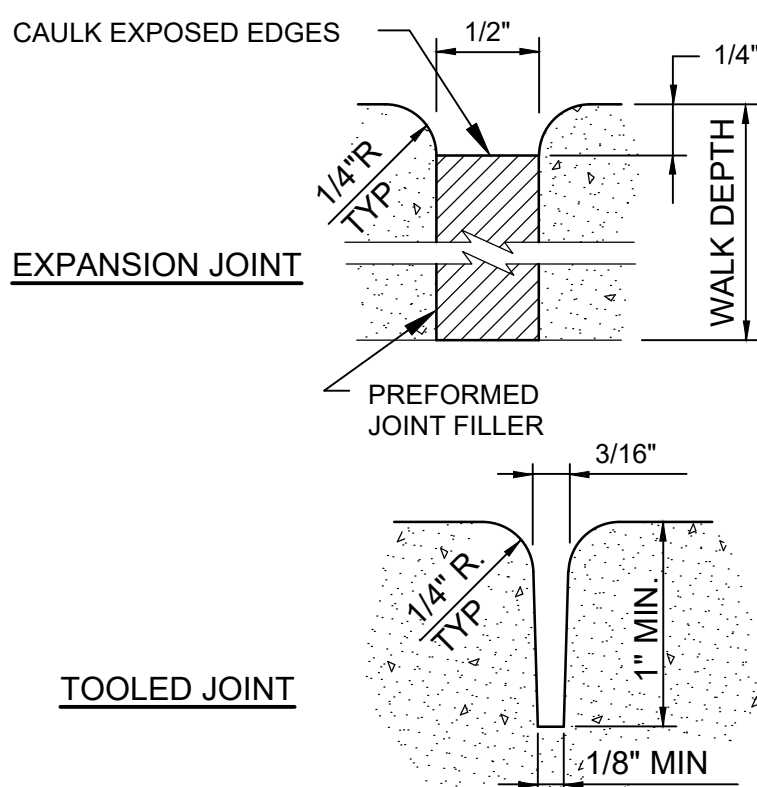
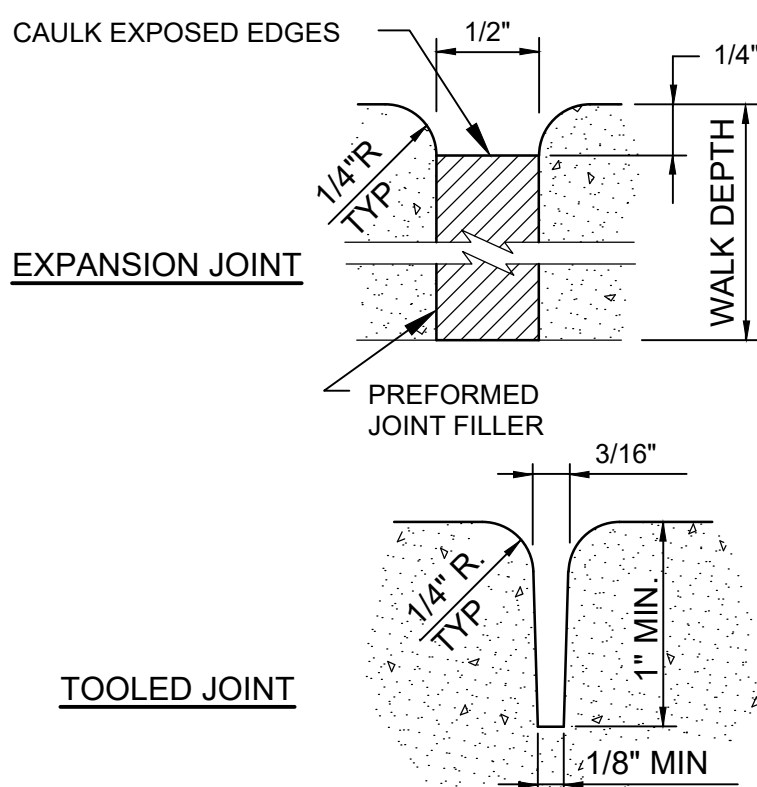
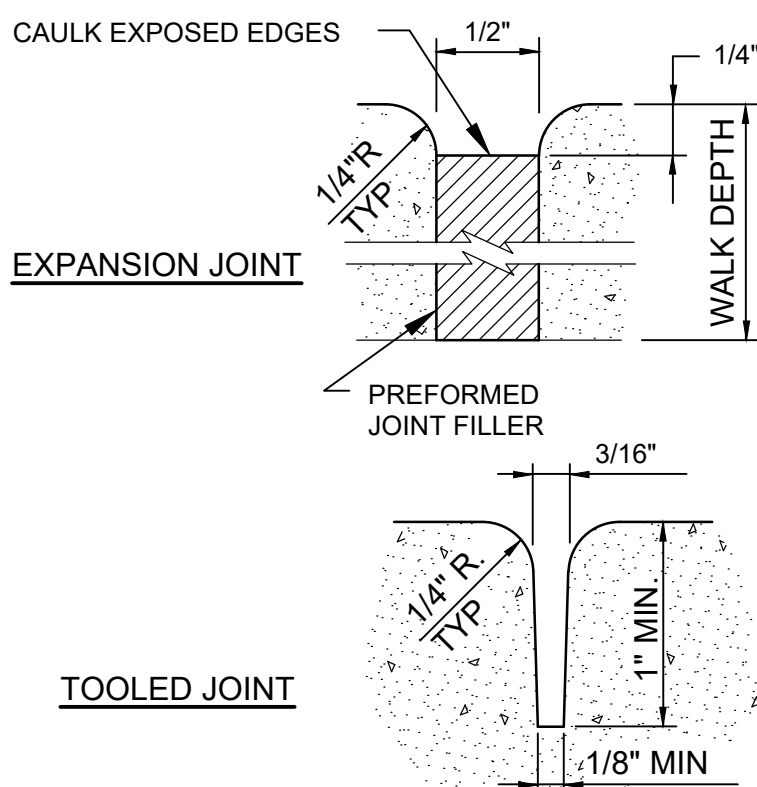
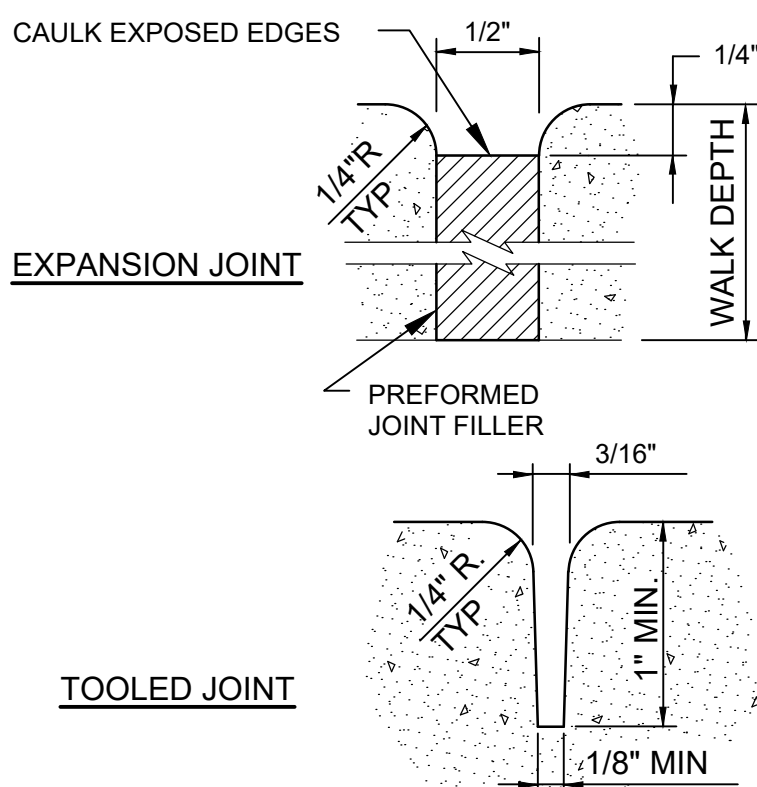
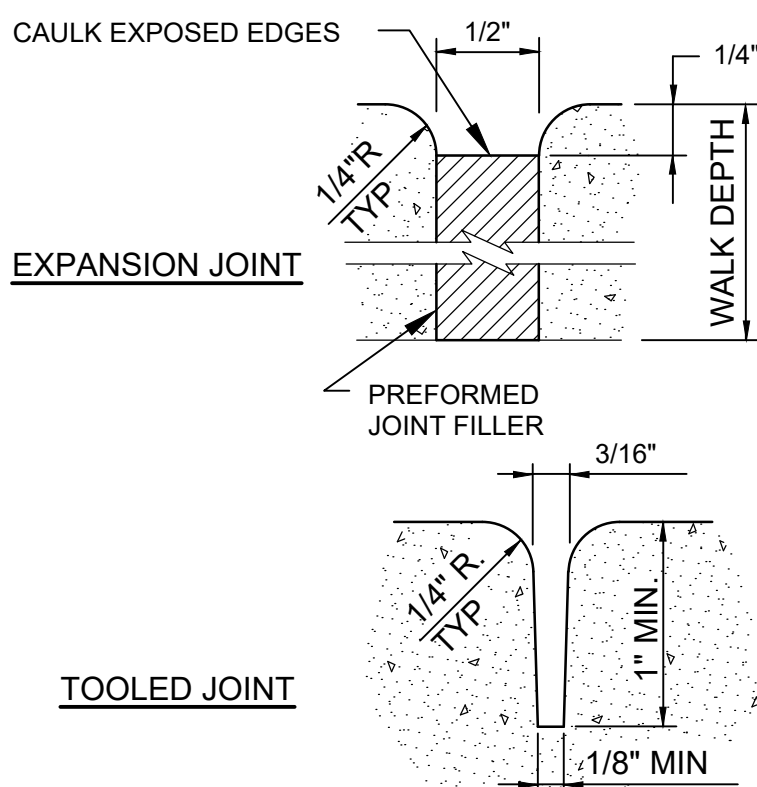
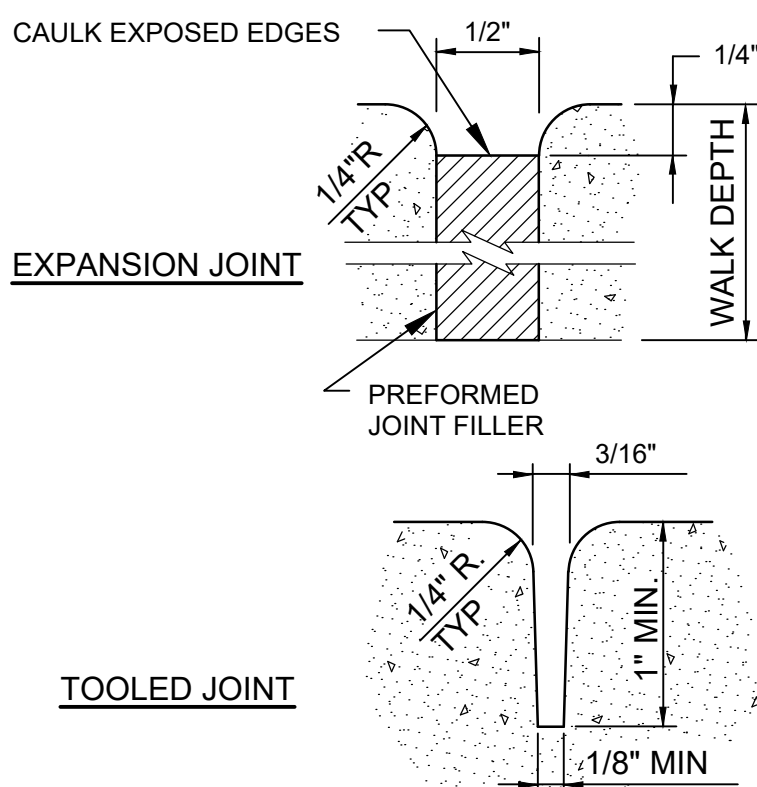
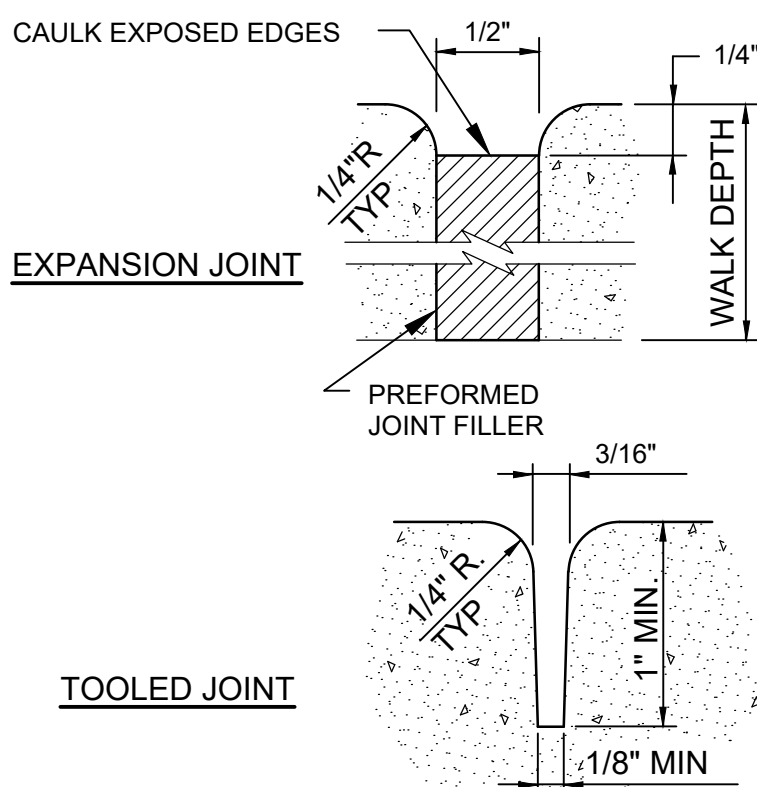
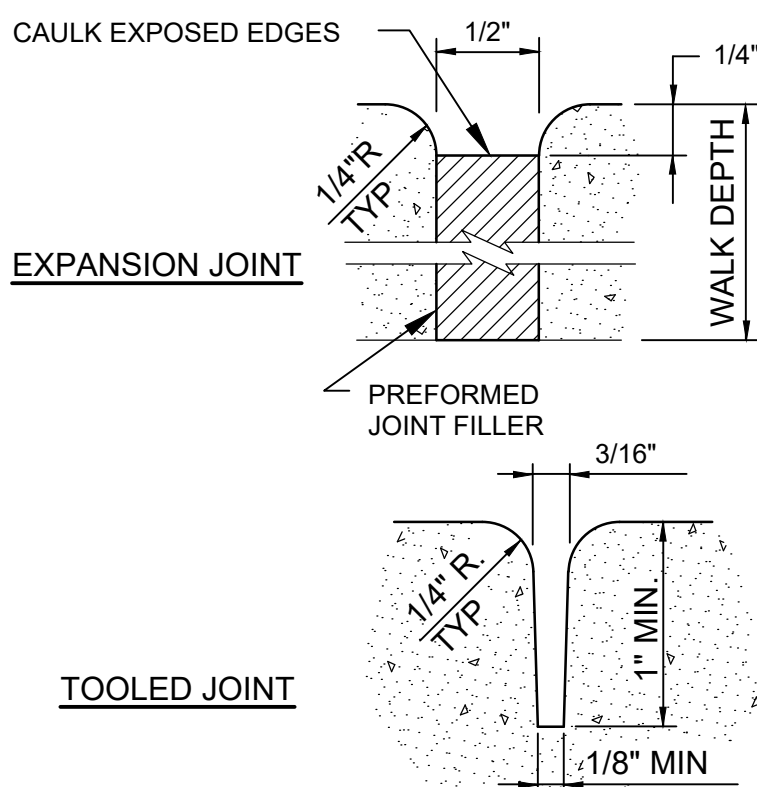
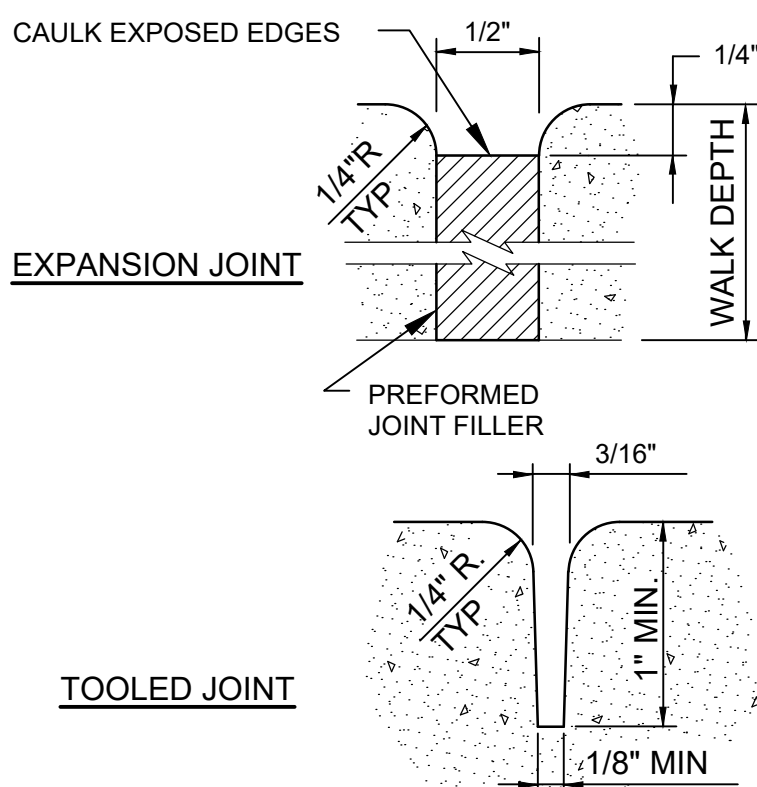
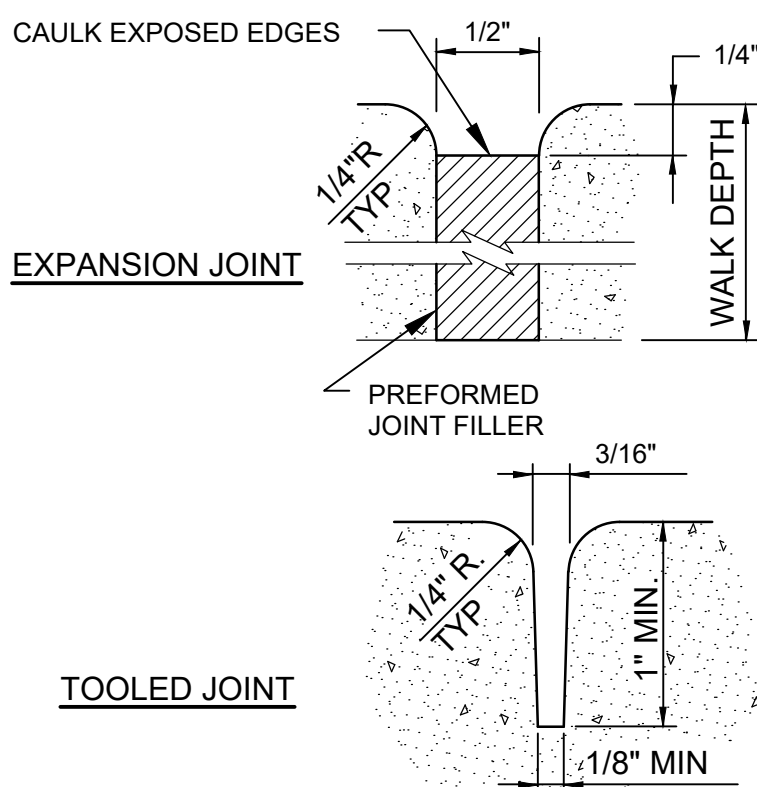
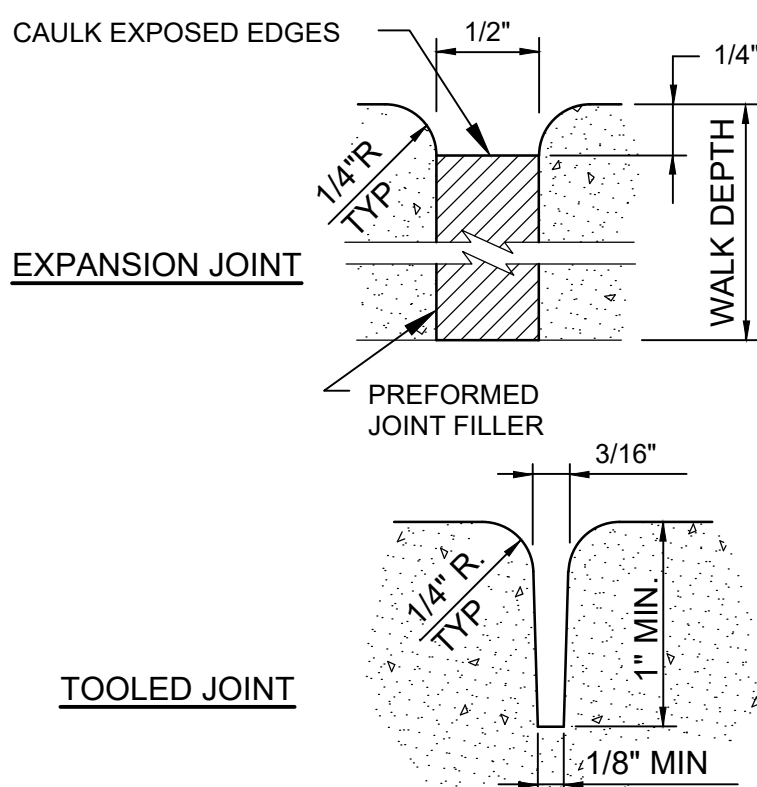
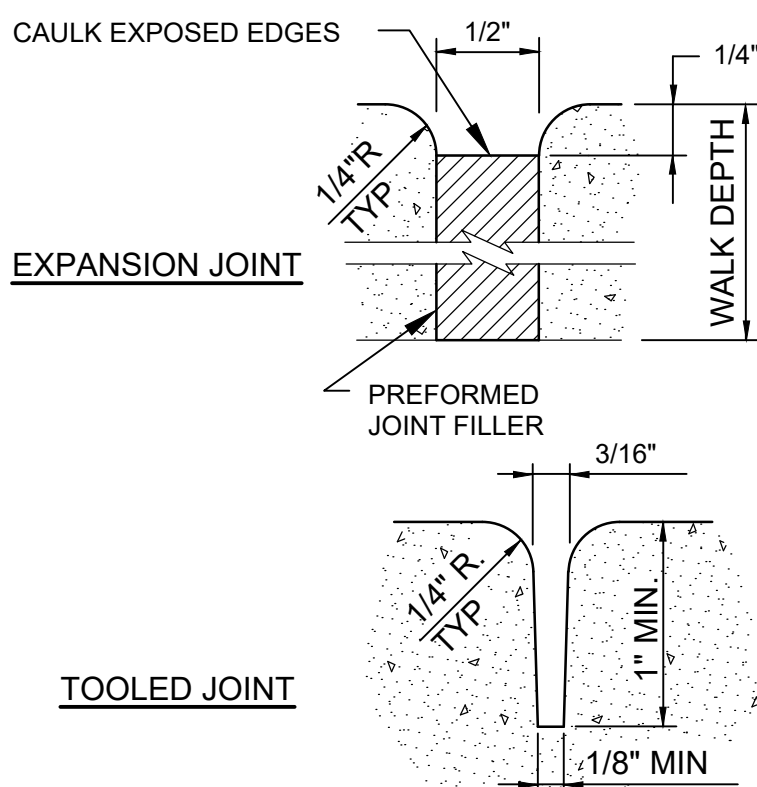
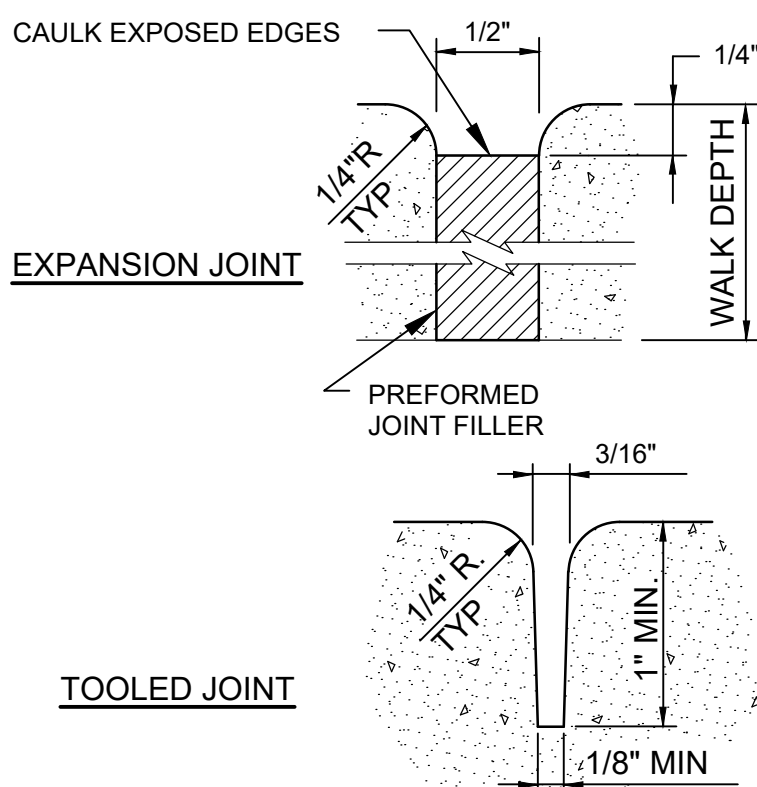
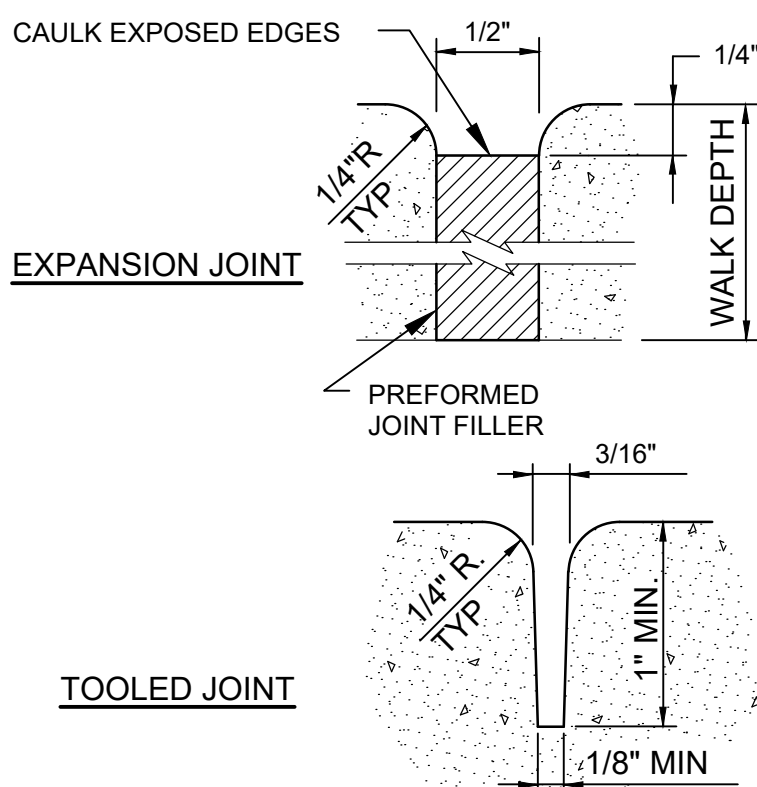
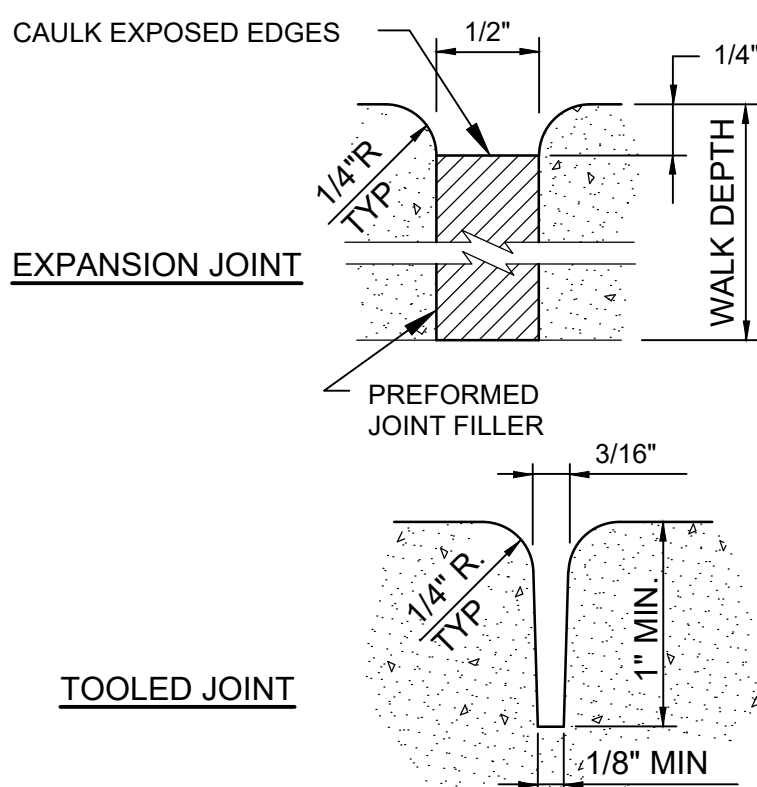
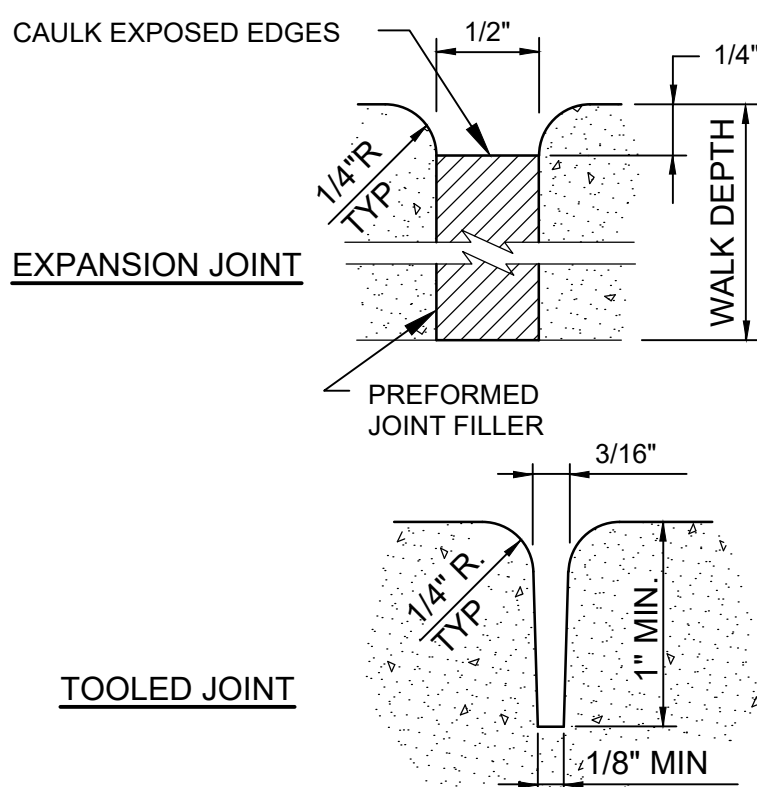
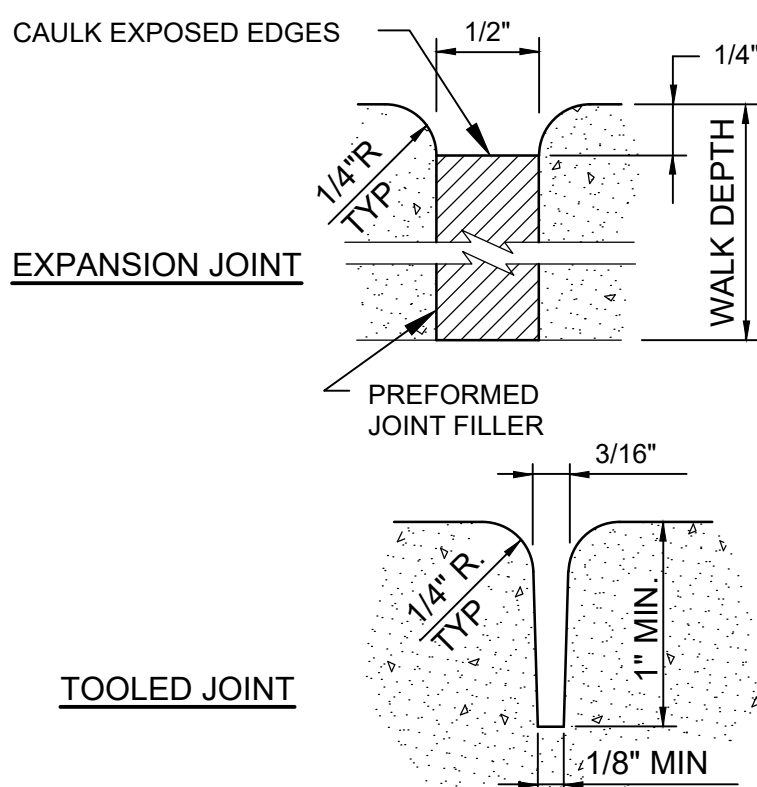
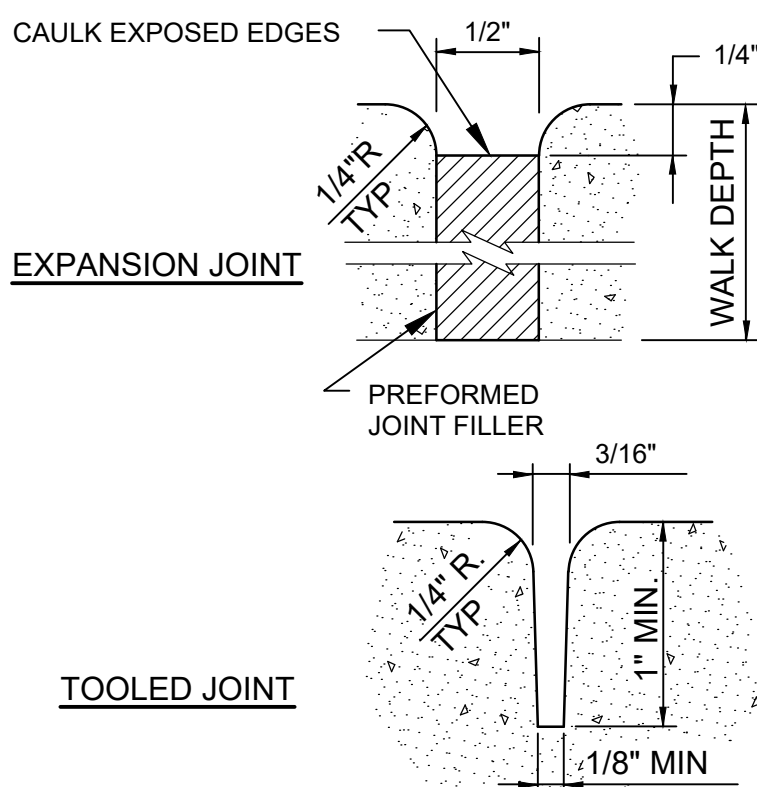
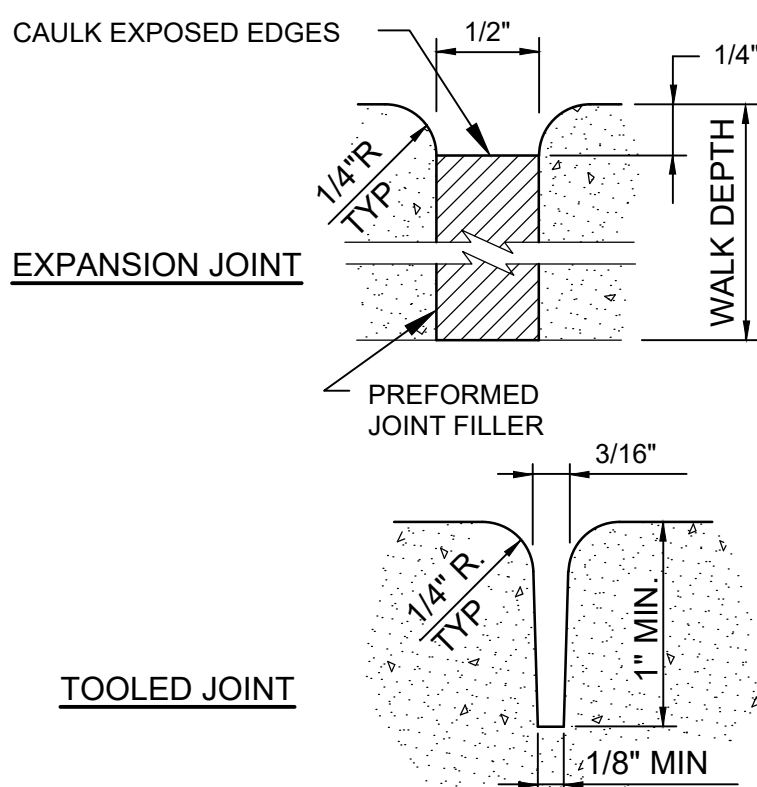
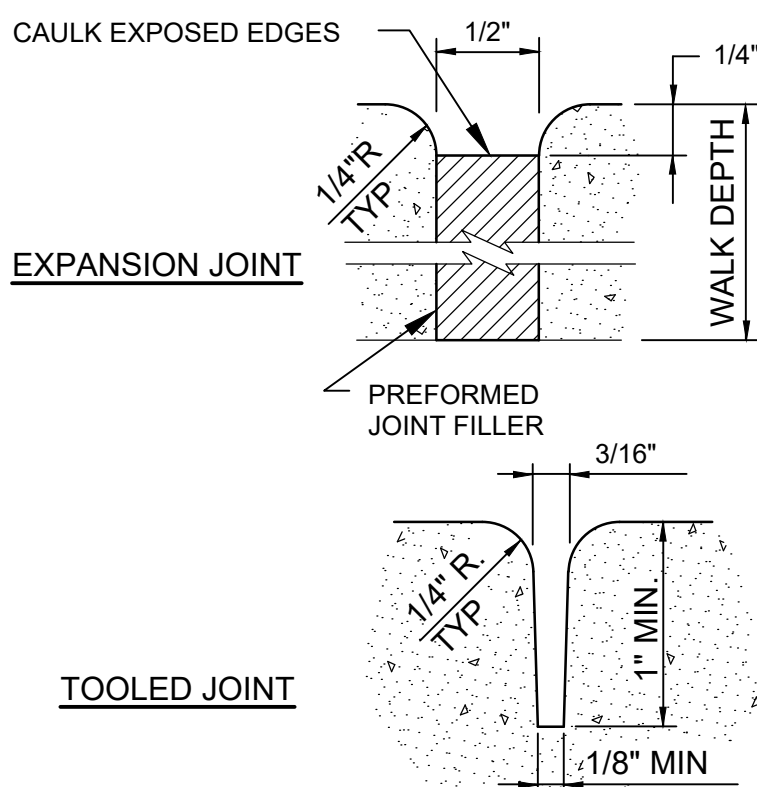
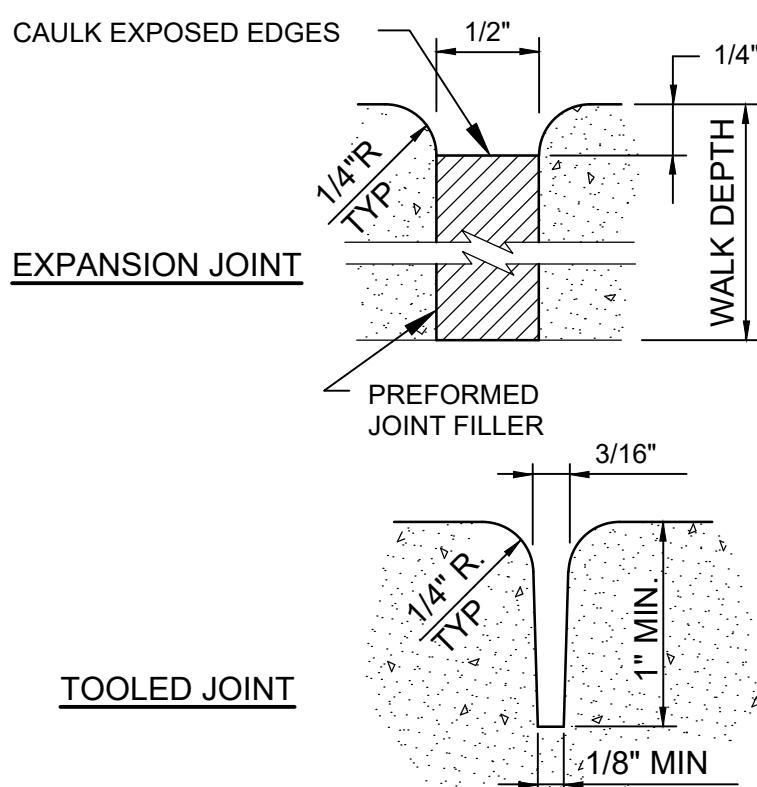
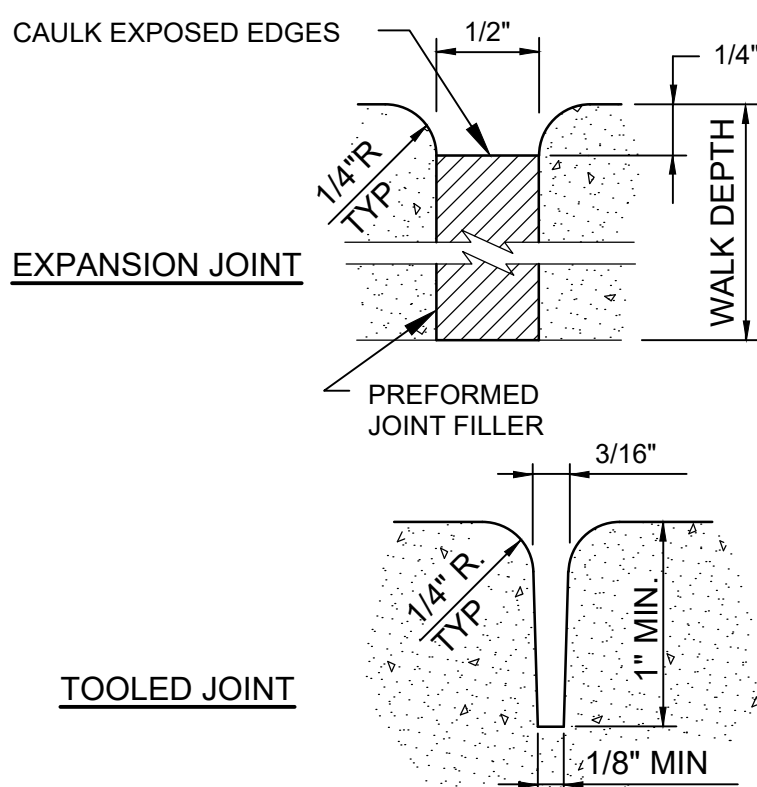
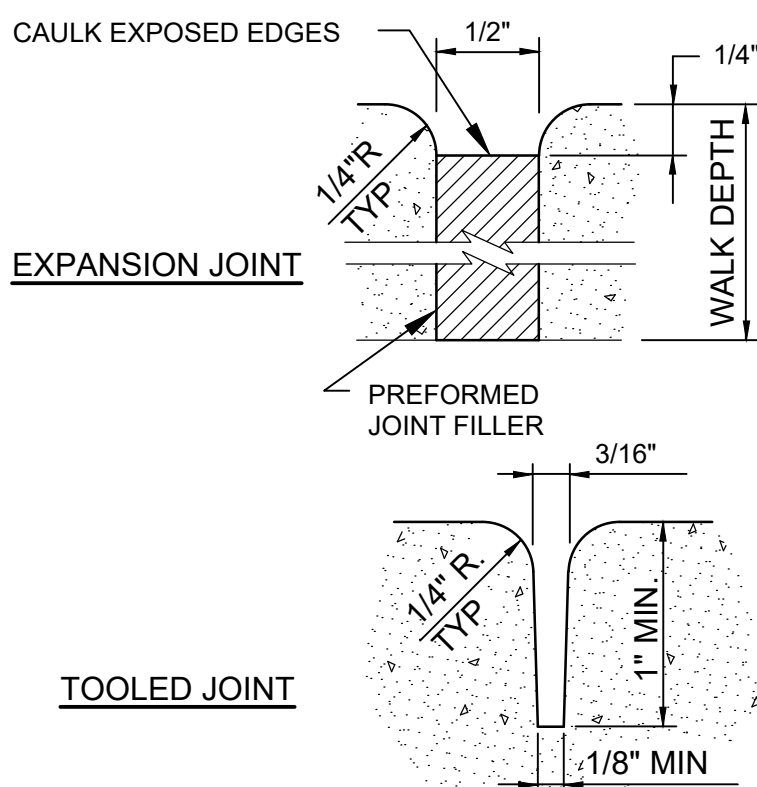
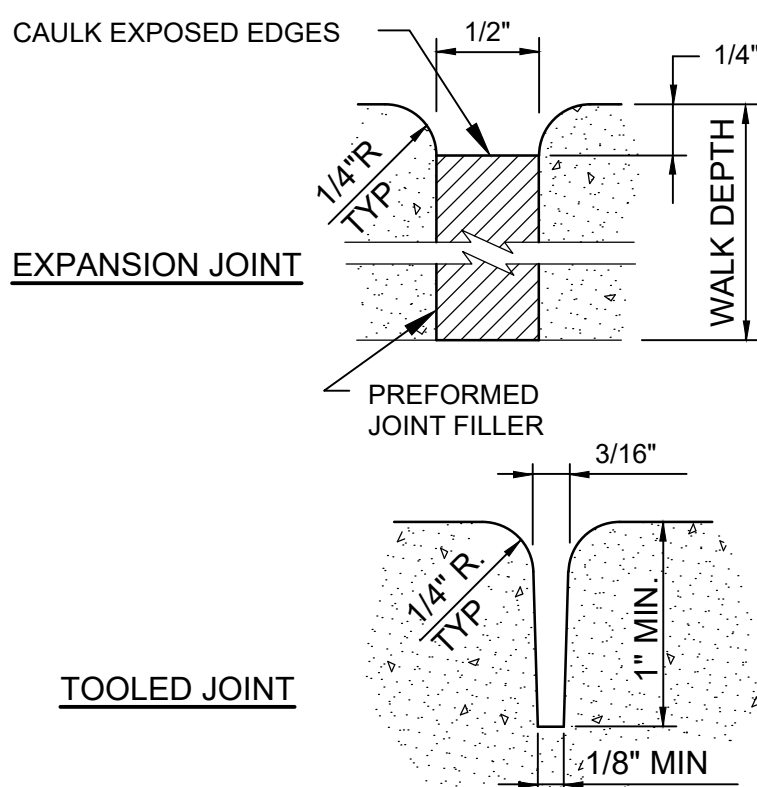
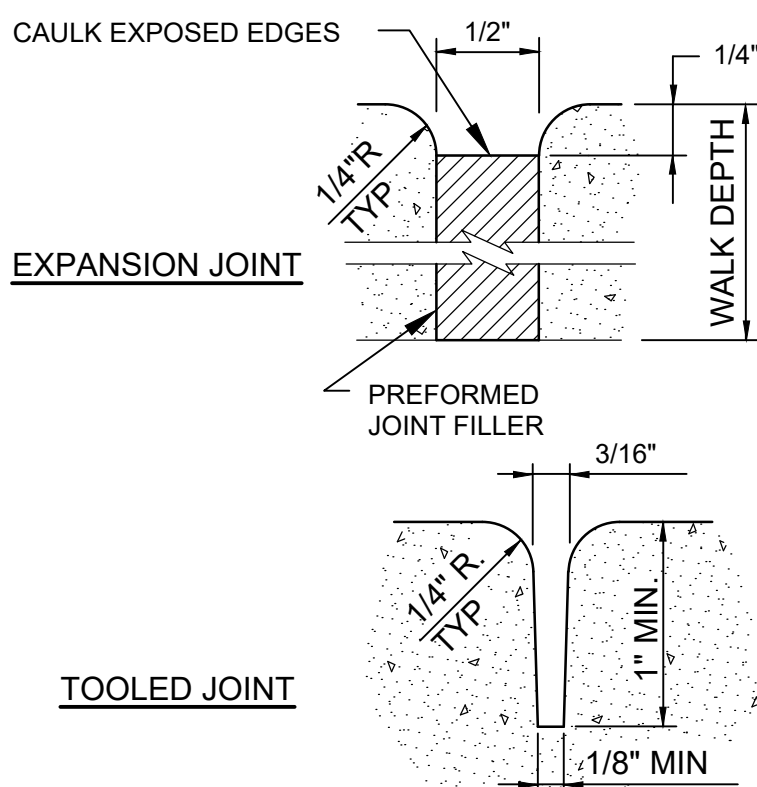
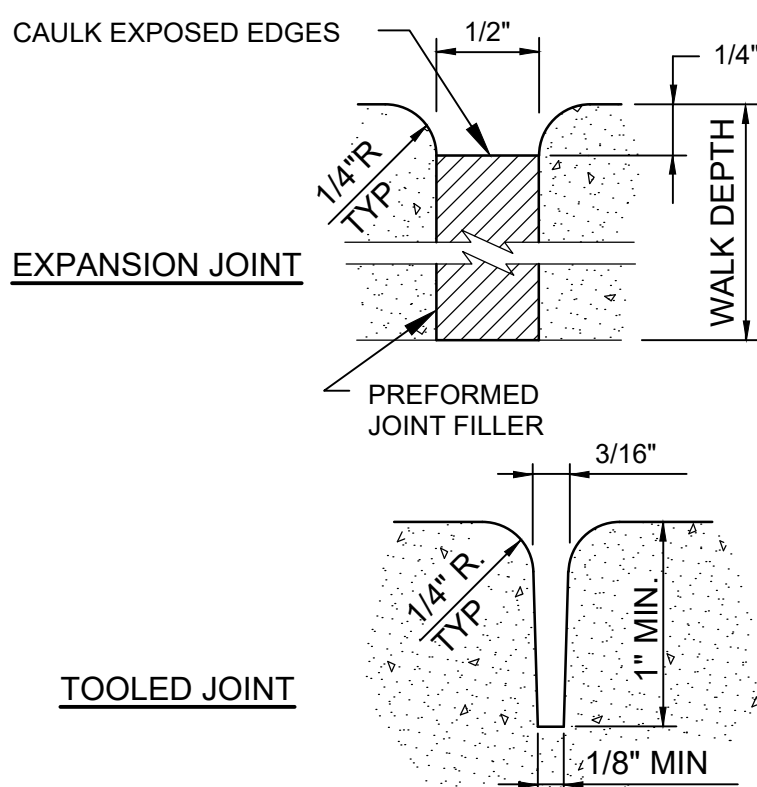
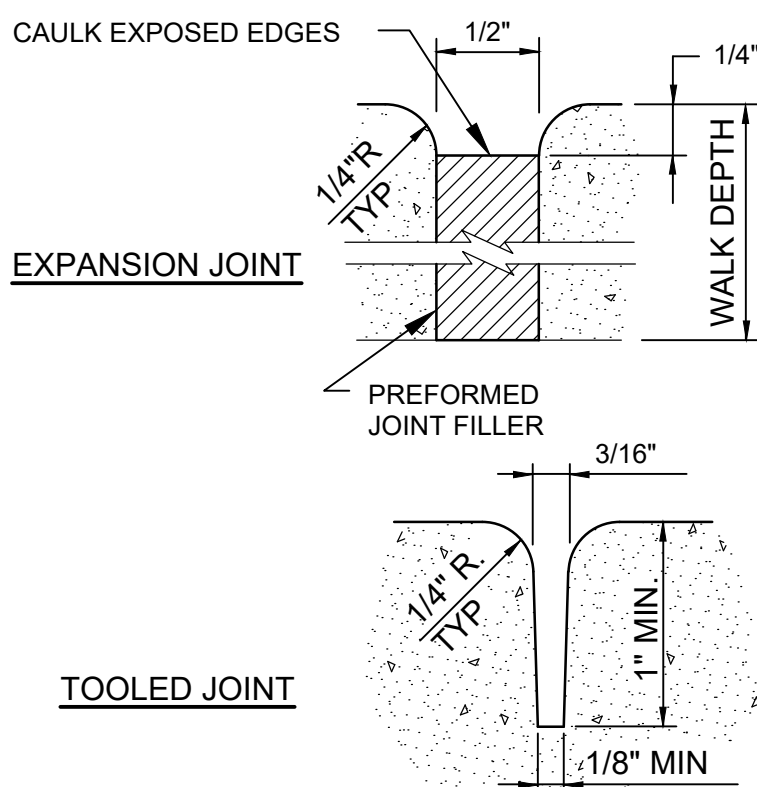
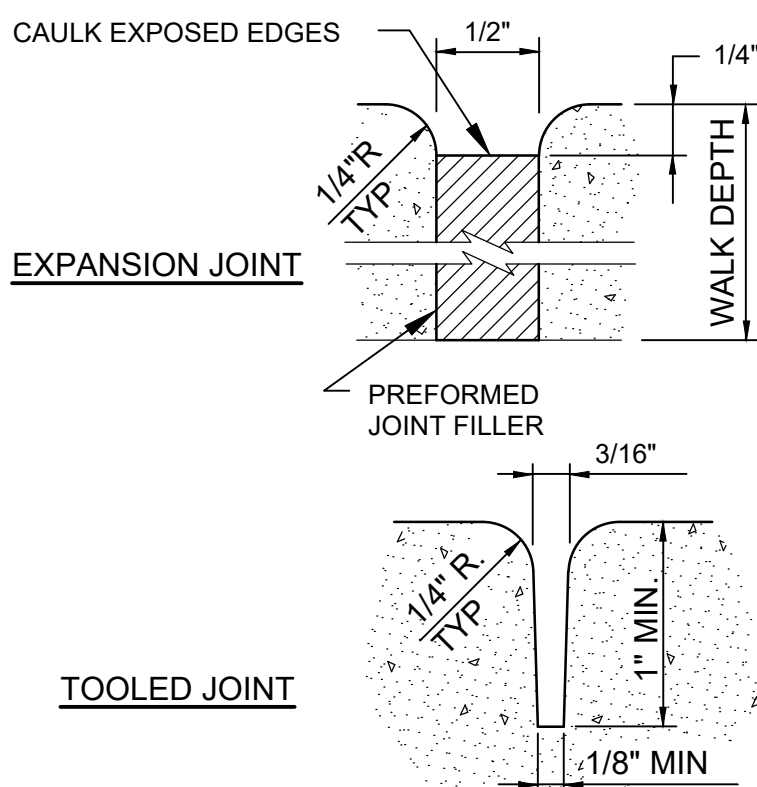
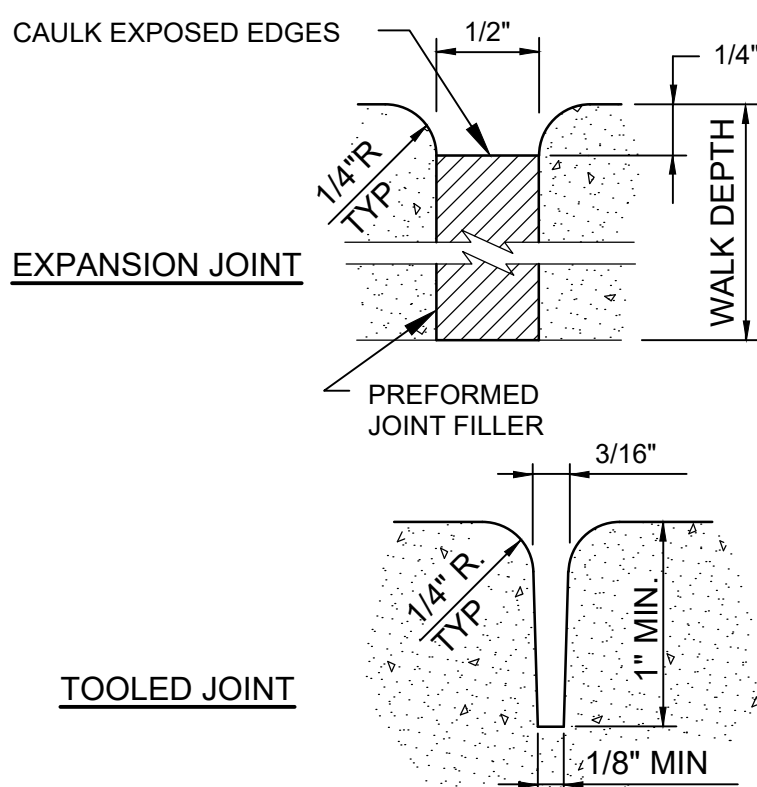
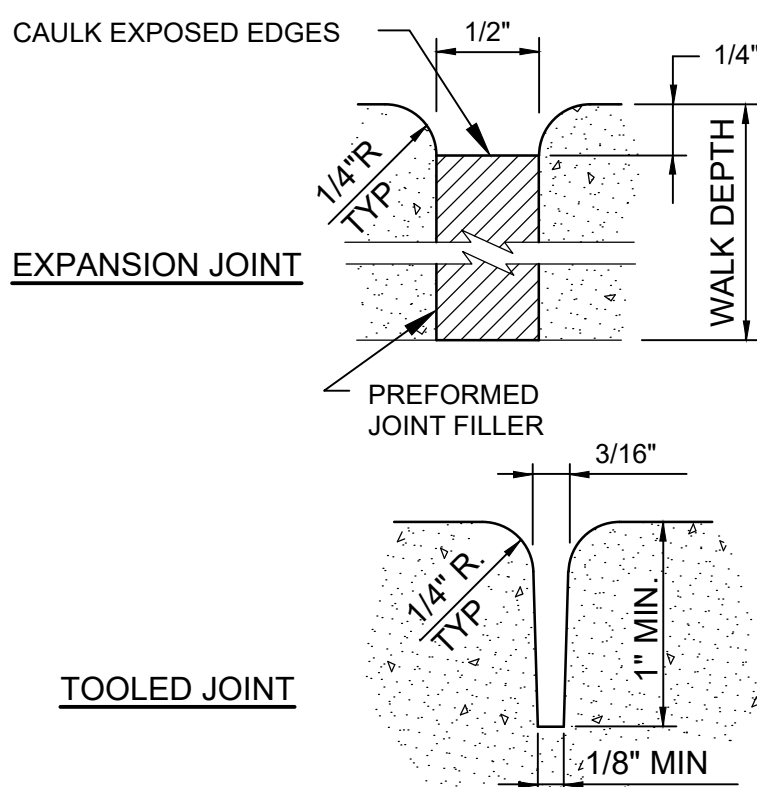
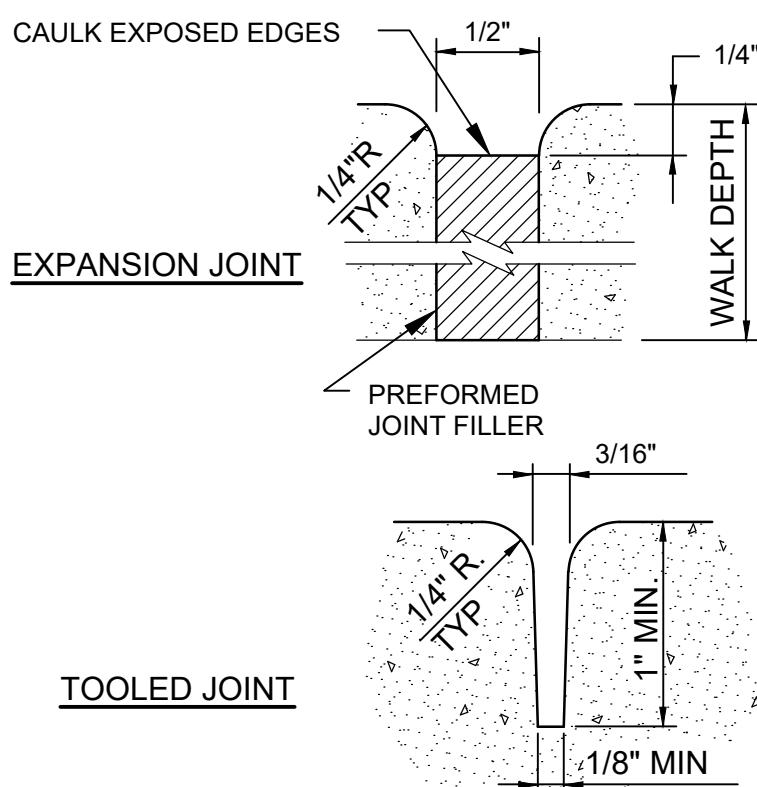
