

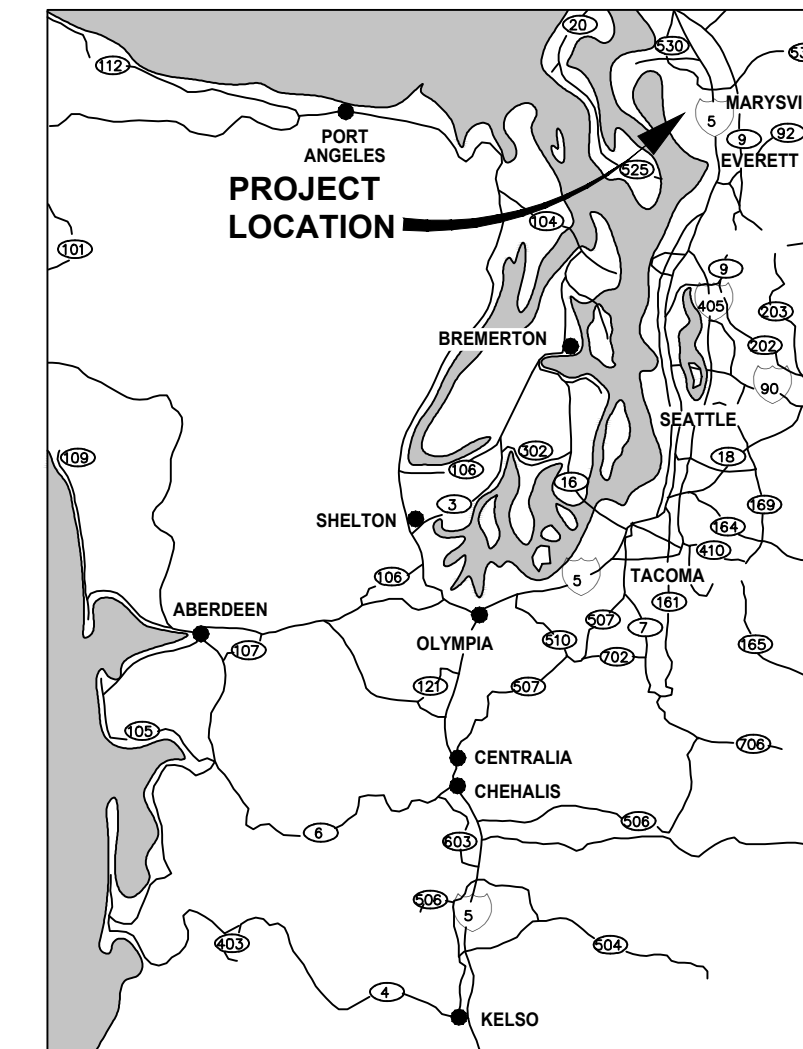


Exhibit D.2

100% DESIGN SUBMITTAL

C	1		2		3		4		5				
	VALVES		GENERAL SYMBOLOGY		REFERENCE SYMBOLS		BURIED PIPING (SINGLE-LINE)						
	HAND / MANUAL OPERATOR (ALSO SHOWN AS NO OPERATOR) AIR VACUUM, AIR RELEASE, OR AIR VACUUM AND AIR RELEASE ASSEMBLY BALL VALVE BUTTERFLY VALVE CHECK VALVE		NEW CONSTRUCTION EXISTING (SCREENED) FUTURE (PHANTOM) EXISTING TO BE REMOVED OR DEMOLISHED NORTH ARROW BM-2 BENCHMARK		SECTION IDENTIFICATION DETAIL IDENTIFICATION STANDARD DETAIL IDENTIFICATION INTERIOR ELEVATION IDENTIFICATION EXTERIOR ELEVATION IDENTIFICATION EQUIPMENT IDENTIFICATION		BURIED POWER WELL WATER SURFACE WATER DRAIN REUSE WATER CLEANING WATER DOMESTIC WATER (CHLORINATED) SANITARY SEWER						
BY:	GATES		MATERIAL SYMBOLOGY				MISCELLANEOUS						
	SLIDE GATE (CAST IRON, ALUMINUM OR STAINLESS STEEL) AC ASPHALT APPROX APPROXIMATE AVAR AIR VACUUM/AIR RELEASE BFV BUTTERFLY VALVE BLDG BUILDING BM BENCHMARK BOL BOLLARD CL CENTERLINE CMP CORRUGATED METAL PIPE CONC CONCRETE COTG CLEANOUT TO GRADE CP CONTROL POINT CFS CUBIC FEET PER SECOND CV CHECK VALVE CHWS CHILLED WATER SUPPLY DI DUCTILE IRON DF DOUBLE FLANGE/ DRUM FILTER DIA DIAMETER DP DIFFERENTIAL PRESSURE DR DRAIN EA EACH ERT EARLY REARING TROUGH EW EACH WAY EHH ELECTRICAL HAND HOLE EG EXISTING GROUND EL ELEVATION FF FINISH FLOOR FL FLANGE FLEX FLEXIBLE FM FLOW METER FRP FIBERGLASS REINFORCED PLASTIC FT FEET FH FIRE HYDRANT FS FORMALIN SUPPLY GB GRADE BREAK GPM GALLON PER MINUTE GS GAS SERVICE H HEIGHT HB HOSE BIB HDPE HIGH DENSITY POLYETHYLENE HWL HIGH WATER LEVEL HWY HIGHWAY HP HORSEPOWER ID INSIDE DIAMETER IE INVERT ELEVATION INV INVERT LHO LOW HEAD OXYGENATOR LIT LEVEL INDICATING TRANSMITTER LOX LIQUID OXYGEN MIN MINIMUM MJ MECHANICAL JOINT MP MEDIUM PRESSURE NIC NOT IN CONTACT NWL NORMAL WATER LEVEL NO NUMBER OD OUTSIDE DIAMETER OF OVERFLOW OP OVERHEAD POWER P PUMP PC POINT OF CURVATURE PCA PACKED COLUMN AERATOR PI POINT OF INFLECTION PP POWER POLE PT POINT OF TANGENCY PVC POLYVINYL CHLORIDE PIPE PVMT PAVEMENT PW POTABLE WATER PIPELINE R REUSE RD ROAD S SLOPE SF SCREEN FILTER SQ SQUARE STA STATION STRUC STRUCTURE SW SURFACE WATER TC TOP OF CURB TDH TOTAL DISCHARGE HEAD TOC TOP OF CONCRETE TOG TOP OF GRATING T&B TOP AND BOTTOM TW TOP OF WALL TYP TYPICAL UTIL UTILITY μ MICRON UV ULTRAVIOLET UW UTILITY WATER VERT VERTICAL VLT VAULT WM WATER METER W WITH W WIDTH WW WELL WATER PIPELINE		CONCRETE (PLAN AND SECTION) GROUT OR SAND (PLAN AND SECTION) STEEL/METAL/FRP (SMALL SCALE SECTION) GRATING (PLAN) GRATING OR SOLID FRP GRATING (SECTION) RAILING (PLAN) LUMBER/FRAMING - NOMINAL FINISHED GRADE GRAVEL/DRAINROCK/AGGREGATE BASE, NEW GRAVEL SURFACING, EXISTING ASPHALT SURFACING, EXISTING ASPHALT SURFACING, NEW LIGHT FIXTURE MATURE TREE CATCH BASIN ELECTRICAL/UTILITY VAULT EDGE OF PAVING CHAIN LINK FENCE DRAINAGE SWALE						CONTROL SYMBOLS				
							MATCHLINE STA 10+00 MATCHLINE SHEET C-112 ARCHITECTURAL UNIT SCALE BAR CIVIL UNIT SCALE BAR CIVIL SCALE BAR WHERE THERE ARE HORIZONTAL AND VERTICAL SCALES		BENCH MARK SITE COORDINATES (SEE TABLE ON DRAWINGS) SITE COORDINATES MONUMENT HORIZONTAL CONTROL POINT VERTICAL CONTROL POINT HORZ AND VERT CONTROL POINT FINISHED ELEVATION EXISTING ELEVATION DELTA				
A													

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Revision	By	Appd	YYYY.MM.DD

FINAL DESIGN	MCM	DEW	2026.02.26
Issued	By	Appd	YYYY.MM.DD

Permit/Seal

Digitally signed by David Whitbeck
Date: 2026.04.09 10:59:31-07'00'

WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

1471 Shoreline Dr. Ste 100, Boise, ID 83702 | (208) 342-4214 | mcmillen.com

Client/Project Logo

Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267 G-3

MCM Dwn.

MDV Dsgn.

DEW Chkd.

2026.02.26

YYYY.MM.DD

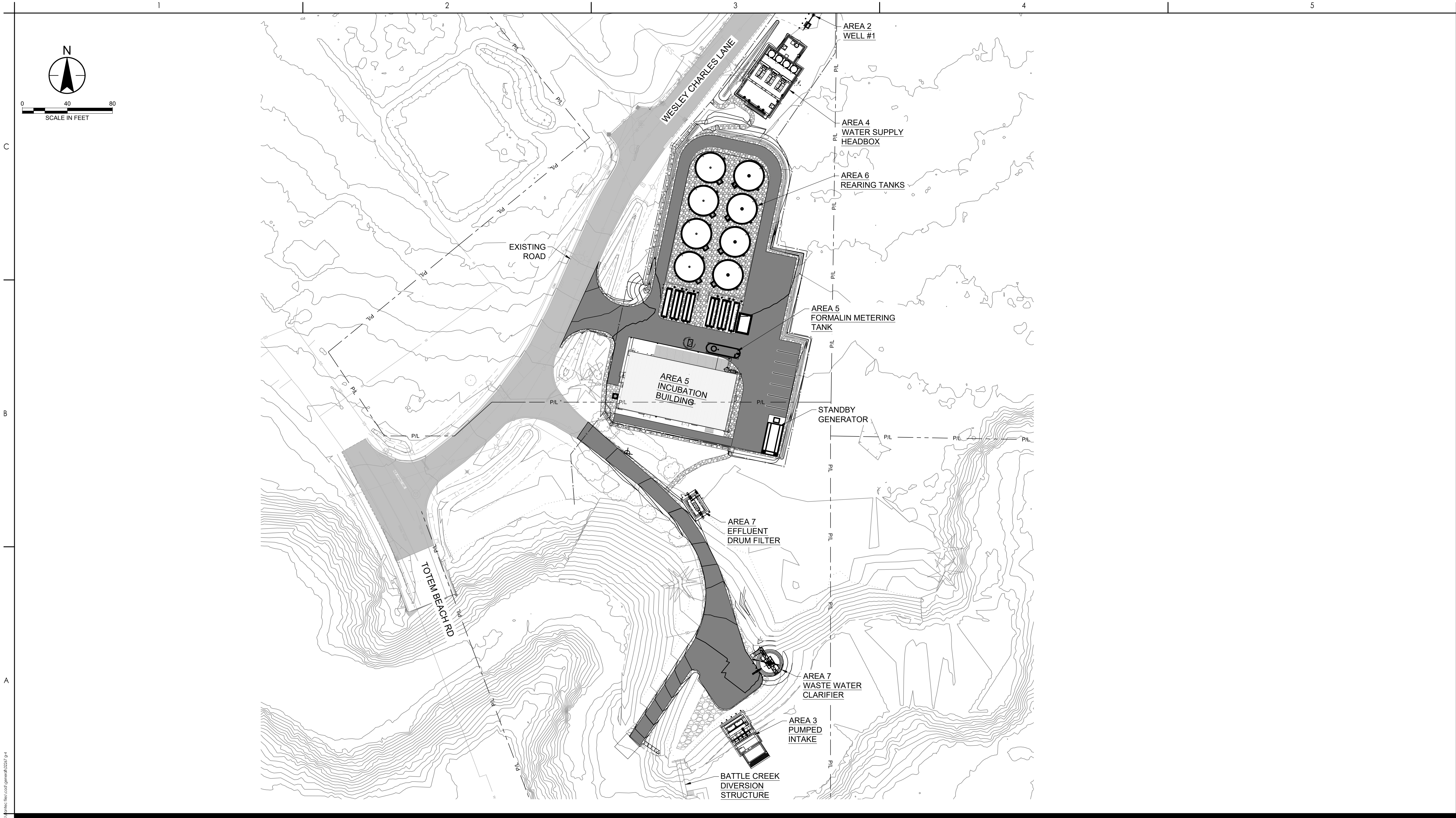
Title
SYMBOLS AND ABBREVIATIONS

Project No.
25-128

Scale
NO SCALE

Revision

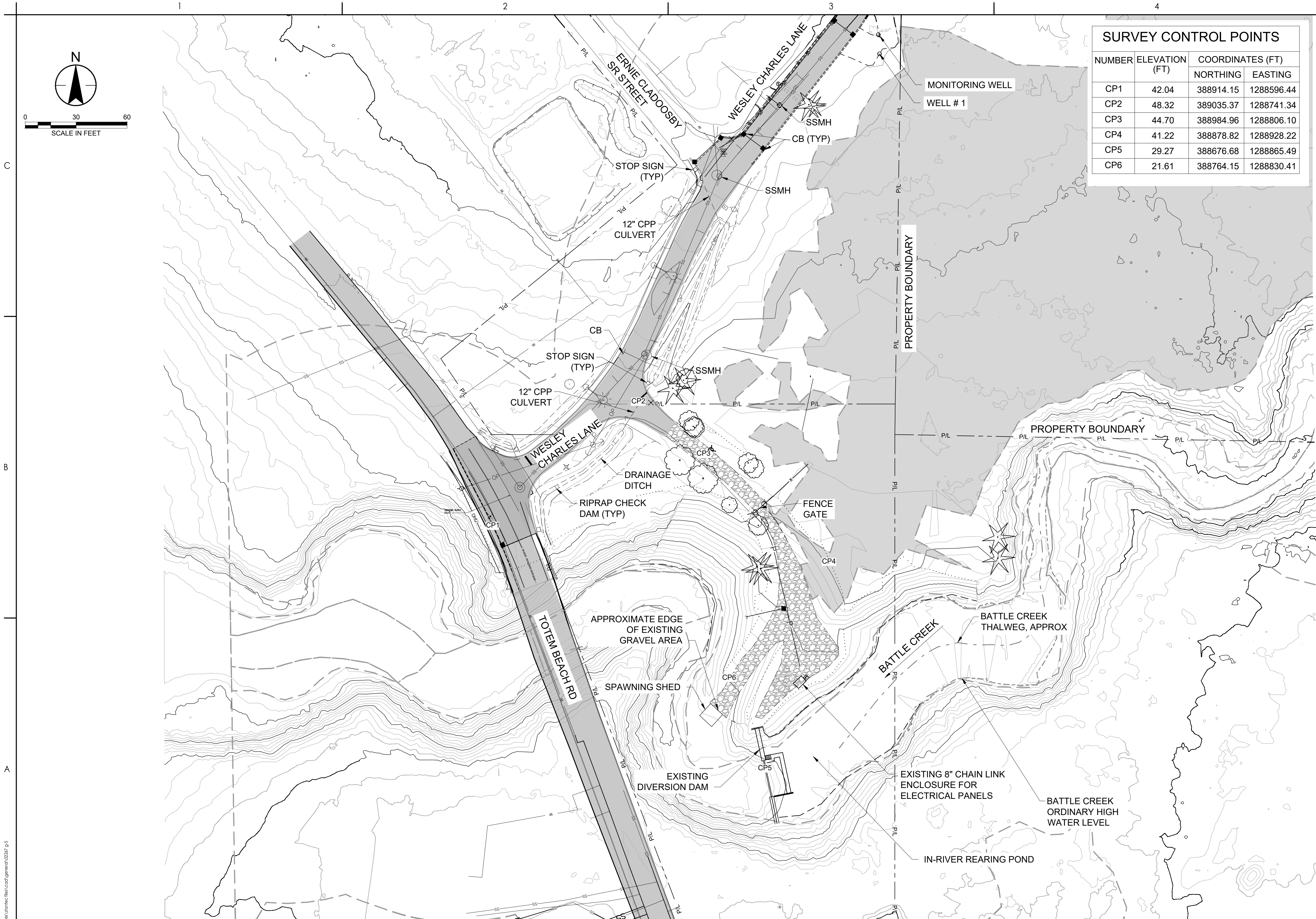
Drawing No.
G-3



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ORIGINAL SHEET - ANSI D



SURVEY CONTROL POINTS			
NUMBER	ELEVATION (FT)	COORDINATES (FT)	
		NORTHING	EASTING
CP1	42.04	388914.15	1288596.44
CP2	48.32	389035.37	1288741.34
CP3	44.70	388984.96	1288806.10
CP4	41.22	388878.82	1288928.22
CP5	29.27	388676.68	1288865.49
CP6	21.61	388764.15	1288830.41

- GENERAL SHEET NOTES**
- EXISTING TOPOGRAPHIC AND UTILITY MAPPING SHOWN HEREIN WAS PREPARED BY STANTEC CONSULTING SERVICES INC, FOR THE PURPOSE OF THE BATTLE CREEK HATCHERY FACILITY DESIGN AND IS NOT INTENDED FOR USE BY ANY OTHER ENTITY FOR ANY OTHER PURPOSE. FIELD SURVEY WAS PERFORMED IN MARCH, 2020 UTILIZING A LEICA TS-15 SERIES ROBOTIC TOTAL STATION AND CARLSON SURVEYOR2/SURVE CE DATA COLLECTOR MAINTAINED IN ADJUSTMENT TO MANUFACTURERS SPECIFICATIONS. THE SURVEY WAS UPDATED FOR WESLEY CHARLES LANE IMPROVEMENTS BY TRULAND SURVEY LLC IN 2022.
 - SURVEY CONTROL:**
HORIZONTAL: LOCAL SITE DATUM (APPROXIMATES GIS IN AREA). HORIZONTAL CONTROL WAS DERIVED VIA GROUND TRAVERSE, HOLDING POSITION OF MONUMENT FOUND AT EAST QUARTER CORNER OF SECTION 27, T30N, R4E (#10511), AT POSITION SHOWN ON COUNTY GIS AS N = 388994.51 E= 1288993.72 , A PUNCH IN BRASS DISK IN PIPE STAMPED "S27- S26 LS 18086" SURFACE MONUMENT SHOWN ON SITE, AND A BASIS OF BEARINGS OF N 01°13'06" E ALONG EAST SECTION LINE PER RECORD OF SURVEY (R1), LOCALLY REFERENCED AS A LINE BETWEEN SAID QUARTER CORNER AND #10502, A BRASS DISK IN CONC MONUMENT IN CASE AT THE NORTHWESTERLY MOST INTERSECTION OF LLOYD HATCH SR. RD. AND ALPHONSUS BOB LOOP ROAD, AS SHOWN HEREON.
VERTICAL: NAVD '88 DERIVED VIA TRIG LEVELING HOLDING FOUND SNOHOMISH COUNTY BM "TULALIP" AS 35.85 FEET NAVD '88 PER GSOW DATASHEET.
 - SITE BENCHMARK: STANTEC CONTROL POINT #10002 SHOWN AND DESCRIBED HEREIN - ELEVATION = 42.04 NAVD '88.
 - TOPOGRAPHIC FEATURES, ELEVATIONS, AND CONTOURS DERIVED VIA DIRECT GROUND SURVEY. CONTOUR INTERVAL IS 2 FEET MEETING OR EXCEEDING NATIONAL MAP ACCURACY STANDARDS (ONE-HALF CONTOUR INTERVAL AT 90% CONFIDENCE LEVEL) UNLESS NOTED OTHERWISE HEREON.
 - RIGHT-OF-WAY AND PARCEL LINES PER RECORD INFORMATION INCLUDING GIS AND/OR CALCULATED FROM REFERENCED PLAT/RECORD INFORMATION. FIT AS POSSIBLE TO LOCAL MONUMENTATION FOUND. THIS DOES NOT REPRESENT A BOUNDARY SURVEY AND SHOULD NOT BE RELIED UPON AS SUCH.
 - UTILITY INFORMATION HEREIN COMPILED FROM MEASUREMENTS MADE TO SURFACE-OBSERVED ABOVE-GRADE FEATURES, AND MEASUREMENTS MADE TO UTILITY LOCATOR MARKINGS FOUND IN FIELD AT TIME OF SURVEY. LOCATES ARRANGED AND PERFORMED BY OTHERS. SURVEYOR DID NOT CALL FOR LOCATES AND NO POTHOLING WAS PERFORMED. UTILITY INFORMATION SHOWN IS APPROXIMATE AND FOR THE DEVELOPMENT OF DESIGN DRAWINGS ONLY AND SHALL NOT BE RELIED UPON FOR CONSTRUCTION. SURVEYOR MAKES NO WARRANTY AS TO THE COMPLETENESS OR ACCURACY OF EXISTING UTILITIES SHOWN ON THIS MAP.

LEGEND	
	EXISTING GRAVEL SURFACING
	EXISTING ASPHALT SURFACING
	STORM DRAIN
	SANITARY SEWER
	POWER CABLE
	WATER SURFACE
	WETLAND
	CHAIN LINK FENCE
	EDGE OF PAVEMENT
	OVERHEAD UTILITY
	POWER POLE

Revision

By

Appd

YYYY.MM.DD

FINAL DESIGN

Issued

MCM

DEW

2026.02.26

By

Appd

YYYY.MM.DD

Permit/Seal

Digitally signed by David Whitbeck
Date: 2026.04.09 10:59:31-07'00'

WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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Client/Project Logo

Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267 G-5

MCM

MDV

DEW

2026.02.26

Dwn.

Dsgn.

Chkd.

YYYY.MM.DD

Title

EXISTING SITE PLAN

Project No.

25-128

Revision

Scale

1" = 50'

Drawing No.

G-5

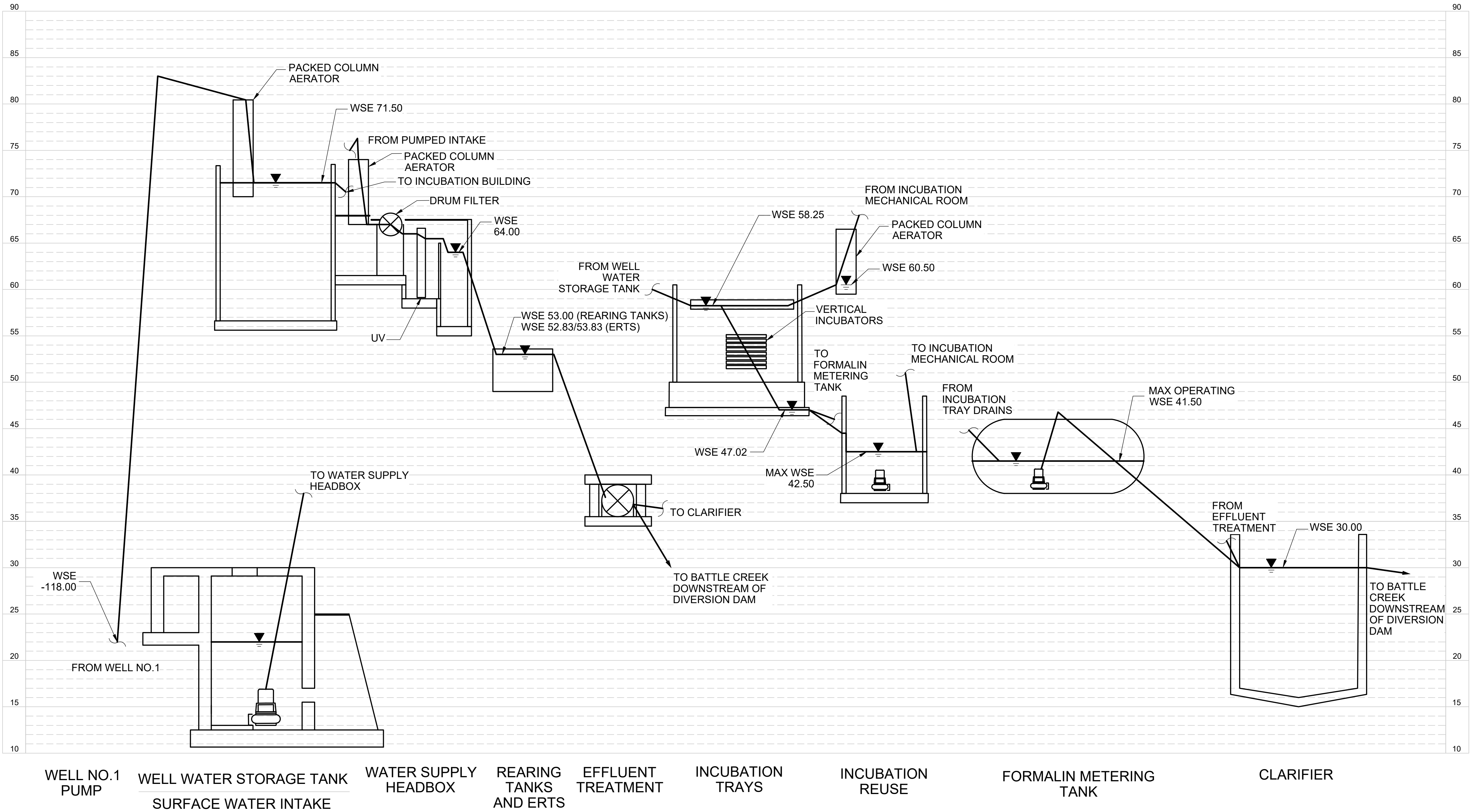
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Exhibit 10-1 02267 G-5 02/26/2026

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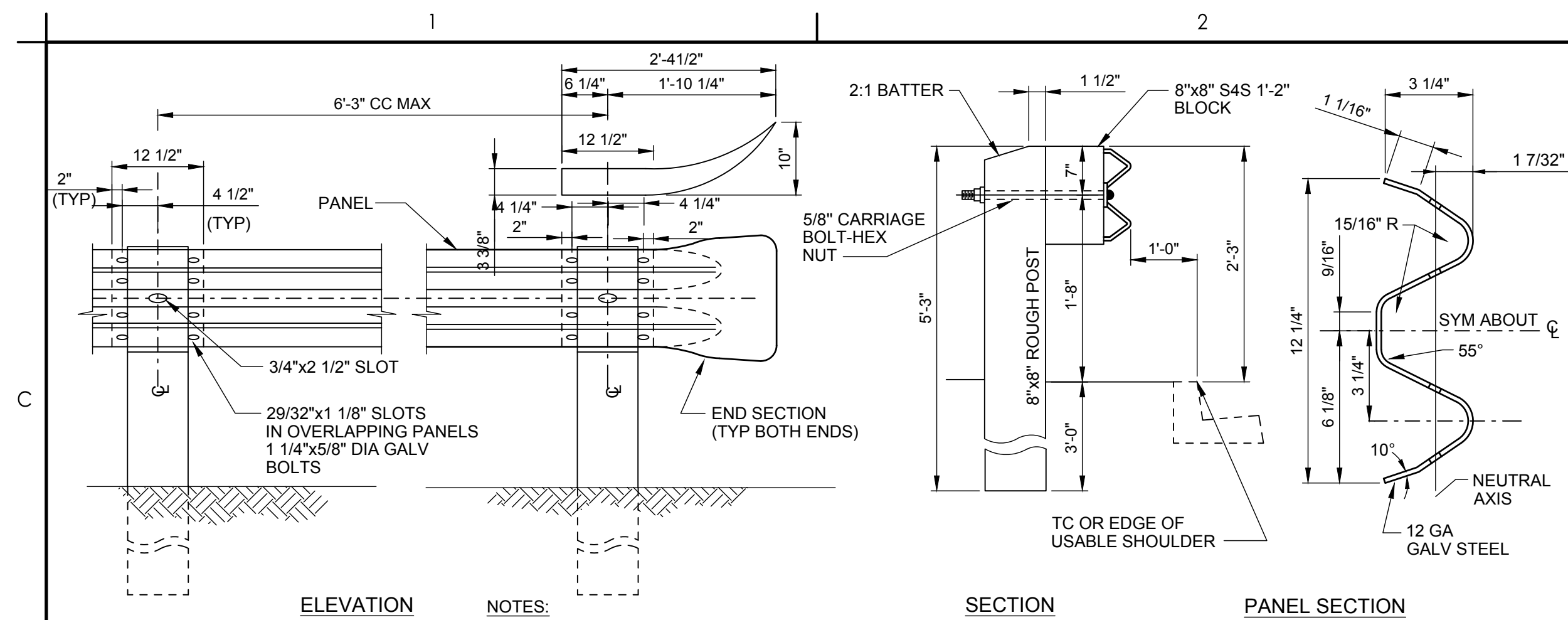
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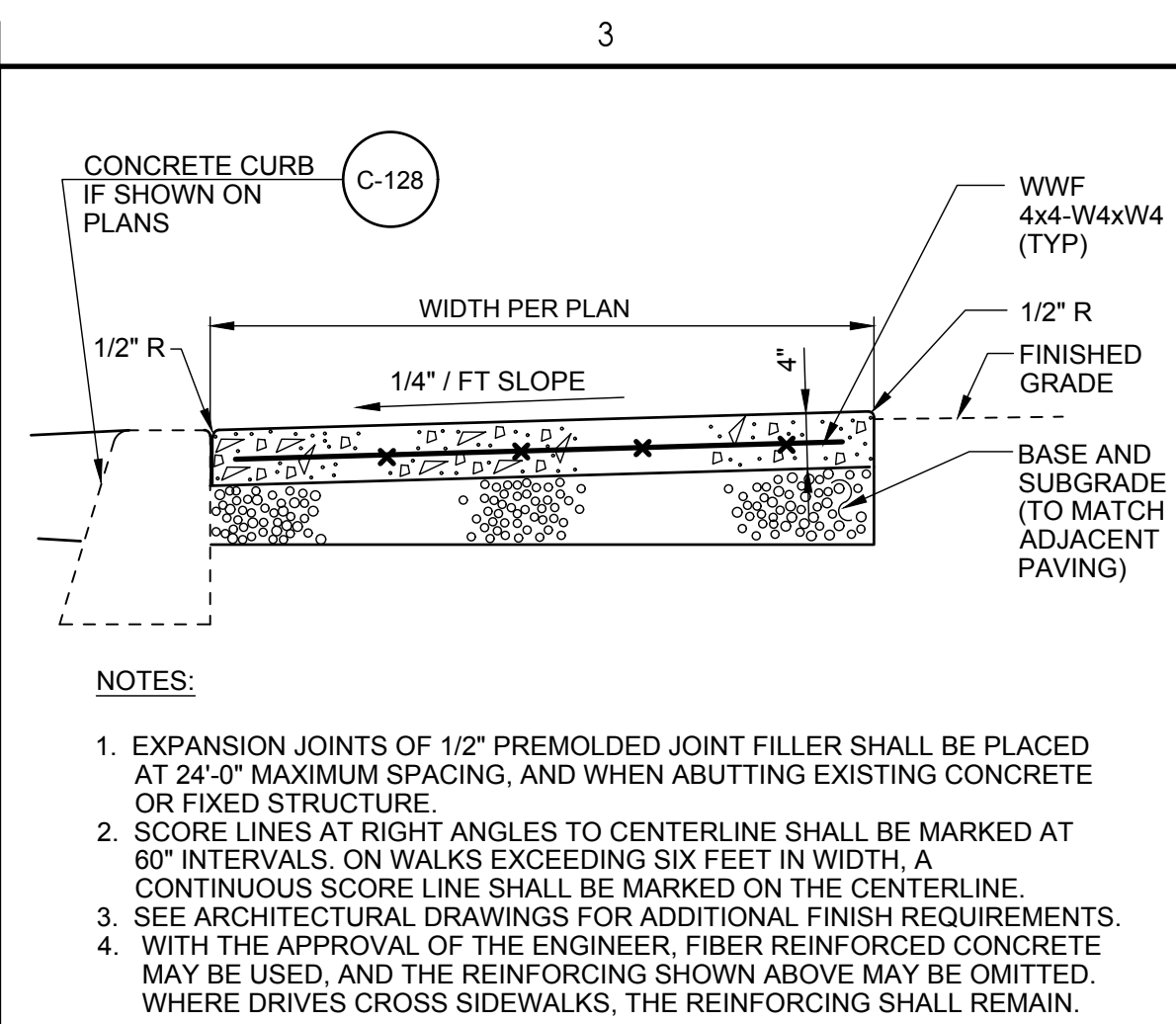


Revision <table><tr><td></td><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>		By	Appd	YYYY.MM.DD																					FINAL DESIGN <table><tr><td>MCM</td><td>DEW</td><td>2026.02.26</td></tr><tr><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr></table> Issued	MCM	DEW	2026.02.26	By	Appd	YYYY.MM.DD	Permit/Seal	WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	1471 Shoreline Dr. Ste 100, Bouse, ID 83702 (208) 342-4214 mcmillen.com	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: 02267 G-7 <table><tr><td>MCM</td><td>MDV</td><td>DEW</td><td>2026.02.26</td></tr><tr><td>Dwn.</td><td>Dsgn.</td><td>Chkd.</td><td>YYYY.MM.DD</td></tr></table>	MCM	MDV	DEW	2026.02.26	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD	Title HYDRAULIC PROFILES Project No. 25-128 Revision Scale NO SCALE Drawing No. G-7
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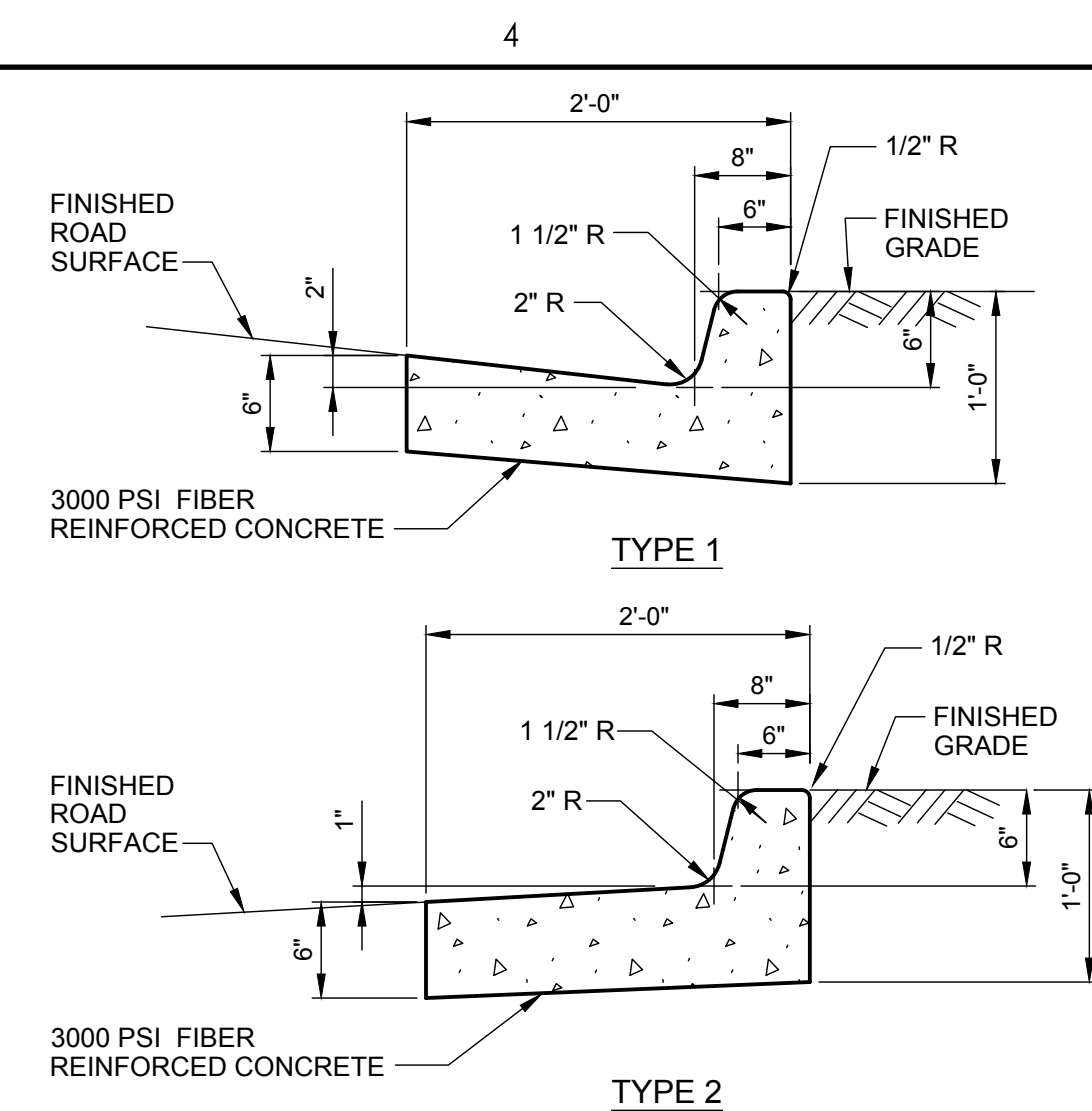
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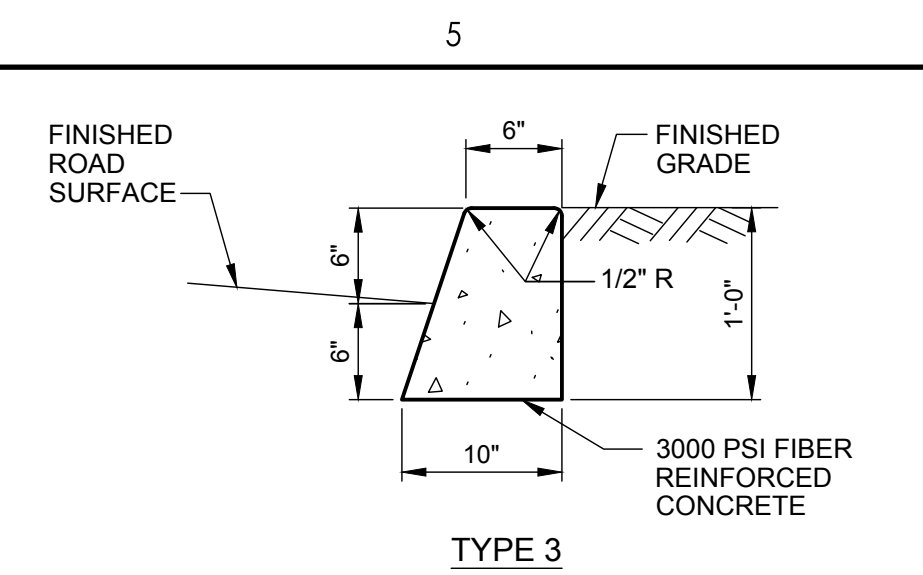
C-119 GUARD RAIL
REV 010119



C-120 CONCRETE SIDEWALK
REV 010119

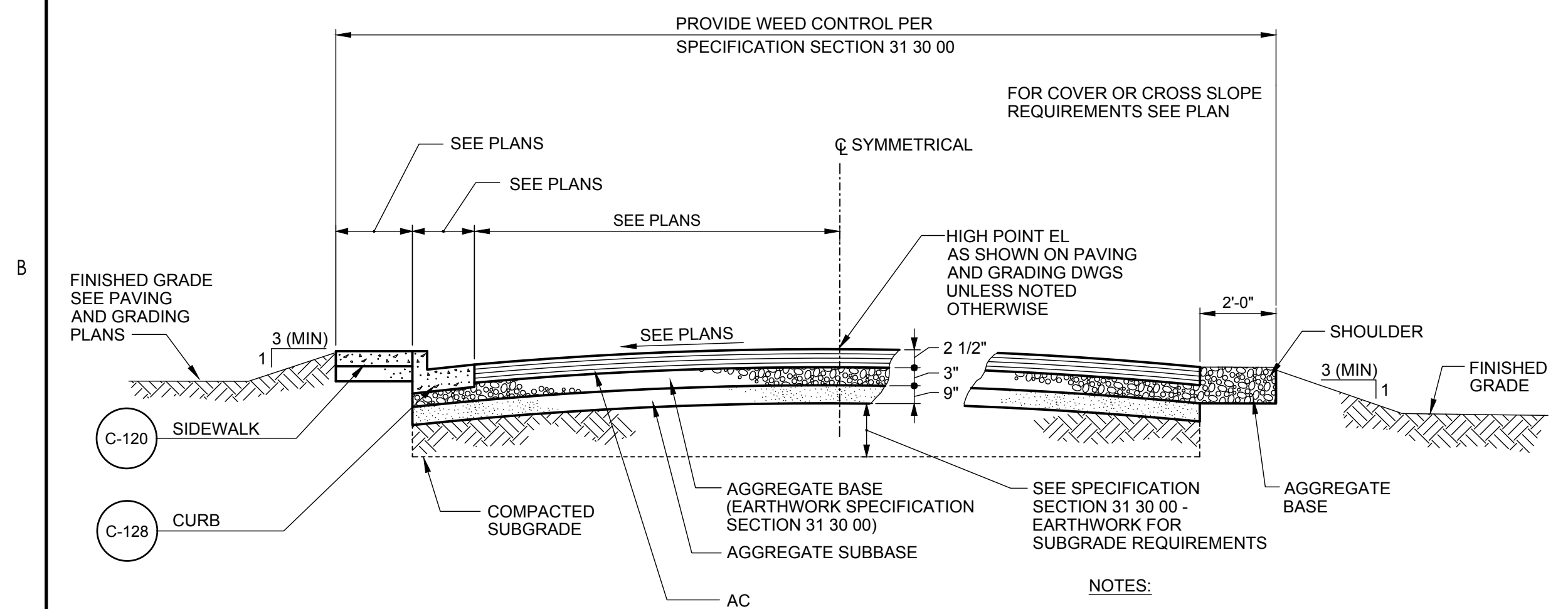


C-128 CURB AND GUTTER
TYPES 1, 2, AND 3
REV 010119

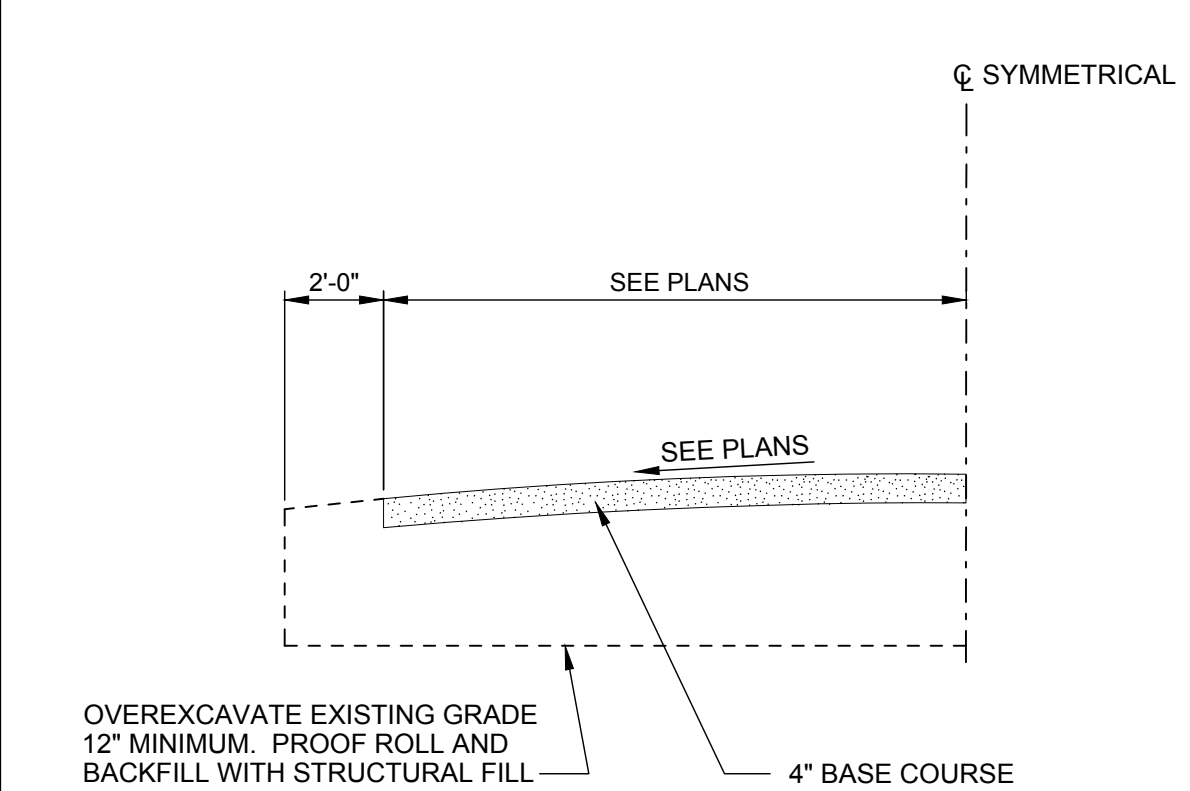


NOTES:

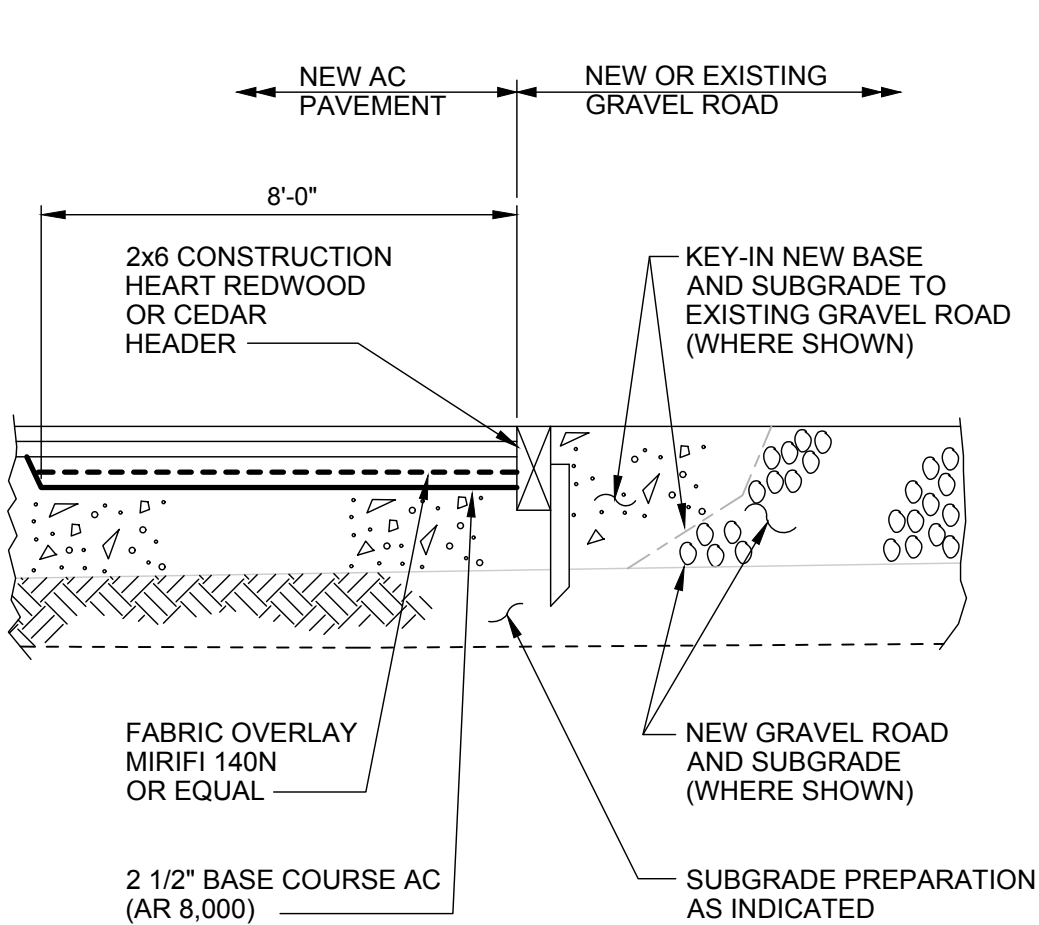
1. EXPANSION JOINTS OF 1/2" PREMOLED JOINT FILLER SHALL BE PLACED AT 50'-0" SPACING AND WHERE CURB AND GUTTER BUTTS OTHER CONCRETE STRUCTURES.
2. ALL EXPOSED SURFACES OF CURB SHALL BE GIVEN A MORTAR BRUSH COAT CONSISTING OF ONE PART PORTLAND CEMENT, AND THEN TROWELED SMOOTH.
3. SCORE AT RIGHT ANGLES AT 10'-0" OC.



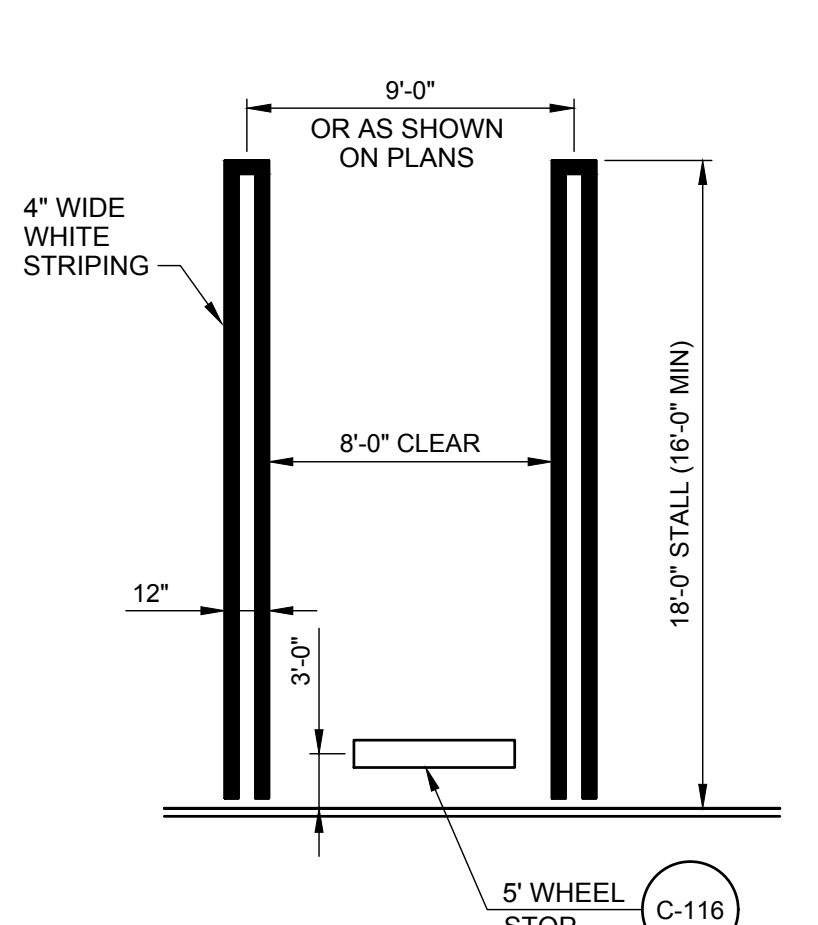
C-130 AC ROAD SECTION
REV 010119



C-132 GRAVEL ROAD SECTION
REV 010119



C-133 AC PAVEMENT GRAVEL TRANSITION
REV 010119



C-170 PARKING STALL
REV 010119

		Permit/Seal			Client/Project Logo	Client/Project TULALIP TRIBES	Title CIVIL STANDARD DETAILS - 2
			 WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE			BATTLE CREEK HATCHERY	
0		FINAL DESIGN	MCM	DEW		File Name: 02267 GC-3	Project No. 25-128
Revision	By Appd YYYY.MM.DD	Issued By Appd YYYY.MM.DD				MCM Dwn. MDV Dsgn. DEW Chkd. 2026.02.26 YYYY.MM.DD	Scale Drawing No.
							GC-3



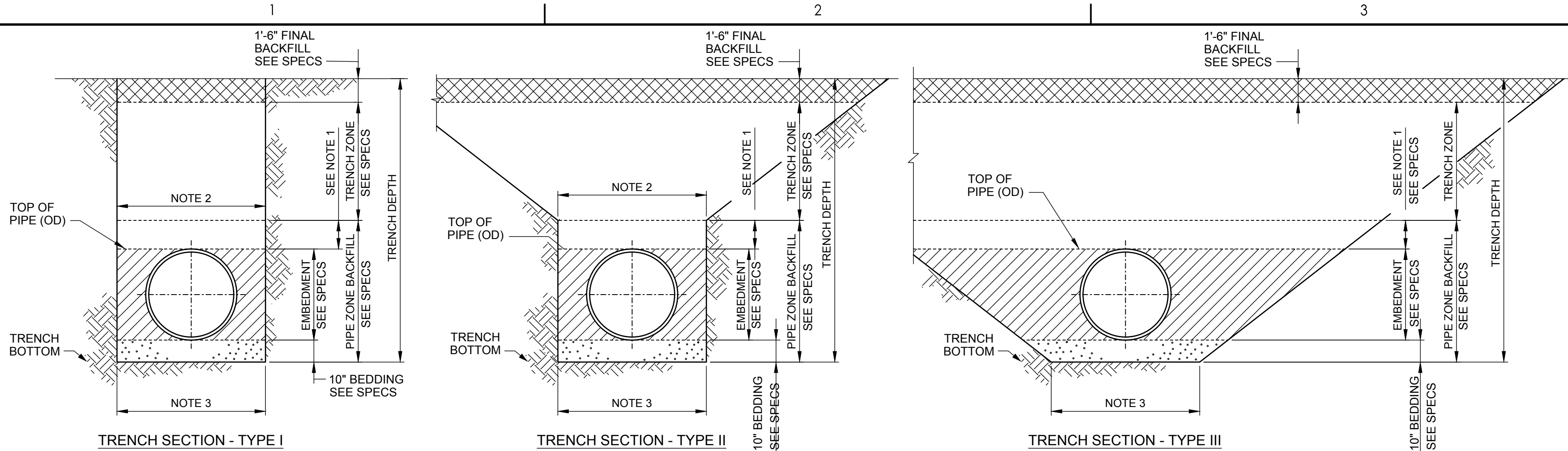
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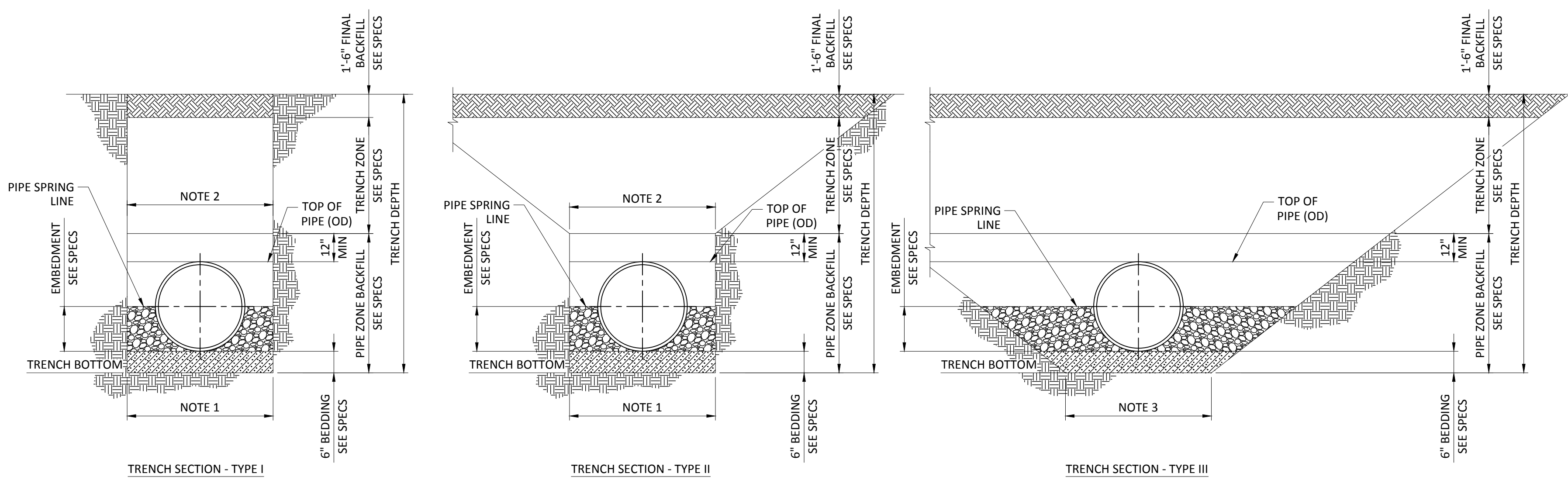
C-601 TRENCH SECTION FLEXIBLE PIPE
REV 010119

- A. FLEXIBLE PIPE REFERS TO ALL STEEL, DUCTILE-IRON, AND PLASTIC PIPES.
- B. TYPICAL TRENCH SECTIONS (I, II AND III) ARE TO BE USED ONLY WHERE STABLE, COMPACT SOIL CONDITIONS EXIST. IF BOULDERS OR LARGE OBSTRUCTIONS ARE ENCOUNTERED, TRENCH SECTIONS MAY BE DEEPER OR WIDER THAN SHOWN. THE ENGINEER SHALL BE ADVISED SHOULD THIS OCCUR.
- C. THE NEED FOR PROTECTIVE SYSTEMS AND EXCAVATION SLOPES SHALL BE DETERMINED CONSIDERING APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS, AND GEOTECHNICAL CONSULTANTS' RECOMMENDATIONS.
- D. PROTECTIVE SYSTEMS SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS.
- E. SUPPORTING DOCUMENTATION SHALL BE SUBMITTED TO THE ENGINEER REGARDING PIPE DESIGN AND COMPLIANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS.
- F. UNSUPPORTED VERTICAL AND/OR SLOPING TRENCH WALL SLOPES SHALL NOT BE STEEPER THAN ALLOWED BY APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS, UNLESS SUPPORTING DOCUMENTATION IS SUBMITTED, ACCORDING TO AFOREMENTIONED SAFETY STANDARDS.
- G. TRENCH SECTIONS OTHER THAN THE TYPICAL SECTIONS SHOWN MAY BE UTILIZED PROVIDED THEY COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS. DOCUMENTATION SUPPORTING THIS COMPLIANCE AND PIPE DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER.
- H. IF OVER-EXCAVATION DUE TO POOR FOUNDATION MATERIAL IS ORDERED BY THE ENGINEER, THE BACKFILL MATERIAL SHALL BE ACCORDING TO THE EARTHWORK SECTION OF THE SPECIFICATIONS ARTICLE ENTITLED, "FILL AND BACKFILL MATERIAL REQUIREMENTS."
- I. IF DURING CONSTRUCTION, THE WATER TABLE IS DISCOVERED TO BE ABOVE THE TRENCH BOTTOM, THE ENGINEER SHALL BE NOTIFIED, AND APPROPRIATE DEWATERING SHALL BE IMPLEMENTED TO LOWER THE WATER LEVEL BELOW THE TRENCH BOTTOM. THE BACKFILL MATERIAL SHALL BE ACCORDING TO THE EARTHWORK SECTIONS OF THE SPECIFICATIONS, OR AS ORDERED BY THE ENGINEER.

- A. RIGID PIPE REFERS TO ALL TYPES OF REINFORCED AND UN-REINFORCED CONCRETE PIPE AND VITRIFIED CLAY PIPE.
- B. TYPICAL TRENCH SECTIONS (I, II AND III) ARE TO BE USED ONLY WHERE STABLE, COMPACT SOIL CONDITIONS EXIST. IF BOULDERS OR LARGE OBSTRUCTIONS ARE ENCOUNTERED, TRENCH SECTIONS MAY BE DEEPER OR WIDER THAN SHOWN. THE ENGINEER SHALL BE ADVISED SHOULD THIS OCCUR.
- C. THE NEED FOR PROTECTIVE SYSTEMS, AND EXCAVATION SLOPES SHALL BE DETERMINED CONSIDERING APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS, AND GEOTECHNICAL CONSULTANTS' RECOMMENDATIONS.
- D. PROTECTIVE SYSTEMS SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS.
- E. SUPPORTING DOCUMENTATION SHALL BE SUBMITTED TO THE ENGINEER REGARDING PIPE DESIGN AND COMPLIANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS.
- F. UNSUPPORTED VERTICAL AND/OR SLOPING TRENCH WALL SLOPES SHALL NOT BE STEEPER THAN ALLOWED BY APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS, UNLESS SUPPORTING DOCUMENTATION IS SUBMITTED, ACCORDING TO AFOREMENTIONED SAFETY STANDARDS.
- G. TRENCH SECTIONS OTHER THAN THE TYPICAL SECTIONS SHOWN MAY BE UTILIZED PROVIDED THEY COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL (OSHA) SAFETY STANDARDS AND REGULATIONS. DOCUMENTATION SUPPORTING THIS COMPLIANCE AND PIPE DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER.
- H. IF OVER-EXCAVATION DUE TO POOR FOUNDATION MATERIAL IS ORDERED BY THE ENGINEER, THE BACKFILL MATERIAL SHALL BE ACCORDING TO THE EARTHWORK SECTION OF THE SPECIFICATIONS ARTICLE ENTITLED, "FILL AND BACKFILL MATERIAL REQUIREMENTS."
- I. IF DURING CONSTRUCTION, THE WATER TABLE IS DISCOVERED TO BE ABOVE THE TRENCH BOTTOM, THE ENGINEER SHALL BE NOTIFIED, AND APPROPRIATE DEWATERING SHALL BE IMPLEMENTED TO LOWER THE WATER LEVEL BELOW THE TRENCH BOTTOM. THE BACKFILL MATERIAL SHALL BE ACCORDING TO THE EARTHWORK SECTIONS OF THE SPECIFICATIONS, OR AS ORDERED BY THE ENGINEER.

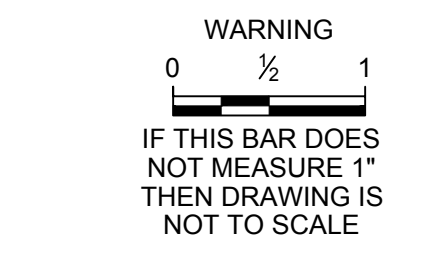
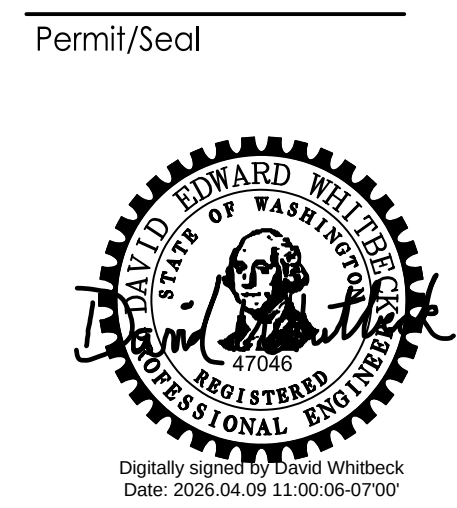
- NOTES:
1. MIN TRENCH BOTTOM WIDTH =
O.D. + 24" FOR MECHANICAL COMPACTION
O.D. + 18" FOR WATER CONSOLIDATION
2. MAX TRENCH WIDTH @ TOP OF PIPE:
O.D. + 36" FOR, 18" & LARGER PIPE O.D.
O.D. + 24" FOR LESS THAN 18" PIPE O.D.

C-602 TRENCH SECTION RIGID PIPE
REV 010119



Revision	By	Appd	YYYY.MM.DD
0			2022.12.02

FINAL DESIGN	MCM	DEW	2026.02.26
Issued	By	Appd	YYYY.MM.DD



Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267 GC-5

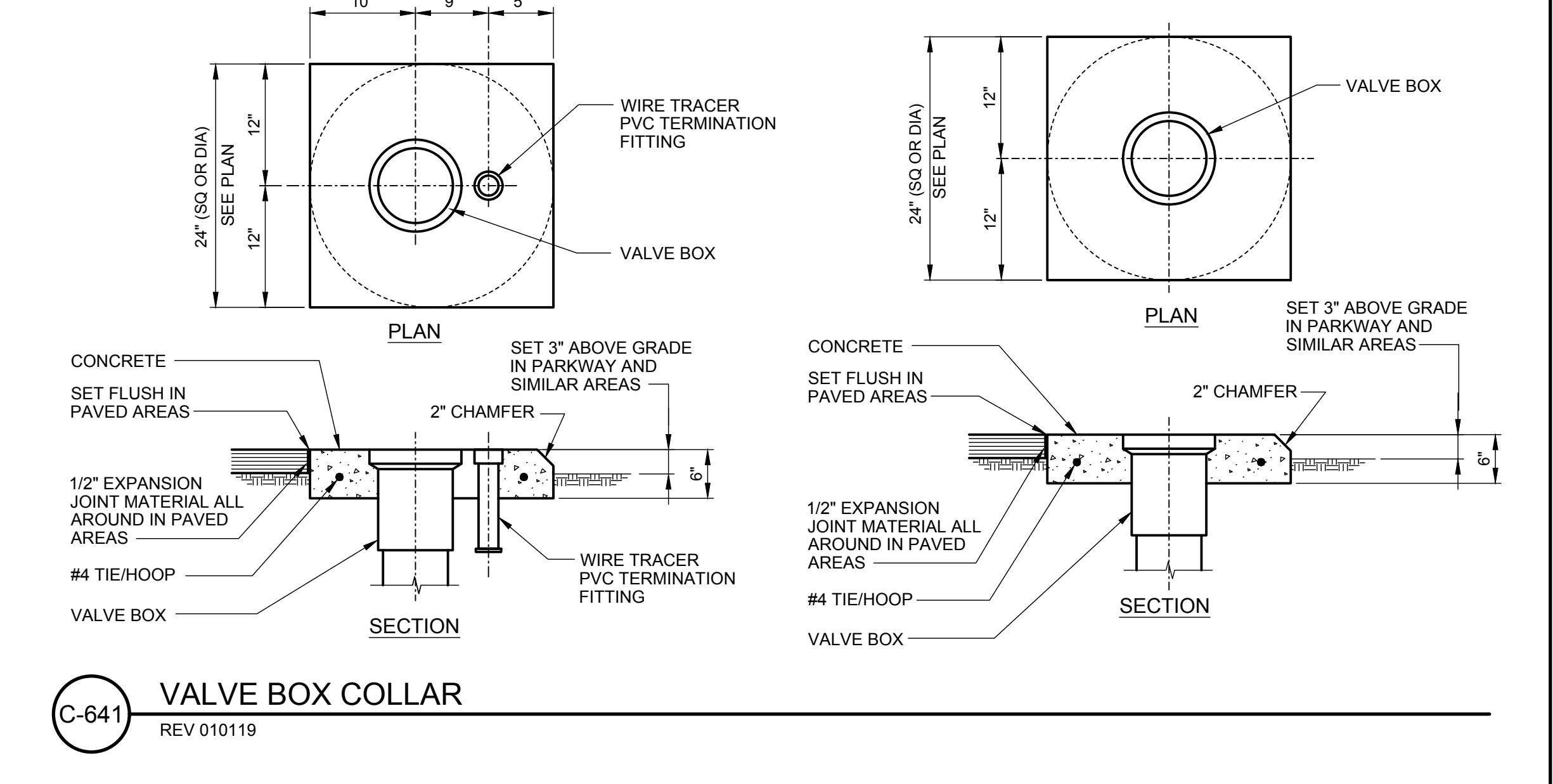
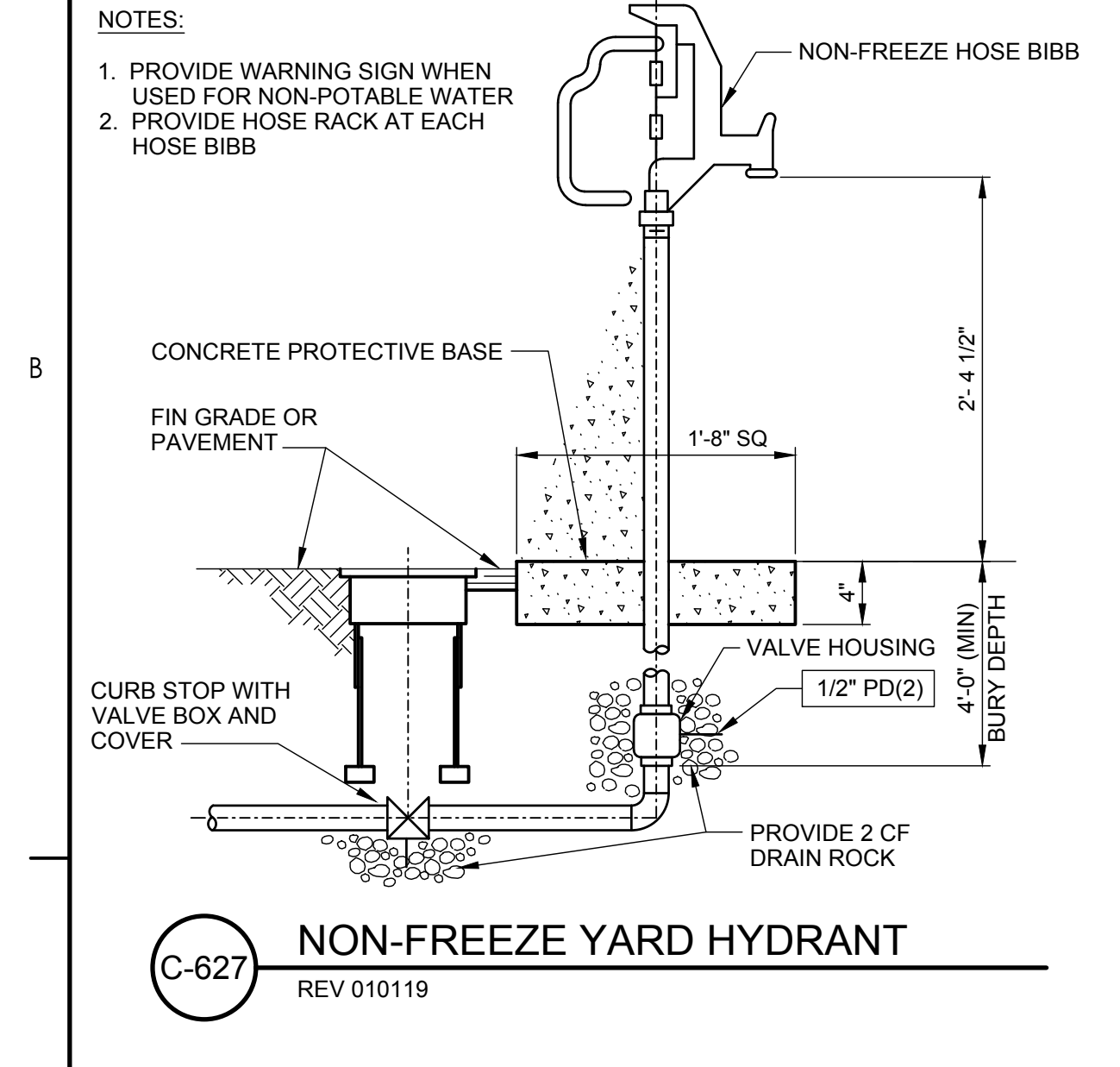
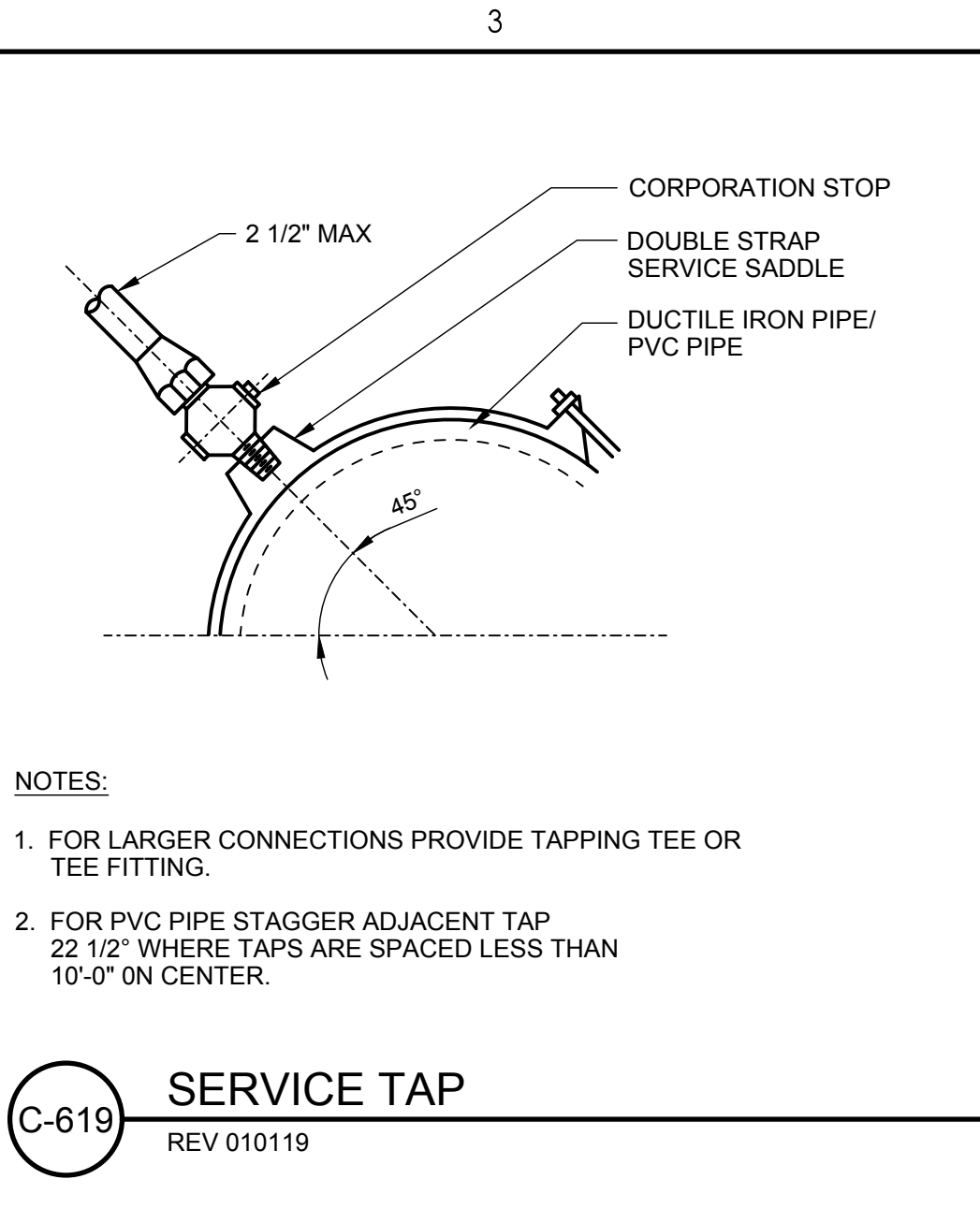
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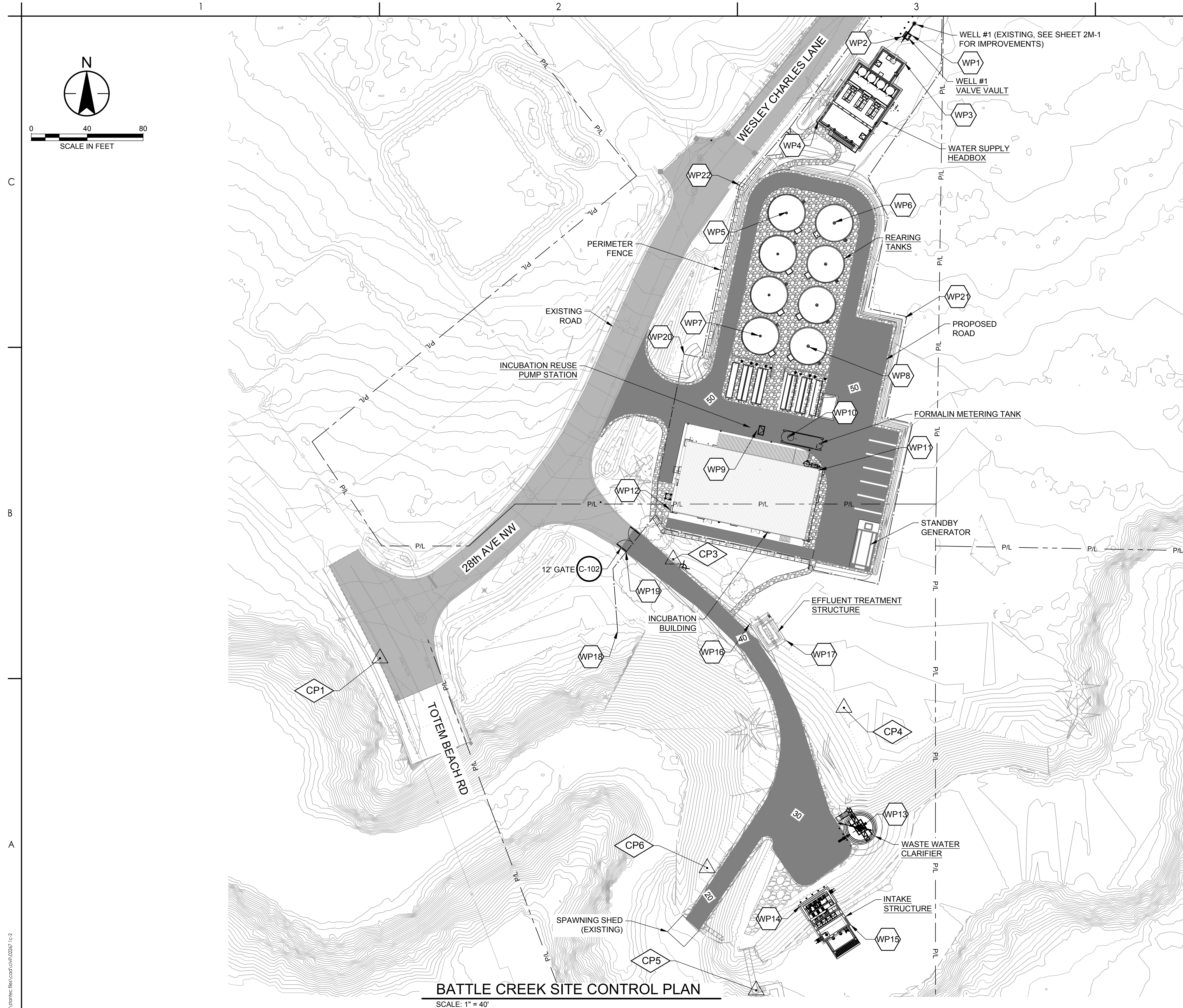
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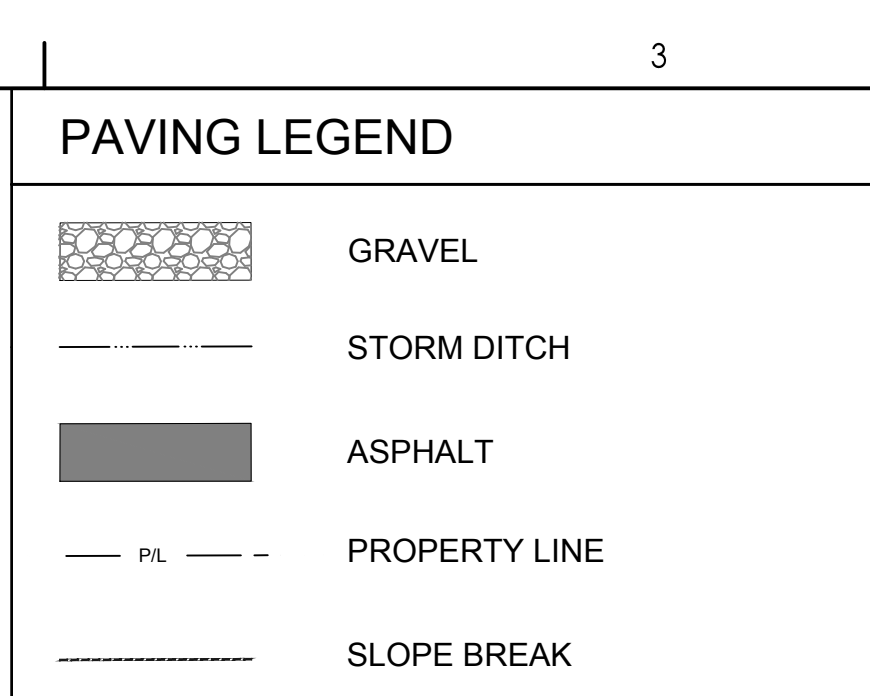
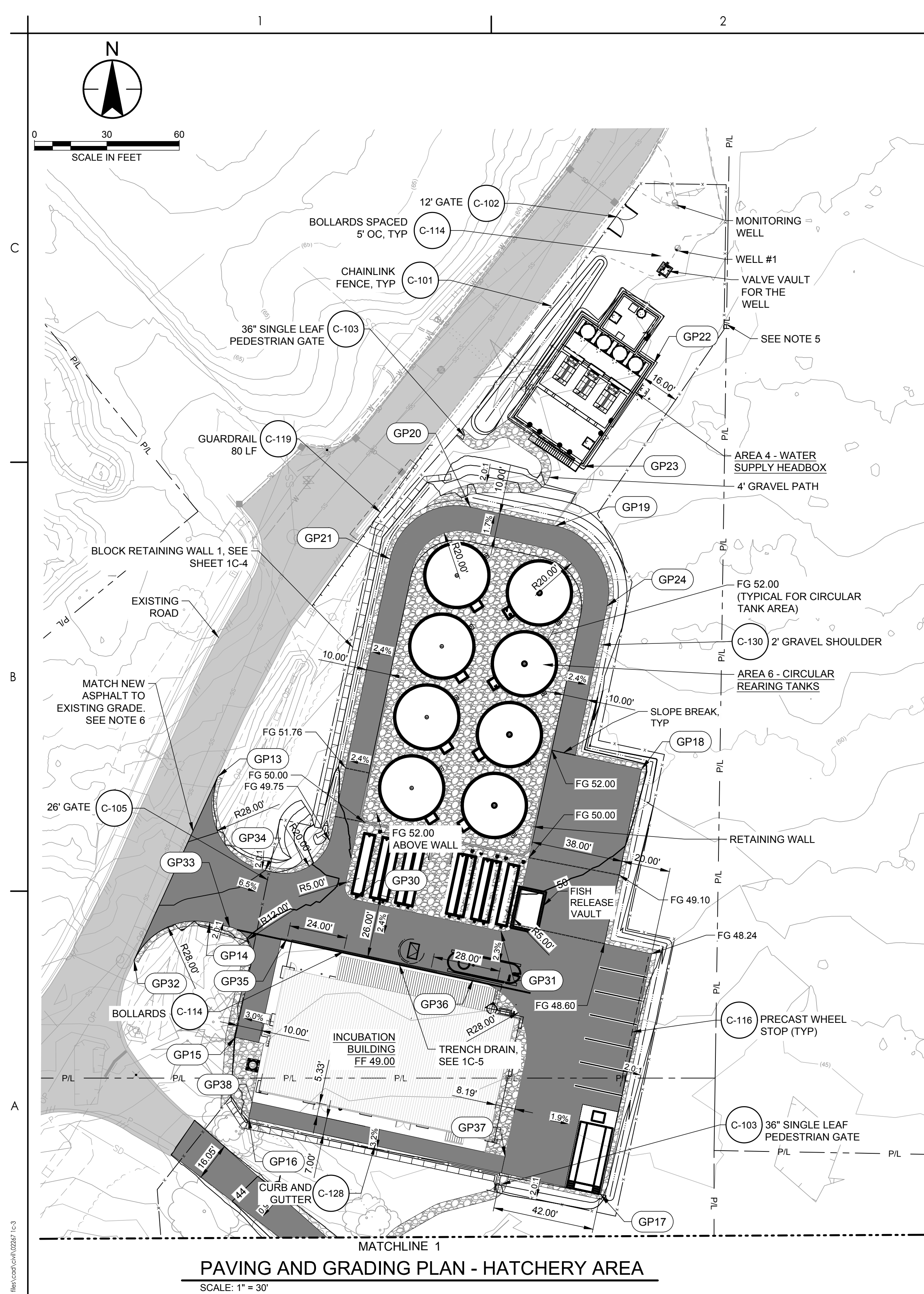
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Title CIVIL STANDARD DETAILS - 4	
Project No. 25-128	Scale
Revision	Drawing No. GC-5



		Permit/Seal			Client/Project Logo	Client/Project TULALIP TRIBES	Title CIVIL STANDARD DETAILS - 5
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0		FINAL DESIGN	MCM	DEW		File Name: 02267 GC-6	Project No. 25-128
Revision	By Appd YYYY.MM.DD	Issued By Appd YYYY.MM.DD				MCM Dwn MDV Dsgn DEW Chkd YYYY.MM.DD	Scale Drawing No.
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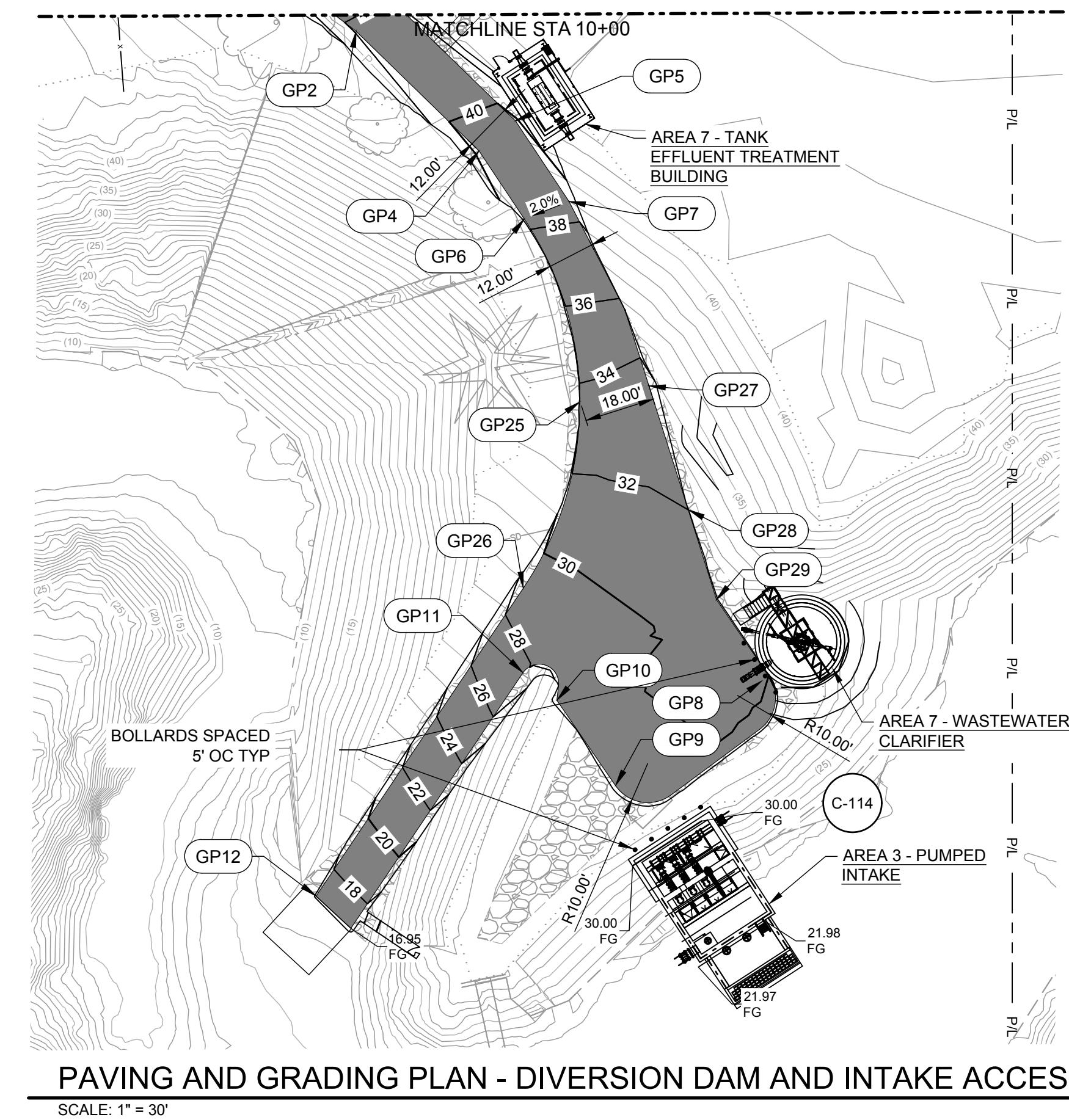


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GENERAL SHEET NOTES

 1. ALL GRAVEL PAVING AND SURFACING SHALL OCCUR AFTER ALL CONSTRUCTION IS COMPLETE. ANY GRAVEL PAVING OR SURFACING THAT OCCURS PRIOR TO COMPLETION OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
 2. SLOPE GRADE UNIFORMLY BETWEEN ELEVATIONS SHOWN.
 3. REFER TO SPECIFICATIONS FOR FILL UNDER STRUCTURES.
 4. GRADING POINTS ARE INTENDED TO GENERALLY LOCATE THE GRADE. THE GRADING AND EXCAVATION GRADE POINTS SHOWN REPRESENT THE MINIMUM REQUIREMENTS. GRADING POINTS MAY BE ADJUSTED WITH THE APPROVAL OF THE OWNER IN THE FIELD. ADDITIONAL EXCAVATION MAY BE REQUIRED TO SUIT THE CONTRACTOR'S MEANS AND METHODS TO COMPLETE THE WORK. SUCH ADDITIONAL EXCAVATIONS SHALL BE CONSIDERED INCIDENTAL AND INCORPORATED INTO THE BID PRICE.
 5. CONTRACTOR SHALL COORDINATE WITH OWNER TO FIELD LOCATE FENCE AROUND EXISTING VEGETATION TO REDUCE EXTENT OF LARGE TREE REMOVAL .
 6. CONNECTIONS TO EXISTING ROAD SHALL BE SAWCUT AND SEALED JOINTS.

GRADE POINT TABLE				
POINT #	NORTHING	EASTING	FG	EG
GP1	388992.76	1288769.01	45.74	45.85
GP2	388949.18	1288825.85	41.80	43.73
GP3	388957.78	1288834.22	42.04	43.38
GP4	388918.52	1288857.34	39.42	41.07
GP5	388926.23	1288866.63	39.66	41.85
GP6	388901.12	1288868.90	38.29	38.50
GP7	388905.60	1288880.34	38.53	38.98
GP8	388784.23	1288931.40	30.00	30.08
GP9	388756.13	1288892.23	30.00	29.51
GP10	388777.98	1288877.24	29.21	28.72
GP11	388785.02	1288868.55	27.89	26.15
GP12	388727.86	1288815.62	16.95	16.76
GP13	389149.40	1288788.13	56.29	56.29
GP14	389089.55	1288779.18	51.50	51.59
GP15	389041.37	1288795.38	48.76	48.60
GP16	389007.39	1288800.84	48.85	46.02
GP17	388977.33	1288945.09	48.06	44.66
GP18	389148.50	1288982.54	51.10	50.00
GP19	389245.57	1288964.43	51.76	52.53
GP20	389261.07	1288892.79	51.76	56.12
GP21	389239.53	1288859.48	51.76	58.35
GP22	389319.13	1288968.52	57.00	56.91
GP23	389272.85	1288927.75	56.00	51.99
GP24	389212.38	1288985.90	51.76	52.00
GP25	388854.29	1288883.11	32.33	32.41
GP26	388806.62	1288868.63	29.04	27.85
GP27	388858.37	1288900.80	33.00	33.80
GP28	388826.70	1288910.85	32.00	31.96
GP29	388803.69	1288918.05	31.05	30.87
GP30	389098.46	1288844.80	49.40	49.35
GP31	389085.37	1288905.44	49.40	48.43
GP32	389073.29	1288753.44	50.80	50.80
GP33	389087.14	1288793.00	51.00	52.51
GP34	389110.55	1288807.77	51.50	54.32
GP35	389082.04	1288816.63	48.88	48.58
GP36	389065.31	1288894.13	48.88	47.48
GP37	388992.04	1288907.08	48.90	44.81
GP38	389014.64	1288802.38	48.88	46.92



		Permit/Seal		Client/Project Logo	Client/Project TULALIP TRIBES	Title PAVING AND GRADING PLAN
			 WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		 BATTLE CREEK HATCHERY	
Revision	By Appd YYYY.MM.DD	FINAL DESIGN Issued	MCM DEW By Appd YYYY.MM.DD		File Name: 02267-1C-3 MCM MDV DEW Dwn Dsgn Chkd YYYY.MM.DD	Project No. 25-128 Revision 0 1 Scale AS NOTED Drawing No. 1C-3

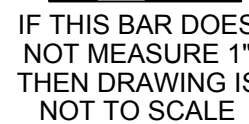


1. CONTRACTOR SHALL USE ULTRABLOCK FULL PLAIN FACE BLOCKS, OR EQUIVALENT. SEE SPEC SECTION 31 90 00 FOR ADDITIONAL REQUIREMENTS.
2. SECTION WILL VARY DEPENDING ON HEIGHT OF RETAINING WALL. CONTRACTOR SHALL FOLLOW THE ULTRABLOCK BUILDING GUIDE FOR RETAINING WALL CONSTRUCTION.

ORIGINAL SHEET - ANSI C

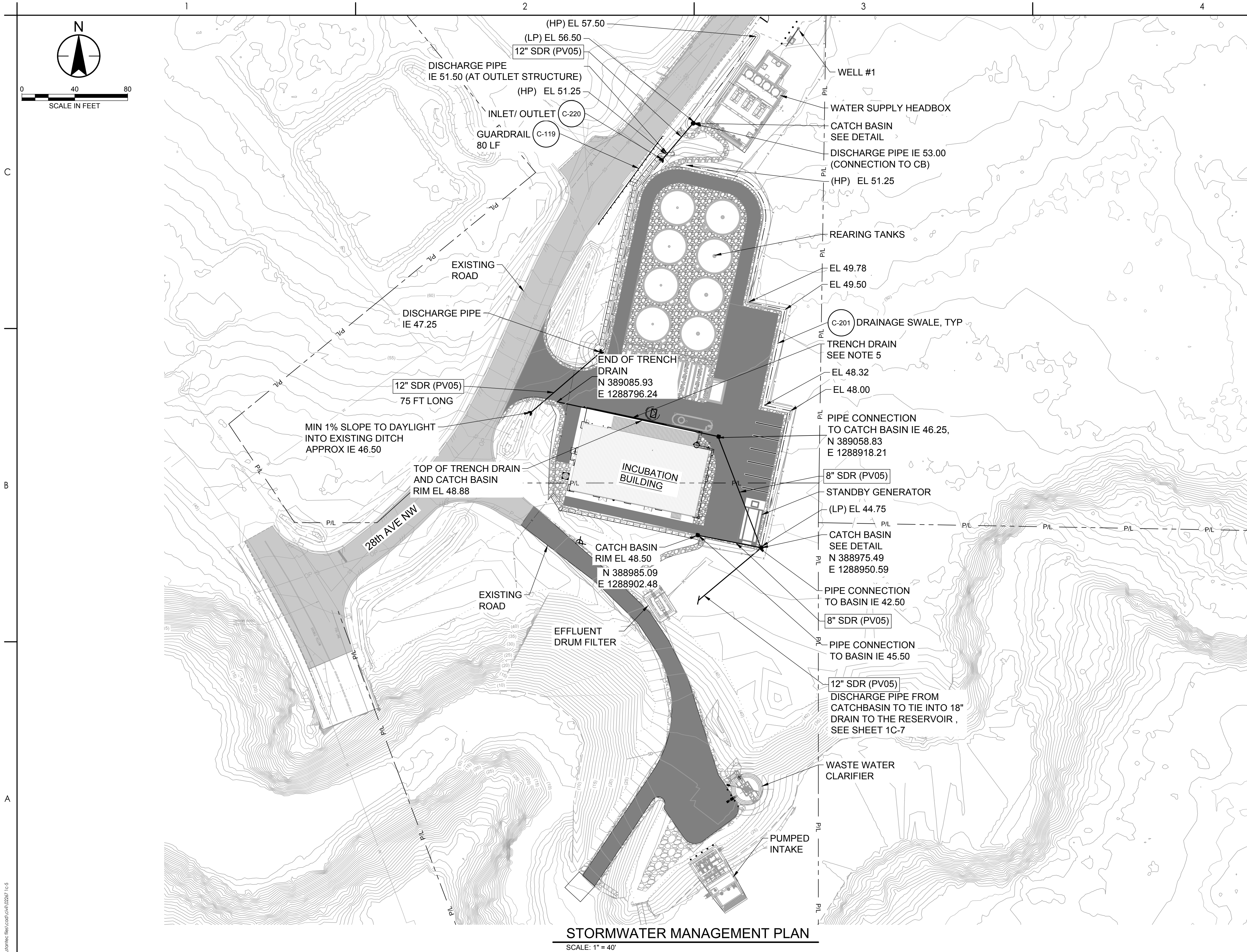
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Date: 2026.04.09 11:00:07-07'00'

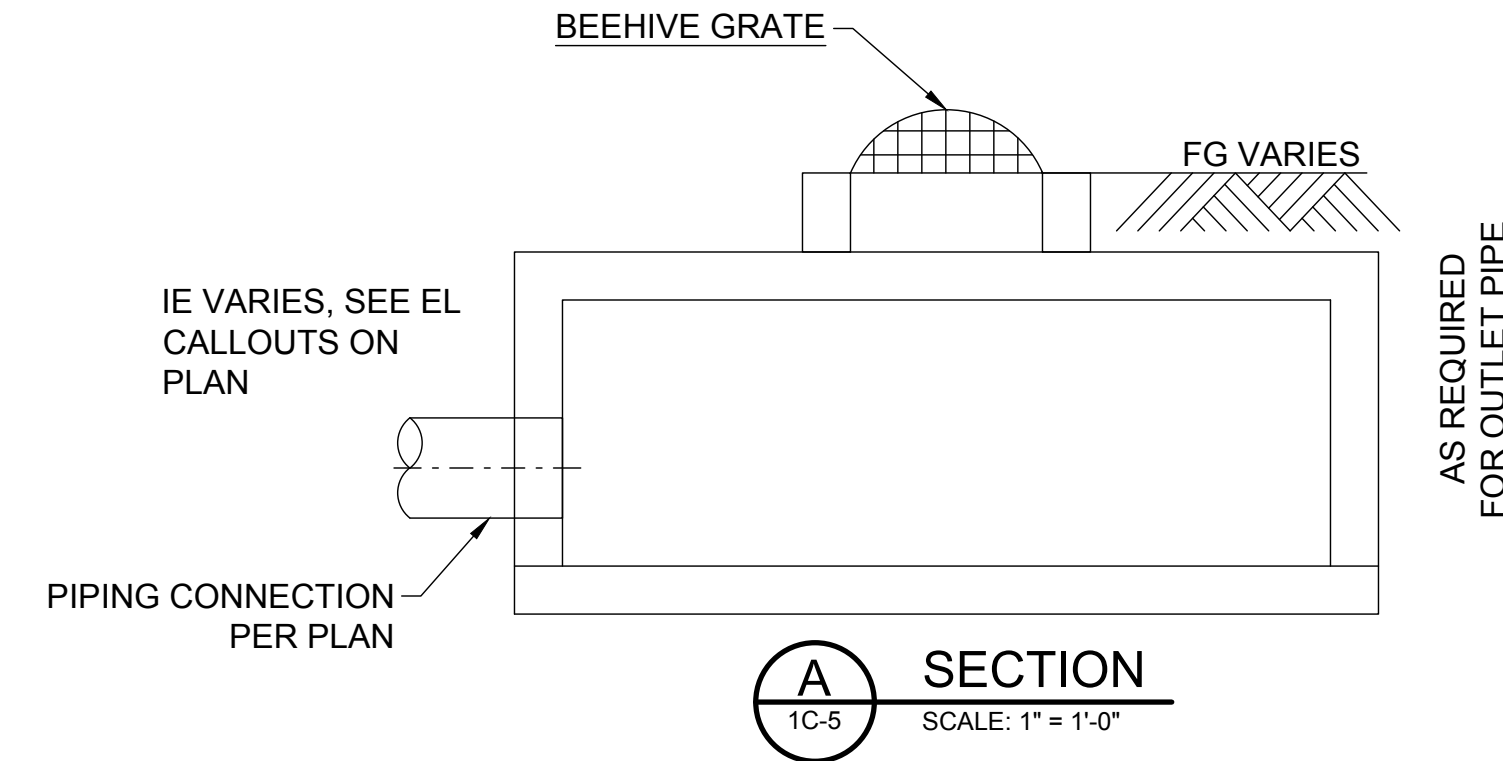
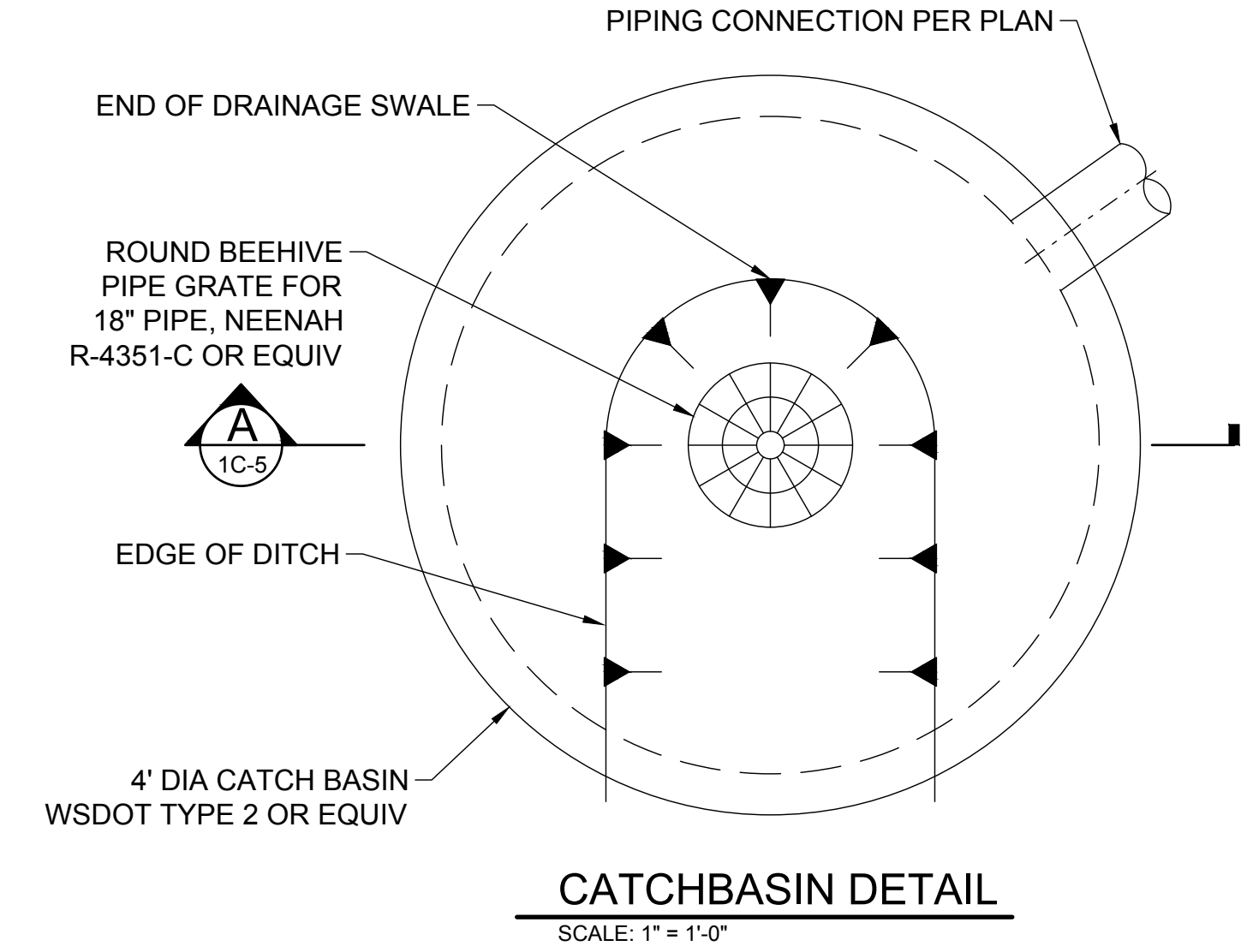


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	Dwn.	Dsgn.	Chkd.	YYYY.MM.D

1C-4



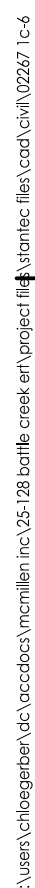
- GENERAL SHEET NOTES**
- SEE PIPING PROFILES ON SHEETS ON 1C-9 TO 1C-12. STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.
 - PIPE DIAMETERS SHOWN ON THE DRAWINGS FOR PIPE ARE NOMINAL DIAMETERS. SEE SPECIFICATIONS FOR DETERMINATION OF WALL INSIDE DIAMETER, WALL THICKNESS, OR PRESSURE RATING.
 - ALL PIPE STATIONING IS RELATIVE TO EACH PIPE. STATIONING REPRESENTS THE HORIZONTAL LENGTH OF PIPE. IT DOES NOT REFLECT THE PIPE LENGTH.
 - ALL WALL PENETRATIONS SHALL BE M-112, UNLESS NOTED OTHERWISE.
 - TRENCH DRAIN SHALL BE HUBBEL POLYCAST 700 SERIES OR EQUIVALENT. TRENCH DRAIN SHALL BE TRAFFIC-RATED, PRESLOPED TRENCH DRAIN .



- NOTES:**
- BEEHIVE GRATE SHALL HAVE MINIMUM THICKNESS OF 1 1/2 INCHES
 - BEEHIVE GRATE SHALL BE CAST IRON

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Revision By Appd YYYY.MM.DD				FINAL DESIGN MCM DEW 2026.02.26 Issued By Appd YYYY.MM.DD				Permit/Seal Digitally signed by David Whitbeck Date: 2026.04.09 11:00:07-07'00'		WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		1471 Shoreline Dr. Ste 100, Boise, ID 83702 (208) 342-4214 mcmillen.com		Client/Project Logo		Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: 02267 1C-5 MCM Dwn. MDV Dsgn. DEW Chkd. 2026.02.26 YYYY.MM.DD		Title STORMWATER DRAINAGE PLAN Project No. 25-128 Revision 0 Scale AS NOTED Drawing No. 1C-5



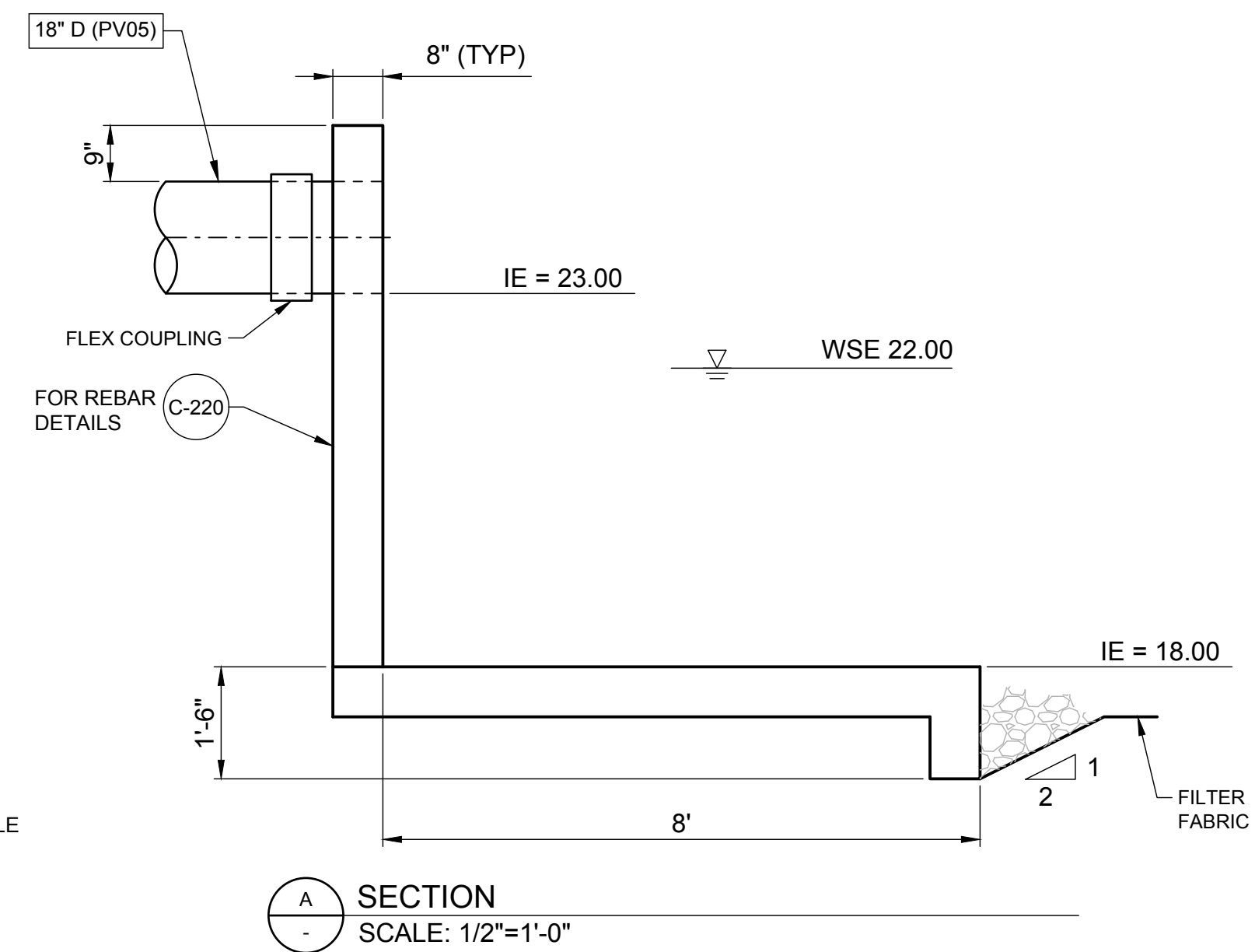
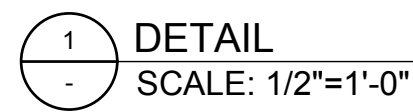
- A. EXISTING WATER MAIN.
- B. METER BOX WITH 2" CURB STOP AND METER SETTER. METER PROVIDED BY TULALIP UTILITY AUTHORITY.
- C. EXISTING 10" CONCRETE SEWER MAIN.
- D. SEWER LATERAL EXITS BUILDING AT 43 FT OF ELEVATION.

1. CONTRACTOR MUST POTHOLE OR EXCAVATE TO EXPOSE THE WATER MAIN AT THE LOCATION PROPOSED FOR A HOT TAP CONNECTION TO ALLOW INSPECTION BY THE TULALIP UTILITY AUTHORITY (TUA). THE CONNECTION WILL NOT OCCUR UNTIL THE INSPECTOR HAS VERIFIED THE EXISTING GRADE AND ALIGNMENT.
2. CONTRACTOR SHALL INSTALL FIRE HYDRANT IN ACCORDANCE WITH TULALIP TRIBE STANDARDS AND IN COORDINATION WITH TUA.
3. CALL THE TUA 48 HOURS IN ADVANCE OF THE DESIRED DATE OF THE CONNECTION TO SCHEDULE INSPECTION.
4. THE TAP COUPON MUST BE RETAINED FOR OBSERVATION BY THE INSPECTOR.
5. CALL THE TUA TO SCHEDULE AN INSPECTOR 48 HOURS IN ADVANCE OF HYDROSTATIC PRESSURE TESTING PRIOR TO DISINFECTION.
6. POST CHLORINATION LAB RESULTS MUST BE PROVIDED TO THE TUA FOR APPROVAL BEFORE FLUSHING, DE-CHLORINATION, AND DISCHARGE.
7. IN NO CIRCUMSTANCES SHALL WATER CONTAINING CHLORINE BE DISCHARGED INTO NATURAL SURFACE WATERS.
8. CONTRACTOR SHALL DETERMINE IN FIELD CONNECTION ELEVATION TO EXISTING SS MANHOLE. MINIMUM 2% SLOPE FROM CLEANOUT NEAR BLDG. SEE PLUMBING SHEETS. PROVIDE KOR-N-SEAL BOOT OR EQUIV AT MANHOLE CONNECTION.
9. HOSE BIBBS SHALL BE ¾" PER STANDARD DETAIL D-823 UNO.

- A. EXISTING WATER MAIN.
- B. METER BOX WITH 2" CURB STOP AND METER SETTER. METER PROVIDED BY TULALIP UTILITY AUTHORITY.
- C. EXISTING 10" CONCRETE SEWER MAIN.
- D. SEWER LATERAL EXITS BUILDING AT 43 FT OF ELEVATION.

ORIGINAL SHEET - ANSI I

[illegible]



1. SEE PIPING PROFILES ON SHEETS ON 1C-9 TO 1C-12. STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERT ELEVATIONS SHOWN OR SPECIFIED.
2. PIPE DIAMETERS SHOWN ON THE DRAWINGS FOR PIPE ARE NOMINAL DIAMETERS. SEE SPECIFICATIONS FOR DETERMINATION OF WALL INSIDE DIAMETER, WALL THICKNESS, OR PRESSURE RATING.
3. ALL PIPE STATIONING IS RELATIVE TO EACH PIPE. STATIONING REPRESENTS THE HORIZONTAL LENGTH OF PIPE. IT DOES NOT REFLECT THE PIPE LENGTH.
4. ALL WALL PENETRATIONS SHALL BE D-112, UNLESS NOTED OTHERWISE.
5. SEE SHEET 1C-8 FOR ENLARGED PIPING PLANS.
6. CONTRACTOR SHALL INSTALL FLOW METER IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. UPSTREAM AND DOWNSTREAM CLEARANCES SHALL BE COORDINATED BY THE CONTRACTOR IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
7. HDPE FOR FISH RELEASE PIPE SHALL BE INSTALLED ENTIRELY WITH LONG-RADIUS SWEEPING BENDS. MITERED OR COMPACT ELBOWS ARE NOT ALLOWED. INSIDE BEAD FROM THE FUSION PROCESS SHALL BE REMOVED.
8. CONTRACTOR SHALL FIELD VERIFY WITH OWNER THE DEPTH AND LOCATION OF FISH RELEASE OUTFALL INTO EXISTING PLUNGE POOL.

SCALE: 1" = 40'

FINAL DESIGN	MCM	DEW	2026.02.26
Issued	By	Appd	YYYY.MM.DD

DAVID EDWARD WHITBECK
STATE OF WASHINGTON
REGISTERED
47046
PROFESSIONAL ENGINEER

Digitally signed by David Whitbeck
Date: 2026.04.09 11:00:08-0700'



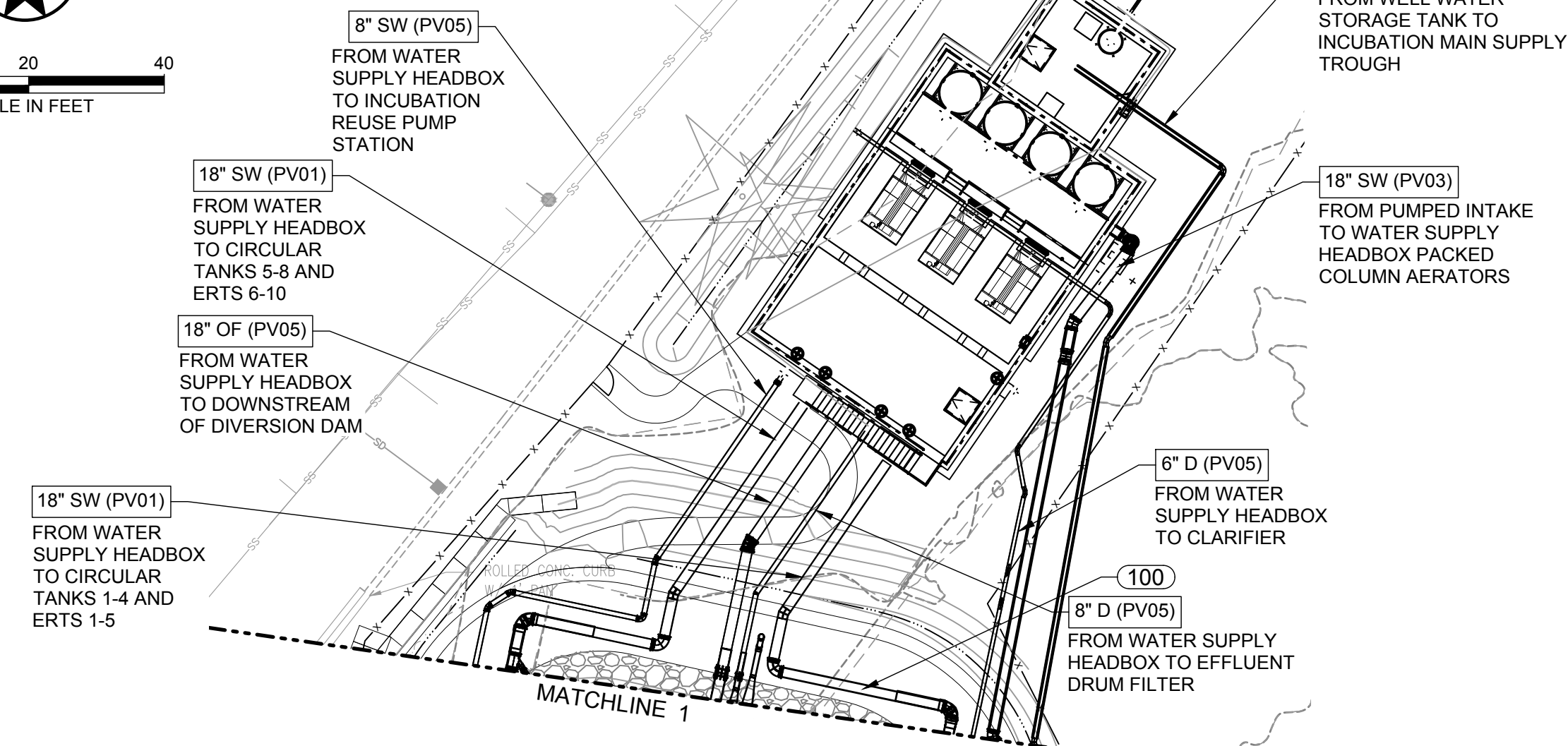
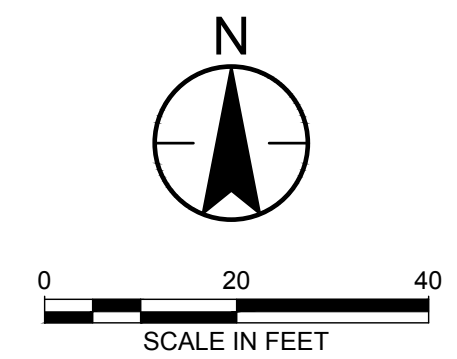
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1C-7

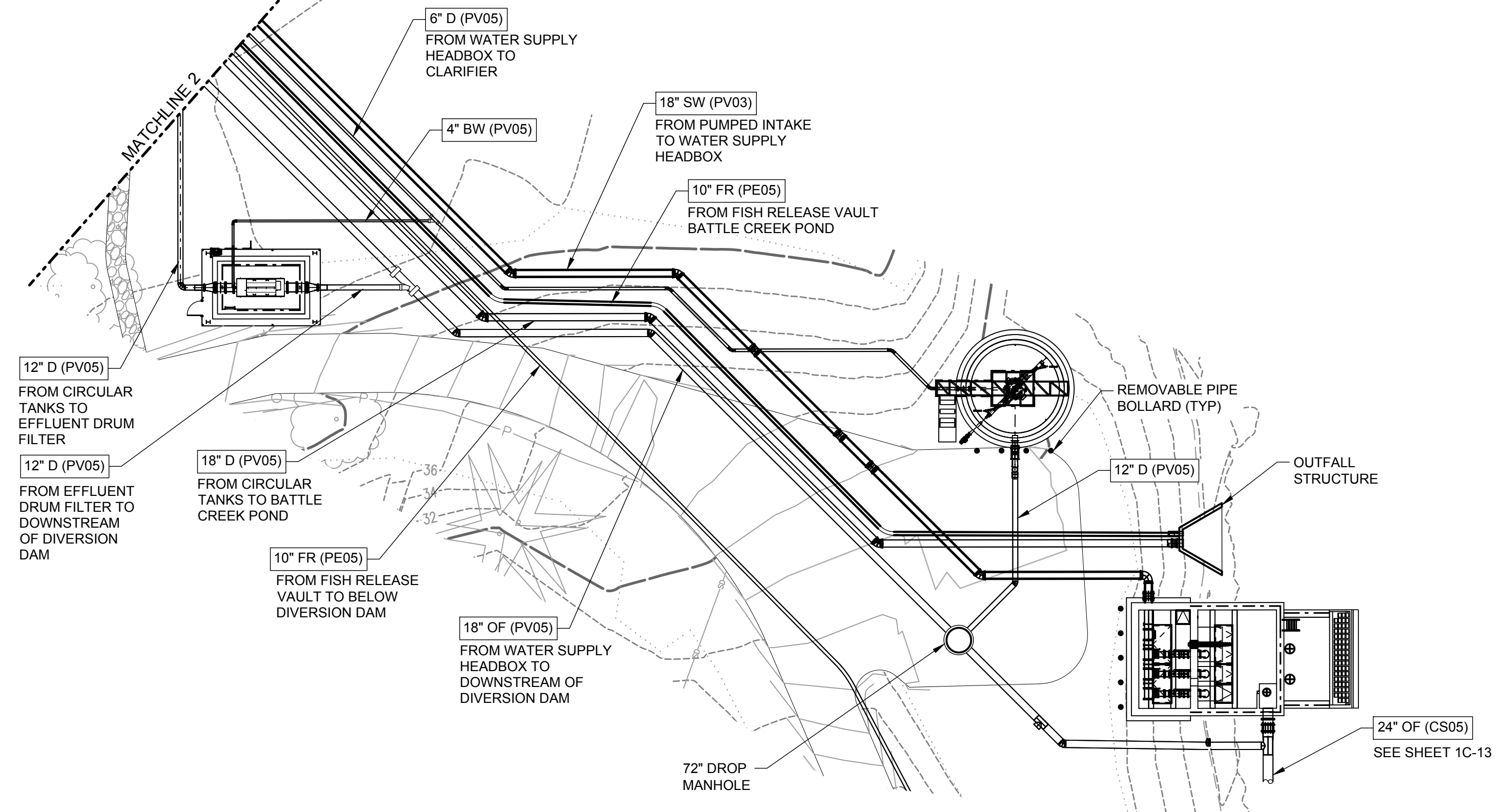
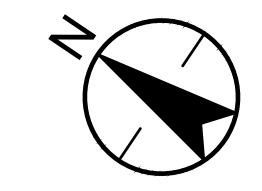
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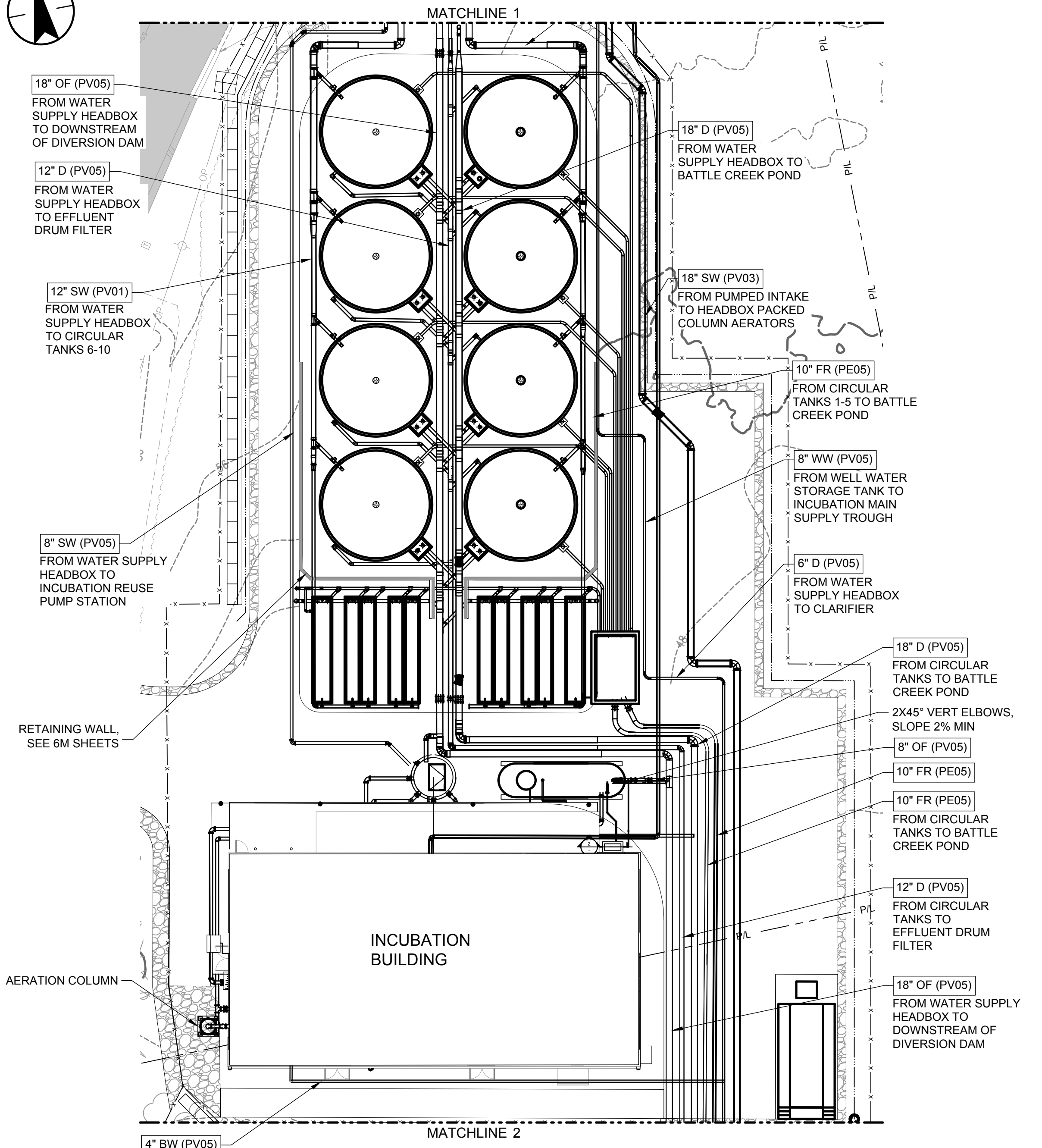
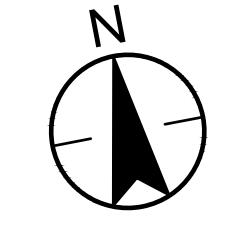
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WELL AND WATER SUPPLY HEADBOX
ENLARGED PIPING PLAN
SCALE: 1" = 20'

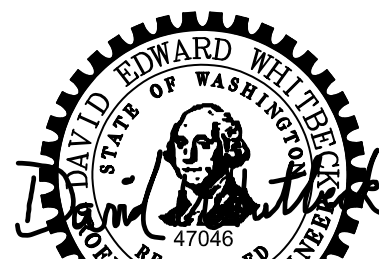
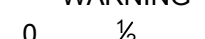


PUMPED INTAKE, EFFLUENT TREATMENT, AND
WASTEWATER CLARIFIER ENLARGED PIPING PLAN
SCALE: 1" = 20'



REARING TANKS AND INCUBATION
ENLARGED PIPING PLAN
SCALE: 1" = 20'

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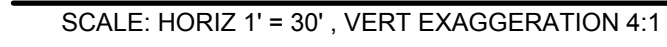
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SCALE: HORIZ 1' = 30' , VERT EXAGGERATION 4:1



SCALE: HORIZ 1' = 30', VERT EXAGGERATION 4:1



FINAL DESIGN	MCM	DEW	2026.02.26
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File Name: 02267 1C-9 TO 12	MCM	MDV	DEW	2026.02.26
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1C-9

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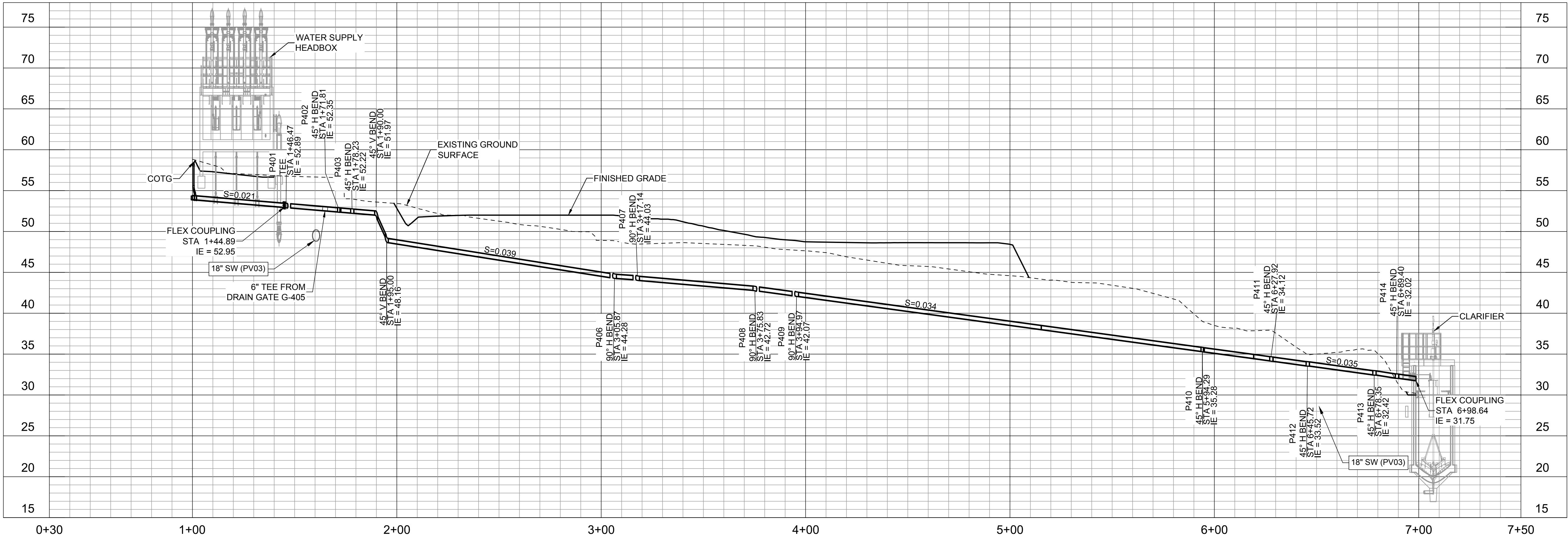
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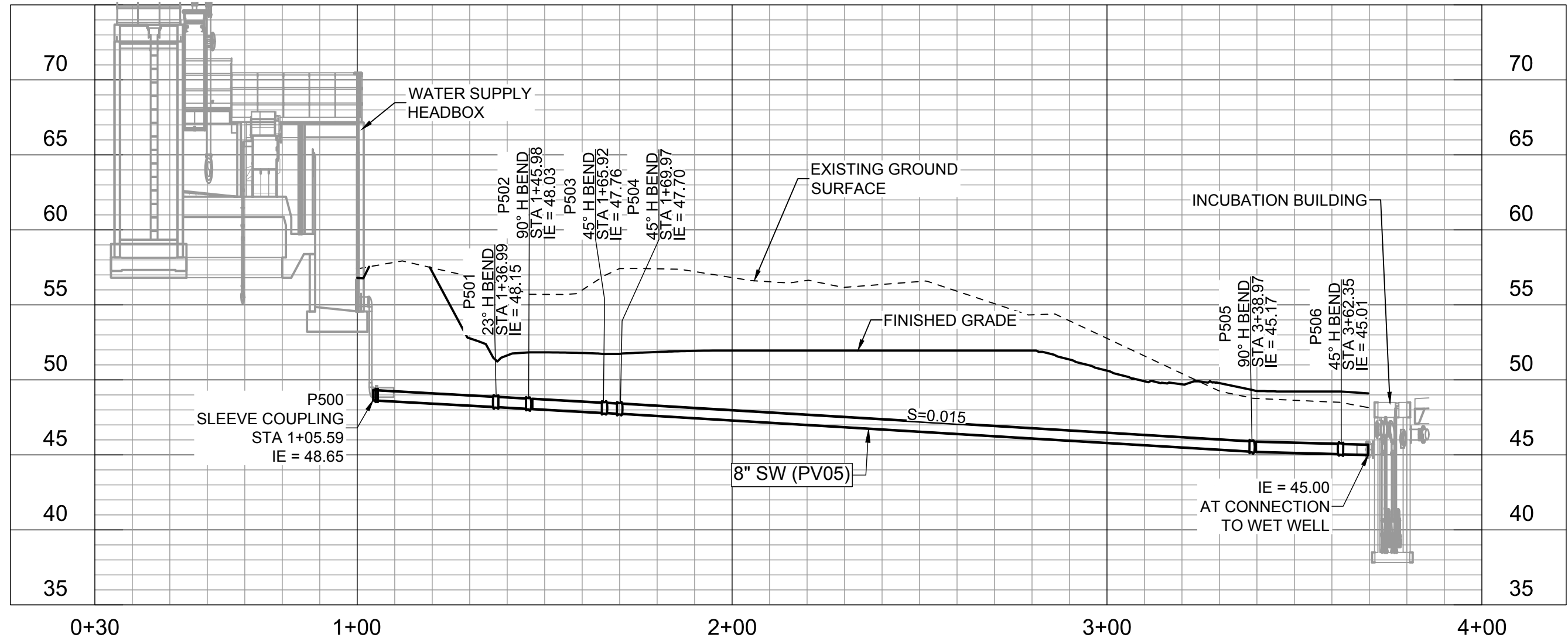
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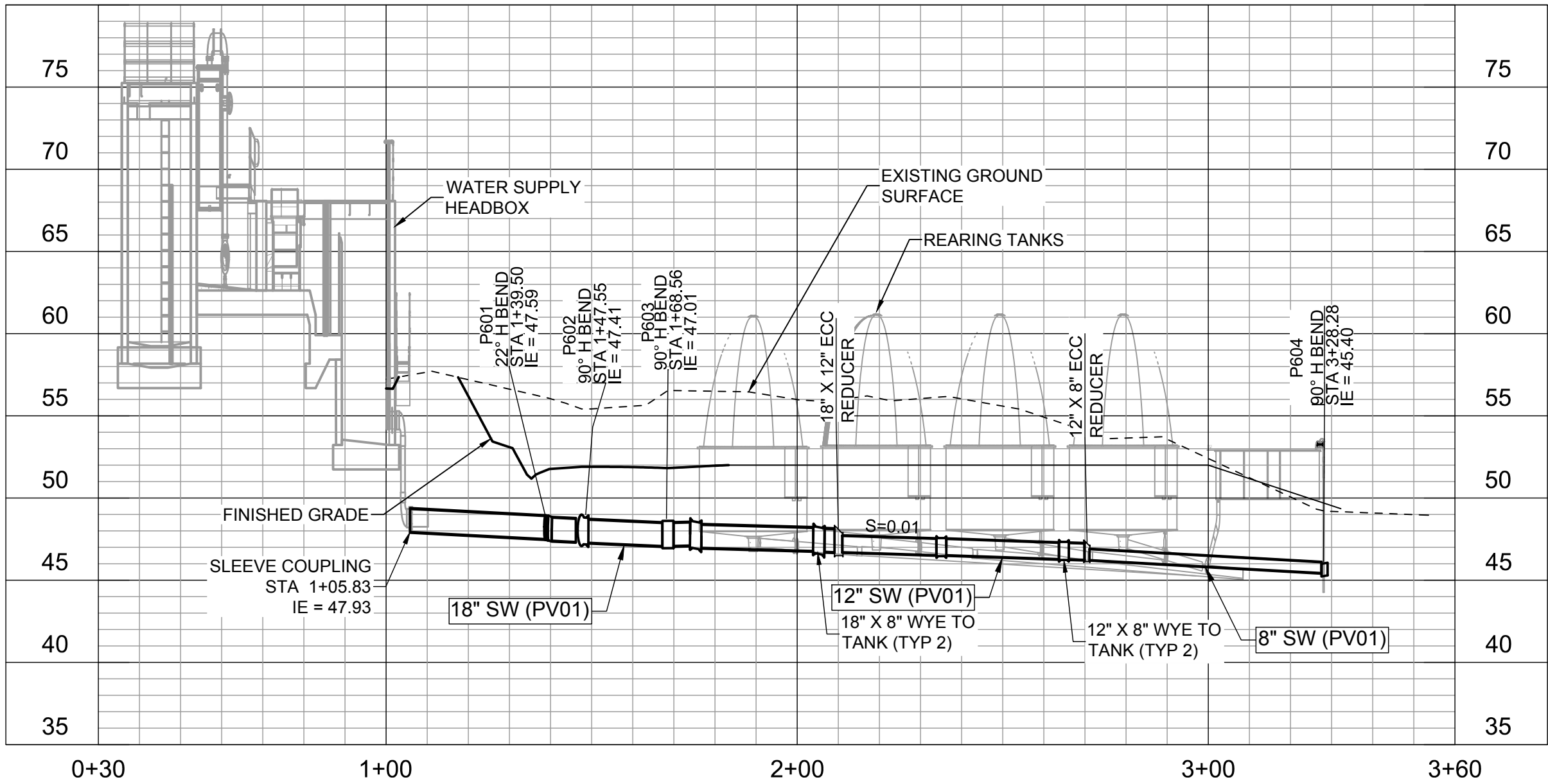
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6" D WATER SUPPLY HEADBOX TO CLARIFIER
SCALE: HORIZ 1" = 30', VERT EXAGGERATION 4:1



8" SW FROM WATER SUPPLY HEADBOX TO INCUBATION REUSE PUMP STATION PROFILE
SCALE: HORIZ 1" = 30', VERT EXAGGERATION 4:1

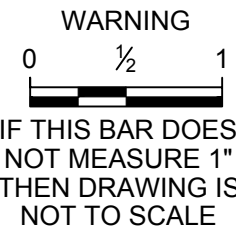
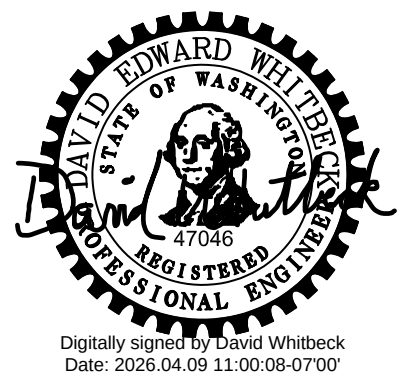


18" SW FROM WATER SUPPLY HEADBOX TO WEST REARING TANKS
SCALE: HORIZ 1" = 30', VERT EXAGGERATION 4:1

Revision	By	Appd	YYYY.MM.DD
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FINAL DESIGN	MCM	DEW	2026.02.26
Issued	By	Appd	YYYY.MM.DD

Permit/Seal



Client/Project Logo



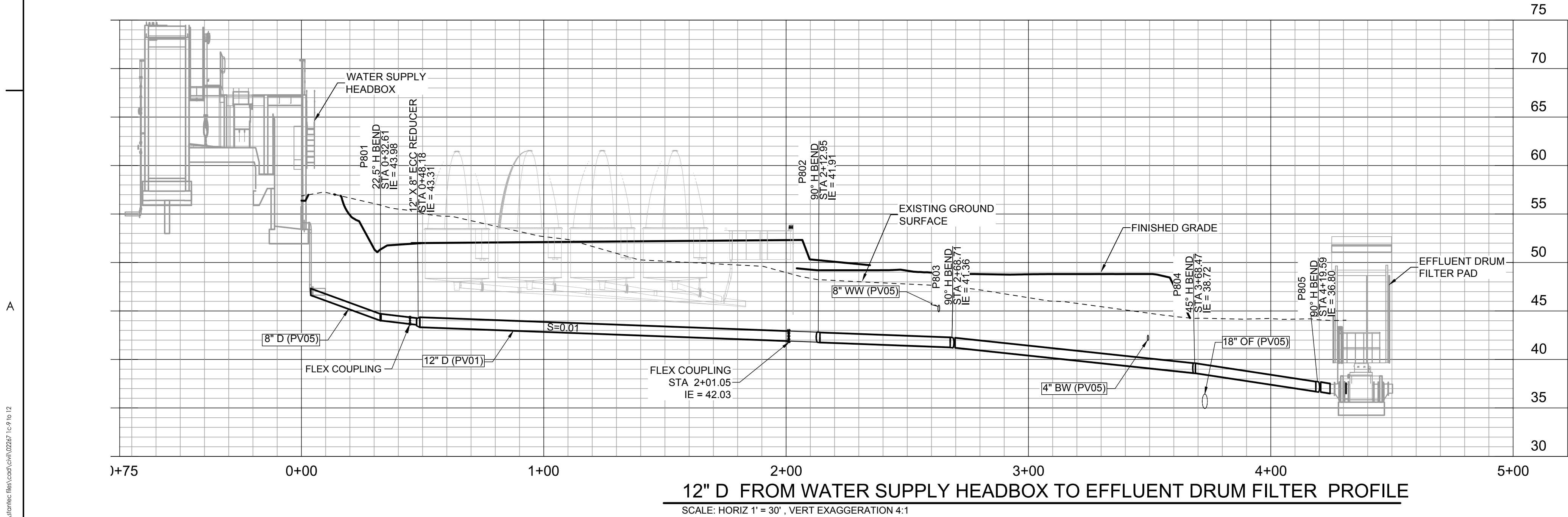
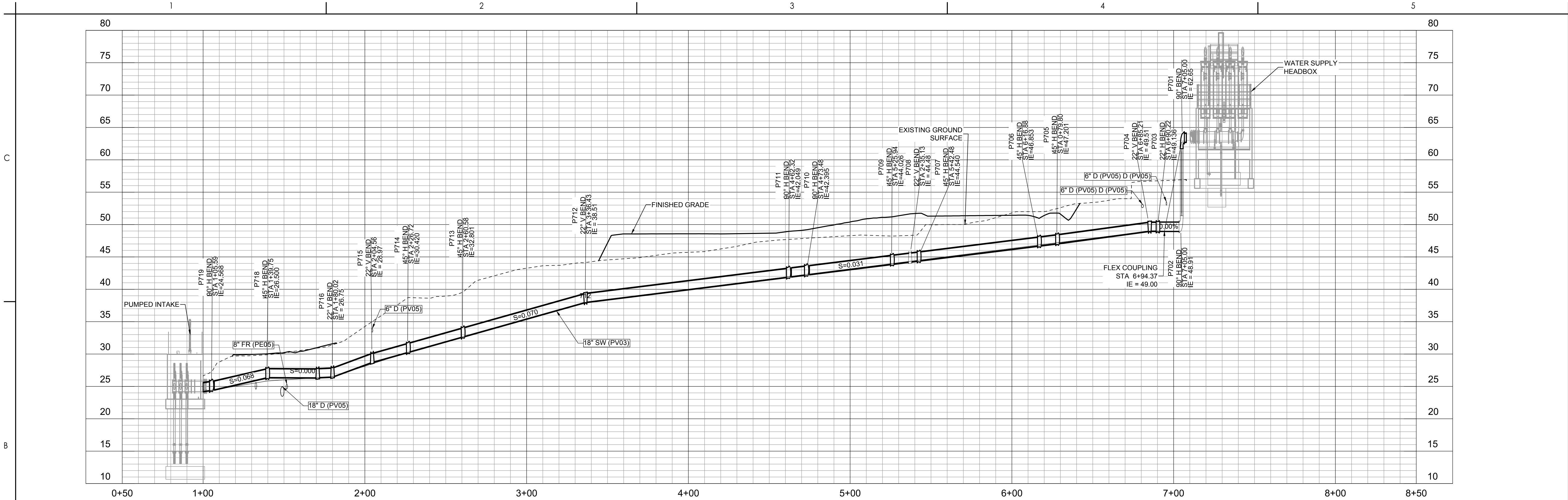
Client/Project
TULALIP TRIBES

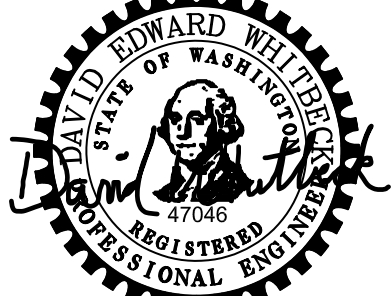
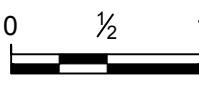
BATTLE CREEK HATCHERY

File Name: 02267 1C-9 TO 12	MCM	MDV	DEW	2026.02.26
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Title
SITE PIPING PROFILES - II

Project No. 25-128	Scale AS NOTED
Revision	Drawing No. 1C-10



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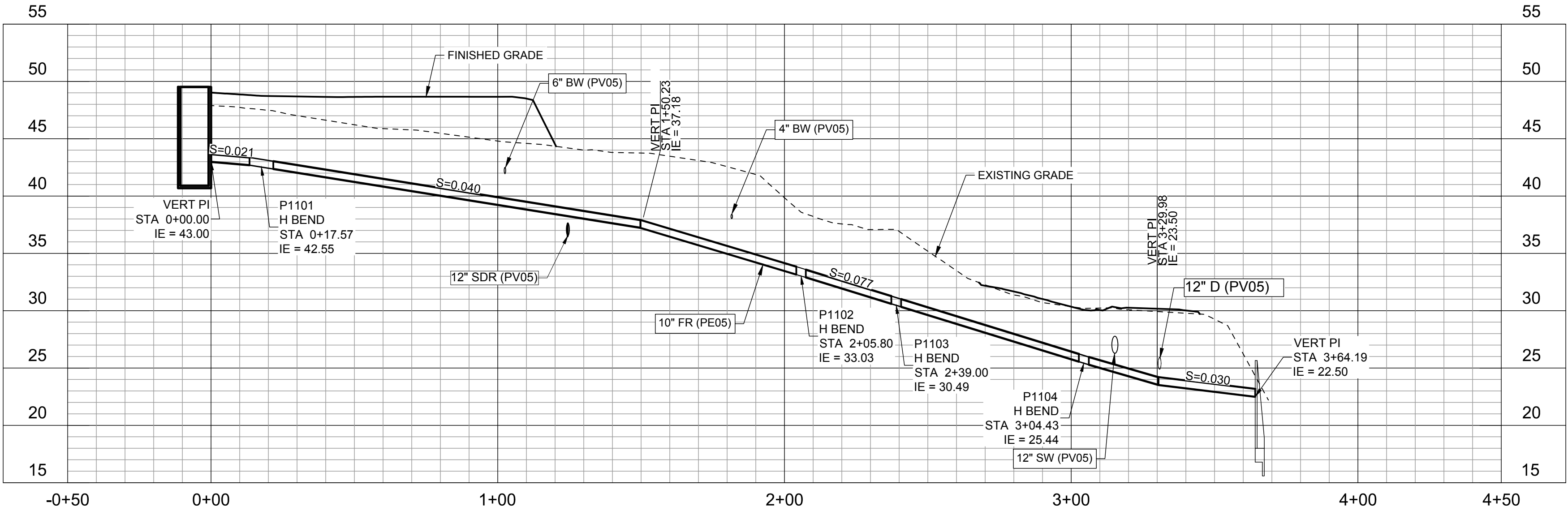
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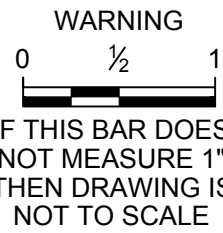
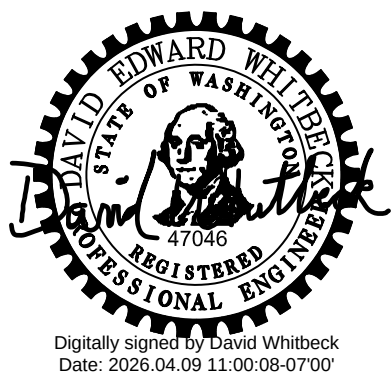
10" FR FROM FISH RELEASE VAULT TO BATTLE CREEK POND

SCALE: HORIZ 1" = 30' , VERT EXAGGERATION 4:1

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Revision	By	Appd	YYYY.MM.DD

FINAL DESIGN	MCM	DEW	2026.02.26
Issued	By	Appd	YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267 1C-9 TO 12	MCM	MDV	DEW	2026.02.26
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Title
SITE PIPING PROFILES - V

Project No. 25-128	Scale AS NOTED
Revision	Drawing No. 1C-13

PROJECT DESCRIPTION

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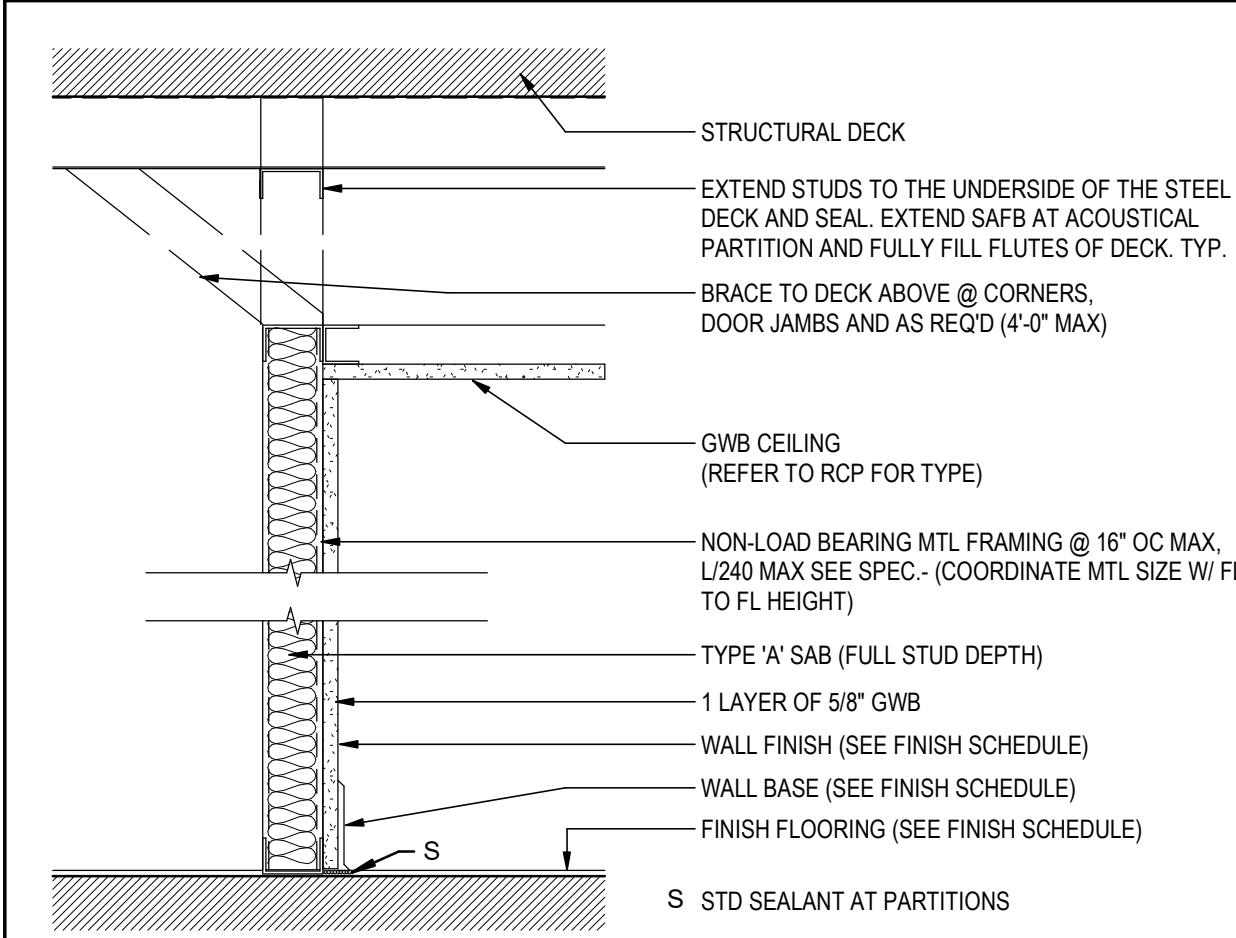
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- Area Name:** 150 SF (Area Tag)
- Door Opening Number:** 100A (Window Tag)
- Partition Type Tag:** A01
- General Sheet Note:** 1
- Ceiling Type:** ACT1
- Ceiling Height:** 10'-0"

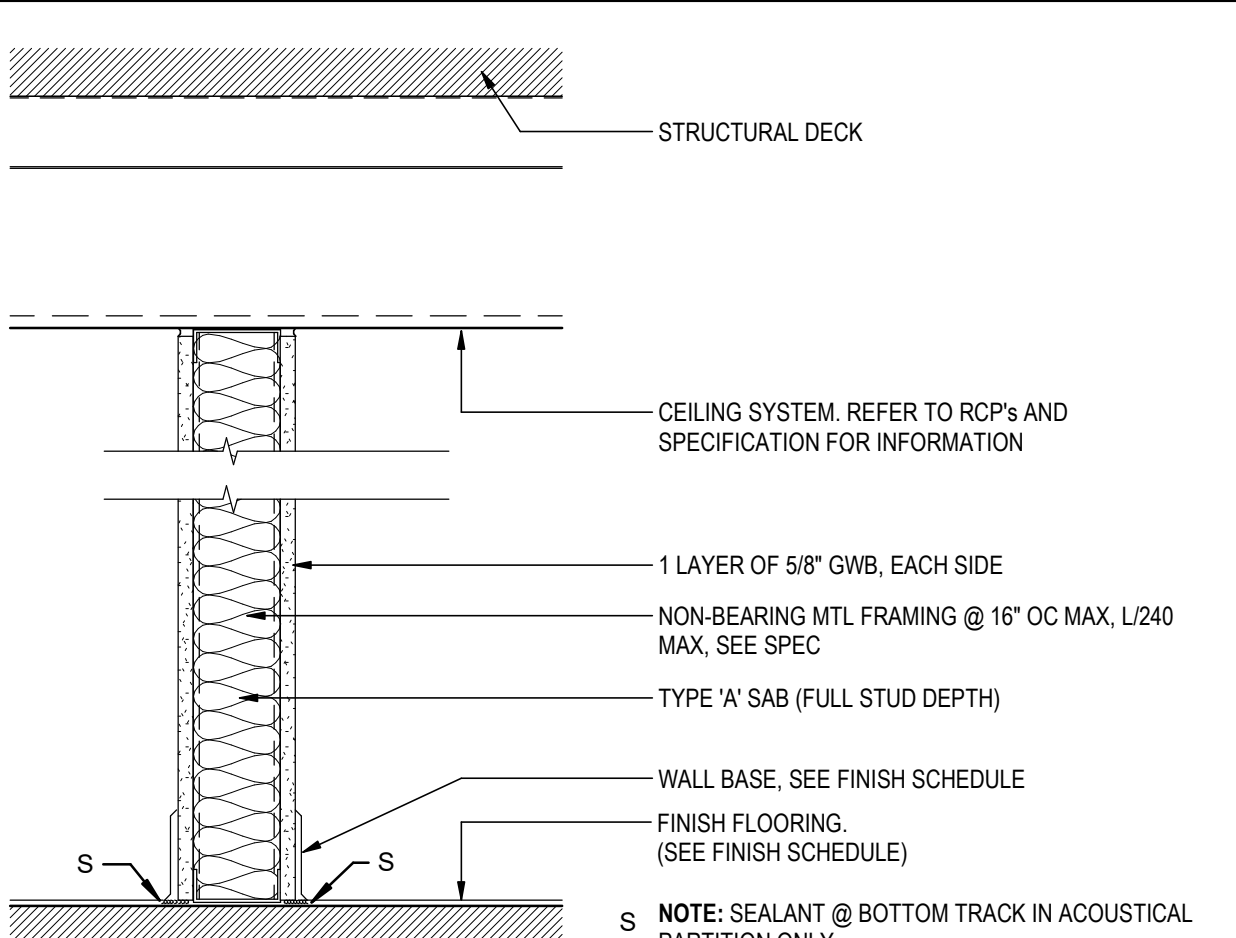
GENERAL PROJECT NOTES

1. CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES & LOCAL AMENDMENTS. REFER TO CODE NARRATIVE AND CODE PLAN SHEET FOR FURTHER INFORMATION.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ANY WORK AND SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY SUBCONTRACTORS. DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS. DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS REQUIRED TO CONTINUE FIELD WITH WORK.
3. FURNITURE, INCLUDING BUT NOT LIMITED TO CHAIRS, WORKSTATIONS, AND TABLES IS SHOWN FOR REFERENCE ONLY AND IS NOT INCLUDED IN THE CONTRACT.
4. WORK SHALL BE ACCOMPLISHED WITH QUALITY WORKMANSHIP OF THE HIGHEST INDUSTRY STANDARDS. ALL MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS AND NATIONAL TRADE GROUP STANDARDS INCLUDING BUT NOT LIMITED TO: DIRECTIONS ON USE OF ACCESSORIES; EXECUTION, SURFACE PREPARATION, TEMPERATURES, HUMIDITY, TOLERANCES, AND PROTECTION.
5. DOORS LOCATED 4" OFF ADJACENT WALL, UNLESS OTHERWISE NOTED, MAINTAIN MIN. ADA CLEARANCE PER ICC-ANSI 117-1.2009.
6. CASEWORK: FIELD VERIFY ALL CONDITIONS TO DETERMINE DIMENSIONS PRIOR TO FABRICATION. PROVIDE CASEWORK FILLERS AS REQUIRED, 1 1/2" WIDE MAXIMUM.
7. PROVIDE BLOCKING AS REQUIRED AT ALL WALLS TO RECEIVE CASEWORK, EQUIPMENT, ACCESSORIES, INCLUDING OFFICE AND OFFICE ITEMS. COORDINATE OFFICE ITEMS WITH OWNER.
8. REFER TO CODE PLAN FOR SMOKE/FIRE RATED PARTITIONS.
9. ACCESSORY WALL ENLARGED PLANS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO ACCESSORIES, WALL TYPES, AND DIMENSIONS.
11. COORDINATE PLUMBING WALL CLEARANCE WITH PLUMBING FIELD MANUFACTURERS' DATA, INSTALLATION INSTRUCTIONS, AND PIPING REQUIREMENTS, TYP.

