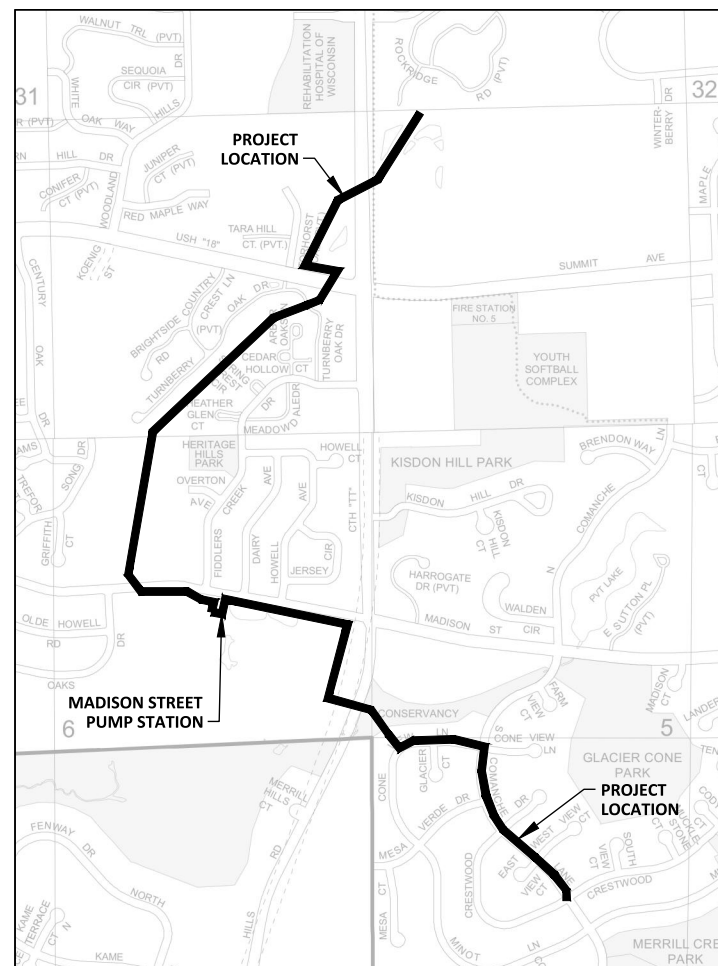


WEST SIDE PUMP STATION CONSOLIDATION

WAUKESHA, WISCONSIN



LOCATION MAP

LEGEND			
	- BUSH		- GUY WIRE
	- GAS VALVE		- FENCE
	- HYDRANT		- BURIED ELECTRIC
	- JUNCTION BOX		- WATER MAIN
	- LIGHT POLE		- COMMUNICATIONS
	- POWER POLE		- FORCE MAIN
	- SANITARY SEWER MANHOLE		- GAS MAIN
	- STORM SEWER MANHOLE		- SANITARY SEWER
	- ELECTRIC MANHOLE		- STORM SEWER
	- TELEPHONE MANHOLE		- OVERHEAD UTILITY
	- WATER MANHOLE		- PROP. SAWCUT AT PAVING LIMITS
	- WATER VALVE		- PIPE ABANDONMENT
	- RECTANGULAR STORM INLET		- PIPE REMOVAL
	- TELEPHONE PEDESTAL		- SECTION LINE
	- ELECTRICAL PEDESTAL		- TREE LINE
	- COMMUNICATION PEDESTAL		- WETLAND BOUNDARY
	- ELECTRICAL METER / CONTROL CABINET		- EDGE OF WATER
	- SOIL BORING		- PROPERTY LINE/ROW
	- EDGE OF WATER POINT		- PERMANENT UTILITY EASEMENT
	- GUY ANCHOR		- TEMPORARY CONSTRUCTION EASEMENT
	- DECIDUOUS TREE		- CONTOURS
	- CONIFEROUS TREE		- ACCESS ROUTE
	- SIGN		- WORK AREA
	- EDGE OF WETLAND POINT		- 100-YR FLOOD BOUNDARY
	- SURVEY MONUMENT/SECTION CORNER		
	- SURVEY BENCHMARK		
	- SURVEY CONTROL POINT		
	- ROUND STORM INLET		
	- MARKER POST		
	- CAUTION SYMBOL		

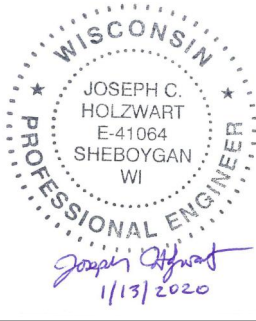
NOTE: EXISTING FEATURES USE THE SAME SYMBOLS/LINETYPES AND ARE HALF-TONE.

PREPARED BY:



CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS		WEST SIDE PUMP STATION CONSOLIDATION COVER SHEET		
APPROVED: JCH	DATE: 01/13/20	DRAWN BY: BEG	PLOT SCALE: 1 IN: 2000 FT	000-COVER
APPROVED:	DATE:	CHECKED BY: SJK	PLOT DATE: 1/14/2020 9:47 AM	001
				PROJECT NO: 2019 - WSPSC

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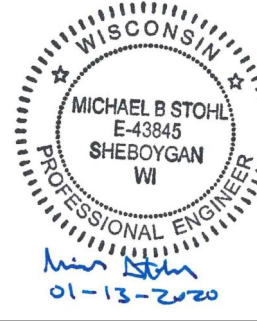


JOSEPH HOLZWART

NAME

CIVIL ENGINEER

TITLE



MICHAEL STOHL

NAME

ELECTRICAL ENGINEER

TITLE

LIST OF DRAWINGS:

- COVER
- 001-GN-1 TO 001-GN-3
- 001-CK-1
- 001-SC-1 TO 001-SC-2
- 100-TC-1 TO 100-TC-6
- 100-EC-1
- 110-EC-1 TO 110-EC-9
- 120-EC-1 TO 120-EC-3
- 200-RP-1
- 210-RP-1
- 215-RP-1
- 220-RP-1
- 225-RP-1
- 230-RP-1
- 240-RP-1
- 250-RP-1
- 400-PP-1 TO 400-PP-18
- 450-PP-1 TO 450-PP-6
- 500-PP-1 TO 500-PP-5
- 800-PD-1 TO 800-PD-12
- 999-C-1 TO 999-C-11

LIST OF DRAWINGS:

- 001-PL-1 TO 001-PL-4
- 002-CR-1
- 002-CFPGE-1
- 007-E-1
- 009-N-1
- 010-R-1
- 010-AS-1 TO 010-AS-8
- 010-M-1 TO 010-M-4
- 010-PH-1 TO 010-PH-2
- 010-EN-1 TO 010-EN-2
- 010-EL-1
- 099-A-1 TO 099-A-2
- 099-S-1 TO 099-S-4
- 099-M-1
- 099-PH-1 TO 099-PH-2
- 099-E-1
- 099-N-1

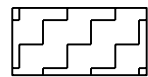
GENERAL NOTES:

1. SEE 010-R DRAWINGS FOR MADISON STREET PUMP STATION REMOVAL INFORMATION.
2. SEE SPECIAL PROVISIONS FOR A LIST OF ITEMS TO BE SALVAGED BY THE OWNER AND CONTRACTOR.
3. SEE 200-RP DRAWINGS FOR ABANDONMENT DETAILS OUTSIDE OF MADISON STREET PUMP STATION LOCATION.
4. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITIES.

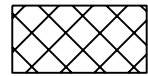
PLAN NOTES:

1. REMOVE EXISTING 8" FORCE MAIN.
2. DEMOLISH EXISTING VALVE VAULT. SEE 010-R-1 DRAWING FOR INFORMATION.
3. PROTECT EXISTING ANTENNA POLE.
4. REMOVE AND SALVAGE EXISTING SIREN POLE.
5. REMOVE CONTROL PANEL. SALVAGE RADIO FOR REINSTALLATION IN NEW PLC PANEL.

REMOVAL LEGEND



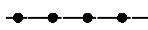
REMOVE EXISTING ASPHALT PAVEMENT AND BASE



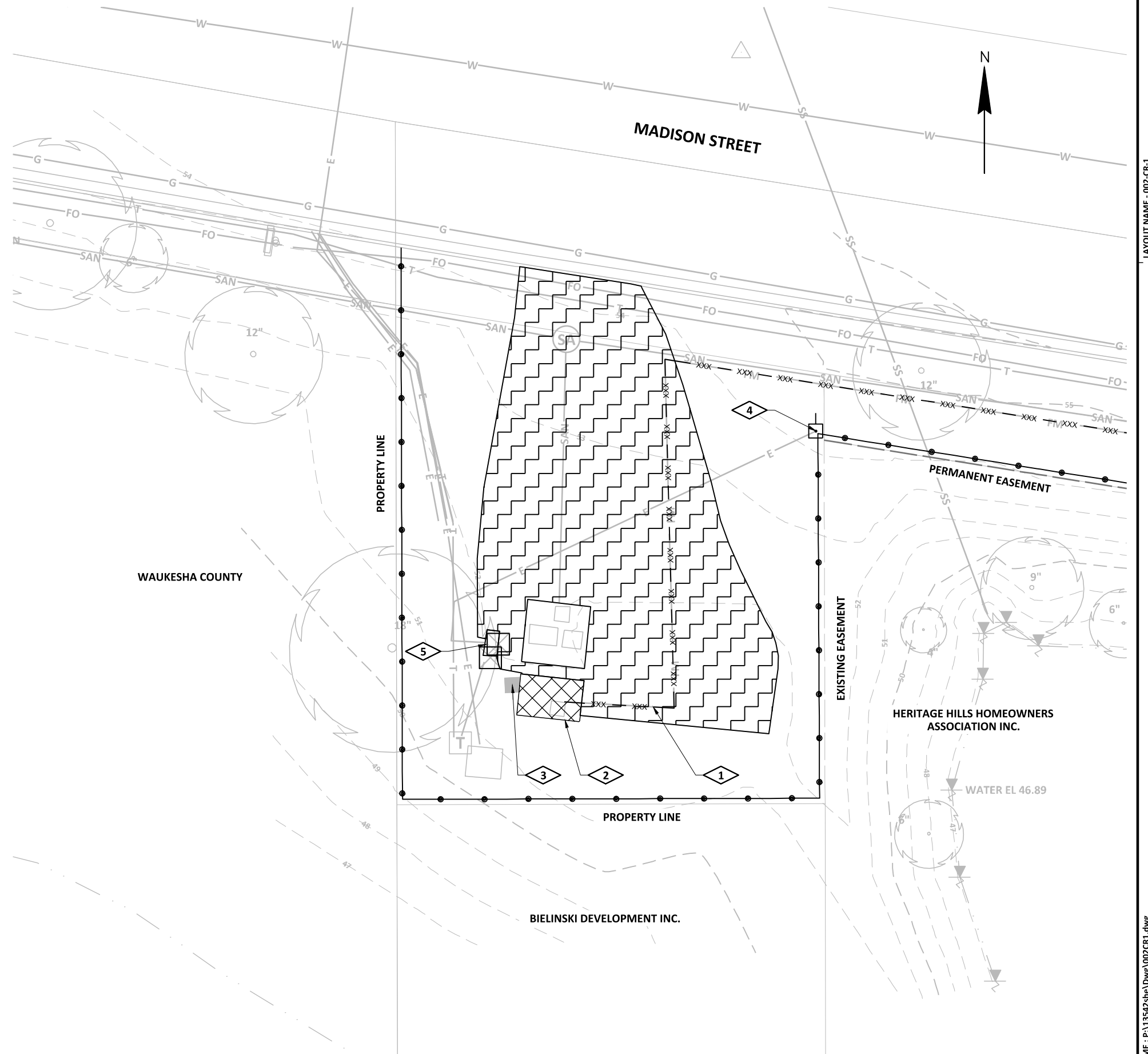
STRUCTURE DEMOLITION



REMOVE EXISTING PIPE



ABANDON EXISTING PIPE





GENERAL NOTES:

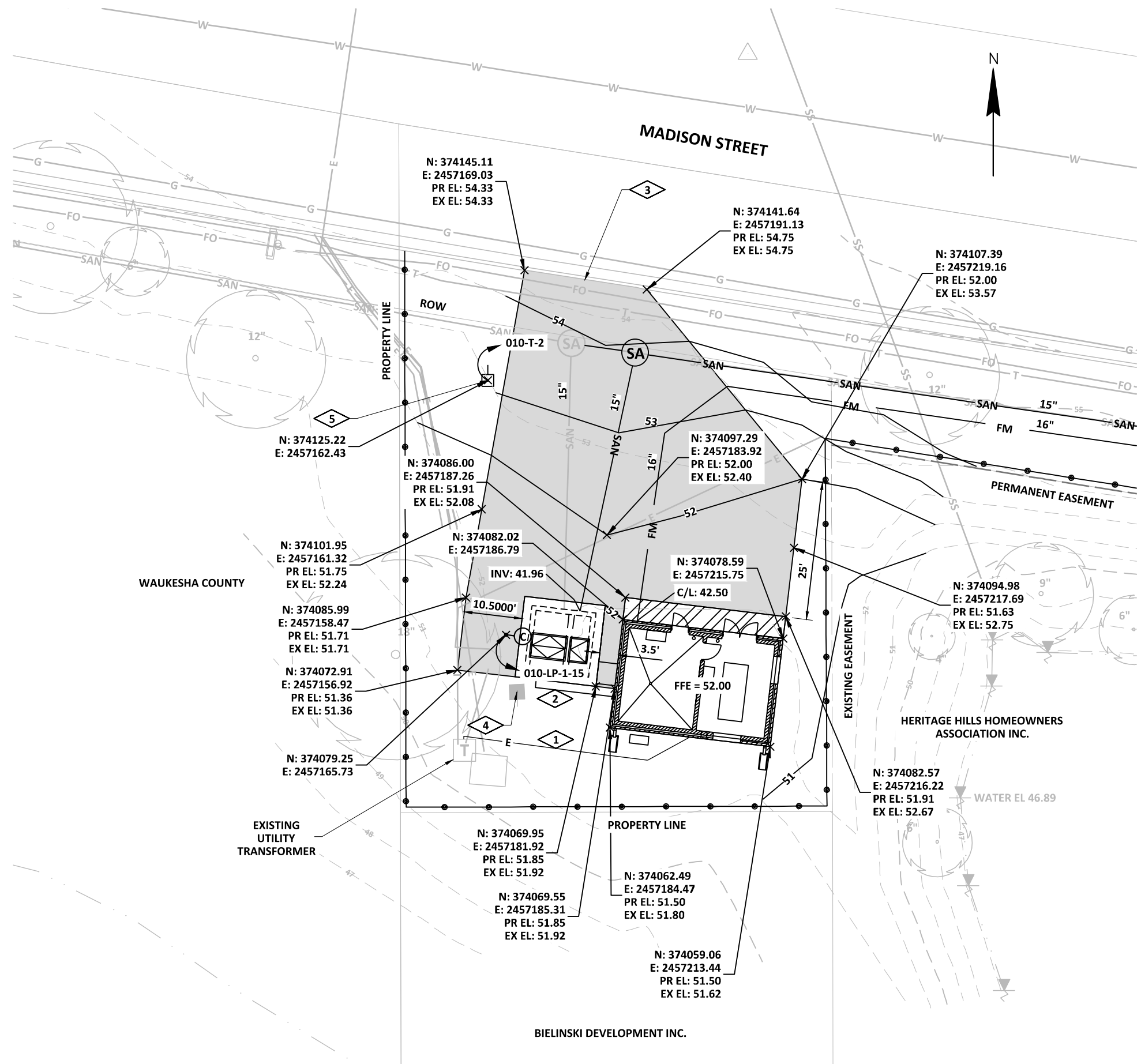
1. SEE 010 DRAWINGS FOR PUMP STATION DETAILS.
2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
3. WHERE NO PROPOSED GRADES OR CONTOURS ARE SHOWN, EXISTING GRADES ARE TO REMAIN.
4. MATCH EXISTING GRADES WHERE REPLACEMENT OR PROPOSED SURFACE IMPROVEMENTS ABUT EXISTING PAVEMENT OR OTHER SURFACE FEATURES.
5. SEE 450-PP DRAWINGS FOR SITE PIPING INFORMATION.

PLAN NOTES:

1. ROUTE DIRECT BURIED CONDUIT FROM EXISTING UTILITY TRANSFORMER TO CT CABINET MOUNTED ON THE EXTERIOR OF THE BUILDING. SEE (E600).
2. ROUTE DIRECT BURIED 2#12, 1#12 GRD. IN 1" CONDUIT.
3. MATCH EXISTING DRIVEWAY OPENING WIDTH.
4. PROTECT EXISTING ANTENNA POLE. PROVIDE NEW DIRECT BURIED CONDUIT SIZED TO ACCOMMODATE NEW CABLING.
5. REINSTALL SALVAGED SIREN POLE. PROVIDE DIRECT BURIED 1 1/2" CONDUIT TO 010-T-2 IN PUMP STATION BUILDING.

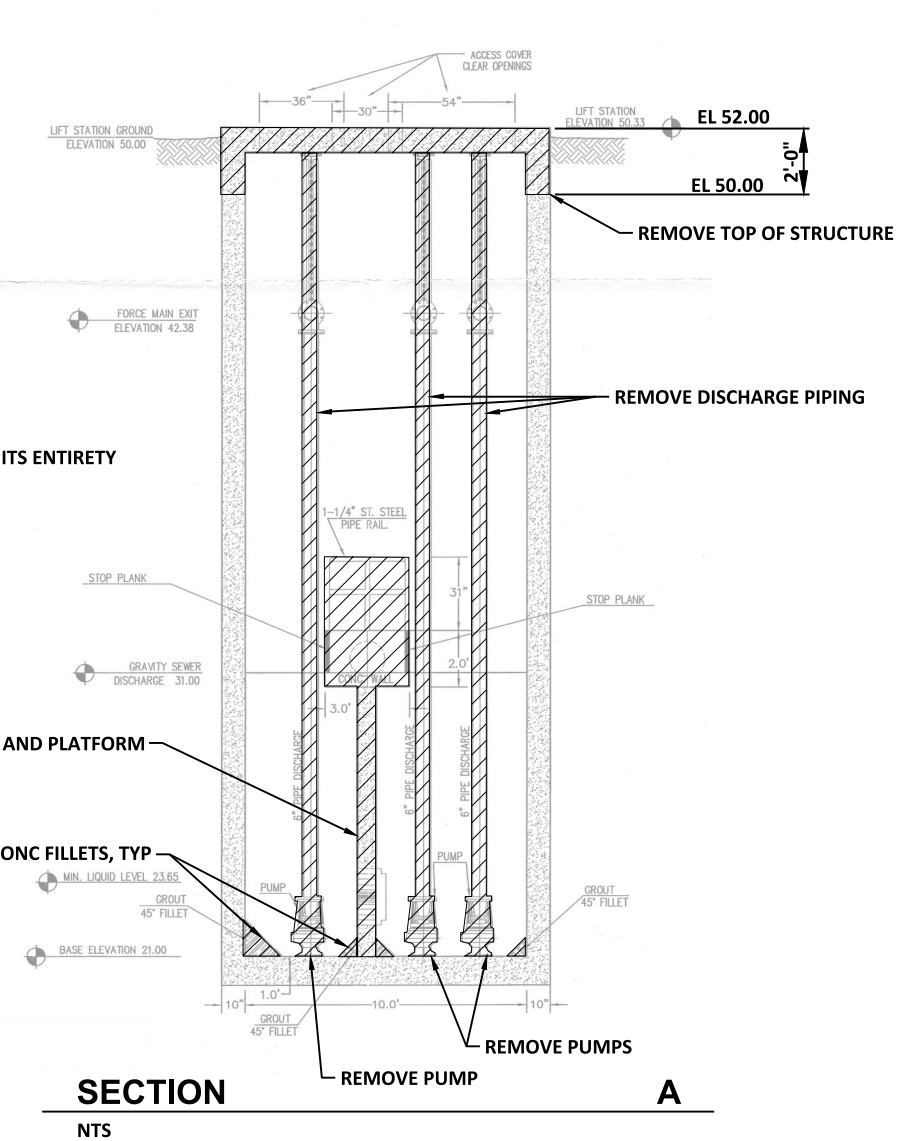
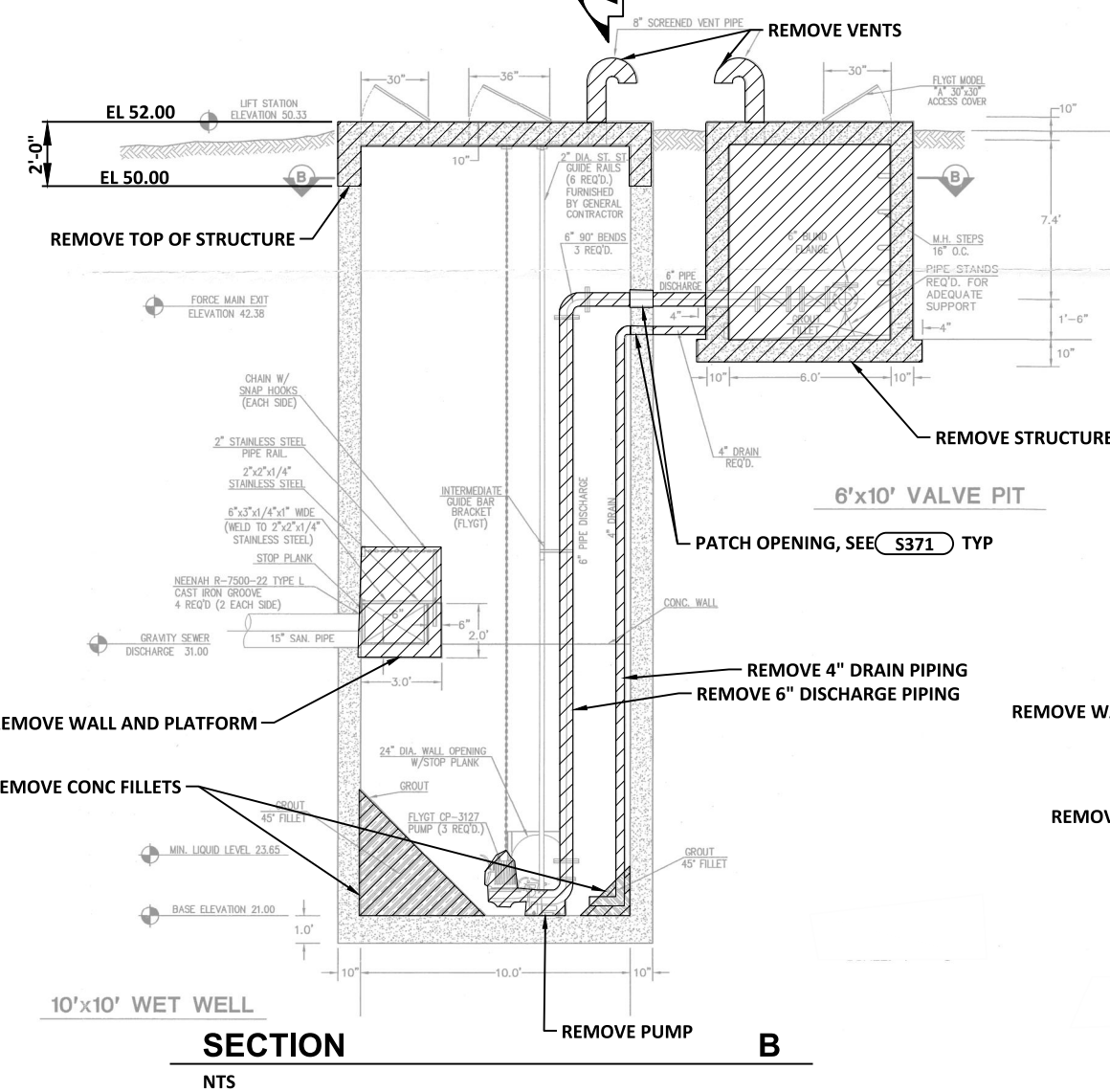
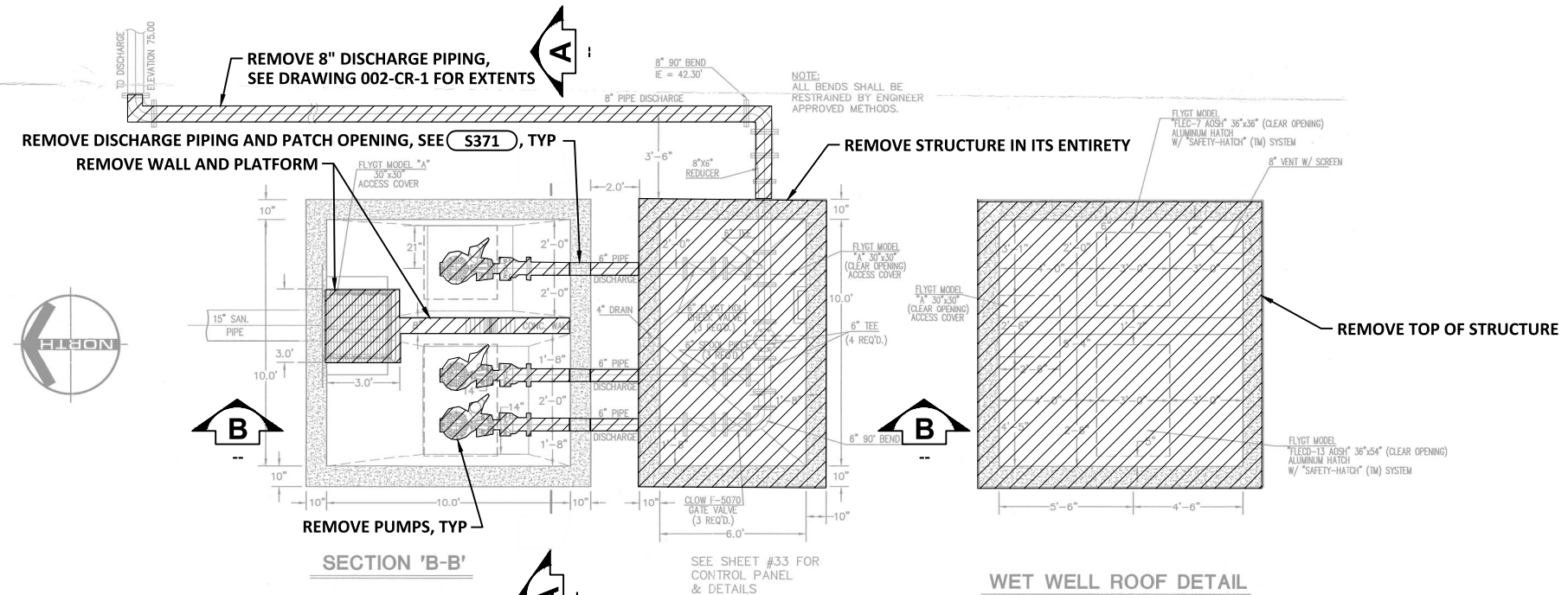
LEGEND