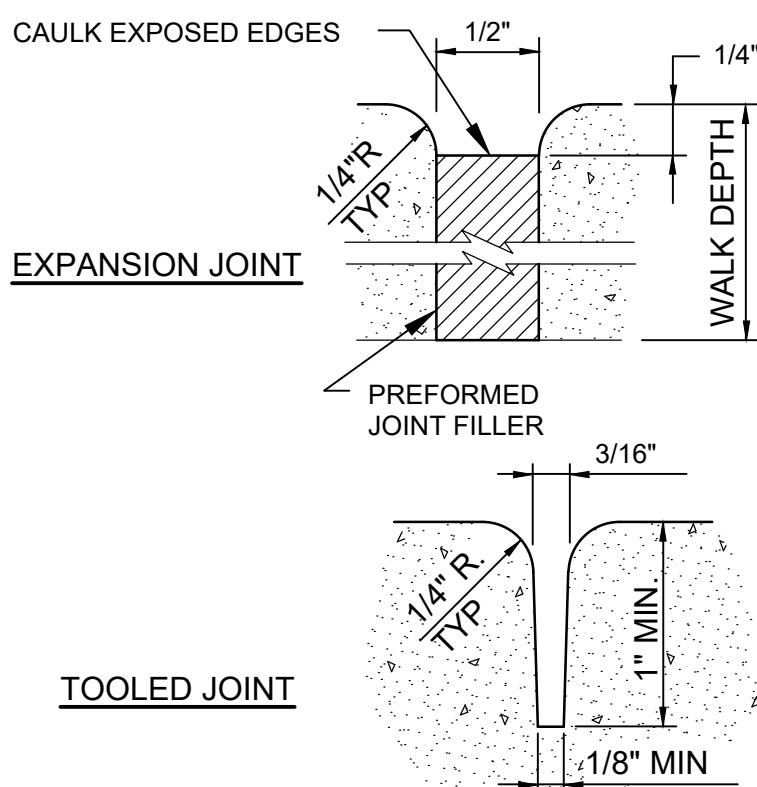
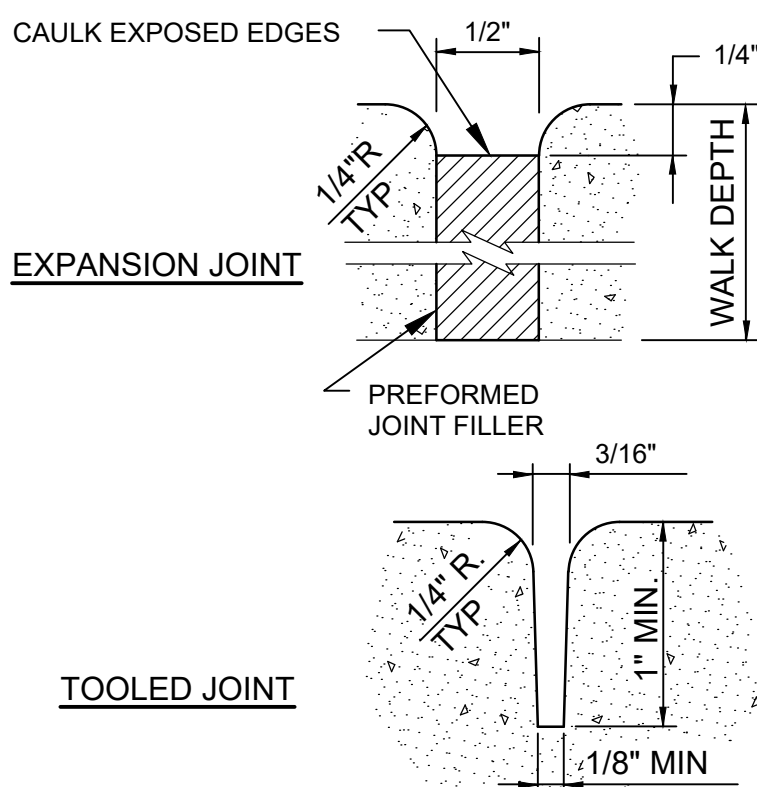
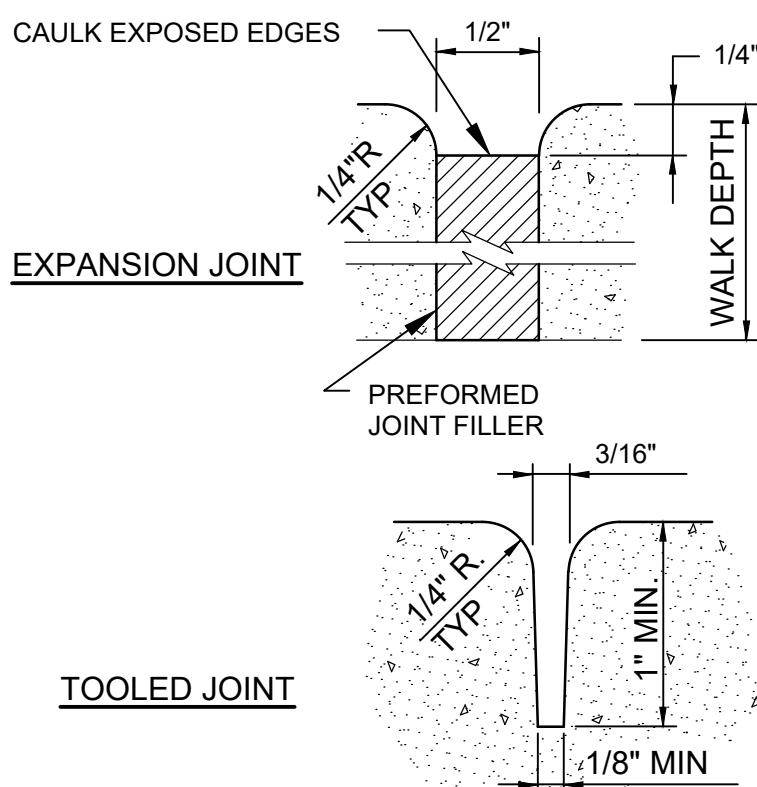
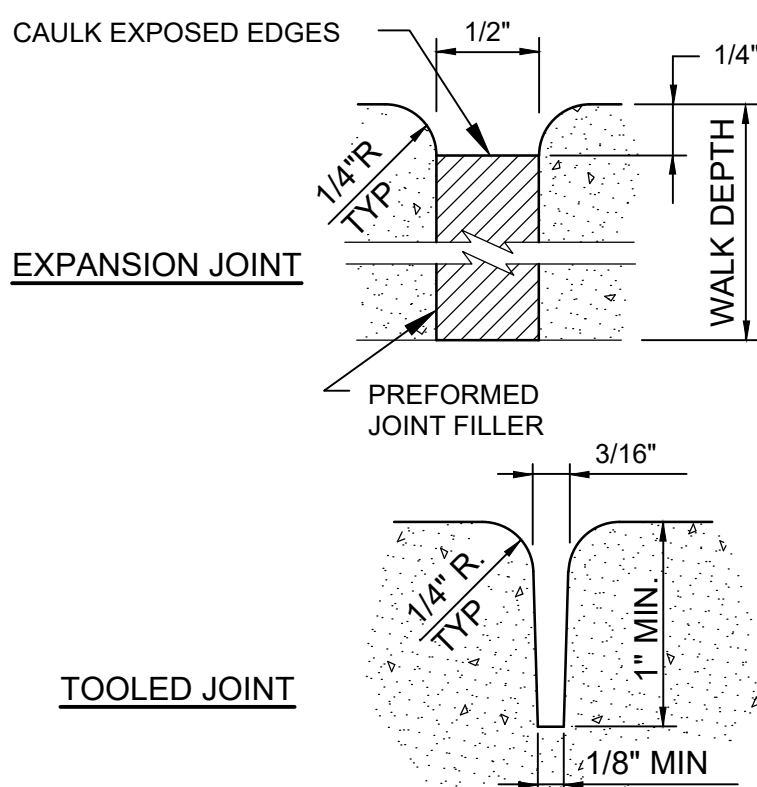
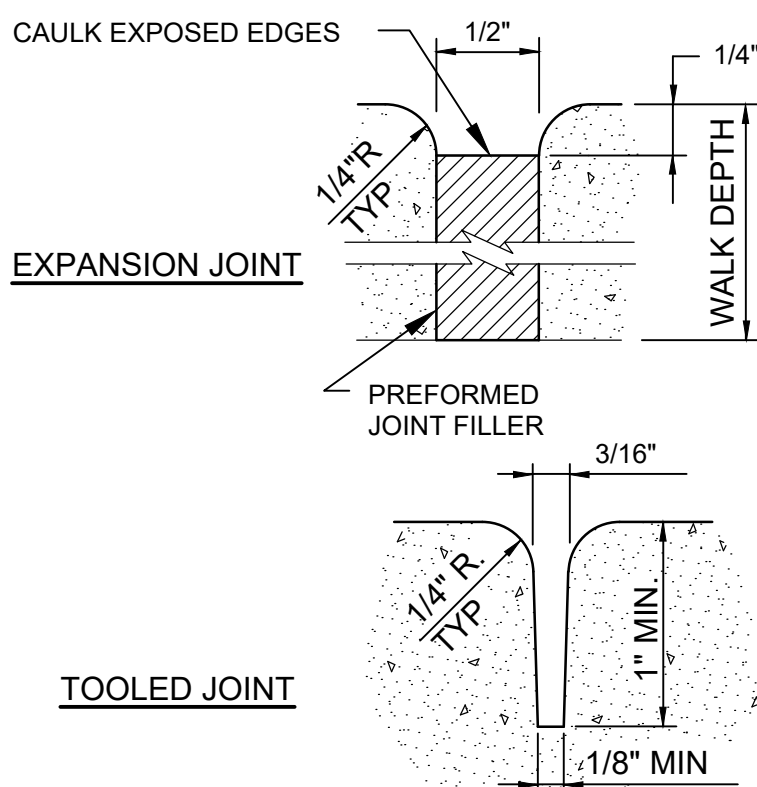
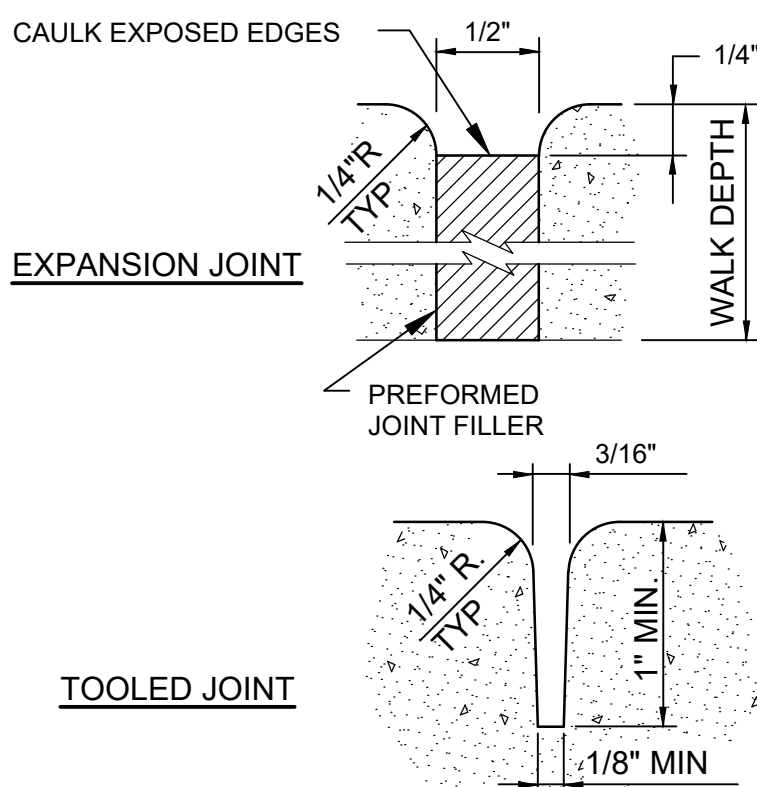
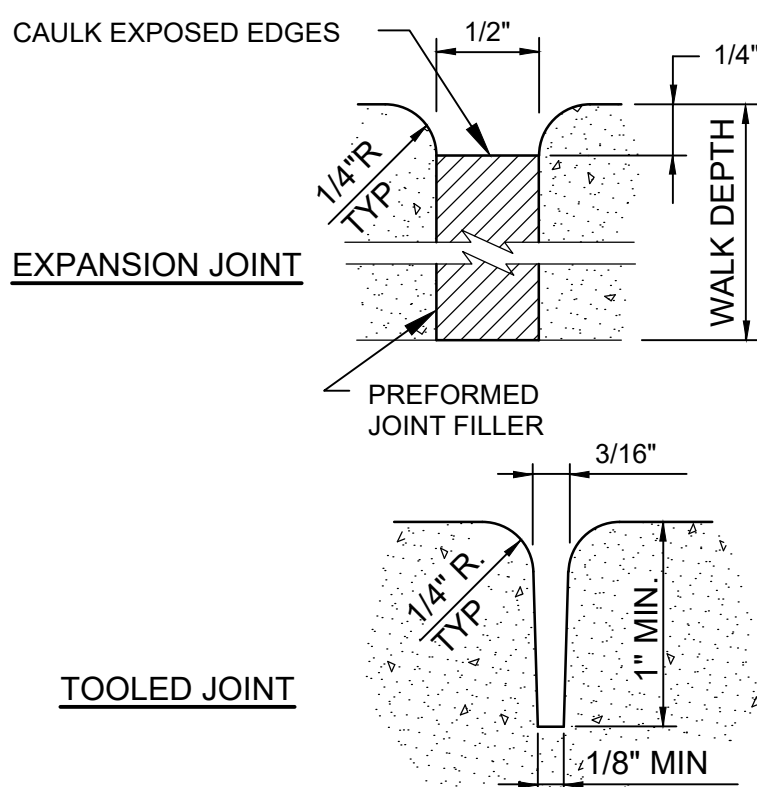
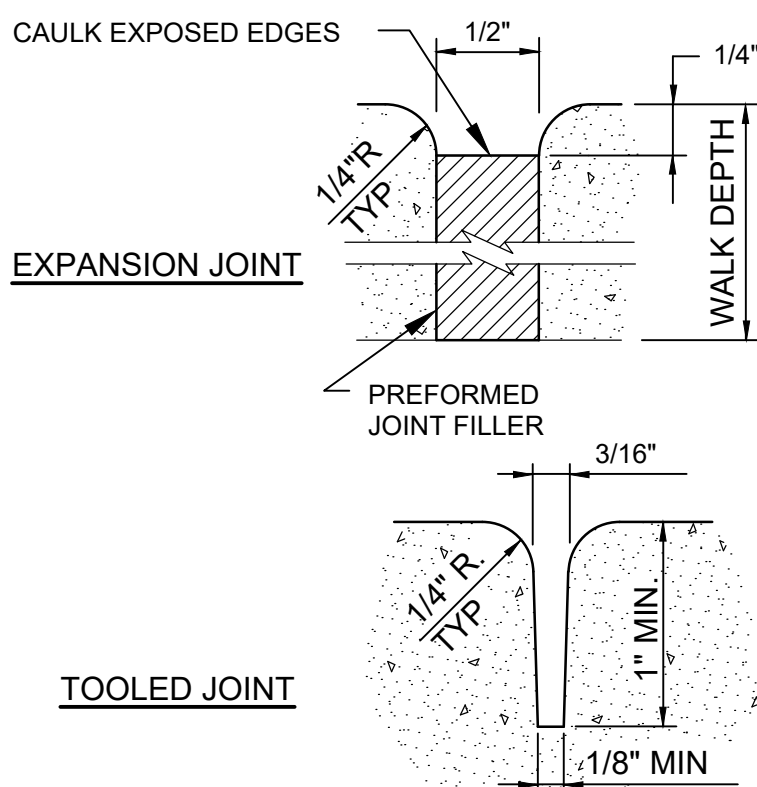
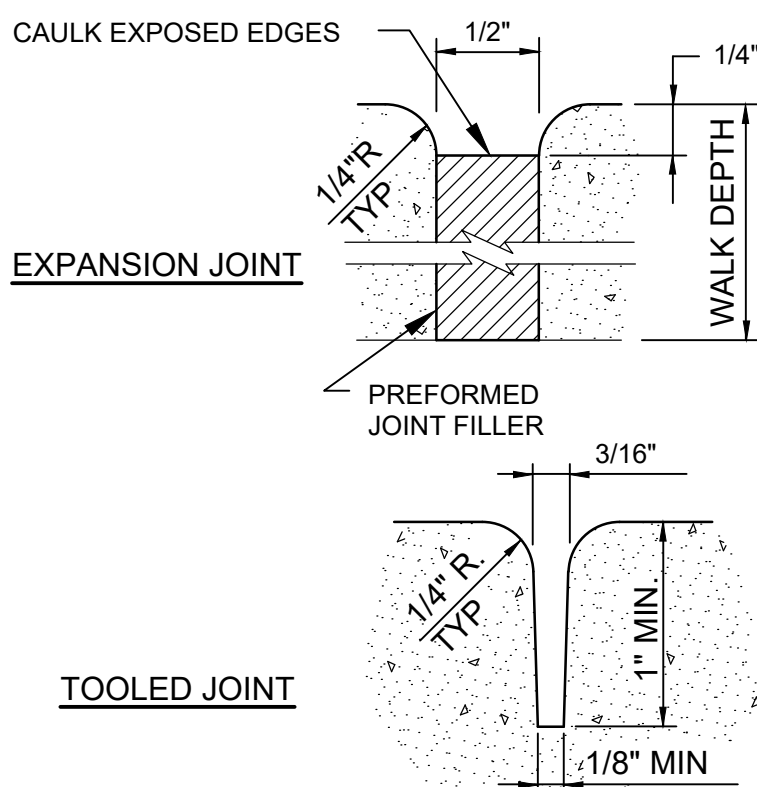
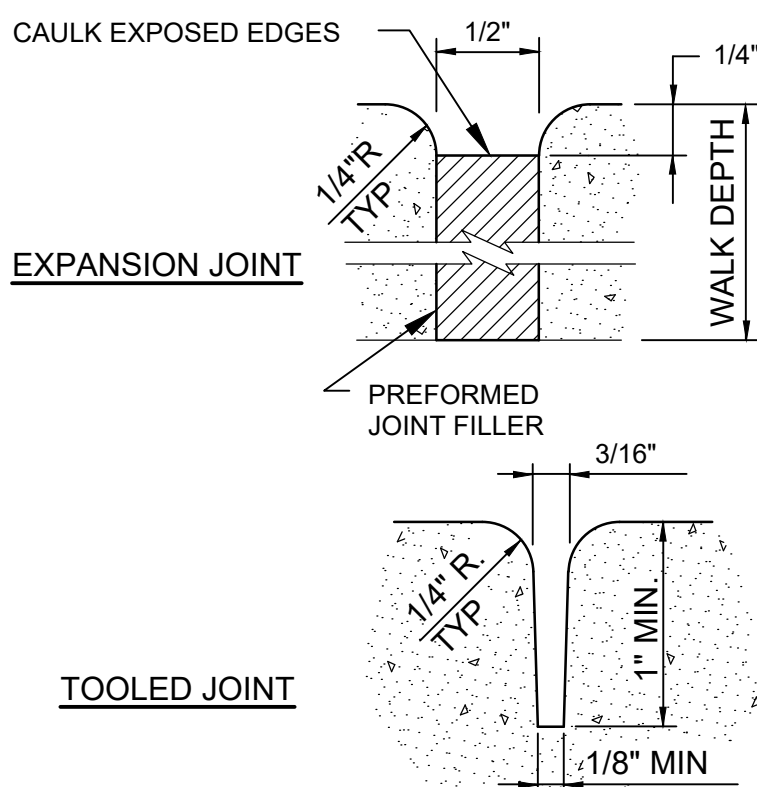
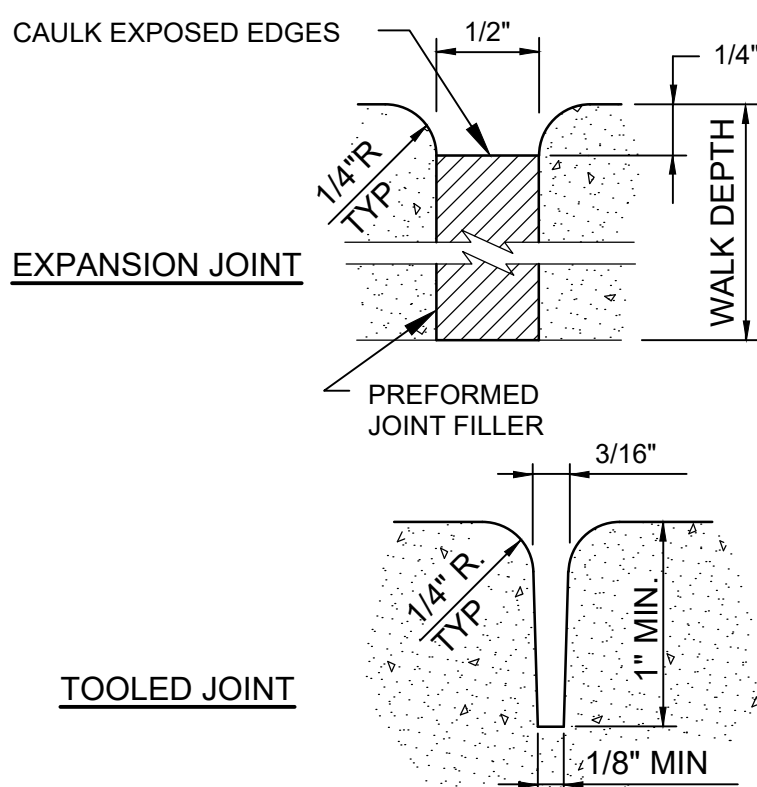
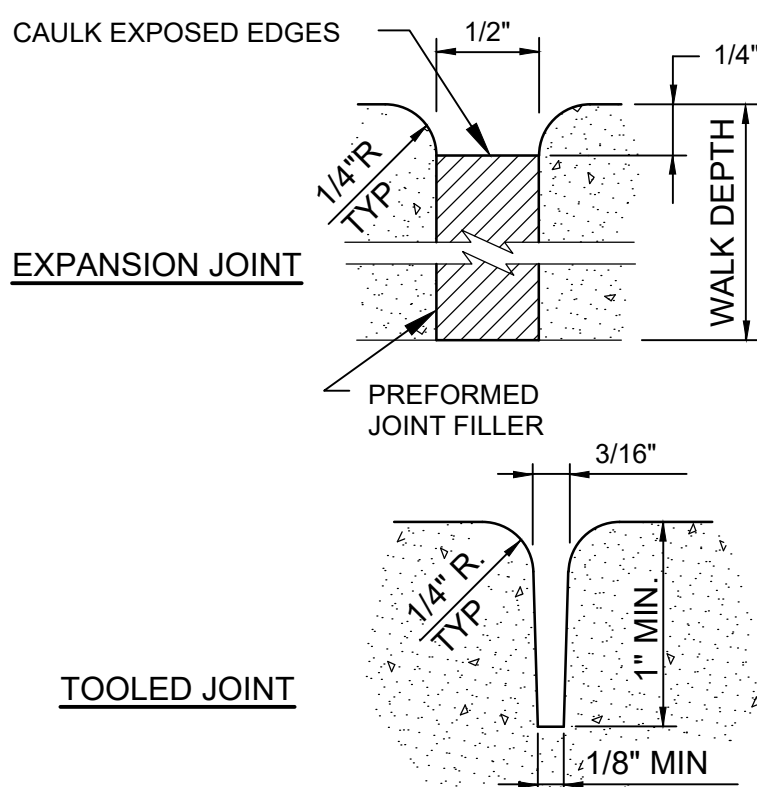
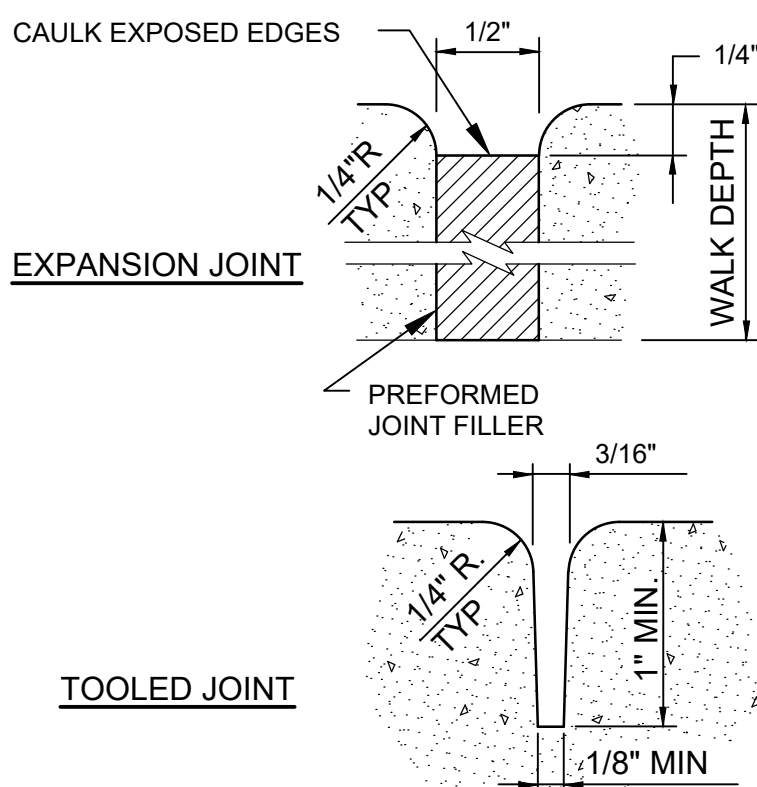
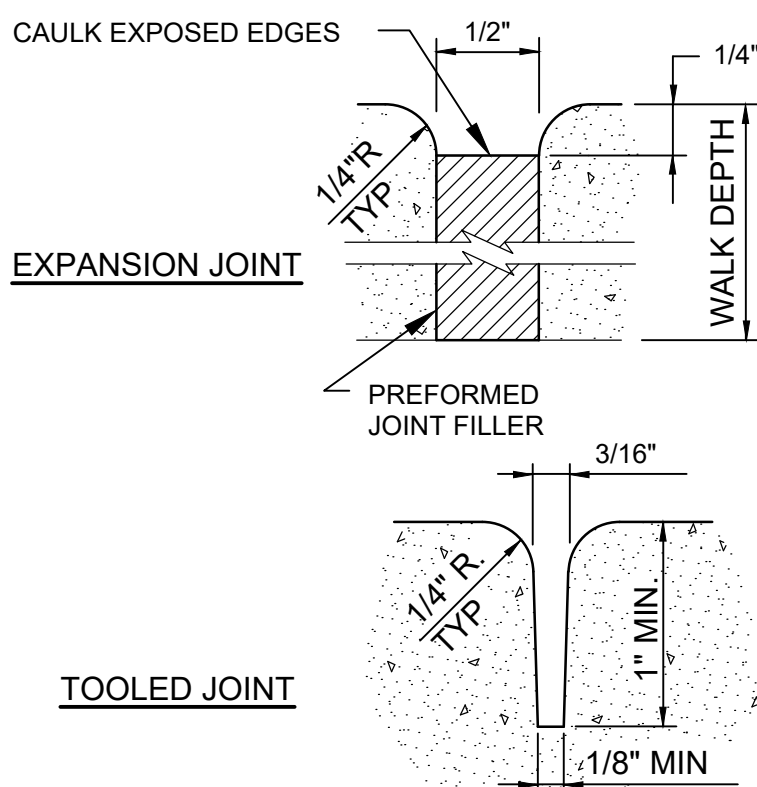
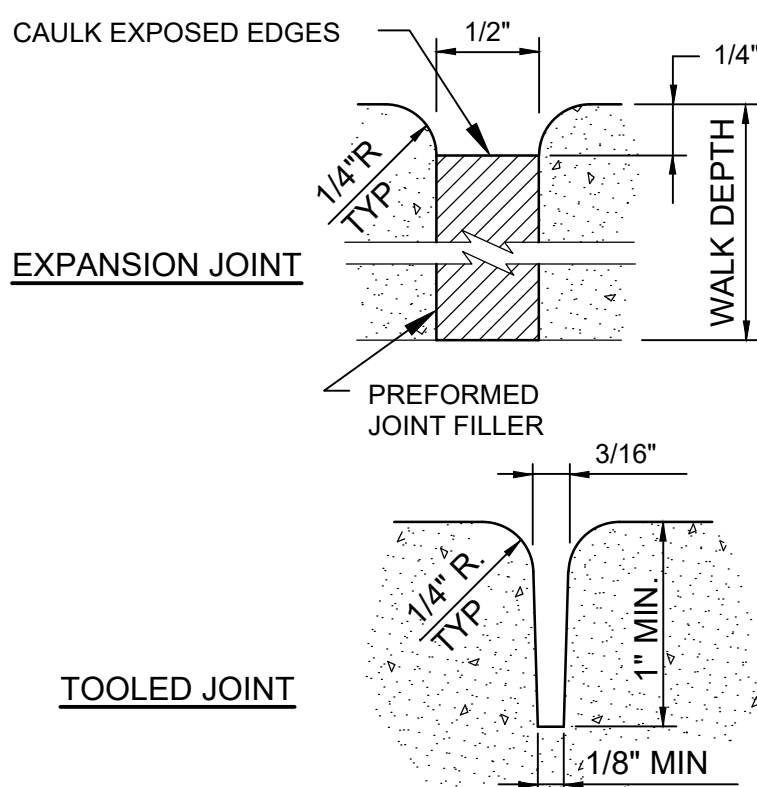
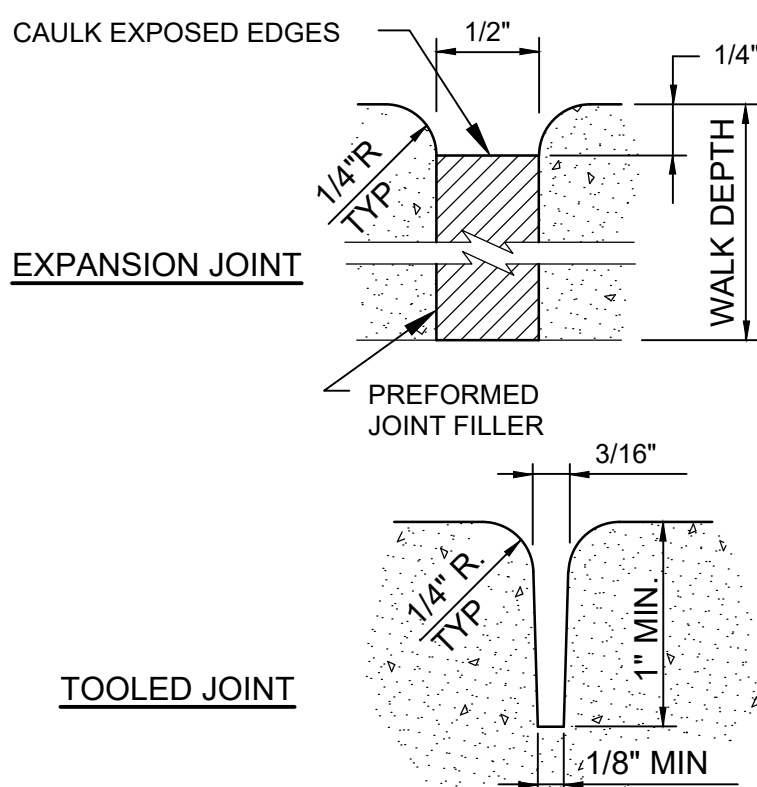
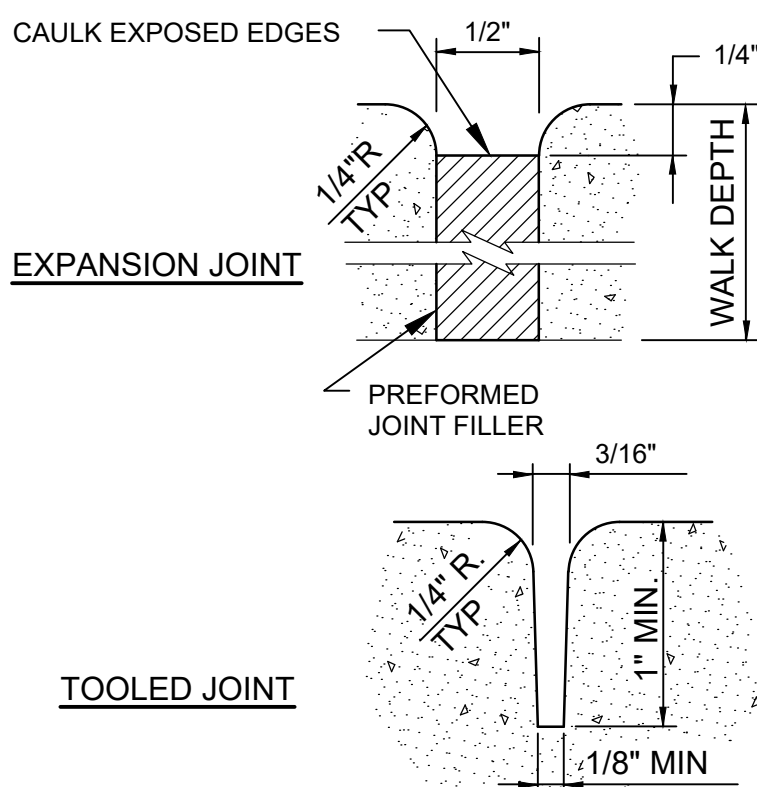
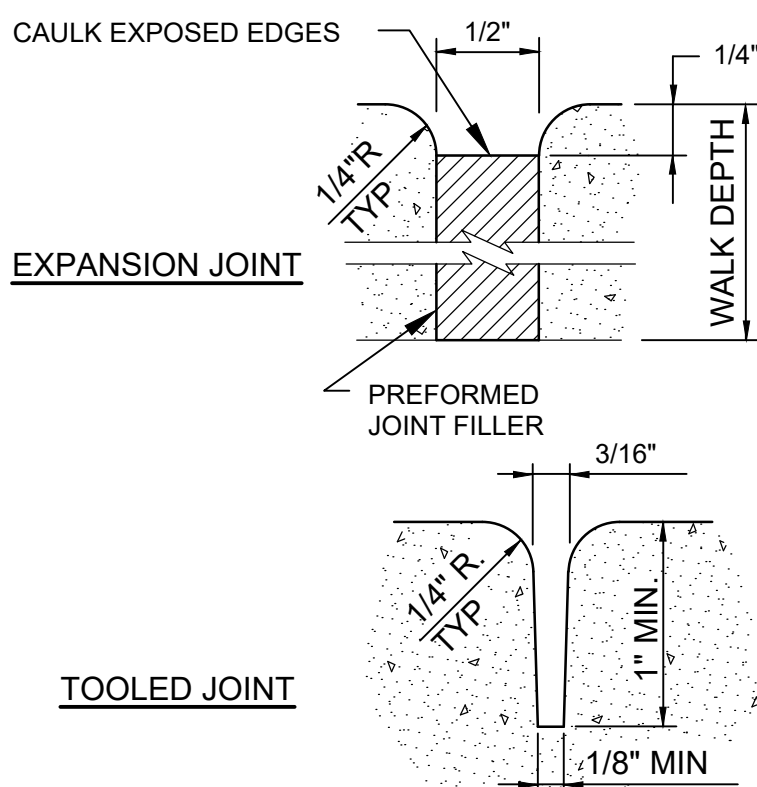
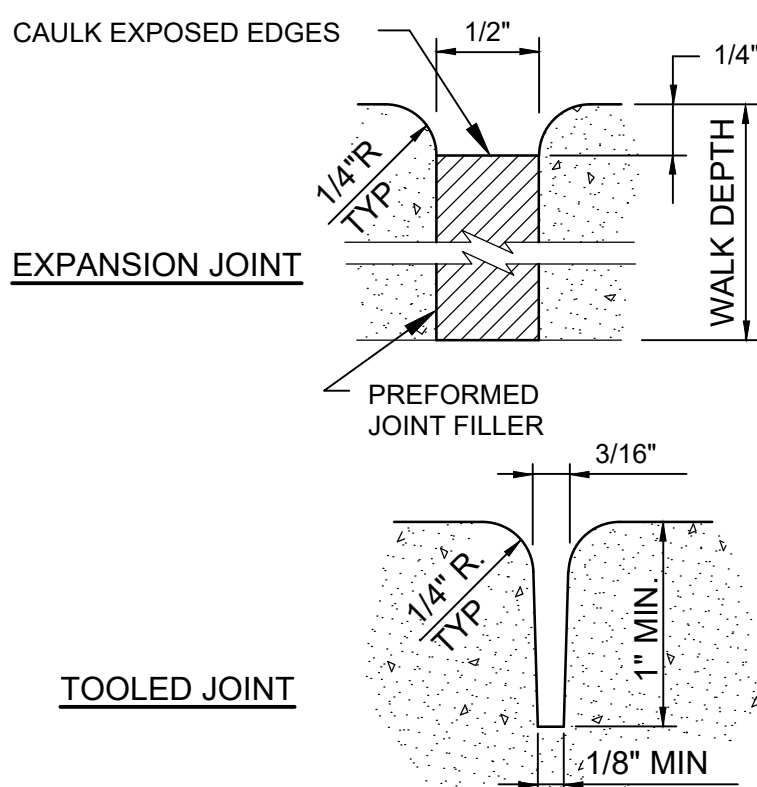
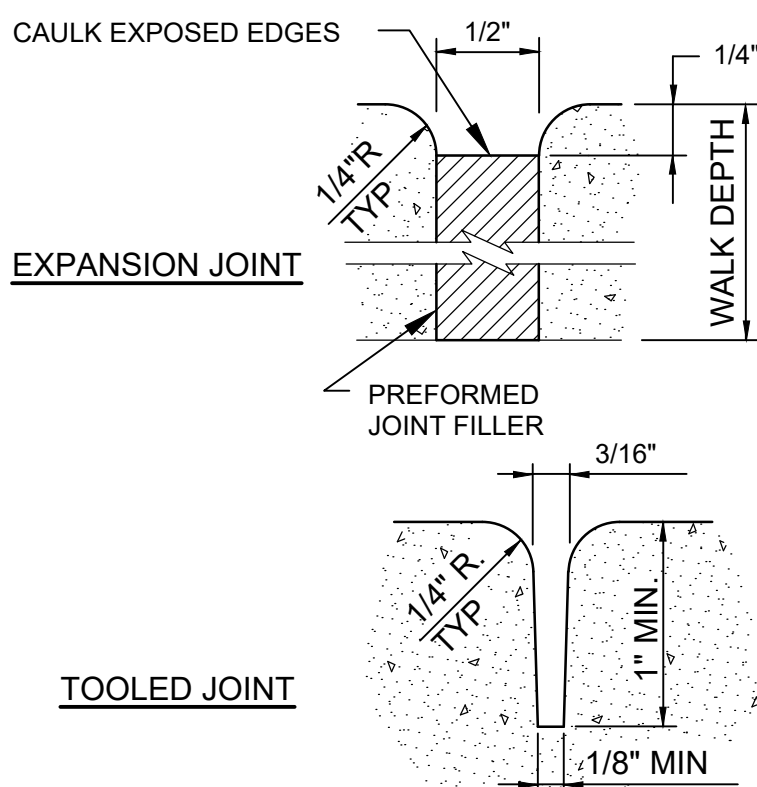
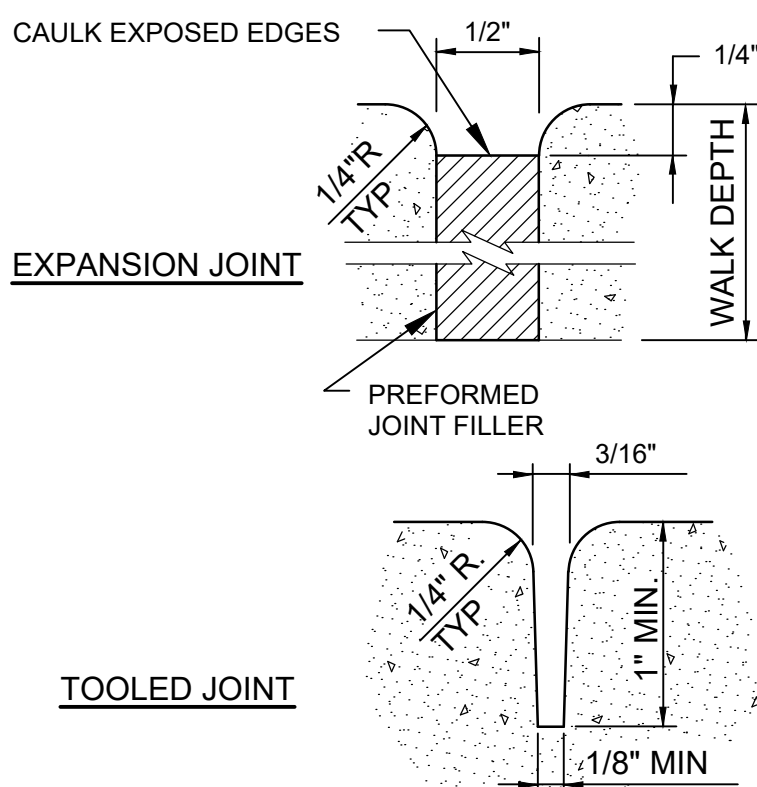
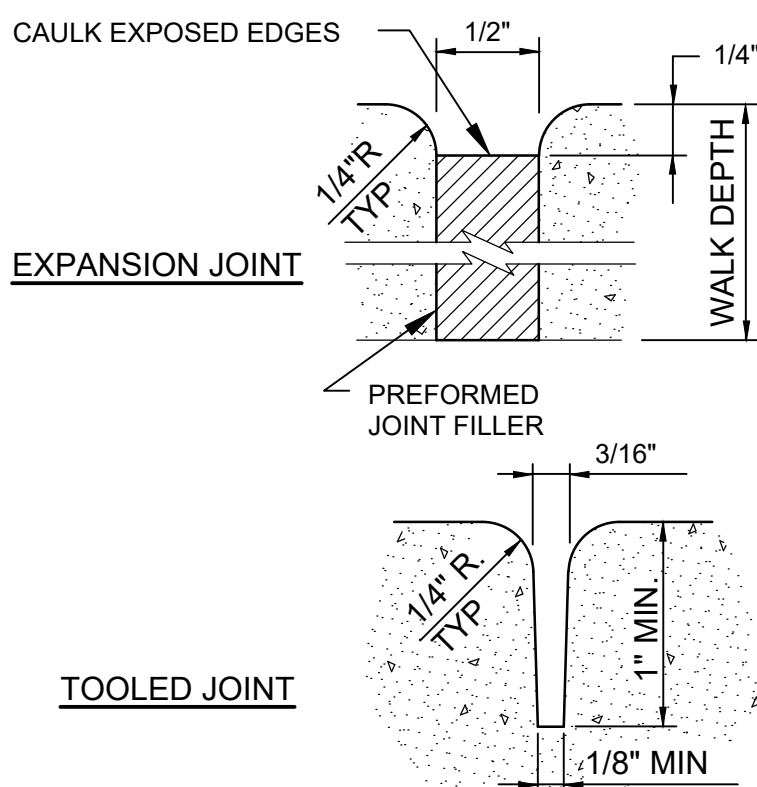
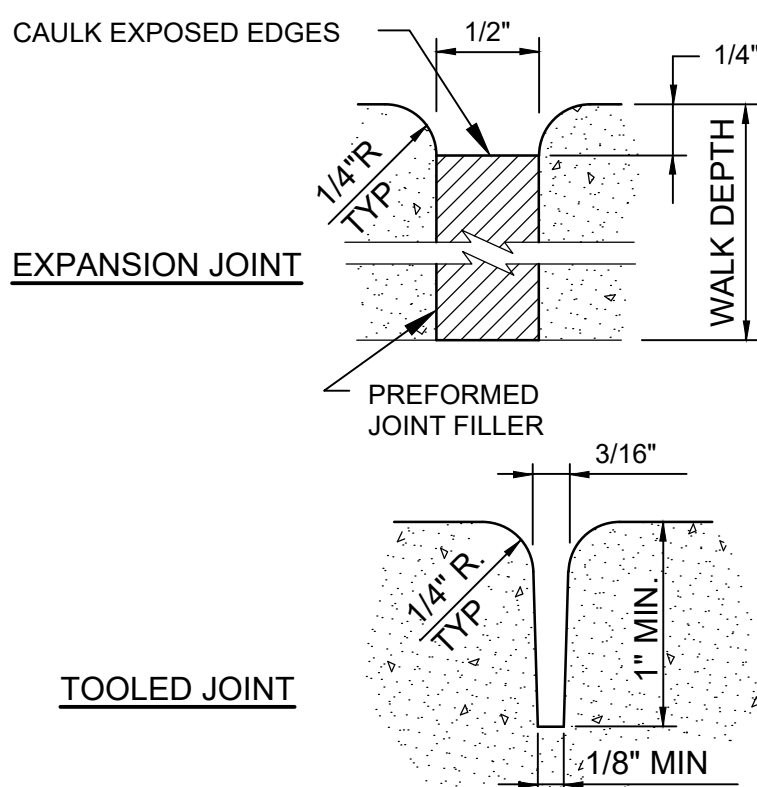
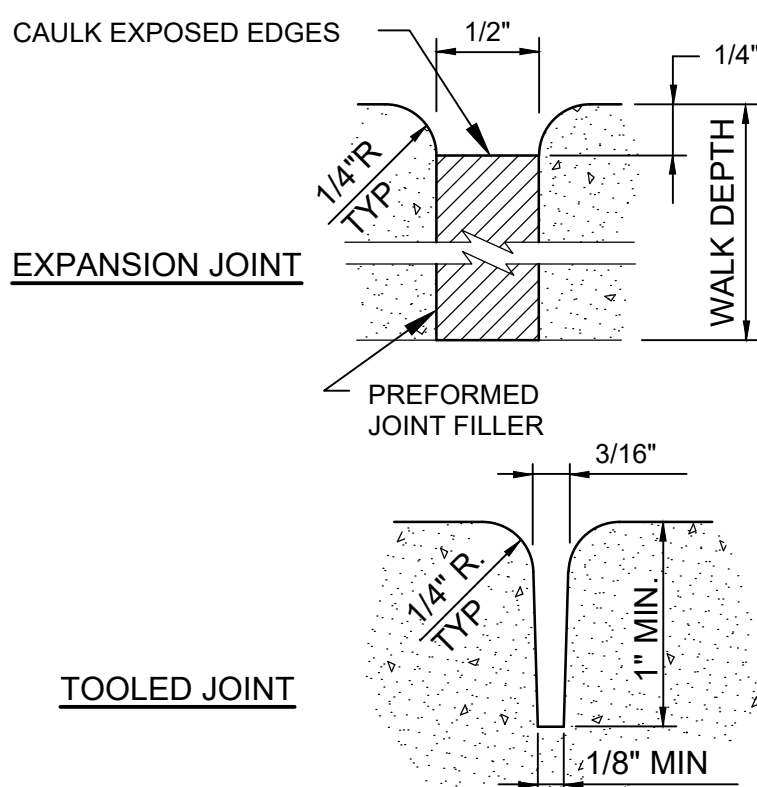
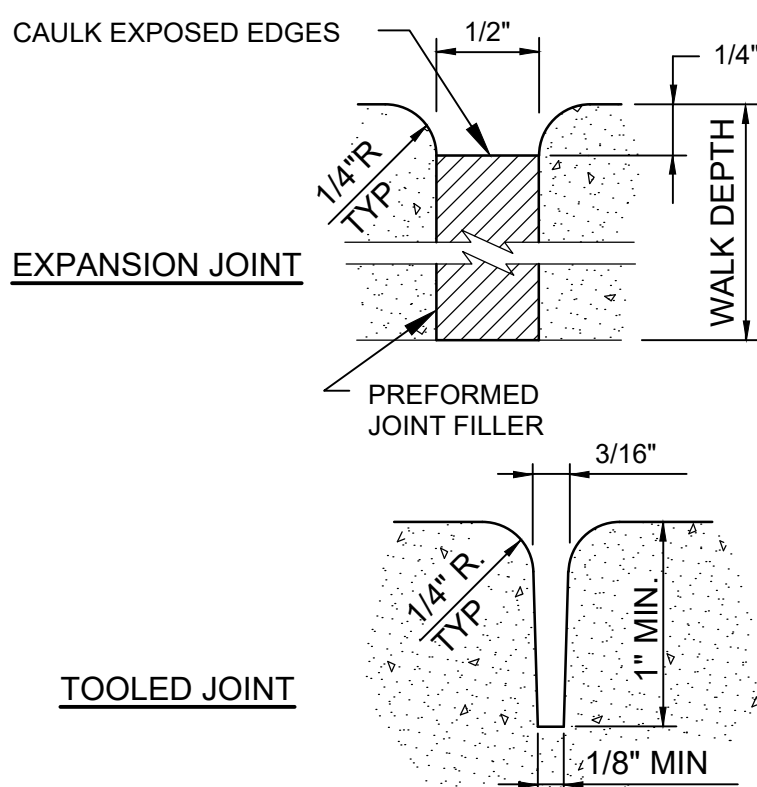
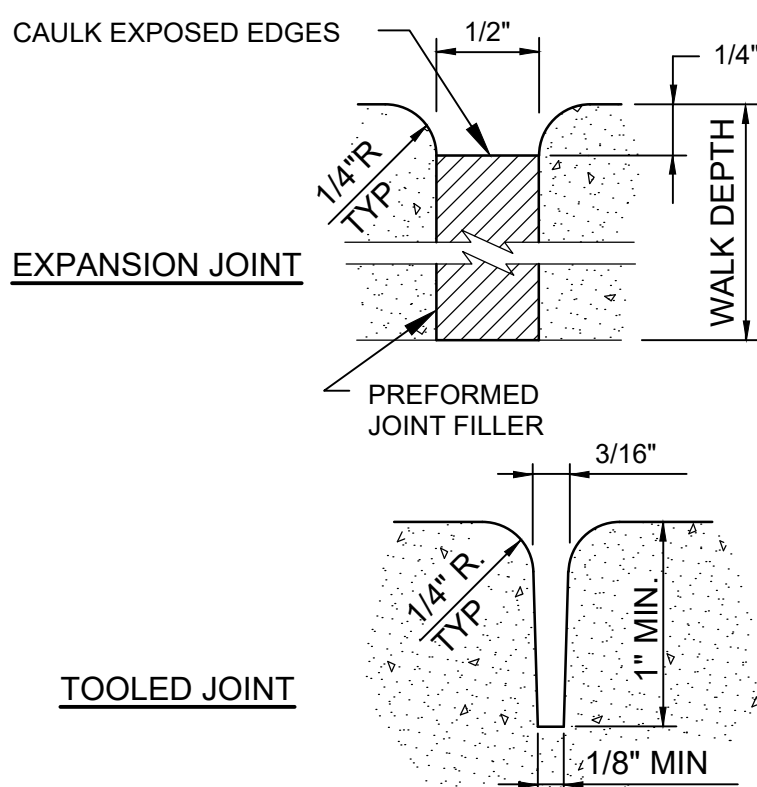
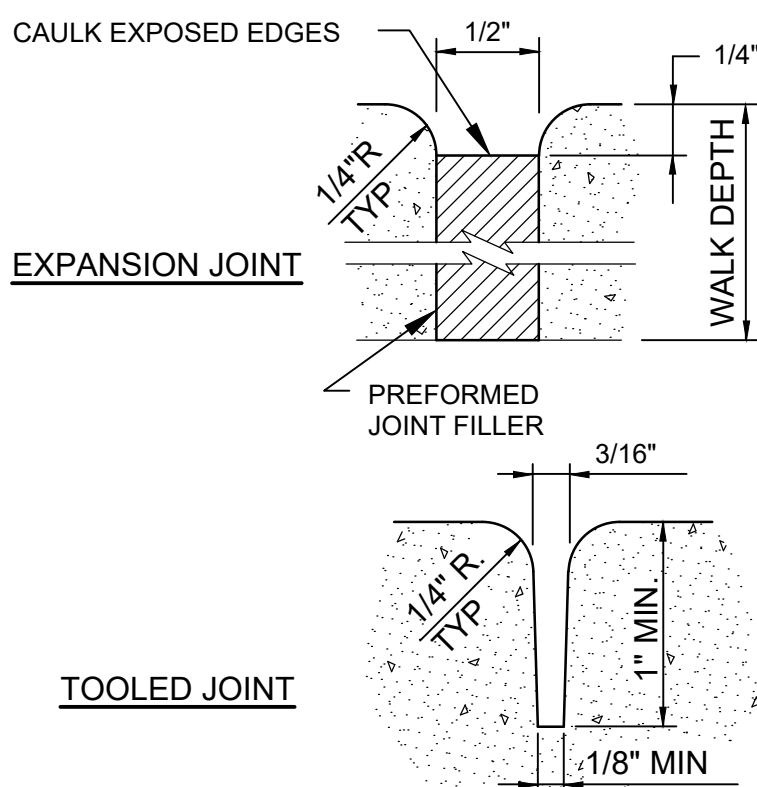
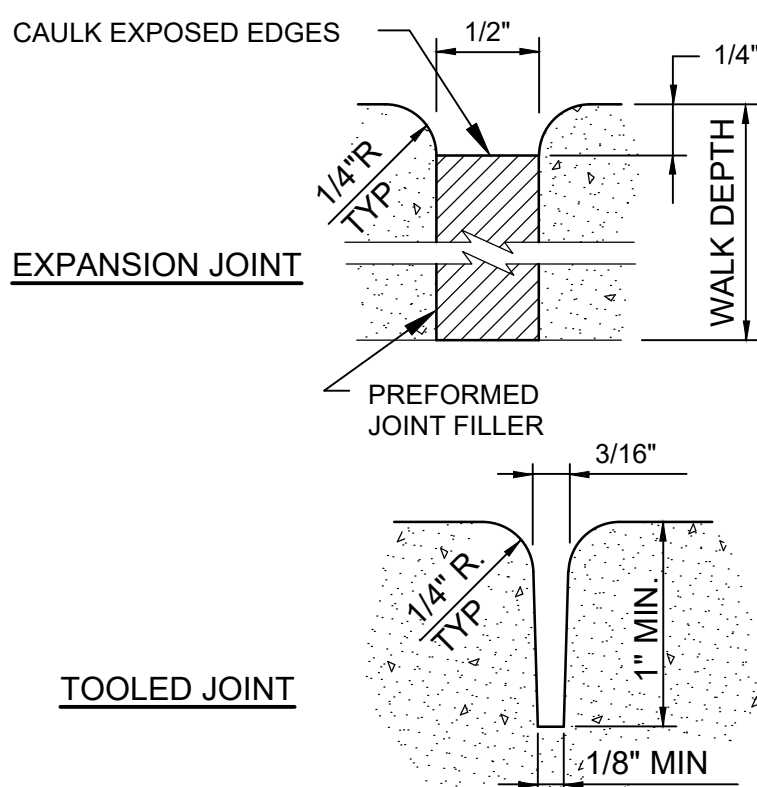
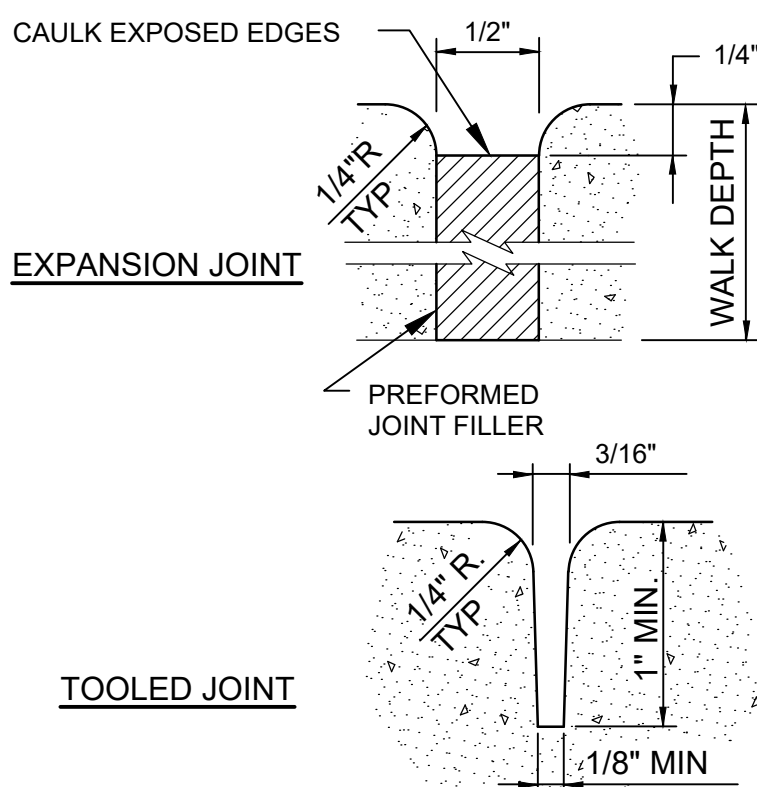
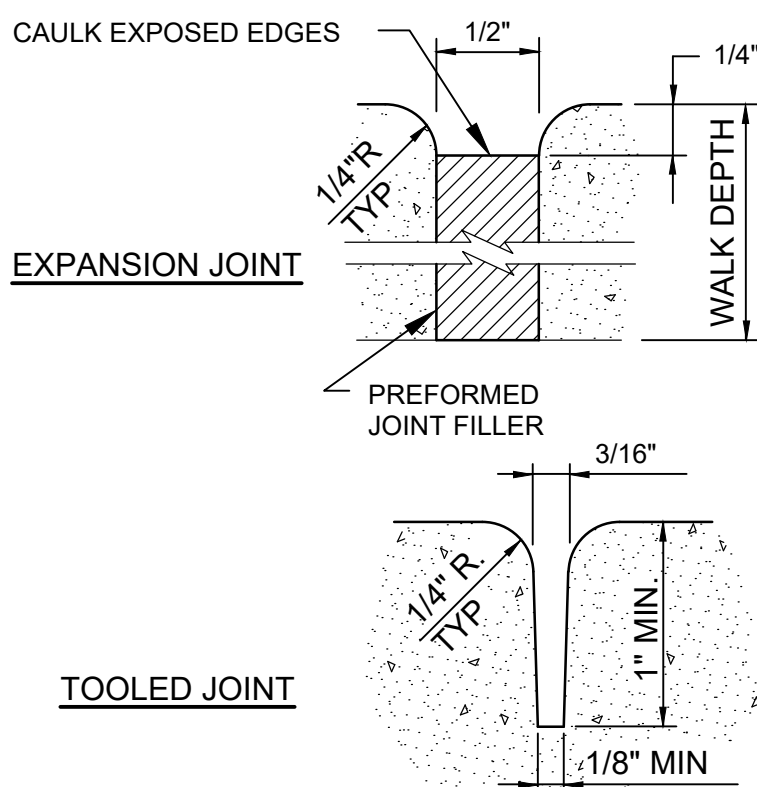
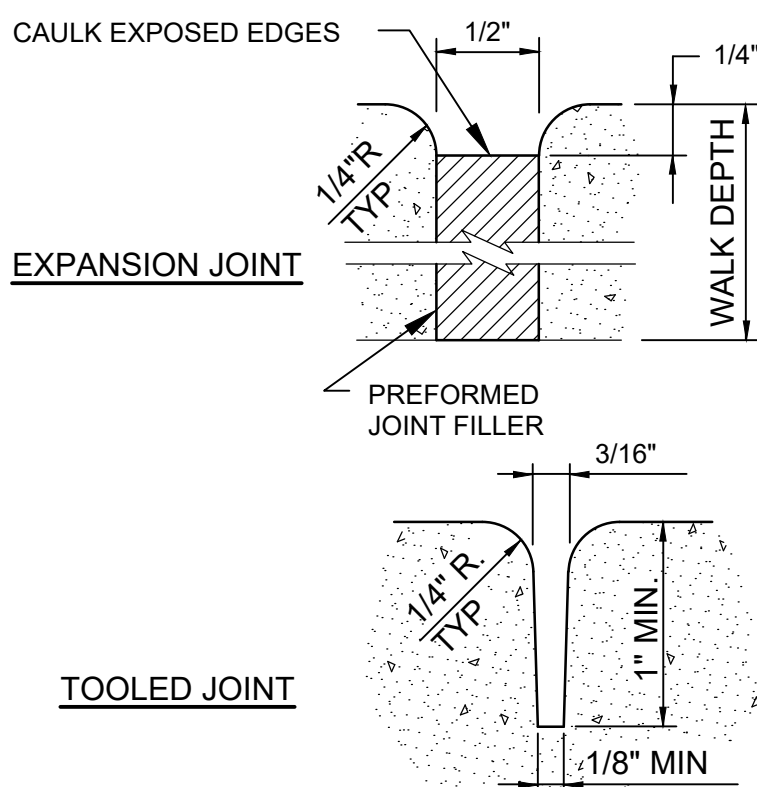