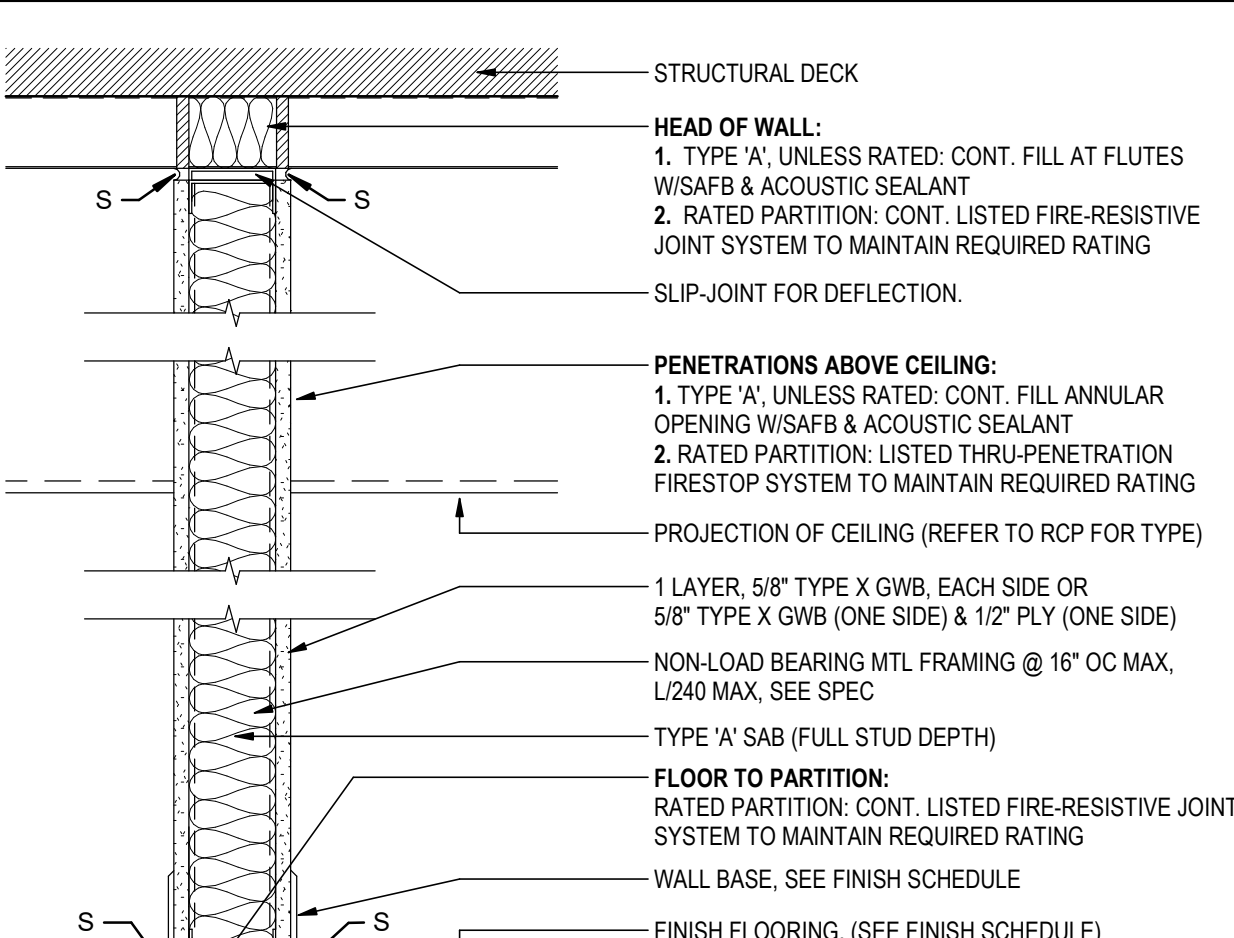
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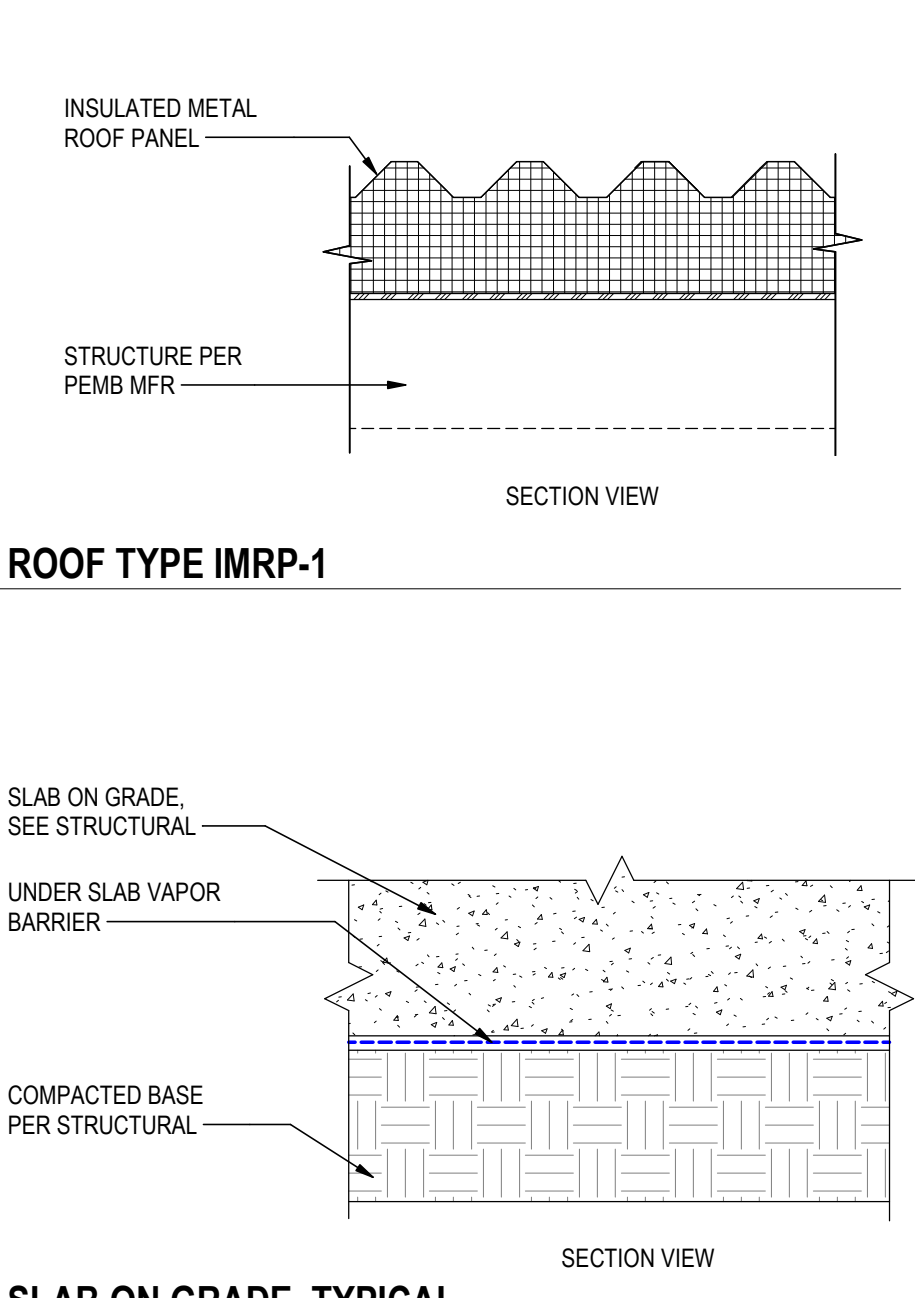
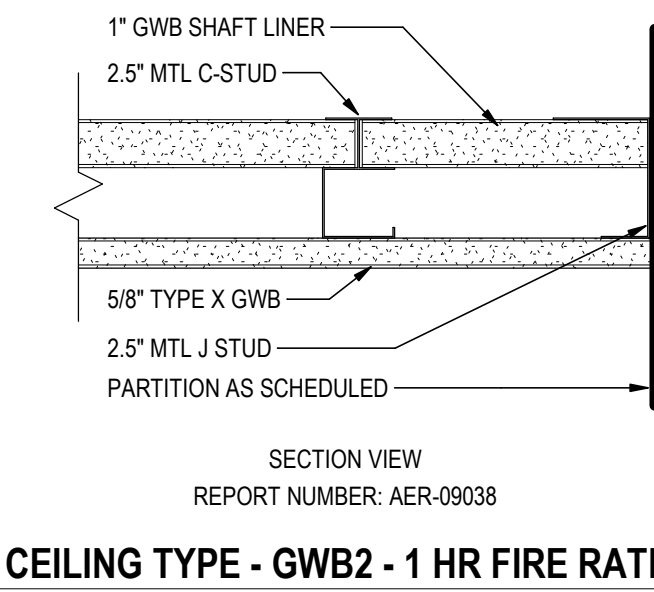
27	SINGLE 2 1/2" STUD PTN @ GWB CLG.	
28	SINGLE 3 5/8" STUD PARTITION	
28A	WITH SAB (SOUND ATTENUATION BATT INSULATION)	



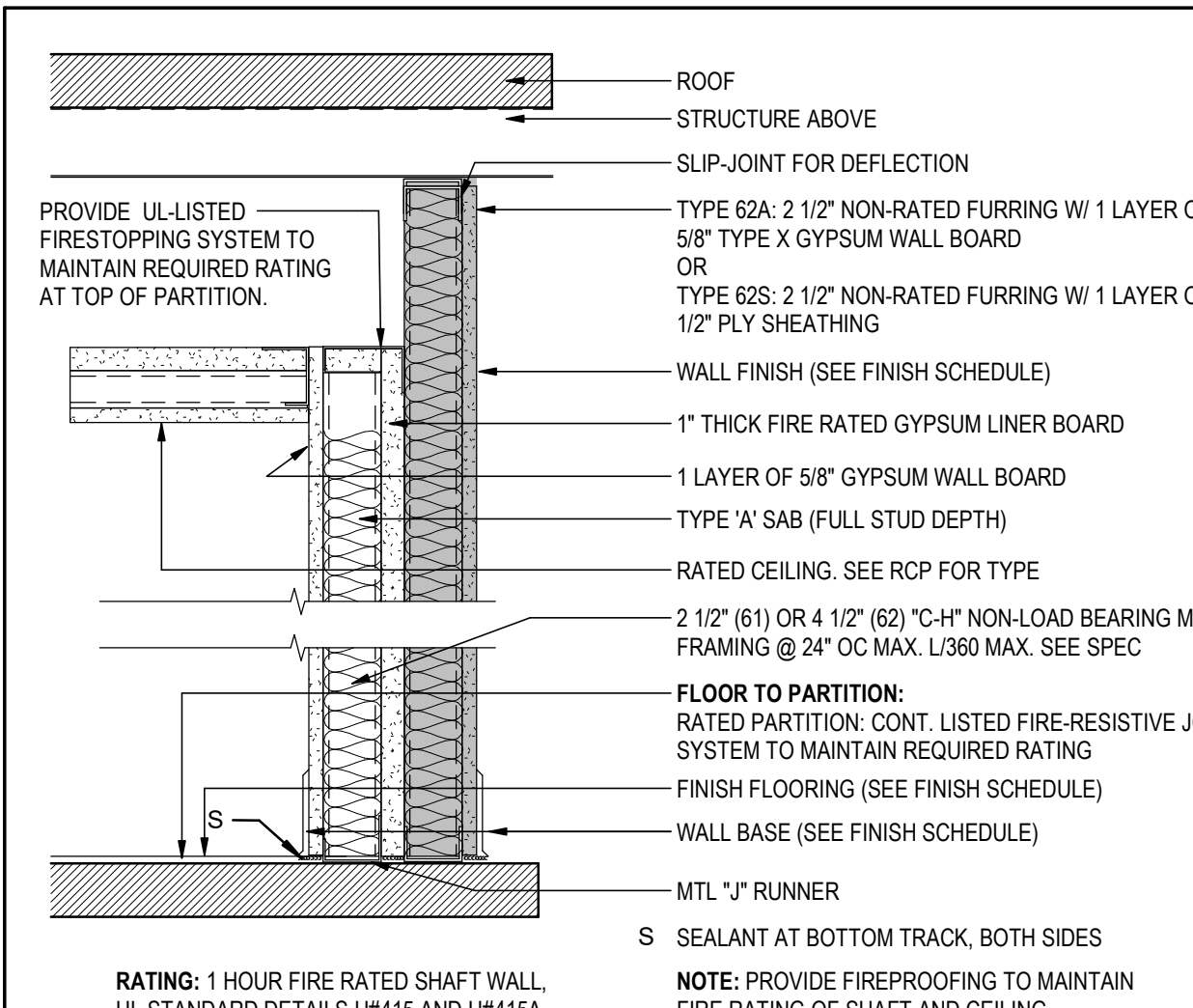
11	SINGLE 2 1/2" STUD PARTITION TO CEILING	
11A	WITH SAB (SOUND ATTENUATION BATT INSULATION)	



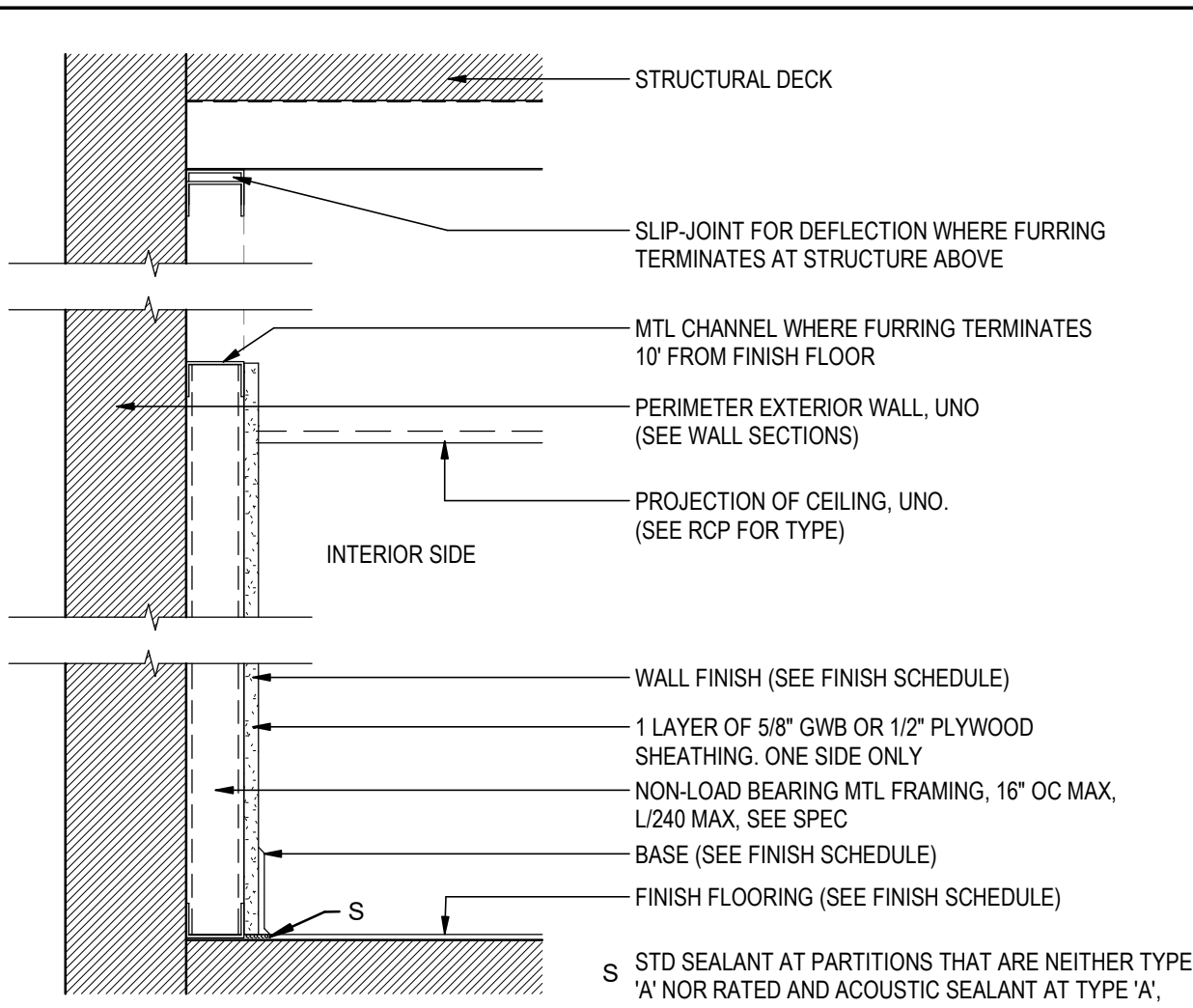
1A	SINGLE 3 5/8" STUD PARTITION W/ SAB	43-48 STC
3A	SINGLE 6" STUD PARTITION SAB	
3S	W/ SAB, 5/8" GWB ONE SIDE, 1/2" PLY ON MECH/INC. SIDE	



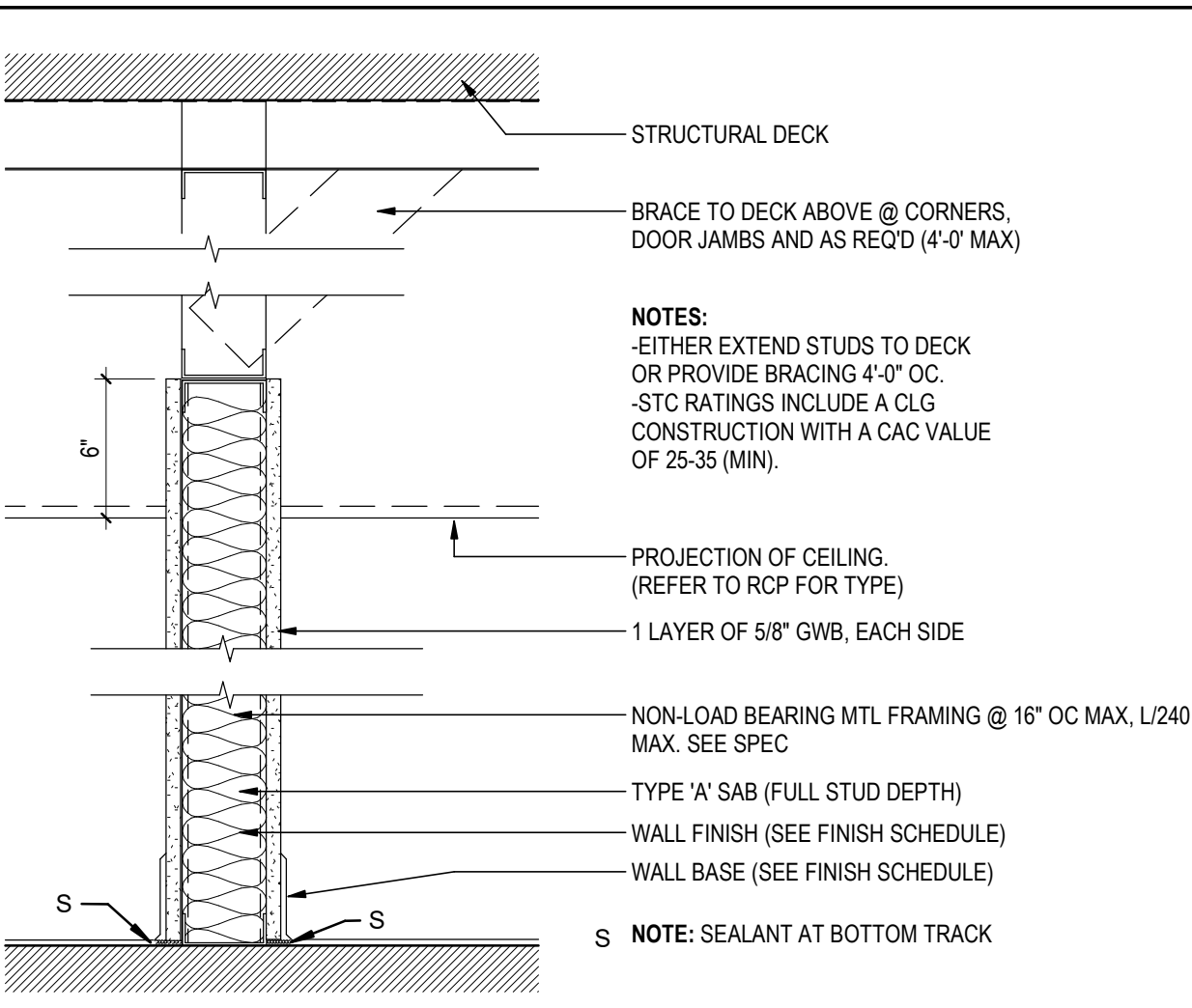
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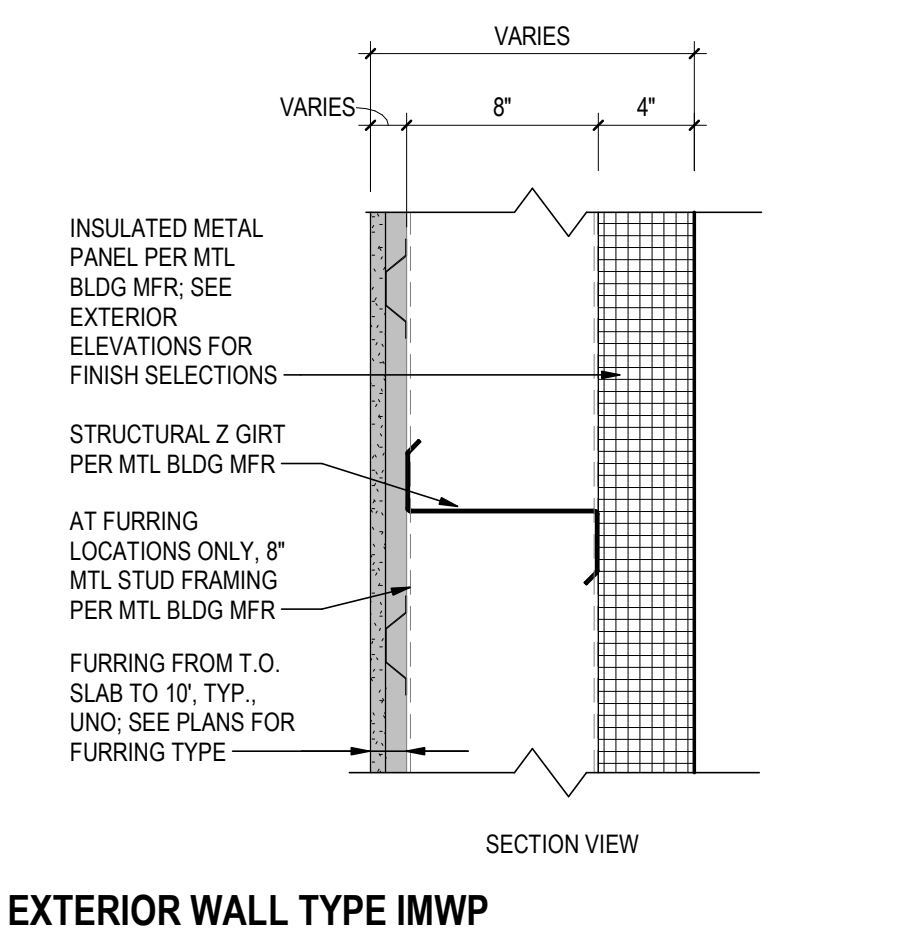
61A	1 HR SHAFT WALL, 2 1/2 " C-H, GWB FURRING	47-53 STC
	WITH SAB	
62A	1 HR SHAFT WALL, 4 1/2 " C-H, SAB, GWB FURR.	
62S	WITH SAB, 1/2" PLY FURRING	



21	SING. 7/8" HAT CHANNEL FURRING, FF TO 10'	
21S	WITH 1/2" PLYWOOD SHEATHING	
23	SING. 2 1/2" STUD FURRING, FF TO 10'	
23S	WITH 1/2" PLYWOOD SHEATHING	



9A	SINGLE 3 5/8" STUD PARTITION 6" ABOVE CLG.	43-48 STC
	WITH SAB (SOUND ATTENUATION BATT INSULATION)	
10	SINGLE 6" STUD PARTITION 6" ABOVE CLG.	
10A	WITH SAB (SOUND ATTENUATION BATT INSULATION)	



LABEL	DESCRIPTION
IMRP-1	INSULATED METAL ROOF PANEL
RP-1	ROOF PANEL-CANOPY-OPAQUE
RP-2	ROOF PANEL-CANOPY-SEMI TRANSPARENT
IMWP-1	INSULATED METAL WALL PANEL
IMWP-2	INSULATED METAL WALL PANEL

A

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Revision

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PACKAGE A

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Permit/Seal

20105228
REGISTERED ARCHITECT
Carel L. K. Nagata
STATE OF WASHINGTON
Digitally signed by Nagata, Carel L. K. DN: cn=Carel L. K. Nagata, email=Carel.L.Nagata@stantec.com, o=Stantec, ou=Stantec, c=US
Date: 2025.02.11 22:49:40 -0900
2025.02.11 22:49:40 -0900

Consultant

Stantec
Stantec Consulting Services Inc.
2353 130th Avenue NE Suite 200
Bellevue, 98005-1759
Tel: (425) 896-6900 • www.stantec.com
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Client/Project Logo

TULALIP TRIBES

Client/Project

Tulalip Tribes

Tulalip- Utility Wells ESDC and Battle Creek Design

6731 Totem Beach Rd. Tulalip, WA 98271

File Name: N/A

SW

CN

RT

2024.12.13

Dwn.

Dsgn.

Chkd.

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Title

ASSEMBLIES

Project No.

224202267

Revision

Scale

As indicated

Drawing No.

5A-3

C

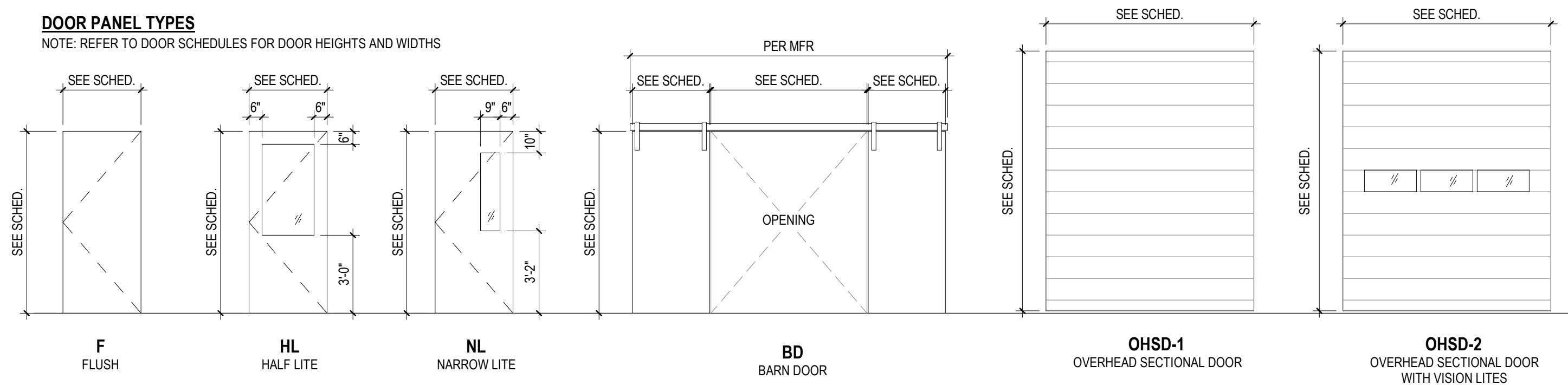
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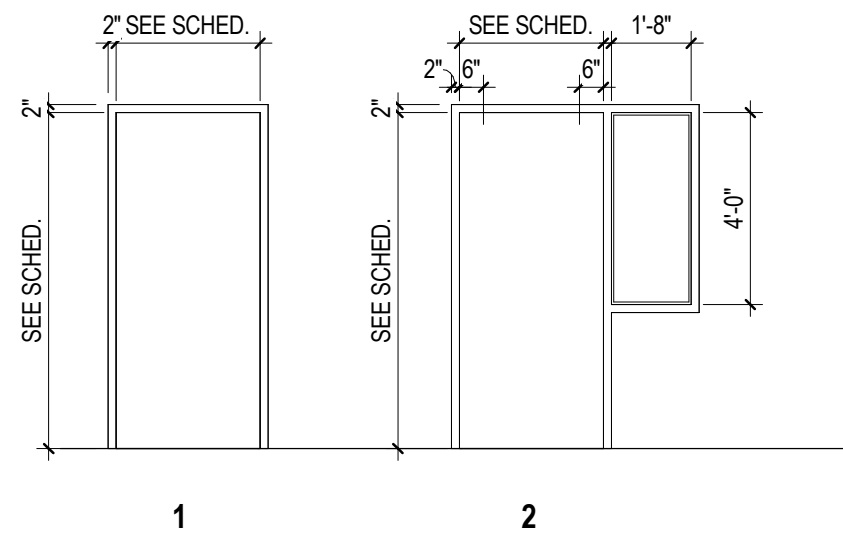
DOOR SCHEDULE - INCUBATION																			
NO.	FROM ROOM	TO ROOM	DOOR					CLOSER	DOOR PROTECTION	STOP	WEATHER SEAL PACKAGE	THRESHOLD	TRANSITION & TYPE SEE 3/5A-17	FRAME		FRAME DETAIL		SIGNAGE	COMMENTS
			WIDTH	HEIGHT	TYPE	MAT'L	HDWR FUNCTION							TYPE	MAT'L	HEAD	JAMB		
500A	INCUBATION		3'-0"	7'-0"	F	IHM	ENTRY	YES W/ STOP	KICK	-	Yes	Yes	EXT	1	IHM	3/A-14	2/5A-14	EXT SP-D, SP-L	EXT
500B			8'-0"	10'-0"	OHSD-1		PADLOCK	-	-	-	Yes	Yes	EXT		IHM			-	EXT, MOTORIZED, TWO CHAMFERED EDGE TRACK GUARDS AT INTERIOR
500C	INCUBATION		6'-0"	8'-0"	F	IHM	STOREROOM	YES W/ STOP	KICK	-	Yes	Yes	EXT	1	IHM	3/A-14	2/5A-14	EXT SP-D, SP-L	EXT
501A	EGG PROCESSING		6'-0"	8'-0"	F	IHM	STOREROOM	YES W/ STOP	KICK	-	Yes	Yes	EXT, FT-3	1	IHM	3/A-14	2/5A-14	EXT SP-D, SP-L	EXT
501B	EGG PROCESSING	INCUBATION	6'-0"	7'-0"	BD		NON LOCKING	-	-	PER MFR	No	No	-		HM			SP-D	HM DOORS, POWDER COATED STAINLESS STEEL HARDWARE
502A	FEED STORAGE		3'-0"	7'-0"	F	IHM	STOREROOM	YES W/ STOP	KICK	-	Yes	Yes	EXT	1	IHM	3/A-14	2/5A-14	EXT SP-D	EXT
502B			8'-0"	10'-0"	OHSD-2		PADLOCK	-	-	-	Yes	Yes	EXT		IHM			-	EXT, MOTORIZED, TWO CHAMFERED EDGE TRACK GUARDS AT INTERIOR
503	MECH		6'-0"	8'-0"	F	IHM	STOREROOM	YES W/ HOLD	30" KICK/ARMOR	-	Yes	Yes	EXT	1	IHM	3/A-14	2/5A-14	EXT SP-D	EXT
504	FORMALIN ROOM		6'-0"	7'-0"	F	IHM	STOREROOM	YES W/ STOP	30" KICK/ARMOR	-	Yes	Yes	EXT	1	IHM	3/A-14	2/5A-14	EXT S-A1, SP-D, SP-K	EXT, 45 MIN FIRE RATED DOOR AND FRAME
505	STORAGE	EGG PROCESSING	6'-0"	8'-0"	F	HM	STOREROOM	-	30" KICK/ARMOR	FLOOR	No	No	-	1	HM	2/5A-17	2/5A-17	SP-D	
506A	HALL A		3'-0"	7'-0"	HL	IHM	ENTRY	YES W/ HOLD	KICK	-	Yes	Yes	EXT, FT-3	2	IHM	3/A-14	2/5A-14	EXT S-A2, SP-K; INT SP-L	EXT
506B	HALL A	INCUBATION	3'-0"	7'-0"	F	HM	ENTRY	YES W/ HOLD	KICK	-	Yes	Yes	FT-3	1	HM	2/5A-17	2/5A-17	SP-D	
507	HALL B	TOILET A	3'-0"	7'-0"	F	HM	PRIVACY	YES	KICK/MOP	FLOOR	No	No	FT-2	1	HM	2/5A-17	2/5A-17	SP-E	INCLUDE OCC INDICATOR AND EMERGENCY KEY
508	HALL B	TOILET B	3'-0"	7'-0"	F	HM	PRIVACY	YES	KICK/MOP	FLOOR	No	No	FT-2	1	HM	2/5A-17	2/5A-17	SP-E	INCLUDE OCC INDICATOR AND EMERGENCY KEY
509	HALL B	JANITOR	3'-0"	7'-0"	F	HM	STOREROOM	-	KICK/MOP	FLOOR	No	No	-	1	HM	2/5A-17	2/5A-17	SP-D	
510	HALL B	SHOWER	3'-0"	7'-0"	F	HM	PRIVACY	YES	KICK/MOP	FLOOR	No	No	FT-2	1	HM	2/5A-17	2/5A-17	SP-D	INCLUDE OCC INDICATOR AND EMERGENCY KEY
511	HALL A	BOOT	3'-0"	7'-0"	-	HM	-	-	-	-	No	No	-	-	HM	1/5A-17	1/5A-17	SP-D	END CLOSURE PER DETAIL
512A	HALL C	BOOT	3'-0"	7'-0"	-	HM	-	-	-	-	No	No	-	-	HM	1/5A-17	1/5A-17	SP-D	END CLOSURE PER DETAIL
512B	HALL C	LOCKER	3'-0"	7'-0"	-	HM	-	-	-	-	No	No	-	-	HM	1/5A-17	1/5A-17		END CLOSURE PER DETAIL
513	HALL C	OFFICE 1	3'-0"	7'-0"	NL	HM	PASSAGE	-	-	WALL	No	No	FT-1	1	HM	2/5A-17	2/5A-17	SP-D	
514	HALL C	OFFICE 2	3'-0"	7'-0"	NL	HM	PASSAGE	-	-	WALL	No	No	FT-1	1	HM	2/5A-17	2/5A-17	SP-D	
515	BREAK		3'-0"	7'-0"	F	IHM	STOREROOM	YES W/ STOP	KICK	-	Yes	Yes	EXT, FT-3	2	IHM	3/A-14	2/5A-14	SP-F, SP-K, SP-L	EXT

DOOR PANEL TYPES

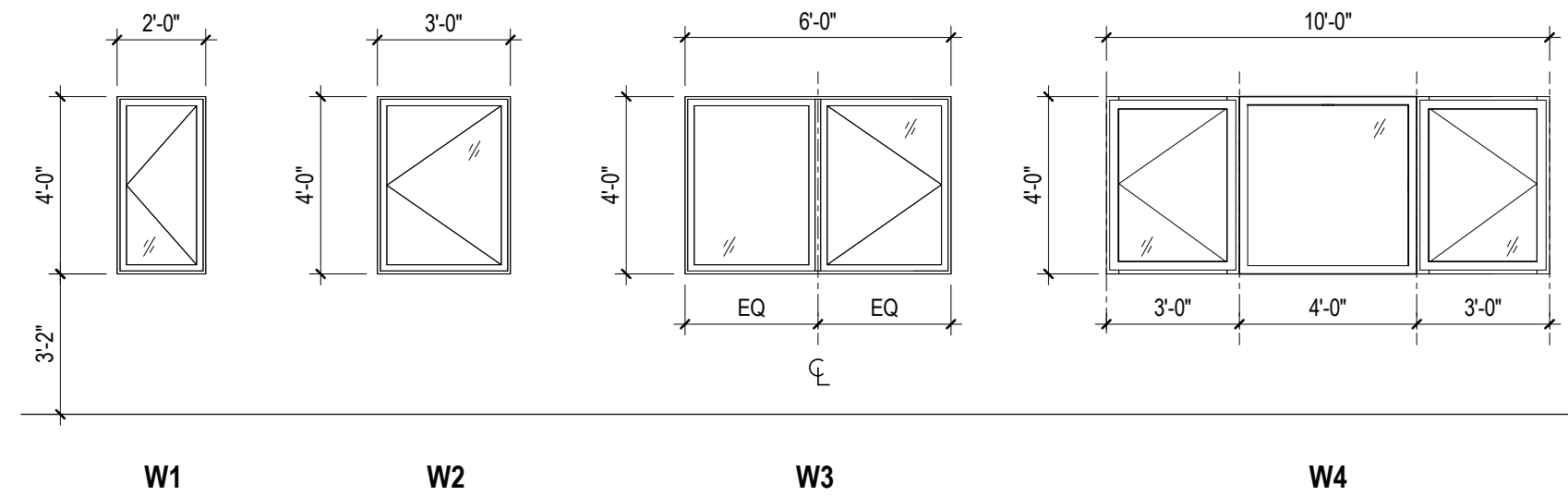
NOTE: REFER TO DOOR SCHEDULES FOR DOOR HEIGHTS AND WIDTHS



DOOR FRAME TYPES



WINDOW TYPE



WINDOW ROLLER SHADE LOCATIONS:
NOTE: SEE SHEET 5A-14 FOR WINDOW ROLLER SHADE DETAIL.

DOOR 515 - INCLUDE (1) SURFACE MOUNTED ROLLER SHADE (WT-1) AT SIDELITE
W1 - NO WINDOW SHADE
W2 - INCLUDE (1) SURFACE MOUNTED ROLLER SHADE (WT-1)
W3 - INCLUDE (2) SURFACE MOUNTED ROLLER SHADES (WT-1) AT EA UNIT
W4 - INCLUDE (3) SURFACE MOUNTED ROLLER SHADES (WT-1) AT EA UNIT

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR FIN.	BASE FIN.	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEIL FIN.	COMMENTS
500	INCUBATION	SC-1	RB-2	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	EXP-1	MOISTURE RES. GWB, FRP UP TO 8'-0"
501	EGG PROCESSING	SC-1	RB-2	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	EXP-1	MOISTURE RES. GWB, FRP UP TO 8'-0"
502	FEED STORAGE	SC-1	RB-2	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	EXP-1	FRP UP TO 8'-0"
503	MECH	SC-1	RB-2	P-1	P-1	P-1	P-1	EXP-1	
504	FORMALIN ROOM	SC-1	RB-2	FRP-3	FRP-3	FRP-3	FRP-3	GWB-2 / CP-1	1 HR CEILING, WALLS, FIXTURES; MOISTURE RES. GWB, FRP UP TO 8'-0"
505	STORAGE	SC-1	RB-2	P-1	P-1	P-1	P-1	EXP-1	
506A	HALL A	SC-1 / WM-1	RB-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	ACT-1	WALL COVERING EXTEND 5'-6" FROM FF
506B	HALL B	SC-1	RB-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	ACT-1	WALL COVERING EXTEND 5'-6" FROM FF
506C	HALL C	SC-1	RB-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	P-2 / WC-1	ACT-1	WALL COVERING EXTEND 5'-6" FROM FF
507	TOILET A	RSF-1	RB-2	P-1 / FRP-2	P-1 / FRP-2	P-1 / FRP-2	P-1 / FRP-2	GWB-1 / CP-1	MOISTURE RES. GWB, FRP UP TO 4'-0"
508	TOILET B	RSF-1	RB-2	P-1 / FRP-2	P-1 / FRP-2	P-1 / FRP-2	P-1 / FRP-2	GWB-1 / CP-1	MOISTURE RES. GWB, FRP UP TO 4'-0"
509	JANITOR	SC-1	RB-2	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	P-1 / FRP-1	EXP-1	MOISTURE RES. GWB, FRP UP TO 4'-0"
510	SHOWER	RSF-1	RB-1	FRP-2	FRP-2	FRP-2	FRP-2	GWB-1 / CP-1	MOISTURE RES. GWB, FRP UP TO 8'-0"
511	BOOT	RSF-1	RB-2	FRP-1	FRP-1	FRP-1	FRP-1	ACT-1	MOISTURE RES. GWB, FRP UP TO 8'-0"
512	LOCKER	SC-1	RB-1	FRP-1	FRP-1	FRP-1	FRP-1	ACT-1	MOISTURE RES. GWB, FRP UP TO 8'-0" UNO
513	OFFICE 1	CPT-1	RB-1	P-2	P-2	P-2	P-2	ACT-1	WT-1 AT WINDOWS
514	OFFICE 2	CPT-1	RB-1	P-2	P-2	P-2	P-2	ACT-1	WT-1 AT WINDOWS
515	BREAK	SC-1 / WM-1	RB-1	P-3 / WC-1	P-3	P-2	-	ACT-1	WT-1 AT WINDOWS
516	KITCHEN	SC-1	RB-1	P-2	-	P-2	P-2	ACT-1	MOISTURE RES. GWB ON WET WALLS

INTERIOR FINISH LEGEND

LABEL	DESCRIPTION	DETAILS	SPEC SECTION

FLOORING:

CPT-1	TILE CARPETING	3/5A-17	09 6813
RSF-1	RESILIENT SHEET FLOORING	3/5A-17	09 6516
SC-1	SEALED CONCRETE	3/5A-17	09 9600
WM-1	ENRANCE FLOOR MATS & FRAMES	3/5A-17	12 4813

BASE:

RB-1	RESILIENT BASE (4")		09 6513
RB-2	RESILIENT BASE (6")		09 6513

WALLS:

CG-1	CORNER GUARD	5/5A-17	09 7200
FRP-1	FIBERGLASS REINF. PANEL-TEXTURED	8-10/5A-17	06 6400
FRP-2	FIBERGLASS REINF. PANEL-SMOOTH	8-10/5A-17	06 6400
FRP-3	FIBERGLASS REINF. PANEL-RATED	8-10/5A-17	06 6400
P-1	PAINT-MAIN		09 9123
	SW 7008 ALABASTER-SATIN		
P-2	PAINT-ACCENT		09 9123
	SW 6178 CLARY SAGE-EGGSHELL		
P-3	PAINT-ACCENT		09 9123
	TBD-EGGSHELL		
P-4	PAINT-DOOR FRAME		09 9123
	TBD-SEMI GLOSS		
VDB-1	VISUAL DISPLAY CORK-BOARD (OFCI)	1/5A-16	10 1100
VDB-2	VISUAL DISPLAY WHITE-BOARD (OFCI)	1/5A-16	10 1100
WC-1	WALL COVERING	8-10/5A-17	09 7200
	P3TEC-TBD		

CEILING:

ACT-1	ACOUSTIC CEILING TILE		09 5113
CP-1	PAINT-CEILING GWB		09 9123
	SW 7008 ALABASTER-EGGSHELL		
EXP	PAINT-EXPOSED STRUCTURE		09 9123
	SW 7008 ALABASTER-SEMI GLOSS		
GWB1	GYP. CLG, MOIST. RES., PAINT CP-1		09 9123
GWB2	GYP. CLG, 1 HR RATED, MOIST. RES. PAINT CP-1	5A-3	09 9123

MILLWORK:

PL-1	PLASTIC LAMINATE, VERTICAL	5A-18	12 3623.13
PL-2	PLASTIC LAMINATE, HORIZONTAL	5A-18	12 3623.13

WINDOW:

WT-1	ROLLER WINDOW SHADES	6/5A-14	12 2413

SIGNAGE:

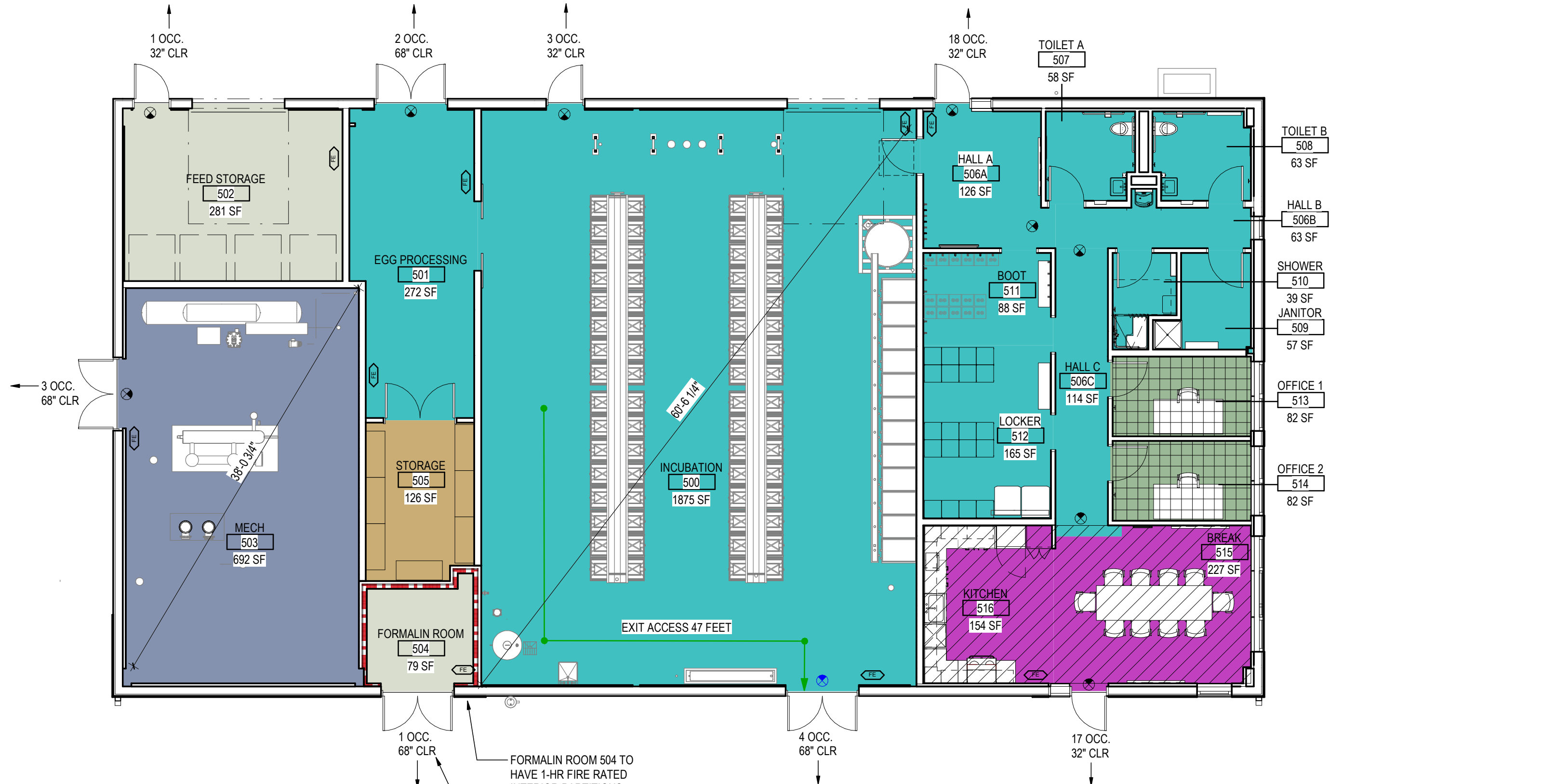
S-A1	SIGNAGE-ADDRESS NUMBER ID	3/5A-29	10 1423
S-A2	SIGNAGE-BUILDING NAME/ADDRESS	3/5A-29	10 1423
SP-D	SIGNAGE PLAQUE-ROOM ID	2/5A-29	10 1423
SP-E	SIGNAGE PLAQUE-RESTROOM ID	1/5A-29	10 1423
SP-F	SIGNAGE PLAQUE-MAXIMUM OCC	5/5A-29	10 1423
SP-G	SIGNAGE PLAQUE-DIRECTIONAL	3/5A-29	10 1423
SP-K	SIGNAGE PLAQUE-NO SMOKING	4/5A-29	10 1423
SP-L	SIGNAGE PLAQUE-EMERGENCY EXIT		10 1423
SP-M	SIGNAGE PLAQUE-FIRE EXTINGUISHER		10 1423
	PLACE ABOVE ALL FIRE EXTINGUISHERS		

								Permit/Seal 20105228 REGISTERED ARCHITECT  CAREL L. K. NAGATA STATE OF WASHINGTON Digitally signed by Nagata, Carel Date: 2025.02.11 22:49:41-09'00'				Consultant  Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.				Client/Project Logo 				Client/Project Tulalip Tribes Tulalip- Utility Wells ESDC and Battle Creek Design 6731 Totem Beach Rd. Tulalip, WA 98271 File Name: N/A SW CN RT 2024.12.13 Dwn. Dsgn. Chkd. YYYY.MM.DD				Title DOOR, WINDOW, FINISH SCHEDULES AND LEGENDS Project No. 224202267 Revision Scale As indicated Drawing No. 5A-4			
Revision By Appd YYYY.MM.DD Issued By Appd YYYY.MM.DD																											

C

B

A



IBC OCCUPANCY CLASSIFICATION AND USE

- A ASSEMBLY
- B BUSINESS
- S-1 MODERATE HAZARD STORAGE
- S-2 LOW HAZARD STORAGE
- U AGRICULTURAL
- U UTILITY AND MISCELLANEOUS

CODE PLAN LEGEND

EXIT SIGN

FIRE EXTINGUISHER

PATH OF TRAVEL

1

5A-11

CODE PLAN

1/8" = 1'-0"

OCCUPANT LOAD						
NUMBER	NAME	OCCUPANCY	FUNCTION OF SPACE	AREA	LOAD FACTOR	OCCUPANT LOAD
500	INCUBATION	U AGRICULTURAL	AGRICULTURAL BUILDING	1875 SF	300 SF	6.3
501	EGG PROCESSING	U AGRICULTURAL	AGRICULTURAL BUILDING	272 SF	300 SF	0.9
502	FEED STORAGE	S-1 MODERATE HAZARD STORAGE	STORAGE	281 SF	300 SF	0.9
503	MECH	U UTILITY AND MISCELLANEOUS	MECHANICAL	692 SF	300 SF	2.3
504	FORMALIN ROOM	S-1 MODERATE HAZARD STORAGE	STORAGE	79 SF	300 SF	0.3
505	STORAGE	S-2 LOW HAZARD STORAGE	STORAGE	126 SF	300 SF	0.4
506A	HALL A	U AGRICULTURAL	-	126 SF	0 SF	0
506B	HALL B	U AGRICULTURAL	-	63 SF	0 SF	0
506C	HALL C	U AGRICULTURAL	-	114 SF	0 SF	0
507	TOILET A	U AGRICULTURAL	-	58 SF	0 SF	0
508	TOILET B	U AGRICULTURAL	-	63 SF	0 SF	0
509	JANITOR	U AGRICULTURAL	-	57 SF	0 SF	0
510	SHOWER	U AGRICULTURAL	-	39 SF	0 SF	0
511	BOOT	U AGRICULTURAL	LOCKER ROOM	88 SF	50 SF	1.8
512	LOCKER	U AGRICULTURAL	LOCKER ROOM	165 SF	50 SF	3.3
513	OFFICE 1	B BUSINESS	BUSINESS	82 SF	150 SF	0.5
514	OFFICE 2	B BUSINESS	BUSINESS	82 SF	150 SF	0.5
515	BREAK	A ASSEMBLY	UNCONCENTRATED TABLES CHAIRS	227 SF	15 SF	15.1
516	KITCHEN	A ASSEMBLY	UNCONCENTRATED TABLES CHAIRS	154 SF	15 SF	10.2
42.6						

BUILDING CODE SUMMARY

AUTHORITY HAVING JURISDICTION
TULALIP TRIBE

CODE SUMMARY:
APPLICABLE CODES PER TULALIP TRIBAL CODES, TITLE 7 LAND USE CODES, CH. 7.14 DEVELOPMENT STANDARDS, SEC. 7.14.100 BUILDING CODE:
2015 INTERNATIONAL BUILDING CODE (IBC), APPENDIX J, WA STATE AMENDMENTS AND REF TO NFPA
2015 INTERNATIONAL FIRE CODE (IFC), APPENDIX A-G, WA STATE AMENDMENTS
2015 INTERNATIONAL FUEL GAS CODE
2015 MECHANICAL CODE (IMC)
2015 UNIFORM PLUMBING CODE (UPC), APPENDIX I, WA STATE AMENDMENTS
2015 NATIONAL ELECTRICAL CODE (NEC)

ICC-ANSI A117.1-2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES,
IBC APPENDIX E SUPPLEMENTARY ACCESSIBILITY STANDARDS

CHAPTER 7 FIRE RATED CONSTRUCTION

707 FIRE BARRIER- EXTEND TO UNDERSIDE OF ROOF SHEATHING OR RATED WALL ASSEMBLY

714.4.1 THROUGH PENETRATIONS- MATERIAL TO FILL ANNULAR SPACE SHALL PREVENT FLAME AND GASES WHEN SUBJECT TO ASTM E119 OR UL 263 TIME-TEMP FIRE CONDITIONS UNDER MIN. POSITIVE PRESSURE DIFF OF 0.01 INCH OF WATER AT LOCATION OF PENETRATION

714.4.2 MEMBRANE PENETRATIONS- MEET 714.3.1.

715.3 FIRE RESISTIVE JOINT SYSTEMS- TESTED IN ACCORDANCE WITH ASTM E1966 OR UL 2079.

CHAPTER 8 INTERIOR FINISHES

803.13 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY
NON SPRINKLERED: U OCCUPANCY- NO RESTRICTIONS

CHAPTER 9 FIRE PROTECTION

903.2 FIRE SPRINKLERS- WHERE REQUIRED- BUILDING IS NOT SPRINKLERED

903.2.11.4 DUCTS WITH HAZARDOUS EXHAUST

906.1 PORTABLE FIRE EXTINGUISHERS WHERE REQUIRED-
3. IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED
5. WHERE REQUIRED BY IFC TABLE 906.1.

CHAPTER 10 EGRESS

1004.1 DESIGN OCCUPANT LOAD
(SEE TABLE BELOW)

1006.3.2(2) SPACES WITH ONE EXIT / MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE: FIRST STORY, U OCCUPANCY, < 49 OCCUPANTS, NON SPRINKLERED: 75 FT MAX

CHAPTER 11 ACCESSIBILITY

1103.2.4 UTILITY BUILDINGS- GROUP U OCCUPANCIES ARE NOT REQUIRED TO COMPLY WITH THIS CHAPTER OTHER THAN AGRICULTURAL BUILDINGS, ACCESS IS REQUIRED TO PAVED WORK AREAS AND AREAS OPEN TO GENERAL PUBLIC.

1104.3.1 EMPLOYEE WORK AREAS- COMMON USE CIRCULATION PATHS WITHIN EMPLOYEE WORK AREAS SHALL BE ACCESSIBLE ROUTES.
EXCEPTION 1- COMMON USE CIRCULATION PATHS, LOCATED WITHIN EMPLOYEE WORK AREAS THAT ARE LESS THAN 1,000 SF IN SIZE AND DEFINED BY PERMANENT PARTITIONS... SHALL NOT BE REQUIRED TO BE ACCESSIBLE ROUTES.

CHAPTER 12 INTERIOR ENVIRONMENT

1207.2 MINIMUM CEILING HEIGHTS: NO LESS THAN 7'-6"

1209.2.1 TOILET FINISH MATERIALS- MATERIALS SHOULD HAVE SMOOTH, HARD NON-ABSORBENT SURFACE. INTERSECTIONS OF FLOORS AT WALLS SHALL HAVE BASE THAT EXTENDS UPWARD ONTO WALLS NOT LESS THAN 4 INCHES.

1209.2.2 WALLS WITHIN 2 FEET OF SERVICE SINKS, URINALS AND WATER CLOSETS SHALL HAVE SMOOTH HARD SURFACE TO HEIGHT OF NO LESS THAN 4 FEET ABOVE FLOOR.

CHAPTER 29 PLUMBING

2902 PLUMBING FIXTURES:

CLASSIFICATION- BUSINESS 32 (16 FEMALE / 16 MALE)
TOILET PER 25 FOR FIRST 50; 2 REQUIRED / 2 PROVIDED
LAV 1 PER 40 FOR FIRST 80; 2 REQUIRED / 1 PROVIDED
SHOWER: NOT REQUIRED
DRINKING FOUNTAIN 1 PER 100; 1 REQUIRED / 1 PROVIDED
SERVICE SINK: 1 REQUIRED / 1 PROVIDED

CHAPTER 2 DEFINITIONS

COMBUSTIBLE LIQUID- A LIQUID HAVING A CLOSED CUP FLASH POINT AT OR ABOVE 100 DEG FAHRENHEIT. COMBUSTIBLE LIQUIDS SHALL BE SUBDIVIDED AS FOLLOWS: CLASS IIIA- LIQUIDS HAVING A CLOSED CUP FLASH POINT AT OR ABOVE 140 DEG FAHRENHEIT AND BELOW 200 DEG FAHRENHEIT.

TOXIC- A CHEMICAL FALLING WITHIN ANY OF THE FOLLOWING CATEGORIES:
1. A CHEMICAL THAT HAS A MEDIAN LETHAL DOSE 50-500mg PER KG BODY WEIGHT WHEN ADMINISTERED ORALLY... 200-300 GRAM RAT,
2. A CHEMICAL THAT HAS MEDIAN LETHAL DOSE 200-1000mg PER KG BODY WEIGHT WHEN ADMINISTERED BY CONTINUOUS CONTACT FOR 24 HOURS OR LESS... 2-3KG RABBIT.
3. A CHEMICAL THAT HAS MEDIAN LETHAL DOSE 200-2,000ppm VOLUME GAS/VAPOR WHEN ADMINISTERED BY CONTINUOUS INHALATION FOR 1 HOUR OR LESS... 200-300 GRAM RAT.

CHAPTER 3 USE AND OCCUPANCY

U AGRICULTURAL

CHEMICAL BEING STORED AND USED IN CLOSED SYSTEM:
WESTERN CHEMICAL INC- PARASITE-S
37% FORMALDEHYDE SOLUTION, 13% METHANOL
CLOSED CUP FLASHPOINT- 145 DEG FAHRENHEIT
BOILING POINT 210 DEG FAHRENHEIT
ACUTE TOXICITY: SEE MFR SAFETY DATA SHEET

307.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING PHYSICAL HAZARD
COMBUSTIBLE LIQUID CLASS IIIA: 330 GALLONS

307.1(2) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING HEALTH HAZARD
TOXIC STORAGE- LIQUID (POUNDS): 500 POUNDS (50 GALLONS) OR PROVIDE WEIGHT PER GALLON TO FIRE CODE OFFICIAL
TOXIC USE- CLOSED SYSTEM: 500 POUNDS (50 GALLONS) OR PROVIDE WEIGHT PER GALLON TO FIRE CODE OFFICIAL

FOOTNOTE b- THE AGGREGATE QUANTITY IN USE AND STORAGE SHALL NOT EXCEED THE QUANTITY LISTED IN STORAGE
FOOTNOTE e- MAX ALLOWABLE QUANTITY MAY BE INCREASED 100 PERCENT WHERE STORED IN APPROVED STORAGE CABINETS, GAS CABINETS OR EXHAUSTED ENCLOSURES AS SPECIFIED IN IFC.
FOOTNOTE i- FOR GALLONS OF LIQUIDS, DIVIDE THE AMOUNT IN POUNDS BY 10 IN ACCORDANCE WITH IFC 5003.1.2.**CHAPTER 4 SPECIAL OCCUPANCIES**

414.2.1 CONTROL AREA CONSTRUCTION- SEPARATE FROM EACH AREA WITH FIRE BARRIERS PER 707 OR HORIZONTAL ASSEMBLIES PER 717.

414.2.2 PERCENTAGE OF MAXIMUM ALLOWABLE QUANTITIES PER TABLE 414.2.2
1 STORY ABOVE GRADE PLANE:
PERCENTAGE OF THE MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA: 100%
CONTROL AREAS PER STORY: 4
FIRE RESISTANCE RATING: 1-HR

CHAPTER 5 BUILDING HEIGHTS AND AREA

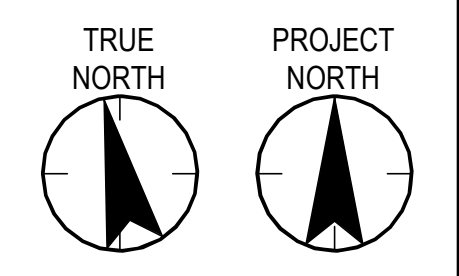
504.3 ALLOWABLE BUILDING HEIGHT
U OCCUPANCY, NS, TYPE VB: 40 FT
ACTUAL HEIGHT: 18 FT

504.4 NUMBER OF STORIES
U OCCUPANCY, NS, TYPE V-B: 2 STORIES
ACTUAL NUMBER OF STORIES: 1 STORY

506.2 ALLOWABLE AREA
U OCCUPANCY: 5,500 SF PER STORY
ACTUAL AREA: 6,041 SF

506.3 FRONTAGE INCREASE:
If = [FIP - 0.25] W / 30
If = [0.50 - 0.25] 30 / 30
If = 25
ALLOWABLE AREA 5,500 x 1.25 = 6,875 SF

CHAPTER 6 CONSTRUCTION TYPE
TABLE 601 FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:
TYPE V-B
PRIMARY STRUCTURAL FRAME: 0
BEARING WALLS- EXTERIOR: 0
BEARING WALLS- INTERIOR: 0
NON BEARING WALLS- EXTERIOR:
NON BEARING WALLS AND PARTITIONS INTERIOR: 0
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS: 0
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS: 0

TABLE 602 FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE
TYPE V, > 30 FEET, U OCCUPANCY: 0

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20105228

REGISTERED ARCHITECT

CAREL L. K. NAGATA

STATE OF WASHINGTON

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Tulalip Tribes

Tulalip- Utility Wells ESDC and Battle Creek Design

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Title

INCUBATION CODE PLAN

Project No.

224202267

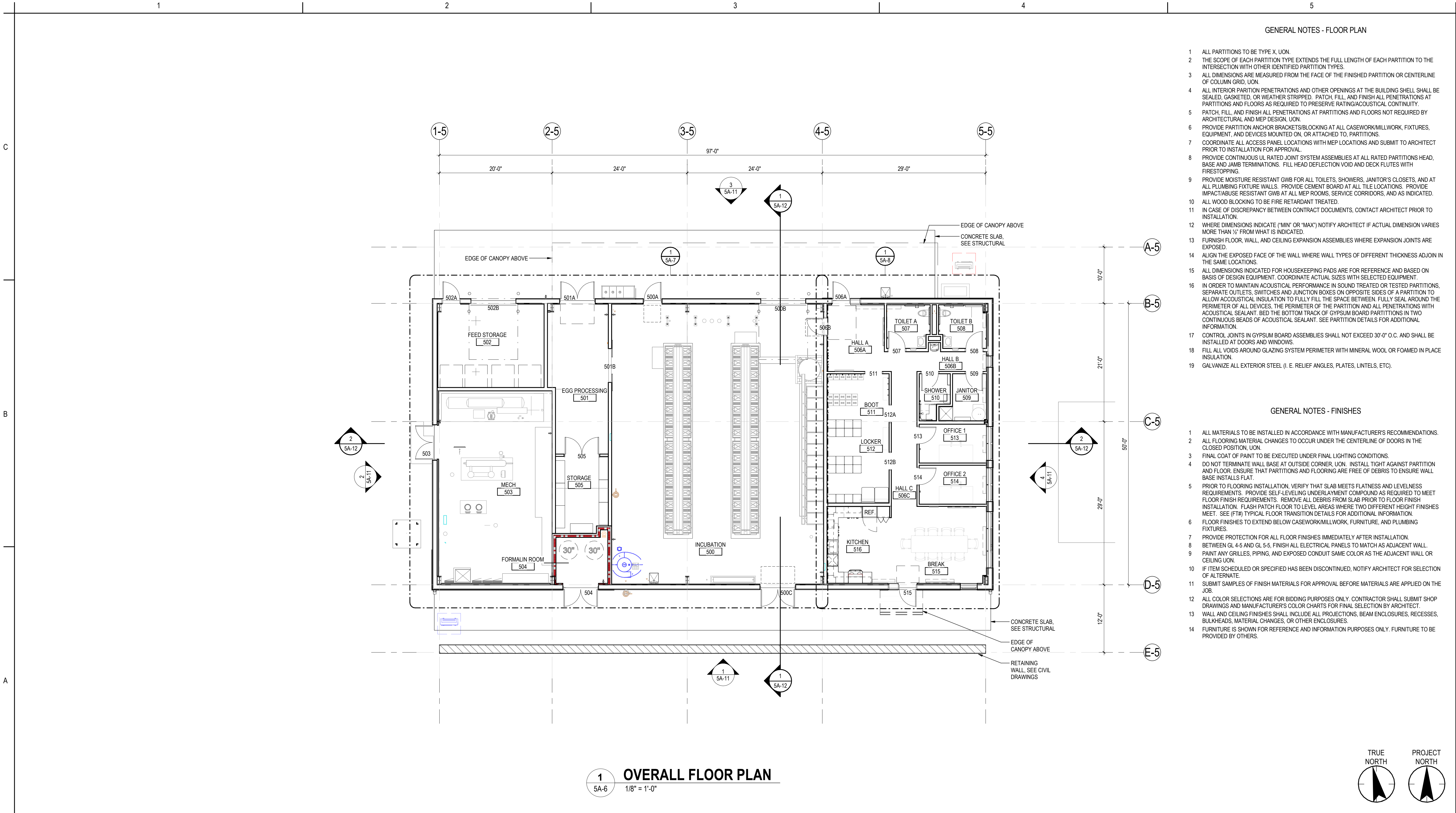
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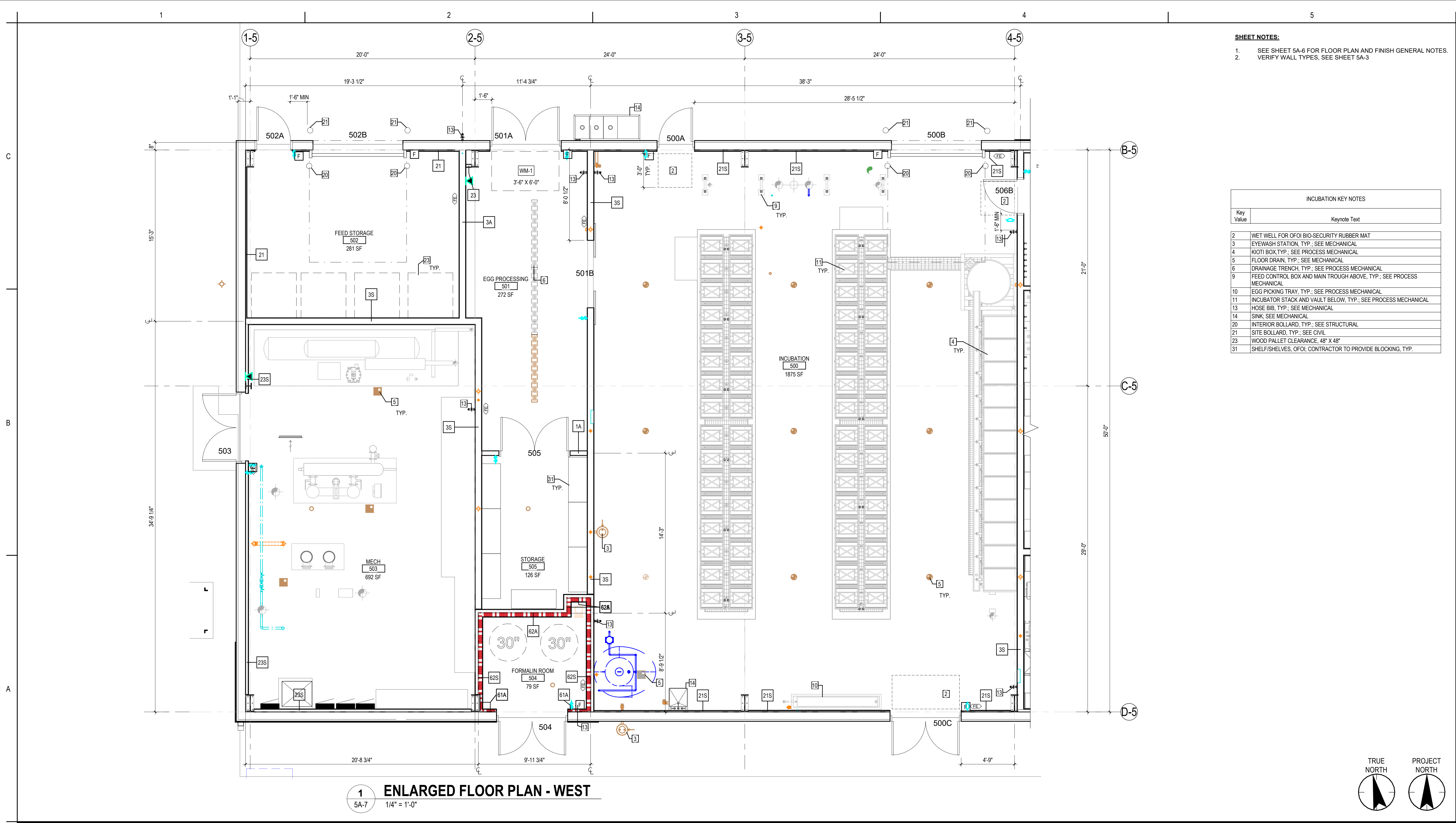
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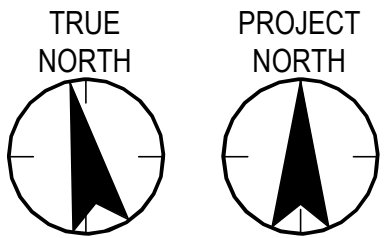
5A-5





- SHEET NOTES:**
- SEE SHEET 5A-6 FOR FLOOR PLAN AND FINISH GENERAL NOTES.
 - VERIFY WALL TYPES, SEE SHEET 5A-3

INCUBATION KEY NOTES	
Key Value	Keynote Text
2	WET WELL FOR OFOI BIO-SECURITY RUBBER MAT
3	EYEWASH STATION, TYP.; SEE MECHANICAL
4	KIOTI BOX, TYP.; SEE PROCESS MECHANICAL
5	FLOOR DRAIN, TYP.; SEE MECHANICAL
6	DRAINAGE TRENCH, TYP.; SEE PROCESS MECHANICAL
9	FEED CONTROL BOX AND MAIN TROUGH ABOVE, TYP.; SEE PROCESS MECHANICAL
10	EGG PICKING TRAY, TYP.; SEE PROCESS MECHANICAL
11	INCUBATOR STACK AND VAULT BELOW, TYP.; SEE PROCESS MECHANICAL
13	HOSE BIB, TYP.; SEE MECHANICAL
14	SINK; SEE MECHANICAL
20	INTERIOR BOLLARD, TYP.; SEE STRUCTURAL
21	SITE BOLLARD, TYP.; SEE CIVIL
23	WOOD PALLET CLEARANCE, 48" X 48"
31	SHELF/SHELVES, OFOI; CONTRACTOR TO PROVIDE BLOCKING, TYP.



1 ENLARGED FLOOR PLAN - WEST
5A-7 1/4" = 1'-0"

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Title
INCUBATION ENLARGED FLOOR PLAN
- WEST

Project No.
224202267

Revision

Scale
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Drawing No.

5A-7

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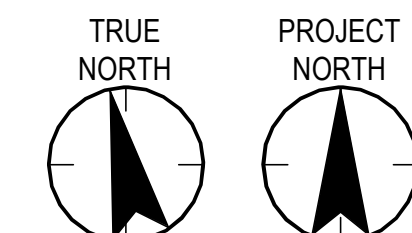

$$\frac{3}{8}'' = 1'-0''$$


1/4" = 1'-0"

1. SEE SHEET 5A-6 FOR FLOOR PLAN AND FINISH GENERAL NOTES
2. VERIFY WALL TYPES, SEE SHEET 5A-3

GENERAL NOTES - TOILET & SHOWER

1. SEE SHEET 5A-16 FOR TYPICAL MOUNTING HEIGHTS AND TOILET ACCESSORY IDENTIFICATION.
2. COORDINATE INSTALLATION OF REQUIRED BLOCKING AND STABILIZING FOR FIXTURES.
3. VERIFY FLOOR DRAIN STRAINER ELEV FOR ACCESSIBLE SHOWERS ARE 1" BELOW ADJACENT FINISH FLOOR ELEV.
4. DIMENSIONS INDICATED ARE FINISH TO FINISH INCLUDING ANY FINISH THICKNESS. WHERE ACCESSORIES (INCLUDING GRAB BARS) ARE SCHEDULED FOR WALL ATTACHMENT, PROVIDE SLOD 2X FRT WOOD BLOCKING.
5. ALL HANDRAIL MOUNTING SHALL COMPLY W/ ADA REQUIREMENTS.



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Drawing No.

5A-8

Exhibit D-1 Page 40 of 220

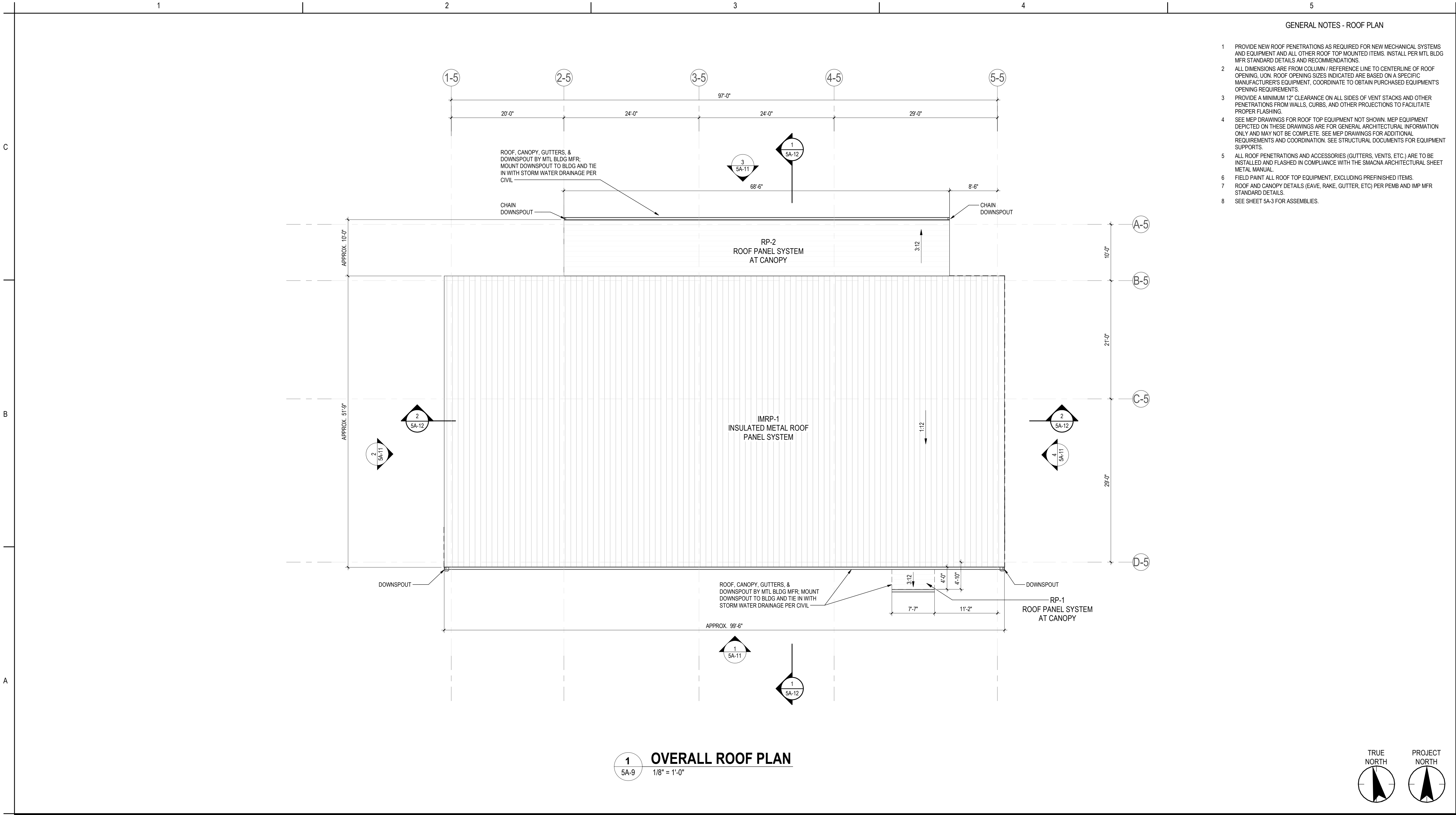
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GENERAL NOTES - RCP

- CUT CEILING TILES SHALL NOT BE LESS THAN 3"; COORDINATE PRIOR TO FINAL CEILING LAYOUT. CUT TILES SHALL BE FIELD REVEALED, PAINTED, AND SEALED.
- COORDINATE LOCATION, ALIGNMENT, AND MOUNTING OF ALL VISIBLE CEILING, PARTITION, AND FLOOR MOUNTED DEVICES WITH ARCHITECT PRIOR TO INSTALLATION IF NOT SHOWN IN ARCHITECTURAL DWGS.
- ALL CEILING DEVICES, INCLUDING BUT NOT LIMITED TO LIGHT FIXTURES, FIRE ALARM DEVICES, MOTION SENSORS, SPRINKLER HEADS, HVAC SUPPLY, AND HVAC RETURNS SHALL BE CENTERED WITHIN CEILING TILE, UNO.
- PROVIDE COORDINATION DWGS FOR LIGHT FIXTURE LAYOUT PRIOR TO INSTALLATION. ARCHITECT TO APPROVE LAYOUT/ ALIGNMENT. CONTRACTOR REMAINS RESPONSIBLE FOR COORDINATION.
- ALL SWITCHES WITHIN AREA TO BE GANGED UNDER ONE PLATE.
- ALL ACCESS PANEL LOCATIONS SHALL BE COORDINATED WITH MEP LOCATIONS AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
- IN CASE OF DISCREPANCY BETWEEN MEP DRAWINGS AND ARCHITECTURAL DRAWINGS, CONTACT ARCHITECT PRIOR TO INSTALLATION OF MEP ITEMS.
- PROTECT LIGHT FIXTURES AND OTHER CEILING MOUNTED FIXTURES FROM STAINS AND DAMAGE FOLLOWING INSTALLATION. CEILINGS TO BE FINISHED PRIOR TO INSTALLATION OF VISIBLE LIGHT FIXTURE PARTS. ALL LIGHT FIXTURE LENSES/COVERS TO BE CLEANED PRIOR TO TURNING OVER THE SPACE.
- IN OPEN CEILING CONDITIONS, ALL CONDUCTORS SHALL BE IN CONDUIT, INCLUDING DATA AND LIFE SAFETY. LAY-OUT CONDUIT RUNS ON THE FLOOR FOR APPROVAL BY ARCHITECT PRIOR TO INSTALLATION.
- CLEAN ALL EXPOSED CEILING AREAS OF ALL DEBRIS AND UNUSED MATERIAL/DEVICES. PAINT DECK, STRUCTURE, DUCT WORK AND EXPOSED PIPING X, UNO.
- THE ZONE ABOVE ALL HARD CEILING AREAS, FROM THE CEILING ELEVATION UP TO THE FLOOR OR ROOF ABOVE, SHALL CONTAIN NO BUILDING SUPPORT ITEMS. BUILDING SUPPORT ITEMS SUCH AS DUCTS, CONDUITS, PIPES, ETC MAY PASS THRU THE ABOVE-CEILING ZONE PROVIDED NONE OF THE ITEMS THAT REQUIRE MAINTENANCE, ADJUSTMENT, OR INSPECTION.
- LIGHT FIXTURE LAYOUT IN ARCHITECTURAL RCP'S ARE SHOWN FOR ALIGNMENT AND DESIGN INTENT PURPOSES. SEE ELECTRICAL DRAWINGS FOR LIGHT FIXTURES TYPES.
- PROVIDE HORIZONTAL AND VERTICAL CONTROL JOINTS AT 30' - 0" OC MAXIMUM AT ALL GYPSUM BOARD BULKHEADS.
- SECURE AND BRACE GYPSUM BULKHEADS TO STRUCTURE WITH METAL STUD KICKERS AT 48" O.C. MIN.

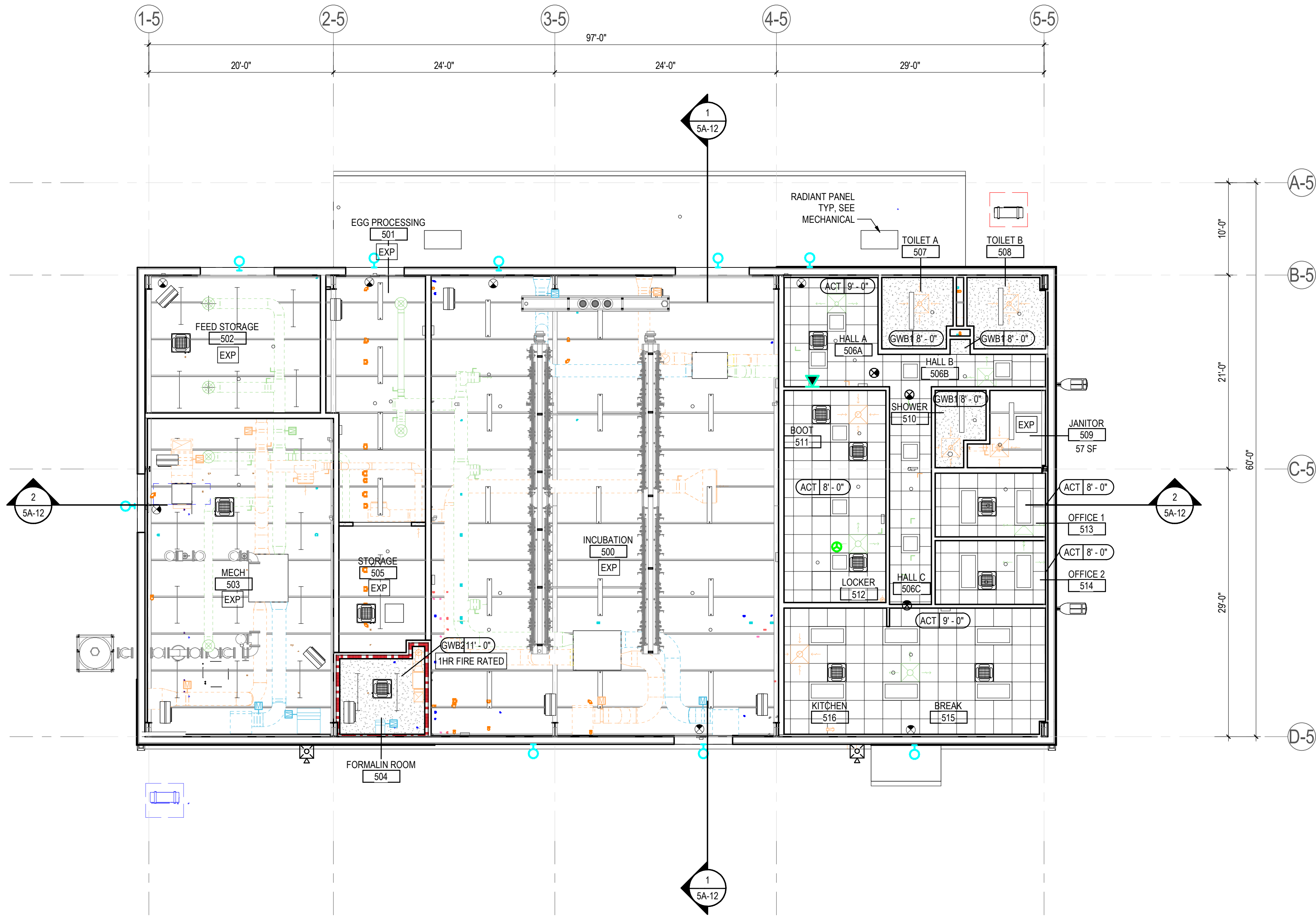
REFLECTED CEILING PLAN LEGEND

- EXP EXPOSED CEILING, PAINTED ABOVE; SEE FINISH LEGEND
- GYPSUM CEILING, UNRATED (GWB1) & 1 HR FIRE RATED (GWB2); SEE 5A-3 FOR GWB2 DETAIL
- 2' X 2' ACOUSTICAL CEILING TILES & GRID (ACT)
- 2' X 4' LIGHT FIXTURE, SEE ELECTRICAL
- 2' X 2' LIGHT FIXTURE, SEE ELECTRICAL
- LINEAR LIGHT FIXTURES, SEE ELECTRICAL
- CAN LIGHT FIXTURE, SEE ELECTRICAL
- EMERGENCY LIGHT FIXTURES, SEE ELECTRICAL
- WALL MOUNTED DOWNLIGHT, SEE ELECTRICAL
- SUPPLY DIFFUSER, SEE MECHANICAL
- RETURN DIFFUSER, SEE MECHANICAL
- SPLIT HEAT PUMP FAN, SEE MECHANICAL
- OCCUPANCY SENSOR, SEE ELECTRICAL
- SMOKE DETECTOR, SEE ELECTRICAL
- HEAT DETECTOR, SEE MECHANICAL
- UNIT HEAT, SEE MECHANICAL

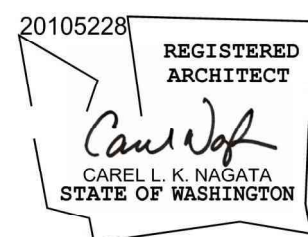


1 REFLECTED CEILING PLAN

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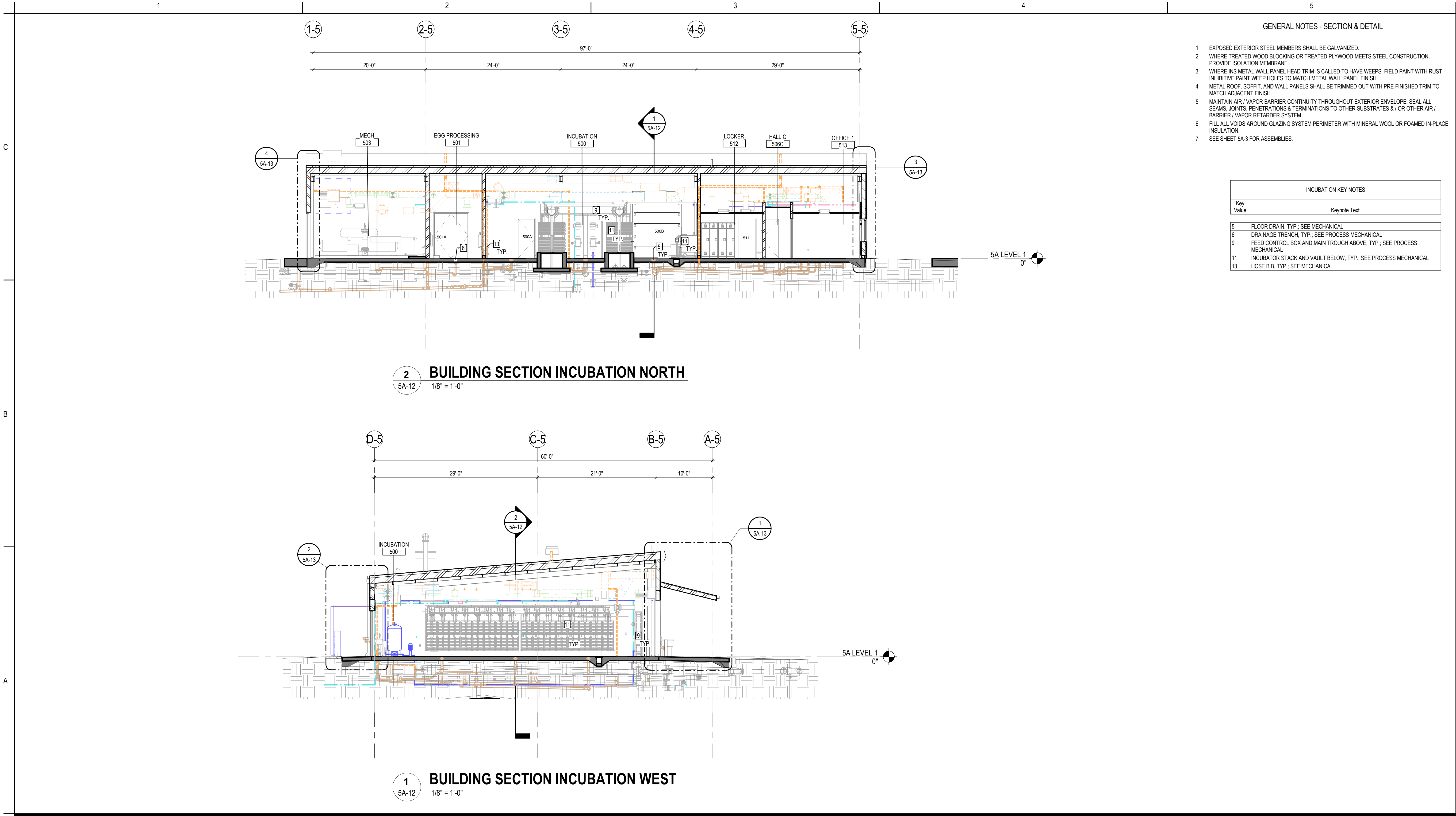
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- 1 MAINTAIN AIR / VAPOR BARRIER CONTINUITY THROUGHOUT EXTERIOR ENVELOPE. SEAL ALL AIR BARRIER / VAPOR RETARDER SEAMS, JOINTS, PENETRATIONS & TERMINATIONS TO OTHER SUBSTRATES & OR OTHER AIR / BARRIER / VAPOR RETARDER SYSTEM.
- 2 FILL ALL VOIDS AROUND GLAZING SYSTEM PERIMETER WITH MINERAL WOOL OR FOAMED IN-PLACE INSULATION.
- 3 EXTERIOR STEEL (I, E, RELIEF ANGLES, PLATES, LINTELS, ETC), ARE TO BE GALVANIZED WITH HIGH PERFORMANCE COATING, UON.
- 4 PROVIDE ISOLATION MEMBRANE WHERE TREATED WOOD BLOCKING OR TREATED PLYWOOD MEETS STEEL CONSTRUCTION.
- 5 SEE SHEET 5A-3 FOR ASSEMBLIES.
- 6 WALLS, ROOF, CANOPY, GUTTERS, & DOWNSPOUTS BY MTL BLDG MFR; MOUNT DOWNSPOUT TO BLDG AND TIE IN WITH STORM WATER DRAINAGE PER CIVL.

Exhibit D-1 Page 43 of 220



GENERAL NOTES - SECTION & DETAIL

- 1 EXPOSED EXTERIOR STEEL MEMBERS SHALL BE GALVANIZED.
- 2 WHERE TREATED WOOD BLOCKING OR TREATED PLYWOOD MEETS STEEL CONSTRUCTION, PROVIDE ISOLATION MEMBRANE.
- 3 WHERE INS METAL WALL PANEL HEAD TRIM IS CALLED TO HAVE WEEPS, FIELD PAINT WITH RUST INHIBITIVE PAINT WEEP HOLES TO MATCH METAL WALL PANEL FINISH.
- 4 METAL ROOF, SOFFIT, AND WALL PANELS SHALL BE TRIMMED OUT WITH PRE-FINISHED TRIM TO MATCH ADJACENT FINISH.
- 5 MAINTAIN AIR / VAPOR BARRIER CONTINUITY THROUGHOUT EXTERIOR ENVELOPE. SEAL ALL SEAMS, JOINTS, PENETRATIONS & TERMINATIONS TO OTHER SUBSTRATES & / OR OTHER AIR / BARRIER / VAPOR RETARDER SYSTEM.
- 6 FILL ALL VOIDS AROUND GLAZING SYSTEM PERIMETER WITH MINERAL WOOL OR FOAMED IN-PLACE INSULATION.
- 7 SEE SHEET 5A-3 FOR ASSEMBLIES.

INCUBATION KEY NOTES	
Key Value	Keynote Text
5	FLOOR DRAIN, TYP.: SEE MECHANICAL
6	DRAINAGE TRENCH, TYP.: SEE PROCESS MECHANICAL
9	FEED CONTROL BOX AND MAIN TROUGH ABOVE, TYP.: SEE PROCESS MECHANICAL
11	INCUBATOR STACK AND VAULT BELOW, TYP.: SEE PROCESS MECHANICAL
13	HOSE BIB, TYP.: SEE MECHANICAL

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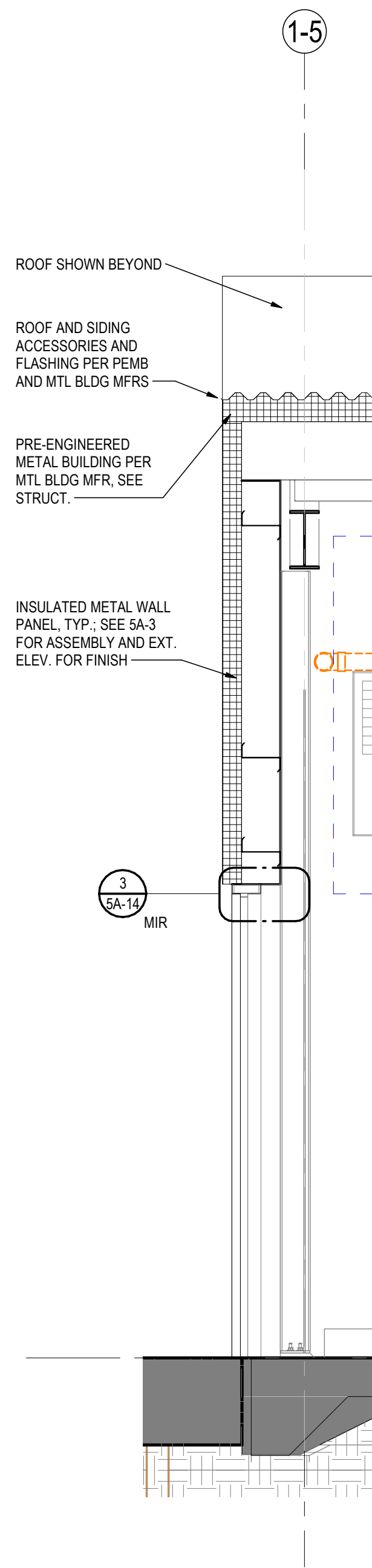
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Revision				By	Appd	YYYY.MM.DD	PACKAGE A Issued		By	Appd	YYYY.MM.DD				

NOTE: SEE PEMB MFR AND IMP MFR FOR RECOMMENDED STANDARD EXTERIOR WALL AND ROOF DETAILS. OPENING DETAILS SHOWN HERE ARE INTENDED TO PROVIDE ADDITIONAL INFORMATION/DIRECTION NOT INCLUDED IN MFR STANDARD DETAILS.

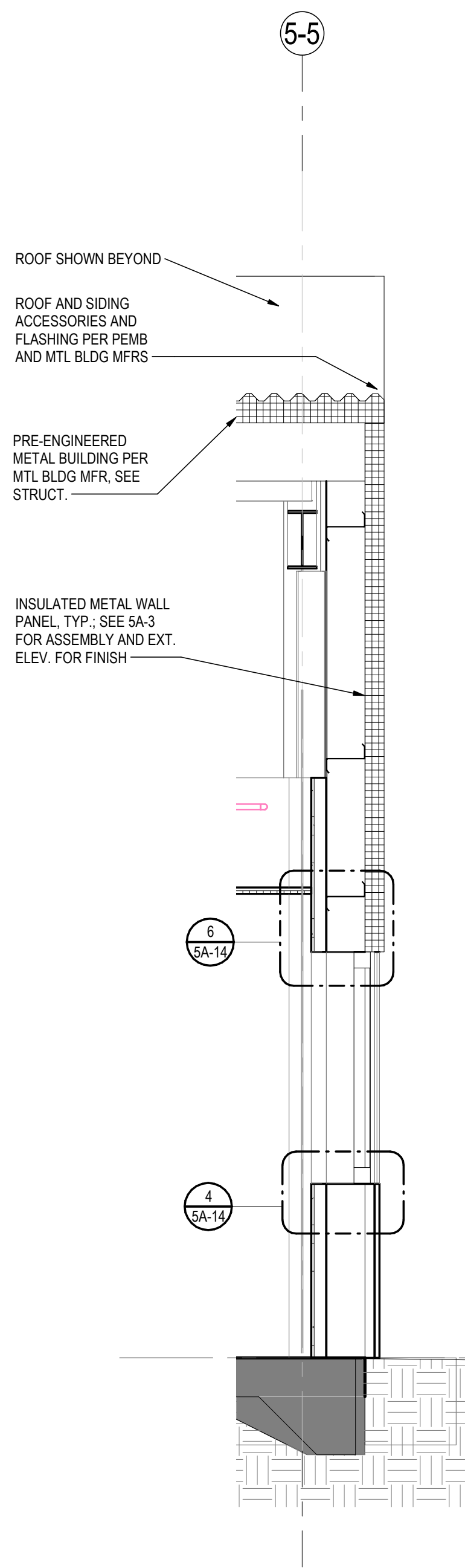
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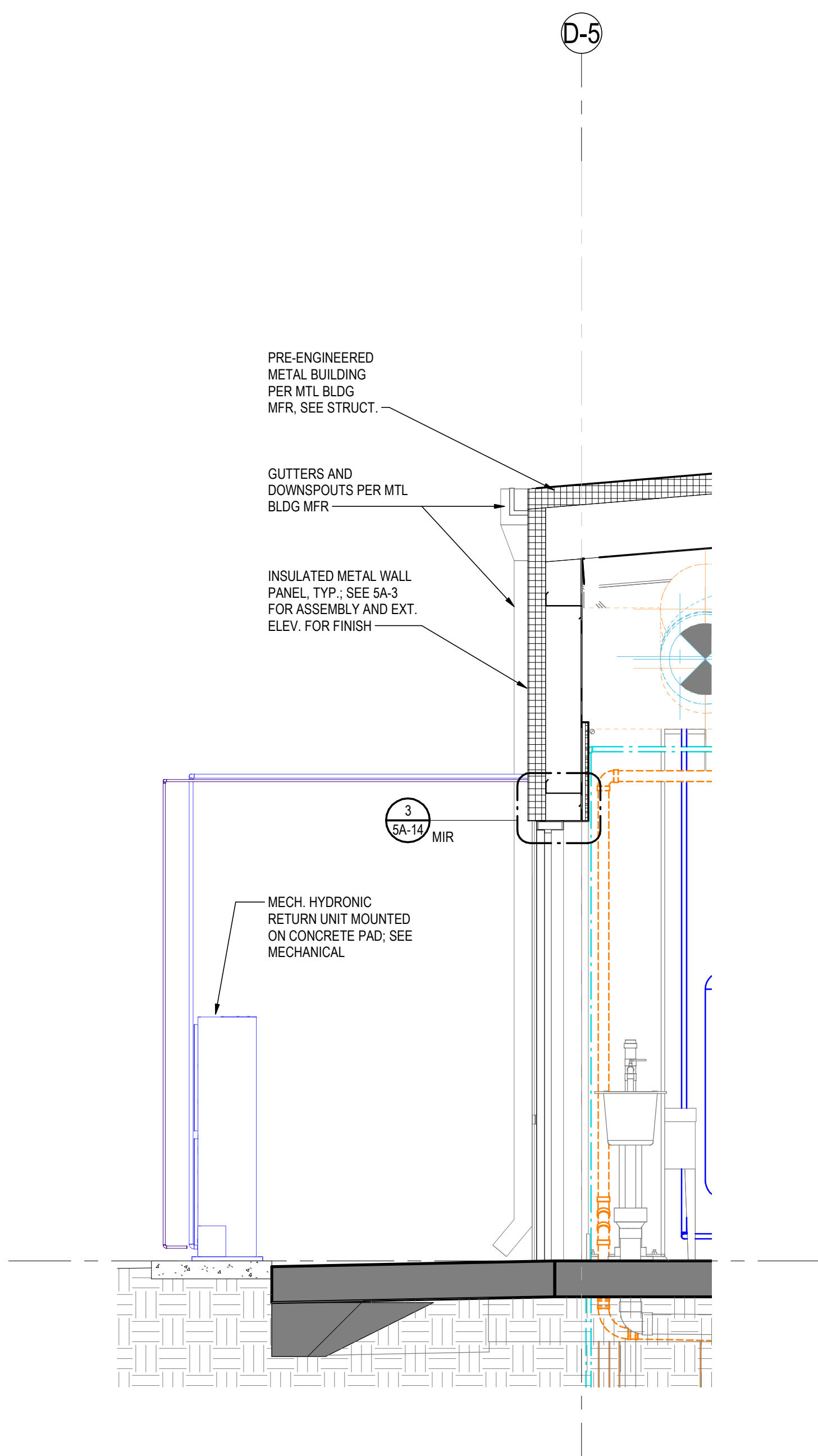
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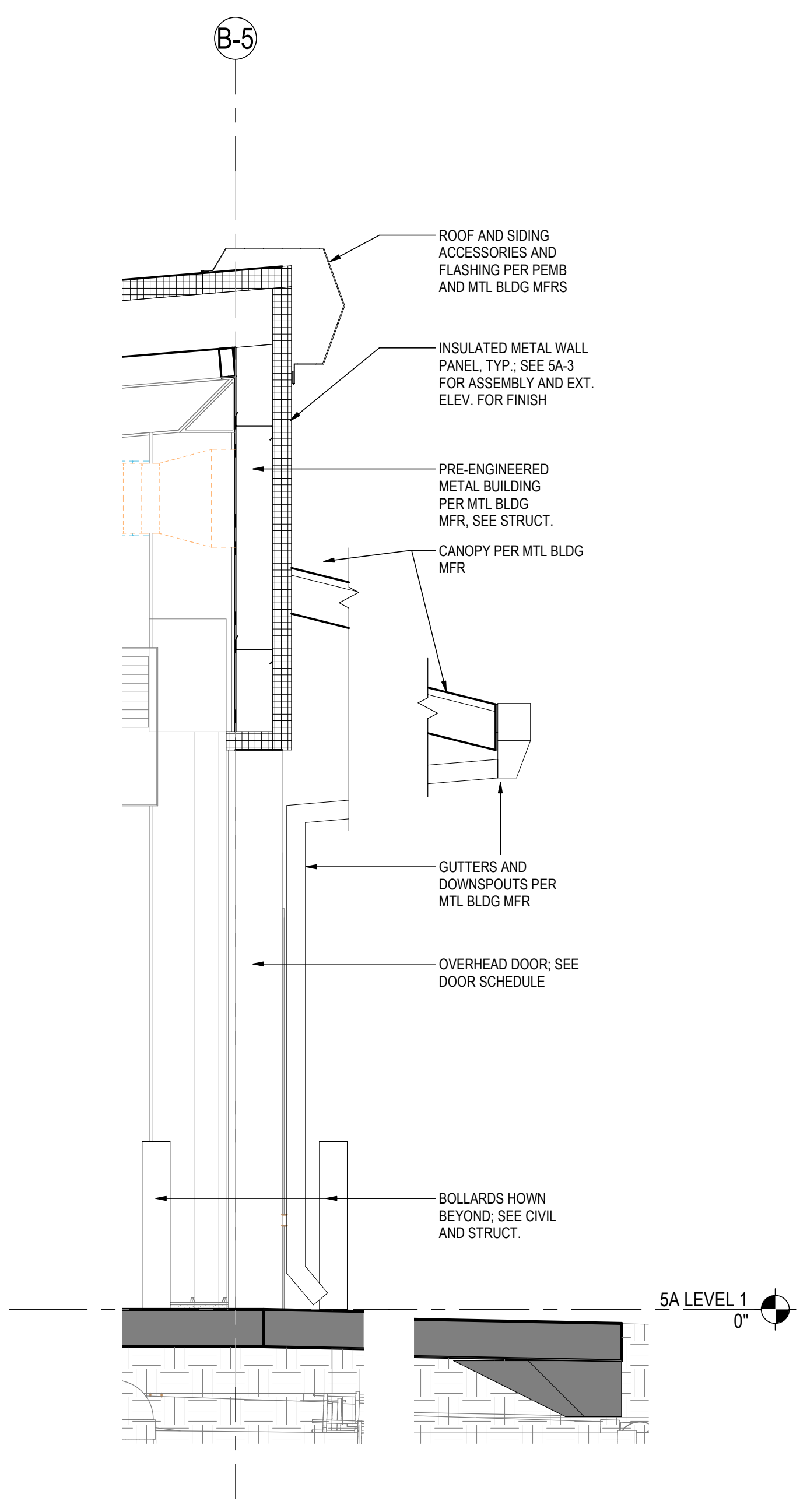
4 WALL SECTION - RAKE - WEST
5A-12 1/2" = 1'-0"



3 WALL SECTION - RAKE - EAST
5A-13 1/2" = 1'-0"



2 WALL SECTION - LOW EAVE
5A-12 1/2" = 1'-0"



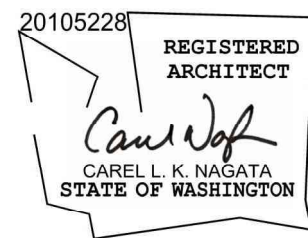
1 WALL SECTION - OHSD, HIGH EAVE
5A-13 1/2" = 1'-0"

<Pick location in Project Information>
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Revision	By	Appd	YYYY.MM.DD

PACKAGE A	By	Appd	YYYY.MM.DD
Issued			

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Digitally signed by Nagata, Carel
Date: 2025.02.11 22:49:44-09'00'

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Client/Project Logo



Client/Project
Tulalip Tribes

Tulalip- Utility Wells ESDC and Battle Creek Design

6731 Totem Beach Rd. Tulalip, WA 98271

File Name: N/A	SW	CN	RT	2024.12.13
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title
INCUBATION WALL SECTIONS

Project No.
224202267
Revision

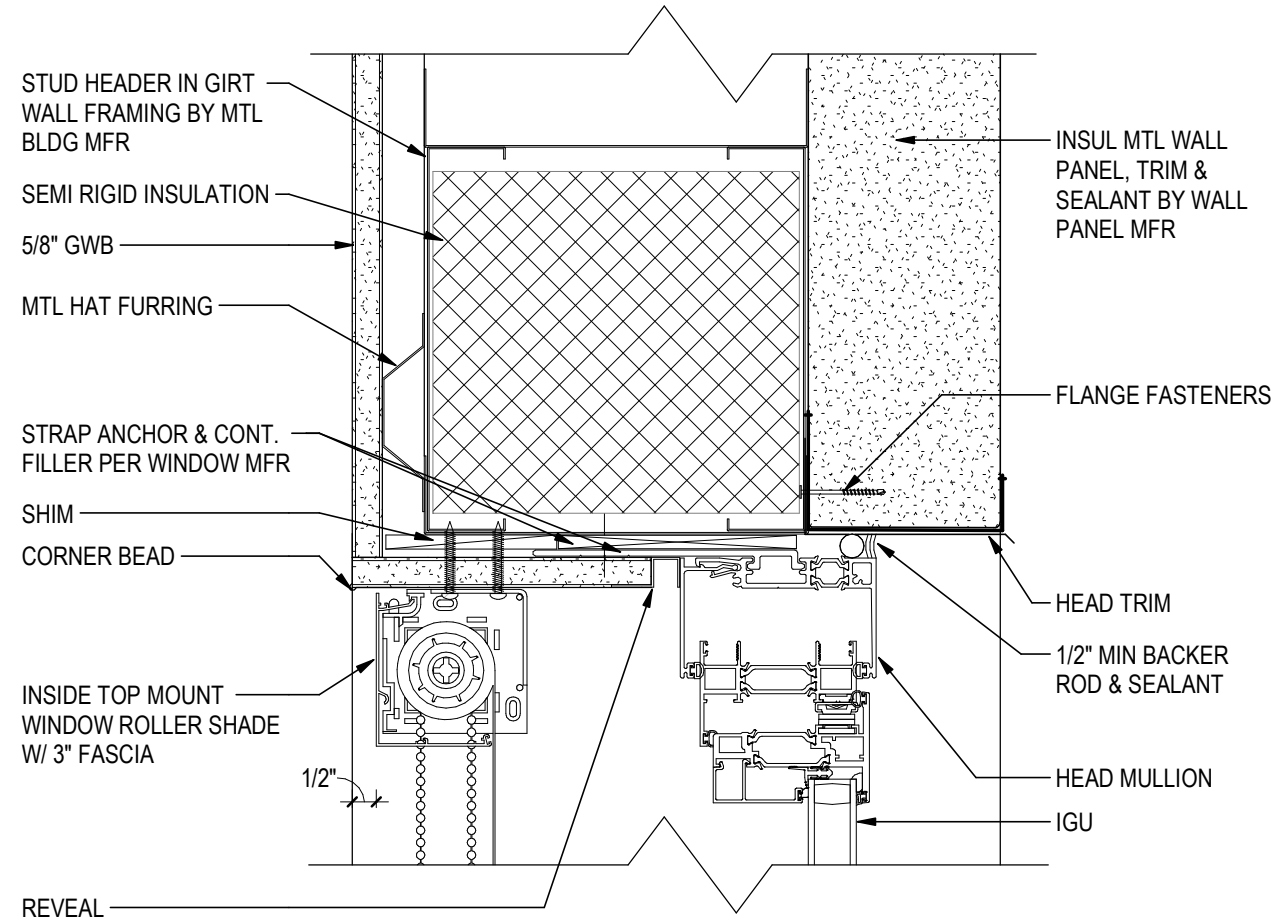
Scale
1/2" = 1'-0"
Drawing No.

5A-13

C

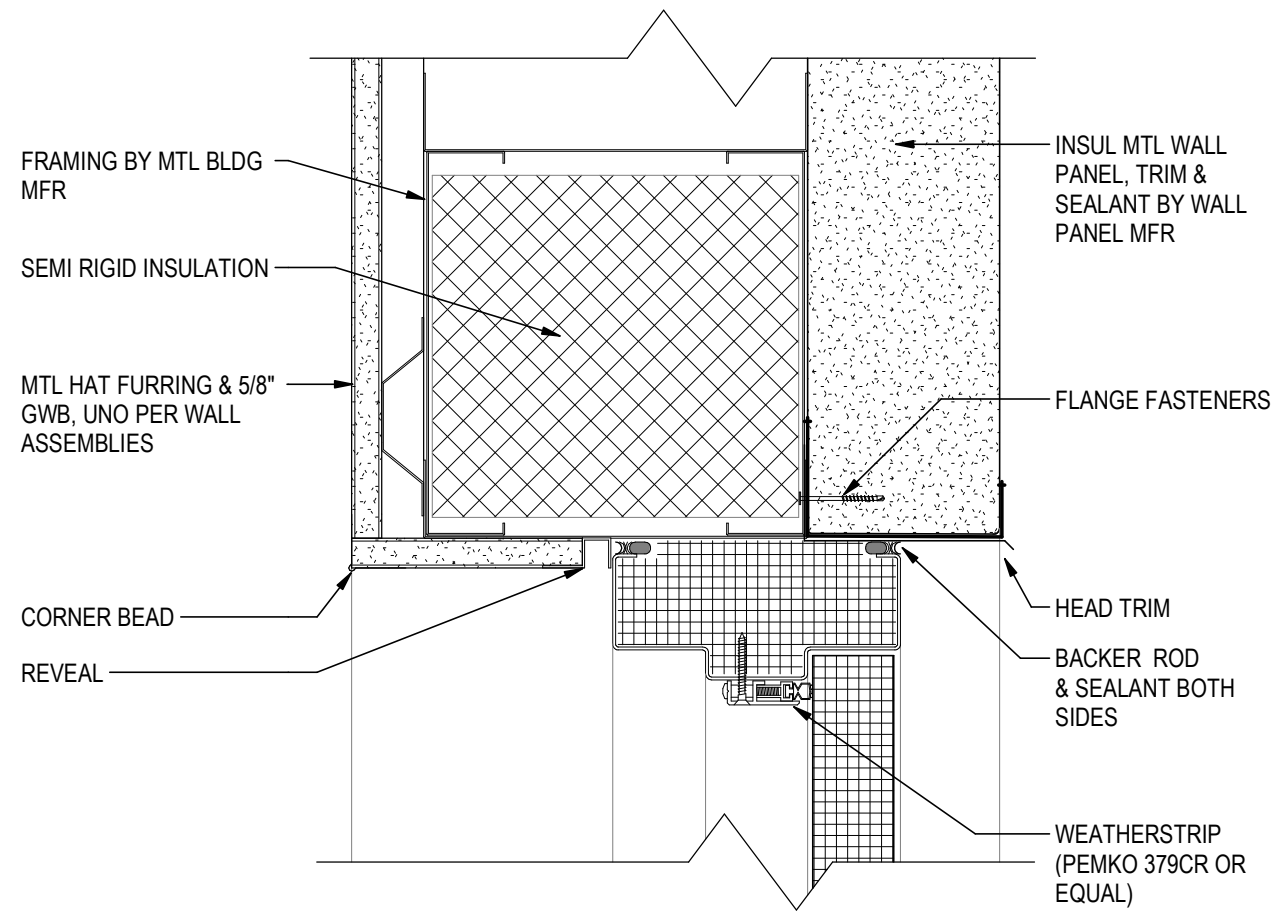
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A



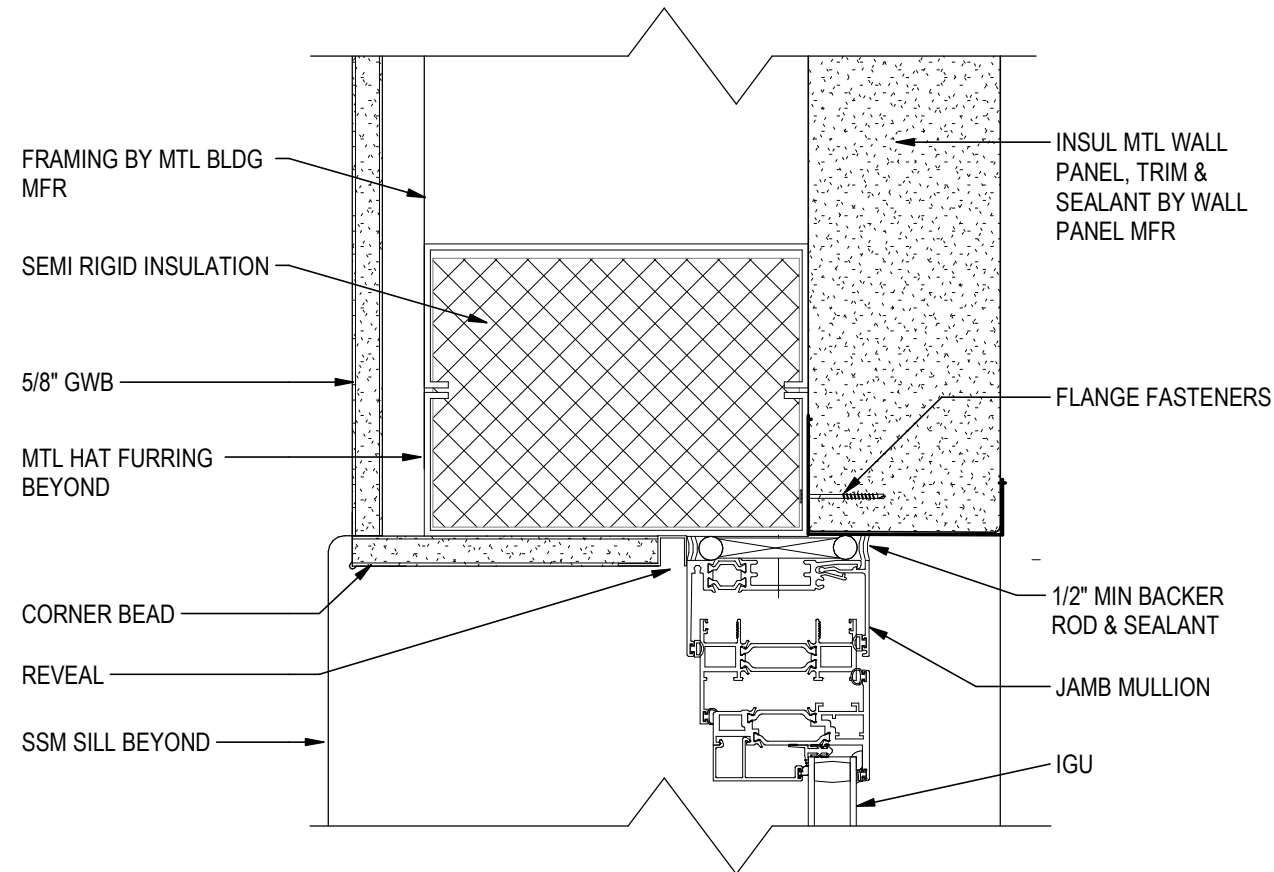
6 WINDOW_EXT_IMP - HEAD

5A-14 3" = 1'-0"



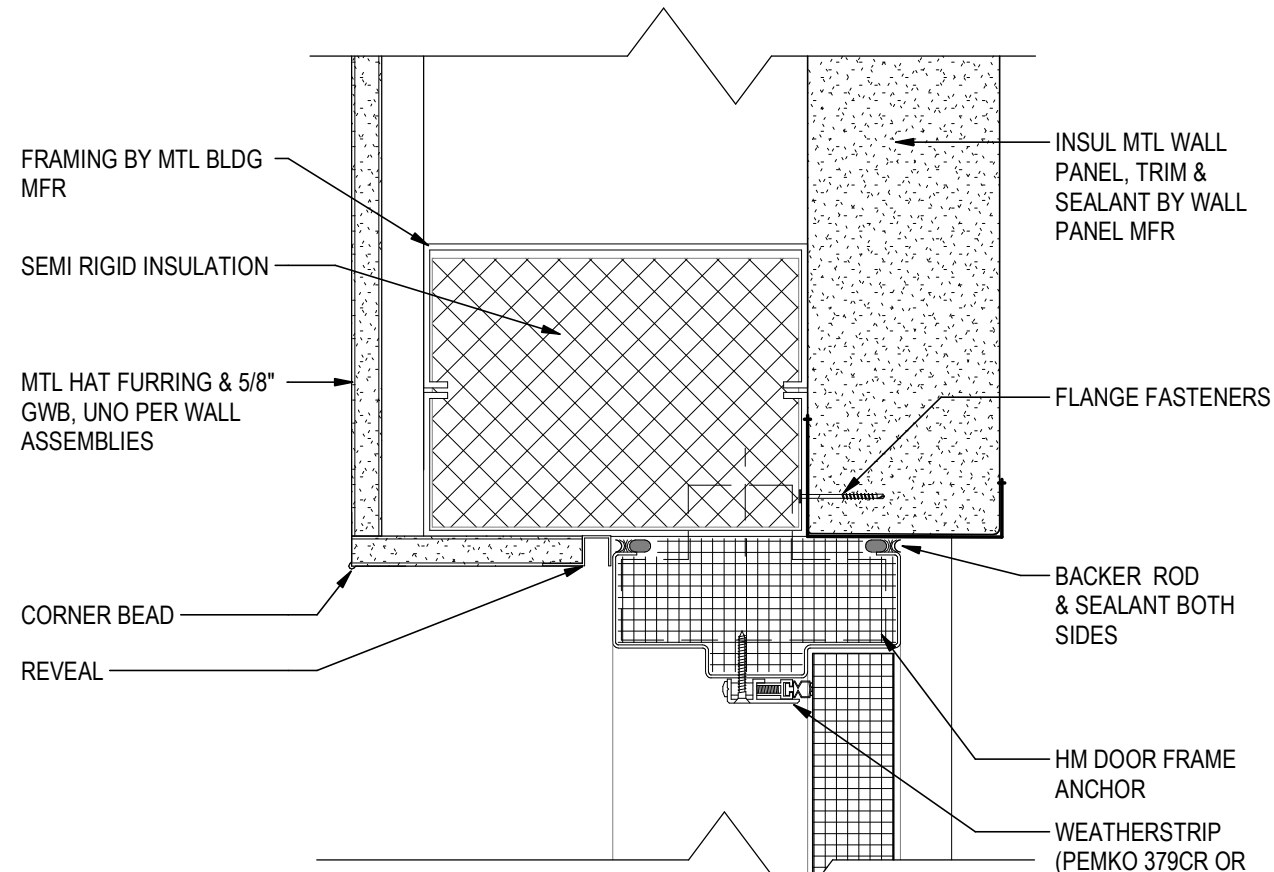
3 DOOR_EXT_IHM - HEAD

5A-14 3" = 1'-0"



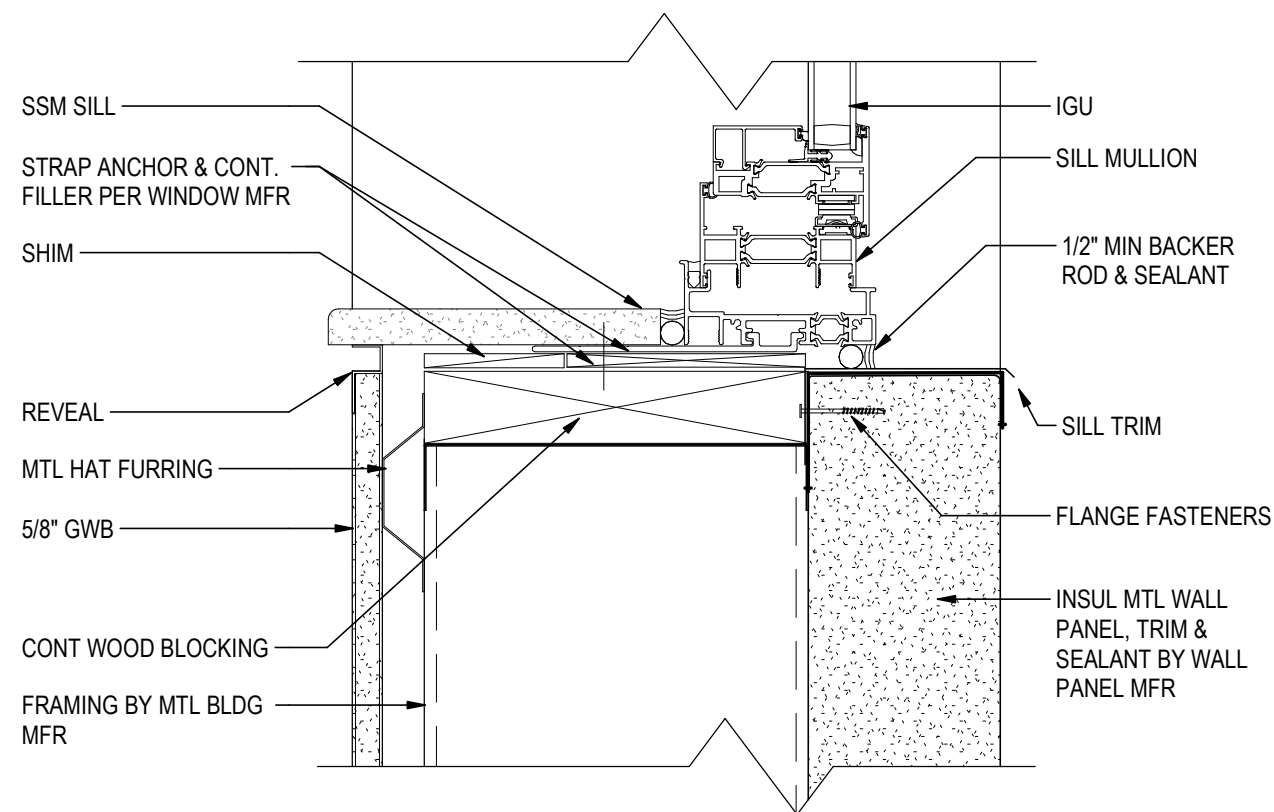
5 WINDOW_EXT_IMP - JAMB

5A-14 3" = 1'-0"



2 DOOR_EXT_IHM - JAMB

5A-14 3" = 1'-0"



4 WINDOW_EXT_IMP - SILL

5A-14 3" = 1'-0"

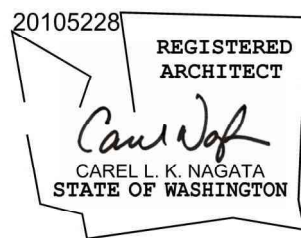
NOTE: SEE PEMB MFR AND IMP MFR FOR RECOMMENDED STANDARD EXTERIOR WALL AND ROOF DETAILS AS WELL AS ADDITIONAL OPENINGS AND PENETRATION DETAILS. OPENING DETAILS SHOWN HERE ARE INTENDED TO PROVIDE ADDITIONAL INFORMATION/DIRECTION NOT INCLUDED IN MFR STANDARD DETAILS.

<Pick location in Project Information>
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Revision	By	Appd	YYYY.MM.DD

PACKAGE A	By	Appd	YYYY.MM.DD
Issued			

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File Name: N/A	SW	CN	RT	2024.12.13
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title

INCUBATION EXTERIOR DETAILS

Project No.
224202267

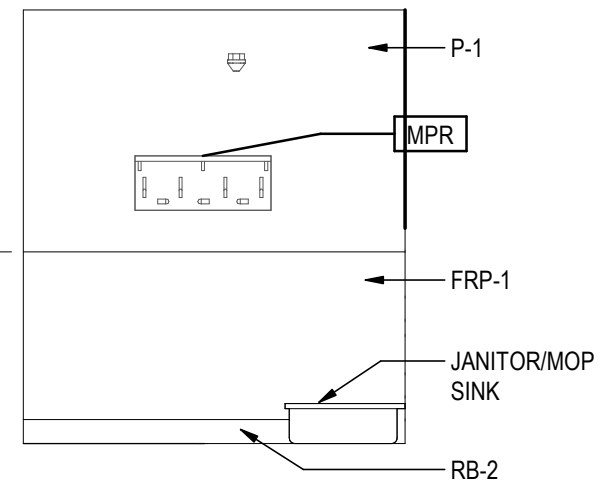
Revision

Scale
3" = 1'-0"

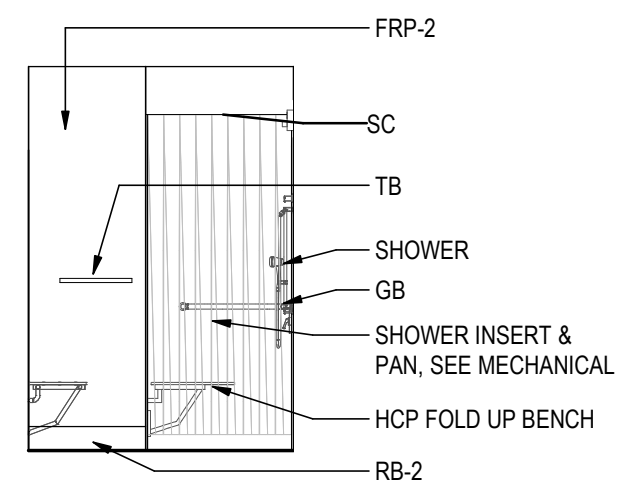
Drawing No.

5A-14

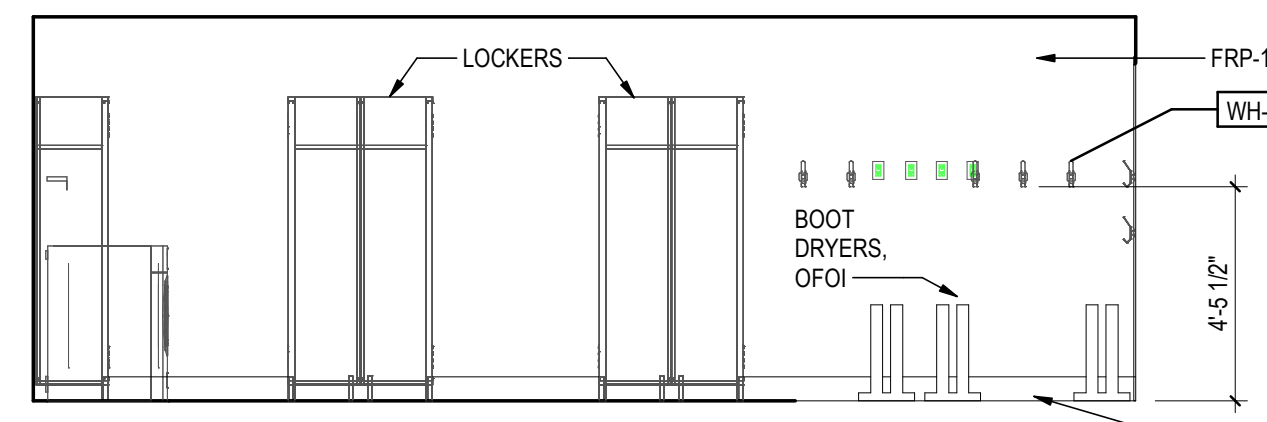
Exhibit D-1 Page 4 of 220



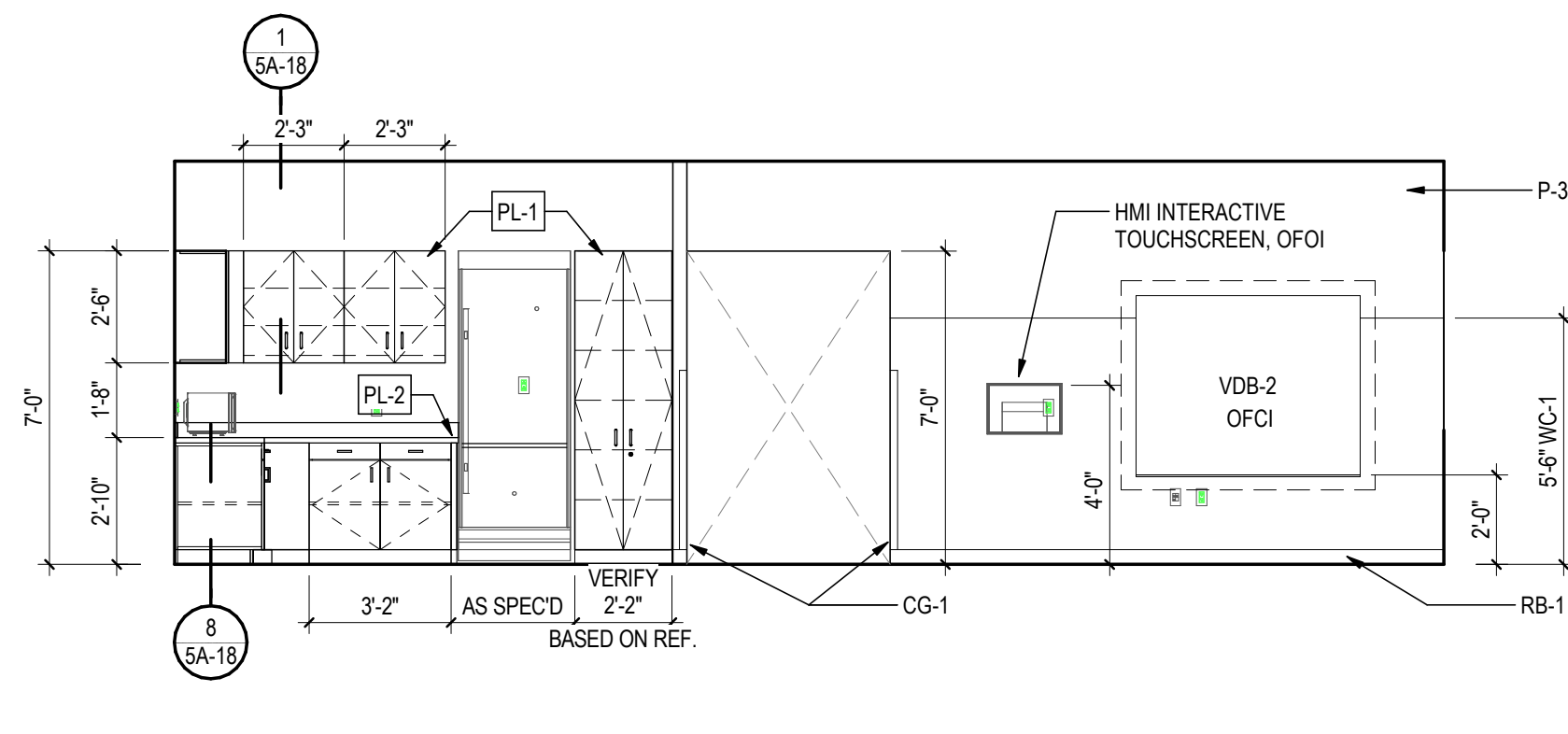
15 INT. ELEV. JAN - S
5A-15 1/4" = 1'-0"



9 INT. ELEV. SHOWER-S
5A-15 1/4" = 1'-0"



5 INT. ELEV. BOOT ROOM - W
5A-15 1/4" = 1'-0"



1 INT. ELEV. BREAK ROOM - N
5A-15 1/4" = 1'-0"

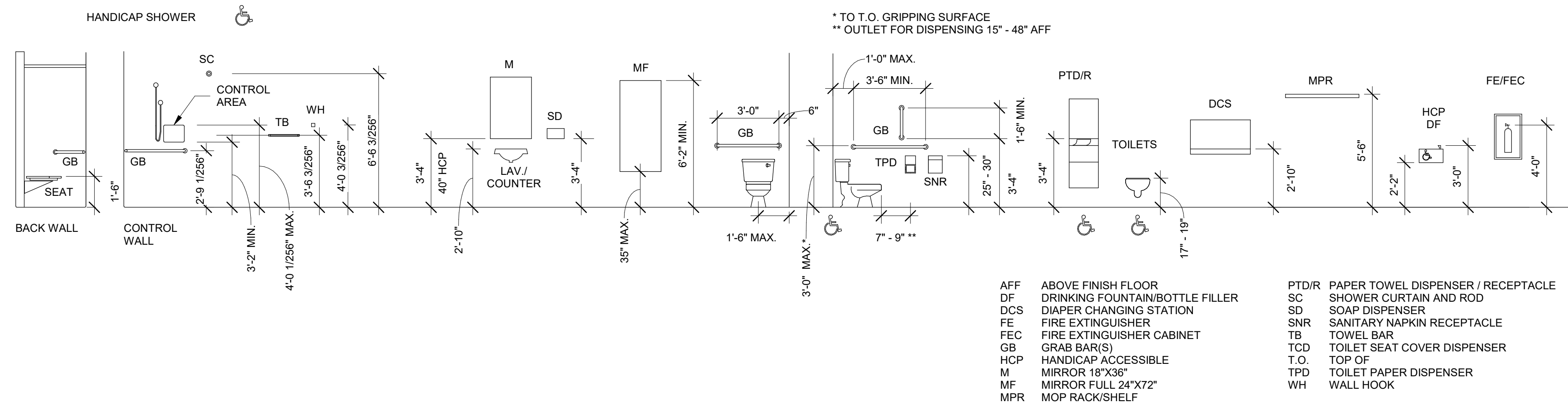
1. SEE SHEET 5A-16 FOR TYPICAL MOUNTING HEIGHTS AND TOILET ACCESSORY IDENTIFICATION.
2. COORDINATE INSTALLATION OF REQUIRED BLOCKING AND STABILIZING FOR FIXTURES.
3. VERIFY FLOOR DRAIN STRAINER ELEV FOR ACCESSIBLE SHOWERS ARE 1" BELOW ADJACENT FINISH FLOOR ELEV.
4. DIMENSIONS INDICATED ARE FINISH TO FINISH INCLUDING ANY FINISH THICKNESS. WHERE ACCESSORIES (INCLUDING GRAB BARS) ARE SCHEDULED FOR WALL ATTACHMENT, PROVIDE SLOD 2x FT WOOD BLOCKING.
5. ALL HANDRAIL MOUNTING SHALL COMPLY W/ ADA REQUIREMENTS.