-  ASPHALT PAVEMENT, SEE DETAIL (C120)
-  DOOR STOOP, SEE DETAIL (S362)

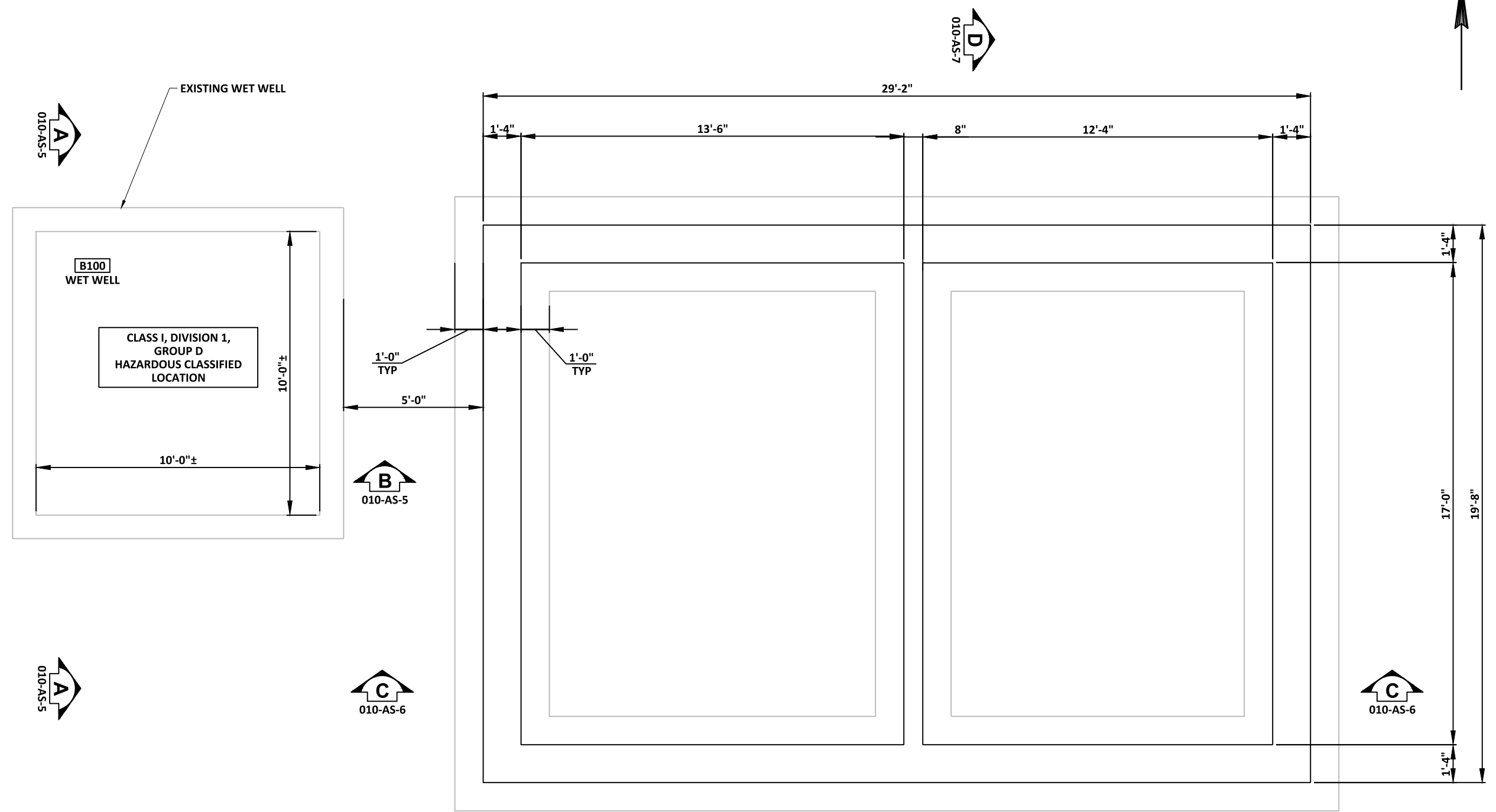


MADISON STREET

EDGE OF PAVEMENT



- GENERAL NOTES:**
1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
 2. FULL TONE COMPONENTS TO BE REMOVED. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
 3. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
 4. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE. REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVE CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
 5. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRIED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH AND PAINT TO MATCH ADJACENT FINISHED SURFACE.
 6. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH BACK TO FINISHED SURFACE WITH PATCHING MORTAR.
 7. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.



LOWER PLAN
 0 1' 2'

010-AS-5
 A

B
 010-AS-5

010-AS-5
 A

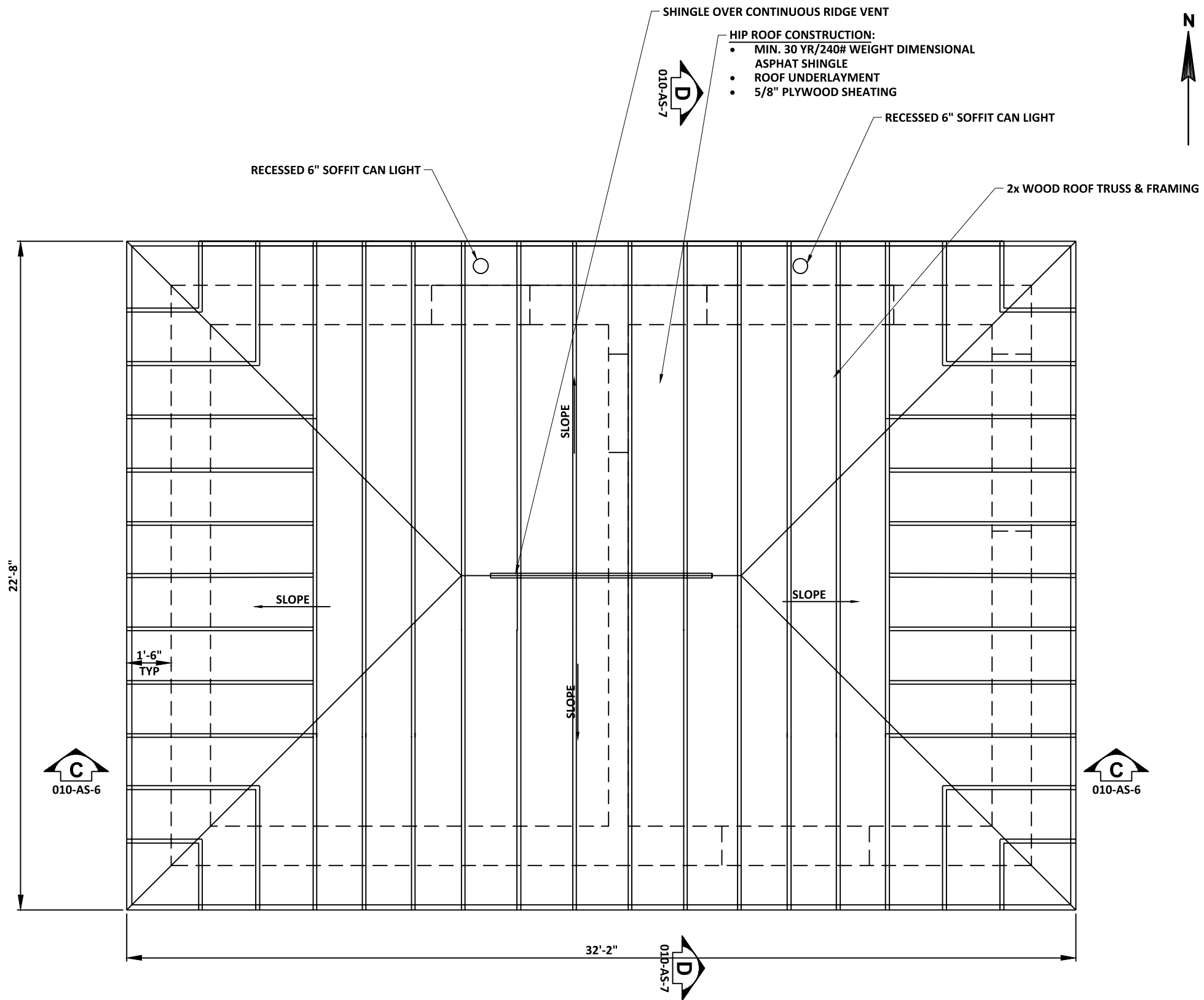
B
 010-AS-5

C
 010-AS-6

010-AS-7
 D

010-AS-7
 D

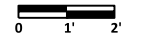
C
 010-AS-6



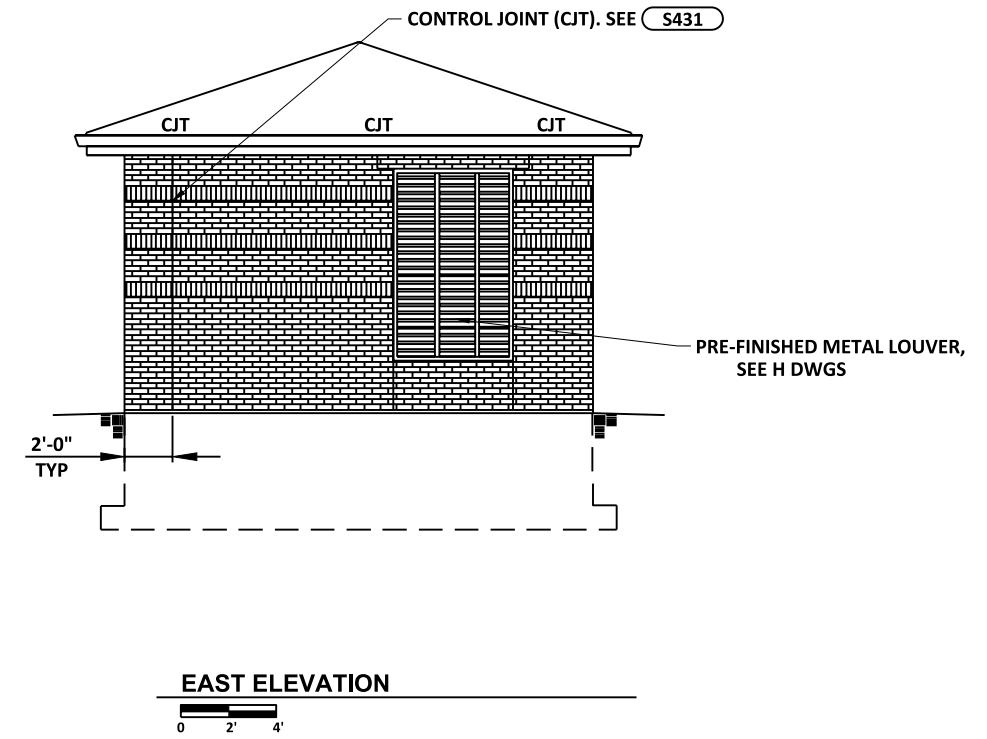
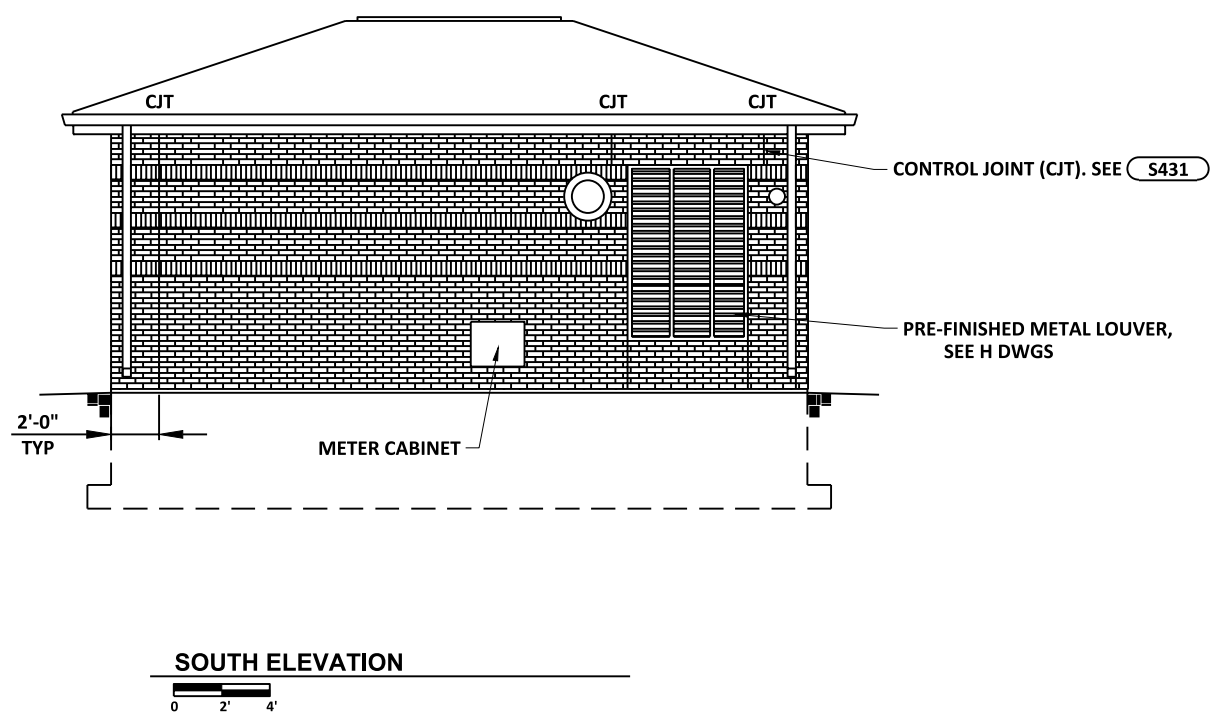
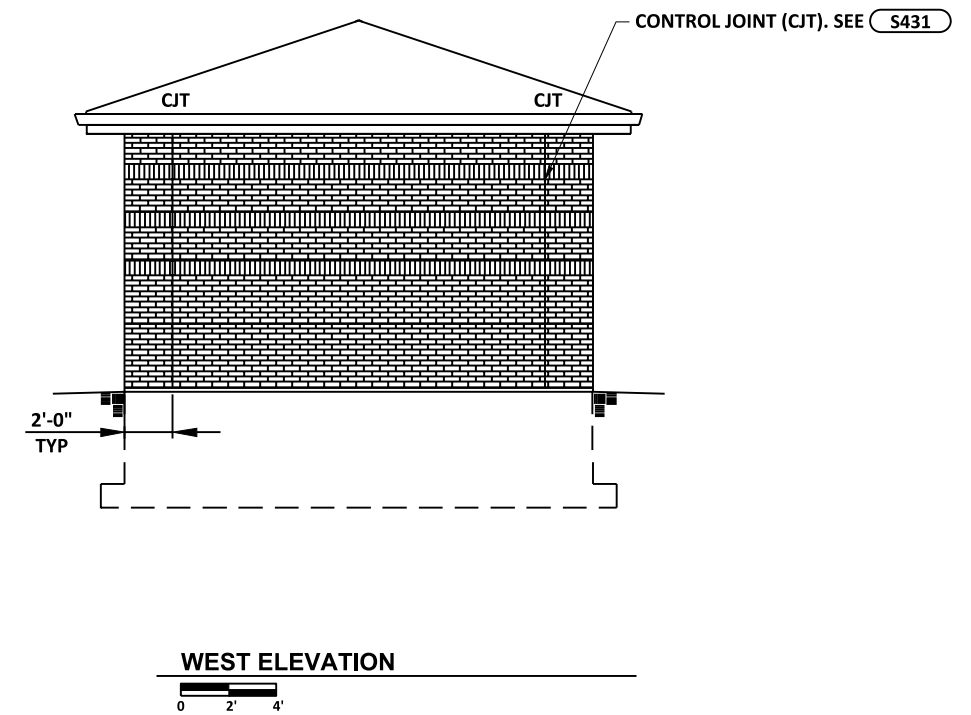
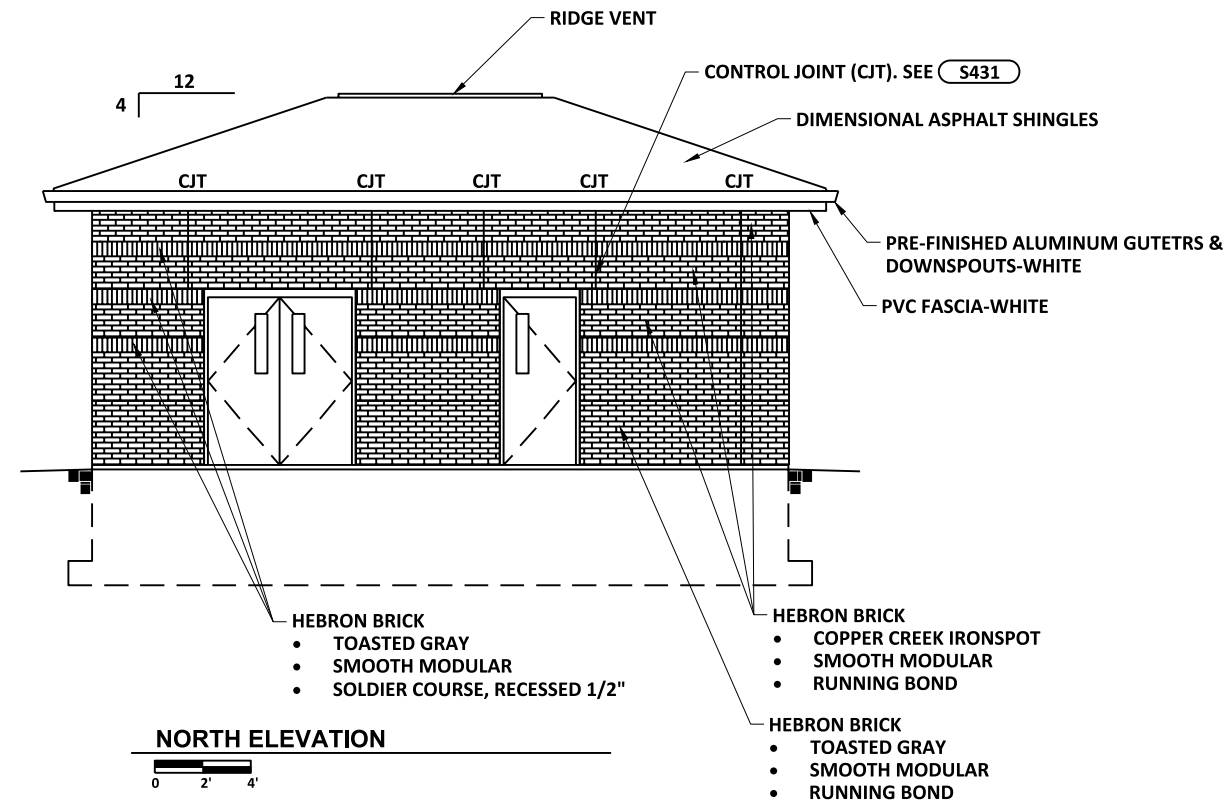
- HIP ROOF CONSTRUCTION:**
- MIN. 30 YR/240# WEIGHT DIMENSIONAL ASPHAT SHINGLE
 - ROOF UNDERLAYMENT
 - 5/8" PLYWOOD SHEATING