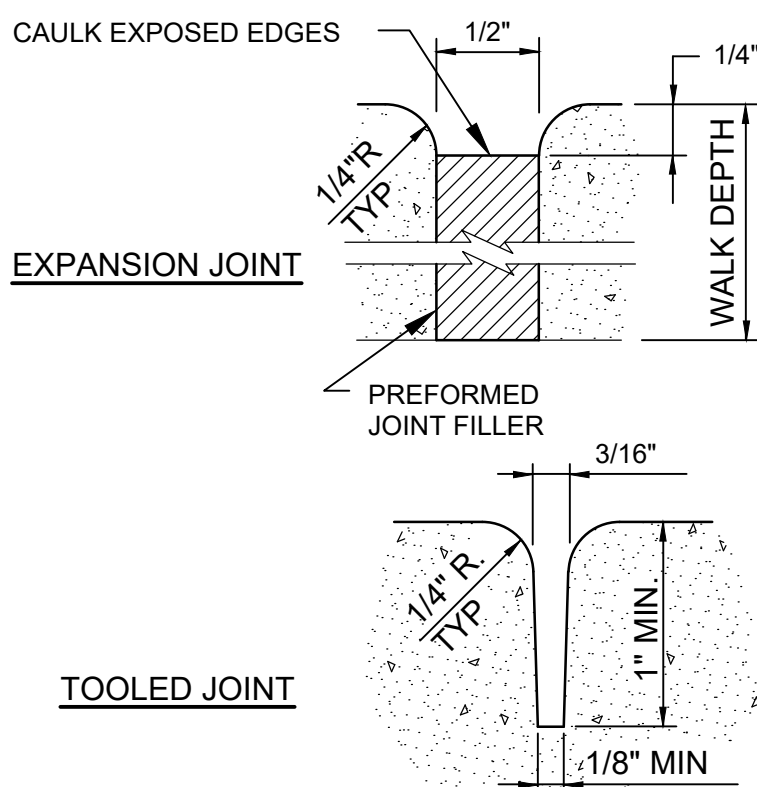
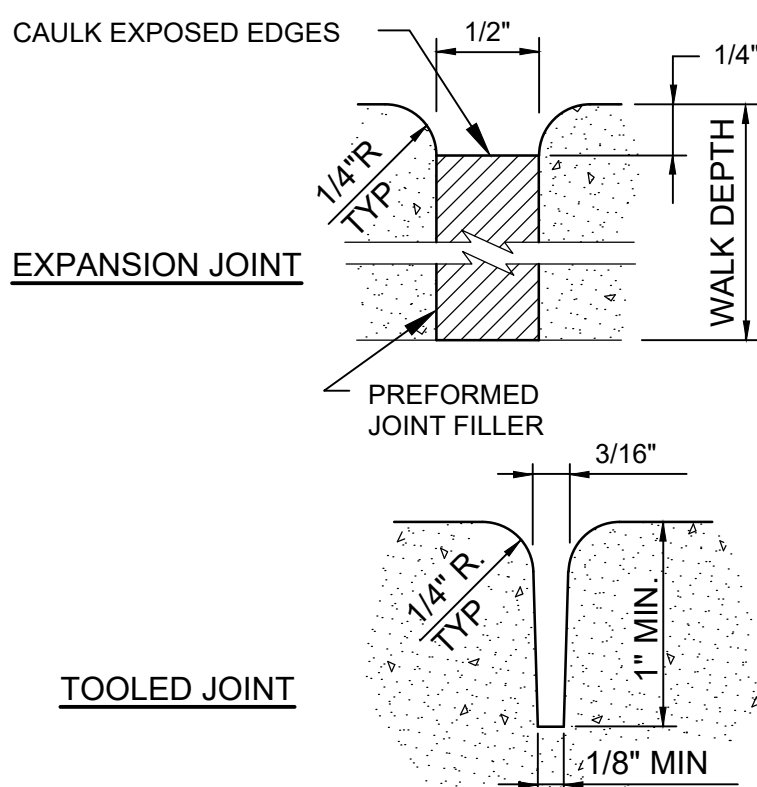
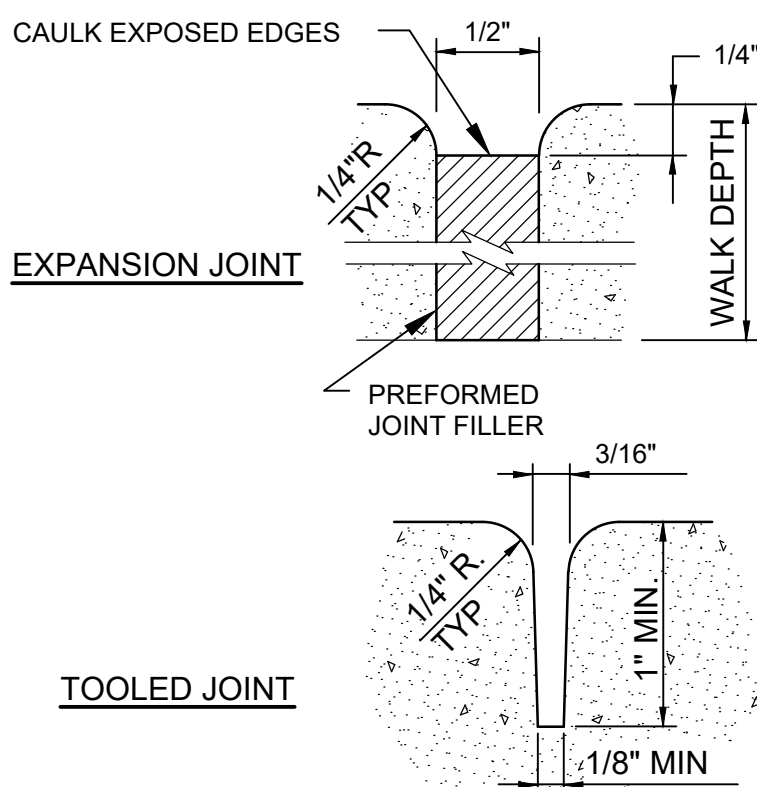
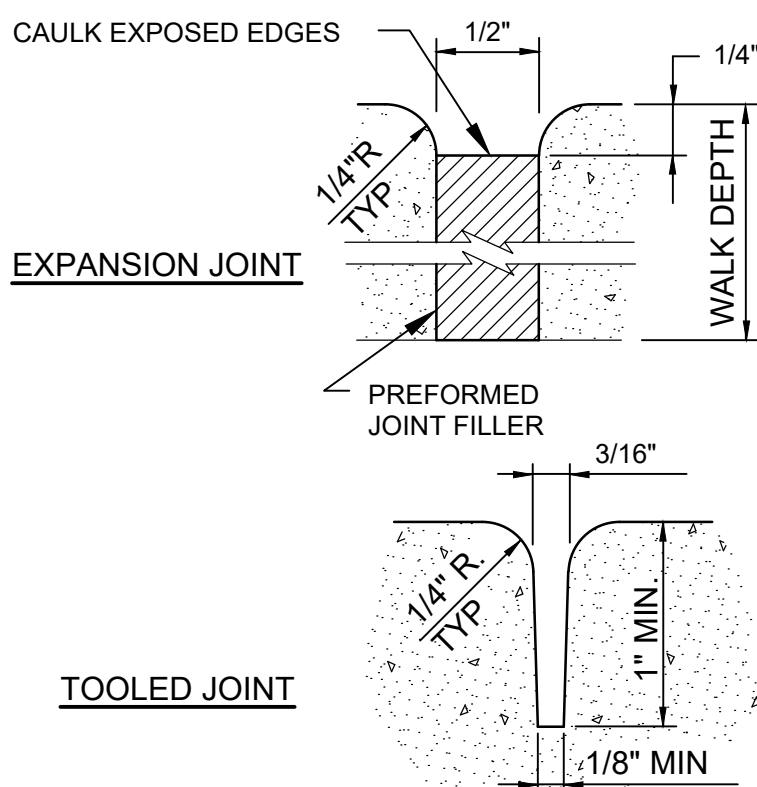
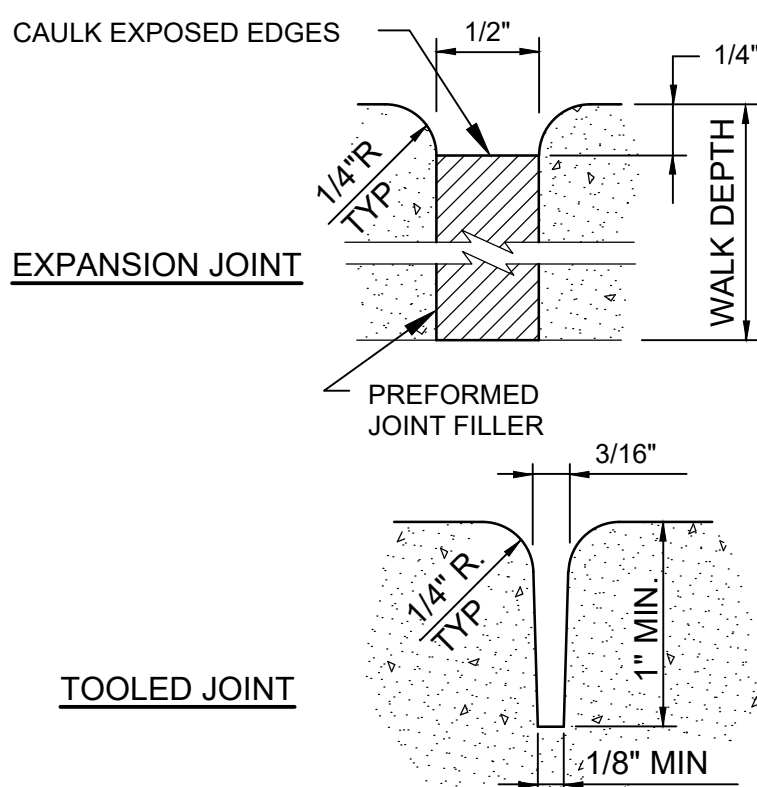
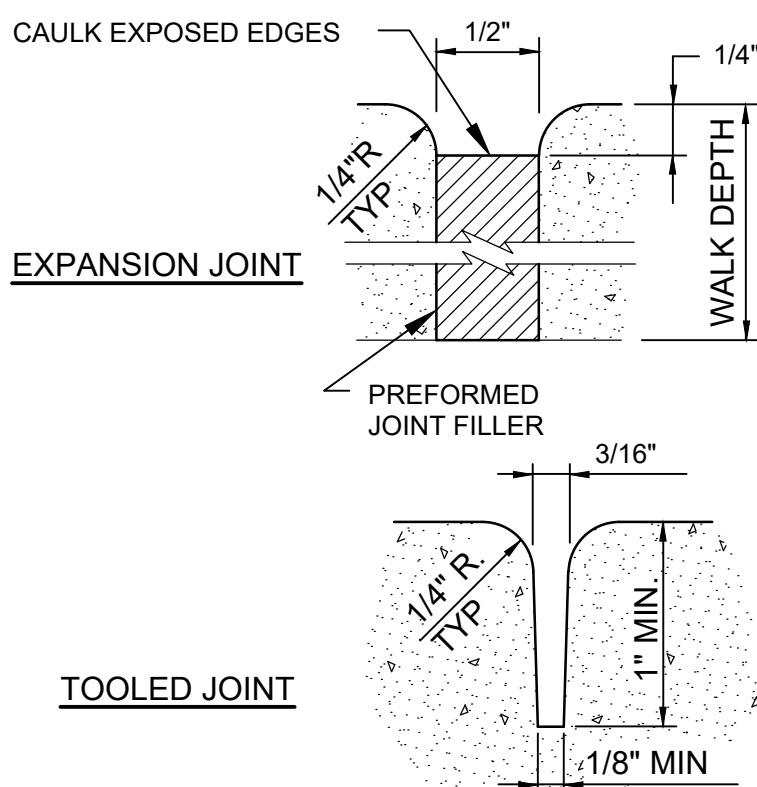
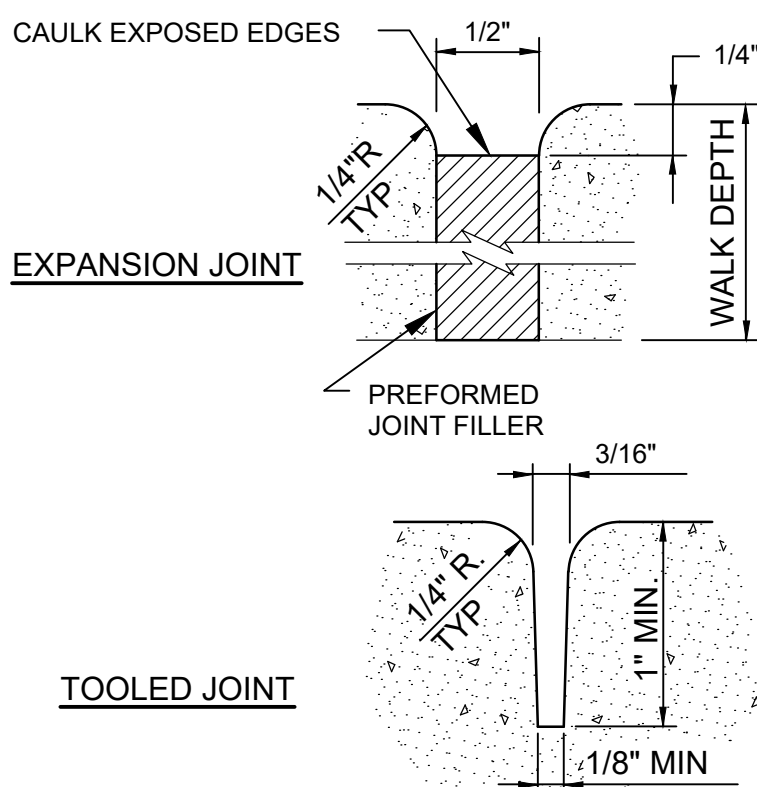
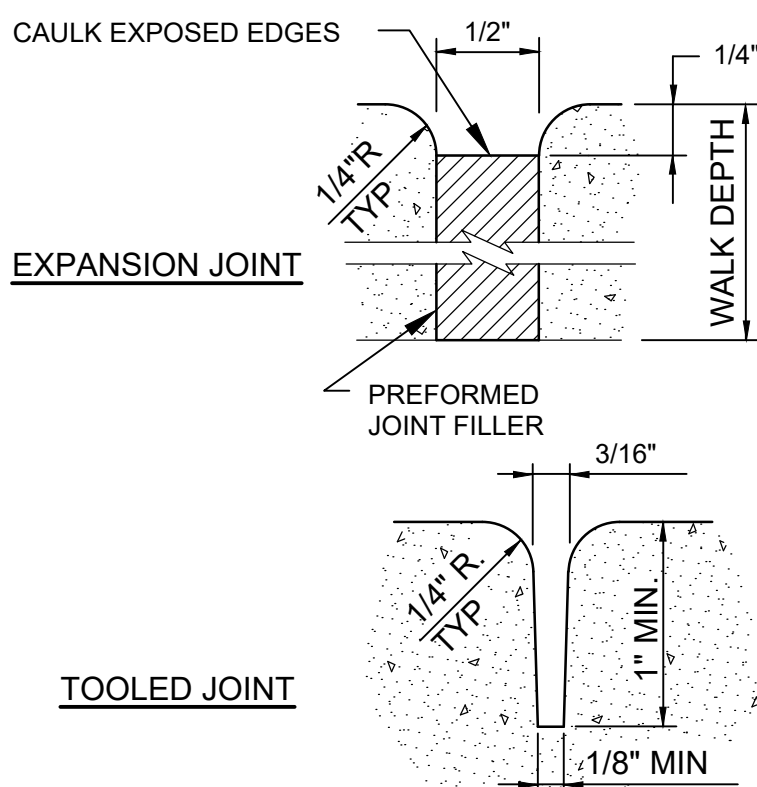
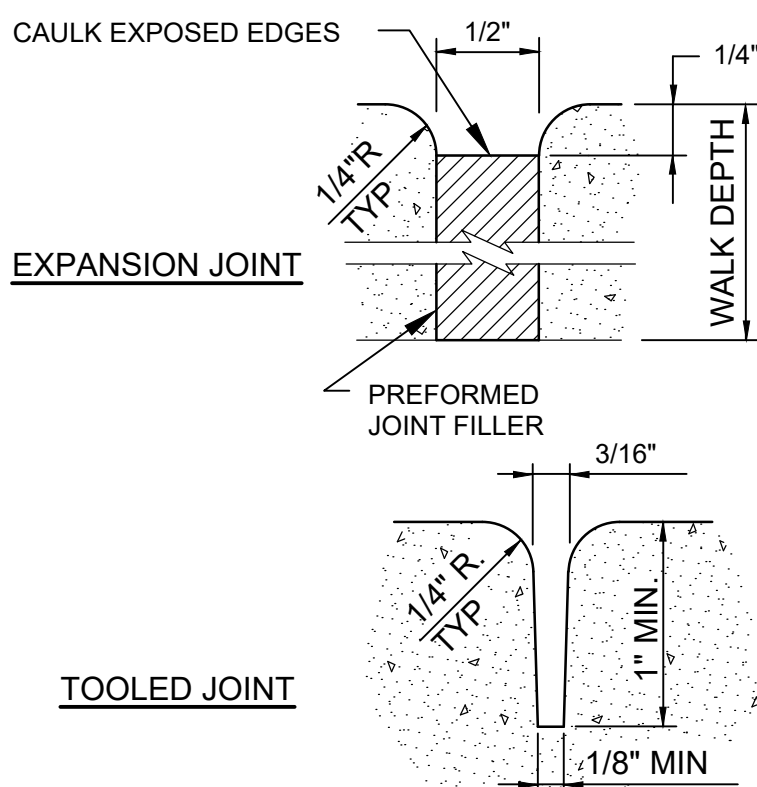
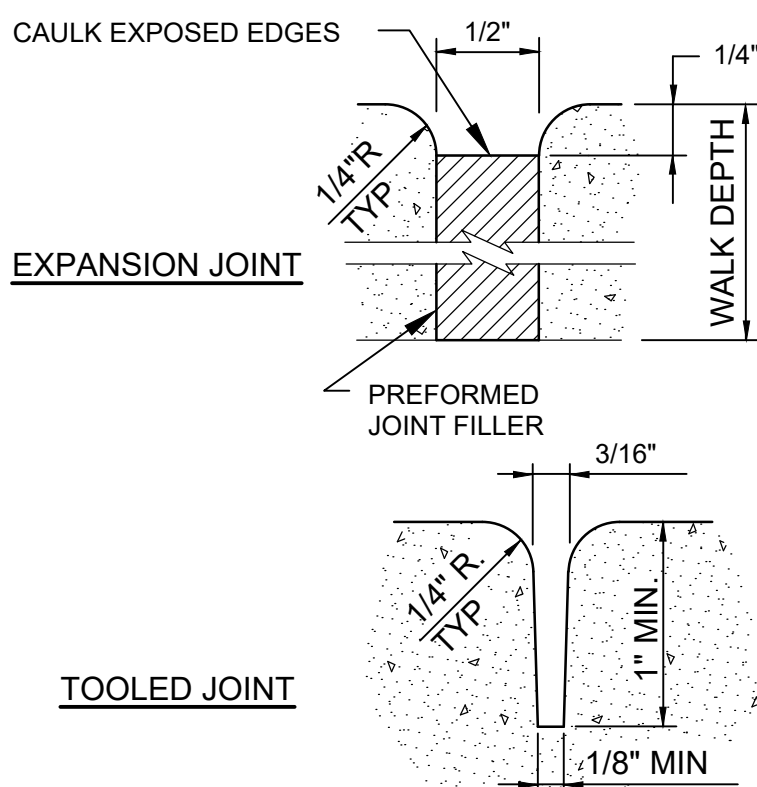
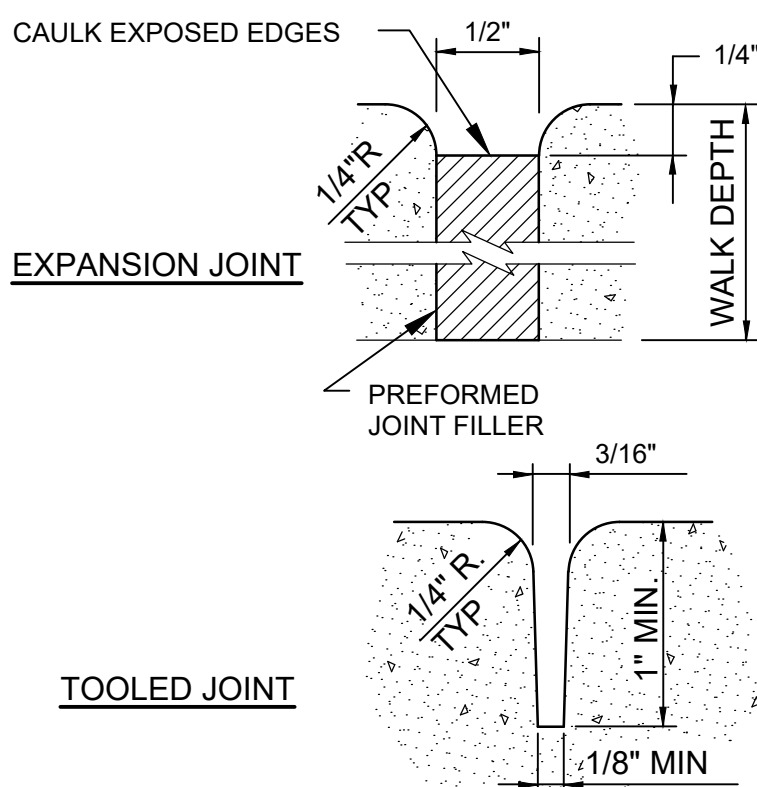
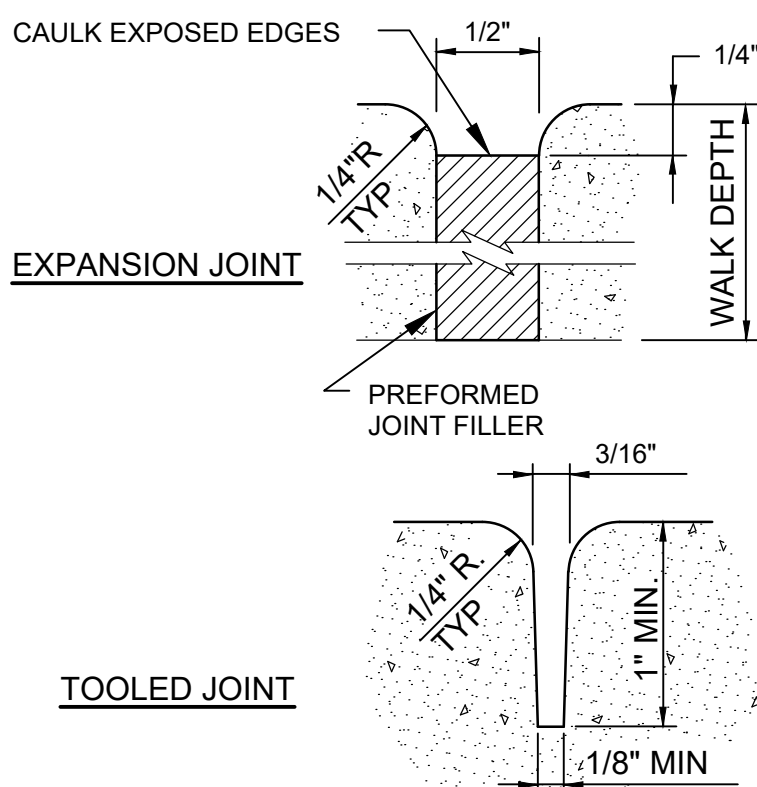
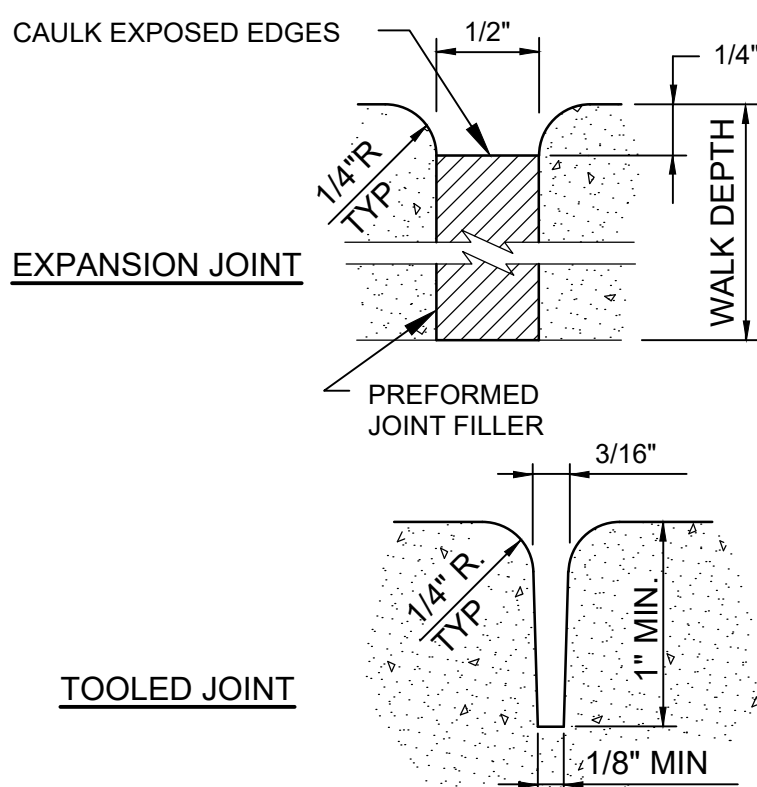
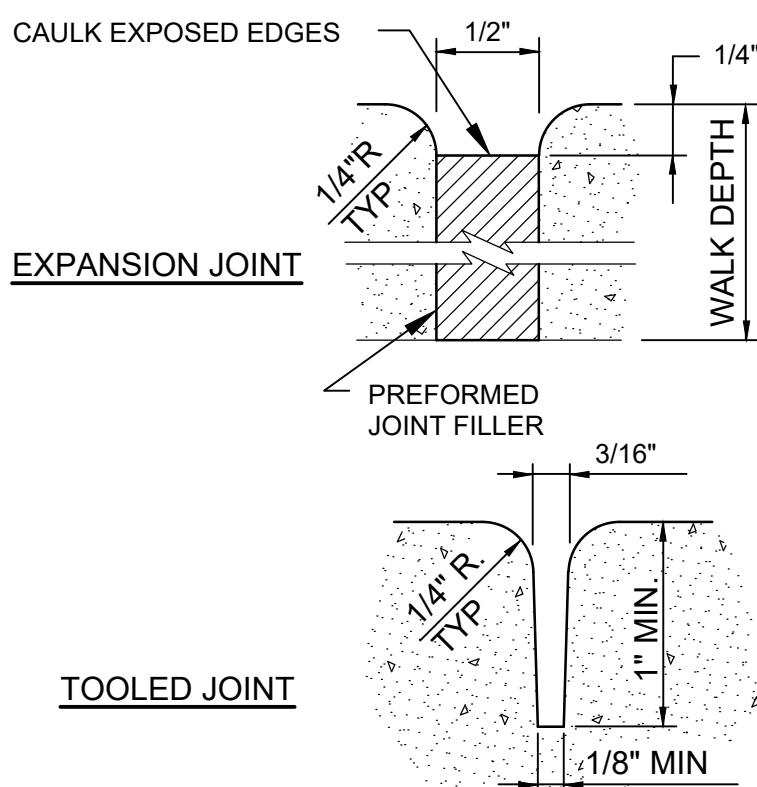
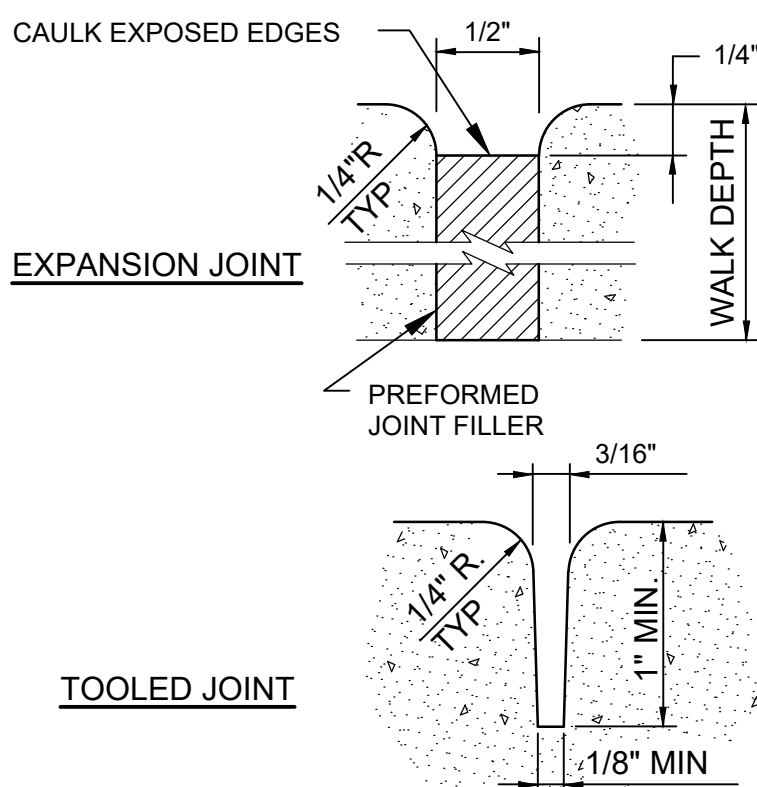
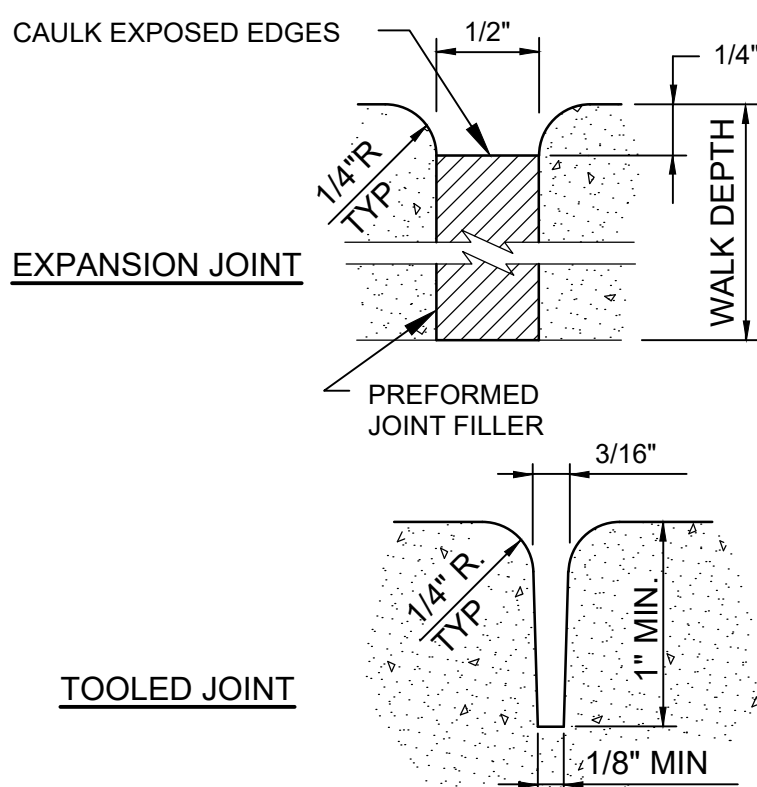
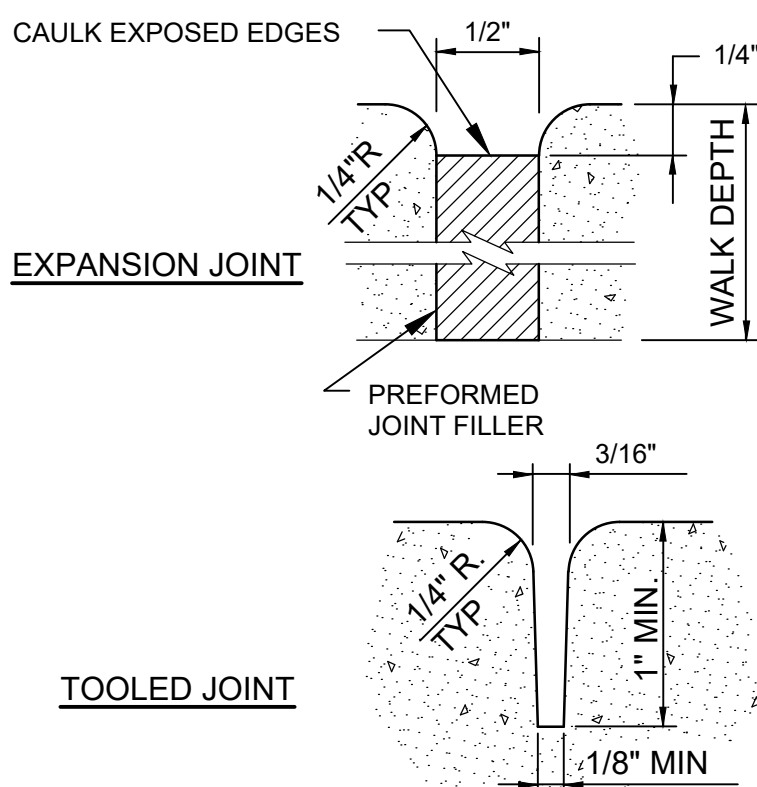
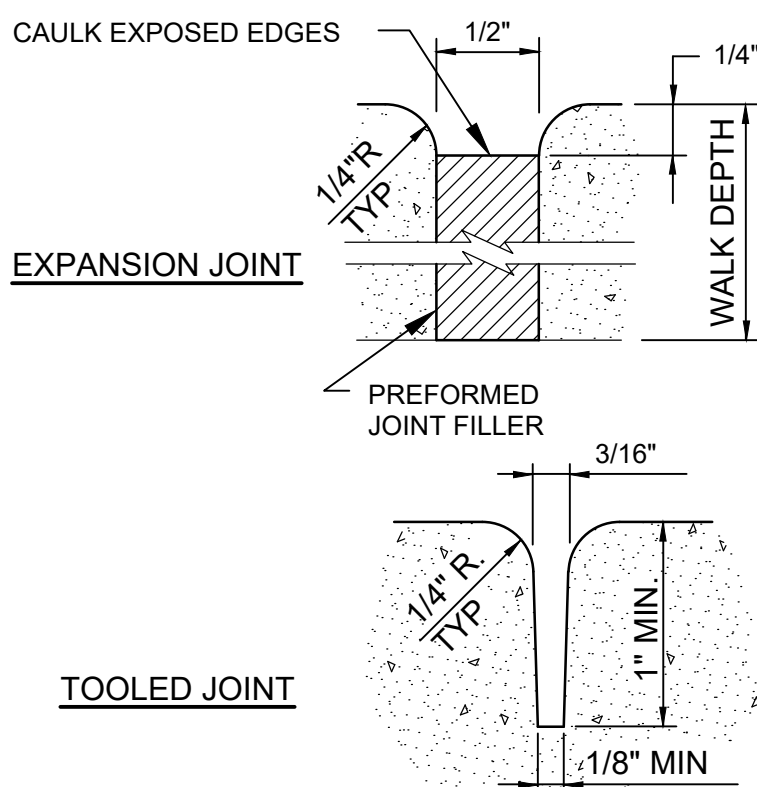
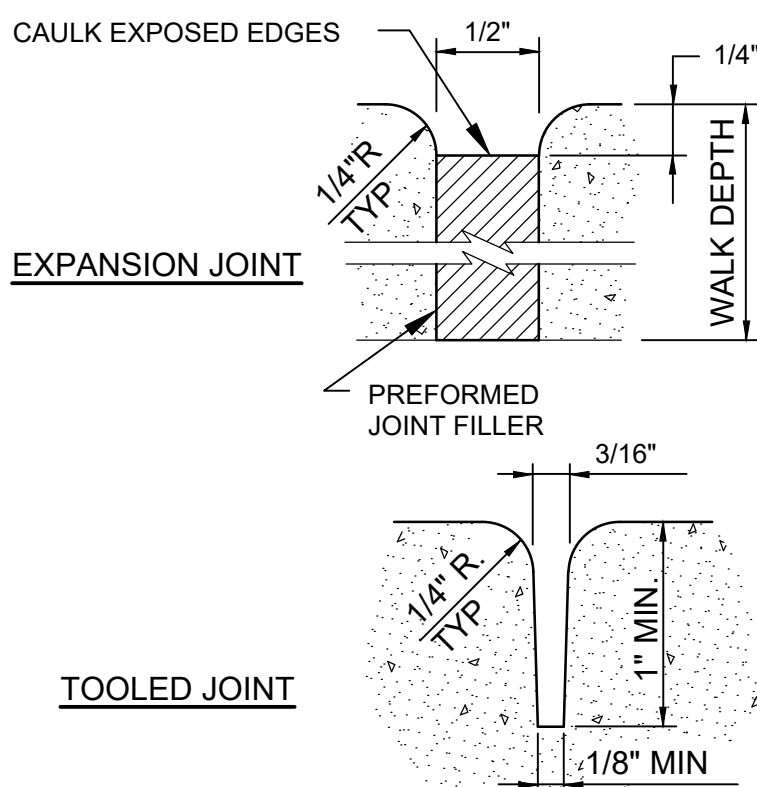
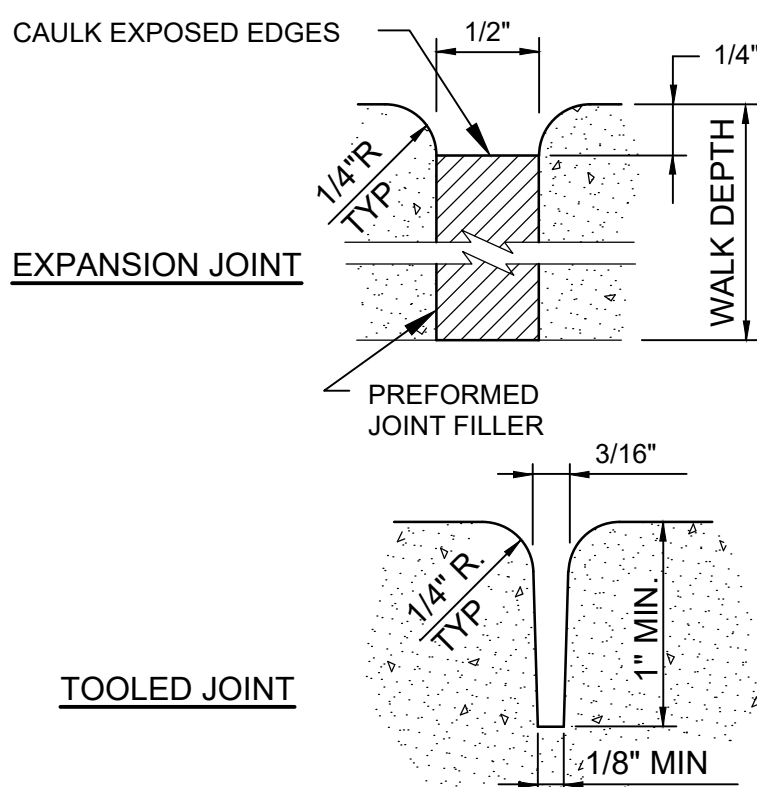
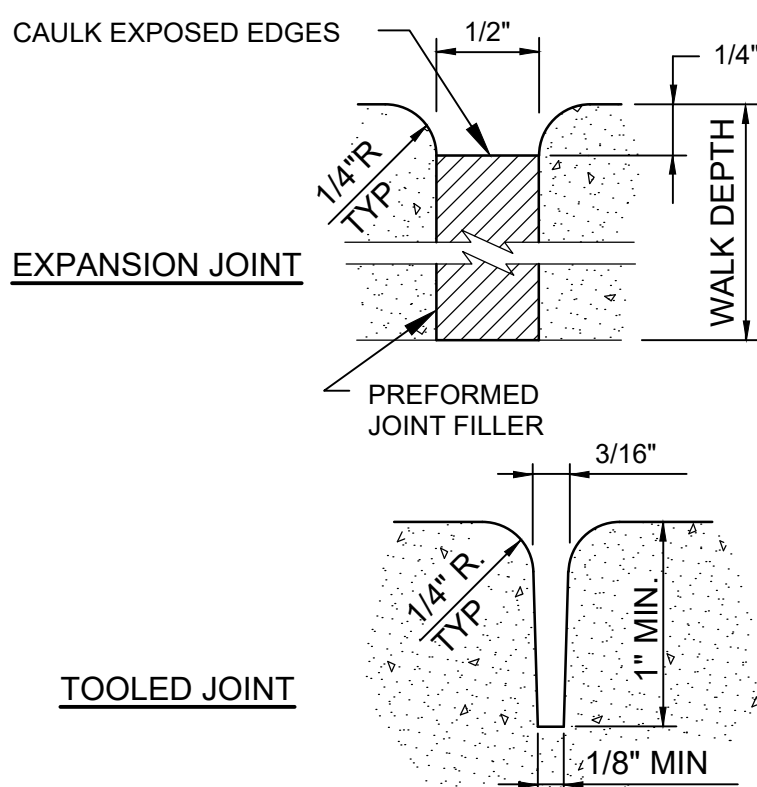
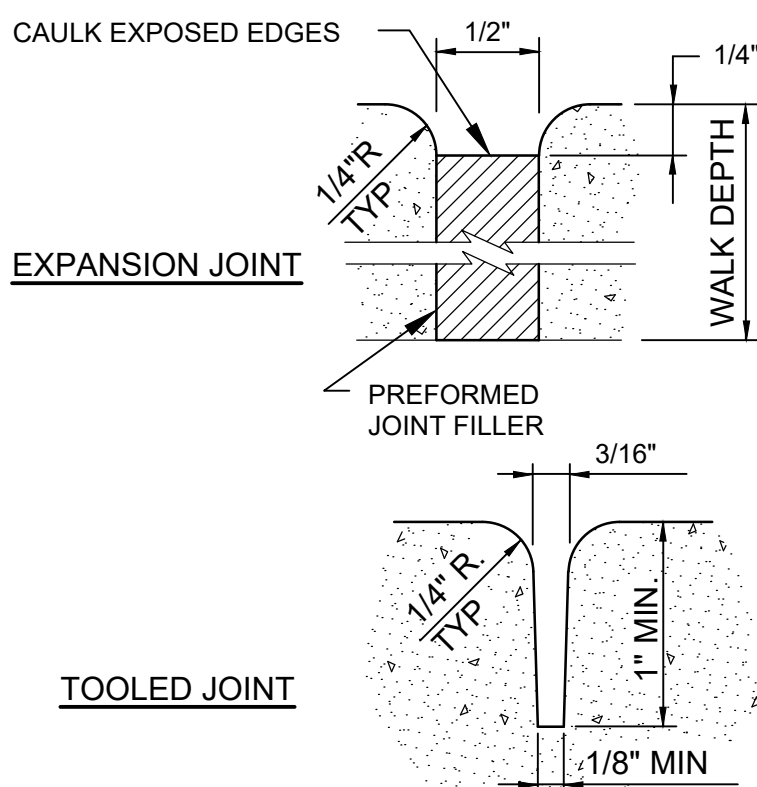
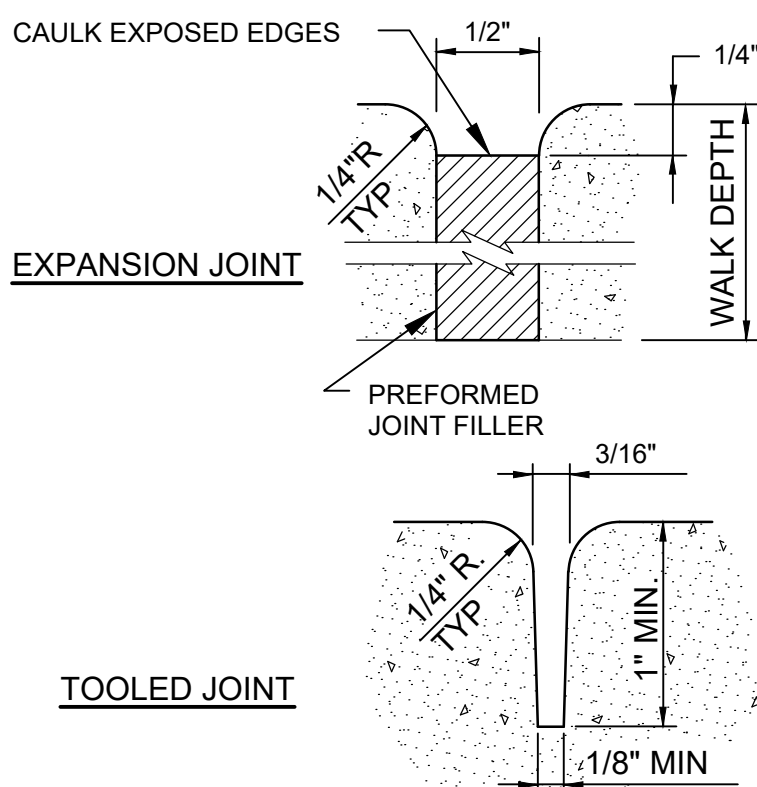
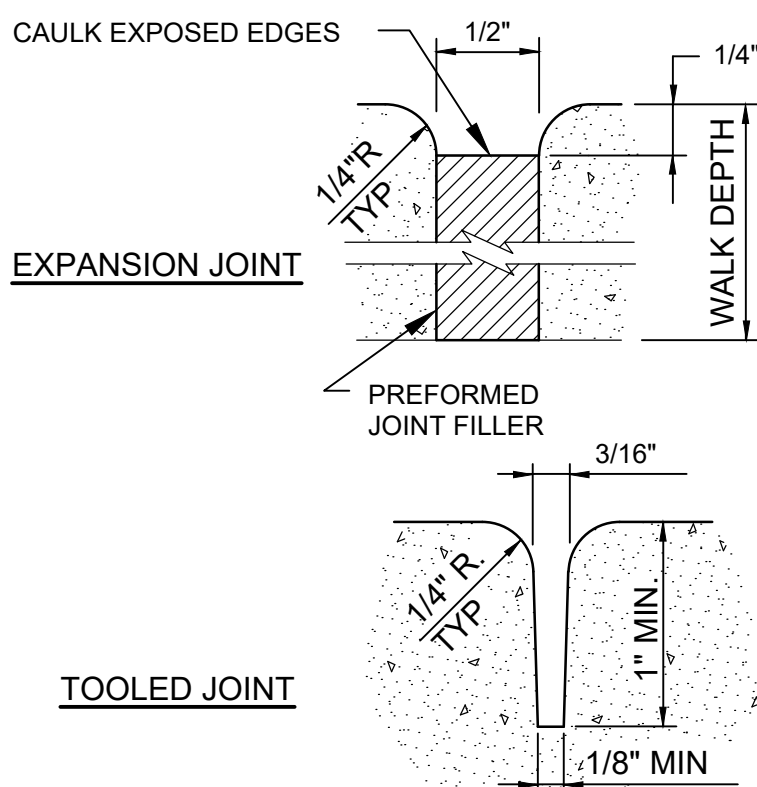
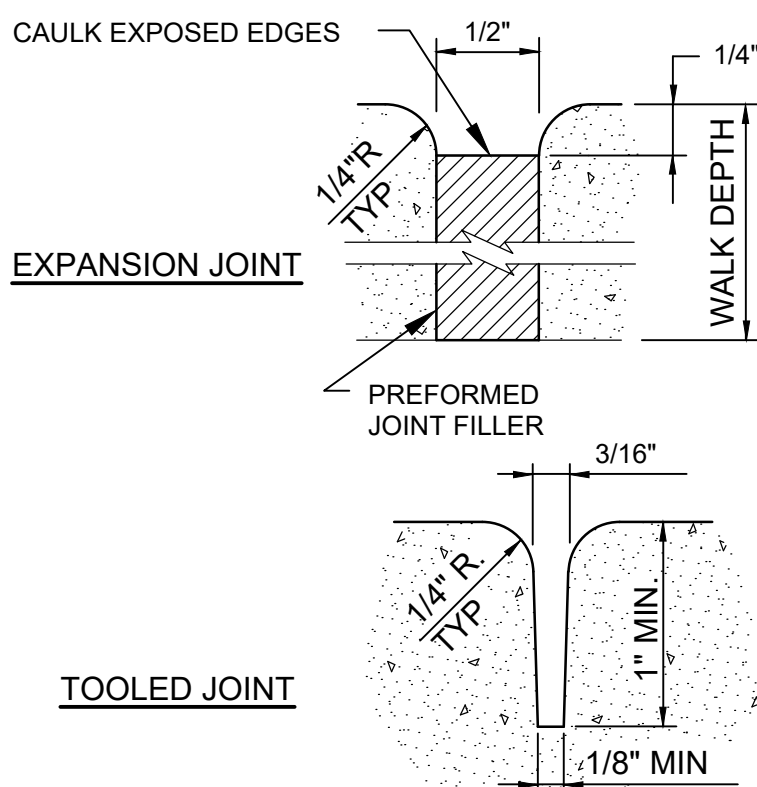
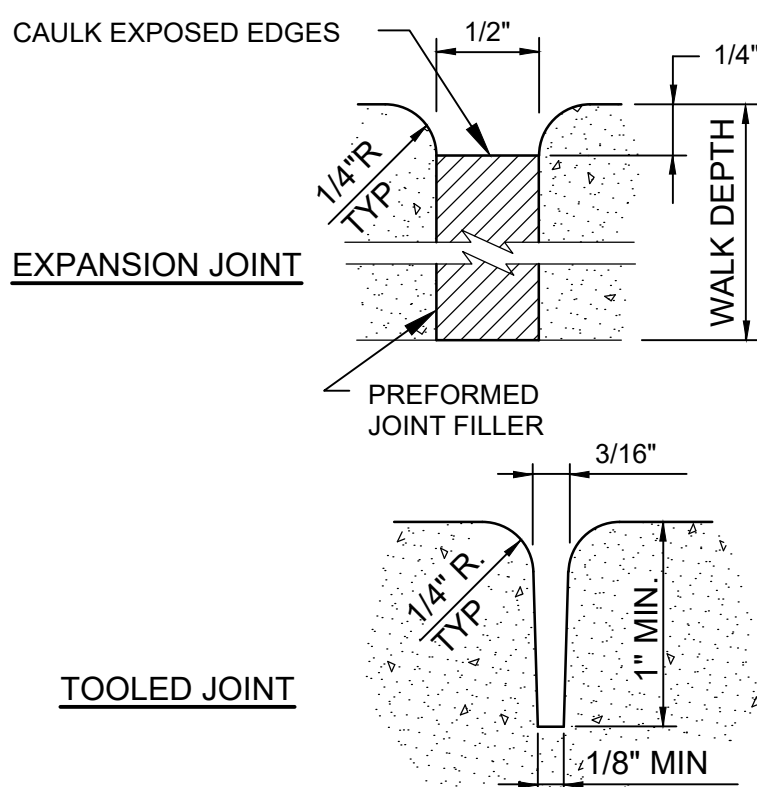
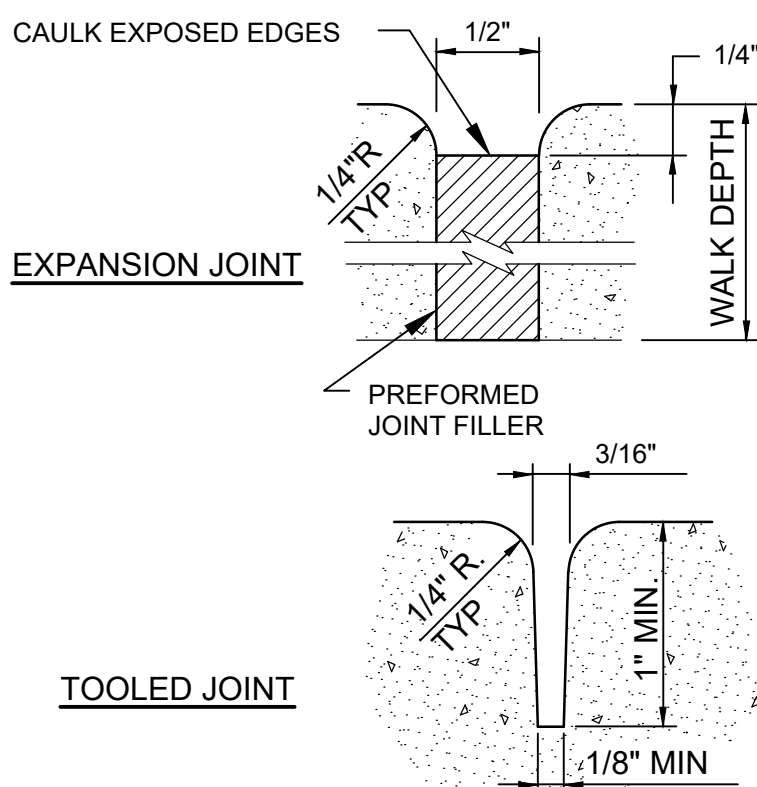
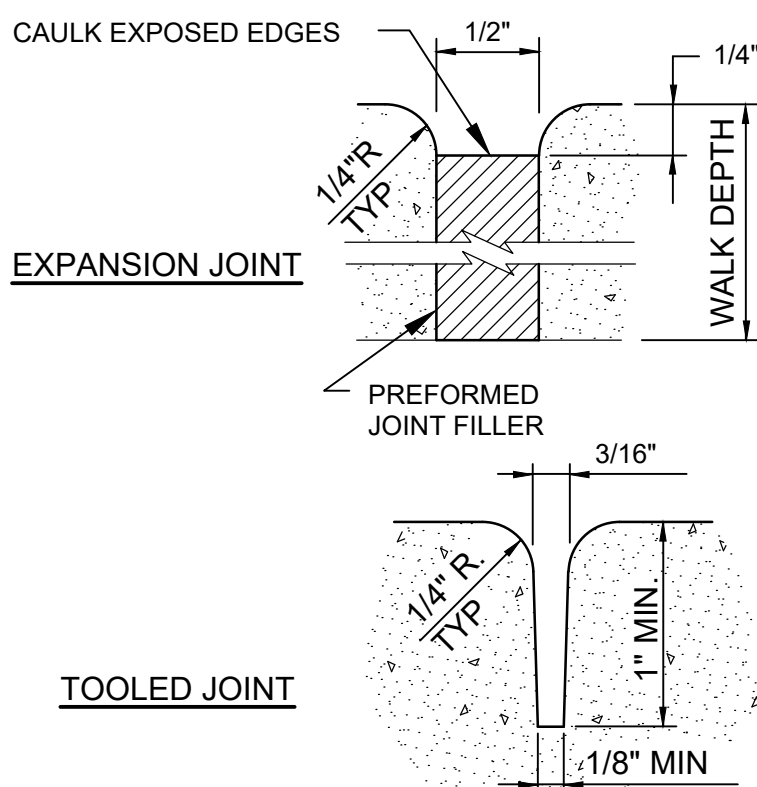
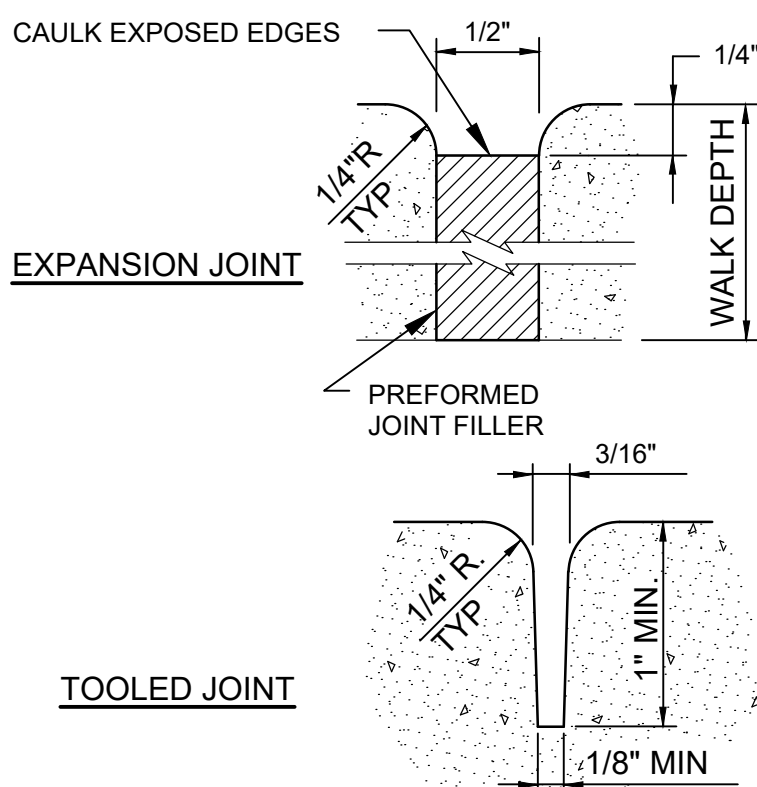
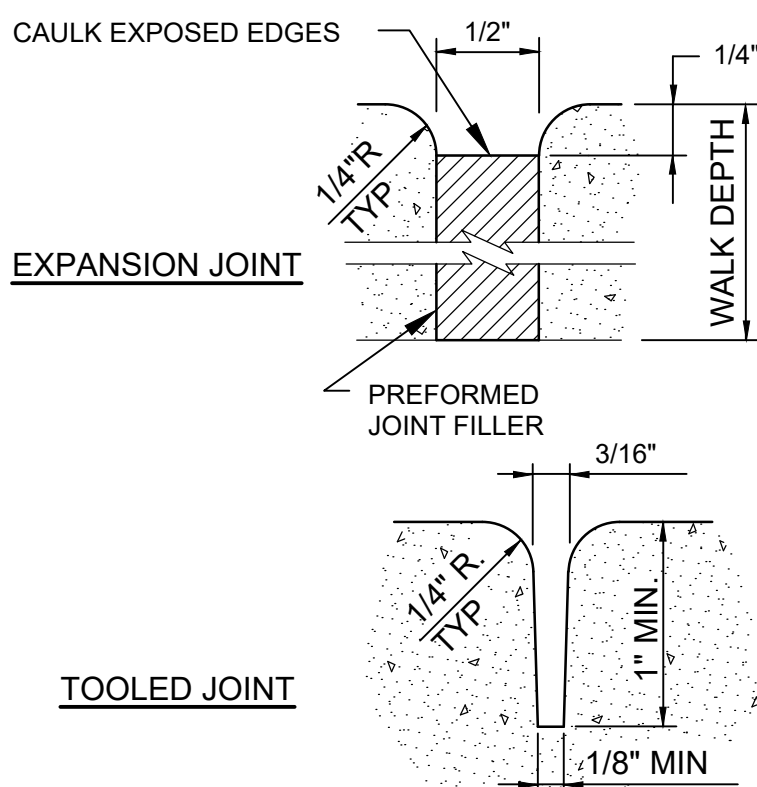
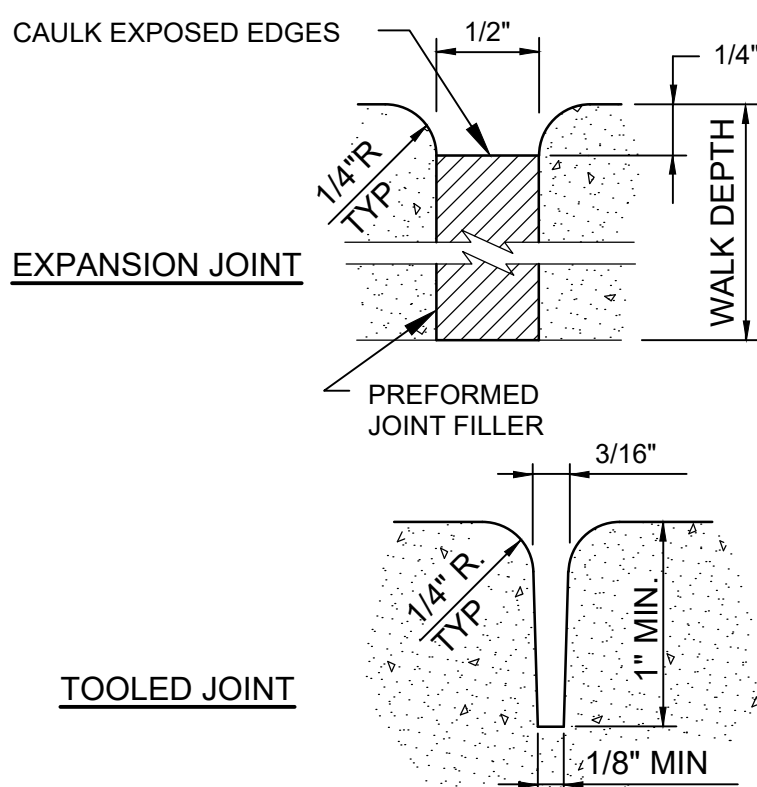