AF	ABOVE FINISH FLOOR
DF	DRINKING FOUNTAIN/BOTTLE FILLER
DCS	DIAPER CHANGING STATION
FE	FIRE EXTINGUISHER
FCB	FIRE EXTINGUISHER CABINET
FG	GRAB BAR(S)
HCP	HANDICAP ACCESSIBLE
M	MIRROR 18"X36"
MF	MIRROR FULL 24"X72"
MP	MOP RACK/SHELF
PD	PAPER TOWEL DISPENSER / RECEPTACLE
STDR	SHOWER CURTAIN AND ROD
SC	SOD DISPENSER
SN	SANITARY NAPKIN RECEPTACLE
TB	TOWEL BAR
TCD	TOILET SEAT COVER DISPENSER
T.O.	TOP OF
TPD	TOILET PAPER DISPENSER
WH	WALL HOOK

C

B

A

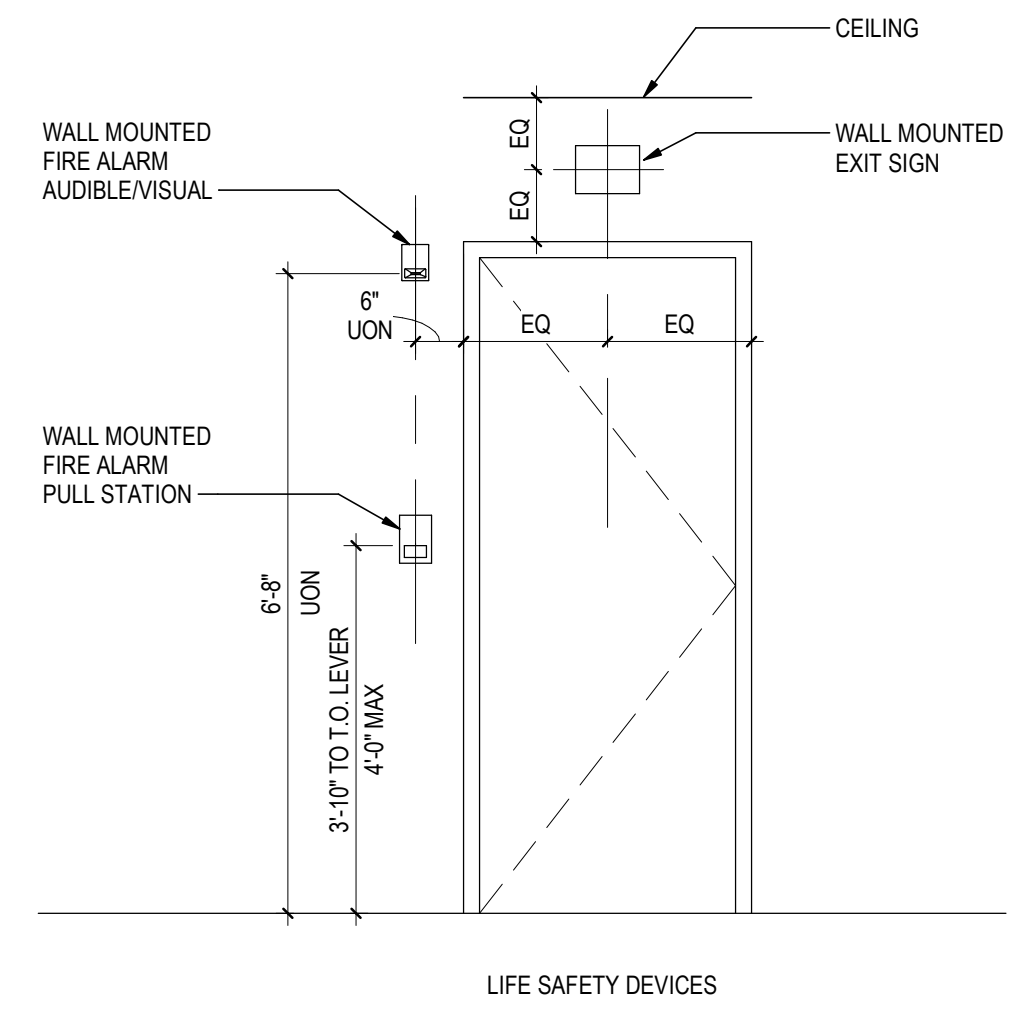


4

5A-16

TYPICAL MOUNTING HEIGHTS

1/4" = 1'-0"

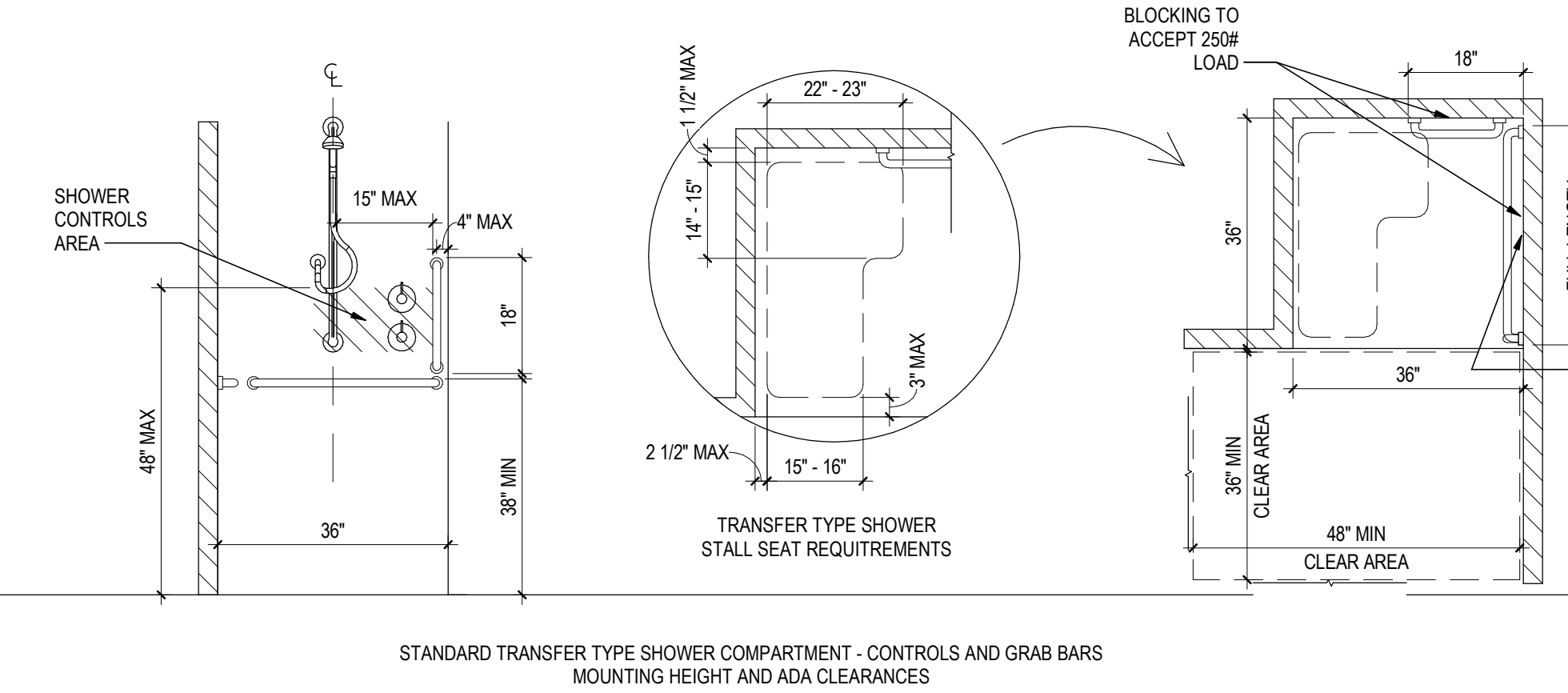
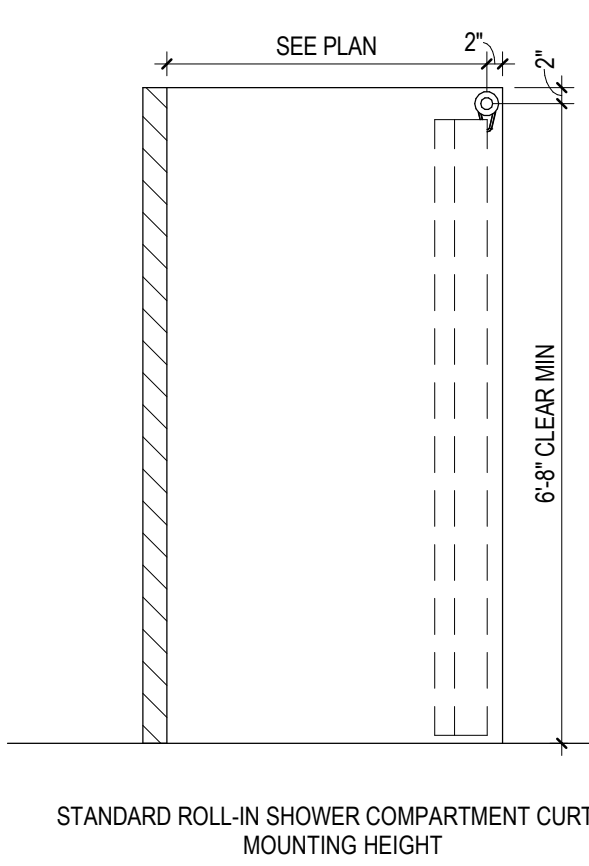


3

5A-16

TYPICAL MOUNTING HEIGHTS - LIFE SAFETY DEVICES

1/2" = 1'-0"

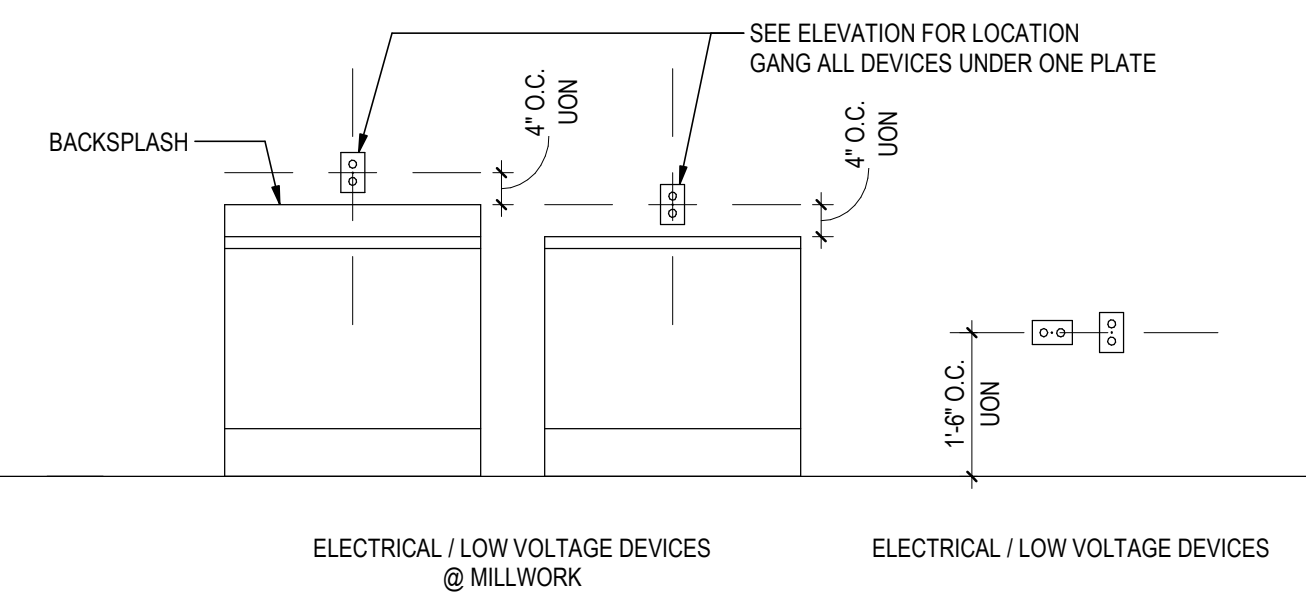
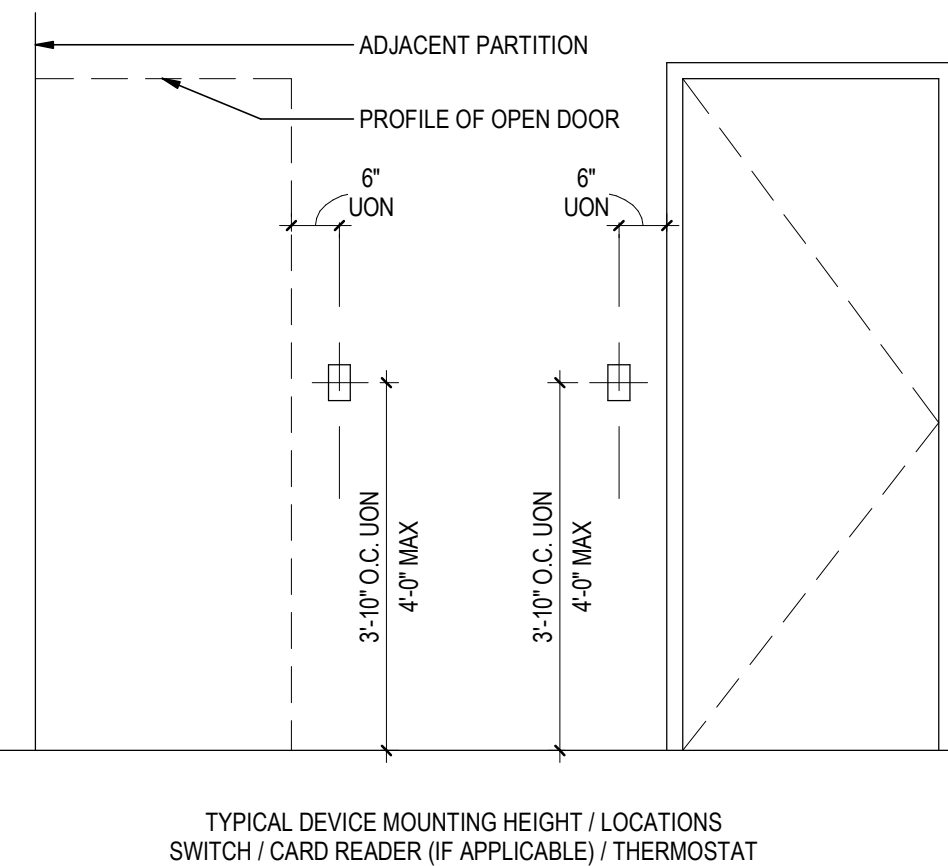
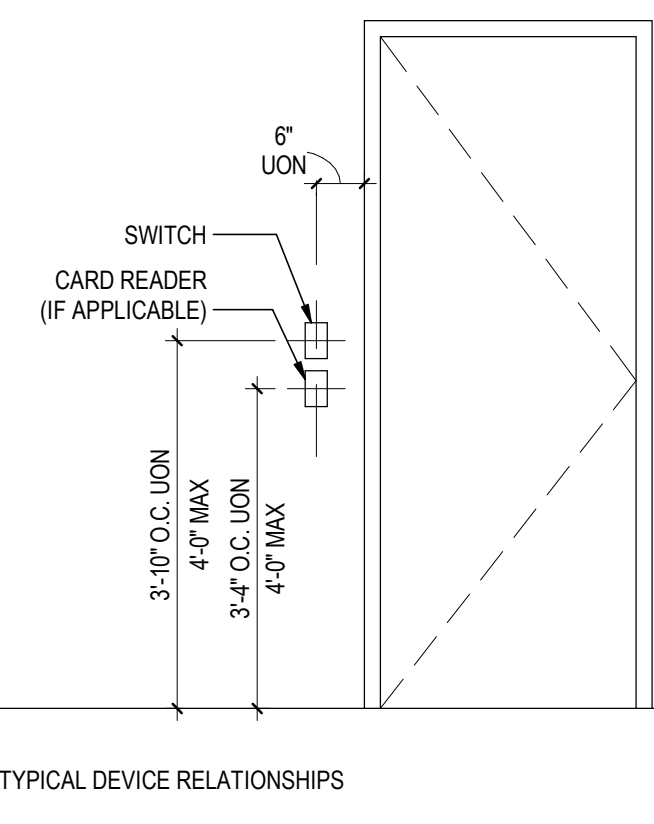
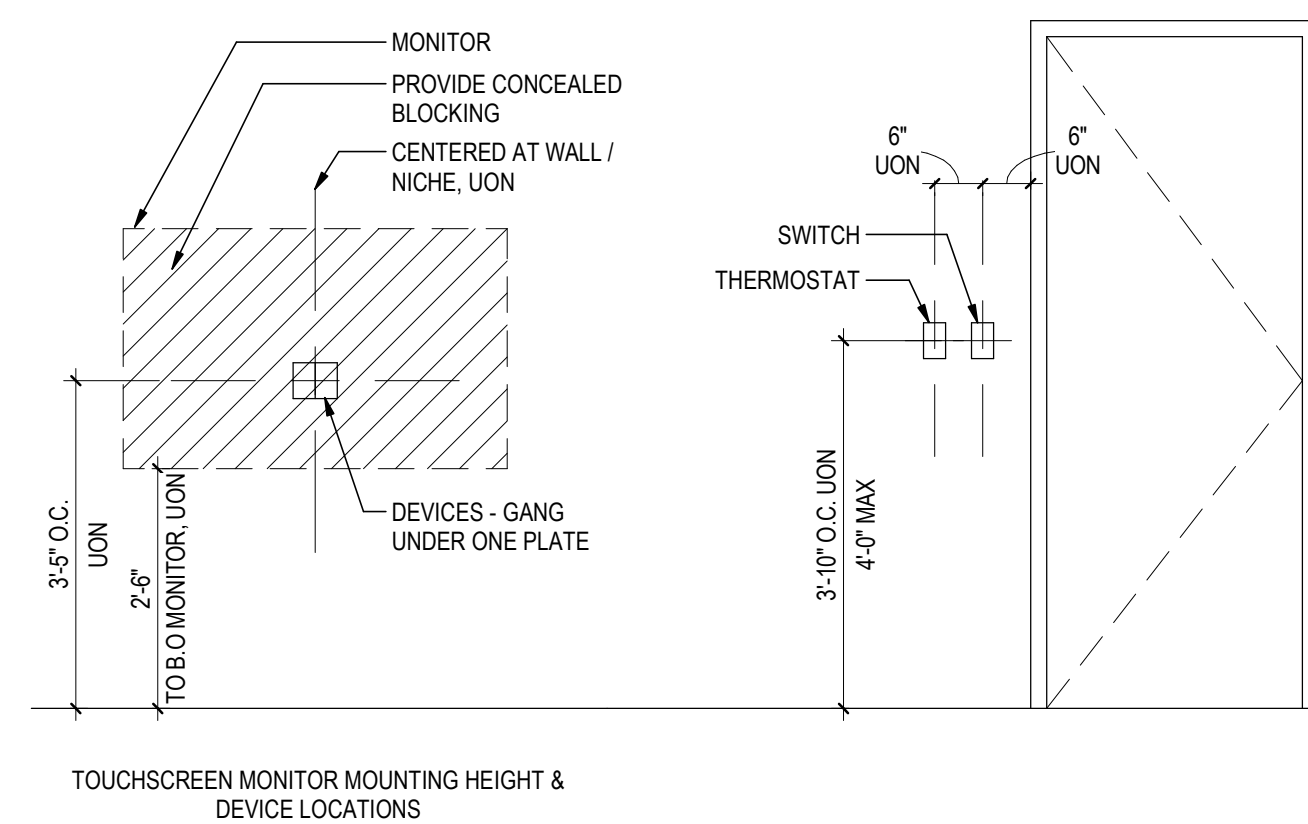


2

5A-16

TYPICAL MOUNTING HEIGHTS - ADA PLUMBING FIXTURE CLEARANCES - SHOWER STALLS

1/2" = 1'-0"



1

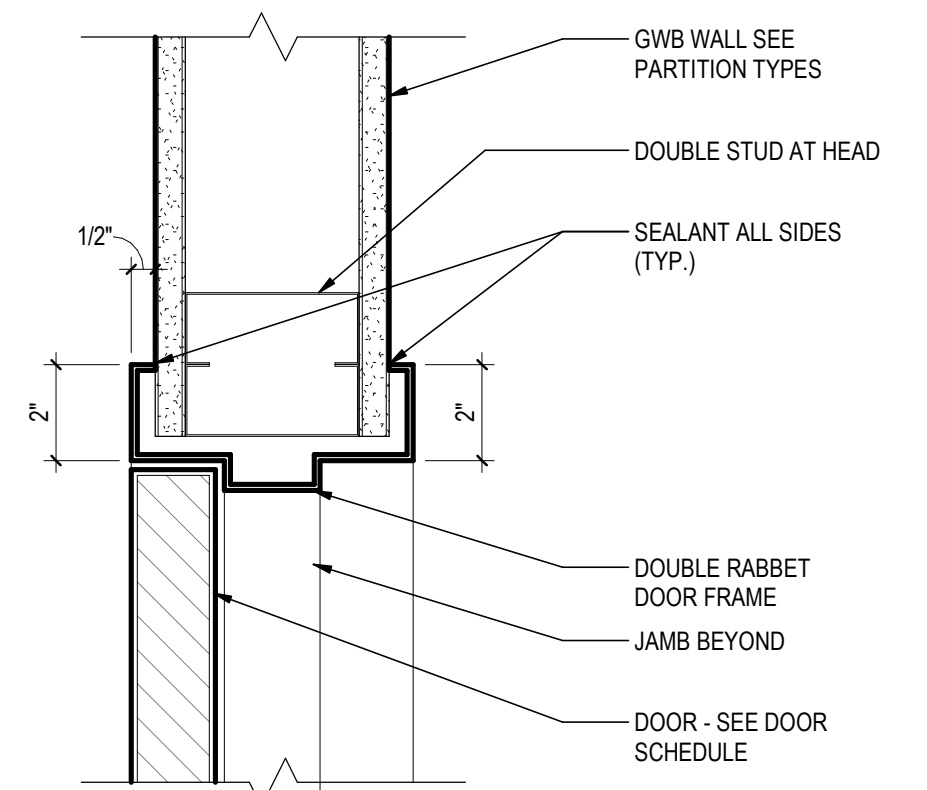
5A-16

TYPICAL MOUNTING HEIGHTS - TYPICAL DEVICES

1/2" = 1'-0"

<Pick location in Project Information>
2/28/2024 11:24:09 AM

Revision		By	Appd	YYYY.MM.DD	PACKAGE A Issued	By	Appd	YYYY.MM.DD	Permit/Seal 20105228 REGISTERED ARCHITECT CAREL L. K. NAGATA STATE OF WASHINGTON Digitally signed by Nagata, Carel Date: 2025.02.11 22:49:46-09'00'	Consultant	 Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo 	Client/Project Tulalip Tribes Tulalip- Utility Wells ESDC and Battle Creek Design 6731 Totem Beach Rd. Tulalip, WA 98271 File Name: N/A	SW Dwn.	CN Dsgn.	RT Chkd.	2024.12.13 YYYY.MM.DD	Title INCUBATION TYP MOUNTING HEIGHTS Project No. 224202267 Revision	Scale As indicated Drawing No. 5A-16



HM HM @GWB: DOUBLE RABBET - HEAD DETAIL
2.2 SCALE: 3"=1'-0"

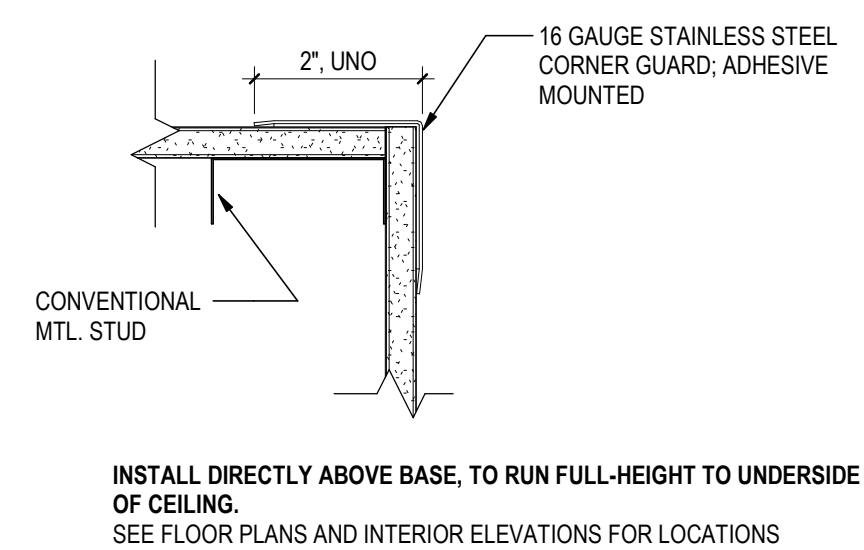
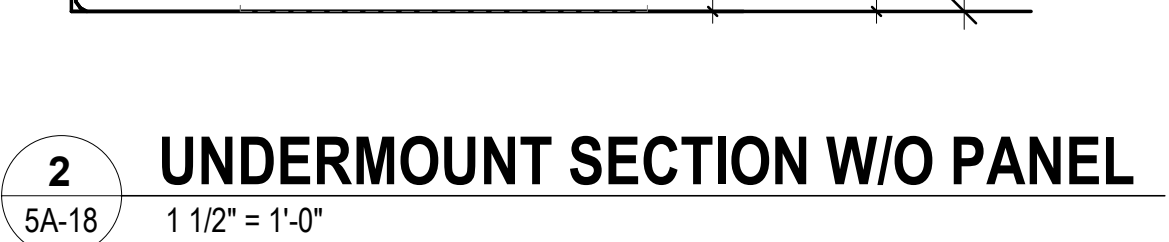


Diagram illustrating the installation of a FRY REGLET #DMEC-4875 OR EQUAL. The diagram shows a cross-section of a window frame assembly. The reglet is shown passing through the frame and the joint compound, secured with screws. Labels indicate the components: GWB ON METAL STUD FRAMING, BOTH SIDES; JOINT COMPOUND, BOTH SIDES; and FRY REGLET #DMEC-4875 OR EQUAL.

1 DRYWALL END ENCLOSURE
5A-17 3" = 1'-0"



- GENERAL NOTES - MILLWORK
- SHALL BE ADJUSTABLE, UON.
- FIELD VERIFY DIMENSIONS PRIOR TO FABRICATING MILLWORK TO ASSURE
FIT CONDITIONS.
- ORDINATE SIZE OF EQUIPMENT AND APPLIANCES WITH NEW MILLWORK
- DATA, AND POWER RECEPTACLES ARE INSTALLED BELOW COUNTERS, 2"
ROVED THROUGH COUNTER AT EACH LOCATION. VERIFY WITH
ABRICATION.
- ARE SHOWN FOR CLARITY AND DO NOT REPRESENT BREAKS IN THE
- COUNTERTOP OVER ALL, SIMILAR HEIGHT MILLWORK, UON.
- (S) (EXPOSED TO VIEW FROM ANY PERSPECTIVE) TO BE COVERED WITH
NDS.
- MEETS A WALL AT ONE OR BOTH ENDS, TO BE PROVIDED WITH FILLER
TO THE WALL(S).
- AND BOTTOM MILLWORK FILLER PIECES AS REQUIRED.
- MILLWORK/ CASEWORK TO HAVE THE SAME FINISH BASE MATERIAL AS THE
PROVIDED AS PART OF THE UNIT.
- ANICAL, PLUMBING & ELECTRICAL ROUGH-INS AND CONNECTIONS WITH
BRICATION.
- ALL VERTICAL AND HORIZONTAL JOINTS WHERE MILLWORK ABUTS A WALL.
RE MODIFICATION IN ORDER TO CONFORM WITH PROTRUDING COLUMN
S-SUBMIT CONDITIONS.

C

B

A

- **PLAQUE:** 1/2" THICK ACRYLIC WITH SQUARE EDGES AND APPLIED PHOTO POLYMER FACE; PLAQUES PERMANENTLY MOUNT ON WALL WITH
- **DOUBLE-SIDED FOAM AND SILICONE**
- **COLOR:** FACE AND RETURN TO BE COLOR 1, COPY RULE LINE AND SYMBOL TO BE COLOR 2; BRAILLE TO BE COLOR 1 TO MATCH BACKGROUND
- **TYPE STYLE:** ARIAL, ALL CAPS, SIZE AND FORMAT AS ILLUSTRATED; ALL TEXT TO BE "TACTILE CHARACTERS" PER ANSI A117.1-703.3, AND TO BE DUPLICATED IN "BRAILLE" PER ANSI A111.7.1-703.4
- **PHOTOLUMINESCENT:** PLAQUES SHALL BE IN COMPLIANCE WITH "SELF-LUMINOUS AND PHOTOLUMINESCENT" PER IBC 1024.4 AS APPLICABLE

1. **ADDRESS IDENTIFICATION** IS TO BE PROVIDED; ADDRESS NUMBERS ARE TO BE LEGIBLE FROM THE STREET FRONTING THE PROPERTY, AND HAVE A MINIMUM HEIGHT OF 4" AND A MINIMUM STROKE WIDTH OF 0.5"; CONTRACTOR TO VERIFY ADDRESS IDENTIFICATION REQUIREMENTS WITH LOCAL JURISDICTION PRIOR TO SIGNAGE ACQUISITION
2. WHERE KEY OPERATED LOCKING DEVICES ARE SPECIFIED, PROVIDE A SIGN THAT READS: **"THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED"**; LETTERS TO BE MIN 1" ON CONTRASTING BACKGROUND; LOCATE ON THE EGRESS SIDE OF THE DOOR
3. PROVIDE **DIRECTIONAL SIGNS** AT INACCESSIBLE BUILDING ENTRANCES, INACCESSIBLE PUBLIC TOILETS, AND ELEVATORS NOT SERVING AN ACCESSIBLE ROUTE; SEE SIGNAGE TYPE "G"
4. FIRE EXTINGUISHERS AND CABINETS CONTAINING FIRE HOSES (IF APPLICABLE) ARE TO HAVE SIGNS IDENTIFYING THE EQUIPMENT; LETTERS TO BE CONTRASTING AND 2" HIGH MINIMUM
5. SIGNS SAYING **"FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS"** IS REQUIRED AT ANY FIRE RATED WALL OR SMOKE BARRIER THAT REQUIRES PROTECTED OPENINGS OR PENETRATIONS; SIGNS ARE TO BE LOCATED IN AN ACCESSIBLE CONCEALED FLOOR OR FLOOR-CEILING SPACE; SIGNS ARE TO BE LOCATED WITHIN 15' OF END OF EACH WALL; LETTERING IS TO BE HIGH CONTRASTING AND 3" MINIMUM HIGH

RELEVANT CODES:	
DOOR TO REMAIN UNLOCKED "LOCKS AND LATCHES" IBC 2012-1008.1.9.3 "KEY OPERATED LOCKS" NFPA 2009-7.2.1.5.4.1	DIRECTIONAL SIGNS "SIGNAGE" IBC 2012-1007.9 "DIRECTIONAL SIGNAGE" IBC 2012-1007.10
RATED CONSTRUCTION "MARKING AND IDENTIFICATION" IBC 2012-703.7 "SIGNS" IFC 2012-703.2.1	"TACTILE CHARACTERS" ANSI A117.1 2009-703.3 "BRAILLE" ANSI A117.1 2009-703.4
FIRE FIGHTING EQUIPMENT "CABINET EQPT IDENTIFICATION" IFC 2012-905.7.1	"DIRECTIONAL SIGNS" ADAAG 2010-216.4.3 "ENTRANCES" ADAAG 2010-216.6 "TOILET AND BATHING ROOMS" ADAAG 2010-216.7
ADDRESS IDENTIFICATION "ADDRESS IDENTIFICATION" IFC 2012-505.1	

6 SIGNAGE PLAQUE GENERAL NOTES

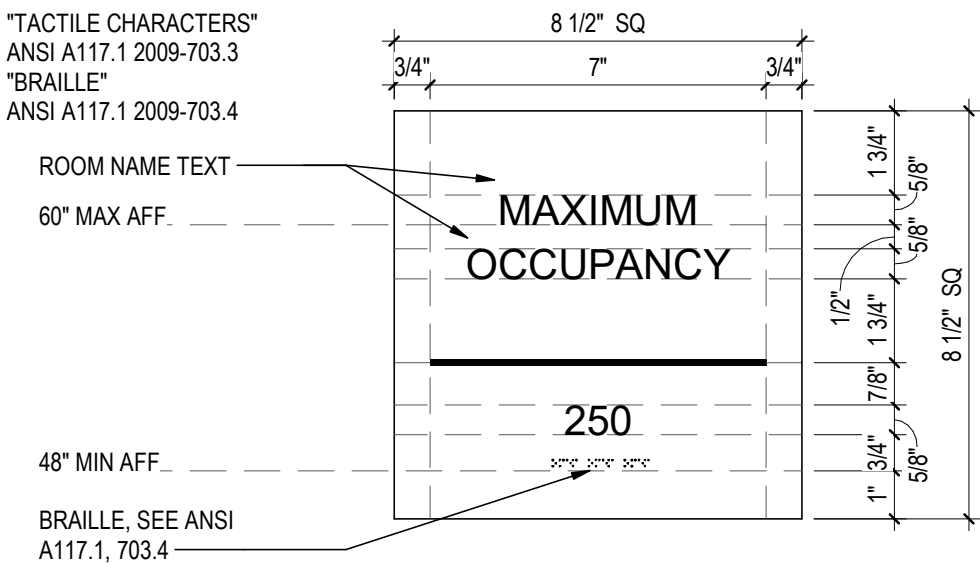
5A-19 1" = 1'-0"

- RELEVANT CODES:**
"POSTING OF OCCUPANT LOAD"
IBC 2012-1004.3

"OCCUPANT LOAD POSTING"
NFPA 2009-12.7.9.3

"...INFORMATIONAL SIGNS"
ADAAG 2010-216.3

"TACTILE CHARACTERS"
ANSI A117.1 2009-703.3
"BRAILLE"
ANSI A117.1 2009-703.4
1. **LOCATION:** PROVIDE MAXIMUM OCCUPANCY PLAQUES IN ASSEMBLY USE AREA(S) NOT HAVING FIXED SEATS; LOCATE IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT FROM THE ROOM; LOWER EDGE OF PLAQUE TO BE LOCATED 4' ABOVE FLOOR LANDING
 2. SEE "SIGNAGE PLAQUE GENERAL NOTES" FOR ADDITIONAL INFORMATION



5 TYPE "F" MAXIMUM OCCUPANCY

5A-19 3" = 1'-0"



- RELEVANT CODES:**
"...NO SMOKING SIGN"
IFC 2012-310.3

"ENVIRONMENTAL TOBACCO SMOKE"
ASHRAE 189.1 2011-8.3.1.4

- NOTES:**
- CONTRACTOR TO VERIFY SIGN REQUIREMENTS WITH LOCAL JURISDICTION PRIOR TO SIGNAGE ACQUISITION
 - PROVIDE "NO SMOKING" SIGNS WHERE REQUIRED BY THE FIRE CODE OFFICIAL
 - PROVIDE "NO SMOKING WITHIN 25 FEET OF ALL BUILDING ENTRANCES" SIGN PER LOCATION SHOWN ON PLANS AND DRAWINGS

4 TYPE "K" NO SMOKING AT ENTRANCES

5A-19 3" = 1'-0"

3 MISCELLANEOUS SIGNS

5A-19 1" = 1'-0"

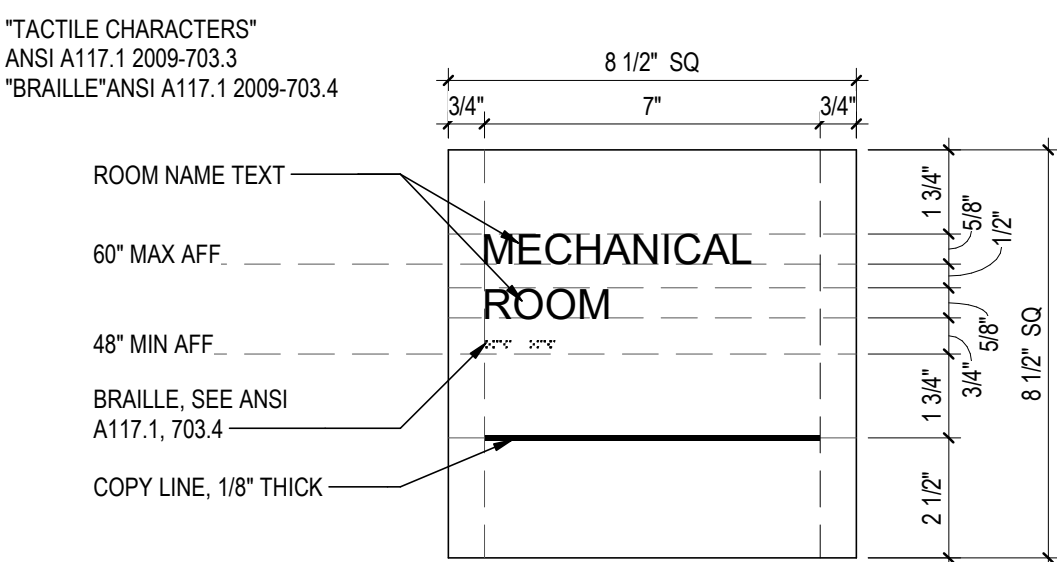
- RELEVANT CODES:**
"FP & UTILITY EQPT IDENTIFICATION"
IFC 2012-509

"ELECTRICAL EQPT LABELING"
IFC 2012-605.3.1

"DESIGNATIONS"
ADAAG 2010-216.2

"TACTILE CHARACTERS"
ANSI A117.1 2009-703.3
"BRAILLE"ANSI A117.1 2009-703.4

1. **LOCATION:** PROVIDE ROOM IDENTIFICATION PLAQUES AT ALL FIRE PROTECTION, UTILITY, AND ELECTRICAL CONTROL PANEL ROOMS; LOWER EDGE OF PLAQUE TO BE LOCATED 4' ABOVE FLOOR LANDING, 3' ADJACENT TO DOOR JAMB ON LATCH SIDE OF DOOR
2. **TYPE STYLE:** IF THIRD LINE OF TEXT IS REQUIRED, ADD 3/8" SPACE AND 5/8" TEXT BEFORE BRAILLE
3. SEE "SIGNAGE PLAQUE GENERAL NOTES" FOR ADDITIONAL INFORMATION



2 TYPE "D" ROOM IDENTIFICATION

5A-19 3" = 1'-0"

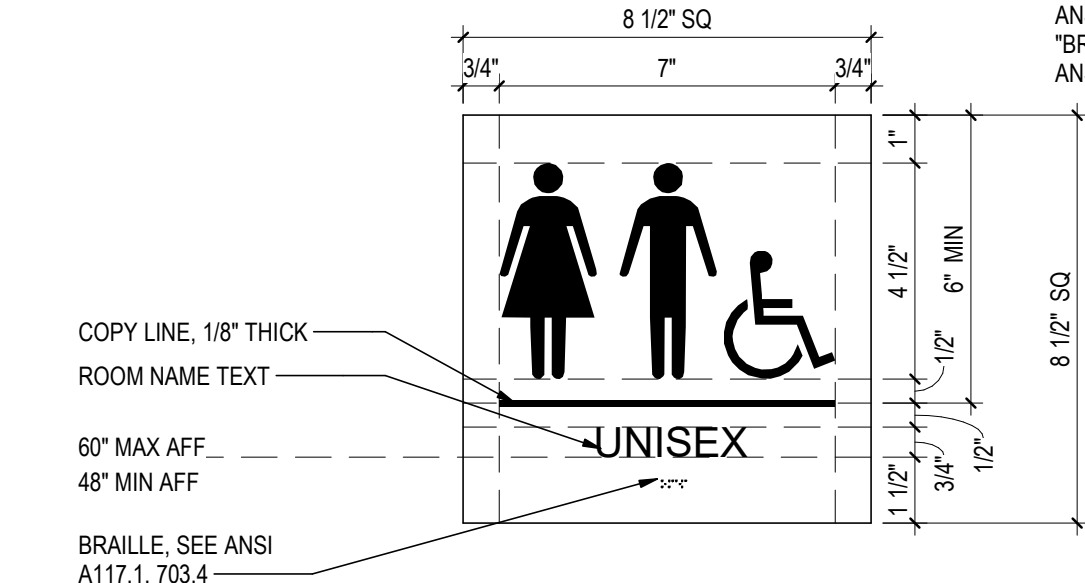
1. **LOCATION:** PROVIDE ROOM IDENTIFICATION PLAQUES AT ALL PUBLIC TOILET, BATHING, AND/OR LOCKER ROOMS; LOWER EDGE OF PLAQUE TO BE LOCATED 4' ABOVE FLOOR LANDING, 3' ADJACENT TO DOOR JAMB ON LATCH SIDE OF DOOR
2. **SYMBOL:** PROVIDE THE ACCESSIBLE SYMBOL WHERE MULTIPLE SINGLE-USER TOILET OR BATHING ROOMS ARE CLUSTERED AT A SINGLE LOCATION, AT FAMILY OR ASSISTED-USE TOILET AND BATHING ROOMS, AND AT LOCKER ROOMS WHERE NOT ALL ROOMS ARE ACCESSIBLE
3. SEE "SIGNAGE PLAQUE GENERAL NOTES" FOR ADDITIONAL INFORMATION

- RELEVANT CODES:**
"SIGNAGE"
IBC 2012-2902.4

- "SIGNAGE"
IBC 2012-1110

- "DESIGNATIONS"
ADAAG 2010-216.2
"IDENTIFICATION"
ADAAG 2010-216.8

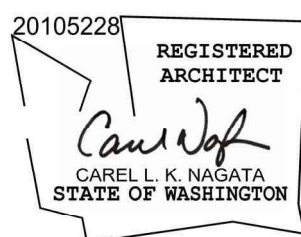
- "TACTILE CHARACTERS"
ANSI A117.1 2009-703.3
"BRAILLE"
ANSI A117.1 2009-703.4



1 TYPE "E" RESTROOM IDENTIFICATION

5A-19 3" = 1'-0"

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Digitally signed by Nagata, Carel
Date: 2025.02.11 22:49:47-09'00'

Consultant



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Client/Project Logo



Client/Project

Tulalip Tribes

Tulalip- Utility Wells ESDC and Battle Creek Design

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Dwn. Dsgn. Chkd. YYYY.MM.DD

Title

INCUBATION INTERIOR DETAILS

Project No.

224202267

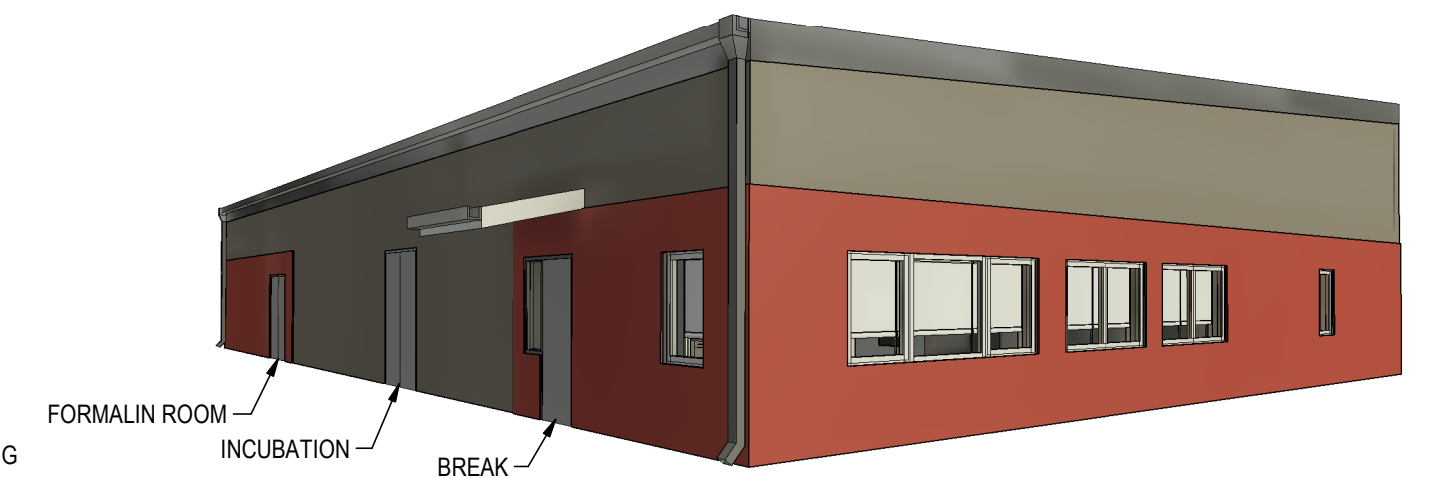
Revision

Scale

As indicated

Drawing No.

5A-19



GENERAL

THESE NOTES ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE.

STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE COORDINATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. BOLT SIZES, TYPES, AND PATTERNS SHALL BE VERIFIED WITH THE MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO ENSURE ACCURACY OF PLACEMENT.

MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DRAWINGS, SHALL BE PROVIDED FOR PRIOR TO PLACING CONCRETE.

STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH MECHANICAL, ELECTRICAL, ARCHITECTURAL, CIVIL DRAWINGS AND SHOP DRAWINGS PROVIDED BY MANUFACTURERS OF EQUIPMENT.

STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL, HYDROSTATIC, AND BACKFILL LOADS ON THE COMPLETED STRUCTURES. THE STRUCTURES HAVE NOT BEEN DESIGNED TO RESIST THESE LOADS WHILE ONLY PARTIALLY CONSTRUCTED. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED FROM ALL CONSTRUCTION LOADS BY BRACING AND BALANCING UNTIL ALL STRUCTURAL ELEMENTS ARE IN PLACE, AND ALL CONCRETE HAS REACHED THE SPECIFIED 28 DAY COMPRESSIVE STRENGTH. OVERLOADING OF ANY STRUCTURAL ELEMENT IS PROHIBITED.

UNLESS OTHERWISE SHOWN, ON ALL STRUCTURAL DRAWINGS THE FINISHED GRADE AROUND STRUCTURES IS SHOWN THUS,  INDICATING EITHER GROUND SURFACE, TOP OF CONCRETE SLAB, OR AC PAVEMENT. FOR DETAILS OF FINISH SURFACES, SEE CIVIL AND ARCHITECTURAL DRAWINGS.

STRUCTURAL STEEL

STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE FIFTEENTH EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.

STRUCTURAL WIDE FLANGE SHAPES AND CHANNELS SHALL BE STEEL MEETING ASTM A-992 SPECIFICATIONS.

ANGLES SHALL BE OF STEEL MEETING ASTM A-572 GRADE 50 SPECIFICATIONS.

OTHER SHAPES, BARS, PLATES AND SHEETS SHALL BE OF STEEL MEETING ASTM-A572 GR 50 SPECIFICATIONS.

PIPE, PIPE COLUMNS, AND BOLLARDS SHALL BE OF STEEL MEETING ASTM A-53, TYPE E OR S, GRADE B STANDARD WEIGHT, UNO

HSS SHALL BE OF STEEL MEETING ASTM A-500 GRADE B.

STEEL JOISTS, BEAMS, AND GIRDERS SHALL NOT BE RELOCATED WITHOUT APPROVAL BY THE ENGINEER.

ALL WELDING SHALL BE BY THE SHIELDED ARC METHOD AND SHALL CONFORM TO AWS CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. QUALIFICATIONS OF WELDERS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR STANDARD QUALIFICATION PROCEDURE OF THE AWS.

CONCRETE (EXCEPT PRECAST CONCRETE)

UNLESS OTHERWISE NOTED OR SPECIFIED, ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI IN 28 DAYS.

REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM A-615, "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN CARBON-STEEL BARS FOR CONCRETE REINFORCEMENT," GRADE 60

COLUMN SPIRALS SHALL CONFORM TO ASTM A-615, "DEFORMED AND PLAIN BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT, GRADE 60 OR ASTM A-82 "STEEL WIRE, PLAIN, FOR CONCRETE REINFORCEMENT".

ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE INDICATED, SHALL BE IN ACCORDANCE WITH ACI-315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.

TOLERANCES IN PLACING REINFORCEMENT SHALL BE:
+/- 3/8 INCH FOR MEMBERS WITH DEPTH D <= 8 INCHES
+/- 1/2 INCH FOR MEMBERS WITH DEPTH D > 8 INCHES

ALL CONSTRUCTION JOINTS, SHALL BE ROUGH AND THOROUGHLY CLEANED FOR BOND.

LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER. ALL CONSTRUCTION JOINTS LOCATED ON THE DRAWINGS, OR REQUIRED FOR CONSTRUCTION BUT NOT SHOWN ON THE DRAWINGS, SHALL HAVE A 6" FLATSTRIP WATERSTOP IF IN CONTACT WITH WATER. IN ADDITION, JOINTS IN ALL SLABS COVERED WITH WATER SHALL HAVE BOTH A 6" FLATSTRIP WATERSTOP AND A SEALANT GROOVE.

DOWELS, PIPE, WATERSTOPS AND OTHER INSTALLED MATERIALS AND ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.

UNLESS OTHERWISE INDICATED, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:

A) IN SLABS #5 RISER BARS AT 36 INCHES OC MAXIMUM TO SUPPORT TOP REINFORCING BARS.

B) IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACERS AT 6 FEET OC EACH WAY.

VERTICAL REINFORCEMENT FOR CONCRETE OR MASONRY SHALL BE SPLICED WITH DOWEL BARS OF THE SAME SIZE AND SPACING FROM THE FOUNDATION USING A STANDARD SPLICE LENGTH UNLESS INDICATED OTHERWISE.

SEALANT SHALL BE PLACED AT THE TOP OF ALL JOINTS RECEIVING EXPANSION JOINT FILLER. SEALANT DEPTH SHALL BE THE JOINT FILL THICKNESS OR 1/2", WHICHEVER IS LESS.

ALL GROUT SHALL BE NON-SHRINK GROUT, UNLESS INDICATED OTHERWISE.

UNLESS OTHERWISE SHOWN CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: #4@12" EW, CENTER OF 6" SECTIONS; #5@12" EW; CENTER OF 8" SECTIONS; #4 @ 12" EW EF OF 10" SECTIONS; #5@12" EW EF OF 12" AND THICKER SECTIONS.

METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.

DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE SHOVED INTO FRESHLY PLACED CONCRETE.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, LAPS OF REINFORCEMENT SHALL BE AS SHOWN ON DETAIL S-143.

LOCATE TWO 3/4 INCH GALVANIZED RICHMOND ROCKET INSERTS, HOHMANN & BARNARD OR EQUAL, STRADDLING CENTERLINE OF EQUIPMENT OVER ALL PUMPS, METERS OR OTHER MECHANICAL UNITS OF MORE THAN 100 LBS, FOR INSERTING LIFTING EYES IF NOT OTHERWISE INDICATED.

REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.

ALL ITEMS EMBEDDED IN CONCRETE SHALL BE SPACED ON CENTER AT LEAST 3 TIMES THEIR OUTSIDE DIMENSION. THE OUTSIDE DIMENSION SHALL NOT EXCEED ONE THIRD OF THE MEMBER THICKNESS

UNLESS OTHERWISE SHOWN ON THE DRAWINGS CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:

FOR CONCRETE PLACED AGAINST EARTH (SEE CONSTRUCTION JOINT DETAILS FOR THIN SLABS-ON-GRADE, BOTTOM COVER MAY BE LESS THAN 3" IF SO INDICATED) 3"

FOR SURFACES IN CONTACT WITH WATER OR WEATHER AND FORMED SURFACES IN CONTACT WITH EARTH 2"

FOR CONCRETE NOT EXPOSED TO WEATHER, OR IN CONTACT WITH WATER OR EARTH 1 1/2"

UNLESS OTHERWISE NOTED, WALLS AND SLABS SHOWN WITH A SINGLE LAYER OF REINFORCEMENT SHALL HAVE THAT REINFORCEMENT CENTERED

SLABS WITH SLOPING SURFACES SHALL HAVE THE INDICATED SLAB THICKNESS MAINTAINED AS THE MINIMUM. SLAB-ON-GRADE BOTTOMS MAY EITHER SLOPE WITH THE TOP SURFACE OR BE LEVEL. REINFORCING IN SLABS WITH SLOPING SURFACES SHALL BE PLACED AT THE REQUIRED CLEARANCE FROM THE SLAB SURFACES.

UNLESS OTHERWISE NOTED WALL, WALLS AND SLABS SHOWN WITH A SINGLE LAYER OF REINFORCEMENT SHALL HAVE THAT REINFORCEMENT CENTERED.

TESTING HYDRAULIC STRUCTURES

WHEN FILLING THE STRUCTURES WITH WATER FOR THE TEST REQUIRED IN THE SPECIFICATIONS, ALL VARIOUS BASINS LOCATED IN THE SAME STRUCTURE SHALL BE FILLED SIMULTANEOUSLY AT THE SAME RATE IN ORDER TO KEEP THE SAME LEVEL IN EACH BASIN.

STRUCTURAL STANDARD DETAILS

DETAILS ON GS SHEETS ARE PART OF STANTEC'S STRUCTURAL STANDARD DETAILS.

THESE DETAILS ARE TO BE USED WHEN REFERRED TO OR WHEN NO OTHER MORE RESTRICTIVE OR DIFFERENT DETAILS ARE INDICATED ON THE DRAWINGS.

DETAILS NOT PERTAINING TO THE PROJECT ARE MARKED THUS 

CONDUIT COORDINATION NOTES

REFER TO THE NOTES BELOW, AND ELECTRICAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS, FOR CONDUIT PLACEMENT REQUIREMENTS. CONDUIT NOT IN CONFORMANCE WITH THESE REQUIREMENTS SHALL NOT BE INSTALLED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.

FOR CONDUIT RUNNING IN THE PLANE OF CONCRETE SLABS OR WALLS:

THE OUTSIDE DIAMETER OF THE CONDUIT SHALL NOT EXCEED ONE-THIRD OF MEMBER THICKNESS;

CONDUIT SHALL NOT BE SPACED CLOSER THAN 3 OUTSIDE DIAMETERS ON CENTER;

CONDUIT SHALL BE LOCATED ONLY WITHIN THE MIDDLE THIRD OF THE MEMBER ;

CONDUIT SHALL NOT BE SUPPORTED DIRECTLY ON REBAR.

SCHEDULE OF STRUCTURAL OBSERVATIONS

MASONRY CONSTRUCTION	WHAT TO OBSERVE
FOUNDATIONS - PRIOR TO THE FIRST CONCRETE POUR, BUT AFTER SUBSTANTIAL PLACEMENT OF REINFORCING STEEL, ANCHORS, AND OTHER EMBEDDED ITEMS	REVIEW FOUNDATION REINFORCEMENT, INCLUDING ADDITIONAL REINFORCEMENT AT PENETRATIONS REVIEW WALL DOWELS; ENSURE ADDITIONAL DOWELS ASSOCIATED WITH OPENINGS IN WALL AND JAMB STEEL ARE IN PLACE REVIEW ANCHOR BOLT PLACEMENT, HOLD-DOWN ANCHORS, AND OTHER STEEL EMBEDS. REVIEW PIPING AND CONDUIT PLACEMENT
MASONRY CONSTRUCTION	WHAT TO OBSERVE
WALLS - PRIOR TO THE FIRST WALL POUR, BUT AFTER SUBSTANTIAL PLACEMENT OF REINFORCING STEEL, ANCHORS, AND OTHER EMBEDDED ITEMS	REVIEW WALL REINFORCEMENT, INCLUDING ADDITIONAL REINFORCEMENT AT PENETRATIONS REVIEW JAMB STEEL, CHORD STEEL, AND WALL-TO-DIAPHRAGM CONNECTION DETAILS REVIEW ANCHOR BOLT PLACEMENT, HOLD-DOWN ANCHORS, AND OTHER STEEL EMBEDS. REVIEW PIPING AND CONDUIT PLACEMENT
ROOFS - PRIOR TO APPLICATION OF NON-STRUCTURAL COVERINGS, BUT AFTER PLACEMENT OF STRUCTURAL FRAMING AND SHEATHING/DECKING	REVIEW ROOF FRAMING REVIEW DIAPHRAGM-TO-WALL CONNECTIONS REVIEW DIAPHRAGM NAILING/WELDING REVIEW FRAMING AROUND OPENINGS
CONCRETE CONSTRUCTION	WHAT TO OBSERVE
FOUNDATIONS - PRIOR TO THE FIRST CONCRETE POUR, BUT AFTER SUBSTANTIAL PLACEMENT OF REINFORCING STEEL, WATERSTOPS, ANCHORS, AND OTHER EMBEDDED ITEMS	REVIEW FOUNDATION REINFORCEMENT, INCLUDING ADDITIONAL REINFORCEMENT AT PENETRATIONS REVIEW WALL DOWELS; ENSURE ADDITIONAL DOWELS ASSOCIATED WITH OPENINGS IN WALL AND JAMB STEEL ARE IN PLACE REVIEW WATERSTOP INSTALLATION, TIE-OFFS, AND JOINTS REVIEW ANCHOR BOLT PLACEMENT, HOLD-DOWN ANCHORS, AND OTHER STEEL EMBEDS. REVIEW PIPING AND CONDUIT PLACEMENT
WALLS - PRIOR TO THE FIRST CONCRETE POUR, BUT AFTER SUBSTANTIAL PLACEMENT OF REINFORCING STEEL, WATERSTOPS, ANCHORS, AND OTHER EMBEDDED ITEMS	REVIEW WALL REINFORCEMENT, INCLUDING ADDITIONAL REINFORCEMENT AT PENETRATIONS REVIEW JAMB STEEL, CHORD STEEL, AND WALL-TO-DIAPHRAGM CONNECTION DETAILS REVIEW WATERSTOP INSTALLATION, TIE-OFFS, AND JOINTS REVIEW ANCHOR BOLT PLACEMENT, HOLD-DOWN ANCHORS, AND OTHER STEEL EMBEDS. REVIEW PIPING AND CONDUIT PLACEMENT
ELEVATED SLABS - PRIOR TO THE FIRST CONCRETE POUR, BUT AFTER SUBSTANTIAL PLACEMENT OF REINFORCING STEEL, WATERSTOPS, ANCHORS, AND OTHER EMBEDDED ITEMS	REVIEW SLAB REINFORCEMENT, INCLUDING ADDITIONAL REINFORCEMENT AT PENETRATIONS REVIEW WALL DOWELS; ENSURE ADDITIONAL DOWELS ASSOCIATED WITH OPENINGS IN WALL AND JAMB STEEL ARE IN PLACE REVIEW CHORD STEEL AND WALL-TO-DIAPHRAGM CONNECTION DETAILS REVIEW WATERSTOP INSTALLATION, TIE-OFFS, AND JOINTS REVIEW ANCHOR BOLT PLACEMENT, HOLD-DOWN ANCHORS, AND OTHER STEEL EMBEDS. REVIEW PIPING AND CONDUIT PLACEMENT

ALUMINUM

ALUMINUM CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALUMINUM ASSOCIATION ASM 35 - SPECIFICATION FOR ALUMINUM SHEET METAL WORK IN BUILDING CONSTRUCTION. ALUMINUM SURFACES SHALL BE PREVENTED FROM COMING IN DIRECT CONTACT WITH CONCRETE OR WITH METALS NOT COMPATIBLE WITH ALUMINUM, USING METHODS DESCRIBED IN THE SPECIFICATIONS.

STAINLESS STEEL

REFER TO SPECIFICATIONS FOR STAINLESS STEEL GRADES REQUIRED.

STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH THE 2015 IBC CHAPTER 17. THE OWNER WILL ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR, WHO WILL PROVIDE ALL SERVICES NECESSARY TO MEET THE IBC SPECIAL INSPECTION REQUIREMENTS.

2. SPECIAL INSPECTIONS WILL BE PROVIDED DURING ALL FABRICATION AND CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE NOTES AND SCHEDULES ON THIS DRAWING.

3. SPECIAL INSPECTION FOR THE MAIN WIND-FORCE-RESISTING SYSTEM AND EXTERIOR CLADDING WILL BE PROVIDED AS INDICATED BELOW:

A. WIND FORCE RESISTING SYSTEM:

1. STEEL FRAME: SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH TABLE 1704.3.

2. STEEL ROOF DIAPHRAGM: PERIODIC SPECIAL INSPECTION IS REQUIRED DURING WELDING, SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS.

3. EXTERIOR WALLS: PERIODIC SPECIAL INSPECTION IS REQUIRED FOR NAILING, SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS.

4. WALL CONNECTIONS TO STEEL FRAMES: PERIODIC SPECIAL INSPECTION IS REQUIRED FOR BOLTING, WELDING, ANCHORING AND OTHER FASTENING OF WALLS TO STEEL FRAMES.

5. WALL CONNECTIONS TO THE FOUNDATION: SPECIAL INSPECTION FOR ALL CONCRETE ANCHOR INSTALLATION IS REQUIRED IN ACCORDANCE WITH THE APPLICABLE ICC OR IAPMO EVALUATION REPORT. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF THE HOLD-DOWNS TO THE ANCHOR BOLTS AND TO THE WALL STUDS.

B. ROOF, WALL, AND SOFFIT CLADDING:

1. PERIODIC SPECIAL INSPECTION IS REQUIRED DURING WELDING, NAILING, SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS.

4. SPECIAL INSPECTION FOR THE SEISMIC FORCE RESISTING SYSTEM AND MECHANICAL AND ELECTRICAL EQUIPMENT WILL BE PROVIDED AS INDICATED BELOW:

A. SEISMIC FORCE RESISTING SYSTEM:

1. WALL CONNECTIONS TO THE FOUNDATION: SPECIAL INSPECTION OF WALL DOWELS INTO THE FOUNDATION. SPECIAL INSPECTION FOR ALL CONCRETE ANCHOR INSTALLATION WHERE REQUIRED IN ACCORDANCE WITH IBC TABLE 1705.3.

2. WALLS: SPECIAL INSPECTION OF REINFORCED MASONRY WALLS IS REQUIRED IN ACCORDANCE WITH TMS 402/ACI 530 TABLE [3.1.1, 3.1.2, 3.1.3].

3. WALL CONNECTION TO ROOF TRUSS & RAFTERS: SPECIAL INSPECTION AS REQUIRED FOR BOLTING, WELDING, ANCHORING AND OTHER FASTENING OF WALLS TO STEEL FRAMES. SPECIAL INSPECTION REQUIRED FOR WELDING, AND ANCHORAGE AT COLLECTOR PER AISC 360.

4. STEEL ROOF DIAPHRAGM: PERIODIC SPECIAL INSPECTION IS REQUIRED FOR SCREW ATTACHMENT, BOLTING, ANCHORING, WELDING AND OTHER FASTENING OF COMPONENTS.

B. MECHANICAL AND ELECTRICAL COMPONENTS AS NOTED BELOW:

1. PERIODIC SPECIAL INSPECTION IS REQUIRED DURING THE ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS

2. PERIODIC SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF ANCHORAGE OF OTHER ELECTRICAL EQUIPMENT.

3. PERIODIC SPECIAL INSPECTION IS REQUIRED DURING THE INSTALLATION OF VIBRATION ISOLATION SYSTEMS.

5. ADDITIONAL SPECIAL INSPECTIONS WILL BE PROVIDED WHERE REQUIRED BY IBC CHAPTER 17.

DEFINITIONS

1. REFER TO SECTION 1702 AND CHAPTER 2 OF THE 2015 IBC FOR DEFINITION OF TERMS APPLICABLE TO SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS.

A. SPECIFIC DEFINITIONS

HIGH STRENGTH BOLT AN ASTM F3125 GR A325 OR A490 BOLT. AN ASTM F1852 TWIST-OFF-TYPE TENSION-CONTROL BOLT OF AN ALTERNATIVE-DESIGN FASTENER THAT MEETS THE REQUIREMENTS IN AISC 360 SECTION 2.8.

CONTRACTOR RESPONSIBILITY

1. EACH CONTRACTOR RESPONSIBLE FOR THE FABRICATION OR CONSTRUCTION OF A MAIN WIND-FORCE-RESISTING SYSTEM OR MAIN SEISMIC-FORCE RESISTING SYSTEM OR COMPONENT LISTED ABOVE SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.

Revision

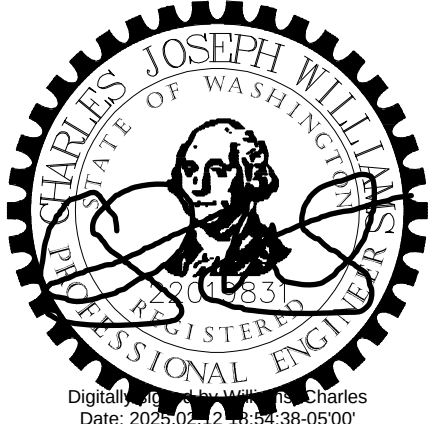
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WARNING
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IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



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1687 114th Ave SE, Suite 100
Bellevue, WA 98004
Tel: (425) 896-6900
www.stantec.com

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TULALIP TRIBES

BATTLE CREEK HATCHERY

Title

STRUCTURAL NOTES-1

Project No.

224202267

Revision

Sheet

of

Scale

Drawing No.

GS-1

File Name: 02267015-MD

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OTHER STRUCTURAL STEEL INSPECTION TASKS

ADDITIONAL INSPECTION REQUIREMENTS OF THE QUALITY ASSURANCE PROCEDURES ARE AS FOLLOWS:

- A) INSPECTION SHALL BE PERFORMED DURING THE PLACEMENT OF THE ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. AS A MINIMUM, THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OF THE EMBEDMENT INTO THE CONCRETE, SHALL BE VERIFIED PRIOR TO THE PLACEMENT OF CONCRETE.
- B) INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME, AS APPROPRIATE, TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.
- C) MATERIAL VERIFICATION OF STRUCTURAL STEEL:
- I) IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.
 - II) MANUFACTURERS' VERIFIED MILL TEST REPORTS.
- D) INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:
- I) DETAILS SUCH AS BRACING AND STIFFENING.
 - II) MEMBERS LOCATIONS
 - III) APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC SECTION 1705.2.2)

VERIFICATION AND INSPECTION	INSPECTION		REFERENCED STANDARDS
	CONTINUOUS	PERIODIC	
MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:			
IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	APPLICABLE ASTM MATERIAL STANDARDS
MANUFACTURER'S CERTIFIED TEST REPORTS.	-	X	
INSPECTION OF WELDING:			
COLD-FORMED STEEL DECK			
FLOOR AND ROOF DECK WELDS	-	X	AWS D1.3
REINFORCING STEEL:			
VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	-	X	AWS D1.4 ACI 318: SECTION 26.6.4
REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	-	
SHEAR REINFORCEMENT	X	-	
OTHER REINFORCING STEEL	-	X	

INSPECTION OF SOILS

1. SPECIAL INSPECTION FOR SOIL WILL BE IN ACCORDANCE WITH IBC SECTION 1705.6 AND THE FOLLOWING TABLE.

VERIFICATION AND INSPECTION	INSPECTION	
	CONTINUOUS	PERIODIC
VERIFY MATERIALS BELOW FOOTINGS AND SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	-	X
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	X	-
PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

INSPECTION OF CONCRETE CONSTRUCTION

1. SPECIAL INSPECTION FOR CONCRETE CONSTRUCTION WILL BE IN ACCORDANCE WITH 2015 IBC SECTION 1705.3 AND THE FOLLOWING TABLE.

VERIFICATION AND INSPECTION	INSPECTION		REFERENCED STANDARD (A)	IBC REFERENCE
	CONTINUOUS	PERIODIC		
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING STEEL, AND PLACEMENT.	-	X	ACI 318: 3.5, 7.1 - 7.7	1910.4
INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2 ITEM 2b.	-	-	AWS D1.4 ACI 318: 3.5.2	-
INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	-	X	ACI 318 - 8.1.3, 21.2.8	1908.5, 1909.1
INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (B).	-	X	ACI 318- 3.8.6, 8.1.3, 21.2.8	1909.1
VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 4, 5.2 - 5.4	1904.2, 1910.2, 1910.3
AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10
INSPECTION OF CONCRETE AND SHOTCRETE FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 5.11 - 5.13	1910.9
ERECTION OF PRECAST CONCRETE MEMBERS	-	X	ACI 318: CH. 16	-
INSPECTION OF PRESTRESSED CONCRETE:	X	-	ACI 318: 18.20	-
A. APPLICATION OF PRESTRESSING FORCES.	X	-	ACI 318: 18.18.4	-
B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC FORCE-RESISTING SYSTEM.	X	-	ACI 318: 18.18.4	-
VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 6.2	-
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 6.1.1	-

- (A) WHERE APPLICABLE, SEE ALSO IBC SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.
- (B) SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 308.2 OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS WILL BE AS SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND WILL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO COMMENCEMENT OF THE WORK.

DEFERRED SUBMITTALS:

DEFERRED SUBMITTALS ARE THOSE PORTIONS OF THE DESIGN WHICH ARE PROVIDED BY THE CONTRACTOR AND THEREFORE WERE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION, AND WHICH ARE TO BE SUBMITTED TO THE PERMITTING AGENCY PRIOR TO FABRICATION OR INSTALLATION OF THAT PORTION OF THE WORK.

NO WORK SHALL BE PERFORMED FOR DEFERRED SUBMITTAL ITEMS UNTIL THE PLANS FOR SUCH WORK HAVE BEEN REVIEWED AND FOUND ACCEPTABLE BY THE STRUCTURAL ENGINEER OF RECORD AND APPROVED BY THE BUILDING OFFICIAL.

DRAWINGS AND CALCULATIONS FOR THESE ITEMS SHALL BE SIGNED AND SEALED BY A LICENSED (CALIFORNIA) PROFESSIONAL ENGINEER. NO FABRICATION SHALL COMMENCE UNTIL THE FINAL APPROVAL HAS BEEN ISSUED BY THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER OF RECORD.

THE DEFERRED SUBMITTALS SHALL INCLUDE AS A MINIMUM, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

SPECIFICATION SECTION	ITEM
[013317]	[EQUIPMENT ANCHORAGE]
[052119]	[STEEL OPEN WEB JOISTS]
[055200]	[HANDRAIL SYSTEM]
[330516]	[PRECAST MANHOLE TYPE STRUCTURES]
[434010]	[FRP & OTHER PREFABRICATED STORAGE TANKS]
[435200]	[MONORAIL AND BRIDGE CRANE SYSTEMS]

INSPECTION OF HIGH STRENGTH BOLTS PER AISC 360

AS A MINIMUM BOLTING INSPECTION TASKS SHALL BE IN ACCORDANCE WITH TABLES N5.6-1, N5.6-2 AND N5.6-3. INSPECTION TASKS ARE AS FOLLOWS:

O- OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.

P- PERFORM THESE TASKS FOR EACH BOLTED CONNECTION.

INSPECTION TASKS PRIOR TO BOLTING (AISC 360 TABLE N5.6-1)

INSPECTIN TASKS PRIOR TO BOLTING	INSPECTION	
	QUALITY CONTROL	QUALITY ASSURANCE
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL. (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	O
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O
CONNECTED ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	O	O

INSPECTION TASKS DURING BOLTING (AISC 360 TABLE N5.6-2)

INSPECTION TASKS DURING BOLTING	INSPECTION	
	QUALITY CONTROL	QUALITY ASSURANCE
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	O
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	O
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O

INSPECTION TASKS AFTER BOLTING (AISC 360 TABLE N5.6-3)

VERIFICATION AND INSPECTION	INSPECTION	
	QUALITY CONTROL	QUALITY ASSURANCE
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P

INSPECTION OF STRUCTURAL STEEL CONSTRUCTION

1. SPECIAL INSPECTION FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE AND QUALITY CONTROL INSPECTION REQUIREMENTS OF AISC 360 AND AISC 341.
2. THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL PROCEDURES IN ACCORDANCE WITH THE REQUIREMENTS OF AISC 360 CHAPTER N AND AISC 341 CHAPTER J.
3. THE OWNER IS RESPONSIBLE FOR QUALITY ASSURANCE PROCEDURES IN ACCORDANCE WITH THE REQUIREMENTS OF AISC 360 CHAPTER N AND AISC 341 CHAPTER J.
4. THE INSPECTION TABLES AND NOTES PROVIDED ON THIS SHEET ARE INTENDED ONLY TO ASSIST THE CONSTRUCTION PERSONNEL IN IDENTIFYING QUALITY CONTROL AND QUALITY ASSURANCE INSPECTION REQUIREMENTS. THE REQUIREMENTS OF AISC 360 CHAPTER N AND AISC 341 CHAPTER J ARE MINIMUM REQUIREMENTS, AND THE QUALITY CONTROL INSPECTOR(S) AND QUALITY ASSURANCE INSPECTOR(S) ARE RESPONSIBLE FOR MEETING ALL REQUIREMENTS OF AISC 360 CHAPTER N AND AISC 341 CHAPTER J, WHETHER INDICATED ON THIS SHEET OR NOT. IF ANY INSPECTIONS ARE REQUIRED IN ADDITION TO THE AISC 360 CHAPTER N AND AISC 341 CHAPTER J INSPECTIONS, SUCH INSPECTIONS ARE INDICATED ON THIS SHEET. IF A DISCREPANCY EXISTS BETWEEN THE REQUIREMENTS OF AISC 360 CHAPTER N AND AISC 341 CHAPTER J AND THE REQUIREMENTS OF THIS DRAWING, THE MORE STRINGENT REQUIREMENT SHALL APPLY, UNLESS OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.

INSPECTION OF WELDING PER AISC 360

AS A MINIMUM WELDING INSPECTION TASKS SHALL BE IN ACCORDANCE WITH TABLES N5.4-1, N5.4-2 AND N5.4-3. INSPECTION TASKS ARE AS FOLLOWS:

O- OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.

P- PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER.

INSPECTION TASKS PRIOR TO WELDING (AISC 360 TABLE N5.4-1)

INSPECTION TASK PRIOR TO WELDING	INSPECTION		AWS D1.1/D1.1M REFERENCES
	QUALITY CONTROL	QUALITY ASSURANCE	
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	P	O	6.4
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	P	P	6.3
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P	6.2
MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O	6.2
WELDER IDENTIFICATION SYSTEM*	O	O	6.4
FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETRY)	O	O	6.5.2 5.22 5.15 5.18 5.10, 5.22.1.1
-JOINT PREPARATION			
-DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)			
-CLEANLINESS (CONDITION OF SURFACES)			
-TACKING (QUALITY AND LOCATION)	O	O	5.22.1 5.15 5.18
-BACKING TYPE AND FIT (IF APPLICABLE)			
CONFIGURATION AND FINISH OF ACCESS HOLES	O	O	6.5.2, 5.17, AISC J1.6
FIT-UP OF FILLET WELDS	O	O	5.22.1 5.15 5.18
-DIMENSIONS (ALIGNMENT, GAPS AT ROOT)			
-CLEANLINESS (CONDITION OF SURFACES)			
-TACKING (QUALITY AND LOCATION)	O	-	6.2, 5.11
CHECK WELDING EQUIPMENT			

*THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW-STRESS TYPE.

INSPECTION TASKS DURING WELDING (AISC 360 TABLE N5.4-2)

INSPECTION TASK DURING WELDING	INSPECTION		AWS D1.1/D1.1M REFERENCES
	QUALITY CONTROL	QUALITY ASSURANCE	
CONTROL AND HANDLING OF WELDING CONSUMABLES	O	O	6.2 5.3.1 5.3.2 (FOR SMAW), 5.3.3 (FOR SAW)
-PACKAGING			
-EXPOSURE CONTROL			
NO WELDING OVER CRACKED TACK WELDS	O	O	5.18
ENVIRONMENTAL CONDITIONS			
-WIND SPEED WITHIN LIMITS	O	O	5.12.1 5.12.2
-PRECIPITATION AND TEMP			
WPS FOLLOWED:	O	O	6.3.3, 6.5.2, 5.5, 5.21
-SETTINGS ON WELDING EQUIP.			
-TRAVEL SPEED			
-SELECTED WELDING MATERIALS			
-SHIELDED GAS TYPE/FLOW RATE			
-PREHEAT APPLIED			5.6, 5.7
-INTERPASS TEMPERATURE (MIN/MAX)	O	O	6.5.2, 6.5.3, 5.24 5.30.1
-PROPER POSITION (F, V, H, OH)			
WELDING TECHNIQUES			
-INTERPASS AND FINAL CLEANING	O	O	
-EACH PASS WITHIN PROFILE LIMITATIONS			
-EACH PASS MEETS QUALITY REQUIREMENTS			
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	P	P	7.8

INSPECTION TASKS AFTER WELDING (AISC 360 TABLE N5.4-3)

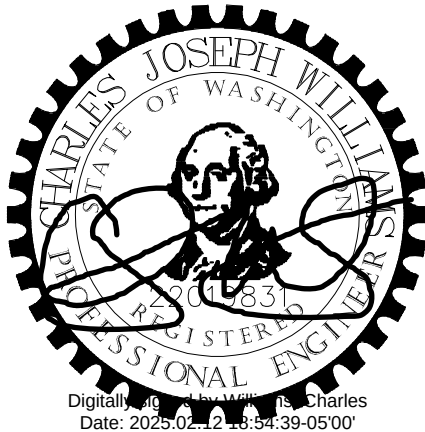
INSPECTION TASKS AFTER WELDING	INSPECTION		AWS D1.1/D1.1M REFERENCES
	QUALITY CONTROL	QUALITY ASSURANCE	
WELDS CLEANED	O	O	5.30.1
SIZE, LENGTH AND LOCATION OF WELDS	P	P	6.5.1
WELDS MEET VISUAL ACCEPTANCE CRITERIA	P	P	6.5.3 TABLE 6.1(1) TABLE 6.1(2) TABLE 6.1(3) TABLE 6.1(4), 5.24 TABLE 6.1(6) TABLE 6.1(7) TABLE 6.1(8)
-CRACK PROHIBITION			
-WELD/BASE METAL FUSION			
-CRATER CROSS SECTION			
-WELD PROFILES			
-WELD SIZE			
-UNDERCUT	P	P	5.10, 5.31
-POROSITY			
ARC STRIKES	P	P	5.29
K-AREA*	P	P	-
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES**	P	P	5.16
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	P	P	
REPAIR ACTIVITIES	P	P	6.5.3, 5.26
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	P	6.5.4, 6.5.5
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	O	O	-

*WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PREFORMED IN THE K-AREA, VISUALLY INSPECT THE WED K-AREA FOR CRACKS WITHIN 3 INCHES OF THE WELD.

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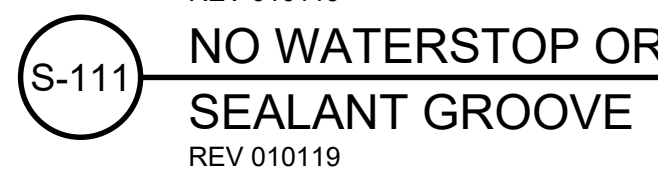
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YYYY.MM.DD

Title
STRUCTURAL NOTES-2

Project No. 224202267
Revision _____ Sheet _____ of _____
Scale _____ Drawing No. _____

GS-2

Exhibit D-1 Page 6 of 220



1. WATERSTOPS AND SEALANT GROOVES TO BE PROVIDED IN ALL WATER RETAINING SLABS, SEE DRAWINGS, FOR OTHER LOCATIONS WHERE THEY MAY BE REQUIRED.



SLAB-ON-GRADE CONSTRUCTION JOINTS



- NOTES:

1. WHERE WATERSTOP IS REQUIRED IN SINGLE CURTAIN WALL REINFORCEMENT, PLACE WATERSTOP ON WATER SIDE OF WALL.
2. UNLESS OTHERWISE NOTED 3/4" CHAMFERS SHALL BE OMITTED IN SURFACES TO RECEIVE ARCHITECTURAL TREATMENT.
3. UNLESS SPECIFICALLY NOTED OTHERWISE #5 AND LARGER BARS SHALL BE CONTINUOUS THRU JOINT. #4 AND SMALLER BARS SHALL STOP ALTERNATE BARS AT JOINT.
4. STAGGER SPLICES UNLESS NOTED OTHERWISE.

VERTICAL WALL CONSTRUCTION JOINT



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Title
STRUCTURAL STANDARD
DETAIL-1

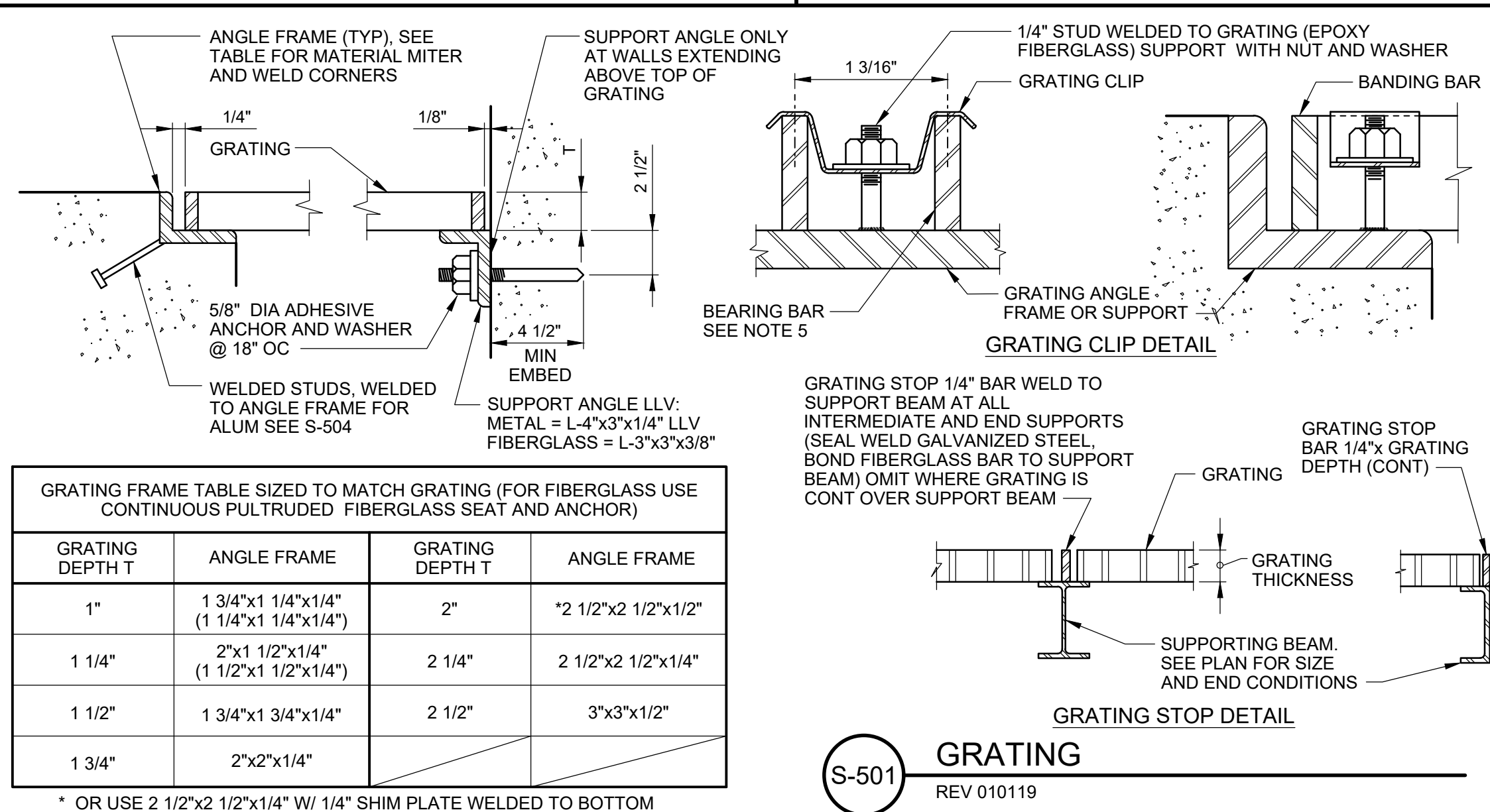
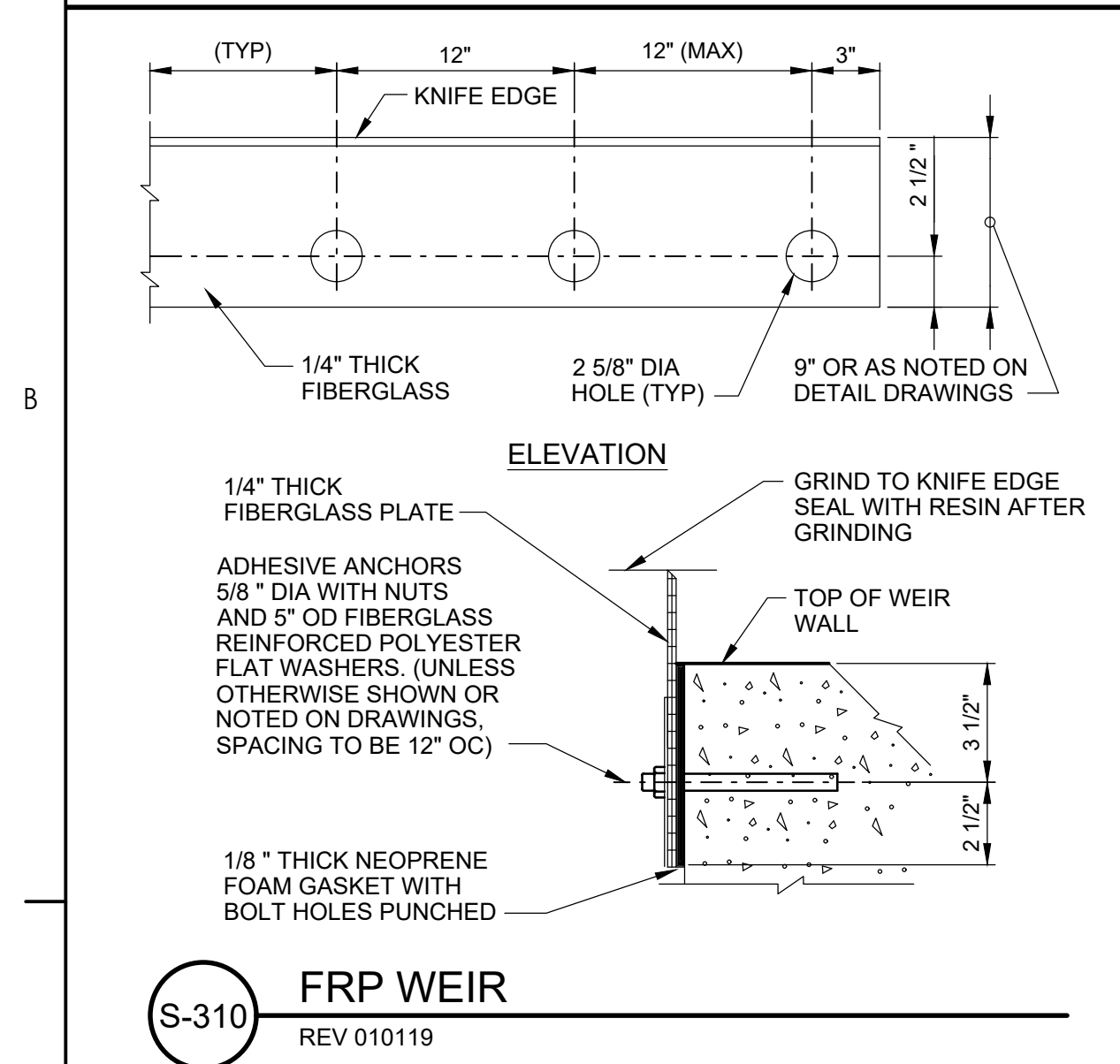
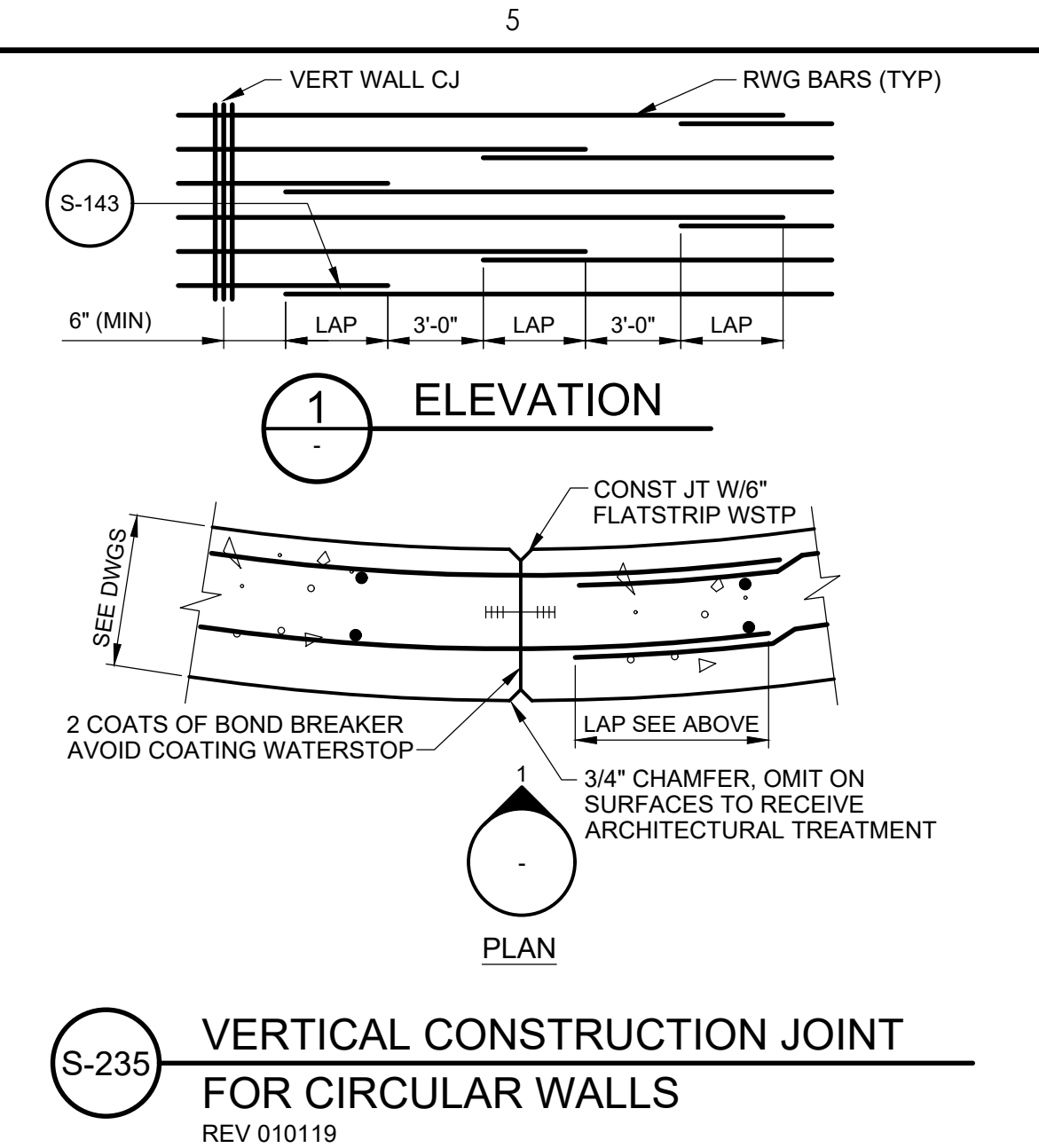
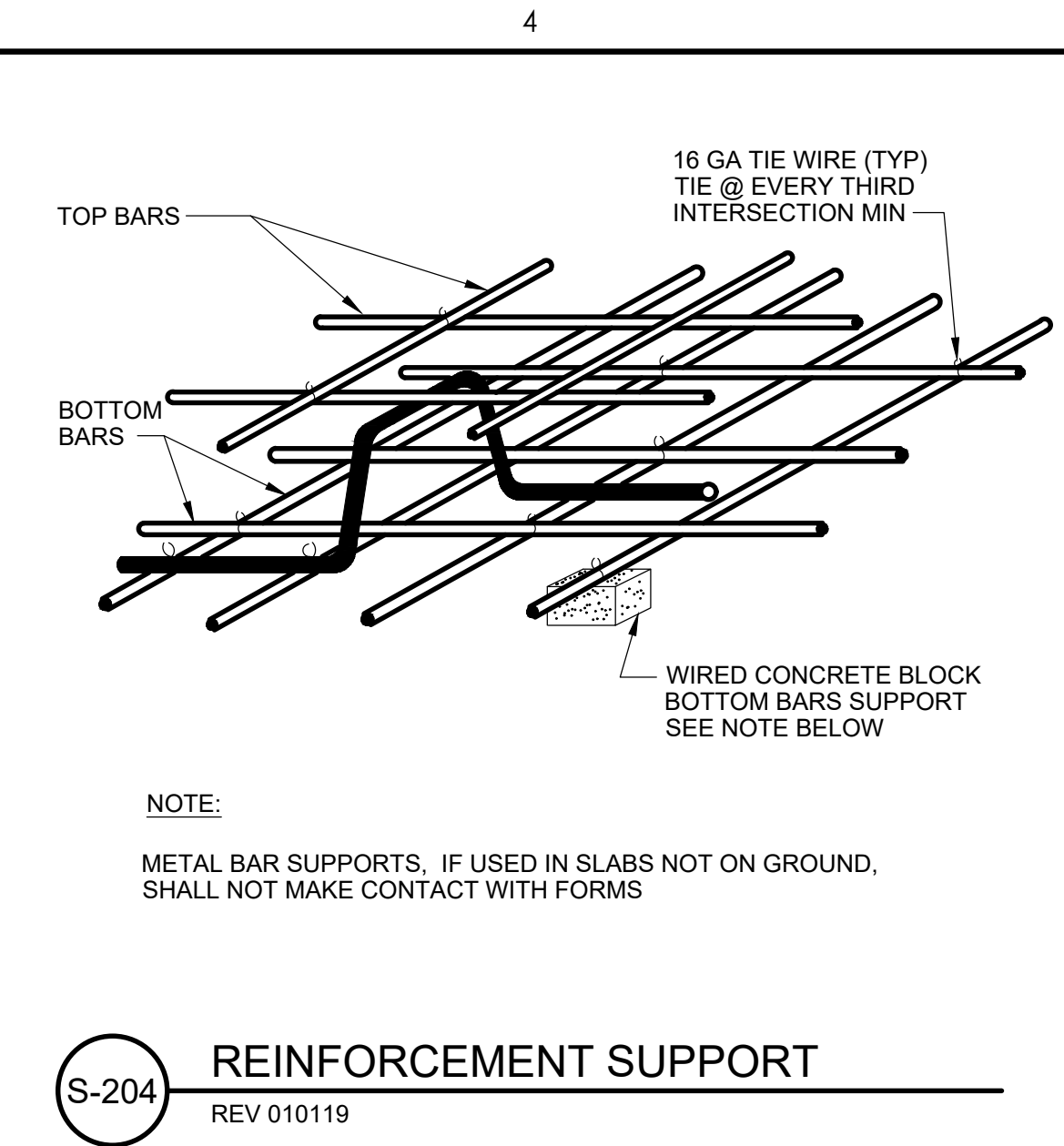
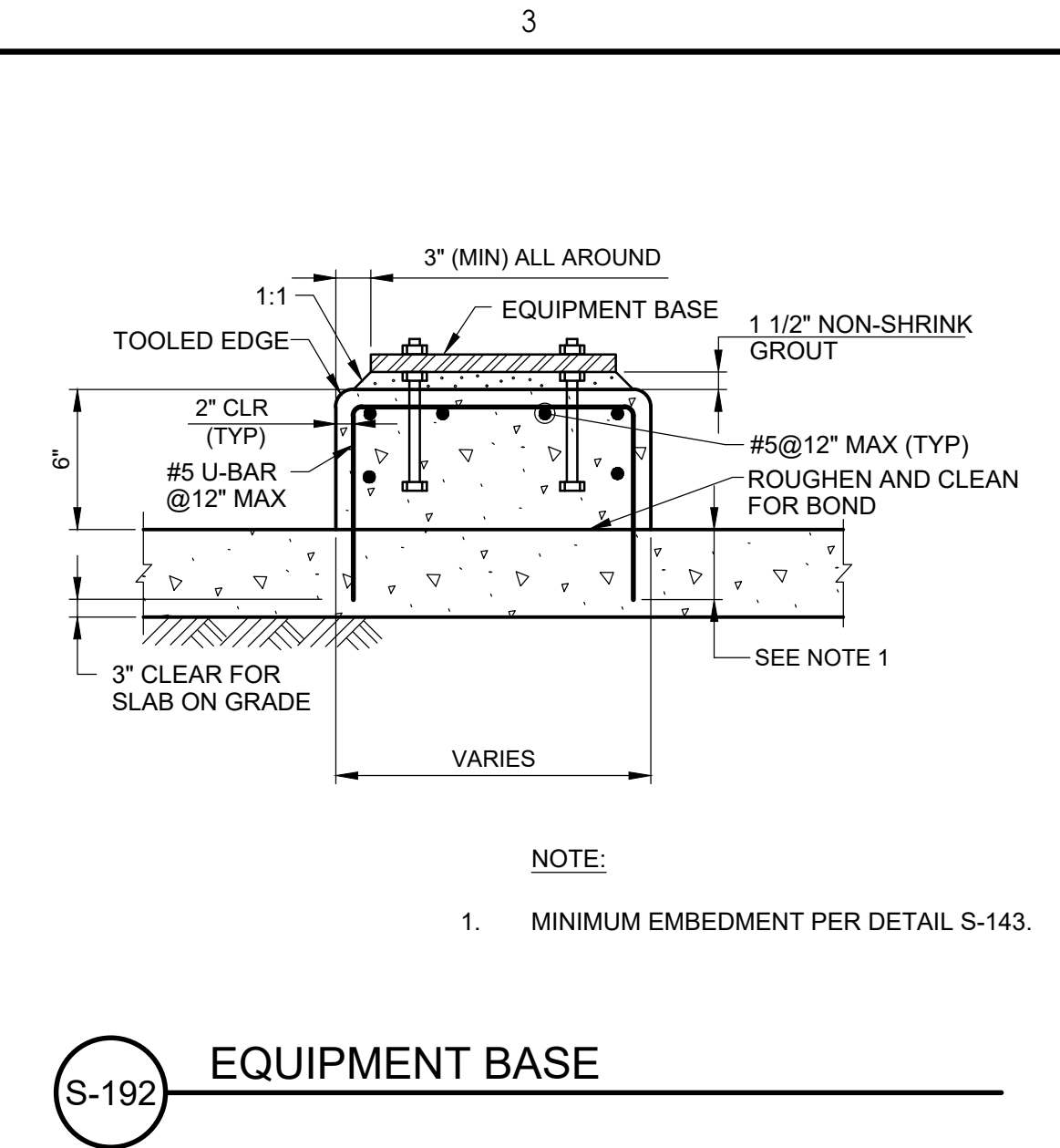
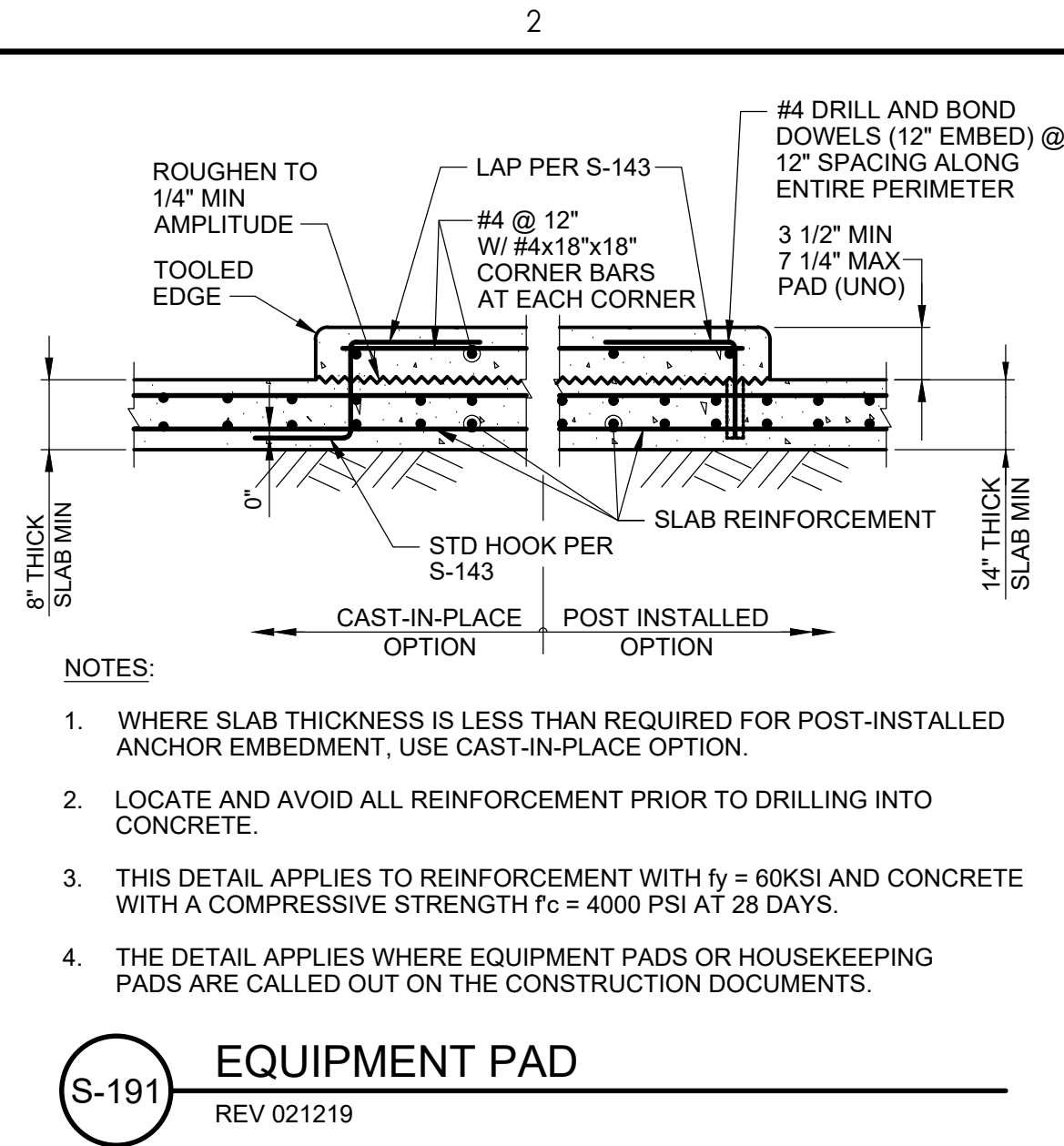
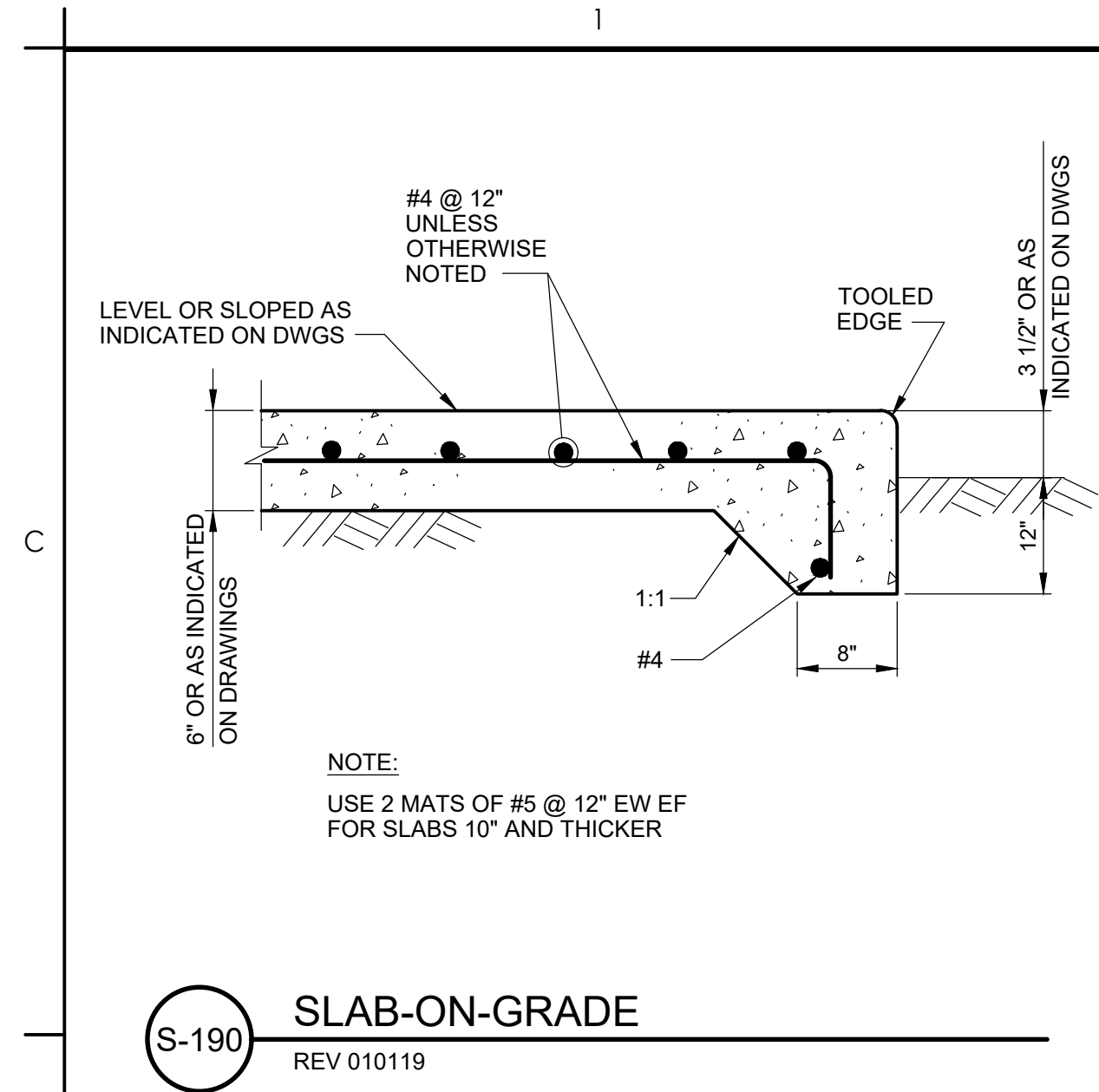
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224202267

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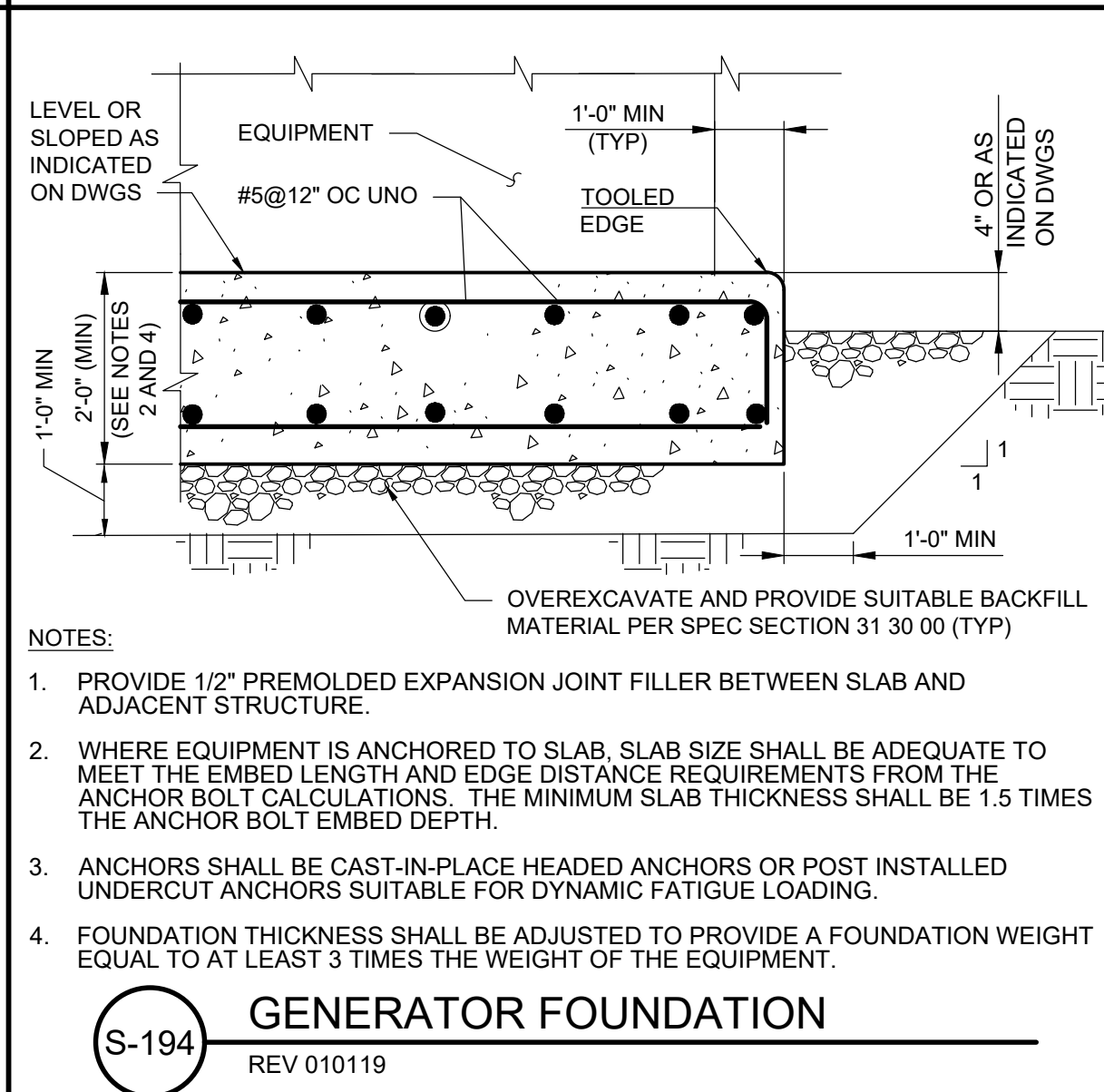
Revision Sheet

Drawing No.

GS-3



- NOTES:**
1. UNLESS INDICATED OTHERWISE, ALL GRATING SHALL BE ALUMINUM.
 2. GRATING DEPTH TO BE DETERMINED BY MANUFACTURER AND APPROVED BY ENGINEER (UNO).
 3. ALL ENDS AND OPENINGS SHALL BE Banded.
 4. WEIGHT OF GRATING SECTION SHALL NOT EXCEED 80 LBS.
 5. METAL BEARING BARS SHALL BE DEPTH 1 1/2"x3/16" @1 3/16" OC CROSS BARS SHALL BE @ 4" OC.
 6. PROVIDE A MINIMUM OF 4 CLIPS PER GRATING PANEL, APPROX 4" FROM PANEL CORNERS. MAXIMUM CLIP SPACING AT 36" OC.
 7. MATERIALS:
- | GRATING MATERIAL | SUPPORT ANGLE | ANGLE FRAME | WELDED STUDS | GRATING CLIPS AND STUDS | ADHESIVE ANCHORS |
|------------------|---------------|--------------|---------------------------------------|-------------------------|------------------------|
| ALUMINUM | ALUMINUM | ALUMINUM | ALUMINUM PER S-504 | ALUMINUM | TYPE 316 SS |
| GALV STEEL | GALV STEEL | GALV STEEL | GALV STEEL, 1/2" DIAx4" @12" OC MAX | GALV STEEL | ASTM F1554 GR 36, GALV |
| STAINLESS STEEL | TYPE 316L SS | TYPE 316L SS | TYPE 316L SS, 1/2" DIAx4" @12" OC MAX | TYPE 316 SS | TYPE 316 SS |
| FIBERGLASS | FIBERGLASS | FIBERGLASS | FIBERGLASS | FIBERGLASS | TYPE 316 SS |
8. ALL GALVANIZED MATERIAL TO BE GALVANIZED AFTER FABRICATION.
 9. SEE S-504 FOR ALUMINUM WELDED STUD DETAIL.
 10. ALUMINUM IN CONTACT WITH CONCRETE SHALL BE COATED PER THE PROTECTIVE COATING SPECIFICATIONS.
 11. FIBERGLASS GRATING - ALL CUT EDGES SHALL BE SEALED WITH RESIN. FOR BONDING, USE AN EPOXY ADHESIVE BONDING AGENT.
 12. NOT ALL MATERIAL TYPES MAY BE USED ON A SINGLE PROJECT.
 13. PROVIDE ANGLE FRAME OR SUPPORT ANGLES AT ALL SIDES OF OPENINGS (UNO).



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TULALIP TRIBES

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Title
STRUCTURAL STANDARD
DETAIL-3

Project No.
224202267

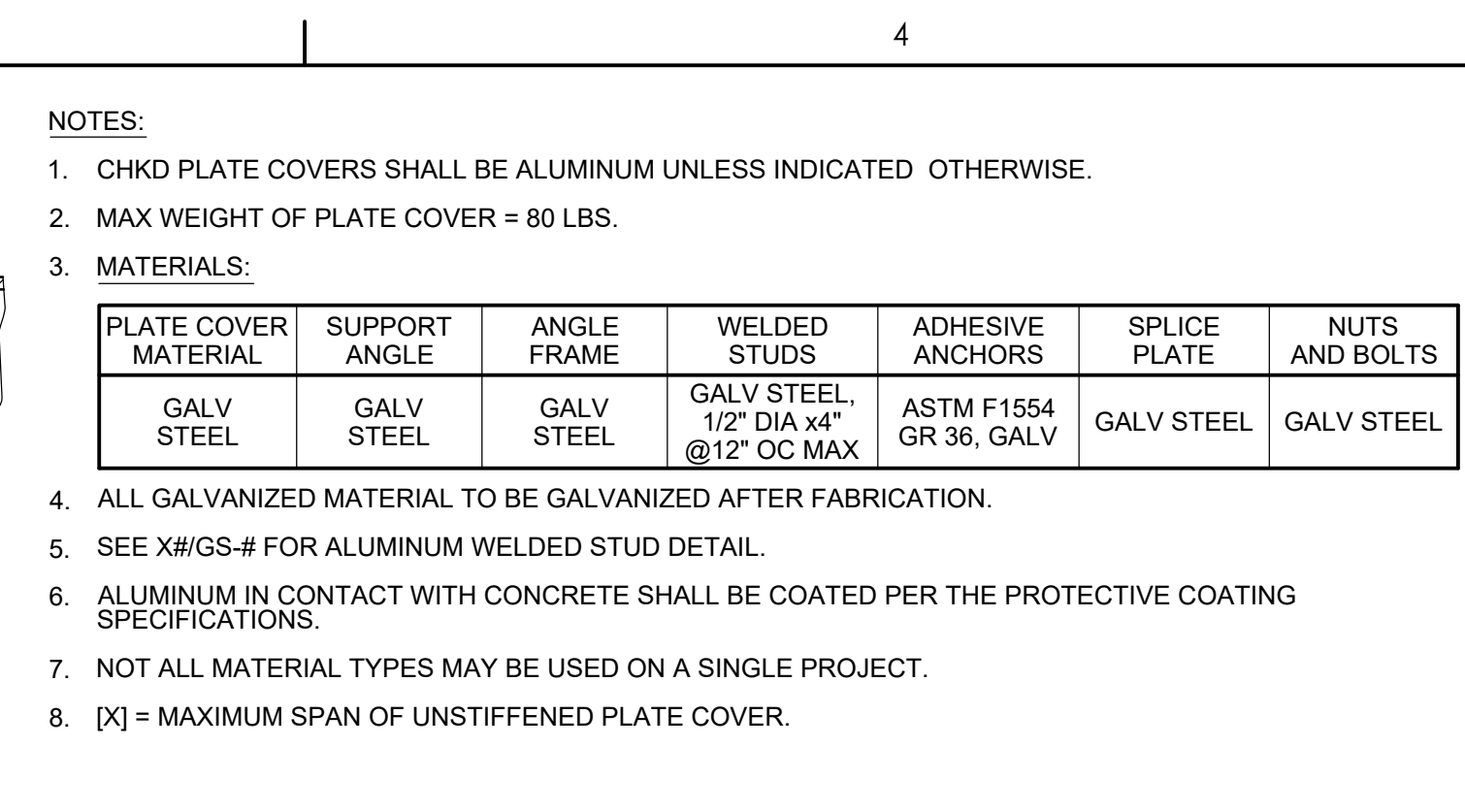
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Scale

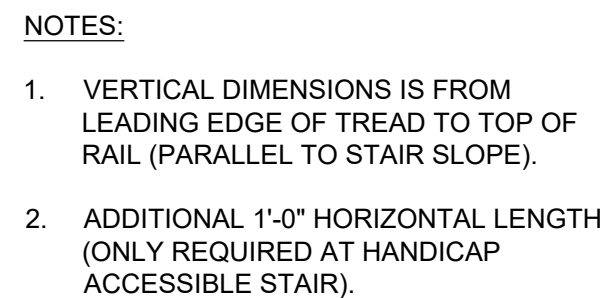
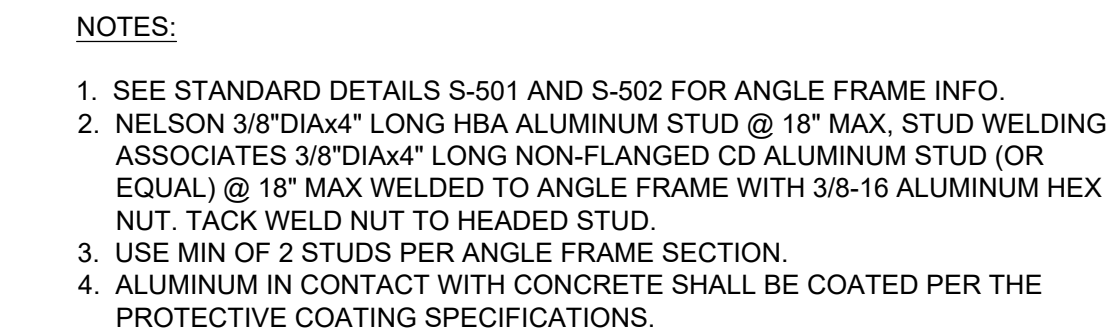
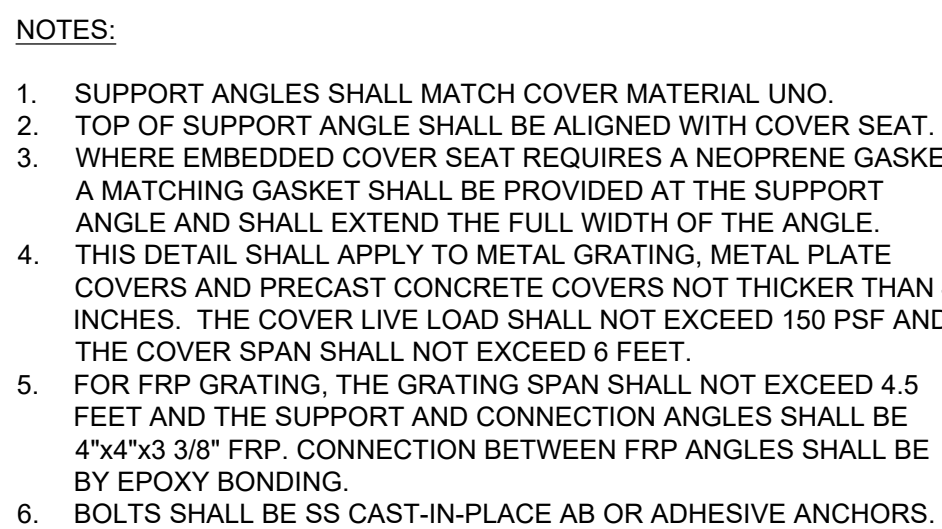
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GS-5



S-502 PLATE COVERED OPENING
REV 010119



C

C

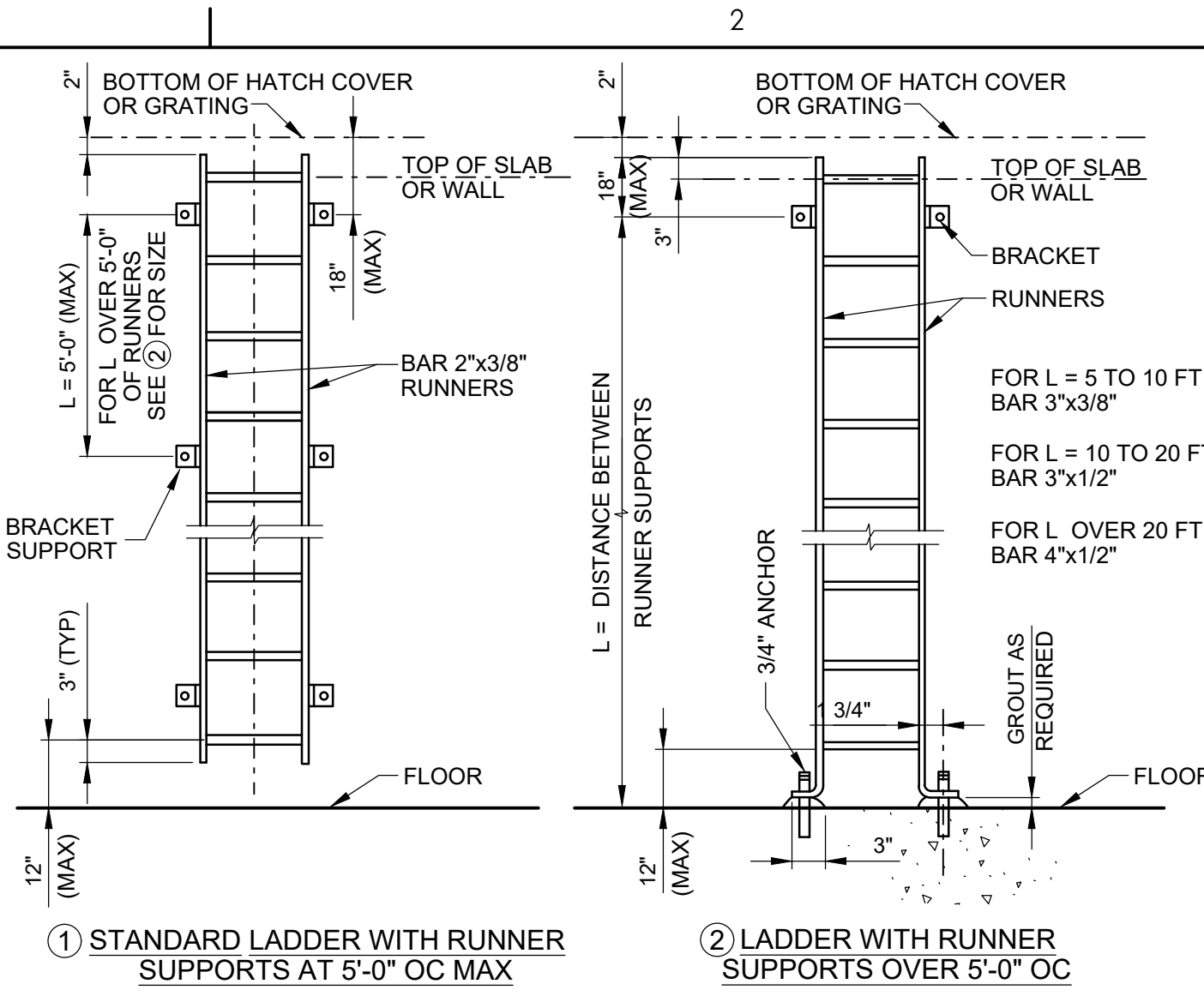
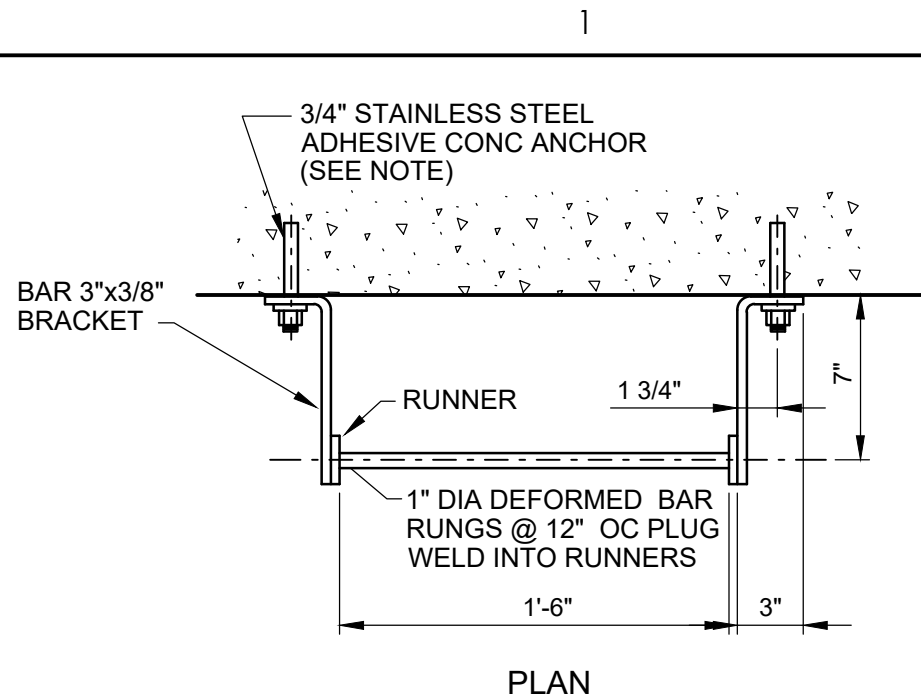
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A

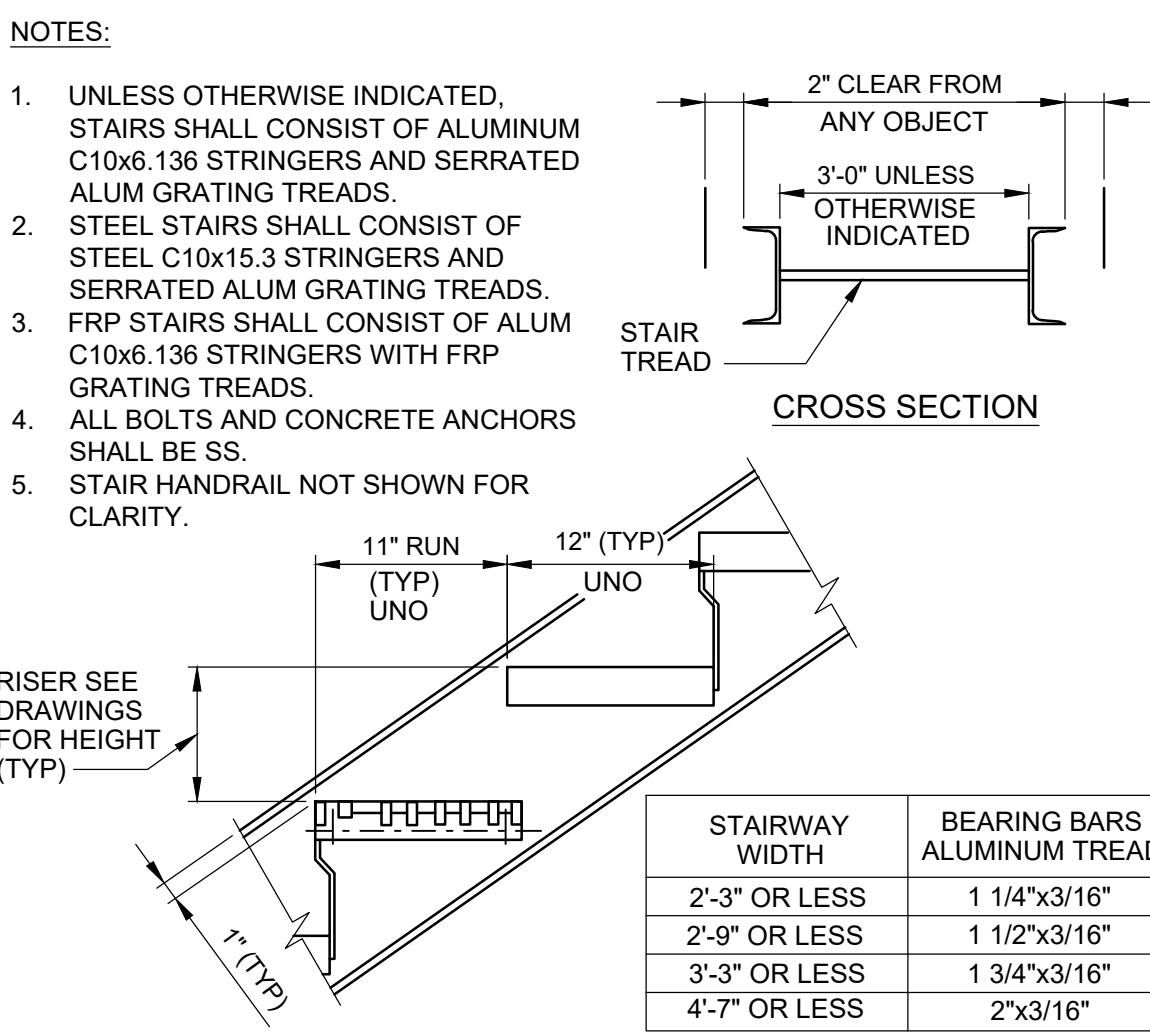
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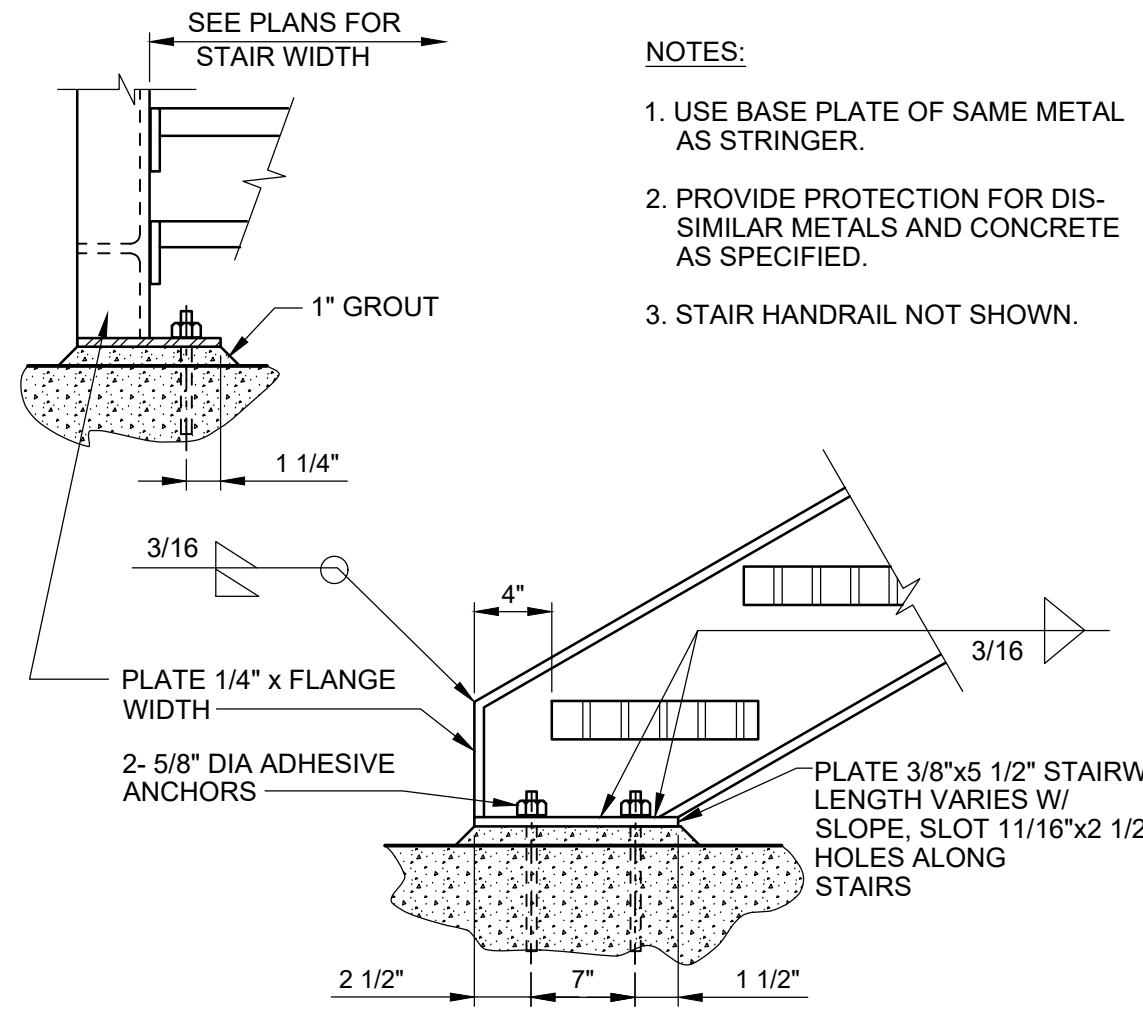
- NOTES:
1. LADDERS SHALL BE ALUMINUM UNLESS INDICATED OTHERWISE.
 2. ANCHORS AND FASTENERS SHALL BE STAINLESS STEEL, EXCEPT FASTENERS FOR GALVANIZED STEEL LADDERS SHALL BE GALVANIZED STEEL.
 3. PROVIDE ANCHOR BOLT INSERTS FOR PRESTRESSED TANK WALLS.
 4. LADDERS SHALL BE OSHA AND ANSI APPROVED.
 5. FRP LADDER MEMBERS SHALL BE SIZED BY THE MANUFACTURER PER THE SPECIFICATIONS.

S-531 **FIXED LADDER**
REV 010119



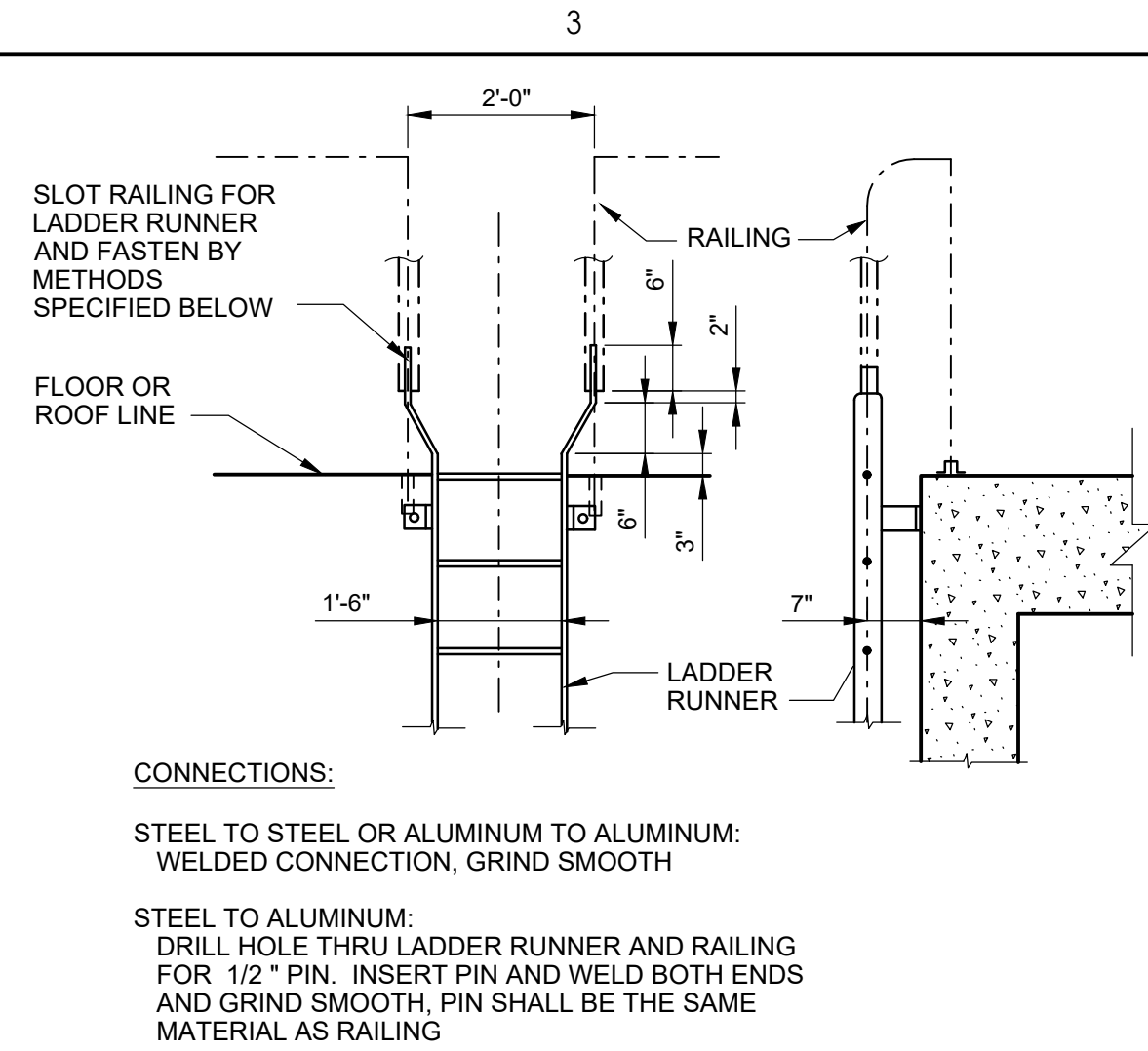
STAIRWAY WIDTH	BEARING BARS ALUMINUM TREAD
2'-3" OR LESS	1 1/4"x3/16"
2'-9" OR LESS	1 1/2"x3/16"
3'-3" OR LESS	1 3/4"x3/16"
4'-7" OR LESS	2"x3/16"

S-544 **METAL STAIR OPEN RISER**
REV 010119



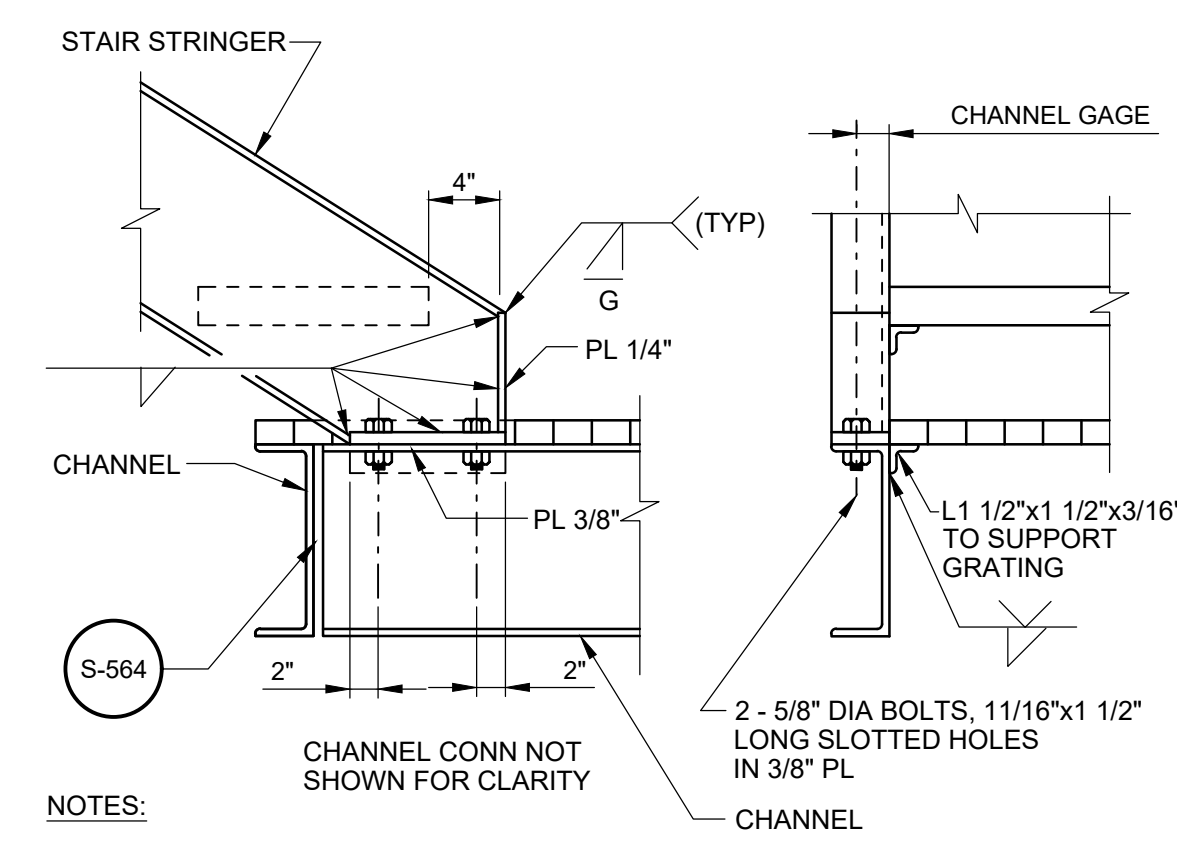
- NOTES:
1. USE BASE PLATE OF SAME METAL AS STRINGER.
 2. PROVIDE PROTECTION FOR DIS-SIMILAR METALS AND CONCRETE AS SPECIFIED.
 3. STAIR HANDRAIL NOT SHOWN.

S-545 **STAIR BOTTOM TO CONCRETE CONNECTION**
S-545 REV 010118



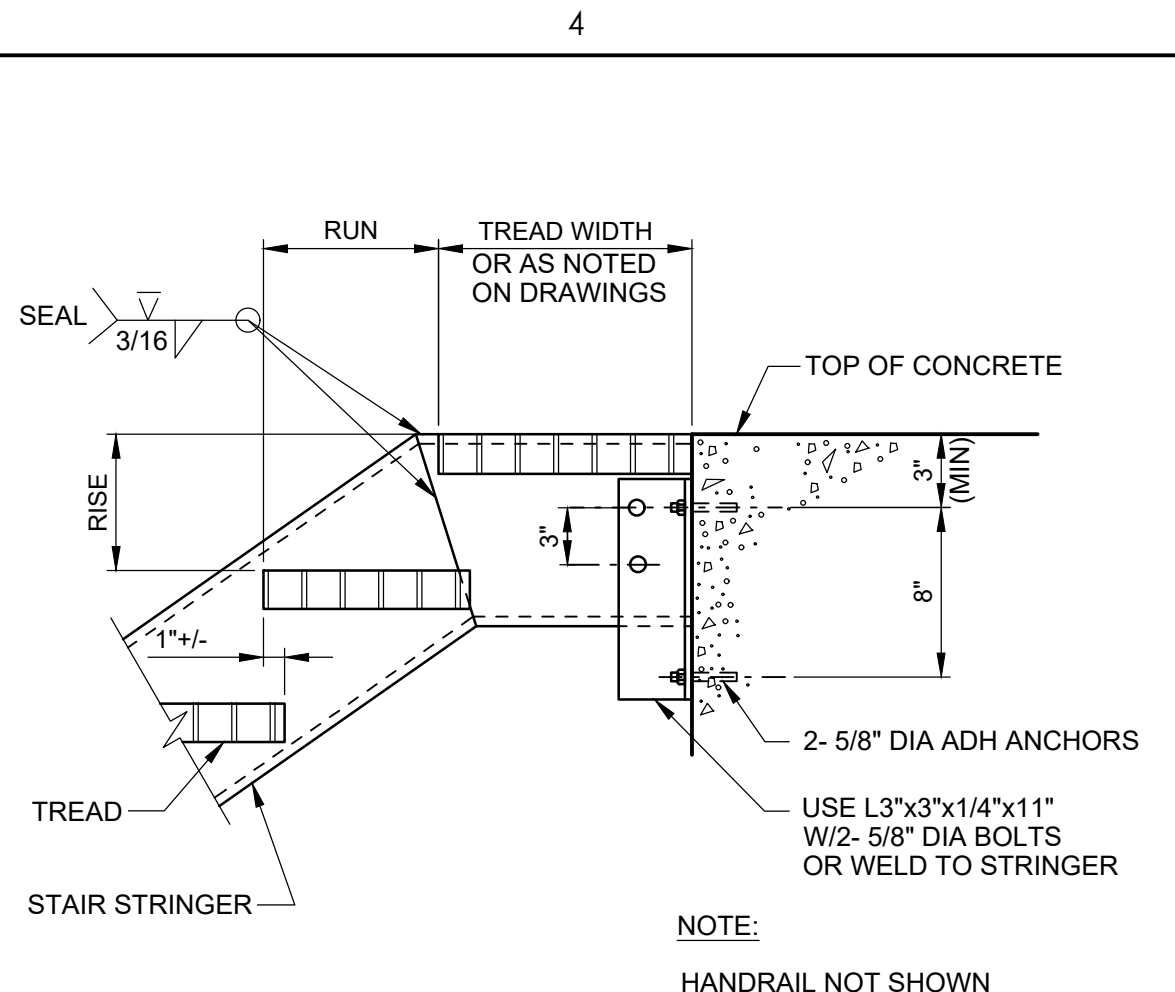
- CONNECTIONS:
- STEEL TO STEEL OR ALUMINUM TO ALUMINUM:
WELDED CONNECTION, GRIND SMOOTH
- STEEL TO ALUMINUM:
DRILL HOLE THRU LADDER RUNNER AND RAILING FOR 1/2" PIN. INSERT PIN AND WELD BOTH ENDS AND GRIND SMOOTH. PIN SHALL BE THE SAME MATERIAL AS RAILING

S-534 **LADDER TO RAILING CONNECTIONS**
REV 010119

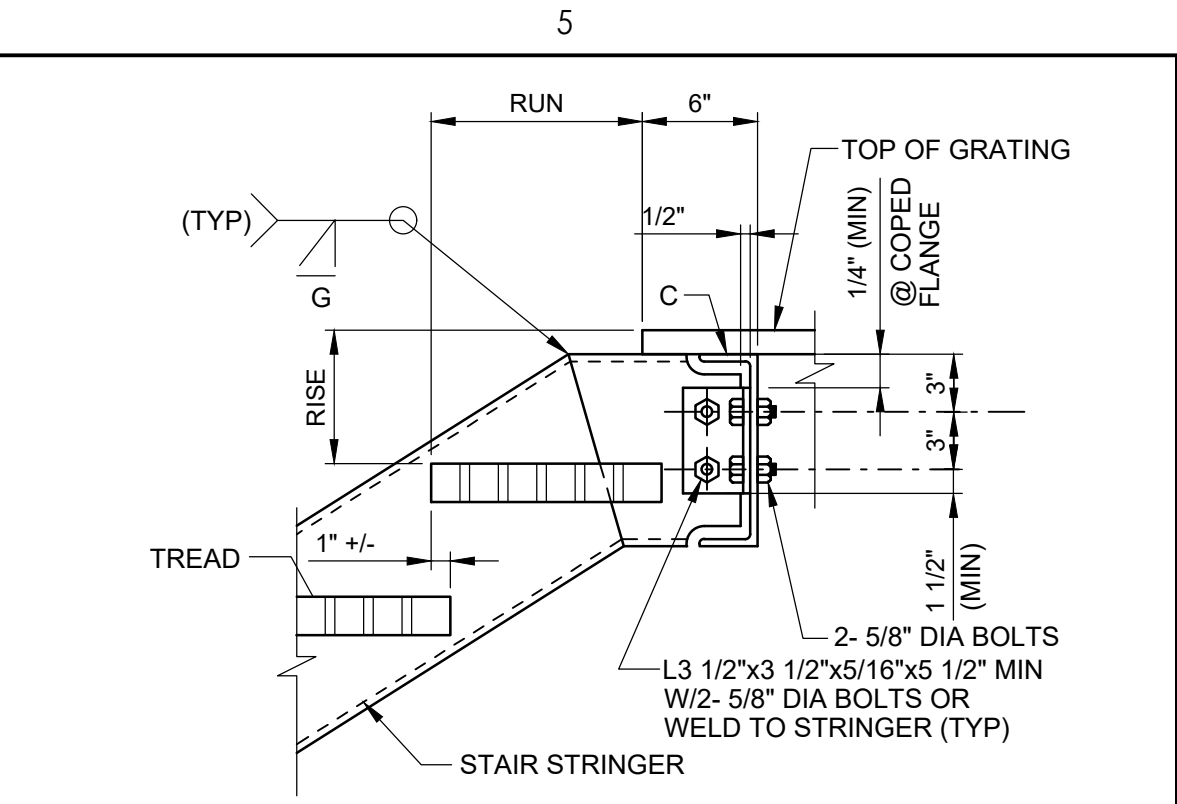


- NOTES:
1. FOR CHANNEL SIZES SEE PLAN.
 2. HANDRAIL NOT SHOWN.
 3. USE PLATES OF SAME METAL AS STRINGER.

S-546 **STAIR BOTTOM TO CHANNEL CONNECTION**
REV 010119

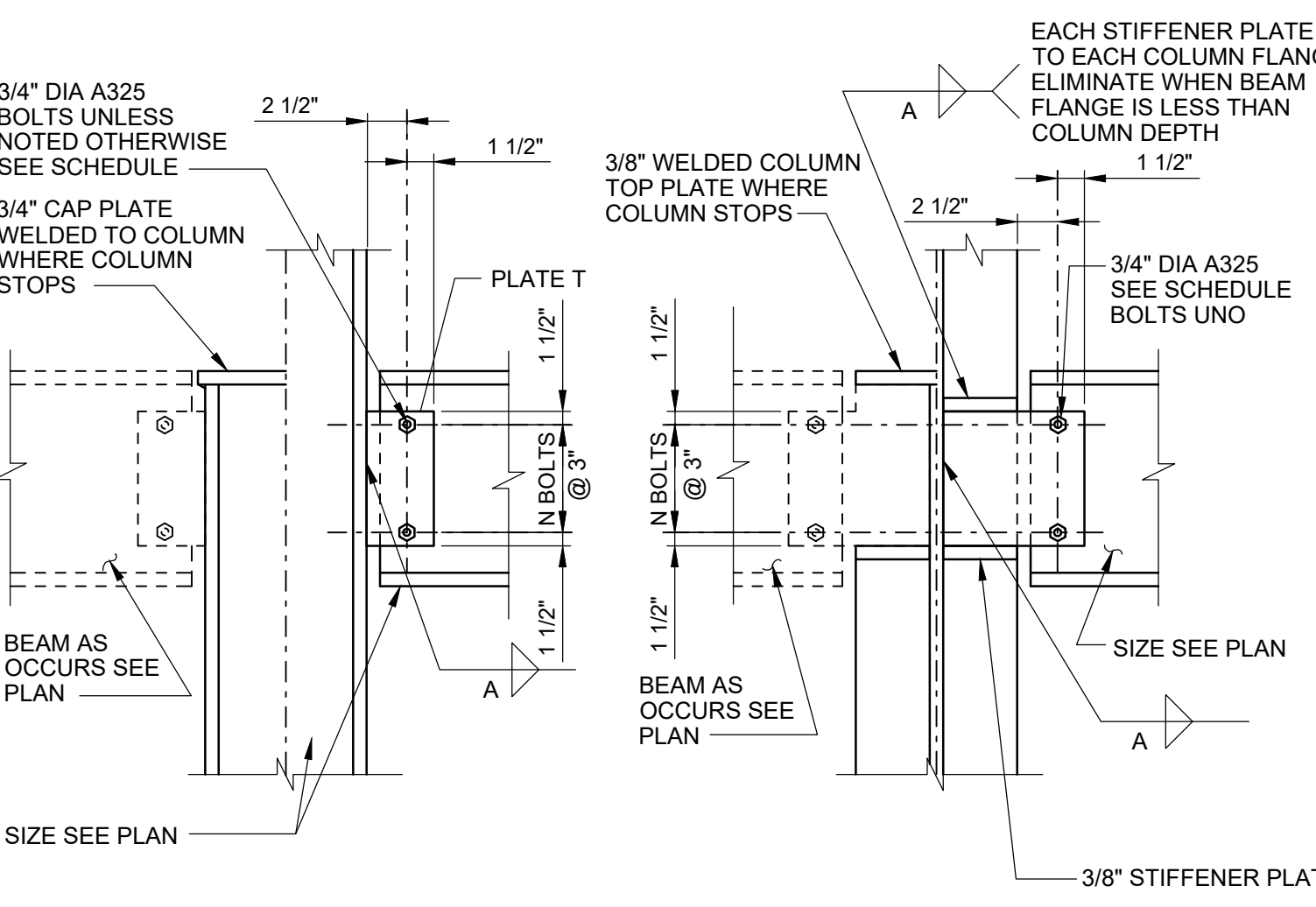


S-541 **STAIR TOP CONNECTION TO CONCRETE**
REV 010119



- NOTES:
1. FOR CHANNEL SIZES SEE PLAN.
 2. HANDRAIL NOT SHOWN.
 3. COPE STRINGER MIN AS REQ'D.