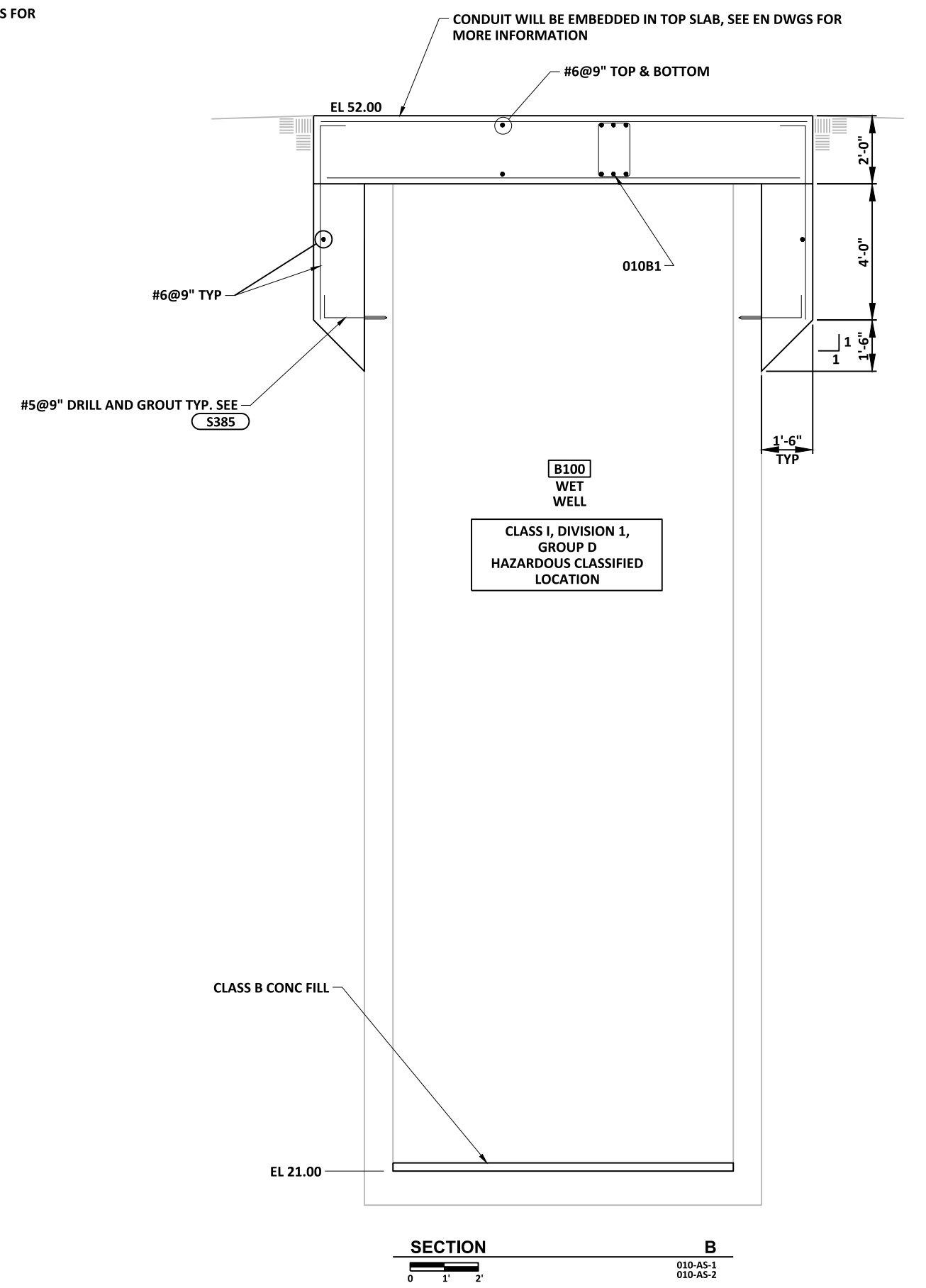
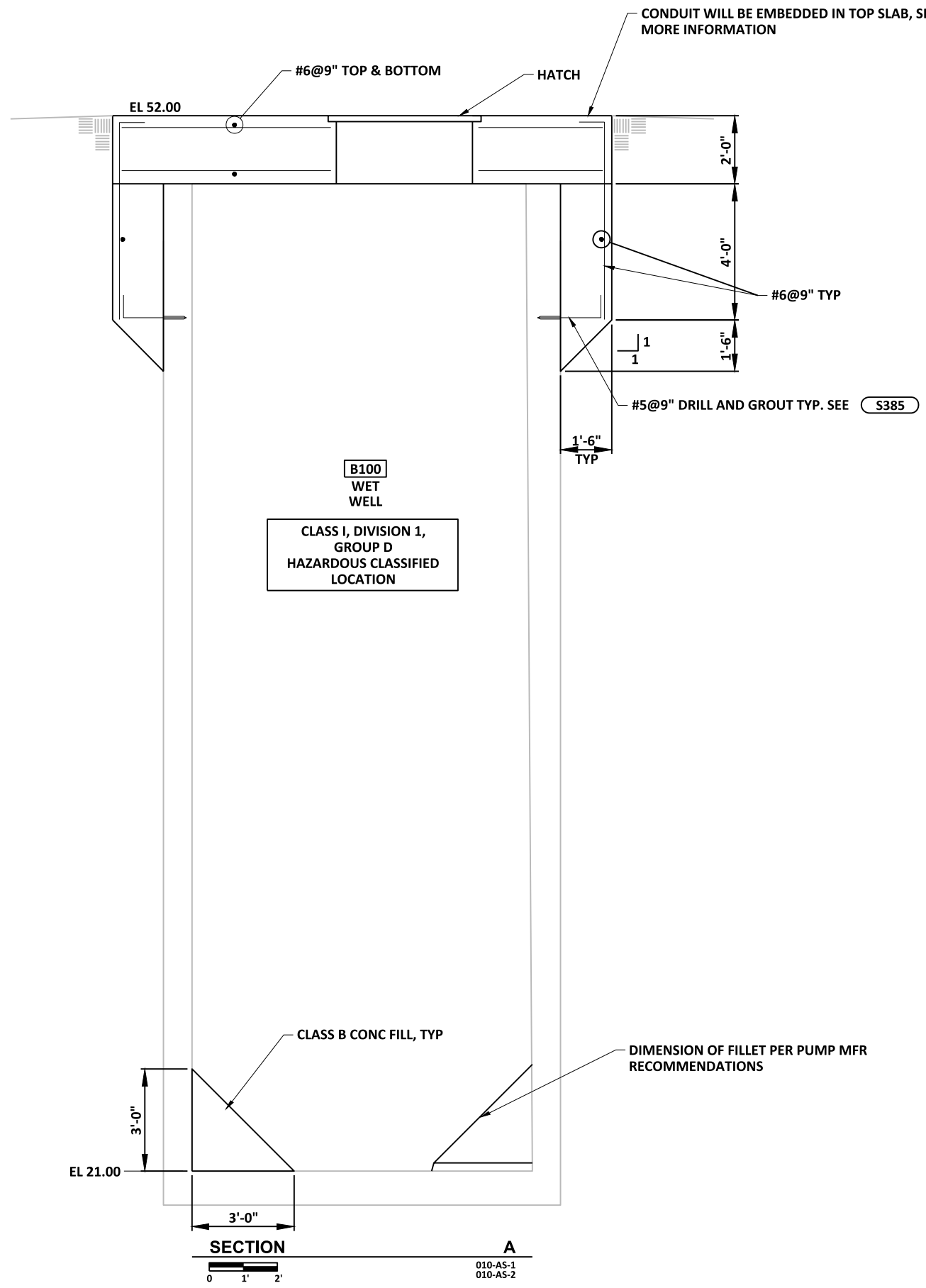


ROOF PLAN

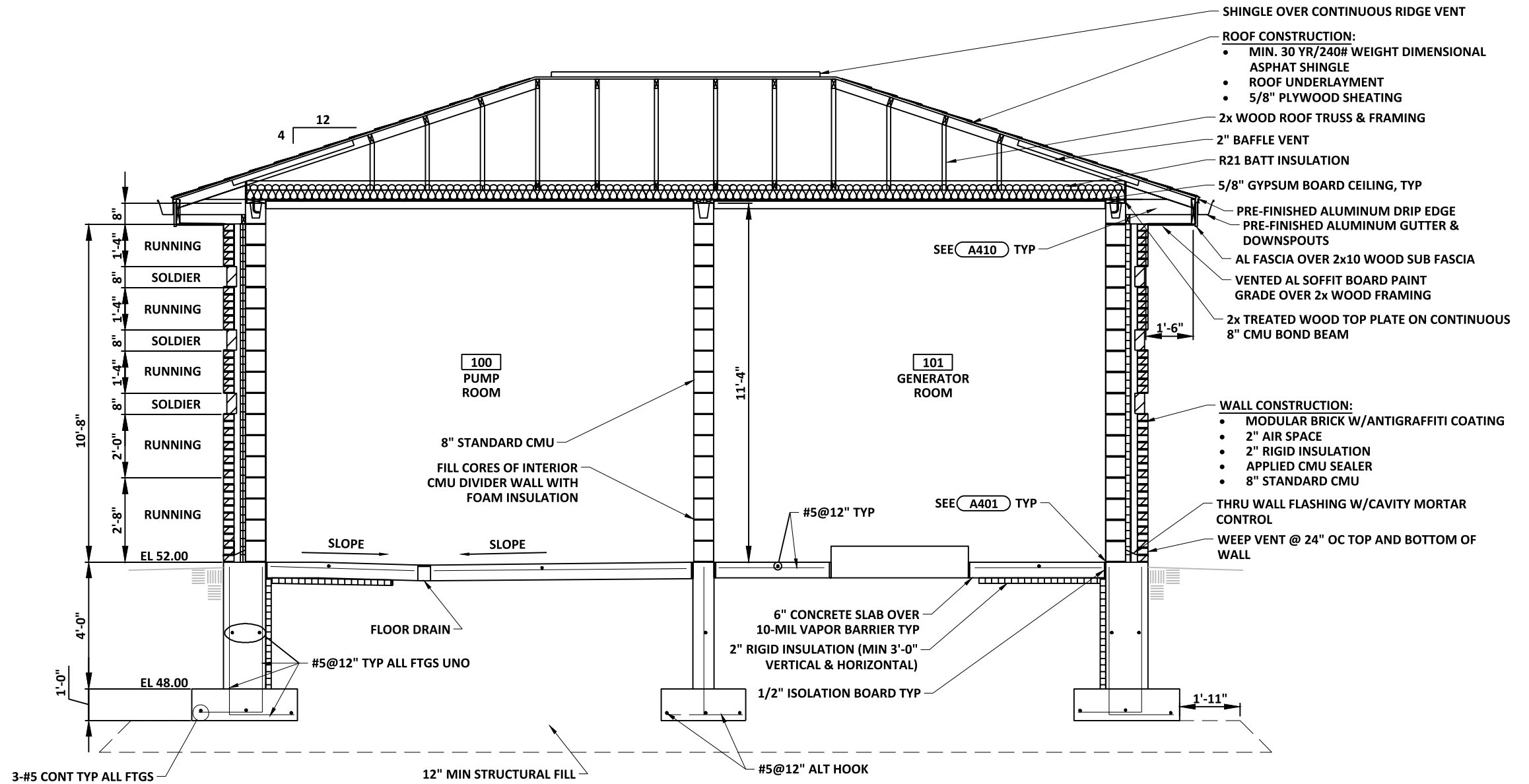


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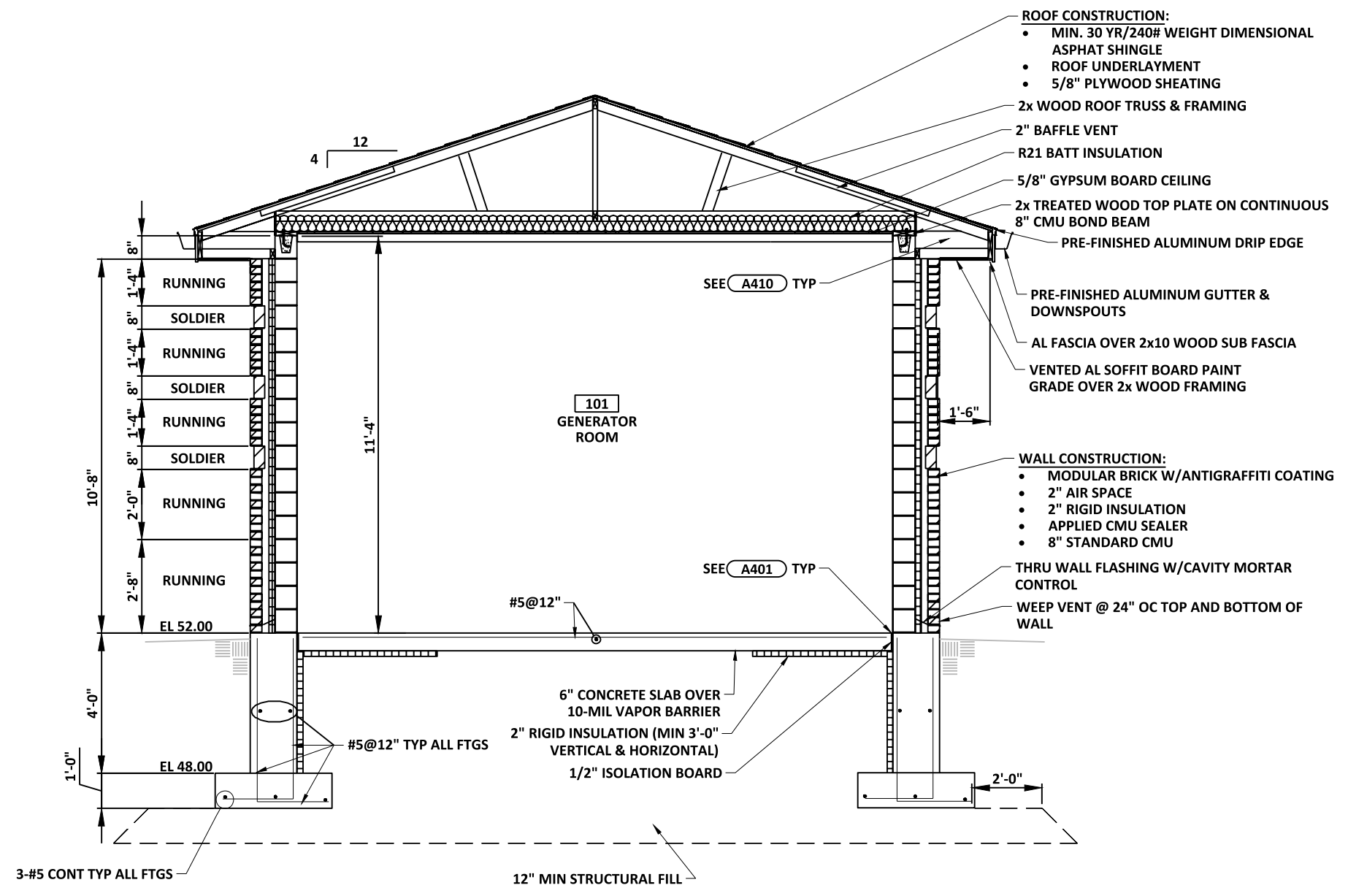
SECTION C

010-AS-1
010-AS-2
010-AS-3

0 1' 2'

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SECTION D

0 1' 2'

010-AS-1
 010-AS-2
 010-AS-3

CODE COMPLIANCE NOTES

CODE: WISCONSIN COMMERCIAL BUILDING CODE / INTERNATIONAL BUILDING CODE 2015

REFERENCE IBC SECTION 306
 NONSEPARATED OCCUPANCY: USE MOST RESTRICTIVE
 (TABLE 503): LOW HAZARD FACTORY INDUSTRIAL F-2
 TYPE OF CONSTRUCTION: VB
 ALLOWABLE BUILDING AREA: 13,000 SF
 TOTAL ACTUAL BUILDING AREA: 574 SF

MEZZANINES: NOT APPLICABLE
 INCIDENTAL USES: NOT APPLICABLE

REFERENCE TABLE 503
 TOTAL ALLOWABLE BUILDING HEIGHT: 40 FT.
 ACTUAL BUILDING HEIGHT: 13'-4"
 TOTAL ALLOWABLE STORIES: 3
 ACTUAL NO. OF STORIES: 1

REFERENCE TABLE 1004.1.2
 AREA PER OCCUPANT: 100 SF PER OCCUPANT
 TOTAL BUILDING OCCUPANT LOAD: 574 SF/100 SF PER OCCUPANT = 6 OCCUPANTS

REFERENCE TABLE 1005
 TOTAL REQUIRED WIDTH OF EGRESS COMPONENTS : 6 OCCUPANTS X 0.2 = 1.2 IN.
 ACTUAL WIDTH OF EGRESS COMPONENT: 36 IN.

FIRE RESISTIVE REQUIREMENTS TABLE 601
 EXTERIOR BEARING WALLS: 0 HR.
 INTERIOR BEARING WALLS: 0 HR.
 EXTERIOR NON-BEARING WALLS: TABLE 602
 STRUCTURAL FRAMES: 0 HR.
 PARTITIONS: 0 HR.
 SHAFT ENCLOSURES: 0 HR. (NOT APPLICABLE)
 FLOOR: 0 HR.
 ROOF: 0 HR.

FIRE SEPARATION FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE (TABLE 602)
 TYPE VB
 OCCUPANCY GROUP F-2
 X < 5 - 1 HR.
 5 < X < 10 - 1 HR.
 10 < X < 30 - 0 HR
 X > 30 - 0 HR.

MAXIMUM AREA OF EXTERIOR WALL OPENINGS TABLE 705.8
 EXTERIOR WALL OPENINGS: (30 OR GREATER) TABLE 705.8 UNPROTECTED NONSPRINKLERED
 NO LIMIT - MAXIMUM ALLOWABLE AREA OF WALL OPENINGS

EXTERIOR WALL OPENINGS: (25 TO LESS THAN 30 FT.) TABLE 705.8 UNPROTECTED NONSPRINKLERED
 70% - MAXIMUM ALLOWABLE AREA OF EXTERIOR WALL OPENINGS

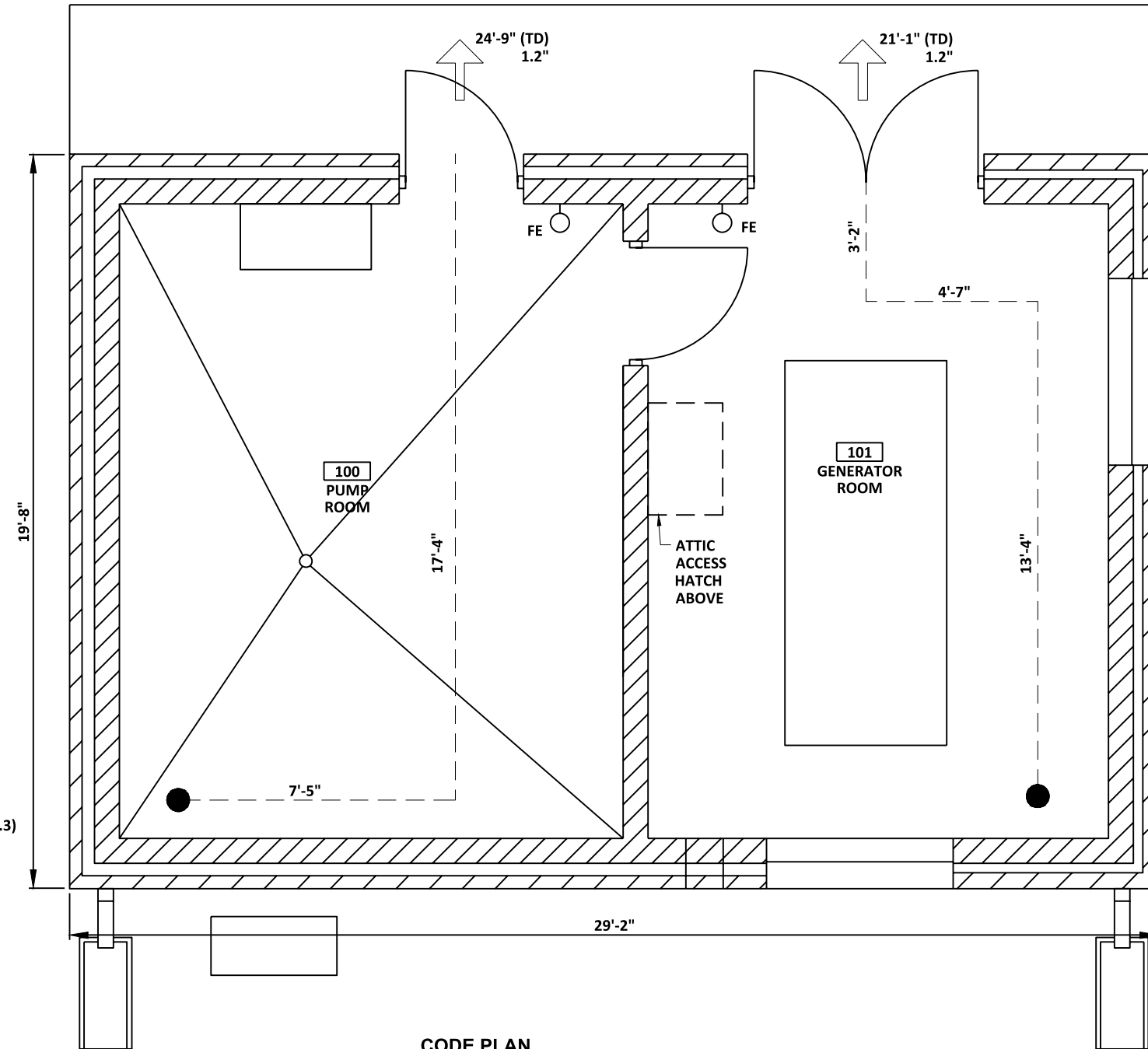
EXTERIOR WALL OPENINGS: (20 TO LESS THAN 25 FT.) TABLE 705.8 UNPROTECTED NONSPRINKLERED
 45% - MAXIMUM ALLOWABLE AREA OF EXTERIOR WALL OPENINGS

COMMON PATH OF EGRESS: 75 FT. WITHOUT SPRINKLER SYSTEM & OCCUPANT LOAD 30 OR LESS (TABLE 1014.3)
 EXIT ACCESS TRAVEL DISTANCE: 300 FT. WITHOUT SPRINKLER SYSTEM (TABLE 1016.2)

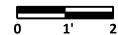
SPACES WITH 1 EXIT PERMITTED: GROUP F-2, MAXIMUM 49 OCCUPANTS (TABLE 1015.1)
 STORIES WITH 1 EXIT PERMITTED (TABLE 1021.2(2)):
 GROUP F, MAXIMUM 49 OCCUPANTS & 75 FT. TRAVEL DISTANCE

LEGEND

- XXX'-X"--- EXIT ACCESS TRAVEL DISTANCE
- ← EXIT LOCATION
- XX NO. OF OCCUPANTS USING EXIT
- XX" REQUIRED WIDTH OF EGRESS COMPONENTS



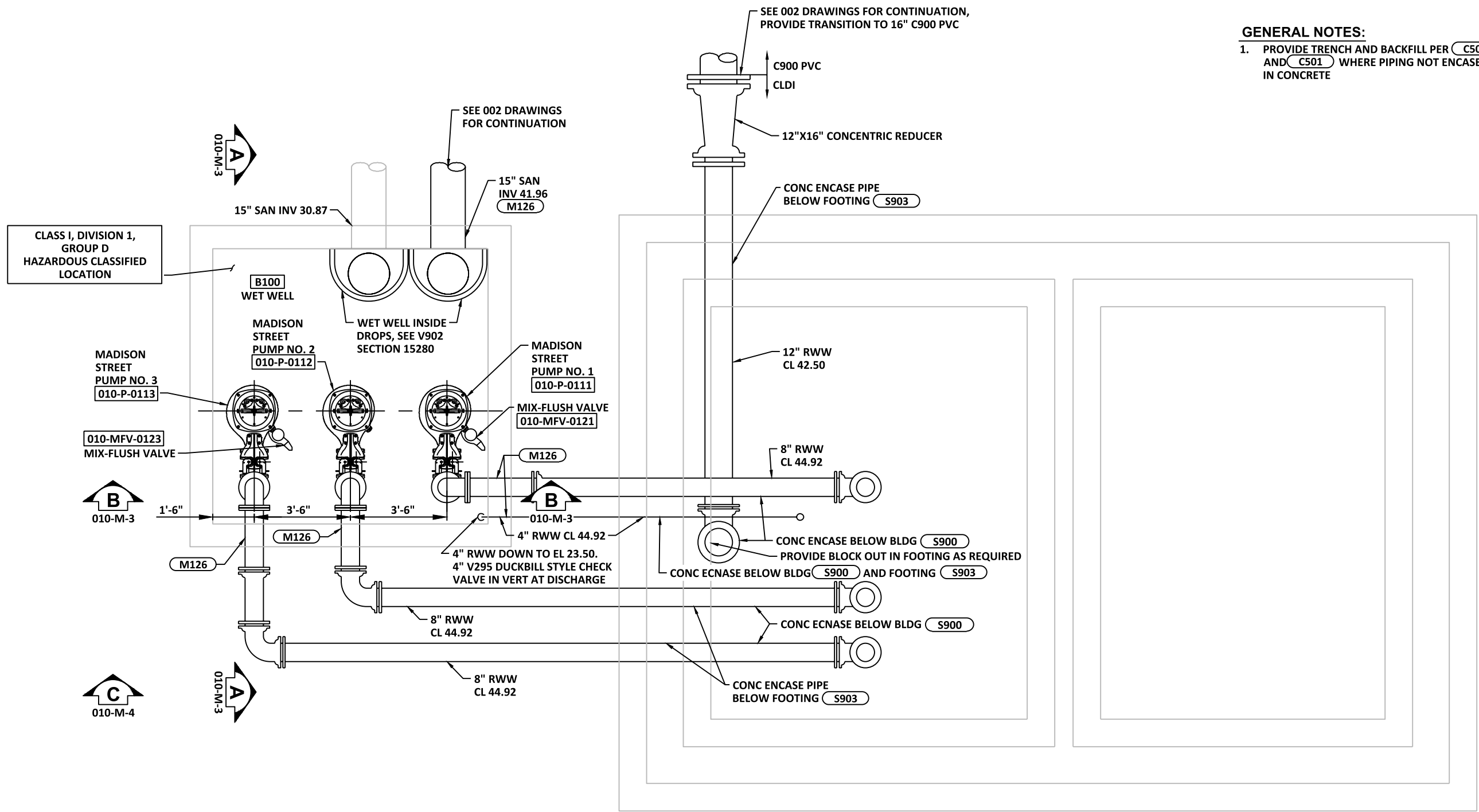
CODE PLAN



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GENERAL NOTES:
 1. PROVIDE TRENCH AND BACKFILL PER C500 AND C501 WHERE PIPING NOT ENCASED IN CONCRETE