8 CONCRETE WALKWAY, SLAB, LANDING AND RAMP DETAILS

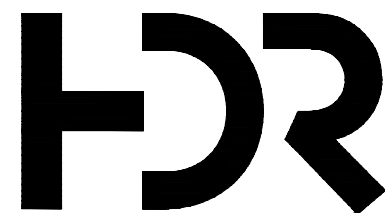


- NOTES:
- PROVIDE FULL DEPTH 3/8" PREMOLED EXPANSION JOINT FILLER ALL AROUND AT ALL UTILITY POLES, METER BOXES, ETC.
 - PLACE FULL DEPTH THRU JOINTS W/1/2"x6" PREMOLED EJ FILLER AT POINT OF TANGENCY AND AT MIN 25' INTERVALS.

6 CONCRETE WALKWAY

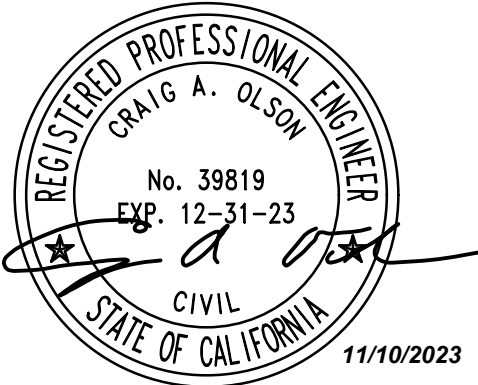


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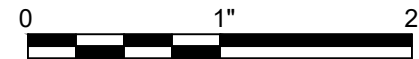


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DESIGNED	A. SINGH
DESIGNED	C. OLSON
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

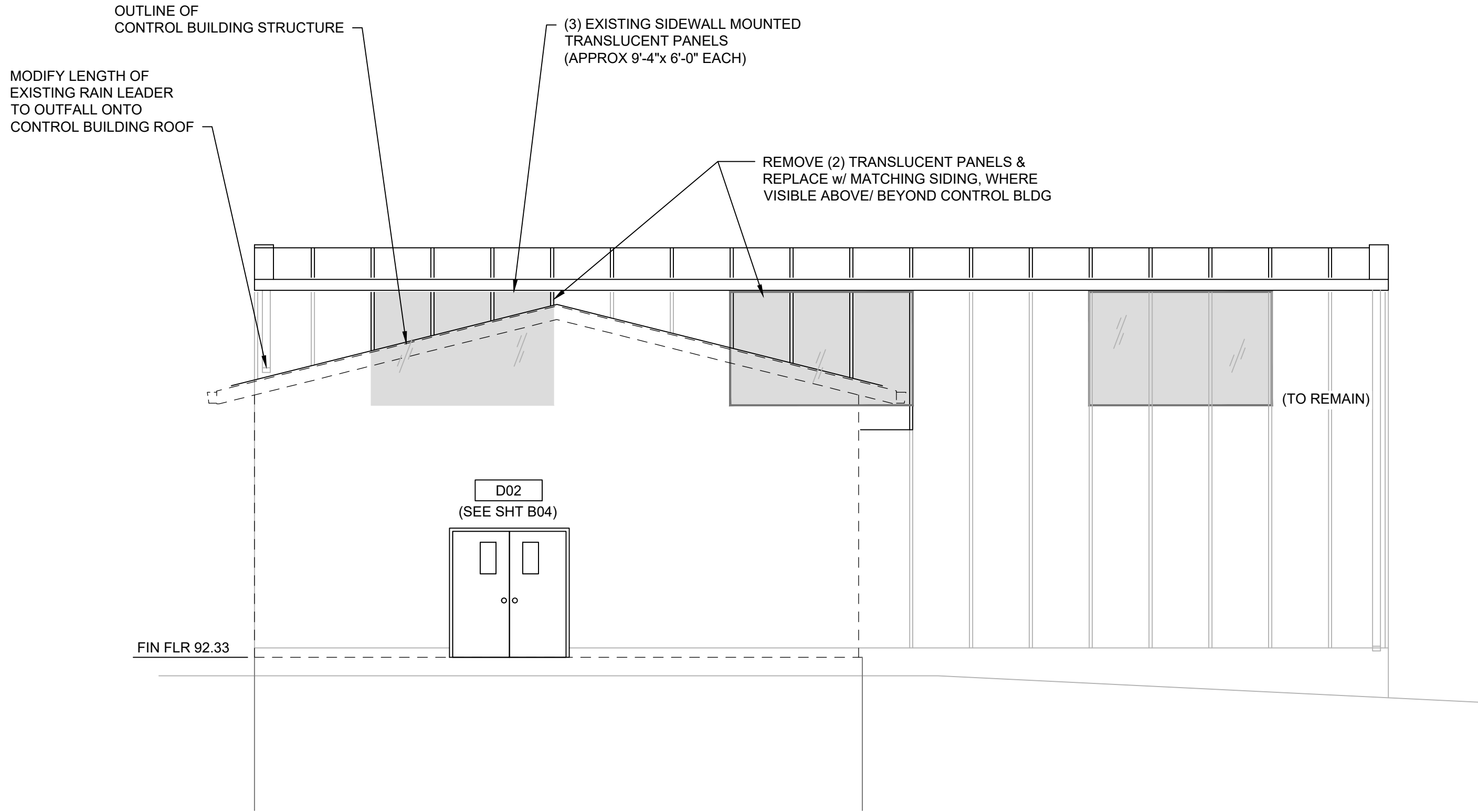


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SCALE | AS NOTED

SHEET
B01

BUILDING

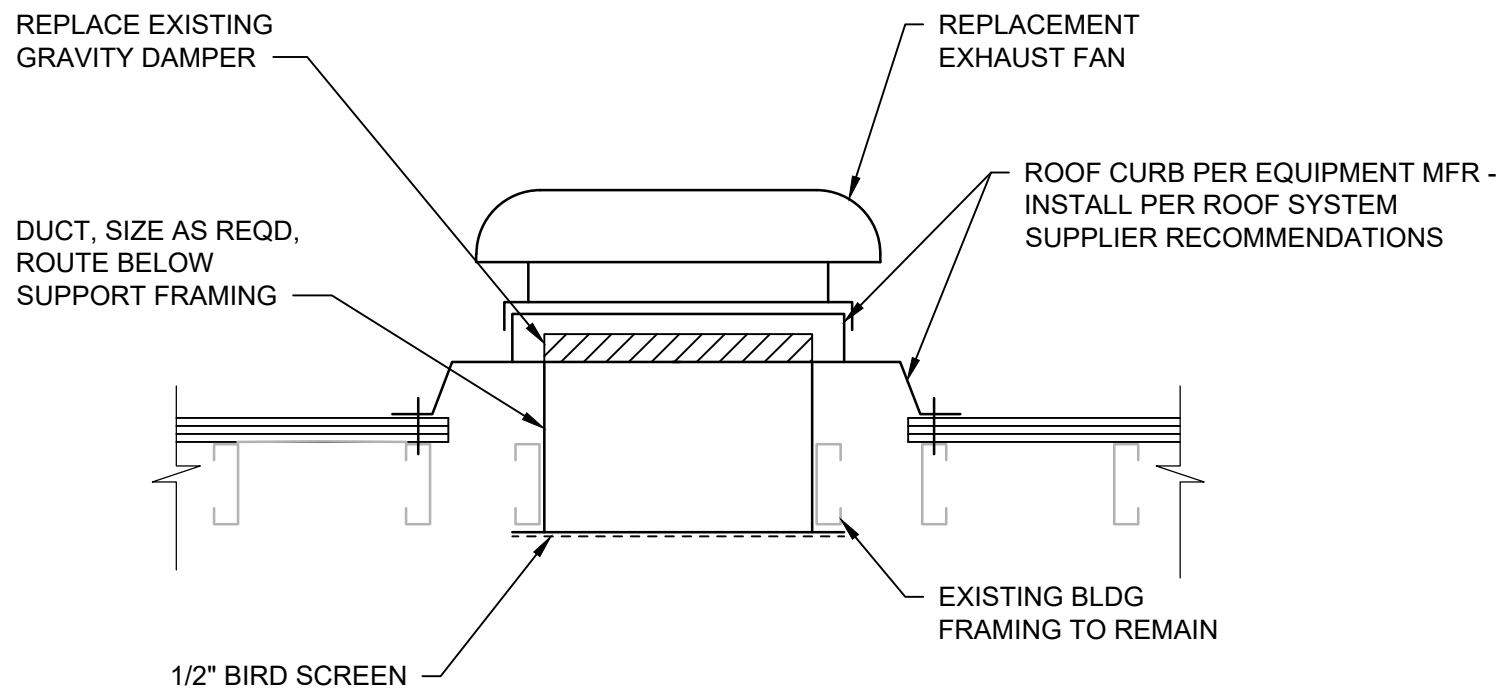
**WATER TREATMENT BUILDING
ROOF REPLACEMENT PLAN AND ELEVATION**



**METAL BUILDING-
NORTH WALL ELEVATION**
1
3/16" = 1'-0"

NOTES:

1. EXISTING METAL BUILDING WAS SUPPLIED BY VARCO PRUDEN BUILDINGS.

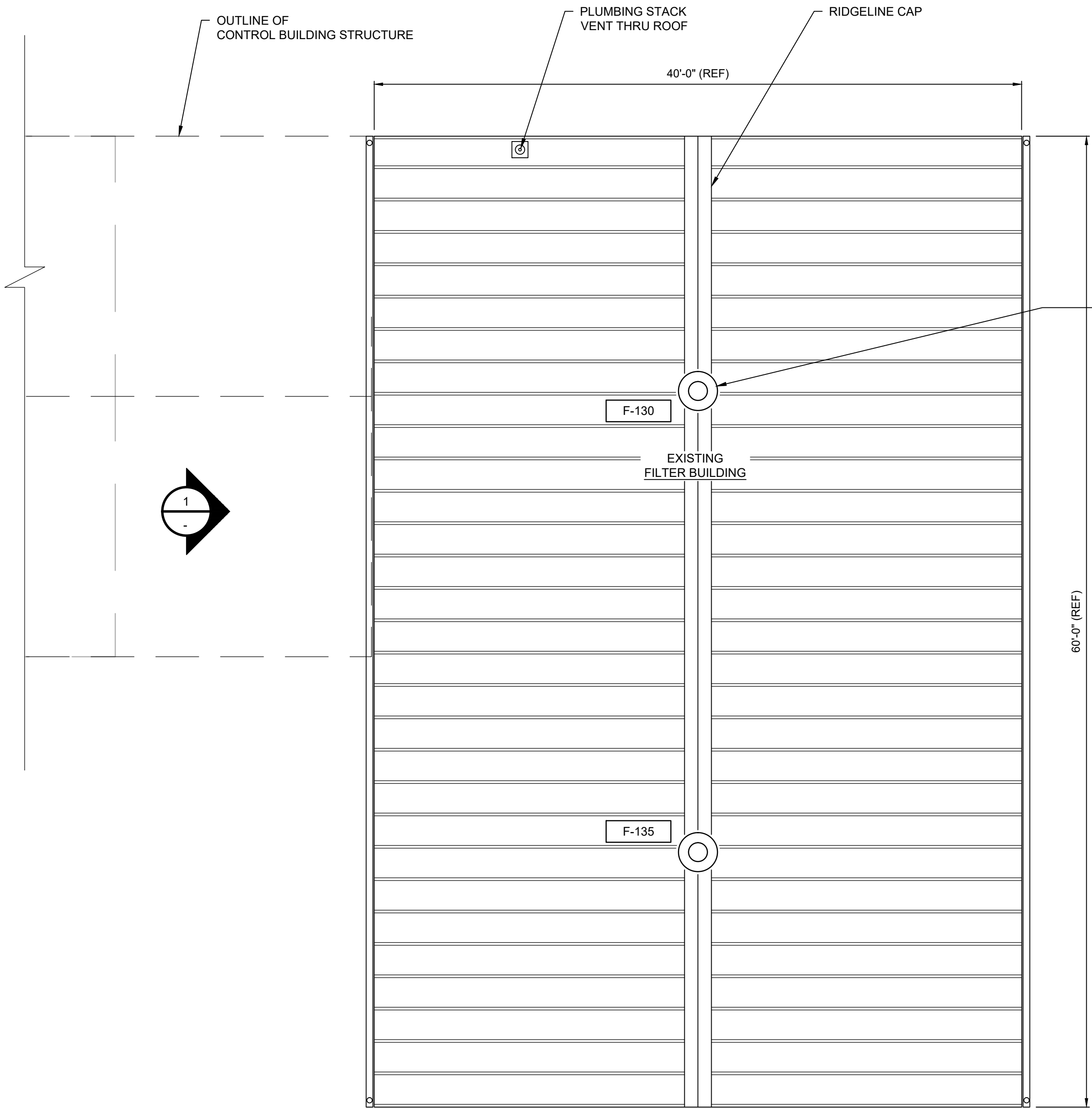


**METAL BUILDING
ROOF EXHAUST FAN DETAIL**
2
NO SCALE



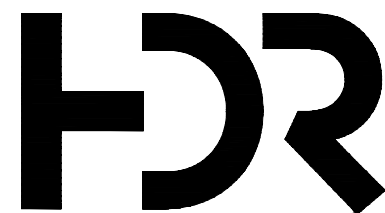
VIEW LOOKING UP TO CEILING

**PHOTO
EXHAUST VENT INTAKE**
3
NO SCALE



**METAL BUILDING-
ROOF PANEL REPLACEMENT PLAN**
3/16" = 1'-0"

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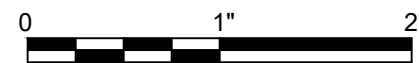


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City of Fort Bragg
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FILENAME | 4B02.dwg
SCALE | AS NOTED

SHEET

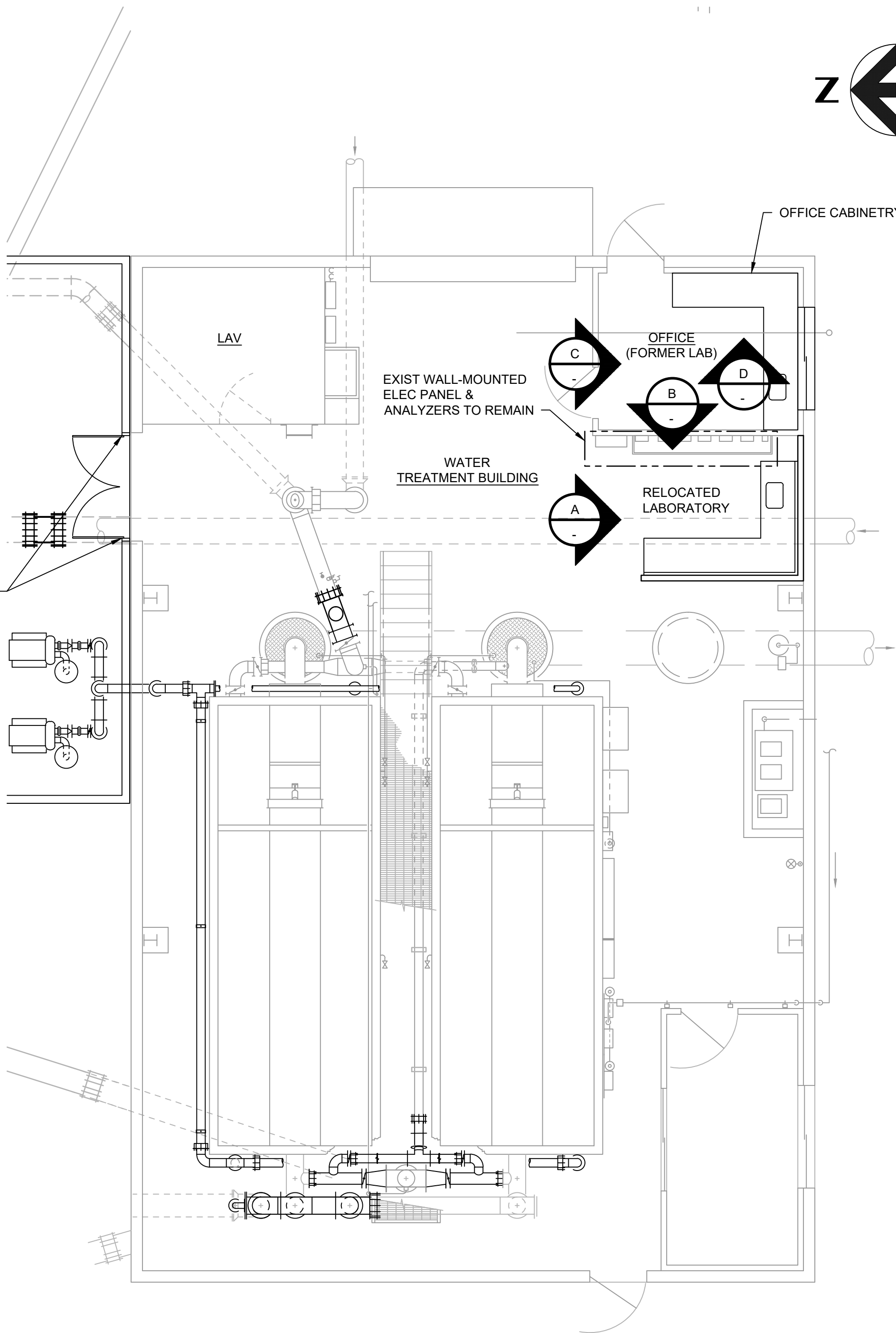
B02

BUILDING

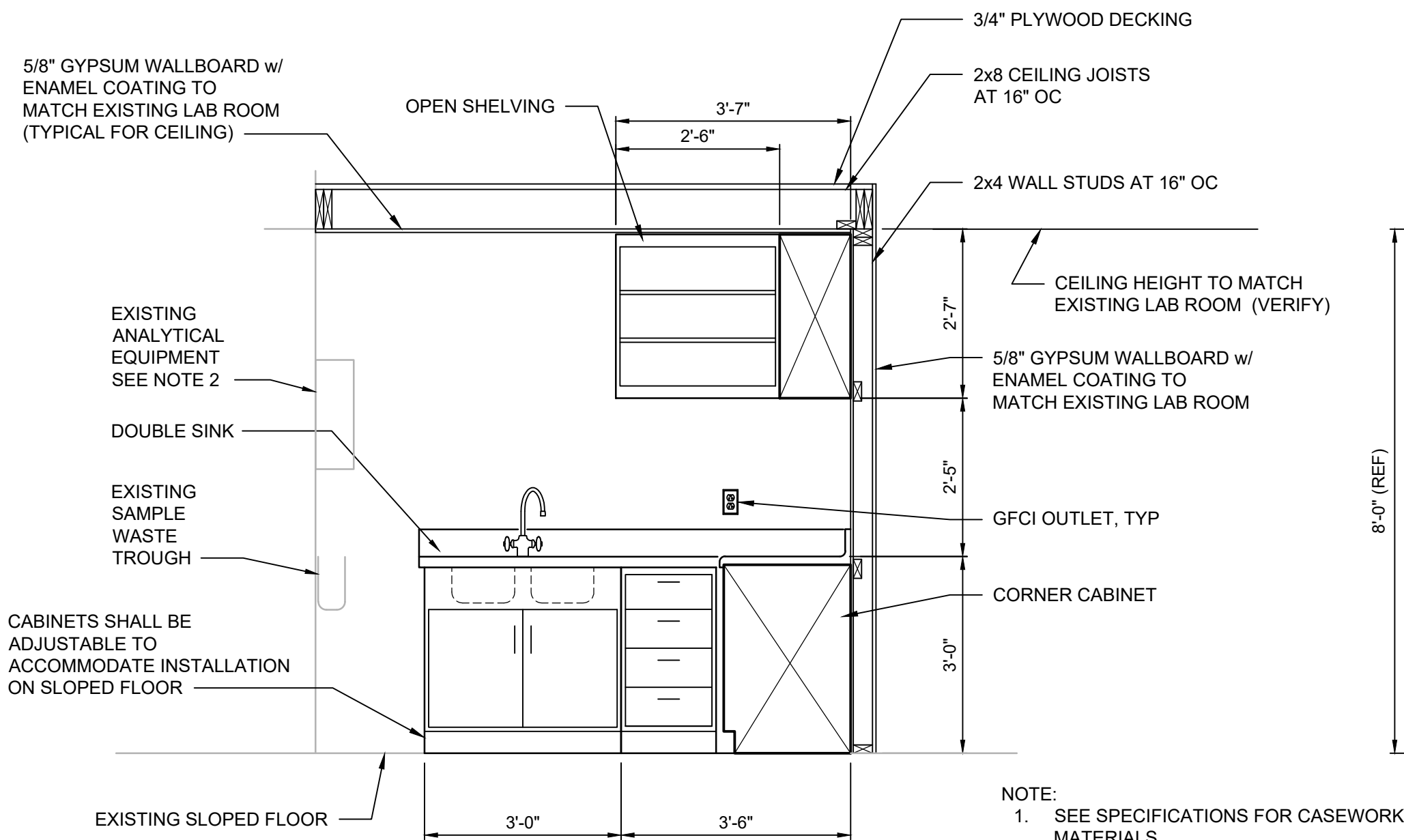
LABORATORY REPLACEMENT
PLAN AND ELEVATIONS

TREATMENT BUILDING PLAN

3/16" = 1'-0"

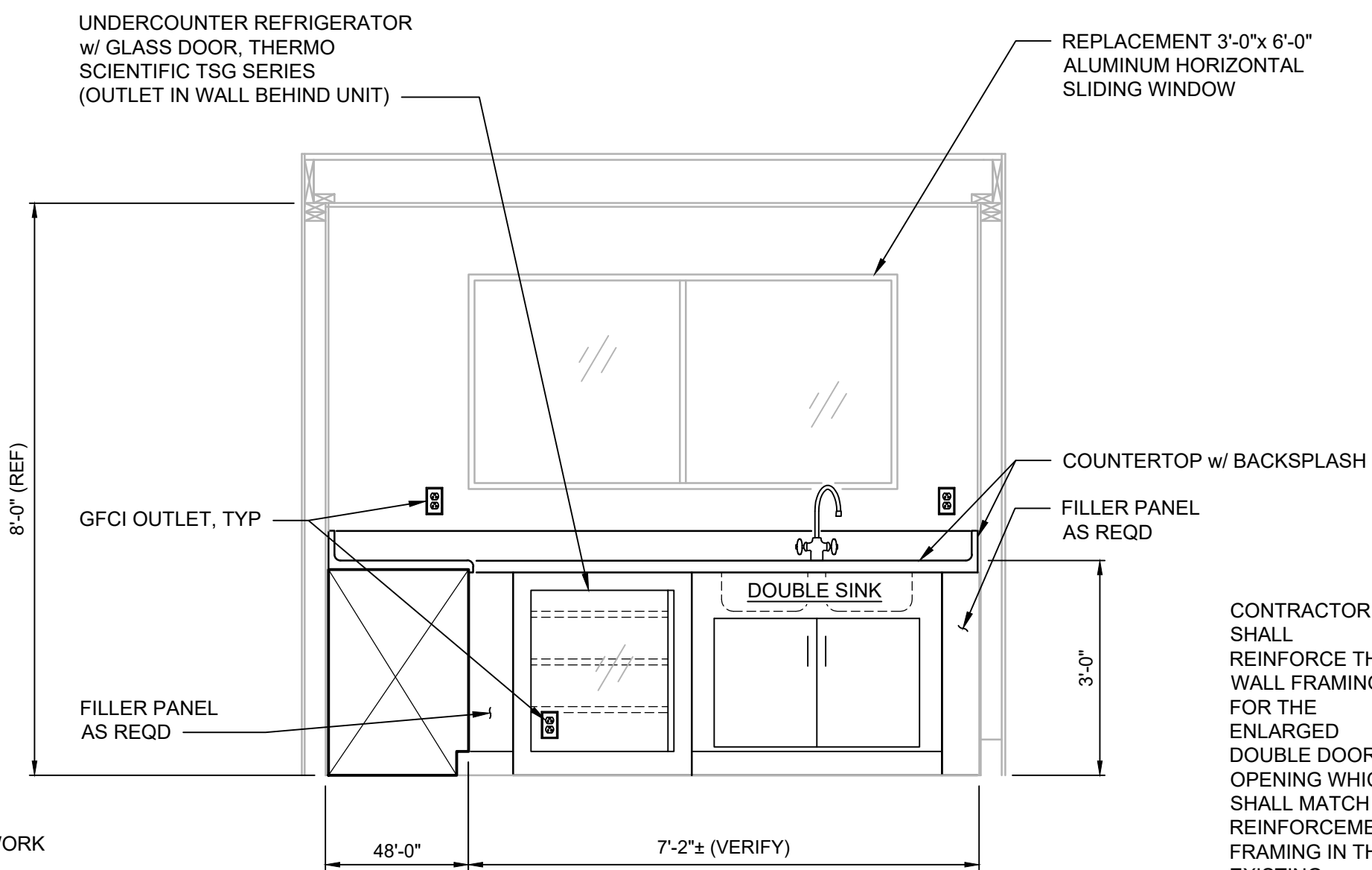


A LABORATORY ELEVATION
1/2" = 1'-0"



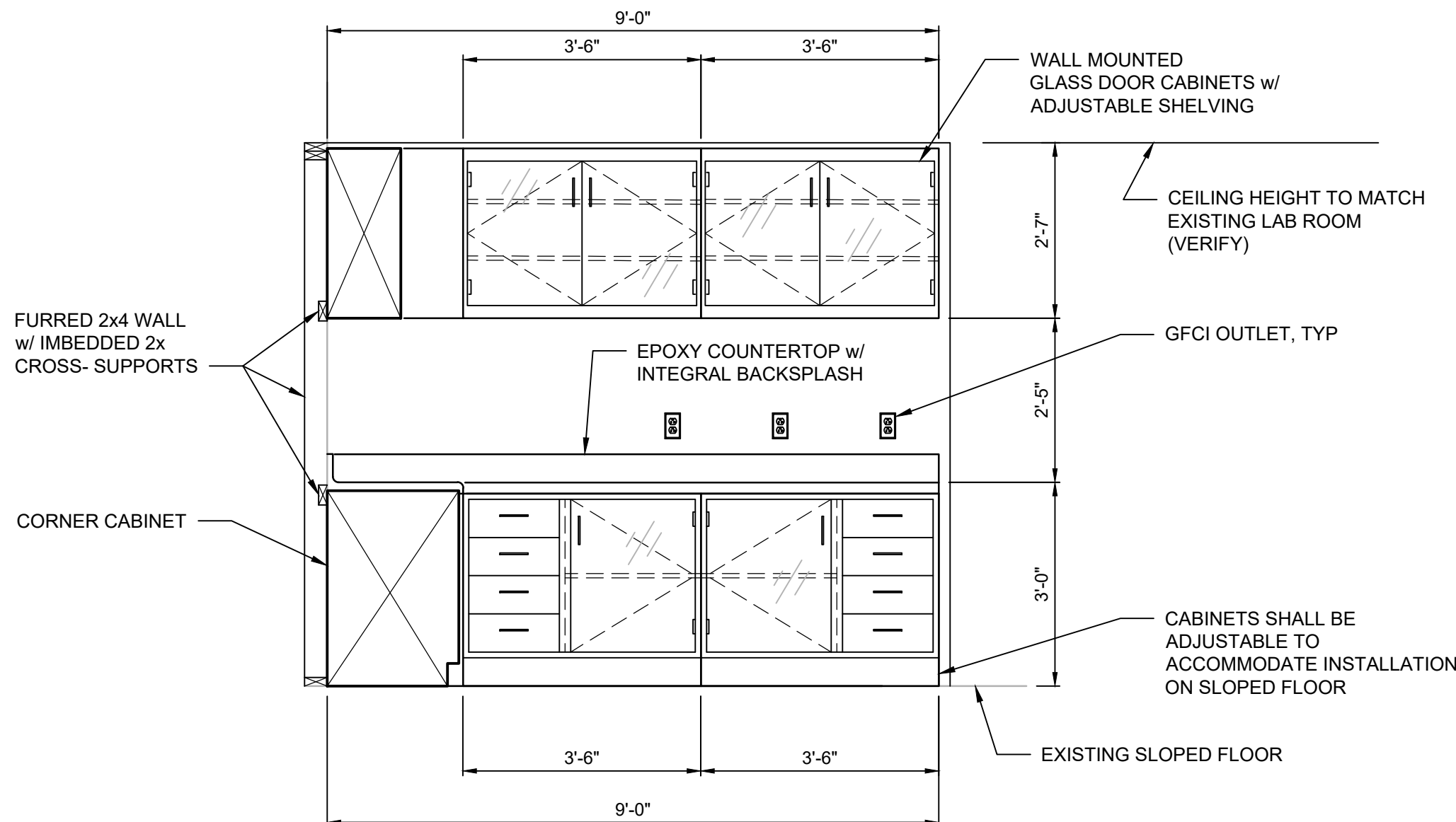
- NOTE:
- SEE SPECIFICATIONS FOR CASEWORK MATERIALS.
 - PROTECT ANALYTICAL EQPT IN PLACE THROUGHOUT CONSTRUCTION. THIS EQPT WILL BE IN CONTINUOUS OPERATION AND PLANT STAFF WILL REQUIRE CONTINUOUS ACCESS TO THIS EQPT.

C OFFICE ELEVATION
1/2" = 1'-0"



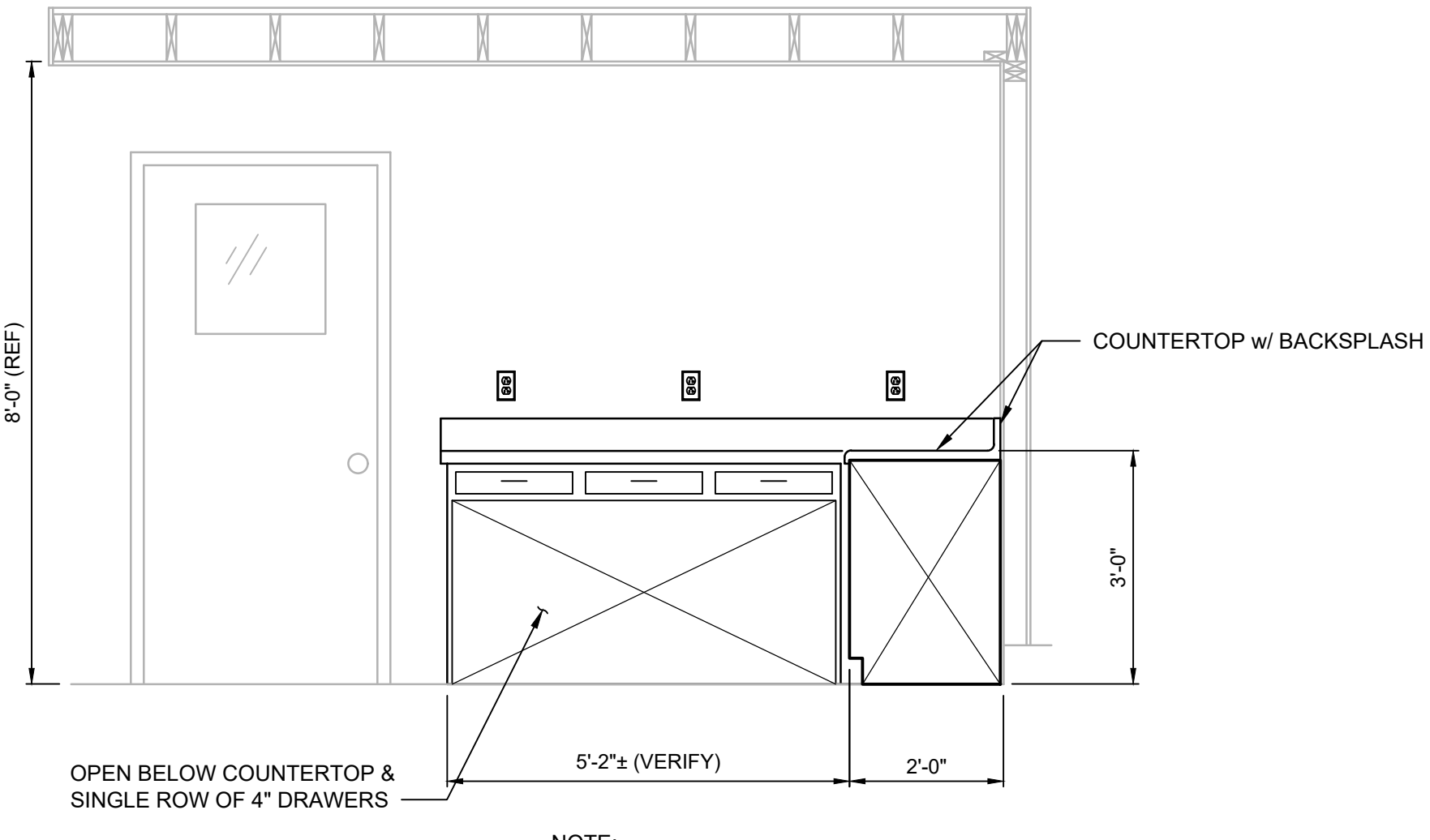
- NOTE:
- SEE SPECIFICATIONS FOR CASEWORK MATERIALS.

B LABORATORY ELEVATION
1/2" = 1'-0"



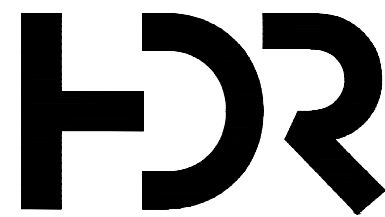
- NOTE:
- SEE SPECIFICATIONS FOR CASEWORK MATERIALS.

D OFFICE ELEVATION
1/2" = 1'-0"



- NOTE:
- SEE SPECIFICATIONS FOR CASEWORK MATERIALS.

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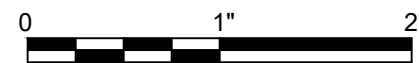


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DRAWN	P. VAN MEURS
DATE	08/2023
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City of Fort Bragg
Water Treatment Plant
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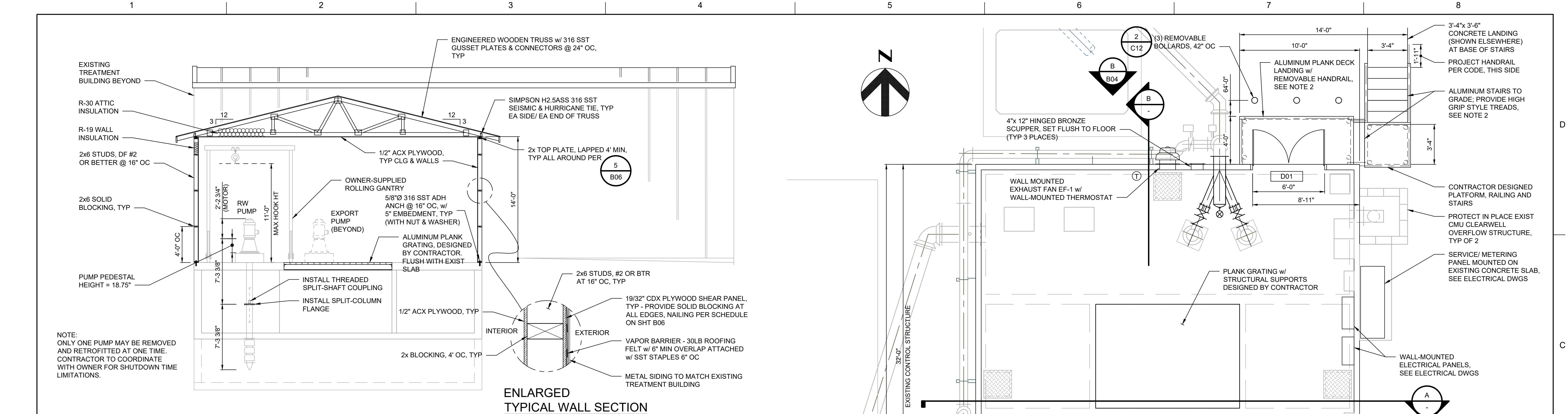
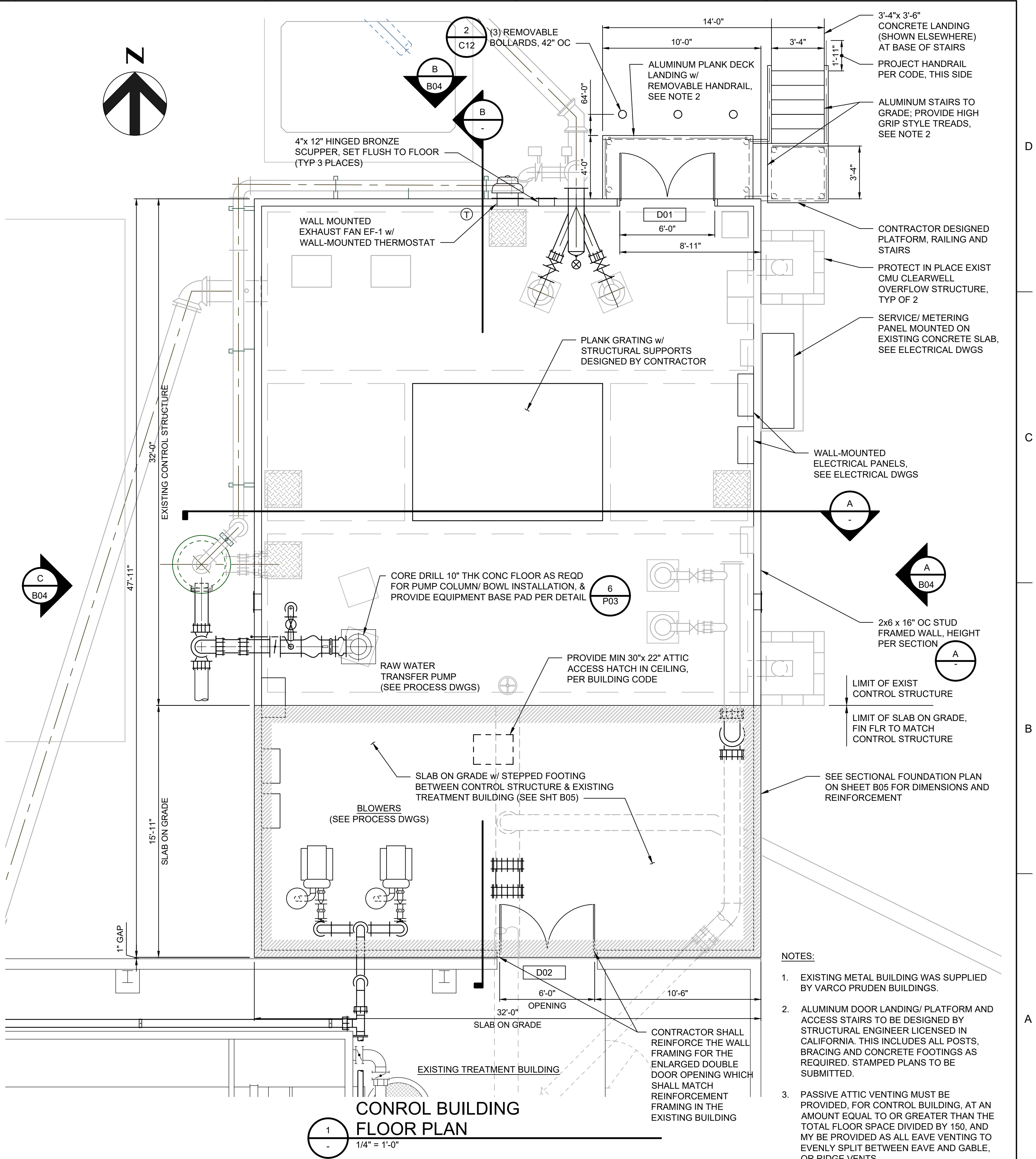
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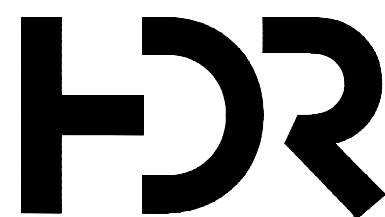
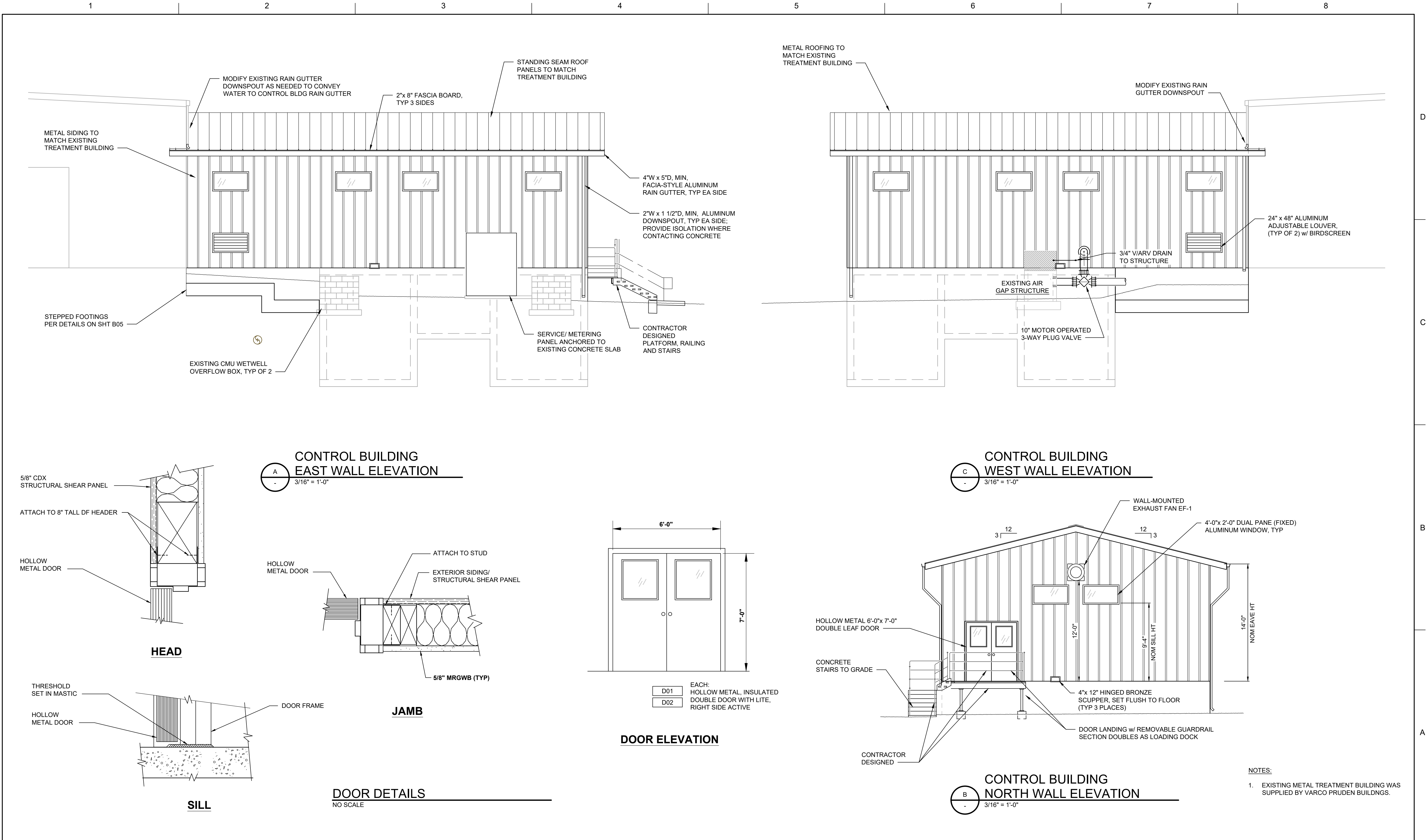
B03

BUILDING

CONTROL BUILDING REPLACEMENT STRUCTURAL PLAN AND SECTIONS

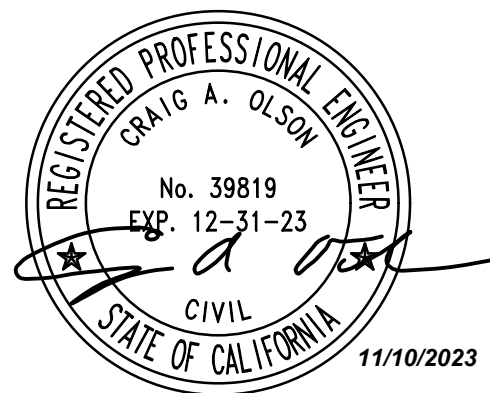


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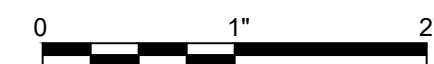


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DRAWN	P. VAN MEURS
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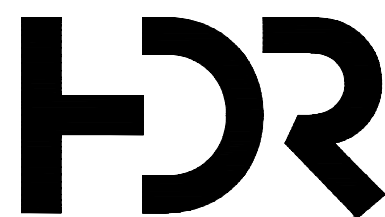


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SHEET

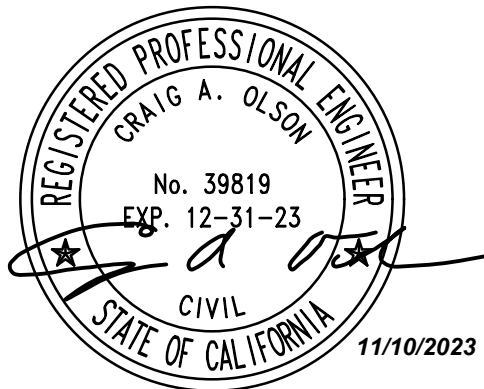
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DATE: 08/10/23 02:33:13pm, JKAMBQJ

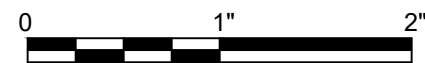


ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
DESIGNED	C. OLSON
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

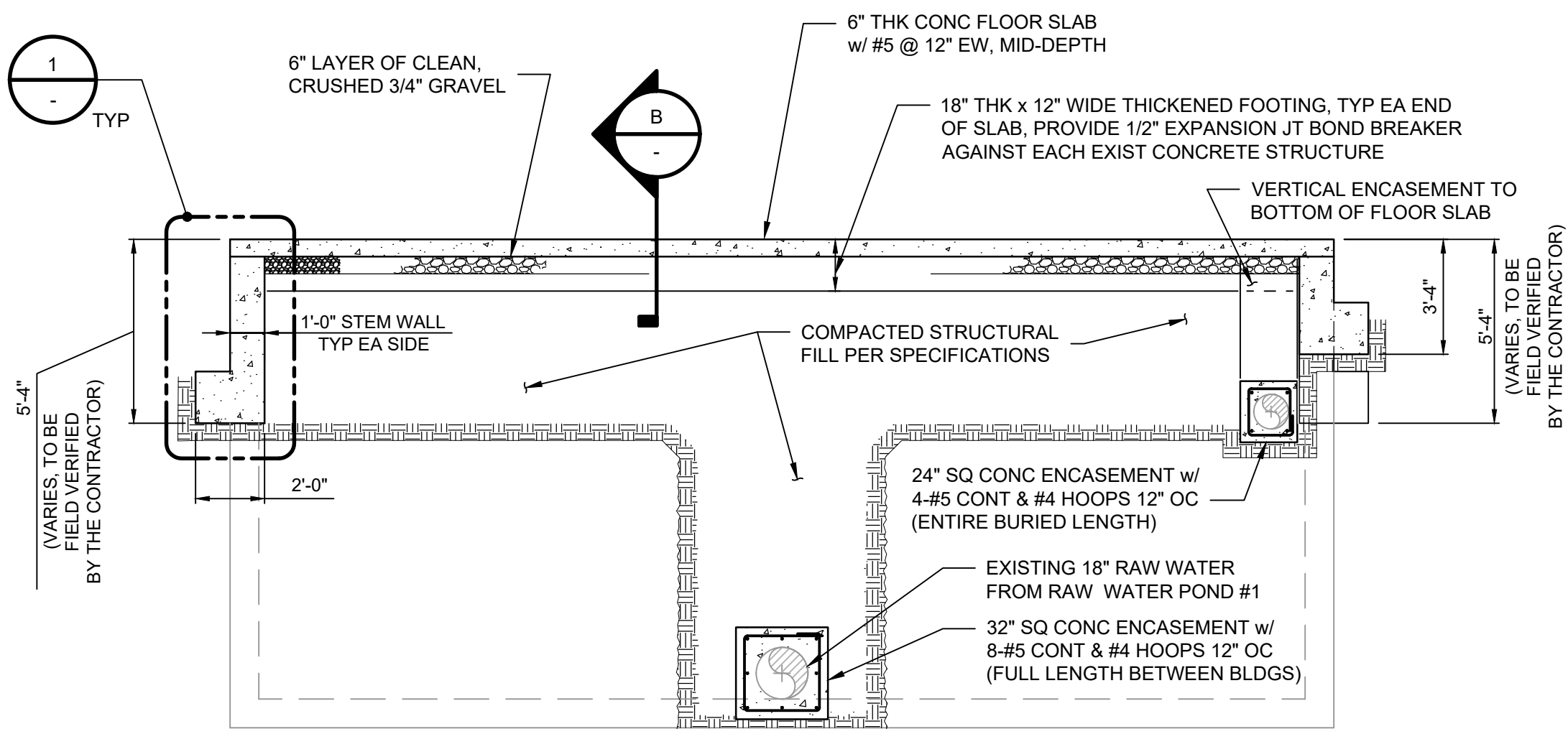


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B05

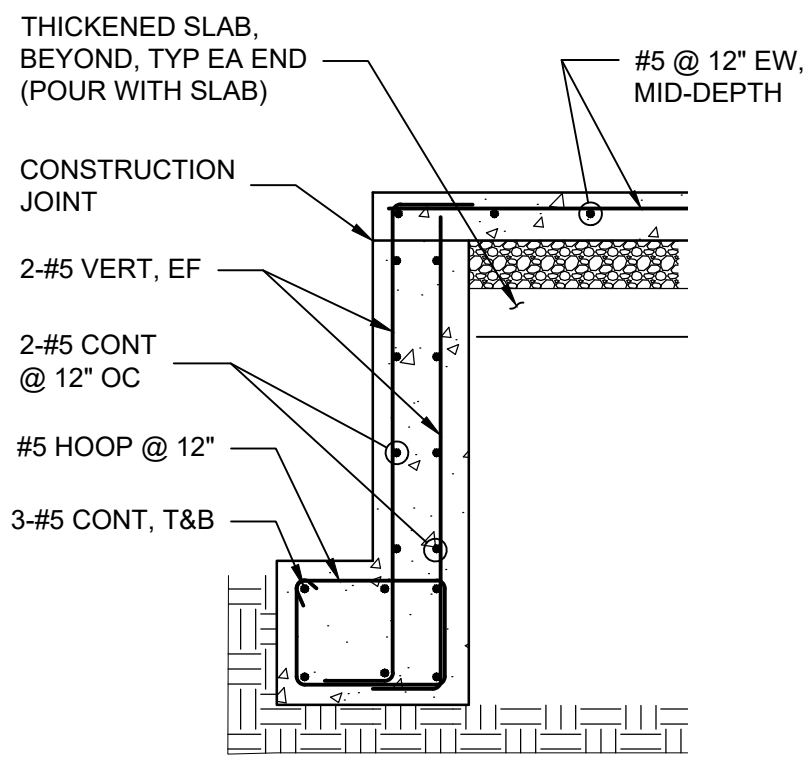
CONTROL BUILDING FOUNDATION PLAN (SECTIONAL)

1/4" = 1'-0"



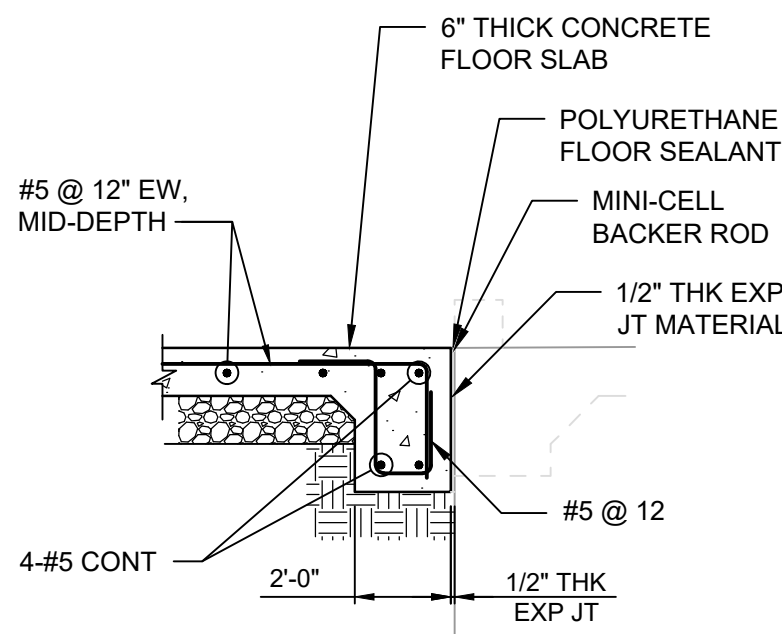
FOUNDATION CROSS-SECTION

1/4" = 1'-0"



FOOTING/ STEMWALL DETAIL

1/2" = 1'-0"

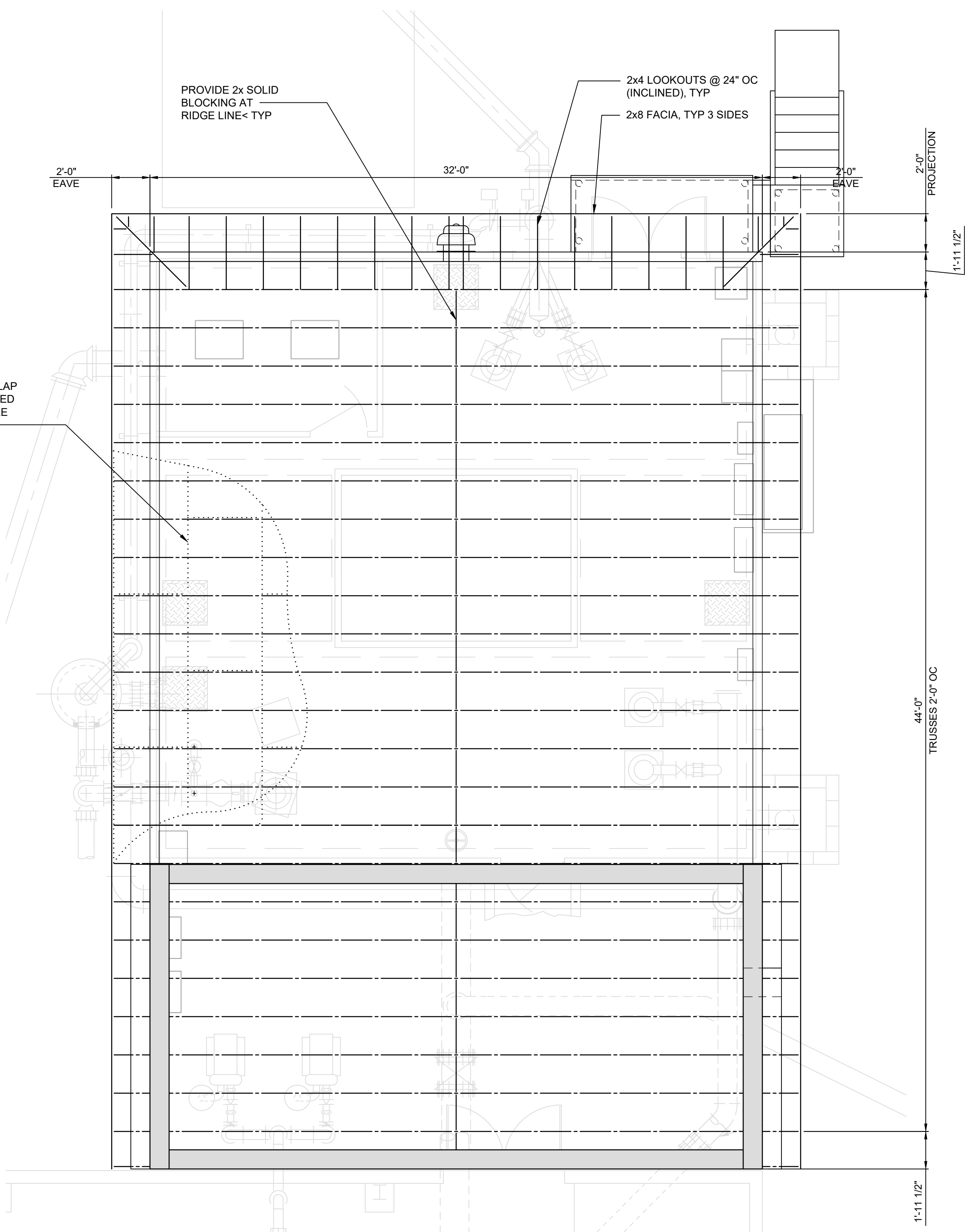


SECTION THICKENED FOOTING

1/2" = 1'-0"

CONTROL BUILDING ROOF FRAMING PLAN

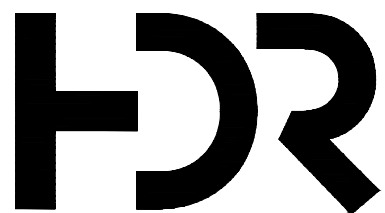
1/4" = 1'-0"



BUILDING

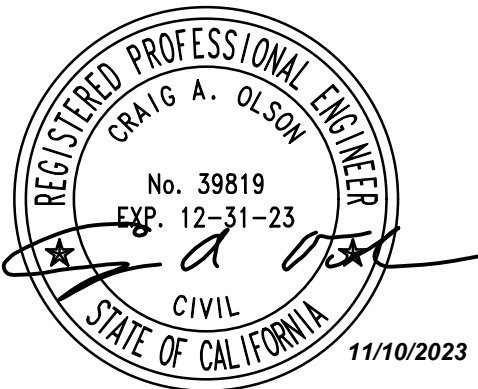
CONTROL BUILDING ROOF AND FOUNDATION
PLANS, SECTIONS AND DETAILS

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DATE: 08/10/23 02:33:30pm - JKAMEOJ



0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

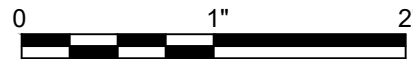
PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
DESIGNED	C. OLSON
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

BUILDING

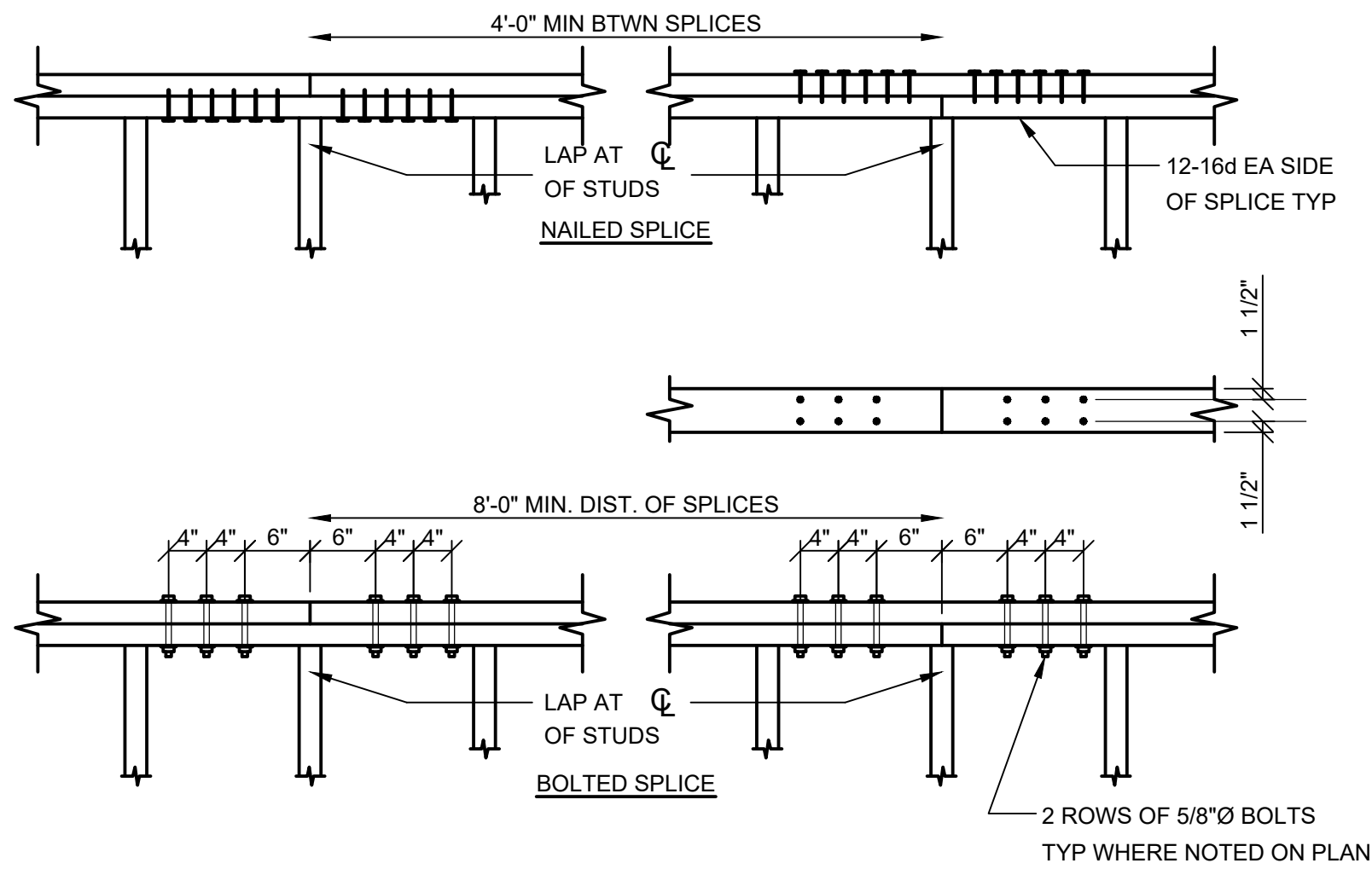
WOOD FRAMING DETAILS



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SCALE	AS NOTED

SHEET

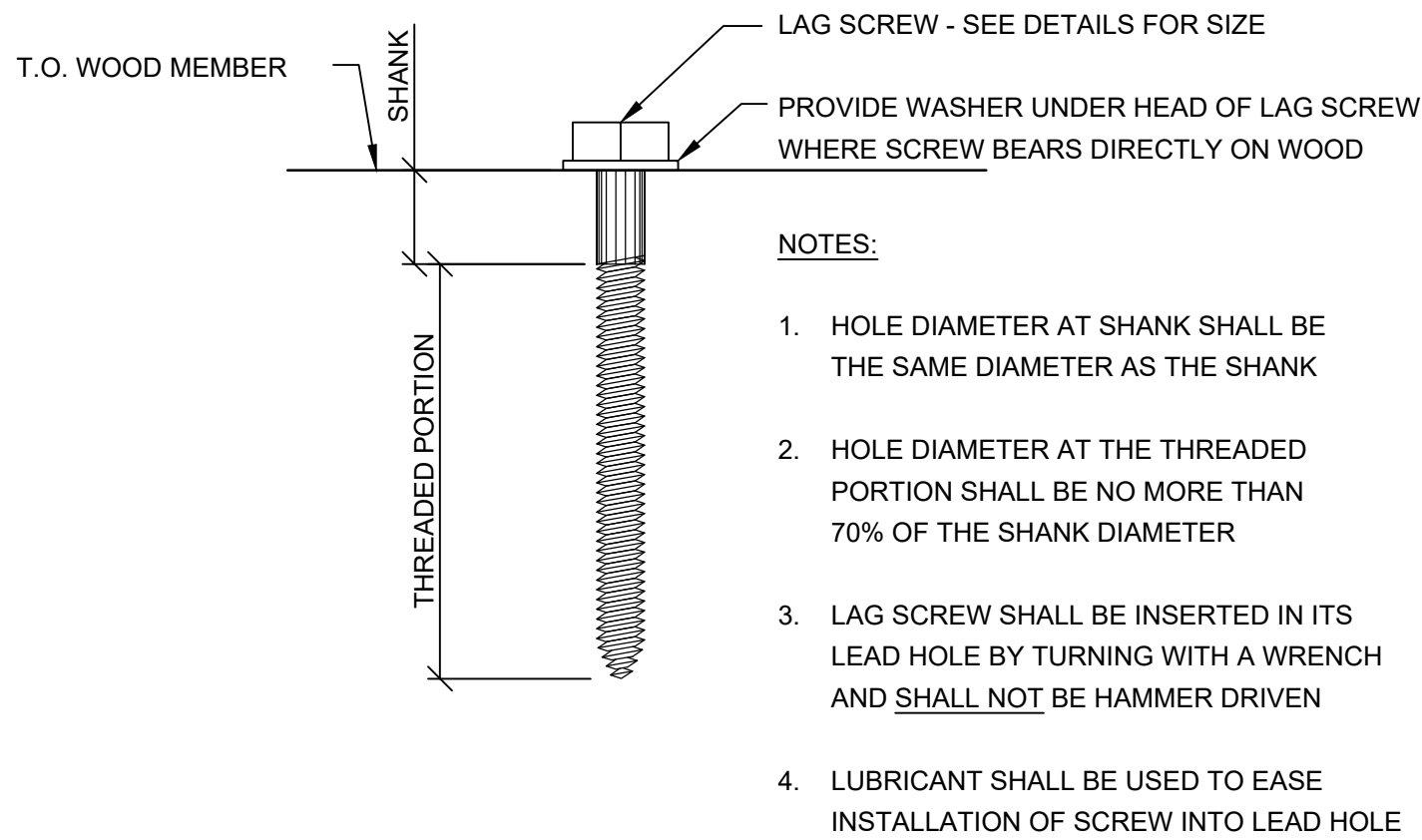
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WALL TOP PLATES SPLICE DETAILS