S-542 **STAIR TOP TO CHANNEL CONNECTION**
REV 010119

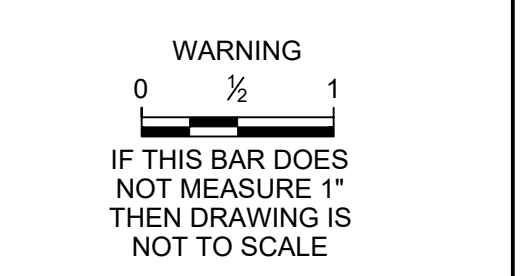
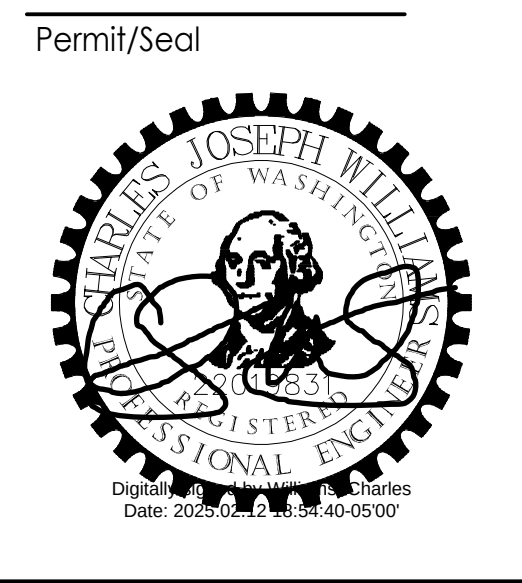


S-561 **BEAM TO COLUMN CONNECTION**
REV 010119

BEAM TO BEAM CONNECTION SCHEDULE				
TYPICAL BEAM	NO OF BOLTS N	PLATE THICKNESS T	WELD SIZE A	COMMENTS
C9	2	1/2"	5/16"	
W12	3	1/2"	5/16"	

* USE A DOUBLE ROW OF BOLTS - 5 PER ROW
3" BETWEEN ROWS AND 1 1/2" EDGE DISTANCE

Revision	By	Appd	YYYY.MM.DD	Issued	By	Appd	YYYY.MM.DD

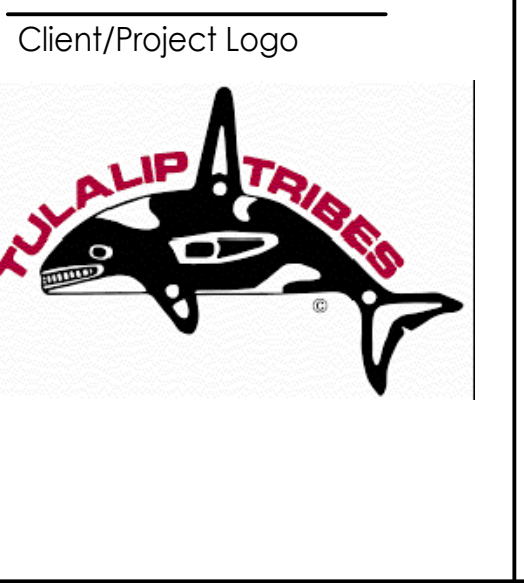


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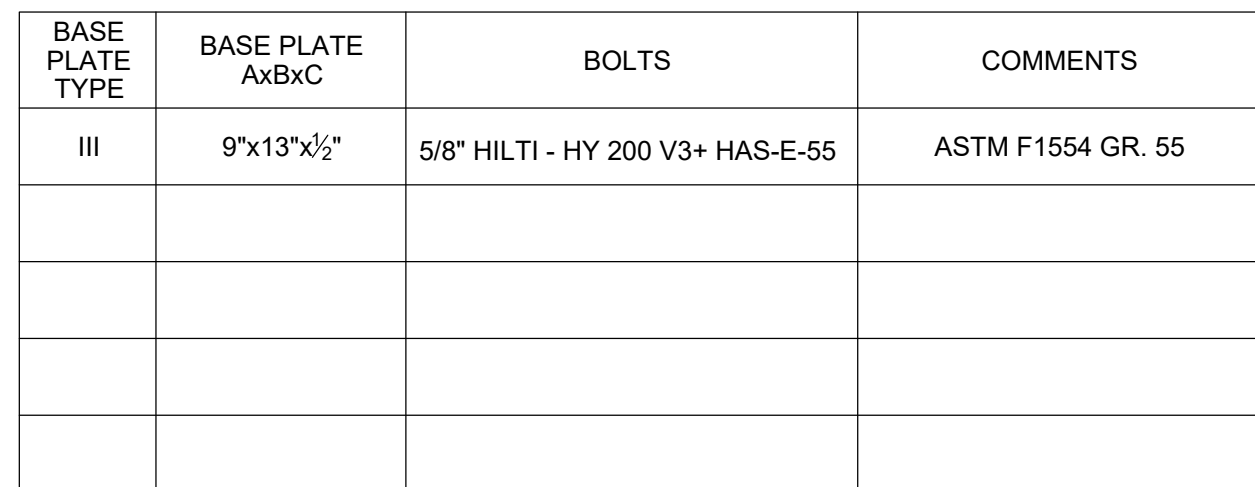
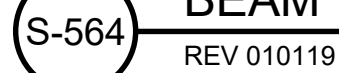
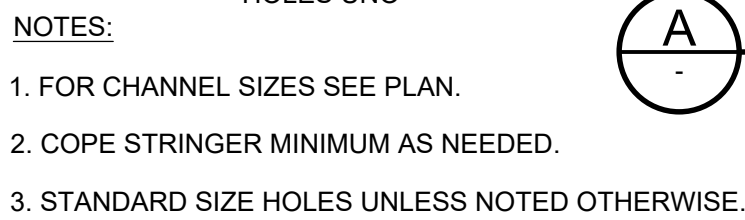
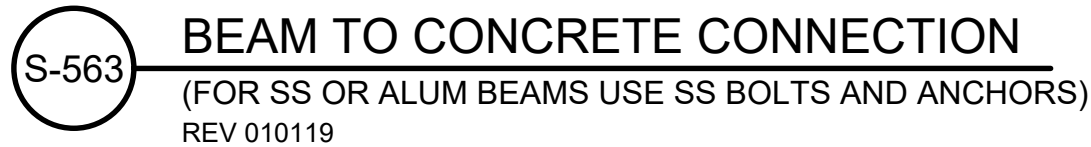
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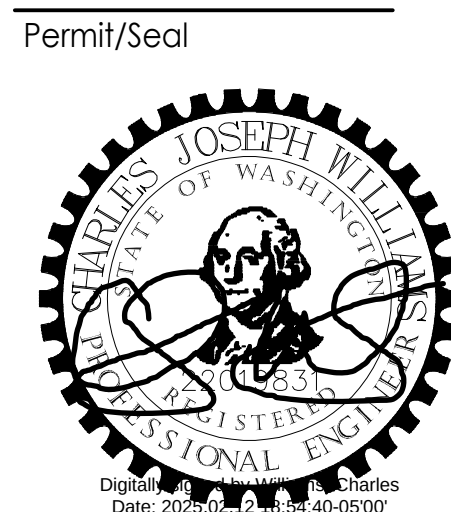
Title STRUCTURAL STANDARD DETAIL-6	Project No. 22402267	Scale
Revision	Sheet	Drawing No.
	of	GS-8



S-568 BEAM TO BEAM CONNECTION
(ANGLE CONNECTION)
REV 010119



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WARNING

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BATTLE CREEK HATCHERY

File Name: 0226709S-MD

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Title
STRUCTURAL STANDARD
DETAIL-7

Project No.
224202267

Revision Sheet
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Scale

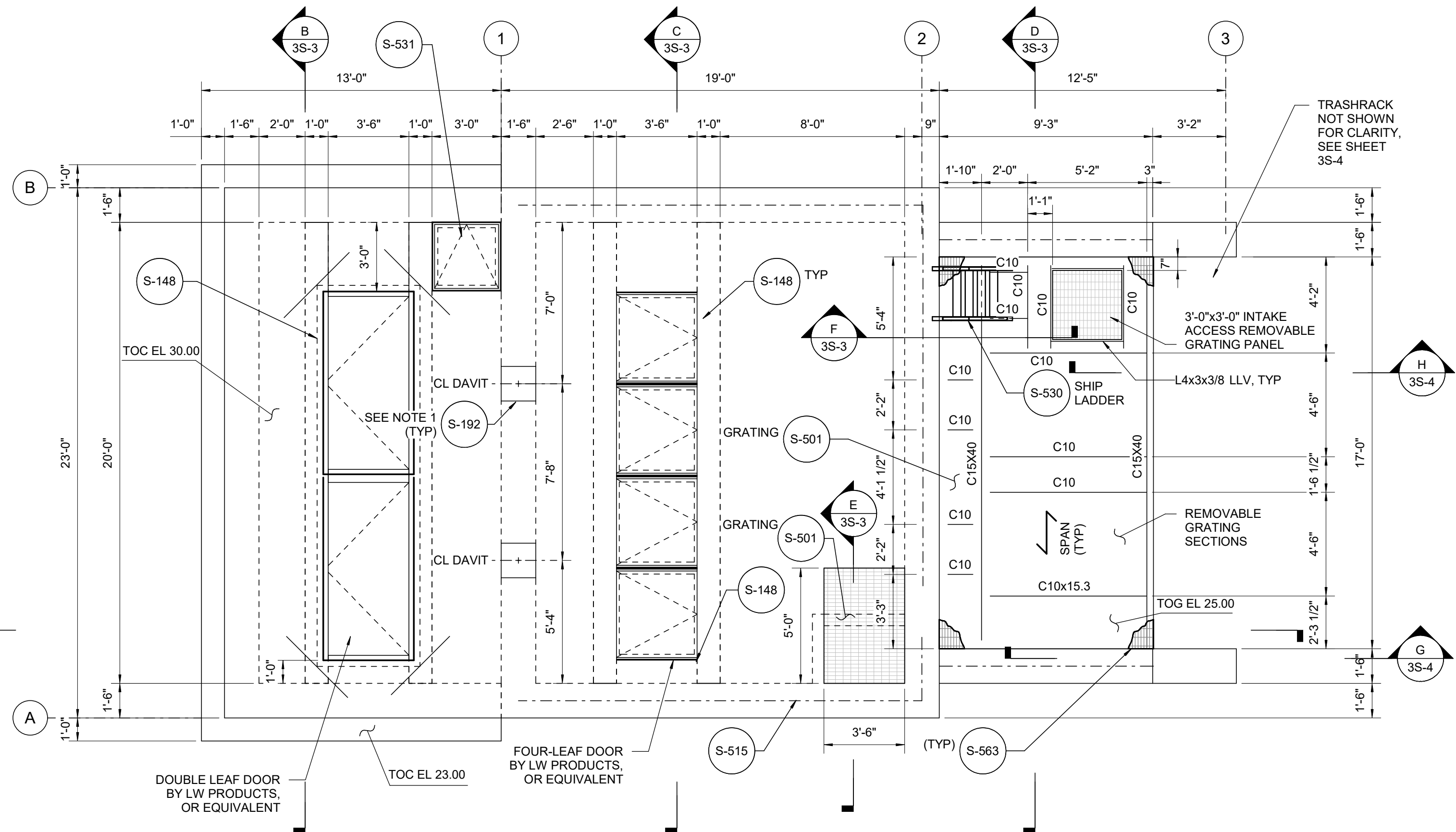
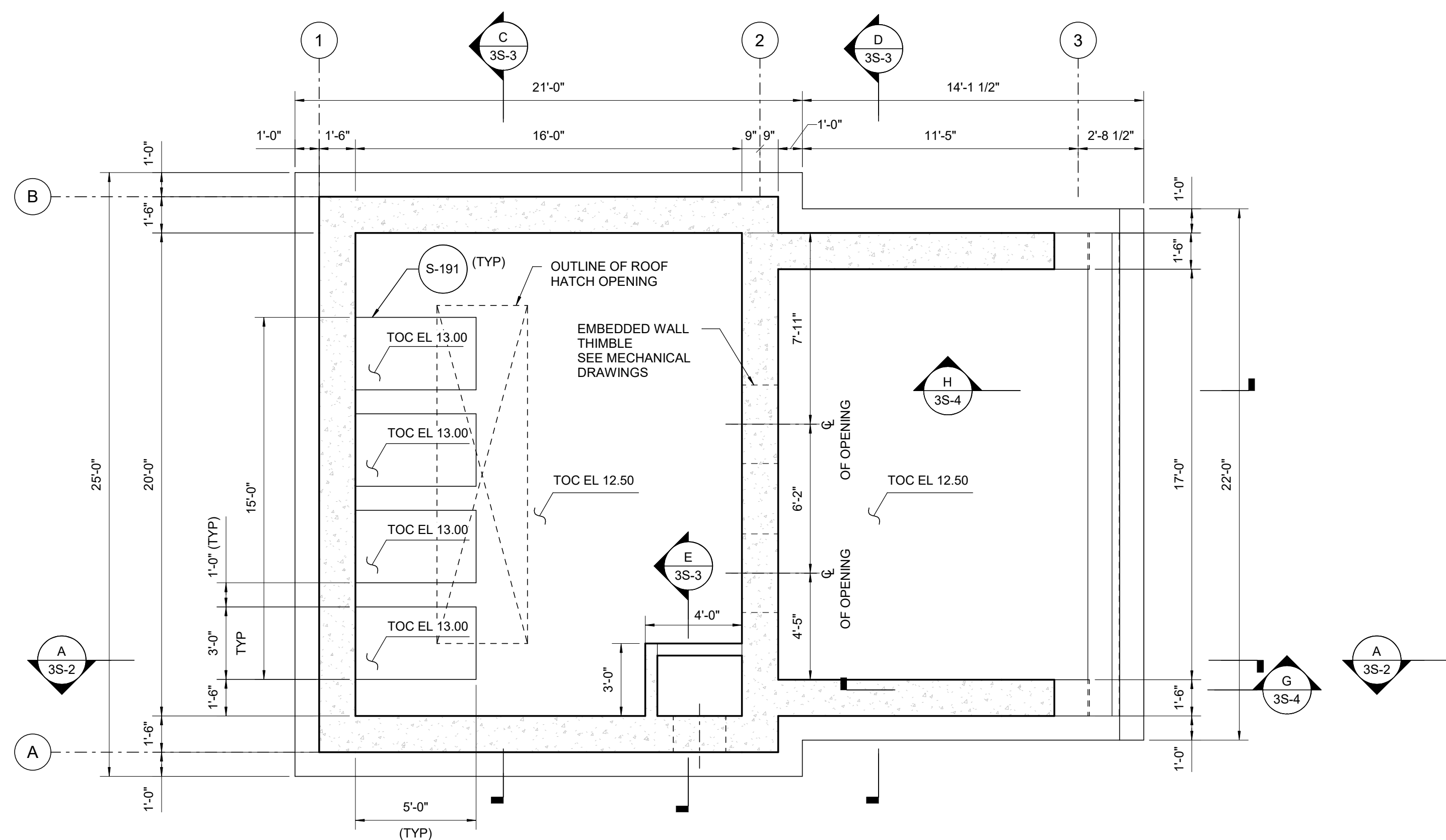
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GS-9



GENERAL SHEET NOTES

1. DAVIT CRANE BASE CONNECTION TO BE PROVIDED BY CRANE MANUFACTURER AND SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. LATERAL BEAMS FOR KNIFE GATE VALVES. CONTRACTOR TO COORDINATE CONNECTION OF KNIFE GATE VALVE TO SUPPORT BEAM WITH VALVE MANUFACTURER. FINAL CONFIGURATION TO BE COORDINATED WITH ENGINEER PRIOR TO INSTALLATION.
3. THE INTAKE STRUCTURE FOOTPRINT SHALL BE EXCAVATED TO DEPTH OF EXISTING GLACIAL TILL, INCLUDING REMOVAL OF EXISTING VEGETATION, TOPSOIL, ORGANIC SOIL, LOOSE OR SOFT SOIL, AND OTHER DELETERIOUS MATERIALS.
4. FOOTPRINT SHALL BE BACKFILLED WITH GRANULAR STRUCTURAL FILL IN ACCORDANCE WITH PROJECT SPECIFICATIONS. THE STRUCTURE SHALL BE PLACED ON A MINIMUM 12" DEPTH OF CRUSHED STONE TO PROVIDE A UNIFORM BEARING SURFACE. GEOTIRD SHALL BE PLACED BETWEEN THE CRUSHED STONE AND STRUCTURAL FILL TO PROVIDE ENHANCED SUBGRADE STABILIZATION.
5. GRADATION, PLACEMENT, AND COMPACTION OF THE CRUSHED STONE SHALL SATISFY REQUIREMENTS OUTLINED IN THE PROJECT SPECIFICATIONS.
6. THE PREPARED SUBGRADE MUST BE INSPECTED AND REVIEWED BY THE GEOTECHNICAL ENGINEER, OR THEIR DELEGATED REPRESENTATIVE, PRIOR TO PLACEMENT OF STRUCTURAL FILL, CRUSHED STONE, FOUNDATION FORMS, OR CONCRETE.

[illegible]

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Client/Project Logo



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

ST

Dw

Dsgn.

Chkd

05/12/20
YYYY.MM.D

Title
PUMPED INTAKE STRUCTURE PLANS

Project No.
224202267

Revision

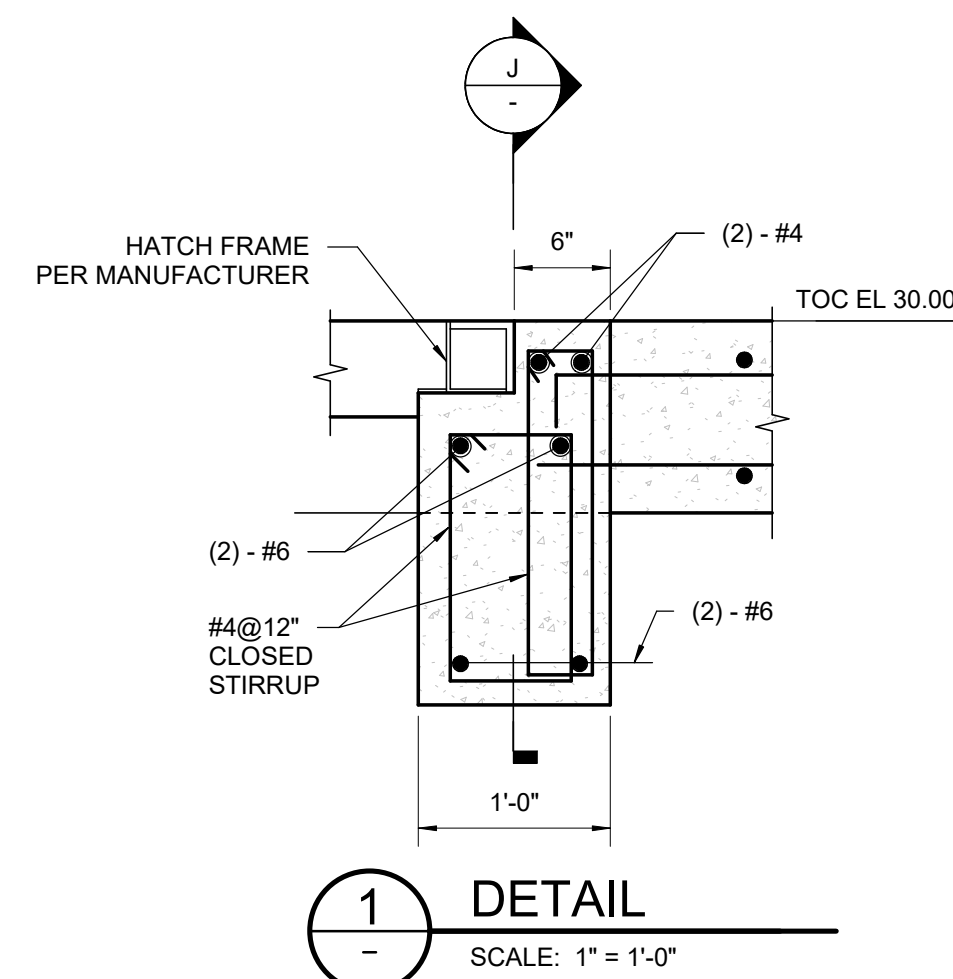
Scale
1/4" = 1'-0"

Drawing No.

3S-1

Exhibit D Page 6 of 220

1. DAVIT CRANE BASE CONNECTION TO BE PROVIDED BY CRANE MANUFACTURER AND SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. LATERAL BEAMS FOR KNIFE GATE VALVES. CONTRACTOR TO COORDINATE CONNECTION OF KNIFE GATE VALVE TO SUPPORT BEAM WITH VALVE MANUFACTURER. FINAL CONFIGURATION TO BE COORDINATED WITH ENGINEER PRIOR TO INSTALLATION.
3. THE INTAKE STRUCTURE FOOTPRINT SHALL BE EXCAVATED TO DEPTH OF EXISTING GLACIAL TILL, INCLUDING REMOVAL OF EXISTING VEGETATION, TOPSOIL, ORGANIC SOIL, LOOSE OR SOFT SOIL, AND OTHER DELETERIOUS MATERIALS.
4. FOOTPRINT SHALL BE BACKFILLED WITH GRANULAR STRUCTURAL FILL IN ACCORDANCE WITH PROJECT SPECIFICATIONS. THE STRUCTURE SHALL BE PLACED ON A MINIMUM 12" THICK LAYER OF CRUSHED STONE TO PROVIDE A UNIFORM BEARING SURFACE. GEGRID SHALL BE PLACED BETWEEN THE CRUSHED STONE AND STRUCTURAL FILL TO PROVIDE ENHANCED SUBGRADE STABILIZATION.
5. GRADATION, PLACEMENT, AND COMPACTION OF THE CRUSHED STONE SHALL SATISFY REQUIREMENTS OUTLINED IN THE PROJECT SPECIFICATIONS.
6. THE PREPARED SUBGRADE MUST BE INSPECTED AND REVIEWED BY THE GEOTECHNICAL ENGINEER, OR THEIR DELEGATED REPRESENTATIVE, PRIOR TO PLACEMENT OF STRUCTURAL FILL, CRUSHED STONE, FOUNDATION FORMS, OR CONCRETE.



(2)- #4

SLAB REINFORCEMENT NOT SHOWN FOR CLARITY

20"

#4@12" CLOSED STIRRUPS
2 SETS SEE DETAIL 1

(2)- #6

(2)- #6

TOC EL 30.00

J SECTION
- SCALE: 1" = 1'-0"

[illegible]

Charles Joseph Williams
STATE OF WASHINGTON
No. 200630
REGISTERED
PROFESSIONAL ENGINEER

Digitally signed by Charles Joseph Williams
Date: 2025.07.02 12:36:41-0500



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File Name: N/A

STI

Dsgn.

Chk

Project No.
224202267

Revision

Scale
As indicated

Drawing No.

38

33-4

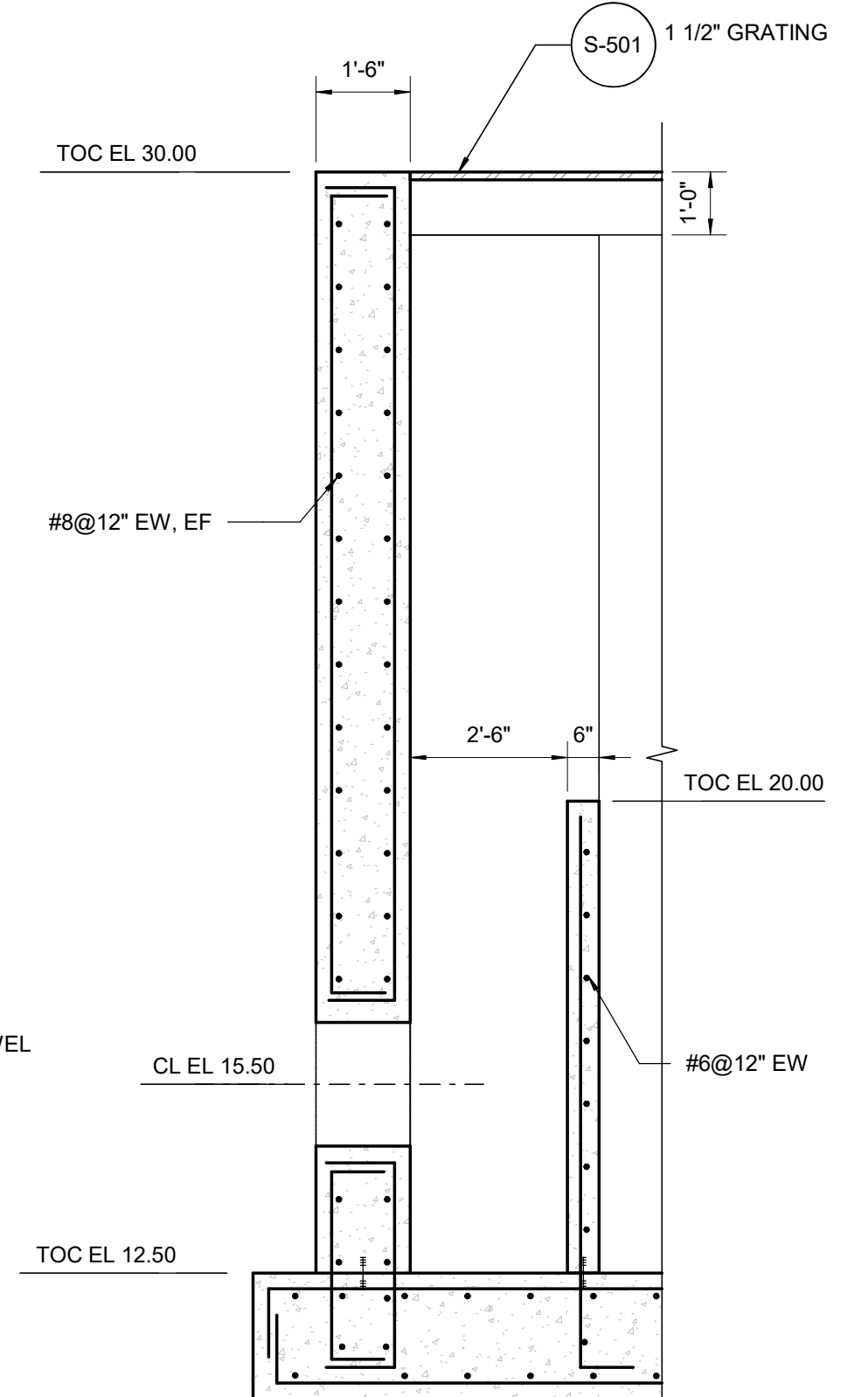
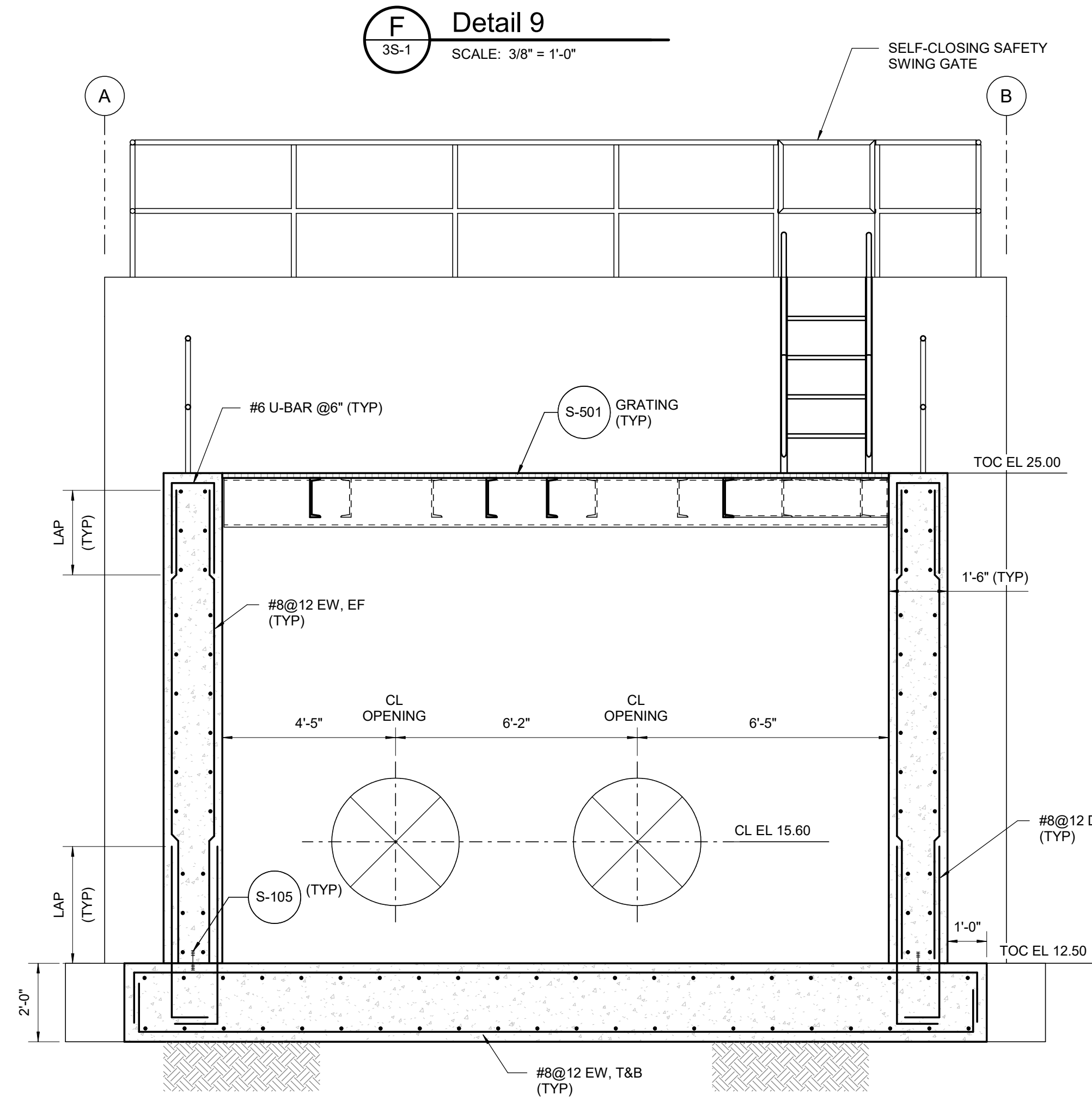
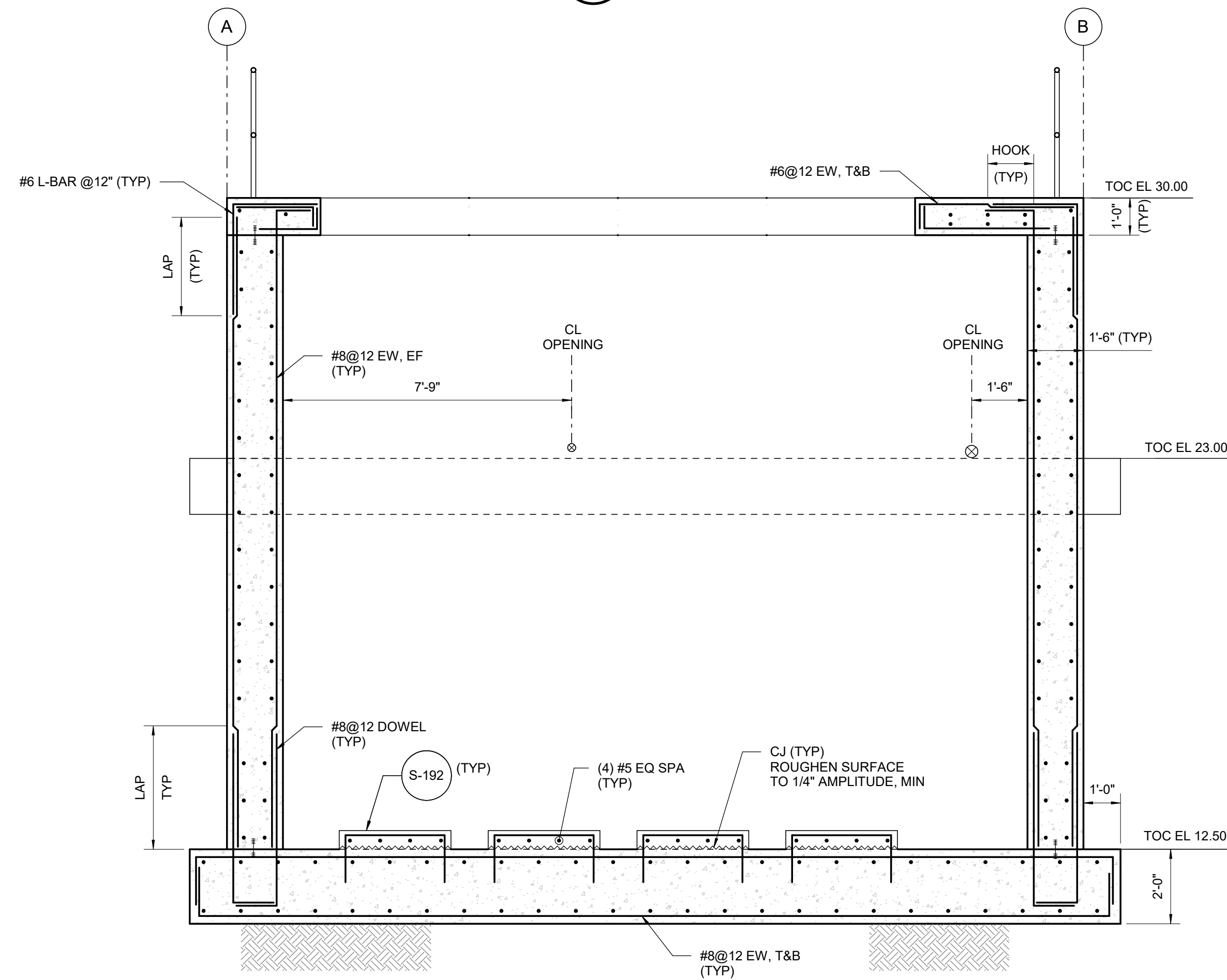
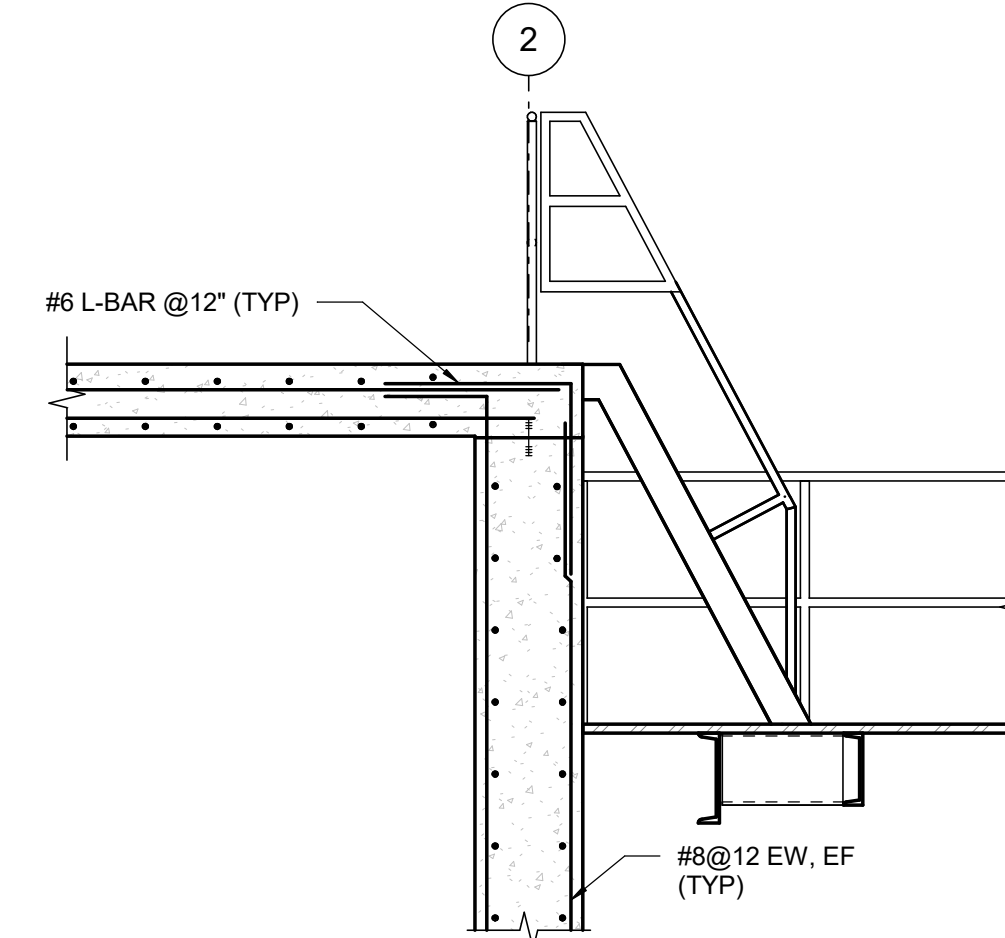
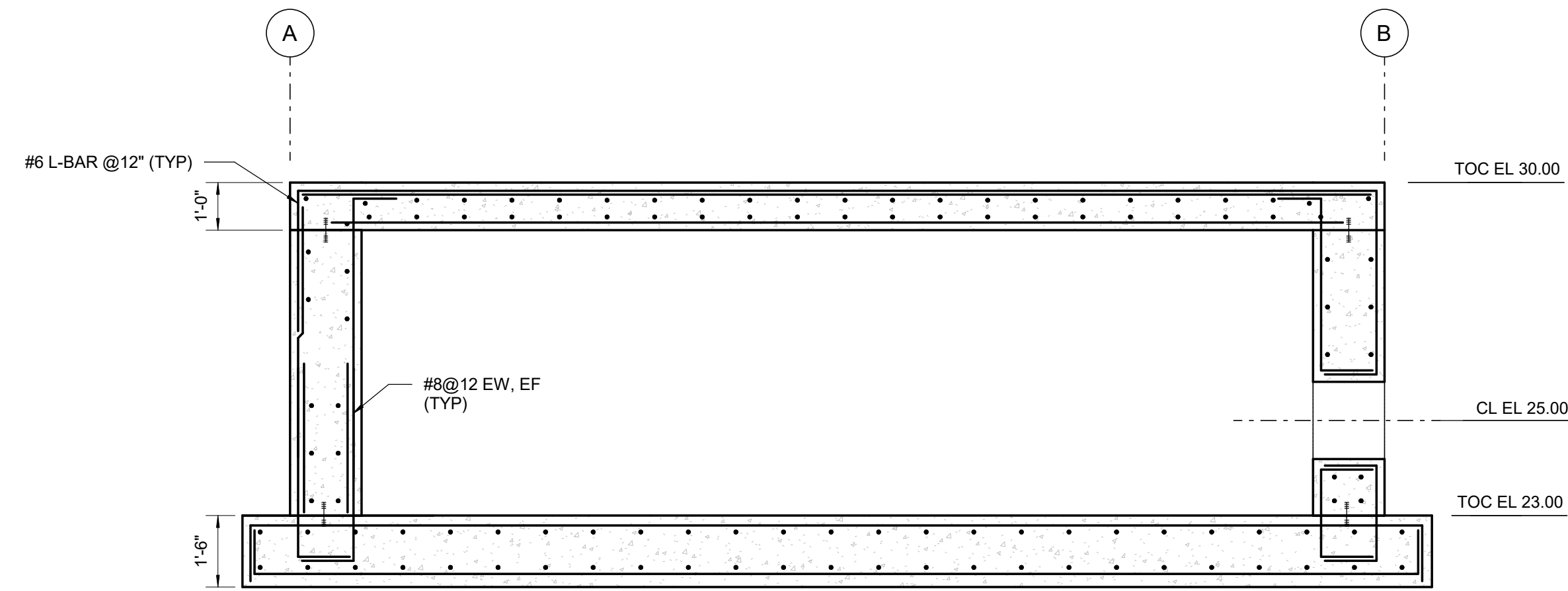
நிதி நலகர

09.11.2023

Exhibit D-1 Page 63 of 220

GENERAL SHEET NOTES

1. DAVIT CRANE BASE CONNECTION TO BE PROVIDED BY CRANE MANUFACTURER AND SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
2. LATERAL BEAMS FOR KNIFE GATE VALVES. CONTRACTOR TO COORDINATE CONNECTION OF KNIFE GATE VALVE TO SUPPORT BEAM WITH VALVE MANUFACTURER. FILLOUT CONFIGURATION TO BE COORDINATED WITH ENGINEER PRIOR TO INSTALLATION.
3. THE INTAKE STRUCTURE FOOTPRINT SHALL BE EXCAVATED TO DEPTH OF EXISTING GLACIAL TILL, INCLUDING REMOVAL OF EXISTING VEGETATION, TOPSOIL, ORGANIC SOIL, LOOSE OR SOFT SOIL, AND OTHER DELETERIOUS MATERIALS.
4. FOOTPRINT SHALL BE BACKFILLED WITH GRANULAR STRUCTURAL FILL IN ACCORDANCE WITH PROJECT SPECIFICATIONS. THE STRUCTURE SHALL BE PLACED ON A MINIMUM 6-INCH LAYER OF CRUSHED STONE TO PROVIDE A UNIFORM BEARING SURFACE. GEORGRID SHALL BE PLACED BETWEEN THE CRUSHED STONE AND STRUCTURAL FILL TO PROVIDE ENHANCED SUBGRADE STABILIZATION.
5. GRADATION, PLACEMENT, AND COMPACTION OF THE CRUSHED STONE SHALL SATISFY REQUIREMENTS OUTLINED IN THE PROJECT SPECIFICATIONS.
6. THE PREPARED SUBGRADE MUST BE INSPECTED AND REVIEWED BY THE GEOTECHNICAL ENGINEER, OR THEIR DELEGATED REPRESENTATIVE, PRIOR TO PLACEMENT OF STRUCTURAL FILL, CRUSHED STONE, FOUNDATION FORMS, OR CONCRETE.

[illegible]

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Client/Project Logo



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

STI

$$-\frac{1}{Dw}$$

08/02/24
YYYY.MM.DD

Title
PUMPED INTAKE STRUCTURE
SECTIONS

Project No.
224202267

Revision

Scale
3/8" = 1'-0"

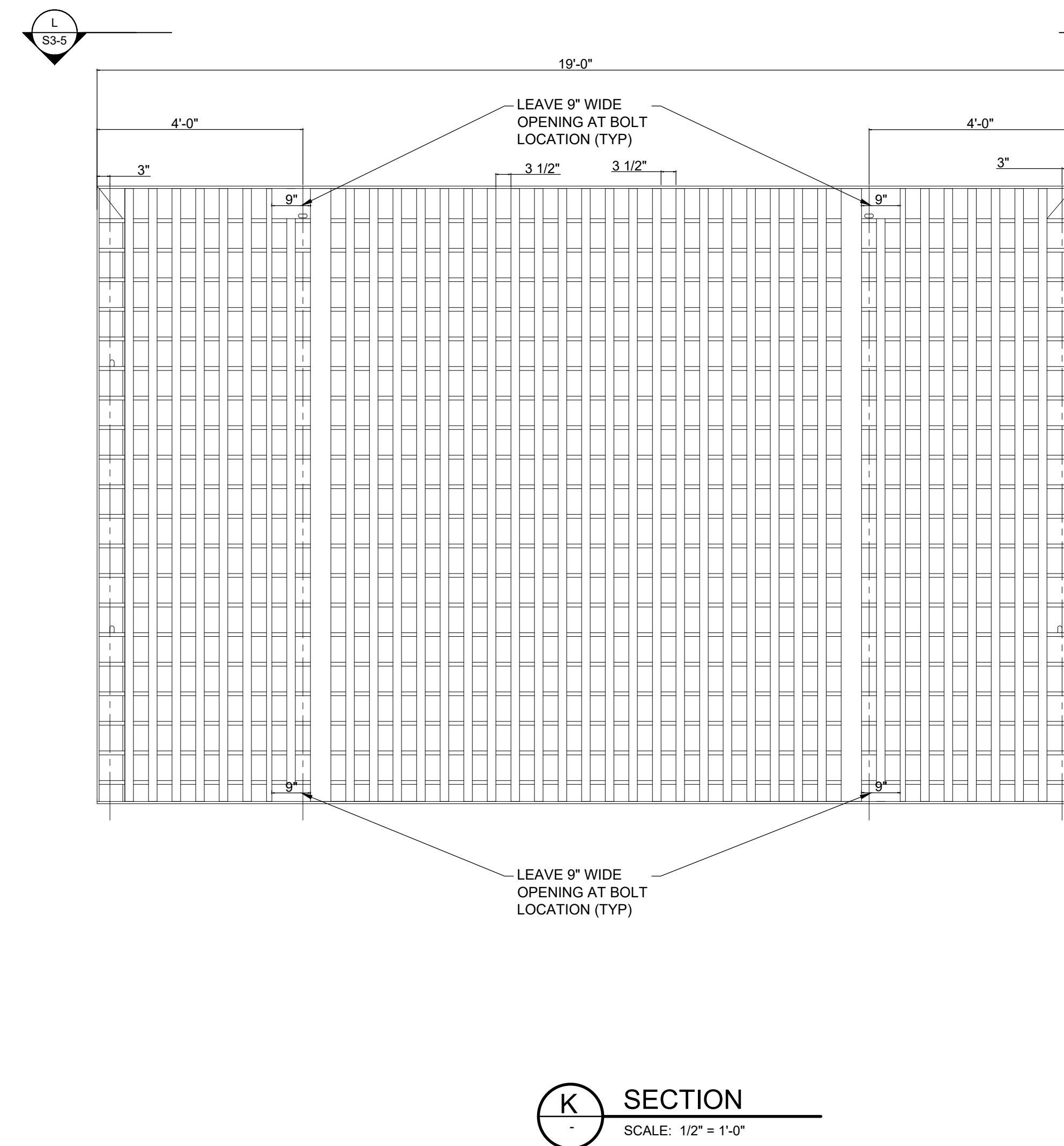
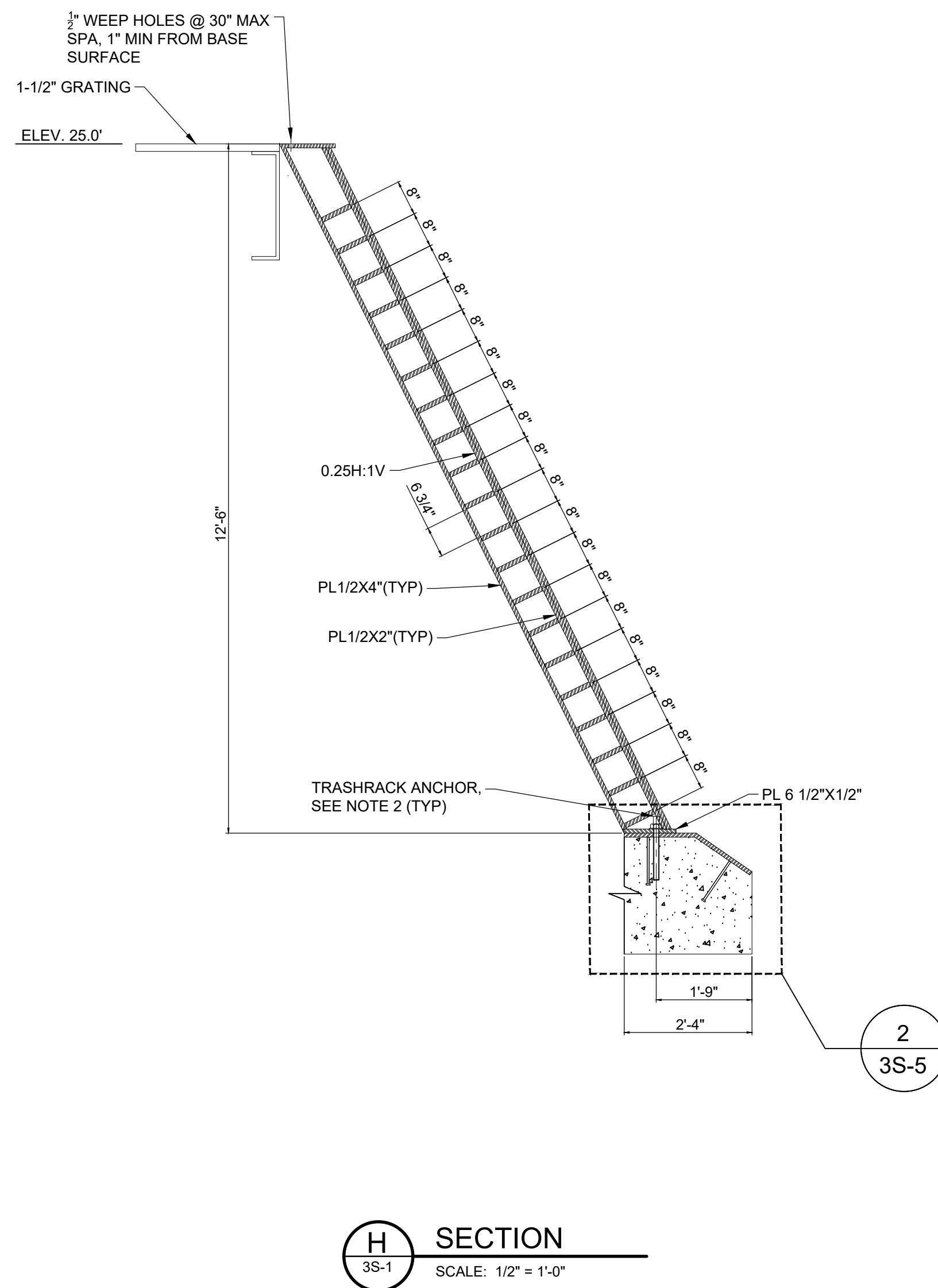
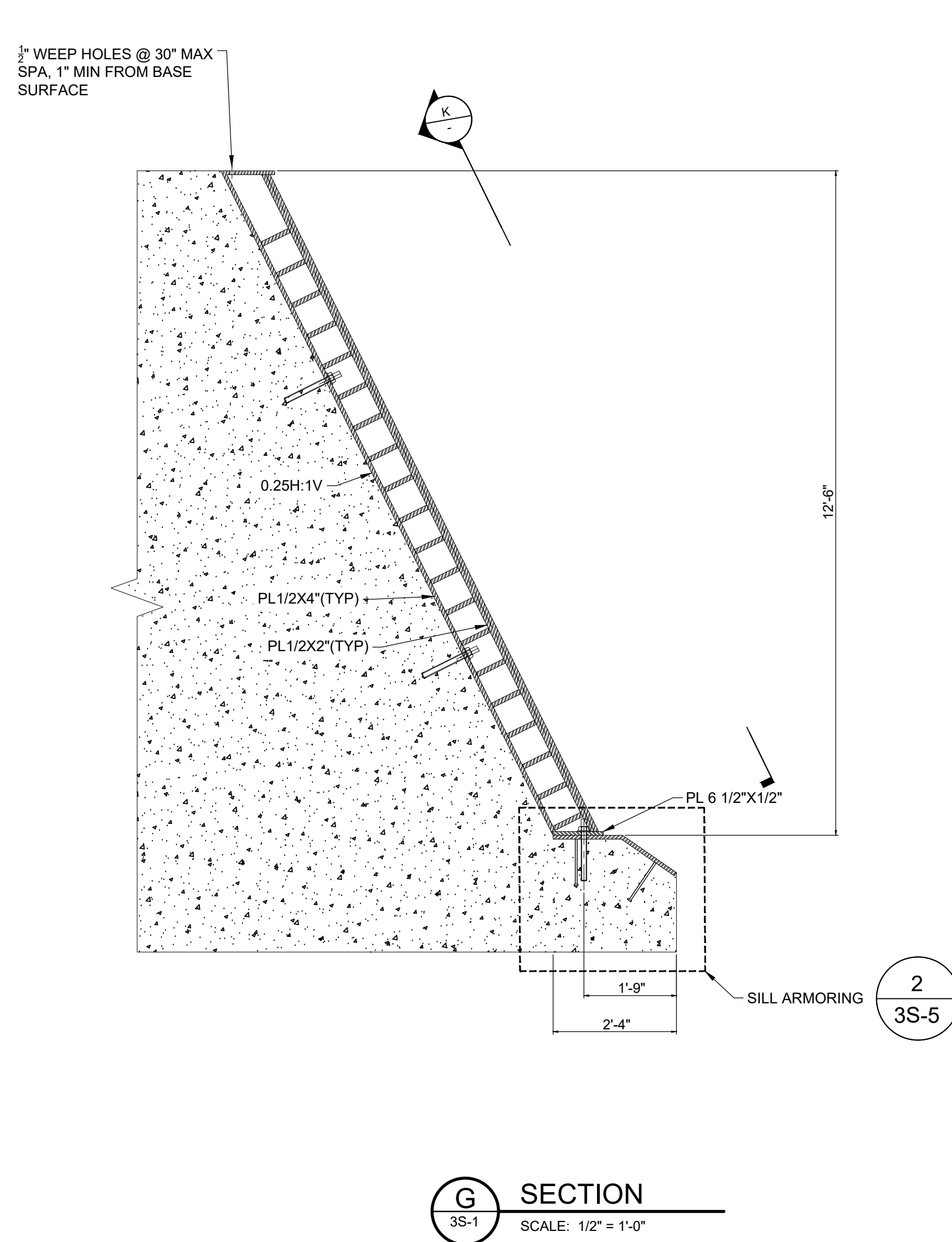
Drawing No.

3S-3

Exhibit D Page 64 of 220

GENERAL SHEET NOTES

1. ALL STEEL TRASHRACK, ANCHORS BOLTS AND ASSOCIATED HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A123, A153
2. ANCHORS SHALL BE 1" DIA THREADED ANCHOR RODS (ASTM F1554, GR 105), 9" MINIMUM EMBEDMENT. INSTALL WITH ADDITIVE GROUT SYSTEM HIT-RE 90 V3 OR APPROVED EQUAL.
3. STEEL REQUIREMENTS:
STEEL PLATES: ASTM A529, GRADE 50
L-SHAPES: ASTM A583, GRADE 50
NUTS AND WASHERS: ASTM A563 AND F436 RESPECTIVELY



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WARNING

0 $\frac{1}{2}$ 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



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TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: DTL_TRASHRACK_TYPE1-2_CO				2022.12.02
	Dwn	Dsan	Chkd	YYYY MM DD

Title
PUMPED INTAKE STRUCTURE
TRASHRACK SECTIONS AND DETAILS

Project No.
224202267

Revision Sheet

Scale
AS INDICATED

Drawing No.

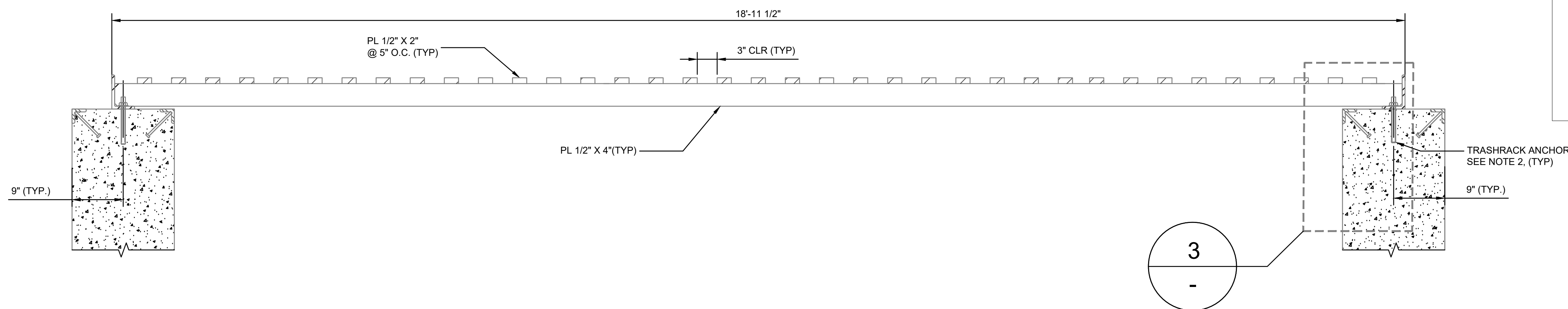
3S-4

Exhibit D Page 65 of 220

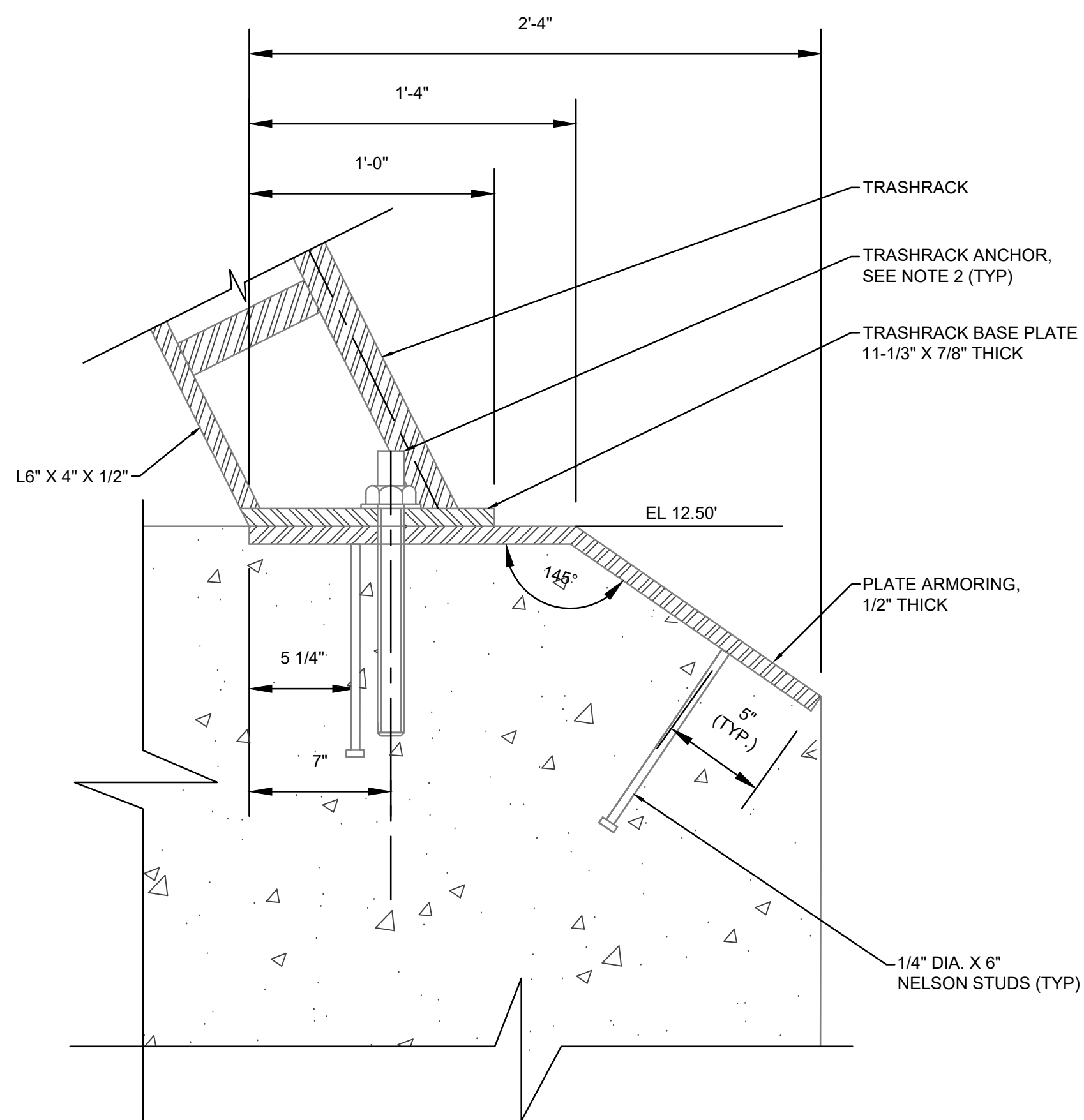
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GENERAL SHEET NOTES

1. ALL STEEL TRASHRACK, ANCHOR BOLTS AND ASSOCIATED HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A123, A153
2. ANCHORS SHALL BE 1" DIA THREADED ANCHOR RODS (ASTM F1554, GR 508, 9" MINIMUM EMBEDMENT. INSTALL WITH ADHESIVE GROUT SYSTEM HIT-RE 500 V3 OR APPROVED EQUAL.
3. STEEL REQUIREMENTS:
STEEL PLATES: ASTM A572
L-SHAPES: ASTM A36, GRADE 50
NUTS AND WASHERS: ASTM A563 AND F436
RESPECTIVELY



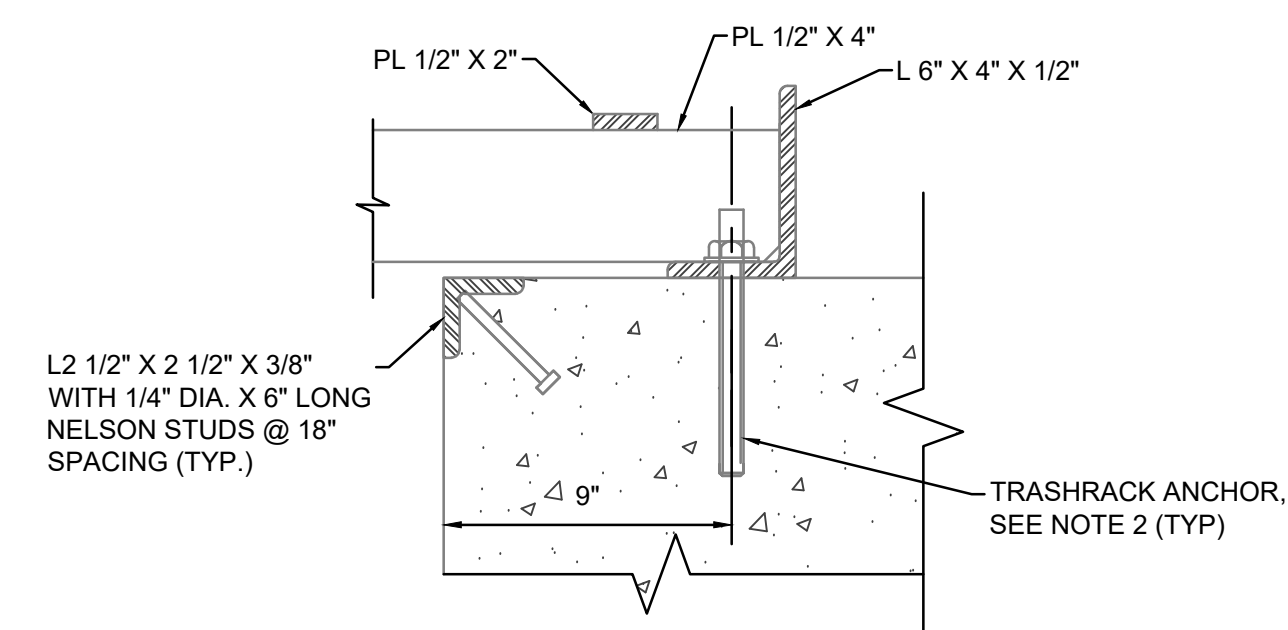
SECTION
SCALE: 1" = 1'-0"



2
3S-4

DETAIL

SCALE: 1 1/2" = 1'-0"



3 DETAIL
- SCALE: 1 1/2" = 1'-0"

Permit/Seal



WARNING

0 1/2 1



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

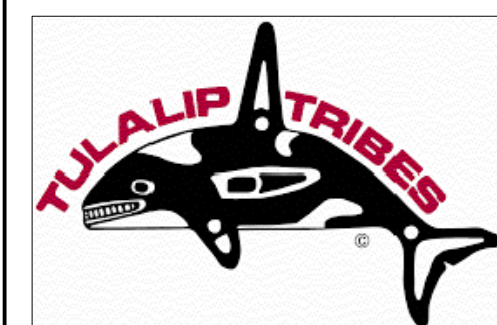


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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: DTL_OUTLET_XS_F_CO				2022.12.02
	Dwn.	Dsan.	Chkd.	YYYY.MM.DD

Title

PUMPED INTAKE STRUCTURE
TRASHRACK SECTIONS AND DETAILS

Project No.
224202267

Revision Sheet

Drawing No.

of 285

3S-5

Exhibit D-1 Page 66 of 220

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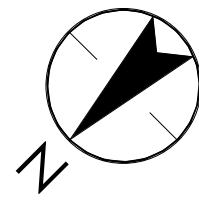
Revision

By Appd YYYY.MM.DD

Issued

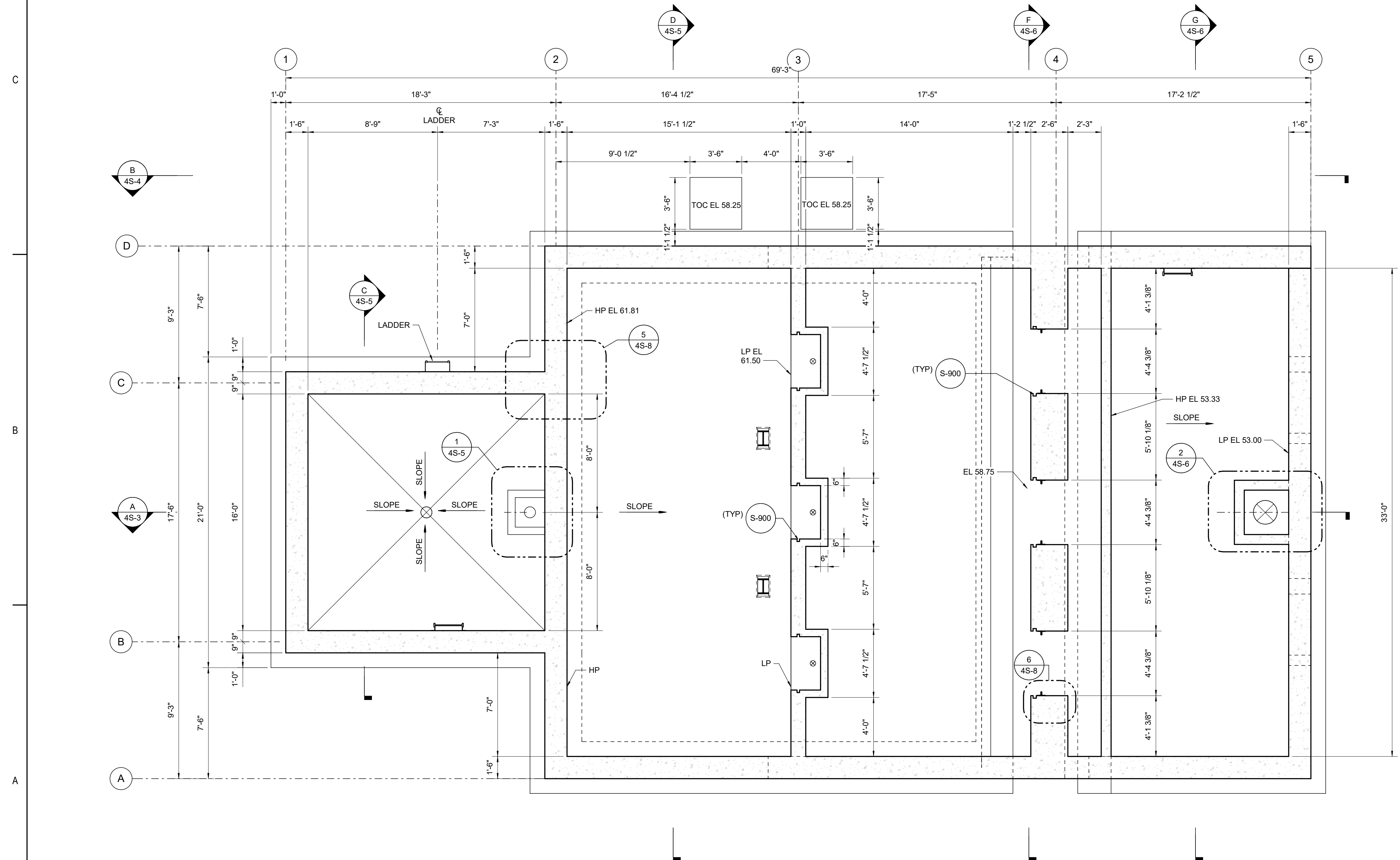
By Appd YYYY.MM.DD

ORIGINAL SHEET - ANSI E



GENERAL SHEET NOTES

1. ROOF AND HATCH LIVE LOAD - 300 PSF
2. ALL REINFORCEMENT SHOWN SHALL BE SPACED AT 12" O.C. UNLESS NOTED OTHERWISE. ADDITIONAL REINFORCEMENT IN ACCORDANCE WITH STANDARD DETAILS S-144 AND S-148 SHALL BE PROVIDED AT ALL OPENINGS.



PLAN AT EL 63.00

SCALE: 1/4" = 1'-0"

[illegible][illegible]

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TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author

Designer

Checker

07/30/

Dwn.

Dsgn.

Chkd.

YYYY.MM

Title

WATER SUPPLY HEADBOX
STRUCTURE
INTERMEDIATE PLAN

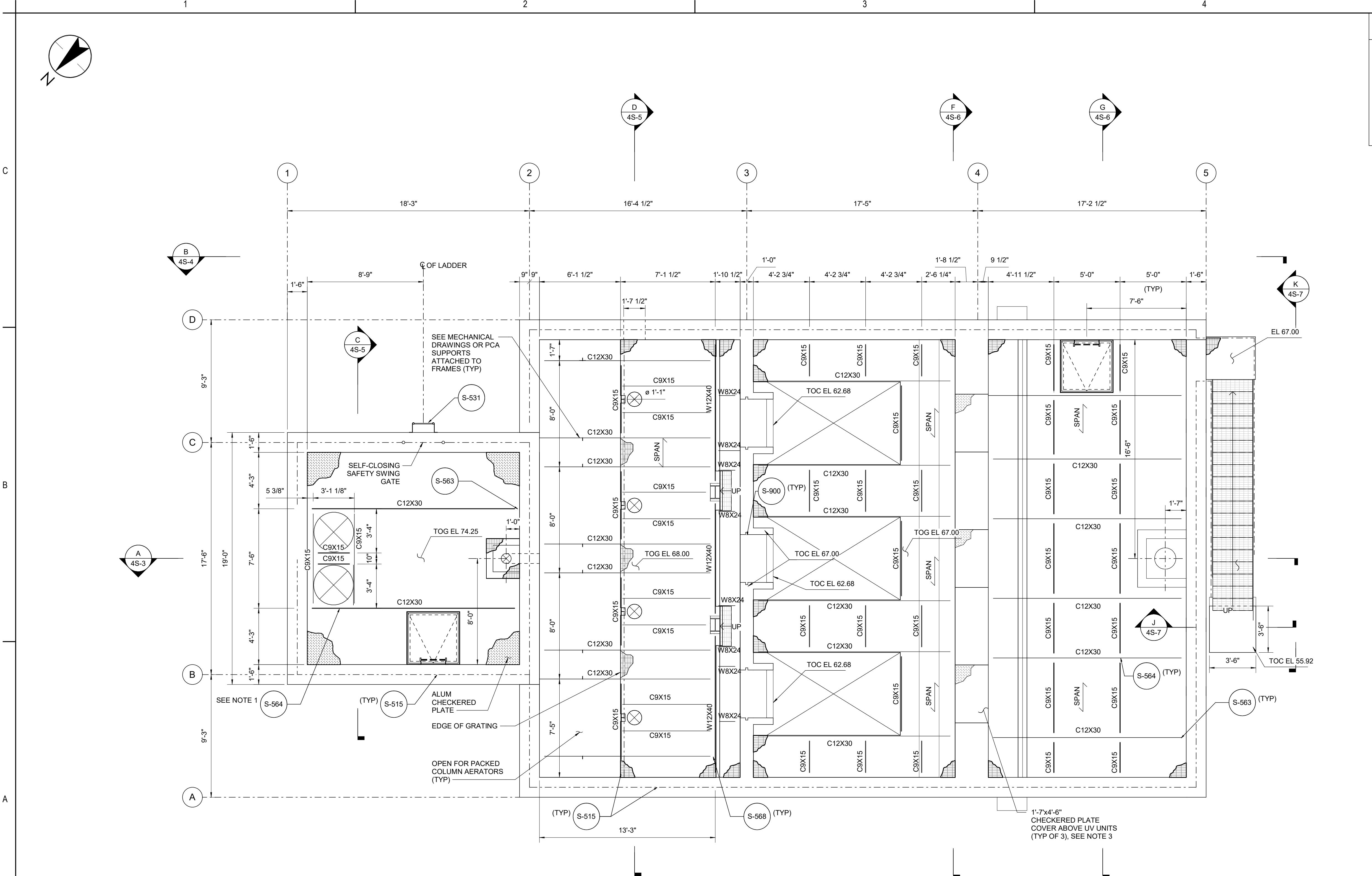
Project No.
22420226

Revision

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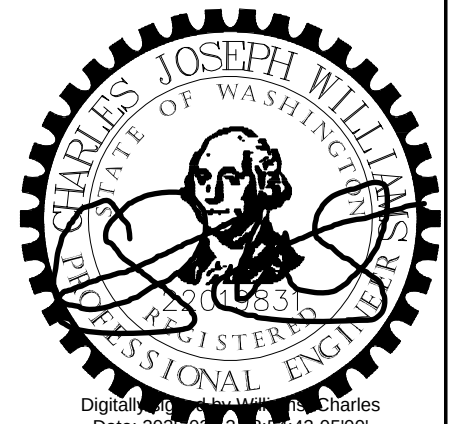
Drawing No.

4S-1



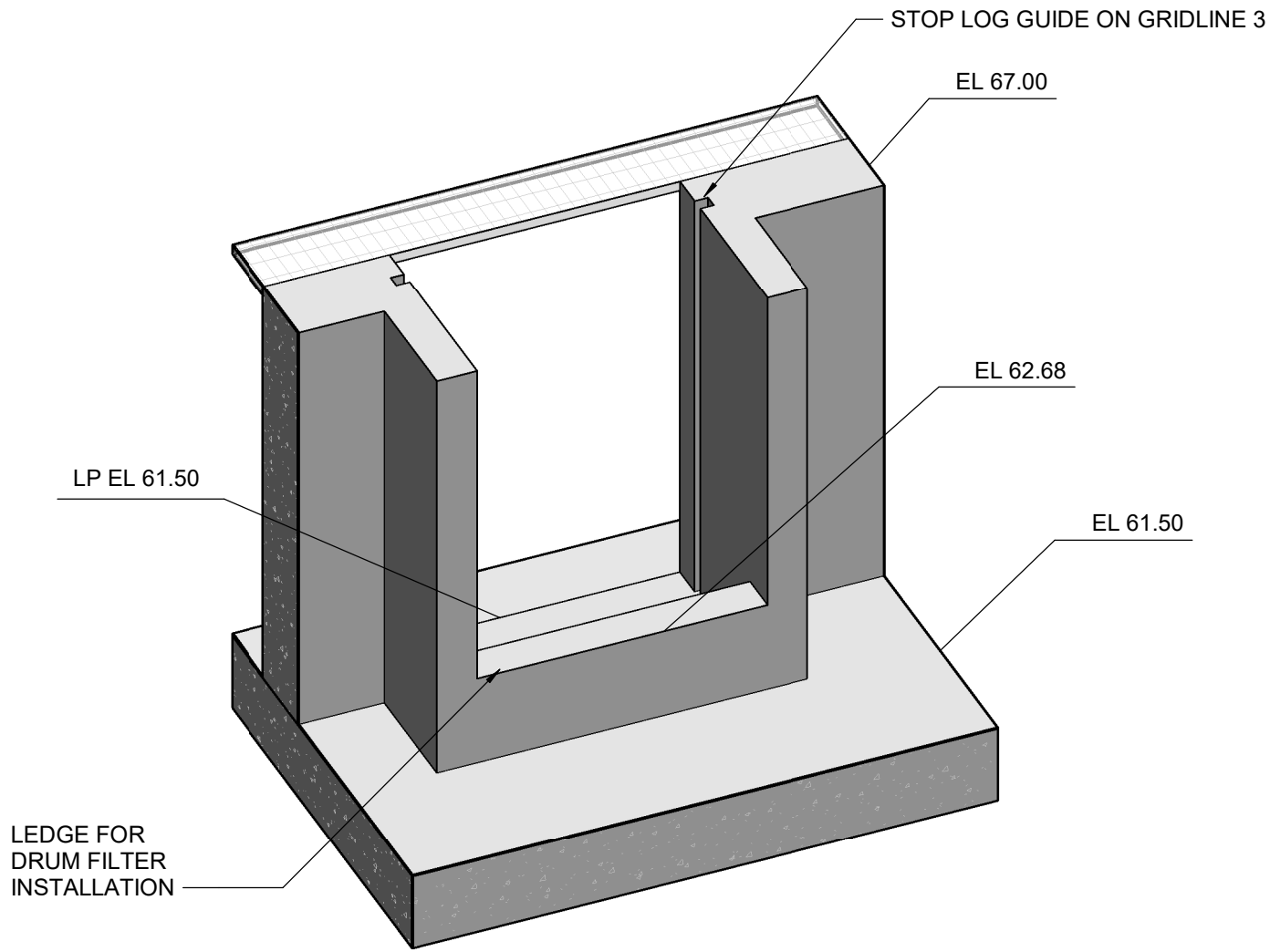
- GENERAL SHEET NOTES**
- STANDARD DETAIL S-502 SHALL BE USED IN CONJUNCTION WITH THE SIZING AND SPACING OF CHANNELS SHOWN FOR SUPPORTED THE PACK COLUMN AERATORS.
 - ALL REINFORCEMENT SHOWN SHALL BE SPACED AT 12" O.C. UNLESS NOTED OTHERWISE. ADDITIONAL REINFORCEMENT IN ACCORDANCE WITH STANDARD DETAILS S-144 AND S-148 SHALL BE PROVIDED AT ALL OPENINGS.
 - COORDINATE AND PROVIDE CHECKERED PLATE COVERS ABOVE UV UNITS LOCATED TO ALLOW FULL ACCESS TO UNITS BELOW WHEN REMOVED. PROVIDE EACH COVER WITH FINGER HOLES AND WELDED UNDERSIDE STIFFENER BARS PER STANDARD DETAIL S-502.

PLAN AT EL 74.25
SCALE: 1/4" = 1'-0"

Revision <table><tr><td>0</td><td>Revision 1</td><td>By</td><td>Appd</td><td>YYYY-MM-DD</td></tr></table>		0	Revision 1	By	Appd	YYYY-MM-DD	Issued <table><tr><td>A</td><td></td><td>By</td><td>Appd</td><td>YYYY-MM-DD</td></tr></table>		A		By	Appd	YYYY-MM-DD	Permit/Seal 	Consultant  Stantec Street Address City, Province/State, Postal/Zip Code Tel: +1.555.555.1234 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo 	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY Tulalip, WA File Name: N/A	Author Designer Checker 06/23/20 YYYY-MM-DD	Title WATER SUPPLY HEADBOX STRUCTURE UPPER PLAN	Project No. 224202267	Scale 1/4" = 1'-0"	Revision 0	Drawing No. 4S-2
0	Revision 1	By	Appd	YYYY-MM-DD																			
A		By	Appd	YYYY-MM-DD																			

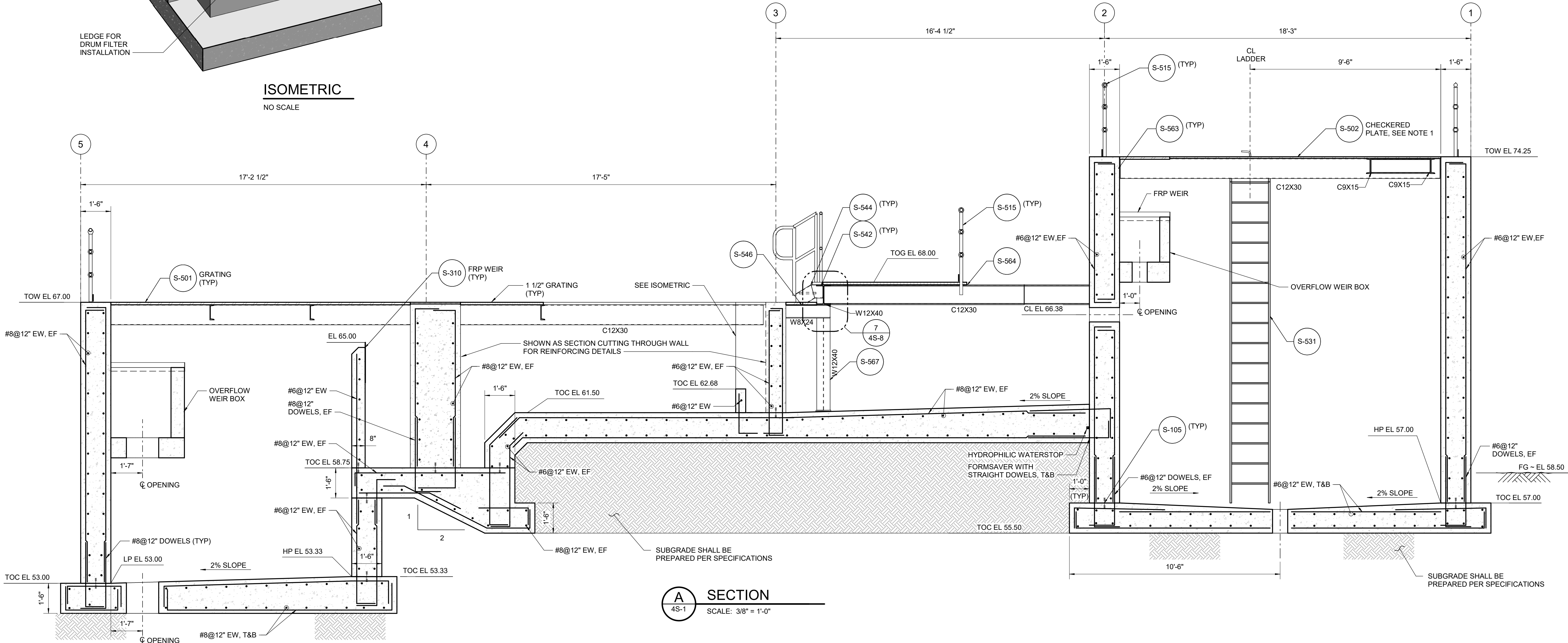
GENERAL SHEET NOTES

1. STANDARD DETAIL S-502 SHALL BE USED IN CONJUNCTION WITH THE SIZING AND SPACING OF CHANNELS SHOWN FOR SUPPORTING THE PACK COLUMN AERATORS.
2. ALL REINFORCEMENT SHOWN SHALL BE SPACED AT 12" O.C. UNLESS NOTED OTHERWISE. ADDITIONAL REINFORCEMENT IN ACCORDANCE WITH STANDARD DETAILS S-144 AND S-148 SHALL BE PROVIDED AT ALL OPENINGS.
3. AT CONTRACTOR'S OPINION, HORIZONTAL CONSTRUCTION WALL JOINTS MAY BE ADDED. LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.



ISOMETRIC

NO SCALE



A SECTION

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

Revision	By	Appd	Date
0			

Issued	By	Appd	Date
A			

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A
Author Dwn. Designer Dsgn. Checker Chkd. 06/23/20
YYYY-MM-DD

Title
WATER SUPPLY HEADBOX
STRUCTURE
SECTION I

Project No.
224202267

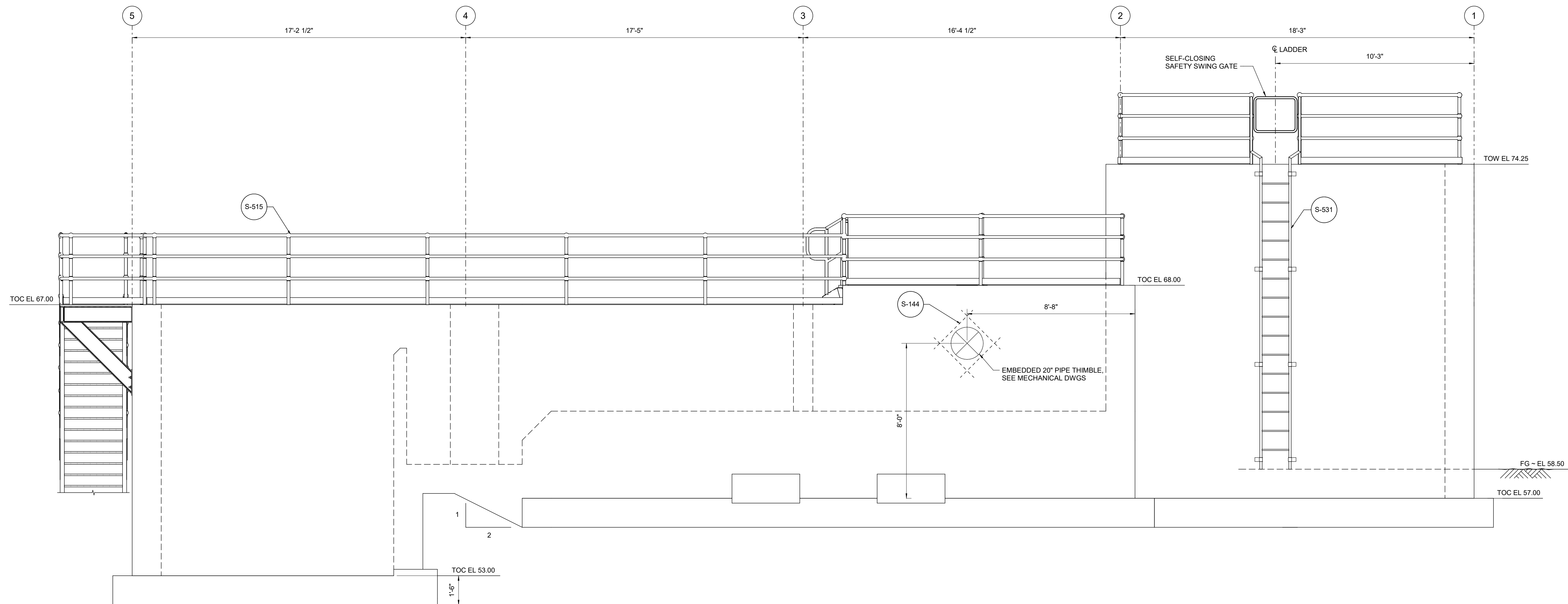
Revision
0

Scale
3/8" = 1'-0"

Drawing No.

4S-3

A



B SECTION
4S-1 SCALE: 3/8" = 1'-0"

[illegible][illegible]

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author
Dwn.

Designer
Dsan.

Checker
Chkd.

05/12/20

Title

WATER SUPPLY HEADBOX STRUCTURE SECTION II

Project No.
224202267

Revision

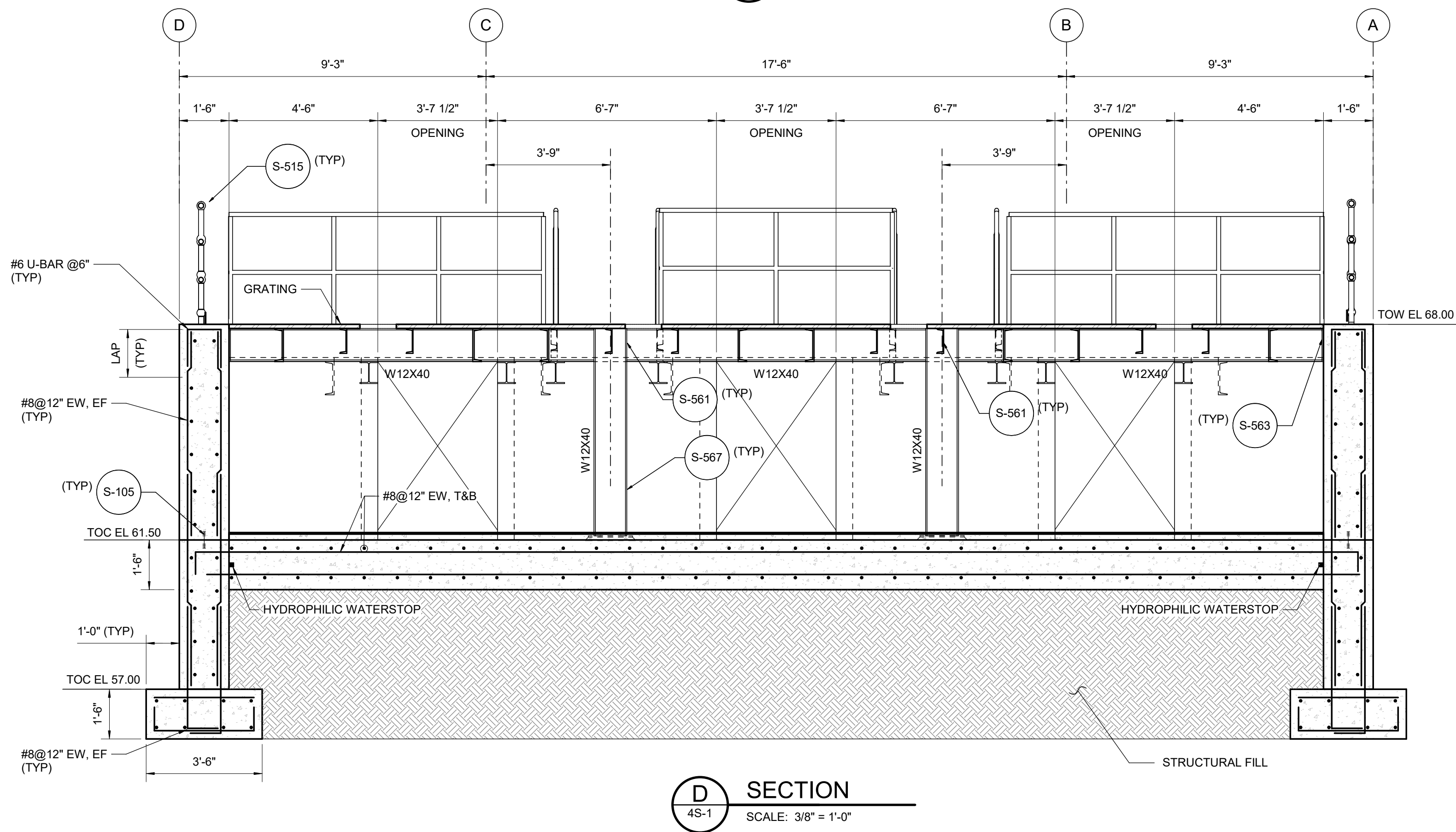
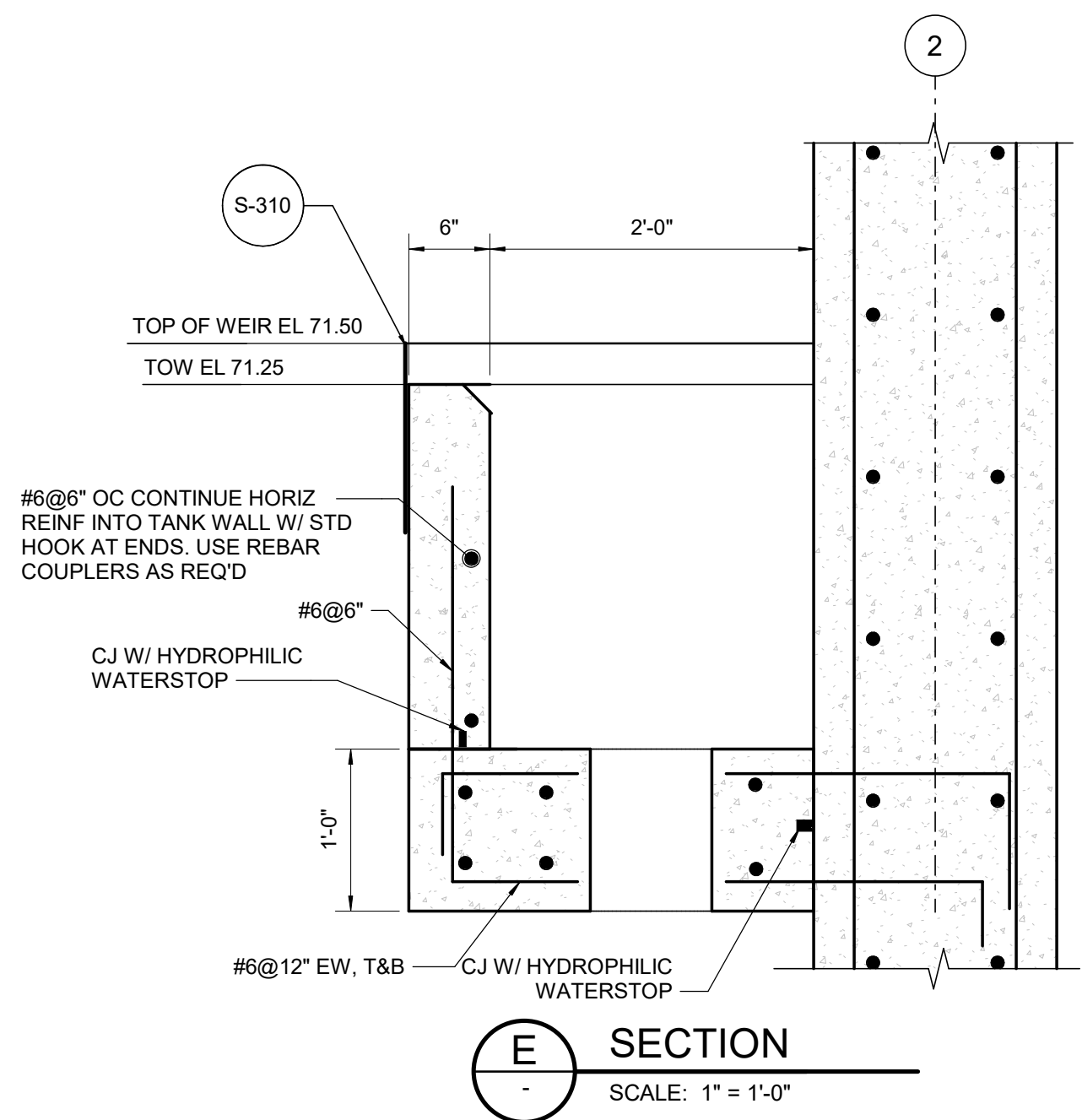
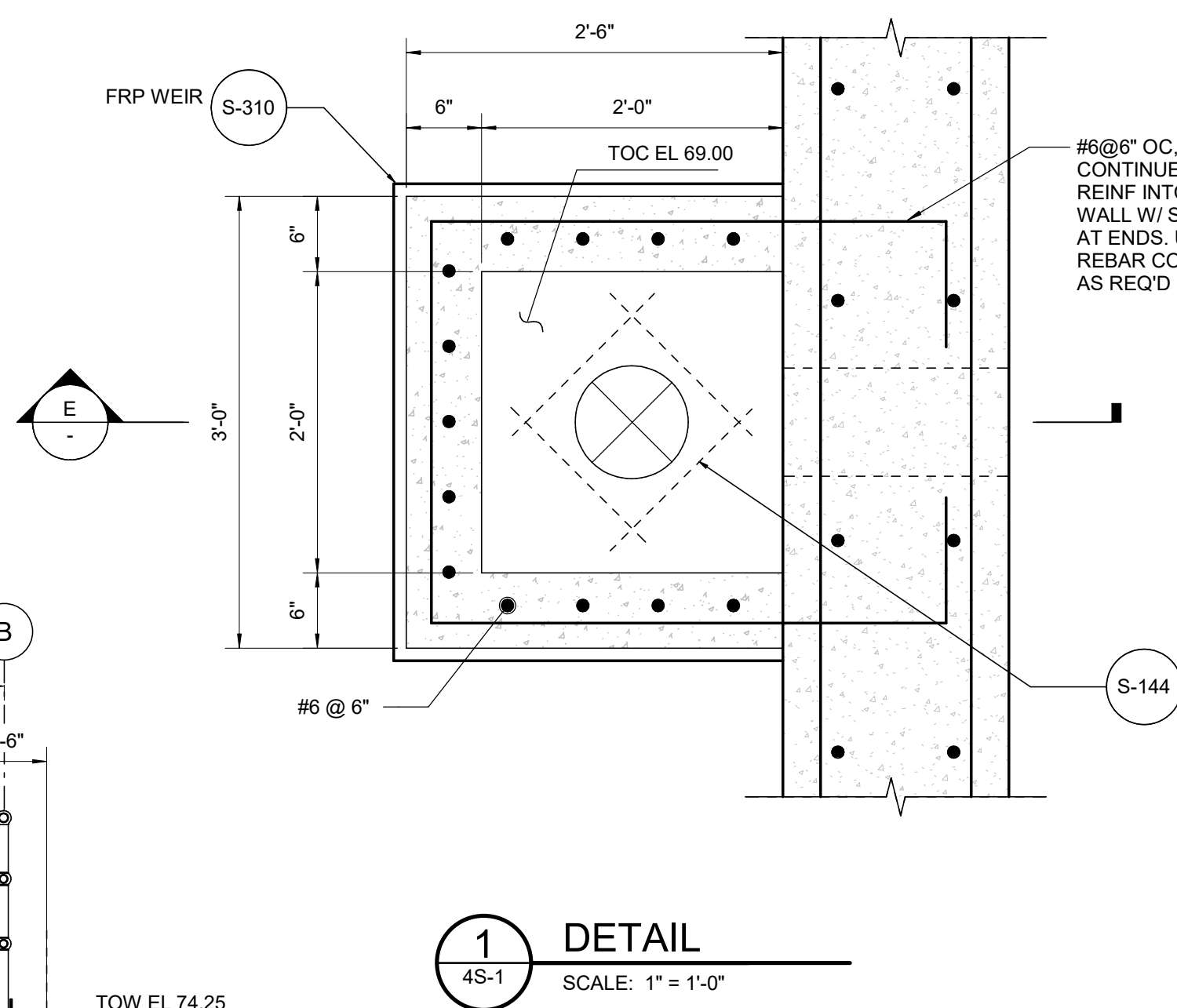
Scale
3/8" = 1'-0"

Drawing No.

4S-4

ALL REINFORCEMENT SHOWN SHALL BE SPACED AT 12" O.C. UNLESS NOTED OTHERWISE. ADDITIONAL REINFORCEMENT IN ACCORDANCE WITH STANDARD DETAILS S-144 AND S-148 SHALL BE PROVIDED AT ALL OPENINGS.

AT CONTRACTOR'S OPINION, HORIZONTAL CONSTRUCTION WALL JOINTS MAY BE ADDED. LOCATIONS SHALL BE SUBMITTED FOR APPROVAL.

[illegible][illegible]

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author

Designer

Checker

07/30/24

Title

WATER SUPPLY HEADBOX
STRUCTURE
SECTION II

Project No.
224202267

Revision

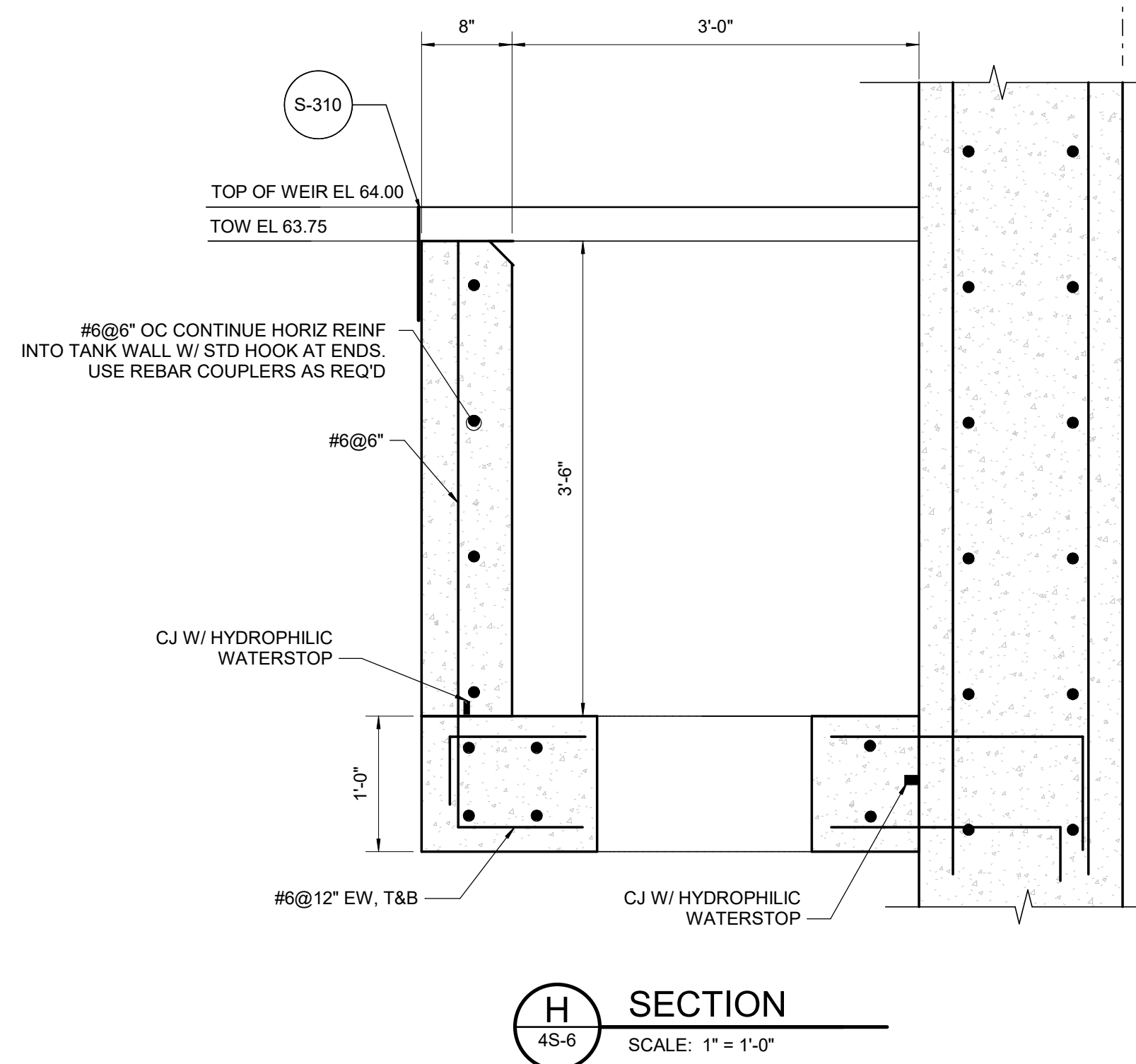
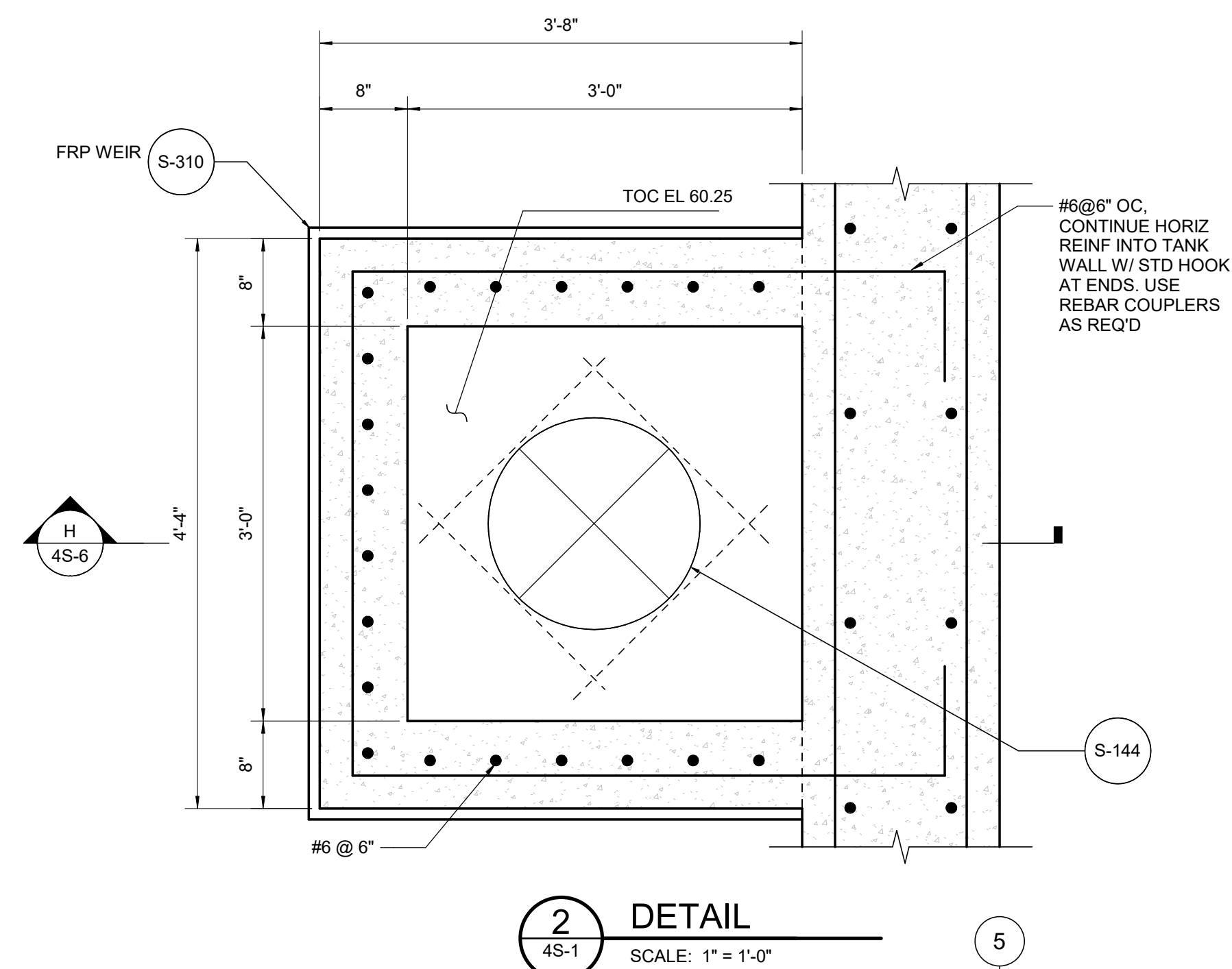
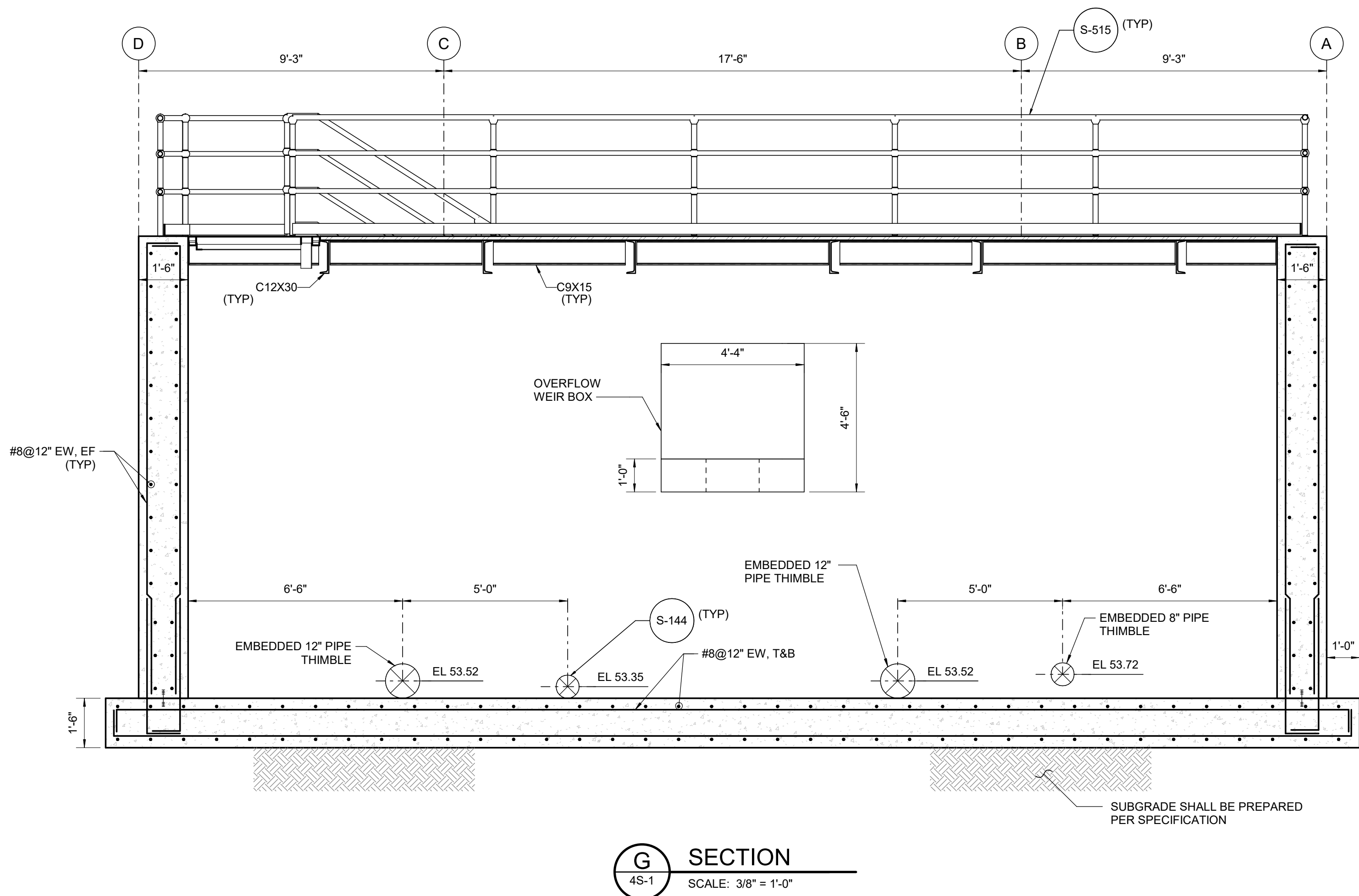
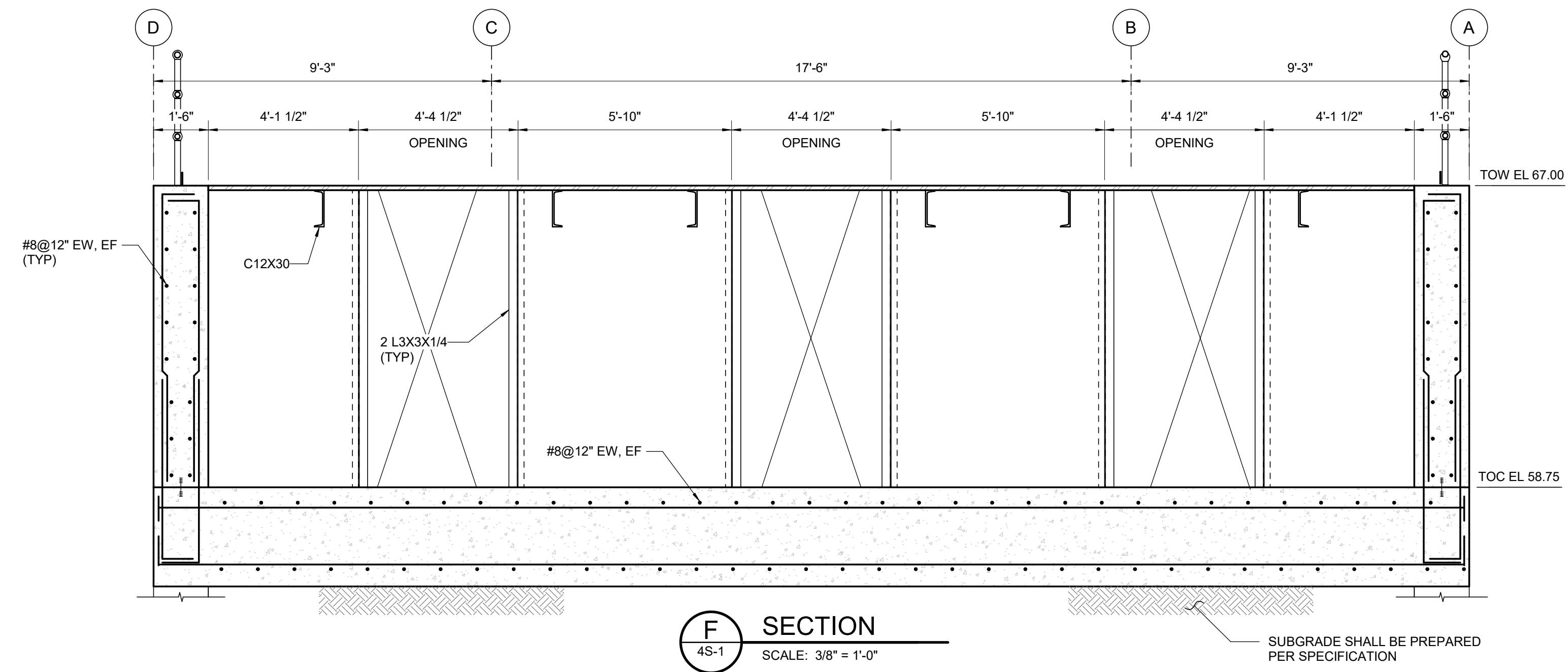
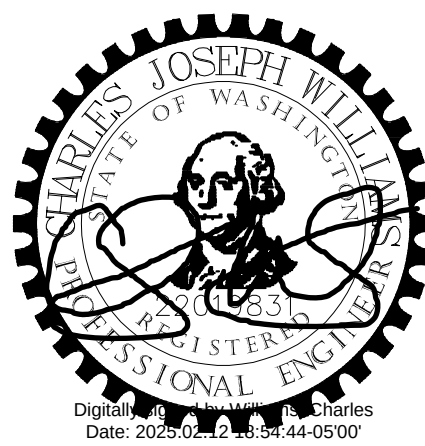
Scale

Drawing No.

4S-5

GENERAL SHEET NOTES

1. ALL REINFORCEMENT SHOWN SHALL BE SPACED AT 12" O.C. UNLESS NOTED OTHERWISE. ADDITIONAL REINFORCEMENT IN ACCORDANCE WITH STANDARD DETAILS S-144 AND S-148 SHALL BE PROVIDED AT ALL OPENINGS.

[illegible]

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Client/Project Logo



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author	Designer	Checker	07/25/24
Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title

WATER SUPPLY HEADBOX
STRUCTURE
SECTION IV

Project No.
224202267
Revision

Scale
As indicated
Drawing No.

4S-6

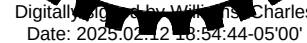
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Client/Project Logo



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author
Dwn.

Designer
Dsgn.

Checker
Chkd.

08/26/24
YYYY.MM.DD

Title

WATER SUPPLY HEADBOX
STRUCTURE
SECTION V

Project No.
224202267

Revision

Scale

As indicated

Drawing No.

4S-7

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[illegible]

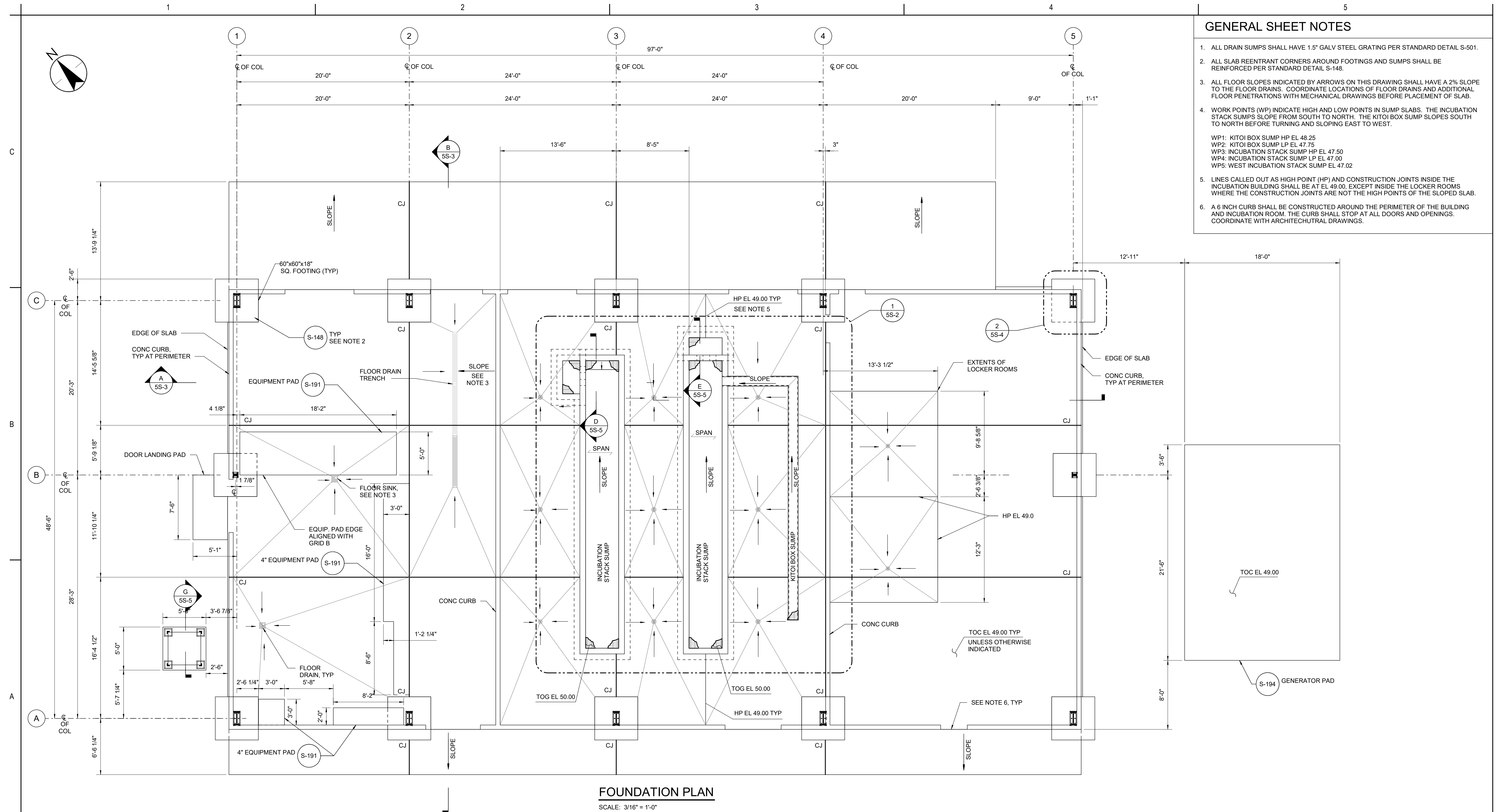
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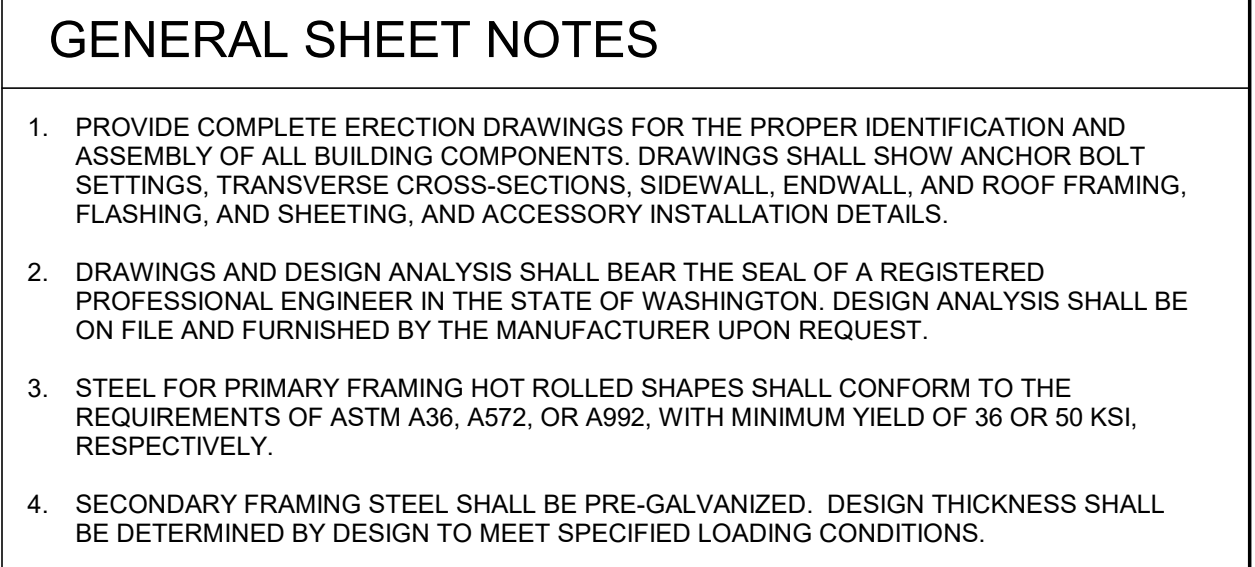


File Name: N/A

Author	Designer	Checker	09/02/24
Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

4S-8

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SCALE: 3/16" = 1'-0"

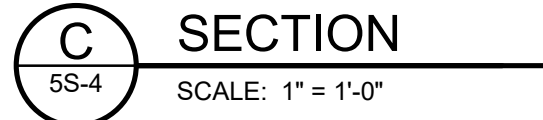
5S-1 SCALE: 3/16" = 1'-0"

~~Exhibit D-1 Page 76 of 220~~

1. ALL STEEL TRASHRAK, ANCHORS BOLTS AND ASSOCIATED HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A123, A153
2. ANCHORS SHALL BE 1" DIA THREADED ANCHOR RODS (ASTM F1554, GR 105), 9" MINIMUM EMBEDMENT. INSTALL WITH ADHESIVE GROUT SYSTEM HIT-RE 500 V3 OR APPROVED EQUAL.
3. STEEL REQUIREMENTS:
STEEL PLATES: ASTM A529, GRADE 50
L-SHAPES: ASTM A529, GRADE 50
NUTS AND WASHERS: ASTM A563 AND F436 RESPECTIVELY
4. CAST-IN-PLACE ANCHORS SHALL BE POSITIONED IN COORDINATION WITH PEMB MANUFACTURER. BASED ON PRELIMINARY REACTIONS, ANCHORS SHALL BE 7/8" DIAMETER HEAVY HEX HEAD ASTM F 1554 GRADE 105 WITH 6" MIN EMBED. ANCHORS AND FOOTINGS SHALL BE VERIFIED OR REDESIGNED BY THE ENGINEER FOR FINAL REACTIONS.



2 DETAIL
5S-1 SCALE: 1" = 1'-0"



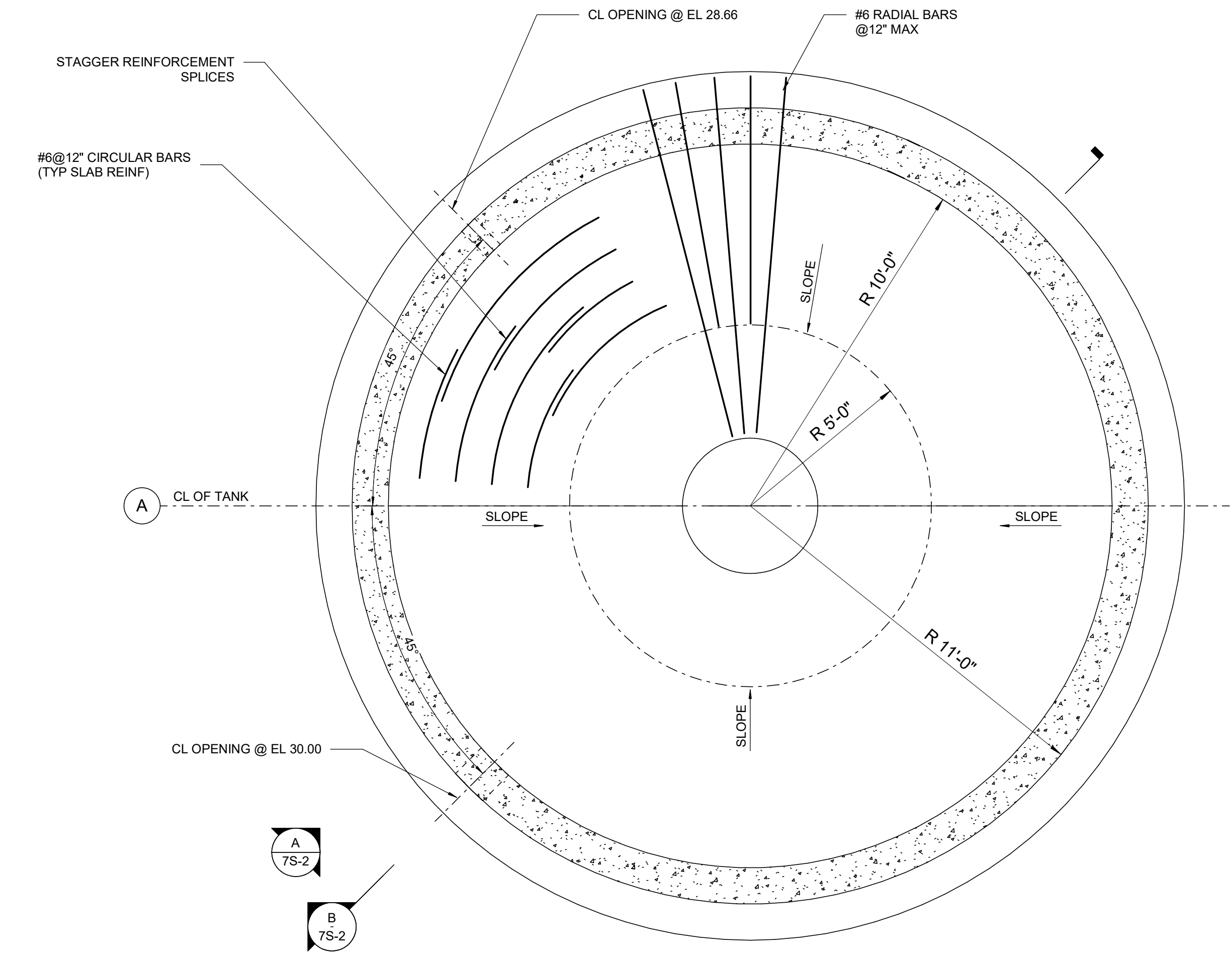
5S-4

GENERAL SHEET NOTES
1. COORDINATE CONNECTION OF CLARIFIER WALKWAY WITH MANUFACTURER.

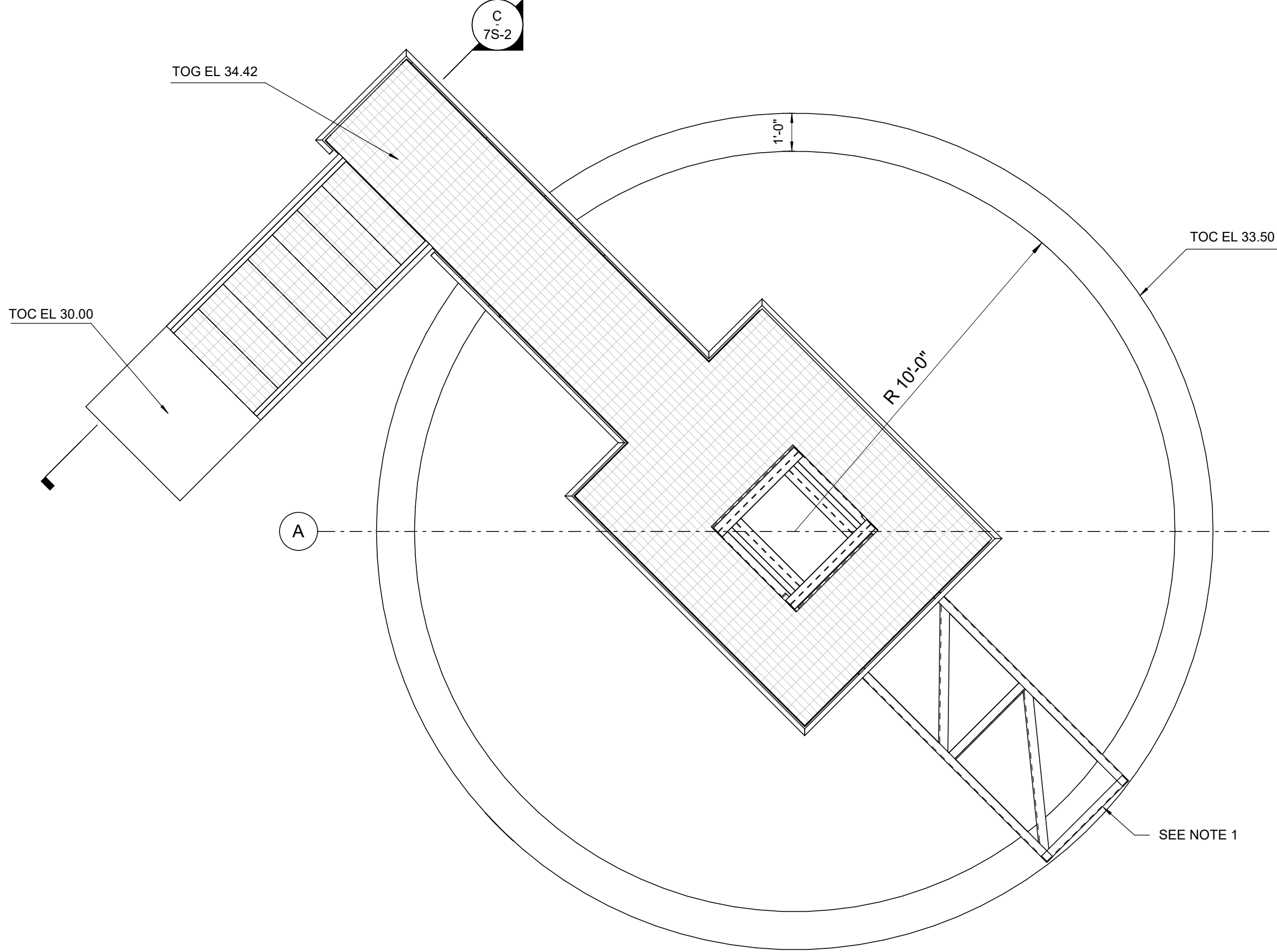
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FOUNDATION PLAN
SCALE: 3/8" = 1'-0"



EL 33.50
SCALE: 3/8" = 1'-0"

1/2/2025 9:44:57 PM ORIGINAL SHEET - ANSI D	<table><tr><th>Revision</th><th>By</th><th>Appd</th><th>YYYY-MM-DD</th></tr><tr><td>0</td><td></td><td></td><td>4/22/2020</td></tr><tr><td colspan="4">30% INTERNAL QA/QC</td></tr></table>	Revision	By	Appd	YYYY-MM-DD	0			4/22/2020	30% INTERNAL QA/QC				<table><tr><th>Issued</th><th>By</th><th>Appd</th><th>YYYY-MM-DD</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>	Issued	By	Appd	YYYY-MM-DD					Permit/Seal	Consultant	Stantec Street Address City, Province/State, Postal/Zip Code Tel: +1.555.555.1234 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY Tulalip, WA File Name: N/A <table><tr><td>Author</td><td>Designer</td><td>Checker</td><td>06/02/20</td></tr><tr><td>Dwn.</td><td>Dsgn.</td><td>Chkd.</td><td>YYYY-MM-DD</td></tr></table>	Author	Designer	Checker	06/02/20	Dwn.	Dsgn.	Chkd.	YYYY-MM-DD	Title WASTEWATER CLARIFIER STRUCTURAL PLAN AND ELEVATION <table><tr><td>Project No.</td><td>Scale</td></tr><tr><td>224202267</td><td>3/8" = 1'-0"</td></tr><tr><td>Revision</td><td>Drawing No.</td></tr><tr><td>0</td><td>7S-1</td></tr></table> Exhibit D-1 Pages 9 of 220	Project No.	Scale	224202267	3/8" = 1'-0"	Revision	Drawing No.	0	7S-1
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1. COORDINATE CONNECTION OF CLARIFIER WALKWAY WITH MANUFACTURER

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

Author

Designer

Checker

09/06/24

Title

WASTEWATER CLARIFIER STRUCTURAL SECTION

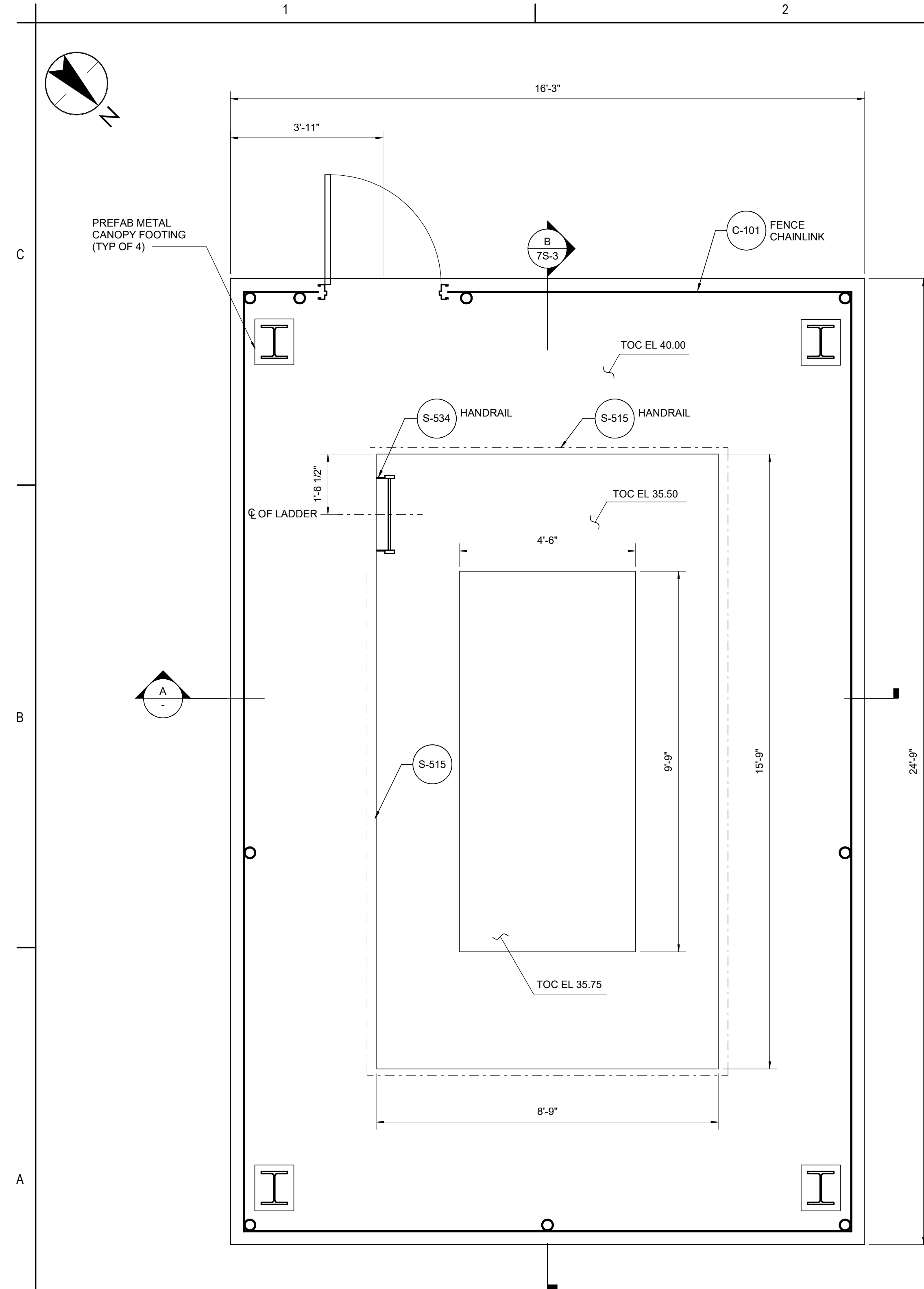
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Revision

Scale
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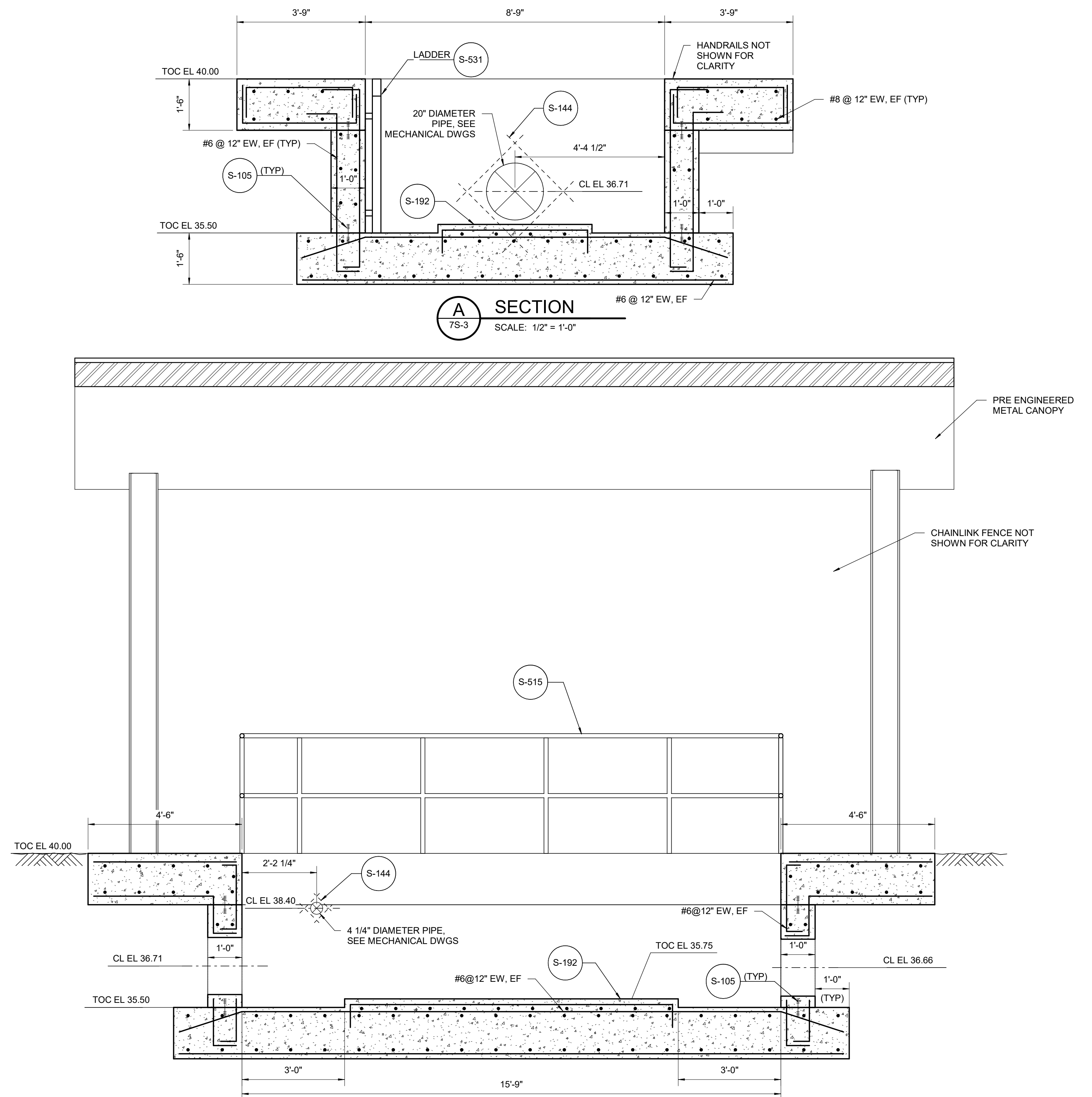
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7S-2



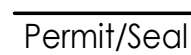
PLAN

SCALE: 1/2" = 1'-0"



B SECTION

SCALE: 1/2" = 1'-0"

[illegible]

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

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Dsg

gn.

Title

EFFLUENT TREATMENT PLAN AND SECTION

Project No.
224202267

Revision

Revision

Scale
1/2" = 1'-0"

Drawing No.

Drawing No.

7S-3

Exhibit D Page 82 of 220

C

1. HOT DIP GALVANIZED BRACKET AND PARTS AFTER FABRICATION, UNO, PROVIDE 316 SS BRACKET AND PARTS IN SUBMERGED OR CORROSIVE CONDITIONS (VERIFY CHEMICAL COMPATIBILITY WITH STAINLESS STEEL).
2. THIS PIPE BRACKET IS LIMITED TO A SINGLE PIPE OF 16" DIAMETER OR A GROUP OF PIPES 16" WIDE, INCLUSIVE.
3. REFER TO TABLE FOR MAXIMUM ALLOWED SERVICE LOAD ON EACH BRACKET. IN NO CASE, SHALL THE LOAD ON THE BRACKET EXCEED THE LOADS SHOWN IN THE TABLE.
4. PROVIDE 1/2" HOLE FOR MANUALLY OPERATED BRACKET AT THE LOCATION.
5. FOR TOLCO 30" BRACKETS WITH 1 1/8" HOLES, PROVIDE 1/4" THICK PLATE WASHER WITH STANDARD 1 1/16" HOLE FOR 1" THREADED ROD. WELD PLATE WASHER ALL AROUND WITH 3/16" EPOXY WELD.
6. DEVIATIONS FROM THIS DESIGN MUST BE VERIFIED WITH CALCULATIONS AND SUBMITTED TO ENGINEER FOR REVIEW.

1. THE SUPPORT IS ADEQUATE FOR SEISMIC RESPONSE COEFFICIENT (SDS) GIVEN IN THE TABLE SEISMIC FORCE ASSUMPTIONS (ASCE 7-10, EQN 13.3-1): $\alpha=2.5$, $R=3.0$, $\Omega=2.5$, $I_p=1.0$, $z/h=1.0$.
2. THE SUPPORT, DESIGNED FOR SEISMIC LOADS ARE ALSO ADEQUATE FOR A DESIGN WIND SPEED (Vult) OF UP TO 180 MPH WITH A MAXIMUM HEIGHT ABOVE GRADE OF 40'. WIND FORCE ASSUMPTIONS: EXPOSURE CATEGORY C, $K_{zt}=1.0$, $K_{z1}=1.0$, $K_d=0.85$, $G=0.85$, $G_{cp}=1.4$, $C_f=1.1$ (DESIGNED PER ASCE 7-10 SECTION 29.5 - OTHER STRUCTURES).

(FOR PIPE 16" DIAMETER AND SMALLER)
REV 010119



(FOR PIPE 36" DIAMETER AND SMALLER)
REV 010119



1. HOT DIP GALVANIZE PARTS AFTER FABRICATION, UNO, PROVIDE 316 SS PARTS AND BOLTS IN SUBMERGED OR CORROSIVE CONDITIONS.
2. PROVIDE CAST-IN-PLACE HEAVY HEX HEAD ASTM F1554 GR 36 ANCHORS, UNO.
3. ORDER 1/2" DIA. ANCHORS WITH 1/2" MIN. SERVICE LOAD ON EACH SUPPORT.
4. USE MUK-2, UNLESS OTHERWISE INDICATED.
5. FOR 3/4" ANCHORS AND LARGER, PROVIDE 1/2" WASHERS PER AISC MANUAL OF STEEL CONSTRUCTION TABLE 14-2 WITH STD BOLDS WELDED TO PLATE WITH 3/16" FILLETS. USE 1/2" SOX3/4" ANCHORS 5/8" ANCHORS.
6. IN ADVERSE ENVIRONMENT, USE 1/2" DIA. (SIZES) ON SET XP, OR EQUAL, USE REDUCED MAX LOADS IN COLUMNS. UNO. OVERSIZED BOLDS AND WASHERS ARE NOT REQUIRED.

SEISMIC AND WIND COMPLIANT DESIGN CRITERIA

* SEE MANUFACTURER

1. THE SUPPORTS ARE ADEQUATE FOR SEISMIC RESPONSE COEFFICIENT (SDS) GIVEN IN THE TABLE. SEISMIC FORCE ASSUMPTIONS (ASCE 7-10, EQN 13.3-1): $a_p=2.5$, $R_p=6$, $Q_o=2.5$, $I_p=1.0$, $z/h=1.0$.
2. THE SUPPORTS, DESIGNED FOR SEISMIC LOADS, ARE ALSO ADEQUATE FOR A DESIGN WIND SPEED (V_{ult}) OF UP TO 165 MPH WITH A MAXIMUM HEIGHT ABOVE GRADE OF 40'. THE SEISMIC FORCE ASSUMPTIONS: EXPOSURE CATEGORY C, $K_z=1.0$, $K_z=1.04$, $K_d=0.95$, $G=0.85$, $C_f=1.2$ (DESIGNED PER ASCE 7-10 SECTION 29.5 - OTHER STRUCTURES).



(FOR PIPE 72" DIAMETER AND SMALLER)
REV 010119



1. THE SUPPORTS ARE ADEQUATE FOR SEISMIC RESPONSE PROVISIONS (SDS) GIVEN IN THE TABLE. SEISMIC FORCE ASSUMPTIONS (ASCE 7-10, EQN 13.3-1): $a_p=2.5$, $R_p=6$, $Q_0=2.5$, $I_p=1.0$, $z/h=1.0$ FOR 6" TO 18" PIPES, $z/h=0.4$ FOR PIPES LARGER THAN 18".
2. THE SUPPORTS, DESIGNED FOR SEISMIC LOADS, ARE ALSO ADEQUATE FOR A DESIGN WIND SPEED (Vult) OF UP TO 160 MPH WITH A MAXIMUM HEIGHT ABOVE GRADE OF 40'. WIND FORCE ASSUMPTIONS: EXPOSURE CATEGORY C, $K_z=1.01$, $K_z=1.04$, $K_d=0.95$, $G=0.85$ Cf=1.2 (DESIGNED PER ASCE 7-10 SECTION 29.5 - OTHER STRUCTURES).