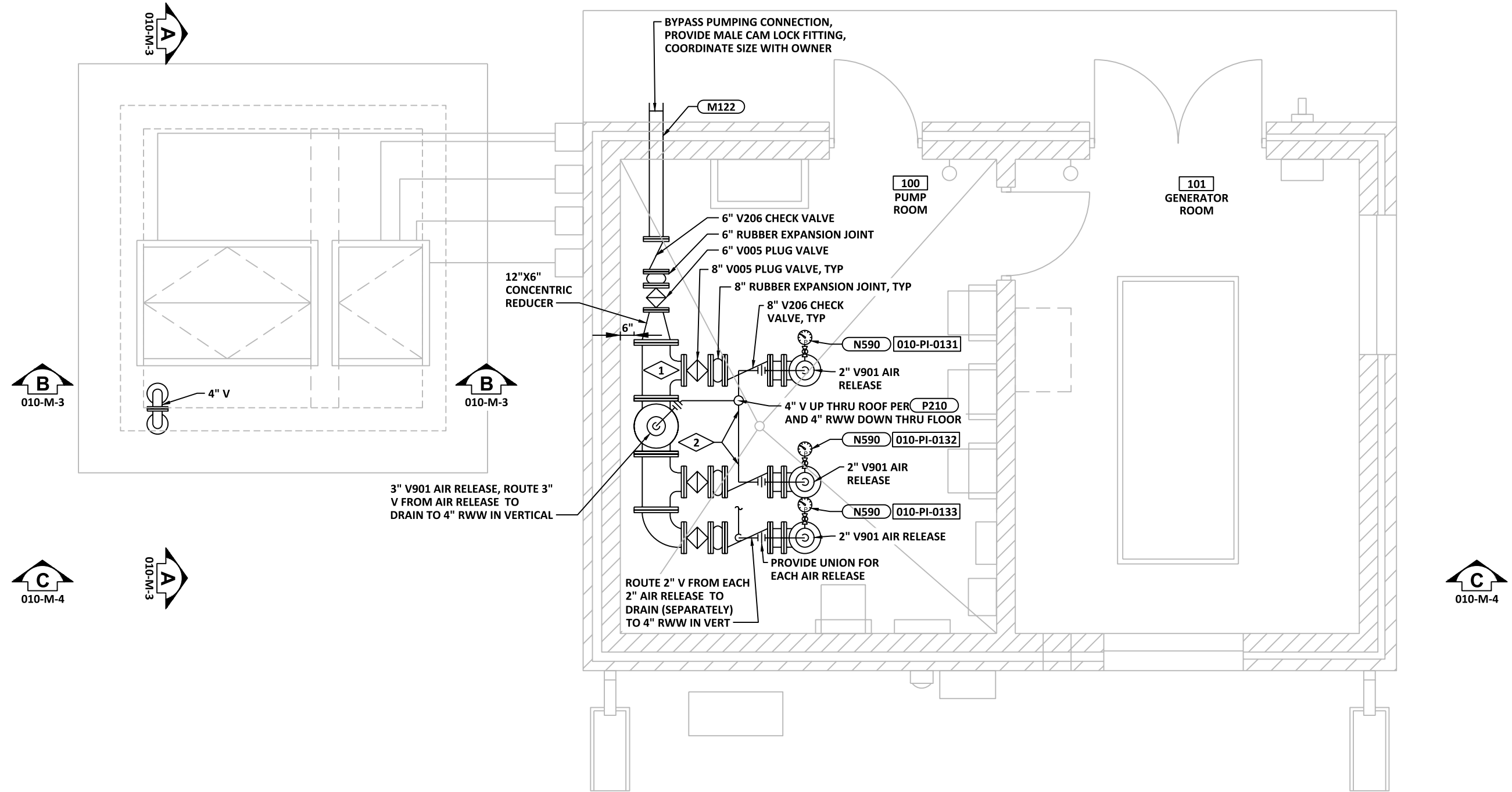


LOWER PLAN
 0 1' 2'

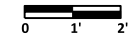
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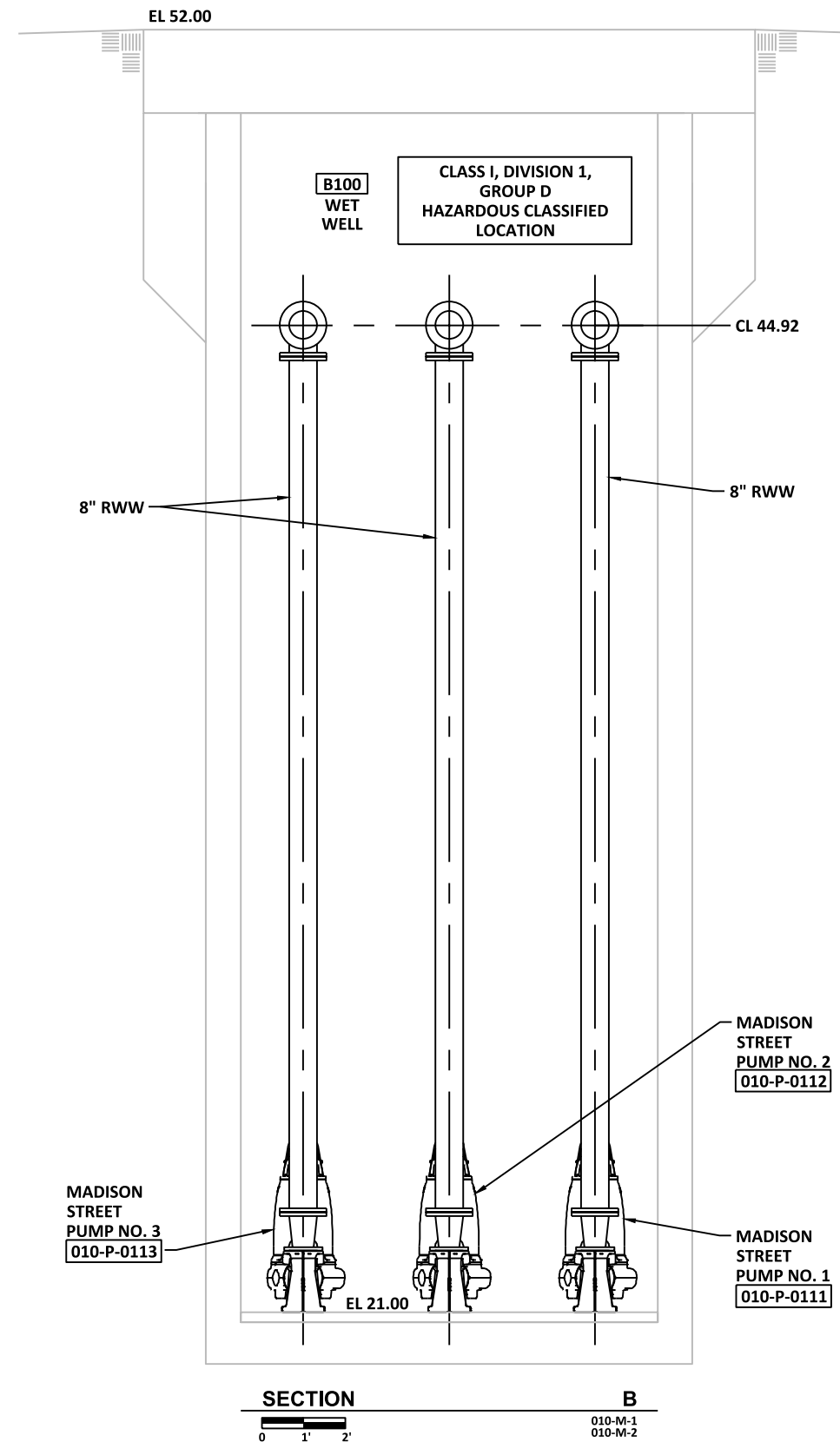
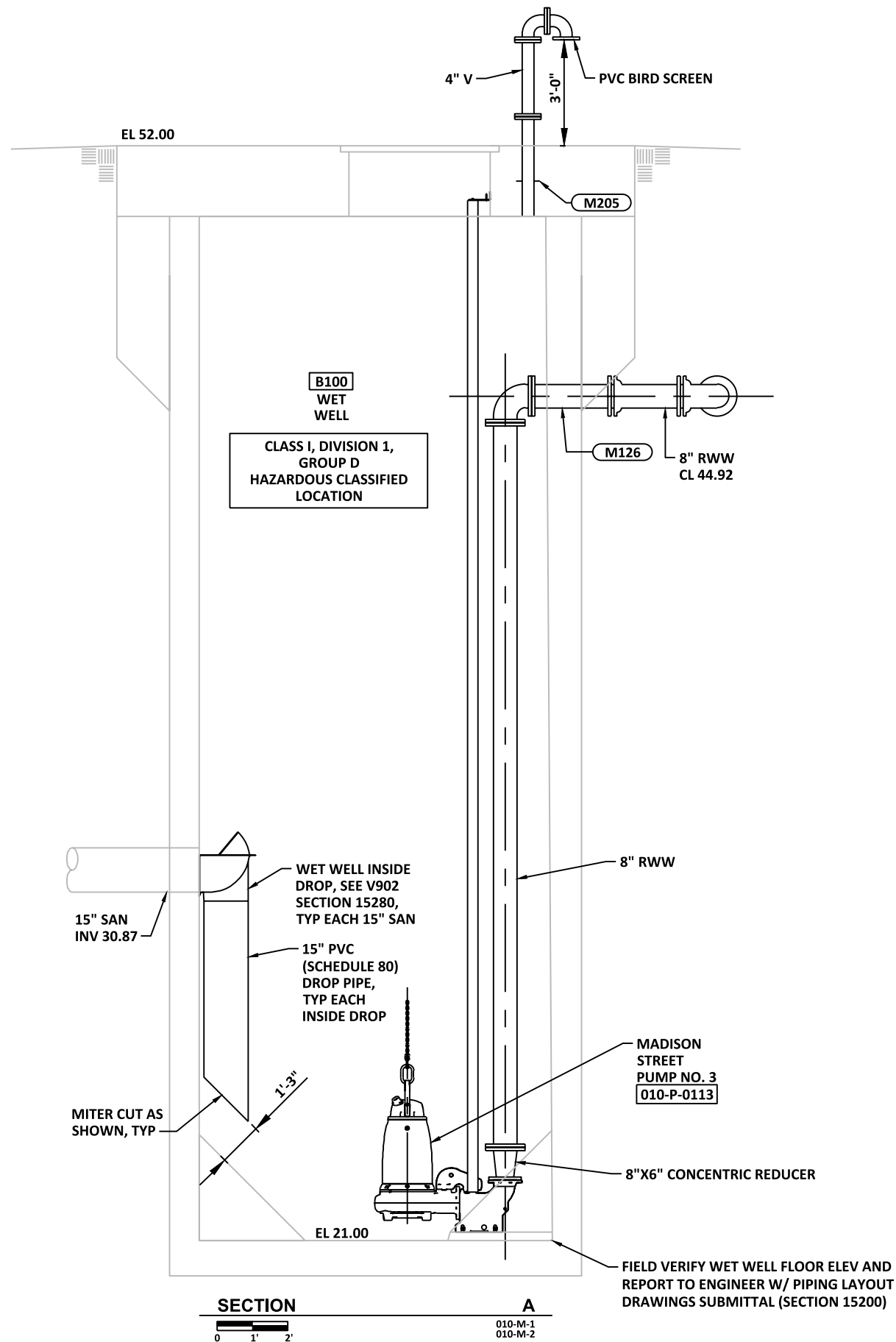
PLAN NOTES:

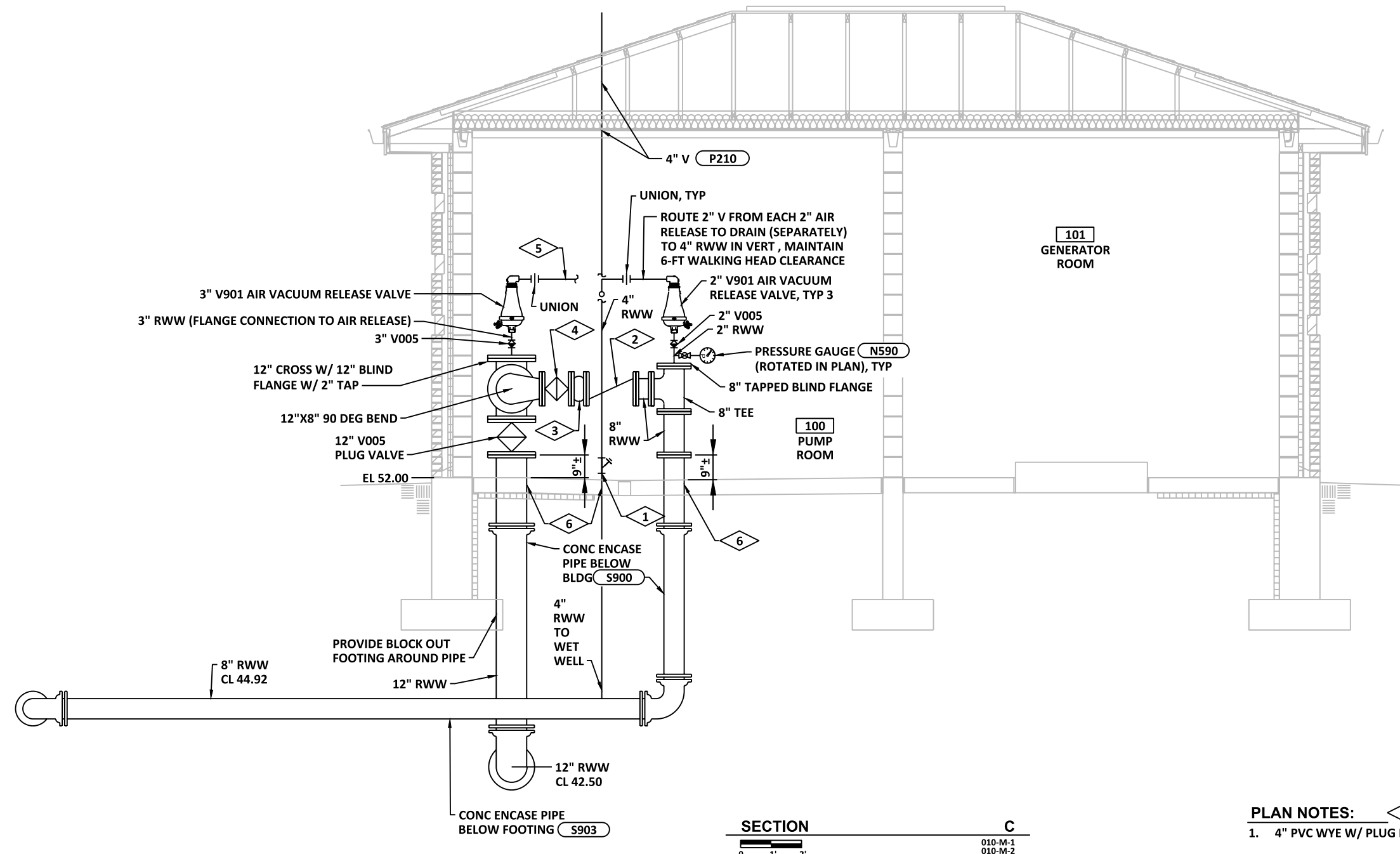
1. 12"x8" TEE W/ 1" V005 PLUG VALVE FOR DRAIN FROM BOTTOM
2. MIN 6-FT ABOVE FINISHED FLOOR



GRADE PLAN

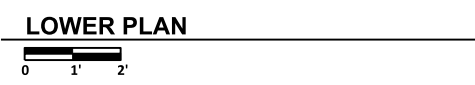
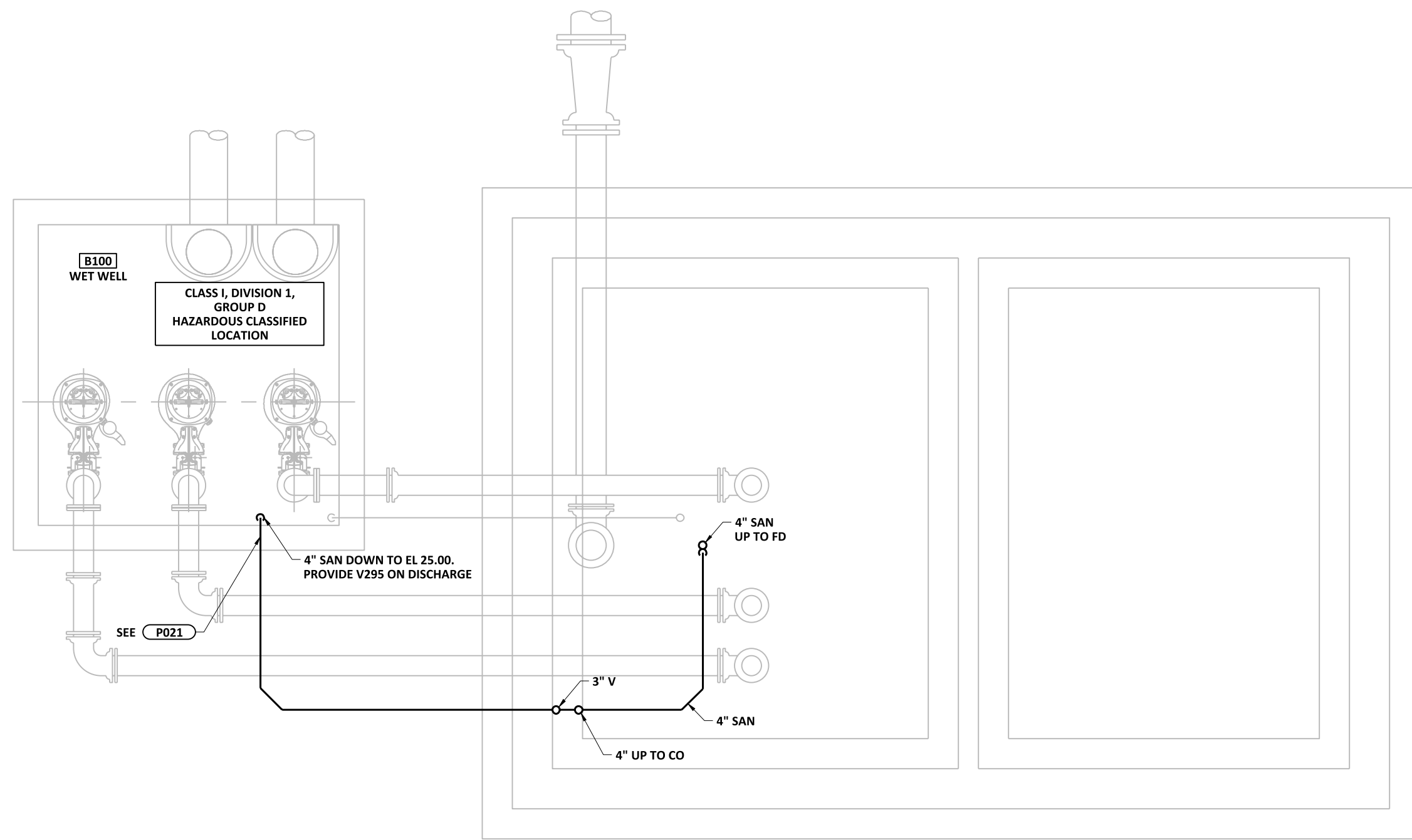






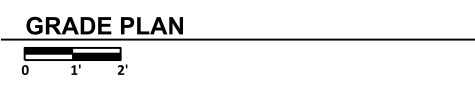
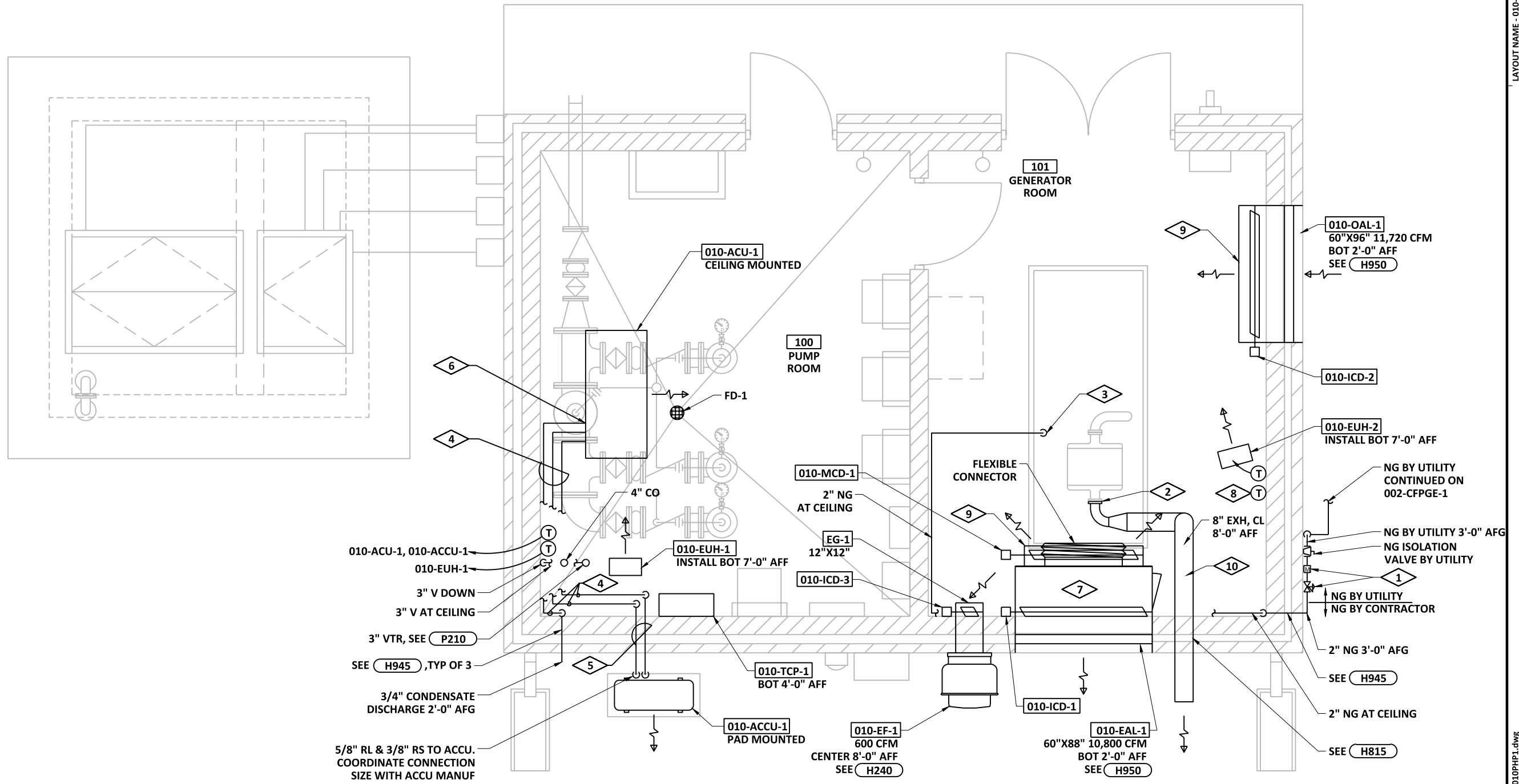
SECTION C
 010-M-1
 010-M-2