NTS

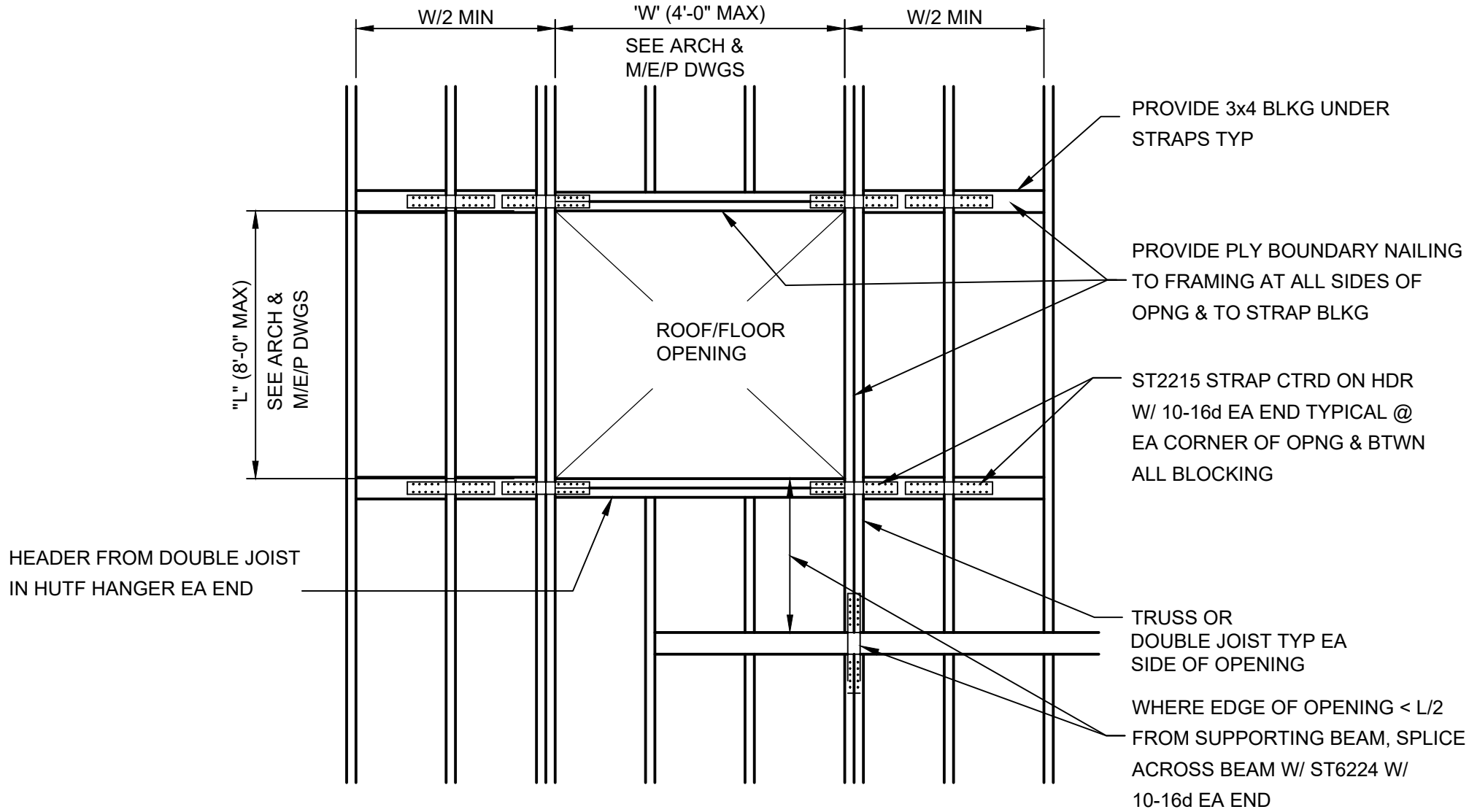
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TYPICAL LAG SCREW LEAD HOLE DETAIL

NTS

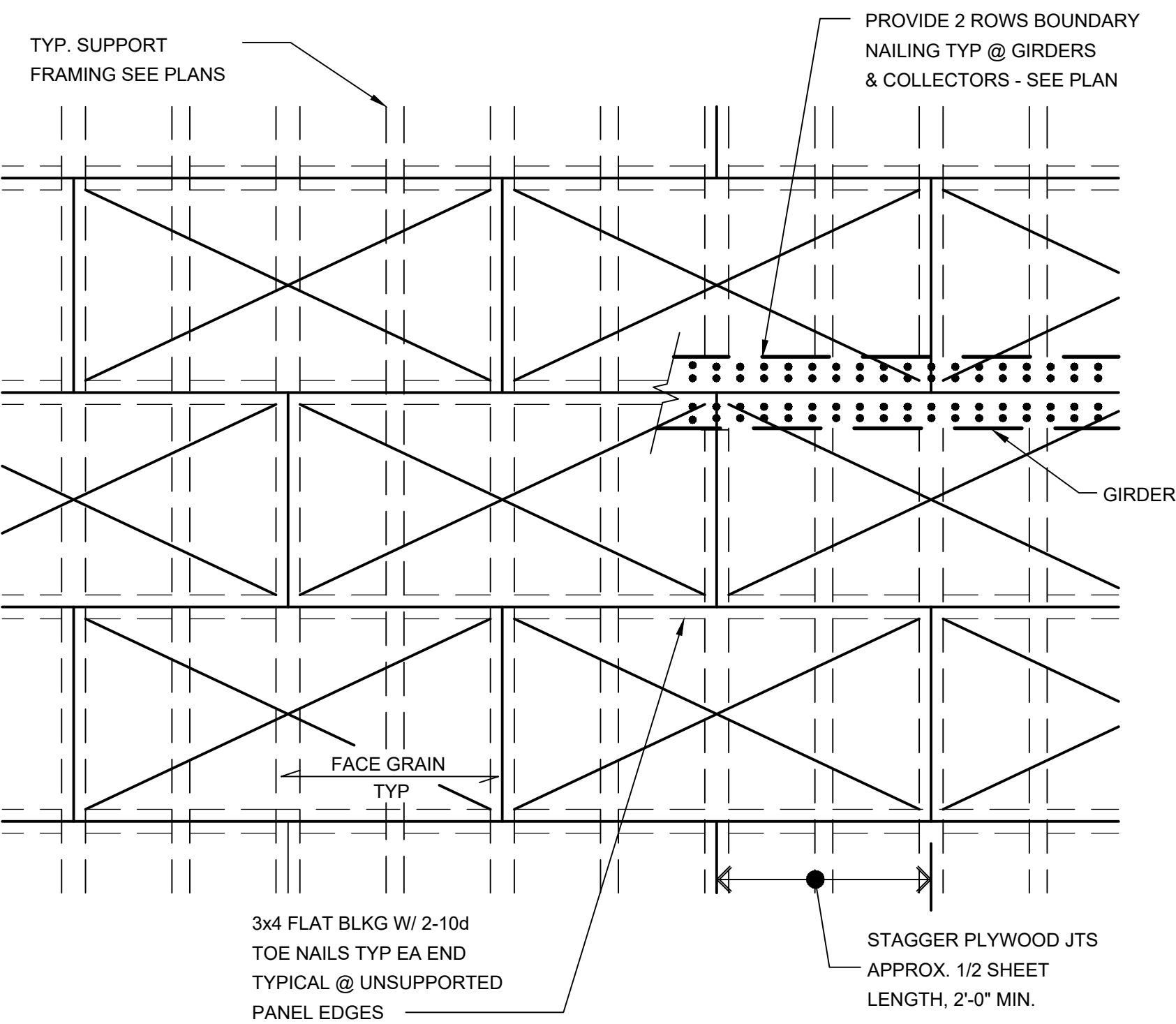
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TYPICAL ROOF OPENING DETAIL

NTS

3



TYPICAL FLOOR/ROOF SHEATHING

NOTES:

- EDGE DISTANCE OF NAILS IN JOISTS & PLYWOOD SHEETS SHALL BE 3/8" MINIMUM.
- PROVIDE REQ'D. EDGE BLOCKING AS SHOWN ABOVE. THIS BLOCKING IS NOT SHOWN ON FRAMING PLANS.
- SEE SCHEDULE 2 FOR PLYWOOD THICKNESS AND NAILING REQUIREMENTS.
- PLYWOOD SHALL BE CONTINUOUS OVER MIN TWO SPANS.

DIAPHRAGM LAYOUT PLANS

NTS

4

- SOLID BLOCKING SHALL BE 3X UNLESS OTHERWISE NOTED. BLOCKING SHALL BE FULL DEPTH OF MEMBERS, STUDS JOIST, ETC.
ALL ROOF OR FLOOR PLY SHALL BE NAILED TO ALL BLOCKS WITH 4 NAILS MINIMUM - NAIL SIZE AND SPACING TO BE PER DIAPHRAGM SCHEDULE
- MACHINE NAILING OF WALL, FLOOR OR ROOF SHEATHING IS ONLY PERMITTED IF THE FOLLOWING CONDITIONS ARE SATISFIED:
 - EQPMT IS CALIBRATED SO THAT NAILS ARE FULLY DRIVEN BUT DO NOT PENETRATE THE FACE OF PLYWOOD BY DEMONSTRATION ON TEST PANEL.
 - COMMON WIRE NAILS OF REQUIRED SIZE & SPACING (W/ HEAD CLIPPED ON ONE SIDE ONLY) PROVIDING REQUIRED PENETRATION INTO SUPPORTING MEMBER(S) ARE USED.
 - NAILS ARE PLACED NO CLOSER THAN 3/8" FROM EDGE OF PLYWOOD SHEETS.
 - MEMBERS SUPPORTING PLYWOOD PANELS AT JOINTS ARE 3x OR WIDER. IF SUCH MEMBERS ARE 2x THEN ADJUST EQPMT SO THAT NAIL HEADS ARE DRIVEN NO CLOSER THAN 1/8 INCH FROM FACE OF PLY BY MACHINE AND COMPLETE DRIVING OF NAIL BY HAND.
 - MACHINE NAILING ON ONE SIDE ONLY WITH PLYWOOD ON BOTH SIDES OF STUDS. OTHER SIDE TO BE HAND-NAILED.
 - WHERE ANY OF THE ABOVE ARE NOT FULLY SATISFIED, WORK WILL NOT BE ACCEPTED AND SHALL BE REMOVED AND REPLACED AT NO COST OR DELAY TO THE OWNER.
- CROSS BRIDGING SHALL BE 1x3 WOOD CROSS BRIDGING OR FULL DEPTH SOLID 2x BLOCKING OR SIMPSON TB METAL BRIDGING. ROWS OF CROSS BRIDGING SHALL BE NOT MORE THAN 8'-0" APART NOR MORE THAN 8'-0" FROM EACH END OF THE JOISTS. BRIDGING SHALL BE USED AT ALL ROOF AND FLOOR JOISTS EVEN THOUGH NOT SHOWN THE DRAWINGS, EXCEPT THAT ROOF JOISTS 8" DEEP OR LESS NEED NOT BE BRIDGED. WHERE CROSS BRIDGING OR METAL BRIDGING IS USED, THE LOWER ENDS OF SUCH BRIDGING SHALL BE DRIVEN UP AND NAILED AFTER THE FLOOR OR ROOF PLY ABOVE HAS BEEN NAILED. PROVIDE 1/2" CLEARANCE BTWN CROSS-BRIDGE PIECES.
- BEAMS, JOISTS AND PURLINS SHALL ONLY BE CUT AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER-OF-RECORD. HOLES THROUGH THE MEMBER SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER IN SIZE AND SHALL BE LOCATED IN THE MIDDLE 1/3 OF THE MEMBER DEPTH. NOTCHES SHALL BE NO GREATER THAN 1/10 OF THE MEMBER DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE MEMBER SPAN. HOLES OR NOTCHES ARE NOT PERMITTED WITHIN 2 TIMES THE MEMBER DEPTH FROM ANY MEMBER SUPPORT. ADJACENT HOLES OR NOTCHES SHALL BE SPACED AT A DISTANCE NOT LESS THAN 1 1/2 X MEMBER DEPTH.

TYPICAL WOOD FRAMING NOTES

NTS

1

DESCRIP	NOMINAL STRUCT PLYWTD THICKNESS	NAIL SIZE (1)	NAIL SPACING			REMARKS (SEE NOTES BELOW)
			@ DIAPH BOUND.	@ CONT. EDGES	IN FIELD/ OTHER EDGES	
ROOF:	15/32" CDX	10d	4"	4"	6"	SEE NOTE 2
WALL, EXTERIOR	19/32" CDX	10d	4"	4"	6"	SEE NOTE 2
WALL, INTERIOR	1/2" ACX	10d	6"	6"	6"	SEE NOTE 2

NOTES:

- FOR PLY LAYOUT & ADD'L NAILING SEE ROOF PLAN.
- 10d SHALL HAVE 1 1/2" MIN PENETRATION INTO FRAMING & BLOCKING.
- WHERE NAIL SPACING 3" OR LESS O.C., FRAMING & BLOCKING AT THOSE PANEL EDGES SHALL BE 3X MIN - STAGGER NAILS.
- USE A 3X FOR ALL FLAT BLOCKING RECEIVING 10d NAILS.

ROOF/WALL DIAPHRAGM SCHEDULE

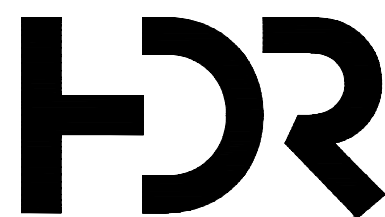
NTS

2

NOTES:

ALL PLATES, STRAPS, BOLTS AND FASTENERS TO BE 316 SST UNLESS NOTED OTHERWISE.

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DATE: 08/10/23 02:33:13pm - JKAMBQJ



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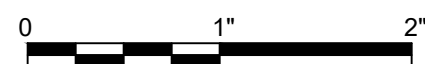
PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

PROCESS-MECHANICAL

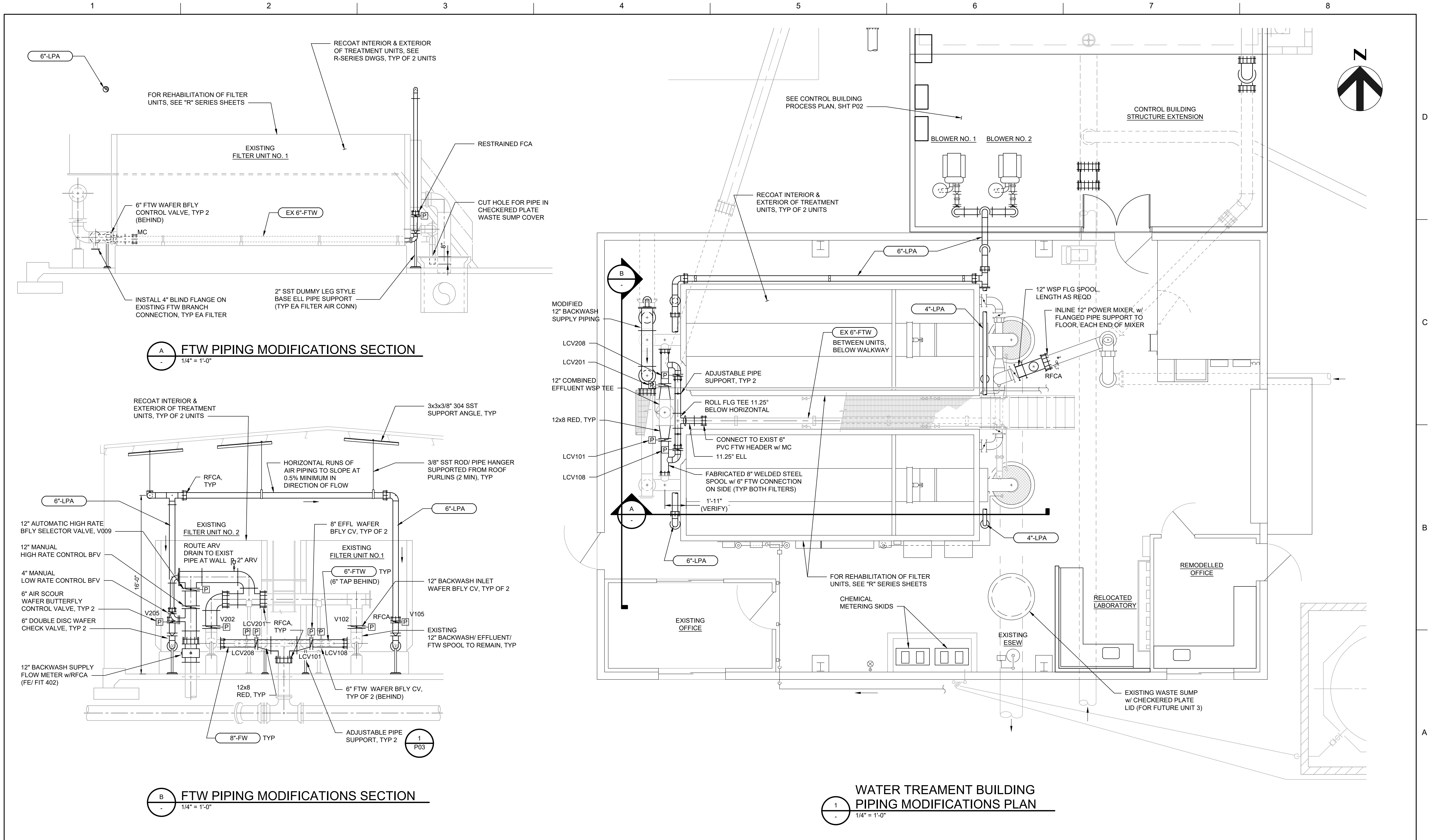
WATER TREATMENT BUILDING
PIPING MODIFICATIONS PLAN AND SECTION



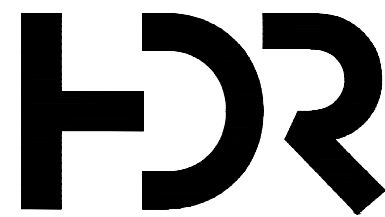
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SHEET

P01



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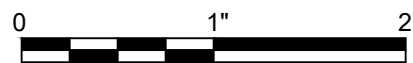
PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	
DESIGNED	
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

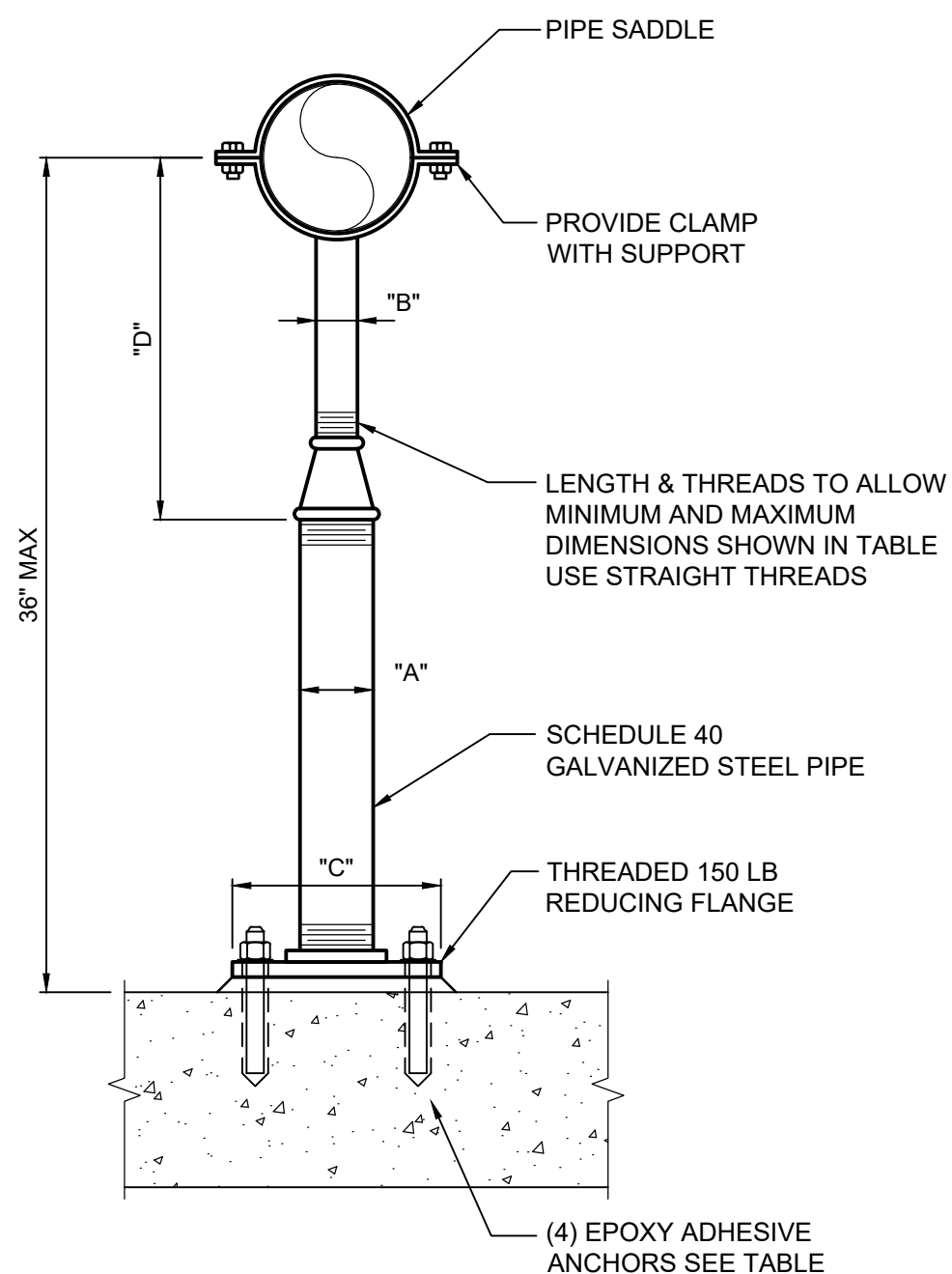
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CONTROL BUILDING
PLAN AND SECTION

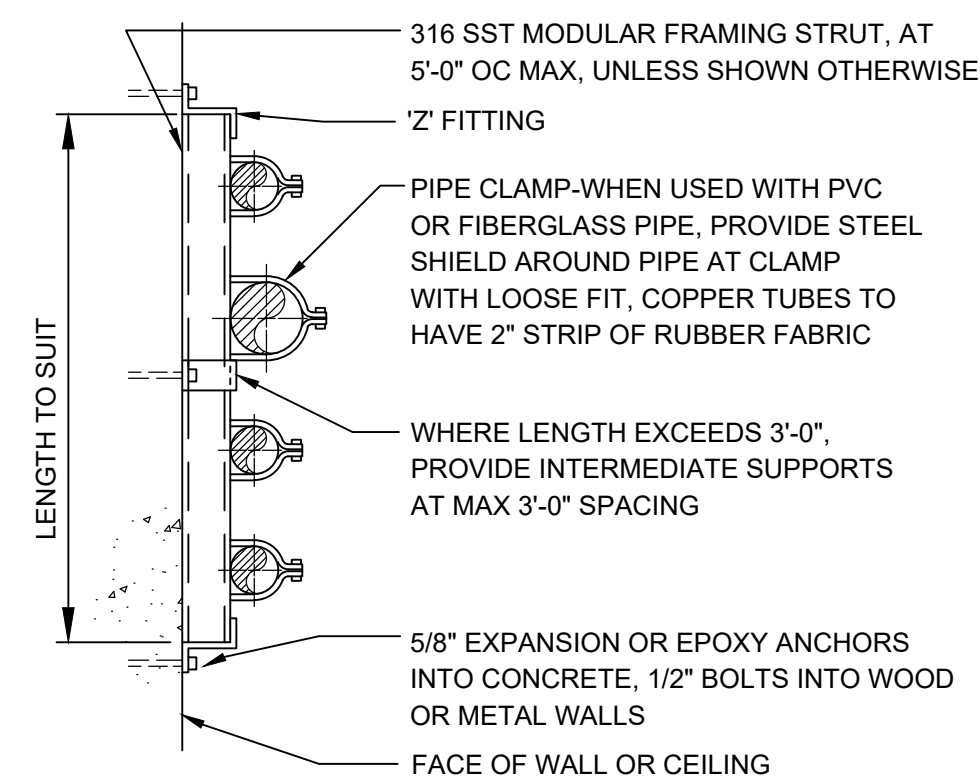


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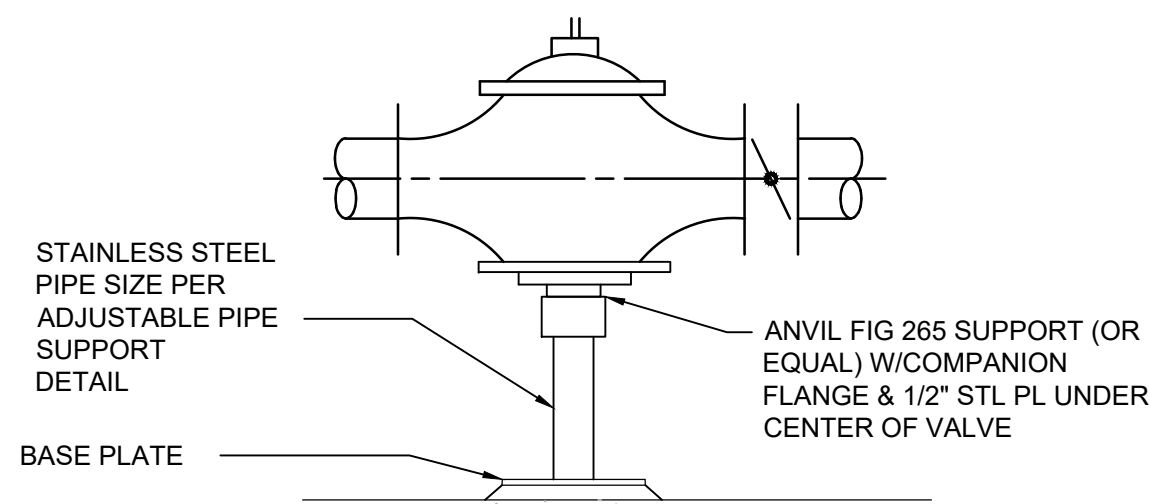


2 PIPE HANGER DETAIL
NTS

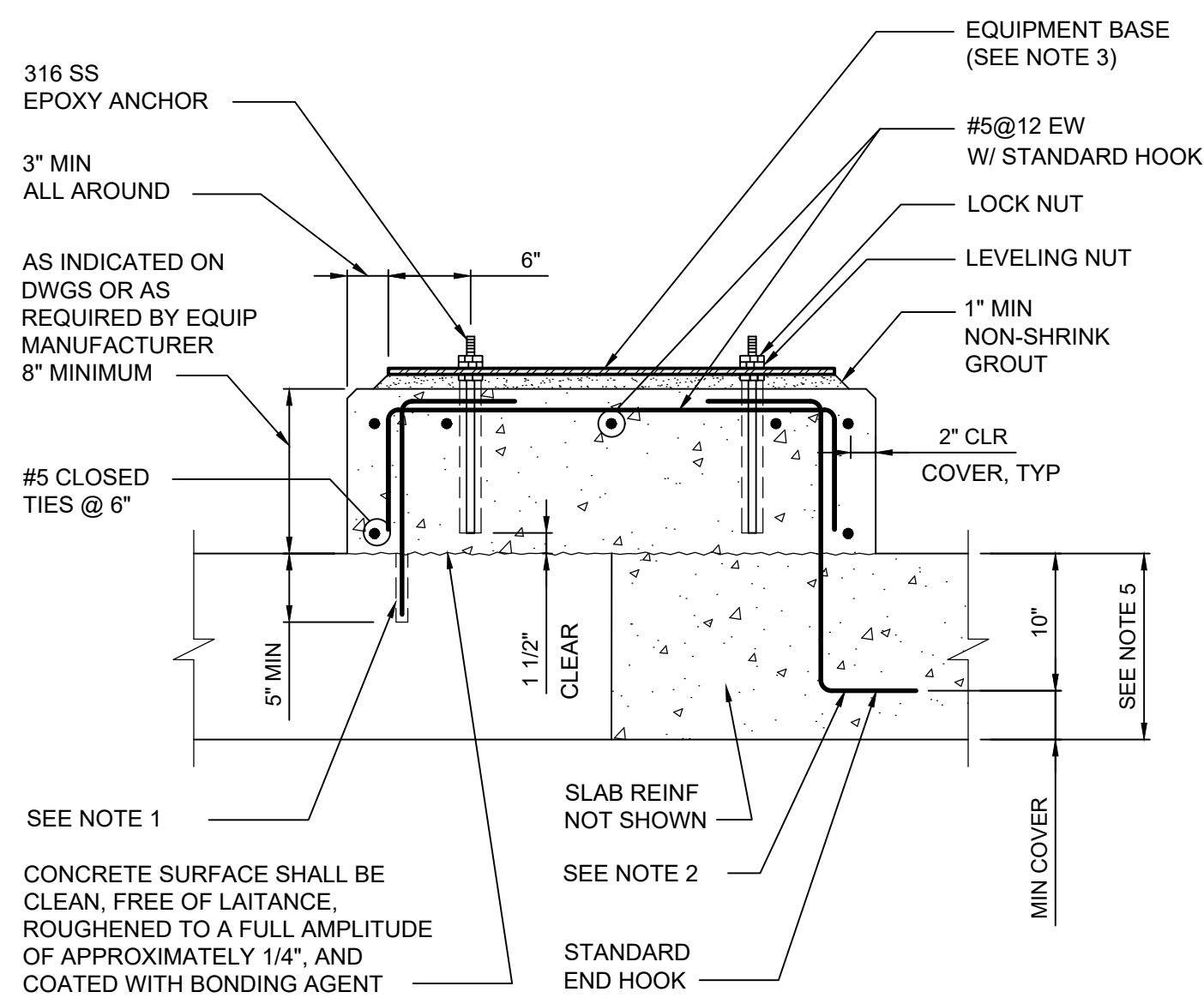


NOTE:
UP TO 6\"/>

3 MODULAR STRUT PIPE SUPPORT DETAIL
NTS



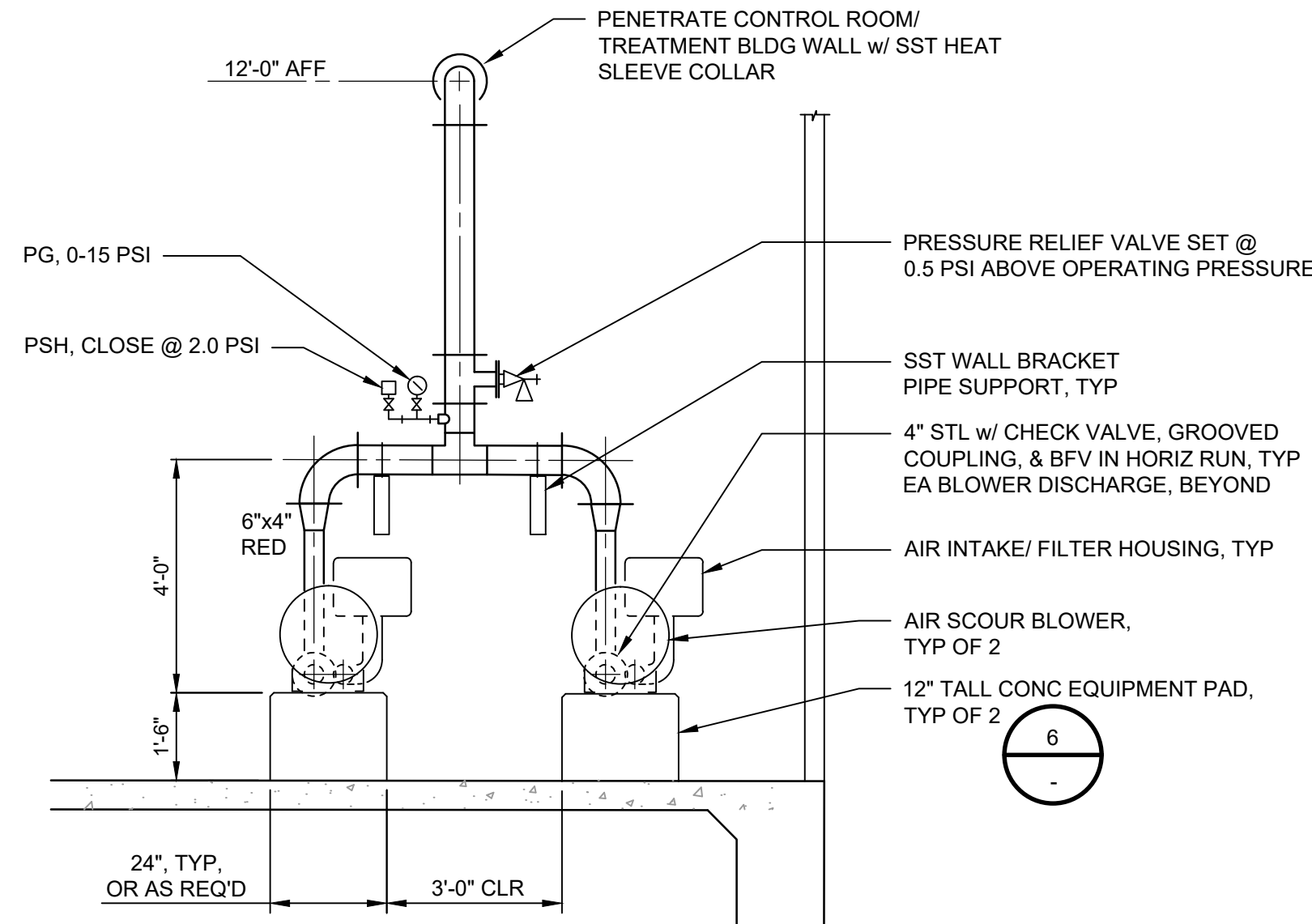
5 VALVE/ METER SUPPORT DETAIL
NTS



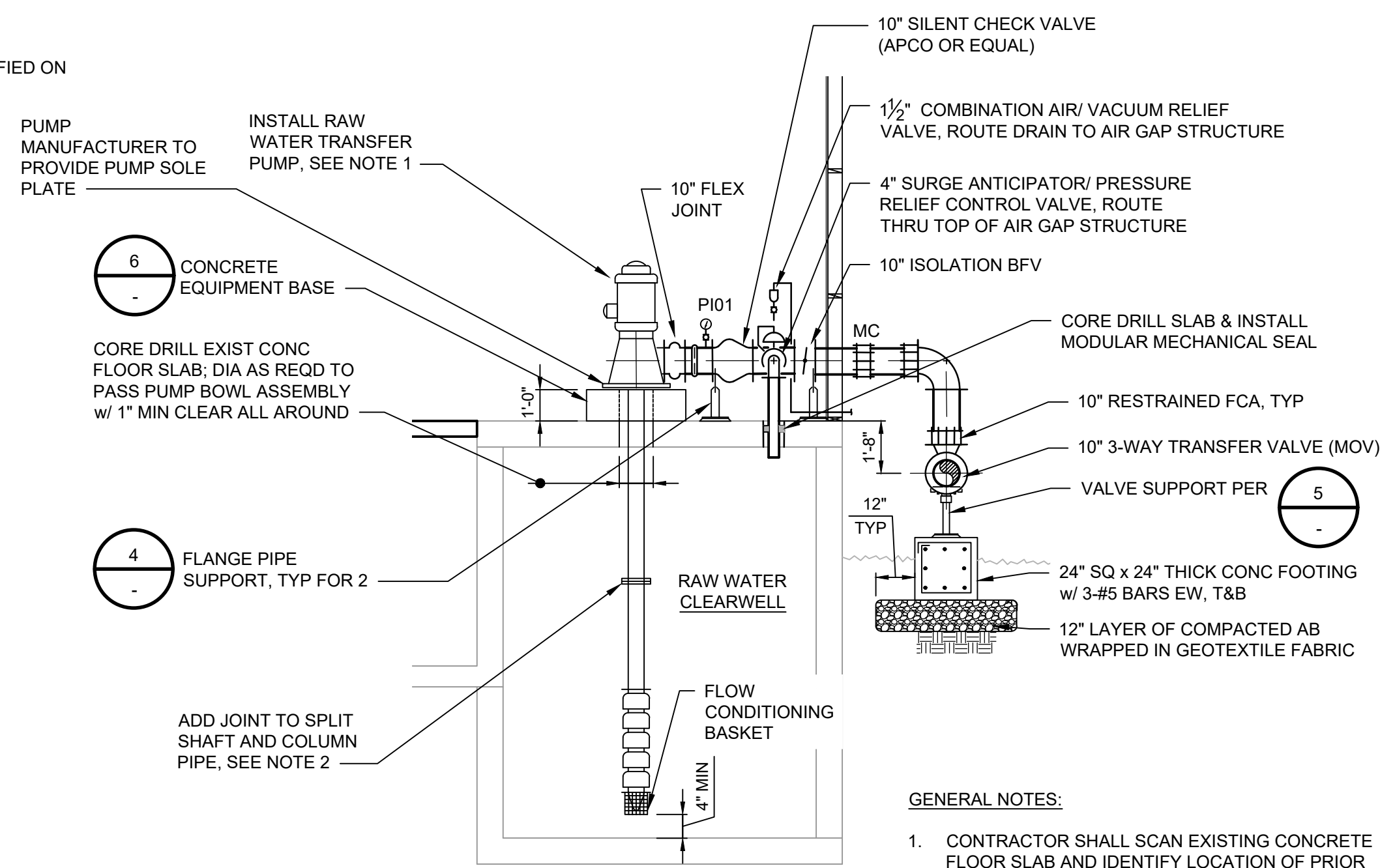
NOTES:

- FOR EQUIPMENT PADS ON EXISTING SLABS, DRILL INTO EXISTING SLAB AT 12" CENTERS AROUND PERIMETER OF EQUIPMENT PADS AND SET #5 HOOKED DOWELS IN EPOXY GROUT.
- FOR EQUIPMENT PADS ON NEW SLABS, PROVIDE #5 DOWELS AT 12" CENTERS AROUND PERIMETER OF EQUIPMENT BASE.
- EQUIPMENT DIMENSIONS SHALL BE AS INDICATED ON THE DRAWINGS OR AS DETERMINED BY THE EQUIPMENT MANUFACTURER AND APPROVED BY THE ENGINEER.
- EQUIPMENT BASES SHALL BE INSTALLED LEVEL. TOLERANCE IS 1/16".
- WHERE CONCRETE SLAB THICKNESS WILL NOT PROVIDE MINIMUM COVER AS SPECIFIED ON DWGS, PROVIDE EXTRA THICKNESS OF CONCRETE.

6 EQUIPMENT BASE DETAIL
NTS



A AIR BLOWERS SECTION
1/4" = 1'-0"



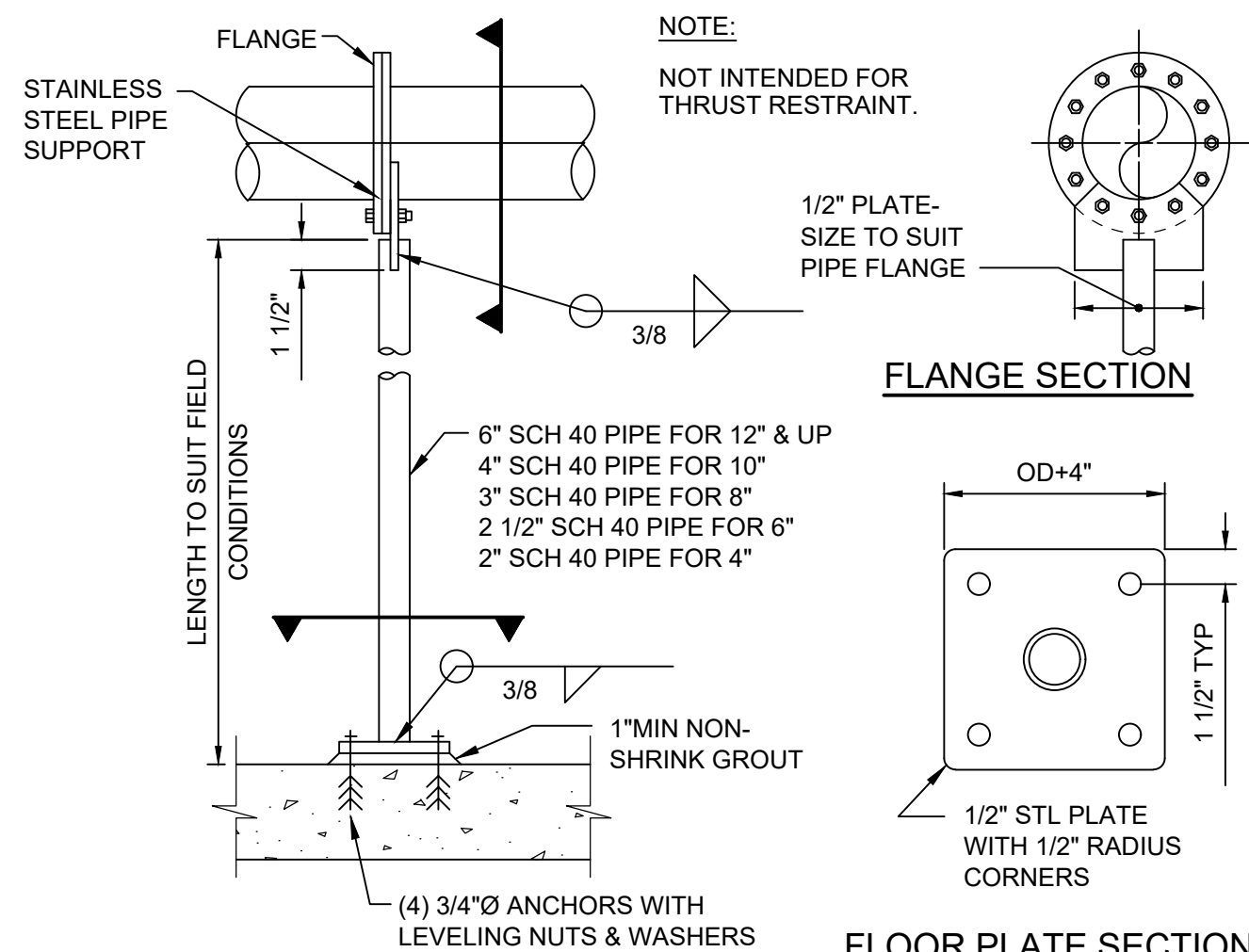
GENERAL NOTES:

- CONTRACTOR SHALL SCAN EXISTING CONCRETE FLOOR SLAB AND IDENTIFY LOCATION OF PRIOR PUMP OPENING INCLUDING ALL STEEL REINFORCING PRIOR TO LOCATING AND DRILLING PENETRATION FOR PUMP INSTALLATION.
- THE PURPOSE OF THE PUMP COLUMN JOINT IS TO FACILITATE REMOVAL OF THE PUMP GIVEN THE VERTICAL CONSTRAINTS INSIDE THE BUILDING. THE OPENING IN THE PUMP PAD SHALL BE LARGE ENOUGH TO FACILITATE REMOVAL OF THE FLANGED JOINT.

B TRANSFER PUMP SECTION
1/4" = 1'-0"

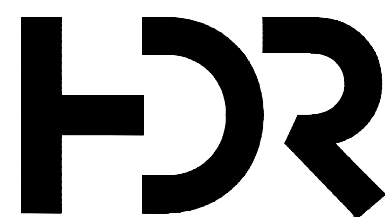
FLOOR PIPE SUPPORT SCHEDULE DIMENSIONS IN INCHES							
PIPE SIZE	"A"	"B"	"C"	"D"		ANCHORS	
				MINIMUM	MAXIMUM	DIA	EMBED
≤ 2 1/2	2 1/2	1 1/2	9	8	13	5/8	5
3	2 1/2	1 1/2	9	8 1/2	13 1/2	5/8	5
3 1/2	2 1/2	1 1/2	9	8 1/2	13 1/2	5/8	5
4	3	2 1/2	9	9 1/2	14	5/8	5
6	3	2 1/2	9	10 1/2	15 1/2	5/8	5
8	3	2 1/2	9	11 1/2	16 1/2	5/8	5
10	3	2 1/2	9	13 1/2	18 1/2	5/8	5
12	3	2 1/2	9	15	19 1/2	5/8	5
14	4	3	11	16 1/2	20 1/2	3/4	6 5/8
16	4	3	11	17 1/2	22 1/2	3/4	6 5/8
18	6	3 1/2	13 1/2	19 1/2	24	3/4	6 5/8
20	6	3 1/2	13 1/2	21	25 1/2	3/4	6 5/8
24	6	4	13 1/2	23 1/2	28 1/2	3/4	6 5/8

1 ADJUSTABLE PIPE SUPPORT DETAIL
NTS



4 FLANGE PIPE SUPPORT DETAIL
NTS

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DATE: 08/10/23 02:34:10pm JKAMEOJ



ISSUE	DATE	DESCRIPTION
0	08/2023	ISSUED FOR BID

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



11/10/2023



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

PROCESS-MECHANICAL

SECTIONS AND DETAILS

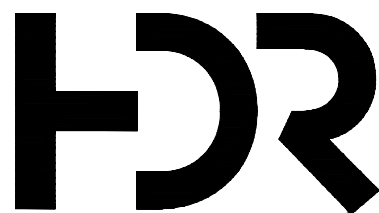


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SHEET

P03

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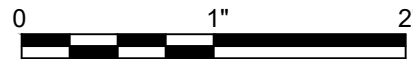
PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	S. LARI
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

REHABILITATION

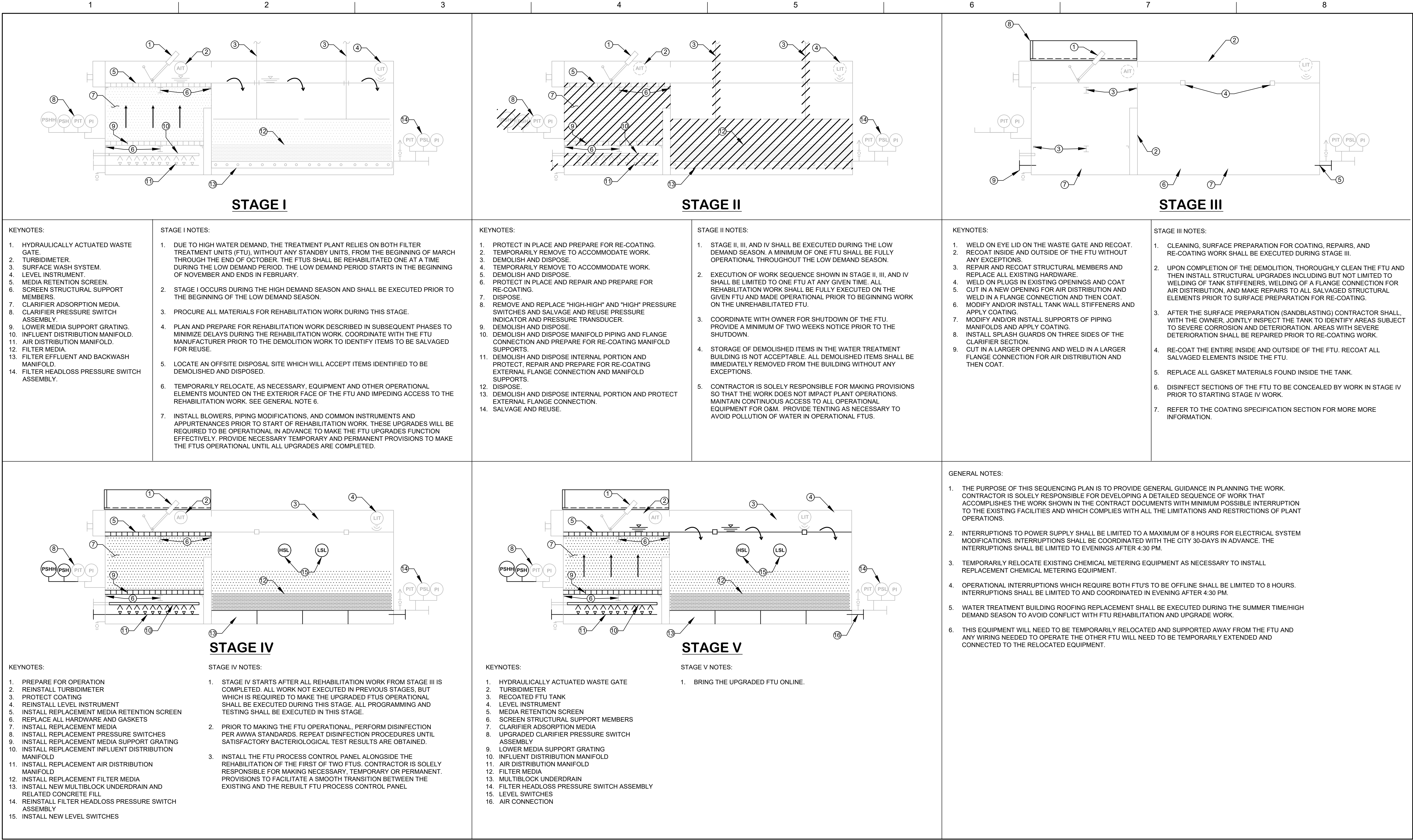
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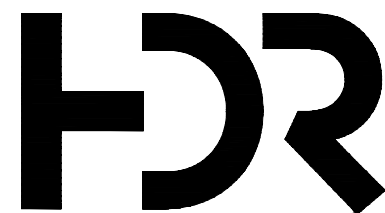
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R01



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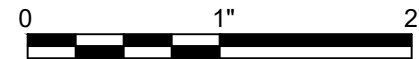


0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	S. LARI
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

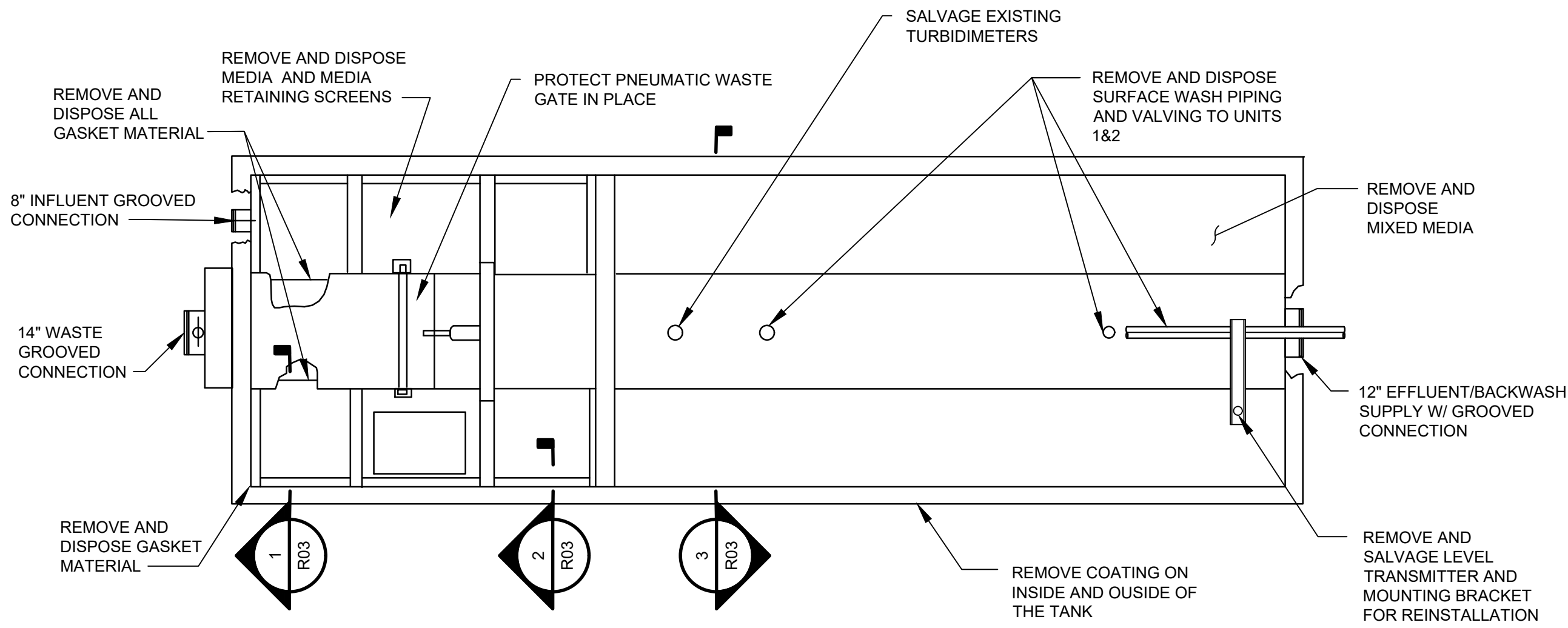


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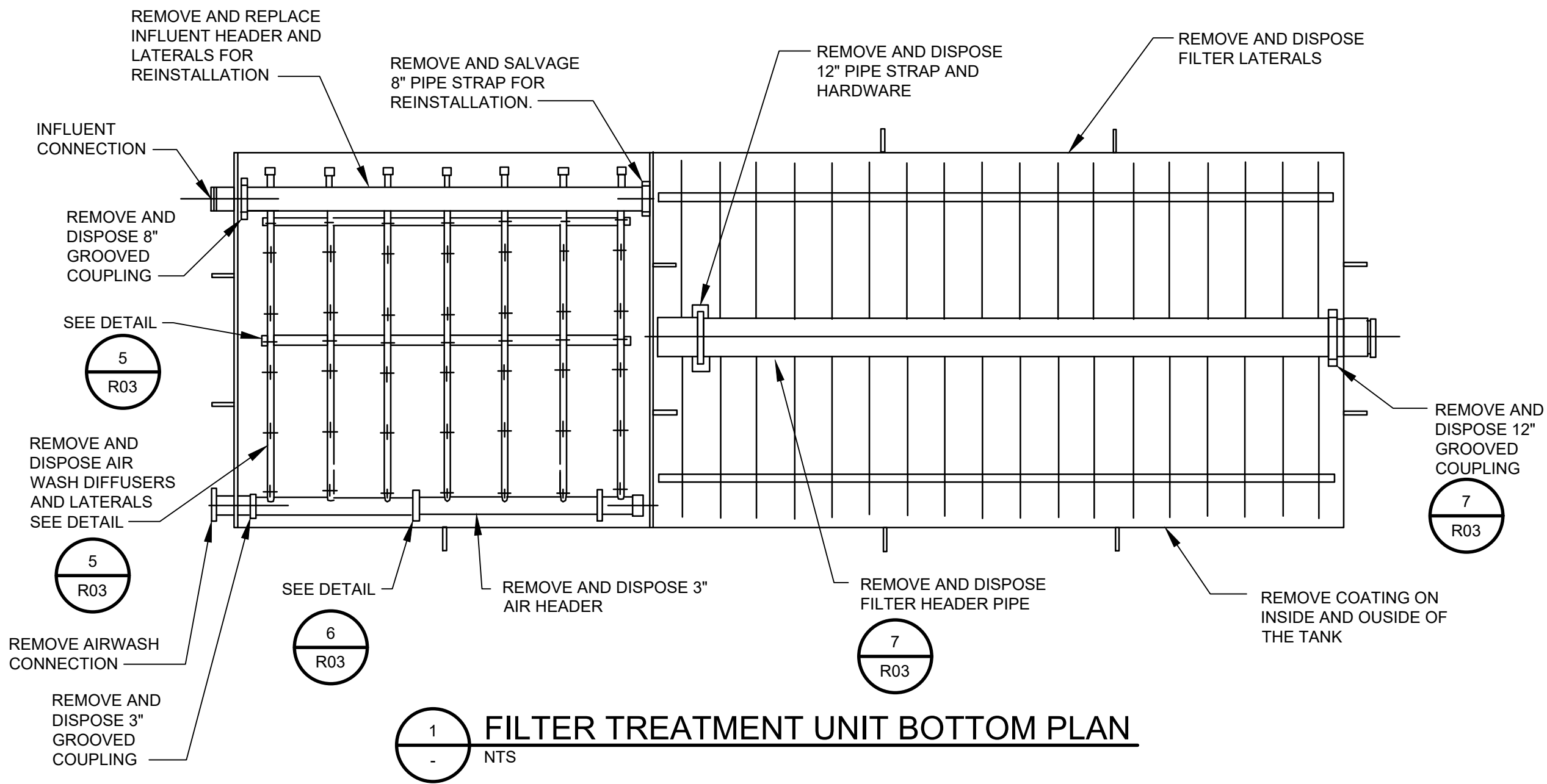
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NOTES:

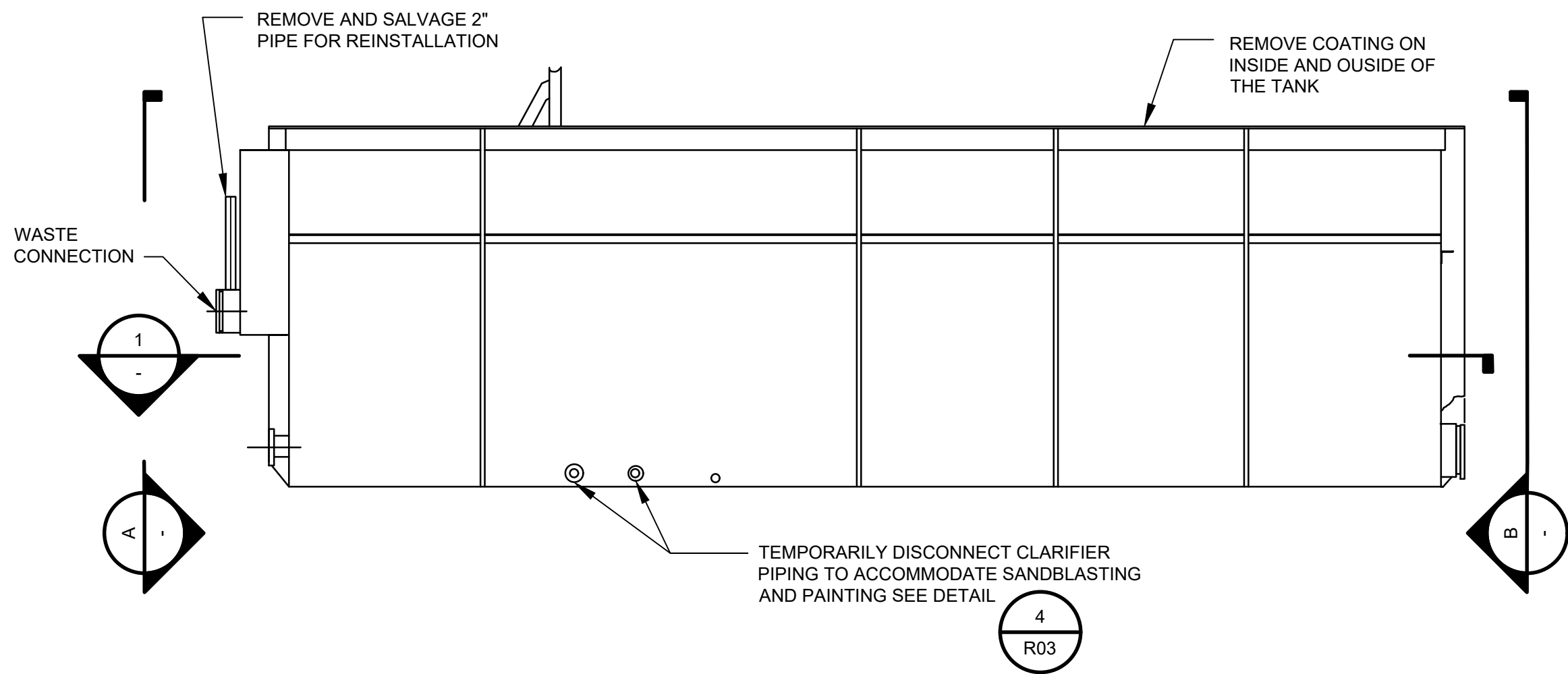
- REMOVE PAINT FROM ALL ELEMENTS ASSOCIATED WITH THE FILTER TREATMENT UNITS WHICH INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
A. MEDIA RETAINING SCREEN
HOLDDOWN ANGLES AND BEAMS
B. SUPPORTS FOR AIR HEADER AND LATERALS
C. WASTE GATE
- REMOVE AND DISPOSE BUOYANT CLARIFIER MEDIA AND FILTER MEDIA.
- COORDINATE WITH FILTER TREATMENT UNIT MANUFACTURER FOR MEDIA REMOVAL METHODOLOGY. MANUFACTURER RECOMMENDS TO REMOVE MEDIA BY PUMPING IT OUT OF THE COMPARTMENT AS A SLURRY. DRAIN THE COMPARTMENT BELOW THE MEDIA RETAINER, BUT KEEP THE MEDIA FLOATING. REMOVE AT LEAST ONE SECTION OF MEDIA RETAINER PANEL. THEN DROP THE PUMP SUCTION HOSE DOWN INTO THE MEDIA. DO NOT STAND ON THE MEDIA SURFACE WHILE THE MEDIA BED IS FLOATING. IT IS NOT DESIGNED TO SUPPORT THE WEIGHT OF A HUMAN BEING.
- ALL WORK SHOWN IS TYPICAL FOR BOTH FTU 1 AND FTU 2.