REV 010119



1. SEE STRUCTURAL DRAWINGS FOR WALL THICKNESS.

REV 010119

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WARNING

0 $\frac{1}{2}$ 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



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TULALIP TRIBES

BATTLE CREEK HATCHERY

Title
MECHANICAL STANDARD DETAILS - 1

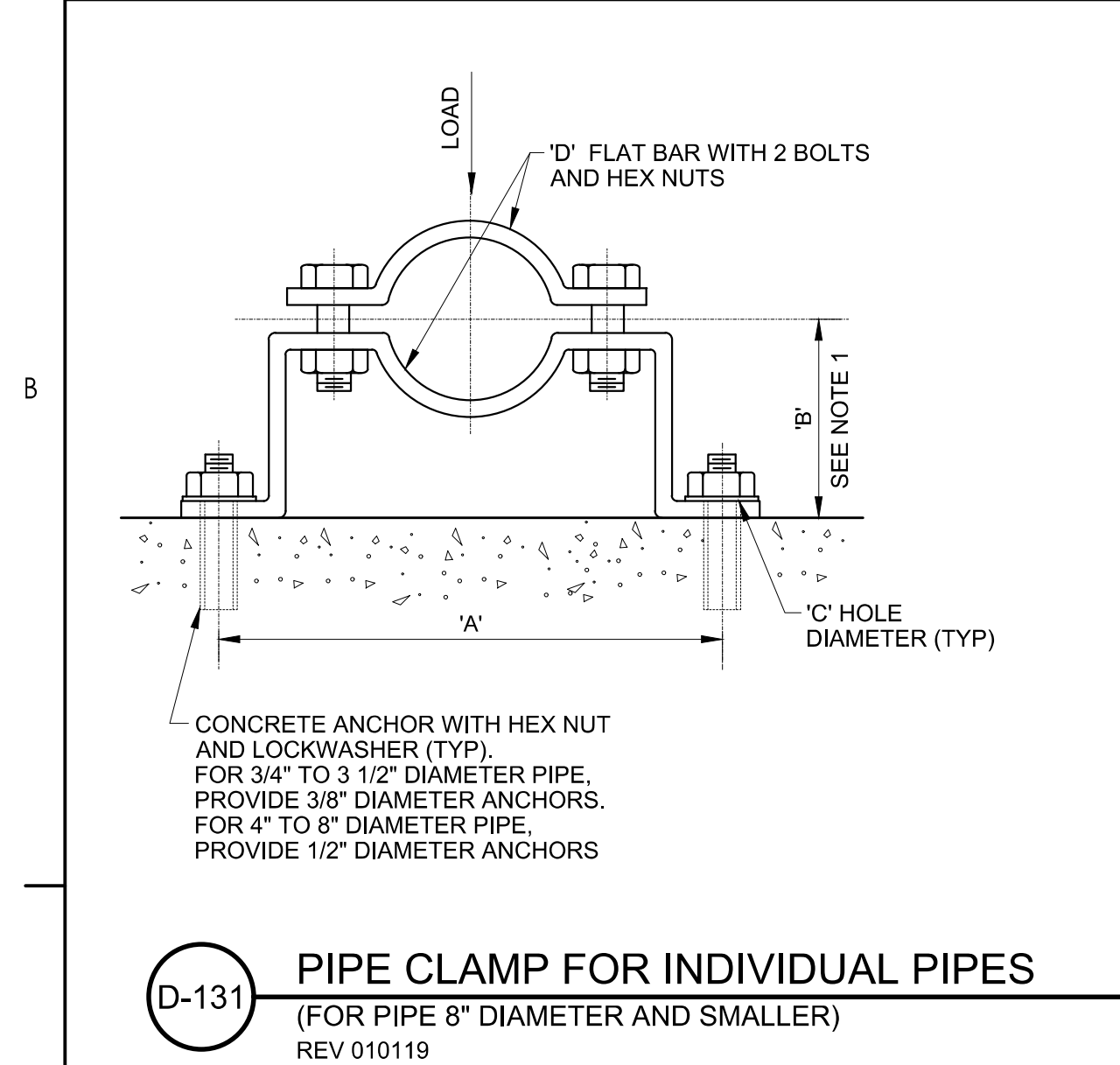
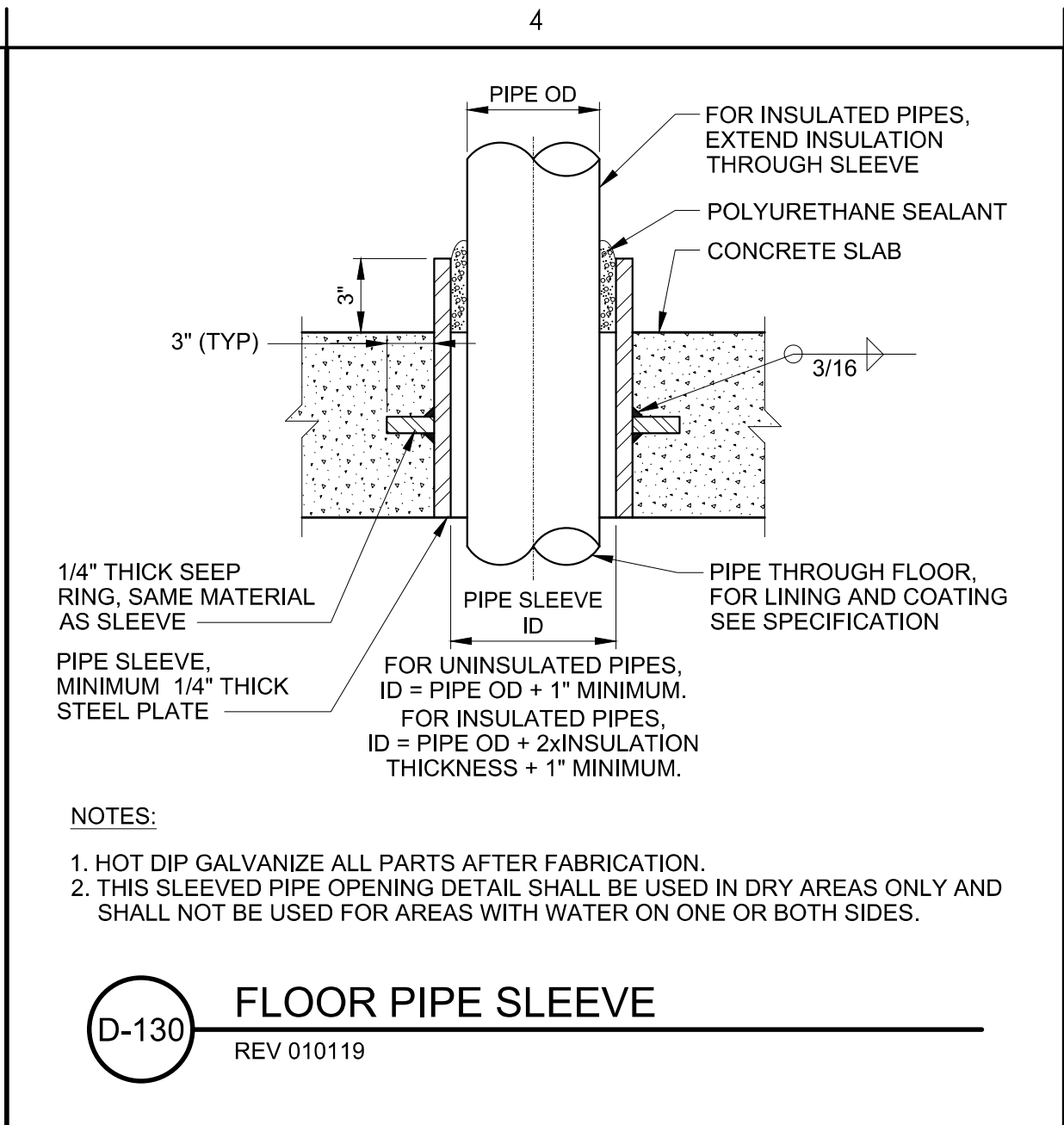
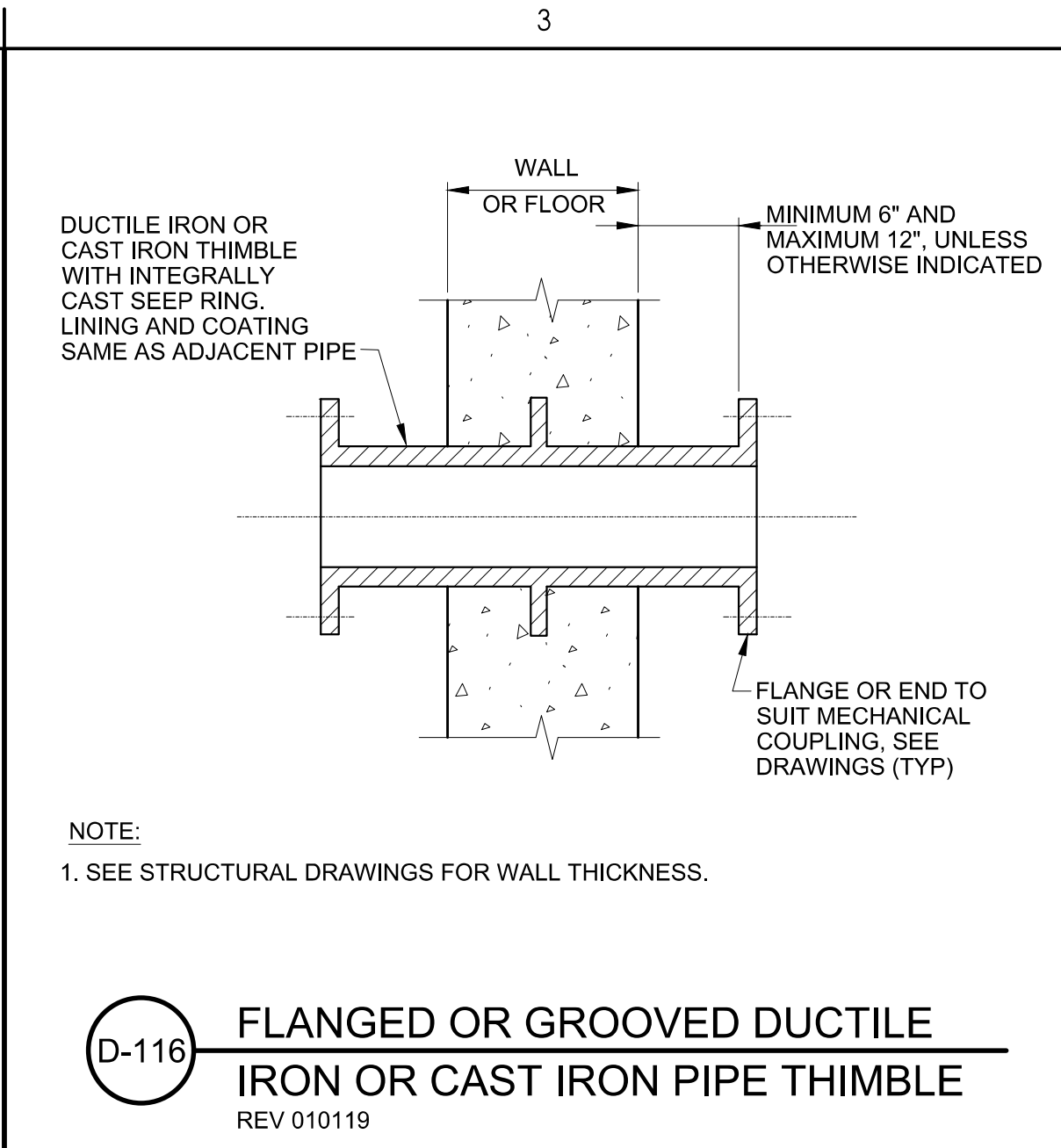
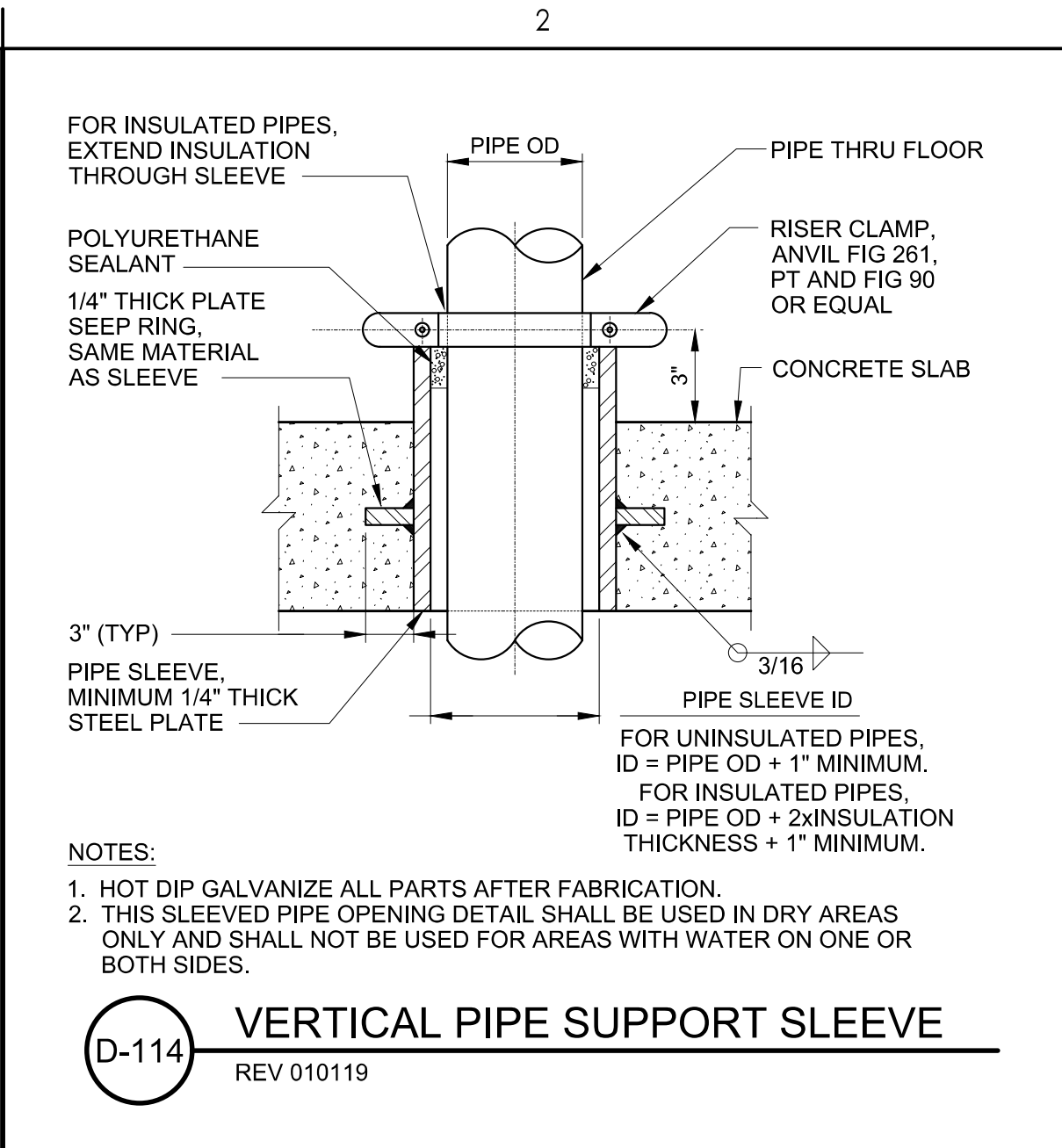
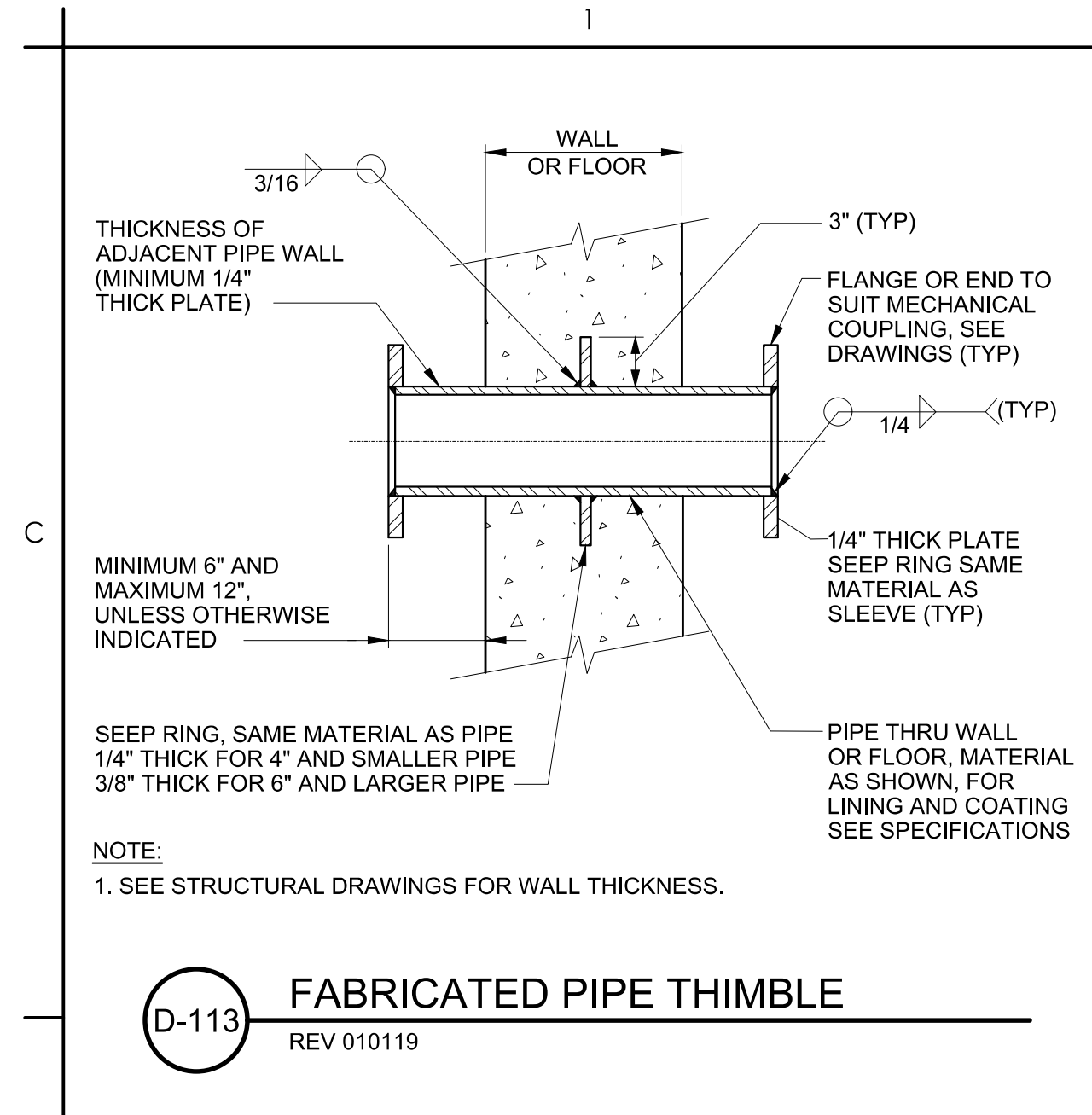
Project No.
224202267

Scale
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Revision Sheet

Drawing No.

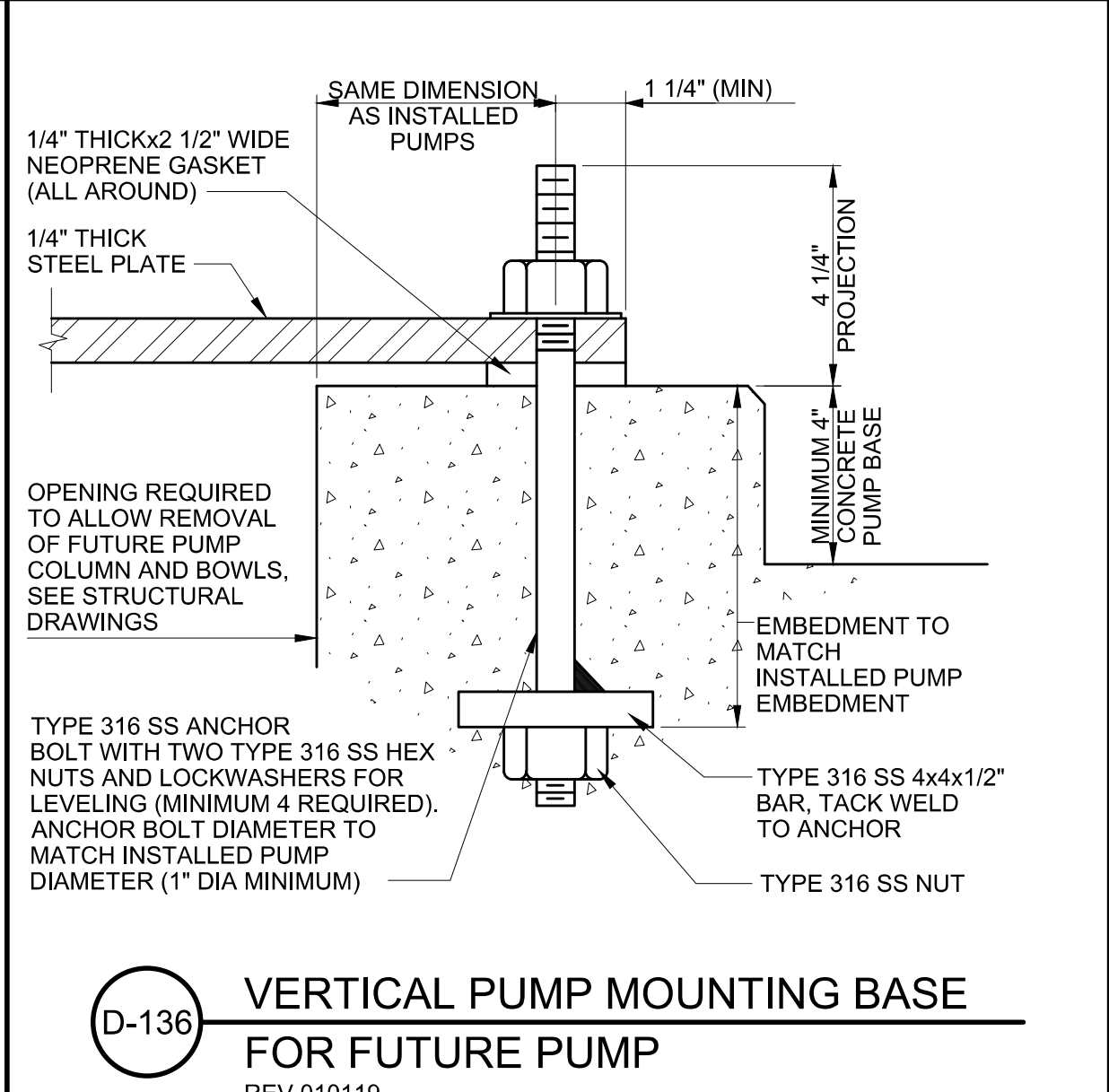
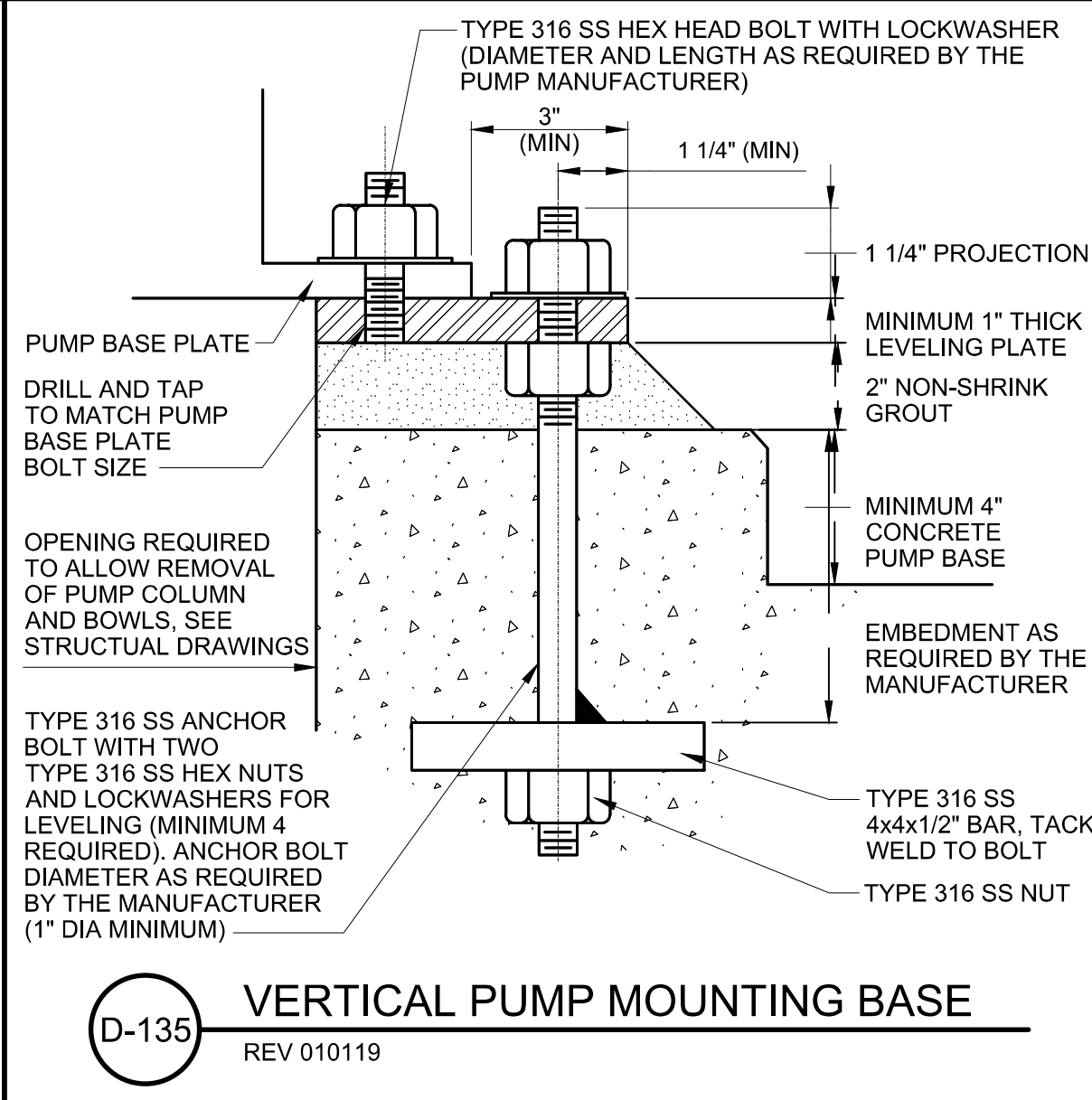
GM-1



DIMENSIONS IN INCHES					LOAD RATING (LBS)
NOMINAL PIPE DIAMETER	'A'	'B'	'C'	'D'	
3/4	5 15/16	2 1/2	7/16	1 1/4 x 3/16	190
1	6 1/4	2 5/8	7/16	1 1/4 x 3/16	190
1 1/4	6 11/16	2 3/4	7/16	1 1/4 x 3/16	190
1 1/2	6 15/16	3	7/16	1 1/4 x 3/16	190
2	8 5/16	3 3/16	7/16	1 1/4 x 1/4	420
2 1/2	8 7/8	3 7/16	7/16	1 1/4 x 1/4	420
3	9 1/8	3 3/4	7/16	1 1/4 x 1/4	420
3 1/2	10 1/16	4	7/16	1 1/4 x 1/4	420
4	10 9/16	4 1/4	9/16	1 1/2 x 1/4	610
5	11 3/4	4 3/4	9/16	1 1/2 x 1/4	610
6	14 3/8	5 5/16	9/16	1 1/2 x 3/8	870
8	16 5/8	6 5/16	9/16	1 1/2 x 3/8	870

NOTES:

- HOT DIP GALVANIZE PARTS AFTER FABRICATION.
- WHERE SUBMERGED, PARTIALLY SUBMERGED, OR LOCATED WITHIN 24 INCHES OF A WATER SURFACE, PARTS SHALL BE TYPE 316 STAINLESS STEEL.
- WHERE LOCATED IN CHEMICAL OR CORROSIVE AREAS, PARTS SHALL BE FRP OR TYPE 316 STAINLESS STEEL.
- FOR FLANGED PIPING, INCREASE 'B' DIMENSION AS REQUIRED.
- FOR PIPE DIAMETERS SMALLER THAN 3/4", SEE STANDARD DETAIL M-142.

[illegible]



1. PROVIDE CAST-IN-PLACE HEAVY HEX HEAD ASTM F1554 GR 36 ANCHORS, UNO. HOT DIP GALVANIZED PARTS AFTER FABRICATION, UNO. PROVIDE 316SS PARTS AND BOLTS IN CONTACT WITH CONCRETE OR CORROSION RESISTANT SET XP, OR EQUAL, USE REDUCED ALLOWABLE STRESS.
2. L IS ALLOWABLE LONGITUDINAL TRIBUTARY LENGTH, DEFINED AS 1/2 THE VERTICAL DISTANCE TO THE NEXT LATERAL PIPE SUPPORT (LV) PLUS 1/2 THE HORIZONTAL DISTANCE TO THE NEXT LONGITUDINAL PIPE SUPPORT (LH), REFER TO TABLE FOR MAXIMUM ALLOWABLE 'L' FOR EACH PIPE SIZE.
3. FOR 3/4" ANCHORS AND LARGER, PROVIDE SQUARE WASHERS PER AISC MANUAL OF STEEL CONSTRUCTION TABLE 14-2 WITH STD HOLES WELDED TO PLATE WITH 3/16" FILLETS, USE 1 3/4" SQX3/16" THICK WASHERS FOR 5/8" ANCHORS.
4. IF THE ANCHOR AND PLATE ARE SIMILAR IN SIZE (SET XP, OR EQUAL), USE REDUCED ALLOWABLE LONGITUDINAL TRIBUTARY LENGTH = $\frac{1}{2}$ ADH, GIVEN IN TABLE. OVERSIZED HOLES AND WASHERS ARE NOT REQUIRED. DO NOT USE ADHESIVE ANCHORS FOR PIPES LARGER THAN 36" DIAMETER.

1. THE SUPPORTS ARE ADEQUATE FOR SEISMIC RESPONSE COEFFICIENT (SDS) GIVEN IN THE TABLE. SEISMIC FORCE ASSUMPTIONS (ASCSE 7-10, EQN 13.3-1): $\alpha_p=2.5$, $R_p=6$, $\Omega_o=2.5$, $\mu_p=1.0$, $z_h=1.0$ FOR 4" TO 18" PIPES, $z_h=0.4$ FOR PIPES LARGER THAN 18".

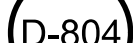
2. THE SUPPORTS, DESIGNED FOR SEISMIC LOADS, ARE ALSO ADEQUATE FOR A DESIGN WIND SPEED (V_{ult}) OF UP TO 200 MPH WITH A MAXIMUM HEIGHT ABOVE GRADE OF 4' EXCEPT FOR 4" AND 6" PIPE DIAMETERS, WHICH ARE ADEQUATE FOR V_{ult} OF UP TO 150 MPH. WIND FORCE ASSUMPTIONS: EXPOSURE CATEGORY C, $K_{zt}=1.0$, $K_{z1}=1.04$, $K_d=0.9$, $G=0.85$, $C_f=1.2$ (DESIGNED PER ASCSE 7-10, SECTION 29.5).



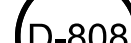
REV 010119



REV 010119



REV 010119



REV 010119



MOUNTED

ALL HATCHES SHALL BE HS-20 RATED.

SEE SECTION 43 52 04 FOR DAVIT CRANE REQUIREMENTS. PROVIDE EXTRA PEDESTAL BASE, TWO TOTAL, FOR MOUNTING TO EACH DAVIT CRANE EQUIPMENT PAD.

CONTRACTOR SHALL COORDINATE WITH EQUIPMENT SUPPLIER TO VERIFY DIMENSIONS FOR APPROVED EQUIPMENT. FISH SCREEN SHALL BE REMOVABLE FROM STRUCTURAL PLATFORM ABOVE WITH GRATING REMOVED.



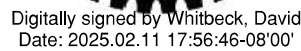
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SCALE: 1/4" = 1'-0"

A	FINAL DESIGN	STN	DEW
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File Name: N/A

PP

DEV

SWW

2024.12.27

Revisor

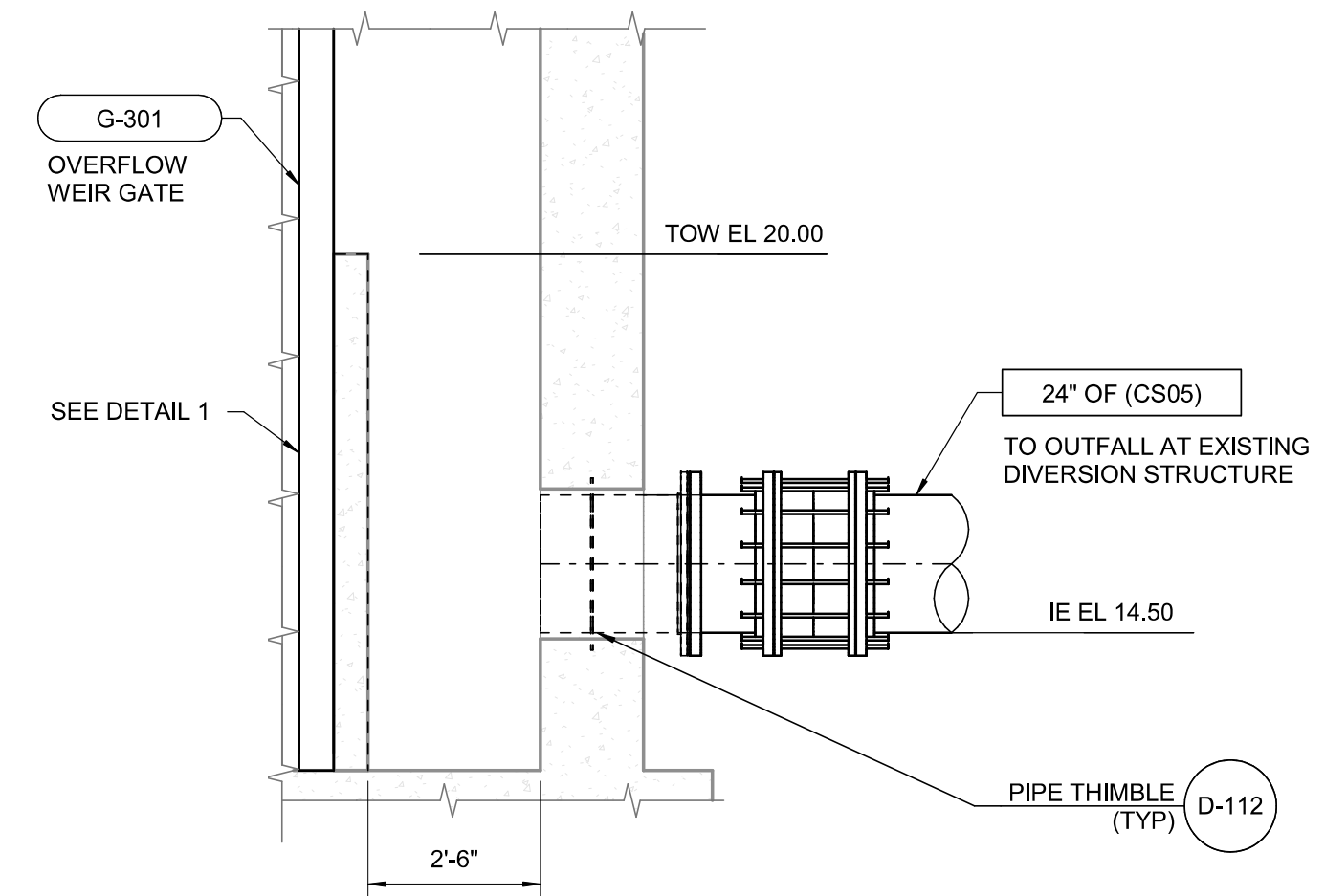
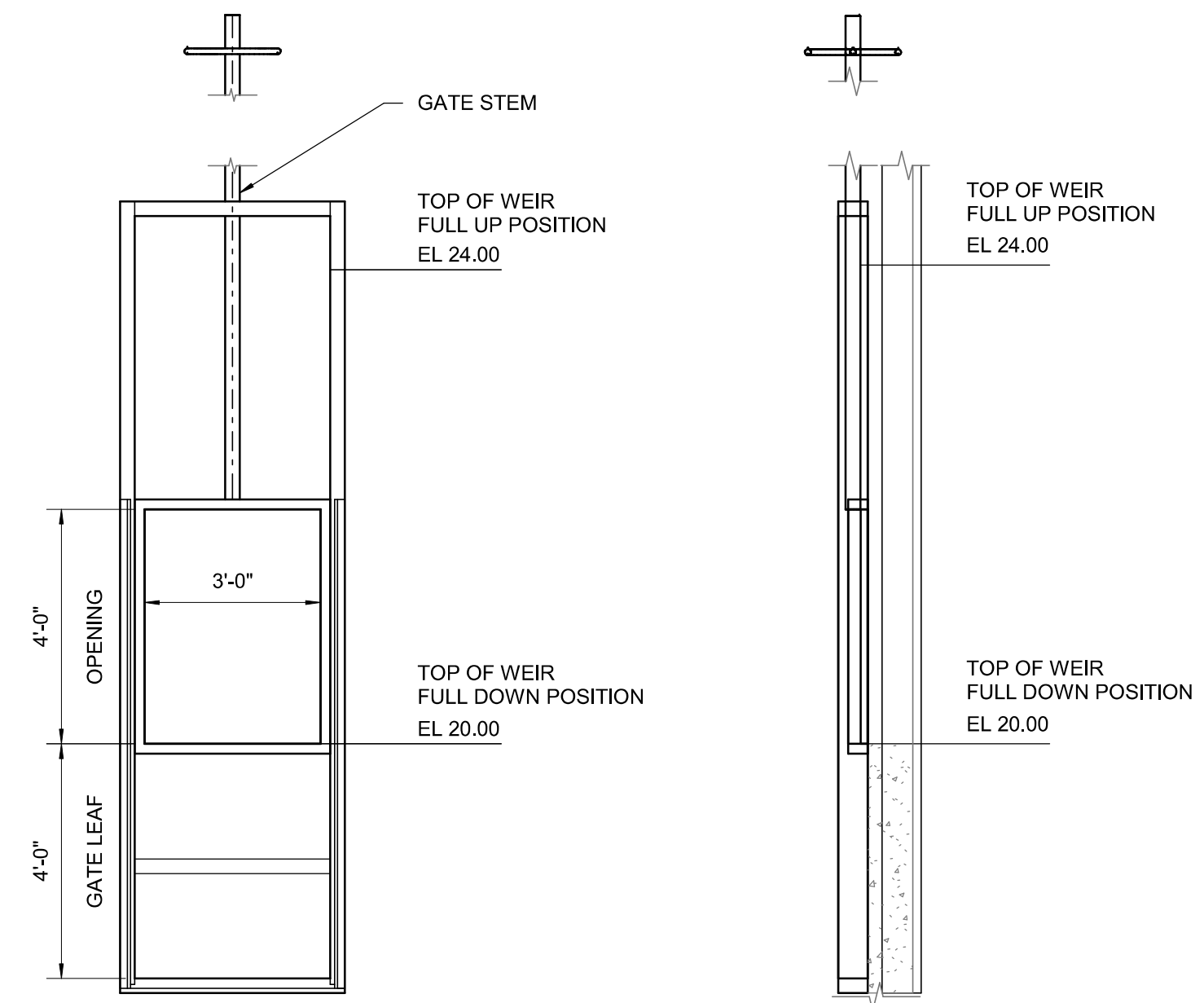
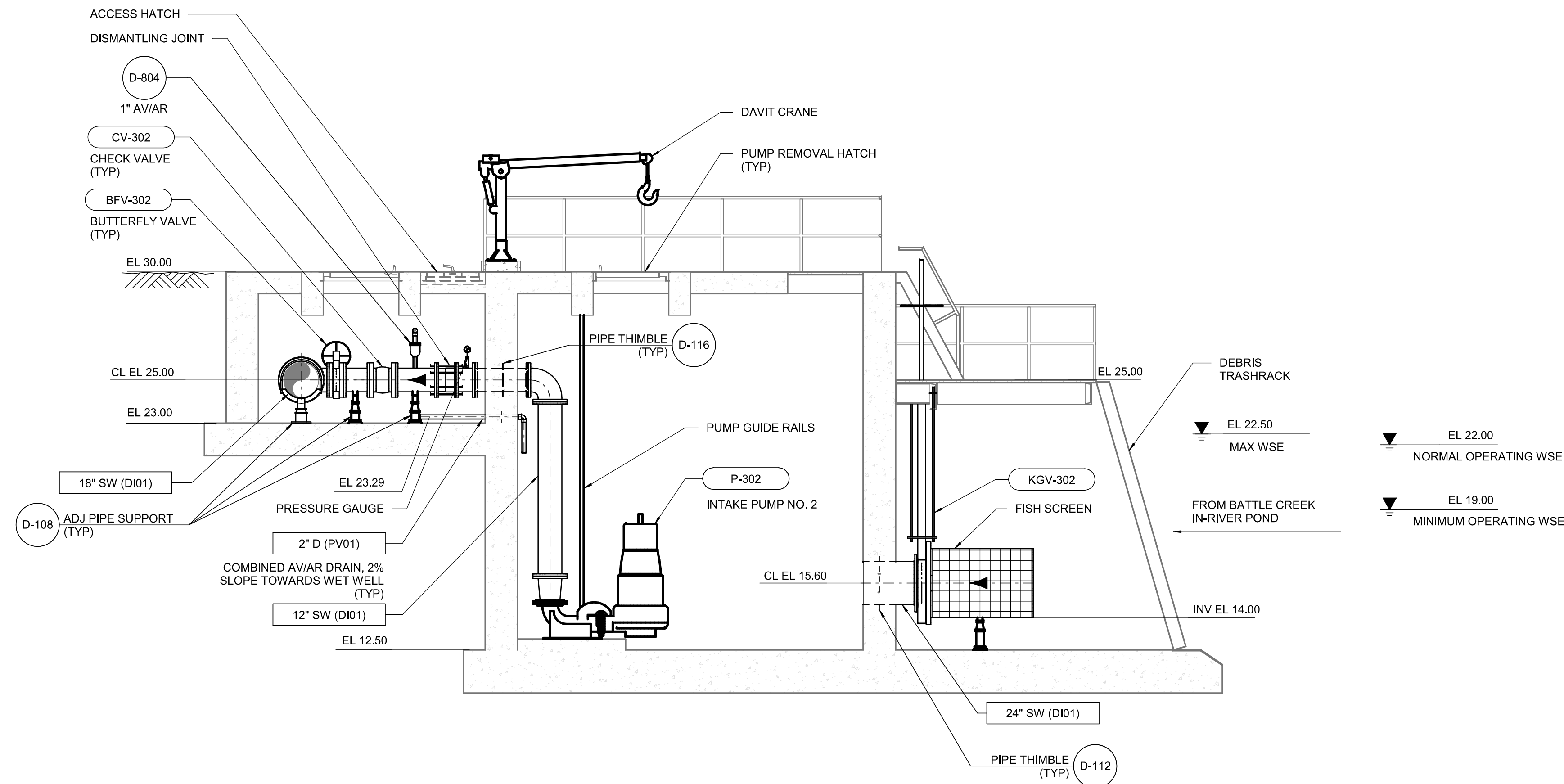
Drawing No.

3M-1

C

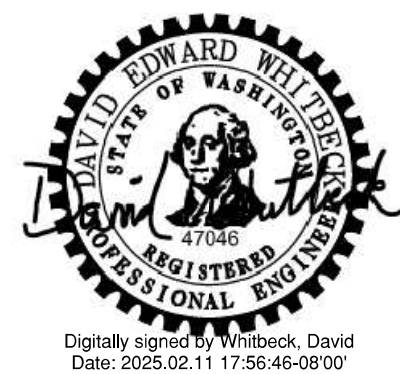
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[illegible]

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			2024.12.27
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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title
INTAKE STRUCTURE MECHANICAL
SECTIONS

Project No.
224202267

Revision

Scale
As indicated

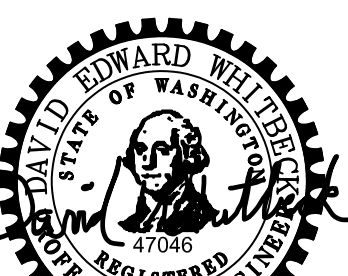
Drawing No.

3M-2

Exhibit D-1 Page 99 of 220

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF THE UV UNIT SUCH THAT THE MINIMUM OPERATING WSE OF THE UV MATCHES THE TOP OF WEIR ELEVATION. MAY INCLUDE ADDING GROUT LAYER OR HOUSEKEEPING PAD TO ADJUST INSTALLED ELEVATION.
2. CONTRACTOR SHALL INSTALL FLOW METER WITH SUFFICIENT STRAIGHT, UNIMPEDED RUN UPSTREAM AND DOWNSTREAM OF THE FLOW METER IN ACCORDANCE WITH MANUFACTURER'S MANUAL.
3. ASSUMED DRUM FILTER UPSTREAM OPERATING WSE RANGE OF 65.00 TO 66.00 . CONTRACTOR SHALL COORDINATE FLOOR AND GRATING ELEVATIONS FOR SELECTED DRUM FILTER TO VERIFY PROPER OPERATIONS. ANY MODIFICATIONS REQUIRED TO ACCOMMODATE A DIFFERENT OPERATING RANGE SHALL BE AT THE CONTRACTOR'S EXPENSE.
4. HEIGHT TO SUIT SELECTED DRUM FILTER. CONTRACTOR TO COORDINATE WITH ENGINEER.

A. DISTRIBUTION PLATE FOR UV UNITS UV-401 TO UV-403 SHALL BE FABRICATED FROM 11GA PERFORATED SS PLATE W/ 1/4" DIA HOLES STAGGERED 3/8" OC AND APPROXIMATELY 40% OPEN AREA.



1471 Shoreline Dr. Ste 100, Boise, ID 83702 | (208) 342-4214 | mcmillen.com



Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Scale
As indicated
Drawing No.

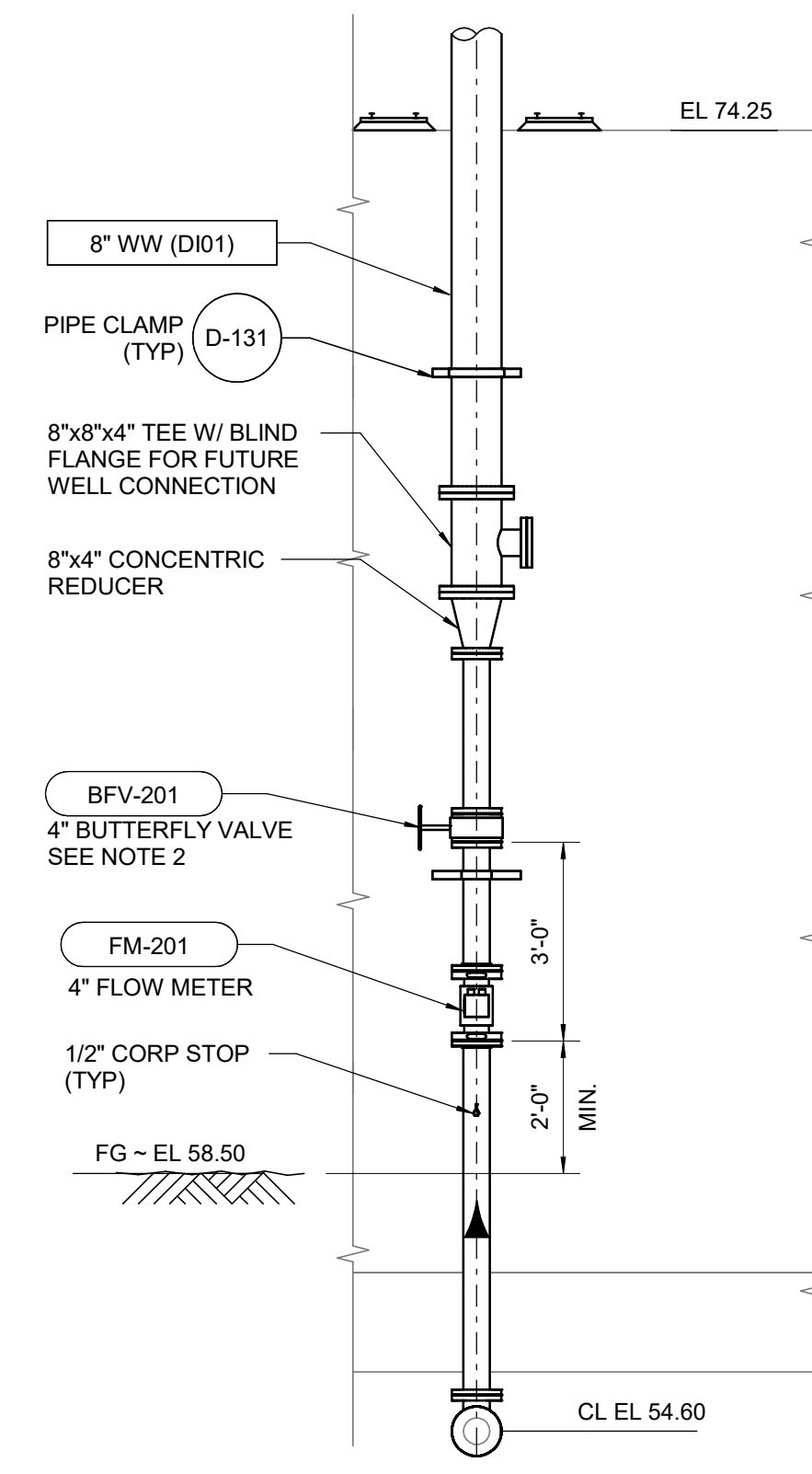
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A



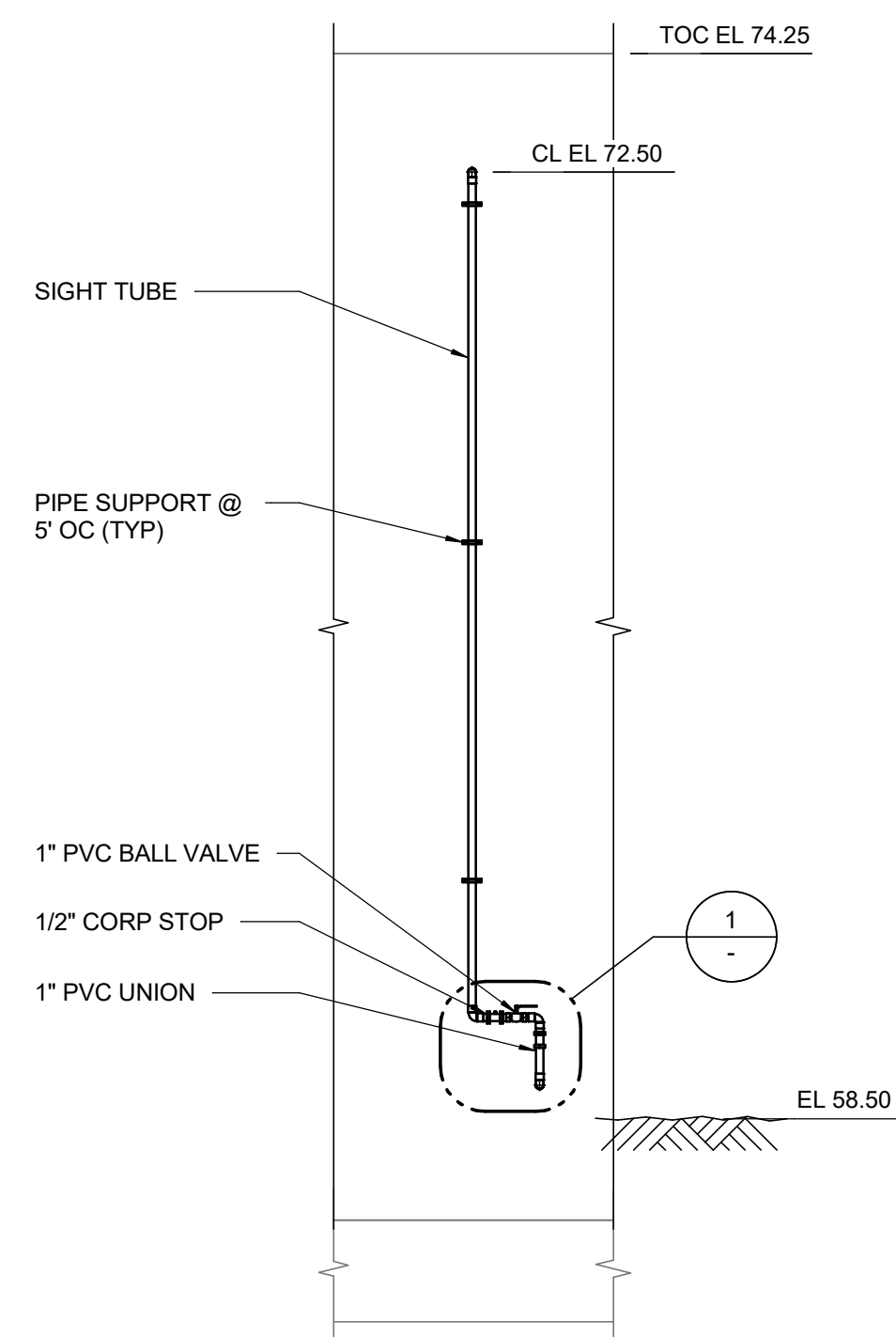
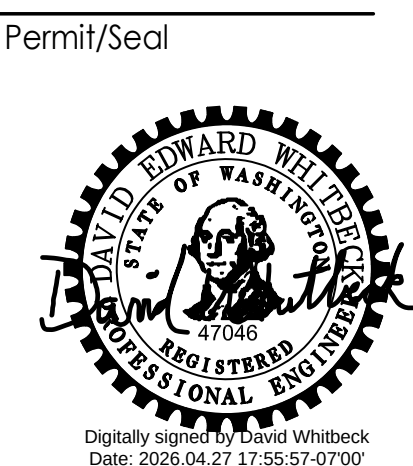
4M-3

A



E SECTION
4M-1 SCALE: 3/8" = 1'-0"

4M-4

[illegible]

Consultant



Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

MCM

MDV

DEW

2026.02.26

Title
WATER SUPPLY HEADBOX
MECHANICAL SECTION - IV

Project No.

Revision

Scale

Drawing No.

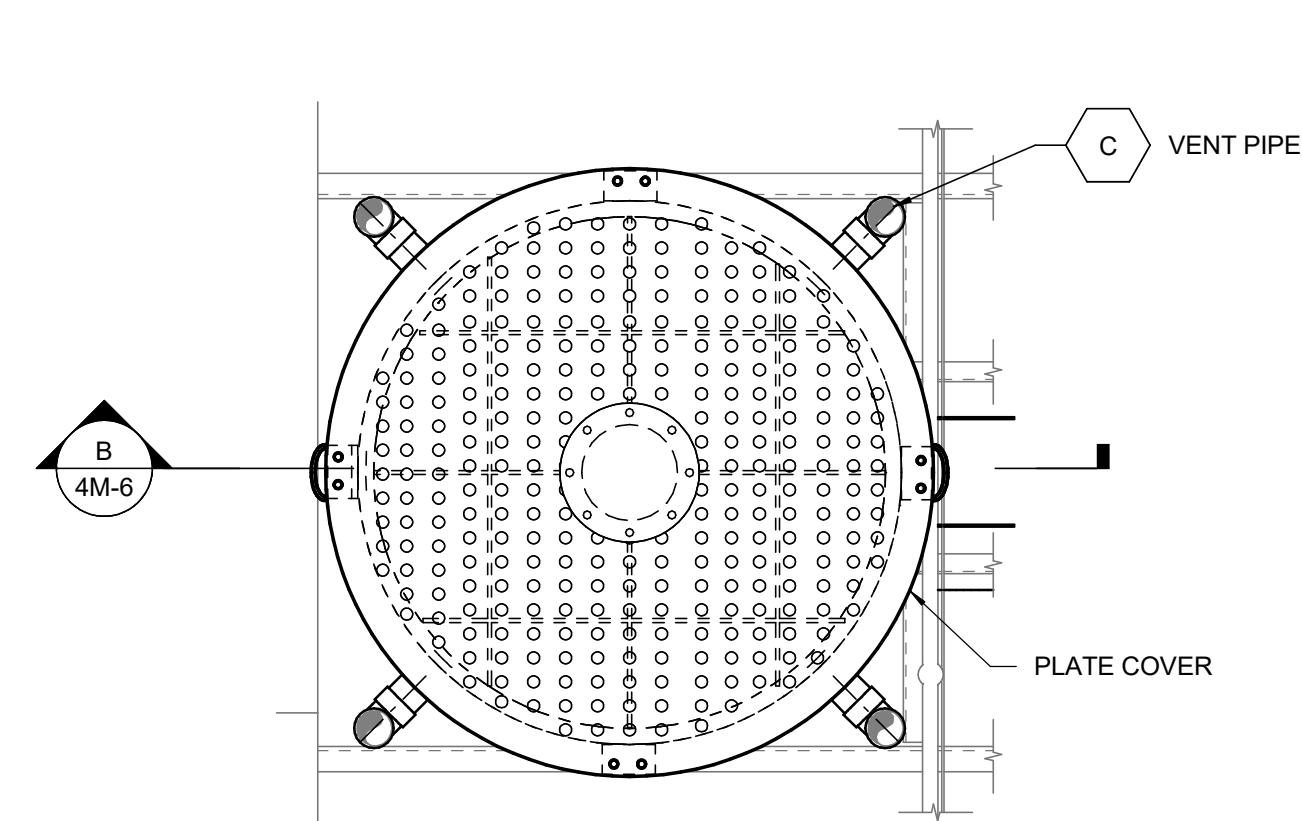
4M-5

GENERAL SHEET NOTES

1. SEE STRUCTURAL DRAWINGS FOR SUPPORT BEAMS.
2. COLUMNS SHALL BE PROVIDED FILLED COMPLETELY WITH MEDIA BETWEEN THE RETAINER PLATE AND THE DISTRIBUTION PLATE. SEE SPECIFICATION FOR MEDIA TYPE.
3. ALL EXTERNAL CONNECTIONS TO THE AERATOR SHALL BE SEAL WELDED.
4. PROVIDE ISOLATION FOR ALL ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS. SEE SECTION 09 96 00 PROTECTIVE COATINGS.

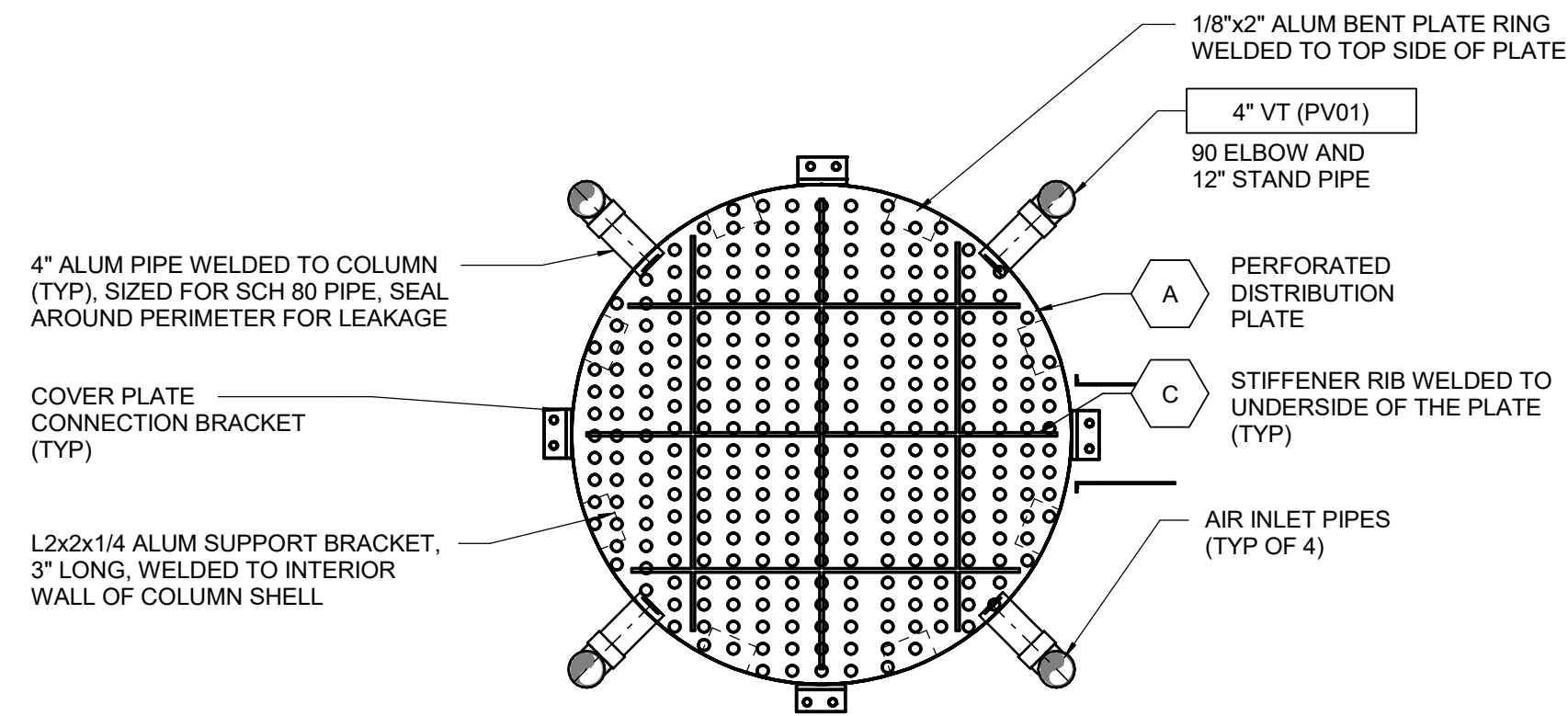
 SHEET KEYNOTES

- A. DISTRIBUTION PLATE FOR ALL PACKED COLUMN AERATORS SHALL BE FABRICATED FROM 11GA MIN PERFORATED STN STEEL WITH 1/4" DIA HOLES SPACED 3/4" OC AND APPROXIMATELY 8.7% OPEN AREA.
- B. DISTRIBUTION PLATE FOR PACKED COLUMN AERATOR AT THE WELL WATER STORAGE TANK SHALL BE FABRICATED FROM 11GA MIN PERFORATED STN STEEL WITH 1/4" DIA HOLES SPACED 1" OC AND APPROXIMATELY 4.9% OPEN AREA
- C. 1/4" X 2" STIFFENER RIB
- D. SCH 40 PVC ELBOW AND PIPE. PIPE EXTENSION SHALL BE PROVIDED TO MATCH THE TOP OF THE TOWER LID.
- E. RETAINER PLATE FOR ALL TOWERS SHALL BE FABRICATED FROM 11 GA MIN PERFORATED STN STEEL WITH 1/4" DIA HOLES STAGGERED 3/8" OC AND APPROXIMATELY 40% OPEN AREA



PLAN

SCALE: 1/2" = 1'-0"



PERFORATED DISTRIBUTION PLATE

SCALE: 1/2" = 1'-0"

COVER NOT SHOWN FOR CLARITY

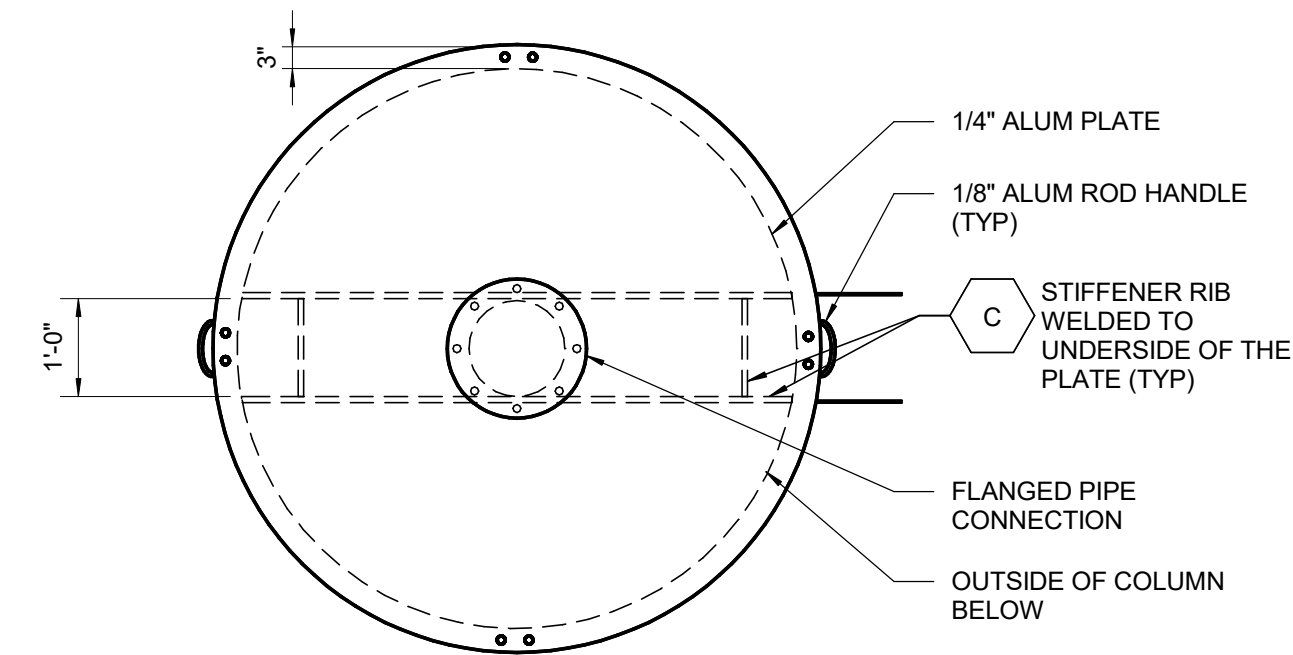
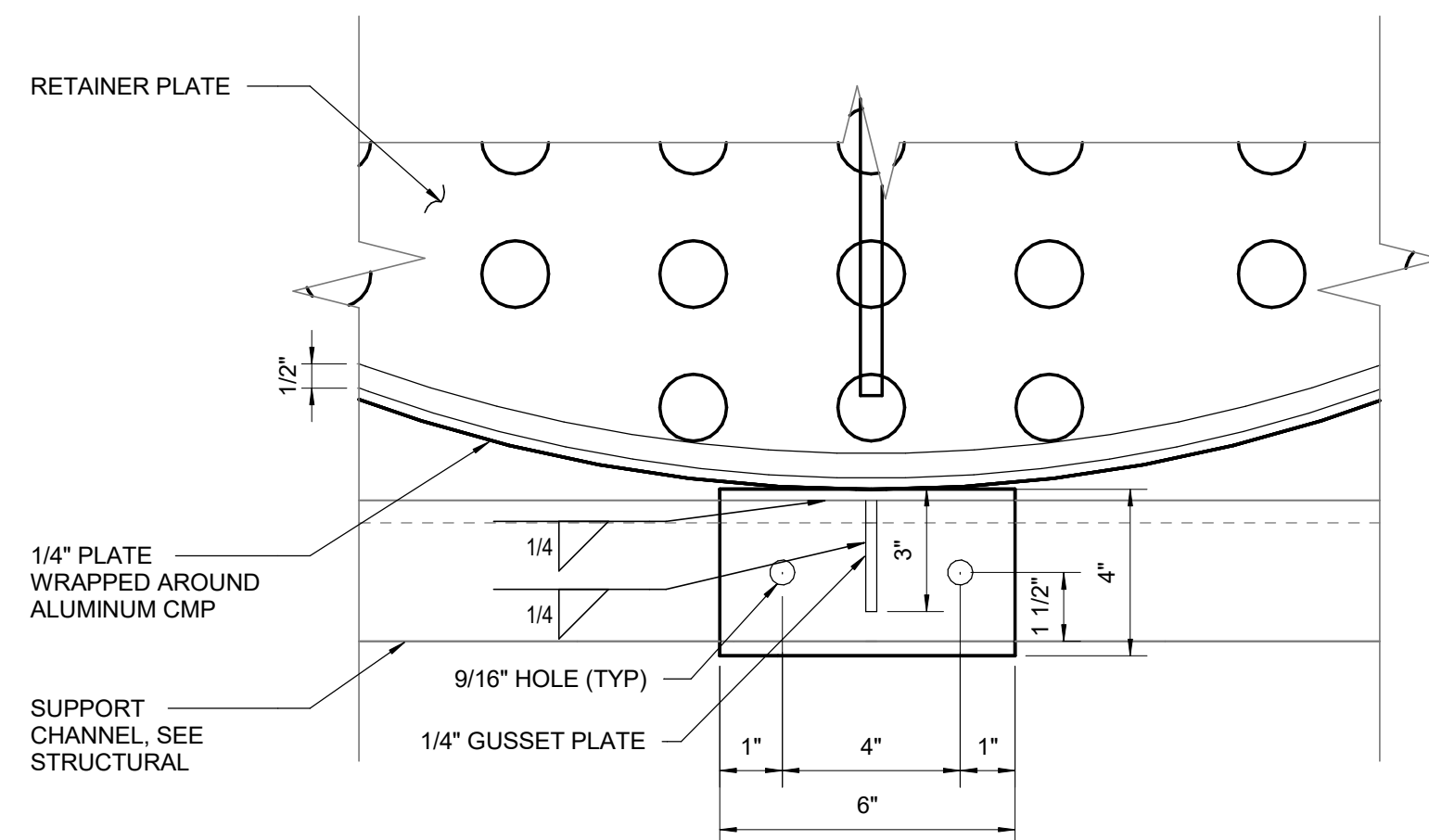


PLATE COVER

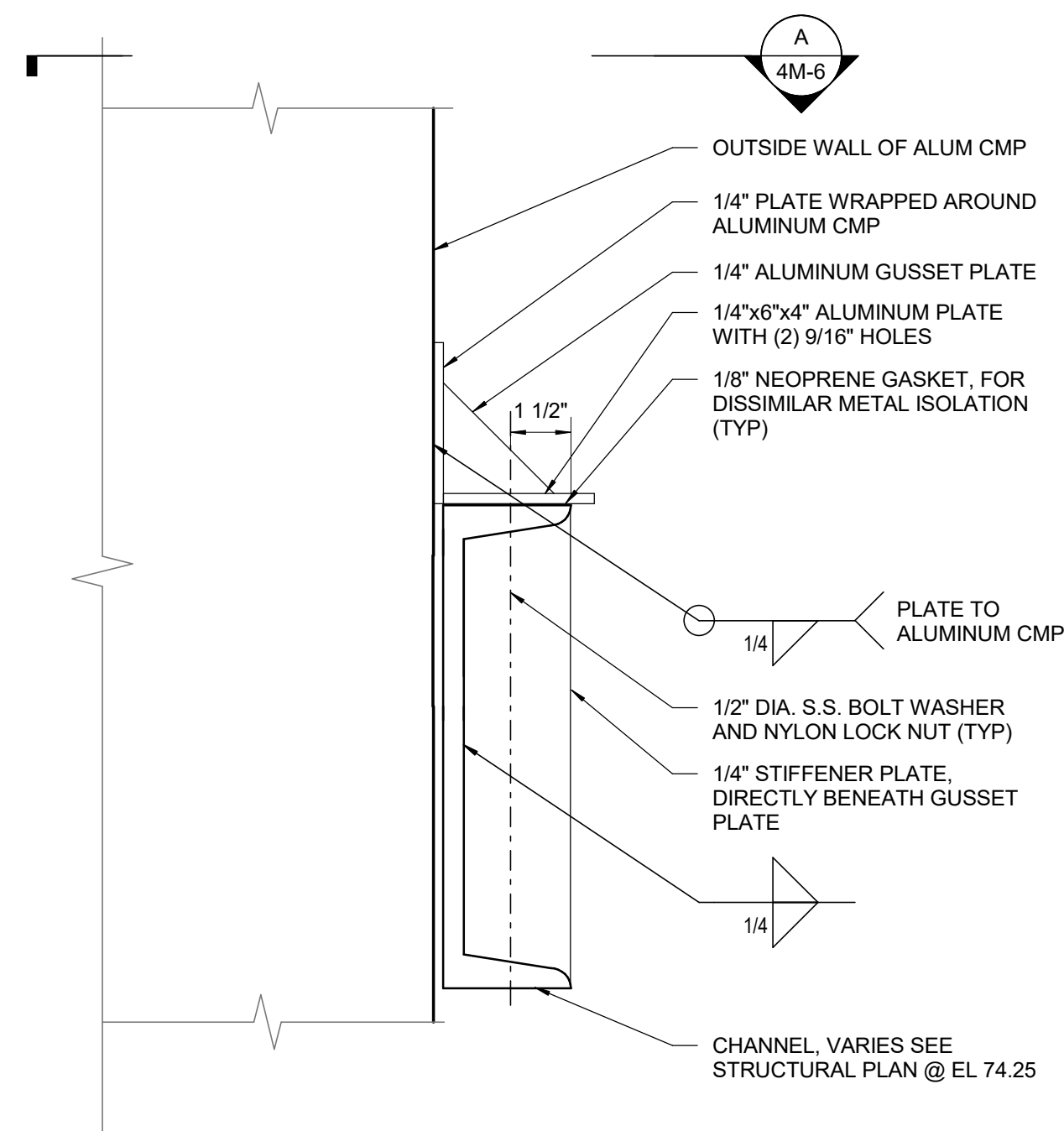
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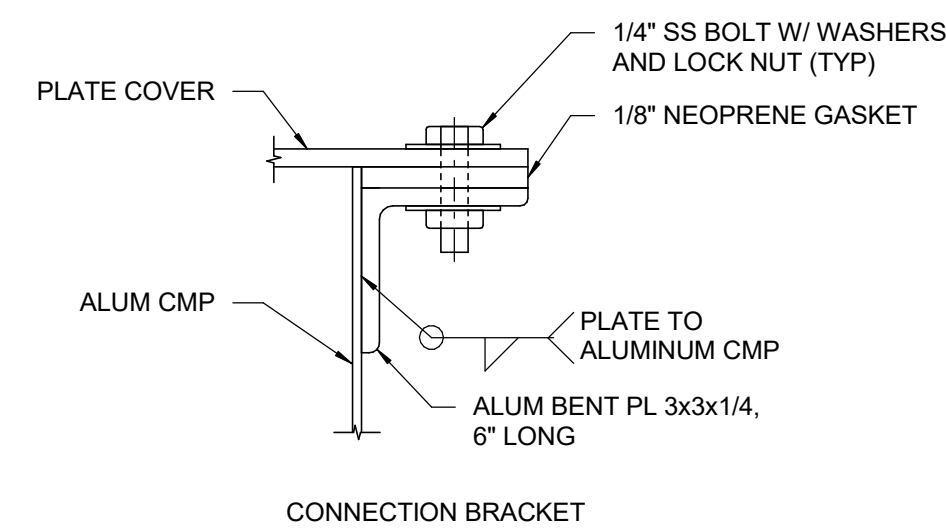
NO SCALE

NOTE: 1/2" DIA. S.S. BOLT AT STEEL BEAM LOCATION.
1/2" DIA. S.S. CONCRETE ANCHOR WITH 9" MINIMUM
EMBEDMENT AT CONCRETE WALL.



1 DETAIL

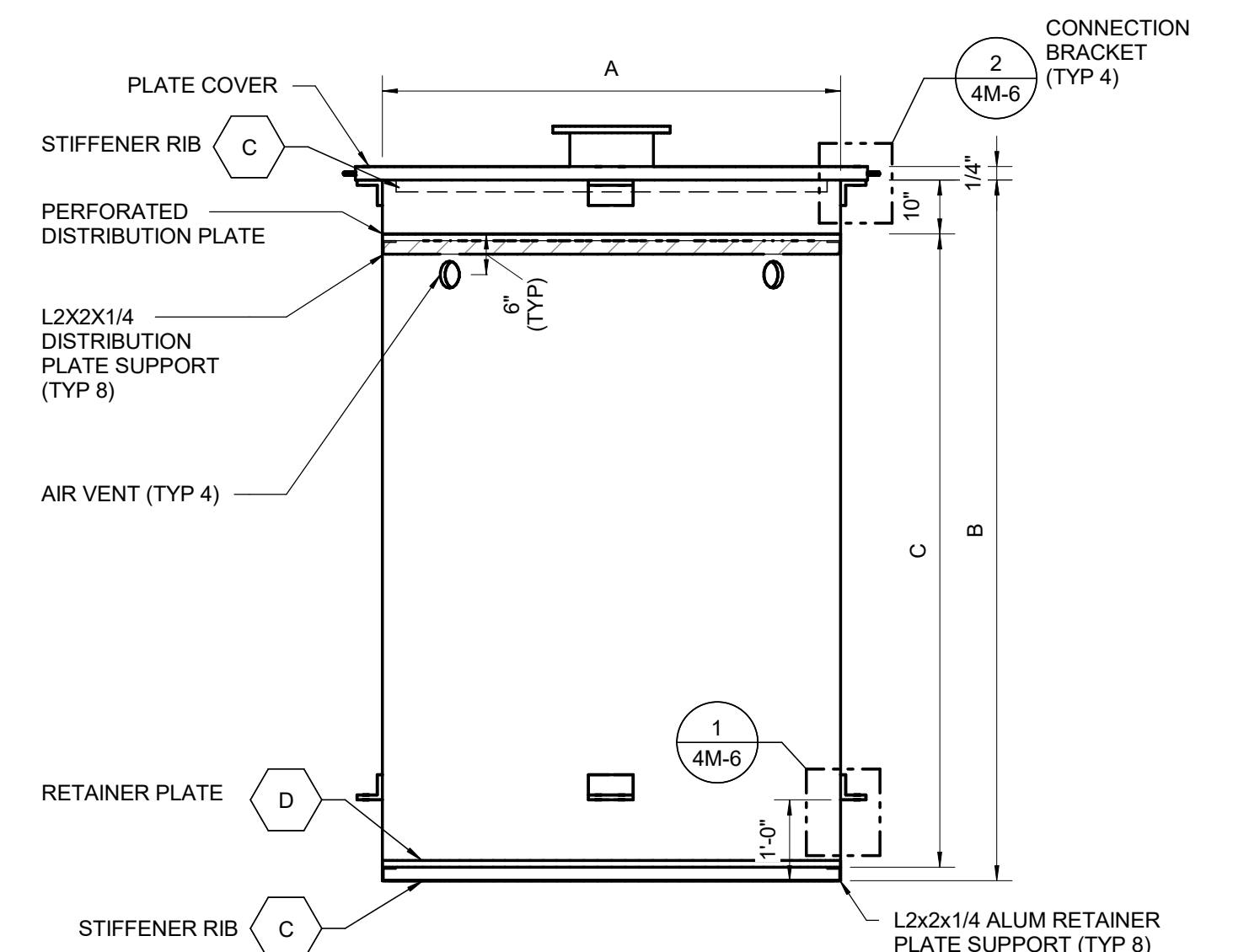
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2 DETAIL

NO SCALE

SERVICE	QUANTITY	FLOW	DIM A	DIM B	DIM C
WELL WATER	1	400 GPM	3.5 FT	8 FT	7 FT
SURFACE WATER	4	1800 GPM	5.5 FT	9 FT	8 FT



B SECTION

NO SCALE

[illegible]

A	FINAL DESIGN	MCM	DEW
Issued		By	Appd
			2026.02.26
			YYYY.MM.DD

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

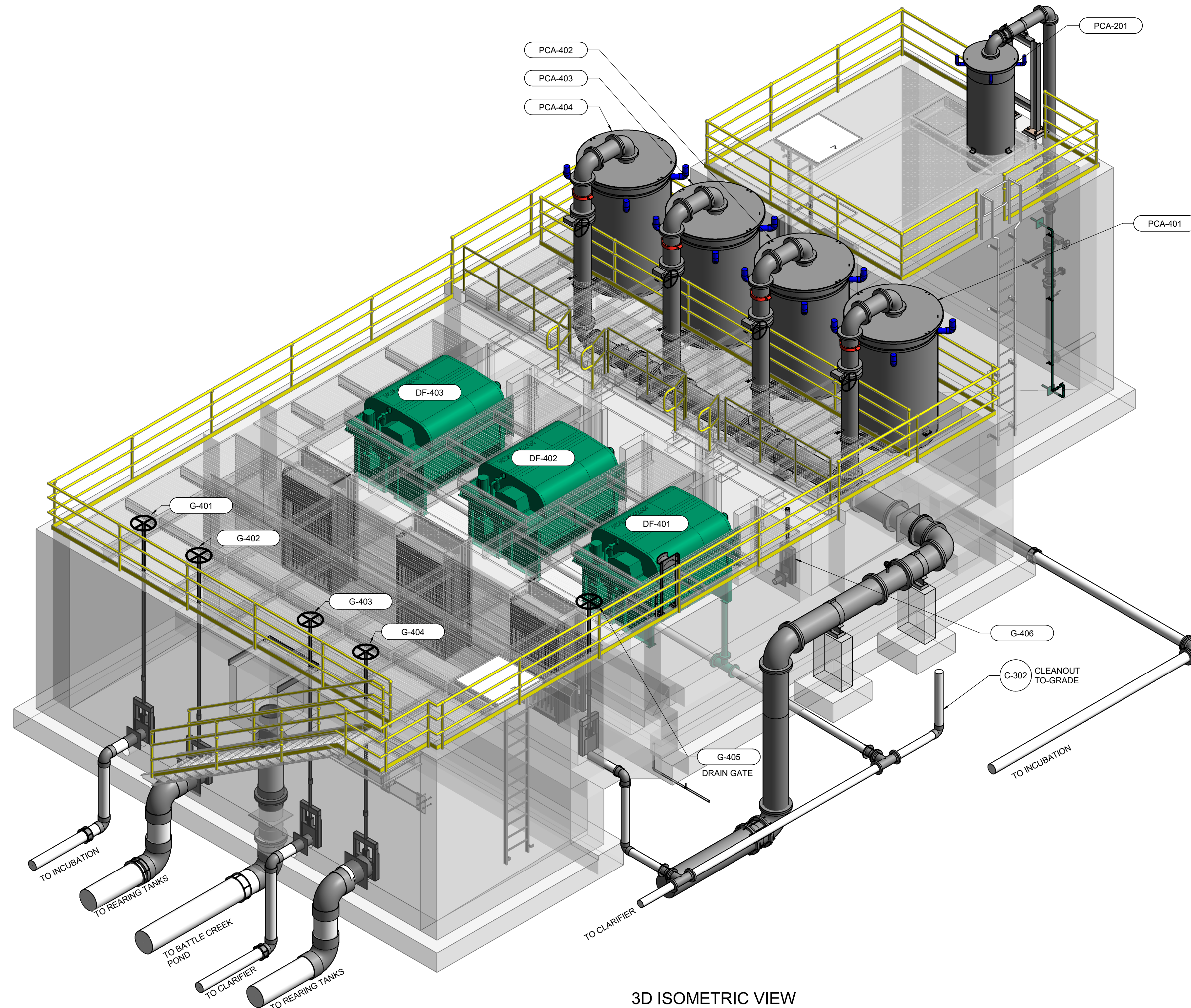
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	Dwn.	Dsgn.	Chkd.	YYYY-MM-DD

Title	
WATER SUPPLY HEADBOX PACKED COLUMN AERATOR DETAILS	
Project No.	Scale
25-128	As indicated
Revision	Drawing No.
	4M-6

C

B

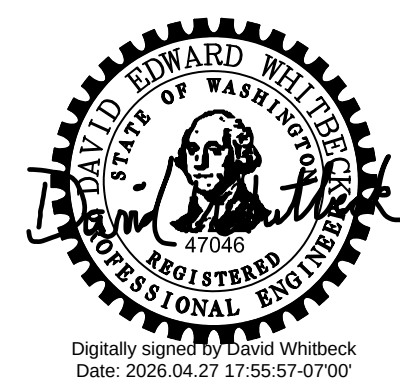
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NO SCALE

[illegible][illegible]

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Digitally signed by David Whitbeck
Date: 2026.04.27 17:55:57-07'00'

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File Name: N/A

MCM
Dwn.

MDV
Dsgn.

DEW
Chkd.

2026.02.26
YYYY.MM.DD

Title

WATER SUPPLY HEADBOX
MECHANICAL ISOMETRIC VIEW

Project No.

25-128

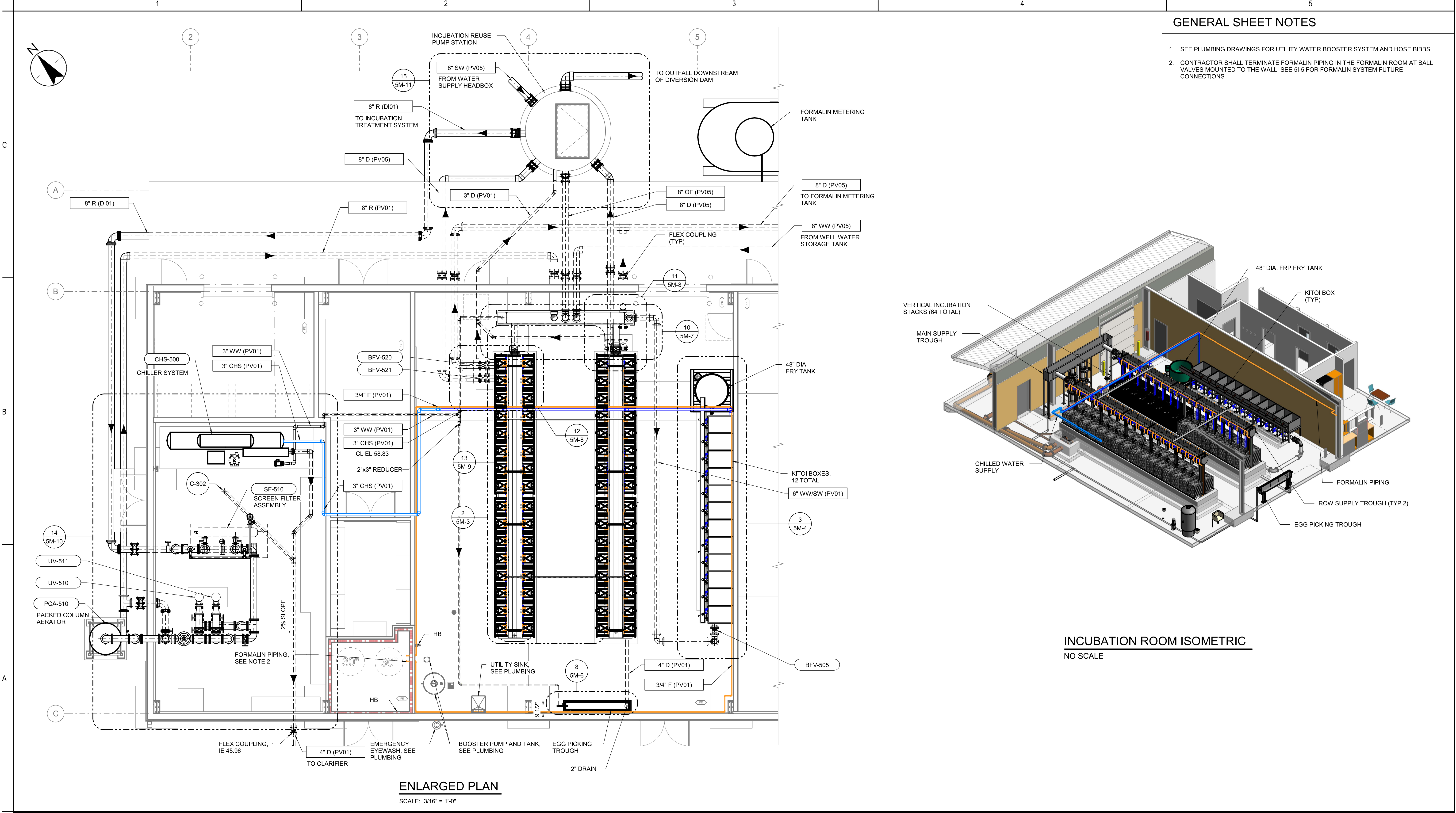
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Scale

Drawing No.

4M-7

Exhibit D-1 Page 96 of 220



Revision <table><tr><td>By</td><td>Appd</td><td>YYYY-MM-DD</td></tr></table>		By	Appd	YYYY-MM-DD	Permit/Seal		Consultant Stantec 1687 114th Ave SE, Suite 100 Bellevue, WA 98004 City, Province/State, Tel: 425-896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.		Client/Project Logo Tulalip Tribes		Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY Tulalip, WA		Title INCUBATION ROOM ENLARGED PLAN AND ISOMETRIC	
By	Appd	YYYY-MM-DD												
By		Appd	YYYY-MM-DD	By		Appd	YYYY-MM-DD	Project No. 224202267		Scale 3/16" = 1'-0"				
Issued		STN DEV 2024.12.27		By		Appd	YYYY-MM-DD	Revision		Drawing No. 5M-2				

File Name: N/A

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2024.12.27

Dwn.

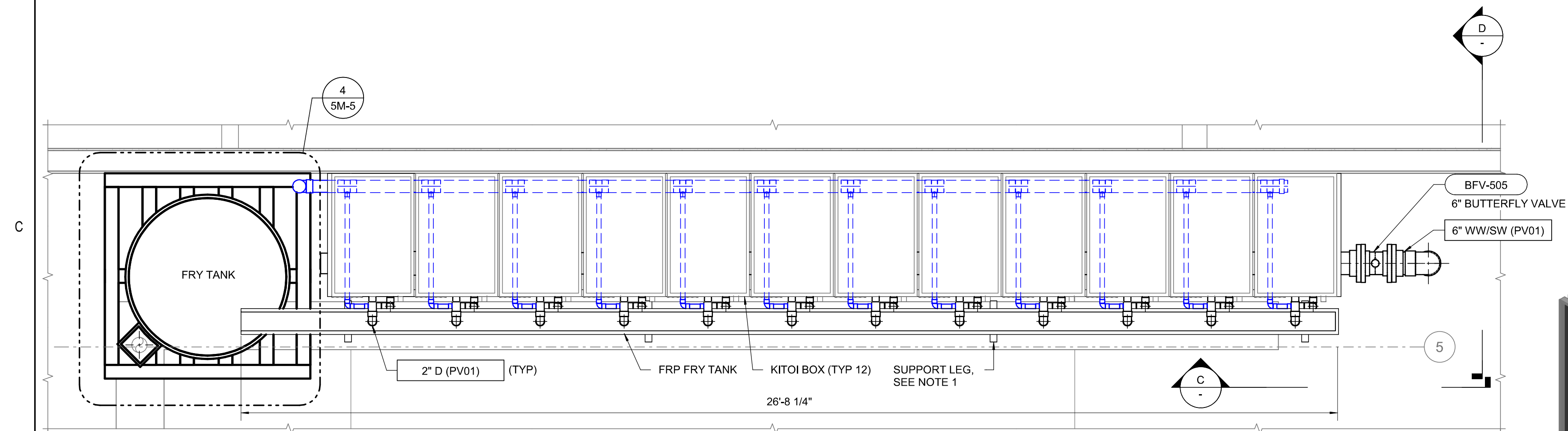
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Chkd.

YYYY-MM-DD

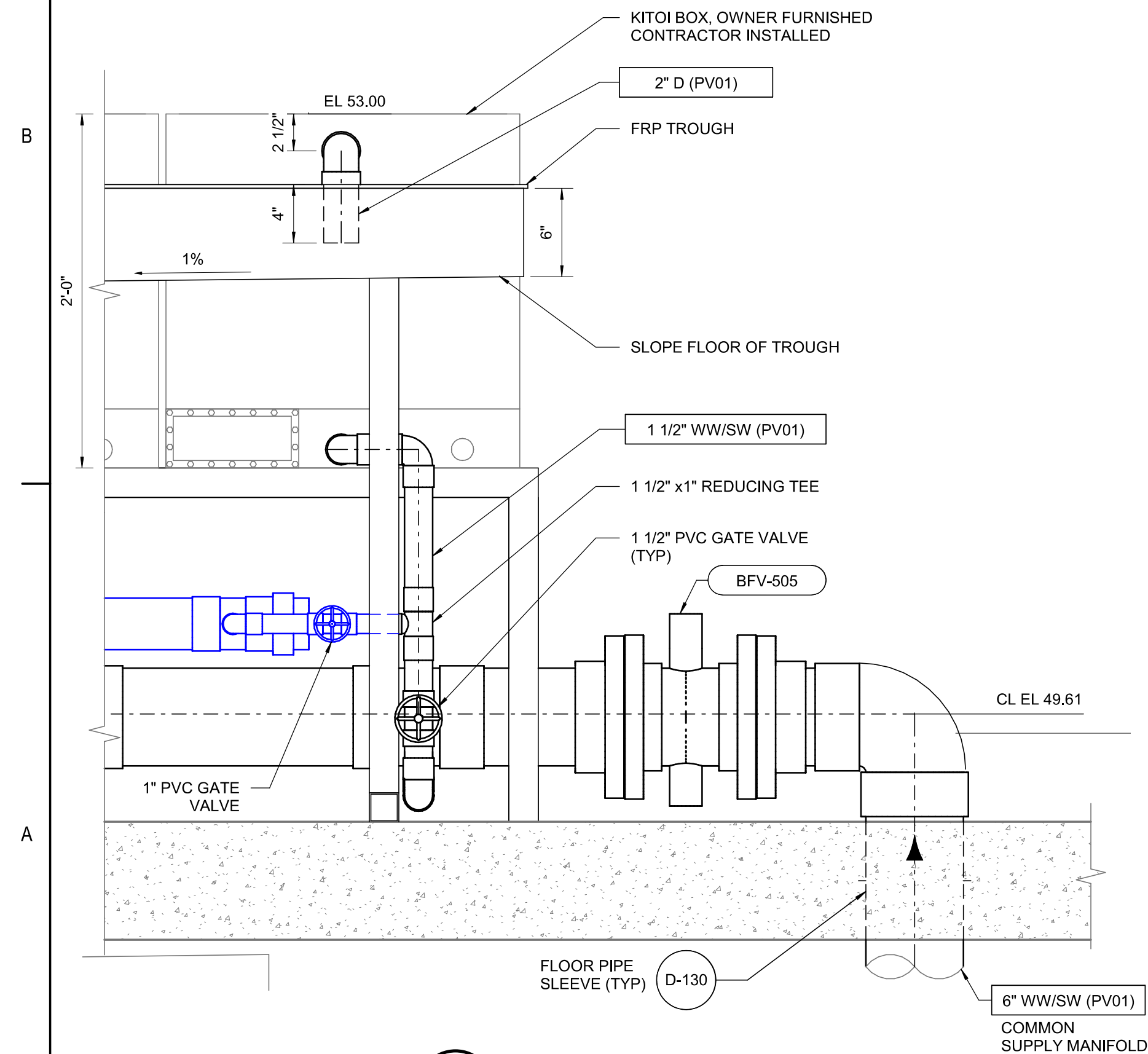
21/02/2024 1:55:06 PM
ORIGINAL SHEET - ANSI D

1. FRP MANUFACTURER TO PROVIDE SUPPORT LEGS FOR FRP TROUGH TO FLOOR AT MAXIMUM 8' OC.



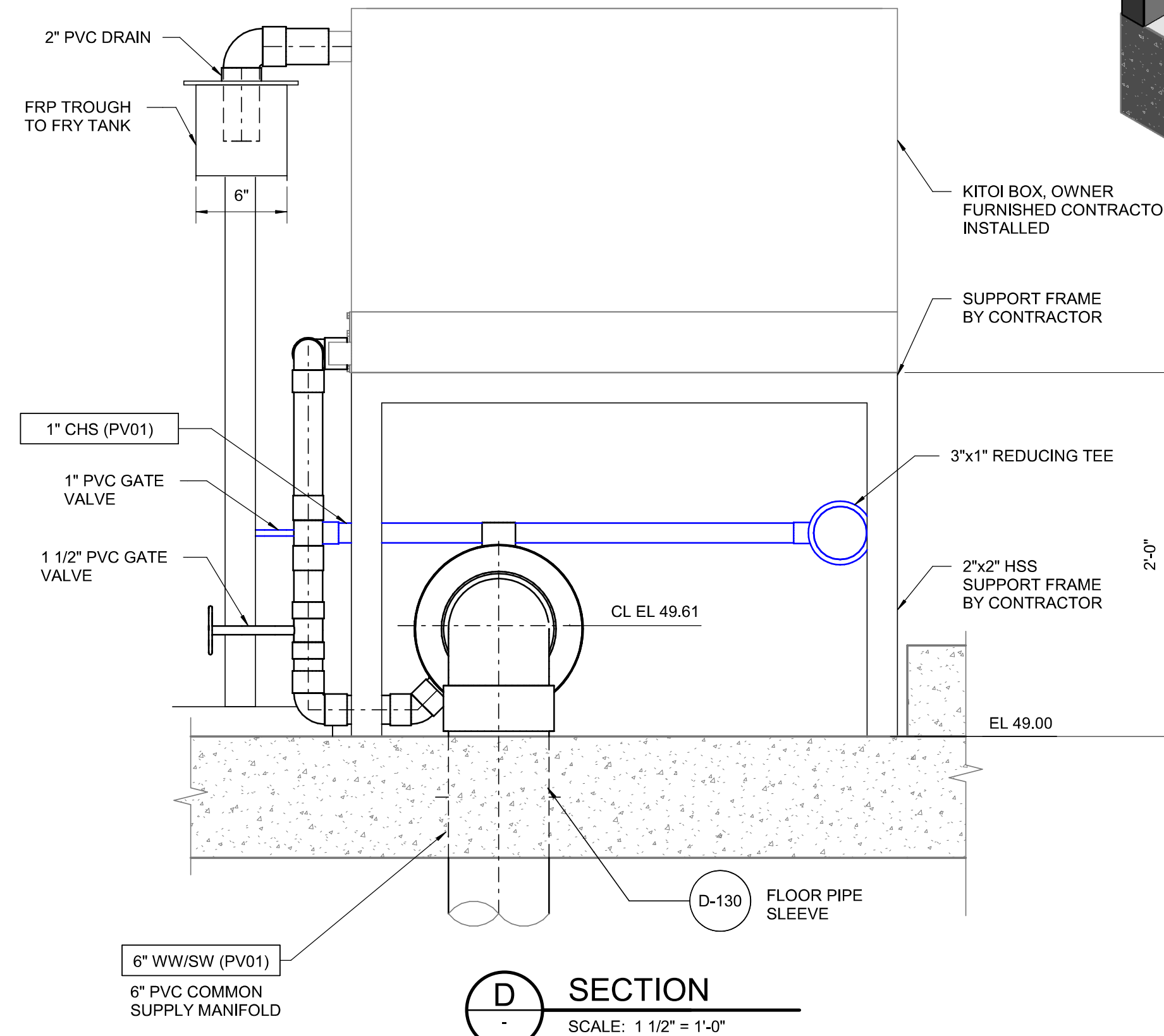
3 INCUBATION BUILDING KITOI BOX PLAN

5M-2 SCALE: 1/2" = 1'-0"



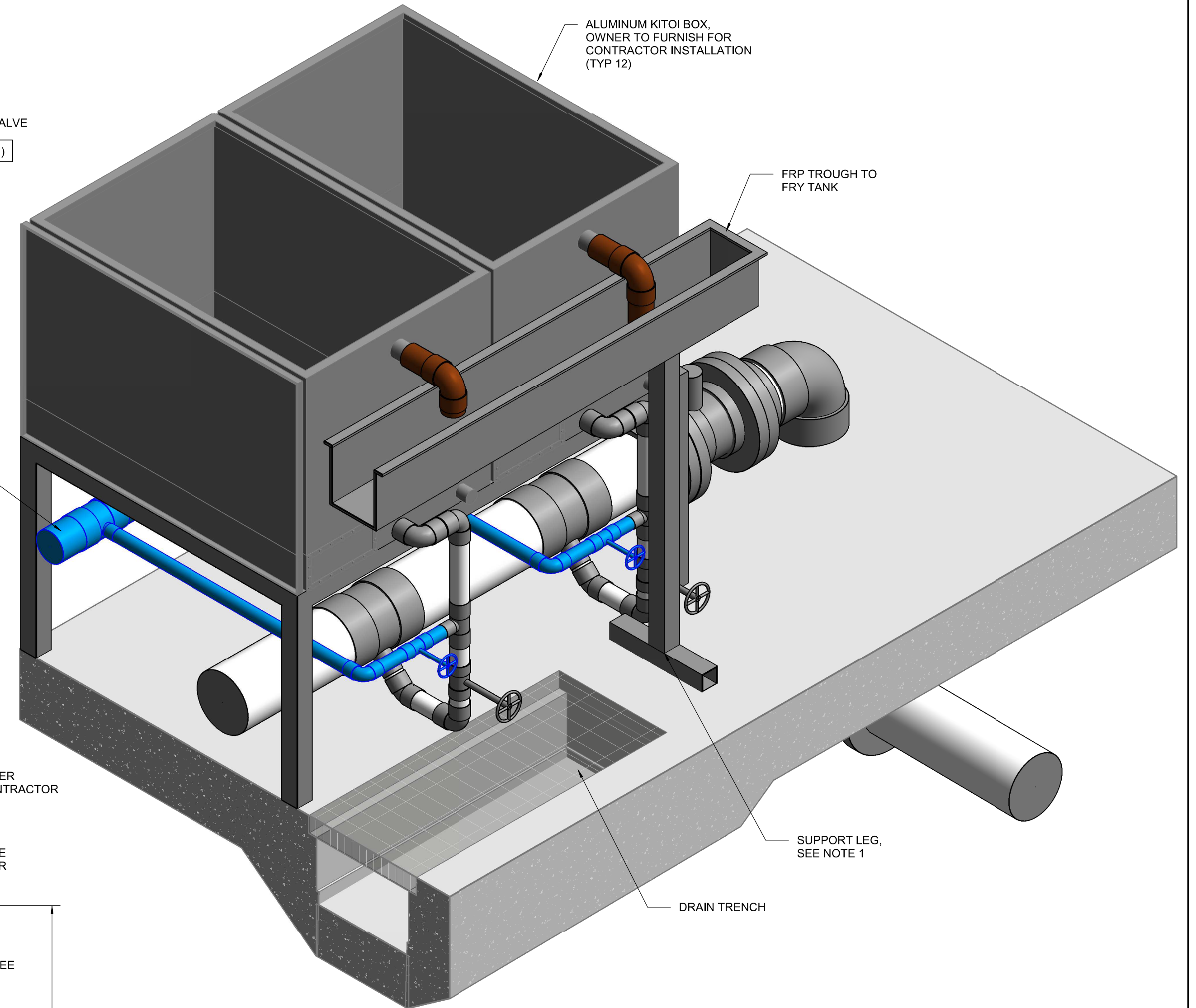
C KITOI BOX ELEVATION

SCALE: 1 1/2" = 1'-0"



D SECTION

SCALE: 1 1/2" = 1'-0"

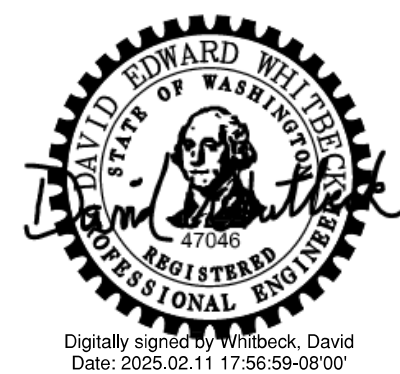


KITOI BOX

NO SCALE

[illegible]

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Date: 2025.02.11 17:56:59-08'00'

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BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

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PP

DEW

SWW

2024.12.27

YYYY.MM.DD

Title

INCUBATION BUILDING KITOI BOX DETAILS

Project No.
224202267

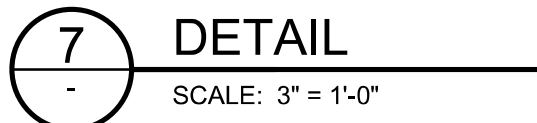
Revision

Scale

As indicated

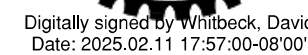
Drawing No.

5M-4



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BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title

INCUBATION BUILDING FRY TANK DETAILS

Project No.
224202267

Revision

Revision

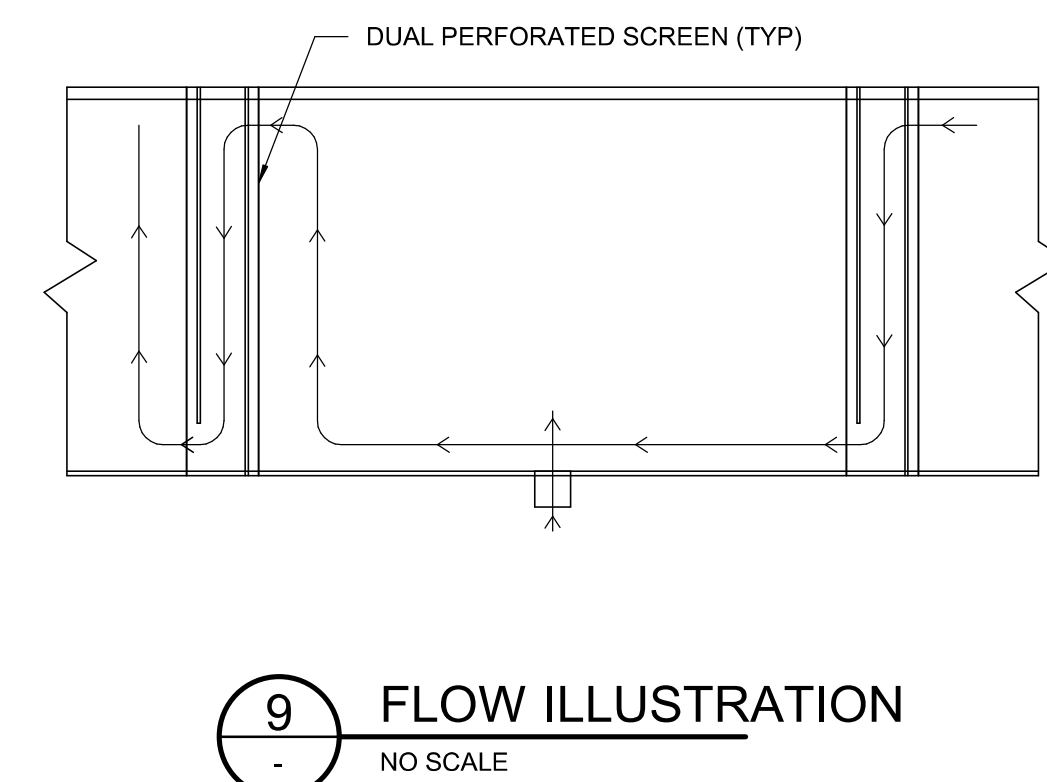
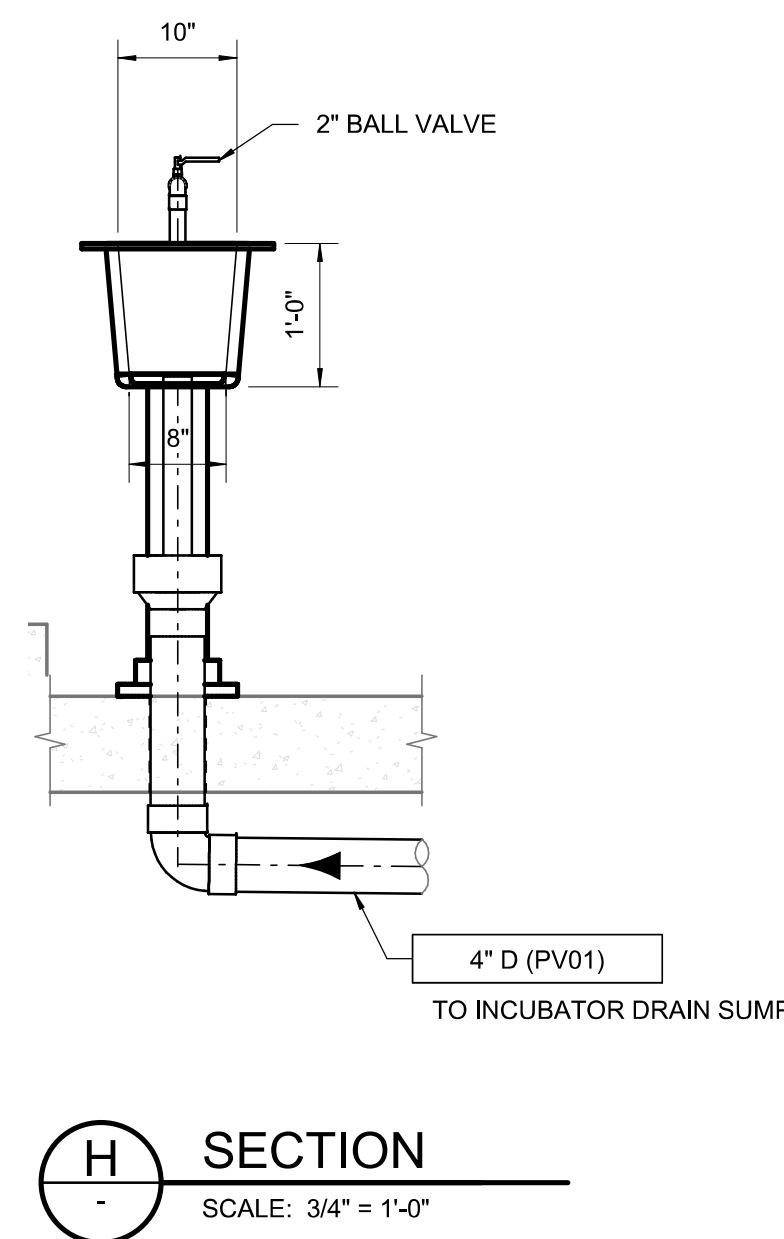
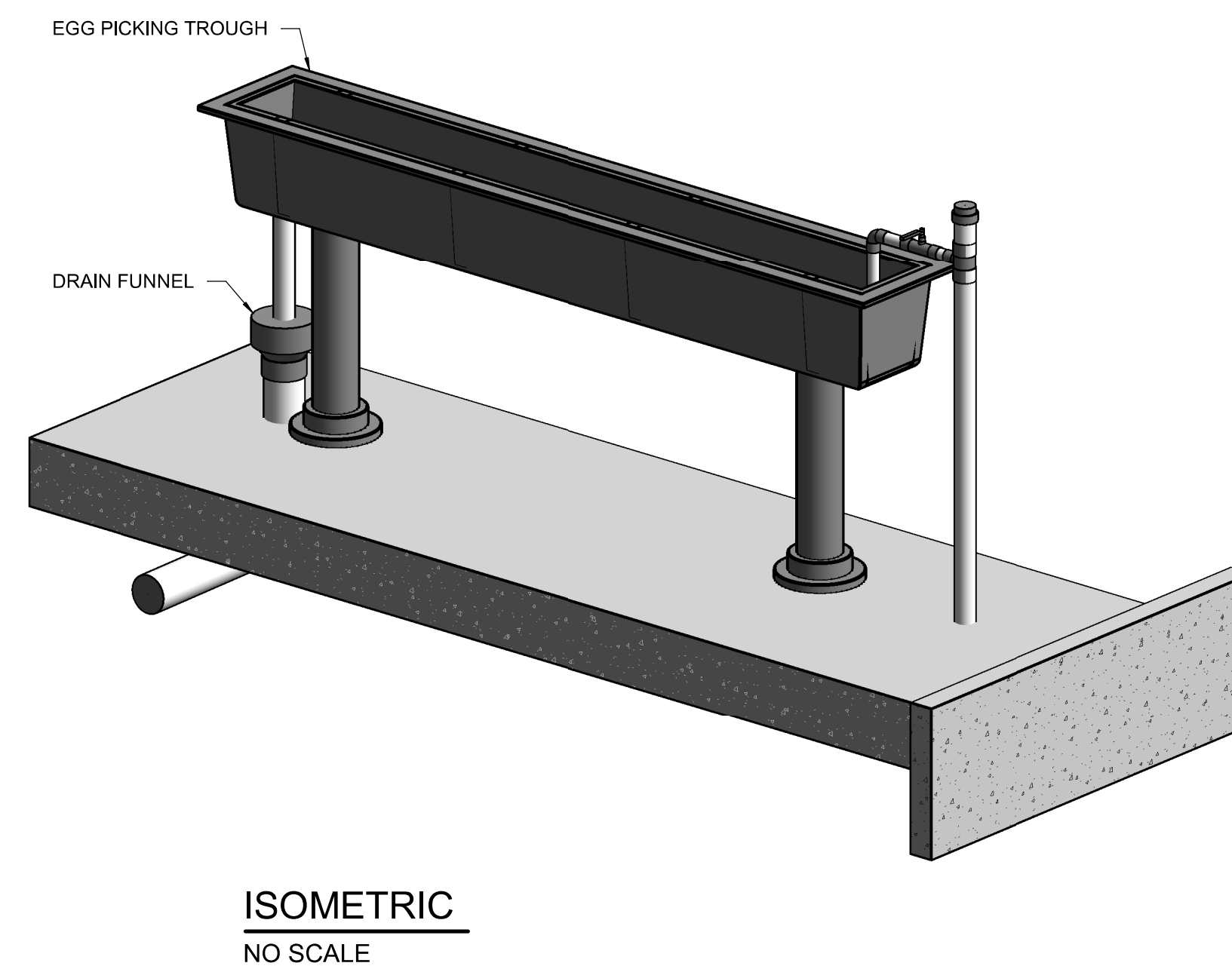
Scale

As indicated

Drawing No.

5M-5

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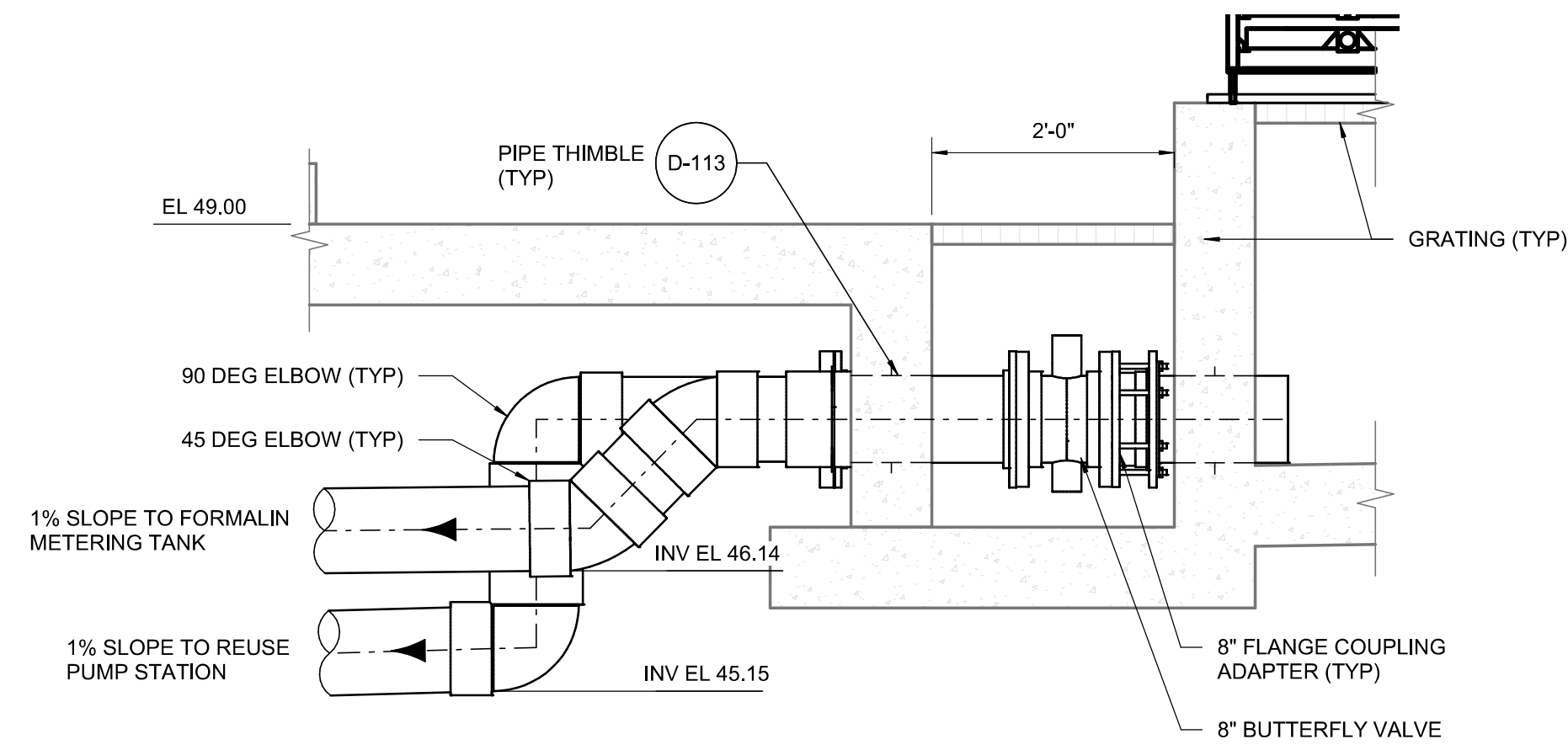


Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
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Project No. 224202267	Scale 3/4" = 1'-0"
Revision	Drawing No.

5M-6

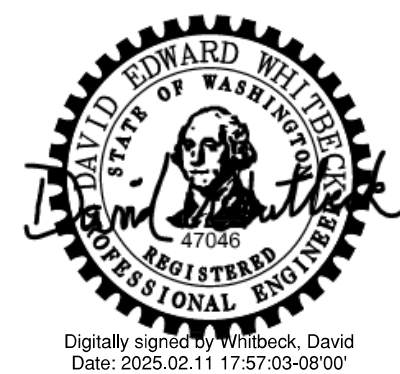


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SCALE: 3/4" = 1'-0"

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A FINAL DESIGN	STN	DEW	2024.12.27
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Tulalip, WA

File Name: N/A

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SWW

2024.12.27

Title

INCUBATION BUILDING DRAIN VALVE VAULT PLAN AND SECTIONS

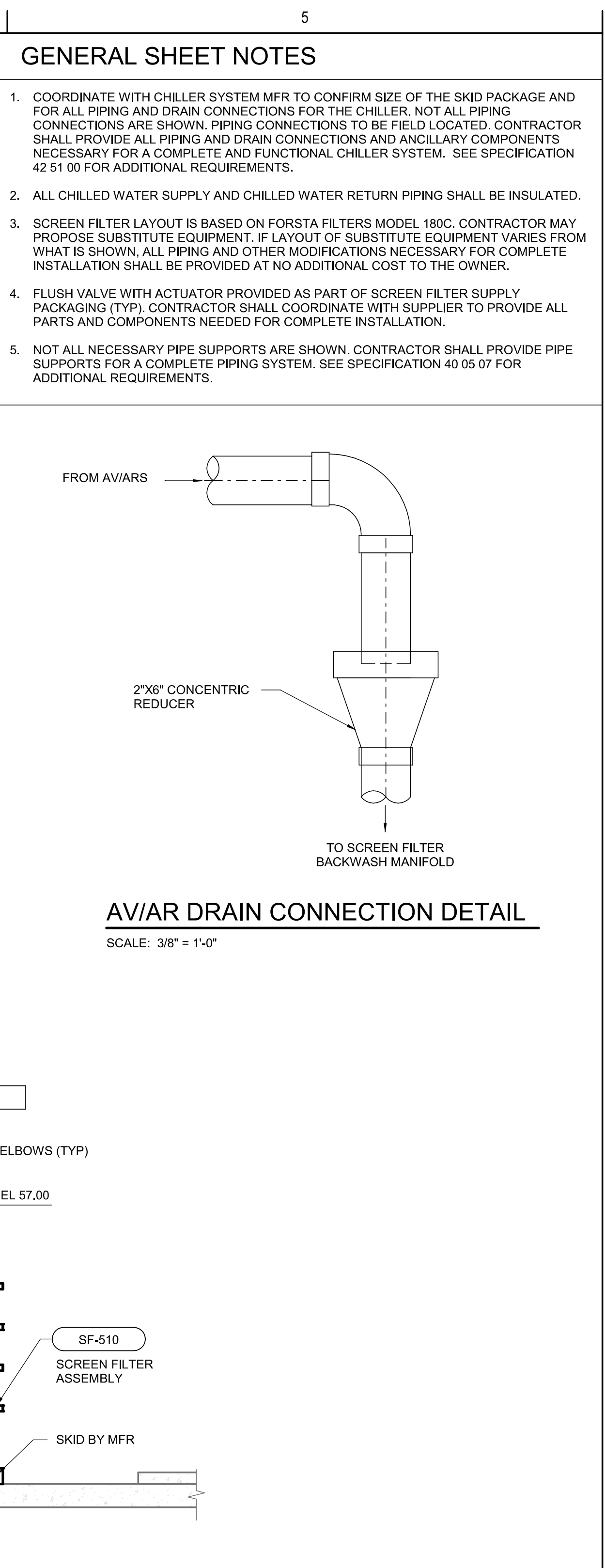
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Revision

Scale
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Drawing No.

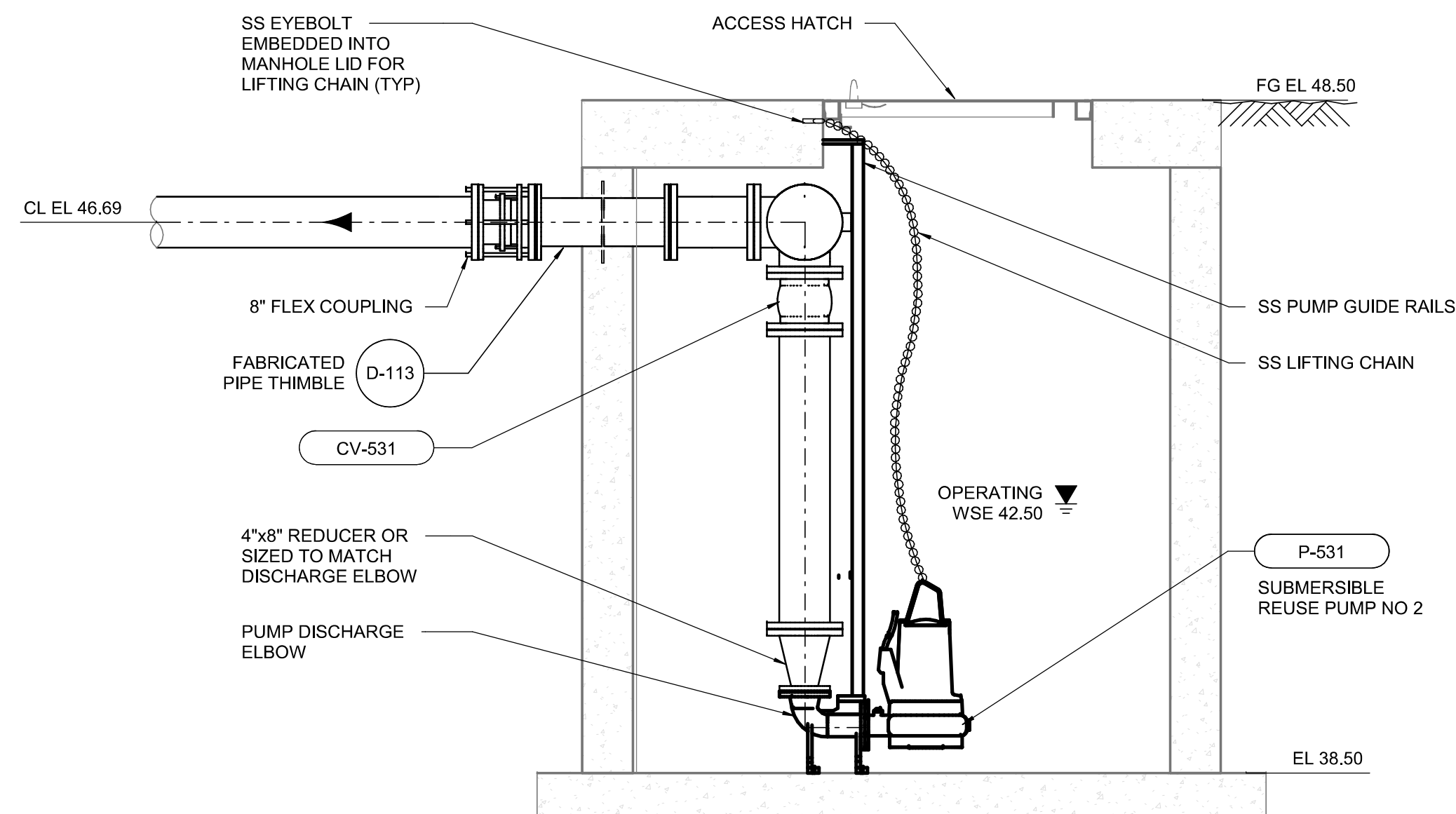
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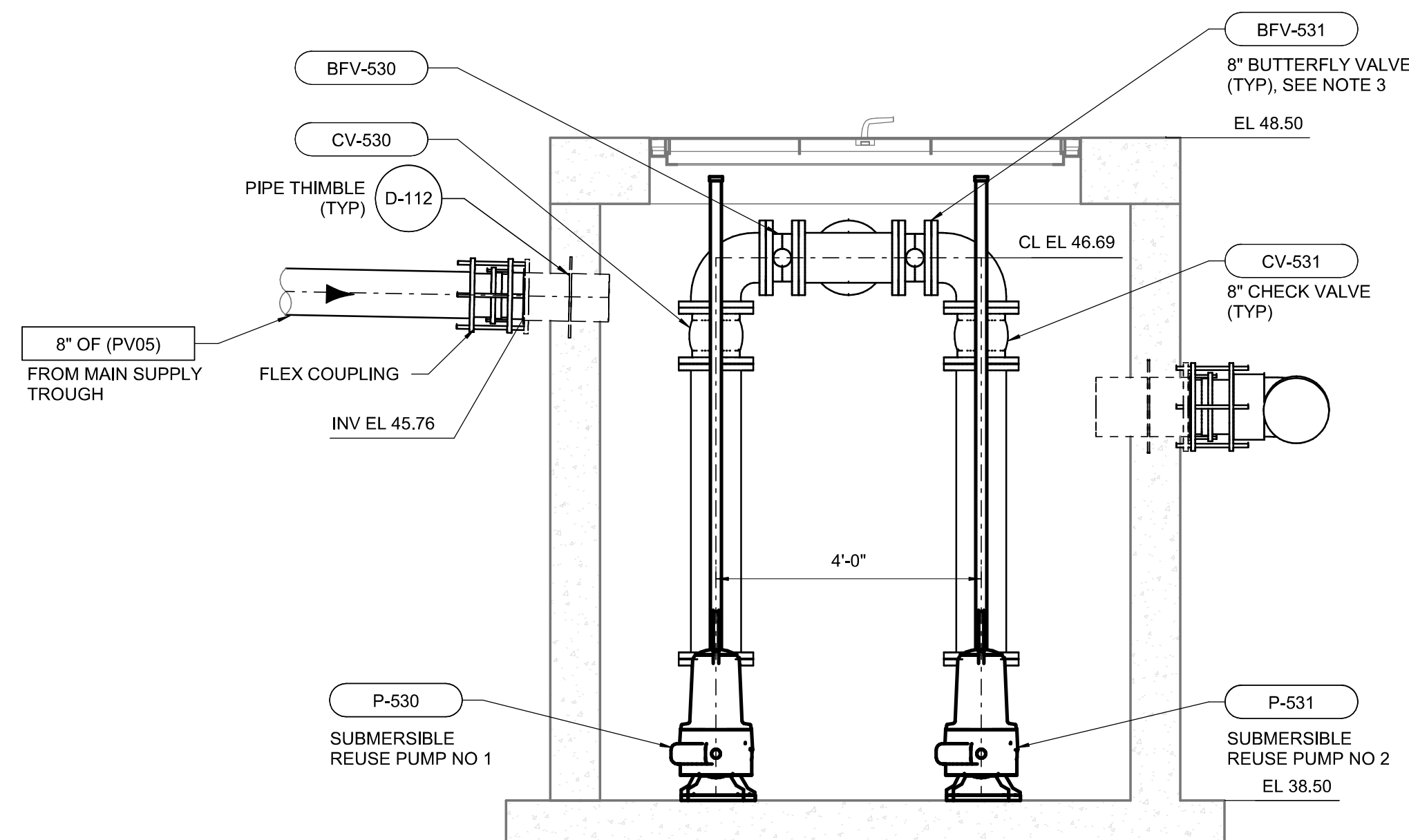
U SECTION
- SCALE: 3/8" = 1'-0"

Permit/Seal  Digitally signed by: Whitbeck, David Date: 2025.02.11 17:57:06-08'00'	Consultant  Stantec 1687 114th Ave SE, Suite 100 Bellevue, WA 98004 City, Province/State, Tel: 425-896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo 	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY Tulalip, WA <table><tr><td>File Name: N/A</td><td>PP</td><td>DEW</td><td>SWW</td><td>2024.12.27</td></tr><tr><td></td><td>Dwn.</td><td>Dsgn.</td><td>Chkd.</td><td>YYYY.MM.DD</td></tr></table>	File Name: N/A	PP	DEW	SWW	2024.12.27		Dwn.	Dsgn.	Chkd.	YYYY.MM.DD	Title INCUBATION BUILDING MECHANICAL ROOM PLAN, SECTIONS AND 3D VIEW <table><tr><td>Project No. 224202267</td><td>Scale 3/8" = 1'-0"</td></tr><tr><td>Revision</td><td>Drawing No. 5M-10</td></tr></table>	Project No. 224202267	Scale 3/8" = 1'-0"	Revision	Drawing No. 5M-10
File Name: N/A	PP	DEW	SWW	2024.12.27														
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD														
Project No. 224202267	Scale 3/8" = 1'-0"																	
Revision	Drawing No. 5M-10																	

1. PUMP STATION LID AND HATCH SHALL BE INSTALLED FLUSH WITH SURROUNDING GRADE AND HS-20 RATED.
2. FOR DRAIN PIPE CONNECTIONS TO WET WELL, CORE DRILL OPENINGS AND PROVIDE KOR-N-SEAL BOOT, OR EQUIVALENT, WITH THE PIPE.
3. PROVIDE BUTTERFLY VALVES WITH MANUAL HANDWHEEL FACING THE ACCESS HATCH.
4. MOUNT PUMP CONTROL PANEL ALONG INCUBATION BUILDING EXTERIOR WALL. SEE PAIDS FOR INSTRUMENTS AND ALARMS ASSOCIATED WITH PUMPS AND WET WELL.



SECTION
SCALE: 1/2" = 1'-0"



15 REUSE PUMP STATION PLAN
5M-2 SCALE: 1/2" = 1'-0"

Consultant



Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Project No. 224202267	Scale 1/2" = 1'-0"
Revision	Drawing No.

5M-11

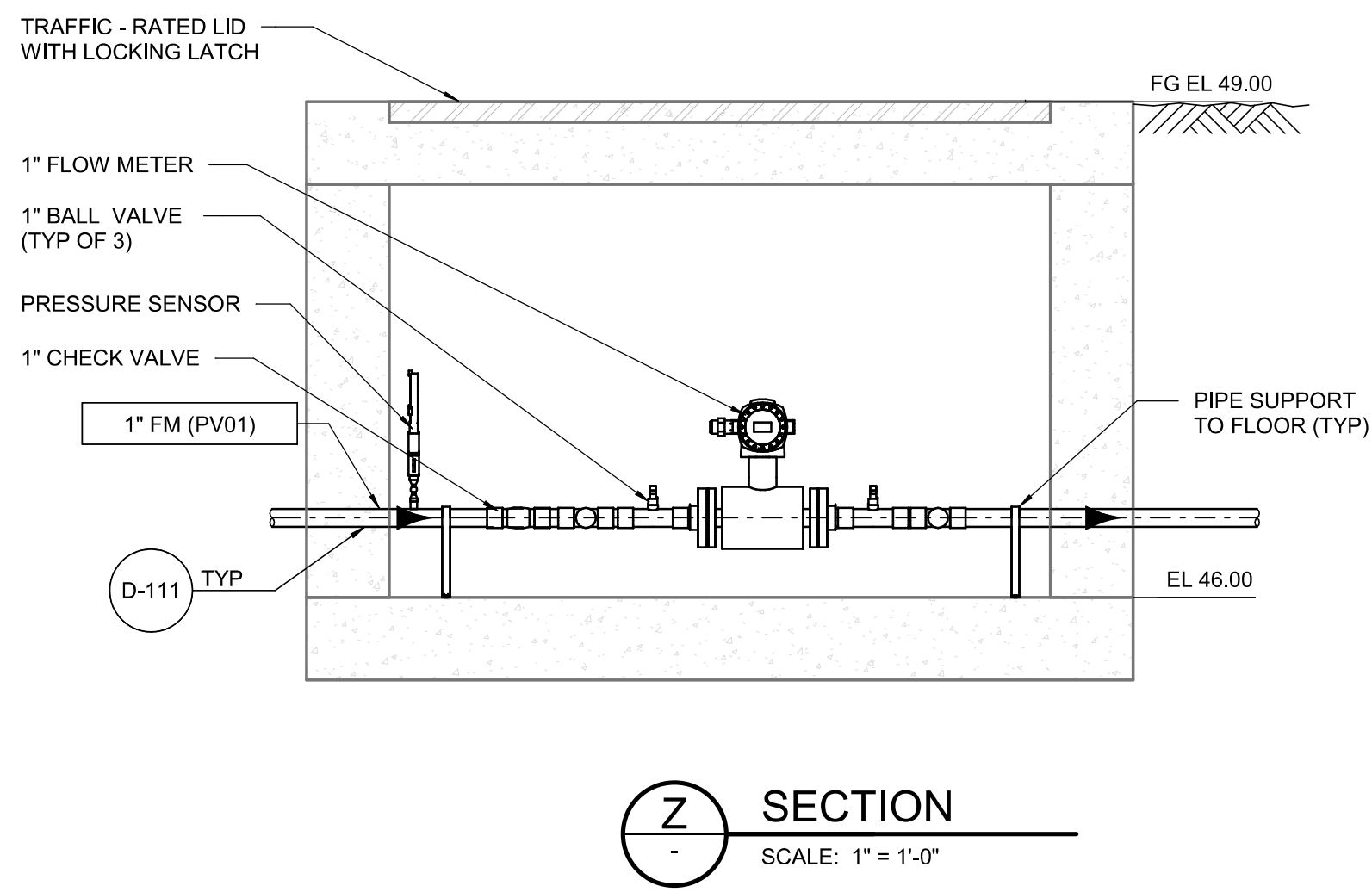
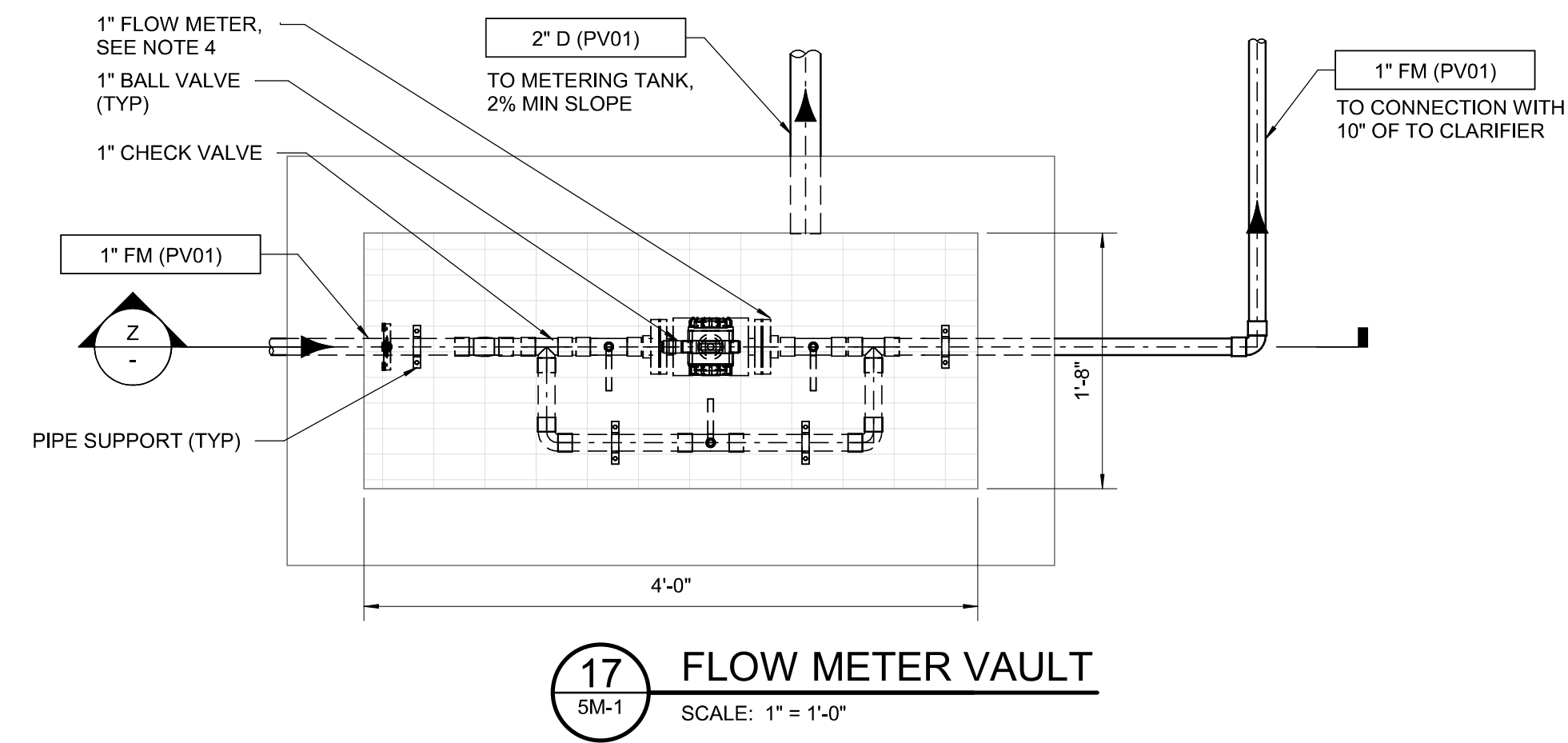
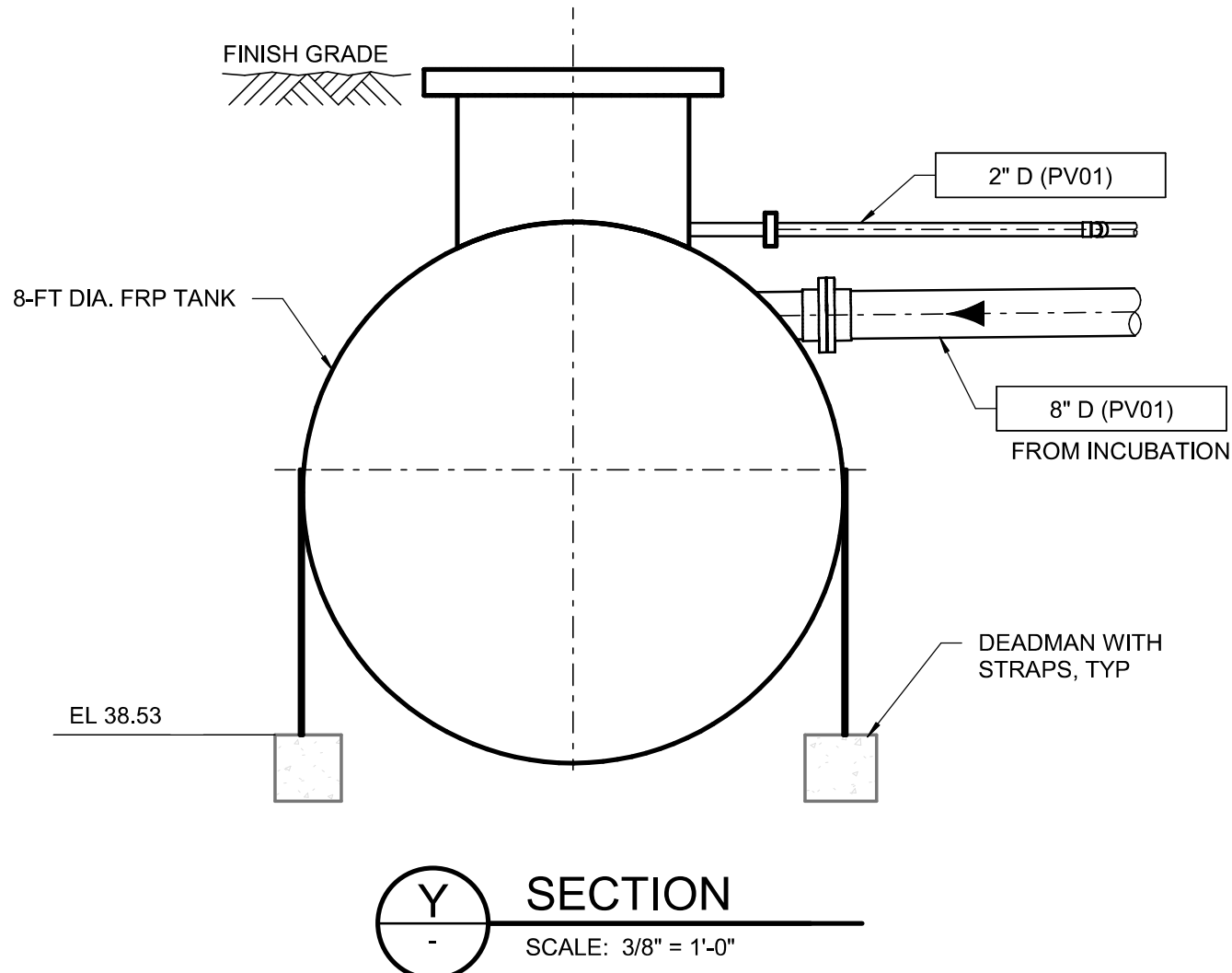
SEE SECTION 33 16 00 FRP STORAGE TANK FOR ADDITIONAL REQUIREMENTS.

COORDINATE ALL PIPING CONNECTIONS WITH TANK SUPPLIER.

THE INTENT IS FOR THE PUMP TO BE REMOVABLE THROUGH THE ACCESS MANWAY WITHOUT HAVING TO ENTER THE TANK. PROVIDE EYEBOLT FOR REMOVAL CHAIN, BRAIDED HOSE WITH COMPATIBLE FITTINGS, AND RATED RECEPTACLE FOR DISCONNECTION OF POWER CABLE.

PROVIDE REMOTE MOUNTED TRANSMITTER LOCATED ALONG BUILDING WALL NEAR VAULT.

PROVIDE STAINLESS STEEL MOUNTING BRACKET FOR LEVEL INDICATOR AND LOW LEVEL LOAT SWITCH. SEE SHEET 5I-2. COORDINATE MOUNTING LOCATIONS WITH FRP STORAGE TANK SUPPLIER.



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File Name: N/A	PP	DEW	SWW	2024.12.27
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Project No.
22420226

Revision

Scale
As indicated

Drawing No.

5M-12



A	FINAL DESIGN	MCM	DEW
Issued		By	Appd
			2026.02.26
			YYYY.MM.DD



Tulalip, WA

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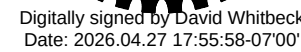
Revision

Drawing No.

6M-3



SCALE: 1/4" = 1'-0"

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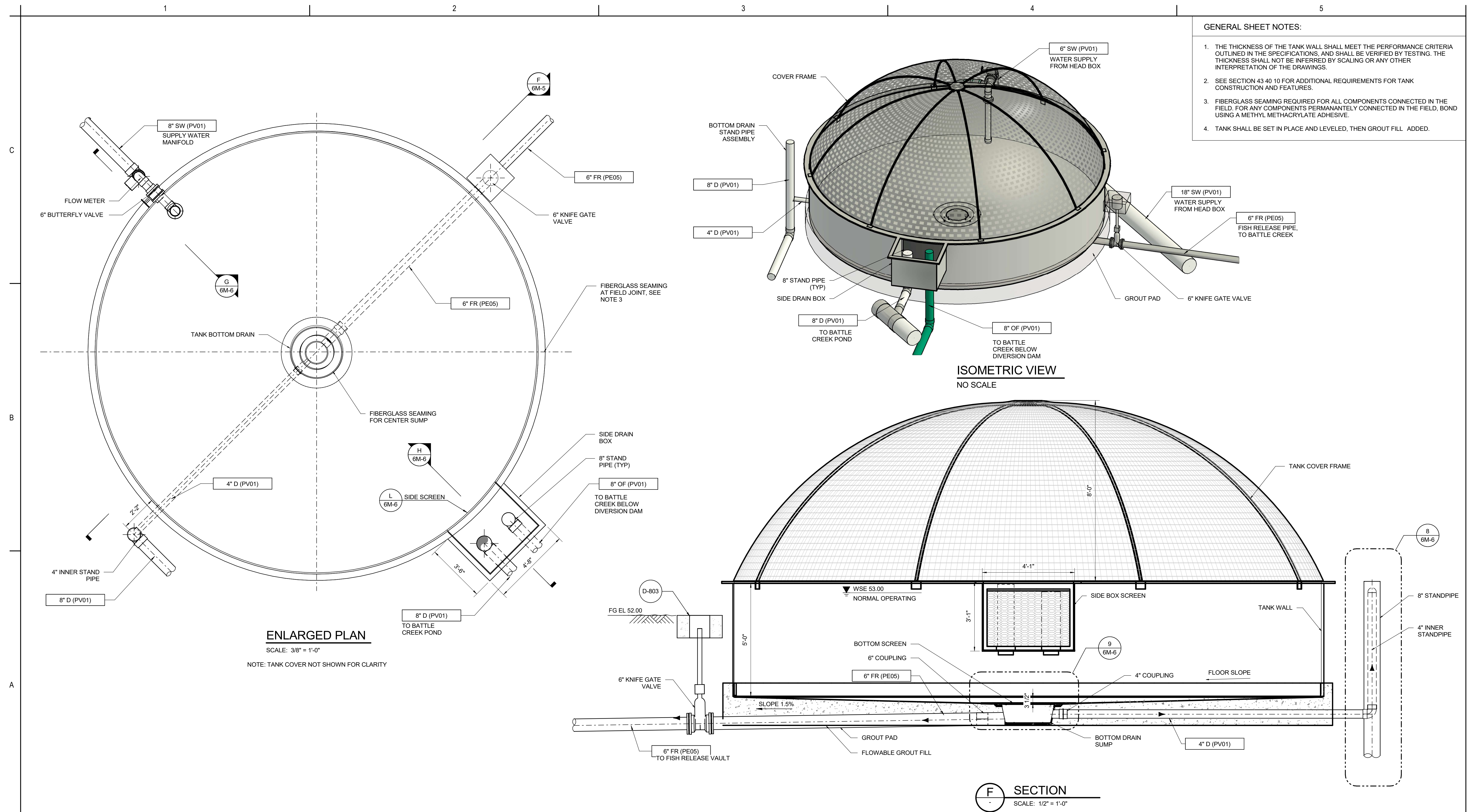
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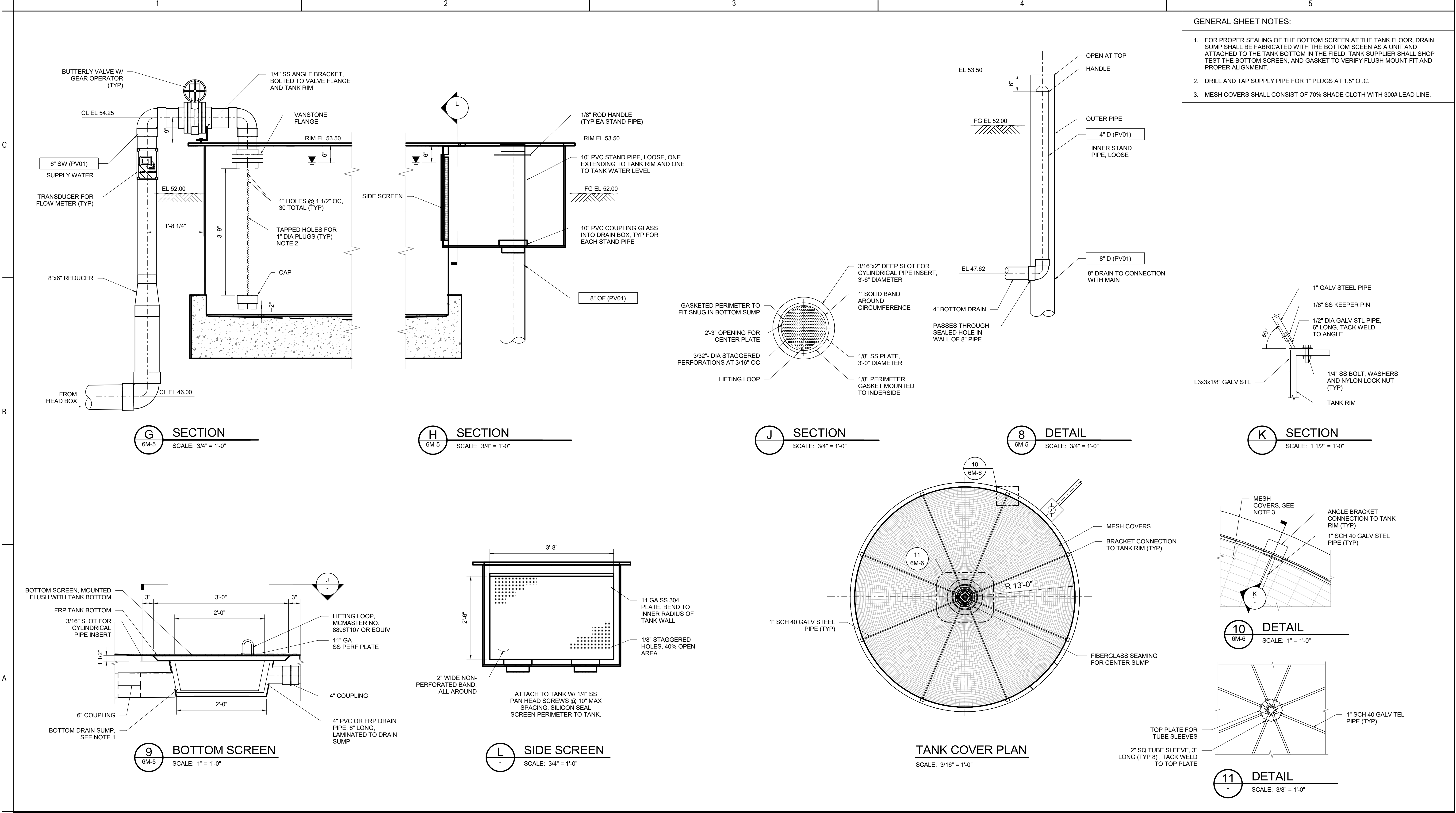


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Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

6M-4

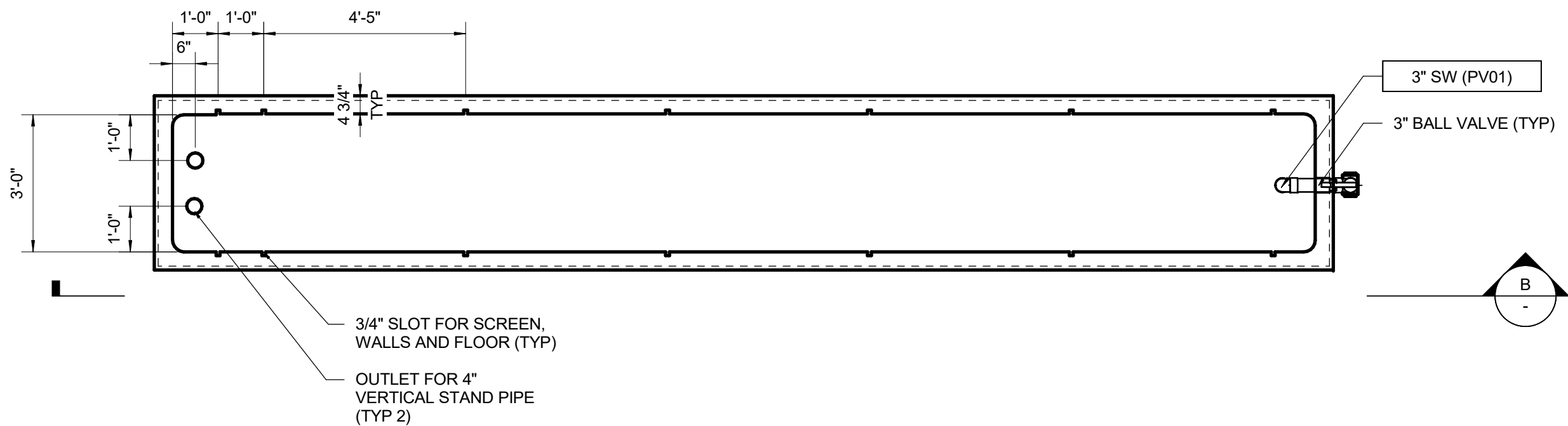
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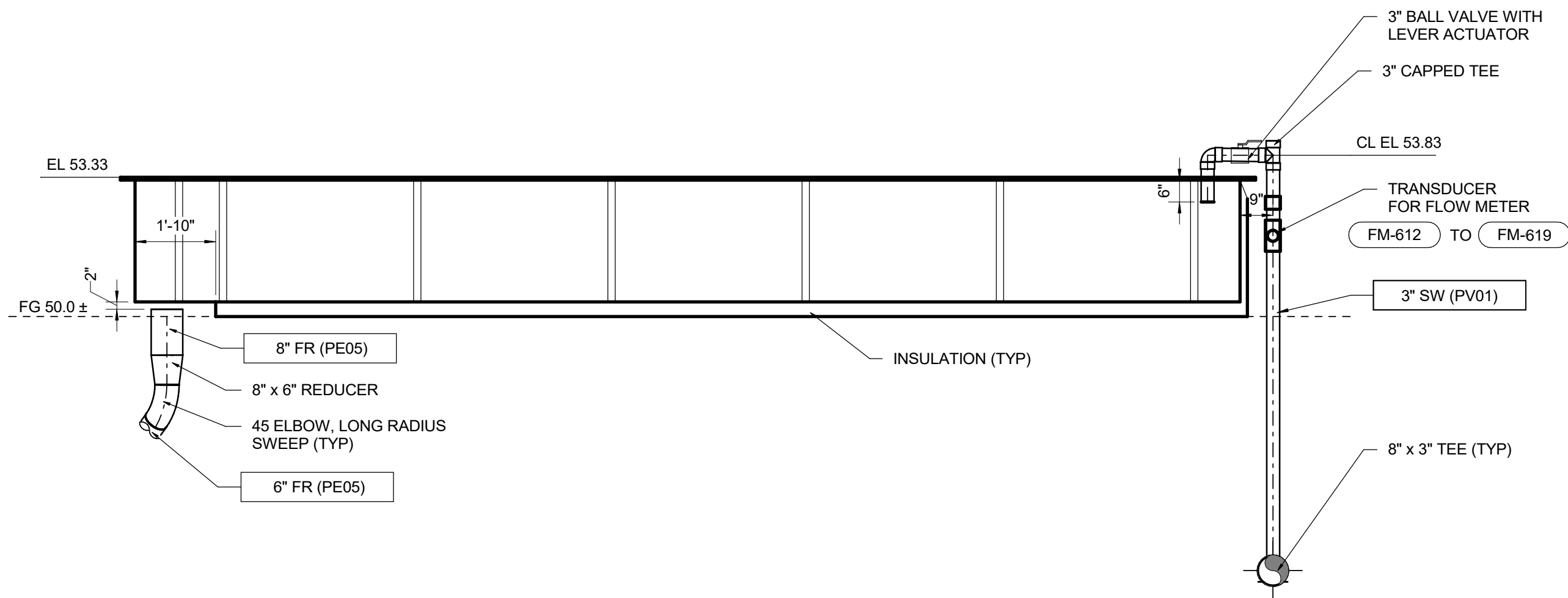
- GENERAL SHEET NOTES:
- FOR PROPER SEALING OF THE BOTTOM SCREEN AT THE TANK FLOOR, DRAIN SUMP SHALL BE FABRICATED WITH THE BOTTOM SCREEN AS A UNIT AND ATTACHED TO THE TANK BOTTOM IN THE FIELD. TANK SUPPLIER SHALL SHOP TEST THE BOTTOM SCREEN, AND GASKET TO VERIFY FLUSH MOUNT FIT AND PROPER ALIGNMENT.
 - DRILL AND TAP SUPPLY PIPE FOR 1" PLUGS AT 1.5" O. C.
 - MESH COVERS SHALL CONSIST OF 70% SHADE CLOTH WITH 300# LEAD LINE.