- PLAN NOTES:**
1. 4" PVC WYE W/ PLUG FOR CLEANOUT
 2. 8" V206 CHECK VALVE, TYP
 3. 8" RUBBER EXPANSION JOINT, TYP
 4. 8" V005 PLUG VALVE, TYP
 5. ROUTE 3" V FROM AIR RELEASE TO DRAIN TO 4" RWW IN VERT, MAINTAIN 6-FT WALKING HEAD CLEARANCE
 6. BREAK BOND B/W CONCRETE AND PIPE, TYP ALL FLOOR PENETRATIONS



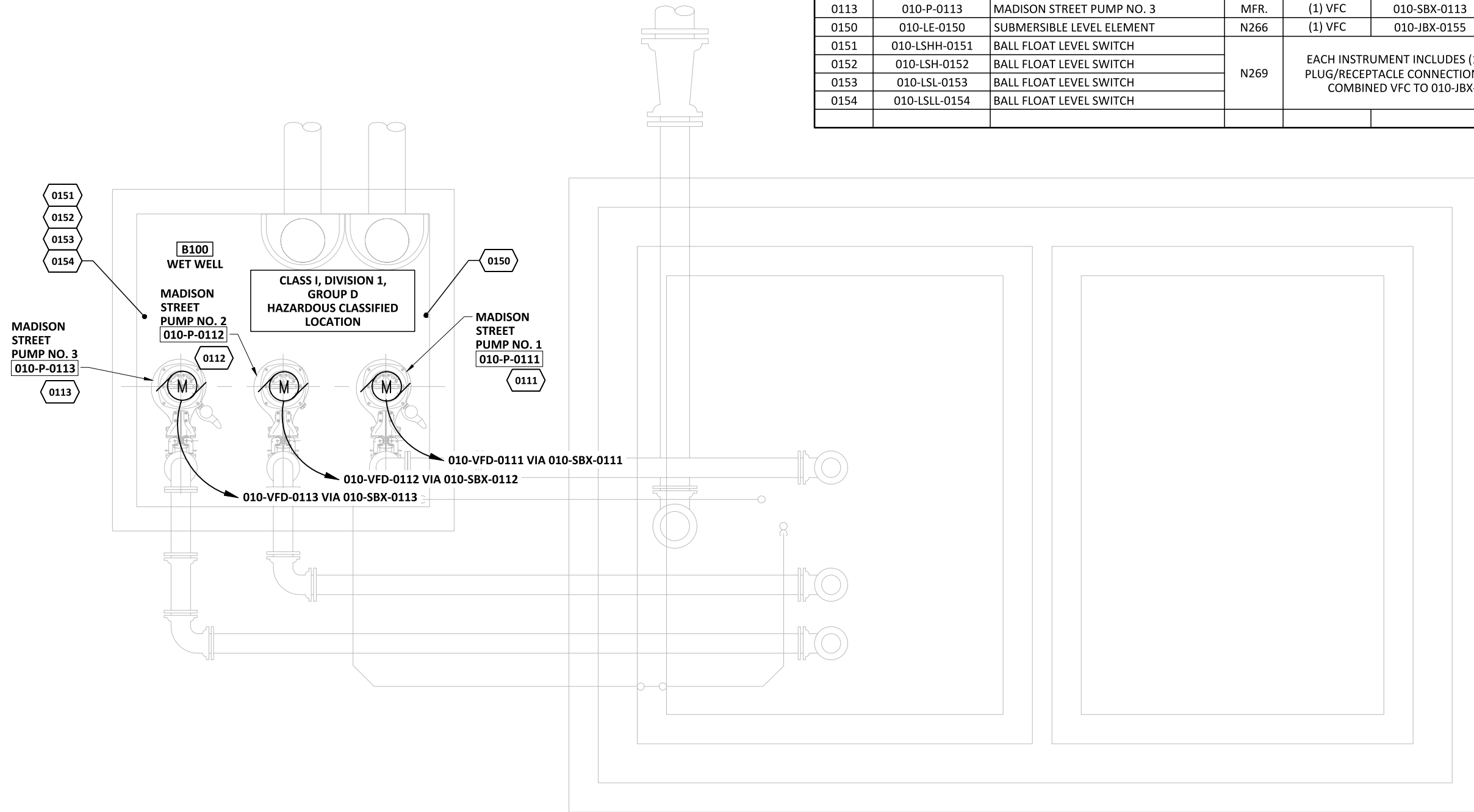
PLAN NOTES:

1. CONTRACTOR SHALL COORDINATE WITH NATURAL GAS UTILITY FOR NEW METER AND REGULATING VALVE AS REQUIRED FOR SERVICE OF 2000 CFH AT 2 PSI.
2. CONNECT EXH PIPING TO SILENCER FURNISHED BY GENERATOR MANUFACTURER. COORDINATE CONNECTION SIZE AND TYPE WITH GENERATOR MANUFACTURER.
3. 2" NG DOWN TO GENERATOR CONNECTION. SEE (H103)
4. 3/4" CND, 3/8" RL, AND 5/8" RS NEAR CEILING.
5. 3/8" RL & 5/8" RS 2'-0" AFF.
6. 3/4" CND, 3/8" RL, AND 5/8" RS TO ACU. COORDINATE CONNECTION SIZE WITH ACU MANUF.
7. INSULATE GENERATOR PLENUM BOX IN ACCORDANCE WITH SPECIFICATION 15083.
8. TEMPERATURE SENSOR.
9. COVER OPENING WITH STAINLESS STEEL HARDWARE WIRE CLOTH. MIN 60% FREE AREA
10. SEE SPECIFICATION 15560 FOR EXH PIPING MATERIAL. INSULATE AND JACKET IN ACCORDANCE WITH SPECIFICATION 15083

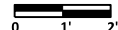


FILE NAME : P:\13542she\Dwg\010PH-2.dwg LAYOUT NAME - 010-PH-2

ID	TAG NAME	DESCRIPTION	DETAIL	WIRING	DESTINATION	ID
0111	010-P-0111	MADISON STREET PUMP NO. 1	MFR.	(1) VFC	010-SBX-0111	0141
0112	010-P-0112	MADISON STREET PUMP NO. 2	MFR.	(1) VFC	010-SBX-0112	0142
0113	010-P-0113	MADISON STREET PUMP NO. 3	MFR.	(1) VFC	010-SBX-0113	0143
0150	010-LE-0150	SUBMERSIBLE LEVEL ELEMENT	N266	(1) VFC	010-JBX-0155	0155
0151	010-LSHH-0151	BALL FLOAT LEVEL SWITCH	N269	EACH INSTRUMENT INCLUDES (1) VFC TO PLUG/RECEPTACLE CONNECTION, THEN A COMBINED VFC TO 010-JBX-0155		
0152	010-LSH-0152	BALL FLOAT LEVEL SWITCH				
0153	010-LSL-0153	BALL FLOAT LEVEL SWITCH				
0154	010-LSLL-0154	BALL FLOAT LEVEL SWITCH				



LOWER PLAN



GENERAL NOTES:

- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- SEE SPECIFICATION SECTION 01110 FOR PROJECT SEQUENCES AND CONSTRAINTS.
- PROVIDE LIGHTNING PROTECTION ON THE BUILDING. PROVIDE AIR TERMINALS AND TWO DOWN CONDUCTORS. SEE SPECIFICATION 16065 FOR REQUIREMENTS.

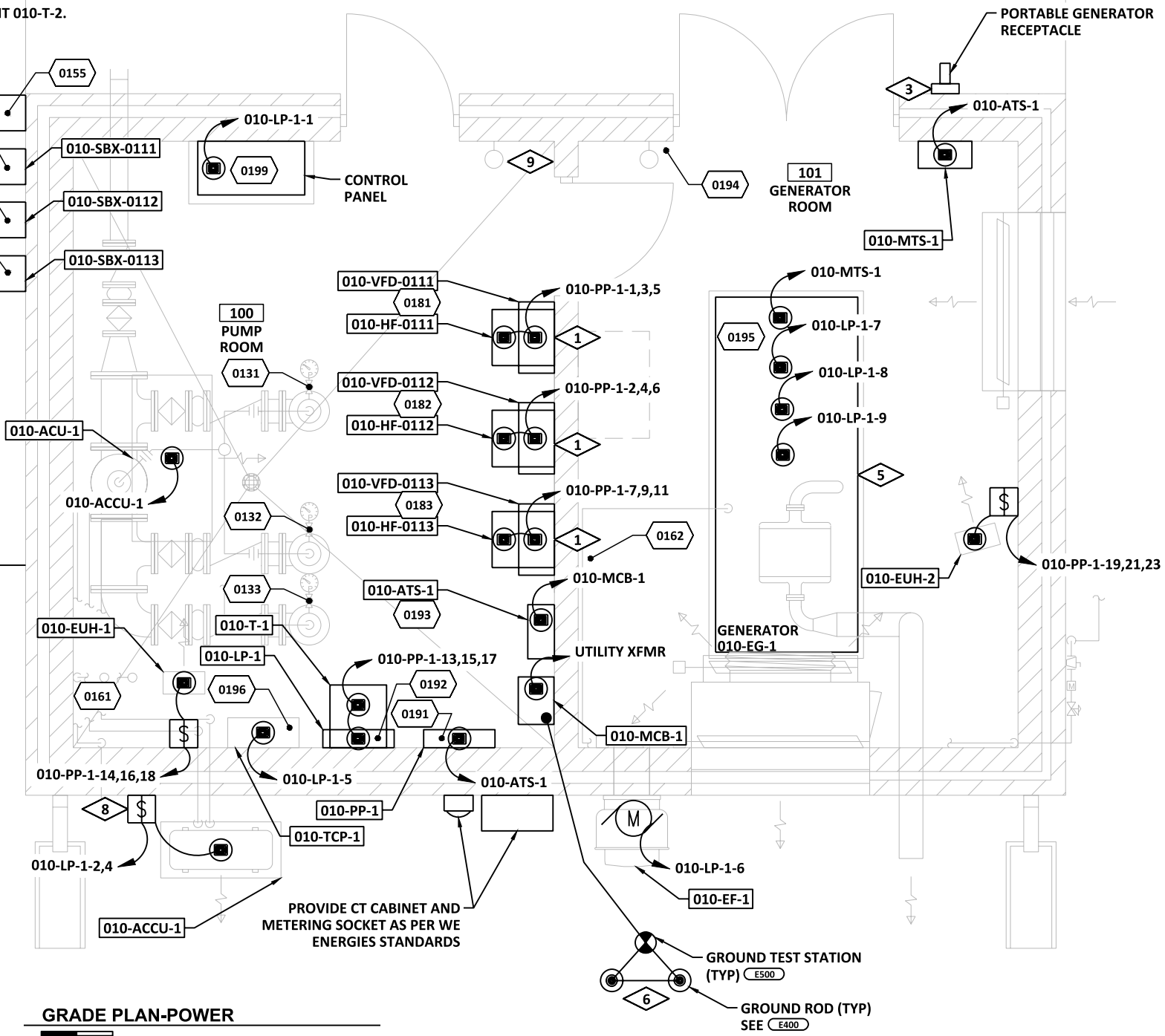
PLAN NOTES:

- SEE E200 FOR MOUNTING DETAILS.
- ROUTE DIRECT BURIED CONDUITS FROM SPLICE BOX TO WET WELL. SEE E600. CONDUITS SHALL BE EMBEDDED IN WET WELL TOP SLAB, CONTRACTOR TO ROUTE BASED ON FIELD CONDITIONS AND DOCUMENT FINAL LOCATION.
- PROVIDE A NEMA 4X JUNCTION BOX FOR MOUNTING PORTABLE GENERATOR RECEPTACLE AND ROUTING OF CONDUCTORS FROM PORTABLE GENERATOR RECEPTACLE TO 010-MTS-1.
- JUNCTION BOX CIRCUITS SHALL BE INTRINSICALLY SAFE.
- GROUND GENERATOR AS PER NEC. PROVIDE DEDICATED GROUND ROD.
- DISTANCE BETWEEN GROUND RODS NOT TO SCALE. MOUNTING DISTANCE BETWEEN GROUND RODS SHALL BE 20'-0". COORDINATE LOCATION WITH ENGINEERING AND FIELD CONDITIONS.
- PROVIDE 1" DIRECT BURIED CONDUIT FOR RADIO ANTENNA CABLE, SEE E600.
- PROVIDE NEMA 4X EXTERIOR 20A FUSIBLE DISCONNECT SWITCH.
- WALL MOUNT 010-T-2.

ID	TAG NAME	DESCRIPTION	DETAIL	WIRING	DESTINATION	ID
0191	010-SPD-1	SURGE PROTECTIVE DEVICE	MFR.	WIRE IN PARALLEL (2) #14 COMMON ALARM TO 010-PLC-1	010-PLC-1	0199
0192	010-SPD-2	SURGE PROTECTIVE DEVICE	MFR.			
0193	010-ATS-1	AUTOMATIC TRANSFER SWITCH	MFR.	(8) #14	010-PLC-1	0199
				(4) #14	010-EG-1	0193
0194	010-HS-1	GENERATOR E-STOP	MFR.	(2) #14	010-EG-1	0193
0195	010-EG-1	GENERATOR	MFR.	(8) #14	010-PLC-1	0199
0196	010-TCP-1	TEMPERATURE CONTROL PANEL	N170	(2) #14	010-EG-1	0193
0198	010-ANT-1	YAGI ANTENNA	EXIST	(1) COAX	010-PLC-1	0199
0199	010-PLC-1	MADISON STREET P/S PLC PANEL	N180		N/A	

EXISTING, LOCATED AT SOUTHWEST CORNER OF WET WELL

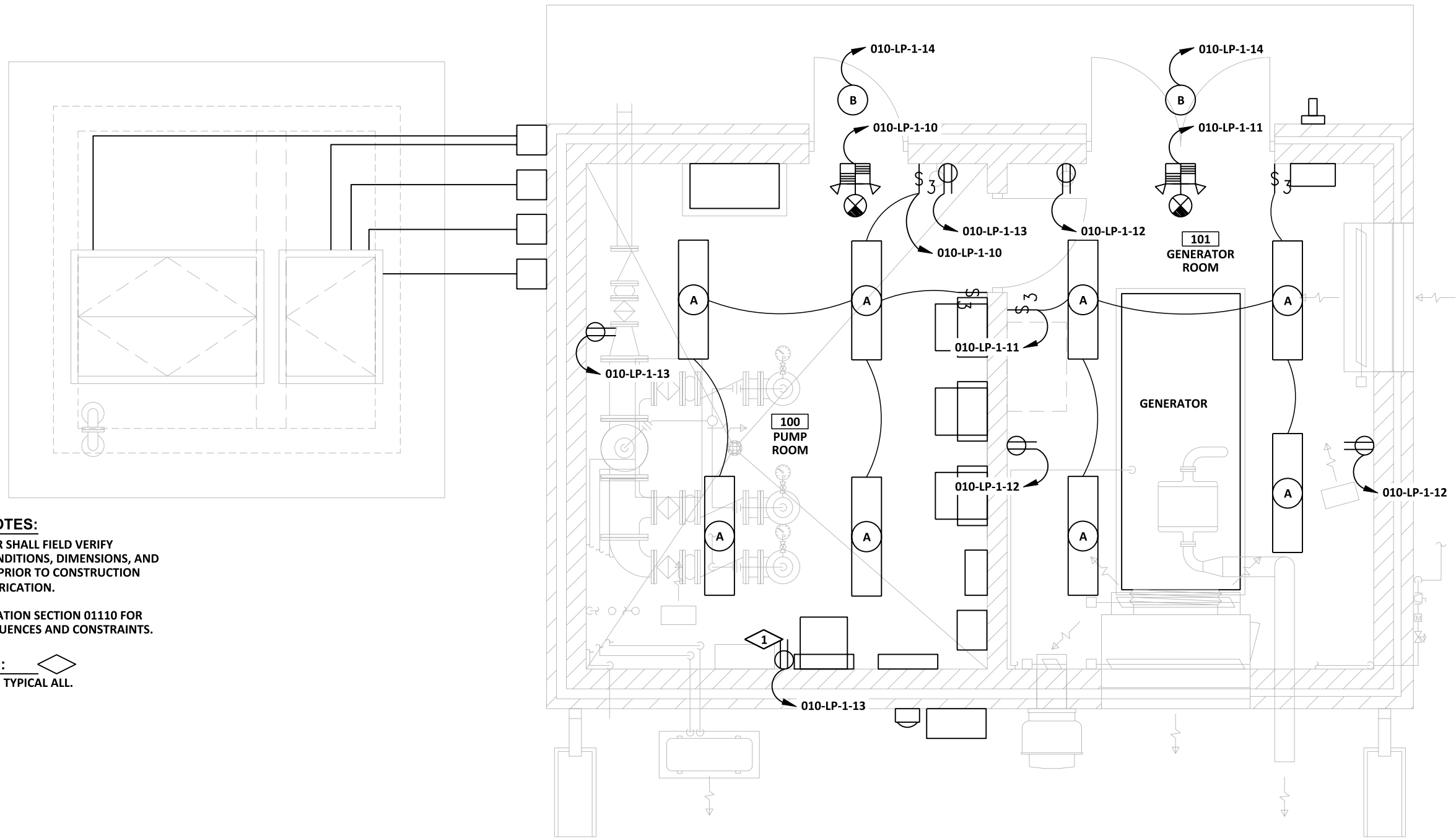
ID	TAG NAME	DESCRIPTION	DETAIL	WIRING	DESTINATION	ID
0131	010-PI-0131	PRESSURE GAUGE - PUMP 1	N590		N/A	
0132	010-PI-0132	PRESSURE GAUGE - PUMP 2	N590		N/A	
0133	010-PI-0133	PRESSURE GAUGE - PUMP 3	N590		N/A	
0141	010-SBX-0111	SPLICE BOX - PUMP 1	E100	(4) #14	010-PLC-1	0199
0142	010-SBX-0112	SPLICE BOX - PUMP 2	E100	(4) #14	010-PLC-1	0199
0143	010-SBX-0113	SPLICE BOX - PUMP 3	E100	(4) #14	010-PLC-1	0199
0155	010-JBX-0155	JUNCTION BOX	E100	(8) #14 (1) STP	010-PLC-1	0199
0161	010-TT-0161	TEMPERATURE TRANSMITTER	N171	(1) STP	010-PLC-1	0199
0162	010-TT-0162	TEMPERATURE TRANSMITTER	N171	(1) STP	010-PLC-1	0199
0181	010-VFD-0111	MADISON STREET PUMP NO. 1 VFD	MFR.	(8) #14 (2) STP (1) CE	010-PLC-1	0199
0182	010-VFD-0112	MADISON STREET PUMP NO. 2 VFD	MFR.	(8) #14 (2) STP (1) CE	010-PLC-1	0199
0183	010-VFD-0113	MADISON STREET PUMP NO. 3 VFD	MFR.	(8) #14 (2) STP (1) CE	010-PLC-1	0199



GRADE PLAN-POWER
0 1' 2'



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GENERAL NOTES:

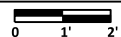
1. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. SEE SPECIFICATION SECTION 01110 FOR PROJECT SEQUENCES AND CONSTRAINTS.

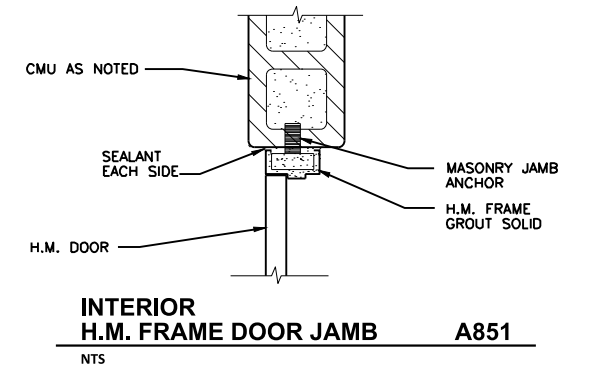
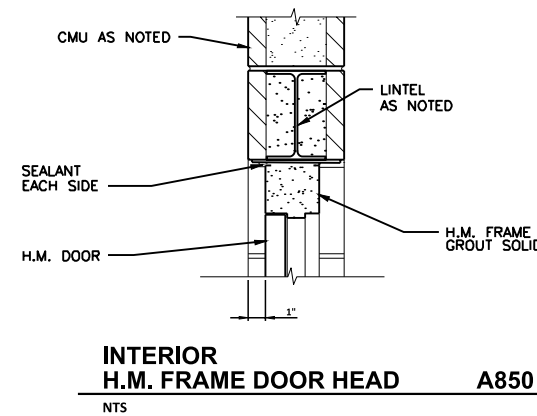
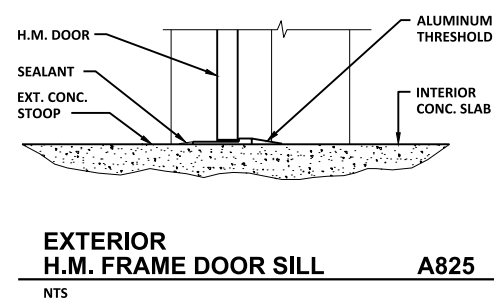
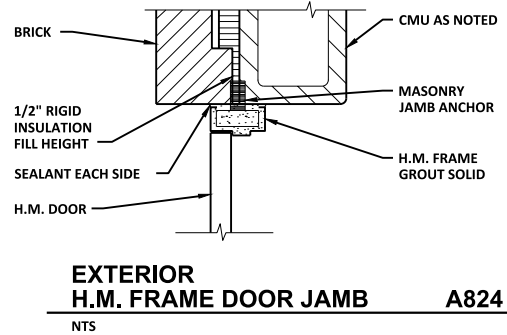
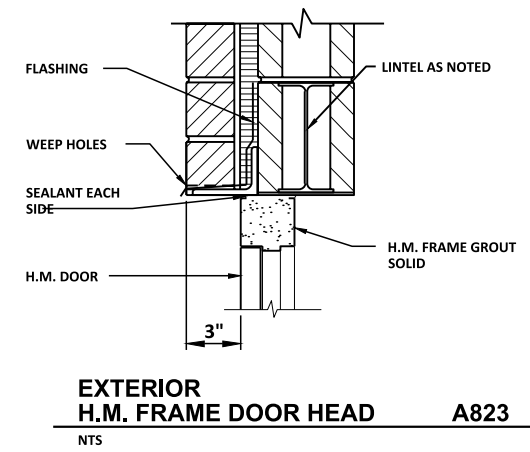
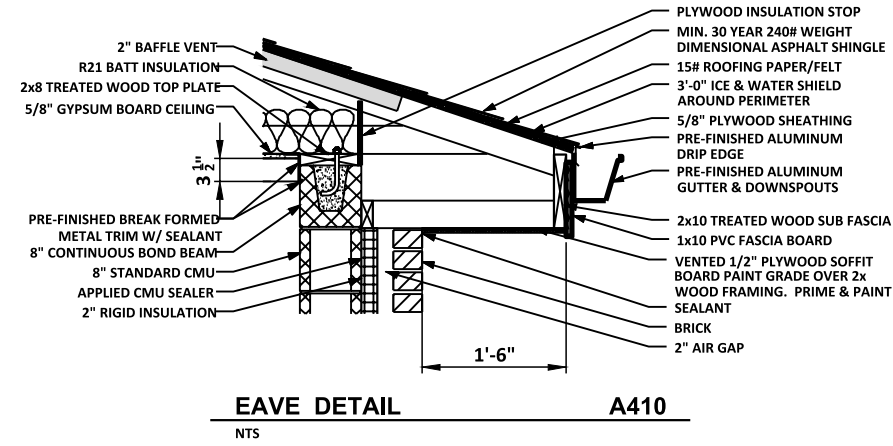
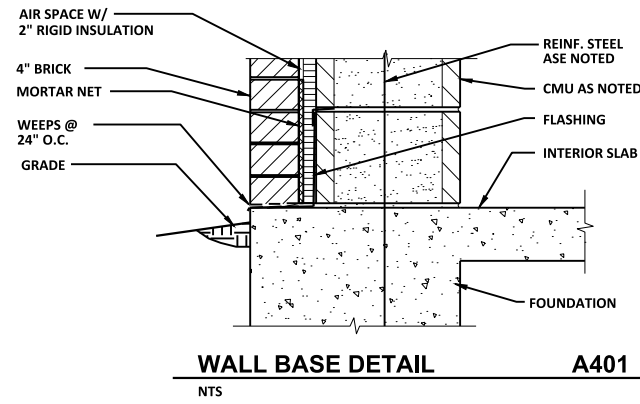
PLAN NOTES:

1. PROVIDE GFI. TYPICAL ALL.



GRADE PLAN-LIGHTING





GENERAL STRUCTURAL NOTES

GENERAL

1. THE GENERAL STRUCTURAL NOTES AND STANDARD STRUCTURAL DETAILS APPLY TO THE ENTIRE PROJECT UNLESS SPECIFICALLY NOTED OTHERWISE.