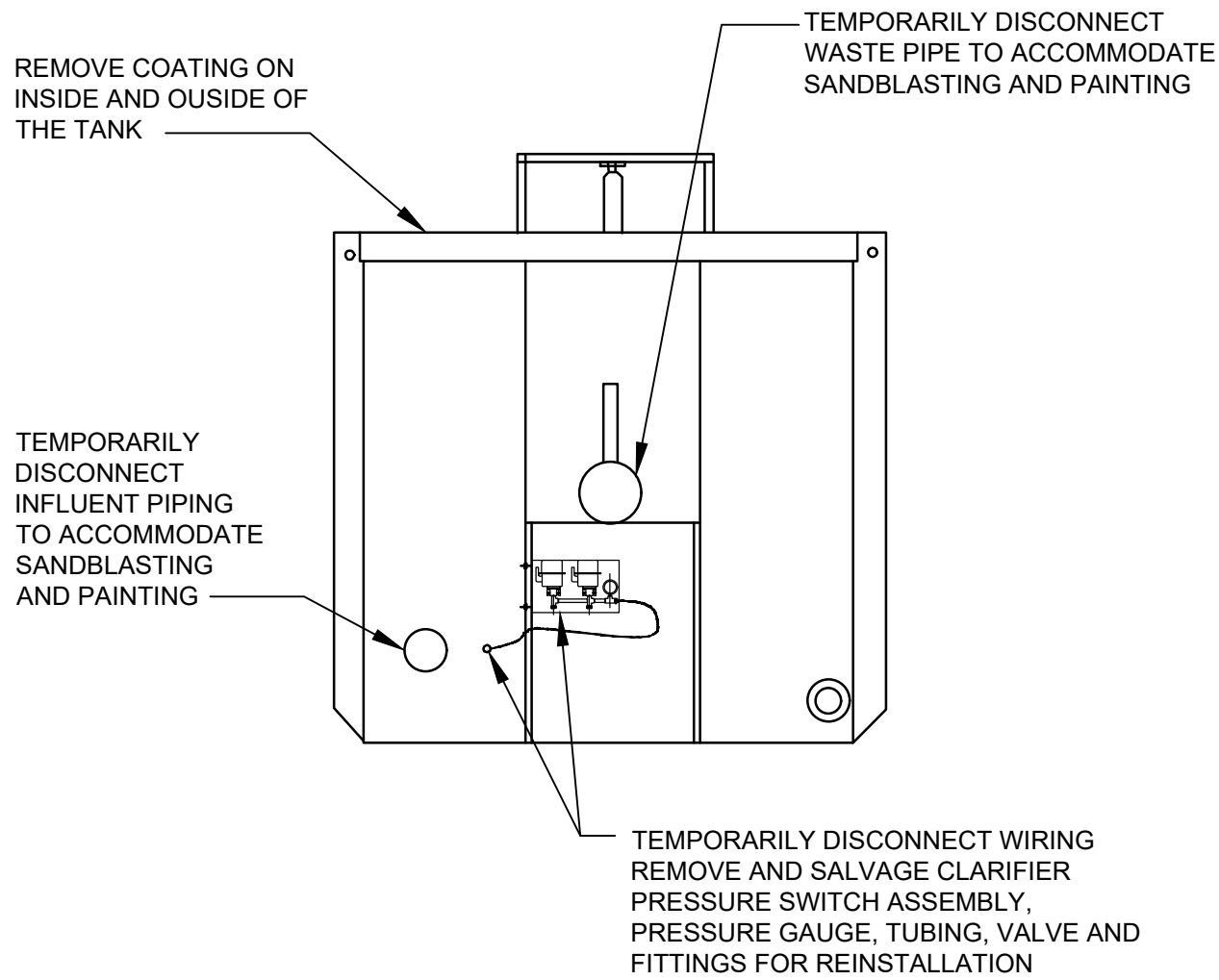
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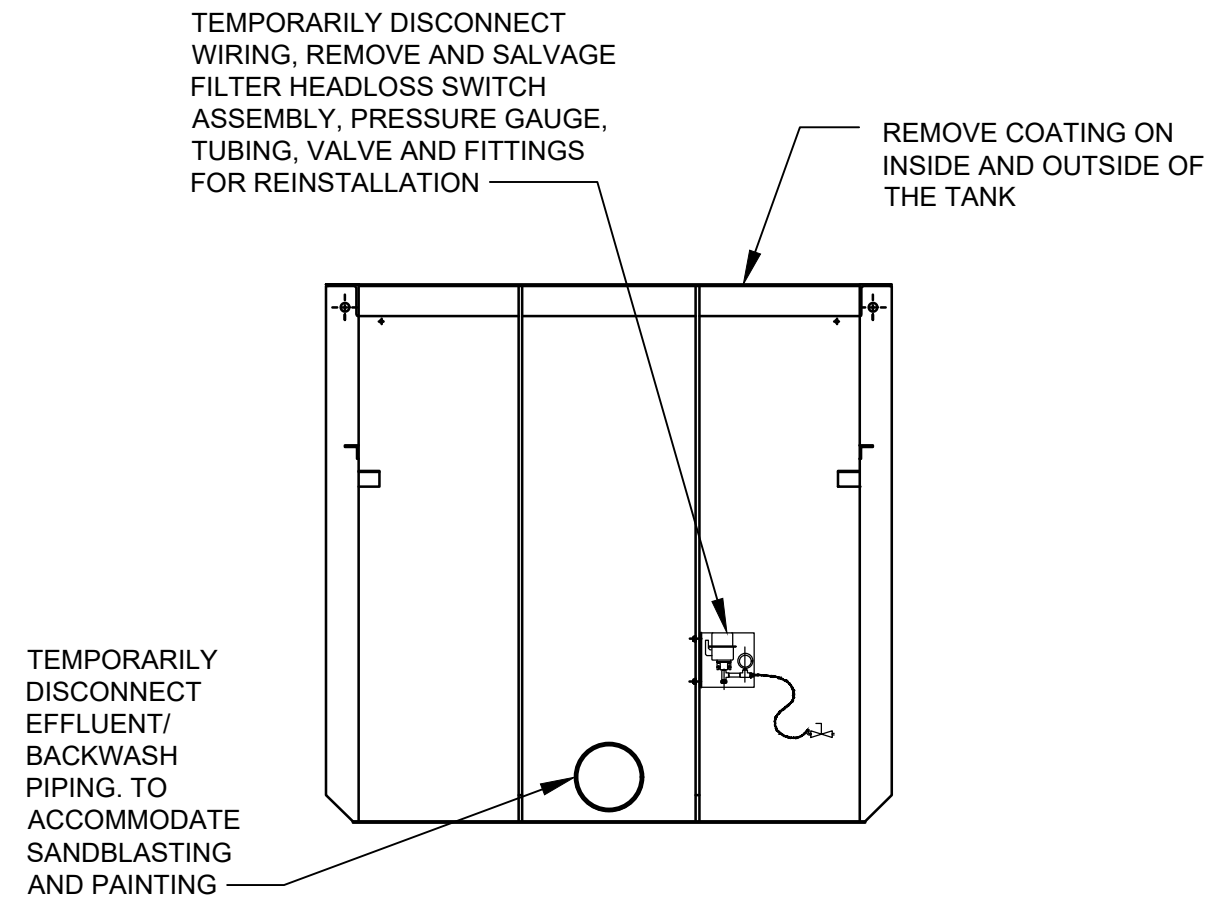
FILTER TREATMENT UNIT BOTTOM PLAN
NTS



FILTER TREATMENT UNIT ELEVATION VIEW
NTS

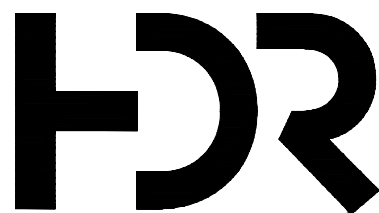


SECTION A
NTS



SECTION B
NTS

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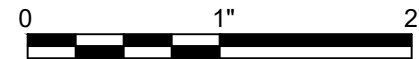


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PROJECT MANAGER	ARASHDEEP SINGH
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DRAWN	S. LARI
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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

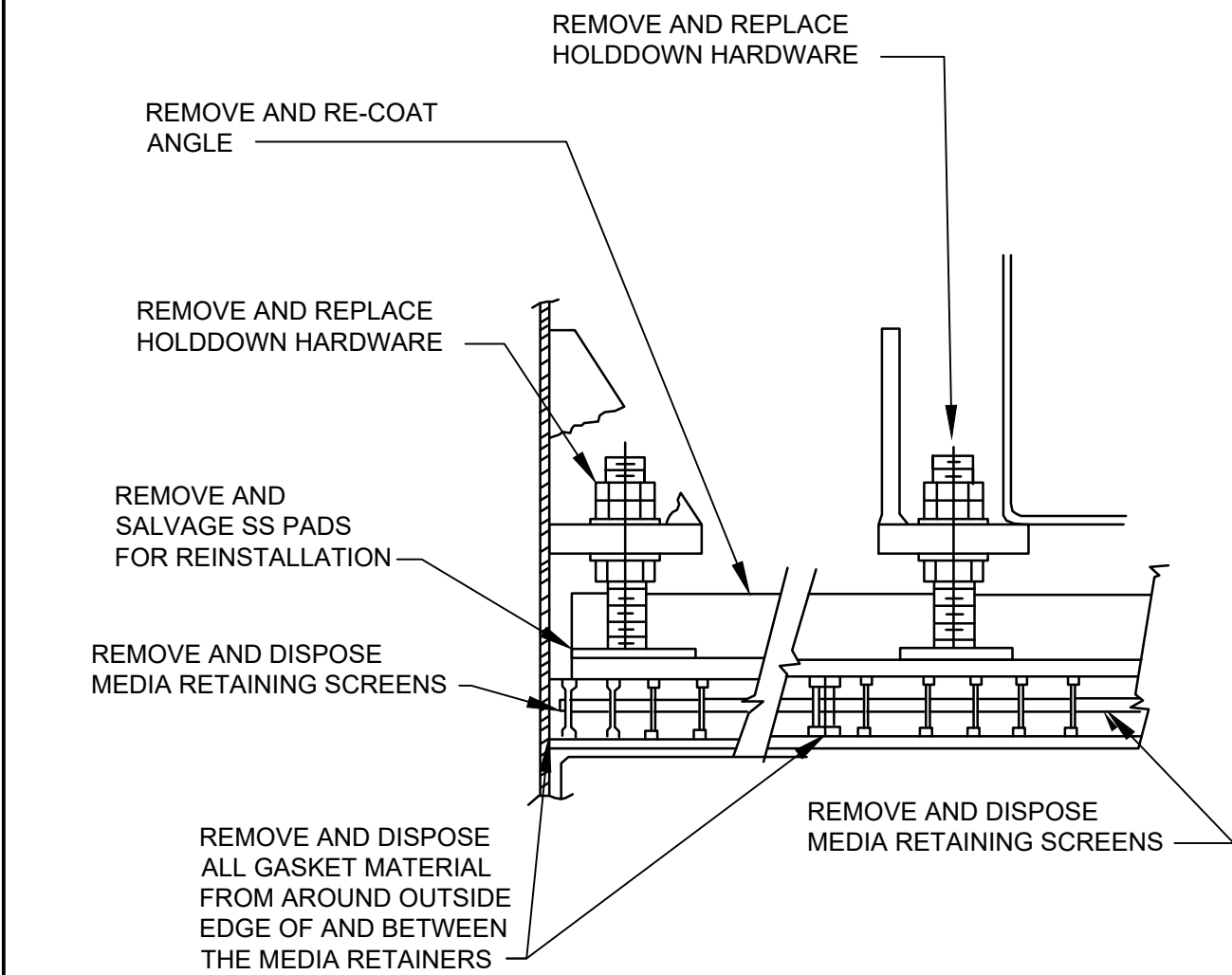


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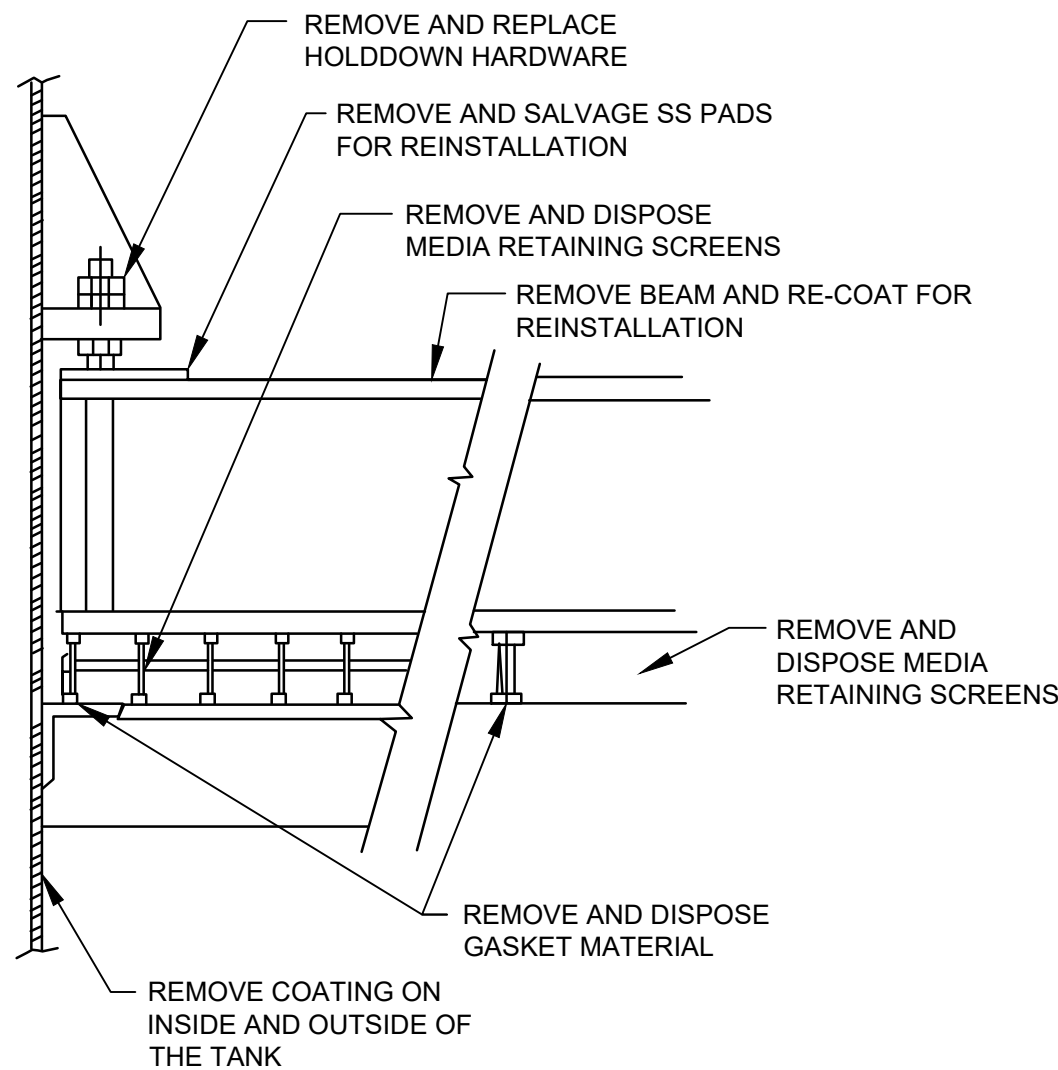
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REHABILITATION

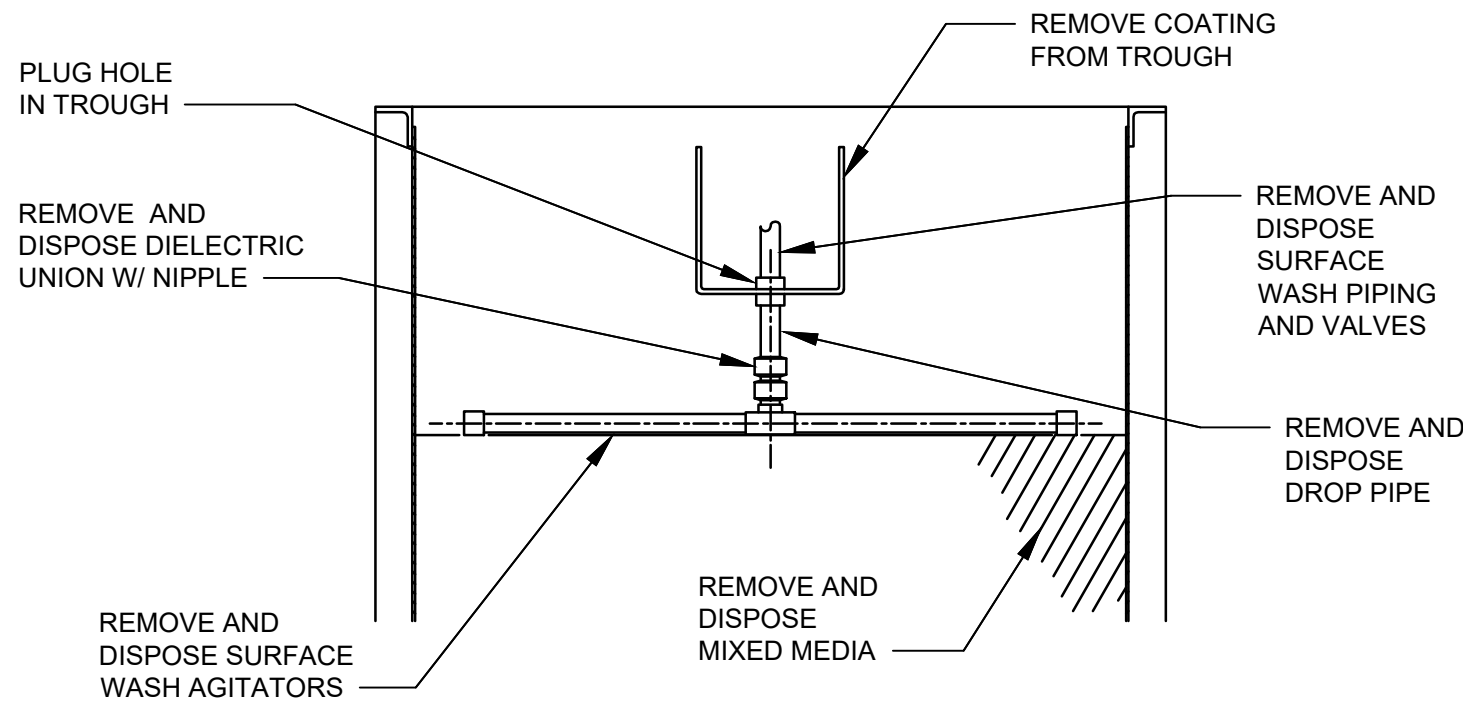
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REHAB PREPARATION SECTIONS AND DETAILS



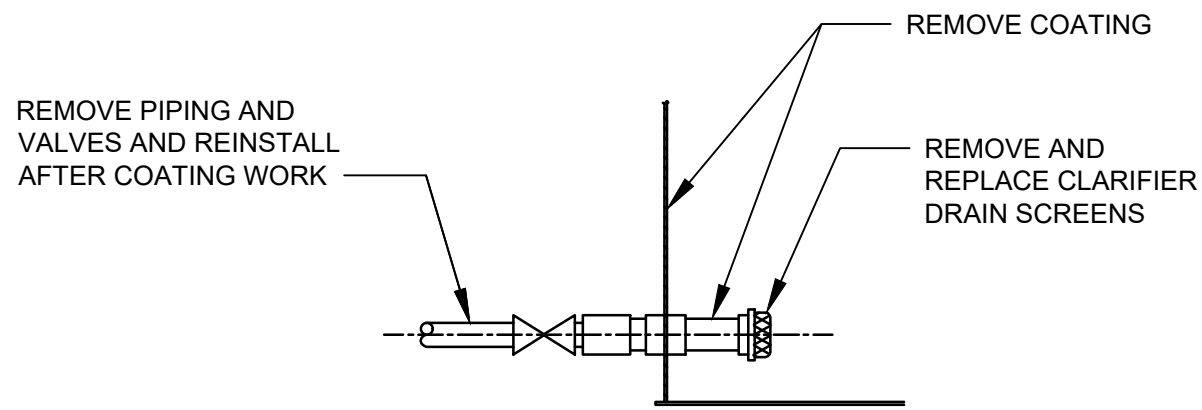
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- NTS



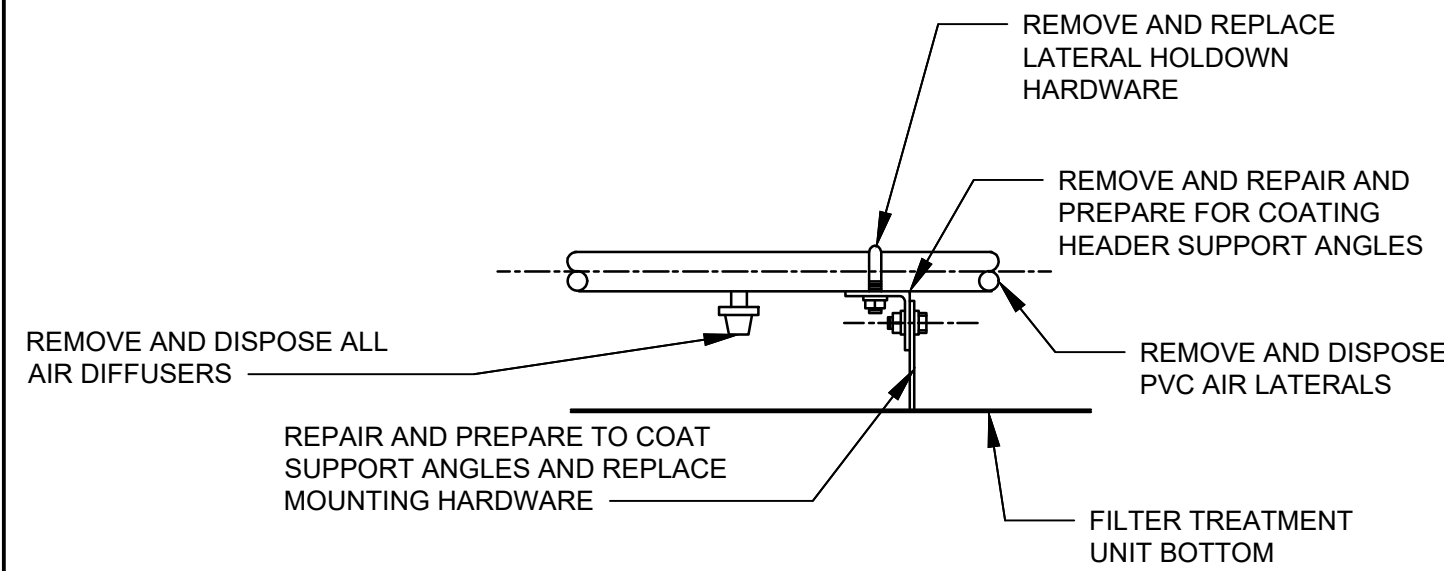
2 SECTION
- NTS



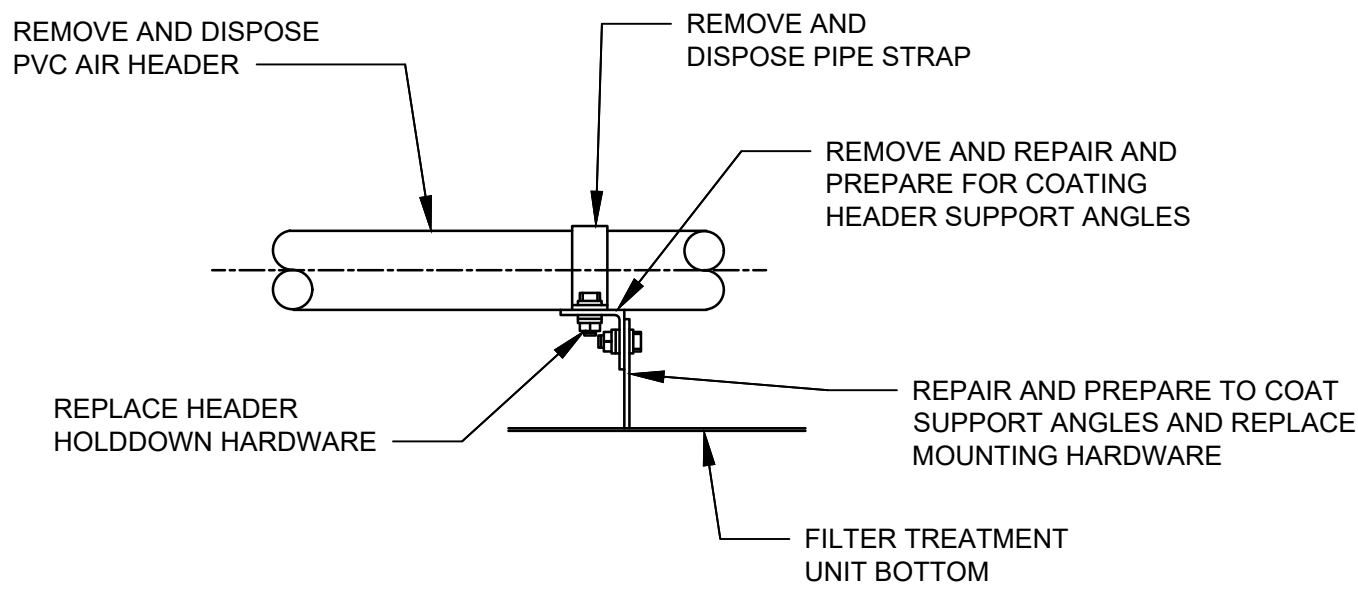
3 SURFACE WASH AGITATOR
- DISASSEMBLY SECTION
- NTS



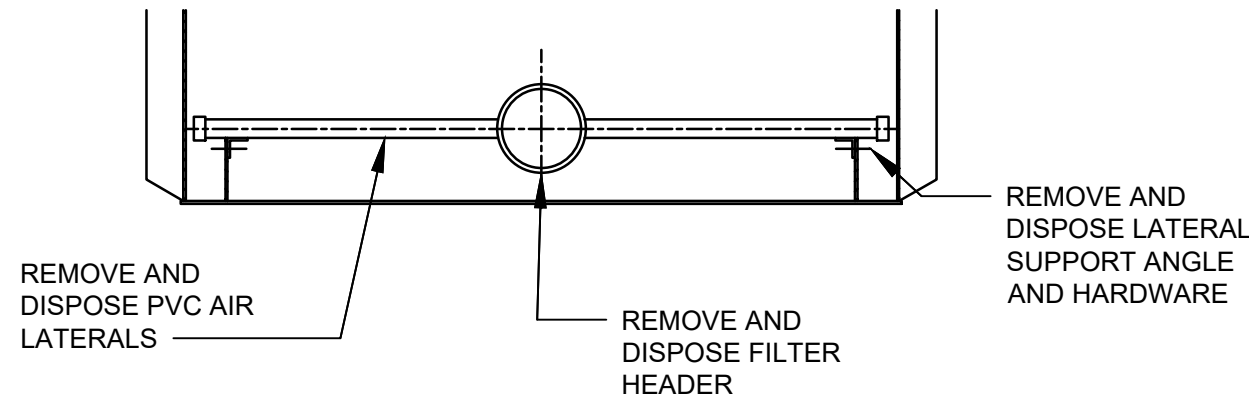
4 DRAIN PIPING SECTION
- NTS



5 AIRWASH SUPPORT
- AND HOLDDOWN DETAIL
- NTS

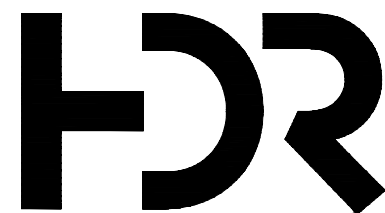


6 AIRWASH HEADER SUPPORT
- AND HOLDDOWN DETAIL
- NTS



7 UNDERDRAIN LATERAL
- DISASSEMBLY SECTION
- NTS

FILE: C:\pwworking\res01142043094\7R04.dwg
DATE: 08/10/23 02:38:38pm - JKAMBQJ



0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	S. LARI
DATE	08/2023
PROJECT NUMBER	10276484

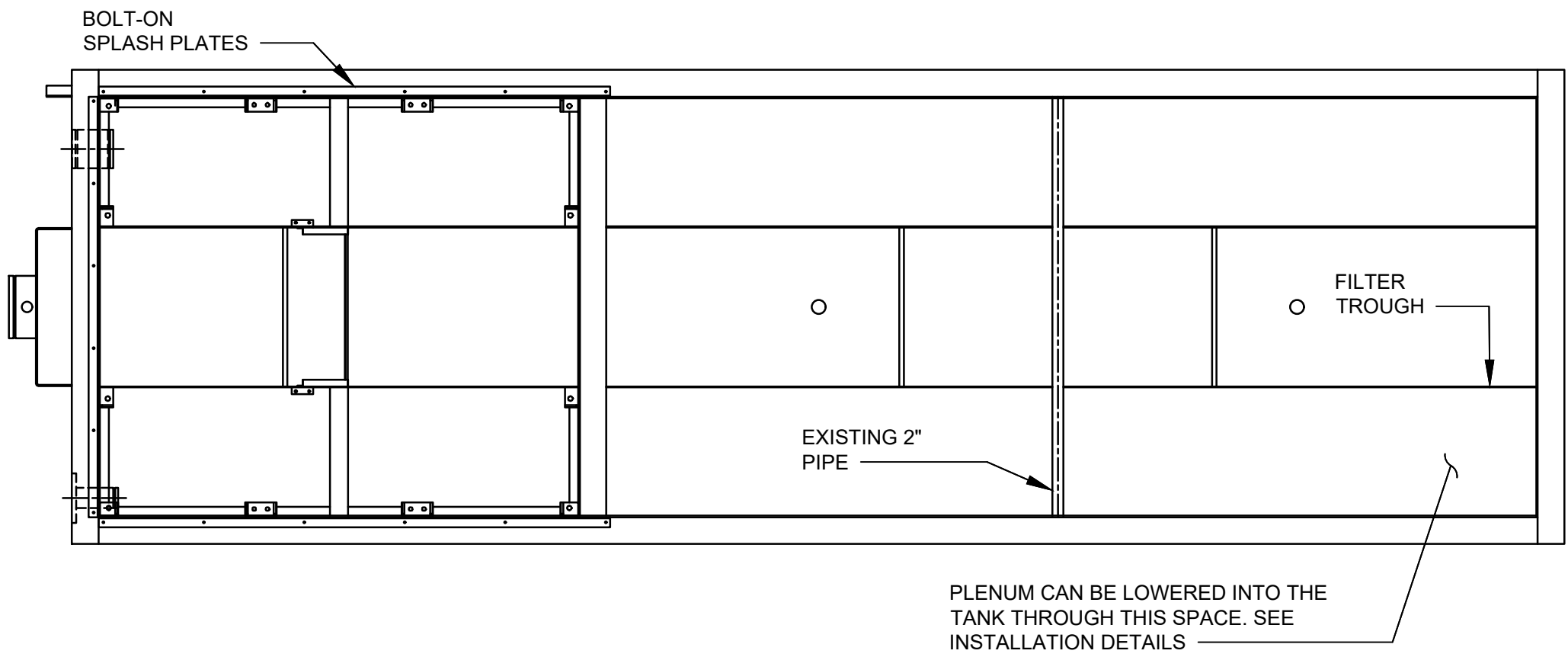


City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

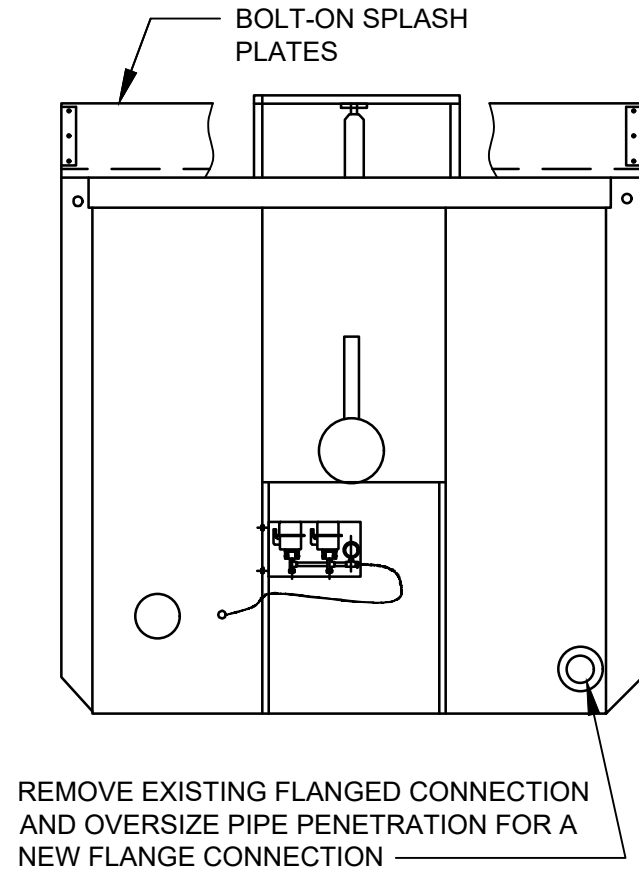
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REHAB AND IMPROVEMENTS PLANS AND SECTIONS 1		
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	SHEET	R04

NOTES:

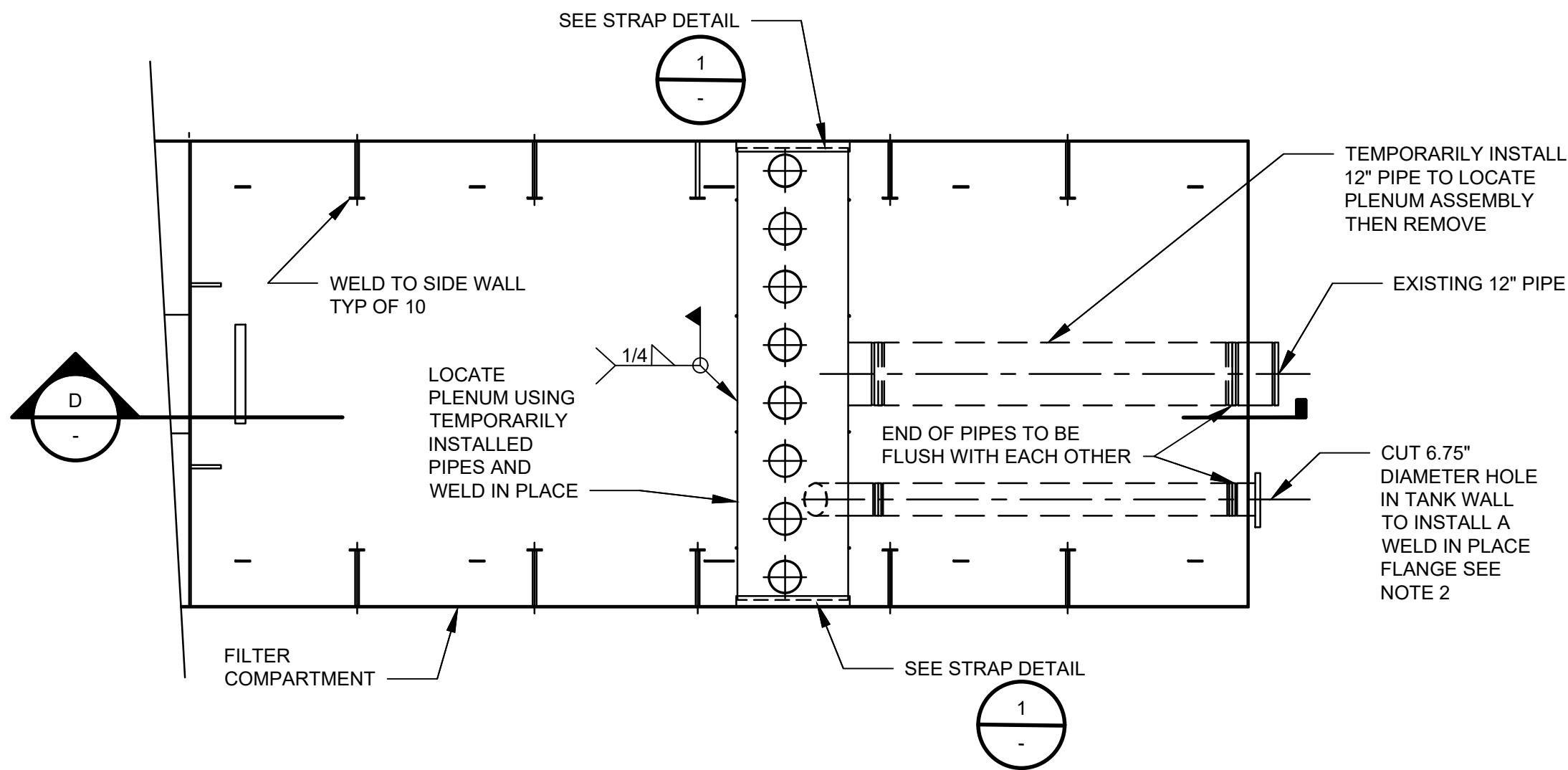
1. ALL WELDS TO BE CONTINUOUS, ALL AROUND, UNLESS OTHERWISE INDICATED.
2. FLANGE BOLT HOLES SHALL STRADDLE THE VERTICAL AND HORIZONTAL.
3. ALL WELD SCALE, SLAG, WELD SPLATTER AND ANTI SPLATTER COMPOUNDS SHALL BE REMOVED AND SHARP EDGES GROUND PER GENERAL INDUSTRY PRACTICE BEFORE SANDBLASTING AND PAINTING.
4. ALL THREADS AND COUPLINGS SHALL BE PROTECTED DURING SANDBLAST AND PAINT.



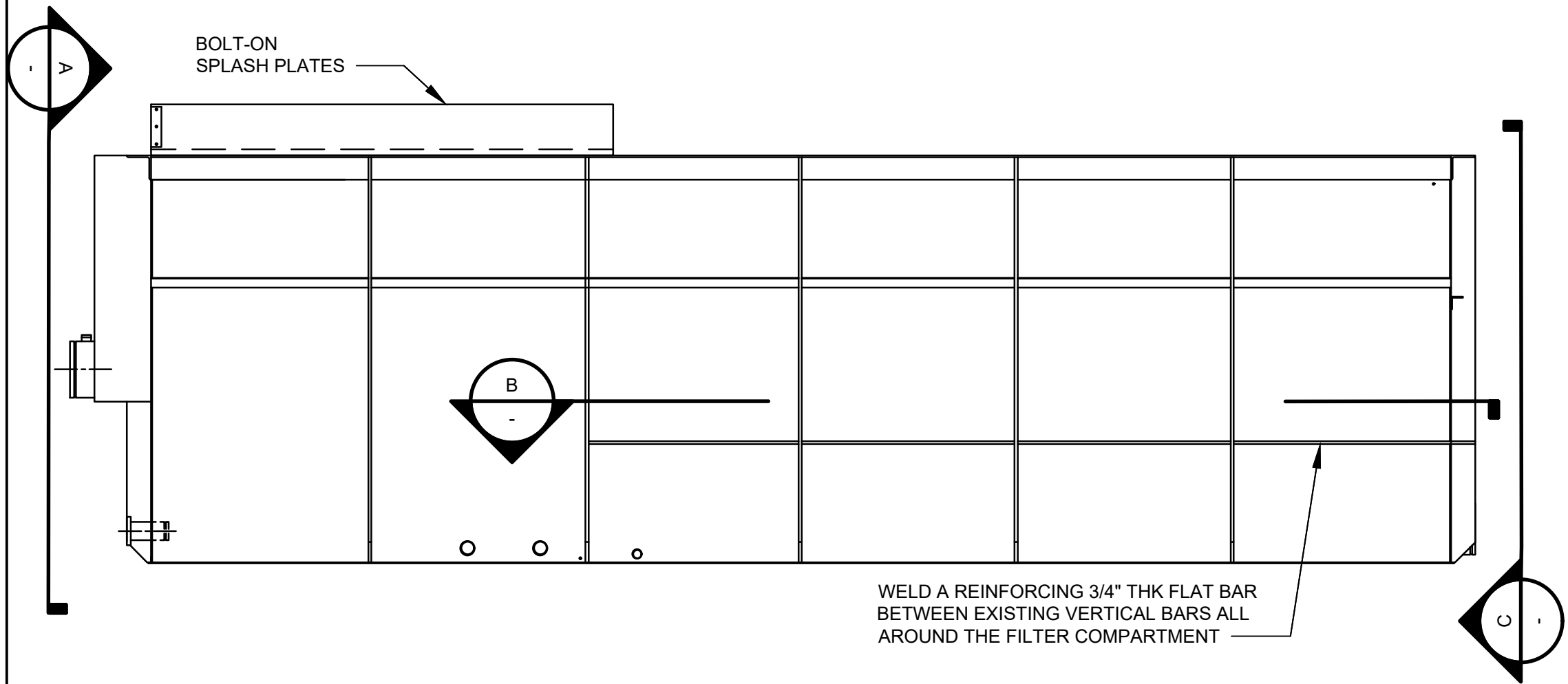
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NTS



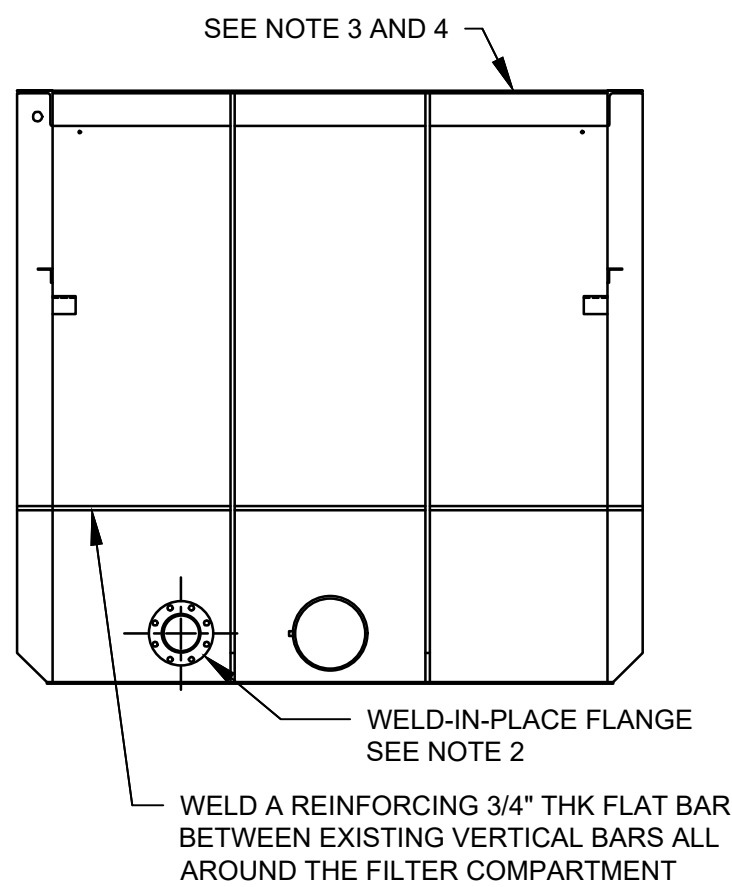
SECTION A-A
NTS



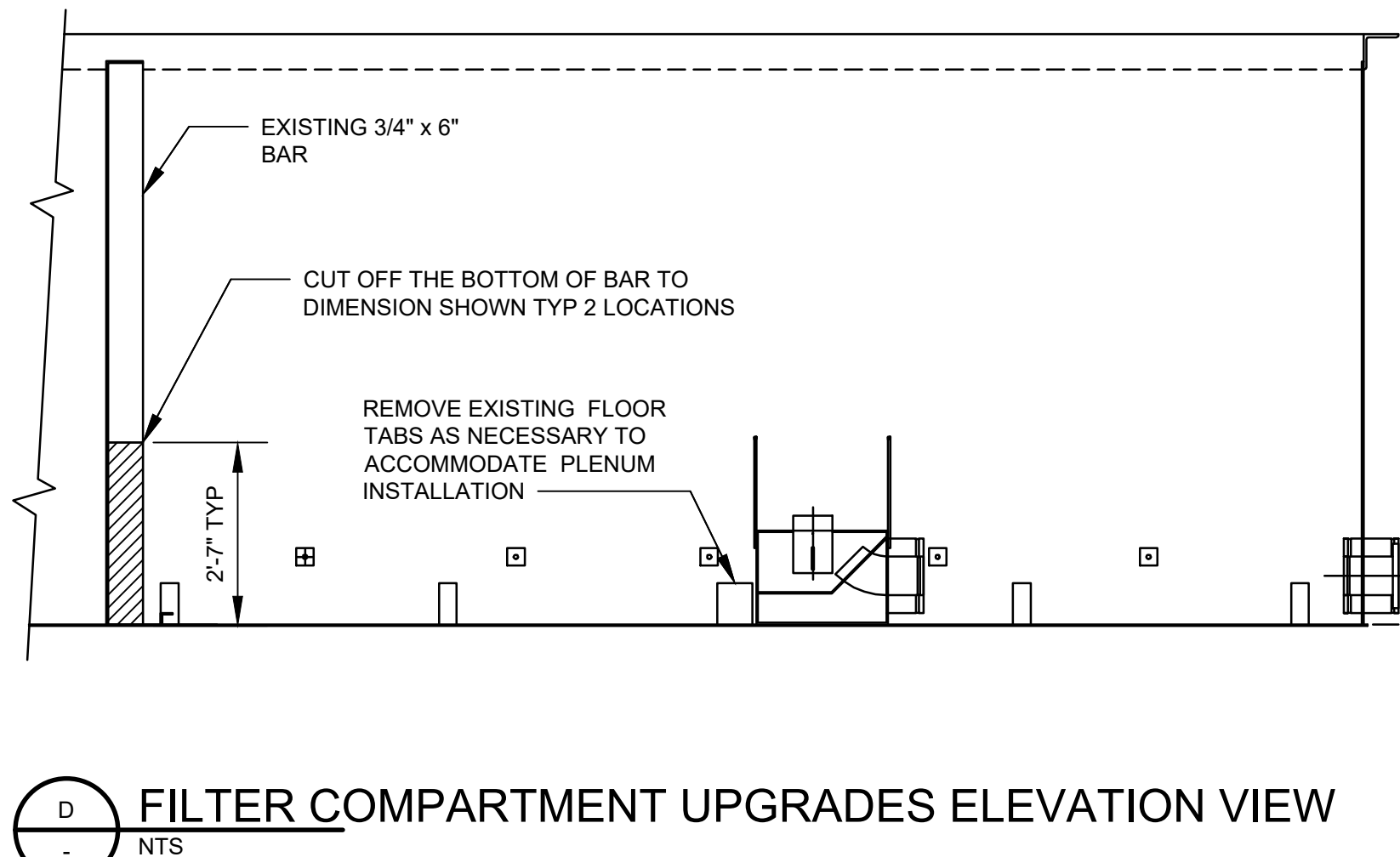
FILTER COMPARTMENT UPGRADES PLAN
NTS



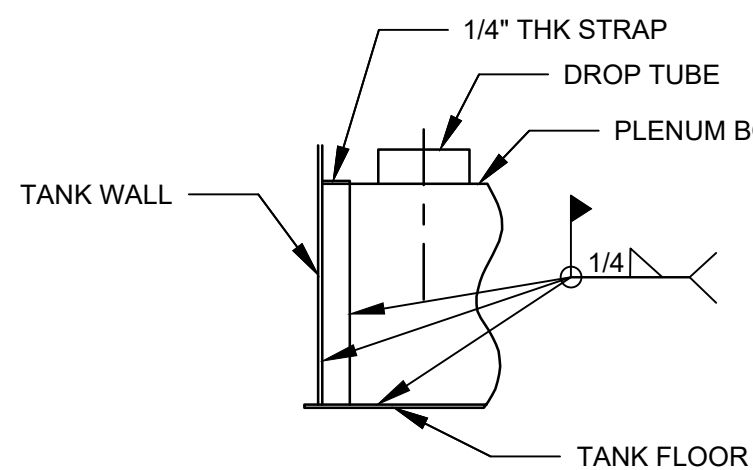
EXTERIOR TANK STRUCTURAL UPGRADES ELEVATION VIEW
NTS



SECTION C-C
NTS

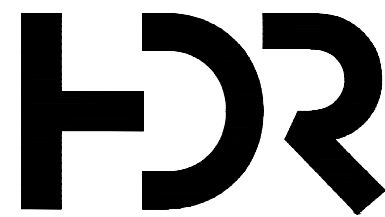


FILTER COMPARTMENT UPGRADES ELEVATION VIEW
NTS



STRAP DETAIL
NTS

FILE: C:\pwworking\res01\424304\7R05.dwg
DATE: 08/10/23 02:37:10pm, JKAMBQJ



0	08/2023	ISSUED FOR BID
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PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	S. LARI
DATE	08/2023
PROJECT NUMBER	10276484