Revision <table><tr><td>By</td><td>Appd</td><td>YYYY-MM-DD</td></tr></table>		By	Appd	YYYY-MM-DD	Permit/Seal Digitally signed by David Wellendorf Date: 2026.04.27 17:55:58-0700		Consultant 1471 Shoreline Dr. Ste 100, Boise, ID 83702 (208) 342-4214 mcmillen.com		Client/Project Logo		Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY Tulalip, WA File Name: N/A MCM Dwn. MDV Dgn. DEW Chkd. 2026.02.26 YYYY-MM-DD		Title REARING TANK DETAILS - II Project No. 25-128 Revision Scale As indicated Drawing No. 6M-6	
By	Appd	YYYY-MM-DD												

1. SEE SPEC SECTION 06 80 00 FOR ADDITIONAL REQUIREMENTS FOR FRP EARLY REARING TROUGHS.
2. PROVIDE SCREENS FOR THE GUIDE SLOTS, 7 TOTAL PER TROUGH. SCREENS SHALL BE PERFORATED PLATE WITH 1/8" DIAMETER HOLES AT 3/16" OC (40% OPEN AREA). SCREENS SHALL BE FABRICATED FROM 1/8"-THICK PLATE, ALUM ALLOY NO. 5052, AND SHALL BE Banded AROUND THE PERIMETER. ALL EDGES AND CORNERS SHALL BE GROUND SMOOTH.



2 EARLY REARING TROUGH (3' X 3' X 25'), ERT-2 THRU ERT-9
6M-1 SCALE: 3/8" = 1'-0"

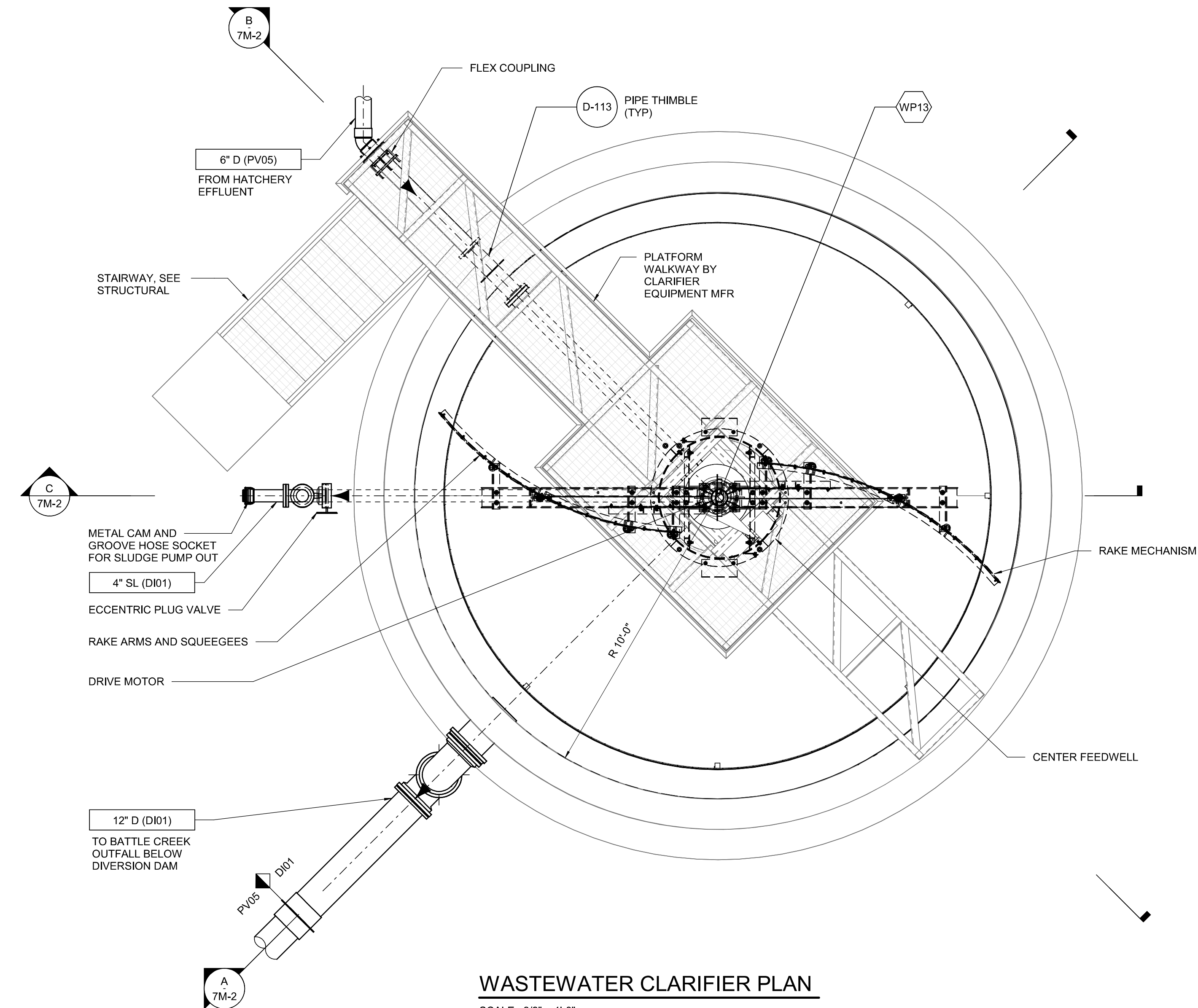
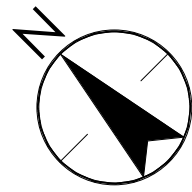


B SECTION
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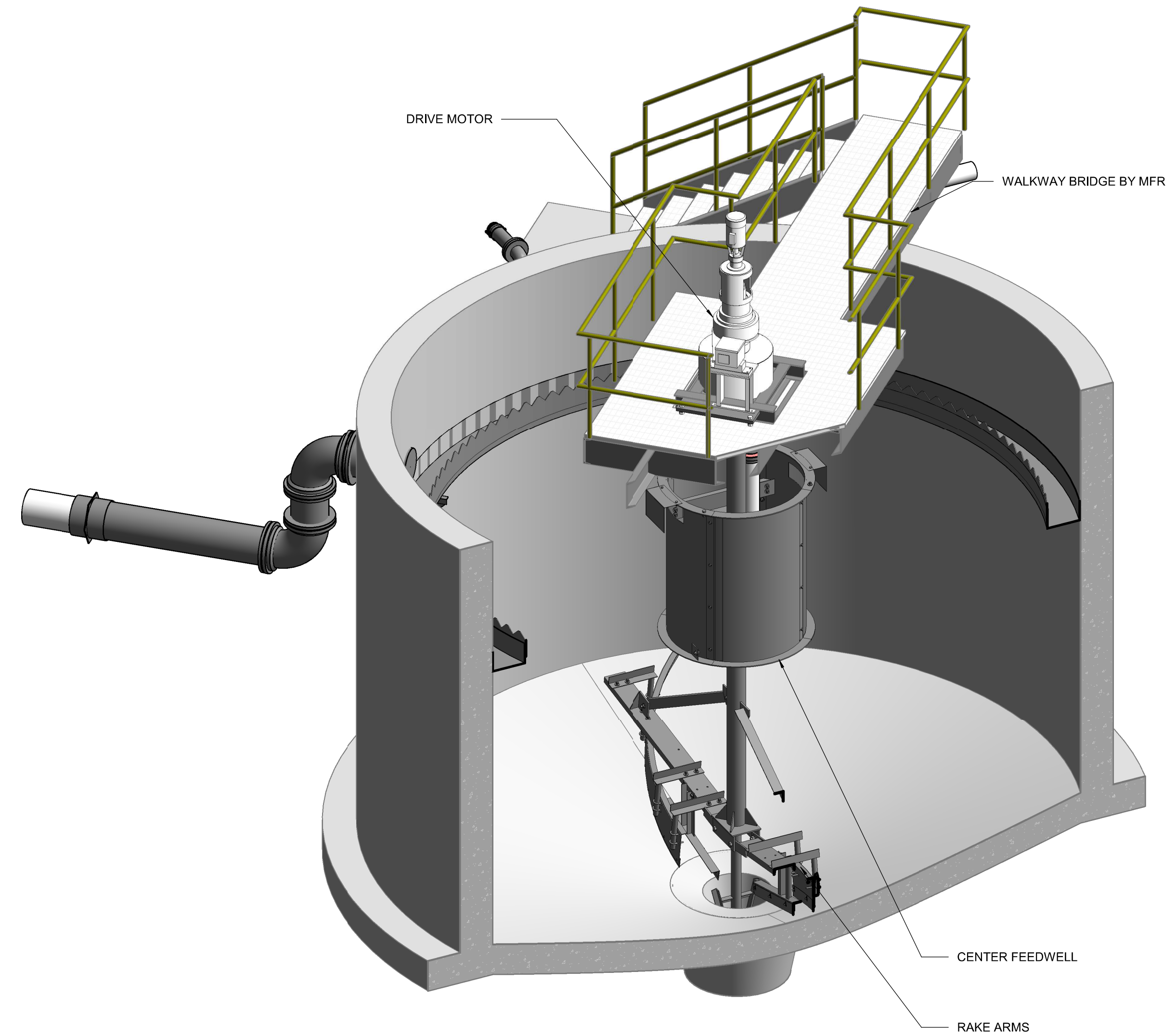
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	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

6M-8



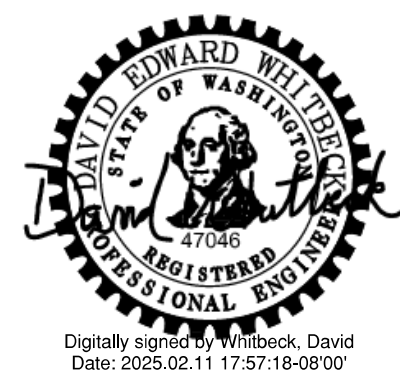
WASTEWATER CLARIFIER PLAN

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



3D VIEW

NO SCALE

[illegible][illegible]

Consultant



Stantec
1687 114th Ave SE, Suite 100
Bellevue, WA 98004
City, Province/State,
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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A	PP	DEW	SWW	2024.12.27
	Dwn.	Dsan.	Chkd.	YYYY.MM.DD

Title
WASTEWATER CLARIFIER
MECHANICAL PLAN

Project No.
224202267

Revision

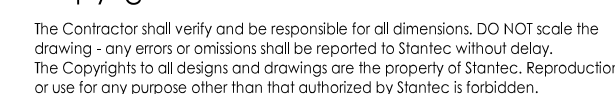
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Drawing No.

7M-1

[illegible]

Consultant



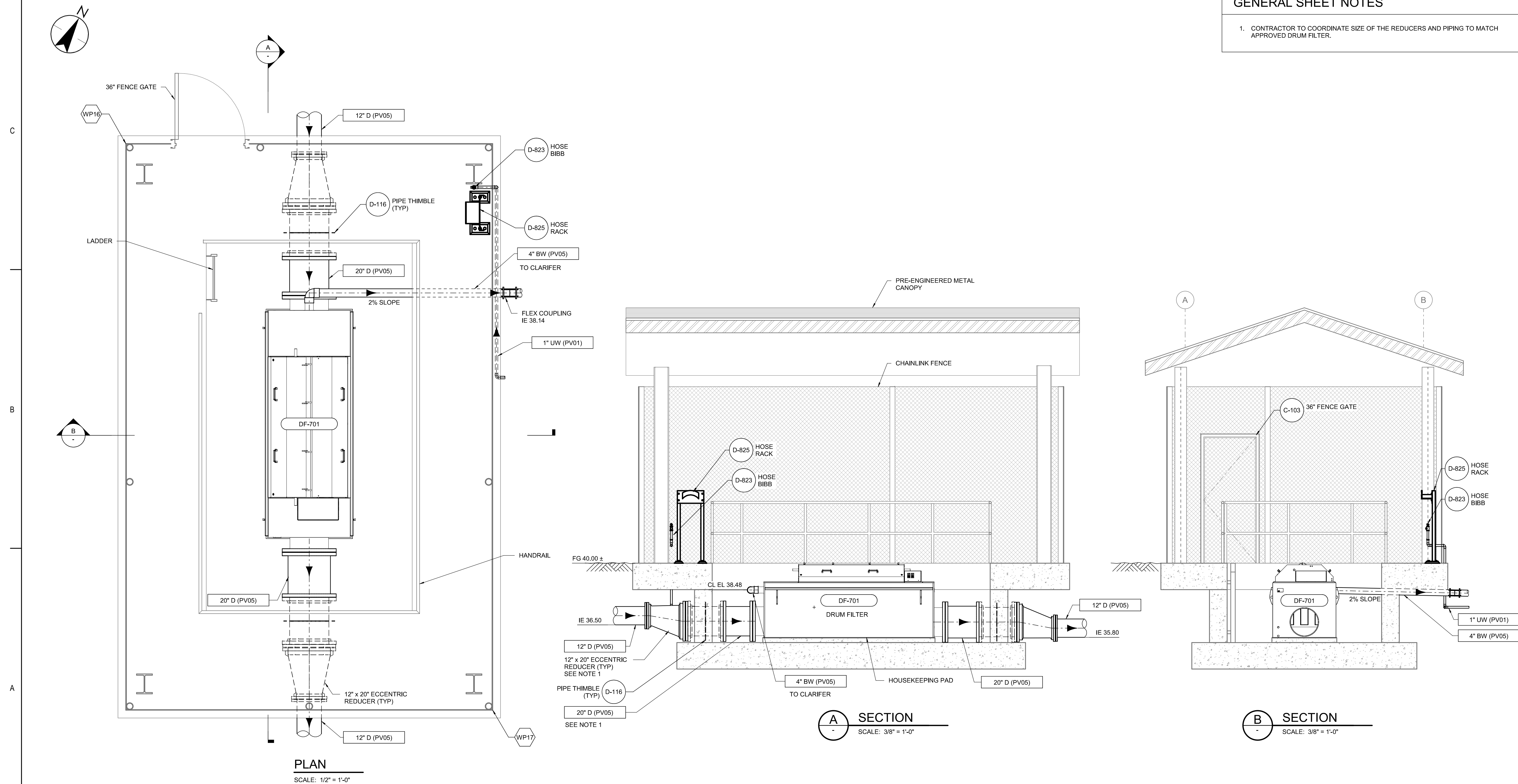
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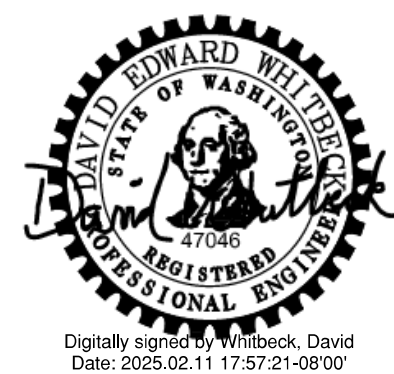
7M-2

GENERAL SHEET NOTES

1. CONTRACTOR TO COORDINATE SIZE OF THE REDUCERS AND PIPING TO MATCH APPROVED DRUM FILTER.

[illegible]

Permit/Seal



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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Tulalip, WA

File Name: N/A

— —

$$\frac{1}{M}$$

Dg

SW

Ch

2024.12.27

kd. YYYY.MM.D

Title

EFFLUENT DRUM FILTER PLAN AND SECTIONS

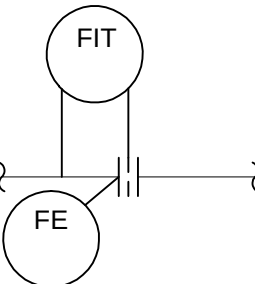
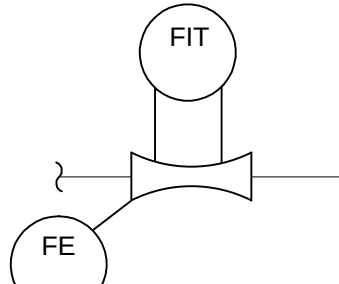
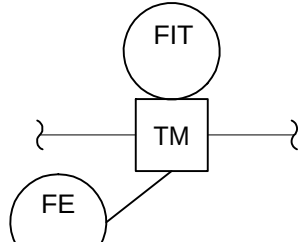
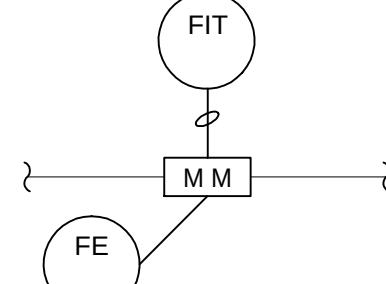
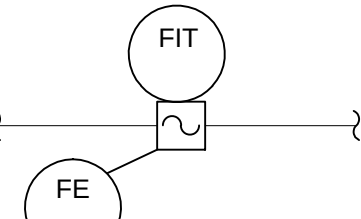
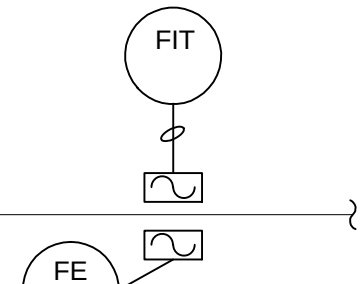
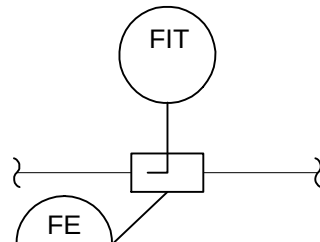
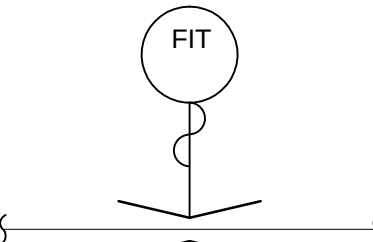
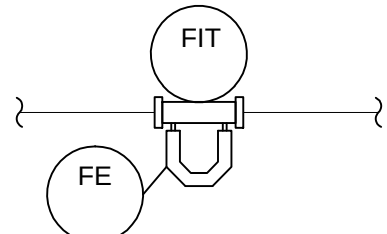
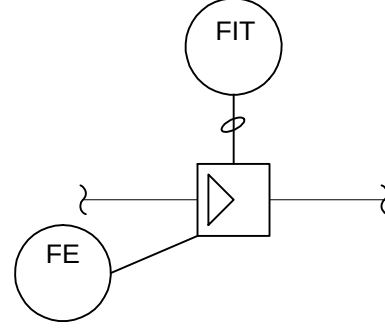
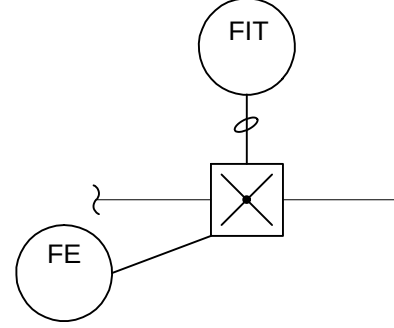
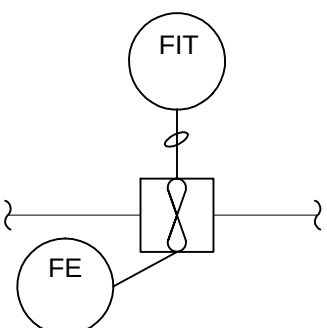
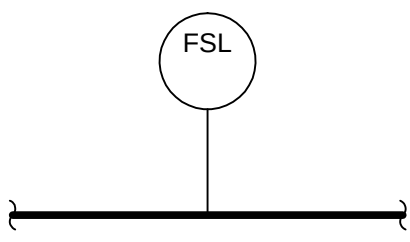
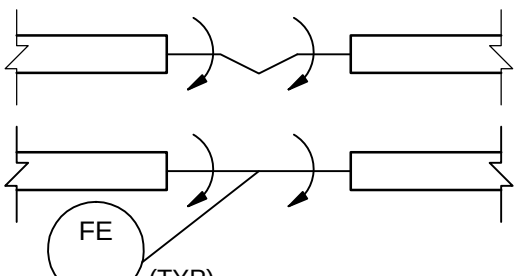
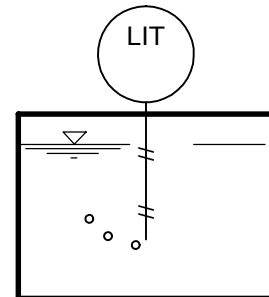
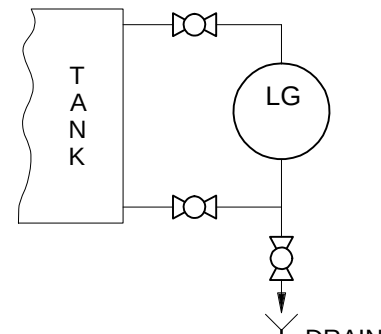
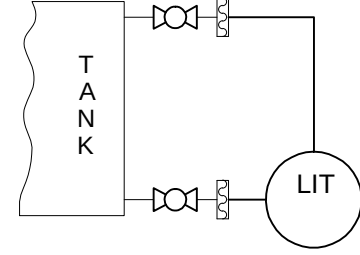
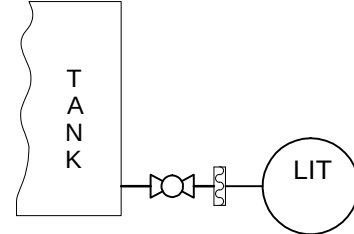
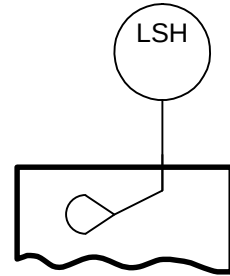
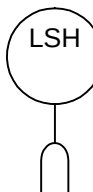
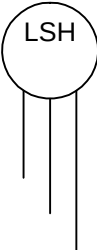
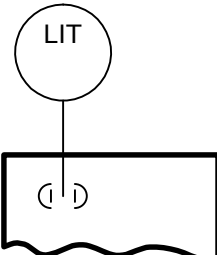
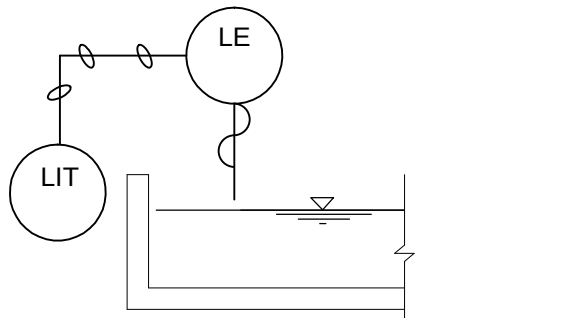
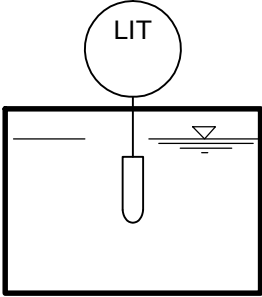
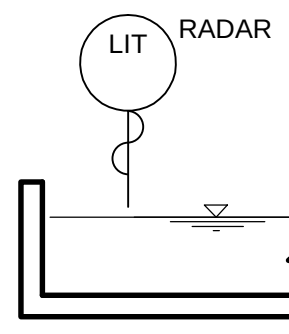
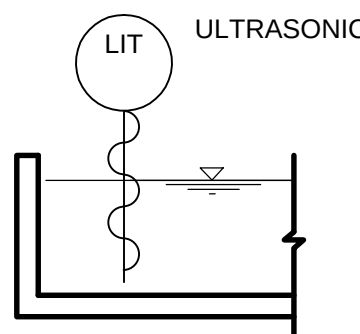
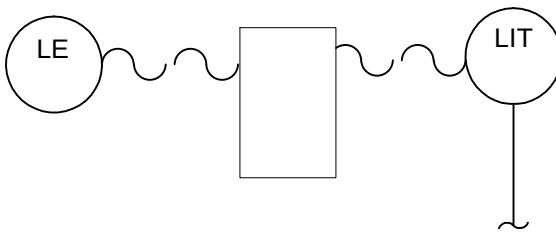
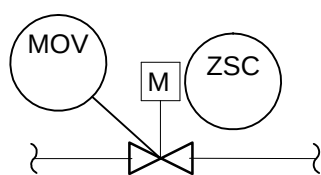
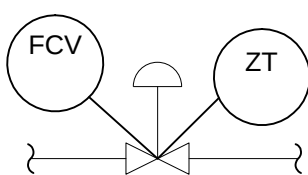
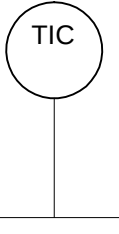
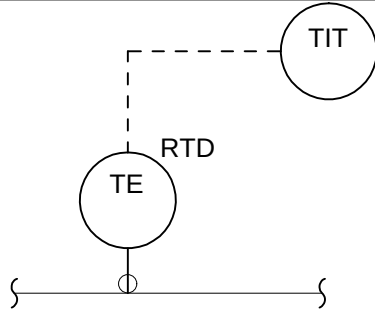
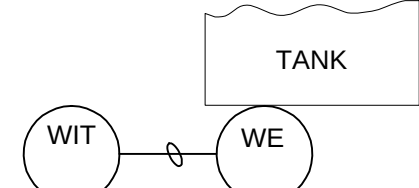
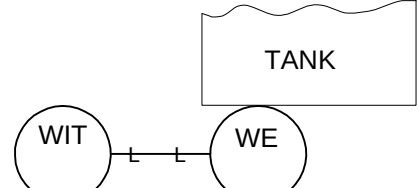
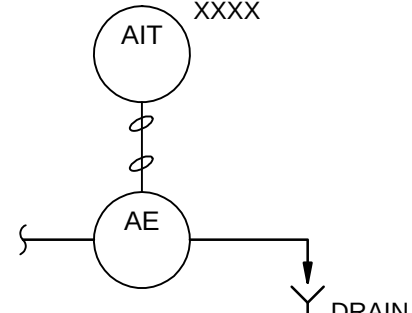
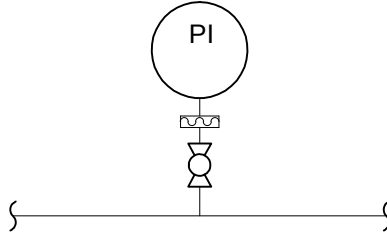
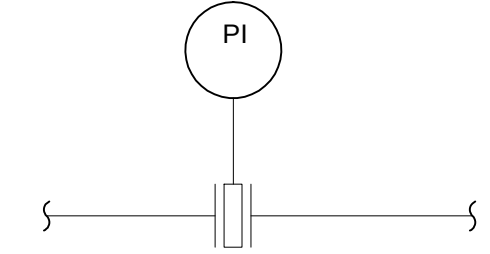
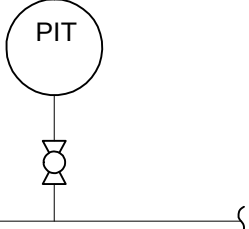
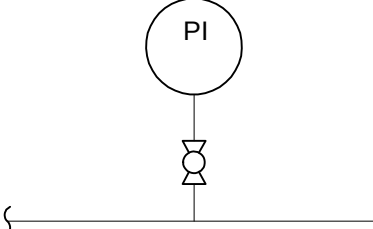
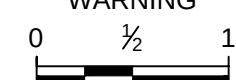
Project No.
224202267

Revision

Scale
As indicated

Drawing No.

7M-3

	1	2	3	4	5																																																																																			
	FLOW INSTRUMENTS																																																																																							
C	 ORIFICE PLATE WITH VENA CONTRACTA, RADIUS, OR PIPE TAPS CONNECTED TO DIFFERENTIAL-PRESSURE -TYPE FLOW TRANSMITTER	 VENTURI TUBE WITH (DIFFERENTIAL PRESSURE) FLOW TRANSMITTER	 THERMAL MASS FLOW METER	 MAGNETIC FLOWMETER WITH REMOTE FLOW TRANSMITTER	 SONIC FLOWMETER DOPPLER OR TRANSIT TIME	 SONIC FLOWMETER CLAMP ON TYPE	 SINGLE PORT PITOT TUBE OR PITOT-VENTURI TUBE	 FLUME OR VELOCITY C/W ULTRASONIC FLOW TRANSMITTER																																																																																
	 CORIOLIS FLOWMETER	 VORTEX FLOW METER	 VARIABLE AREA FLOW INDICATOR (ROTAMETER)	 PADDLE WHEEL FLOW METER	 TURBINE OR PROPELLER TYPE FLOW METER	 FLOW DETECTION SWITCH THERMAL TYPE	 WEIR																																																																																	
B	LEVEL INSTRUMENTS							AREA DESIGNATORS																																																																																
	 LEVEL TRANSMITTER BUBBLER TYPE	 GAUGE GLASS (EXTERNALLY CONNECTED)	 LEVEL TRANSMITTER, SEALED DIFFERENTIAL PRESSURE TYPE (MOUNTED ON TANK)	 LEVEL TRANSMITTER PRESSURE ACTUATED	 LEVEL DETECTION SWITCH FLOAT ACTUATED TYPE	 LEVEL DETECTION SWITCH VIBRATING FORK TYPE	 LEVEL DETECTION SWITCH CONDUCTANCE TYPE																																																																																	
	 LEVEL TRANSMITTER CAPACITANCE OR DIELECTRIC OR RF ADMITTANCE TYPE	 LEVEL TRANSMITTER NON-CONTACTING ULTRASONIC TYPE REMOTE MOUNTED	 LEVEL TRANSMITTER HYDROSTATIC TYPE	 LEVEL TRANSMITTER NON-CONTACTING RADAR TYPE	 LEVEL TRANSMITTER ULTRASONIC	 LEVEL TRANSMITTER RADIOACTIVE OR SONIC TYPE WITH INTEGRAL SENSOR																																																																																		
	1 - SITE 2 - WELL WATER 3 - SURFACE WATER 4 - HEAD BOX 5 - INCUBATION BUILDING 6 - REARING TANKS 7 - REUSE TREATMENT 8 - ELECTRICAL & INSTRUMENTATION																																																																																							
A	POSITION INSTRUMENTS		TEMPERATURE INSTRUMENTS		WEIGHT INSTRUMENTS		ANALYTICAL INSTRUMENTS																																																																																	
	 LIMIT SWITCH ON MOTORIZED VALVE INDICATING CLOSED POSITION	 VALVE POSITION TRANSMITTER ON PNEUMATIC ACTUATED VALVE	 BIMETALLIC TYPE THERMOMETER, GLASS THERMOMETER, OR OTHER LOCAL UNCLASSIFIED TEMPERATURE INDICATOR	 THERMOCOUPLE, RESISTANCE BULB (RTD) OR THERMISTOR (TH) TEMPERATURE TRANSMITTER WITH THERMOWELL	 STRAIN GAUGE CONNECTED TO SEPARATE WEIGHT TRANSMITTER (TAG STRAIN GAUGE WE)	 HYDRAULIC ACTUATED WEIGHT TRANSMITTER	 FLOW THROUGH ANALYZING ELEMENT WITH REMOTE TRANSMITTER LEL LOWER EXPLOSIVE LIMIT NO ₃ / NO ₂ NITRATE / NITRITE NH ₃ / NH ₄ AMMONIA / AMMONIUM O ₂ OXYGEN CONCENTRATION O ₃ OZONE ORP OXIDATION - REDUCTION POTENTIAL PC PARTICLE COUNTER pH HYDROGEN ION CONCENTRATION SCU STREAMING CURRENT UNIT SO SULFUR DIOXIDE TH ² TOTAL HARDNESS TKN TOTAL KJELDAHL NITROGEN TN TOTAL NITROGEN TOC TOTAL ORGANIC CARBON TURB TURBIDITY TSS TOTAL SUSPENDED SOLIDS UVI ULTRA VIOLET INTENSITY UVT ULTRA VIOLET TRANSMITTANCE NOTE : IN THE CASE WHERE MULTIPLE SENSORS ARE TIED TO A SINGLE TRANSMITTER OR IN THE CASE OF GAS DETECTION, THE ANALYTIC CALLOUT WILL BE ASSIGNED TO THE SENSOR. REV 010119																																																																																	
	PRESSURE OR VACUUM INSTRUMENTS																																																																																							
	 PRESSURE GAUGE WITH DIAPHRAGM SEAL	 PRESSURE GAUGE WITH LIQUID FILLED ANNULAR SEAL SYSTEM	 PRESSURE INDICATING TRANSMITTER	 PRESSURE INDICATOR DIRECT - CONNECTED																																																																																				
Revision <table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>0</td><td></td><td>2022.12.02</td><td></td></tr></table>																														0		2022.12.02		Issued <table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>0</td><td></td><td>2022.12.02</td><td></td></tr></table>																													0		2022.12.02		Permit/Seal  2/12/2025	WARNING  IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	 Stantec Consulting Services Inc 1687 114th Ave SE, Suite 100 Bellevue, WA 98004 Tel: (425) 896-6900 www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo 	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: 0226GI-2 <table><tr><td>JM</td><td>JS</td><td>JR</td><td>2024.09.19</td></tr><tr><td>Dwn.</td><td>Dsgn.</td><td>Chkd.</td><td>YYYY.MM.DD</td></tr></table>	JM	JS	JR	2024.09.19	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD	Title SYMBOLS & NOMENCLATURE - II <table><tr><td>Project No.</td><td>Scale</td></tr><tr><td>224202267</td><td>NOT TO SCALE</td></tr><tr><td>Revision</td><td>Sheet</td></tr><tr><td>0</td><td>of</td></tr></table> GI-2	Project No.	Scale	224202267	NOT TO SCALE	Revision	Sheet	0	of
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ORIGINAL SHEET - ANSI D

1			2			3			4			5		
PROCESS ABBREVIATIONS			PROCESS ABBREVIATIONS			VALVES			PIPING ACCESSORIES			PUMPS & COMPRESSORS		
C	CHANNEL AGITATION WATER	CAW	SUMP PUMP DISCHARGE	SPD		AIR VACUUM, AIR RELEASE, OR COMBINATION AIR VACUUM AND AIR RELEASE ASSEMBLY		ANNULAR SEAL		SLUDGE DIAPHRAGM PUMP				
	MEMBRANE CLEANING CONCENTRATE RETURN	CCR	SANITARY SEWER	SS		ANGLE VALVE		ATMOSPHERIC VENT		HORIZONTAL CENTRIFUGAL PUMP				
	CHEMICAL DRAIN	CD	SODIUM SILICOFLUORIDE	SSF		BACK-PRESSURE VALVE		BLIND FLANGE		GENERIC PUMP				
	CONDENSER WATER RETURN	CDR	STEAM	STM		BACKFLOW PREVENTER VALVE		CAP - BREATHER		CHEMICAL METERING PUMP				
	CONDENSER WATER SUPPLY	CDS	STRUCTURE UNDERDRAIN	SU		BALL VALVE		CAP - SCREW / THREADED		DRUM PUMP				
	CHILLED WATER RETURN	CHR	STRUCTURE UNDERDRAIN COLLECTOR	SUC		BUTTERFLY VALVE		CAP - WELDED		ROTARY GEAR PUMP				
	CHILLED WATER SUPPLY	CHS	SETTLED WATER	SW		CHECK VALVE		CAP - QUICK DISCONNECT		SPLIT-CASE PUMP				
	CORROSION INHIBITOR	CI	SCRUBBER WATER RETURN	SWR		CONE VALVE		CHLORINE INJECTOR OR CHEMICAL EDUCTOR		HOSE / PERISTALTIC PUMP				
	CHLORINE (GAS OR LIQUID)	CL	TRICKLING FILTER EFFLUENT	TFE		DIAPHRAGM VALVE		DRAIN		PLUNGER / PISTON PUMP				
	CHLORINE SOLUTION	CLS	TRICKLING FILTER INFLUENT	TFI		FLAP VALVE		EXPANSION CHAMBER WITH RUPTURE DISK		PROGRESSIVE CAVITY PUMP				
CHLORINE GAS UNDER VACUUM	CLV	TRICKLING FILTER RECYCLE	TFR		GATE VALVE		EDUCTOR		ROTARY LOBE PUMP					
CENTRATE	CN	THICKENED SLUDGE	TSL		GLOBE VALVE		FLANGED		SUBMERSIBLE SUMP PUMP					
CONDENSATE DRAIN	CND	TREATED WATER	TW		HOSE BIBB VALVE		FLEXIBLE CONNECTION - BELLOWS TYPE		SUBMERSIBLE TURBINE PUMP					
CHEMICAL CONTAINMENT	CP	UNDERDRAIN	UD		NEEDLE VALVE		FLAME ARRESTOR		VERTICAL TURBINE PUMP					
MEMBRANE CLEANING PERMEATE RETURN	CPR	UTILITY WATER (NON-POTABLE WATER)	UW		PINCH VALVE		FLOOR CLEANOUT		VERTICAL CENTRIFUGAL PUMP					
CIRCULATED SLUDGE	CSL	VACUUM	V		PLUG VALVE		FILTER		INCLINED ARCHIMEDES SCREW PUMP					
CITRIC ACID	CTA	VENT	VT		PRESSURE REGULATING VALVE		HUB DRAIN		VERTICAL SUMP PUMP					
CALCIUM THIOSULFATE	CTH				PRESSURE RELIEF VALVE		INLINE MIXER		RECIPROCATING COMPRESSOR					
CHLORINATOR VENT AND DETECTION	CV				SLEEVE VALVE		PIPE MATERIAL CHANGE		ROTARY SCREW COMPRESSOR					
CHEMICAL DRAIN VENT	CVT				TELESCOPING VALVE		PULSATION DAMPENER							
COAGULATED WATER	CW				FLOAT VALVE		REDUCER - CONCENTRIC							
COOLING WATER RETURN	CWR						REDUCER - ECCENTRIC							
COOLING WATER SUPPLY	CWS						REMOVABLE SPOOL PIECE							
DEFOAMING CHEMICAL	DC						UNION							
DOMESTIC COLD WATER	DCW						RUPTURE DISK							
DIESEL FUEL OIL	DFO						STRAINER - BASKET TYPE							
DEMINERALIZED WATER	DMW						STRAINER - DUPLEX BASKET TYPE							
DECANT	DN						STRAINER - WYE TYPE							
DRAIN	DR						TRAP							
DIGESTED SLUDGE	DSL						WALL CLEANOUT							
DOMESTIC HOT WATER RETURN	DWR						TIE-IN POINT							
DOMESTIC HOT WATER SUPPLY	DWS													
ENGINE EXHAUST	EE													
ENGINE COOLING WATER RETURN	EWR													
ENGINE COOLING WATER SUPPLY	EWS													
FOUL AIR	FA													
FILTER AIR WASH	FAW													
FILTER BACKWASH	FBW													
FINAL EFFLUENT	FE													
FERRIC CHLORIDE	FEC													
FERRIC SULFATE	FES													
FILTER INFLUENT	FI													
FILTERED WATER	FLW													
FORCE MAIN	FM													
FUEL OIL RETURN	FOR													
FUEL OIL SUPPLY	FOS													
FIRE PROTECTION	FP													
FROTH	FR													
FROTH SPRAY	FS													
FILTER SURFACE WASHWATER	FSW													
FILTER TO WASTE	FTW													
FINISHED WATER	FW													
FILTER WASTE WASHWATER	FWW													
GRIT	G													
GRANULAR ACTIVATED CARBON	GAC													
GASEOUS OXYGEN	GOX													
HYDROCHLORIC ACID	HCA													
HYDROGEN PEROXIDE	HDP													
HYDROFLUOSILICIC ACID	HFA													
HEATING WATER RETURN	HWR													
HEATING WATER SUPPLY	HWS													
INSTRUMENT AIR	IA													
INTERMEDIATE EFFLUENT	IE													
LANDFILL GAS	LFG													
LUBE OIL	LO													
LIQUID OXYGEN	LOX													
LIQUEFIED PETROLEUM GAS	LPG													
LIME SLURRY	LS													
LANDSCAPING SPRINKLER SYSTEM	LSP													
MEMBRANE CONCENTRATE	MC													
MEMBRANE CLEANING RETURN	MCR													
MEMBRANE CLEANING SUPPLY	MCS													
MEMBRANE CLEANING WASTE	MCW													
MECHANICAL DEWATERING POLYMER	MDP													
MEMBRANE FEED	MF													
METHANE GAS	MG													
MIXED LIQUOR	ML													
MIXED LIQUOR RECYCLE	MLR													
MEMBRANE PERMEATE	MP													
MURIATIC ACID	MRA													
NATURAL GAS	NG													
NON-LEADED GASOLINE	NLG													
OVERFLOW	OF													
OFFGAS	PDR													
PLANT DRAIN	PE													
PRIMARY EFFLUENT	PI													
PLANT INFLUENT	PLE													
PLANT EFFLUENT	PO													
PLANT OVERFLOW	POA													
ANIONIC POLYMER	POC													
CATIONIC POLYMER	POF													
FILTER AID POLYMER	PON													
NONIONIC POLYMER	POT													
THICKENER POLYMER	PRR													
PRESSURIZED RECYCLE	PRS													
PRESSATE	PTP													
POTASSIUM PERMANGANATE	PW													
POTABLE WATER	RAS													
RETURN ACTIVATED SLUDGE	REW													
RECLAIMED WATER	RFL													
REFRIGERANT LIQUID	RFS													
REFRIGERANT SUCTION	RSL													
REFRIGERANT SUCTION	RSS													
RETURN SECONDARY SLUDGE	RW													
RAW WATER	RWL													
RAINWATER LEADER	RWO													
RAINWATER LEADER OVERFLOW	SDB													
SANITARY DRAIN	SDH													
SODIUM BISULFITE	SDR													
SODIUM HYDROXIDE (CAUSTIC SODA)	SDV													
STORM DRAIN														
SANITARY DRAIN VENT														
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Revision

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2022.12.02

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2/12/2025

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Client/Project Logo

Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 0226G1-3

JM JS JR

Dwn. Dsgn. Chkd.

2024.09.19

YYYY.MM.DD

Title
SYMBOLS & NOMENCLATURE - III

Project No.
224202267

Revision
0

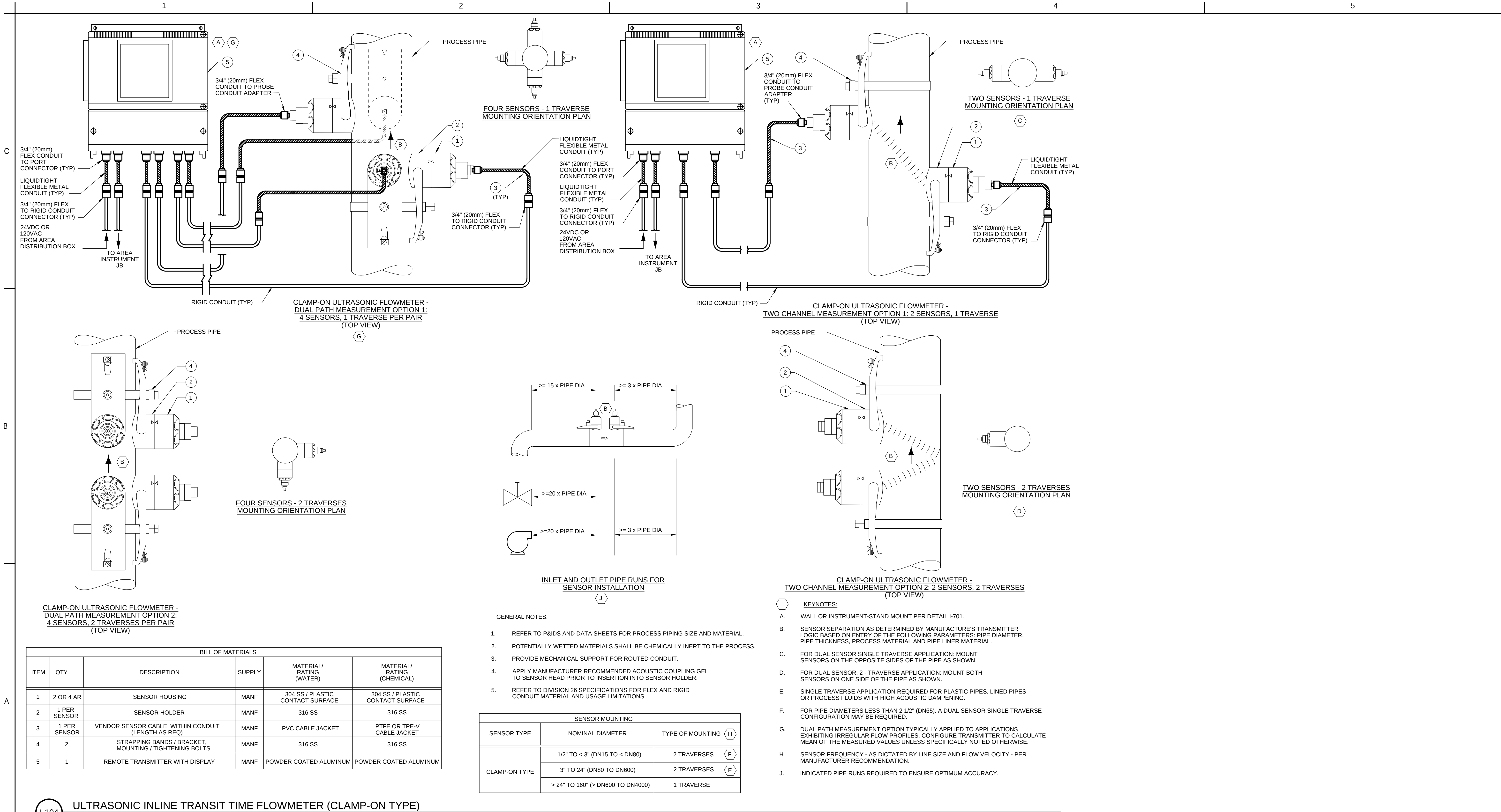
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GI-3

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I-104

ULTRASONIC INLINE TRANSIT TIME FLOWMETER (CLAMP-ON TYPE)

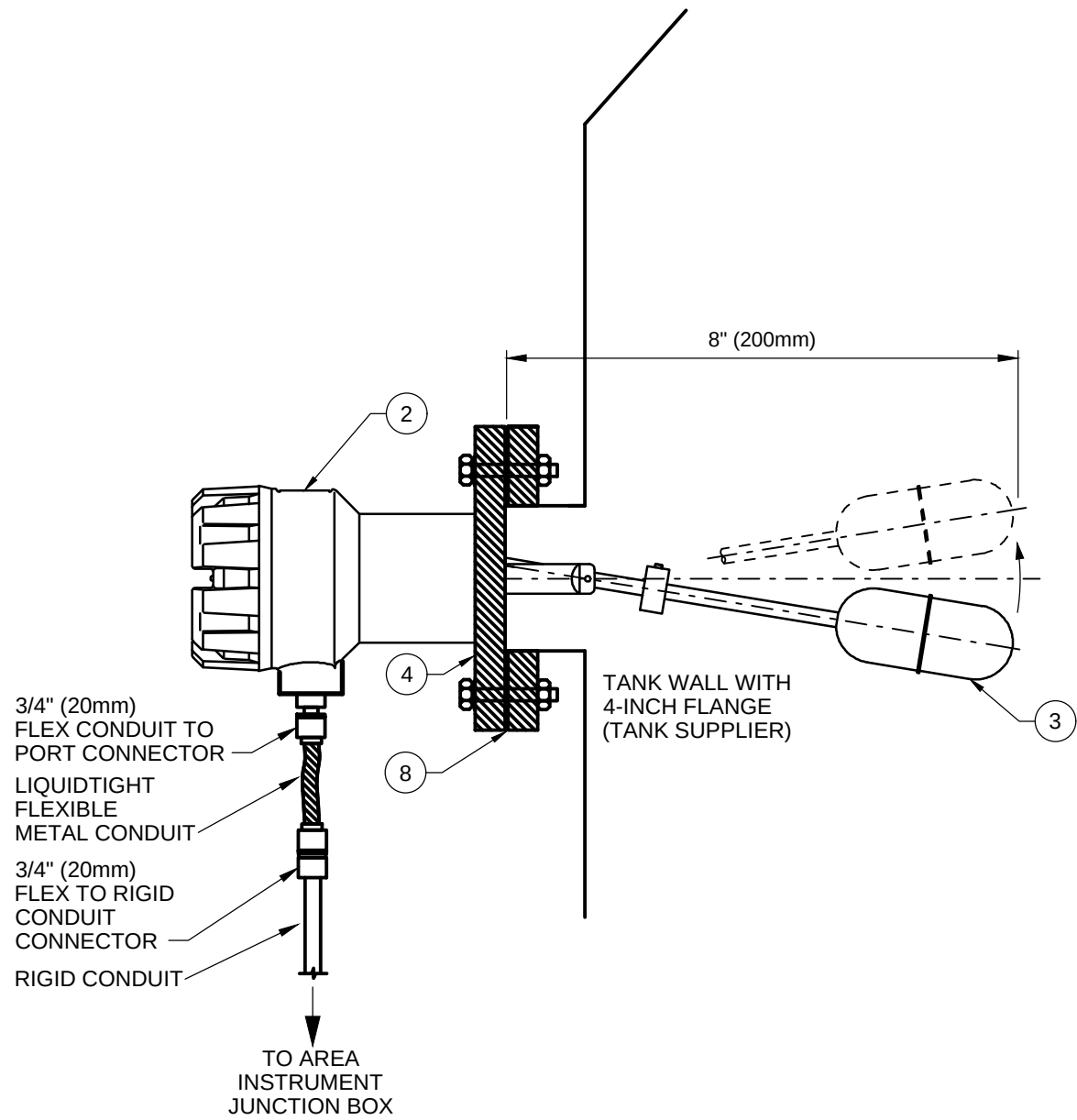
REV 010119

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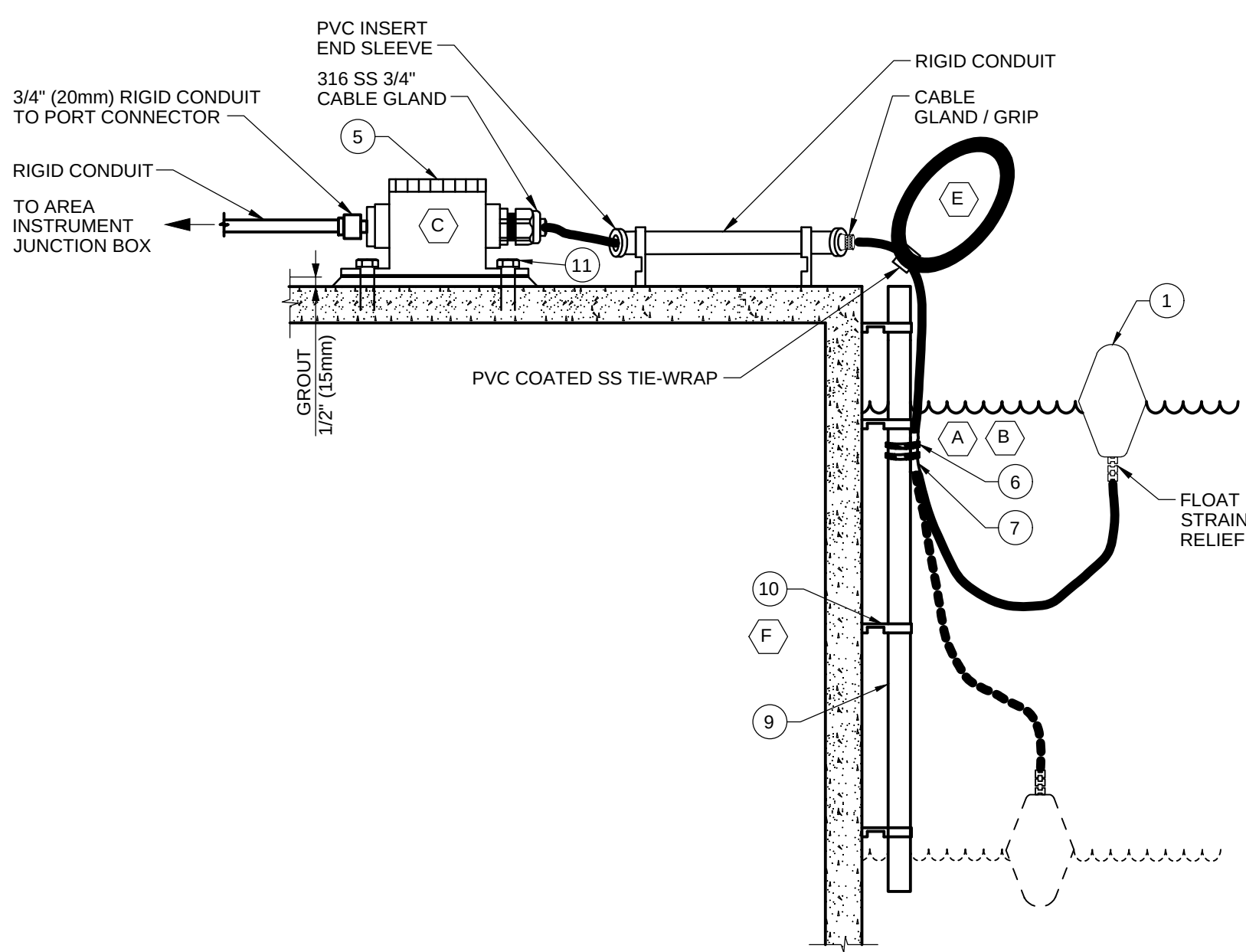
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SIDE MOUNT FLANGE INSTALLATION



SUSPENDED FLOAT

GENERAL NOTES:

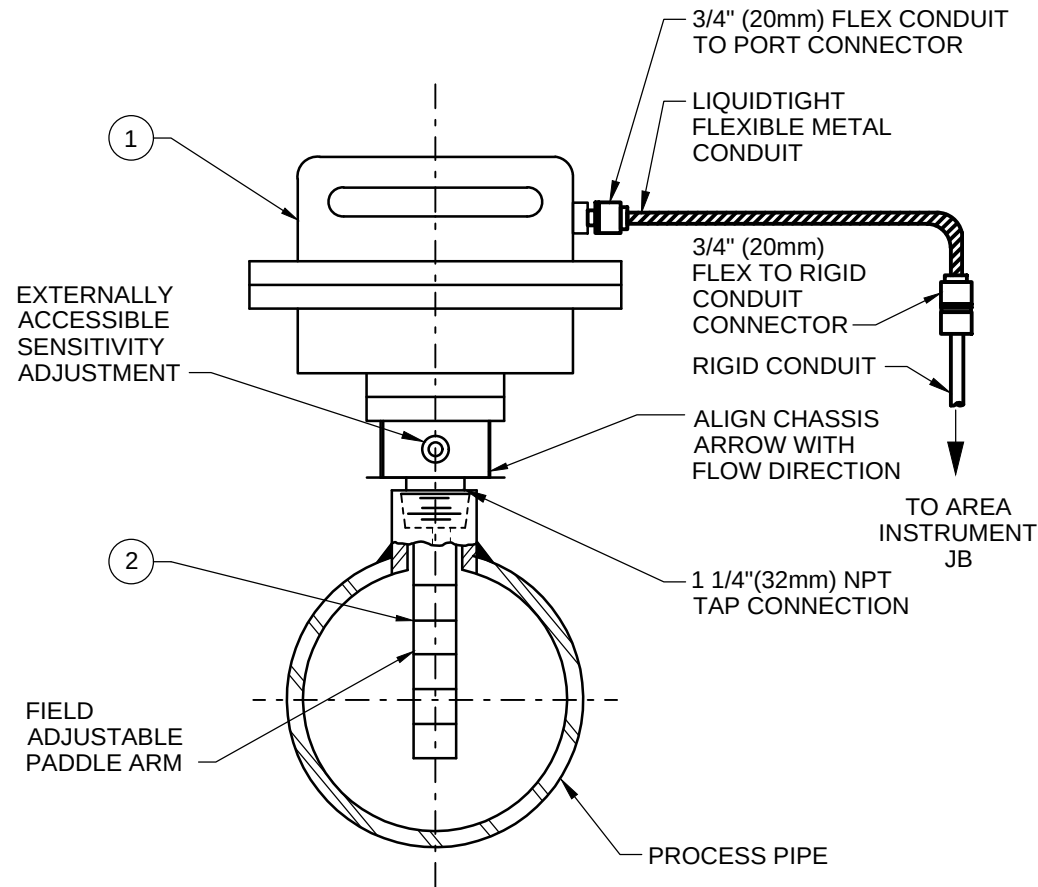
1. PROVIDE MECHANICAL SUPPORT AND FITTINGS FOR ROUTED CONDUIT.
2. SWITCHES SHALL BE MOUNTED AND ORIENTED IN ACCORDANCE WITH THE MANUFACTURER REQUIREMENTS.
3. INSTALLATION OF ANY FLANGED UNITS SHALL BE CARRIED OUT IN COOPERATION WITH THE PIPING AND/ OR TANK SUPPLIER CONTRACTOR.
4. WETTED MATERIALS SHALL BE CHEMICALLY INERT TO THE PROCESS.
5. REFER TO DIVISION 26 SPECIFICATIONS FOR FLEX AND RIGID CONDUIT MATERIAL AND USAGE LIMITATIONS.
6. REFER TO TANK MECHANICAL DATA SHEETS OR DETAILS FOR TANK NOZZLE SIZE AND SPACING. INSTRUMENT INSTALLATION IN THE TANK MANWAY IS NOT PERMITTED.
7. USE PVC COATED SS TIE-WRAPPS TO NEATLY COIL AND SECURE ANY EXCESS FLOAT CABLING AS SHOWN.



KEYNOTES:

- A. POSITION THE ADJUSTABLE STRAIN RELIEF ON THE CABLE TO ALLOW ONE HALF THE DISTANCE OF THE DIFFERENTIAL BAND BETWEEN THE END OF THE ADJUSTABLE STRAIN RELIEF AND THE END OF THE STRAIN RELIEF ON THE FLOAT.
- B. FOR SUSPENDED FLOAT, PROVIDE CABLE TIE AT MIDPOINT AND TOP OF ADJUSTABLE STRAIN RELIEF AS SHOWN, PLUS ONE CABLE TIE FOR EVERY 12' (300mm) OF CABLE LENGTH.
- C. TERMINAL JUNCTION BOX SHALL BE WALL OR FLOOR MOUNTED IN EASILY ACCESSED LOCATION WITHIN 30 FEET (10 METERS) OF INSTRUMENT INSTALLATION. FOR FLOOR MOUNT PROVIDE 1/2" (15mm) THICK GROUTING. FOR WALL MOUNT, LOCATE APPROXIMATELY 36" (1 METER) ABOVE GRADE. IF AREA INSTRUMENT JUNCTION BOX IS WITHIN 33 FEET (10 METERS) OF INSTRUMENT INSTALLATION, TERMINAL BOX WILL NOT BE REQUIRED AND INSTRUMENT CABLE MUST BE ROUTED WITHOUT SPLICE OF ANY KIND.
- D. 316 SS OR HASTELLOY C PREFERRED, HOWEVER ENGINEER APPROVED FINAL SELECTION BASED ON MATERIAL CHEMICAL COMPATIBILITY.
- E. MAINTENANCE LOOP SHALL INCLUDE 3 FEET (1 METER) LENGTH OF CABLE SECURED WITH PVC-COATED SS TIE WRAPS, BEND RADIUS NO LESS THAN 8" (200mm).
- F. PROVIDE MOUNTING BRACKET SUPPORT FOR EVERY 3FT (1M) OF PIPE LENGTH.

BILL OF MATERIALS					
ITEM	QTY	DESCRIPTION	SUPPLY	MATERIAL/RATING (WATER)	MATERIAL/RATING (CHEMICAL)
1	1	SUSPENDED BALL FLOAT SWITCH WITH INTEGRAL CABLE	MANF	PVC	PVC
2	1	FLOAT SWITCH HOUSING	MANF	EPOXY COATED ALUMINUM	EPOXY COATED ALUMINUM
3	1	TIPPING FLOAT	MANF	316 SS	
4	1	4" (DN100) DIA THREADED FLANGE AND MOUNTING HARDWARE	MANF	316 SS	
5	AR	LOCKABLE SCREW LID TERMINAL JUNCTION BOX WITH DIN-RAIL MOUNTED TERMINAL BLOCK (MIN DIMENSIONS: 2" (53mm) (h)x4" (110mm) (Ø))	MANF	NEMA 4X / GRP	NEMA 4X / GRP
6	AR	CABLE TIES	CONT	PVC COATED 316 SS	PVC COATED 316 SS
7	1	ADJUSTABLE STRAIN RELIEF	MANF	NEOPRENE	NEOPRENE
8	AR	FLANGE GASKET	CONT	VITON	VITON
9	1	FLOAT SUPPORT PIPE	CONT	PVC (SCH 80)	PVC (SCH 80)
10	AR	MOUNTING BRACKET WITH 5/8" (16mm) SS ANCHOR BOLTS	CONT	316 SS	316 SS
11	AR	SS BOLTS / ANCHORS	CONT	316 SS	316 SS



GENERAL NOTES:

1. INSTALL UPRIGHT IN HORIZONTAL PIPE SECTION WITH MINIMUM OF 5 PIPE DIAMETERS UPSTREAM AND DOWNSTREAM.
2. FIELD TRIM PADDLE ARM AS NECESSARY TO MEET MANUFACTURER'S RECOMMENDED LENGTH FOR APPLICATION.
3. REFER TO DIVISION 26 SPECIFICATIONS FOR FLEX AND RIGID CONDUIT MATERIAL AND USAGE LIMITATIONS.
4. APPLY SEALANT TO MALE THREADS.



KEYNOTES:

- A. 316 SS PREFERRED, HOWEVER ENGINEER APPROVED FINAL SELECTION BASED ON PROCESS TEMPERATURE, MAX FLOW VELOCITY AND MATERIAL CHEMICAL COMPATIBILITY.

BILL OF MATERIALS					
ITEM	QTY	DESCRIPTION	SUPPLY	MATERIAL/ RATING (WATER)	MATERIAL/ RATING (CHEMICAL)
1	1	PADDLE FLOW SWITCH HOUSING	MANF	EPOXY COATED ALUMINUM	EPOXY COATED ALUMINUM
2	1	PADDLE FLOW SWITCH WETTED PARTS	MANF	316 SS	

I-153 PADDLE FLOW DETECTION SWITCH
REV 010119

I-151 FLOAT LEVEL DETECTION SWITCH
REV 010119

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Revision

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Issued

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Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

Title

INSTRUMENT DETAILS - III

Project No.

224202267

Revision

0

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Scale

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Drawing No.

GI-6

File Name: 0226GI-6

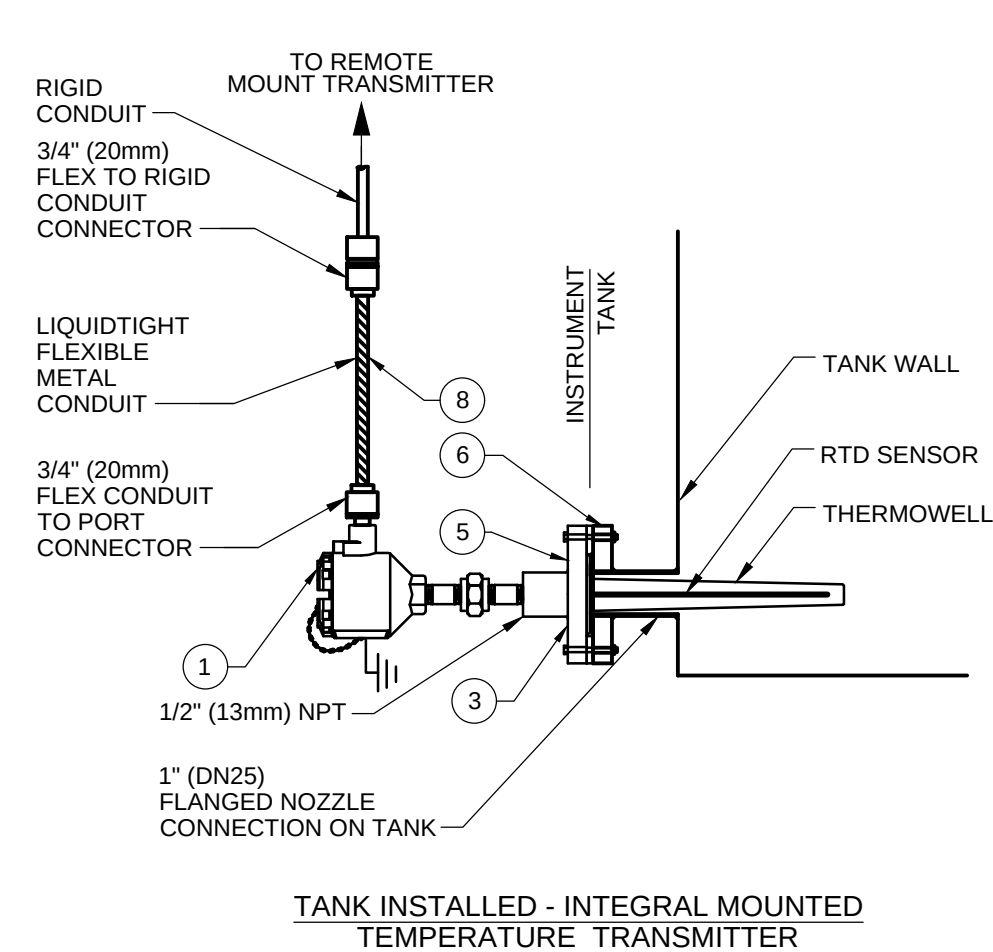
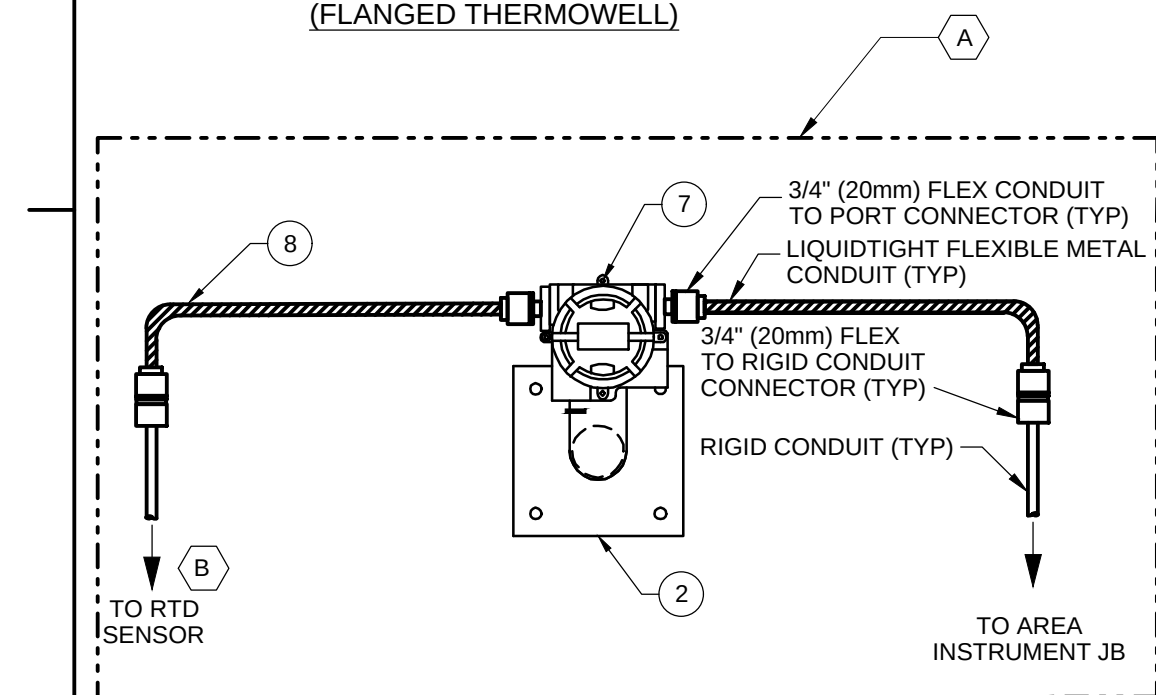
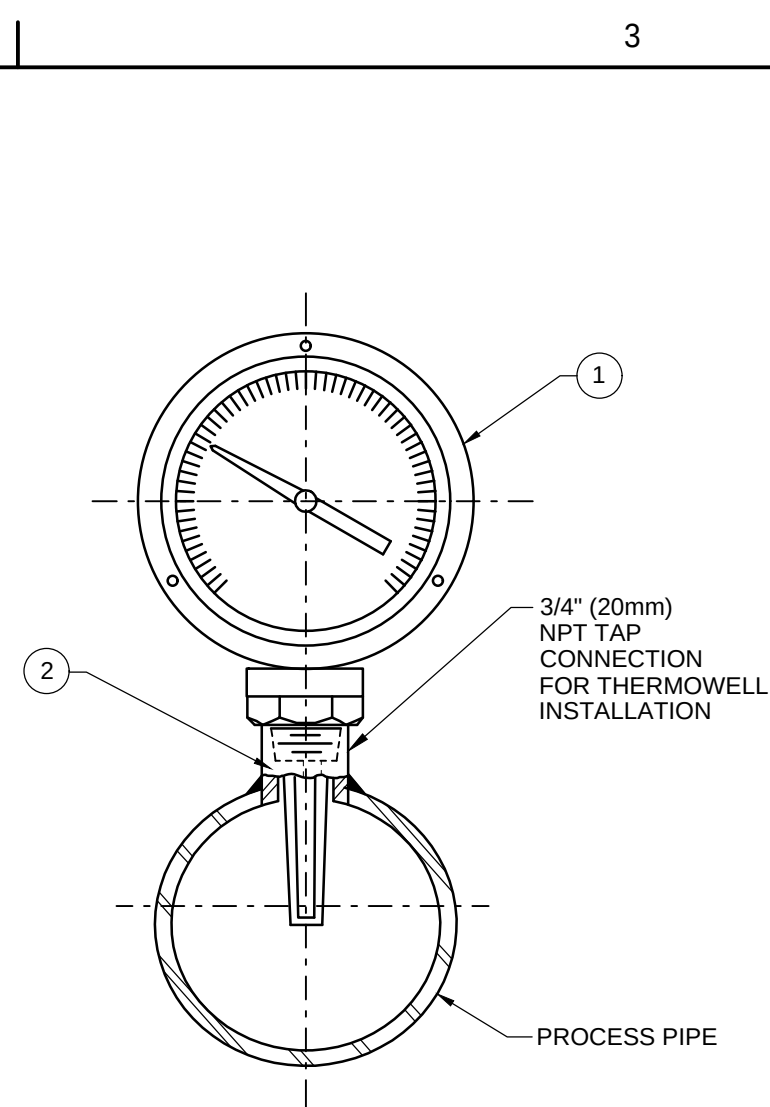
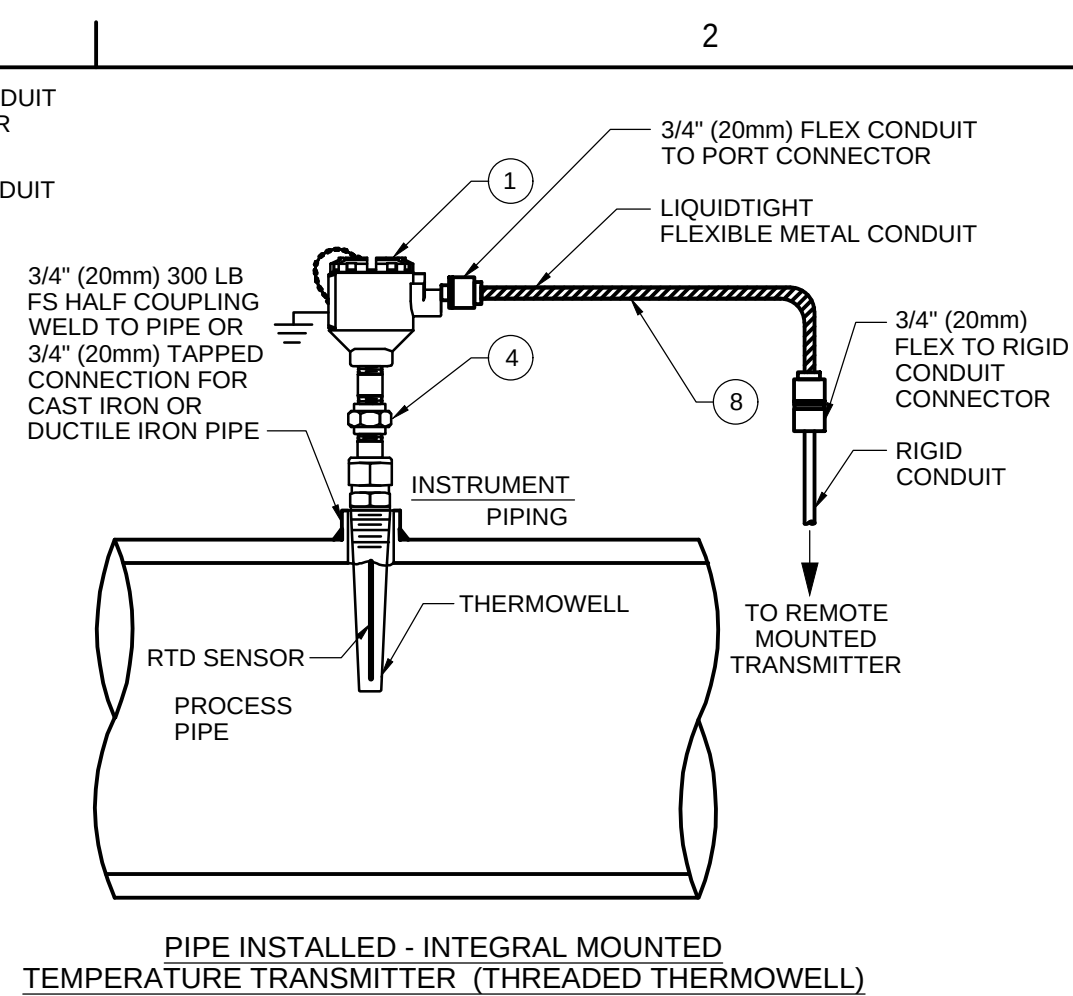
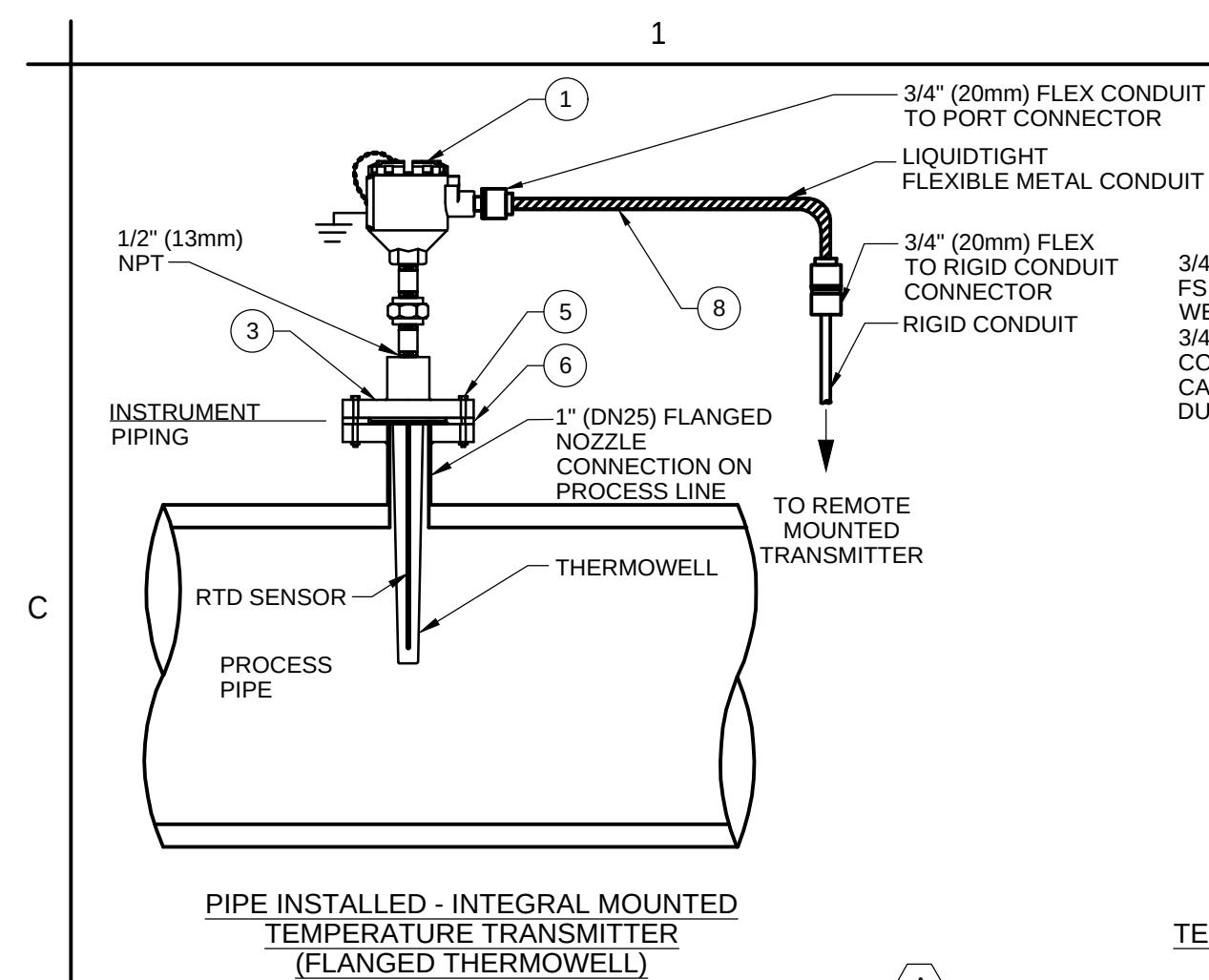
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JR Chkd.

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- GENERAL NOTES:

1. FOR LIQUIDS: ENSURE PROBE IS IMMERSSED A MINIMUM OF 2-INCHES OR HALF THE PIPE DIAMETER (WHICHEVER IS LESS IF PIPE IS ALWAYS FULL DURING NORMAL OPERATION).
2. FOR MOVING GAS: ENSURE PROBE IS IMMERSSED A MINIMUM OF 4-INCHES OR HALF THE PIPE DIAMETER (WHICHEVER IS LESS).
3. APPLY SEALANT TO MALE THREADS.

-  KEYNOTES:

- A. HASTELLOY C PREFERRED. HOWEVER ENGINEER APPROVED FINAL SELECTION BASED ON PRESSURE, FLOW VELOCITY AND MATERIAL CHEMICAL COMPATIBILITY.

BILL OF MATERIALS					
ITEM	QTY	DESCRIPTION	SUPPLY	MATERIAL/ RATING (WATER)	MATERIAL/ RATING (CHEMICAL)
1	1	TEMPERATURE GAUGE HOUSING	MANF	304 SS	304 SS
2	1	3/4" (20mm) NPT THERMOWELL	MANF	316 SS	

- GENERAL NOTES:

1. PROVIDE MECHANICAL SUPPORT AND FITTINGS FOR ROUTED CONDUIT.
2. REFER TO P&IDS AND DATA SHEETS FOR PROCESS PIPING SIZE AND MATERIAL.
3. REFER TO MECHANICAL SECTIONS AND TANK DATA SHEETS FOR FLANGED NOZZLE SIZE AND MATERIAL.
4. WETTED MATERIALS SHALL BE CHEMICALLY INERT TO THE PROCESS.
5. REFER TO DIVISION 26 SPECIFICATIONS FOR FLEX AND RIGID CONDUIT MATERIAL AND USAGE LIMITATIONS.
6. USE SPRING-LOADED PROBE FOR THERMOWELL INSTALLATION.
7. APPLY SEALANT TO MALE THREADS.

-

- KEYNOTES:

- A. WALL OR INSTRUMENT-STAND MOUNT PER DETAIL I-701.
- B. SENSOR CABLE SPLICE OF ANY KIND SHALL NOT BE ACCEPTABLE.
- C. HASTELLOY C PREFERRED. HOWEVER ENGINEER APPROVED FINAL SELECTION BASED ON PRESSURE, FLOW VELOCITY AND MATERIAL CHEMICAL COMPATIBILITY.
- D. INSERTION LENGTH: HALF PIPE DIAMETER OR 4-INCHES, WHICHEVER IS SHORTER.

BILL OF MATERIALS					
ITEM	QTY	DESCRIPTION	SUPPLY	MATERIAL/ RATING (WATER)	MATERIAL/ RATING (CHEMICAL)
1	1	ELECTRONIC HOUSING	MANF	EPOXY COATED ALUMINUM	EPOXY COATED ALUMINUM
2	1	MOUNTING SUPPORT BRACKET AND HARDWARE.	CONT	316 SS	316 SS
3	1	TEMPERATURE ELEMENT ASSEMBLY, 1"(25mm) FLANGED TAPERED THERMOWELL	MANF	316 SS	Ⓒ
4	1	TEMPERATURE ELEMENT ASSEMBLY, 1/2" (15mm) NPT TAPERED THERMOWELL	MANF	316 SS	Ⓒ
5	4	BOLTS, WASHER + NUTS	MANF	316 SS	316 SS
6	1	GASKET	CONT	VITON	VITON
7	1	TRANSMITTER HOUSING	MANF	EPOXY COATED ALUMINUM	EPOXY COATED ALUMINUM
8	AS REQ.	TRIAD RTD EXTENSION CABLE (WITHIN CONDUIT)	CONT	PER DIV 26	-

I-401 TEMPERATURE TRANSMITTER
REV 010119

REV 010119

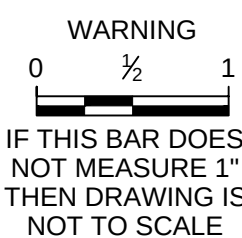
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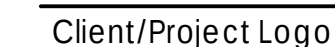
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TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 0226GI-9	JM	JS	JR	2024.09.19
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Title
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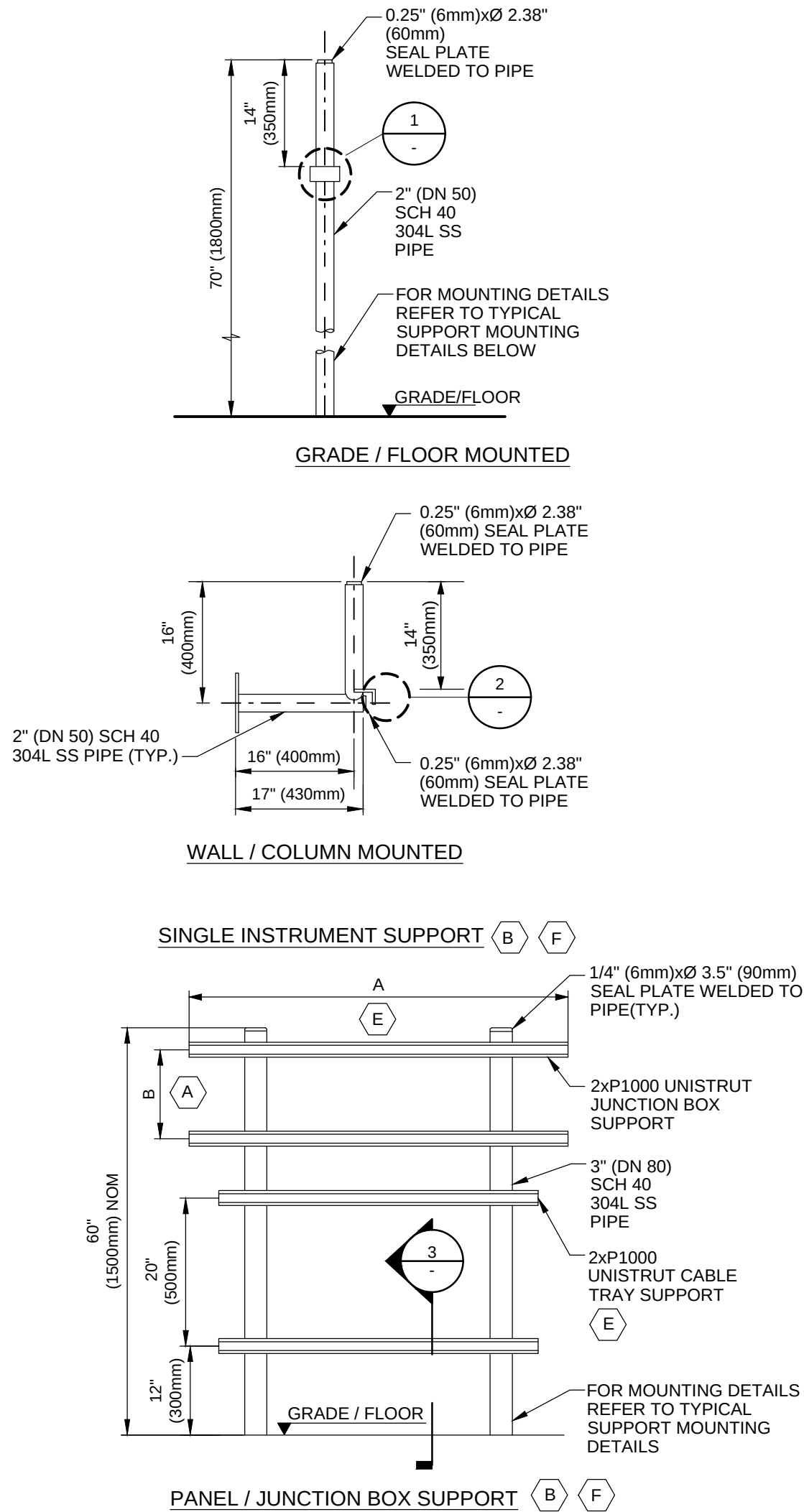
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Revision 0	Sheet of	Drawing No. GI-9

GI-9

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GENERAL NOTES:

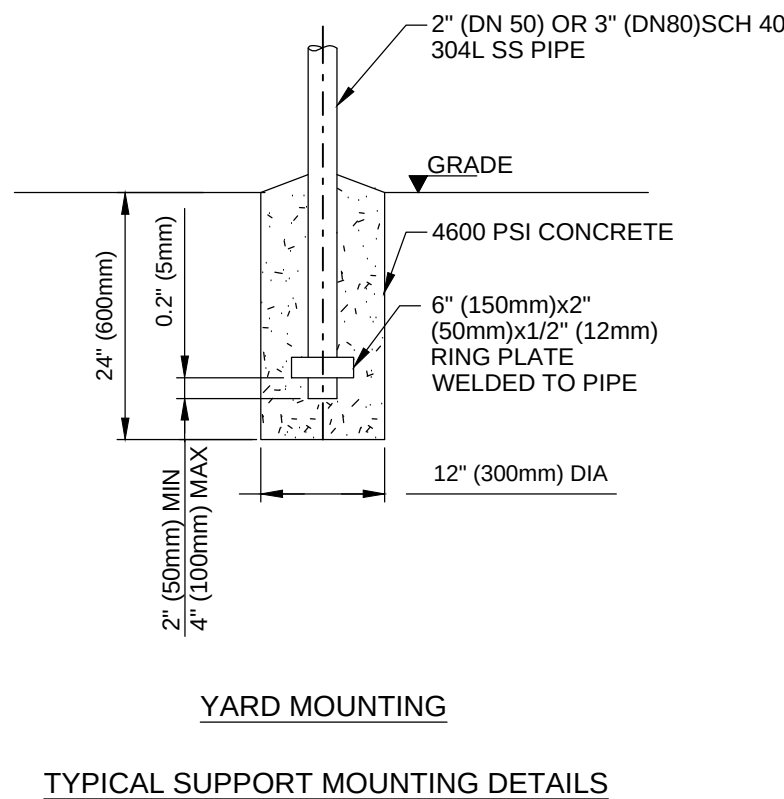
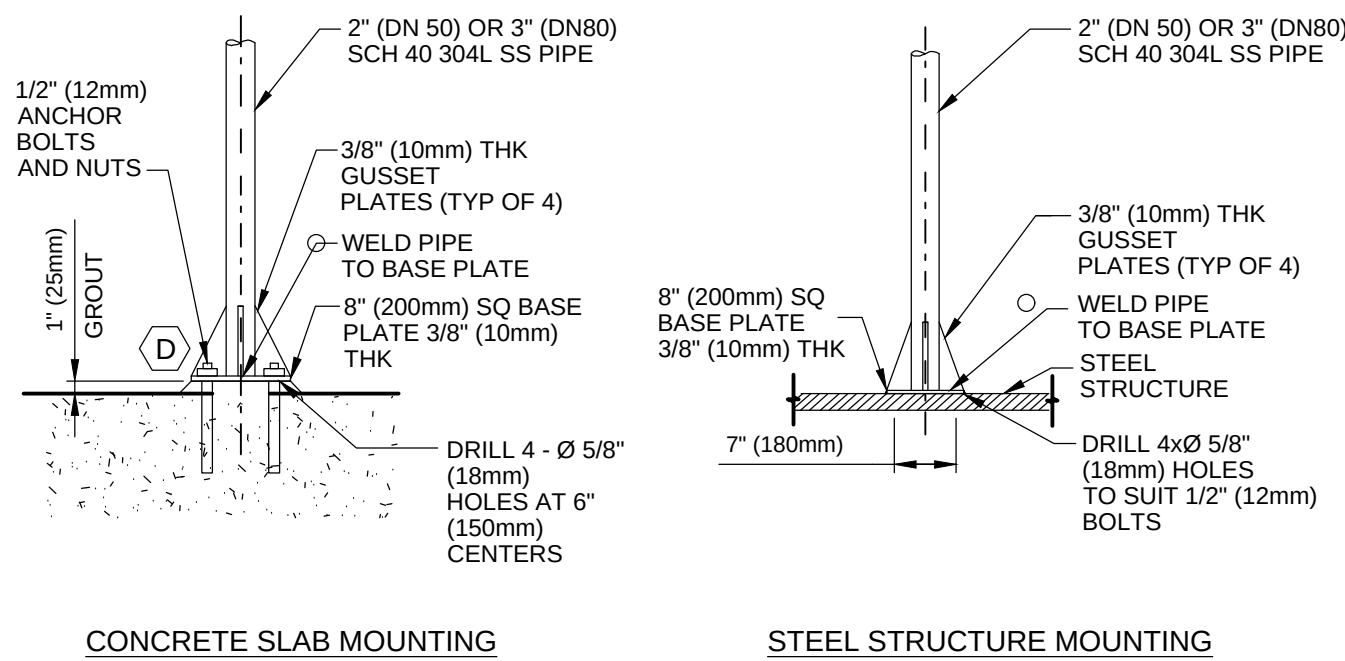
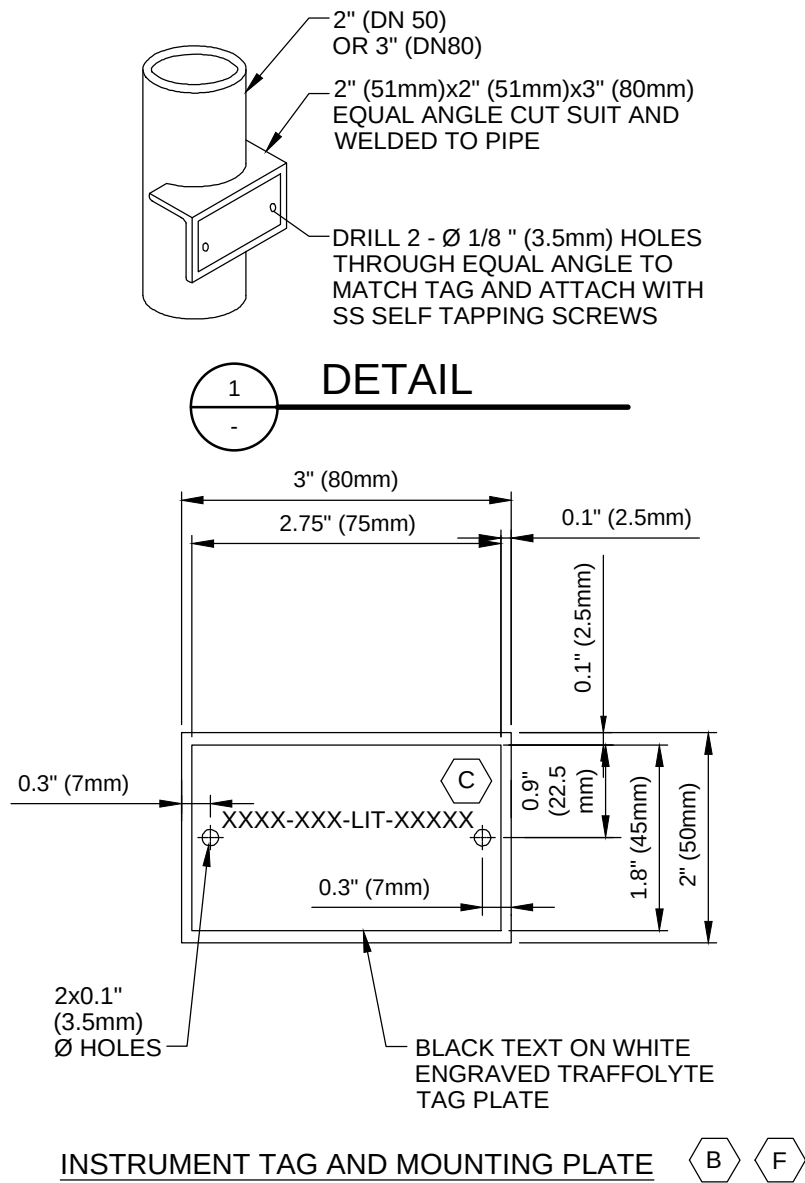
- INSTRUMENT DISPLAY SHALL BE SITUATED 48" (1220mm) ABOVE GRADE. REQUEST FOR DEVIATION SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR APPROVAL.
- REFER TO WEATHER SHIELD INSTALLATION DETAILS I-702 FOR WEATHER SHIELD SPECIFICS AND ADDITIONAL INSTALLATION REQUIREMENTS.
- AFTER FABRICATION REMOVE ALL SHARP EDGES, BURRS ETC.
- ALL WELDS SHALL BE 0.2" (6mm) CONTINUOUS FILLET WELDS FULL PERIMETER UNLESS NOTED OTHERWISE.
- STANDS ARE TYPICAL; SITE MODIFICATION MAY BE NECESSARY TO ACCOMMODATE INSTALLATION.

KEYNOTES:

- DIMENSION "B" TO SUIT JUNCTION BOX MOUNTING BRACKETS.
- ALL HEAT AFFECTED WELD AREAS TO BE PAINTED WITH ZINC CHROMATE.
- REFER TO PROJECT INSTRUMENT SCHEDULE FOR TAG NUMBERING DETAILS.
- BASEPLATES TO BE FIXED TO CONCRETE USING 1/2" (12mm) 316 SS ANCHOR BOLTS (QTY=4) USING MULTI EPOXY ADHESIVE ANCHORS. IF CONCRETE THICKNESS IS INSUFFICIENT FOR MOUNTING VERTICAL BASE PLATES, EMPLOY A THROUGH BOLTED CONNECTION.
- DIMENSION "A" LENGTH AND CABLE TRAY SUPPORT LENGTH AS REQUIRED TO SUIT NUMBER OF JUNCTION BOXES OR CONTROL PANELS.
- SUPPORT ASSEMBLY SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.

I-701 INSTRUMENT STAND

REV 010119

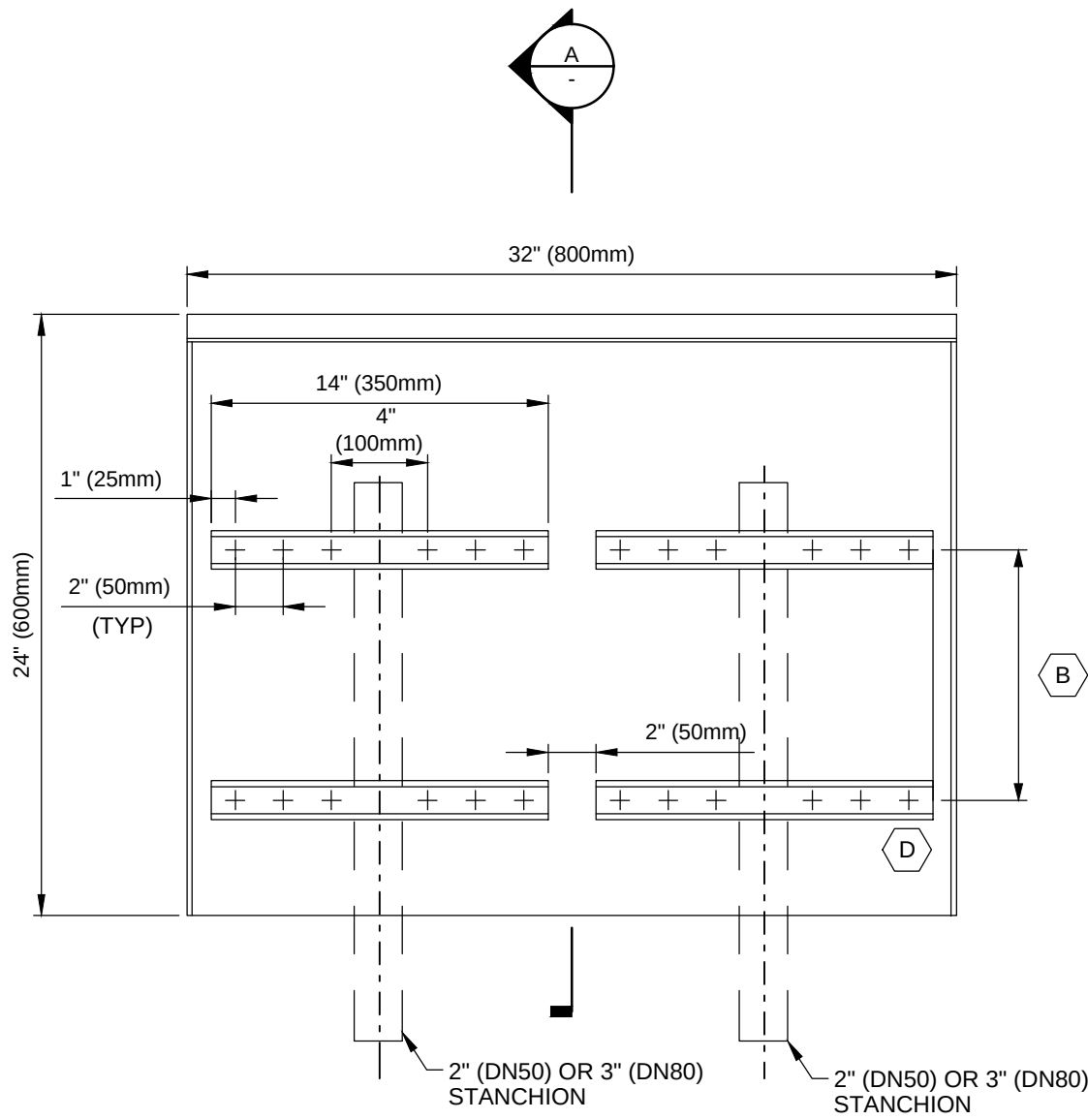


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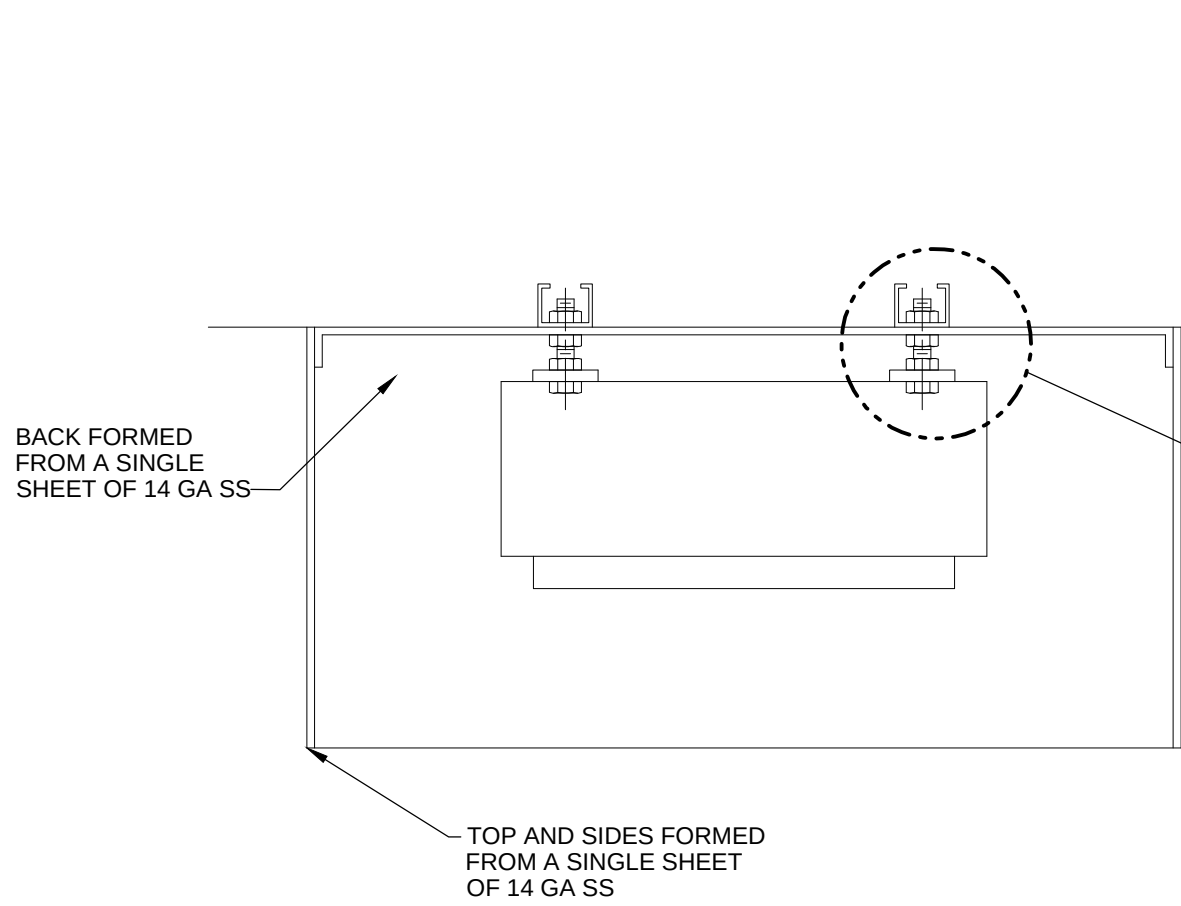
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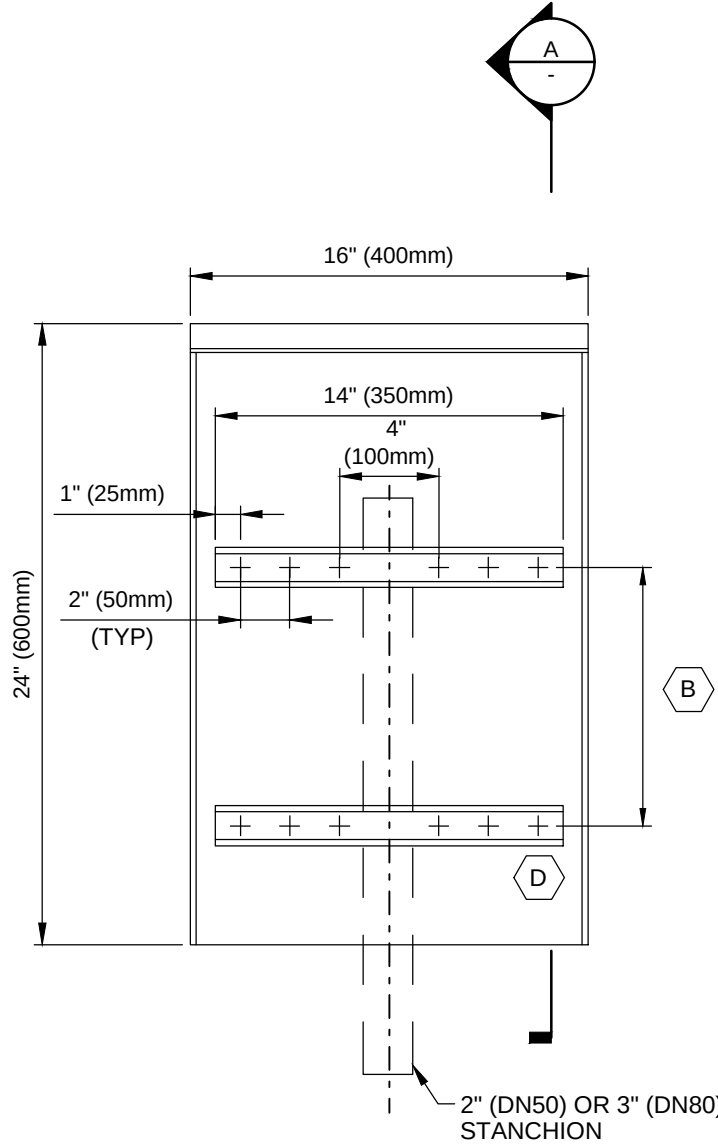
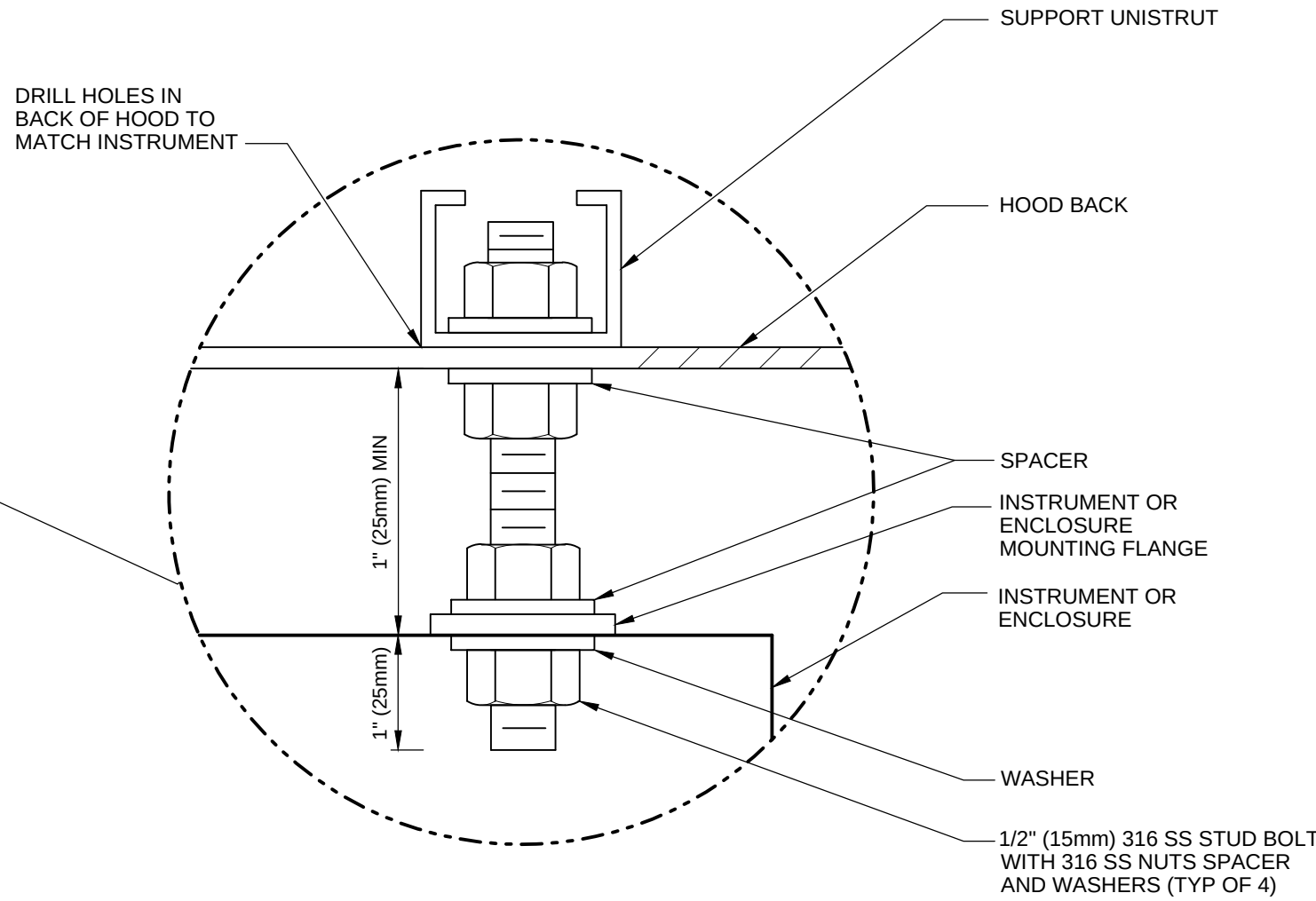
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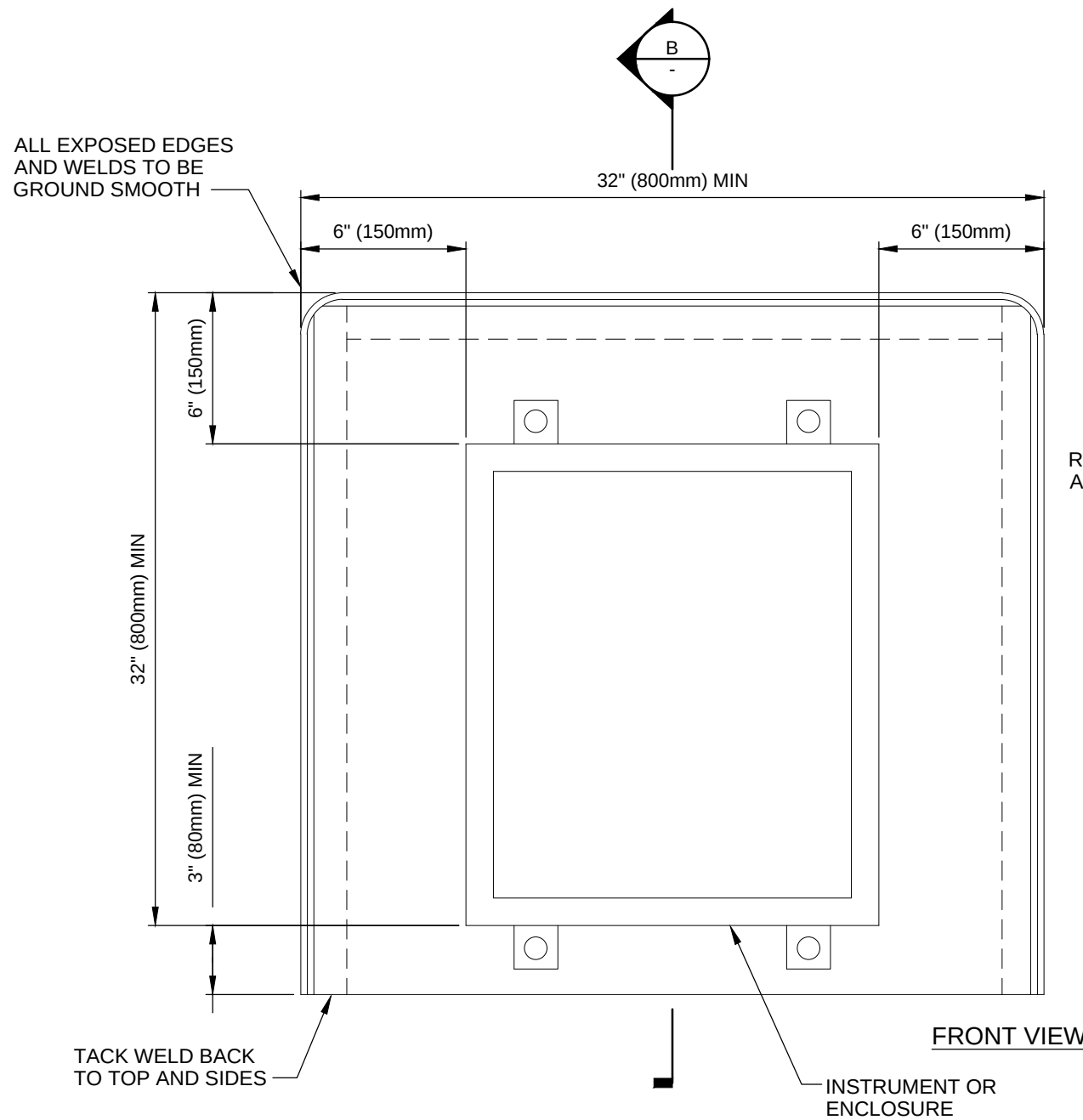
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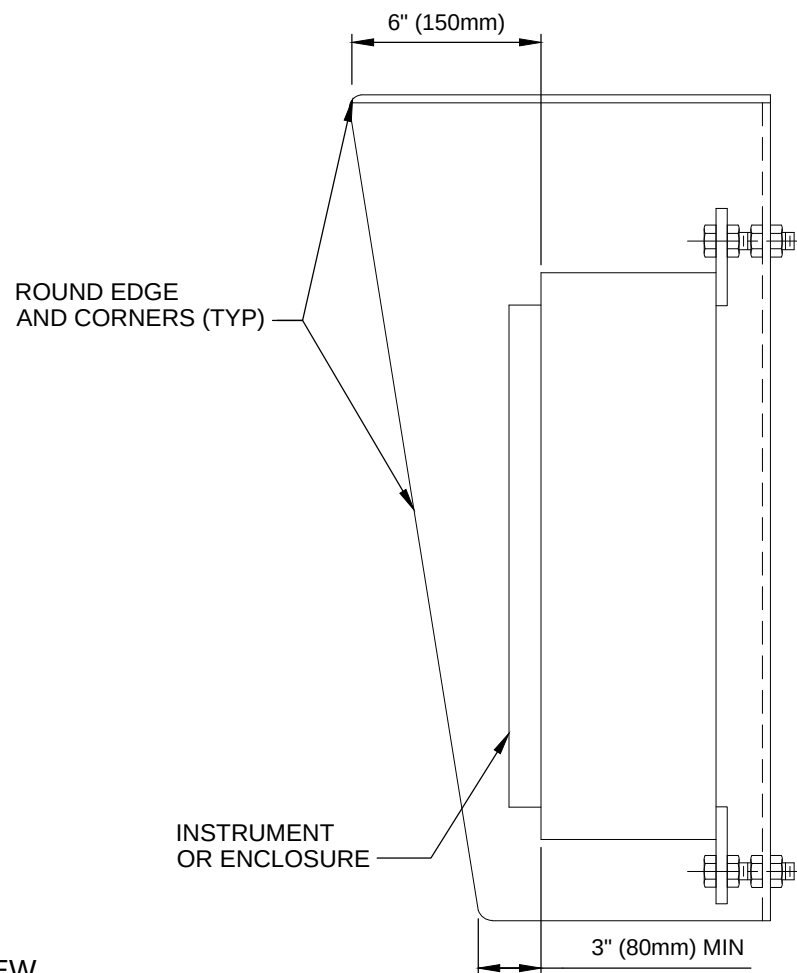
TOP VIEW WITH MOUNTED ELEMENT



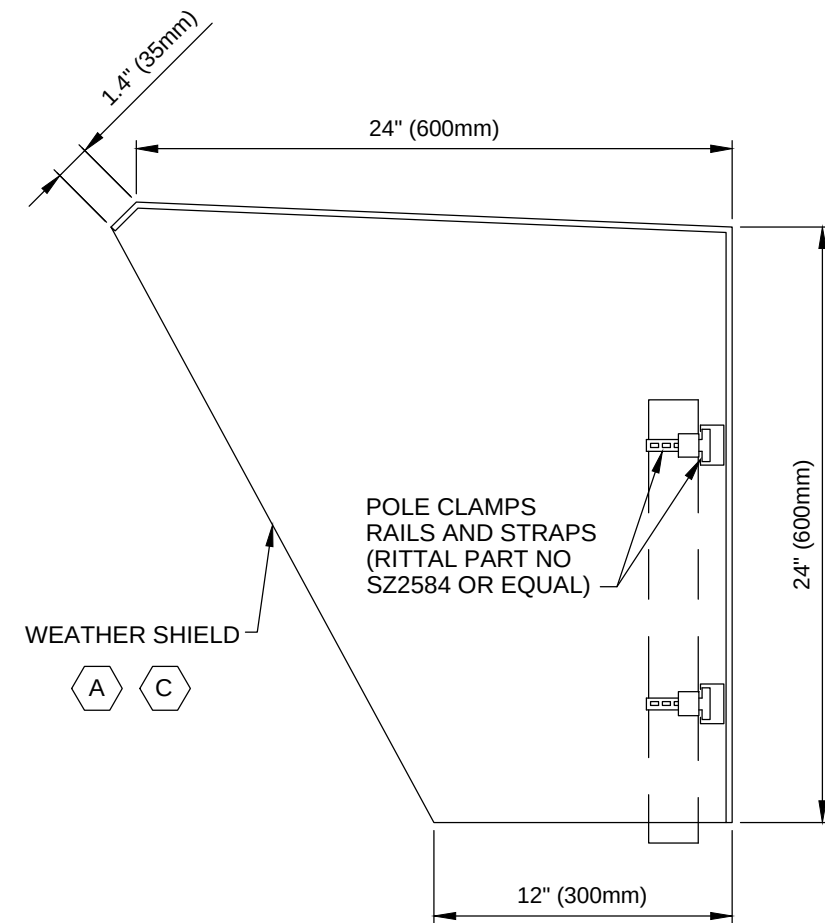
TYPE 16" (400mm) FRONT VIEW



FRONT VIEW WITH MOUNTED ELEMENT



SECTION



SECTION

GENERAL NOTES:

- REFER TO INSTRUMENT STAND INSTALLATION DETAIL I-701 FOR STANCHION SUPPORT DETAILS.
- CROSS RAILS TO HAVE MOUNTING HOLES DRILLED AS DETAILED.

KEYNOTES:

- 304 STAINLESS STEEL.
- WEATHER SHIELD MOUNTING HOLES ARE TO BE DRILLED ON SITE TO SUIT JUNCTION BOX POSITION, HOLES TO BE SMOOTH AND DEBURRED.
- WEATHER SHIELD OPEN AT FRONT AND BOTTOM.
- WEATHER SHIELD ATTACHED TO CROSS RAILS WITH 1/4" (6mm) DIA BY 3/4" (20mm) LONG 316SS BOLTS, 1/4" (6mm) DIA NUTS AND WASHERS.

I-702

INSTRUMENT WEATHER SHIELD

REV 010119

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

Title
INSTRUMENT DETAILS - VIII

Project No.
224202267

Revision
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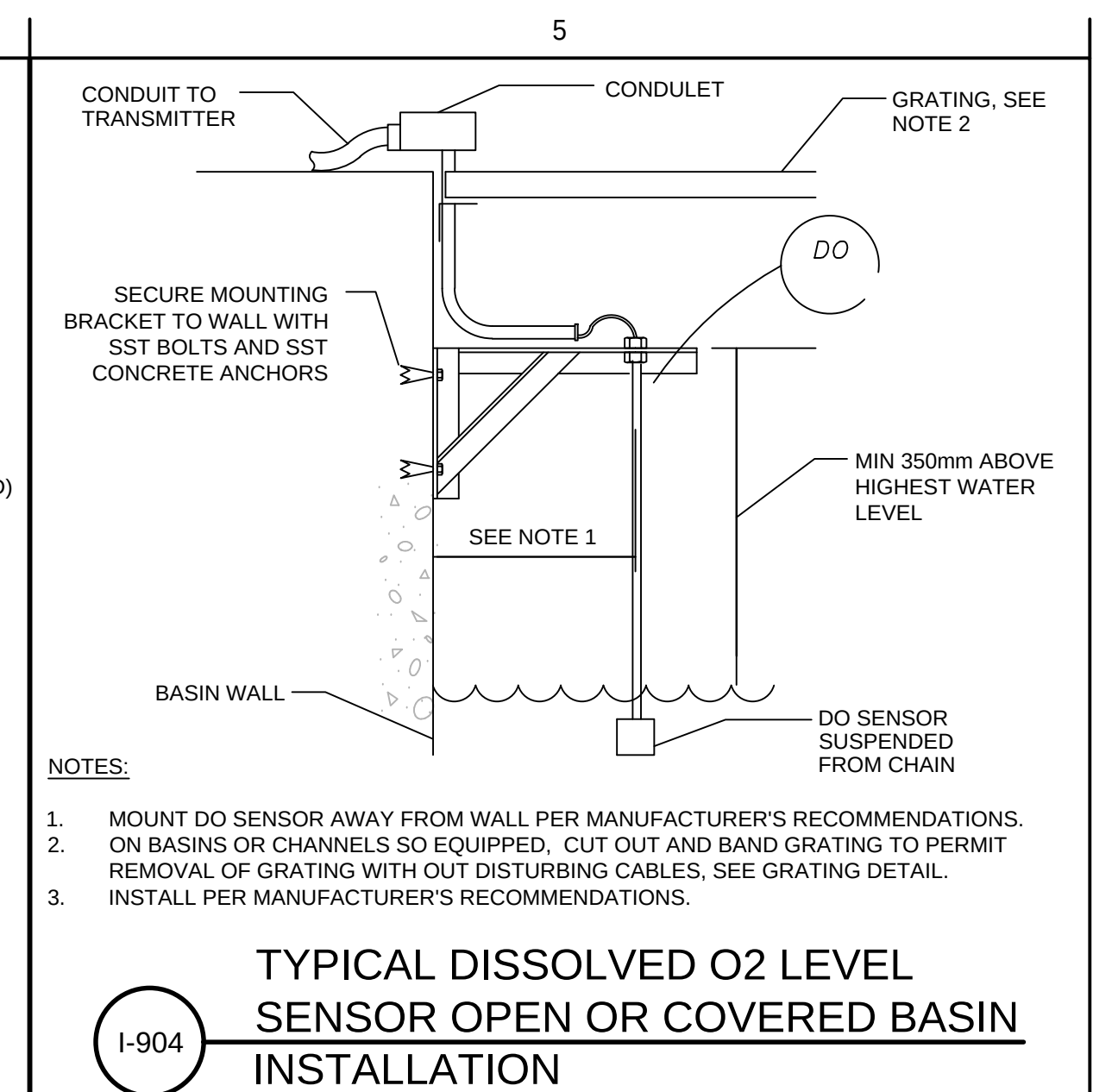
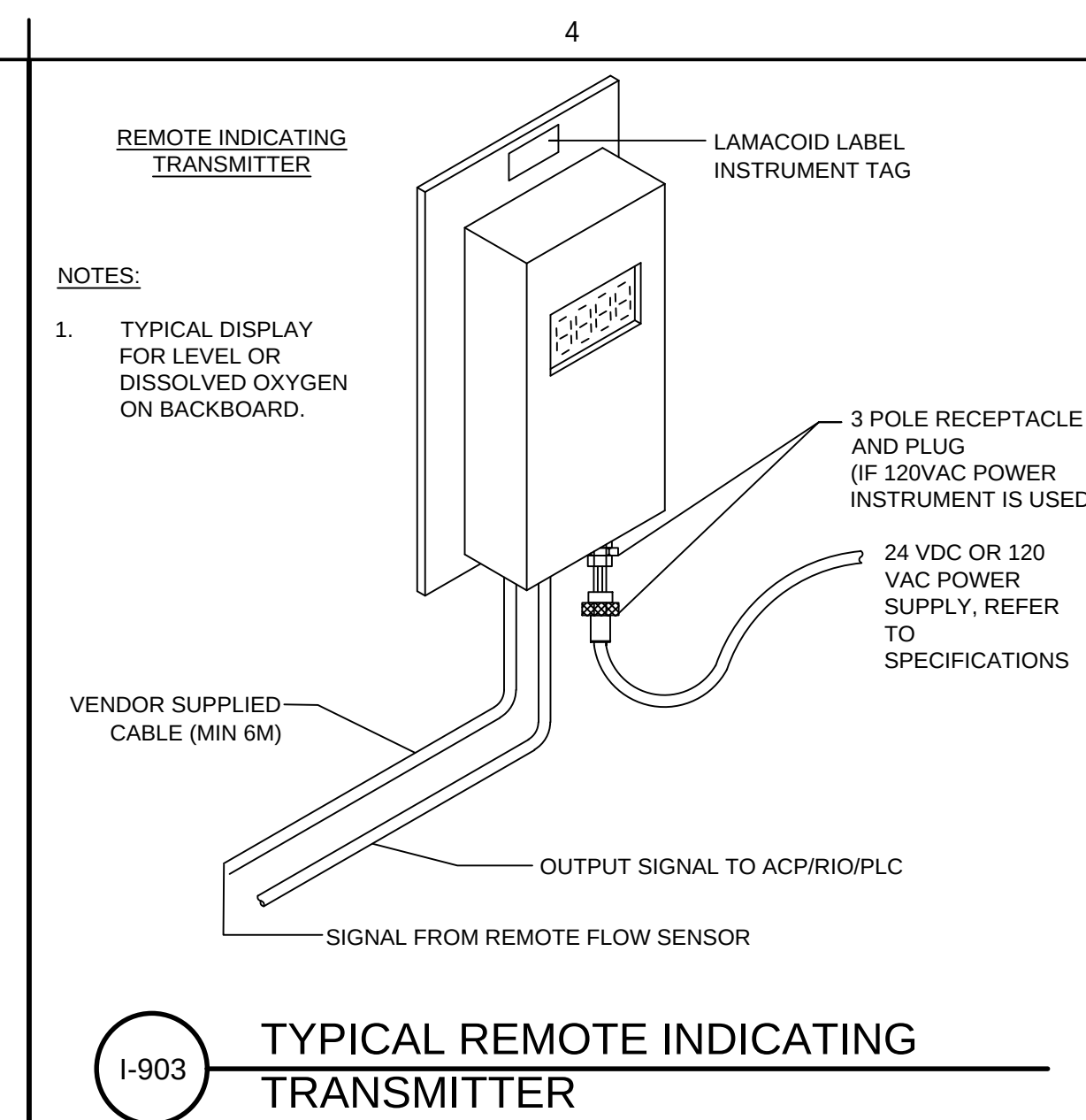
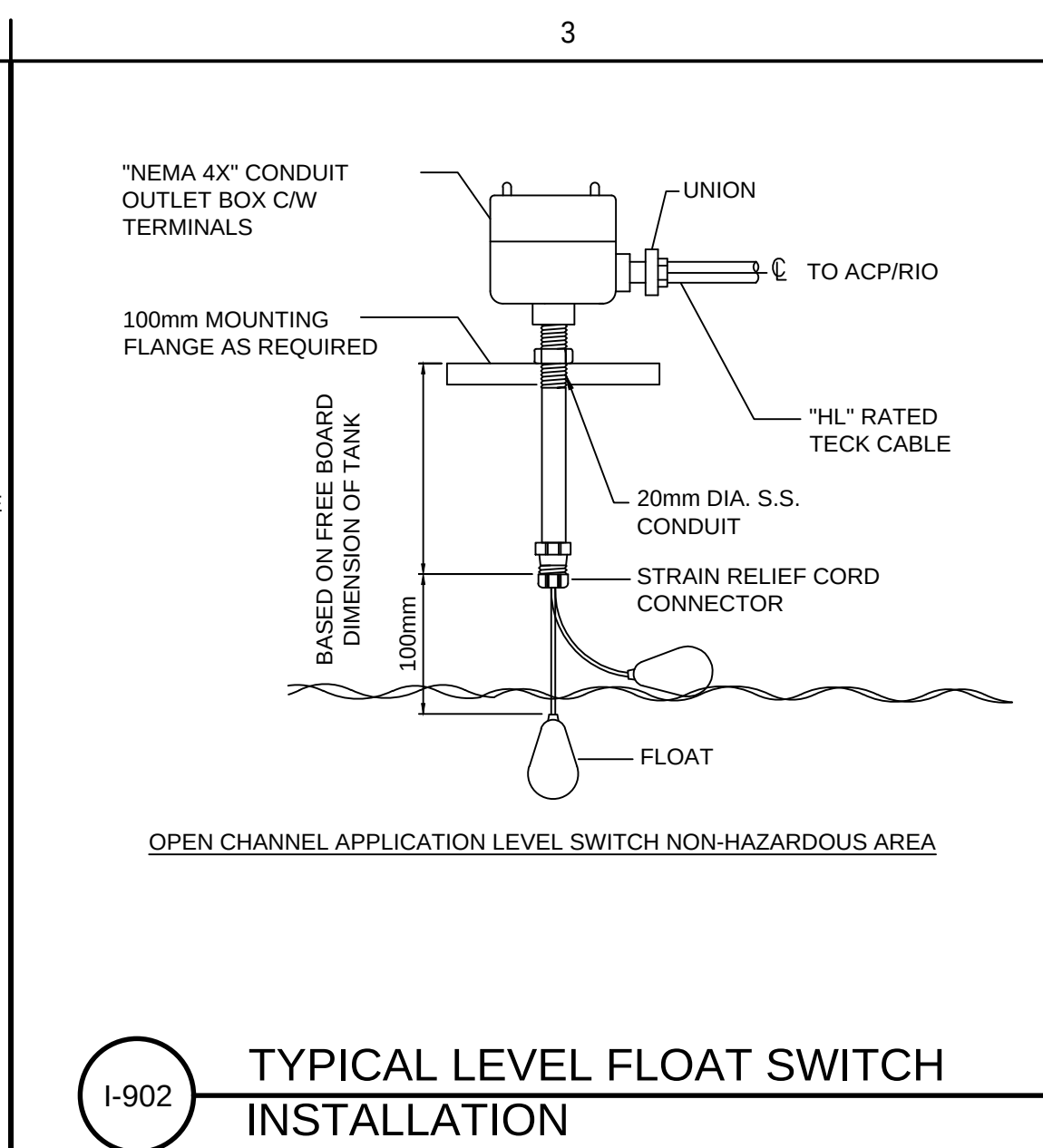
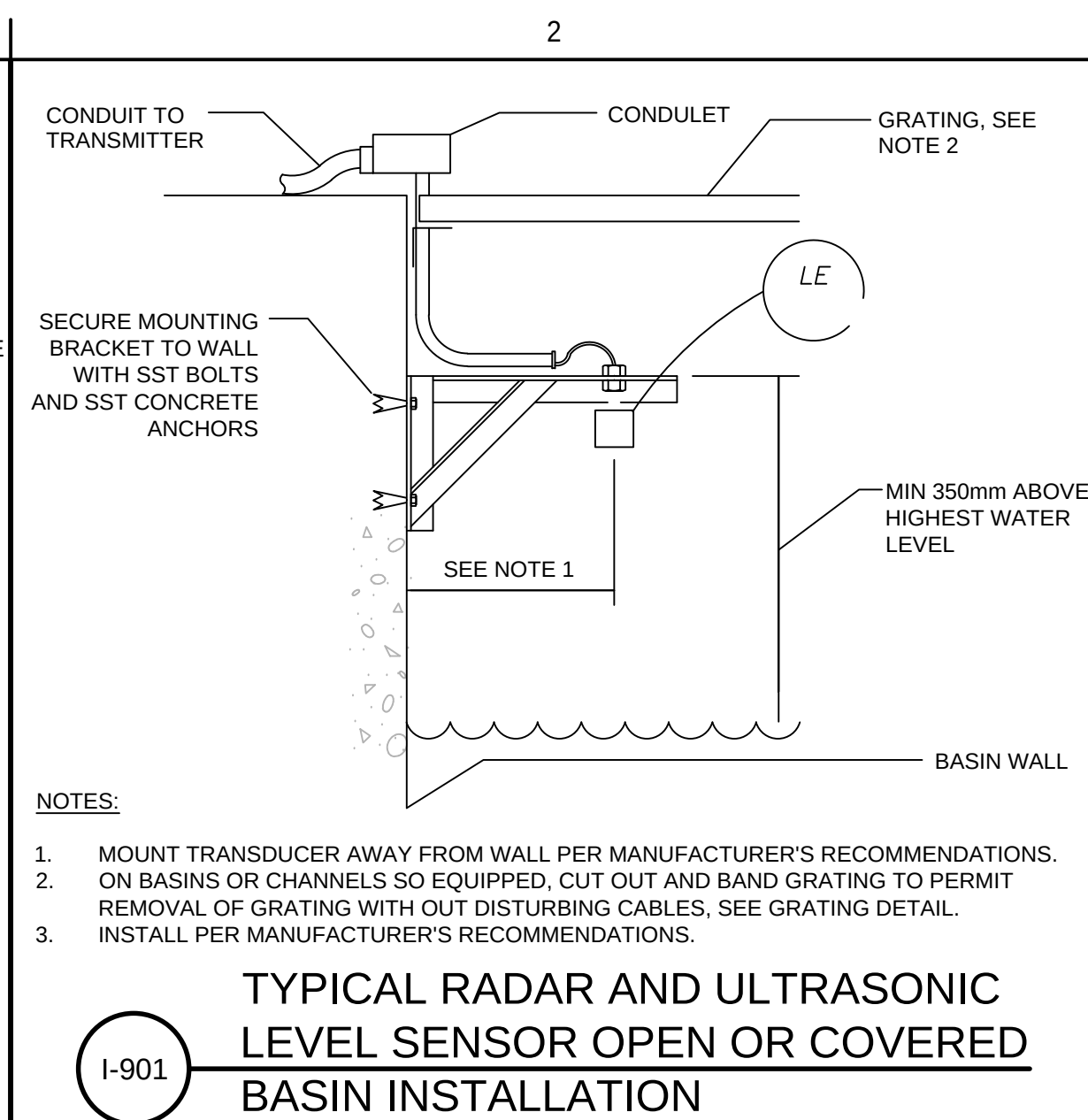
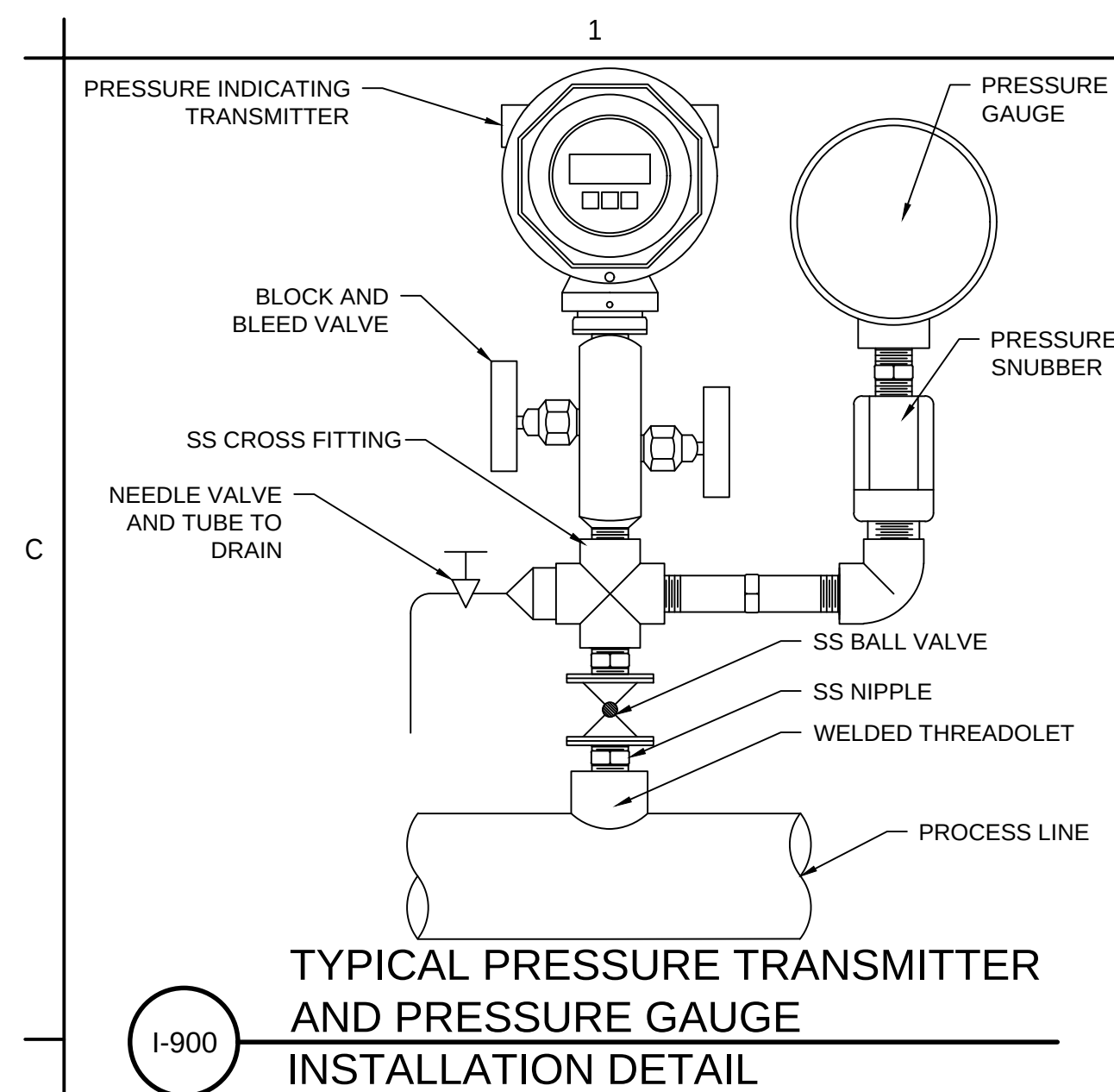
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Drawing No.

GI-11

Exhibit D Page 13 of 220



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B

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LOCAL CONTROL PANEL (LCP-300)				
DIGITAL INPUTS				
#	1769-IQ32	PLC Tag	PLC I/O	PLC Termination
1	Intake Pump No 1 P-301 in Remote Status	ZL-3201	I:00/01/00	Slot 01: IN0
2	Intake Pump No 1 P-301 Run Status	YI-3201	I:00/01/01	Slot 01: IN1
3	Intake Pump No 1 P-301 Fail Alarm	YA-3201	I:00/01/02	Slot 01: IN2
4	Intake Pump No 1 P-301 Temperature Alarm High	TAH-3201	I:00/01/03	Slot 01: IN3
5	Intake Pump No 1 P-301 Moisture Alarm High	MAH-3201	I:00/01/04	Slot 01: IN4
6	Intake Pump No 1 P-301 Low Flow Alarm	FAL-3201	I:00/01/05	Slot 01: IN5
7	Intake Pump No 2 P-302 in Remote Status	ZL-3202	I:00/01/06	Slot 01: IN6
8	Intake Pump No 2 P-302 Run Status	YI-3202	I:00/01/07	Slot 01: IN7
9	Intake Pump No 2 P-302 Fail Alarm	YA-3202	I:00/01/08	Slot 01: IN8
10	Intake Pump No 2 P-302 High Temperature Alarm	TAH-3202	I:00/01/09	Slot 01: IN9
11	Intake Pump No 2 P-302 High Moisture Alarm	MAH-3202	I:00/01/10	Slot 01: IN10
12	Intake Pump No 2 P-302 Low Flow Alarm	FAL-3202	I:00/01/11	Slot 01: IN11
13	Intake Pump No 3 P-303 in Remote Status	ZL-3203	I:00/01/12	Slot 01: IN12
14	Intake Pump No 3 P-303 Run Status	YI-3203	I:00/01/13	Slot 01: IN13
15	Intake Pump No 3 P-303 Fail Alarm	YA-3203	I:00/01/14	Slot 01: IN14
16	Intake Pump No 3 P-303 High Temperature Alarm	TAH-3203	I:00/01/15	Slot 01: IN15
17	Intake Pump No 3 P-303 High Moisture Alarm	MAH-3203	I:00/01/16	Slot 01: IN16
18	Intake Pump No 3 P-303 Low Flow Alarm	FAL-3203	I:00/01/17	Slot 01: IN17
19	Vault Flow Meter FM-702 Totalized Flow Indication	FQI-7103	I:00/01/18	Slot 01: IN18
20	Intake Pump Station Level Alarm High High	LSHH-3202	I:00/01/19	Slot 01: IN19
21	Discharge Flow Switch 3301 Low Flow Alarm	FAL-3301	I:00/01/20	Slot 01: IN20
22	Discharge Flow Switch 3302 Low Flow Alarm	FAL-3302	I:00/01/21	Slot 01: IN21
23	Discharge Flow Switch 3303 Low Flow Alarm	FAL-3303	I:00/01/22	Slot 01: IN22
24	SPARE		I:00/01/23	Slot 01: IN23
25	SPARE		I:00/01/24	Slot 01: IN24
26	SPARE		I:00/01/25	Slot 01: IN25
27	SPARE		I:00/01/26	Slot 01: IN26
28	SPARE		I:00/01/27	Slot 01: IN27
29	SPARE		I:00/01/28	Slot 01: IN28
30	SPARE		I:00/01/29	Slot 01: IN29
31	SPARE		I:00/01/30	Slot 01: IN30
32	SPARE		I:00/01/31	Slot 01: IN31
DISCRETE OUTPUTS				
#	1769-OW16	PLC Tag	PLC I/O	PLC Termination
1	Intake Pump No 1 P-301 Start / Stop Command	HS-3201	O:00/02/00	Slot 02: OUT0
2	Intake Pump No 2 P-302 Start / Stop Command	HS-3202	O:00/02/01	Slot 02: OUT1
3	Intake Pump No 3 P-303 Start / Stop Command	HS-3203	O:00/02/02	Slot 02: OUT2
4	SPARE		O:00/02/02	Slot 02: OUT3
5	SPARE		O:00/02/04	Slot 02: OUT4
6	SPARE		O:00/02/05	Slot 02: OUT5
7	SPARE		O:00/02/06	Slot 02: OUT6
8	SPARE		O:00/02/07	Slot 02: OUT7
9	SPARE		O:00/02/08	Slot 02: OUT8
10	SPARE		O:00/02/09	Slot 02: OUT9
11	SPARE		O:00/02/10	Slot 02: OUT10
12	SPARE		O:00/02/11	Slot 02: OUT11
13	SPARE		O:00/02/12	Slot 02: OUT12
14	SPARE		O:00/02/13	Slot 02: OUT13
15	SPARE		O:00/02/14	Slot 02: OUT14
16	SPARE		O:00/02/15	Slot 02: OUT15
ANALOG INPUTS				
#	1769-IF8	PLC Tag	PLC I/O	PLC Termination
1	Intake Pump No 1 P-301 Speed Indication	SI-3201	I:00/03/00	Slot 03: AI0
2	Intake Pump No 2 P-302 Speed Indication	SI-3202	I:00/03/01	Slot 03: AI1
3	Intake Pump No 3 P-303 Speed Indication	SI-3203	I:00/03/02	Slot 03: AI2
4	Intake Pump Station Level Transmitter LIT-3201 Level Indication	LI-3201	I:00/03/03	Slot 03: AI3
5	Vault Flow Meter FM-702 Flow Indication	FI-7103	I:00/03/04	Slot 03: AI4
6	Intake Pump No 1 PIT-3301 Pressure Indication	PI-3301	I:00/03/05	Slot 03: AI5
7	Intake Pump No 1 PIT-3302 Pressure Indication	PI-3302	I:00/03/06	Slot 03: AI6
8	Intake Pump No 1 PIT-3302 Pressure Indication	PI-3303	I:00/03/07	Slot 03: AI7
#	1769-IF8	PLC Tag	PLC I/O	PLC Termination
1	SPARE		I:00/04/00	Slot 04: AI0
2	SPARE		I:00/04/01	Slot 04: AI1
3	SPARE		I:00/04/02	Slot 04: AI2
4	SPARE		I:00/04/03	Slot 04: AI3
5	SPARE		I:00/04/04	Slot 04: AI4
6	SPARE		I:00/04/05	Slot 04: AI5
7	SPARE		I:00/04/06	Slot 04: AI6
8	SPARE		I:00/04/07	Slot 04: AI7
ANALOG OUTPUTS				
#	1769-OF4CI	PLC Tag	PLC I/O	PLC Termination
1	Intake Pump No 1 P-301 Speed Control	SC-3201	O:00/05/00	Slot 05: AO0
2	Intake Pump No 2 P-302 Speed Control	SC-3202	O:00/05/01	Slot 05: AO1
3	Intake Pump No 3 P-303 Speed Control	SC-3203	O:00/05/02	Slot 05: AO2
4	SPARE		O:00/05/03	Slot 05: AO3

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Client/Project Logo



Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

Title

PLC I/O LIST - AREA 3/8
PUMPED INTAKE AND CLARIFIER

Project No.

224202267

Revision

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Drawing No.