DESIGN CRITERIA

1. DESIGN AND CONSTRUCT IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, 2015 EDITION.

2. SUPERIMPOSED DESIGN LOADS

- A. ROOF LIVE LOAD 20 PSF
- B. ROOF DEAD LOAD 10 PSF
- C. MECHANICAL EQUIPMENT VERIFY WITH MFR
- D. OCCUPANCY CATEGORY OF BUILDING III
- E. SNOW LOAD:
 - 1. GROUND SNOW LOAD, P_g 30 PSF
 - 2. FLAT ROOF SNOW LOAD, P_f 23 PSF + DRIFT
 - 3. SNOW EXPOSURE FACTOR, C_e 1.0
 - 4. SNOW LOAD IMPORTANCE FACTOR, I 1.1
 - 5. THERMAL FACTOR, C_t 1.0

- I. WIND LOAD:
 - 1. ULTIMATE DESIGN WIND SPEED, V_{ult} 120 MPH
 - 2. NOMINAL DESIGN WIND SPEED, V_{osd} 90 MPH
 - 3. RISK CATEGORY III
 - 4. WIND EXPOSURE C
 - 5. INTERNAL PRESSURE COEFFICIENT, G_{Cpi} +/- 0.18 PSI
 - 6. COMPONENTS AND CLADDING WIND PRESSURES +/- 30 PSF

3. SEISMIC DESIGN DATA:

- A. RISK CATEGORY III
- B. IMPORTANCE FACTOR, I 1.25
- C. MAPPED SPECTRAL RESPONSE ACCELERATIONS
 - 1. S_s 0.089g
 - 2. S_1 0.047g
- D. SITE CLASS C
- E. SPECTRAL RESPONSE COEFFICIENTS
 - 1. S_{ds} 0.095g
 - 2. S_{d1} 0.075g
- F. SEISMIC DESIGN CATEGORY B
- G. BASIC SEISMIC FORCE RESISTING SYSTEM MASONRY SHEAR WALLS
- H. DESIGN BASE SHEAR, V $V=0.01W$

FOUNDATIONS

1. GEOTECHNICAL INVESTIGATION BY INTERTEK PSI:
NET ALLOWABLE SOIL BEARING CAPACITIES AT STR 010: 2000 PSF
2. PLACE FOOTINGS ON NATURAL UNDISTURBED EARTH OR STRUCTURAL FILL
3. PLACE FILL AGAINST FOUNDATION WALLS ENCLOSING INTERIOR SPACES AFTER CONSTRUCTION SUCH AS CROSS WALLS, BEAMS OR SLABS ARE IN PLACE TO BRACE WALL AND SUCH CONSTRUCTION HAS REACHED ITS DESIGN STRENGTH.
4. TO MINIMIZE LATERAL FORCES AGAINST THE STRUCTURE DUE TO WEDGING ACTION OF THE SOIL, BEGIN COMPACTION OF EACH LAYER AT THE STRUCTURE WALL.

REINFORCEMENT

1. REINFORCEMENT STEEL
 - A. DEFORMED BARS: ASTM A615 - GRADE 60
2. UNLESS NOTED OTHERWISE PROVIDE CLEAR COVER FOR REINFORCEMENT AS FOLLOWS:
 - A. CAST AGAINST:
 - 1. EARTH: 3 INCHES
 - 2. MUD SLAB: 2 INCHES
 - B. EXPOSED TO EARTH, WEATHER, OR WATER
 - 1. SLABS
 - A. #5 BARS OR SMALLER: 1 1/2 INCHES
 - B. #6 THROUGH #11 BARS: 2 INCHES
 - 2. WALLS, BEAMS, AND COLUMNS: 2 INCHES
 - C. NOT EXPOSED TO EARTH, WEATHER, OR WATER
 - 1. SLABS AND WALLS
 - A. #3 THROUGH #7 BARS: 1 INCH
 - B. #8 THROUGH #11 BARS: 1 1/2 INCHES
 - 2. BEAMS AND COLUMNS: 1 1/2 INCHES
3. PLACE DOWELS BEFORE PLACING CONCRETE.
4. DO NOT FIELD WELD OR FIELD BEND REINFORCING BARS.

CONCRETE

1. DESIGN STRENGTH
 - A. INTERIOR EQUIPMENT BASES, FENCE POST PIERS, CONCRETE FILLETS IN TANKS, AND WHERE SPECIFICALLY NOTED CLASS B: $f'c = 3000$ PSI
 - B. ALL LOCATIONS, EXCEPT WHERE CLASS B SPECIFIED CLASS A: $f'c = 4500$ PSI
2. UNLESS NOTED OTHERWISE, CONSTRUCTION JOINTS SHOWN ARE OPTIONAL CONSTRUCTION JOINTS NOT SHOWN SHALL BE APPROVED BY ENGINEER.
3. BEFORE CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE CLEANED, LAITANCE REMOVED, AND SURFACE WETTED. REMOVE STANDING WATER.
4. BEAMS SHALL BE PLACED MONOLITHICALLY AS PART OF SLAB SYSTEM, UNLESS DETAILED OTHERWISE.
5. CONSTRUCTION JOINTS SHALL HAVE ROUGHENED SURFACES. SURFACE SHALL HAVE AMPLITUDE OF 1/4 IN. MIN.
6. PROVIDE 3/4 IN. CHAMFER ON EXTERNAL CORNERS OF EXPOSED EDGES OF CONSTRUCTION JOINTS.
7. VERIFY EQUIPMENT PAD AND CURB LOCATIONS, DIMENSIONS, AND ELEVATIONS WITH EQUIPMENT MANUFACTURERS.

MASONRY

1. MASONRY OPENINGS LESS THAN 4 FT IN WIDTH THAT DO NOT HAVE A LINTEL SCHEDULED SHALL HAVE AN 8 IN. HIGH REINFORCED MASONRY LINTEL WITH 2-#5 BARS OR DOUBLE ANGLE STEEL ANGLE LINTEL.
2. UNLESS NOTED OTHERWISE, PROVIDE A CONTINUOUS BOND BEAM REINFORCED WITH 2-#5 AROUND THE TOP OF BUILDINGS.
3. UNLESS NOTED OTHERWISE, PROVIDE HORIZONTAL MASONRY REINFORCING IN WALLS AT 16 IN. ON CENTER.
4. FILL JAMB CORES OR OPENINGS OVER 3 FT IN WIDTH WITH MASONRY GROUT FROM BOTTOM OF LINTEL TO BOTTOM OF WALL. REINFORCE CORES WHERE NOTED.
5. BRACE MASONRY WALLS UNTIL ROOF SYSTEM IS IN PLACE.

METALS

1. STEEL
 - A. W SHAPES ASTM A992
 - B. S, C, AND MC SHAPES ASTM A36
 - C. SQUARE OR RECTANGULAR TUBE: ASTM A500, GRADE B, 46 KSI
 - D. PIPE: ASTM A53
 - E. PLATES AND BARS ASTM A36
 - F. BOLTED CONNECTIONS FOR STEEL MEMBERS: ASTM A325
 - G. BOLTED CONNECTIONS FOR ALUMINUM MEMBERS: STAINLESS STEEL
 - H. STAINLESS STEEL
 - 1. EXTERIOR AND SUBMERGED USES AISI, TYPE 316
 - 2. INTERIOR AND ARCHITECTURAL USES AISI, TYPE 304
 - 3. CAST-IN-PLACE ANCHOR BOTLS AISI, TYPE 316
2. ALUMINUM
 - A. SHAPES AND PLATES: ALLOY 6061-T6 OR 6063-T6
3. ANCHOR BOLTS, 1/2" MINIMUM DIA:
 - A. DRY LOCATIONS ASTM A307 GALVANIZED
 - B. ALL OTHER LOCATIONS STAINLESS STEEL
4. WELD STRUCTURAL STEEL WITH E70XX ELECTRODES IN ACCORDANCE WITH AWS REQUIREMENTS.
5. WELD ALUMINUM IN ACCORDANCE WITH AWS AND AA REQUIREMENTS.
6. COAT ALUMINUM SURFACES IN CONTACT WITH CONCRETE IN ACCORDANCE WITH AA REQUIREMENTS. UNDER NO CIRCUMSTANCES SHALL ALUMINUM CONTACT DISSIMILAR METALS.

MISCELLANEOUS

1. VERIFY PERTINENT EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING CONSTRUCTION AND/OR FABRICATION.
2. FOR ADDITIONAL OPENINGS, ANCHORS, AND EMBEDDED ITEMS SEE ARCHITECTURAL, PROCESS, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS.

REMOVALS

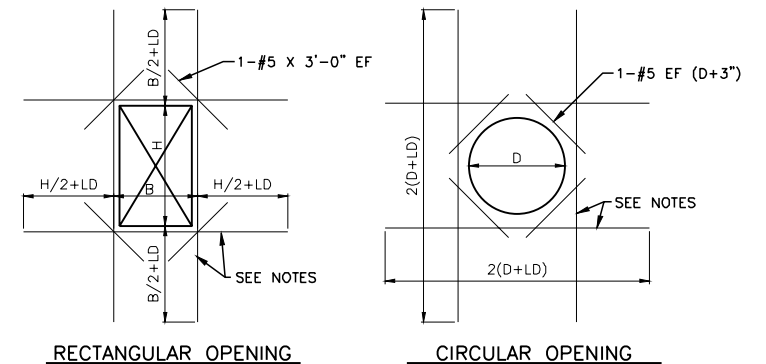
1. REMOVE ALL CONCRETE ANCHORS, ANCHOR BOLTS AND OTHER EMBEDMENTS A MINIMUM OF 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH EXISTING.
2. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE AND REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVAL. PATCH BACK TO FINISHED SURFACE WITH PATCHING MORTAR.
3. SAWCUT AND REMOVE CONCRETE TO LIMITS NOTED. REMOVE CONCRETE AND REINFORCEMENT A MINIMUM 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE WILL NOT COVER ROUGH SURFACE OF REMOVAL. PATCH BACK TO FINISHED SURFACE WITH PATCHING MORTAR.

MINIMUM REINFORCEMENT BAR SPLICE AND ANCHORAGE LENGTH (INCHES) S010

BAR SIZE	LAPPED SPLICE LENGTH		EMBEDMENT LENGTH		COMPRESSION LAP LENGTH
	TOP BARS	OTHERS	TOP BARS	OTHERS	
3	24	19	19	15	12
4	32	25	25	19	15
5	40	31	31	24	19
6	48	37	37	29	23
7	70	54	54	42	26
8	80	62	62	48	30
9	91	70	70	54	34
10	102	78	78	61	38
11	113	87	87	67	42

NOTES:

1. TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
2. FOR BARS SPACED LESS THAN 6 BAR DIAMETER OC INCREASE LENGTH BY 25%.
3. WHEN LAPPING TWO DIFFERENT SIZE BARS USE THE LAP LENGTH OF THE SMALLER BAR UNLESS NOTED OTHERWISE.
4. EMBEDMENT LENGTH IS MINIMUM LENGTH OF EMBEDMENT FOR STRAIGHT DOWELS WHERE END HOOK IS NOT SHOWN, UNLESS OTHERWISE NOTED.
5. COMPRESSION LAP LENGTH FOR VERTICAL COLUMN BARS ONLY.
6. HOOKS SHALL BE ACI STANDARD UNLESS OTHERWISE NOTED.
7. FOR EPOXY COATED REINFORCEMENT, INCREASE LENGTH BY 20% FOR TOP BARS AND 50% FOR OTHERS.



RECTANGULAR OPENING

CIRCULAR OPENING

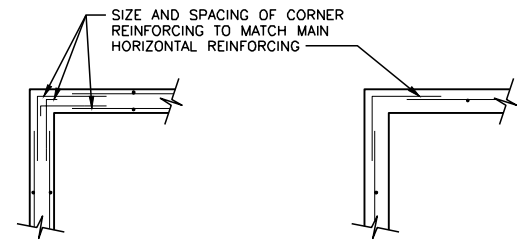
NOTES:

1. THESE DETAILS APPLY TO ALL OPENINGS IN CONCRETE WALLS AND SLABS WHEN THE LARGEST OPENING DIMENSION IS GREATER THAN TWO TIMES SECTION THICKNESS OR GREATER THAN REINFORCING SPACING IN THE SECTION, UNLESS OTHERWISE INDICATED IN THE DRAWINGS.
2. THE AREA OF ADDITIONAL REINFORCING REQUIRED IN EACH FACE ON EACH SIDE OF AN OPENING SHALL EQUAL OR EXCEED ONE-HALF OF THE AREA OF THE INTERCEPTED BARS IN EACH FACE, IN EACH DIRECTION, RESPECTIVELY WITH A MINIMUM OF 1-#5 BAR EACH FACE.
3. PLACE THE ADDED BARS IN THE SAME LAYERS AS THE WALL OR SLAB REINFORCING.
4. LD = EMBEDMENT LENGTH. SEE S010

ADDITIONAL REINFORCEMENT AT OPENINGS IN WALLS AND SLABS DETAIL S020

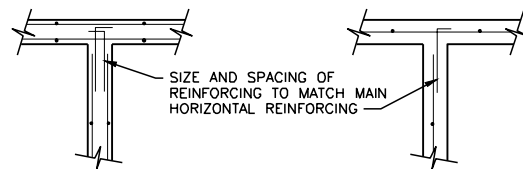
NTS

LAYOUT NAME - 099-S-2



90° CORNER - 2 LAYERS

90° CORNER - 1 LAYER



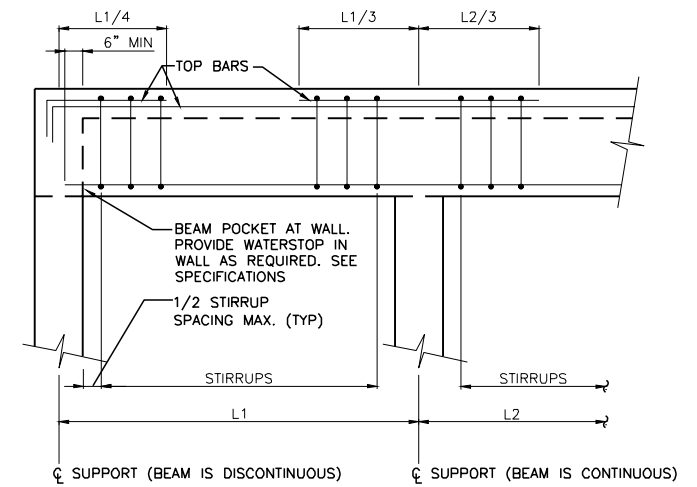
T-INTERSECTION - 2 LAYERS

T-INTERSECTION - 1 LAYER

HORIZONTAL REINFORCEMENT DETAIL S030
NTS

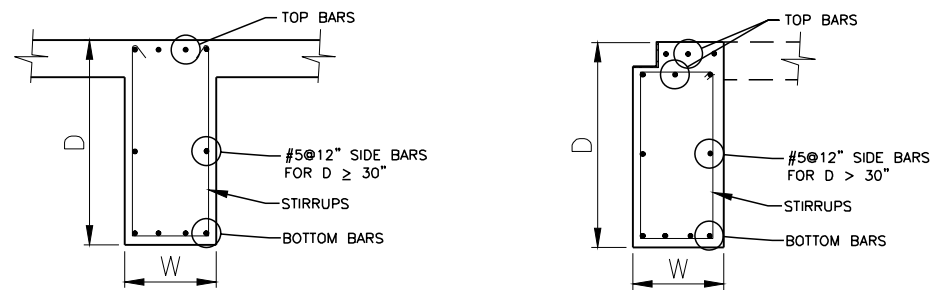
CONCRETE BEAM SCHEDULE S315												
MARK	SIZE W x D	REINFORCEMENT							STIRRUPS	LEFT SKETCH	RIGHT	REMARKS
		A	B	C	D	E	F	G				
010B1	12X24	3-#6	3-#6						#3@10"			

NOTES:
 1. LEFT SUPPORT IS DESIGNATED AS THE SUPPORT CLOSEST THE LEFT SIDE OR BOTTOM OF DRAWING ON WHICH FRAMING PLAN IS DRAWN, UNLESS NOTED OTHERWISE.
 2. FOR TYPICAL BEAM REINFORCEMENT SEE (S316) & (S317)
 3. THE BEAM DEPTH NOTED IS MINIMUM REQUIRED. CONTRACTOR SHALL INCREASE DEPTH AS REQUIRED TO PROVIDE FOR FLOOR AND / OR ROOF SLOPES.



NOTES:
 1. WALL REINFORCING SHALL BE CONTINUOUS THRU BEAM POCKETS. TOP BARS MAY BE SPLICED AT MID SPAN. BOTTOM BARS MAY BE SPLICED AT SUPPORT.

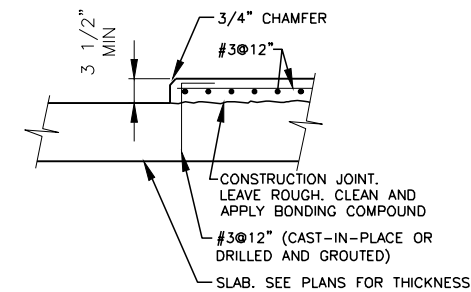
BEAM REINFORCING DETAIL S316
NTS



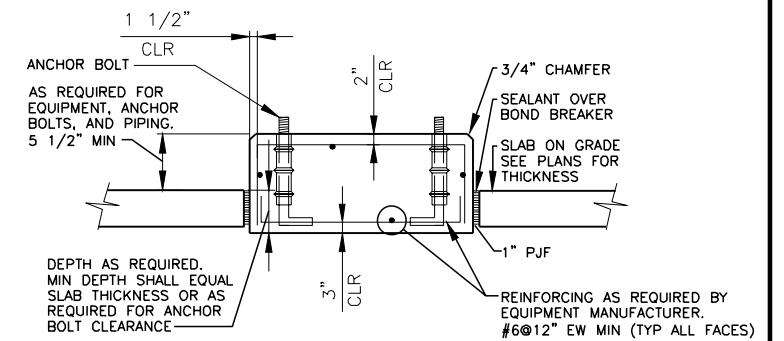
BEAM WITH SLAB

BEAM WITH GRATING SUPPORT
ANGLE OR HATCH FRAME

TYPICAL BEAM SECTIONS S317
NTS

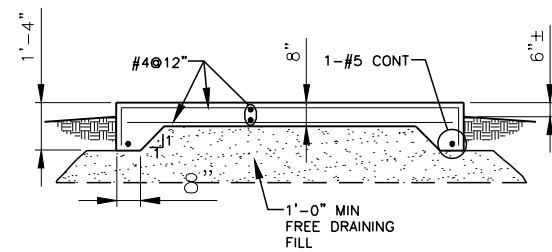


EQUIPMENT PAD DETAIL S340
NTS



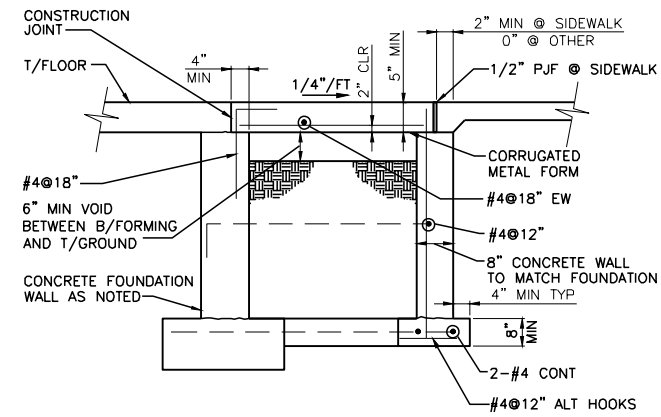
NOTES:
 1. CONCRETE BASE AS REQUIRED BY EQUIPMENT MANUFACTURER. MINIMUM OF 2 TIMES THE MASS OF EQUIPMENT SUPPORTED OR 10 TIMES THE MASS OF MOVING PARTS, WHICHEVER IS GREATER.
EQUIPMENT PAD DETAIL S344
NTS

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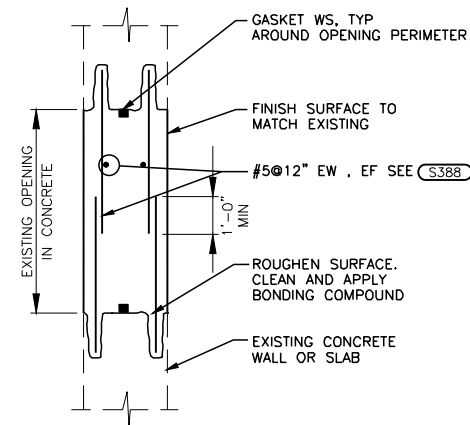


NOTES:
1. AT CONTRACTORS OPTION, PAD CAN BE PLACED FULL THICKNESS THROUGHOUT

EQUIPMENT PAD DETAIL S346
NTS

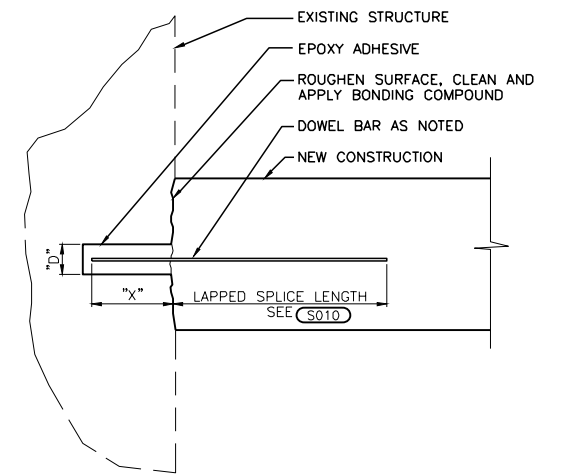


DOOR STOOP DETAIL S362
NTS



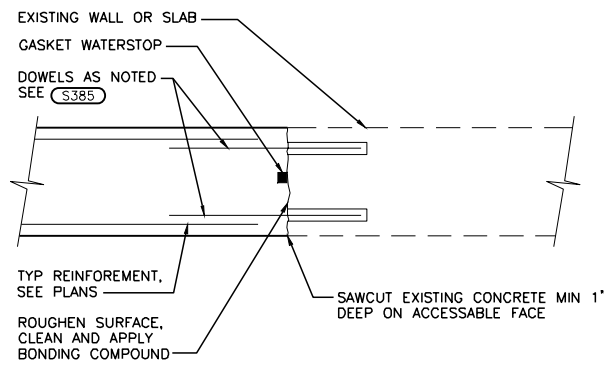
NOTES:
1. FOR OPENINGS LESS THAN 1'-0", FILL WITH NONSHRINK GROUT AND PROVIDE GASKET WS ALL AROUND.