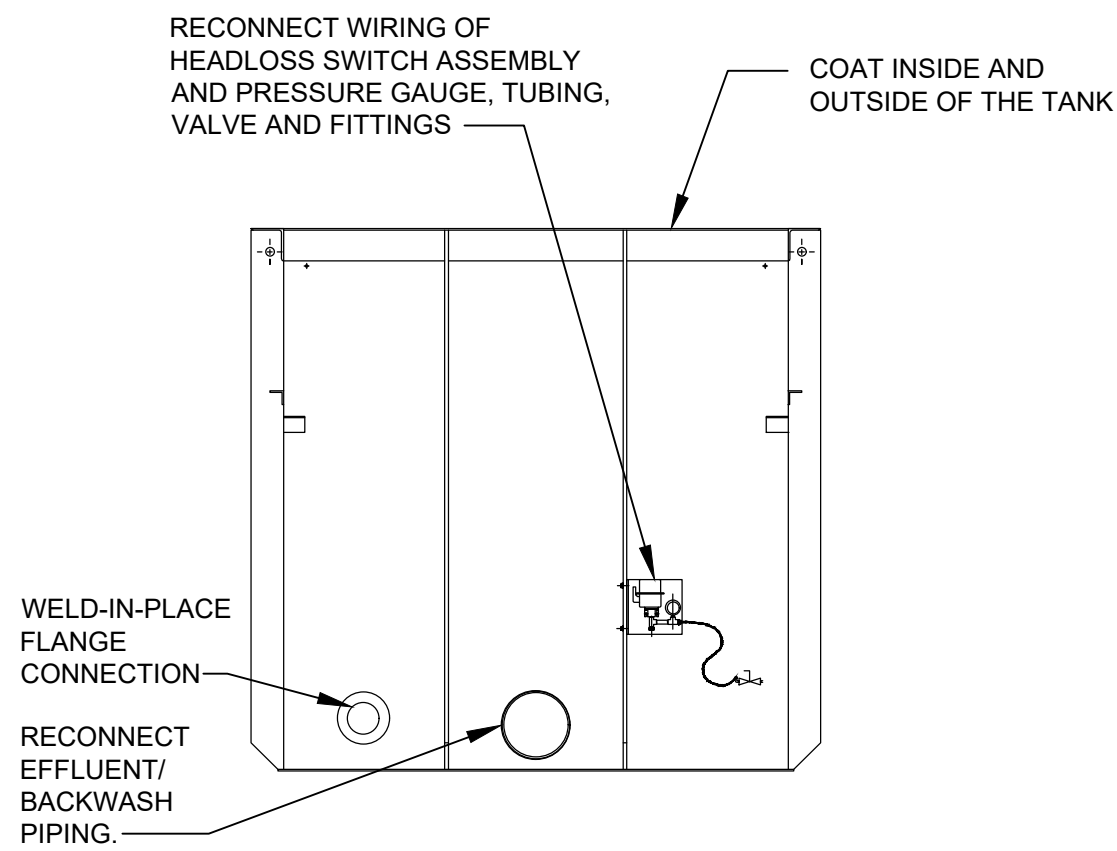
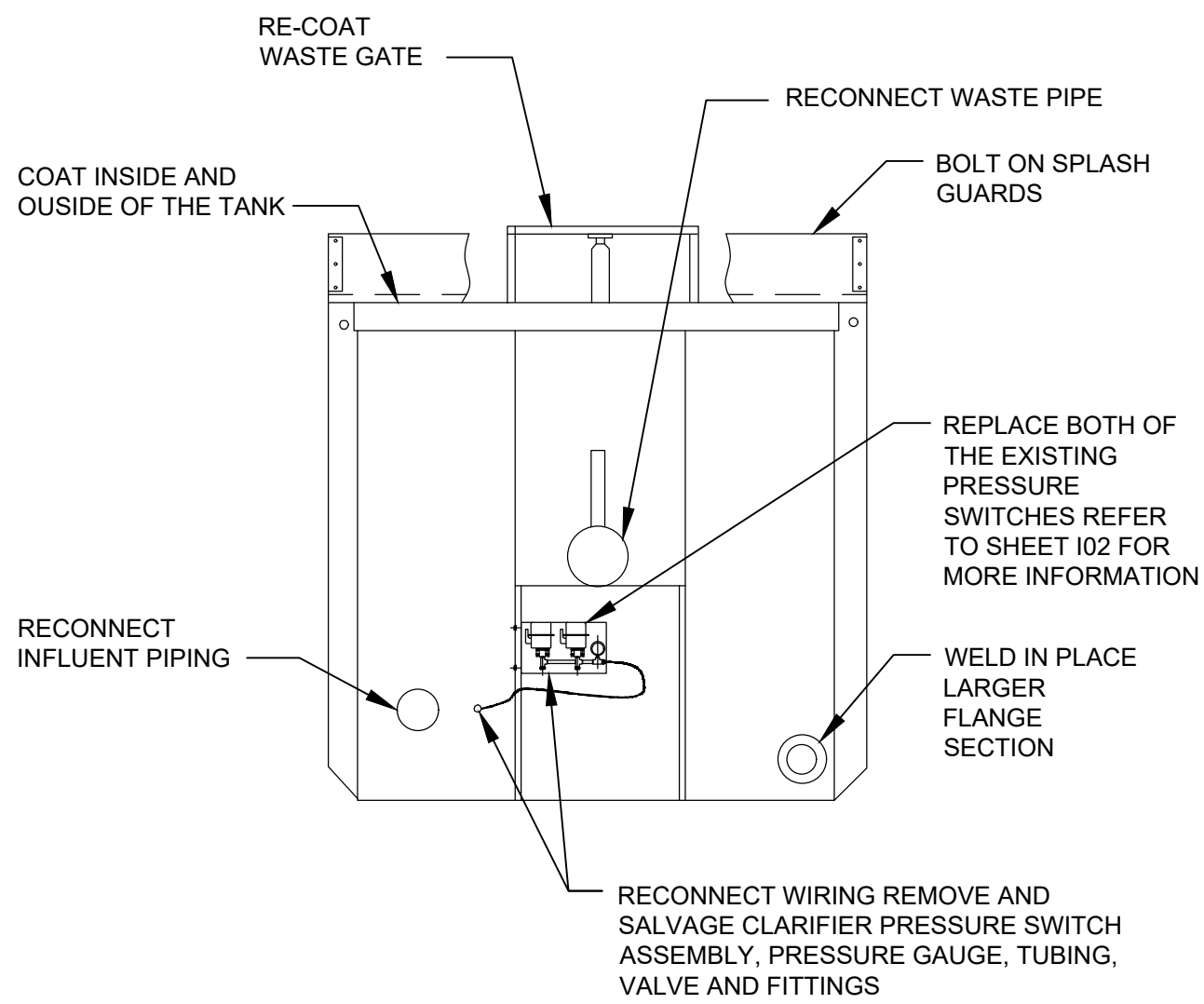
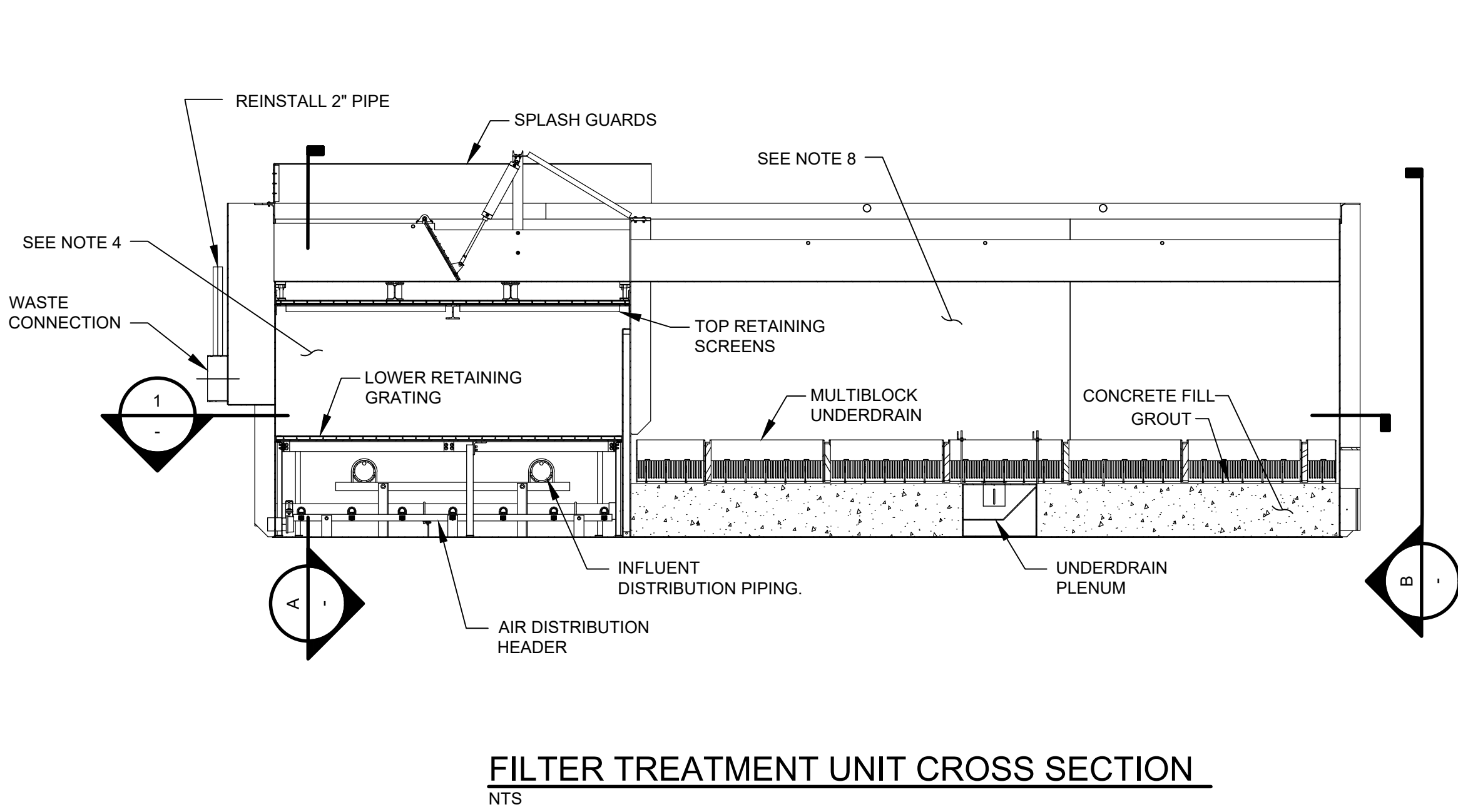
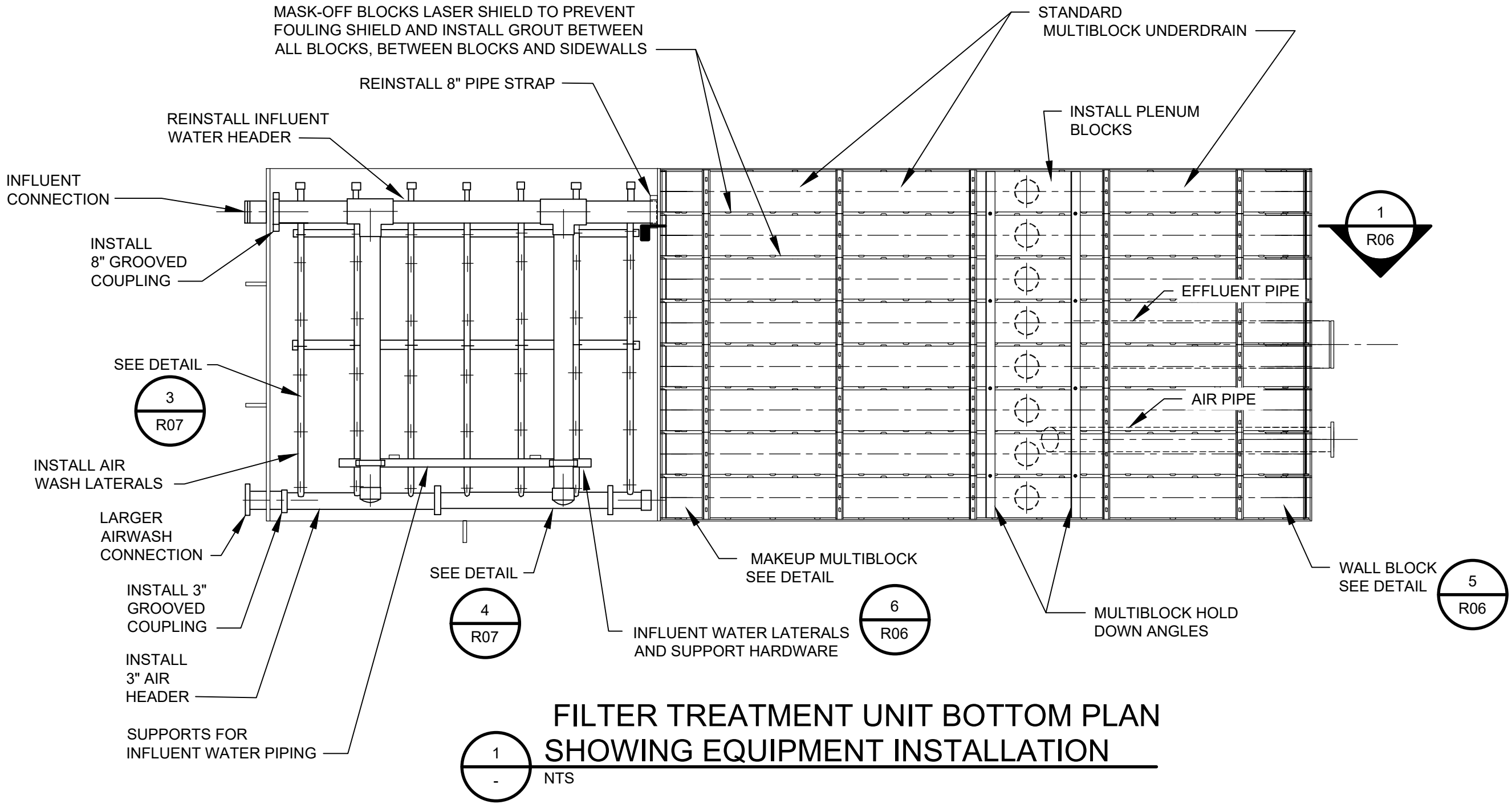
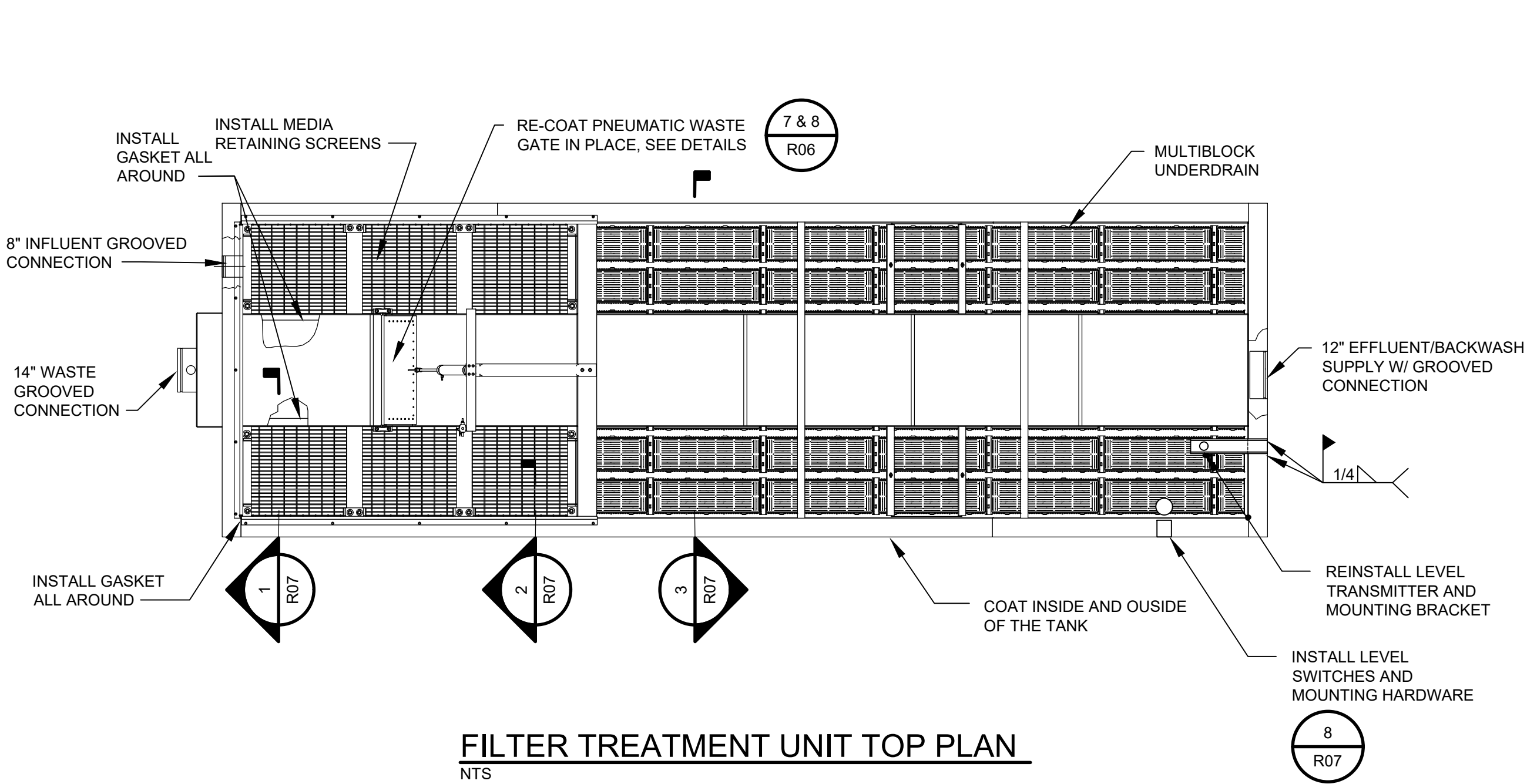


City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

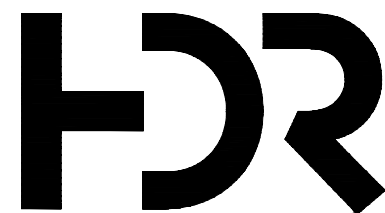
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FILTER TREATMENT UNITS NO. 1 AND NO. 2 REHAB AND IMPROVEMENTS PLANS AND SECTIONS 2		
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	SCALE	NONE
	SHEET	R05

NOTES:

- ALL BOLTS AND NUTS SHALL BE INSTALLED WITH A FLAT WASHER AGAINST PAINTED SURFACES. ALL FASTENERS SHALL BE TIGHTENED TO PROVIDE A SNUG FIT. DO NOT OVER TIGHTEN.
- ALL ELEMENTS OF THE FILTER TREATMENT REHABILITATION TO BE ASSEMBLED AND INSTALLED IN THE FIELD.
- REMOVE ALL FOREIGN MATERIAL FROM TANK INTERIOR PRIOR TO MEDIA INSTALLATION.
- REPLACEMENT MEDIA SHOULD BE PLACED IN ADSORPTION CLARIFIER AFTER ALL AIR WASH LATERALS AND SUPPORTS HAVE BEEN ASSEMBLED AND PRIOR TO INSTALLATION OF MEDIA RETAINER COVER. THERE SHALL BE NO UNSCREENED OPENINGS IN MEDIA RETAINING COVER. FOLLOW MANUFACTURERS INSTRUCTIONS.
- INSTALL GASKET BETWEEN MEDIA RETAINER SCREENS AND UNDER EDGES OF THE SCREENS.
- ALL AIR NOZZLES MUST BE COMPLETELY LEVEL.
- APPLY ADHESIVE, 3M ADHESIVE #77, ON ONE EDGE OF GRATING PRIOR TO ATTACHING GASKET MATERIAL.
- INSTALL REPLACEMENT FILTER MEDIA AFTER ALL UPGRADE AND REHABILITATION WORK IS COMPILED. FILTER MEDIA NOT SHOWN.



FILE: C:\pwworking\wse01\2024\3094\7R06.dwg
DATE: 08/10/23 02:37:26pm - JKAMBQJ



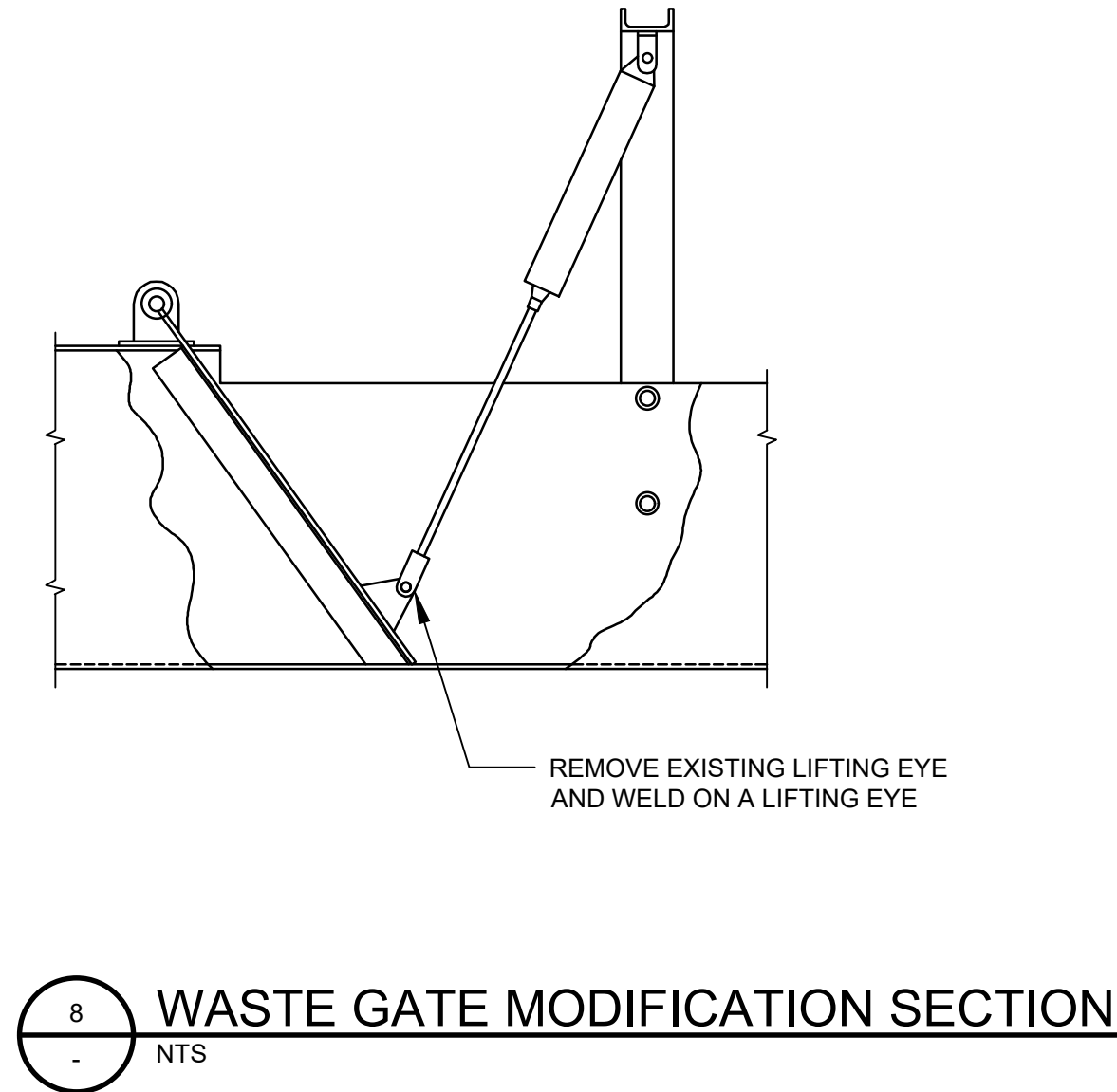
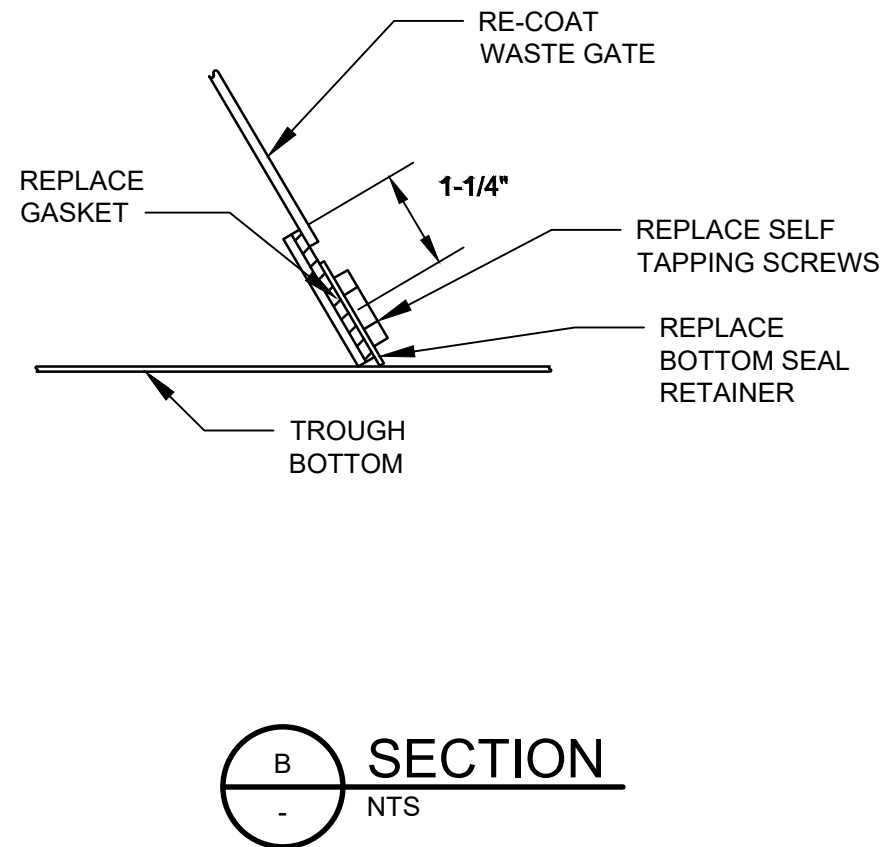
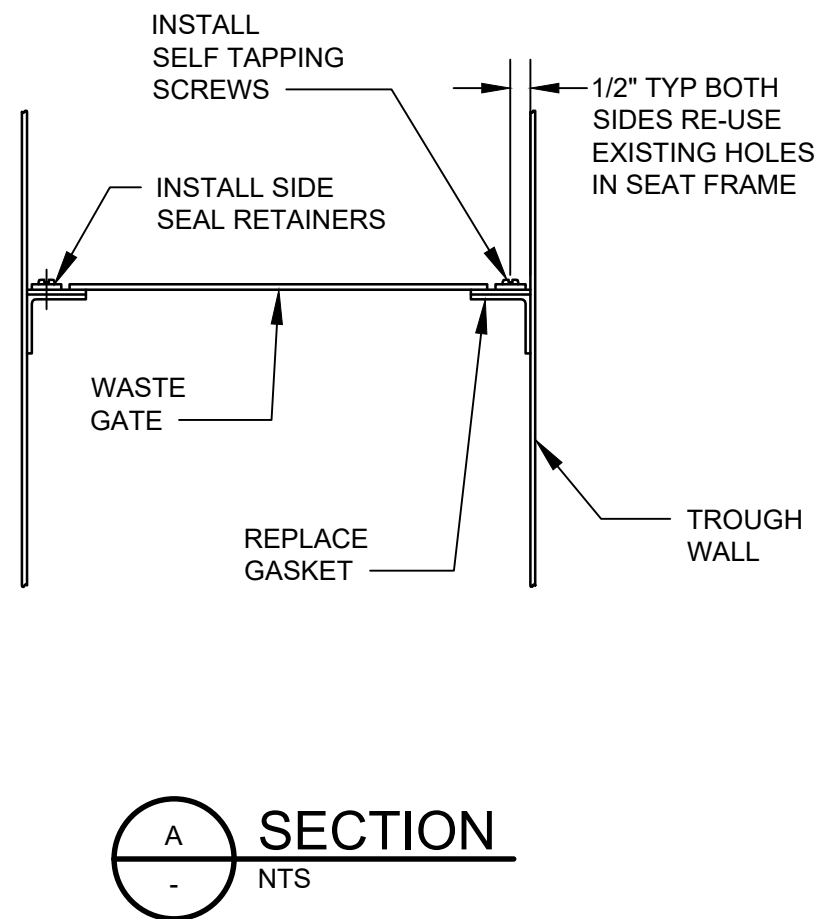
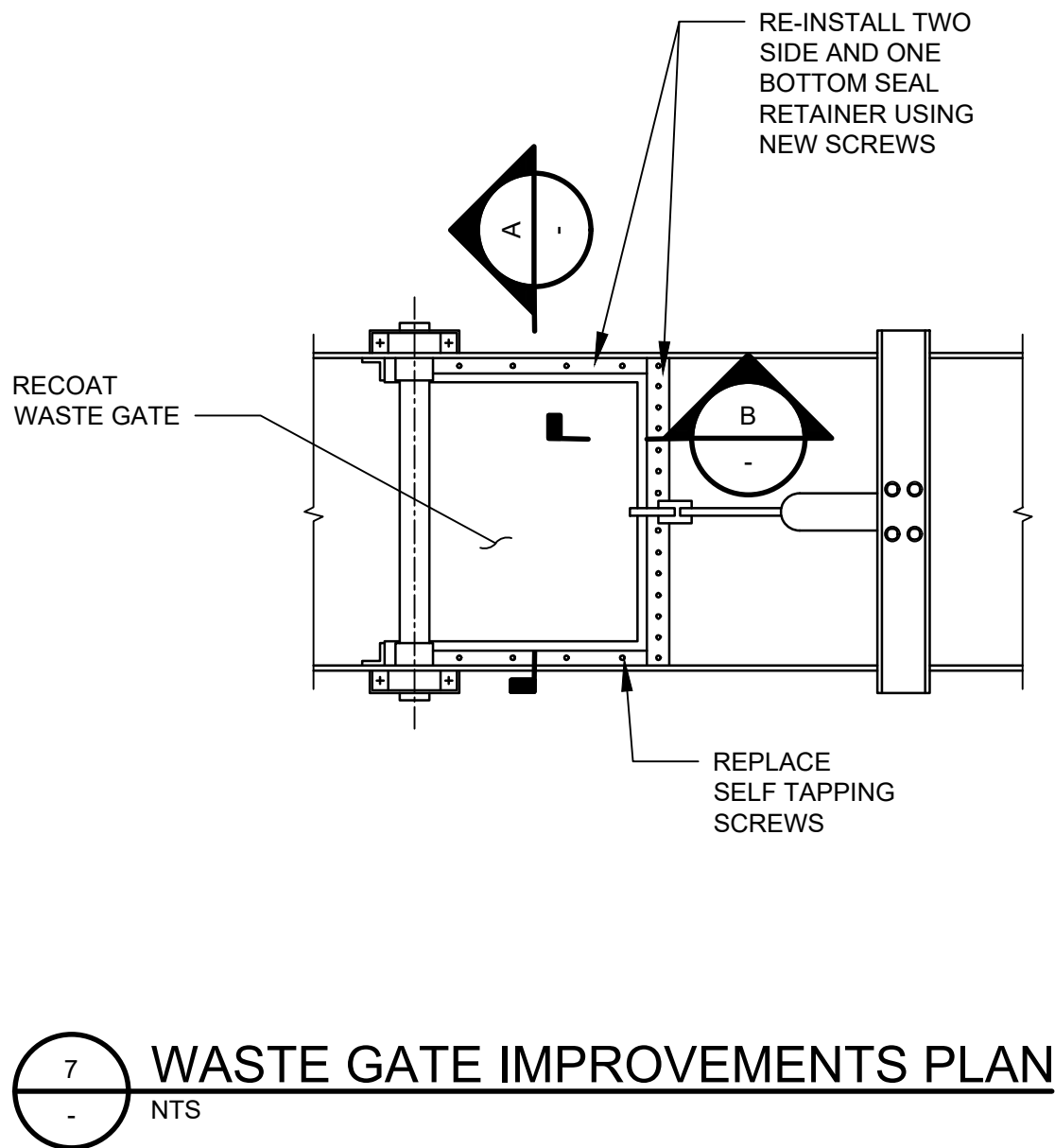
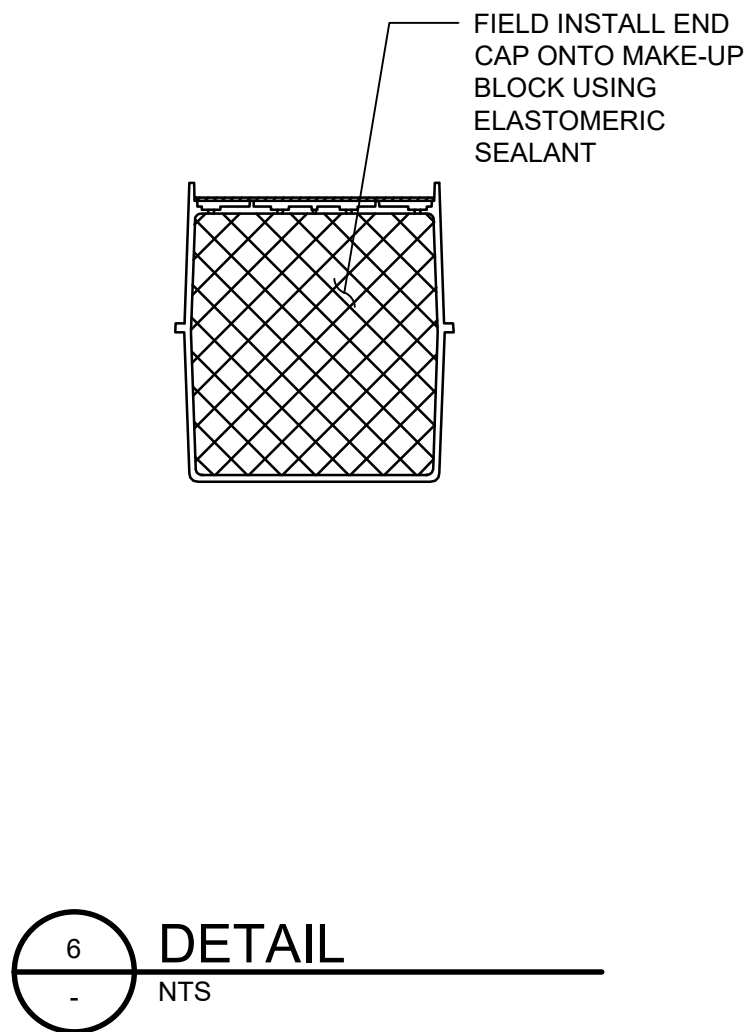
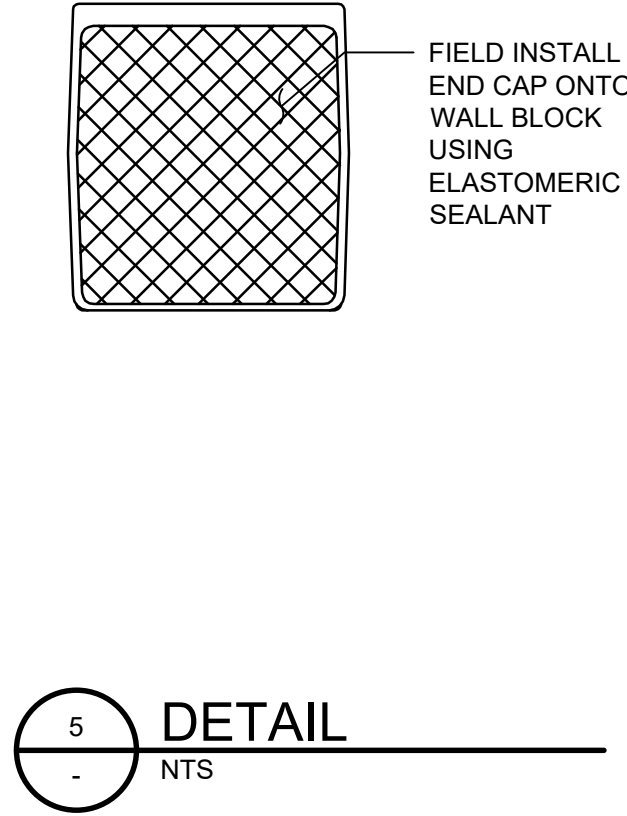
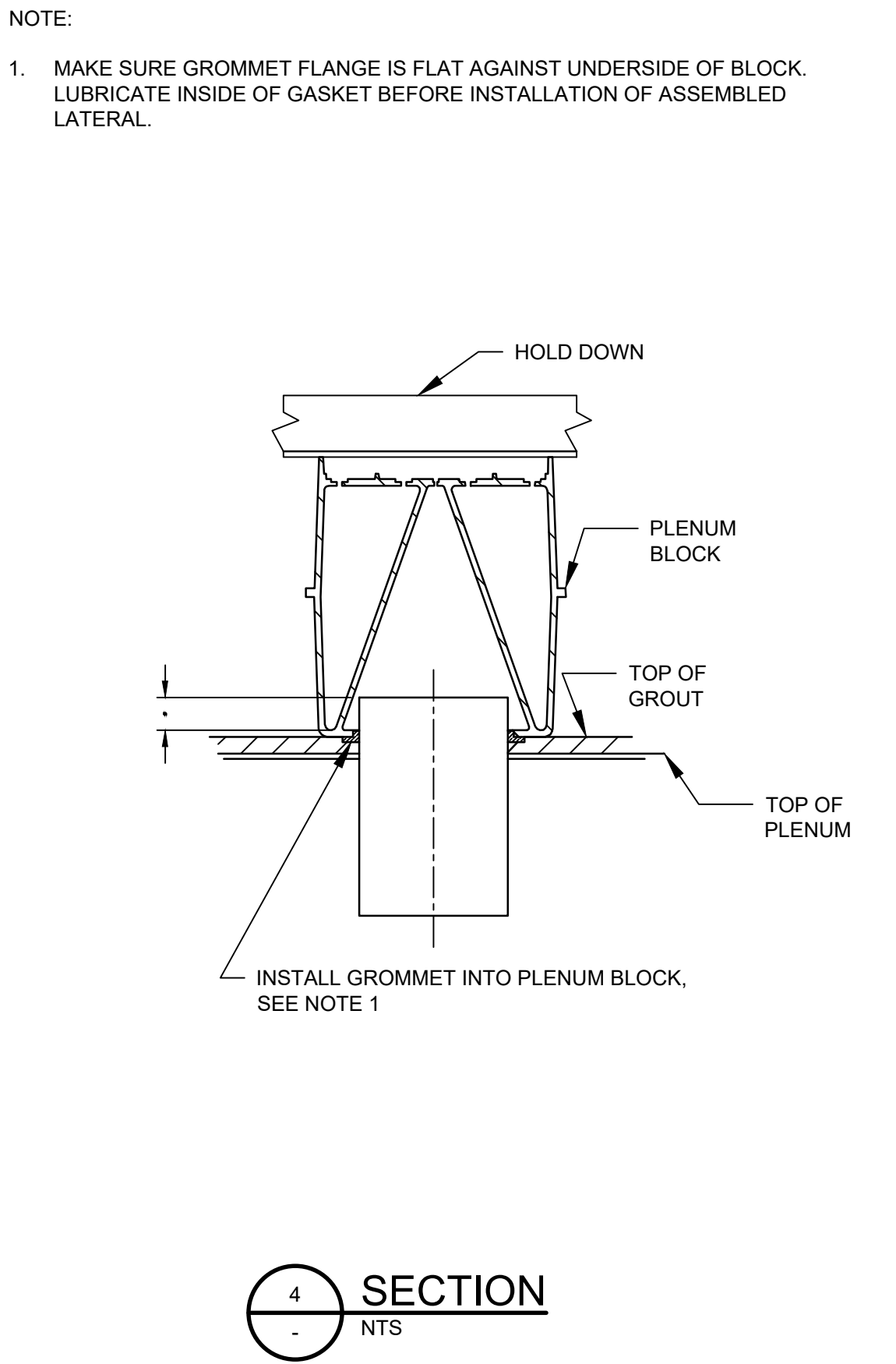
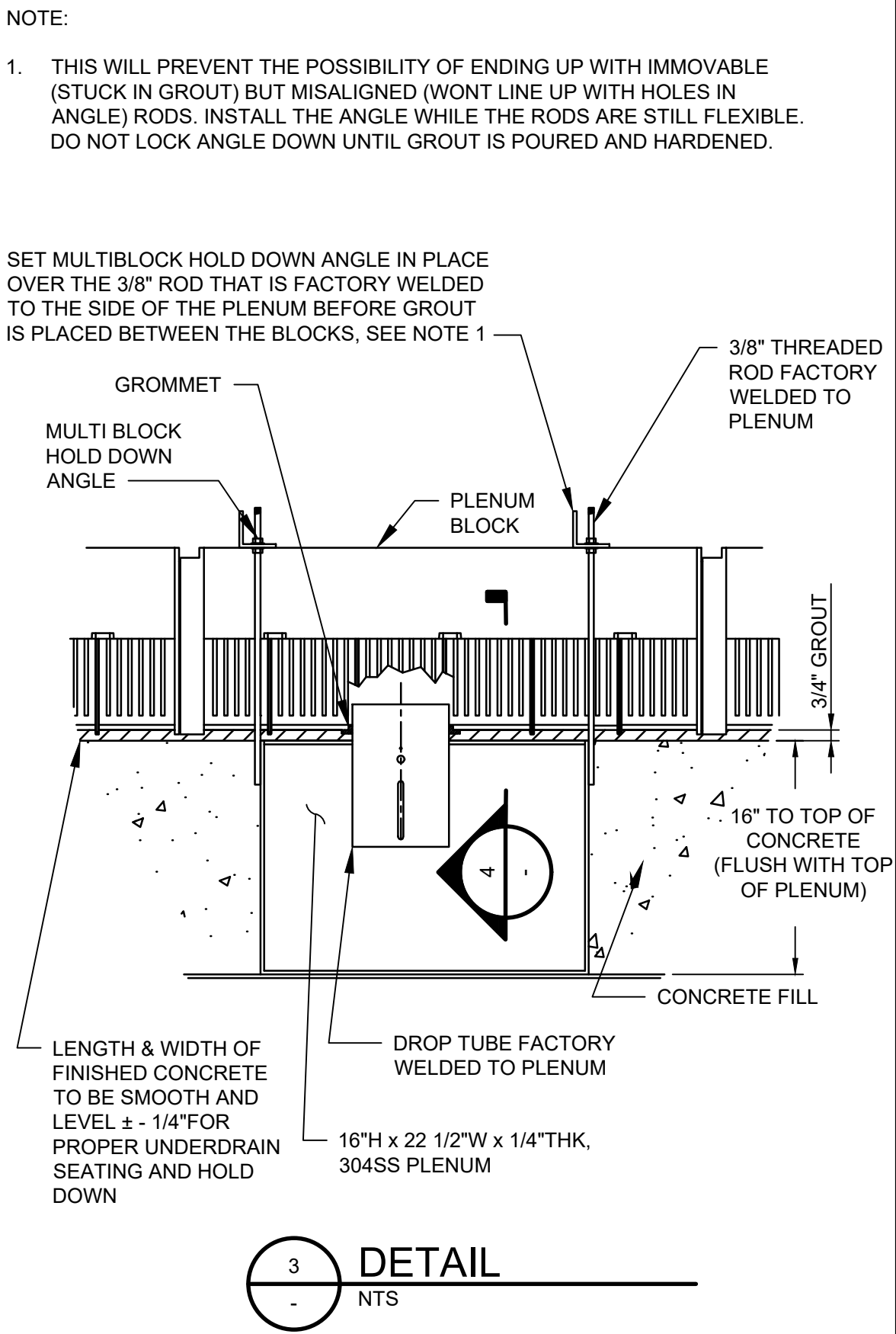
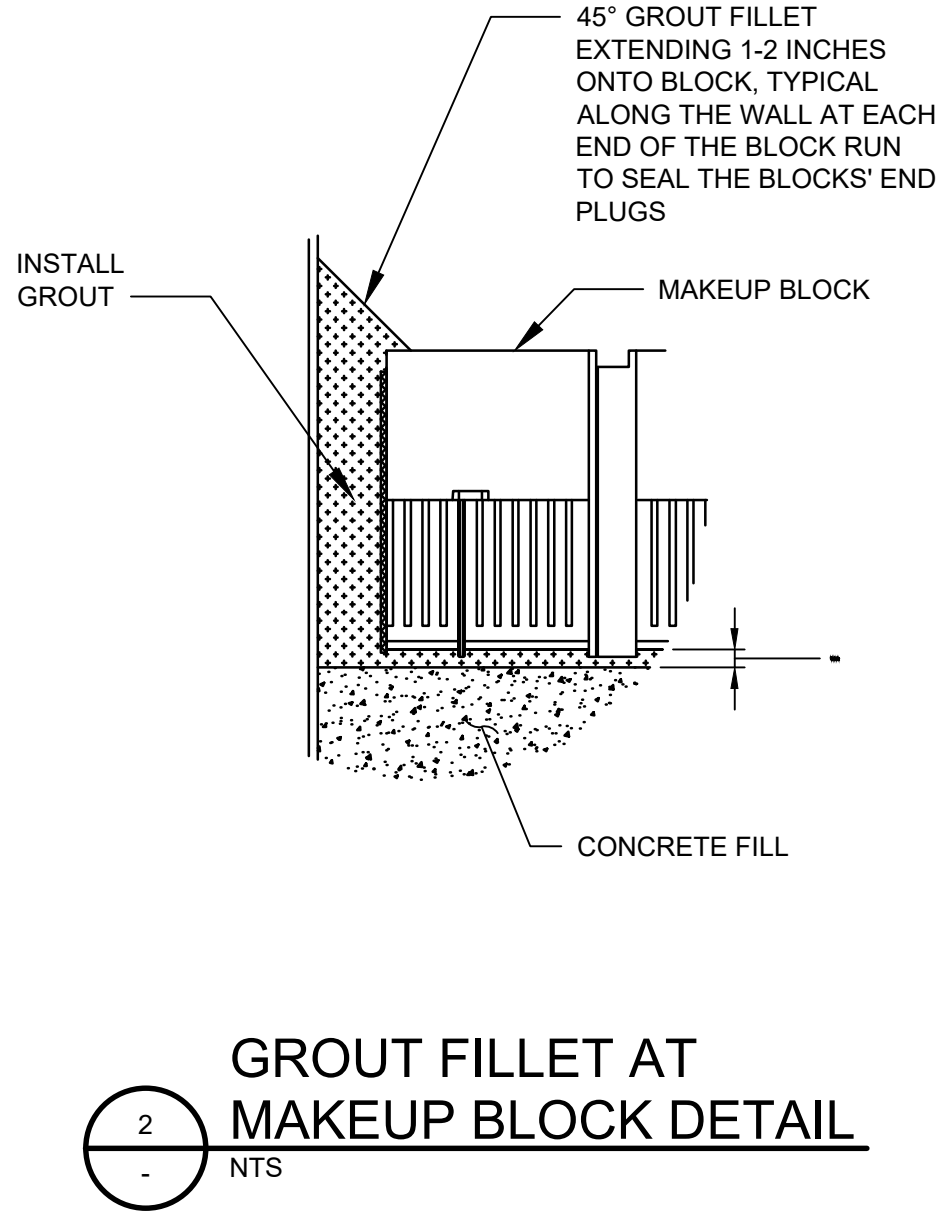
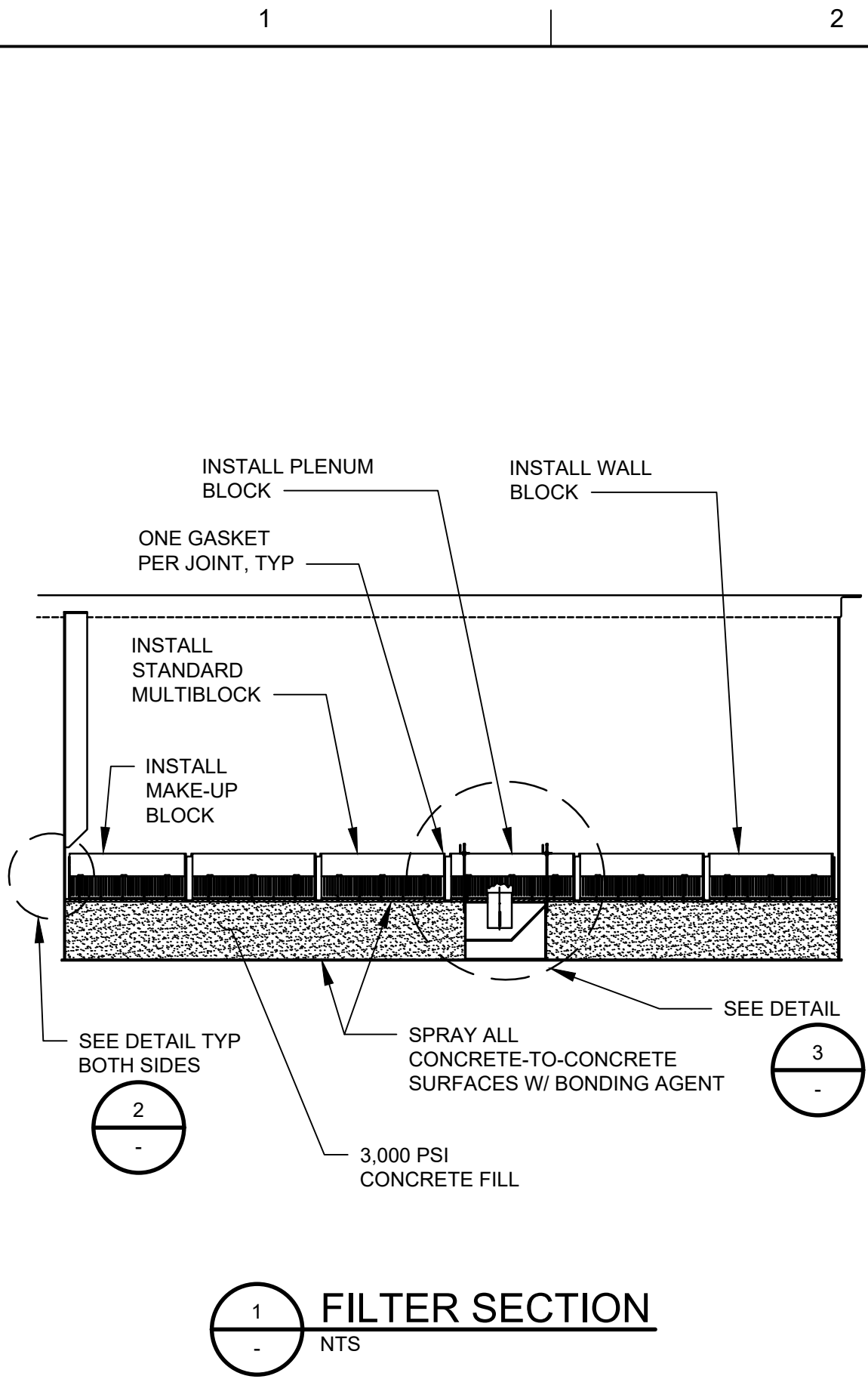
0	08/2023	ISSUED FOR BID
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER		ARASHDEEP SINGH
DESIGNED		A. SINGH
CHECKED		T. KONTONICKAS
DRAWN		S. LARI
DATE		08/2023
PROJECT NUMBER		10276484

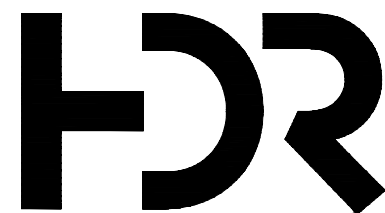


City of Fort Bragg
Water Treatment Plant
Rehabilitation Project

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DATE: 08/10/23 02:37:40pm - JKAMBDJ

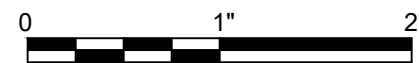


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DESIGNED	A. SINGH
CHECKED	T. KONTONICKAS
DRAWN	S. LARI
DATE	08/2023
PROJECT NUMBER	10276484



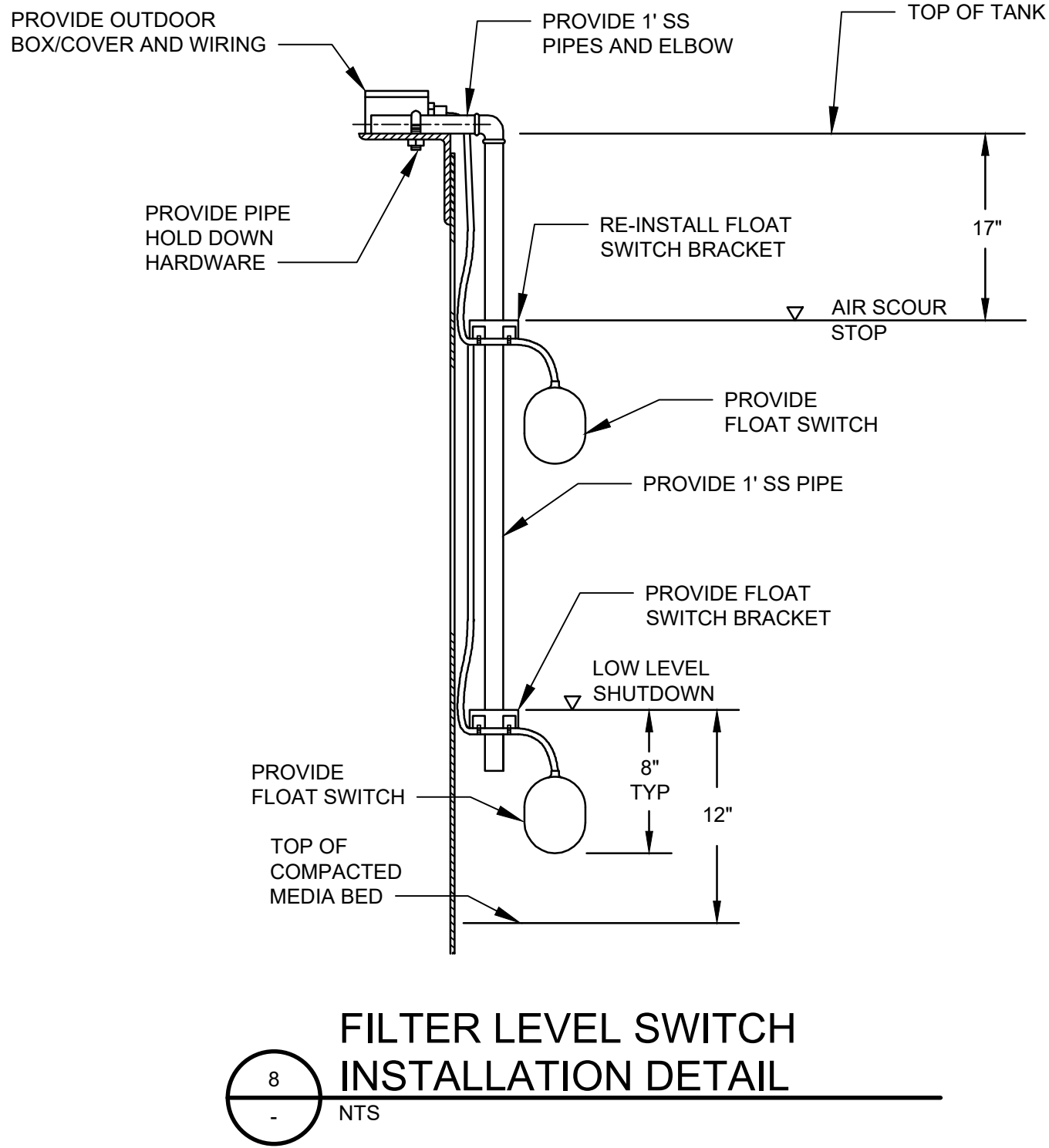
City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



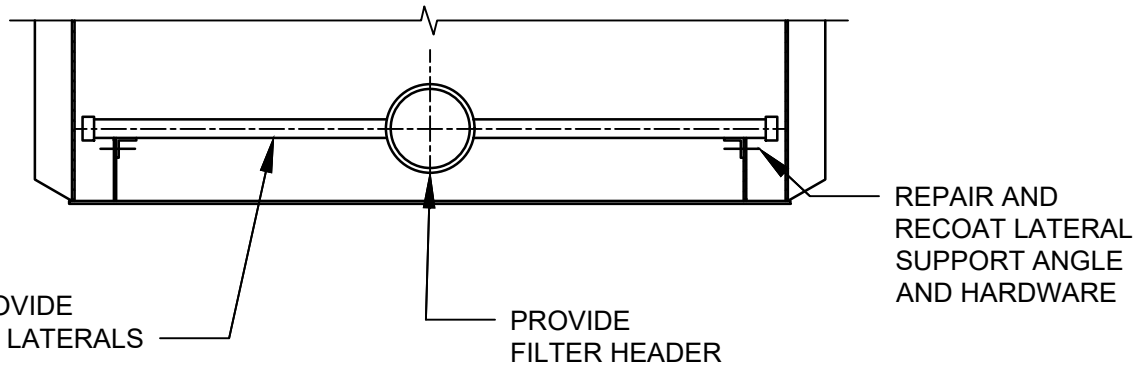
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SHEET
R07

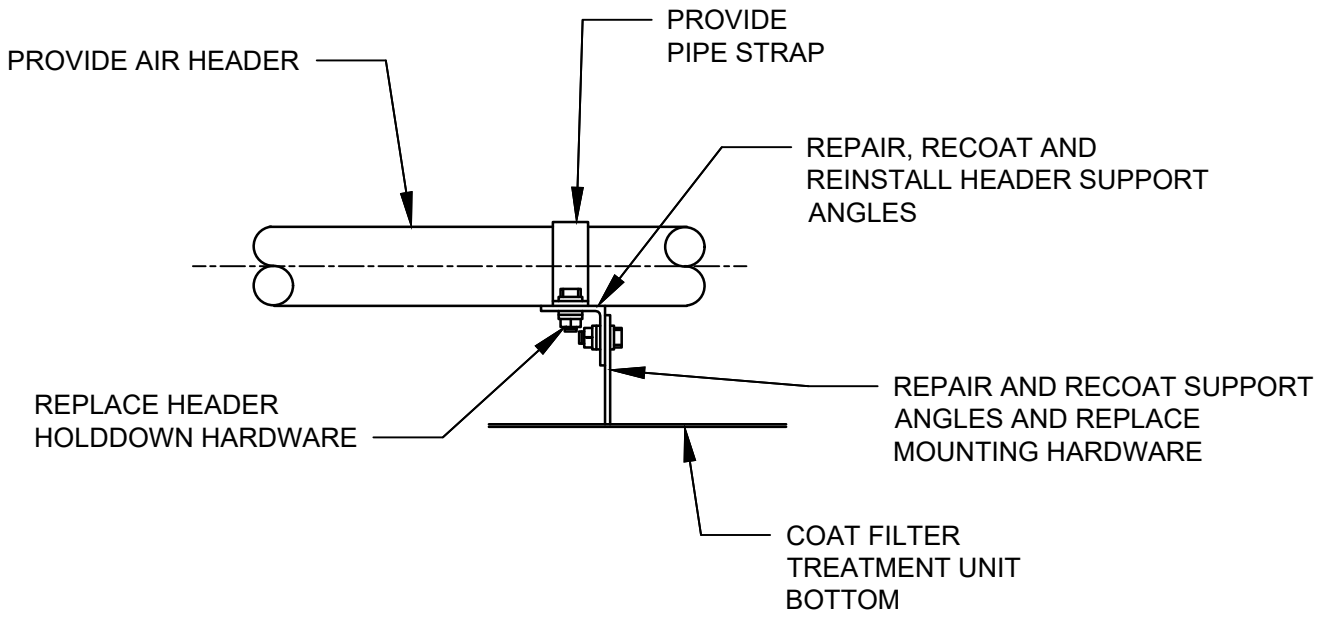
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REHAB AND IMPROVEMENTS DETAILS 2



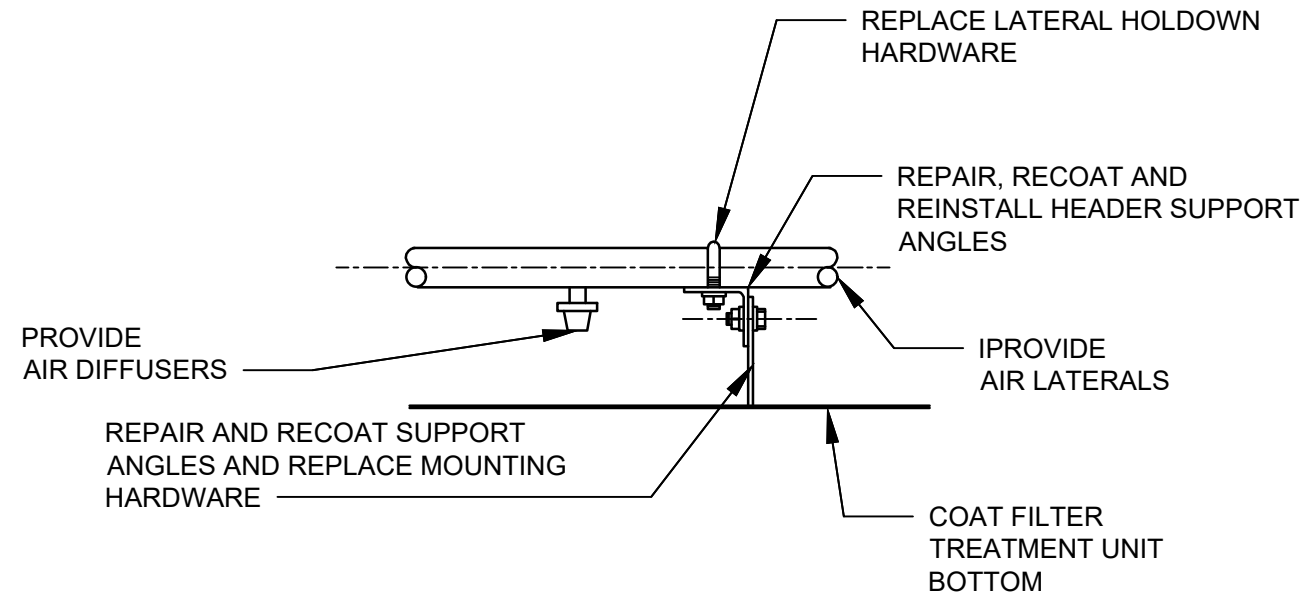
8
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NTS
FILTER LEVEL SWITCH
INSTALLATION DETAIL



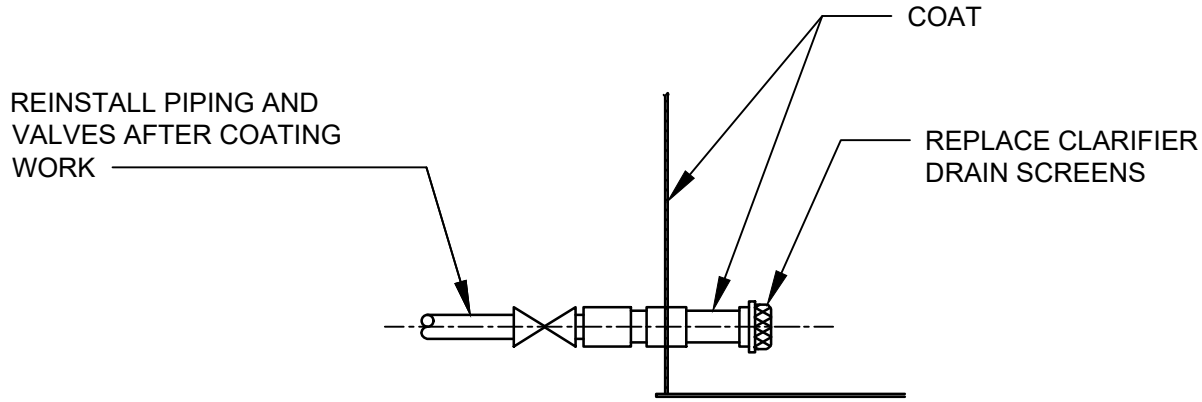
7
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NTS
UNDERDRAIN LATERAL
IMPROVEMENTS SECTION



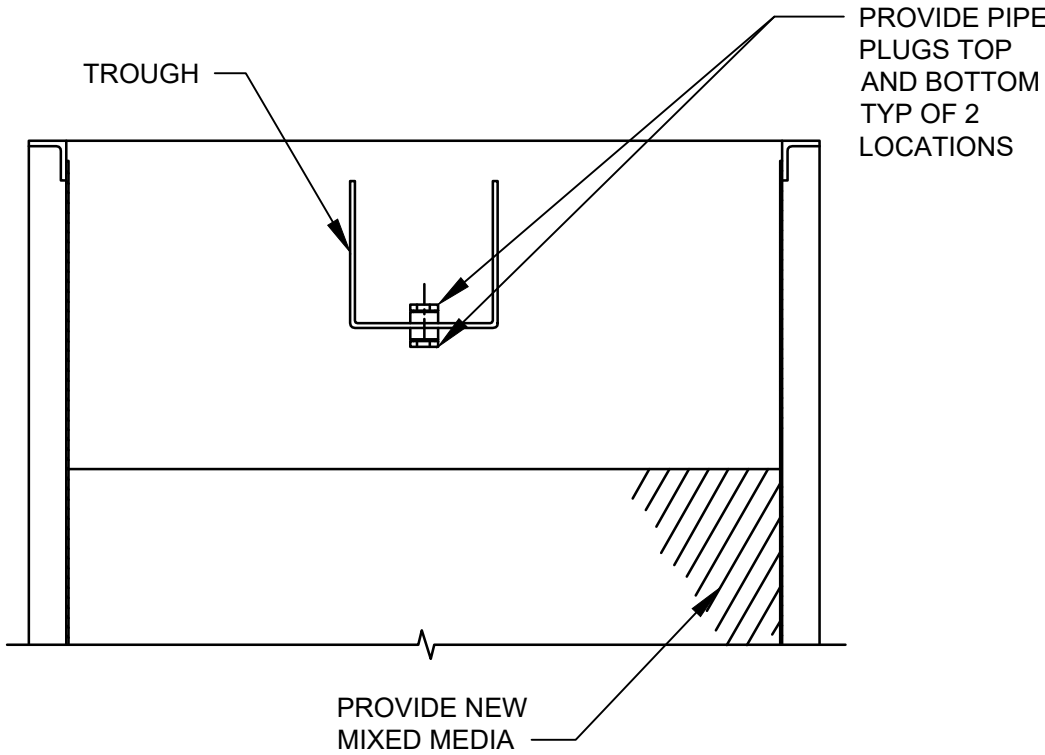
6
-
NTS
AIRWASH HEADER SUPPORT
AND HOLDDOWN DETAIL



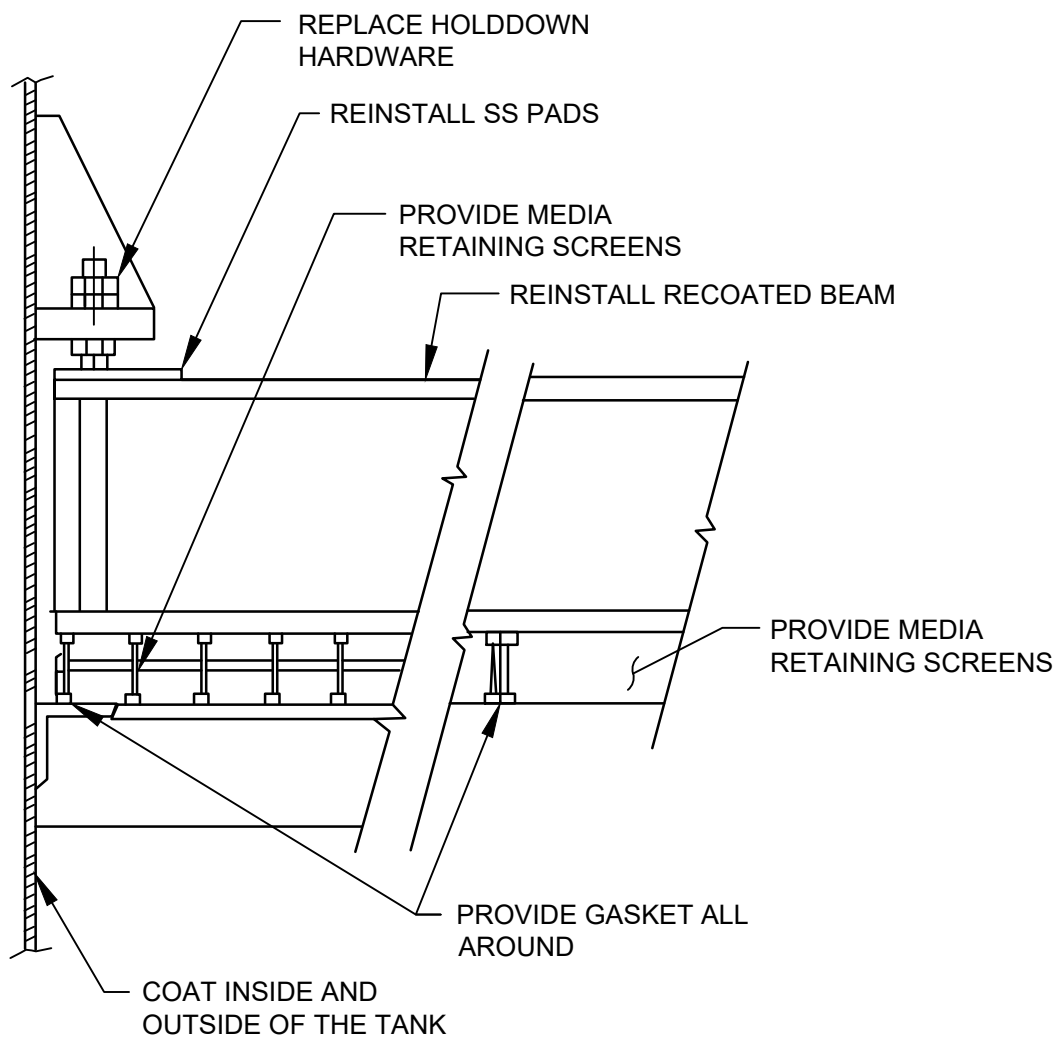
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NTS
AIRWASH SUPPORT
AND HOLDDOWN DETAIL