GI-13

File Name: 0226G-13

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2024.09.19

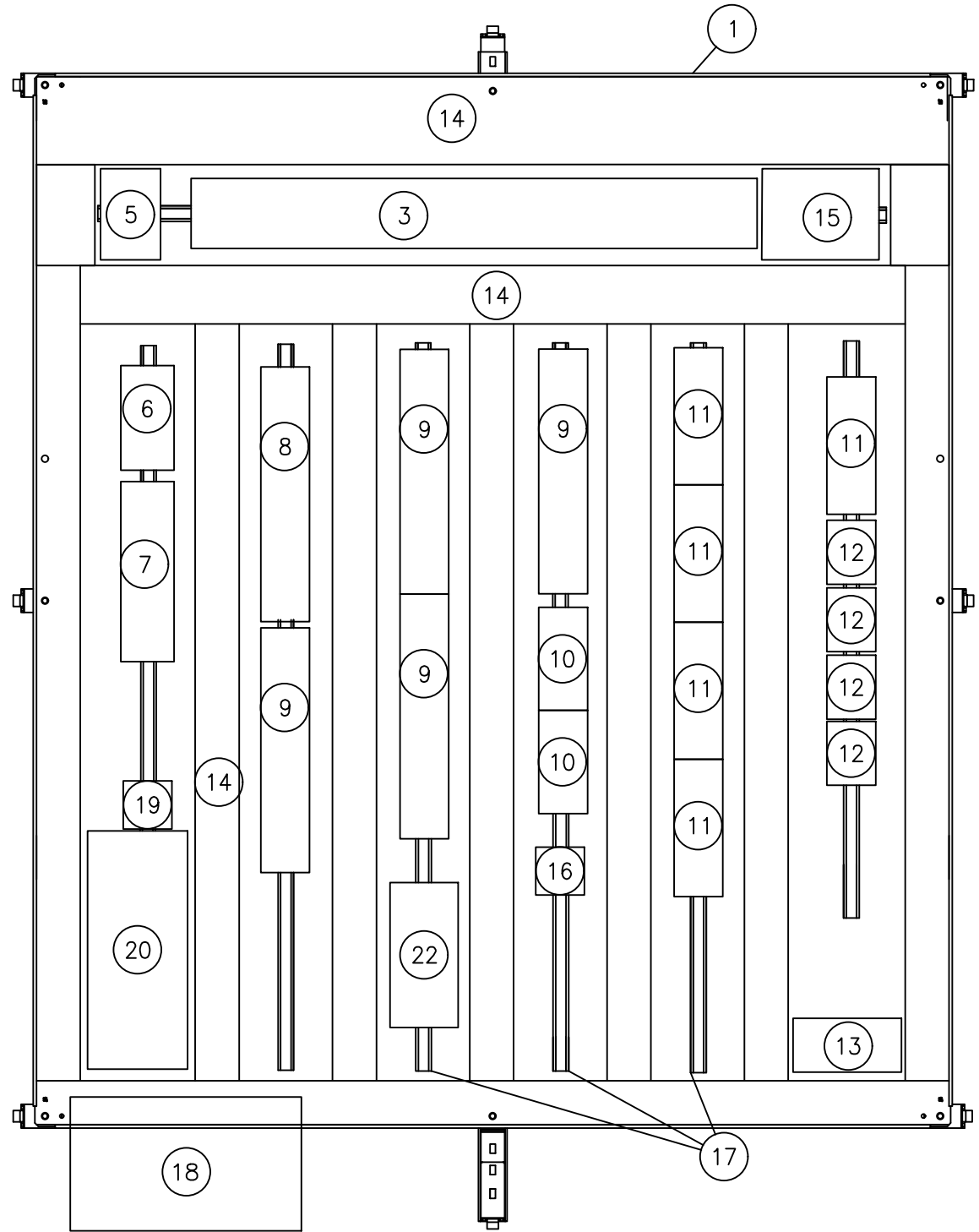
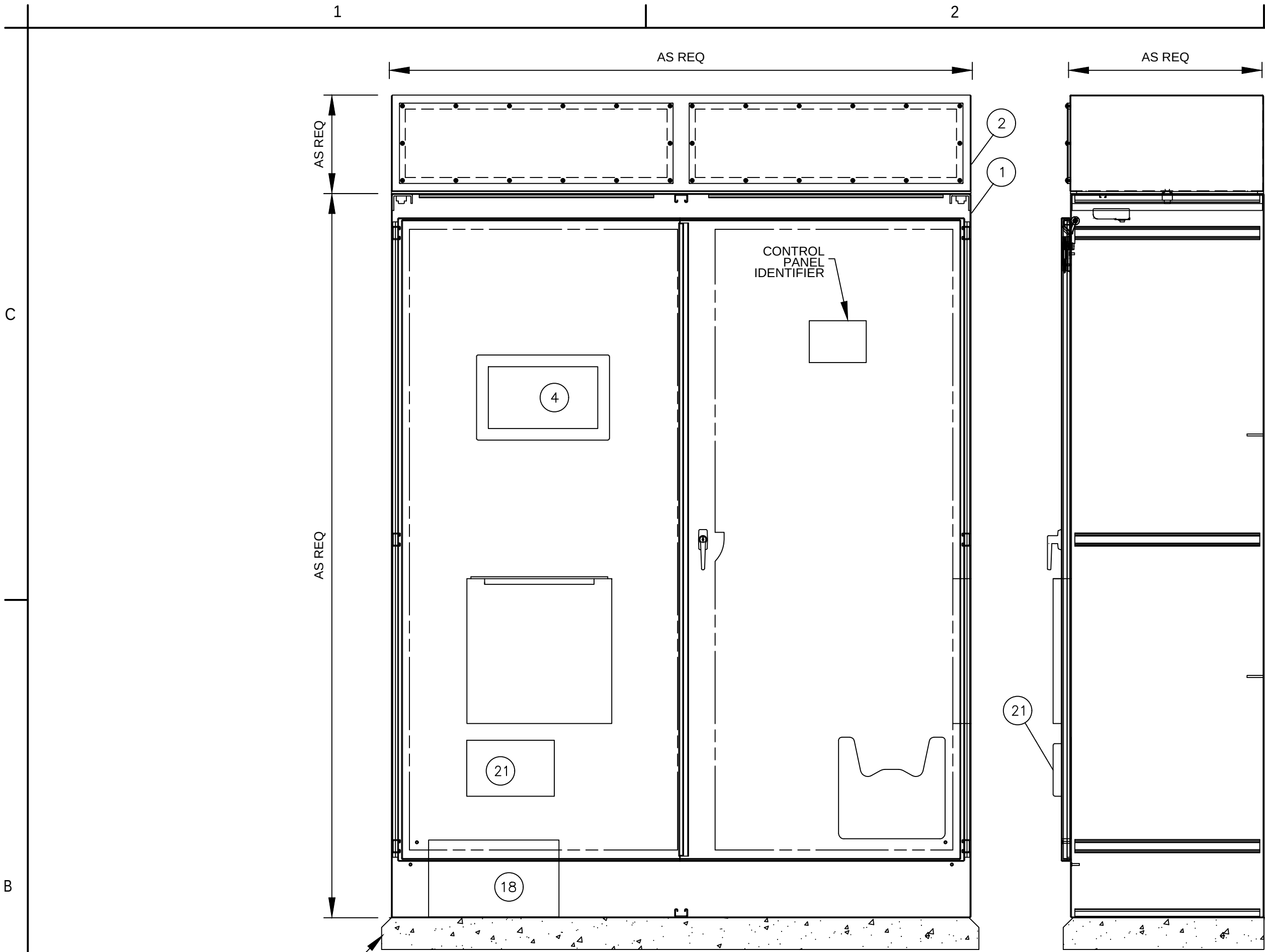
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Exhibit D Page 13 of 220



ITEM	DESCRIPTION	MANUFACTURER
1	TYPE 12 ENCLOSURE c/w FULL SIZE MOUNTING PANEL, ENCLOSURE LIGHTING, LAPTOP FOLDING SHELF, DOOR SWITCH AND DOCUMENT STORAGE POCKET	HOFFMAN
2	PANEL TOP HAT ENCLOSURE	HAMMOND
3	PLC CONTROL SYSTEM INCLUDING: POWER SUPPLY, CONTROLLER, INPUT/OUTPUT MODULES, WIRING TERMINALS AND COMMUNICATIONS CABLES	AB
4	HUMAN MACHINE INTERFACE (HMI)	ADVANTECH
5	24VDC POWER SUPPLIES c/w REDUNDANCY FUNCTIONALITY	WEIDMULLER
6	INCOMMING 120VAC POWER DISTRIBUTION INCLUDING: BREAKERS, SURGE PROTECTION DEVICE, TERMINALS AND JUMPER BARS	WEIDMULLER
7	120VAC UPS POWER DISTRIBUTION INCLUDING BREAKERS, TERMINALS AND JUMPER BARS	WEIDMULLER
8	24VDC POWER DISTRIBUTION INCLUDING BREAKERS, TERMINALS AND JUMPER BARS	WEIDMULLER
9	DIGITAL INPUT TERMINAL STRIP INCLUDING: END BRACKETS, LABEL CARRIERS AND LABELS, KNIFE SWITCHES AND FUSED TERMINALS	WEIDMULLER
10	RELAY OUTPUT TERMNAL STRIP INCLUDING: END BRACKETS, LABEL CARRIERS AND LABELS, KNIFE SWITCHES AND FEED THROUGH TERMINALS	WEIDMULLER
11	ANALOG INTPUT TERMINAL STRIP INCLUDING: END BRACKETS, LABEL CARRIERS AND LABELS, GROUND TERMINALS, KNIFE SWITCHES AND FUSED TERMINALS	WEIDMULLER
12	ANALOG OUTPUT TERMINAL STRIP INCLUDING: END BRACKETS, LABEL CARRIERS AND LABELS, GROUND TERMINALS, KNIFE SWITCHES AND FUSED TERMINALS	WEIDMULLER
13	CONTROL ENCLOSURE GROUNDING c/w BUSSBAR, LUGS, CLAMPING SCREWS	WEIDMULLER
14	WIRE DUCT c/w COVER (VARIOUS SIZES)	PANDUIT
15	NETWORK / COMMUNICATIONS GATEWAYS INCLUDING: ETHERNET SWITCHES AND PROTOCOL CONVERTERS	VARIOUS
16	CONTROL PANEL RELAYS c/w BASE AND SOLENOID	WEIDMULLER
17	SLOTTED DIN RAIL	WEIDMULLER
18	UNINTERRUPTIBLE POWER SUPPLY (UPS) c/w RELAY OUTPUT CARD	EATON
19	120VAC RAIL MOUNT SIMPLEX RECEPTACLE	WEIDMULLER
20	UPS WRAP-AROUND BYPASS, 15A, 120VAC, c/w AUTOMATIC TRANSFER SWITCH AND FORM C OUTPUT	ALWAYS ON
21	ENCLOSURE DOOR ACCESS PORTS INCLUDING: 120VAC RECEPTACLE AND RJ45 CAT 6 ETHERNET DATA PORT	LEVITON / WEIDMULLER
22	CELLULAR OR LANDLINE BASED AUTODIALER ALARM NOTIFIER c/w POWER SUPPLY	VARIOUS

GENERAL SHEET NOTES

- CONTROL PANEL SHOWN AS TYPICAL GENERAL ARRANGEMENT FOR MCP-01.
- CONTRACTOR TO FOLLOW GENERAL PANEL ARRANGEMENT WHEN LAYING OUT AND FABRICATING MCP-01. MODIFY ARRANGEMENT AS REQUIRED TO MEET DESIGN INTENT.
- DETAILED CONTROL PANEL DRAWINGS AND LOOP DRAWINGS FOR FIELD CONNECTIONS TO MCP-01 ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- BILL OF MATERIALS INCLUDES DESIGN BASIS COMPONENTS. CONTRACTOR TO PROVIDE EQUAL OR EQUIVALENT WHEN DESIGNING AND BUILDING CONTROL PANEL.
- REFER TO THE MCP-01 I/O LIST ON GI-15 FOR REQUIRED SIGNAL CONNECTIONS TO MCP-01 WHEN LAYING OUT OF TERMINALS AND CREATING LOOP DRAWINGS.
- MCP-01 PANEL AND LOOP DRAWINGS TO BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO FABRICATING.
- CONTRACTOR TO ENGAGE THE OWNER'S PREFERRED CONTROLS SYSTEM INTEGRATOR TO COMPLETE THE PLC, HMI, AND SCADA PROGRAMMING. REFER TO SPECIFICATION 40 91.00 FOR ADDITIONAL INFORMATION.

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Client/Project Logo



Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 0226G-17

JM Dwn.

JS Dsgn.

JR Chkd.

2024.09.19

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Title

MAIN CONTROL PANEL - MCP-01
TYPICAL LAYOUT, BILL OF MATERIALS,
AND GENERAL ARRANGEMENT

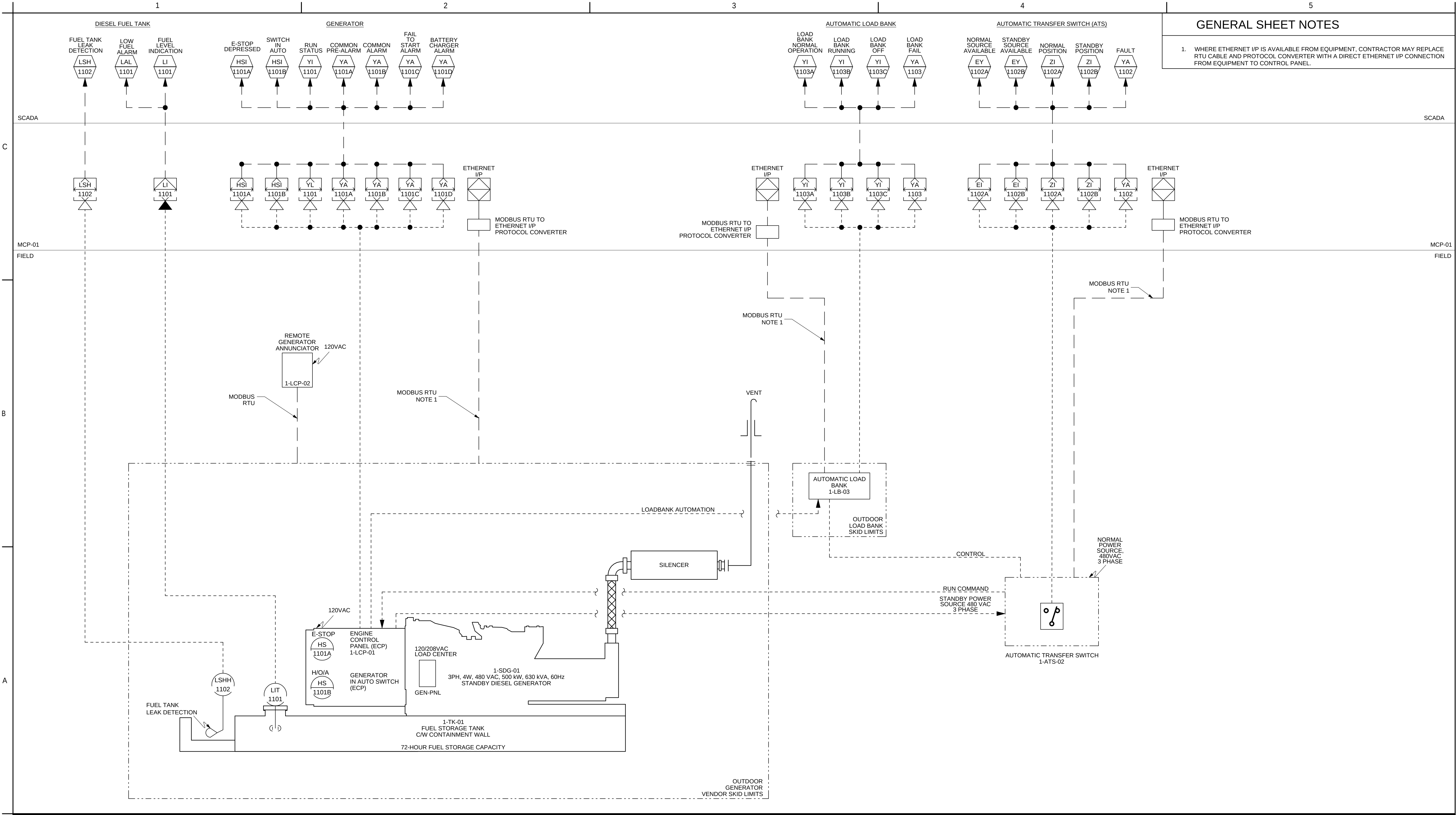
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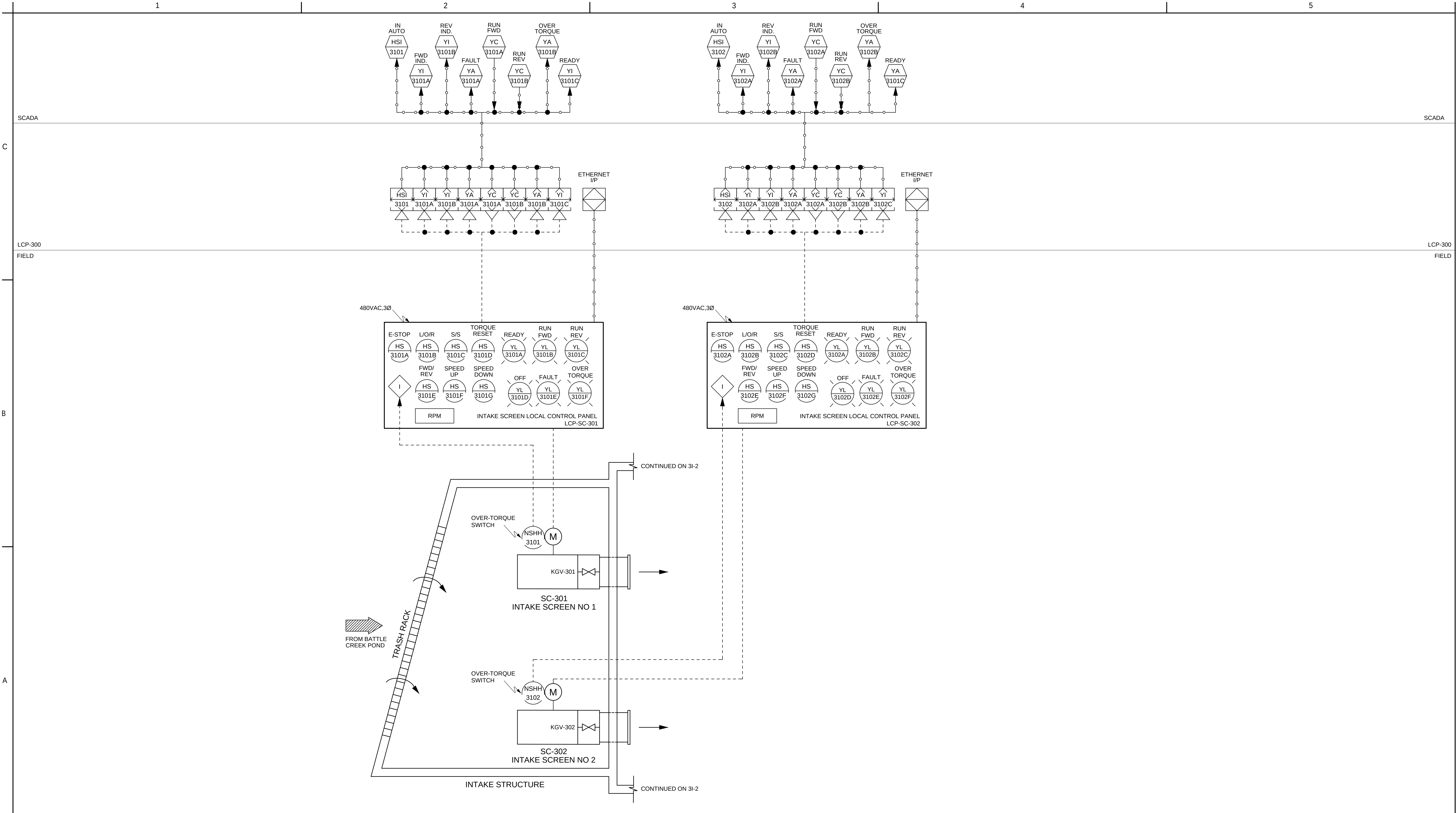
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By		By		2/12/25		Copyright Reserved		File Name: 02267J-1		Revision Sheet 0 of 11-1	
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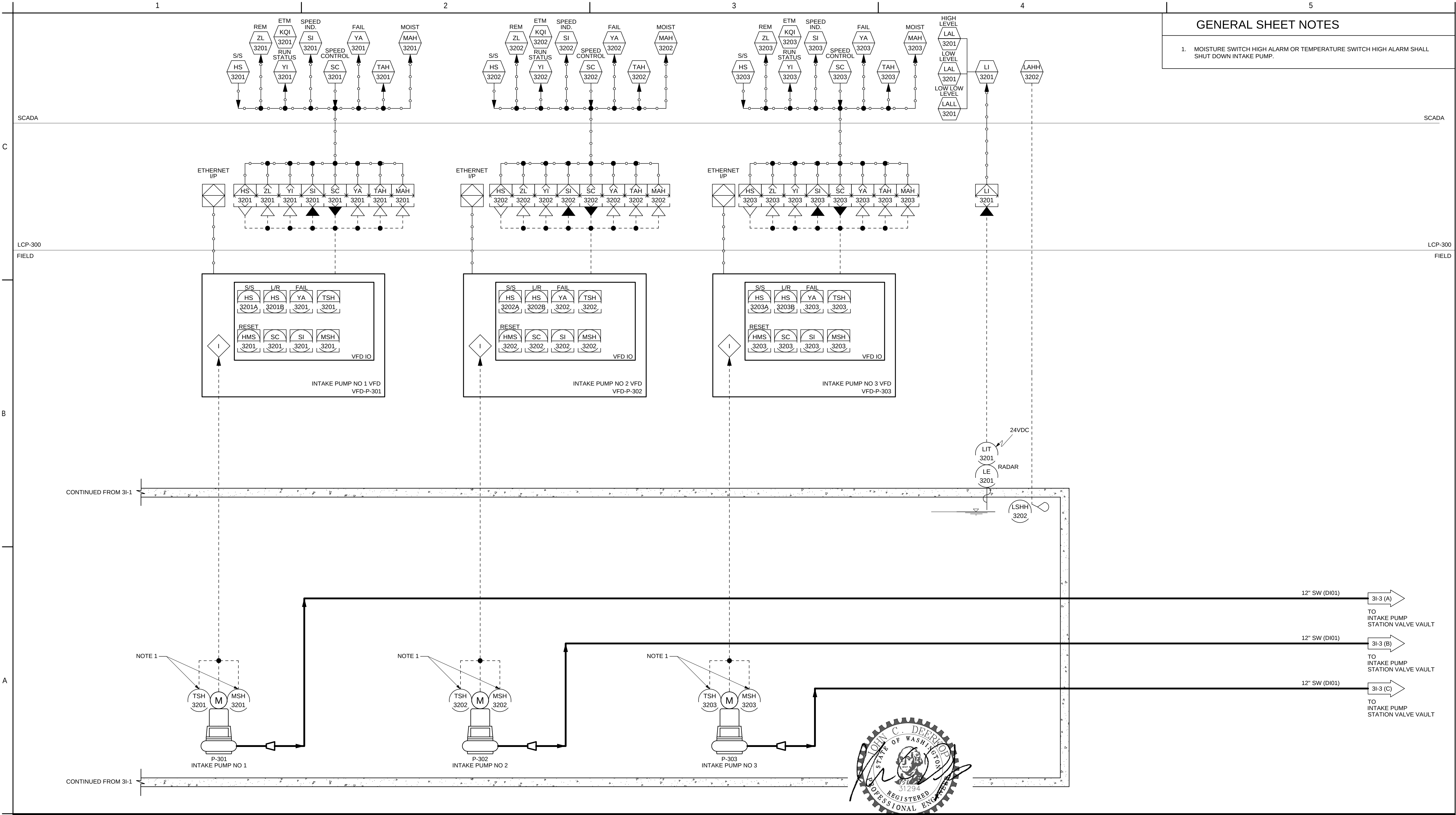
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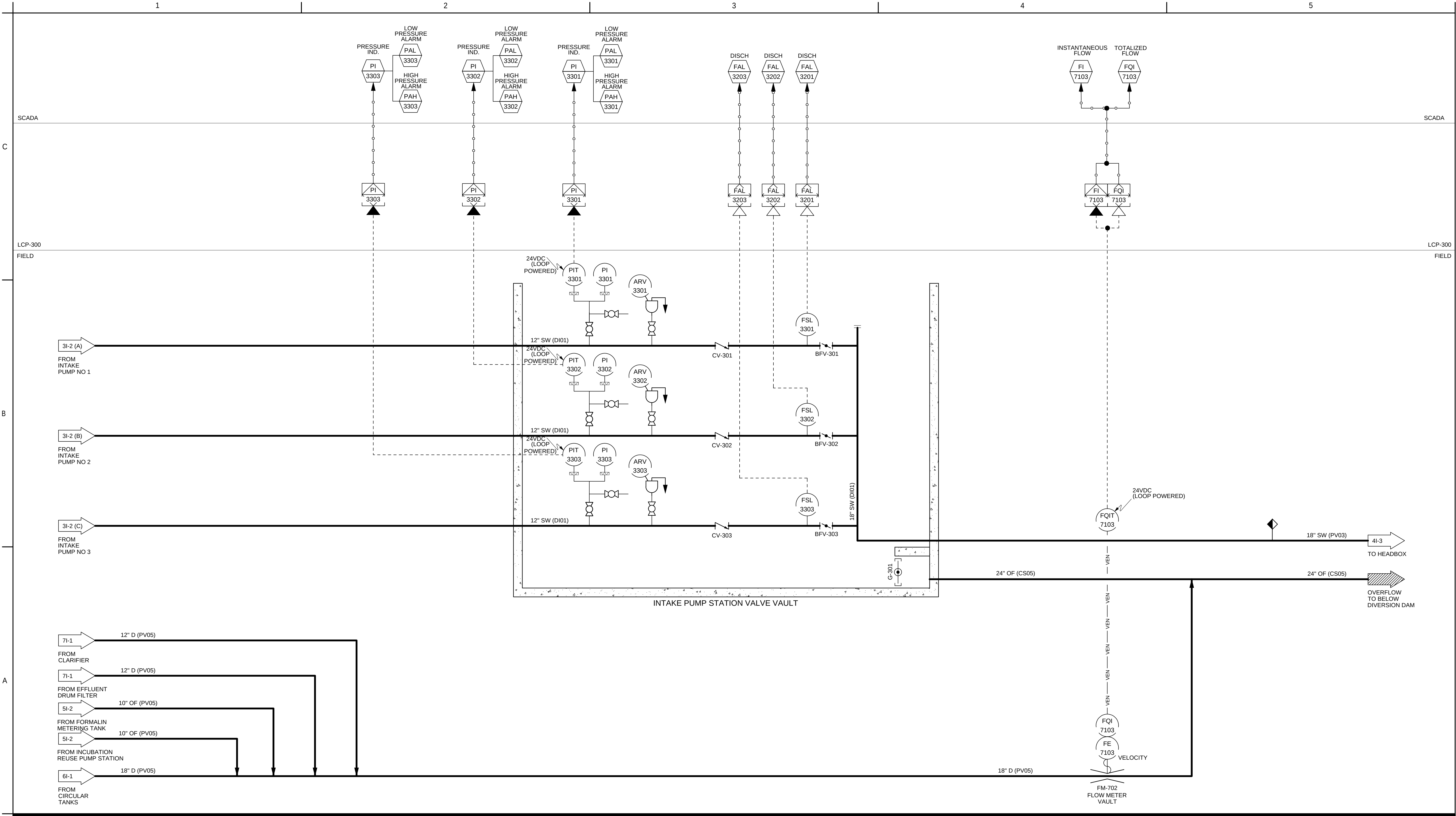
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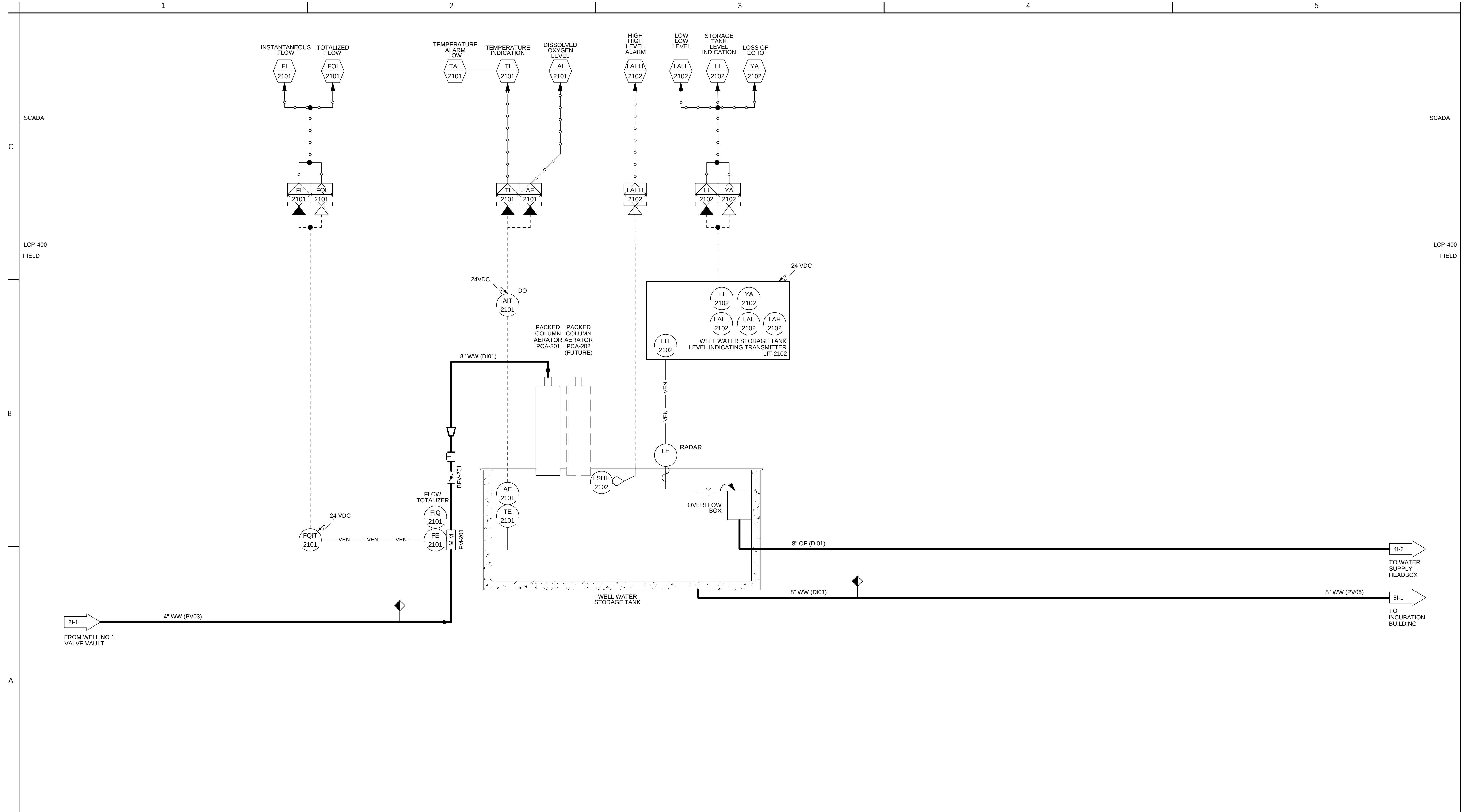
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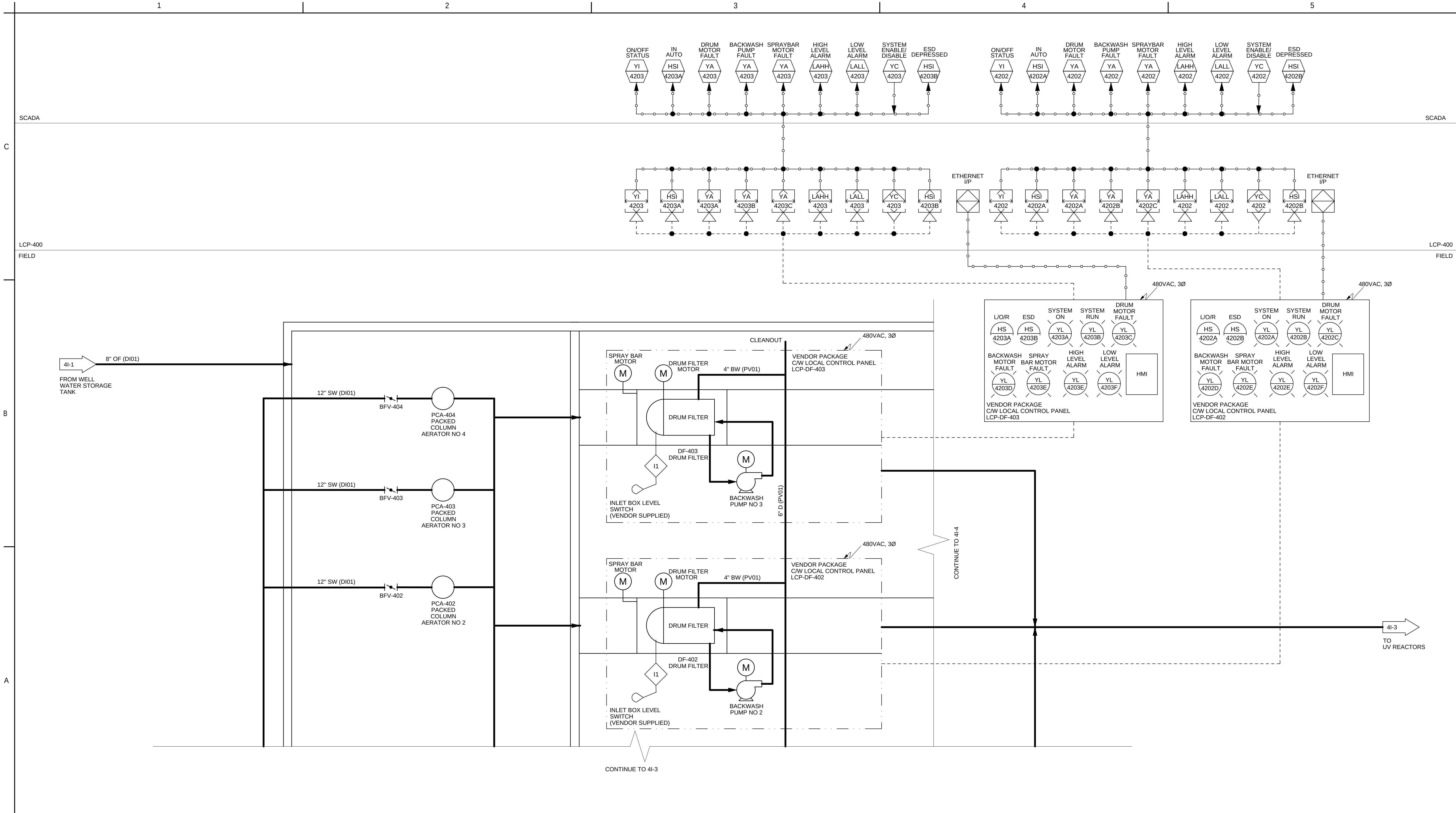


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Rev	By	Appd	YYYY.MM.DD														
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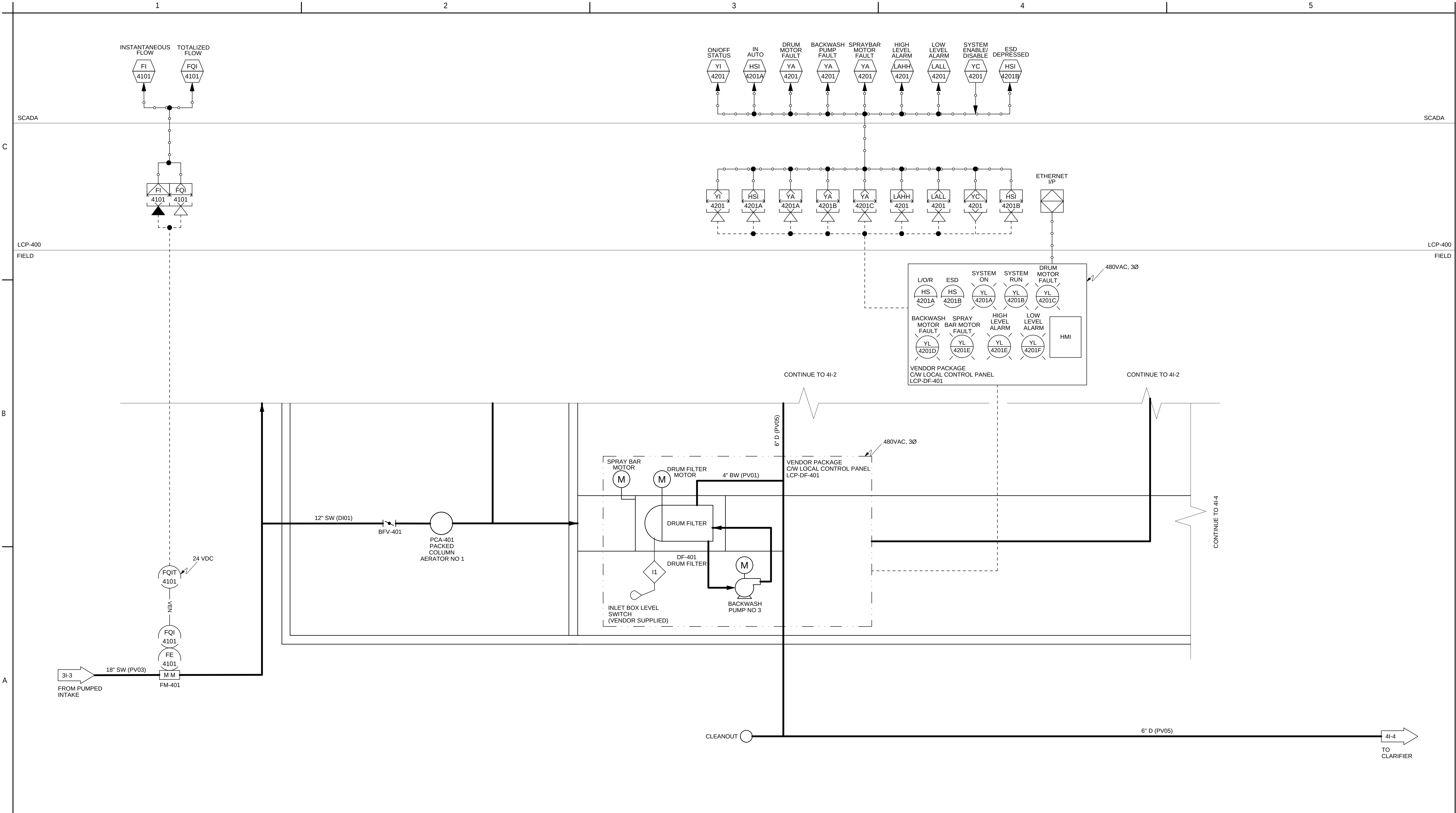
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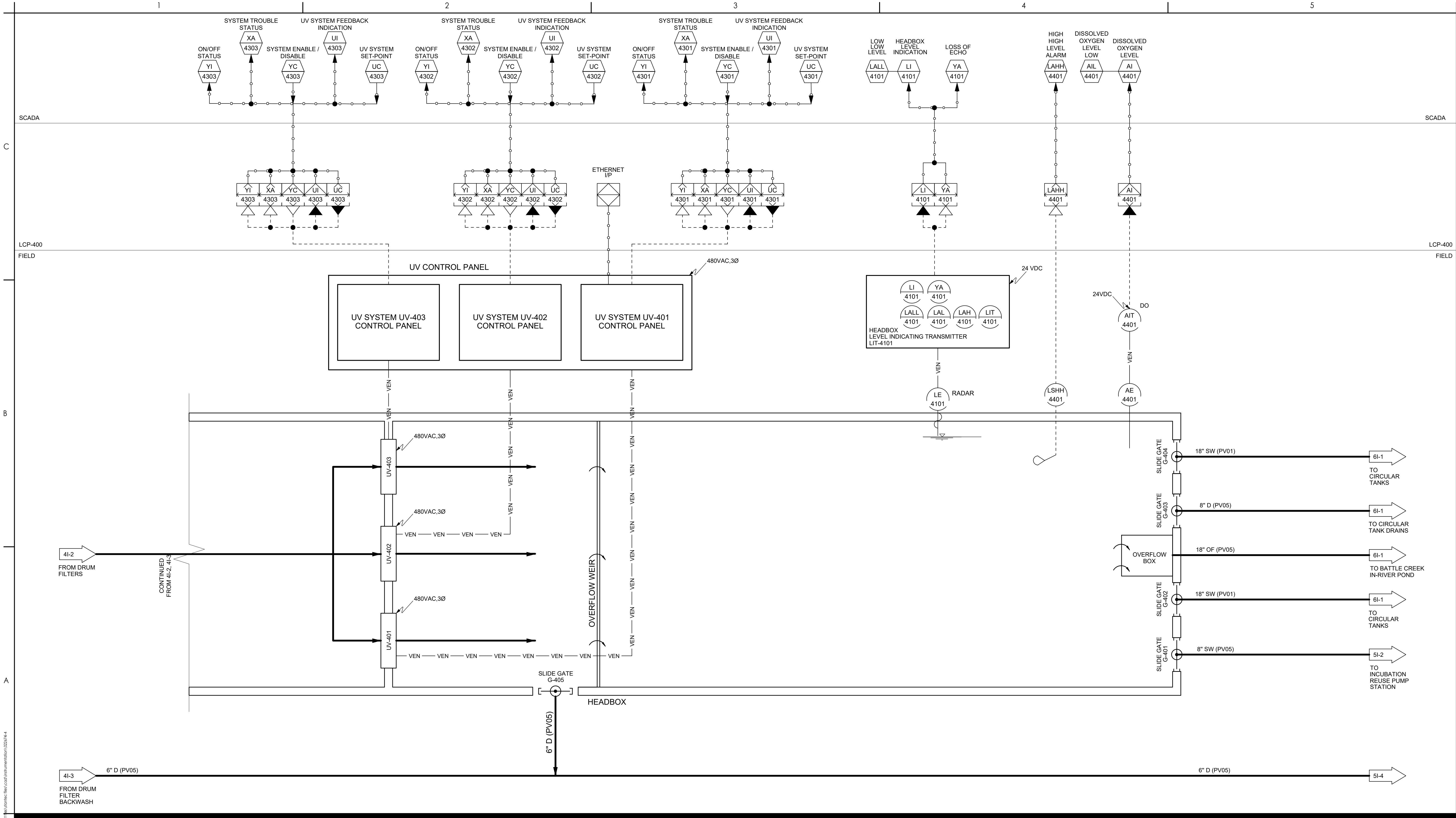
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FINAL DESIGN				MCM	DEW	2026.02.26	YYYY.MM.DD
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TULALIP TRIBES

BATTLE CREEK HATCHERY

Title

WATER SUPPLY HEADBOX P&ID - IV

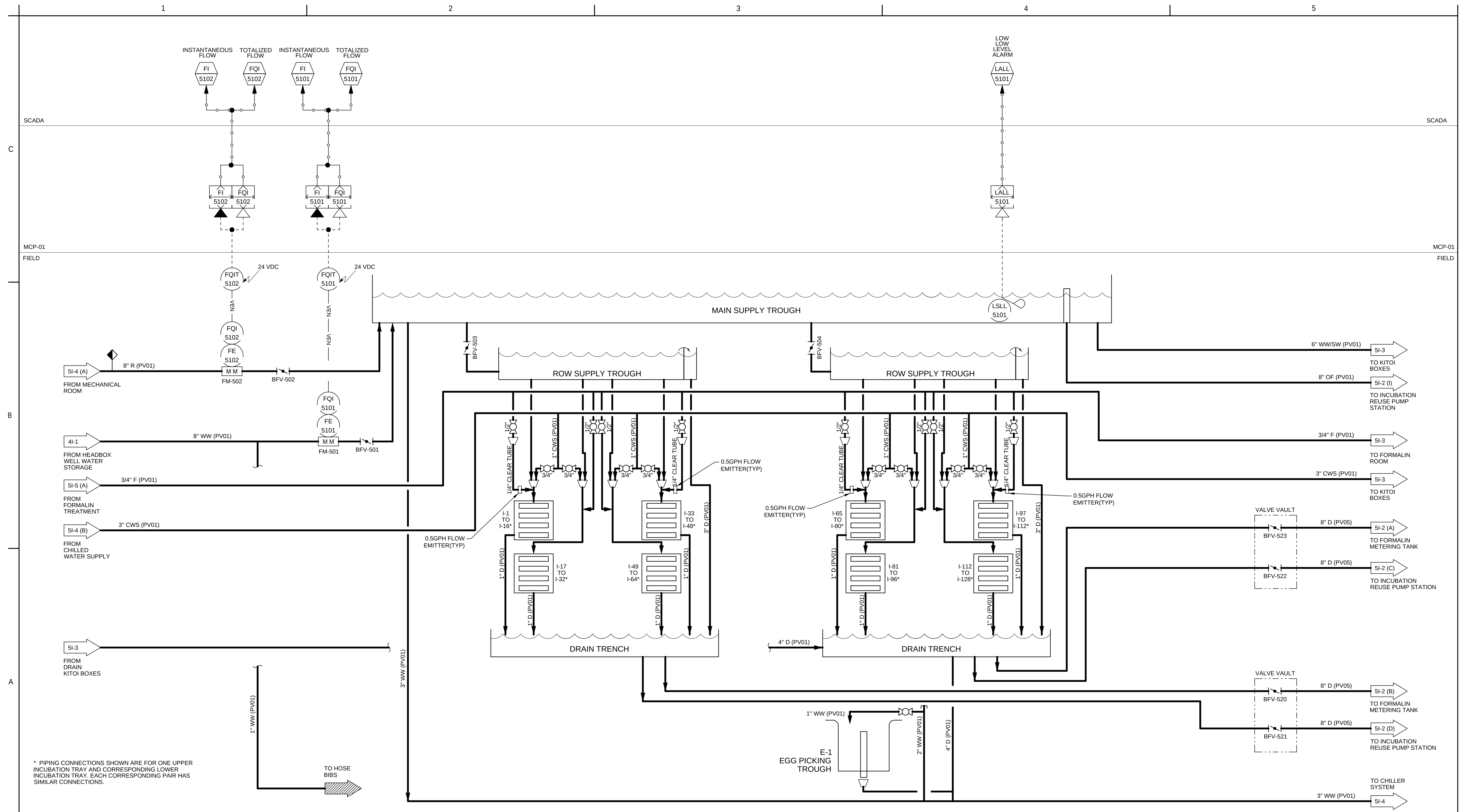
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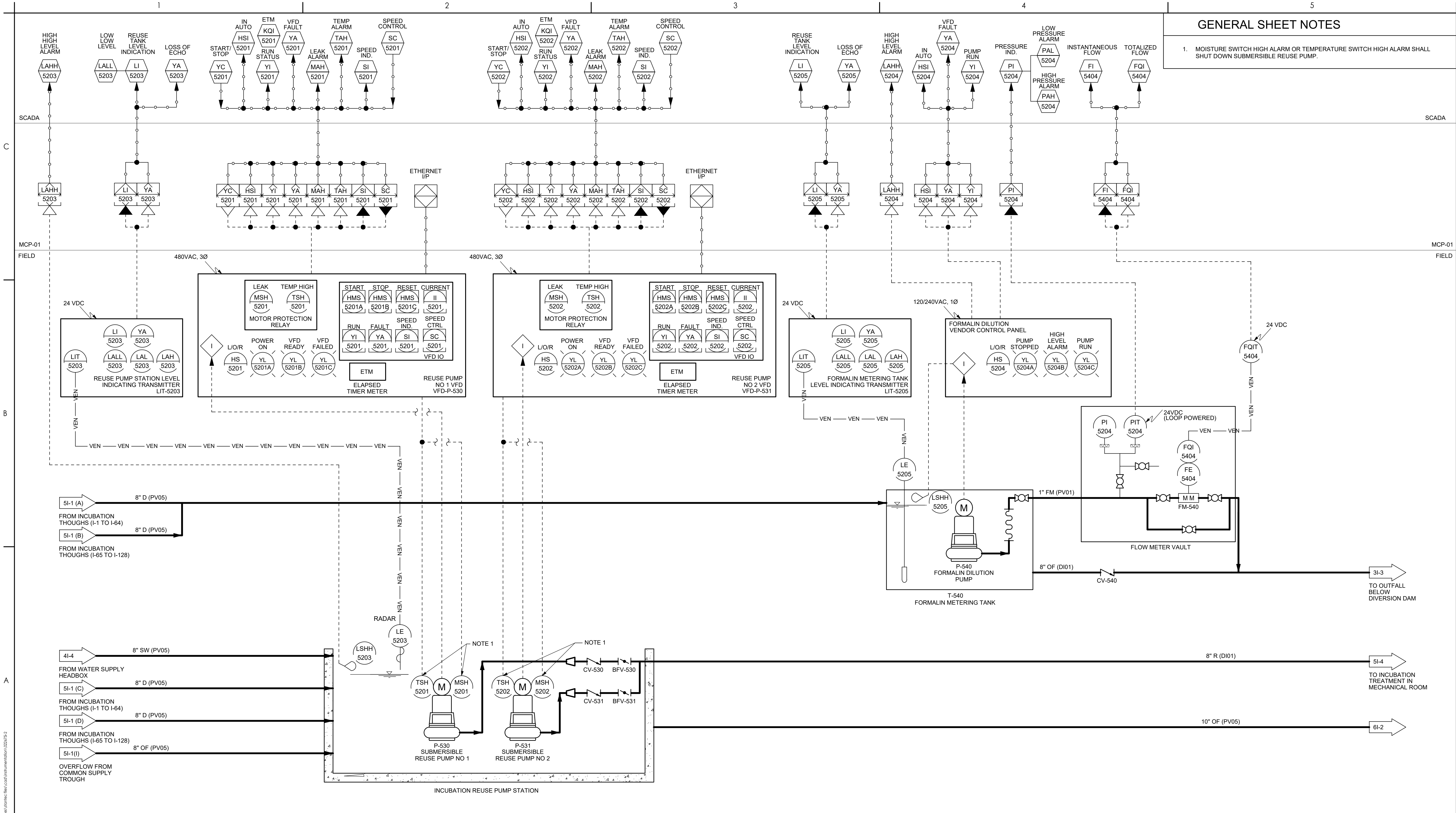
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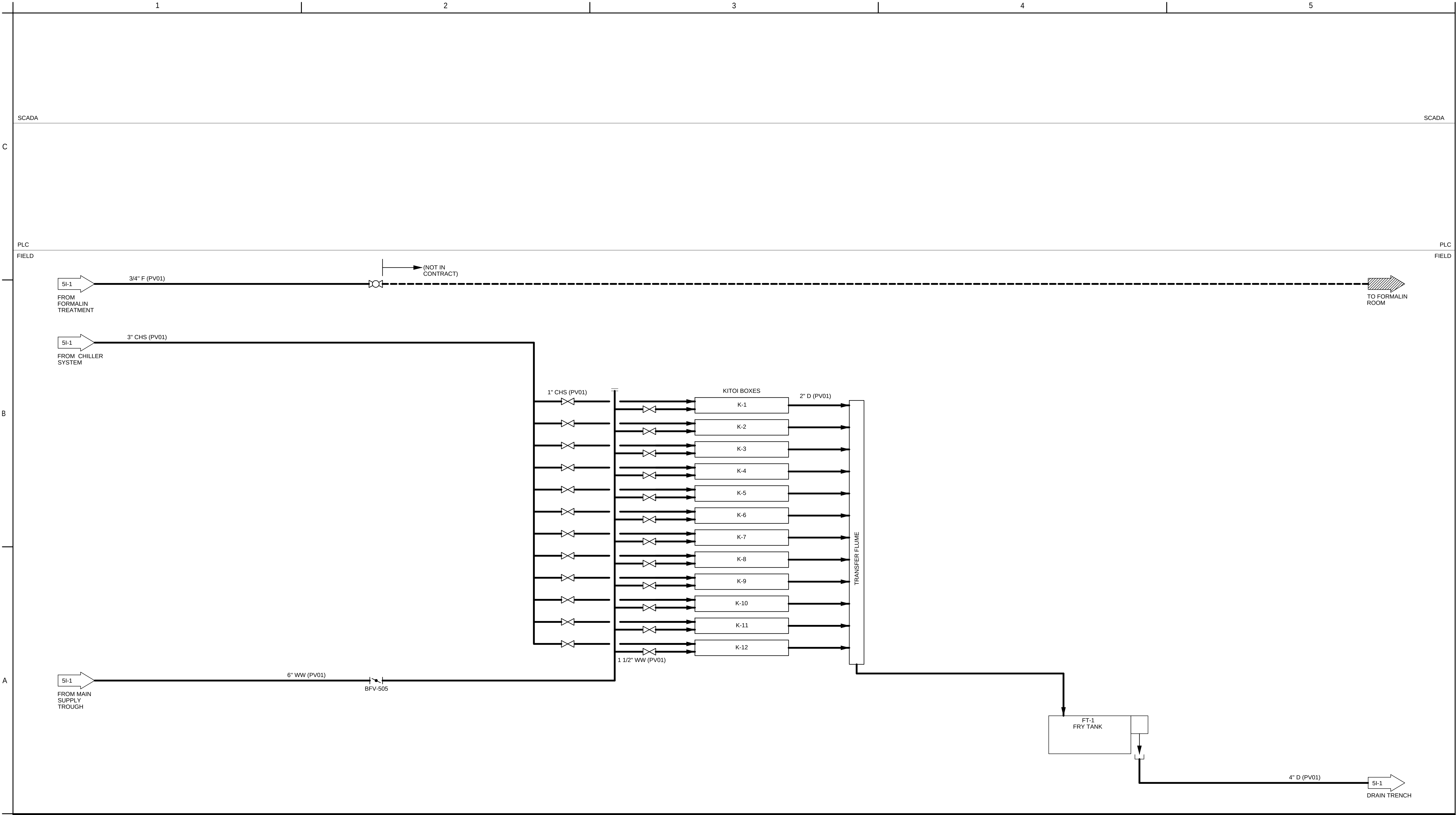
GENERAL SHEET NOTES

1. MOISTURE SWITCH HIGH ALARM OR TEMPERATURE SWITCH HIGH ALARM SHALL SHUT DOWN SUBMERSIBLE REUSE PUMP.

Revision		By	Appd	YYYY.MM.DD	Permit/Seal		WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE		Client/Project Logo		Client/Project TULALIP TRIBES		Title INCUBATION BUILDING P&ID - II	
FINAL DESIGN		MCM	DEW	2026.02.26	McMillen		TULALIP TRIBES		BATTLE CREEK HATCHERY		Project No. 25-128		Scale NOT TO SCALE	
Issued		By	Appd	YYYY.MM.DD	1471 Shoreline Dr. Ste 100, Boise, ID 83702 (208) 342-4214 mcmillen.com		4/27/26		File Name: 0226791-2		Revision 0		Drawing No. 51-2	

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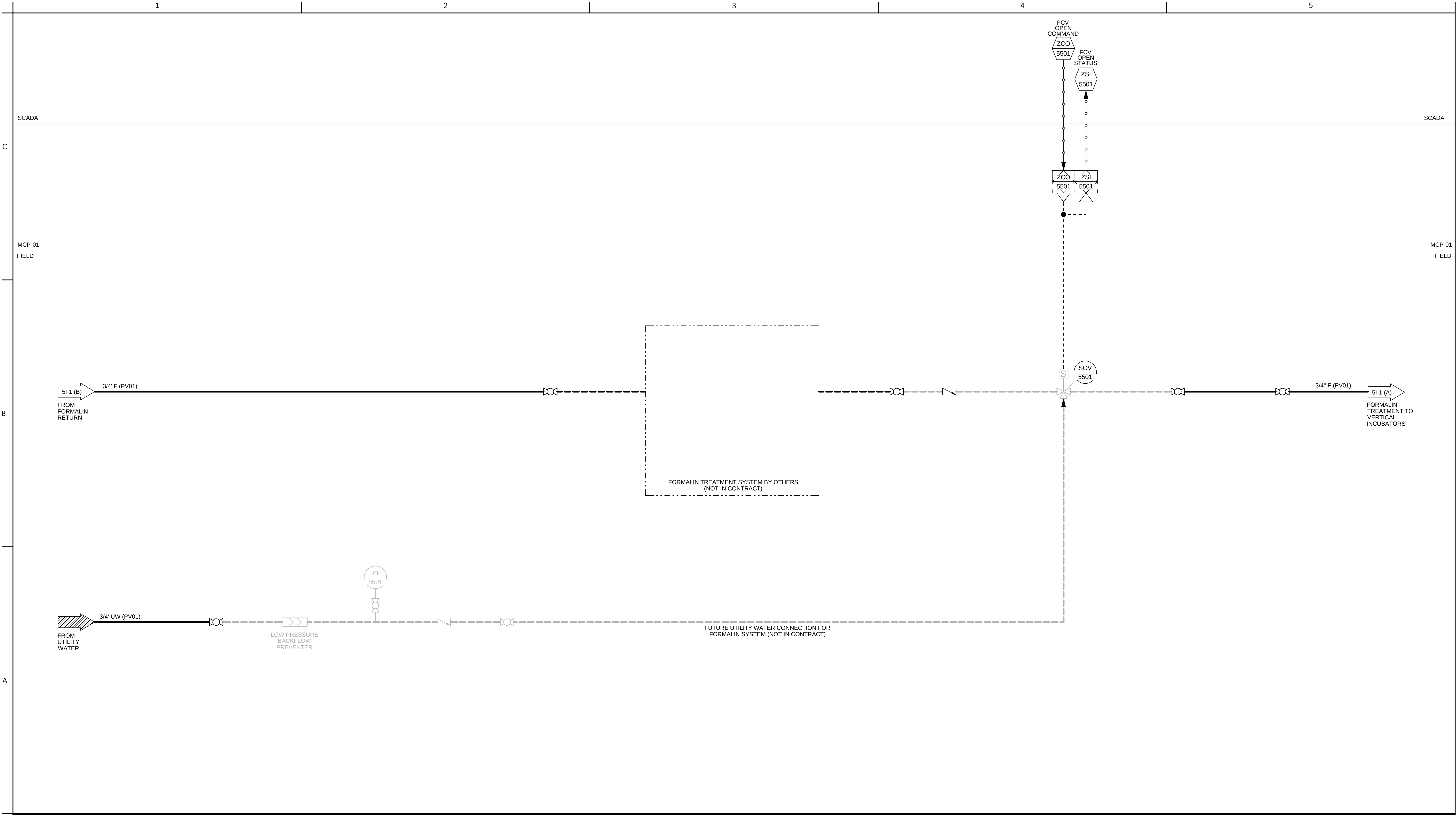
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Revision <table><tr><td>0</td><td></td><td></td><td>2022.12.02</td></tr><tr><td></td><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr></table>	0			2022.12.02		By	Appd	YYYY.MM.DD	Issued <table><tr><td>0</td><td></td><td></td><td>2022.12.02</td></tr><tr><td></td><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr></table>	0			2022.12.02		By	Appd	YYYY.MM.DD	Permit/Seal		Stantec Consulting Services Inc 1687 114th Ave SE, Suite 100 Bellevue, WA 98004 Tel: (425) 896-6900 www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: 022675I-3 <table><tr><td>JM</td><td>JS</td><td>JR</td><td>2024.09.19</td></tr><tr><td>Dwn.</td><td>Dsgn.</td><td>Chkd.</td><td>YYYY.MM.DD</td></tr></table>	JM	JS	JR	2024.09.19	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD	Title INCUBATION BUILDING P&ID - III Project No. 224202267 Revision 0 Sheet of Scale NOT TO SCALE Drawing No. 51-3
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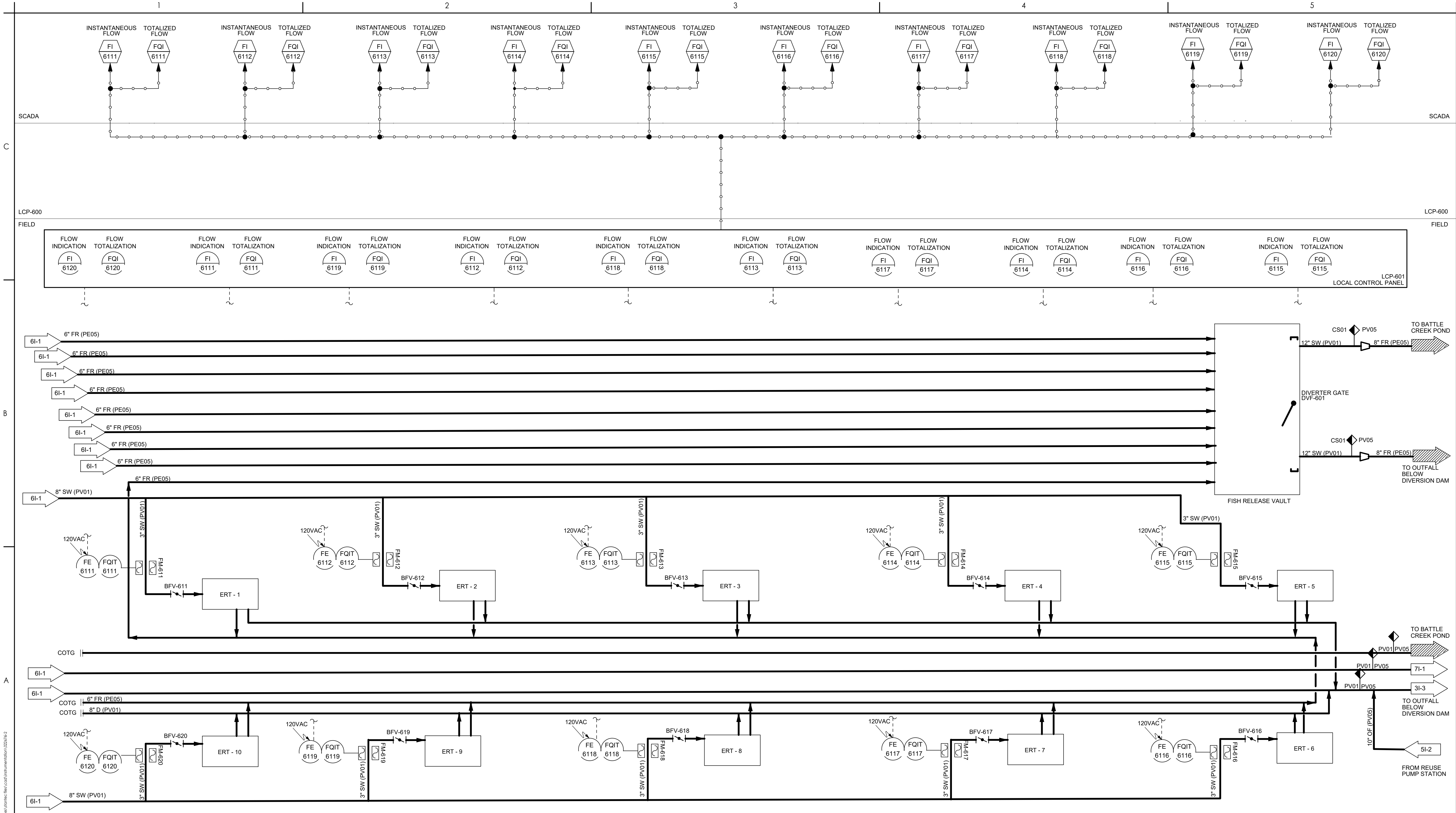
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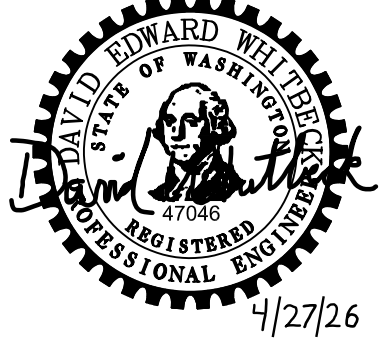
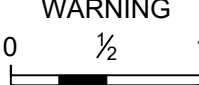


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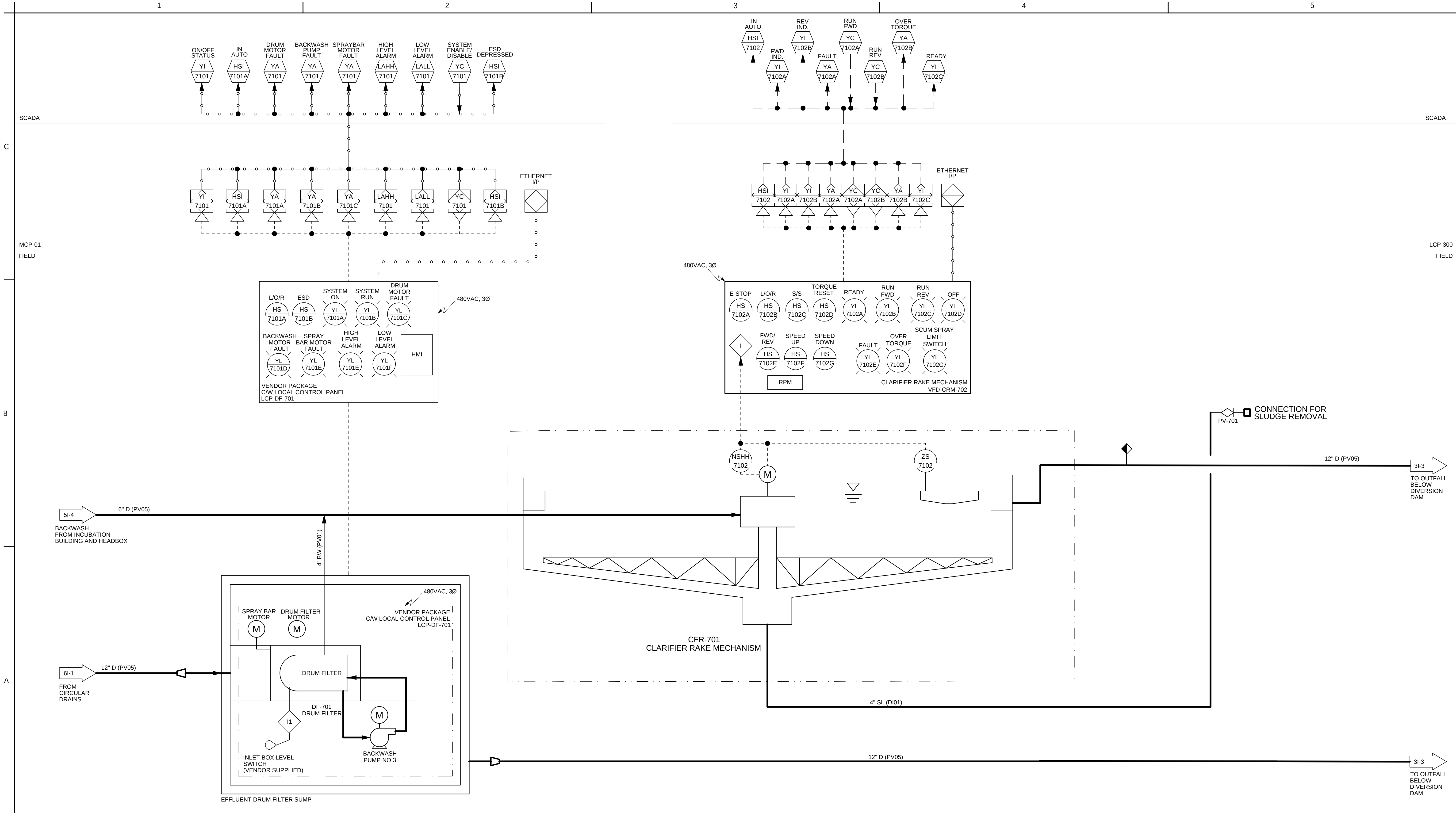
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GENERAL NOTES

1. THE PLUMBING PLANS ARE DIAGRAMMATIC IN NATURE AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL OF THE DETAILS FOR THE EQUIPMENT. THE MECHANICAL CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT AND ENSURE THAT IT WILL FIT IN THE AVAILABLE SPACE.
2. PLUMBING CONTRACTOR RESPONSIBLE FOR INSTALLATION OF COMPLETED AND OPERATIONAL SYSTEMS WITH DUE RESPECT TO ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
3. COORDINATE PIPE ROUTING WITH DUCTWORK, SPRINKLER PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
4. CONTRACTORS TO VERIFY ALL GRADES, DIMENSIONS AND EXISTING CONDITIONS AT THE SITE BEFORE PROCEEDING WITH WORK. NOTIFY PRIME CONSULTANT OF ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS BEFORE INSTALLATION.
5. ALL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE PROJECT MASTER CONSTRUCTION SPECIFICATIONS.
6. COORDINATE INSTALLATION OF PIPING AND DUCTWORK WITH ELECTRICAL CONTRACTOR AND OTHER TRADES.
7. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS NEEDED TO CONSTRUCT WORK SHOULD IN THE CONSTRUCTION DOCUMENTS AND ACCOMPANYING SPECIFICATIONS.
8. IF THERE IS A CONFLICT BETWEEN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, THE MOST STRINGENT WILL APPLY.
9. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS. CONTRACTOR TO PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
10. PENETRATIONS OF DUCTS, PIPES, CONDUITS, ETC IN WALLS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A UL/ULC-LISTED ASSEMBLY APPROPRIATE FOR FIRE OR SMOKE PENETRATIONS AS APPLICABLE AND AS APPROVED BY THE FIRE MARSHAL.
11. THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL FIRE, SMOKE, OR COMBINATION SMOKE/FIRE DAMPERS AND ACCESS PANELS COMMENSURATE WITH THE RATING OF THE WALL. IN ALL DUCTWORK THAT PENETRATES FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITION IN ALL DUCTWORK THAT PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON THE DRAWINGS.
12. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAPS TO SUPPORT PIPES WILL NOT BE PERMITTED. REFER TO SPECIFICATIONS FOR MINIMUM SPACING OF PIPE SUPPORTS.
13. A BUILDING COMMISSIONING PROCESS AND FUNCTIONAL TESTING OF PLUMBING SYSTEMS SHALL CARRIED OUT BY A CERTIFIED COMMISSIONING PROFESSIONAL.
14. ALL EQUIPMENT TO BE INSTALLED ON MIN 6" THICK CONCRETE HOUSEKEEPING PADS.
15. ALL EQUIPMENT, DUCTS PIPING, AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHERPROOFED.
16. PLUMBING EQUIPMENT, DUCTS AND PIPING ARE TO BE COORDINATED WITH STRUCTURAL JOISTS AND CROSS BRACING.
17. ALL EXPOSED PIPING IN OCCUPIED SPACES SUBJECT TO ARCHITECTURAL APPROVAL PRIOR TO INSTALLATION.



LOCATION MAP

NOTE: NOT ALL SYMBOLS, SYSTEMS, AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

REAL OBJECT

SYMBOL

PIPING COMPONENTS

PIPING COMPONENTS

PLUMBING

	ISOLATION VALVE (GENERIC)		PIPE SIZE
	GATE VALVE		PIPING ROUTED BELOW SLAB OR GRADE
	GLOBE VALVE		CONDENSATE DRAIN
	BUTTERFLY VALVE NPS 6 AND LESS		DOMESTIC COLD WATER
	BUTTERFLY VALVE NPS 8 AND MORE		NON-POTABLE WELL WATER
	BALL VALVE		DOMESTIC HOT WATER
	PLUG VALVE		DOMESTIC HOT WATER RECIRCULATION
	NEEDLE VALVE		SANITARY DRAIN
	CHECK VALVE (GENERIC)		VENT
	BALANCING VALVE		PIPE INSULATION
	FLOW LIMITING VALVE		FIXTURE TRAP
	PRESSURE REDUCING VALVE		CATCH BASIN
	2-WAY CONTROL VALVE (GENERIC)		MANHOLE
	TWO-WAY ELECTRIC CONTROL VALVE, BUTTERFLY TYPE		FLOOR DRAIN
	3-WAY CONTROL VALVE (GENERIC)		PLUMBING FIXTURES
	THREE-WAY ELECTRIC CONTROL VALVE, BUTTERFLY TYPE		PLUMBING FIXTURE TAG (REFER TO SCHEDULE)
	SOLENOID 2-WAY CONTROL VALVE		
	SOLENOID 3-WAY CONTROL VALVE		
	FLOAT OPERATED VALVE ACTUATOR		
	SAFETY OR RELIEF VALVE		
	ANGLE VALVE		
	BOILER STOP AND CHECK VALVE		
	BACKFLOW PREVENTER (GENERIC)		
	MULTI-PURPOSE VALVE (SHUTOFF, BALANCING AND CHECK)		
	SUCTION DIFFUSER		
	PUMP (GENERIC)		
	Y STRAINER (GENERIC)		
	STEAM TRAP (GENERIC)		
	AUTOMATIC AIR VENT		
	MANUAL AIR VENT		
	VACUUM BREAKER		
	SHOCK ABSORBER		
	TEMPERATURE GAUGE		
	PRESSURE GAUGE		
	TEMPERATURE AND PRESSURE TAP		
	SIGHT FLOW GLASS		
	FLEXIBLE CONNECTOR		
	EXPANSION JOINT		
	GUIDE		
	ANCHOR		
	FLOW ARROW		
	PIPING SLOPE		
	PIPE CAP		
	PIPE BREAK		
	PIPE CROSS		
	PIPING ELBOW UP		
	PIPING ELBOW DOWN		
	PIPING TEE UP		
	PIPING TEE DOWN		
	UNION CONNECTION		
	FLANGED CONNECTION		
	CONCENTRIC REDUCER		
	ECCENTRIC REDUCER		

ABBREVIATIONS

ABBREVIATIONS

EQUIPMENT IDENTIFICATION

A/C	AIR CONDITIONING UNIT
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AF	ABOVE FINISHED CEILING
AF	ABOVE FINISHED FLOOR
AF	ABOVE FINISHED GRADE
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
C/W	COMPLETE WITH
CAV	CONSTANT AIR VOLUME
CFM	CUBIC FEET PER MINUTE
COTF	CLEAN OUT THROUGH FLOOR
DB	DRY BULB TEMPERATURE

dB	DECIBEL(S)
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DIA/Ø	DIAMETER
DIFF	DIFFERENTIAL
DIV	DIVISION
DN	DOWN
DWG	DRAWING
EA	EXHAUST AIR
EA (K)	EXHAUST AIR, KITCHEN
EA (LD)	EXHAUST AIR, LAUNDRY/DRYER
EA (W)	EXHAUST AIR, WASHROOM
EAT	ENTERING AIR TEMPERATURE
EAV	EXHAUST AIR VALVE
EER	ENERGY EFFICIENCY RATIO
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EXIST / E	EXISTING (DEMOLITION PLANS)
F	FAHRENHEIT
FLA	FULL LOAD AMPERAGE
FP	FIRE PROTECTION
PFM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT/FEET
GA	GAUGE
GAL	GALLON (US)
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HP	HORSEPOWER
HR	HOUR
HVAC	HEATING / VENTILATING / AIR CONDITIONING
HZ	HERTZ
IE	INVERT ELEVATION
IN	INCHES
IN WG	INCHES WATER GAUGE
IPLV	INTEGRATED PART LOAD VALUE
kW	KILOWATT
kWh	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSAND OF BTUH
MCA	MINIMUM CIRCUIT AMPS
MFR	MANUFACTURER
MIN	MINIMUM
MOP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NPS	NOMINAL PIPE SIZE
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFE	OWNER FURNISHED EQUIPMENT
OFOI	OWNER FURNISHED / OWNER INSTALLED
PG	PROPYLENE GLYCOL
POE	POINT OF ENTRANCE
POS	POINT OF SERVICE
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH, ABSOLUTE
PSIG	POUNDS PER SQUARE INCH, GAGE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
RELA	RELIEF AIR
REQD	REQUIRED
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SP	STATIC PRESSURE
SRV	SAFETY RELIEF VALVE
TA	TRANSFER AIR
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TYP	TYPICAL
UG	UNDERGROUND
UP	UP
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VTR	VENT-THRU-ROOF
W/	WITH
W/O	WITHOUT
WB	WET BULB TEMPERATURE
WCO	WALL CLEAN OUT
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
ZN#	ZONE

ACU#	AIR CONDITIONING UNIT
ADS#	AIR AND DIRT SEPARATOR
AF#	AIR FILTER
AHU#	AIR HANDLING UNIT
AS#	AIR SEPARATOR
ATU#	AIR TERMINAL UNIT
B#	BOILER
BCU#	BLOWER COIL UNIT
BFP#	BACKFLOW PREVENTER
BP#	BOOSTER PUMP
CH#	CHILLER
CP#	RECIRCULATION PUMP
CU#	CONDENSING UNIT
CUH#	CABINET UNIT HEATER
CV#	CONTROL VALVE
DAM#	DAMPER
DF#	DRINKING FOUNTAIN
DRC#	DRYER ROOF CAP
DS#	DUCT SILENCER
DU#	DEHUMIDIFICATION UNIT
E#	EXHAUST GRILLE / REGISTER / DIFFUSER
EBB#	ELECTRIC FINNED TUBE
EF#	EXHAUST FAN
ERP#	ELECTRIC RADIANT PANEL
ERV#	ENERGY RECOVERY UNIT
ET#	EXPANSION TANK
EUH#	ELECTRIC UNIT HEATER
EW#	EYE WASH STATION
F#	FAUCET
FCU#	FAN COIL UNIT
FD#	FLOOR DRAIN
FS#	FLOOR SINK
FV#	FLUSH VALVE
H#	HUMIDIFIER
HB#	HOSE BIBB
HC#	HEATING COIL
HP#	HEAT PUMP
HRV#	HEAT RECOVERY UNIT
HWD#	HOT WATER DISPENSER
HX#	HEAT EXCHANGER
IB#	ICE MAKER OUTLET BOX
IDU#	INDOOR AIR CONDITIONING UNIT
KH#	KITCHEN HOOD
KWC#	KITCHEN WALL CAP
LAV#	LAVATORY
LV#	LOUVER
MAU#	MAKEUP AIR UNIT
MV#	MIXING VALVE
ODU#	OUTDOOR AIR CONDITIONING UNIT
P#	PUMP
PRV#	PRESSURE REDUCING VALVE
PT#	PRESSURE TANK
R#	RETURN AIR GRILLE / REGISTER / DIFFUSER
RC#	ROOF CAP
RD#	ROOF DRAIN
RH#	RELIEF HOOD
RP#	RADIANT PANEL
RTU#	ROOFTOP UNIT
S#	SUPPLY GRILLE / REGISTER / DIFFUSER
SF#	SUPPLY FAN
SH#	SHOWER
SK#	SINK
T#	TRANSFER AIR GRILLE
TD#	TRENCH DRAIN
TF#	TRANSFER FAN
TMV#	TEMPERING VALVE
TP#	TRAP PRIMER
UH#	UNIT HEATER
UR#	URINAL
VA#	VALVE
WB#	WASHING MACHINE OUTLET BOX
WC#	WATER CLOSET
WH#	WATER HEATER

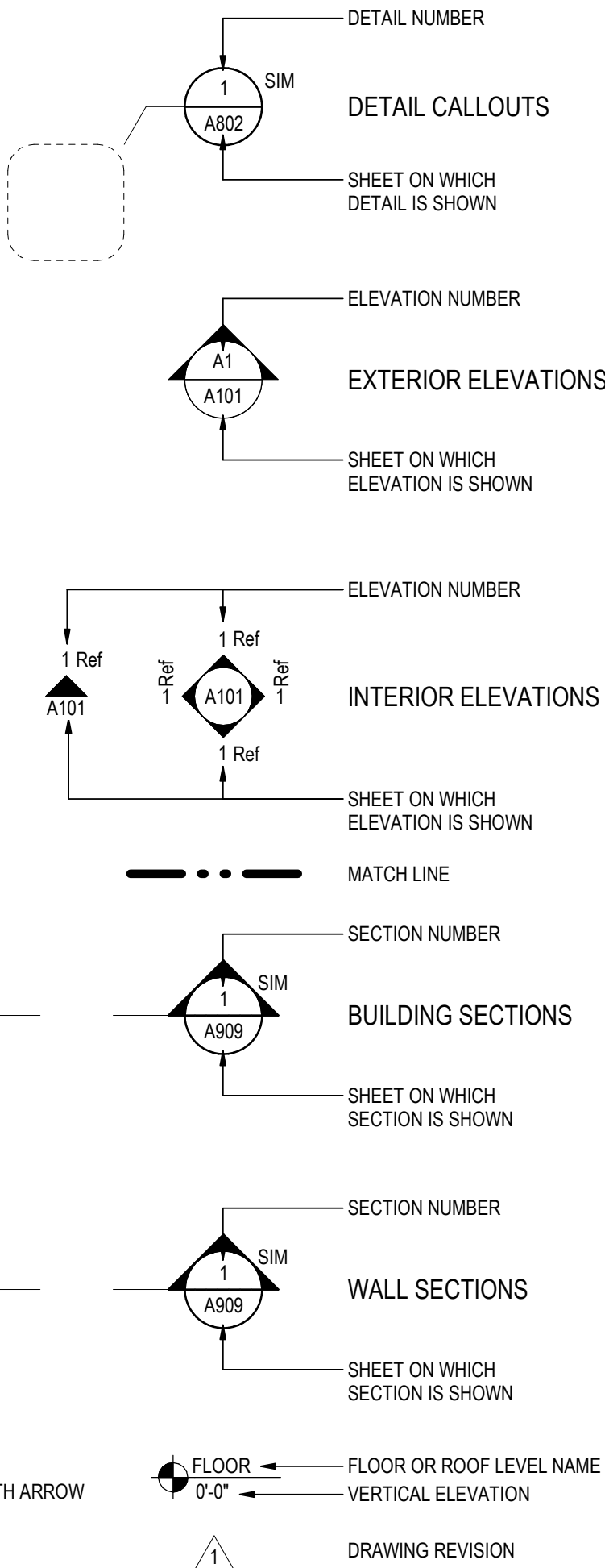
PLUMBING SHEET LIST

SHEET NUMBER	SHEET NAME
P-0	PLUMBING LEGENDS & ABBREVIATIONS
SP-0	INCUBATION BUILDING PLUMBING SCHEDULES
SP-1	INCUBATION BUILDING PLUMBING SCHEDULES
SP-2	INCUBATION BUILDING UNDERGROUND PLUMBING PLAN
SP-3	INCUBATION BUILDING PLUMBING PLAN
SP-4	INCUBATION BUILDING PLUMBING ROOF PLAN
SP-5	PLUMBING DETAILS
SP-6	PLUMBING DETAILS
SP-7	PLUMBING RISER DIAGRAMS

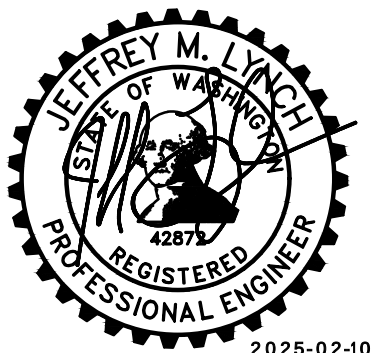
APPLICABLE CODES AND STANDARDS

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE
- 2015 INTERNATIONAL MECHANICAL CODE
- 2015 UNIFORM PLUMBING CODE
- 2015 WASHINGTON STATE RESIDENTIAL ENERGY CODE
- 2015 WASHINGTON STATE PLUMBING CODE

GENERAL SYMBOLS



Permit/Seal



Consultant



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Bellevue, 98005-1759
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Client/Project Logo



Client/Project
Tulalip Tribes

Tulalip - Utility Wells ESDC & Battle Creek Design

Title
PLUMBING LEGENDS & ABBREVIATIONS

Project No.
224202267

Revision

Scale
As indicated

Drawing No.

P-0

1

2

3

4

5

C

PLUMBING FIXTURES SCHEDULE																				
FIXTURE TYPE: WATER CLOSET																				
UNIT IDENTIFICATION	CONNECTION SIZES					BOWL									TOILET SEAT	FLUSH VALVE	SUPPORT	MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	MATERIAL	TYPE	STRAINER / TRAPWAY	MOUNTING	HEIGHT (IN)	RIM CONTOUR	WATER CONSUMPTION...	SPUD LOCATION	COLOR						
WC-1	4	2	2-1/8	1	-	VITREOUS CHINA	SIPHON JET	INTEGRAL	WALL	18-5/8	ELONGATED	1.28	TOP	WHITE	BEMIS 1955CT	FV-1	ZURN Z1202-ND4	ST-2459-STG	SLOAN	1.2,3,13
FIXTURE TYPE: FLUSH VALVES																				
UNIT IDENTIFICATION	VALVE					MODEL	MANUFACTURER	NOTES												
	OPERATOR	TYPE	PRESSURE (PSIG)	MATERIAL	EXPOSED FINISH				PANEL FINISH	STYLE	WATER CONSUMPTION (GPF)									
FV-1	INFRARED SENSOR	DIAPHRAGM	25-80	SEMI-RED BRASS	POLISHED CHROME	-	EXPOSED	1.28	ECOS 115	SLOAN	2.3,9									
FIXTURE TYPE: SINK																				
UNIT IDENTIFICATION	CONNECTION SIZES					FIXTURE CHARACTERISTICS						INSTANT HOT WATER DISPENSER	FAUCET	MOUNT	ACCESSORIES			MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	MATERIAL	TYPE	DIMENSIONS (IN)	QUANTITY OF HOLES	HOLE SPACING (IN)	MOUNTING MATERIAL				DRAIN	TRAP GUARD	MIXING VALVE			
LAV-1	1-1/2	1-1/2	1-1/2	1/2	1/2	VITREOUS CHINA	WALL MOUNT LAVATORY	20-3/4 X 18-1/4	1	-	WALL CARRIER	-	F-1	SINK	STRAINER	YES	TMV-3	SS-3103-STG	SLOAN	1.2,3
SK-1	2	2	1-1/2	1/2	1/2	STAINLESS STEEL	DROP-IN SINK	27 X 22	3	4	COUNTER	F-5	F-2	SINK	STRAINER	YES	-	LSR2722	ELKAY	3.4,10
SK-2	3	2	3	1/2	1/2	TERRAZZO	MOP SINK	30 X 30	-	-	FLOOR	-	F-3	WALL	INTEGRAL	NO	-	SB3030	FIAT	1.3,5
SK-3	2	2	1-1/2	1/2	1/2	STAINLESS STEEL	SERVICE SINK	27 X 27-1/2	2	8	-	-	HB-2	WALL	STRAINER	YES	-	SS81242	ELKAY	3.11
SK-4	2	2	1-1/2	1/2	1/2	STAINLESS STEEL	SERVICE SINK	27 X 27-1/2	2	8	-	-	HB-1	WALL	STRAINER	YES	-	SS81242	ELKAY	3.11
SK-5	2	2	1-1/2	1/2	1/2	STAINLESS STEEL	3-COMPARTMENT SINK	70-1/2 X 27-1/2	4	8	-	-	HB-2	WALL	STRAINER	YES	-	WNSF8345R4	ELKAY	3.11,12
FIXTURE TYPE: LAVATORY FAUCET																				
UNIT IDENTIFICATION	TYPE	MIXING	HOT / COLD INDICATORS	BODY TYPE	CENTER SPACING (IN)	BODY MATERIAL	FINISH	WATER CONSUMPTION (GPM)	MOUNTING TYPE	VALVE HANDLE TYPE	HANDLE SIZE (IN)	VANDAL RESISTANT	SPOUT TYPE	SPOUT OUTLET	MODEL	MANUFACTURER	NOTES			
F-1	SENSOR	THERMOSTATIC	-	PEDESTAL	-	ZINC	CHROME	0.5	DECK MOUNTED	-	-	-	RIGID SPOUT	MULTI-LAMINAR	EFX-300.210.0010	SLOAN	3.9			
F-2	MANUAL	CERAMIC DISC CARTRIDGE	RED/BLUE ON HANDLE	PULL DOWN GOOSENECK	4	STAINLESS STEEL	CHROME	1.8	DECK MOUNTED	LEVER	4-1/2	-	PULLDOWN	NON-RESTRICTED	19881Z-DST	DELTA	3.4			
F-3	MANUAL	CERAMIC DISC CARTRIDGE	RED/BLUE ON HANDLES	TWO HANDLE CENTER SET	8	CAST BRASS	CHROME	-	WALL	LEVER	2-3/8	YES	INTEGRAL CHECK VACUUM BREAKER	HOSE END	897-CCP	CHICAGO FAUCET	2.3,5			
F-4	MANUAL	CERAMIC DISC CARTRIDGE	-	TWO HANDLE CENTER SET	8	CAST BRASS	CHROME	1.5	WALL	LEVER	3	YES	SWIVEL GOOSENECK	VANDAL RESISTANT LAMINAR	28C6923-S	DELTA	2.3			
F-5	MANUAL	CERAMIC DISC CARTRIDGE	RED ON HANDLE	PEDESTAL	-	BRASS	CHROME	0.75	DECK MOUNTED	LEVER	3	-	SWIVEL GOOSENECK	NON-RESTRICTED	F-H3300	INSINKERATOR	3			
FIXTURE TYPE: SHOWER																				
UNIT IDENTIFICATION	CONNECTION SIZES					FIXTURE CHARACTERISTICS						WATER CONSUMPTION (GPF)	FAUCET	MOUNT	ACCESSORIES			MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	MATERIAL	TYPE	DIMENSIONS (IN)	QUANTITY OF HOLES	HOLE SPACING (IN)	MOUNTING TYPE				DRAIN	TRAP GUARD	MIXING VALVE			
SH-1	2	1-1/2	2	1/2	1/2	ACRYLIC	ADA SHOWER	36 X 36	1	-	FLOOR	1.8	-	WALL	STRAINER	YES	TMV-4	APFQ3838BF1PRRF	FREEDOM SHOWERS	1.2,3,7
FIXTURE TYPE: DRINKING FOUNTAIN																				
UNIT IDENTIFICATION	CONNECTION SIZES					FIXTURE CHARACTERISTICS						SUPPORT	FAUCET	MOUNT	ACCESSORIES			MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	MATERIAL	TYPE	DIMENSIONS (IN)	QUANTITY OF HOLES	HOLE SPACING (IN)	MOUNTING MATERIAL				DRAIN	TRAP GUARD	MIXING VALVE			
DF-1	1-1/2	1-1/2	1-1/2	1/2	1/2	STAINLESS STEEL	ADA NONREFRIGERATED	36-1/4 X 18-5/8	-	-	-	ELKAY MLP100	-	WALL	INTEGRAL	NO	-	WNSF8345L4	ELKAY	2,3,8
FIXTURE TYPE: EMERGENCY EYEWASH																				
UNIT IDENTIFICATION	CONNECTION SIZES					FIXTURE CHARACTERISTICS						ACCESSORIES	FAUCET	MOUNT	ACCESSORIES			MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	BODY MATERIAL	TYPE	DIMENSIONS (IN)	FINISH	BOWL MATERIAL	MOUNTING TYPE				DRAIN	TRAP GUARD	MIXING VALVE			
EW-1	2	2	1-1/2	1/2	1/2	BRASS	EYEWASH SINK	11 Ø	CHROME	ABS PLASTIC	WALL	-	-	WALL	1-1/2	-	TMV-2	7260BT-7270BT	HAWS	2.3,11,13
EW-2	2	2	1-1/4	1/2	1/2	BRASS	EYEWASH SINK	11 Ø	STAINLESS STEEL	STAINLESS STEEL	WALL	-	-	WALL	1-1/4	-	TMV-2	7433FP	HAWS	2.3,11,13
FIXTURE TYPE : WALL OUTLET BOX																				
UNIT IDENTIFICATION	CONNECTION SIZES					FIXTURE CHARACTERISTICS						ACCESSORIES	FAUCET	MOUNT	ACCESSORIES			MODEL	MANUFACTURER	NOTES
	SAN	VENT	TRAP	CW	HW	BODY MATERIAL	TYPE	DIMENSIONS (IN)	FINISH	VALVE MATERIAL	MOUNTING TYPE				DRAIN	TRAP GUARD	MIXING VALVE			
WB-1	2	2	2	1/2	1/2	ABS	WASHING MACHINE OUTLET BOX	11-1/2 X 7-1/4 X 3-1/2	STAINLESS STEEL	BRASS	WALL	-	-	WALL	2	YES	-	696-G2313WF	SILOUX CHIEF	1.2,6,13
IB-1	-	-	-	1/2	-	ABS	ICE MAKER OUTLET BOX	5-7/8 X 7-1/4 X 3-1/2	STAINLESS STEEL	BRASS	WALL	-	-	WALL	-	NO	-	696-G1010WF	SILOUX CHIEF	1.2,13
NOTES: 1. CONTRACTOR SHALL COORDINATE COLOR SELECTION WITH ARCHITECT PRIOR TO ORDERING. 2. CONTRACTOR TO VERIFY WALL THICKNESS AND TYPE FOR MOUNTING HARDWARE. 3. INSTALL FAUCET/VALVE PER MANUFACTURERS INSTRUCTIONS. 4. PROVIDE WITH DISHWASHER AIR-GAP FITTING. 5. REFER TO DETAIL #4 ON PLUMBING SHEET SP-5 FOR MOP SINK INSTALLATION. 6. REFER TO DETAIL #3 ON PLUMBING SHEET SP-5 FOR WASHING MACHINE OUTLET BOX INSTALLATION. 7. PROVIDE ADA FOLDING SEAT WITH STALL OPPOSITE TO SHOWER HEAD PER MANUFACTURER'S INSTRUCTIONS. 8. PROVIDE CANE APRON FOR DRINKING FAUCETS, ELKAY LKAPREZL OR EQUAL. 9. PROVIDE 120V POWER CONNECTION PROVIDED BY DIVISION 26. 10. PROVIDE INSTANT HOT WATER TANK HWT-F1000S OR APPROVED EQUAL. 11. PROVIDE SELF REGULATING HEAT TRACE ON OUTDOOR SINK AND FAUCET PROVIDED BY DIVISION 26, NELSON LT3 OR APPROVED EQUAL. 12. PROVIDE DRAIN BOARD ON LEFT HAND SIDE. 13. PROVIDE WITH WATER HAMMER ARRESTER.																				

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Client/Project

Tulalip Tribes

Tulalip - Utility Wells ESDC & Battle Creek Design

File Name: N/A

BHC Dwn.

MSM Dsgn.

JML Chkd.

2/10/25

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Title

INCUBATION BUILDING PLUMBING SCHEDULES

Project No. 224202267

Revision

Scale

Drawing No. 5P-0

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ORIGINAL SHEET - ANSI D

Exhibit D Page 6 of 220

C

B

A

SHEET NOTES

1. SYSTEMS SHOWN ARE DIAGRAMMATIC AND MAY NOT INCLUDE ALL OFFSETS, FITTINGS AND REQUIRED ROUTING. PLUMBING CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF COMPLETE AND OPERATIONAL SYSTEMS WITH DUE RESPECT TO ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
2. COORDINATE PIPE ROUTING WITH DUCTWORK, SPRINKLER/PROCESS PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
3. ALL NEW PIPING ROUTING DOWN IN EXTERIOR WALLS TO SERVE NEW PLUMBING FIXTURES SHALL BE ON THE INTERIOR SIDE OF THE WALL INSULATION.
4. ALL HORIZONTAL SANITARY DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2% TOWARD THE POINT OF DISPOSAL PER UPC SECTION 708.1, UNLESS OTHERWISE NOTED & APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION.
5. INSTALL ALL PLUMBING EQUIPMENT, FIXTURES AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. PROVIDE TRAP PRIMER CONNECTION AND ROUTE TRAP PRIMER LINES TO ALL FLOOR DRAINS, FLOOR SINKS, AND TRENCH DRAINS.
7. PROVIDE CLEANOUT PLUGS ON DRAIN OR VENT FOR ALL SINKS AND EYEWASH STATIONS. SIZE AND LOCATE CLEANOUT PLUGS ACCORDING TO 2015 UPC SECTION 707.

KEYNOTE:

P-02

CIRCUIT VENT PLUMBING. INSTALL DRAIN PER 2015 UPC SECTION 911.

P-03

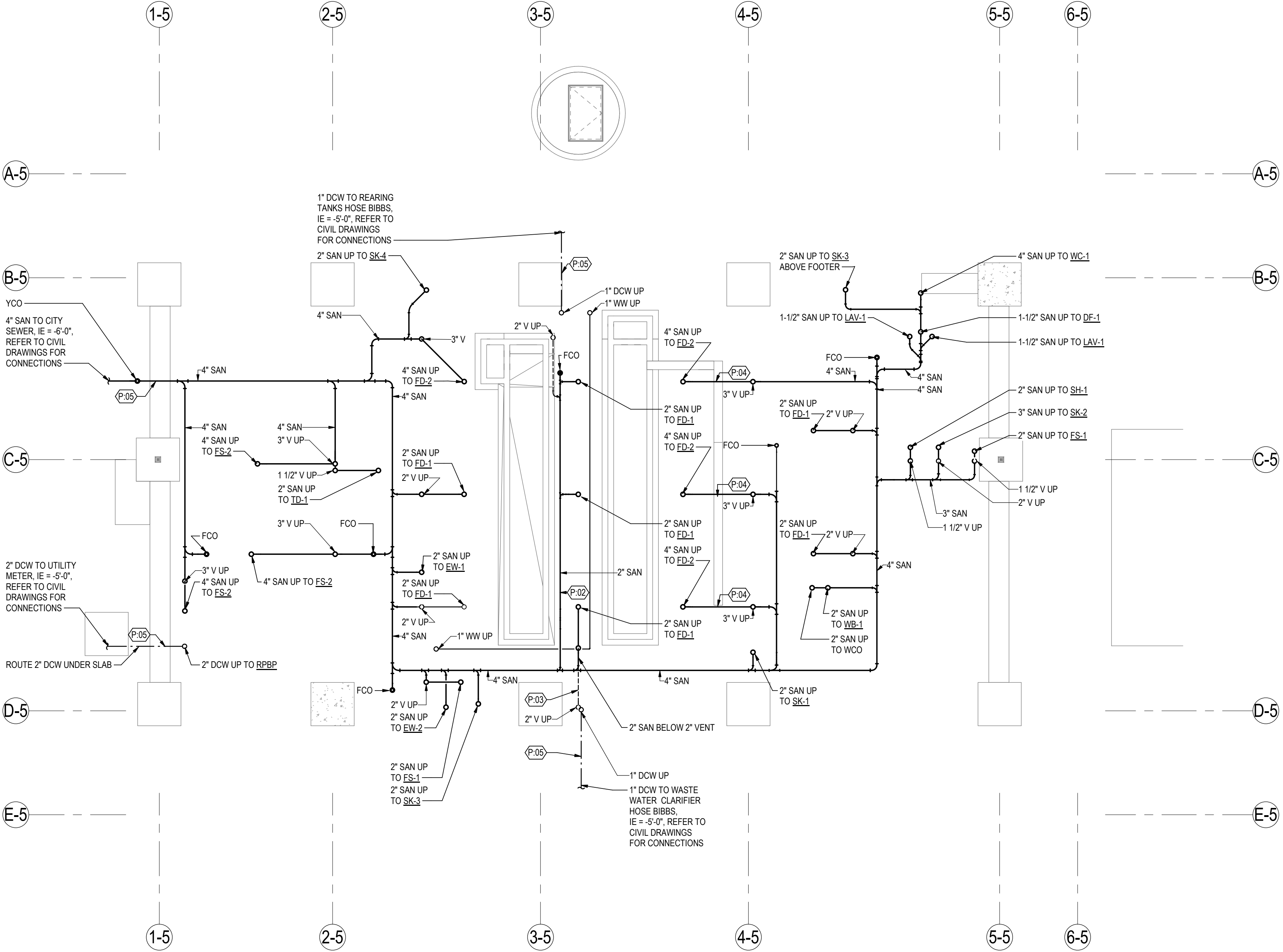
HORIZONTAL VENT BELOW SLAB. SLOPE VENT AT 1/4" PER FT BELOW GRADE AND USE SANITARY FITTINGS

P-04

ROUTE HORIZONTAL DRAIN BELOW CONCRETE TRENCH. PROVIDE WITH PROTECTIVE SLEEVE

P-05

PROVIDE WITH PROTECTIVE SLEEVE OVER CARRIER PIPE WITH MECHANICAL SEAL AND SPACERS FOR PIPING RUNNING BELOW CURBS.



1

5P-2

INCUBATION BUILDING UNDERGROUND PLUMBING PLAN

1/8" = 1'-0"

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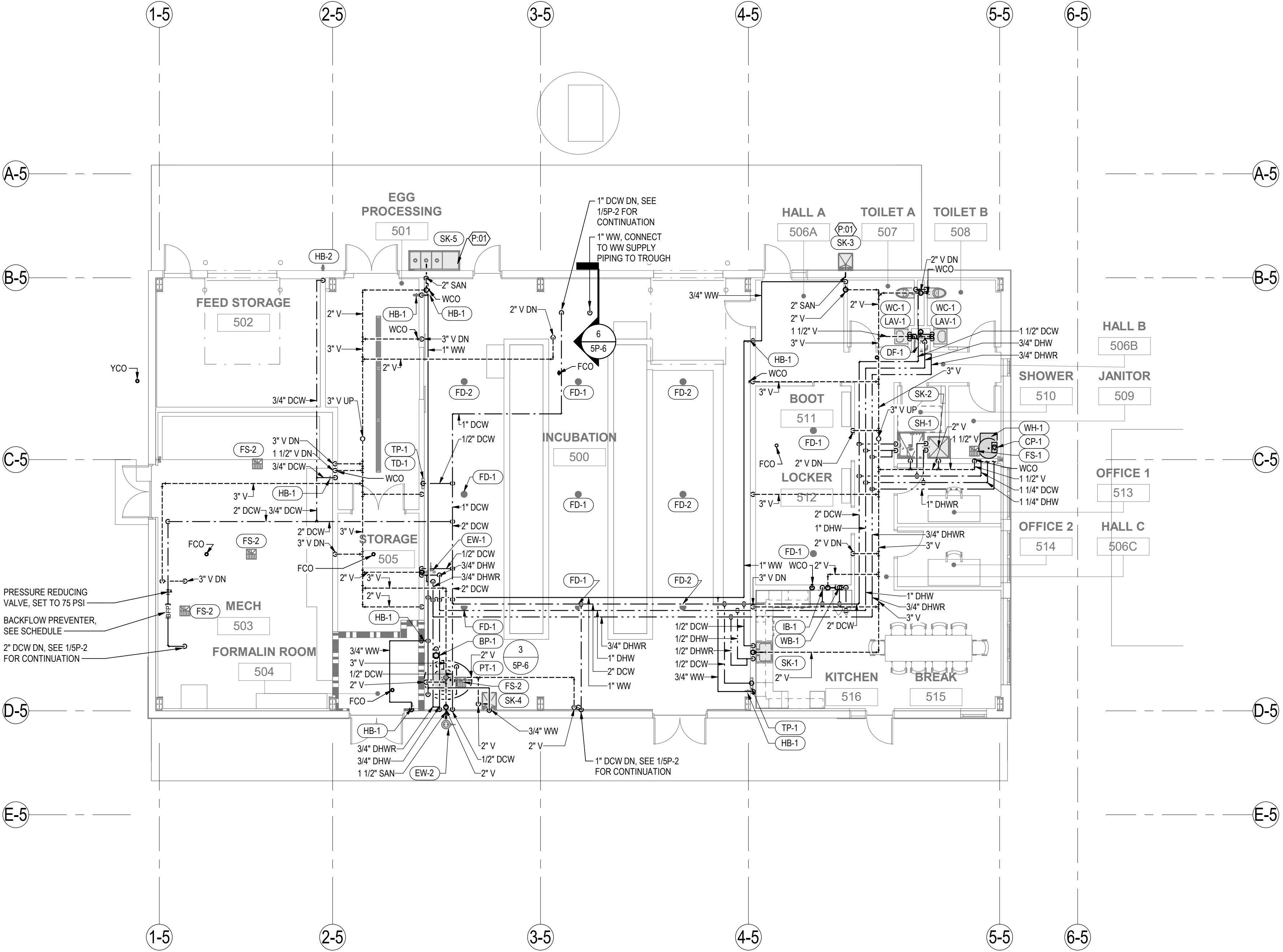
Revision By Appd YYYY.MM.DD				PACKAGE A Issued By Appd YYYY.MM.DD				Permit/Seal	Consultant	Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design File Name: N/A BHC Dwn. MSM Dsgn. JML Chkd. 2/10/25 YYYY.MM.DD	Title INCUBATION BUILDING UNDERGROUND PLUMBING PLAN Project No. 224202267 Revision Scale As indicated Drawing No. 5P-2

SHEET NOTES

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2. COORDINATE PIPE ROUTING WITH DUCTWORK, SPRINKLER/PROCESS PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
3. ALL NEW PIPING ROUTING DOWN IN EXTERIOR WALLS TO SERVE NEW PLUMBING FIXTURES SHALL BE ON THE INTERIOR SIDE OF THE WALL INSULATION.
4. ALL HORIZONTAL SANITARY DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2% TOWARD THE POINT OF DISPOSAL PER UPC SECTION 708.1, UNLESS OTHERWISE NOTED & APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION.
5. ALL HORIZONTAL VENT PIPING SHALL BE SLOPED AT 1% GRADE, PER UPC SECTION 905.1, UNLESS OTHERWISE NOTED & APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION.
6. INSTALL ALL PLUMBING EQUIPMENT, FIXTURES AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
7. PROVIDE ISOLATION VALVES ON DOMESTIC HOT AND COLD WATER SUPPLY TO ROUGH IN OF EACH FIXTURE.
8. TRAP PRIMERS ARE TO BE INSTALLED AT A MINIMUM 42" AFF.
9. PROVIDE CLEANOUT PLUGS ON DRAIN OR VENT FOR ALL SINKS AND EYEWASH STATIONS. SIZE AND LOCATE CLEANOUT PLUGS ACCORDING TO 2015 UPC SECTION 707.
10. PROVIDE BALANCING VALVES ON ALL HOT WATER RECIRCULATION BRANCHES. SIZE TO MANUFACTURER'S INSTRUCTIONS.

P-01

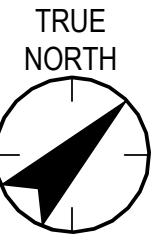
KEYNOTE:
PROVIDE SELF REGULATING HEAT TRACE ON FIXTURE FAUCET AND DRAIN, NELSON LT3 OR APPROVED EQUAL. INSULATE AROUND HEAT TRACE.



1
5P-3

INCUBATION BUILDING PLUMBING PLAN

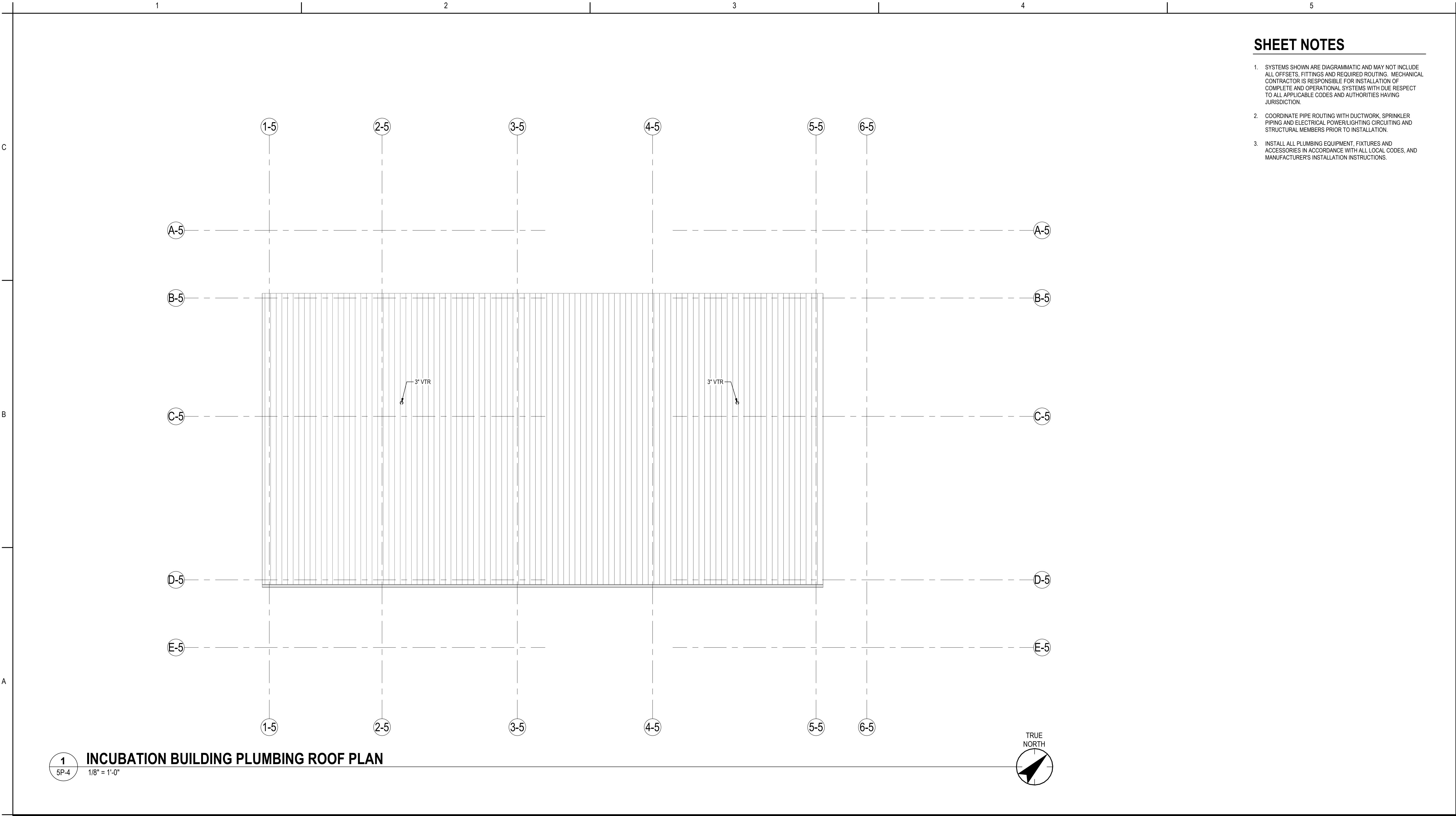
1/8" = 1'-0"



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JEFFREY M. LYNAL SEAL OF WISCONSIN REGISTERED PROFESSIONAL ENGINEER 42874 2025-02-10				Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com				TULALIP TRIBES				Tulalip Tribes			
								Tulalip - Utility Wells ESDC & Battle Creek Design				Title			
												INCUBATION BUILDING PLUMBING PLAN			
												Project No.			
												224202267			
												Revision			
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												File Name: N/A			
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2. COORDINATE PIPE ROUTING WITH DUCTWORK, SPRINKLER PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
3. INSTALL ALL PLUMBING EQUIPMENT, FIXTURES AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

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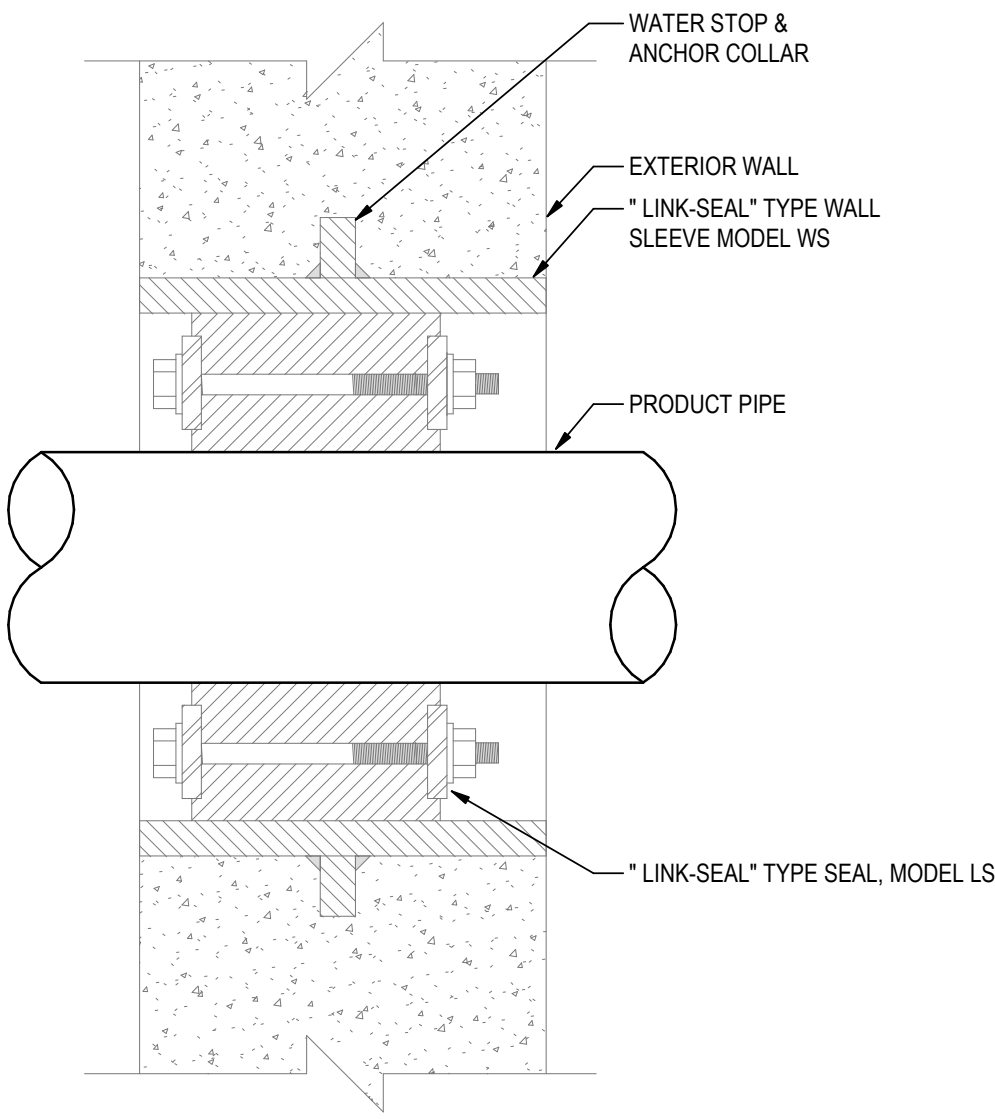
Revision By Appd YYYY.MM.DD				PACKAGE A Issued By Appd YYYY.MM.DD				Permit/Seal JEFFREY M. LYNCH STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER 42874 2025-02-10	Consultant	Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo TULALIP TRIBES CHIEF	Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design File Name: N/A BHC Dwn. MSM Dsgn. JML Chkd. 2/10/25 YYYY.MM.DD	Title INCUBATION BUILDING PLUMBING ROOF PLAN Project No. 224202267 Revision Scale As indicated Drawing No. 5P-4

ORIGINAL SHEET - ANSI D

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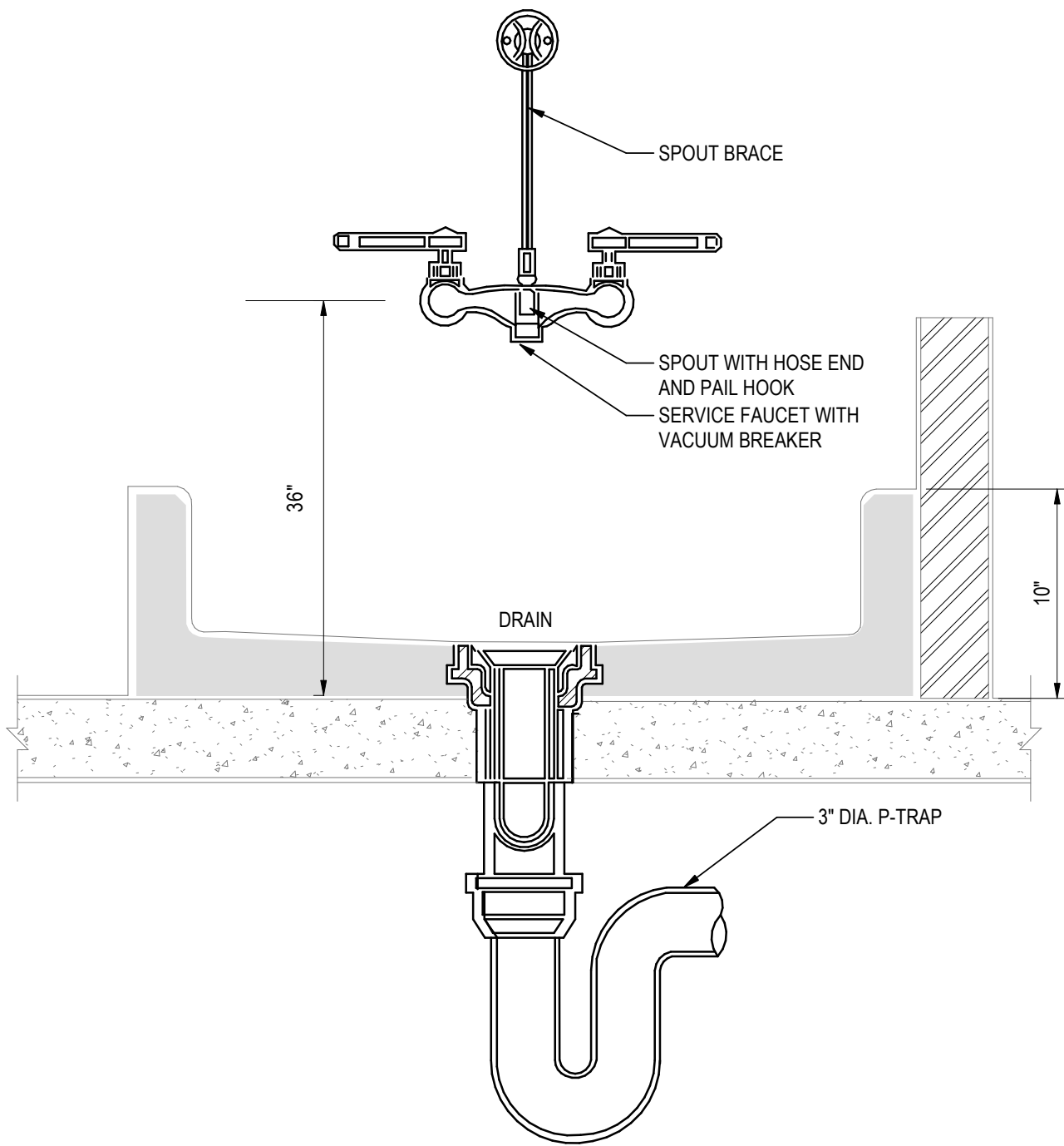


1

PIPE PENETRATION DETAIL

5P-5

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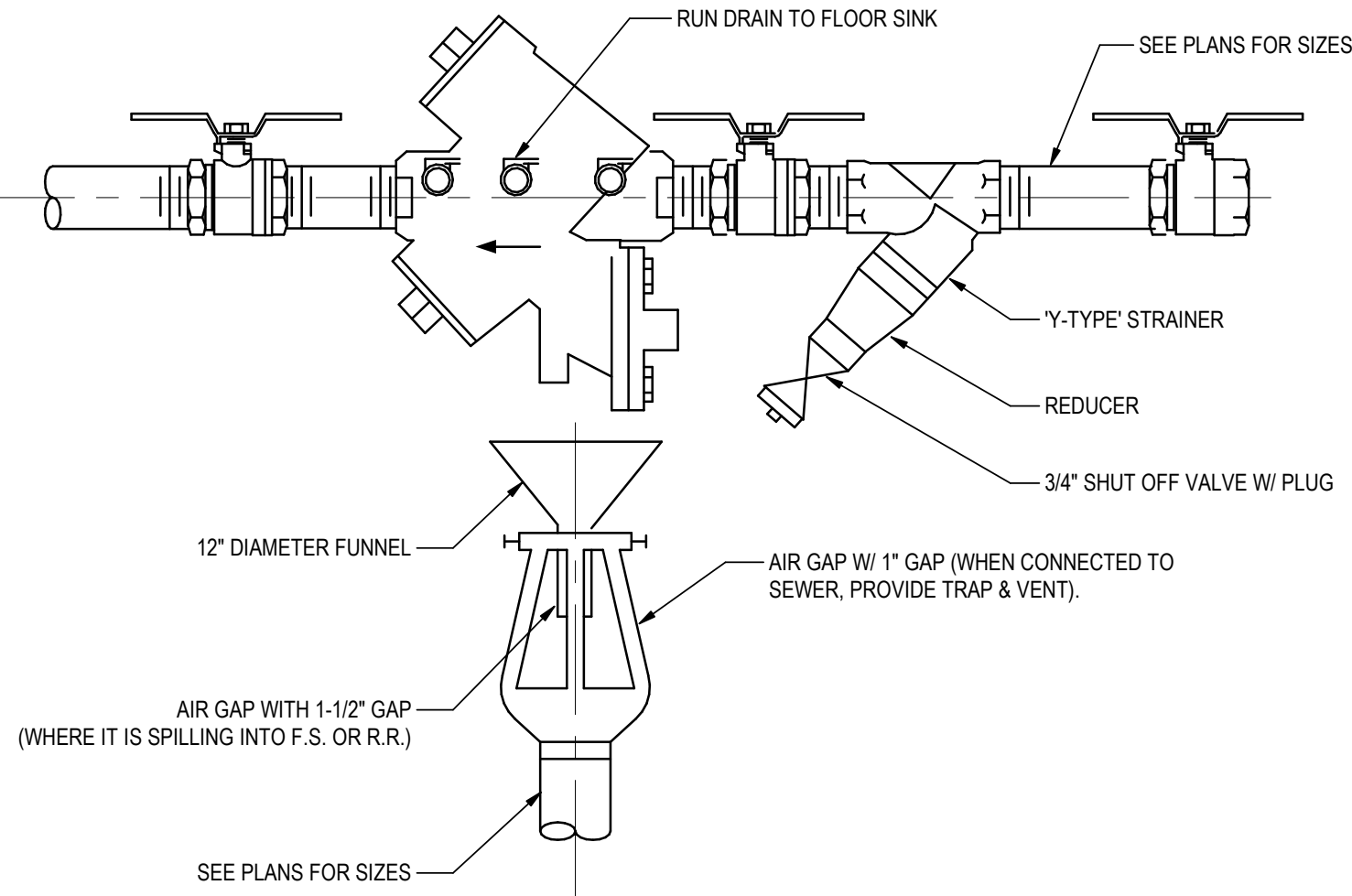


4

MOP SINK

5P-5

NOT TO SCALE

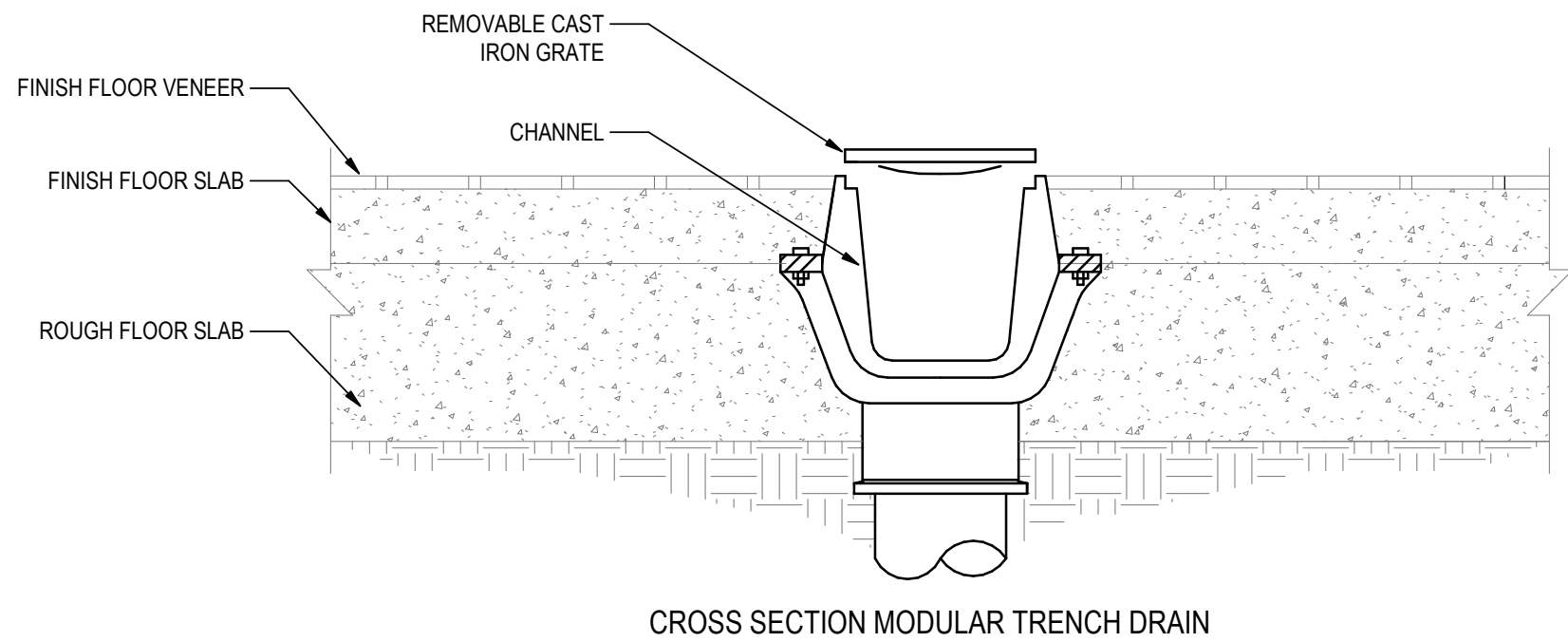


2

BACKFLOW PREVENTER DRAIN

5P-5

NOT TO SCALE

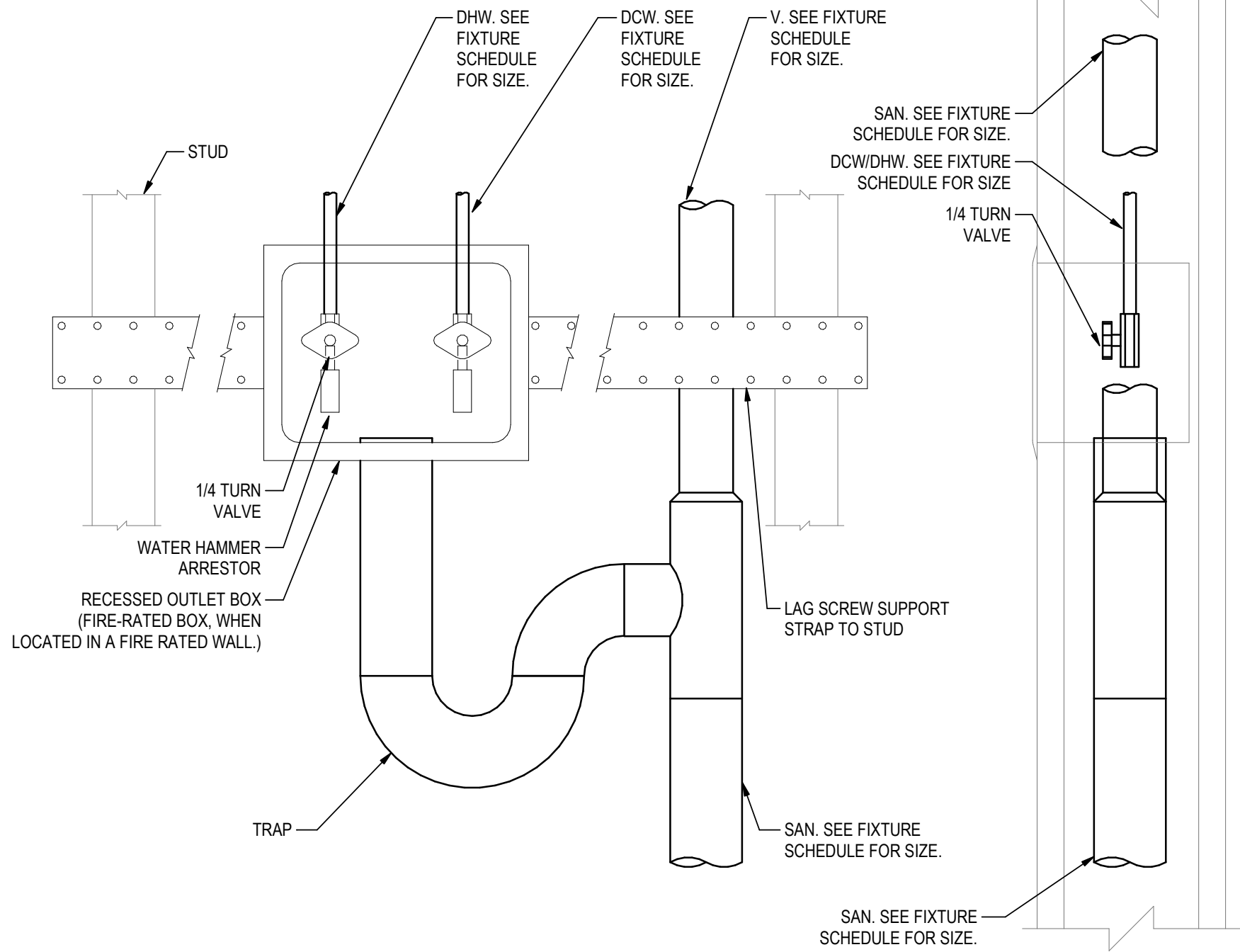


5

TRENCH DRAIN

5P-5

NOT TO SCALE

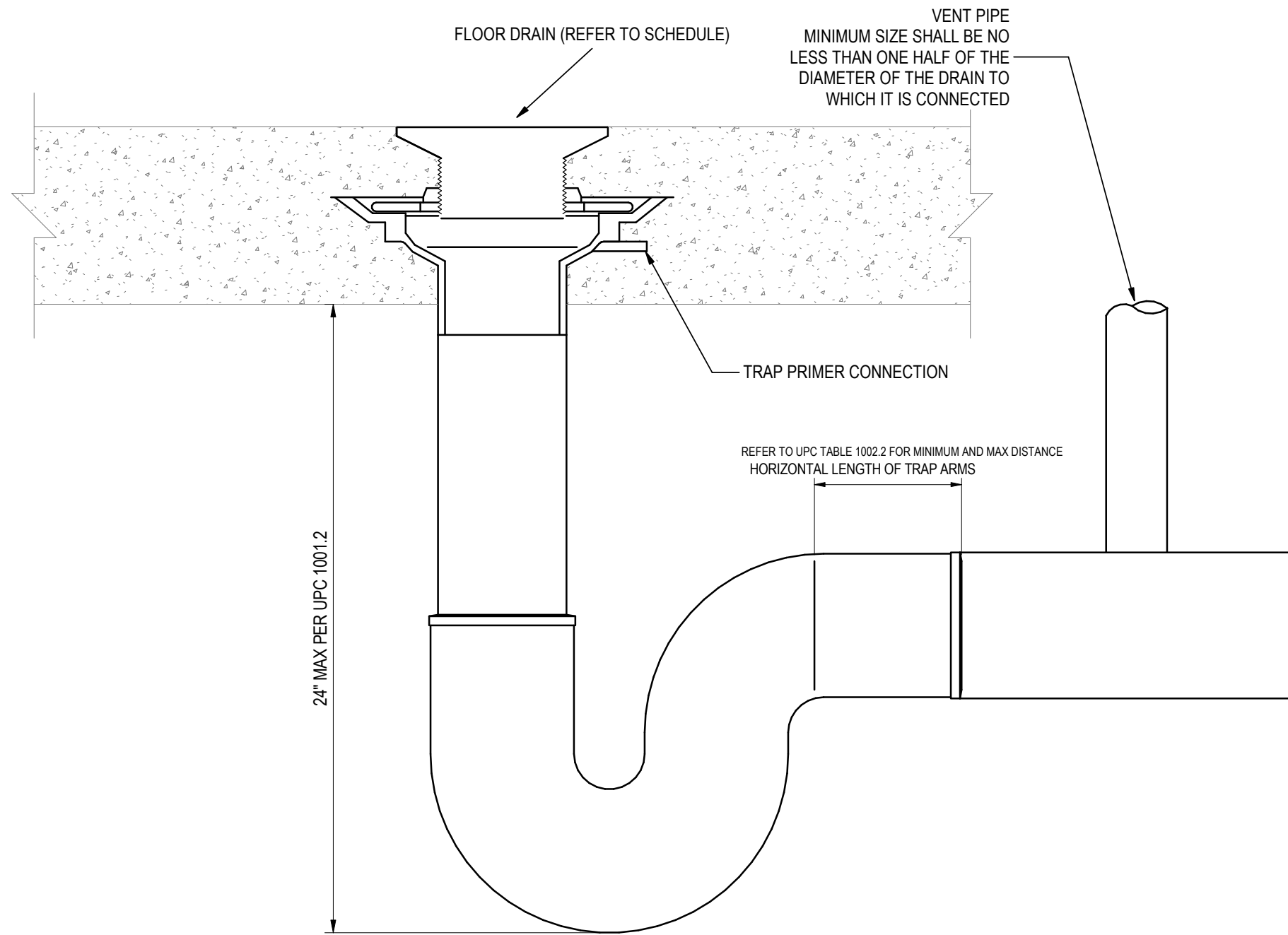


3

WASHING MACHINE OUTLET BOX

5P-5

NOT TO SCALE



6

FLOOR DRAIN DETAIL

5P-5

NOT TO SCALE

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Client/Project
Tulalip Tribes

Tulalip - Utility Wells ESDC & Battle Creek
Design

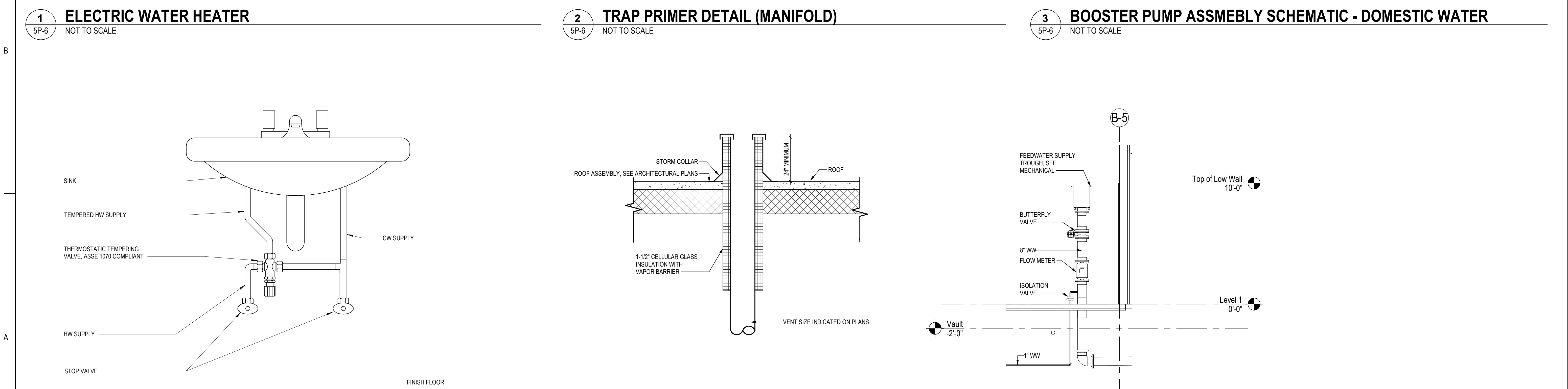
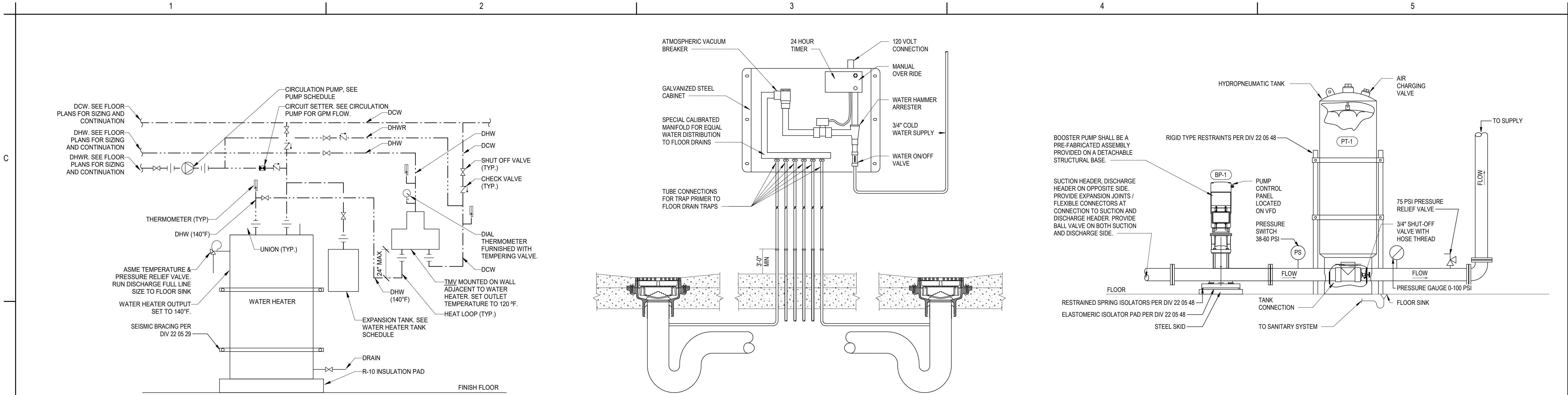
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Title
PLUMBING DETAILS

Project No.
224202267
Revision

Scale
NOT TO SCALE
Drawing No.

5P-5



4 LAVATORY TEMPERING VALVE SCHEMATIC 5P-6 NOT TO SCALE		5 VENT THROUGH ROOF DETAIL 5P-6 NOT TO SCALE		6 WELL WATER ENTRY 5P-6 NOT TO SCALE	
Revision _____ By _____ Appd _____ YYYY.MM.DD		PACKAGE A Issued _____ By _____ Appd _____ YYYY.MM.DD		Permit/Seal  2025-02-10	
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		Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design		Title PLUMBING DETAILS	
		File Name: N/A BHC Dwn. MSM Dsgn. JML Chkd. 2/10/25 YYY.YMM.DD		Project No. 224202267 Scale As indicated	
				Revision Drawing No. 5P-6	

C

AIR TO AIR HEAT EXCHANGER SCHEDULE																																					
UNIT...		TYPE	WINTER																SUMMER										ELECTRICAL					OPERATING WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	NOTES
MARK	NUMBER		MIN EFFECTIVE (%)	TOTAL AIRFLOW (CFM)	ESP (IN WG)	TSP (IN WG)	HP	EDB (F)	EWB (F)	LDB (F)	LWB (F)	TOTAL AIRFLOW (CFM)	ESP (IN WG)	TSP (IN WG)	HP	EDB (F)	RH (%)	LDB (F)	LWB (F)	MIN EFFECTIVE (%)	EDB (F)	EWB (F)	LDB (F)	LWB (F)	EDB (F)	RH (%)	LDB (F)	LWB (F)	POINT OF CONNECTION	VOLTS	PHASE	MCA	MOP				
ERV	1	ENERGY WHEEL	78.8	560	1.30	1.36	3/4	25.0	21.0	60.9	51.9	560	0.80	0.86	3/4	70.0	50.0	33.4	30.5	79.6	87.5	68.0	77.3	63.6	75.0	50.0	85.1	67.1	SINGLE	208	1	12.5	15	263	GREENHECK	ERV-10-20H	1,2,3,6,7,8,9,10
ERV	2	ENERGY WHEEL	81.5	880	1.00	1.17	3/4	25.4	21.3	62.1	52.8	880	0.80	0.87	1/2	70.0	50.0	32.7	29.6	82.0	87.5	68.0	77.0	63.5	75.0	50.0	85.4	67.2	SINGLE	208	3	5.9	15	665	GREENHECK	ERV-20-15L	1,2,4,6,7,8,9,10
ERV	3	ENERGY WHEEL	73.1	1,400	1.10	1.26	1-1/2	25.4	21.3	58.9	50.1	1,400	0.80	0.96	1	70.0	50.0	35.7	33.2	74.3	87.5	68.0	74.0	61.1	75.0	50.0	84.6	66.8	SINGLE	208	3	15.2	20	665	GREENHECK	ERV-20-15H	1,2,6,7,8,9,10
NOTES: 1) UNIT CONTROL - MICROPROCESSOR CONTROLLER. LOCATE CONTROLLER AT ACCESSIBLE LOCATION ON WALL WITHIN SAME ROOM AS ERV. PROVIDE EXPANSION BOARD AS NEEDED TO ENSURE ALL POINTS CAN BE SERVED THROUGH THE MICROCONTROLLER. 2) SUPPLY AND EXHAUST DIRTY FILTER SENSORS 3) SUPPLY FAN CONTROL - CONSTANT VOLUME 4) SUPPLY FAN CONTROL - IAQ 6) EXHAUST FAN CONTROL - BUILDING PRESSURE 7) REMOTE DISPLAY 8) WHEEL ROTATION SENSOR 9) ECONOMIZER CONTROL - WHEELSTOP, ENTHALPY 10) SUPPLY AND EXHAUST FAN EC MOTORS 11) PROVIDE FACTORY FURNISHED AIRFLOW SENSORS TO SUPPLY AND EXHAUST AIRSTREAMS.																																					

B

DAMPER SCHEDULE										
MARK	NUMBER	DIMENSION (INCH)	AIRFLOW (CFM)	CONTROL	MATERIAL	BLADE ACTION	BLADE TYPE	MODEL NUMBER	MANUFACTURER	
DAM	1	12	560	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	2	12	560	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	3	14	880	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	4	14	880	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	5	16	1400	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	6	16	1400	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,2
DAM	7	12 x 12	140	2-POS	304SS	OPPOSED	AIRFOIL	VCD-33	GREENHECK	1,2
DAM	8	12 x 12	140	2-POS	304SS	OPPOSED	AIRFOIL	VCD-33	GREENHECK	1,2
DAM	9	30 x 12	1400	2-POS	304SS	OPPOSED	AIRFOIL	VCD-33	GREENHECK	1,2
DAM	10	24 x 12	1400	2-POS	304SS	OPPOSED	AIRFOIL	VCD-33	GREENHECK	1,2
DAM	11	12	480	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,3
DAM	12	12	480	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,3
DAM	13	6	60	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,3
DAM	14	6	60	2-POS	304SS	OPPOSED	ROUND	VCDR-53	GREENHECK	1,3
NOTES: 1. DAMPER LEAKAGE RATE PER AMCA 511 TO BE CLASS I OR GREATER. 2. PROVIDE 24V ACTUATOR WITH DAMPERS. INTERLOCK DAMPER WITH CONTROLLER FOR FAN ENABLE. SEE CONTROLS DIAGRAMS ON 5H-6 AND 5H-7. 3. PROVIDE 24V ACTUATOR WITH DAMPERS. INTERLOCK DAMPER OPERATION TO ENERGIZE WITH DAM-9 AND DAM-10.										

SPLIT SYSTEM INDOOR AIR CONDITIONING UNIT SCHEDULE																						
UNIT IDENTIFICATION				INDOOR UNIT																		
MARK	NUMBER	ROOM(S) SERVED	REFRIG TYPE	HEATING CAPACITY (BTU/H)	SENSIBLE CAPACITY (BTU/H)	LATENT CAPACITY (BTU/H)	AIRFLOW (CFM)	HEATING OUTDOOR DB (F)	HEATING INDOOR DB (F)	COOLING OUTDOOR DB (F)	COOLING INDOOR DB/WB (F)	FILTER	MOUNTING	DIRECTION	SIZE	ELECTRICAL			OPERATING WEIGHT (LBS.)	MODEL NUMBER	MANUFACTURER	NOTES
																VOLTS	PHASE	WATTS				
IDU1	1	506A HALL	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU1	2	511 BOOT RM	R410A	12,900	8,900	3,400	307	25	70	100.0	80 / 67	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	17	32	ARNJ123TRD4	LG	1,2
IDU1	3	511 BOOT RM	R410A	12,900	8,900	3,400	307	25	70	100.0	80 / 67	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	17	32	ARNJ123TRD4	LG	1,2
IDU1	4	513 OFFICE 1	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU1	5	512 LOCKER	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU1	6	514 OFFICE 2	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU1	7	515 BREAK RM	R410A	12,900	7,900	1,900	307	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	17	32	ARNJ123TRD4	LG	1,2
IDU1	8	516 KITCHEN	R410A	8,100	4,800	1,200	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ073TRD4	LG	1,2
IDU2	1	504 FORMALIN	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU2	2	503 MECHANICAL	R410A	21,500	15,300	3,600	735	25	70	100.0	80 / 67	WASHABLE	CEILING	4-WAY	3' x 3'	208	1	31	60	ARNJ183TAA4	LG	1,2
IDU2	3	505 STORAGE	R410A	5,800	3,400	1,000	265	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	13	29	ARNJ053TRD4	LG	1,2
IDU2	4	503 MECHANICAL	R410A	20,400	13,800	5,300	396	25	70	100.0	80 / 67	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	25	35	ARNJ183TDQ4	LG	1,2
IDU2	5	502 FEED STORAGE	R410A	12,900	7,900	1,900	307	25	70	100.0	73 / 61	WASHABLE	CEILING	4-WAY	2' x 2'	208	1	17	32	ARNJ153TDQ4	LG	1,2
NOTES: 1. PROVIDE ALL INTERCONNECTING WIRING BETWEEN THE INDOOR AND OUTDOOR UNITS. 2. PROVIDE WITH FACTORY FURNISHED AND WIRED CONDENSATE PUMP AND FLOAT SWITCH. INCLUDE FACTORY FURNISHED HIGH CONDENSATE LEVEL LIMIT SWITCH TO DISABLE CONDENSATE UNIT.																						

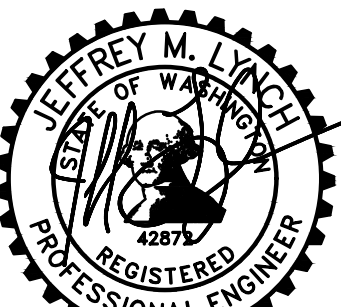
LOUVER SCHEDULE									
MARK	NUMBER	DIMENSION (INCH)	AIRFLOW (CFM)	FREE AREA (SQ FT)	VELOCITY (FPM)	PRESS DROP (IN-WG)	SERVICE	MODEL NUMBER	MANUFACTURER
LV	1	18 x 18	560	0.97	577	0.070	INTAKE	ELF6375DX	RUSKIN
LV	2	18 x 18	560	0.97	577	0.060	EXHAUST	ELF6375DX	RUSKIN
LV	3	24 x 24	880	1.89	466	0.090	INTAKE	ELF6375DX	RUSKIN
LV	4	24 x 18	880	1.34	657	0.040	EXHAUST	ELF6375DX	RUSKIN
LV	5	30 x 24	1400	2.47	567	0.070	INTAKE	ELF6375DX	RUSKIN
LV	6	24 x 24	1400	1.94	722	0.100	EXHAUST	ELF6375DX	RUSKIN
LV	7	12 x 12	120	0.03	4000	0.030	INTAKE	ELF6375DX	RUSKIN
LV	9	30 x 24	1400	2.47	567	0.070	INTAKE	ELF6375DX	RUSKIN
NOTES: 1. 3/4" BIRDSCREEN.									

ROOF AND WALL CAP SCHEDULE									
MARK	NUMBER	RECTANGULAR NECK SIZE (INCH)	NECK DIAMETER (INCH)	AIRFLOW (CFM)	PRESS DROP (IN-WG)	SERVICE	MATERIAL	MODEL NUMBER	MANUFACTURER
DRC	1		4	175	0.125	EXHAUST	ALUMINUM	DJK486	DRYER JACK
RC	1	6 x 9		140	0.030	EXHAUST	STEEL	RJ-6x9	GREENHECK
KWC	1		8	160	0.025	EXHAUST	ALUMINUM	WC-8	GREENHECK
RH	1	12 x 24		1400	0.083	EXHAUST	ALUMINUM	FGR-12x24	GREENHECK
NOTES: 1. BACKDRAFT DAMPER. 2. BIRDSCREEN 3. INSULATED ROOF CURB, 1 INCH INSULATION, 8 INCH HEIGHT, SEE ARCHITECTURAL FOR ROOF SLOPE. GREENHECK MODEL GPFF-18x30-G8 OR APPROVED EQUAL.									

KITCHEN HOOD SCHEDULE														
UNIT IDENTIFICATION			AIRFLOW (CFM)	ESP (IN-WG)	NECK DIMENSION (INCHES)	NECK ORIENTATION	HOOD WIDTH (INCHES)	FINISH	LIGHTS	NO. OF SPEEDS	ELECTRICAL			NOTES
MARK	NUMBER	UNIT/AREA SERVED									AMPS	VOLTS	PHASE	
KH-1	1	BREAKROOM	160	0.25	3-1/4 x 10	VERTICAL	30	STAINLESS	LED	2	0.65	115	1	1
NOTES: 1) 8" DIAMETER ROUND TRANSITION.														

SPLIT SYSTEM OUTDOOR AIR CONDITIONING UNIT SCHEDULE																				
UNIT...		REFRIG TYPE	REFRIG CHARGE (LBS)	COOLING CAPACITY (BTU/H)	HEATING CAPACITY (BTU/H)	AIRFLOW (CFM)	NO. OF COMP	COOLING AMBIENT DESIGN TEMP (F)	COOLING INDOOR TEMP (F) DB / WB	HEATING AMBIENT DESIGN TEMP (F)	MINIMUM AMBIENT TEMP (F)	HEATING INDOOR TEMP (F) DB	ELECTRICAL				OPERATING WEIGHT (LBS.)	MODEL NUMBER	MANUFACTURER	NOTES
MARK	NUMBER												VOLTS	PHASE	MCA	MOP				
ODU	1	R410A	8	48,200	64,000	3,885	1	100	73 / 61	25	-13	70	208	1	25.4	40	260	ARUN060GSS4	LG	1,2
ODU	2	R410A	8	48,200	64,000	3,885	1	100	73 / 61	25	-13	70	208	1	25.4	40	260	ARUN060GSS4	LG	1,2
NOTES: 1. PROVIDE ALL INTERCONNECTING WIRING BETWEEN THE INDOOR AND OUTDOOR UNITS. 2. OUTDOOR UNIT TO BE MOUNTED ON 6" HOUSEKEEPING PAD.																				

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Revision By Appd YYYY.MM.DD				PACKAGE A Issued By Appd YYYY.MM.DD				Permit/Seal 		Consultant		 Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.		Client/Project Logo 		Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design File Name: N/A BHC MSM JML 2/10/25 Dwn. Dgn. Chkd. YYYY.MM.DD		Title HVAC SCHEDULES Project No. 224202267 Revision Scale Drawing No. 5H-0	

C

GRILLE, REGISTER, DIFFUSER SCHEDULE												
UNIT IDENTIFICATION		DIFFUSER FACE SIZE (IN)	FLOW RANGE (CFM)	DIFFUSER NECK SIZE (IN)	FLOW PATTERN	MOUNTING TYPE	COLOR	MATERIAL	ACCESSORY	MANUFACTURER	MODEL NUMBER	NOTES
MARK	NUMBER											
S	1	4 Ø	15	4	ROUND	T-GRID	WHITE	PLASTIC	-	LIFEBREATH	TECH GRILLE	1, 2, 4
S	2	21 x 21	190	8	4-WAY-44	T-GRID	WHITE	ALUMINUM	-	PRICE	AMDA	1, 2, 3, 4, 6
S	3	21 x 21	180	8	2-WAY-S2	T-GRID	WHITE	ALUMINUM	-	PRICE	AMDA	1, 2, 3, 4, 6
S	4	6 x 6	80	5	2-WAY-S2	T-GRID	WHITE	ALUMINUM	-	PRICE	AMDA	1, 2, 3, 4, 6
S	5	SEE DWG	240 - 325	SEE DWG	2-DEFLECTION	DUCT	WHITE	ALUMINUM	-	PRICE	22	3, 6
S	6	6 x 5	60	6 x 5	2-DEFLECTION	GYP	WHITE	ALUMINUM	-	PRICE	22	1, 3, 6
S	7	SEE DWG	190 - 240	SEE DWG	ROUND	DUCT	WHITE	ALUMINUM	-	PRICE	ARCD	3, 5
E	1	24 x 24	50 - 100	24 x 24	1/2" EGGRATE	GYP	WHITE	ALUMINUM	-	PRICE	80	1, 3
E	2	24 x 24	180	24 x 24	1/2" EGGRATE	T-GRID	WHITE	ALUMINUM	-	PRICE	80	1, 3
E	3	18 x 12	380 - 480	18 x 12	45° - 3/4" SPACE	DUCT	WHITE	ALUMINUM	-	PRICE	630	3
E	4	6 x 6	60	6 x 6	45° - 3/4" SPACE	GYP	WHITE	ALUMINUM	-	PRICE	630	1, 3
E	5	40 x 14	950	40 x 14	1/2" EGGRATE	DUCT	WHITE	ALUMINUM	-	PRICE	630	3
E	6	24 x 12	380 - 480	24 x 12	45° - 3/4" SPACE	DUCT	WHITE	ALUMINUM	-	PRICE	630	3
NOTES: 1. REFER TO REFLECTED CEILING PLANS EXACT LOCATION. PROVIDE ALL FRAMES AND ACCESSORIES AS REQUIRED FOR PROPER INSTALLATION. 2. FLEXIBLE DUCTWORK SHALL BE THE SAME SIZE AS THE DIFFUSER NECK OR AN EQUIVALENT ROUND DUCT. FLEXIBLE DUCTWORK SHALL BE SUPPORTED TO PREVENT KINKS OR BENDS. 3. COLOR TO BE SELECTED BY ARCHITECT FROM STANDARD COLORS. 4. T-BAR LAY IN PANEL. 5. 3 POSITION ADJUSTABLE CORE OPTION. 6. INCLUDE FULLY ADJUSTABLE DIRECTIONAL VANES.												