CONCRETE OPENING PATCHING DETAIL S371
NTS

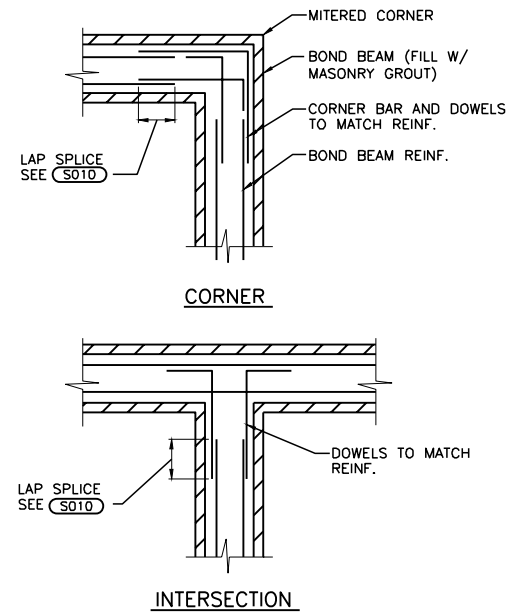


NOTES:
1. EMBEDMENT "X"=16 BAR DIAMETERS MIN.
2. HOLE DIAMETER "D"=PER EPOXY MFR.

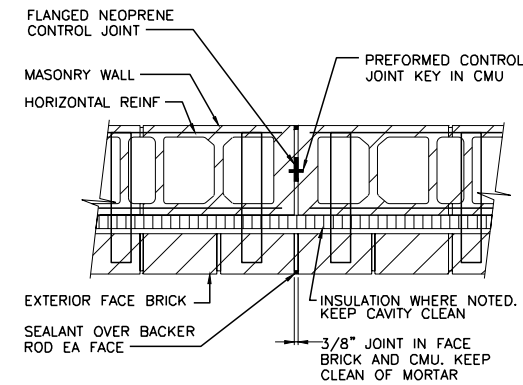
DRILLED IN DOWEL DETAIL S385
NTS



NEW CONCRETE TO EXISTING CONCRETE DETAIL S388
NTS

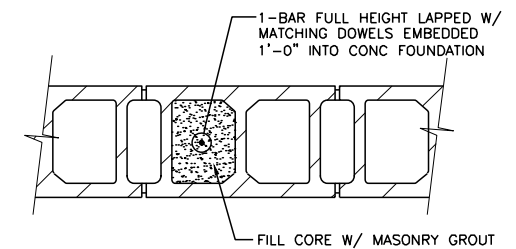


BOND BEAM REINFORCEMENT DETAIL S400
NTS





NOTES:
1. DISCONTINUE HORIZONTAL REINFORCING AT CONTROL JOINT.

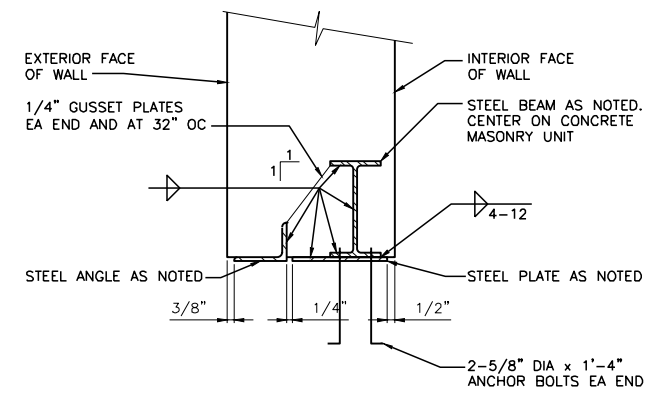
BRICK AND CMU CONTROL JOINT DETAIL S431
NTS



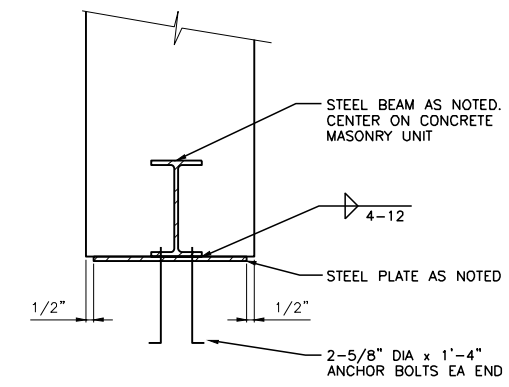
NOTES:
1. REINFORCING SIZE AND SPACING AS NOTED.
2. TYPICAL WHERE NOTED ON PLANS AS THUS ●

REINFORCED MASONRY DETAIL S451
NTS

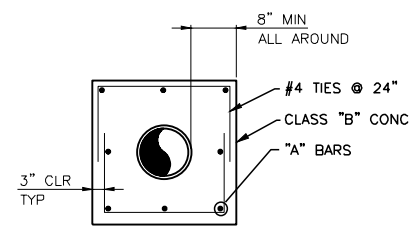
LINTEL SCHEDULE S510			
MARK	DESCRIPTION	TYPE	REMARKS
L-1	W8x15 W/ 5/16" \bar{r} & L6x4x5/16 LLH		8" BEARING EACH END. SEE S512
L-2	W8x15 W/ 5/16" \bar{r}		8" BEARING EACH END. SEE S513
NOTES: 1. MASONRY OPENINGS 4'-0" AND LESS IN WIDTH THAT DO NOT HAVE A LINTEL SCHEDULED SHALL HAVE A BOND BEAM WITH 2-#5 BARS OR STEEL ANGLE LINTEL WITH A TOTAL WIDTH OF HORIZONTAL LEGS APPROXIMATELY 1" LESS THAN WALL THICKNESS. 2. PROVIDE A MINIMUM OF 8" BEARING AT EACH END FOR STEEL BEAM LINTELS AND BOND BEAM LINTELS AND 6" BEARING AT EACH END FOR ANGLE LINTELS UNLESS NOTED OTHERWISE.			



STEEL LINTEL DETAIL S512
NTS



STEEL LINTEL DETAIL S513
NTS

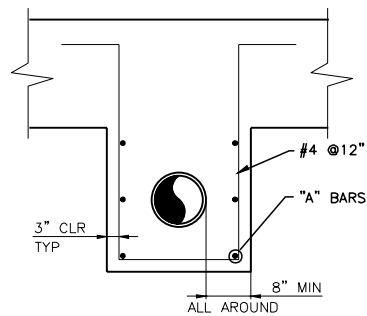


PIPE SIZE	"A" BARS
4" AND SMALLER PIPE	4-#4
5" TO 12" PIPE	8-#4
14" TO 36" PIPE	8-#5
42" AND LARGER PIPE	12-#5

NOTE:
EXTEND HORIZONTAL REINF. A MINIMUM OF 12" INTO STRUCTURE.

PIPE ENCASEMENT DETAIL S900

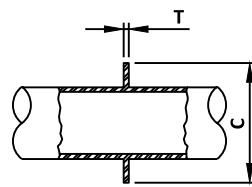
NTS



PIPE SIZE	"A" BARS
4" AND SMALLER PIPE	4-#4
5" TO 12" PIPE	6-#4
14" AND LARGER PIPE	6-#5

PIPE ENCASEMENT DETAIL S903

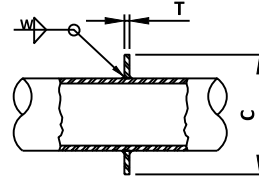
NTS



NOMINAL PIPE DIA (INCHES)	MINIMUM COLLAR DIMENSIONS			
	INTEGRALLY CAST D.I. COLLAR		STEEL COLLAR	
	T THICKNESS (INCHES)	C DIAMETER (INCHES)	T THICKNESS (INCHES)	C DIAMETER (INCHES)
4	0.50	8.00	0.25	6.80
6	0.50	10.00	0.25	8.90
8	0.50	12.50	0.25	11.05
10	0.50	14.50	0.25	13.10
12	0.50	16.50	0.25	15.20
14	0.75	19.50	0.25	17.30
16	0.75	21.75	0.25	19.40
18	0.75	23.75	0.38	22.50
20	0.75	25.75	0.38	24.60
24	0.75	30.25	0.38	28.80
30	1.00	36.50	0.50	36.00
36	1.00	43.00	0.50	42.30
42	1.25	49.50	0.75	50.75
48	1.25	56.50	0.75	57.05
54	1.50	63.00	1.00	66.06
60	1.50	70.25	1.00	70.11

DUCTILE IRON WALL AND FLOOR PIPE COLLAR DIMENSIONS DETAIL M105

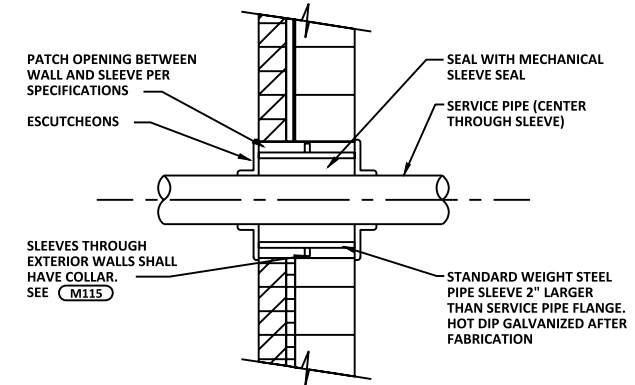
NTS



NOMINAL PIPE DIA (INCHES)	MINIMUM DIMENSIONS		
	T THICKNESS (INCHES)	C DIAMETER (INCHES)	W WELD SIZE (INCHES)
1	0.250	3.50	1/8
1 1/2	0.250	4.00	1/8
2	0.250	5.00	1/8
2 1/2	0.250	6.00	1/8
3	0.250	6.50	1/8
4	0.375	8.00	3/16
6	0.375	10.00	3/16
8	0.375	12.50	3/16
10	0.375	14.50	3/16
12	0.375	16.50	3/16
14	0.50	19.50	1/4
16	0.50	21.75	1/4
18	0.50	23.75	1/4
20	0.50	25.75	1/4
24	0.50	30.25	1/4
30	0.75	36.50	5/16
36	0.75	43.00	5/16
42	0.75	49.50	5/16
48	1.25	56.50	5/16
54	1.50	63.00	5/16

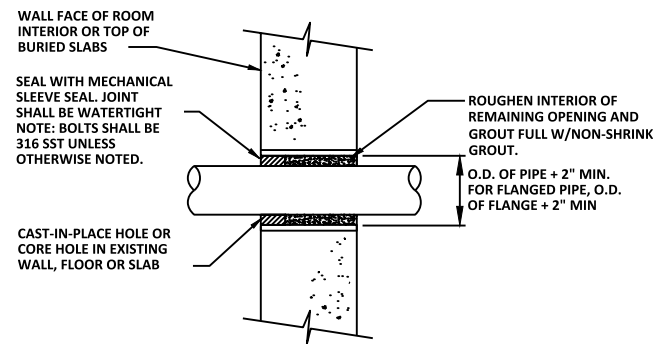
STEEL WALL AND FLOOR PIPE COLLAR DIMENSION DETAIL M115

NTS



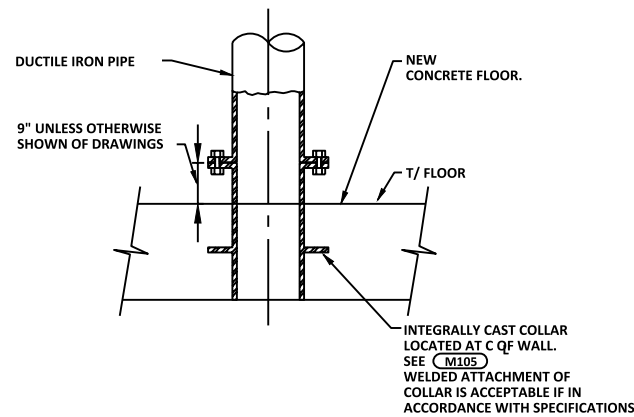
PIPE PENETRATION THROUGH MASONRY WALL DETAIL M122

NTS



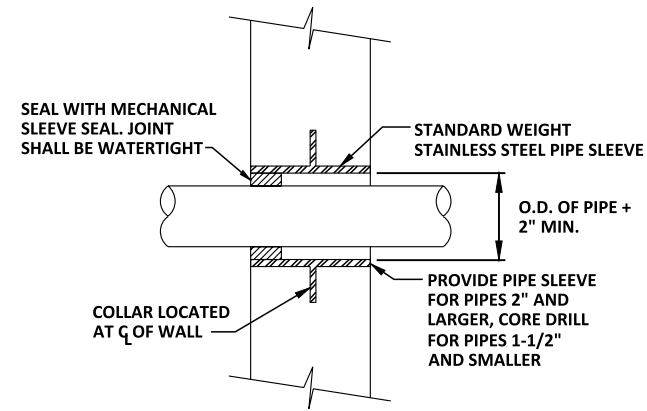
PIPE PENETRATION DETAIL M126

NTS



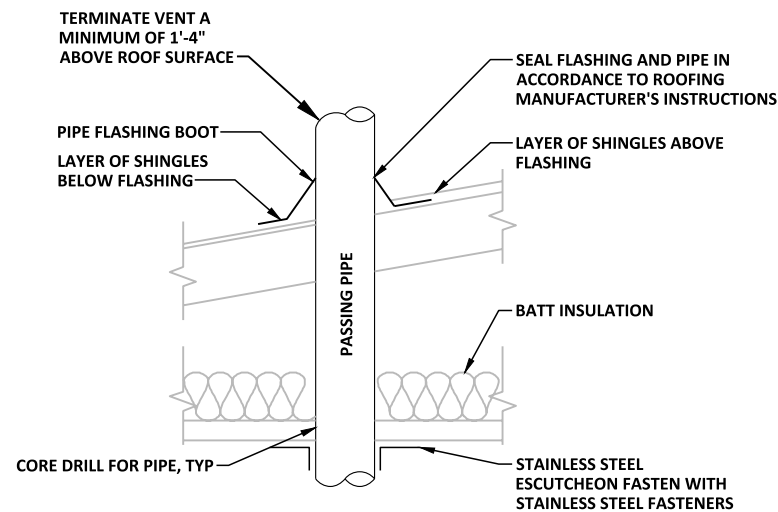
FLG / PLAIN END DUCTILE IRON FLOOR PIPE DETAIL M205

NTS



WALL SLEEVE DETAIL P021

NTS



SLOPED ROOF PIPE PENETRATION DETAIL P210

NTS

AIR INLET AND OUTLET SCHEDULE										SECTION 15875
TAG NO.	MANUFACTURER	MODEL	SERVICE	MAX. APD (IN. W.C.)	MAX. NC	PATTERN	FINISH	MATERIAL	REMARKS	
EG-1	CARNES	RARM	EXHAUST	0.10	30	SD	WBE	ALUM		

SD = 3/4" SINGLE BLADE DEFLECTION.
WBE = WHITE BAKED ENAMEL.

ELECTRIC HEATER SCHEDULE															SECTION 15765
TAG NO.	MANUF.	MODEL NUMBER	TYPE	OUTPUT (MBH)	MOUNT. HEIGHT (FT)	AIR DATA			ELECTRICAL DATA			MOTOR DATA			REMARKS
						CFM	THROW (FT)	ΔT (°F)	KW	VOLT/Ø	AMP	HP	VOLT/Ø	RPM	
010-EUH-1	QMARK	MUH-03-41	HOR PROP	10.2	--	800	12	27	3	460/3	3.6	1/100	460/3	1600	---
010-EUH-2	QMARK	MUH-05-41	HOR PROP	17.0	--	800	12	45	5	460/3	6.0	1/100	460/3	1600	---

MOTOR OPERATED DAMPER SCHEDULE													SECTION 15910
TAG NO.	TYPE	FUNCTION	BLADES	CFM	WIDTH (IN.)	HEIGHT (IN.)	FAIL POS.	ENCLOSURE NEMA	ELECTRICAL	SERVICE	MOUNTING	REMARKS	
010-ICD-1	INSULATED	MODULATING	PARALLEL	10,800	60	88	OPEN	2	CC	EXHAUST	DUCT	---	
010-ICD-2	INSULATED	OPEN/CLOSE	PARALLEL	11,720	60	96	OPEN	2	CC	INTAKE	LOUVER	---	
010-ICD-3	INSULATED	OPEN/CLOSE	PARALLEL	600	12	12	CLOSE	2	CC	EXHAUST	DUCT	1	
010-MCD-1	CONTROL	MODULATING	PARALLEL	10,800	48	36	OPEN	2	CC	RETURN	DUCT	---	

1. = PROOF OF OPEN LIMIT SWITCH.

FAN SCHEDULE															SECTION 15830
TAG NO.	MANUFACTURER	MODEL NUMBER	TYPE	SERVICE	AIR FLOW DATA			FAN RPM	DRIVE	SONES	ELECTRICAL DATA				REMARKS
					CFM	ESP (IN. W.C.)	BHP				HP/WATTS	VOLTS	PHASE	RPM	
010-EF-1	GREENHECK	CUE-099-VG	WALL CENTRI	EXHAUST	600	0.30	0.07	1120	DIRECT	7	1/4	120	1	1725	1,2,3,4,5,6

- = ALUMINUM CONSTRUCTION.
- = STAINLESS FASTENERS.
- = HEAVY DUTY NEMA 4X DISCONNECT.
- = ALUMINUM BIRDSCREEN.
- = ECM MOTOR WITH SPEED CONTROL DIAL MOUNTED NEAR FAN OR DUCTWORK TO SERVE BALANCING PURPOSES ONLY.
- = SIDEWALL MOUNTED.

AIR COOLED CONDENSER SCHEDULE													SECTION 15752
TAG NO.	MANUF	MODEL	NOMINAL CAP (TONS)	TOTAL CAP* (MBH)	REQ. SEN CAP (MBH)	REFRIGERANT	STAGES	AMB. TEMP (°F)	SEER	VOLT/PHASE	MCA (AMPS)	REMARKS	
010-ACCU-1	TOSHIBA	RAV-SP300AT2-UL	2.5	30	19.8	R-410A	1	95	20.5	208/1	24	1,2,3,4	

- * = CAPACITY AT SCHEDULED AMBIENT TEMPERATURE
- = MATCHED WITH COOLING COIL FROM CEILING SUSPENDED DUCT FREE SPLIT SYSTEM SCHEDULE.
 - = DESIGNED TO BE PAD MOUNTED.
 - = WIND BAFFLES.
 - = LOW AMBIENT CONTROLS (-13F).

CEILING SUSPENDED DUCT FREE SPLIT SYSTEM													SECTION 15752	
TAG NO.	MANUF.	MODEL	CFM	HP	VOLTS	PHASE	FLA (AMP)	COOLING DATA			HEATING DATA			REMARKS
								TOT CAP (MBH)	EAT (°F) (DB/WB)	LAT (°F) (DB/WB)	TOT CAP (MBH)	EAT (°F) (DB/WB)	LAT (°F) (DB/WB)	
010-ACU-1	TOSHIBA	RAV-SP300CT-UL	860	-	208	1	-	30	81/65	58.9/57.3	29.8	60	92	1,2

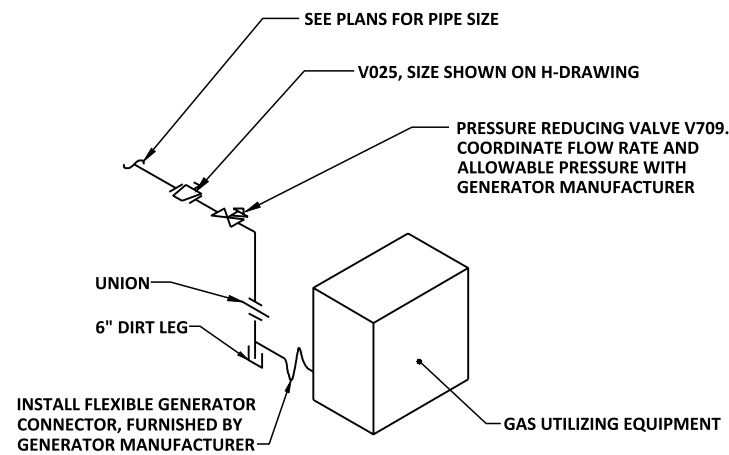
- = WIRED REMOTE CONTROLLER.
- = POWER VIA THE AIR COOLED CONDENSING UNIT.

WALL LOUVER SCHEDULE											SECTION 15875
TAG NO.	MANUFACTURER	MODEL NUMBER	SERVICE	CFM	WIDTH (IN.)	HEIGHT (IN.)	DEPTH (IN.)	MAX APD (IN. W.C.)	MAX FREE AREA VEL. (FPM)	REMARKS	
010-EAL-1	GREENHECK	AFA-801	EXHAUST	10,800	60	88	4	0.06	850	1,2,3	
010-OAL-1	GREENHECK	AFA-801	INTAKE	11,720	60	96	4	0.05	805	1,2,3	

- = ALUMINUM BIRDSCREEN.
- = EXTENDED SILL.
- = KYNAR FINISH.