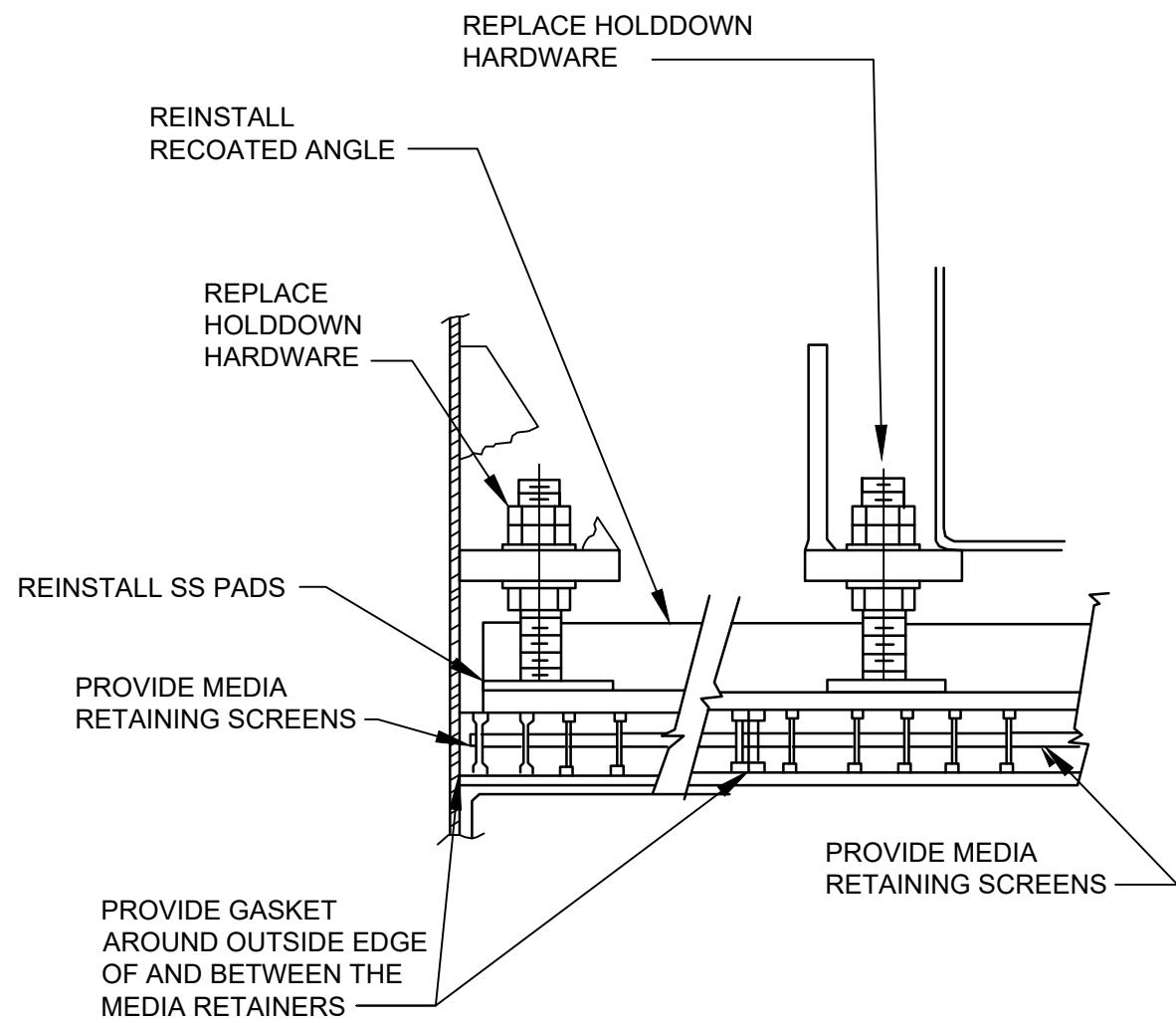
4
-
NTS
DRAIN PIPING SECTION



3
-
NTS
SECTION

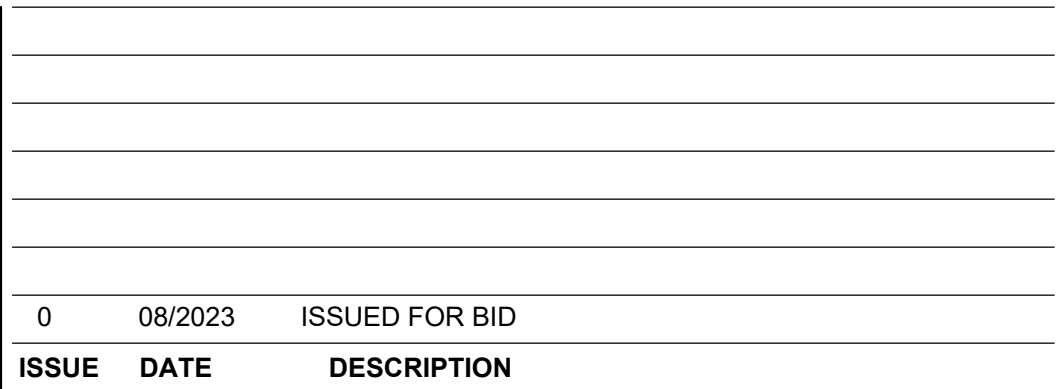


2
-
NTS
SECTION



1
-
NTS
SECTION

FILE: C:\pwworking\west01\d2043094\8E01.dwg
DATE: 08/10/23 02:37:57pm JKAMBO I



E01

LOADS

MCC-1

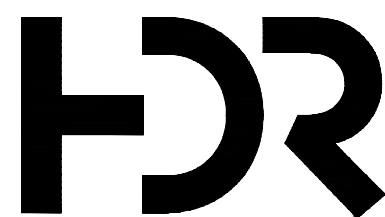
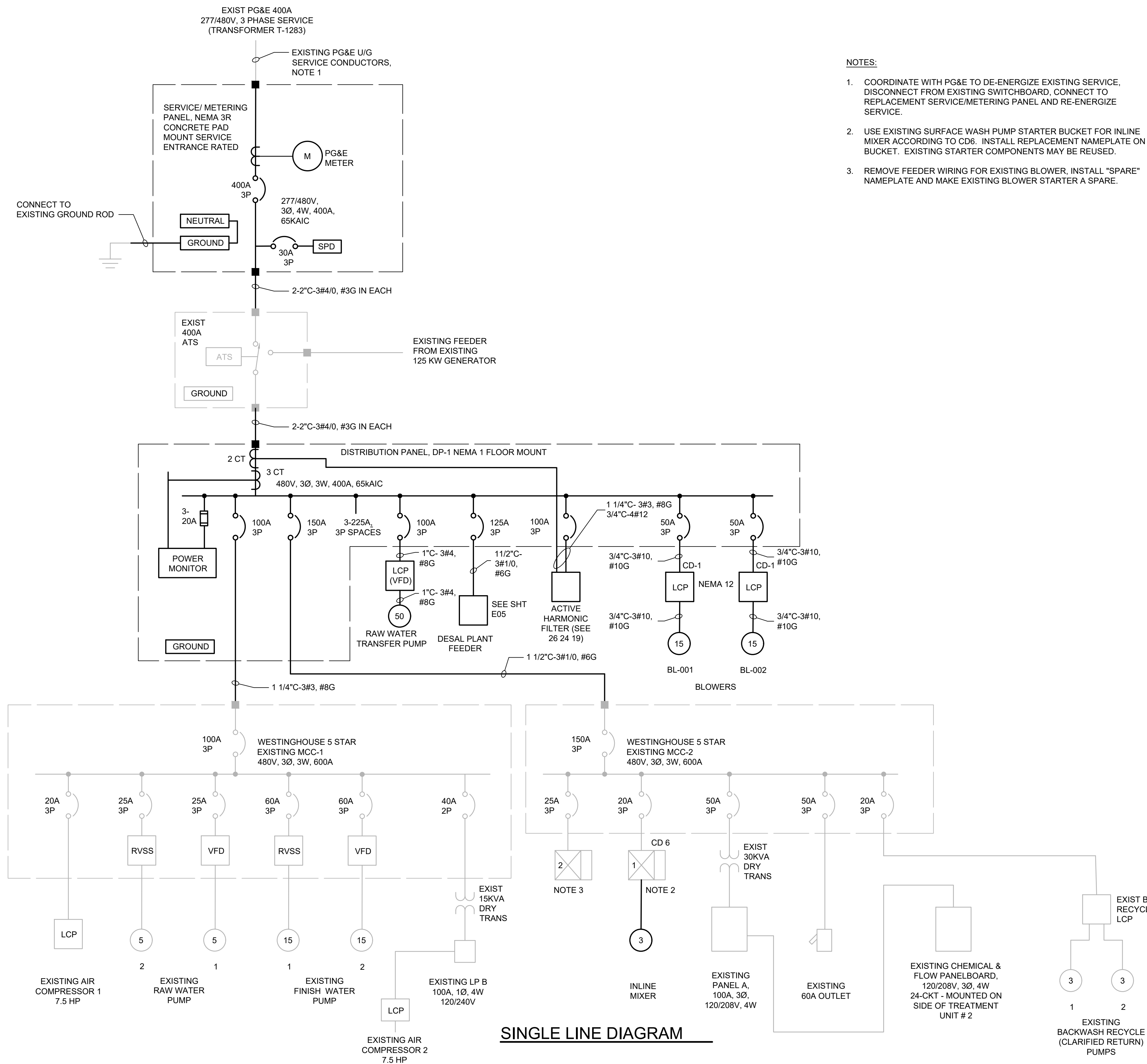
LOAD	kVA	
	CONNECTED	DEMAND
AIR COMPRESSOR 1	7	7
FINISH WATER PUMP 1	15	15
FINISH WATER PUMP 2	15	15
RAW WATER PUMP 1	5	5
RAW WATER PUMP 2	5	5
15 kVA TRANSFORMER (LPB)	15	10
TOTAL	62	57
AMPS @ 480V	75	69

MCC-2

LOAD	kVA	
	CONNECTED	DEMAND
IN LINE MIXER	3	3
30 kVA TRANSFORMER (LPA)	30	15
60 AMP OUTLET	25	0
BACKWASH RECYCLE PUMP 1	3	3
BACKWASH RECYCLE PUMP 2	3	0
TOTAL	64	21
AMPS @ 480V	77	25

DP-1 AND SERVICE SWBD

LOAD	kVA	
	CONNECTED	DEMAND
MCC-1	62	57
MCC-2	64	21
RAW WATER TRANSFER PUMP	50	50
BLOWER 1	15	15
BLOWER 2	15	0
TOTAL	206	143
AMPS @ 480V	247	173

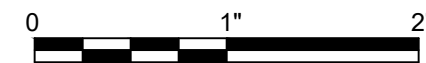


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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
DESIGNED	W. ETTLICH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg Water Treatment Plant Rehabilitation Project



ELECTRICAL

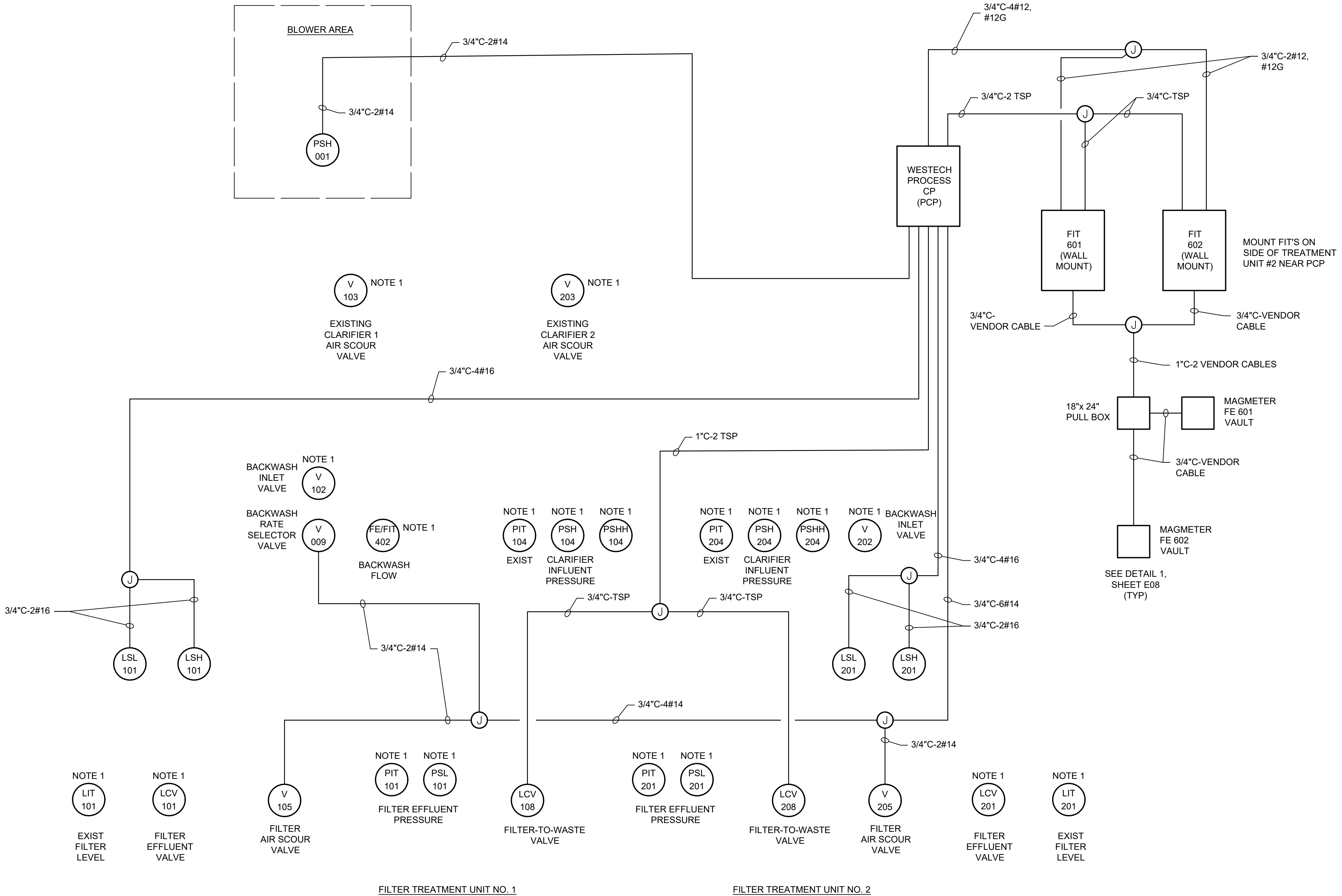
SINGLE LINE DIAGRAM

FILENAME	8E02.dwg
SCALE	NONE

SHEET

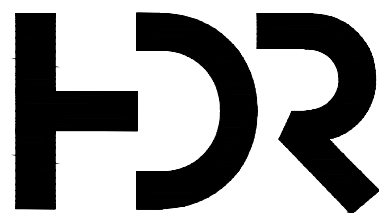
E02

FILE: C:\pwworking\west01\2024\3094\BEE03.dwg
DATE: 08/10/23 02:38:25pm JKAMBOJ



FILTER TREATMENT UNIT
CONTROL WIRING SINGLE LINE DIAGRAM

- NOTES:
- DISCONNECT EXISTING DEVICE AND RE-CONNECT CONDUIT AND WIRE TO EXISTING OR REPLACEMENT DEVICE. FOR TANK PAINTING, SEE "R" SHEETS.
 - SEE SHEET P01 FOR EQUIPMENT LOCATIONS.

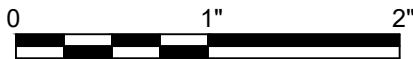


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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



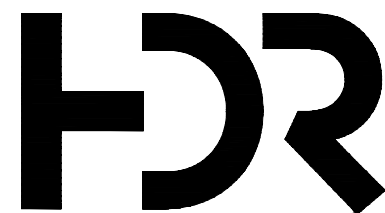
ELECTRICAL

CONTROL WIRING SINGLE LINE DIAGRAM

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SCALE	NONE

SHEET
E03

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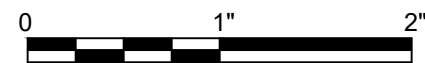


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City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



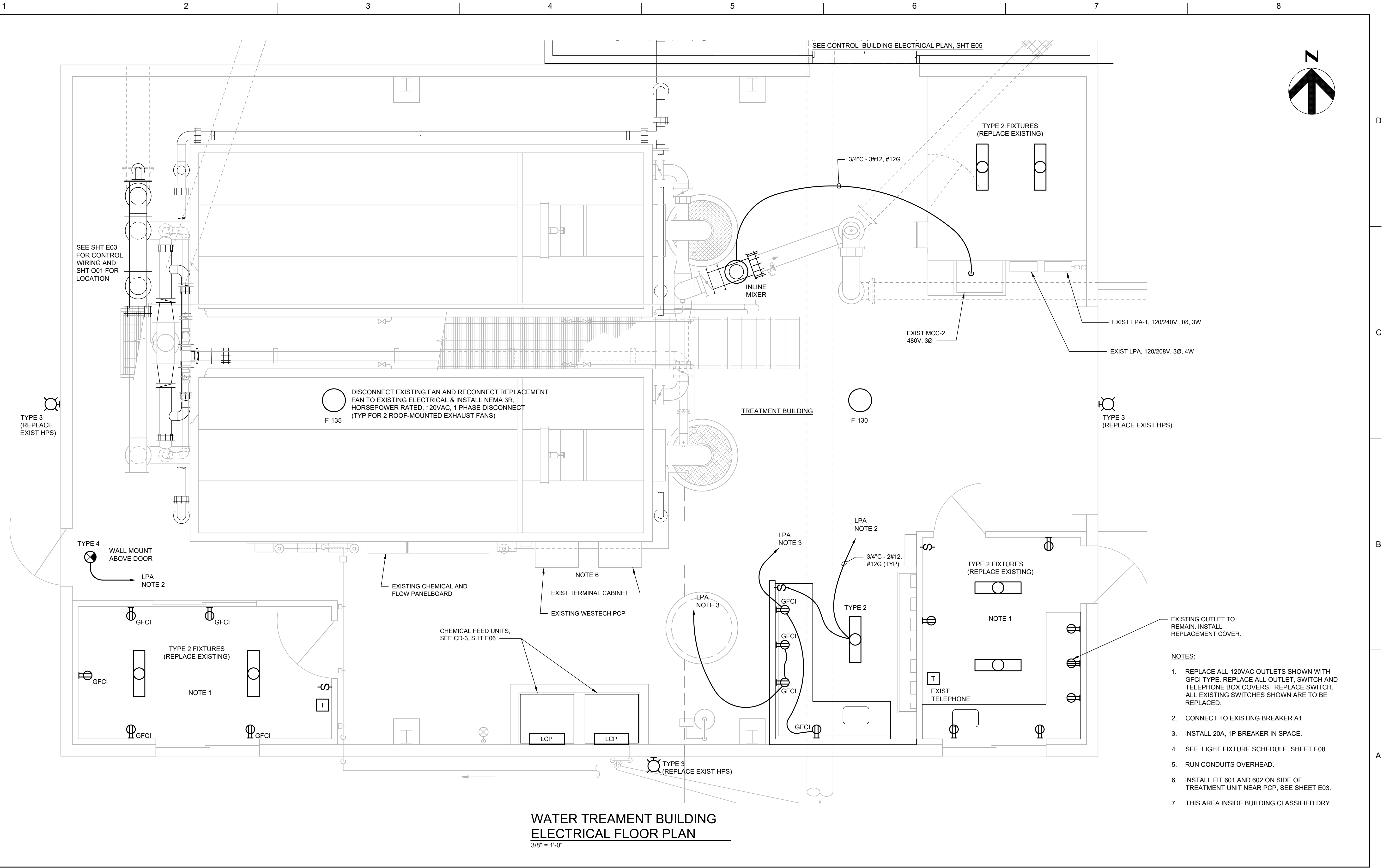
ELECTRICAL

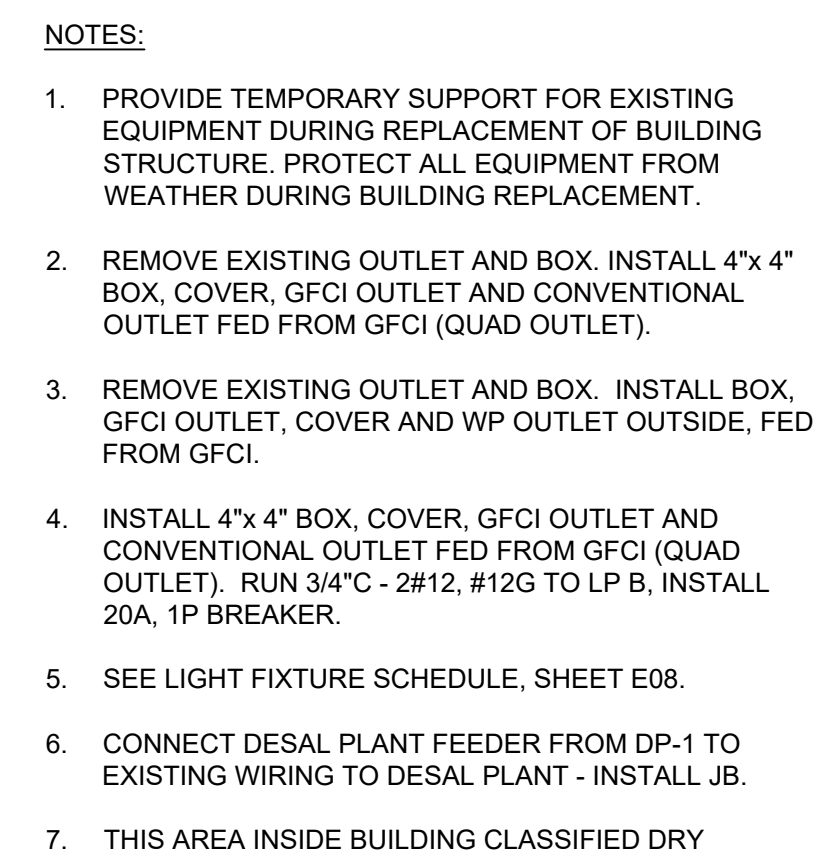
WATER TREATMENT BUILDING
ELECTRICAL FLOOR PLAN

FILENAME 8E04.dwg
SCALE AS NOTED

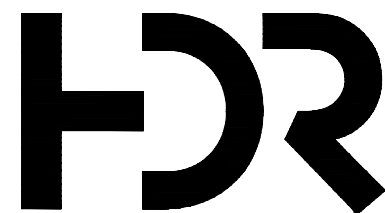
SHEET

E04



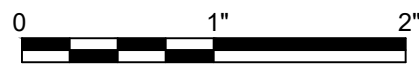
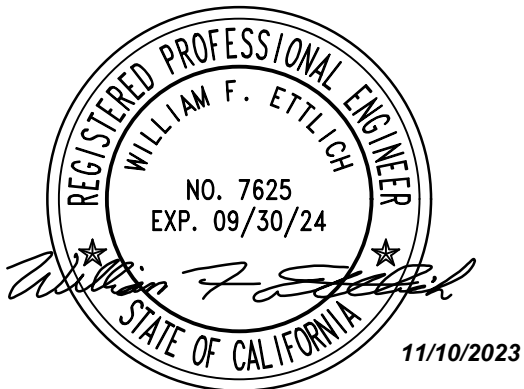


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DATE: 08/10/23 02:39:24pm - JKAMBOJ



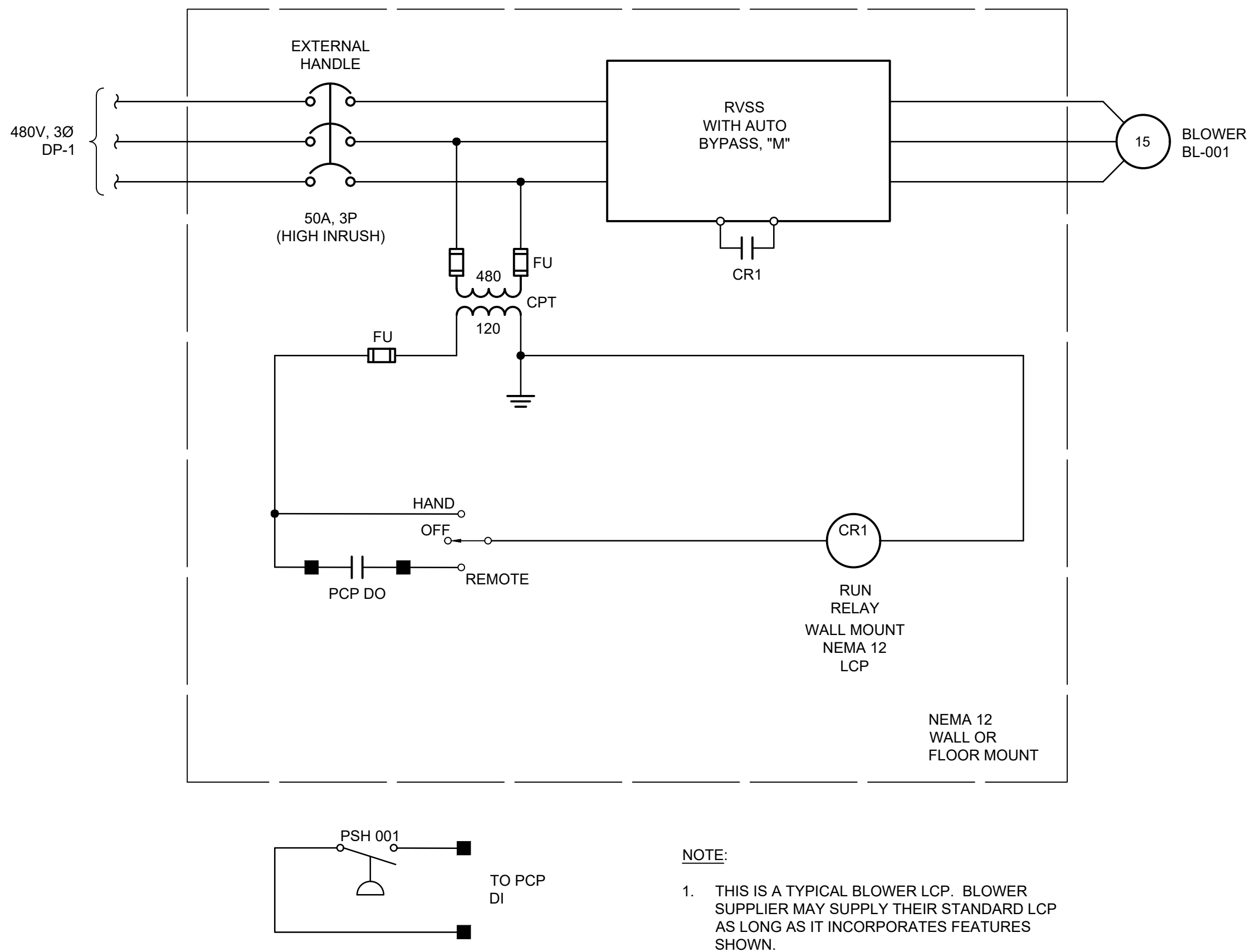
0	08/2023	ISSUED FOR BID
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DESIGNED	W. ETTLICH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484

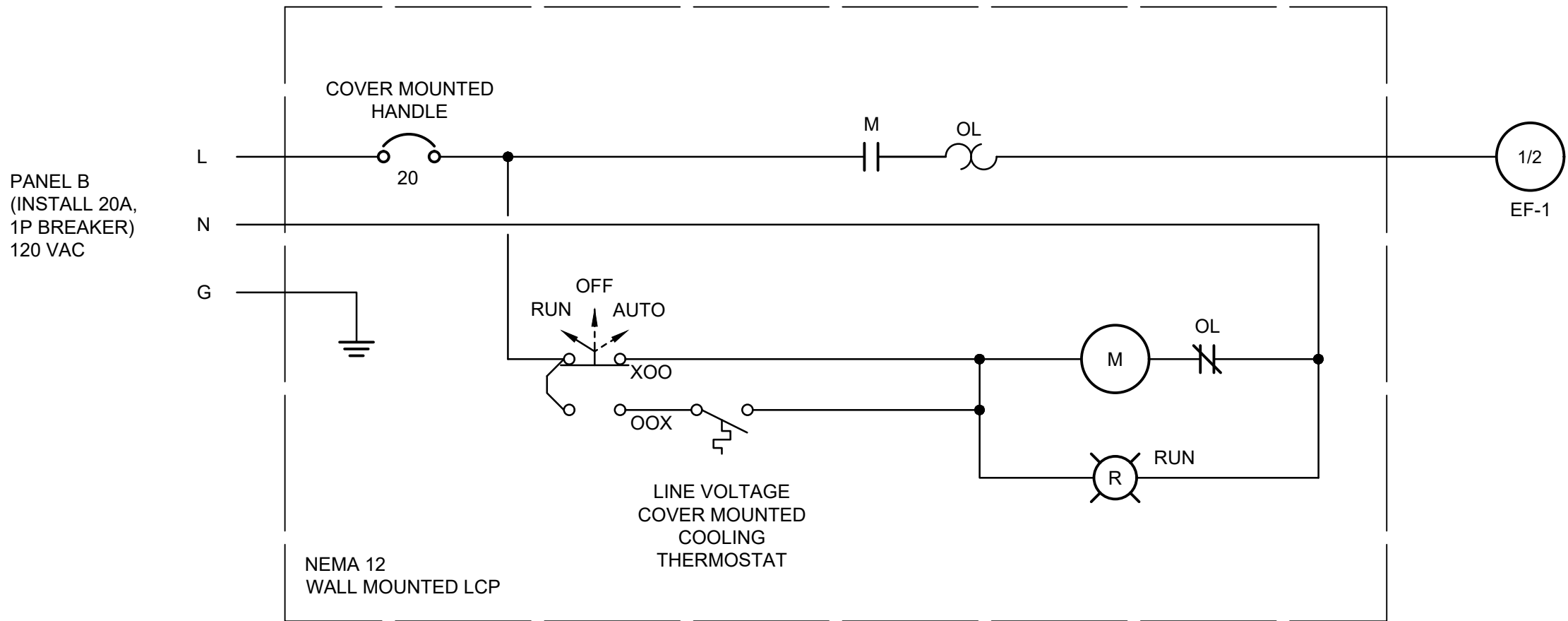


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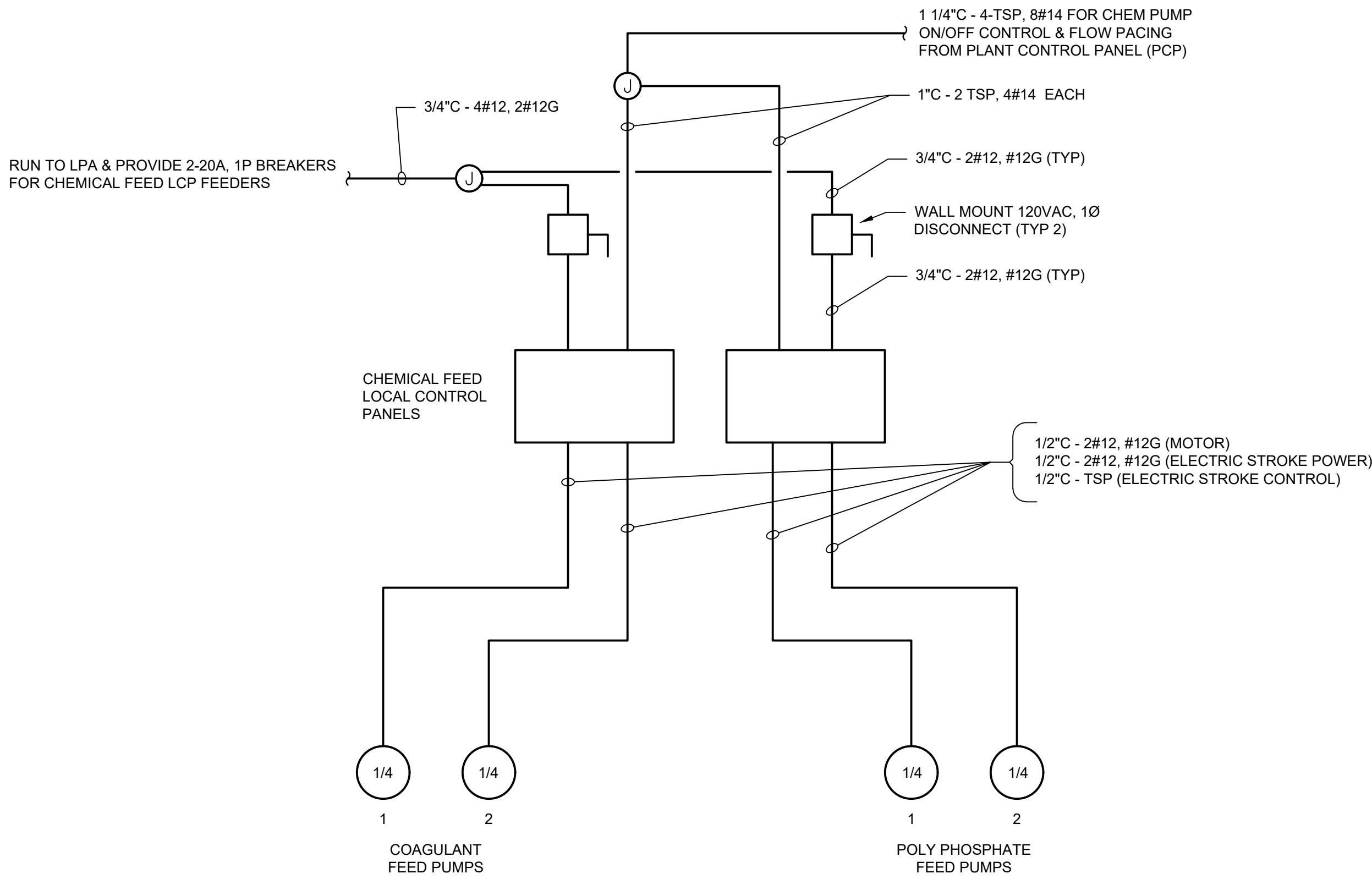
SHEET	E06
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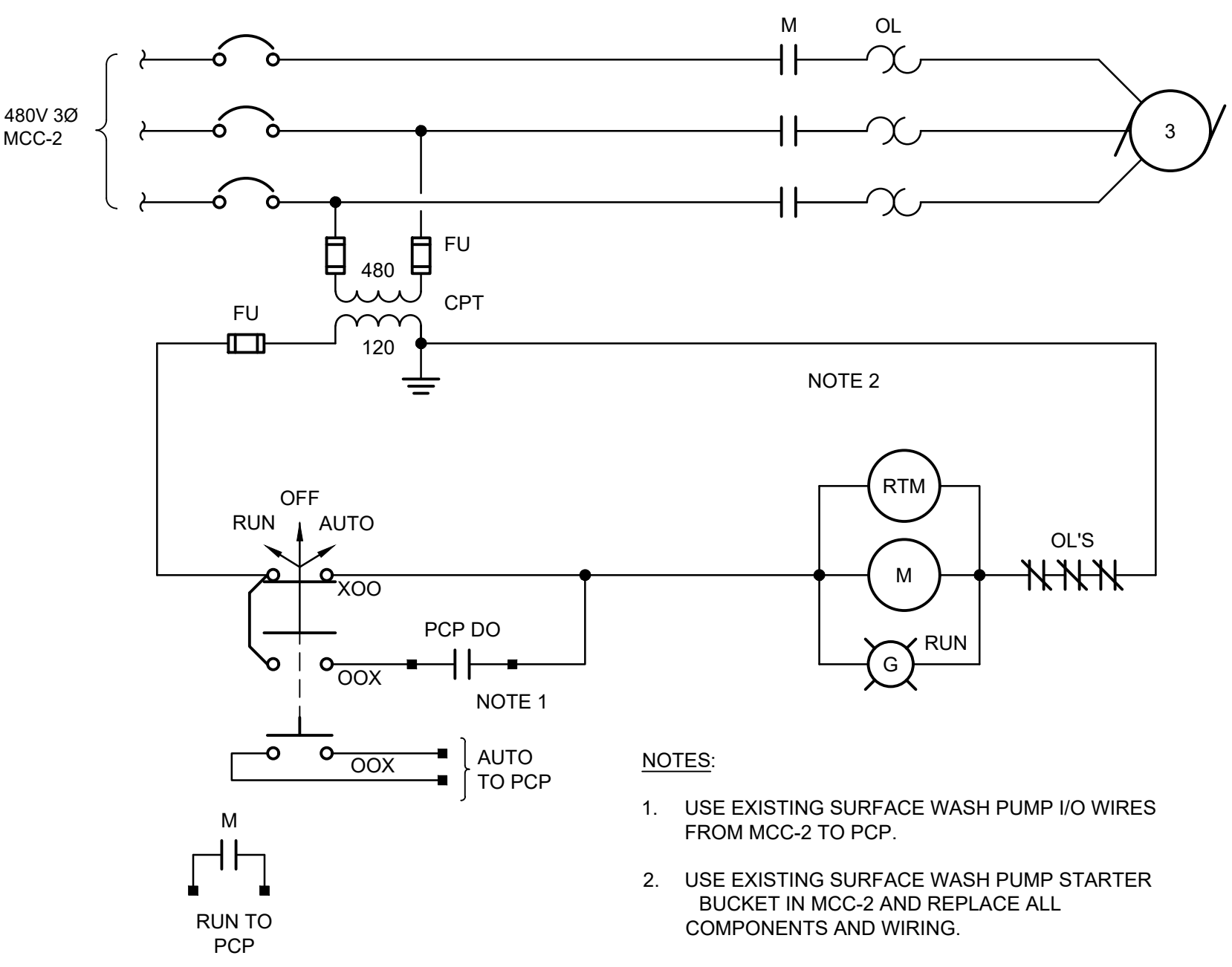
CD1 AIR BLOWER BL 001
TYP ALSO FOR AIR BLOWER BL 002



CD5 EXHAUST FAN EF-1

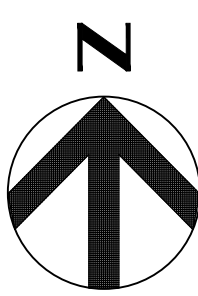


CD3 CHEMICAL FEED SINGLE LINE DIAGRAM



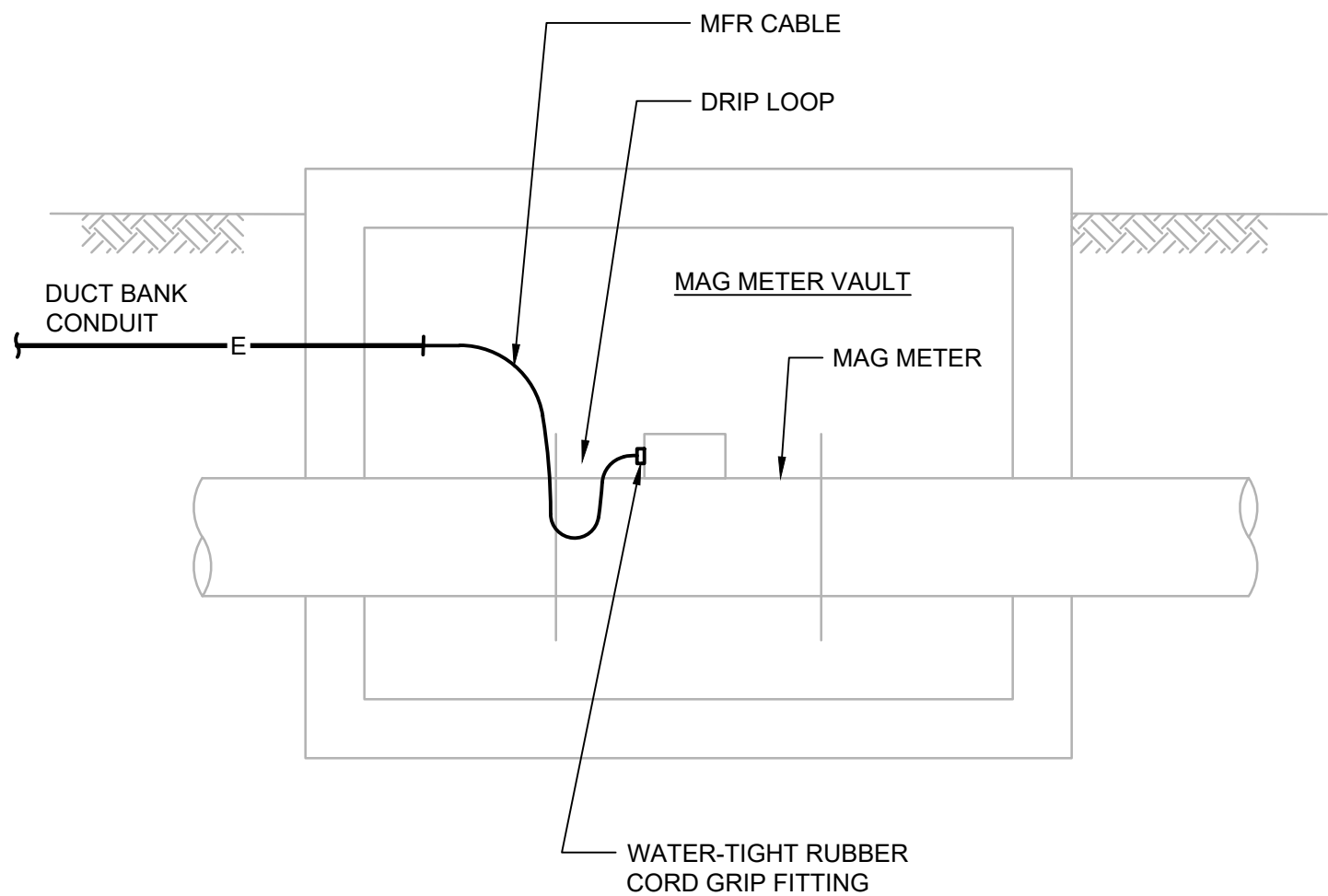
CD6 INLINE MIXER
SEE SHT E02

ELECTRICAL
CONTROL DIAGRAMS 1

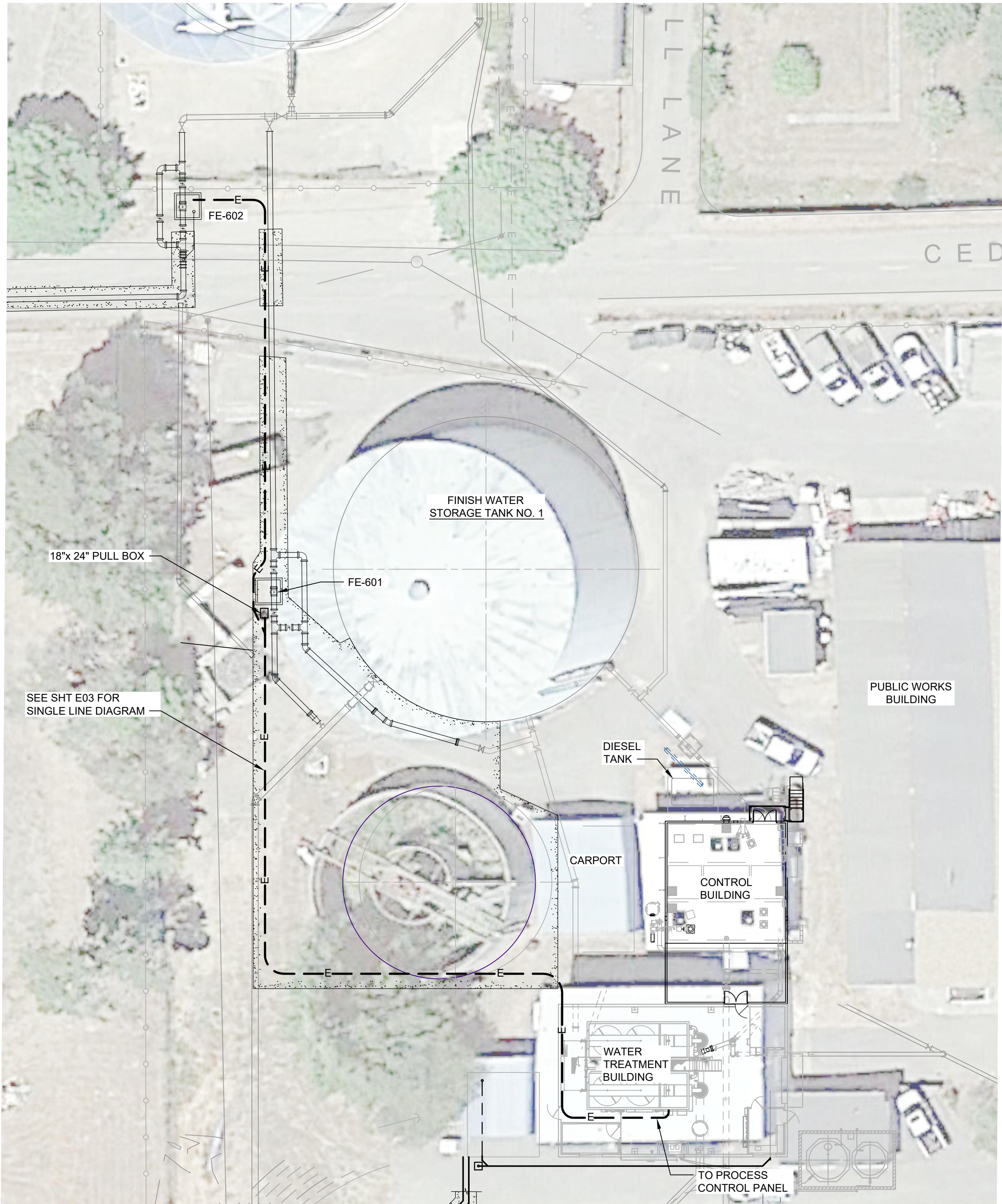


LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING
1	LITHONIA IBE L24 12000LM ATC 4000 K, MD MVOLT GZ10 40K	CEILING MOUNTED
2	LITHONIA FML 4W 48 3500 K, SURFACE MOUNT, WRAP LENS	SURFACE MOUNT
3	LITHONIA WPX2 LED 40K MVOLT DDBXD, WALL WASHER	WALL MOUNT TO REPLACE EXISTING
4	LITHONIA LHQM LED WHITE HOUSING WITH RED LETTERS HO WITH 2-LAMP HEADS, EMERGENCY/ EXIT LIGHT	WALL MOUNT, ABOVE DOOR

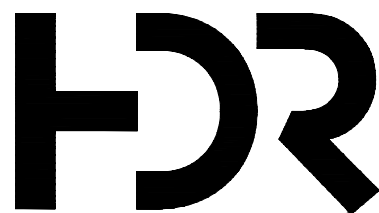


1 VAULT-MOUNTED MAG METER
- NTS



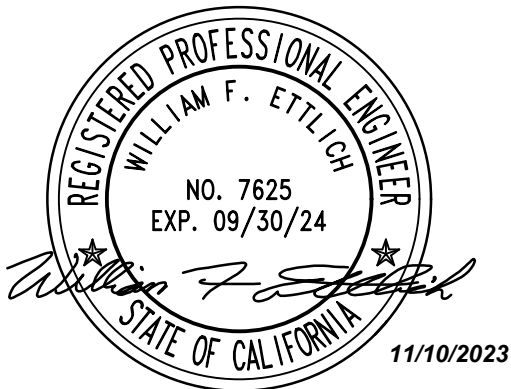
ELECTRICAL SITE PLAN
1" = 20'

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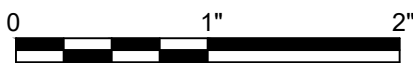


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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	ARASHDEEP SINGH
DESIGNED	A. SINGH
DESIGNED	W. ETTLICH
CHECKED	T. KONTONICKAS
DRAWN	P. VAN MEURS
DATE	08/2023
PROJECT NUMBER	10276484



City of Fort Bragg
Water Treatment Plant
Rehabilitation Project



ELECTRICAL

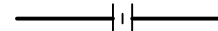
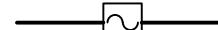
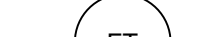
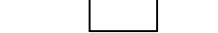
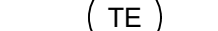
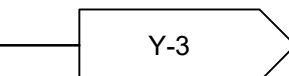
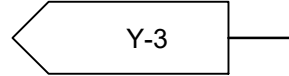
ELECTRICAL SITE PLAN AND
LIGHTING SCHEDULE

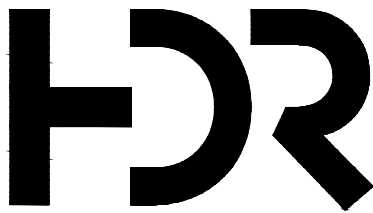
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SHEET

E08

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PRIMARY ELEMENT SYMBOLOGY		INSTRUMENT SYMBOLOGY		INSTRUMENT IDENTIFICATION LETTERS					CONTROL SWITCH NOTATION ABBREVIATIONS		MISCELLANEOUS SYMBOLOGY	
 ORIFICE PLATE  PITOT TUBE OR ANNUBAR  ROTOMETER  SONIC OR ULTRASONIC FLOWMETER  MAGNETIC FLOWMETER  MASS DISPERSION FLOWMETER  FLUME  WEIR  PROPELLER OR TURBINE METER  VENTURI TUBE  FLOAT SWITCH  TEMPERATURE ELEMENT WITH THERMOWELL  SIGHT FLOW GLASS	 LOCALLY MOUNTED FIELD INSTRUMENTATION  MOUNTED ON PANEL FRONT  MOUNTED INSIDE PANEL  FRONT PANEL MOUNTED ON AUXILIARY PANEL (SUBSCRIPT INDICATES PANEL)  MOUNTED INSIDE AUXILIARY PANEL  PILOT LIGHT  INSTRUMENT FUNCTIONS SHARING COMMON HOUSING  COMPLEX INTERLOCK AS DEFINED IN CONTROL DIAGRAM OR IN SPECIFICATIONS  SHARED DISPLAY, SHARED CONTROL, FIELD MOUNTED  SHARED DISPLAY, SHARED CONTROL, PRIMARY LOCATION - NORMALLY ACCESSIBLE TO OPERATOR  PROGRAMMABLE LOGIC CONTROL, PRIMARY LOCATION - NORMALLY ACCESSIBLE TO OPERATOR  PROGRAMMABLE LOGIC CONTROL, FIELD MOUNTED		FIRST LETTER		SUCCEEDING LETTERS					 xxx xxxx ACK ESTOP FAIL FOR FR FS HA HOA HOR LL LLS LOR LR LS MA OAC OC OO OSC RJ RJR SIL SS ACKNOWLEDGE EMERGENCY STOP FAILURE FORWARD-OFF-REVERSE FORWARD-REVERSE FAST-SLOW HAND-AUTO HAND-OFF-AUTO HAND-OFF-REMOTE LEAD-LAG LEAD-LAG-STANDBY LOCAL-OFF-REMOTE LOCAL-REMOTE LEAD-STANDBY MANUAL-AUTO OPEN-AUTO-CLOSE OPEN-CLOSE ON-OFF OPEN-STOP-CLOSE RUN-JOG RUN-JOG-REVERSE SILENCE START-STOP	 GENERAL NOTES: 1. THIS IS A STANDARD INSTRUMENTATION SYMBOLOGY AND ABBREVIATIONS SHEET. LISTING OF SYMBOLS AND ABBREVIATIONS DOES NOT IMPLY ALL SYMBOLS AND ABBREVIATIONS HAVE BEEN USED ON THIS PROJECT. 2. SEE PROCESS, MECHANICAL AND PLUMBING LEGEND SHEET FOR MISCELLANEOUS PIPING SYMBOLS. 3. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE. 4. VALVE SYMBOLS SHOWN HERE ARE APPLICABLE ONLY TO INSTRUMENTATION DIAGRAMS. SEE PROCESS, MECHANICAL AND PLUMBING LEGEND SHEET FOR VALVE SYMBOLS USED ELSEWHERE ON THE SHEETS.	
		A	ANALYSIS			ALARM						
		B	BURNER, COMBUSTION			USER'S CHOICE	USER'S CHOICE	USER'S CHOICE				
		C	USERS CHOICE				CONTROL	CLOSED				
		D	USERS CHOICE	DIFFERENTIAL								
		E	VOLTAGE			SENSOR (PRIMARY ELEMENT)						
		F	FLOW RATE	RATIO (FRACTION)								
		G	USER'S CHOICE			GLASS, VIEWING DEVICE						
		H	HAND						HIGH			
		I	CURRENT (ELECTRICAL)			INDICATE						
		J	POWER	SCAN								
K	TIME, TIME SCHEDULE	TIME; RATE OF CHANGE			CONTROL STATION							
L	LEVEL			LIGHT			LOW					
M	USER'S CHOICE	MOMENTARY					MIDDLE, INTERMEDIATE					
N	USER'S CHOICE			USER'S CHOICE	USER'S CHOICE	USER'S CHOICE						
O	USER'S CHOICE			ORIFICE, RESTRICTION								
P	PRESSURE, VACUUM			POINT (TEST) CONNECTION								
Q	QUANTITY	INTEGRATE, TOTALIZE										
R	RADIATION			RECORD								
S	SPEED, FREQUENCY	SAFETY			SWITCH							
T	TEMPERATURE				TRANSMIT							
U	MULTIVARIABLE			MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION						
V	VIBRATION, MECH. ANALYSIS				VALVE, DAMPER, LOUVER							
W	WEIGHT, FORCE			WELL								
X	UNCLASSIFIED	X AXIS		UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED						
Y	EVENT, STATE OR PRESENCE	Y AXIS			RELAY, COMPUTE, CONVERT							
Z	POSITION, DIMENSION	Z AXIS			DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT							
					MISCELLANEOUS INSTRUMENTATION ABBREVIATIONS							
					AI AO CL2 CO CO2 COMB COND DEN DI DO DO E/P H2S HCL I/O I/P NOX OI O2 P&ID SS TURB WAN ANALOG INPUT ANALOG OUTPUT CHLORINE (ANALYZER MODIFIER) CARBON MONOXIDE (ANALYZER MODIFIER) CARBON DIOXIDE (ANALYZER MODIFIER) COMBUSTIBLES (ANALYZER MODIFIER) CONDUCTIVITY (ANALYZER MODIFIER) DENSITY (ANALYZER MODIFIER) DIGITAL INPUT DIGITAL OUTPUT DISSOLVED OXYGEN (ANALYZER MODIFIER) VOLTAGE TO PNEUMATIC HYDROGEN SULFIDE (ANALYZER MODIFIER) HYDROGEN CHLORIDE (ANALYZER MODIFIER) INPUT/OUTPUT CURRENT TO PNEUMATIC NITROGEN OXIDE (ANALYZER MODIFIER) OPERATOR INTERFACE OXYGEN (ANALYZER MODIFIER) PROCESS AND INSTRUMENTATION DIAGRAM SUSPENDED SOLIDS (ANALYZER MODIFIER) TURBIDITY (ANALYZER MODIFIER) WIDE AREA NETWORK							
LINE TYPES												
 MAIN PROCESS LINE  SECONDARY PROCESS LINE  AUXILIARY PROCESS LINE  DIRECTION OF FLOW  PNEUMATIC SIGNAL  ELECTRICAL SIGNAL  HYDRAULIC SIGNAL  SOFTWARE OR DATA LINK  SIGNAL CONNECTION  CROSSOVER - NO CONNECTION  CAPILLARY												
CROSS REFERENCE SYMBOLOGY		TYPES OF POWER SUPPLY										
 Y-3 CONTINUATION ON SHEET Y-3  Y-3 CONTINUATION ON SHEET Y-3		A IA ES NG HYD PLANT COMPRESSED AIR INSTRUMENTATION AIR ELECTRIC SUPPLY NATURAL GAS HYDRAULIC										



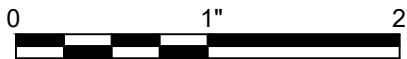
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DESIGNED		W. ETTLICH
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DRAWN		P. VAN MEURS
DATE		08/2023
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GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS

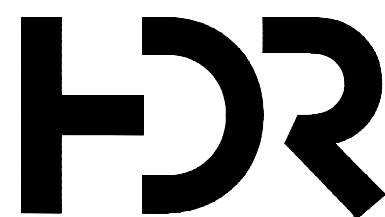
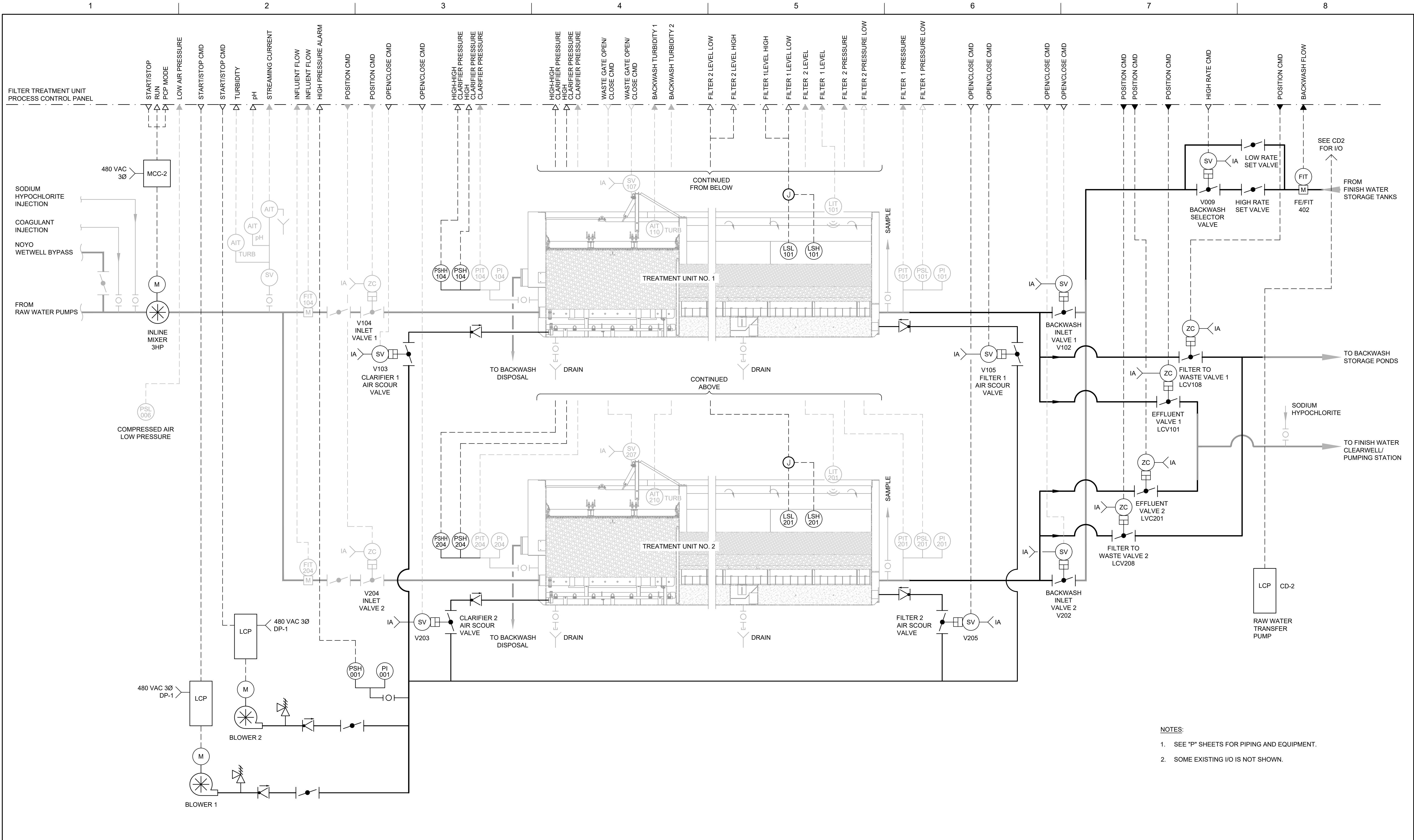


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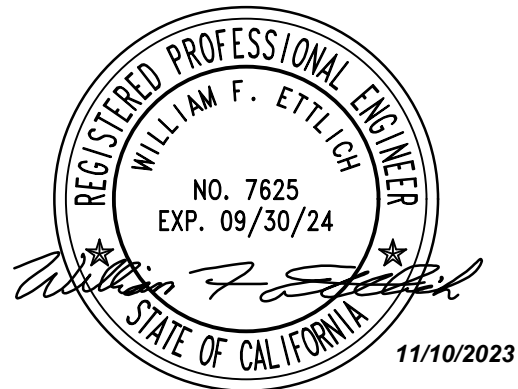
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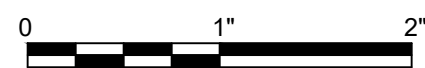


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FILENAME | 9102.dwg
SCALE | NONE

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102