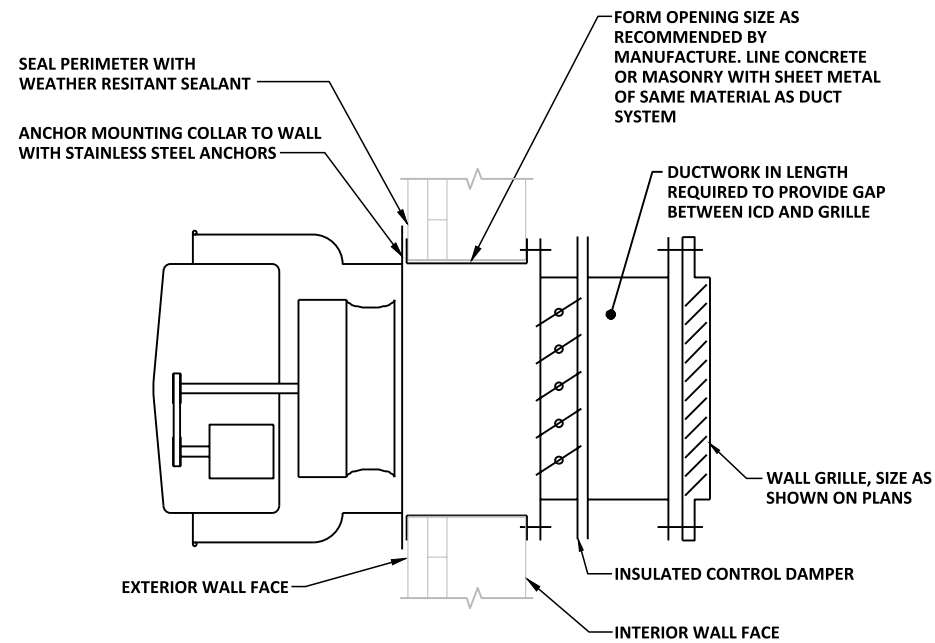
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099PHD1.dwg



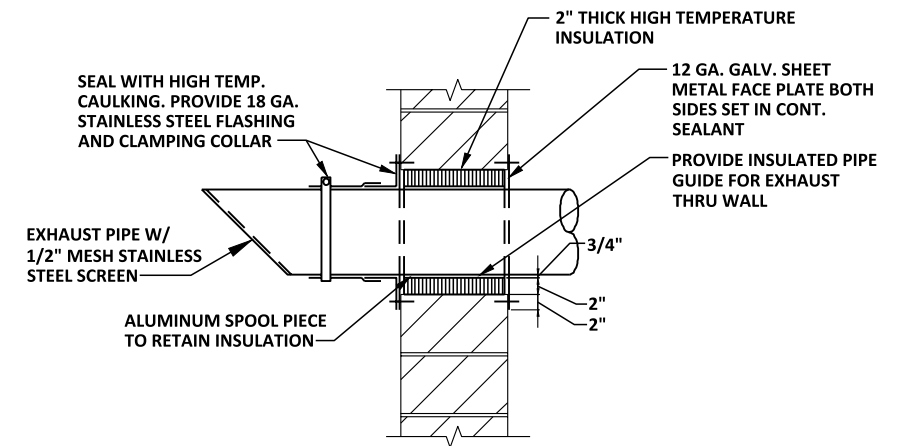
TYPICAL GAS CONNECTION DETAIL H103

NTS



WALL MOUNTED EXHAUST FAN DETAIL H240

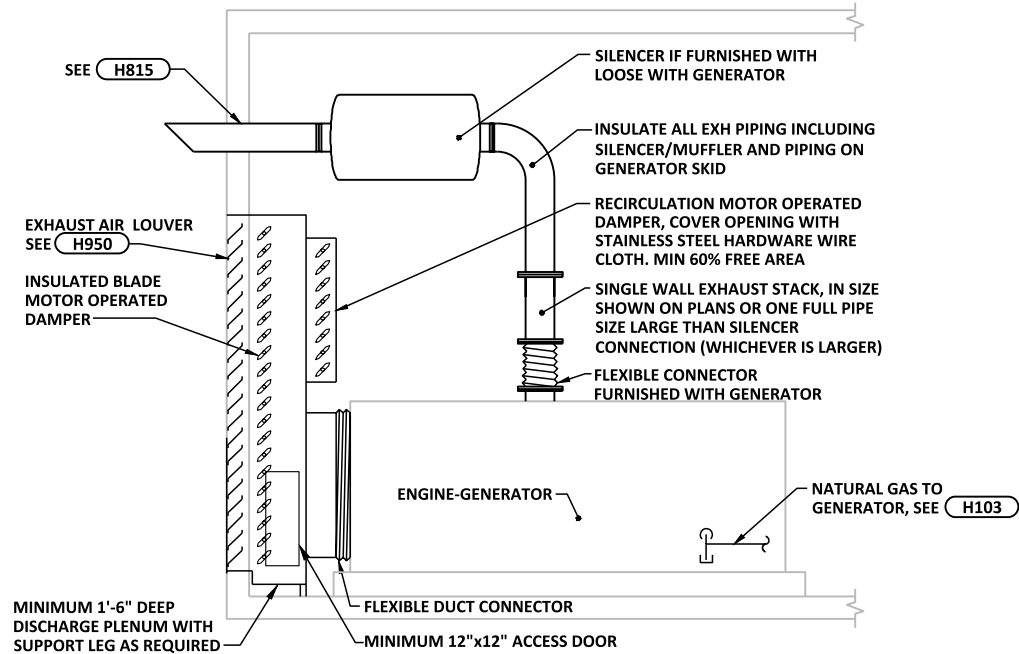
NTS



NOTES:
1. VERIFY EXHAUST DIAMETER WITH EQUIP. MANUFACTURER

TYPICAL EXHAUST PIPE DETAIL H815

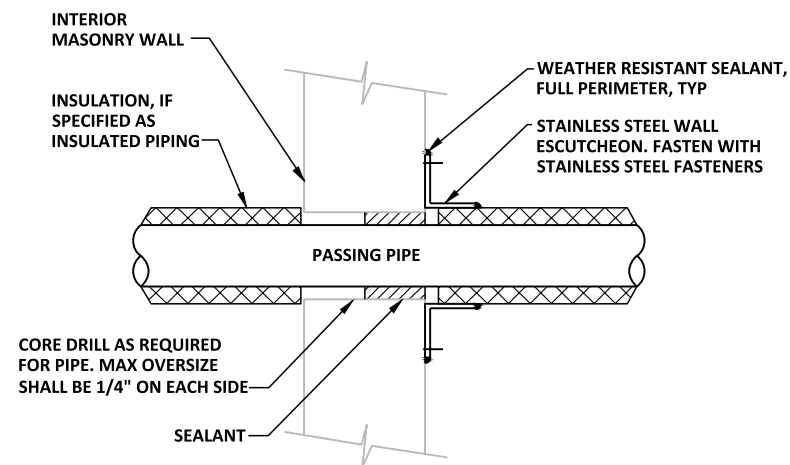
NTS



NOTE: GENERATOR PIPING AND SILENCER INSTALLATION VARIES BETWEEN THE SPECIFIED GENERATORS. CONTRACTOR SHALL INCLUDE ALL WORK AND MATERIALS REQUIRED TO PROVIDE A COMPLETE INSTALLATION REGARDLESS OF WHICH EXHAUST COMPONENTS ARE FURNISHED LOOSE BY THE GENERATOR MANUFACTURER.

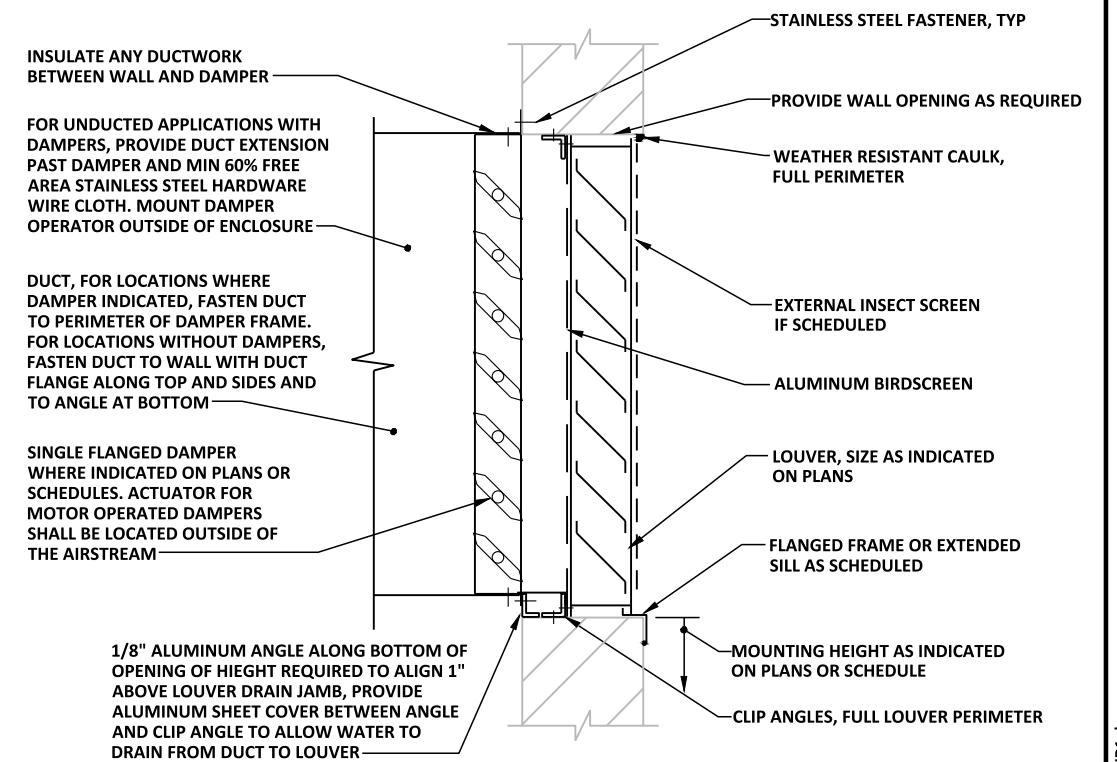
GENERATOR PIPING DETAIL H855

NTS



PIPE WALL PENETRATION DETAIL H945

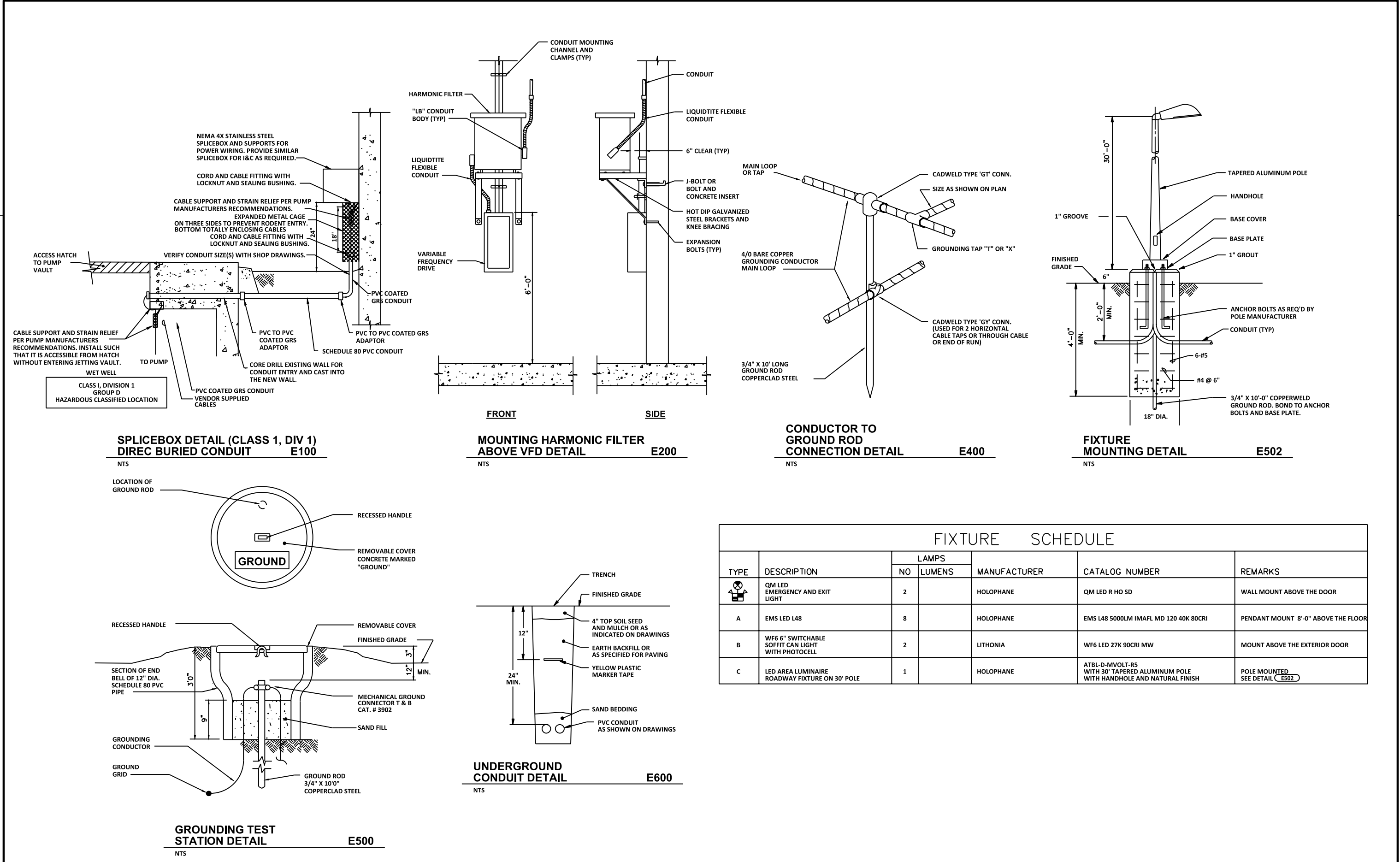
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NOTE: ALL FASTENERS SHALL BE OF STAINLESS STEEL CONSTRUCTION

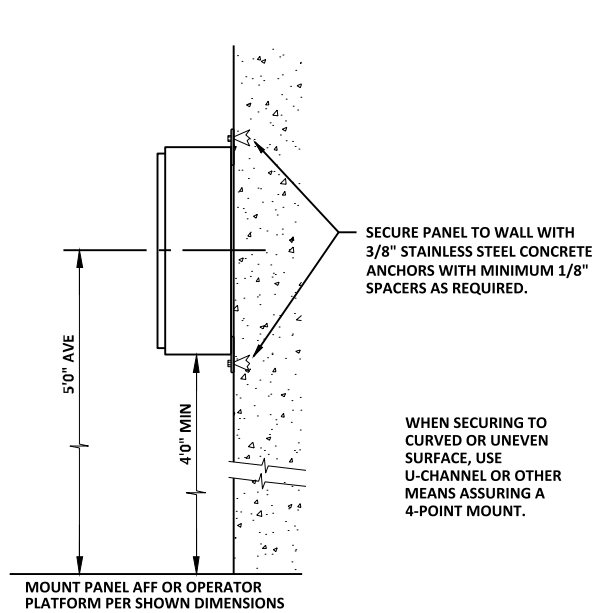
TYPICAL LOUVER DETAIL H950

NTS

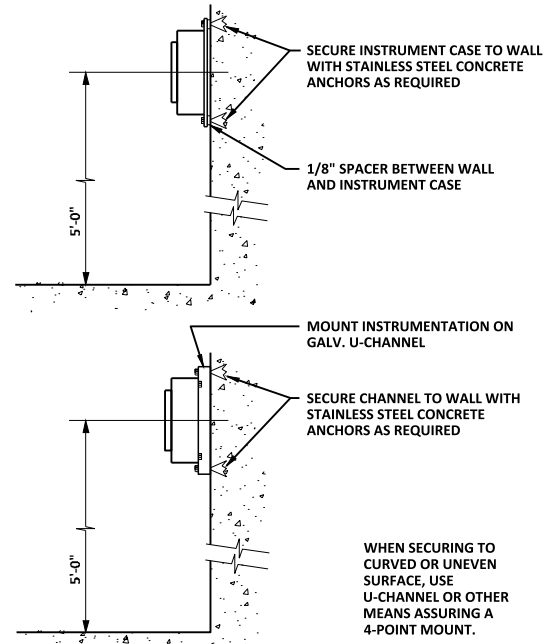


FIXTURE SCHEDULE						
TYPE	DESCRIPTION	LAMPS		MANUFACTURER	CATALOG NUMBER	REMARKS
		NO	LUMENS			
⊗	QM LED EMERGENCY AND EXIT LIGHT	2		HOLOPHANE	QM LED R HO SD	WALL MOUNT ABOVE THE DOOR
A	EMS LED L48	8		HOLOPHANE	EMS L48 5000LM IMAFL MD 120 40K 80CRI	PENDANT MOUNT 8'-0" ABOVE THE FLOOR
B	WF6 6" SWITCHABLE SOFFIT CAN LIGHT WITH PHOTOCELL	2		LITHONIA	WF6 LED 27K 90CRI MW	MOUNT ABOVE THE EXTERIOR DOOR
C	LED AREA LUMINAIRE ROADWAY FIXTURE ON 30' POLE	1		HOLOPHANE	ATBL-D-MVOLT-R5 WITH 30' TAPERED ALUMINUM POLE WITH HANDHOLE AND NATURAL FINISH	POLE MOUNTED SEE DETAIL E502

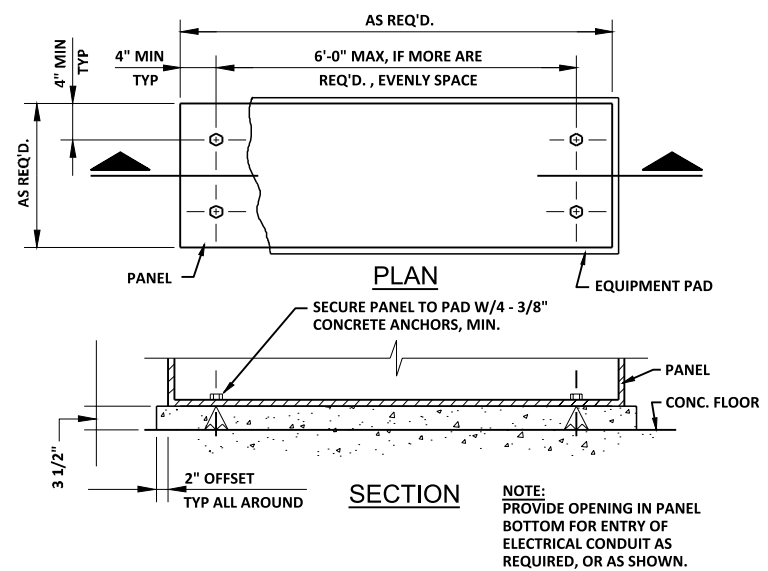
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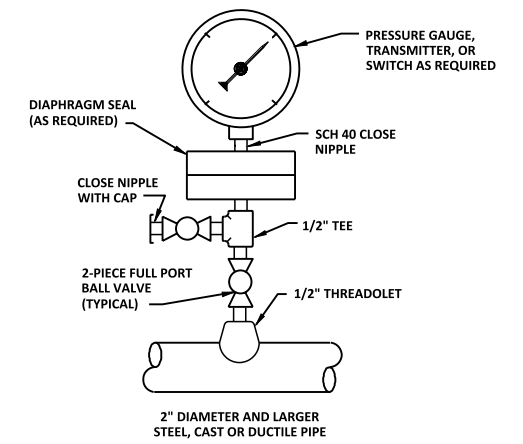
WALL MOUNT CONTROL PANEL N170
NTS



WALL MOUNT SMALL CASE INSTRUMENTATION N171
NTS



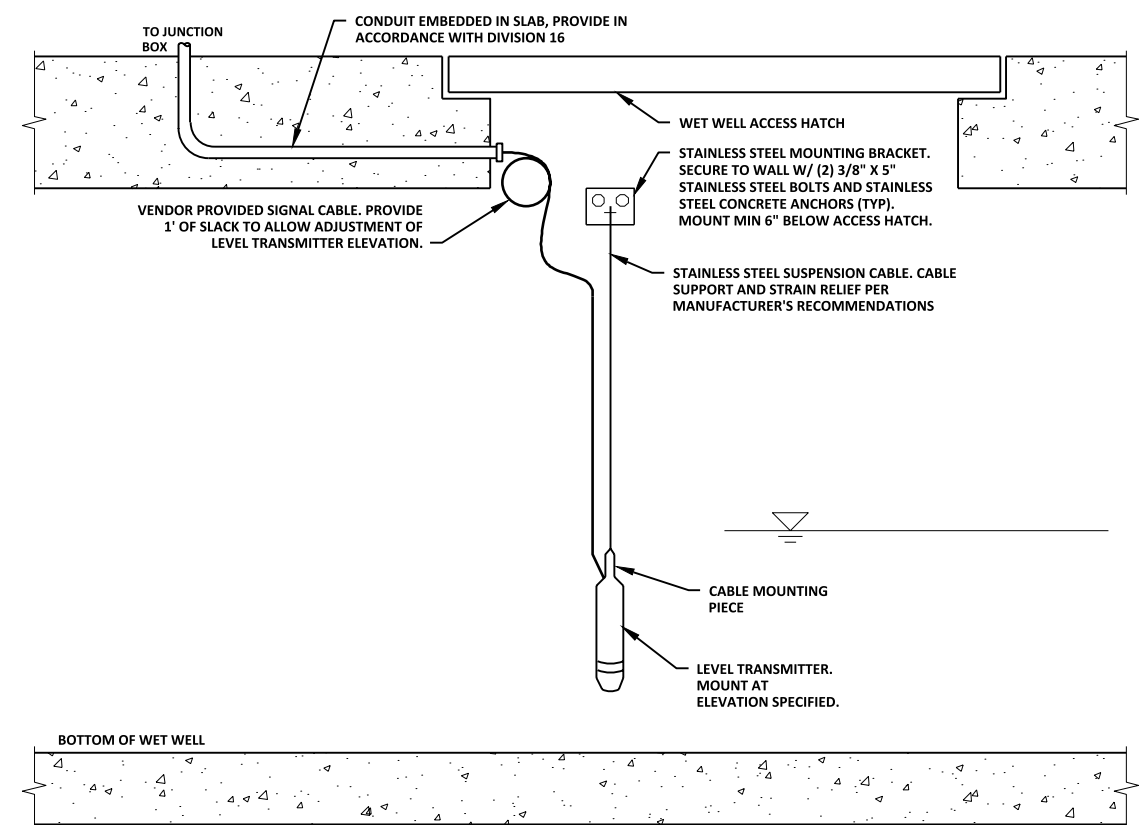
FREE STANDING CONTROL PANEL N180
NTS



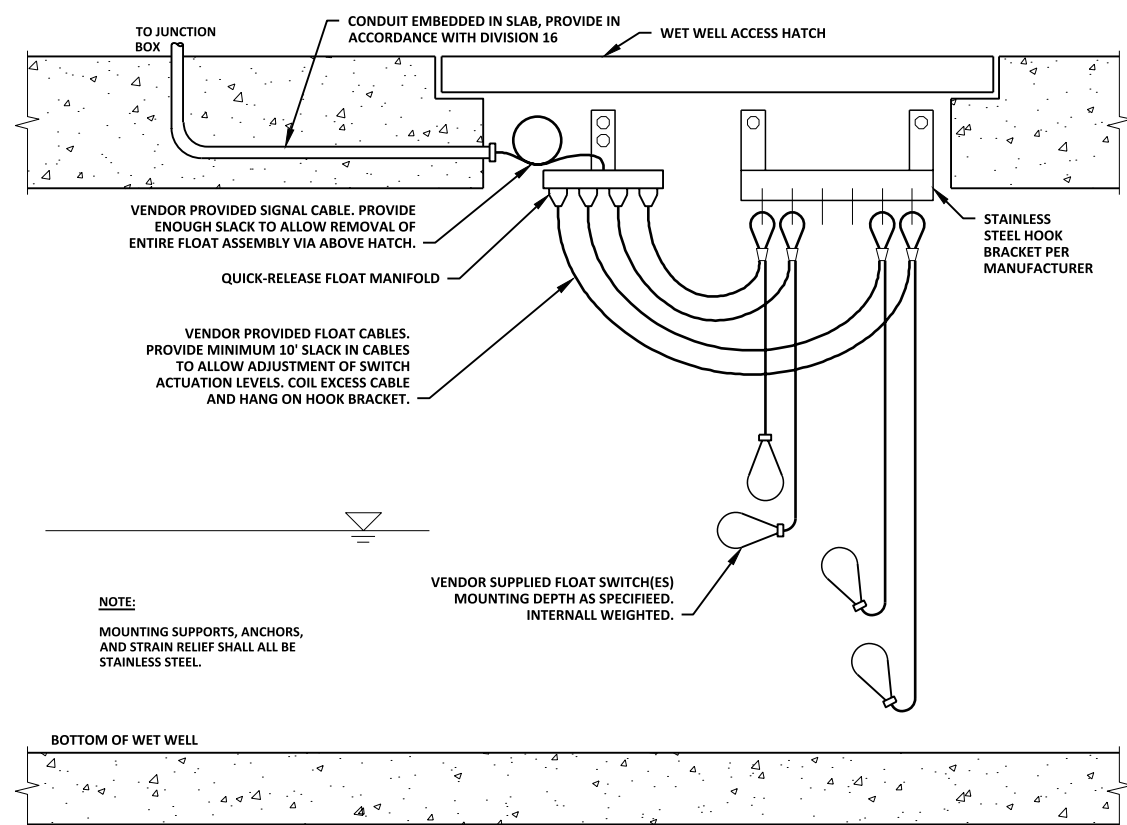
PRESSURE ELEMENTS PIPE MOUNTED - W OR WO DIAPHRAGM SEAL N590
NTS

NOTES:

- FITTING MATERIAL SHALL BE COMPATIBLE WITH MAIN PROCESS PIPE MATERIAL. ALL REMAINING FITTINGS TO BE 316 STAINLESS STEEL.
- 1/2" PIPE SHALL NOT BE REDUCED PRIOR TO FLUSHING TEE OR ISOLATION VALVE



SUBMERSIBLE LEVEL TRANSMITTER N266
NTS



BALL FLOATS CABLE SUSPENSION WITH HATCH ACCESS N269
NTS