B

ELECTRIC FINNED TUBE RADIATION SCHEDULE																
UNIT IDENTIFICATION			ENCLOSURE										MANUFACTURER	MODEL NUMBER	NOTES	
MARK	NUMBER	AREA SERVED	FIN MATERIAL	NO OF TIERS	LENGTH (FT)	W	VOLT / PH	TYPE	MATERIAL	GAGE	HEIGHT (IN)	FINISH				
EBB	1A	TOILET A 507	NICKEL CHROMIUM	1	2'-6"	500.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC25026W	1, 2	
EBB	1B	TOILET B 508	NICKEL CHROMIUM	1	2'-6"	500.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC25026W	1, 2	
EBB	1C	HALL 506B	NICKEL CHROMIUM	1	2'-6"	500.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC25026W	1, 2	
EBB	1D	JANITOR 509	NICKEL CHROMIUM	1	2'-6"	500.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC25026W	1, 2	
EBB	2A	OFFICE 1-513	NICKEL CHROMIUM	1	3'-0"	750.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2503W	1, 2	
EBB	2B	OFFICE 2-514	NICKEL CHROMIUM	1	3'-0"	750.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2503W	1, 2	
EBB	3A	KITCHEN 516	NICKEL CHROMIUM	1	4'-0"	1,000.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2504W	1, 2	
EBB	4A	HALL 506A	NICKEL CHROMIUM	1	5'-0"	1,250.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2505W	1, 2	
EBB	4B	BREAK RM 515	NICKEL CHROMIUM	1	5'-0"	1,250.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2505W	1, 2	
EBB	4C	BREAK RM 515	NICKEL CHROMIUM	1	5'-0"	1,250.0	208 / 1	ELEC	STEEL	18	6-3/4	WHITE	QMARK	QMKC2505W	1, 2	
NOTES: 1) DP THERMOSTAT, TAMPER RESISTANT, MODEL TATPAW 2) DOUBLE POLE POWER ON/OFF, MODEL DSW2W																

A

ASHRAE 62.1 VENTILATION AND EXHAUST SCHEDULE															
1.0 Ez - Zone Air Distribution Effectiveness			0.464 D = Ps/Pz												
0.43 Ev - System Ventilation Efficiency			0.72 = Max Zp												
13 Ps - Building Population															
ZONE	ROOM SERVED	AREA (SQ. FT.)	ZONE AIR DISTRIBUTION EFFECTIVENESS Ez	ZONE PRIMARY AIR FLOW Vpz	PRIMARY OUTDOOR AIR FRACTION Zp =	OCCUPANCY	PEOPLE OUTDOOR AIRFLOW RATE (CFM/PERSON) Rp	AREA OUTDOOR AIRFLOW RATE (CFM/SQ. FT.) Ra	OCCUPANT DENSITY (PERS./1000 SQ....	EXHAUST AIRFLOW RATE (CFM/SQ. FT.)	EXHAUST RATE	EXHAUST (CFM)	AIR CLASS	OCCUPANT LOAD (PERS.) Pz	100% O/A OUTDOOR AIRFLOW (CFM) Voz
1	500 INCUBATION	1,900	1.0	950	0.23	WAREHOUSE	10	0.06	5	0.5	MOISTURE CONTROL	950	2	10	214
2	501 EGG PROCESSING	301	1.0	450	0.13	WAREHOUSE	10	0.06	10	1.5	ODOR CONTROL	450	2	4	58
3	502 FEED STORAGE	295	1.0	440	0.06	STORAGE - DRY MTRL	5	0.06	2	1.5	ODOR CONTROL	440	1	1	23
4	503 MECHANICAL	725	1.0	380	0.00	MECHANICAL	0	0.00	0	0.5	ASHRAE 15 - 8.9.8	380	0	0	0
5	504 FORMALIN	120	1.0	60	0.00	STORAGE RM - CHEMICAL	0	0.00	0	1.5	TOXIC CONTROL AREA	120	4	0	0
6	505 STORAGE	110	1.0	60	0.20	STORAGE - DRY MTRL	5	0.06	2	0.0		60	1	1	12
7	506A HALL ENTRY	130	1.0	80	0.10	CORRIDOR	0	0.06	0	0.0		0	1	0	8
8	506B HALL	201	1.0	80	0.16	CORRIDOR	0	0.06	0	0.0		0	1	0	12
9	507 TOILET A	75	1.0	0	0.00	TOILET	0	0.00	0	0.0		75	2	0	0
10	508 TOILET B	78	1.0	0	0.00	TOILET	0	0.00	0	0.0		75	2	0	0
11	509 JANITOR RM	50	1.0	0	0.00	SHOWER	0	0.00	0	0.0		50	2	0	0
12	510 SHOWER	50	1.0	0	0.00	SHOWER	0	0.00	0	0.0		80	2	0	0
13	511 BOOT RM	99	1.0	90	0.00	LOCKER INDUSTRIAL	0	0.00	0	0.5	ASHRAE 62.1	100	2	0	0
14	512 LOCKER RM	154	1.0	90	0.00	LOCKER INDUSTRIAL	0	0.00	0	0.5	ASHRAE 62.1	80	2	0	0
15	513 OFFICE 1	93	1.0	15	0.71	OFFICE SPACES	5	0.06	5	0.0		0	1	1	11
16	514 OFFICE 2	96	1.0	15	0.72	OFFICE SPACES	5	0.06	5	0.0		0	1	1	11
17	515 BREAK RM	189	1.0	190	0.39	BREAKROOMS	5	0.12	50	0.0		0	1	10	73
18	516 KITCHEN	187	1.0	0	0.00	KITCHENETTES	0	0.00	0	0.3	ASHRAE 62.1	100	2	0	0
		4,850												28	420

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C

B

A

GENERAL NOTES

1. SYSTEMS SHOWN ARE DIAGRAMMATIC AND MAY NOT INCLUDE ALL OFFSETS, FITTINGS AND REQUIRED ROUTING. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF COMPLETE AND OPERATIONAL SYSTEMS WITH DUE RESPECT TO ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
2. COORDINATE DUCT ROUTING WITH SPRINKLER/PROCESS/PLUMBING PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
3. INSTALL ALL VENTILATION EQUIPMENT, DIFFUSERS AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. SEE 5H-2 FOR ASHRAE 62.1 VENTILATIONA AND EXHAUST SCHEDULE.
5. BALANCE EF-1 WITH HOA CONTROLLER TO MAINTAIN AIRFLOW OF 120 CFM. BALANCER TO FIELD VERIFY SITE CONDITIONS SUCH THAT THE AIRFLOW FOR BOTH EXHAUST AND MAKEUP AIR FOR IN 504 FORMALIN ROOM EXCEEDS 1CFM/SQFT AND OPERATES CONTINUOUSLY PER 2018 IMC 502.8.

M:02

M:03

M:04

M:05

M:06

M:07

KEYNOTE:

OPPOSED BLADE DAMPER PROVIDED WITH GRILLE.

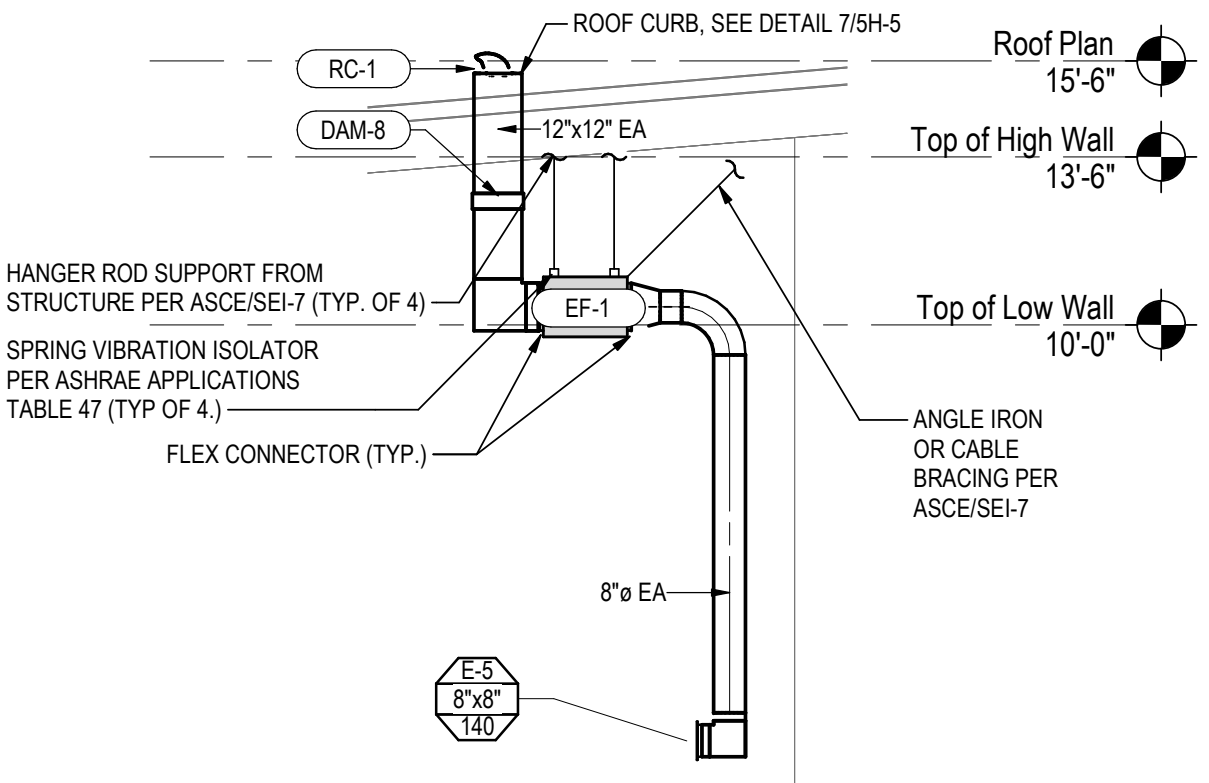
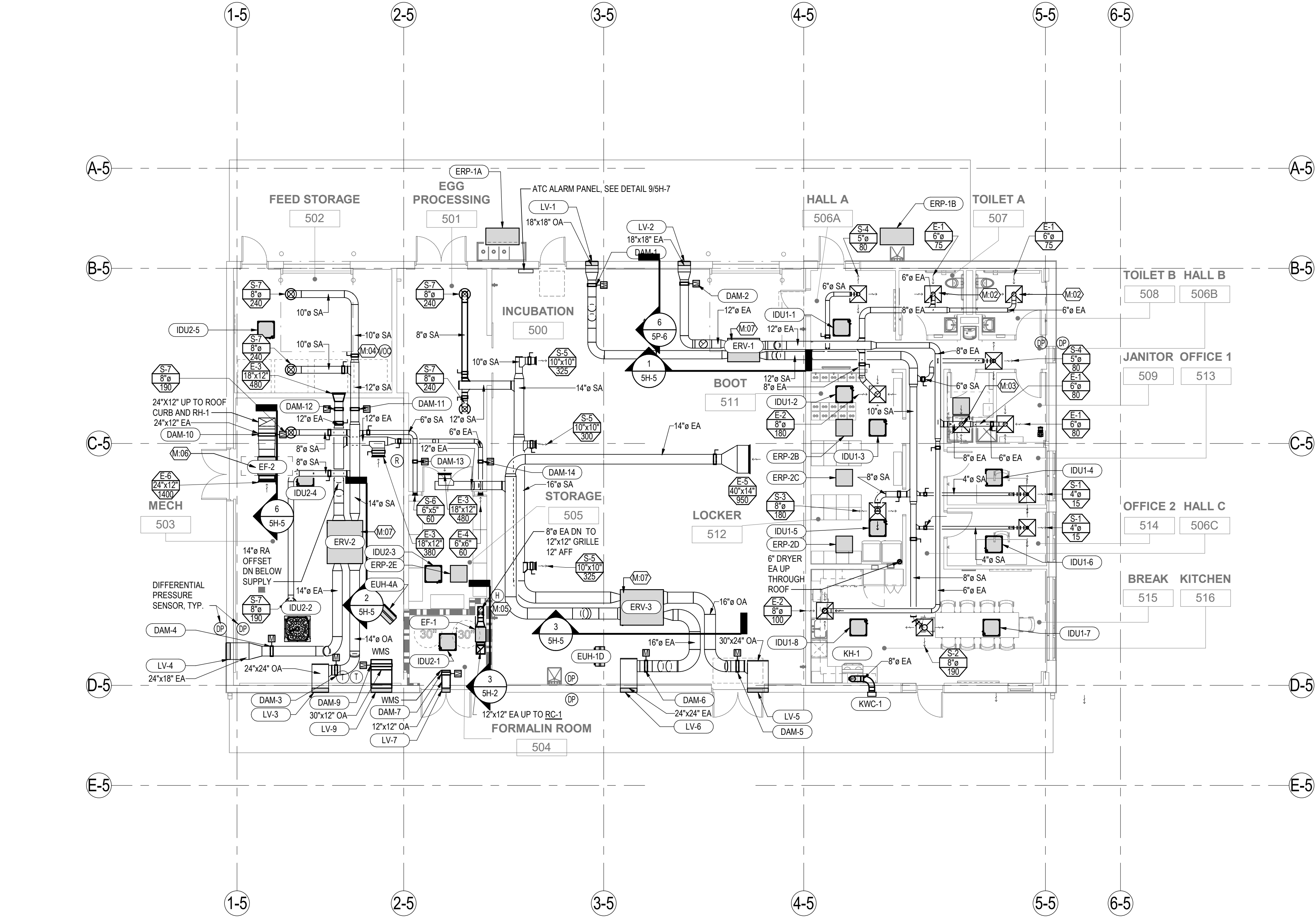
BALANCE DAMPER INSTALLED VERTICALLY BELOW.

VOC SENSOR, TYP.

HUMIDISTAT, TYP.

EF-2 SIZED FOR 200 LBS OF REFRIGERANT IN SPACE. CONTRACTOR VERIFY AND COORDINATE IF SIGNIFICANTLY DIFFERENT.

INSTALL ERV MICROCONTROLLER AT ACCESSIBLE LOCATION ON WALL WITHIN THE SAME ROOM. PROVIDE FRONTAL CLEARANCE FOR OPERATION AND MAINTENANCE.



1

INCUBATION BUILDING HVAC PLAN

5H-2

1/8" = 1'-0"

3

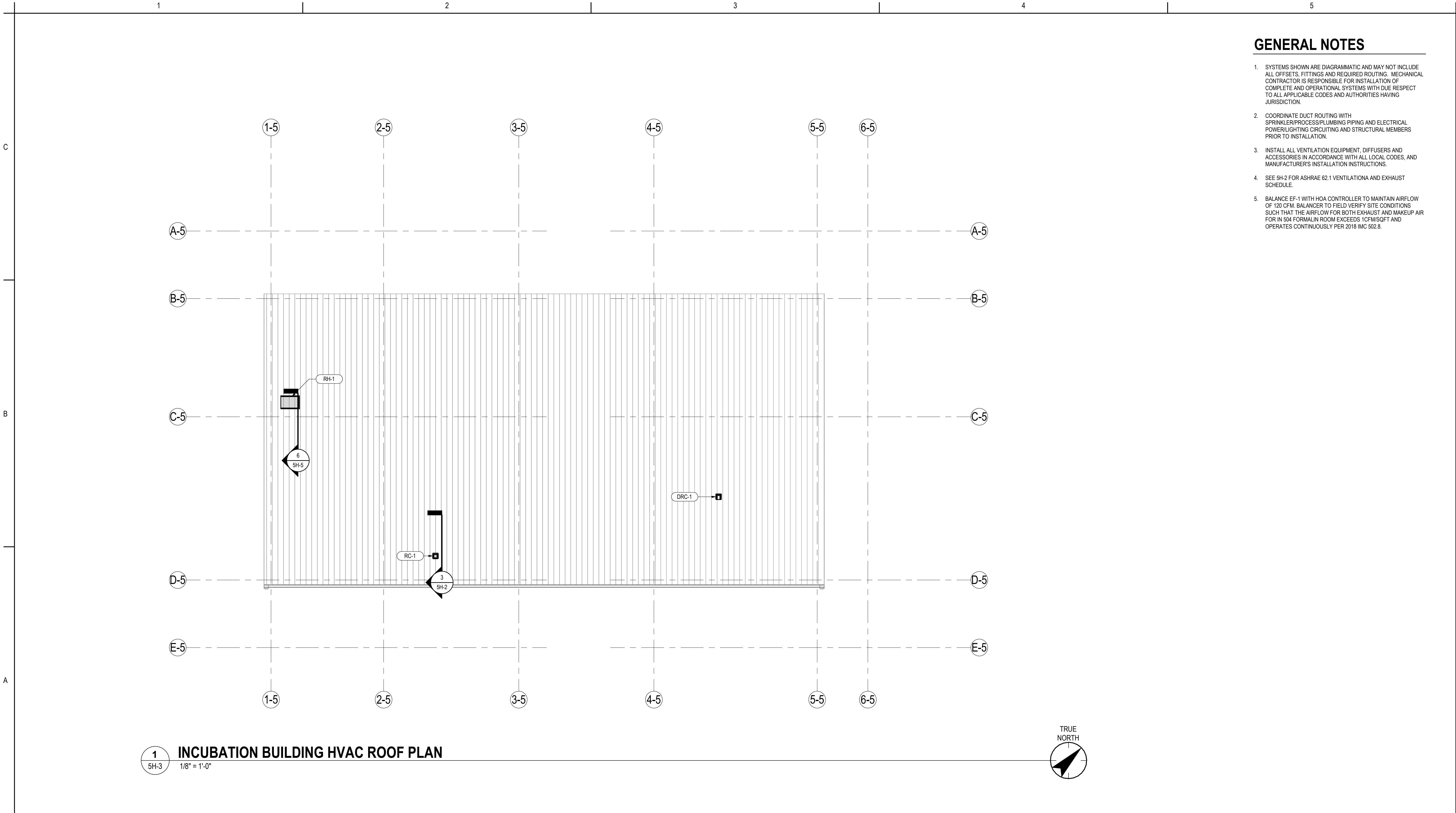
EF-1 HVAC SECTION

5H-2

1/4" = 1'-0"

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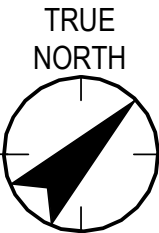
Revision By Appd YYYY.MM.DD				PACKAGE A ISSUED By Appd YYYY.MM.DD				Permit/Seal JEFFREY M. LYNCH STATE OF WISCONSIN 42874 PROFESSIONAL ENGINEER 2025-02-10	Consultant Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo TULALIP TRIBES	Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design File Name: N/A BHC Dwn. MSM Dsgn. JML Chkd. 2/10/25 YYYY.MM.DD	Title INCUBATION BUILDING HVAC PLAN Project No. 224202267 Revision Scale As indicated Drawing No. 5H-2



GENERAL NOTES

1. SYSTEMS SHOWN ARE DIAGRAMMATIC AND MAY NOT INCLUDE ALL OFFSETS, FITTINGS AND REQUIRED ROUTING. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF COMPLETE AND OPERATIONAL SYSTEMS WITH DUE RESPECT TO ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
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3. INSTALL ALL VENTILATION EQUIPMENT, DIFFUSERS AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. SEE 5H-2 FOR ASHRAE 62.1 VENTILATION AND EXHAUST SCHEDULE.
5. BALANCE EF-1 WITH HOA CONTROLLER TO MAINTAIN AIRFLOW OF 120 CFM. BALANCER TO FIELD VERIFY SITE CONDITIONS SUCH THAT THE AIRFLOW FOR BOTH EXHAUST AND MAKEUP AIR FOR IN 504 FORMALIN ROOM EXCEEDS 1CFM/SQFT AND OPERATES CONTINUOUSLY PER 2018 IMC 502.8.

1 INCUBATION BUILDING HVAC ROOF PLAN
5H-3 1/8" = 1'-0"



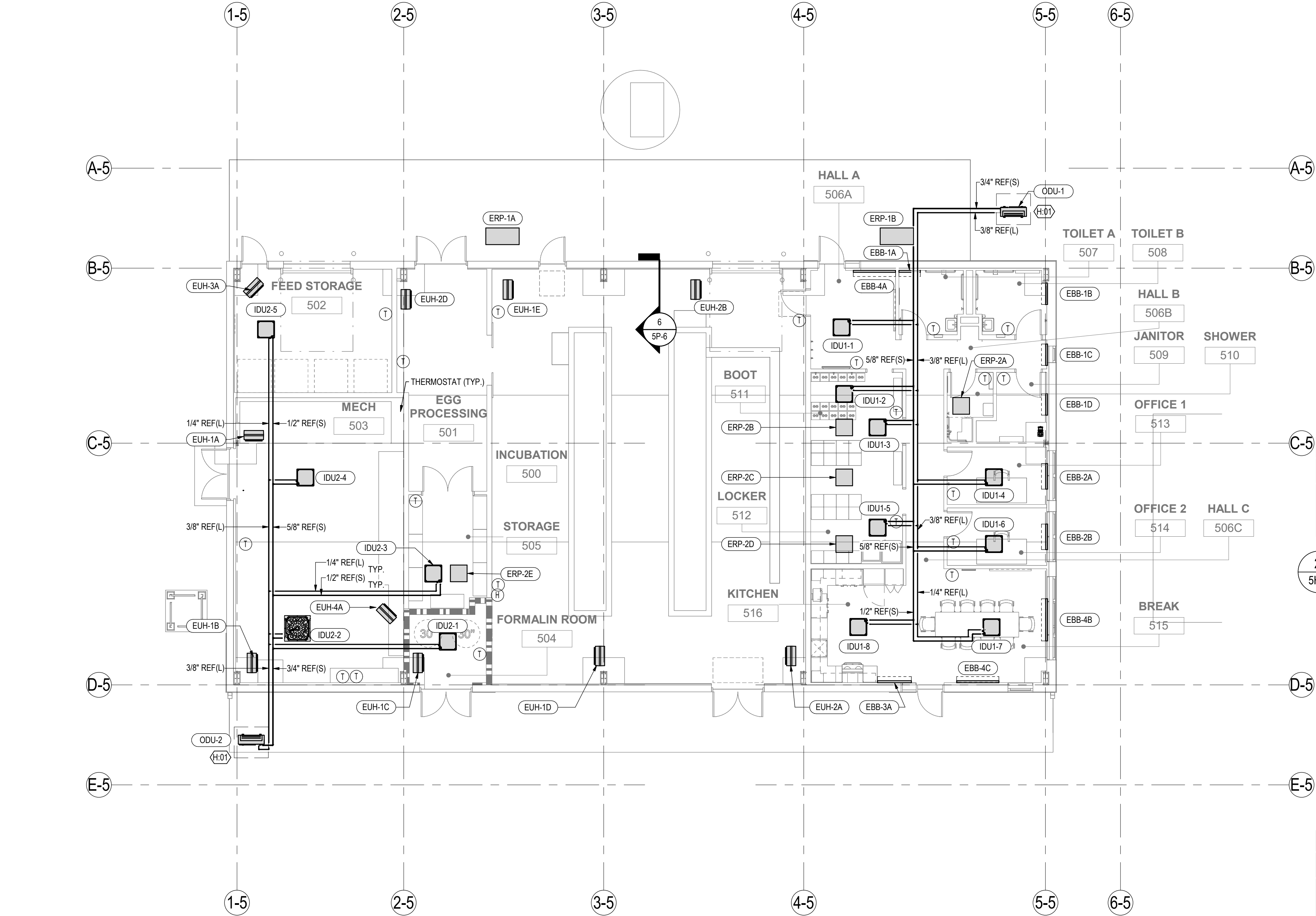
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Revision By Appd YYYY.MM.DD				PACKAGE A Issued By Appd YYYY.MM.DD				Permit/Seal	Consultant	Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project Tulalip Tribes Tulalip - Utility Wells ESDC & Battle Creek Design File Name: N/A BHC Dwn. MSM Dsgn. JML Chkd. 2/10/25 YYYY.MM.DD	Title INCUBATION BUILDING HVAC ROOF PLAN Project No. 224202267 Revision Scale As indicated Drawing No. 5H-3

GENERAL NOTES

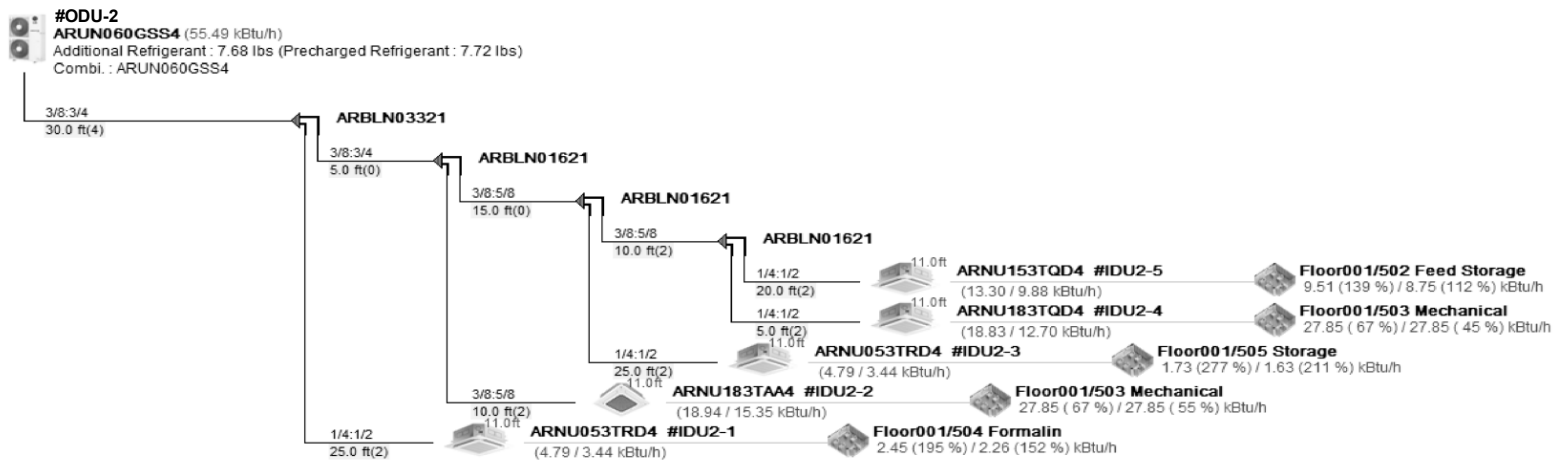
1. SYSTEMS SHOWN ARE DIAGRAMMATIC AND MAY NOT INCLUDE ALL OFFSETS, FITTINGS AND REQUIRED ROUTING. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF COMPLETE AND OPERATIONAL SYSTEMS WITH DUE RESPECT TO ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
2. COORDINATE PIPE ROUTING WITH DUCTWORK, SPRINKLER/PROCESS/PLUMBING PIPING AND ELECTRICAL POWER/LIGHTING CIRCUITING AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
3. INSTALL ALL REFRIGERATION EQUIPMENT, TERMINAL UNITS AND ACCESSORIES IN ACCORDANCE WITH ALL LOCAL CODES, AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

KEYNOTE:
H.01
PROVIDE CONCRETE HOUSEKEEPING PAD.



1 INCUBATION BUILDING MECHANICAL PIPING PLAN
5H-4 1/8" = 1'-0"

2 ODU-1 PIPING DIAGRAM
5H-4 NOT TO SCALE

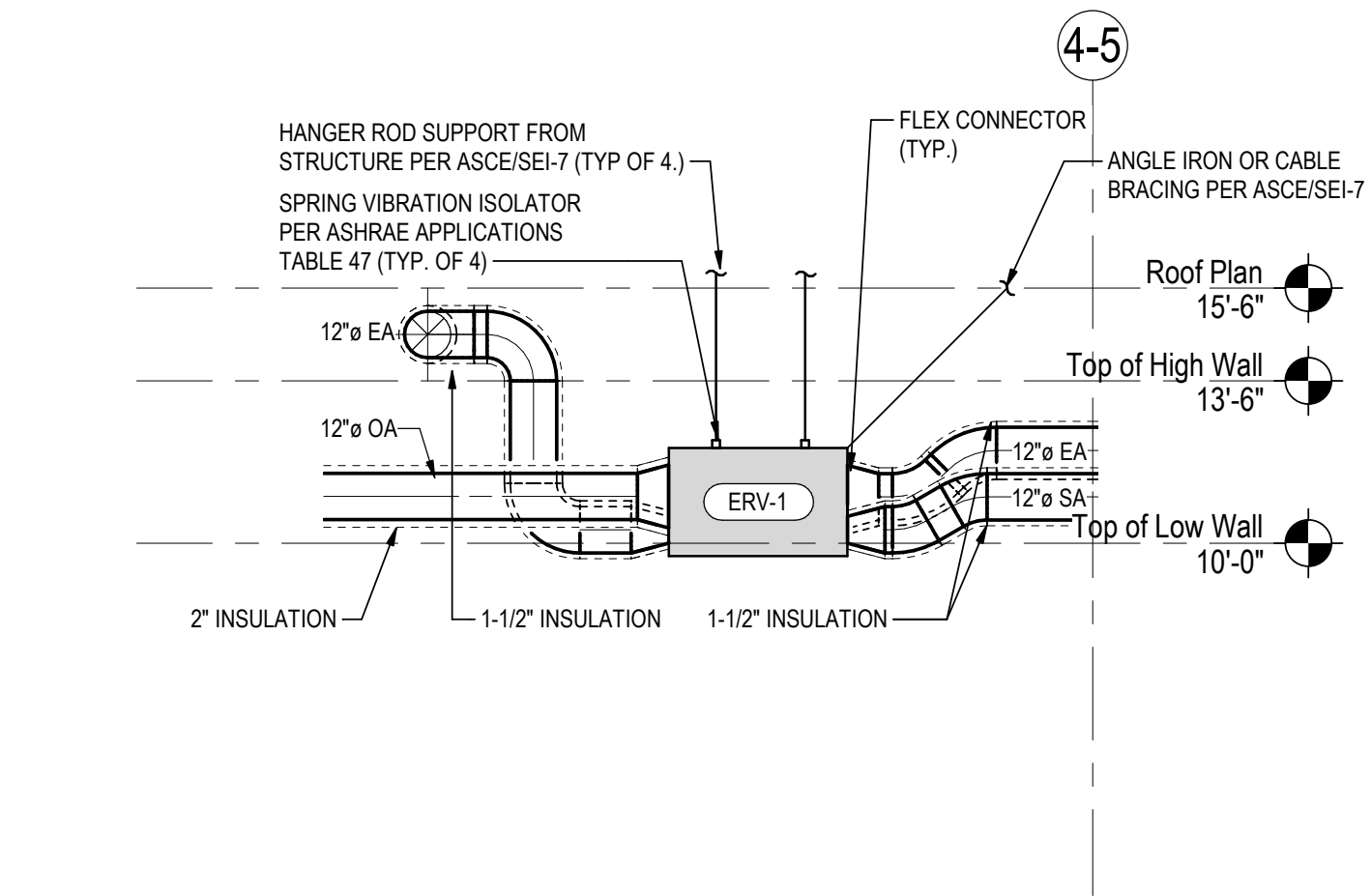


3 ODU-2 PIPING DIAGRAM
5H-4 NOT TO SCALE

C

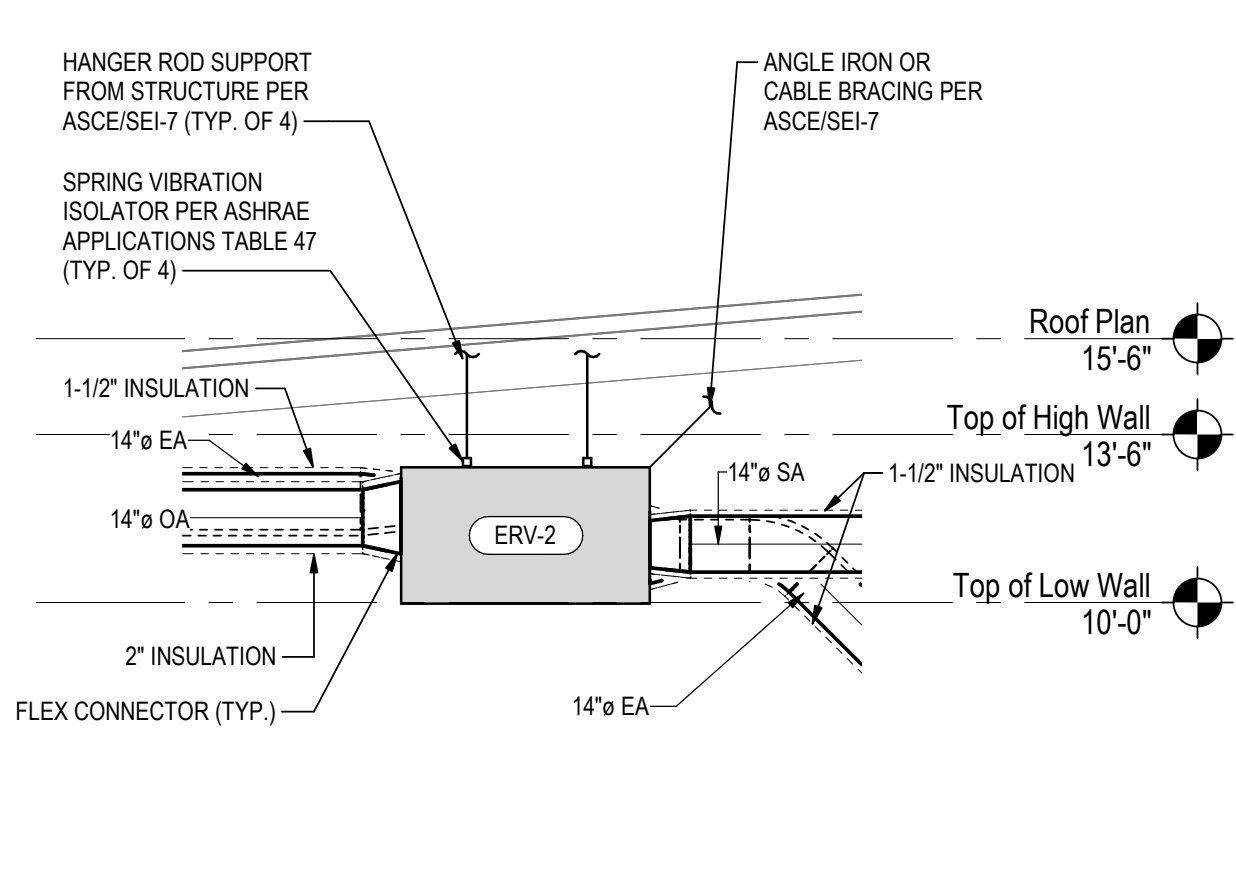
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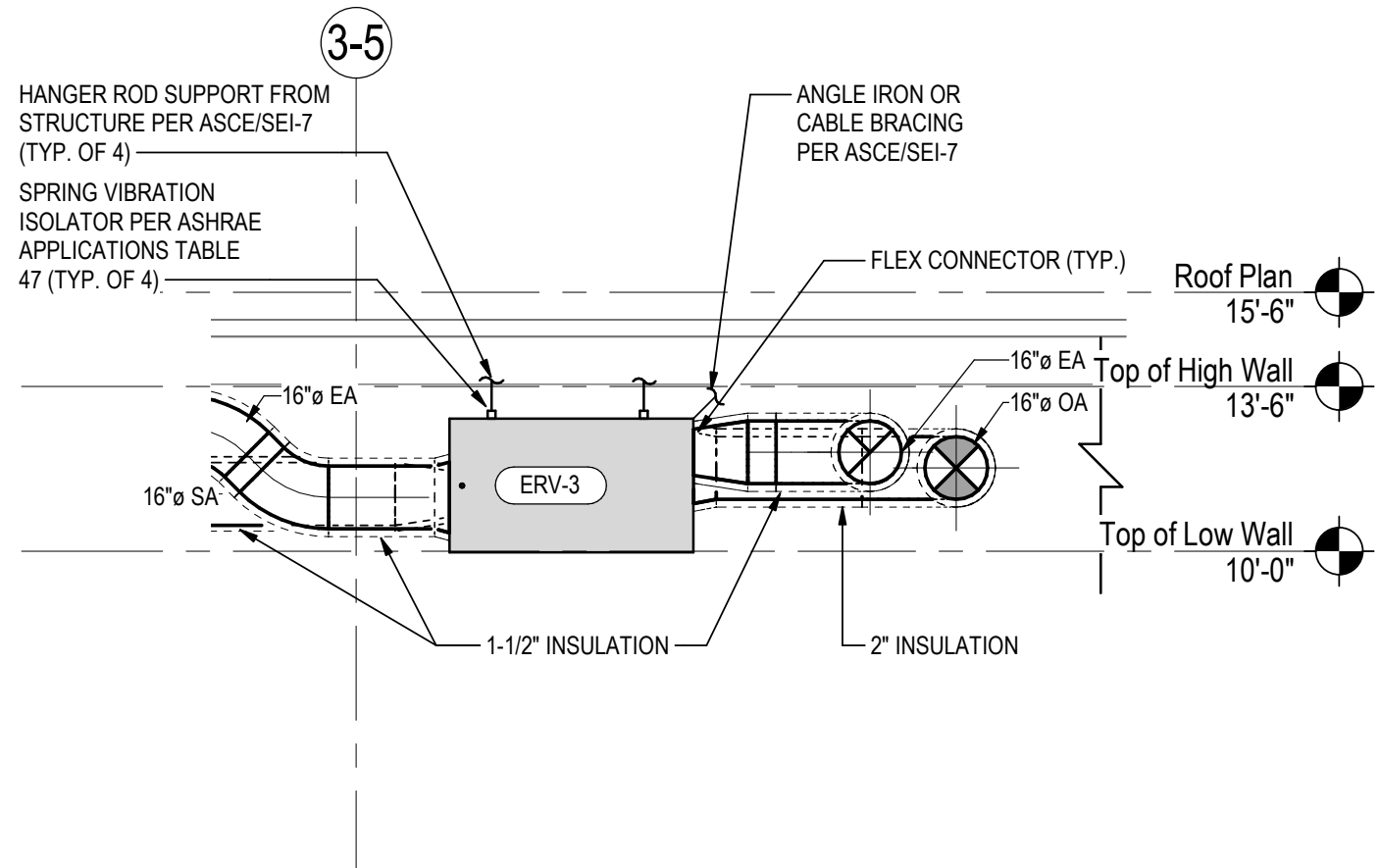
1 ERV-1 HVAC SECTION

5H-5 NOT TO SCALE



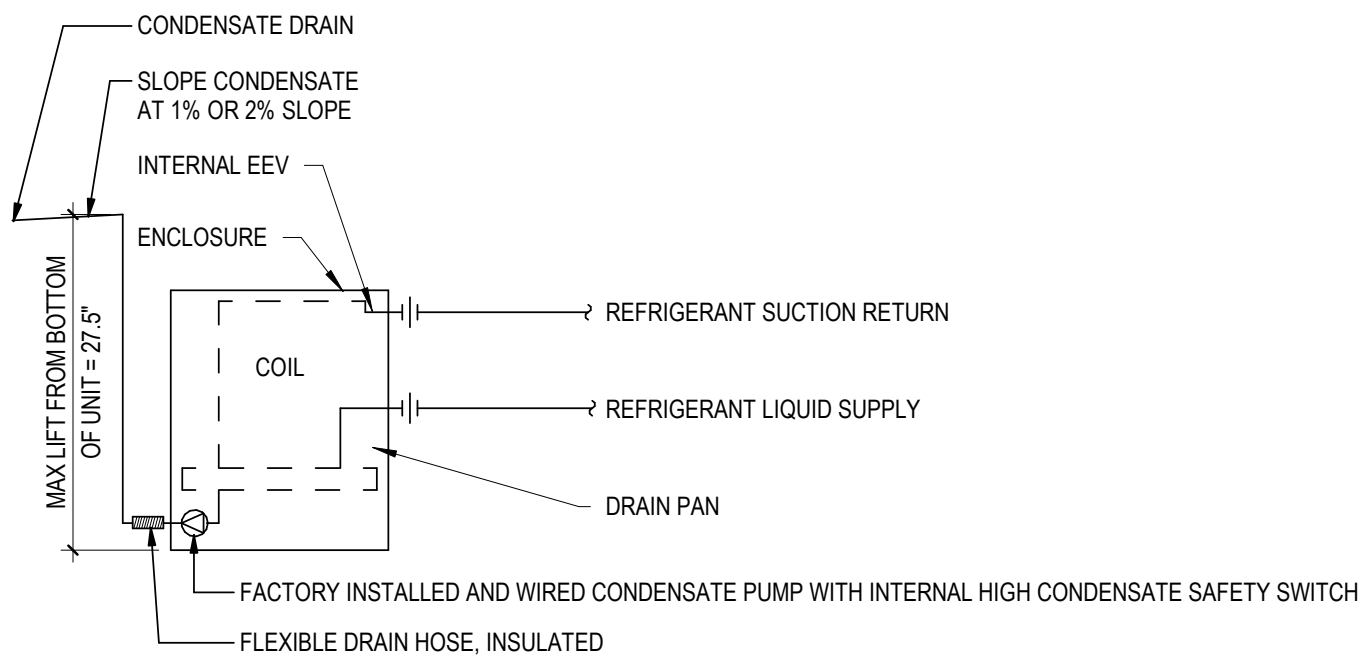
2 ERV-2 HVAC SECTION

5H-5 NOT TO SCALE



3 ERV-3 HVAC SECTION

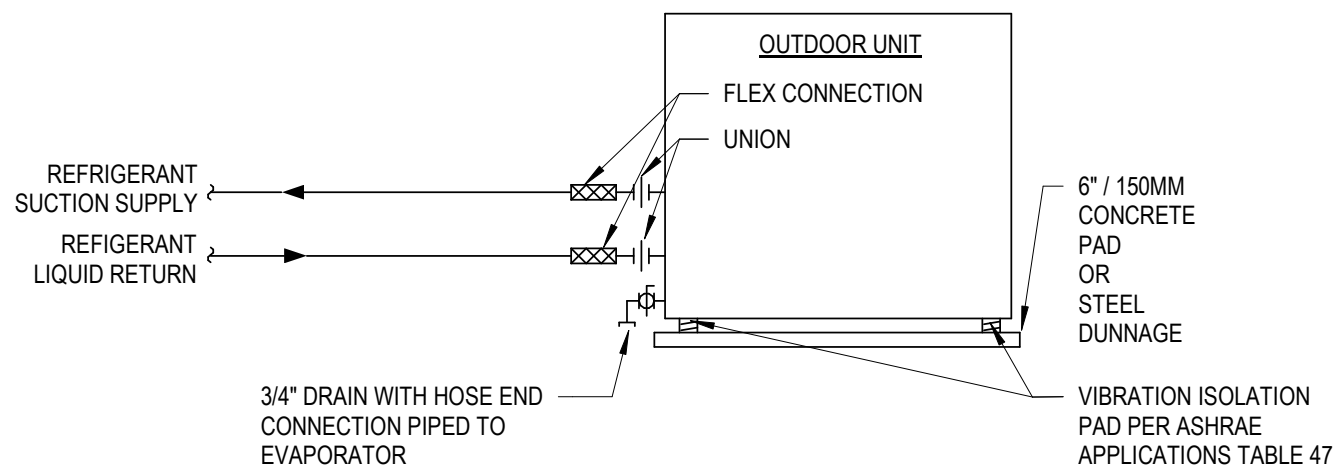
5H-5 NOT TO SCALE



- NOTES:
1. INSULATE THE SUCTION COIL TO PREVENT HEAT LOSS / CONDENSATION.
 2. IF THE MECHANICAL CONTRACTOR USES QUICK CONNECT KITS, WHERE THE EQUIPMENT ISOLATION VALVE IS PART OF ANOTHER COMPONENT, THEN PROVIDE THE MAIN ISOLATION VALVES (OTHERWISE THEY ARE NOT REQUIRED).
 3. SHUT OFF VALVES AND ACCESSORIES SHALL BE THE SAME SIZE AS THE SYSTEM PIPING. TRANSITION TO THE COIL CONNECTION SIZE AT THE COIL.
 4. INCLUDE FACTORY FURNISHED WATER-LEVEL MONITORING DEVICE INSIDE PRIMARY DRAIN PAN. INTERLOCK MONITORING DEVICE TO VRF UNIT ENABLE TO DISABLE UNIT IF WATER LEVEL EXCEEDS LIMIT.
 5. ROUTE CONDENSATE DRAINAGE PER MANUFACTURER'S RECOMMENDATIONS.
 6. PROVIDE WITH FACTORY FURNISHED CONDENSATE PUMP WITH HIGH CONDENSATE LEVEL SAFETY SWITCH.

4 INDOOR VRF CEILING CASSETTE DETAIL

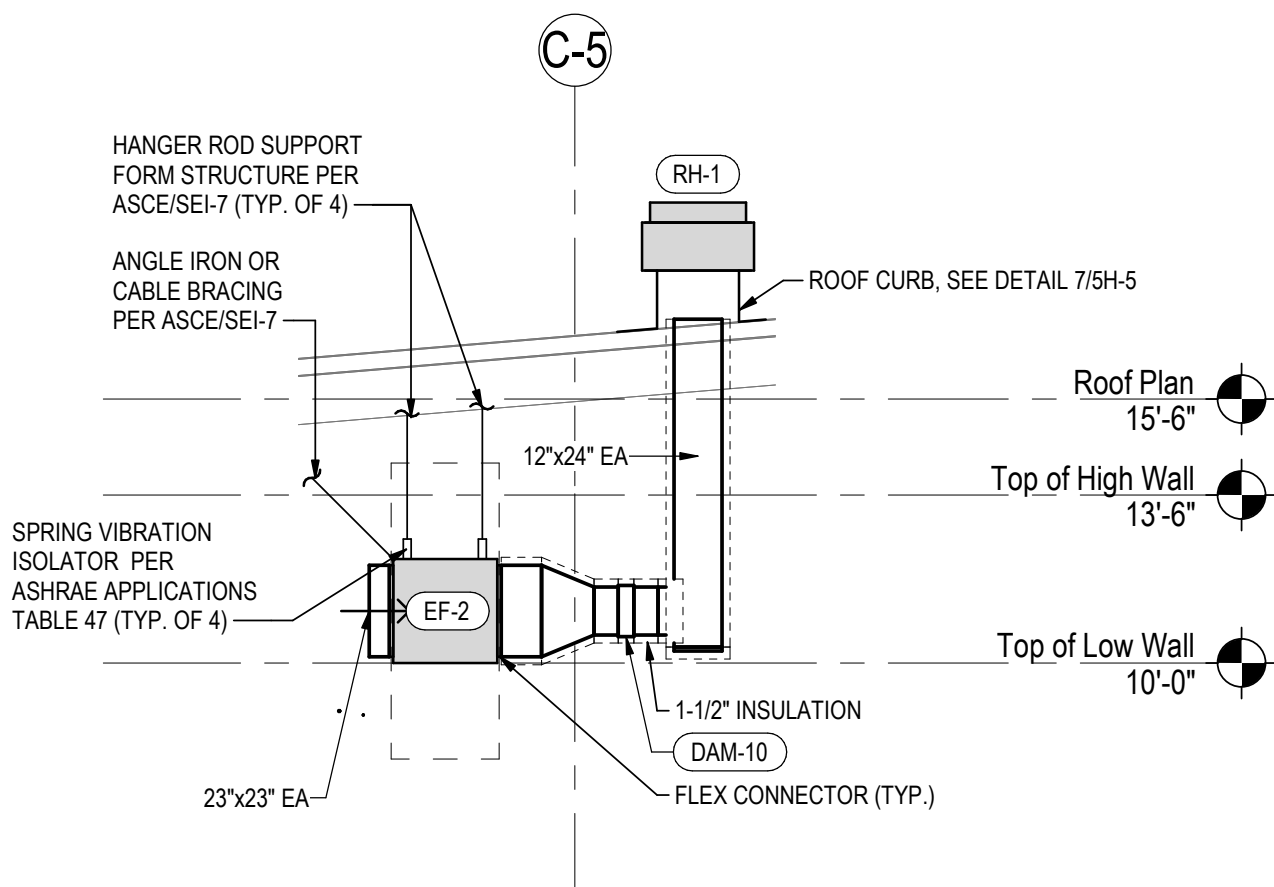
5H-5 NOT TO SCALE



- NOTES:
1. LOCATE PIPING TO FACILITATE THE REQUIRED ACCESS AND REMOVAL OF REFRIGERATION COMPONENTS.
 2. COORDINATE THE COIL PULL SIDE WITH THE PIPING LAYOUT AND ALLOCATED ACCESS AREAS.
 3. SHUT OFF VALVES AND ACCESSORIES SHALL BE THE SAME SIZE AS THE SYSTEM PIPING. TRANSITION TO THE CHILLER INLET/OUTLET SIZES AT THE CHILLER

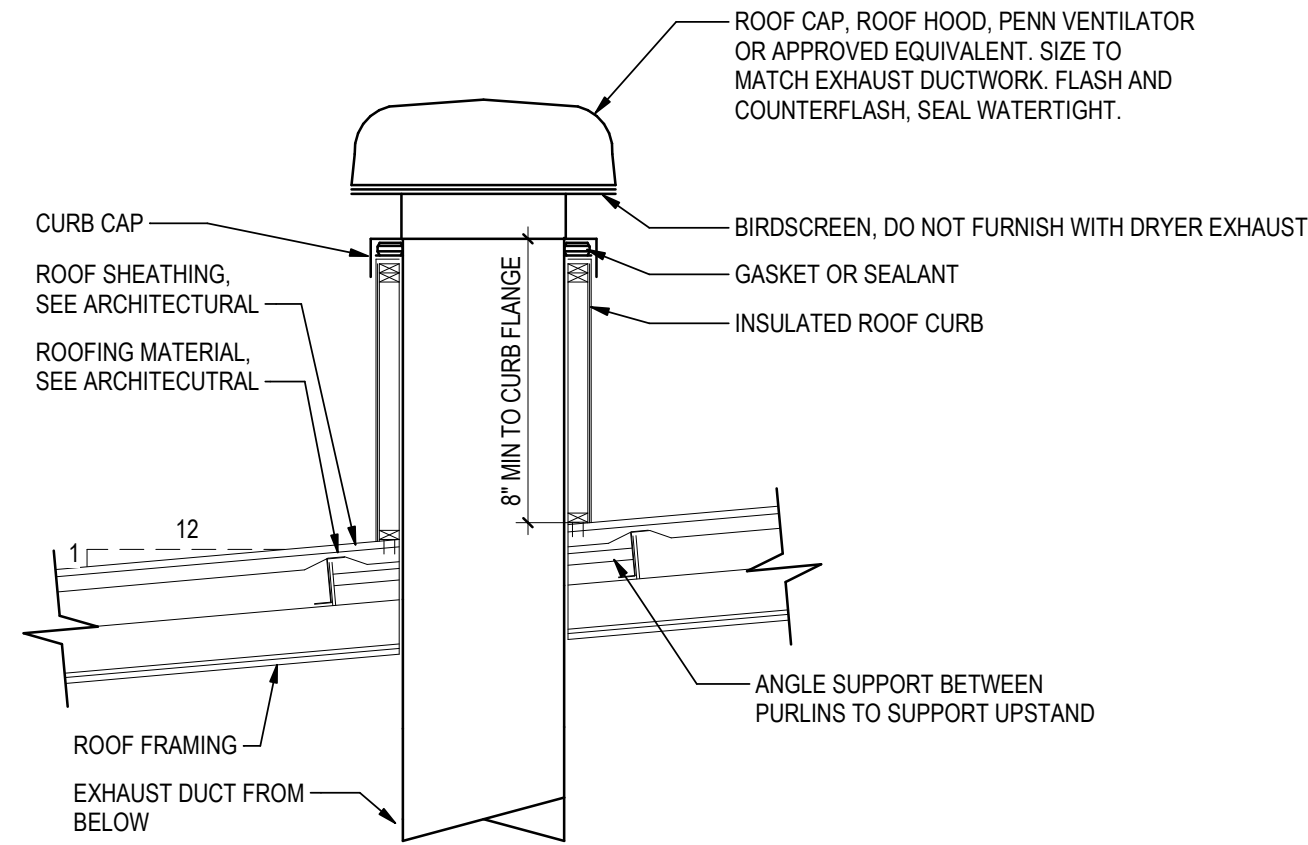
5 OUTDOOR DRY COOLER UNIT DETAIL

5H-5 NOT TO SCALE



6 EF-2 HVAC SECTION

5H-5 NOT TO SCALE



- NOTES:
1. REFER TO CONTRACT DOCUMENTS FOR DUCT MATERIAL AND INSULATION REQUIREMENTS.
 2. COORDINATE THE LOCATION AND SIZE OF THE EQUIPMENT BASED ON THE CONTRACT DOCUMENTS.
 3. THE PURPOSE OF THE EQUIPMENT CURB IS TO SUPPORT THE WEIGHT OF THE EQUIPMENT. FOLLOW VIBRATION/SEISMIC REQUIREMENTS PER ASCE/SEI 7-16.

7 ROOF CURB DETAIL

5H-5 NOT TO SCALE

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Client/Project Logo



Client/Project
Tulalip Tribes

Tulalip - Utility Wells ESDC & Battle Creek
Design

Title
INCUBATION BUILDING HVAC DETAILS

Project No. 224202267	Scale As indicated
Revision	Drawing No. 5H-5

CONTROL SCHEMATIC SYMBOLS

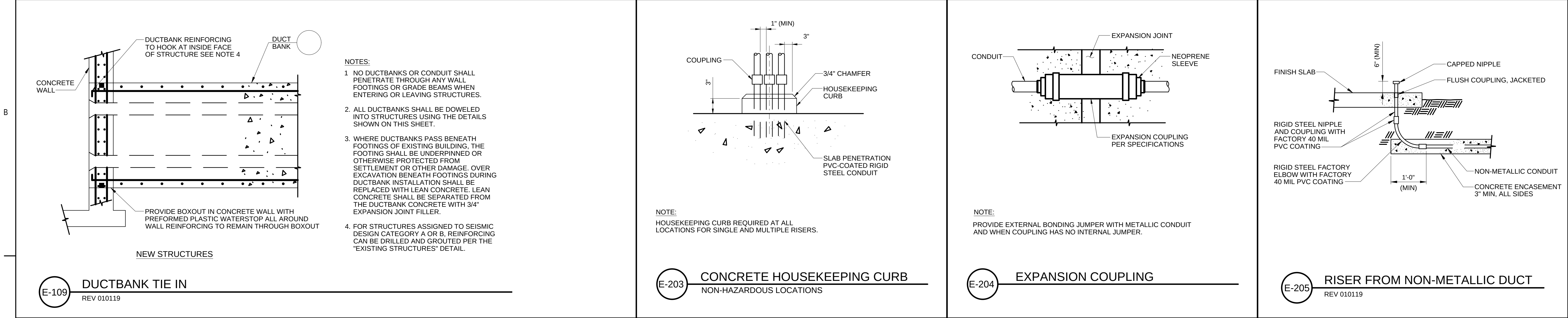
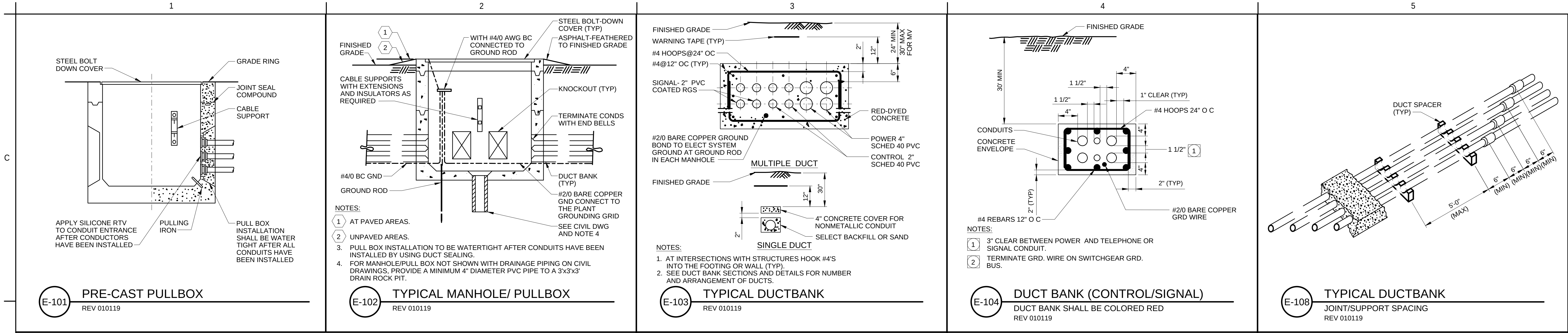
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ELECTRICAL ABBREVIATIONS																				GENERAL ELECTRICAL NOTES																				GENERAL PROGRAMMING & AUTOMATION NOTES																			
C	A	AMPERE, AUTOMATIC	M	MOTOR CONTACTOR COIL	1.	ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES.	25.	CONTRACTOR SHALL READ THESE DRAWINGS AND ALL PROJECT RELATED DOCUMENTATION, INCLUDING DRAWINGS AND SPECIFICATIONS FROM ALL OTHER DISCIPLINES. SCOPE OF WORK IS NOT LIMITED TO THESE DRAWINGS BUT INCLUDES ALL ITEMS AS LISTED ON DRAWINGS, SPECIFICATIONS AND ALL OTHER PROJECT RELATED DOCUMENTATION.	1.	REFER TO THE SPECIFICATIONS FOR ADDITIONAL NOTES ON PROGRAMMING AND AUTOMATION.																																																	
	AC	ALTERNATING CURRENT	mA	MILLIAMPERE	2.	THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST APPROVED SHOP DRAWINGS BEFORE STUBBING UP CONDUITS.	26.	ALL ELECTRICAL AND INSTRUMENTATION WORK AND EQUIPMENT SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE NEC, AND AS ALLOWED AND ACCEPTED BY THE APPROPRIATE AUTHORITY HAVING JURISDICTION IN THE STATE OF WASHINGTON. CONTRACTOR SHALL VERIFY THAT THE NEW ELECTRICAL AND INSTRUMENTATION SYSTEMS ARE TESTED, COMMISSIONED, AND READY FOR USE PRIOR TO TURNOVER TO THE OWNER. CONTRACTOR SHALL FIELD TEST THE ENTIRE SYSTEM AND ENSURE IT IS OPERATIONAL AND READY FOR USE PRIOR TO HANDING OVER TO THE OWNER.	2.	PROGRAMMABLE LOGIC CONTROLLER (PLC) PROGRAMMING FOR THE BATTLE CREEK FISH HATCHERY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.																																																	
	AF	CIRCUIT BREAKER FRAME SIZE	MCP	MOTOR CIRCUIT PROTECTOR	3.	REFER TO SPECIFICATION SECTION 260533 FOR REQUIREMENTS RELATED TO FLEXIBLE CONDUIT INSTALLATION.	27.	CONTRACTOR TO REFER TO ALL DISCIPLINE DRAWINGS AND SPECIFICATIONS, CONFIRM THE EXACT LOCATION OF ELECTRICAL, INSTRUMENTATION, AND PROCESS CONTROL ITEMS.	3.	SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) PROGRAMMING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.																																																	
	AM	AMMETER	MLO	MAIN LUGS ONLY	4.	CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT OR STRUCTURAL CONDITIONS. EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BEAMS AND WALLS. REFER TO SPECIFICATION SECTION 260533.	28.	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS.	4.	ALL PLC AND SCADA HARDWARE FOR THE BATTLE CREEK FISH HATCHERY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.																																																	
	ANN	ANNUNCIATOR	MOV	MOTOR OPERATED VALVE	5.	CONDUIT STUB-UPS SHALL NOT BE MORE THAN 6 INCHES FROM THE CENTERLINE OF TERMINAL BOXES.	29.	PROVIDE A SET OF "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE CONTRACT AND PRIOR TO FINAL ACCEPTANCE.	5.	SITE COMMUNICATIONS TO UTILIZE THE ETHERNET IP/TCP PROTOCOL FOR THE HATCHERY PLC AND SCADA SYSTEM.																																																	
	AS	ADJUSTABLE SPEED	MS	MANUAL MOTOR STARTER	6.	IN THE EVENT OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING AND THE ENGINEER SHALL APPROVE PROPOSED CHANGES BEFORE THEY ARE MADE.	30.	THE CONTRACTOR SHALL BRING ANY DISCREPANCIES IN THE DESIGN TO THE CONSULTANT'S ATTENTION FOR REVIEW, PRIOR TO MOVING FORWARD WITH PORTIONS OF THE WORK THAT ARE AFFECTED BY POTENTIAL CHANGES.	6.	PERFORM LOOP CHECKS, AND PREPARE REQUIRED COMMISSIONING DOCUMENTATION PRIOR TO ALL COMMISSIONING AND TESTING.																																																	
	AT	AMPERE TRIP	MTS	MANUAL TRANSFER SWITCH	7.	ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INTERIOR OF EXTERIOR WALLS ABOVE GRADE OR IN OTHER LOCATIONS CONSIDERED DAMP OR WET SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4 INCH (MINIMUM) AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.	31.	CONFIRM THE INSTALLATION REQUIREMENTS/INSTRUCTIONS WITH THE ELECTRICAL AND INSTRUMENTATION VENDORS AND MANUFACTURER'S BASED ON BEST PRACTICE.	7.	CONTRACTOR TO ENGAGE THE OWNER'S PREFERRED CONTROLS SYSTEM INTEGRATOR TO COMPLETE THE PLC, HMI, AND SCADA PROGRAMMING. REFER TO SPECIFICATION 40 91 00 FOR ADDITIONAL INFORMATION.																																																	
	ATS	AUTOMATIC TRANSFER SWITCH	NEUT	NEUTRAL	8.	LOCATION OF PULLBOXES ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH MECHANICAL PIPING AND SHALL BE 6 INCHES (MINIMUM) AWAY FROM MECHANICAL PIPING FLOW LINES.	32.	FIELD COORDINATE INSTALLATION OF ALL ELECTRICAL AND INSTRUMENTATION CONDUITS, PULL BOXES, DEVICES AND EQUIPMENT ON SITE. ADJUST ELECTRICAL DEVICE AND EQUIPMENT PLACEMENT AS REQUIRED TO SUIT FIELD CONDITIONS.	GENERAL CONTROL PANEL SYSTEM NOTES																																																		
	AUTO	AUTOMATIC	NP	NAMEPLATE	9.	ONLY MAJOR PULLBOXES ARE SHOWN. THE CONTRACTOR SHALL PROVIDE ADDITIONAL PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION.	33.	USE GALVANIZED RIGID CONDUIT (GRC) FOR ALL POWER AND CONTROL FEEDERS OR WHERE EXPOSED TO MECHANICAL DAMAGE.																																																			
	AWG	AMERICAN WIRE GAUGE	OL	OVERLOAD	10.	THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS WHETHER OR NOT THEY ARE REFERENCED ON THE DRAWINGS.	34.	USE RIGID PVC OR GALVANIZED RIGID CONDUIT (GRC) WHEN INSTALLING CONDUITS IN-SLAB. EXIT ABOVE SLAB WITH GRC AND PROVIDE MINIMUM 6" OF GRC BELOW SLAB.	3.	CONTROL PANEL DESIGN BASED ON THE P&ID'S, I/O LISTS, AND GENERAL CONTROL PANEL DRAWINGS.																																																	
B	BATT	BATTERY	O	OPEN, OFF	11.	ALL CONDUIT RUNS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION OR EXPANSION AND DEFLECTION TYPE FITTINGS. FOR LOCATIONS OF EXPANSION JOINTS, REFER TO THE STRUCTURAL DWGS.	35.	WIRING NUMBERING STRATEGY: A. SINGLE CONDUCTOR OR MULTI CONDUCTOR NON-COLOR CODED CABLES; EACH END OF THE WIRE IS TO BE LABELED WITH THE SOURCE AND DESTINATION OF THE WIRE (SAME WIRE TAG ON BOTH ENDS OF THE WIRE). B. ALL ANALOG LOOPS ARE TO BE WIRED WITH ONE PAIR SHIELDED INSTRUMENT CABLE AND TAG WITH THE LOOP NUMBER ON BOTH ENDS.	4.	SUBMIT FOR REVIEW PRIOR TO FABRICATING CONTROL PANELS: 4.1 PANEL LAYOUTS (ELEVATION, DIMENSIONS) 4.2 PANEL ARRANGEMENTS 4.3 BILL OF MATERIALS 4.4 CARD DRAWINGS 4.5 I/O DRAWINGS																																																	
	BC	BARE COPPER	RECPT	RECEPTACLE	12.	LUMINAIRES SHALL BE MOUNTED ACCORDING TO THE MOUNTING HEIGHT GIVEN ON THE DRAWINGS, WITH THE DISTANCE BEING MEASURED FROM THE BOTTOM OF THE LUMINAIRE TO THE FINISHED FLOOR. THE APPROPRIATE MOUNTING BRACKETS AND HARDWARE SHALL BE SUPPLIED.	36.	PERMANENTLY LABEL ALL LOADS, POWER DISCONNECTS AND REMOTE LOADS WITH THE PANEL AND CIRCUIT NUMBER SERVING THE DEVICE. PERMANENTLY LABEL NEW WIRES AS INDICATED WITHIN THE DETAILED DRAWINGS.																																																			
	BKR	BREAKER	RGS	RIGID GALVANIZED STEEL	13.	ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE CENTERLINE OF THE TOP CIRCUIT BREAKER OPERATING HANDLE IN THE UPPERMOST POSITION TO THE FINISHED FLOOR SHALL NOT EXCEED 6'-7".	37.	ALL CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. FOR CONDUITS CONTAINING MORE THAN THREE, PROVIDE APPROPRIATE DE-RATING OF CONDUCTORS AS PER THE NEC; MOST RECENT VERSION.																																																			
	C	CONDUIT, CLOSED	RMS	ROOT MEAN SQUARE	14.	THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.	38.	ALL UNDERGROUND CONDUITS TO BE SCHEDULE 40PVC.																																																			
	CAP	CAPACITOR	RTU	REMOTE TERMINAL UNIT	15.	CONNECTIONS BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOXES OR SIMILAR EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT.	39.	ALL EXTERIOR CONDUITS TO BE GRC.																																																			
	CB	CIRCUIT BREAKER	RVSS	REDUCED VOLTAGE SOLID STATE	16.	CONDUITS SHALL BE TERMINATED SO AS TO PERMIT NEAT CONNECTION TO MOTORS AND OTHER EQUIPMENT.	40.	CONDUIT AND CABLE SCHEDULES SHOW INDIVIDUAL POWER, CONTROLS, OR COMMUNICATIONS RUNS TO COMMUNICATE DESIGN INTENT. CONTRACTOR MAY GROUP LIKE SIGNALS WITHIN THE SAME CONDUIT RUNS PROVIDED THEY MEET THE RULES OF N.E.C. FOR CONDUCTORS AND CABLES IN RACEWAYS. DO NOT GROUP PARALLEL FEEDS IN THE SAME CONDUIT RUN.																																																			
	CCT	CIRCUIT	SEL SW	SELECTOR SWITCH	17.	CONDUITS FOR FUTURE EQUIPMENT OR EXTENSIONS SHALL BE TERMINATED AS SHOWN IN DETAIL OR AS SPECIFIED.																																																					
	CLF	CURRENT LIMITING FUSE	SEQ	SEQUENCE	18.	SWITCHBOARD AND SWITCHGEAR COMPARTMENT DESIGNATIONS SHALL BE AS FOLLOWS: BLANK/SPACE: CONTAINS NECESSARY BUS AND HARDWARE FOR FUTURE ADDITION OF BREAKERS OR STARTERS. SPARE: CONTAINS A COMPLETE INSTALLED BREAKER OR STARTER AVAILABLE FOR FUTURE USE.																																																					
	COM	COMMON	SHLD	SHIELDED	19.	ALL MOTOR STARTER CONTROL POWER TRANSFORMERS SHALL BE SIZED TO PROVIDE SUFFICIENT VOLT-AMPERE CAPACITY FOR OPERATING ALL LOCAL AND REMOTE ELECTRICAL DEVICES ASSOCIATED WITH CONTROL OF THE MOTOR IN ADDITION TO THE STARTER COIL.																																																					
	COMM	COMMUNICATIONS	SIG	SIGNAL	20.	SWITCHBOARD AND ALL FREE STANDING PANELS SHALL BE SET ON CONCRETE HOUSEKEEPING PADS WITH LEVELING CHANNELS EMBEDDED IN THE PAD.																																																					
A	COMP	COMPARTMENT	SP	SPARE	21.	ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES WITH WEATHERPROOF COVERS.																																																					
	CP	CONTROL PANEL	SP HTR	SPACE HEATER	22.	ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING THE PROJECT TO VERIFY THE SCOPE OF WORK WITH FIELD CONDITIONS.																																																					
	CPT	CONTROL POWER TRANSFORMER	SPDT	SINGLE POLE DOUBLE THROW	23.	EQUIPMENT LOCKOUTS SHALL BE IN STRICT ACCORDANCE WITH OWNER'S REQUIREMENTS.																																																					
	CR	CONTROL RELAY, CARD READER	SPST	SINGLE POLE SINGLE THROW	24.	FOR LIGHTING, RECEPTACLES, AND EQUIPMENT POWER FROM 102/208V PANELS, ONLY CIRCUIT NUMBERS ARE SHOWN. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUITS, WIRES, FITTINGS, JUNCTION BOXES AND ALL NECESSARY COMPONENTS SHOWN OR NOT SHOWN ON THE DRAWINGS, TO MAKE THE ELECTRICAL INSTALLATION COMPLETE AND OPERATIONAL. ALL CONDUIT RUNS SHALL BE CONCEALED UNLESS INDICATED OTHERWISE. CIRCUIT LOADING SHALL BE AS INDICATED IN THE PANEL SCHEDULES. ALL LIGHTING AND RECEPTACLE CIRCUITS SHALL INCLUDE GROUND WIRE.																																																					
	CT	CURRENT TRANSFORMER	SSM	SOLID STATE METER																																																							
	DCS	DISTRIBUTED CONTROL SYSTEM	SSMP	SOLID STATE MOTOR PROTECTOR																																																							
	DISC	DISCONNECT	ST, SH	SHUNT TRIP																																																							
	DISTR	DISTRIBUTION	STR	STARTER																																																							
	DPDT	DOUBLE POLE DOUBLE THROW	SSTU	SOLID STATE TRIP UNIT																																																							
	DPST	DOUBLE POLE SINGLE THROW	SW	SWITCH																																																							
	E	EMERGENCY	SWBD	SWITCHBOARD																																																							
	EMT	ELECTRICAL METALLIC TUBING	SWGR	SWITCHGEAR																																																							
	ENCL	ENCLOSURE	TACH	TACHOMETER																																																							
	ETM	ELAPSED TIME METER	TB	TERMINAL BOX																																																							
	F	FREQUENCY, FUSE, FIXED	TERM	TERMINAL																																																							
	FDR	FEEDER	TM	REPEAT CYCLE TIMER																																																							
	FLA	FULL LOAD AMPS	TD	TIME DELAY RELAY																																																							
	FLUOR	FLUORESCENT	TS	TEMPERATURE SWITCH																																																							
	FM	FREQUENCY METER	UPS	UNINTERRUPTIBLE POWER SUPPLY																																																							
	FO	FIBER OPTIC	V	VOLTAGE, VOLTS																																																							
FVR	FULL VOLTAGE REVERSING	VA	VOLT AMPERE																																																								
FVNR	FULL VOLTAGE NON-REVERSING	VAR	VOLT AMPERE REACTIVE																																																								
	GEN	GENERATOR	VFD	VARIABLE FREQUENCY DRIVE																																																							
	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VM	VOLTMETER																																																							
	GND	GROUND	VP	VAPOR PROOF																																																							
	H	HAND	W	WATTS, WIRE																																																							
	HD	HEAT DETECTOR	WM	WATT METER																																																							
	HH	HAND HOLE	WP	WEATHERPROOF																																																							
	HID	HIGH INTENSITY DISCHARGE	XFMR	TRANSFORMER																																																							
	HOA	HAND-OFF-AUTOMATIC	XMTR	TRANSMITTER																																																							
	HPS	HIGH PRESSURE SODIUM	XP	EXPLOSION PROOF																																																							
	HS	HAND SWITCH																																																									
HZ	HERTZ																																																										
	IMC	INTERMEDIATE METALLIC CONDUIT																																																									
	INCAND	INCANDESCENT																																																									
	IND	INDICATION																																																									
	INST	INSTANTANEOUS																																																									
	I/O	INPUT/OUTPUT																																																									
	Isc	SHORT CIRCUIT CURRENT, AMPS																																																									
	ISO	ISOLATION																																																									
	J,JB	JUNCTION BOX																																																									
	KA	KILO AMPERES																																																									
	KAIC	KILO AMP INTERRUPTING CURRENT																																																									
KCMIL	KILO CIRCULAR MILS																																																										
KVA	KILOVOLT AMPERE																																																										
	L	LOCAL																																																									
	LCP	LOCAL CONTROL PANEL																																																									
	LCS	LOCAL CONTROL STATION																																																									
	LOC	LOCAL																																																									
	LOR	LOCAL-OFF-REMOTE																																																									
	LOS	LOCKOUT STOP PUSHBUTTON																																																									
	LP	LIGHTING PANEL																																																									
	LRA	LOCKED ROTOR AMPS																																																									
	LS	LEVEL SWITCH																																																									
	LTG	LIGHTING																																																									
LTS	LIGHTS																																																										

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Revision By Appd YYYY.MM.DD				Issued By Appd YYYY.MM.DD				A 100% DESIGN JM JCD 2025.01.14				File Name: 02267BCH-GE-2 STW DESJ CWS 2024.12.27 Dwn. Dsgn. Cnkd. YYYY.MM.DD			

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Revision

By

Appd

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Consultant

Stantec Consulting Services Inc
1687 114th Ave SE, Suite 100
Bellevue, WA 98004
Tel: (425) 896-6900
www.stantec.com

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Client/Project Logo

Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267BCH-GE-3

SWN

DENV

CHPS

2024.12.27

Dwn.

Dsgn.

Chkd.

YYYY.MM.DD

Title

ELECTRICAL STANDARD DETAILS
(1 OF 5)

Project No.

224202267

Scale

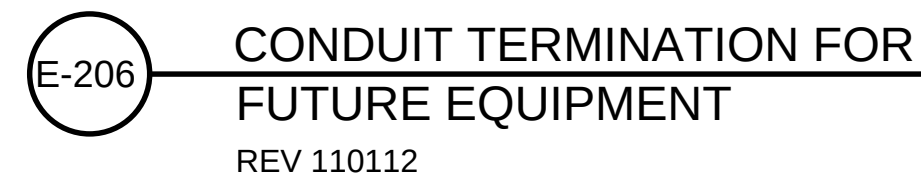
AS NOTED

Revision

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Drawing No.

GE-3



2/12/2025



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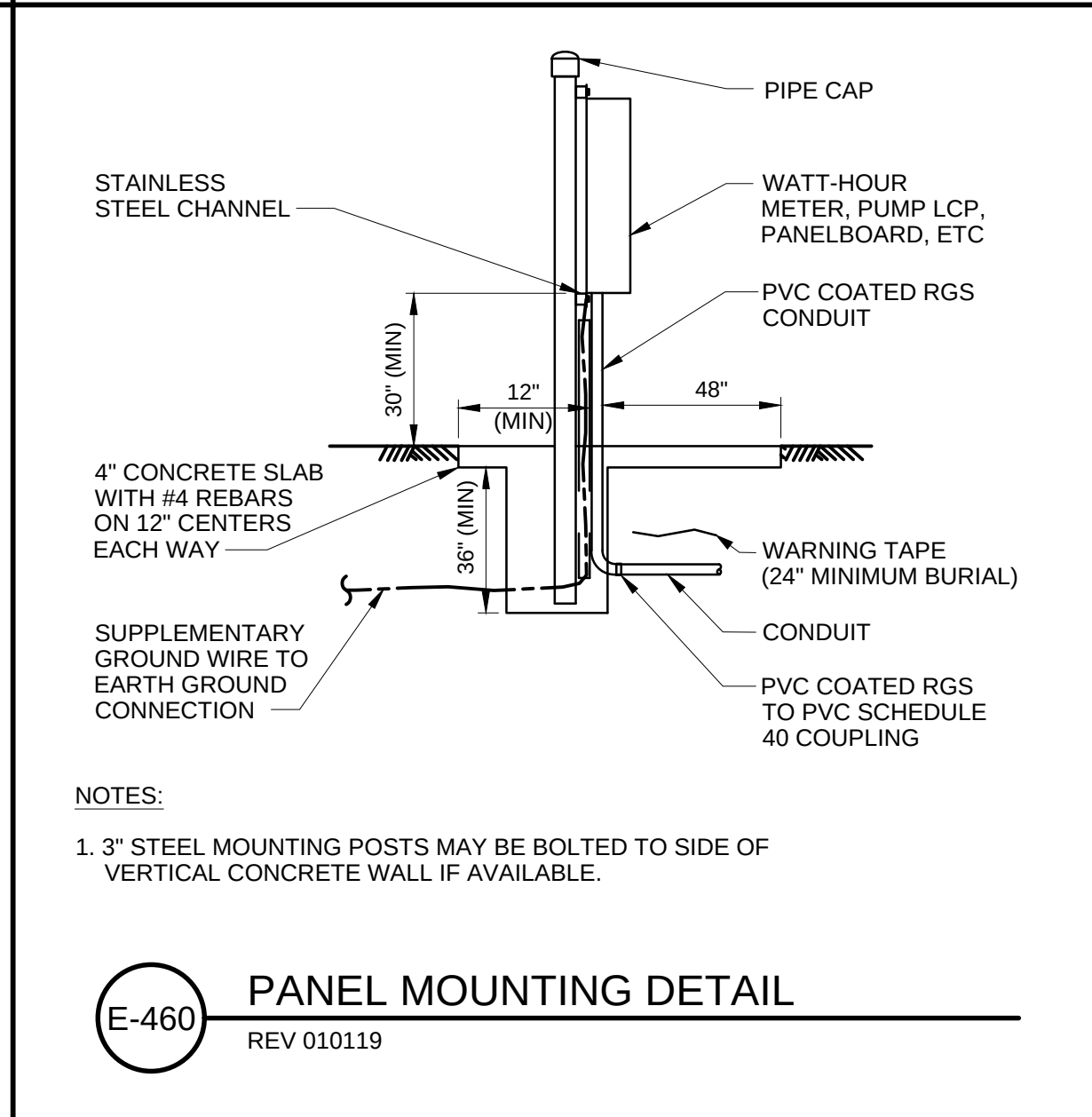
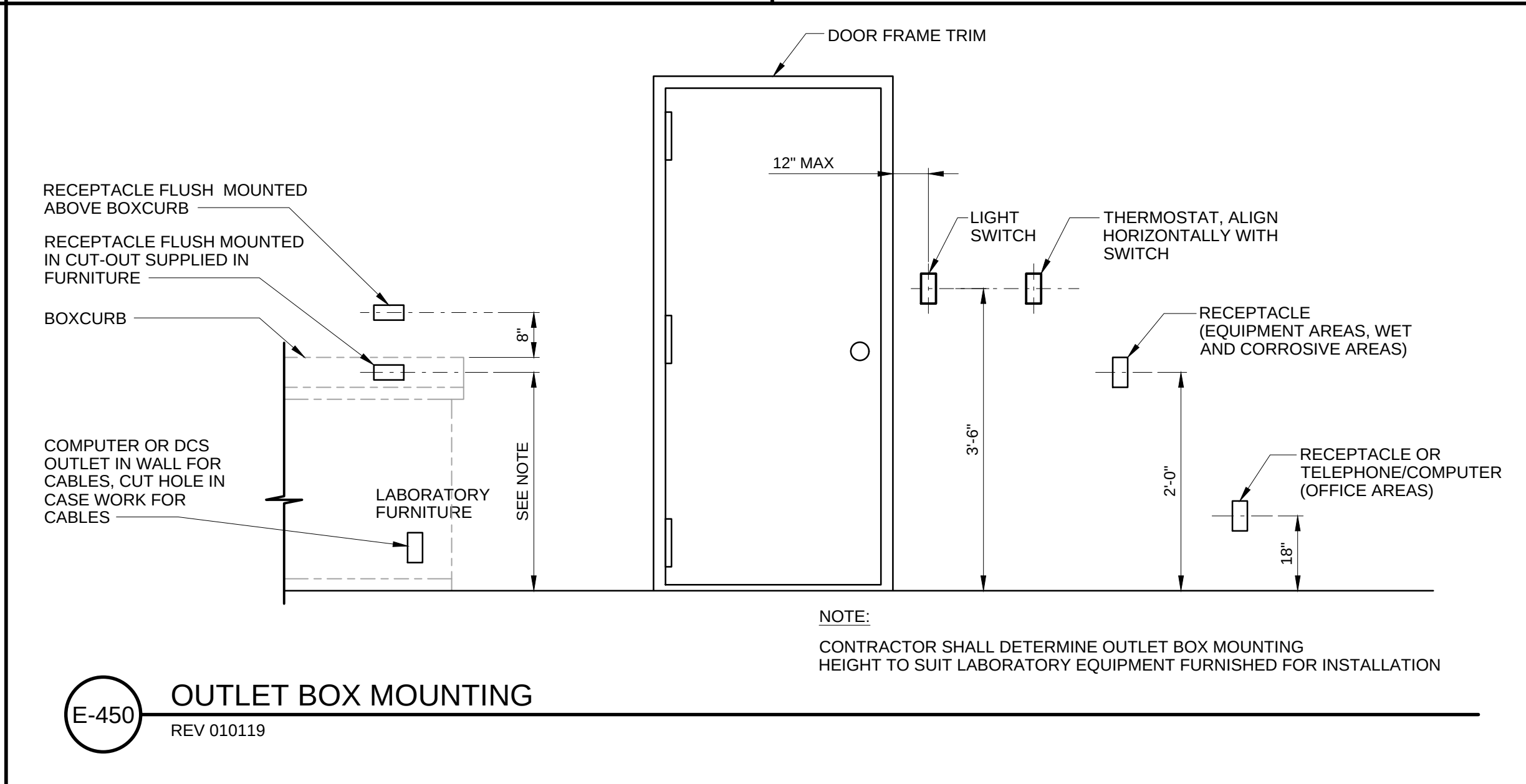
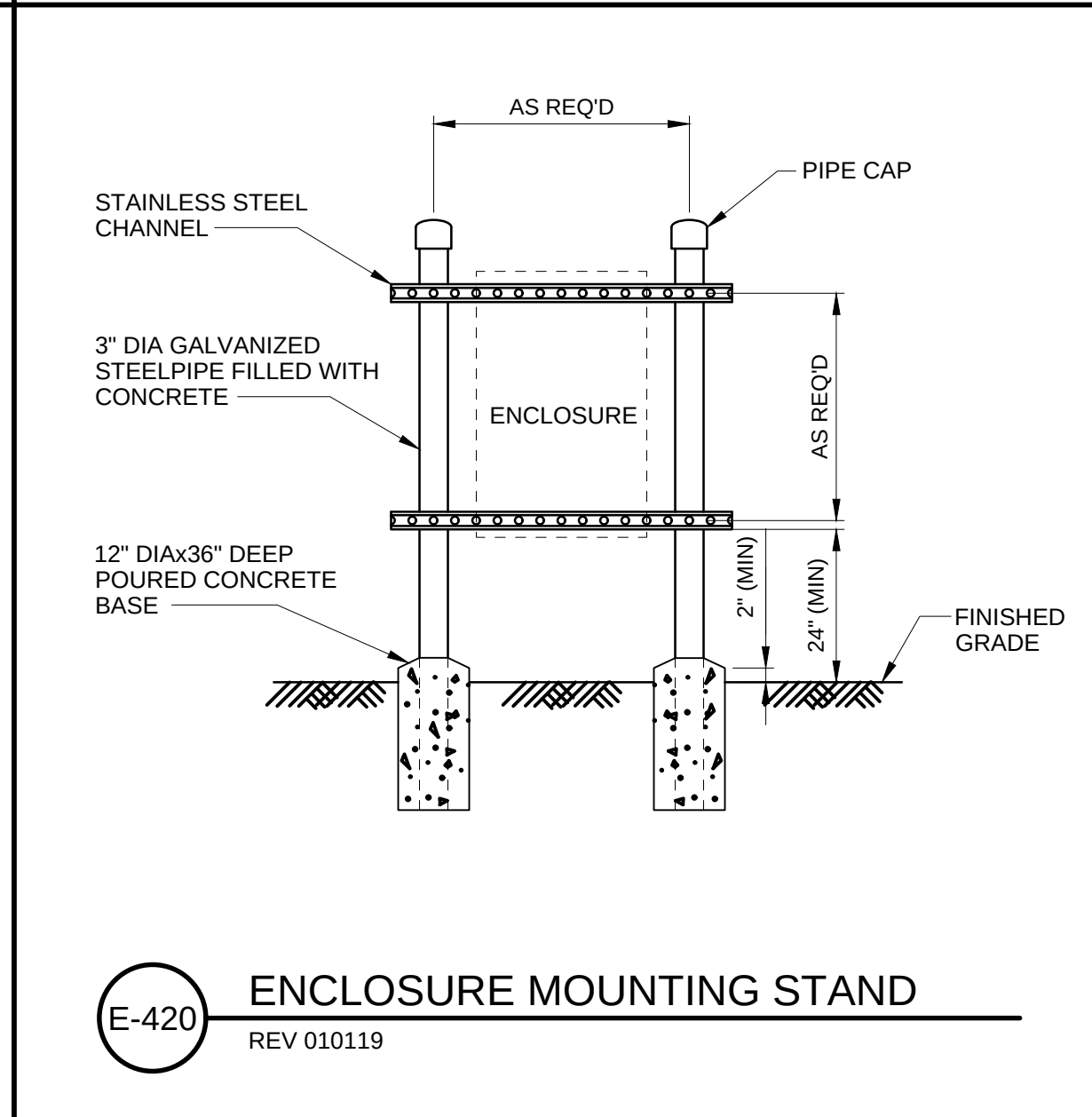
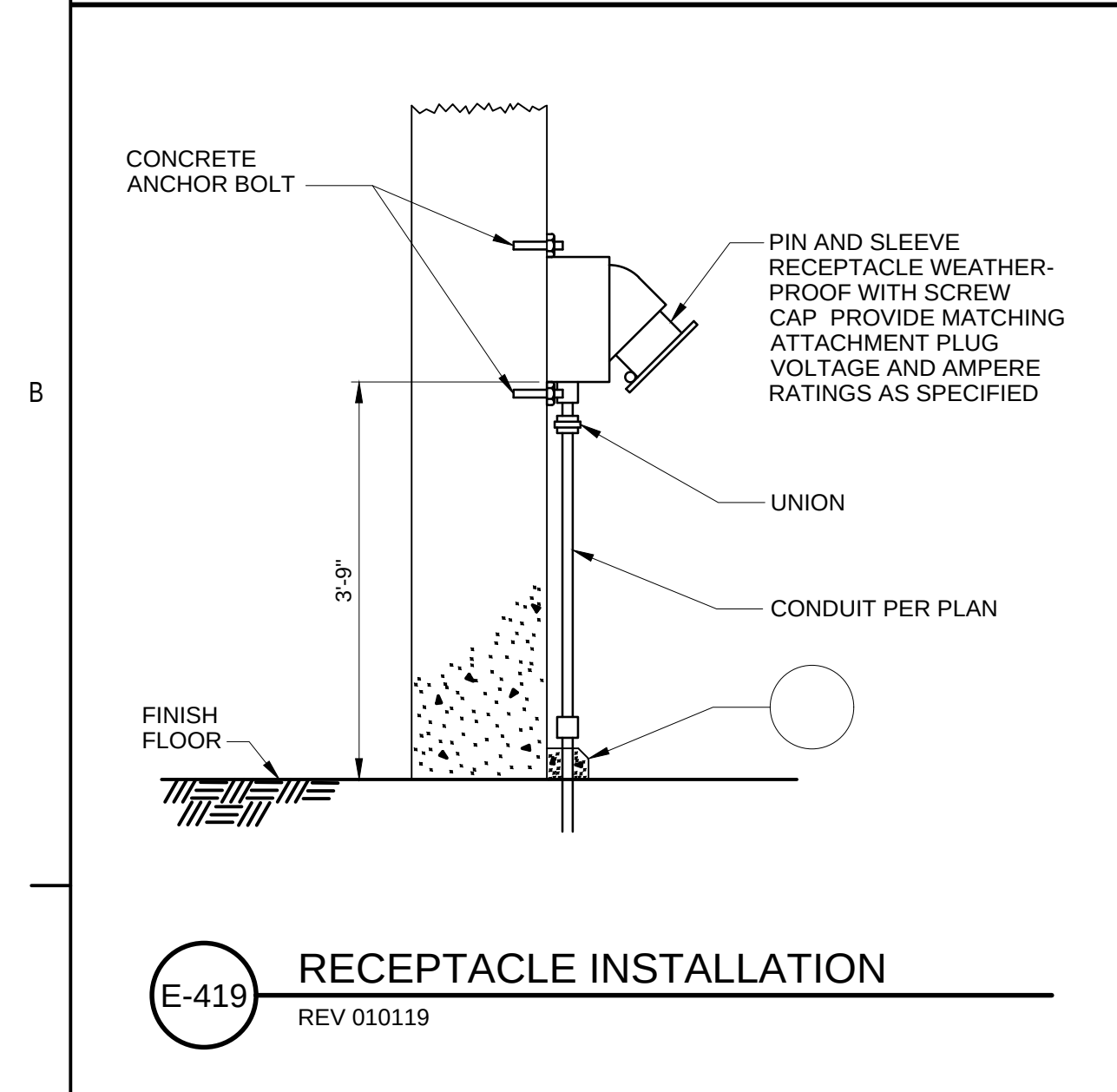
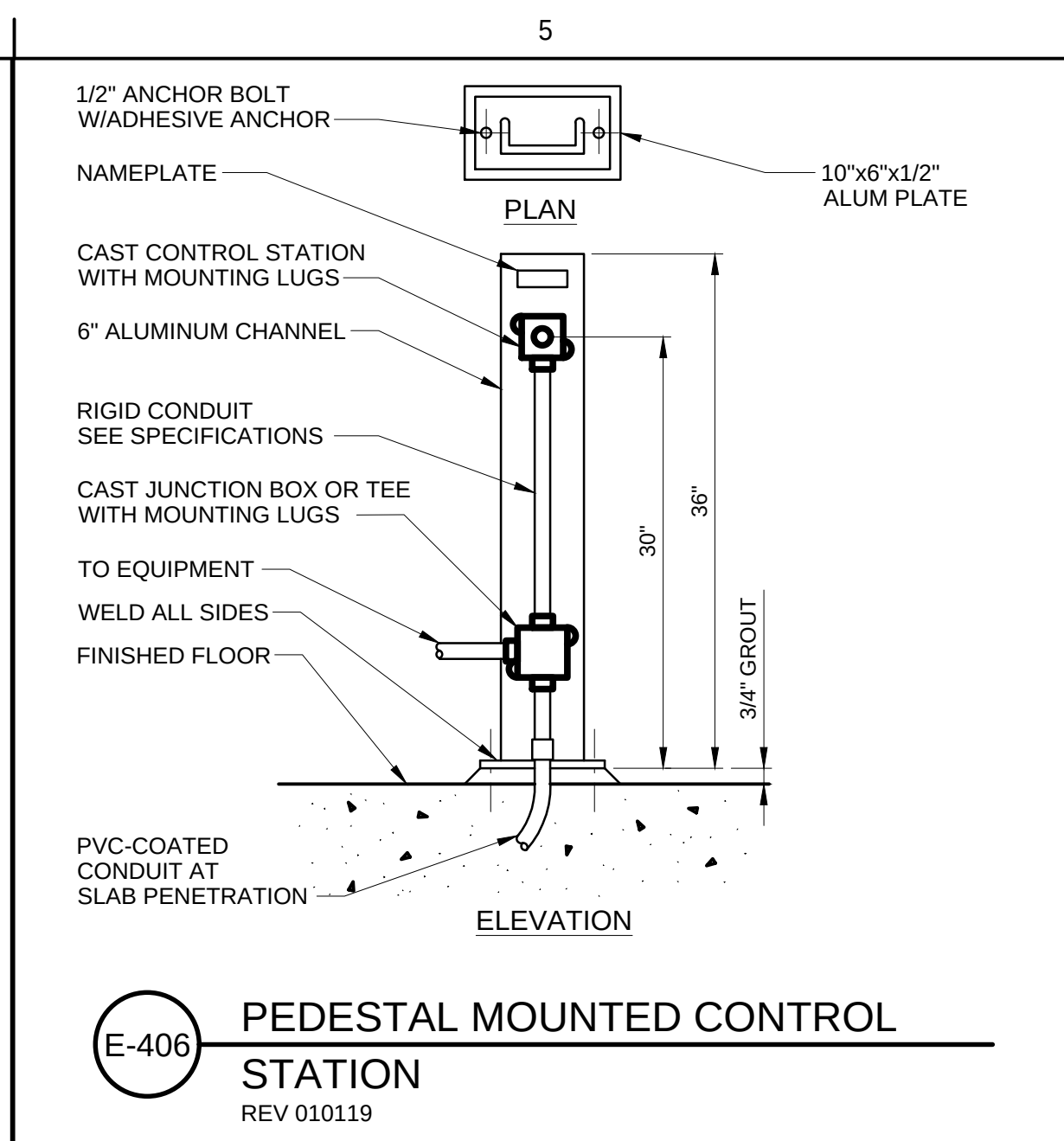
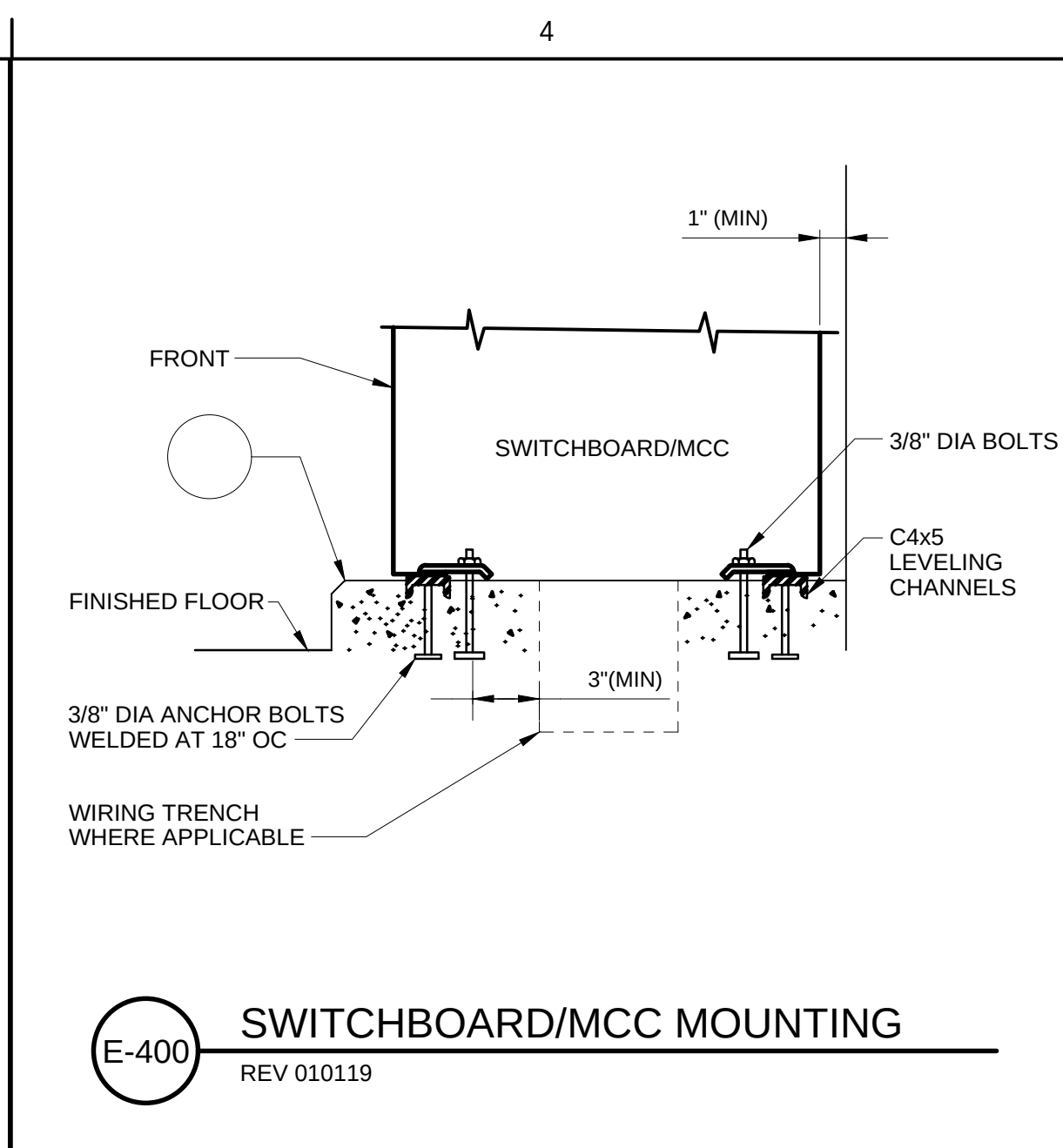
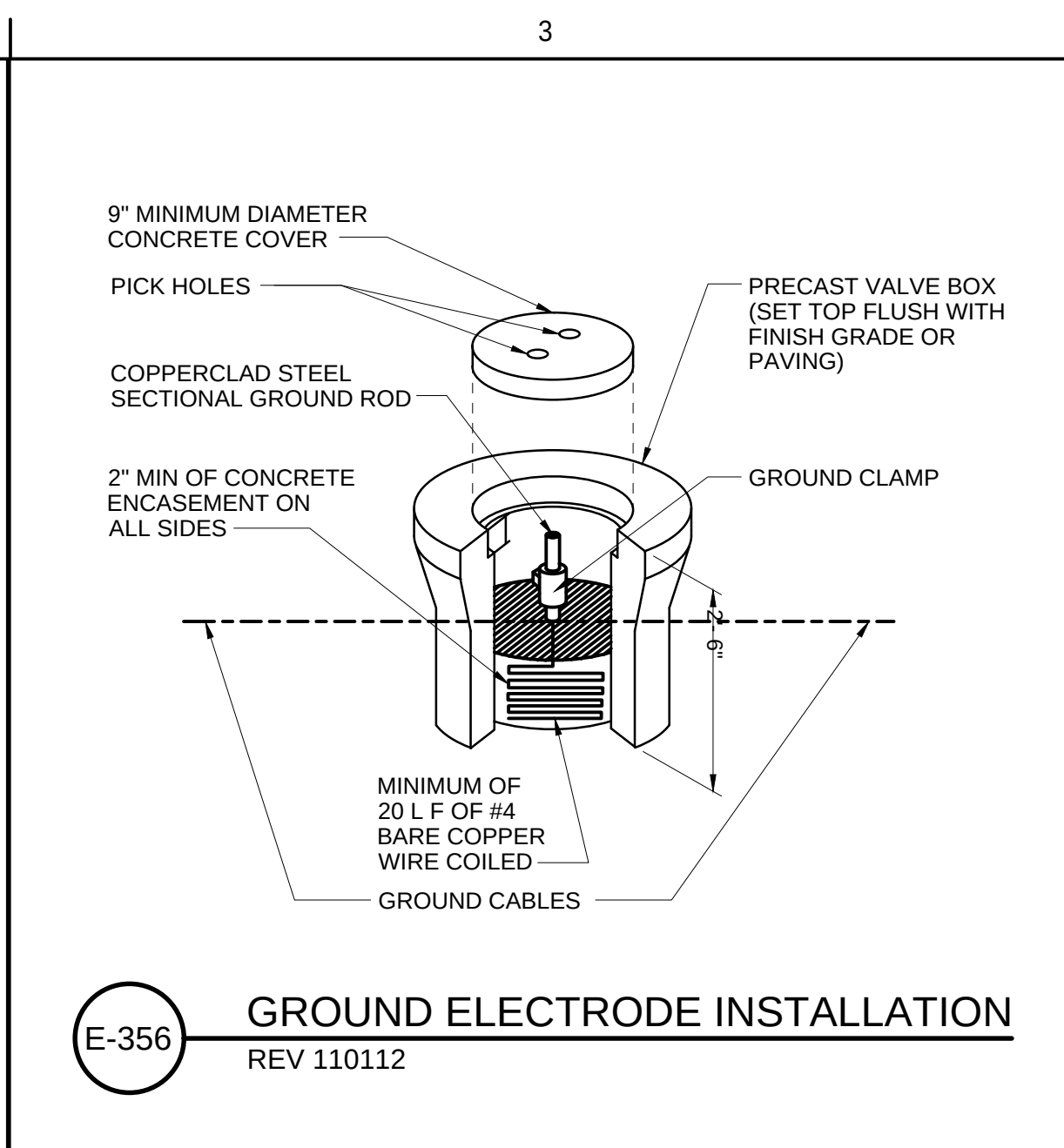
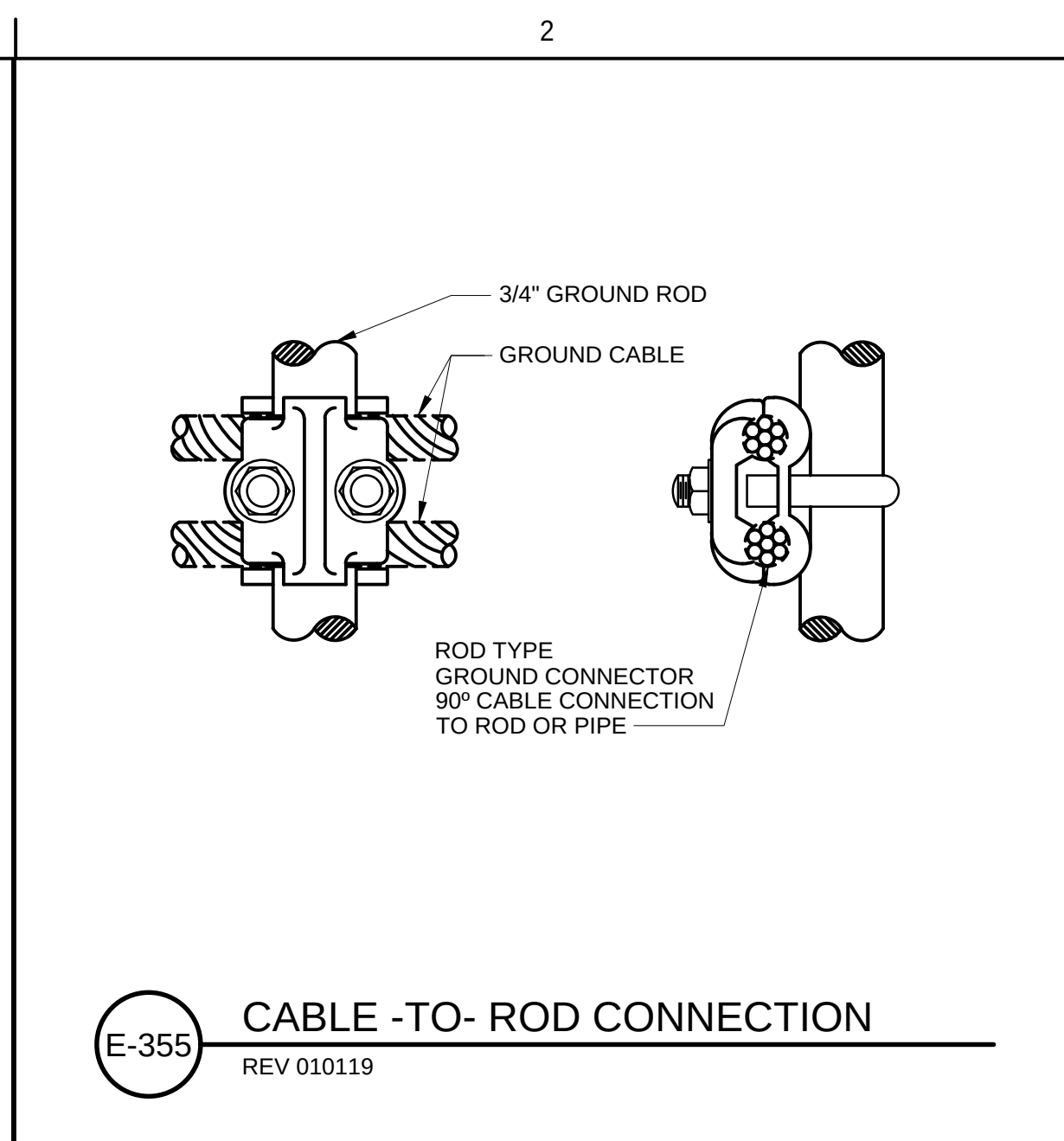
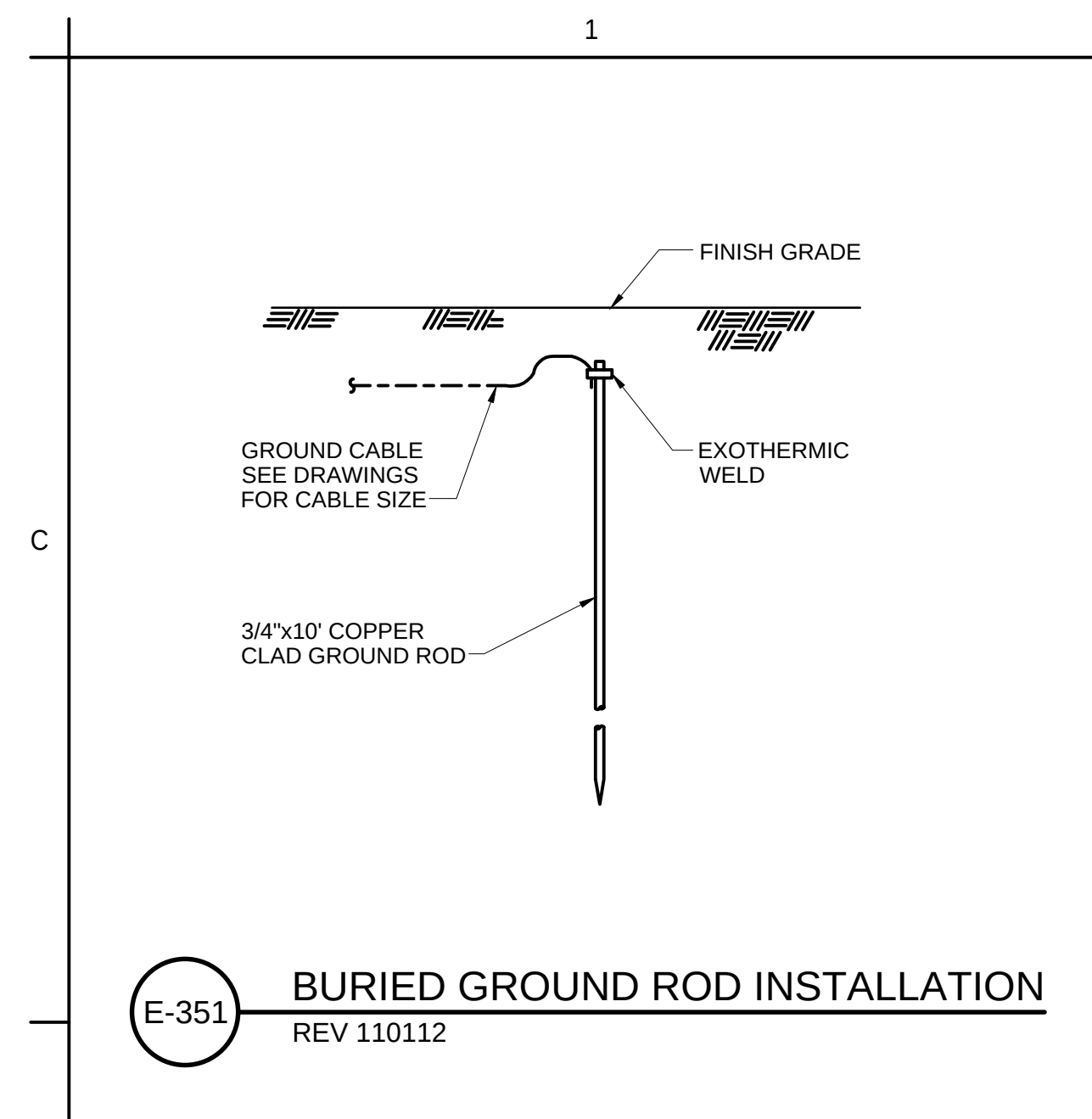
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File Name: 02267BCH-GE-4

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GE-4

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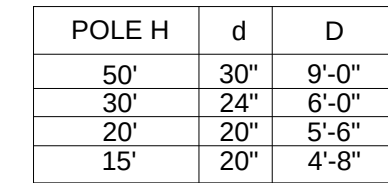
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(E-605)



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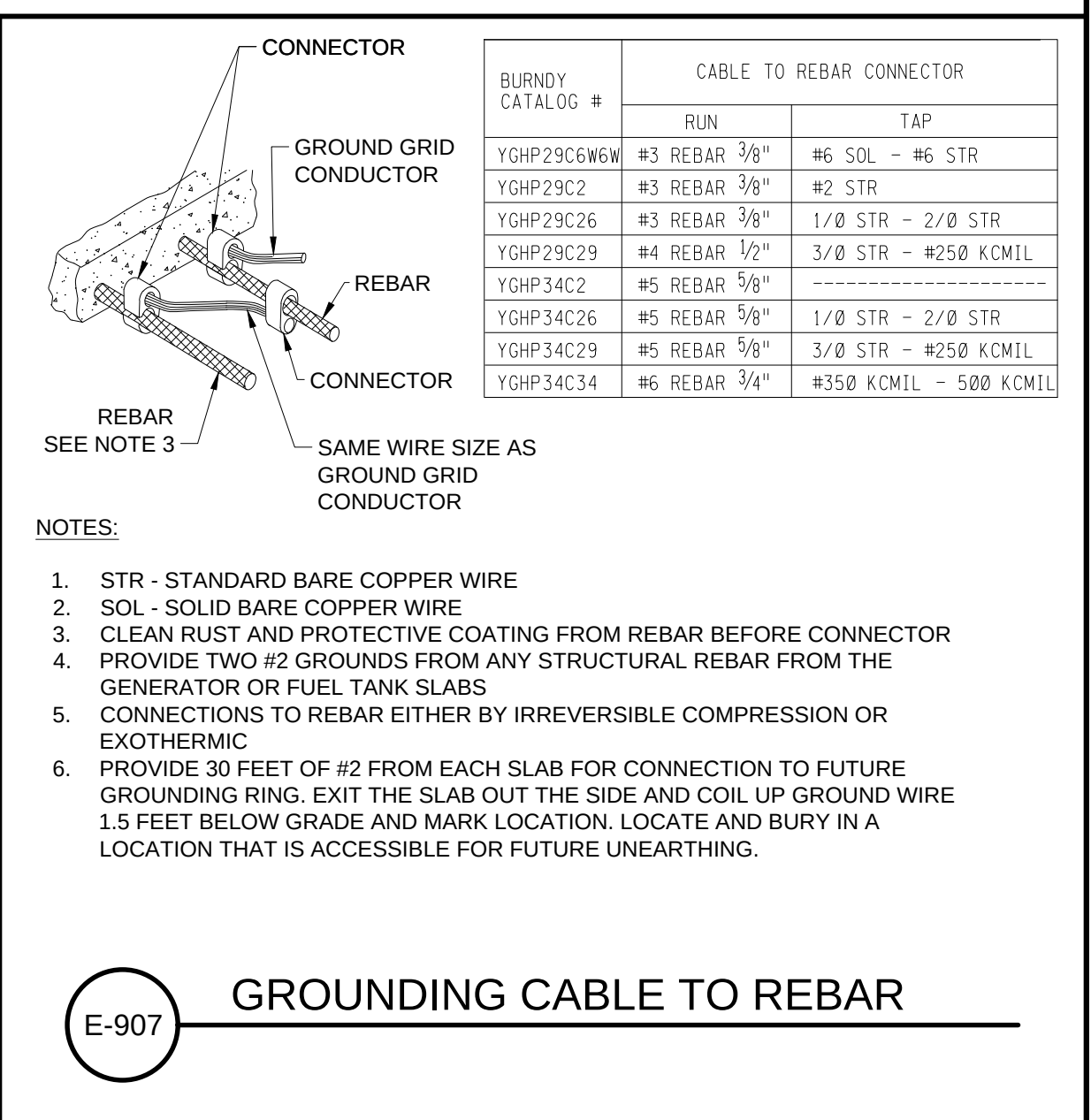
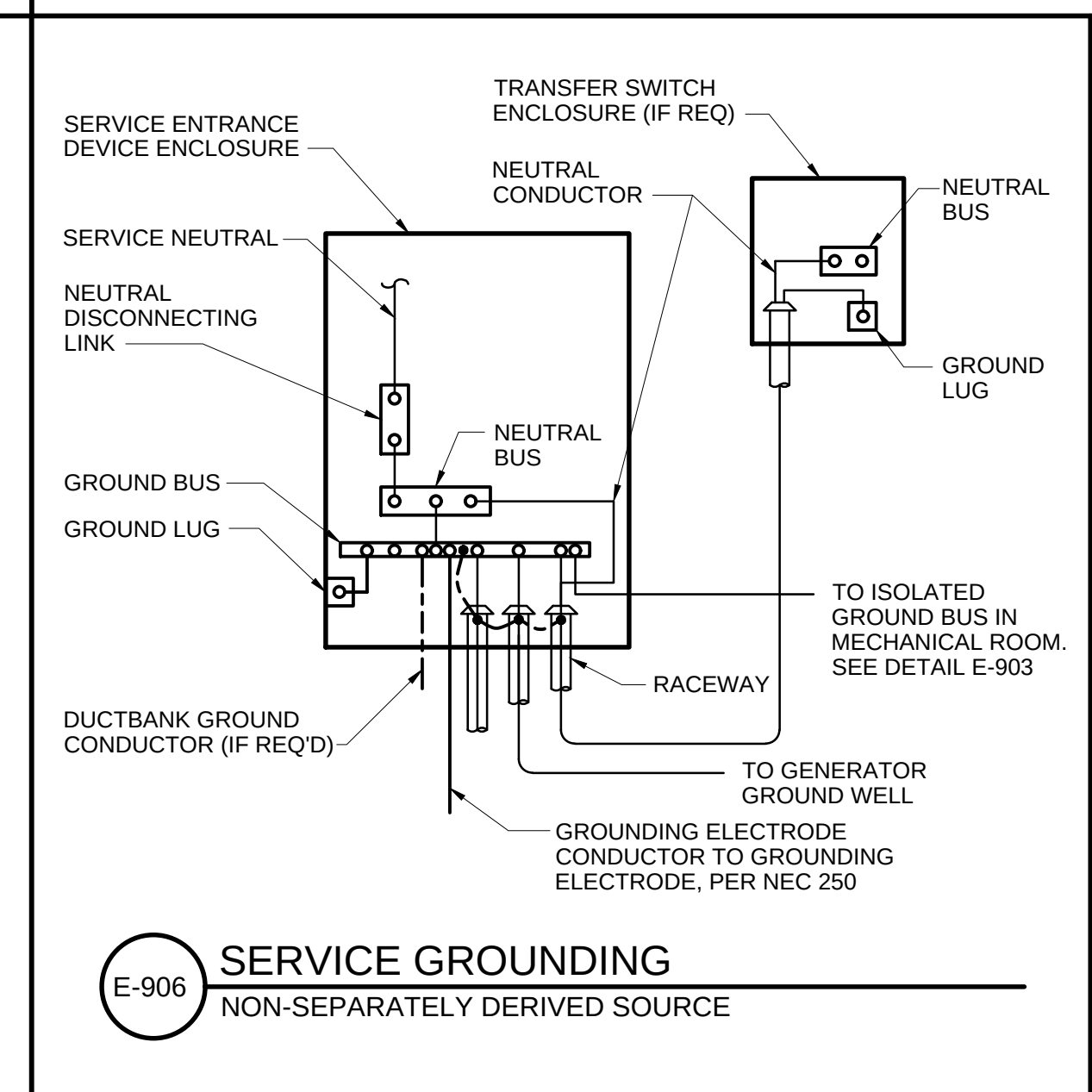
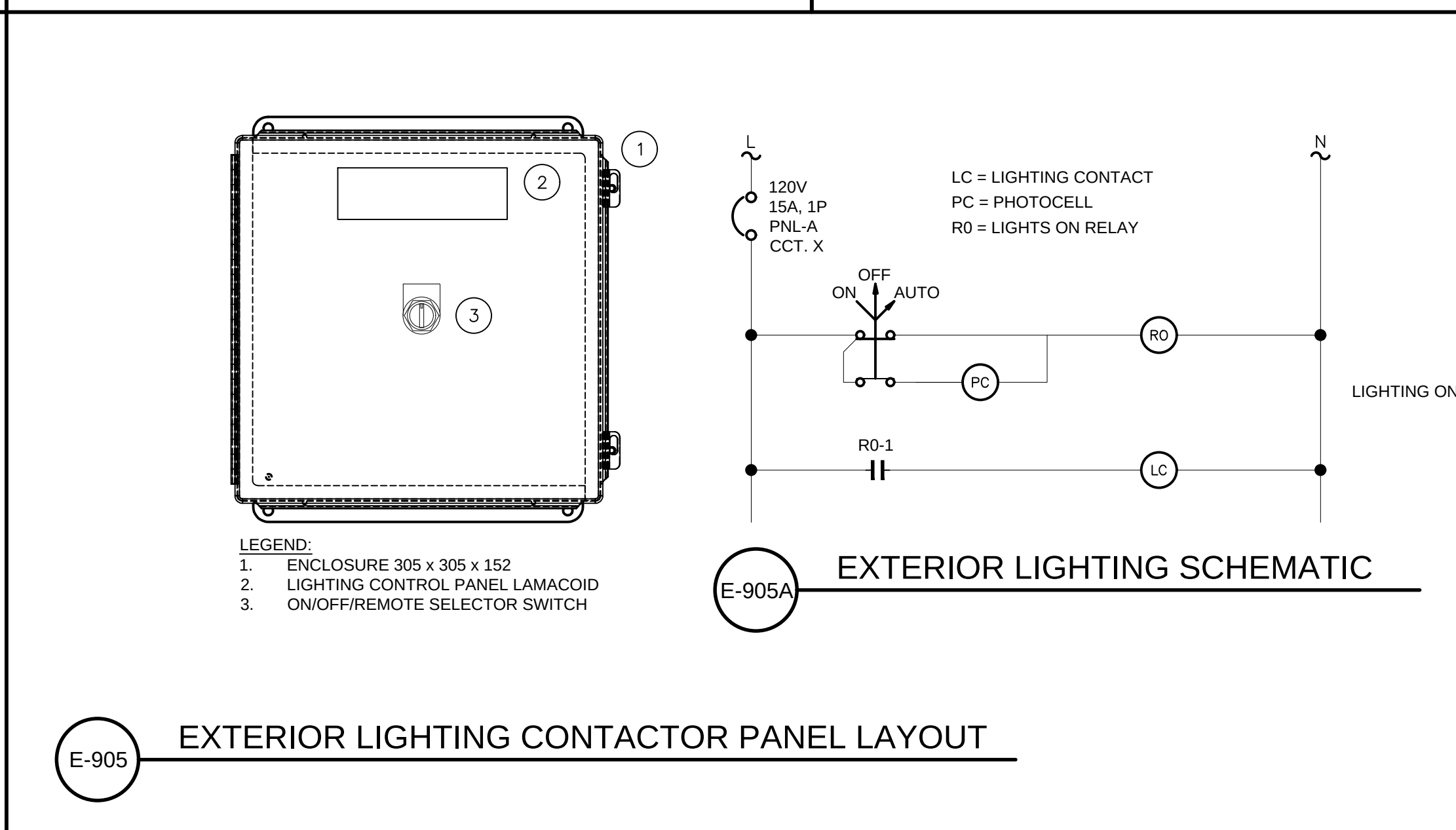
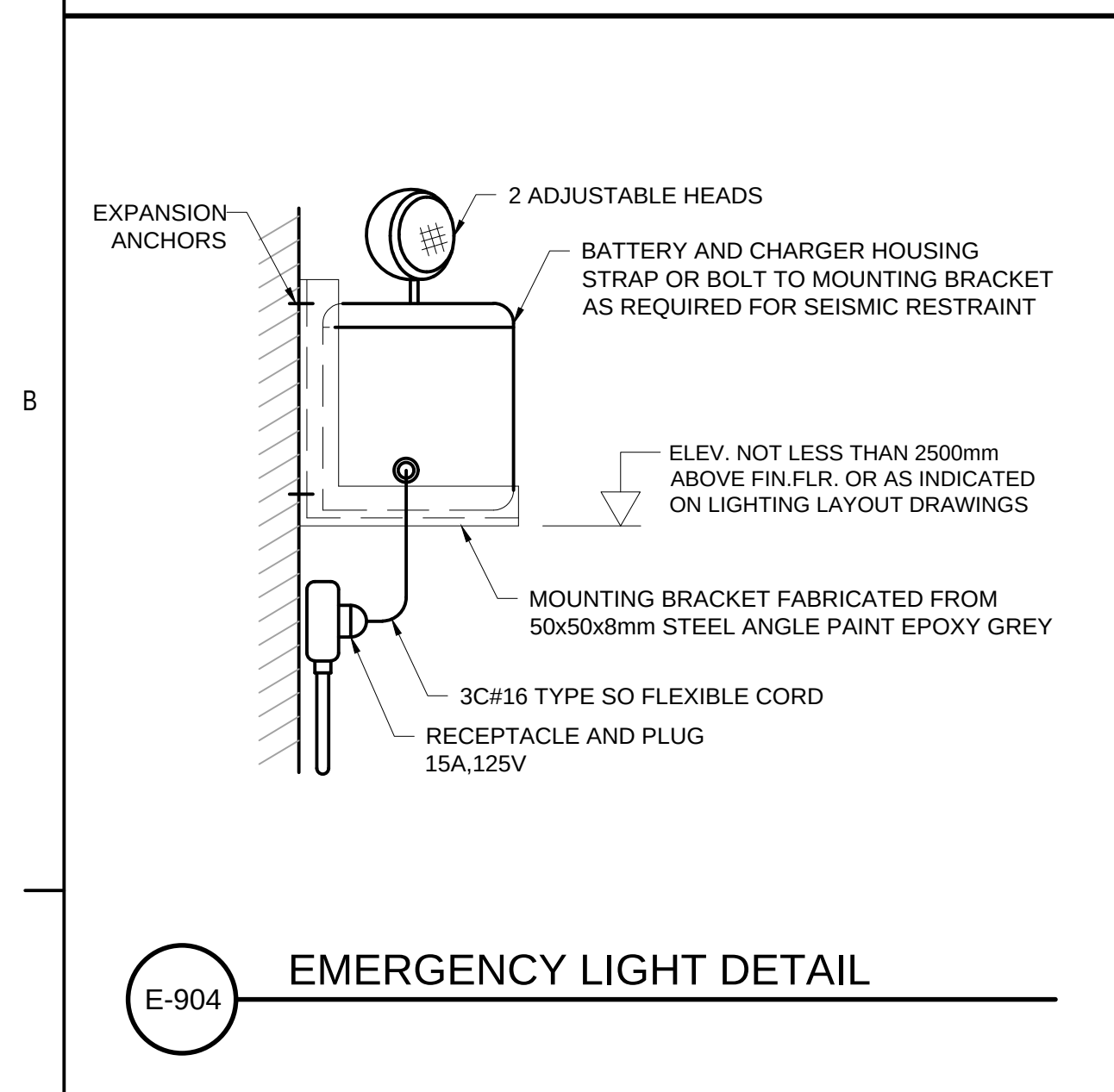
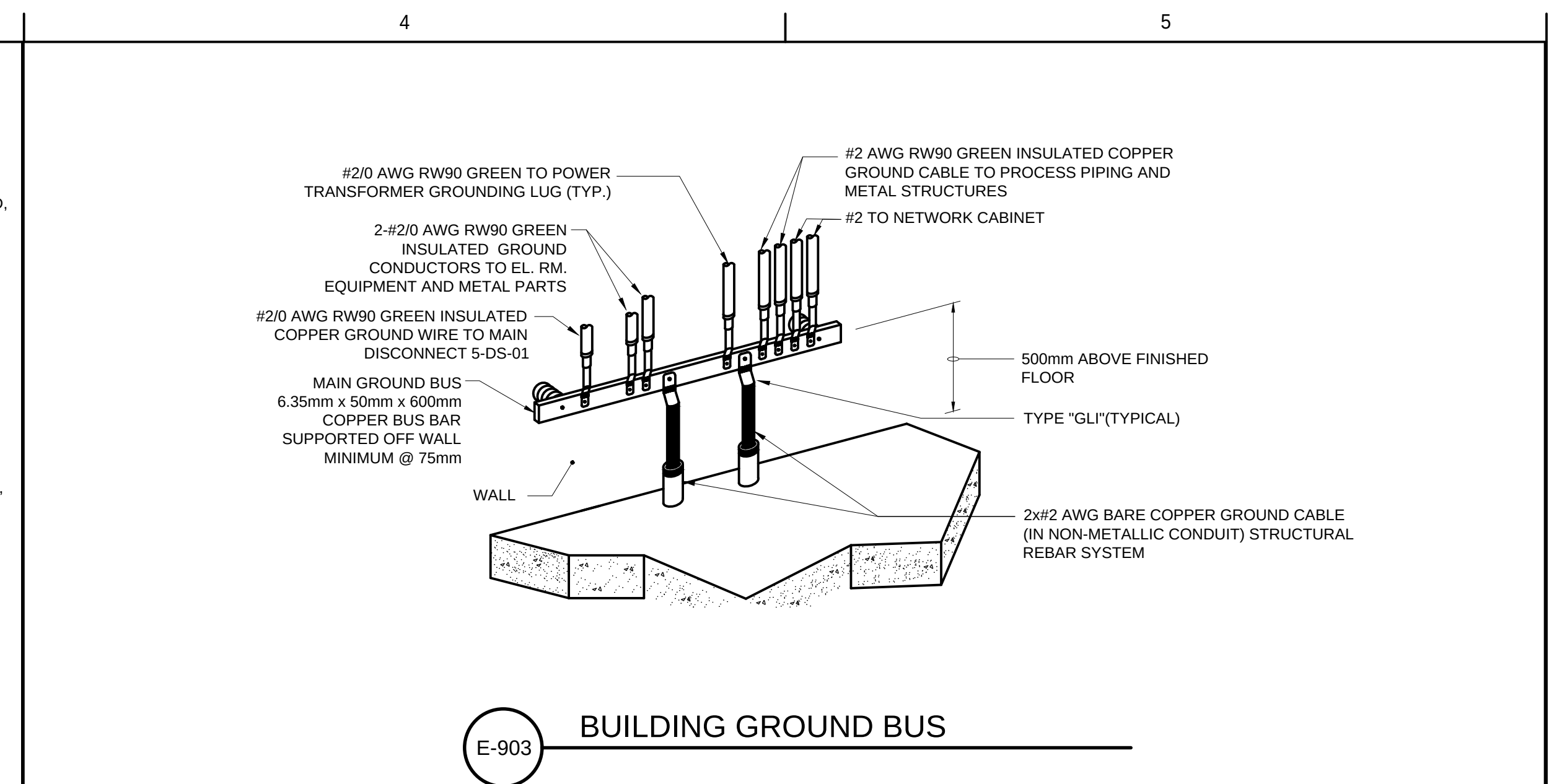
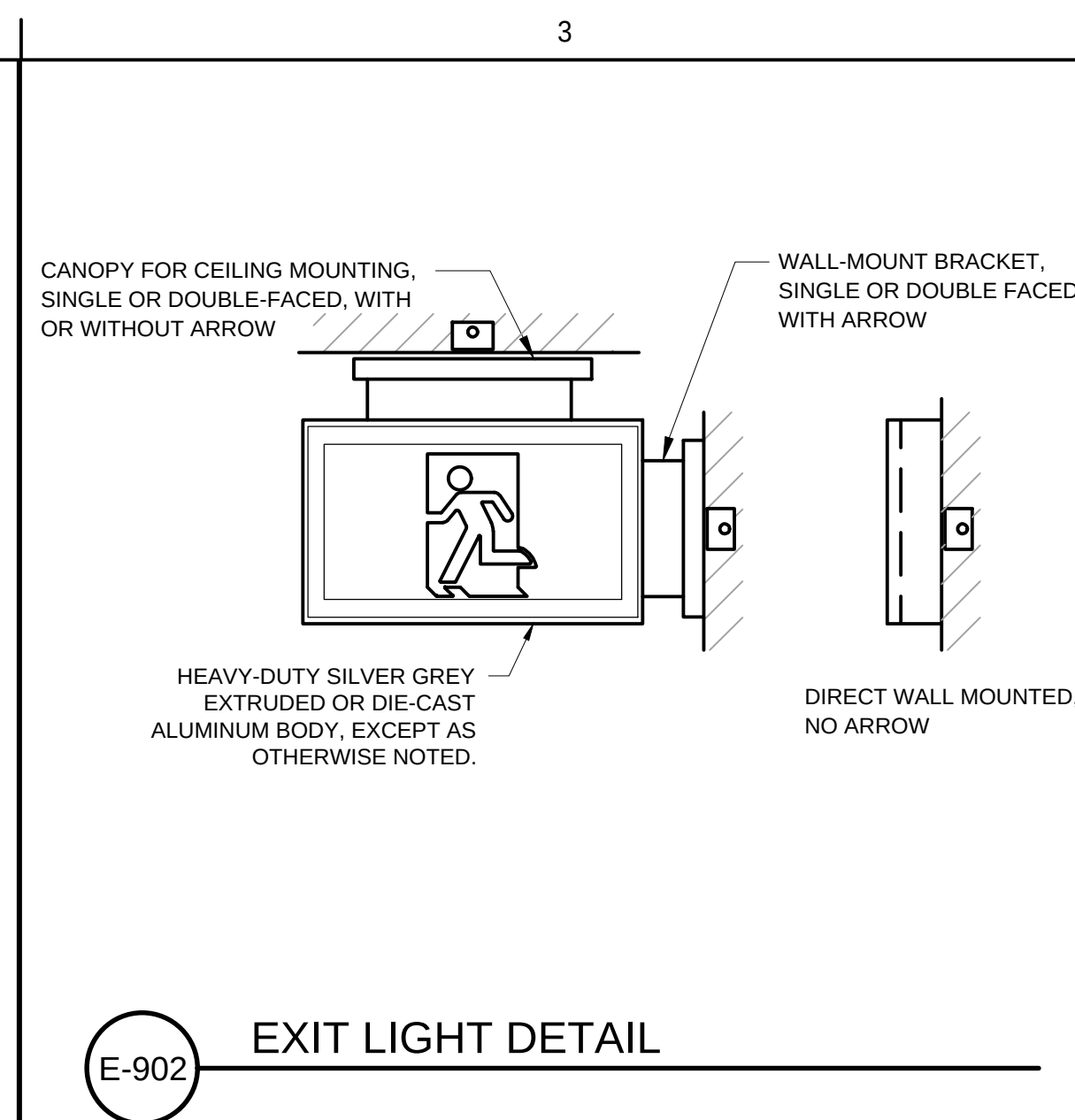
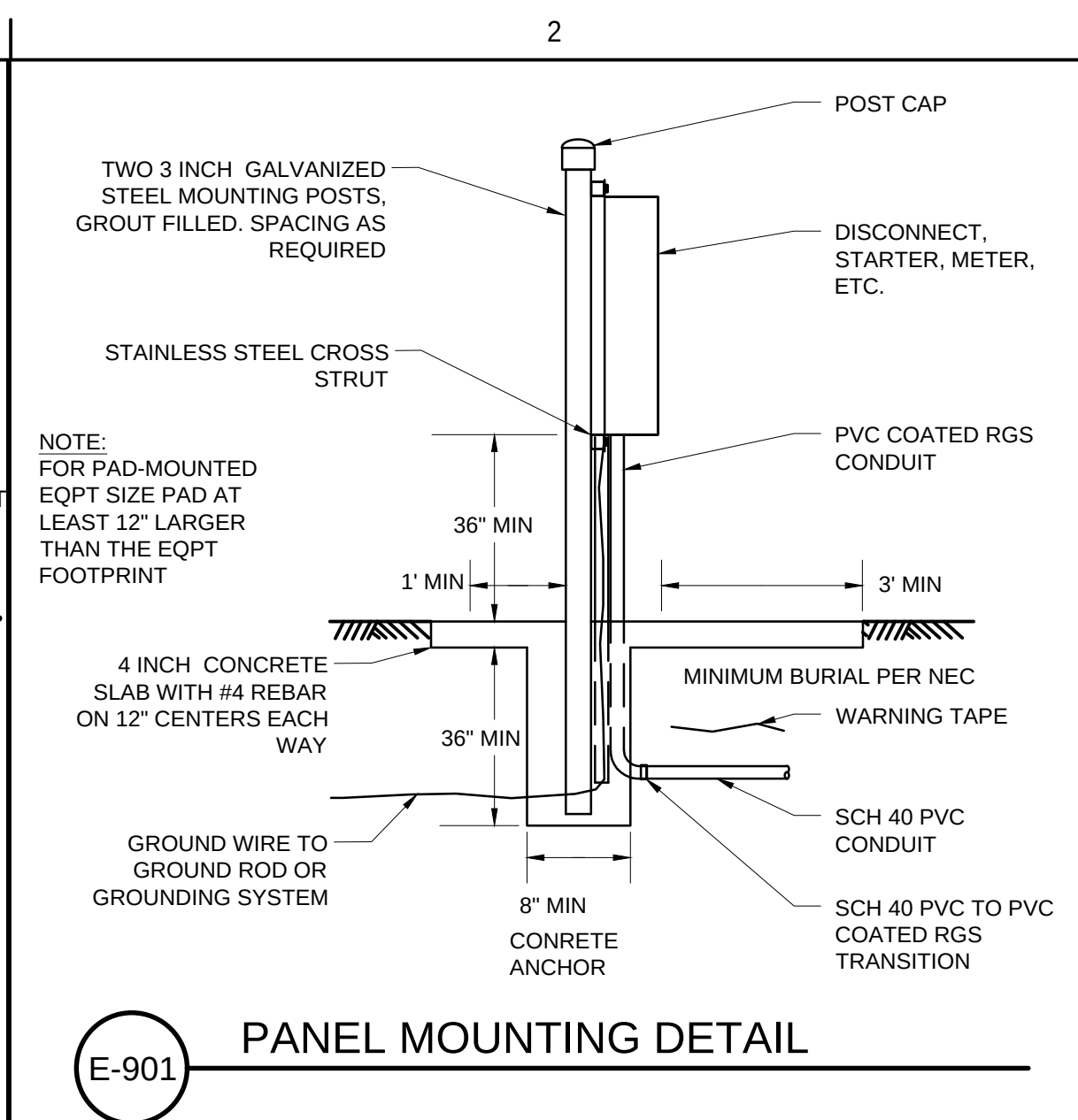
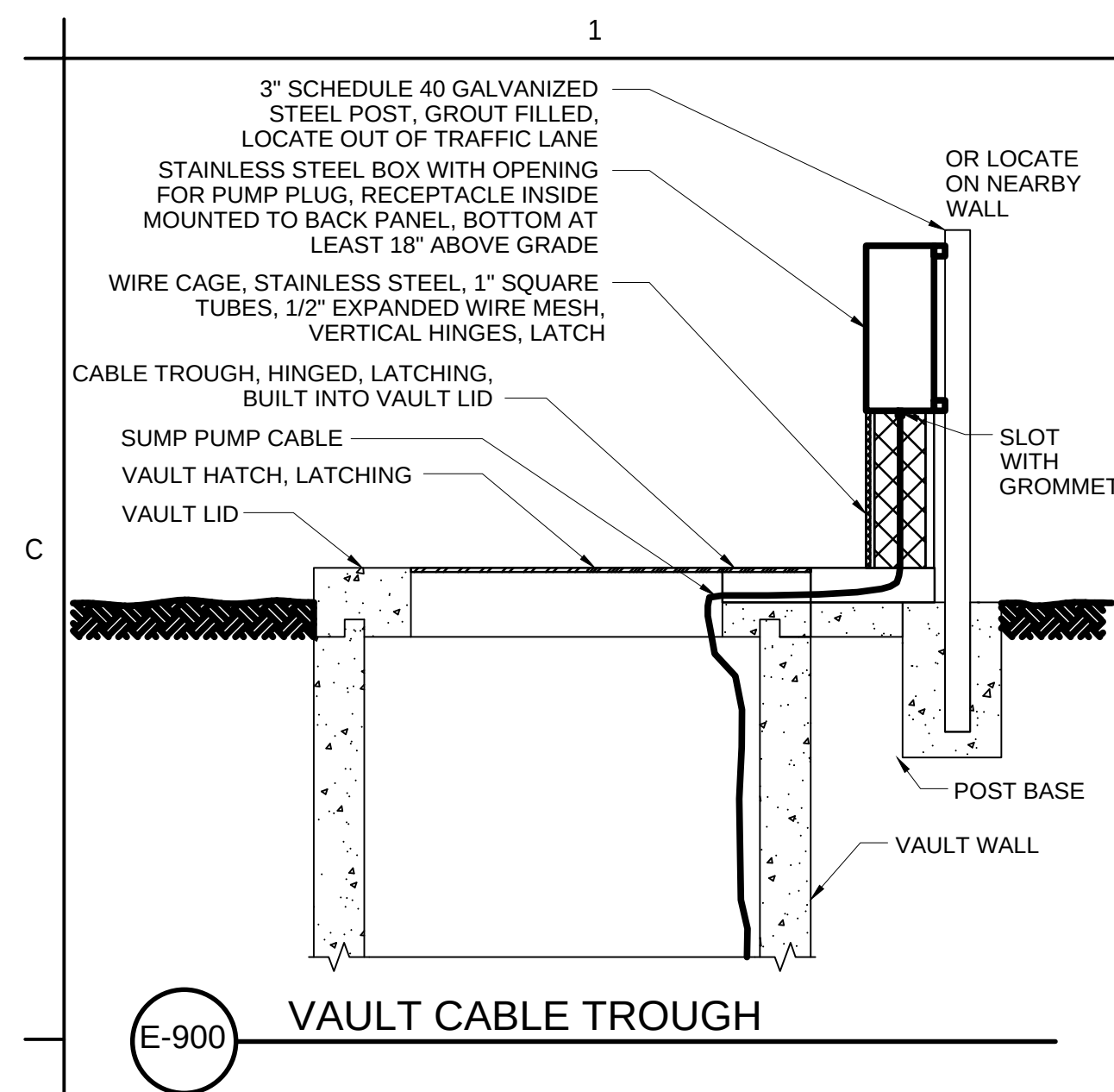
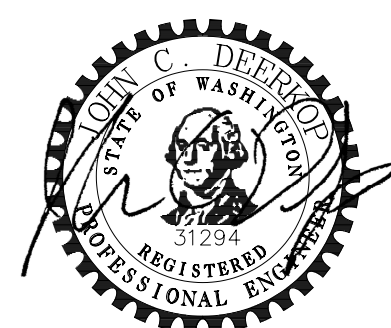
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BATTLE CREEK HATCHERY

File Name: 02267BCH-GE-6	STW	DES	CWS	2024.12.27
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Exhibit D-1 Page 82 of 220

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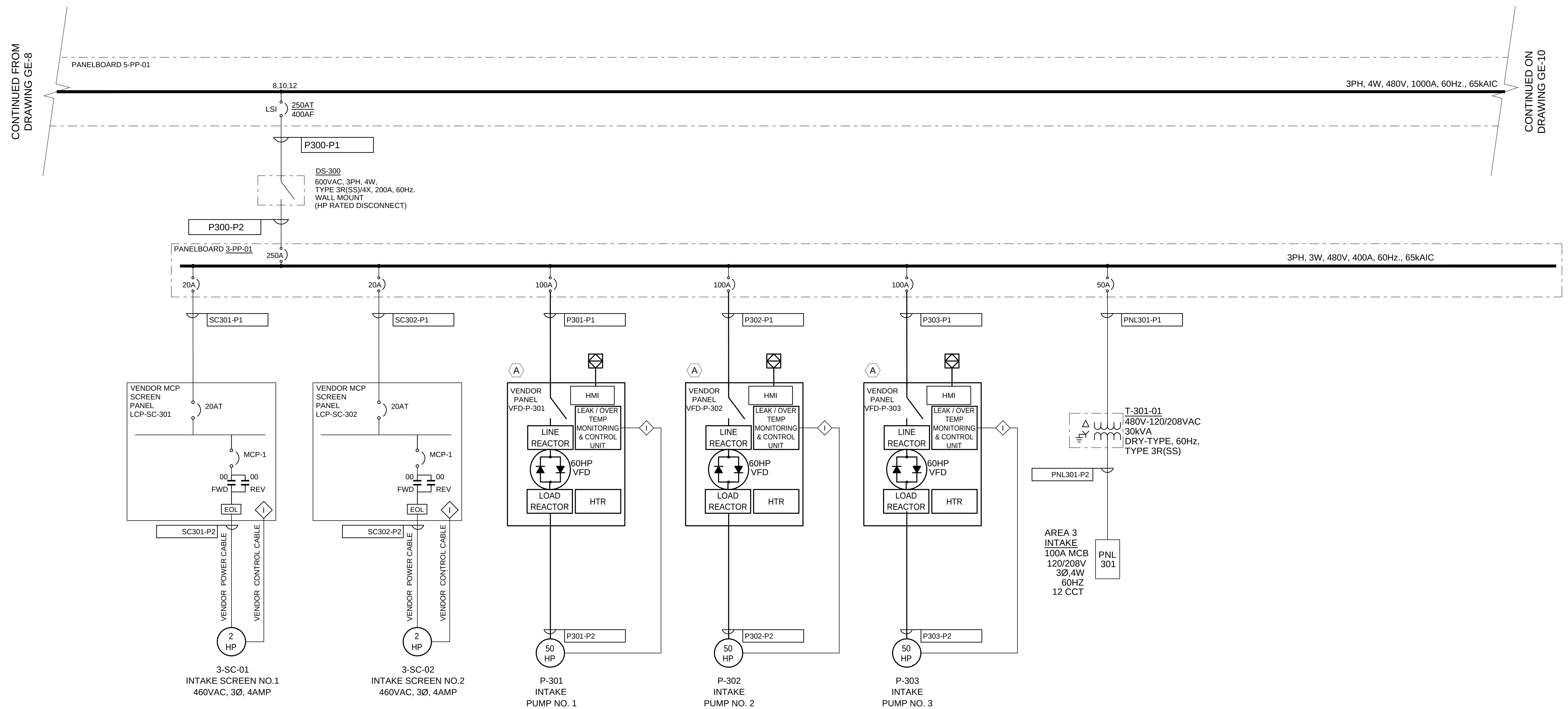


BATTLE CREEK HATCHERY

ELECTRICAL STANDARD DETAILS
(5 OF 5)

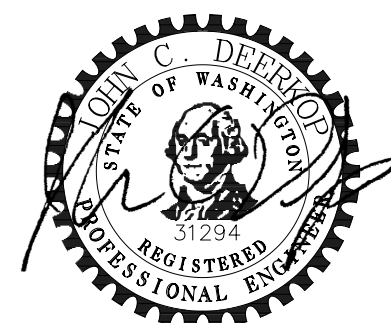
KEY SHEET NOTES

A. MANUFACTURER TO CONFIRM BREAKER SIZE AND RATING FOR VFD. VERIFY OVERCURRENT PROTECTION PRIOR TO FURNISHING PANELBOARD. VFD INPUT CABLE TO BE 125% OF VFD RATED CABLE. VERIFY VFD RATING AND ADJUST CABLE SIZE AS REQUIRED BASED ON FINAL SELECTION OF VENDOR SYSTEM.

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Client/Project
TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267BCH-GE-9

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Title

SINGLE LINE DIAGRAM (2 OF 3)

Project No.
224202267

Revision
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Scale
NO SCALE

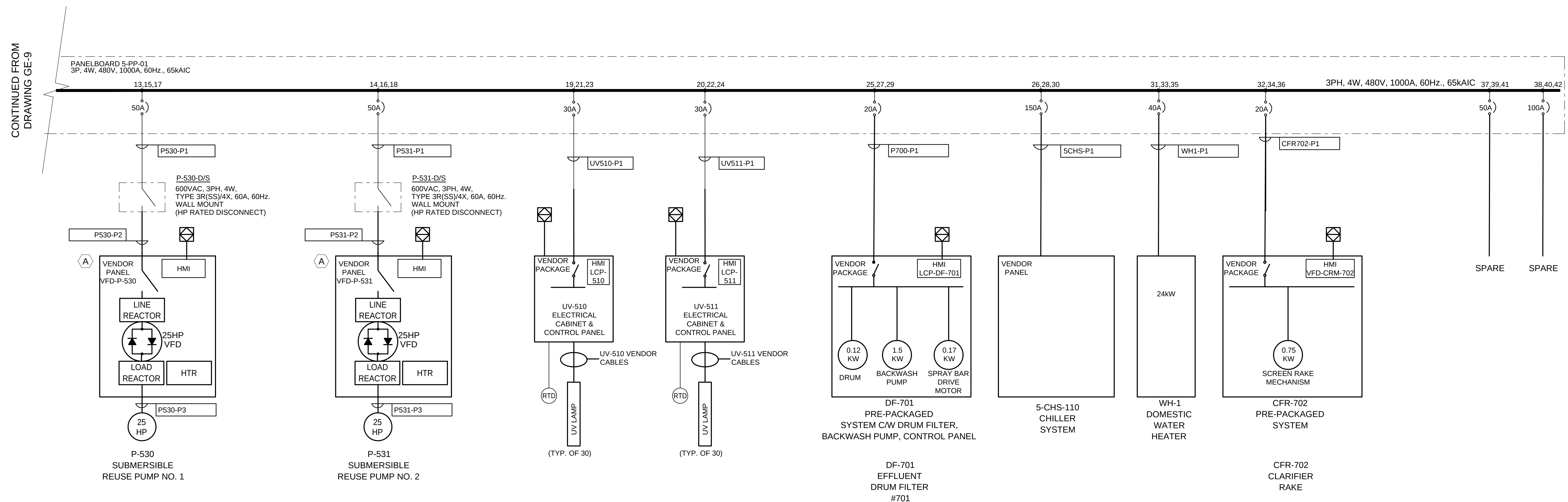
Drawing No.

GE-9

Exhibit D-1 Page 185 of 220

KEY SHEET NOTES

A. MANUFACTURER TO CONFIRM BREAKER SIZE AND RATING FOR VFD. VERIFY OVERCURRENT PROTECTION PRIOR TO FURNISHING PANELBOARD. VFD INPUT CABLE TO BE 125% OF VFD RATED CABLE. VERIFY VFD RATING AND ADJUST CABLE SIZE AS REQUIRED BASED ON FINAL SELECTION OF VENDOR SYSTEM.



C

B

A

AREA #2 WELL WATER													
DEVICE GROUP	CABLE/CONDUIT TAG (INDIVIDUAL)	APPLICATION	VOLTS	CONDUIT TYPE	RUN			CONDUCTORS				CONDUIT	COMMENTS
					FROM	VIA	TO	WIRE COUNT	WIRE SIZE (CU.)	SPARE	GROUND/ BOND/SHLD	SIZE	
LIT-2101	C1	INSTRUMENT	24VDC	PVC,GRC	LCP-400	U,G/S	C-2101-JB	1PR	#16AWG	-	#16AWG	3/4"	ANALOG LEVEL SIGNAL
	E1	INSTRUMENT	24VDC	PVC,GRC	C-2101-JB	S	LE-2101	VENDOR					LEVEL INSTRUMENT
P-201	C1	CONTROL	24VDC	PVC,GRC	VFD-P-201	U/G,S	LCP-400	14C	#14AWG	2C	#14AWG	1"	BUNDLED DIGITAL SIGNALS
	C2	CONTROL	24VDC	PVC,GRC	VFD-P-201	U/G,S	LCP-400	2PR	#1AWG	-	#14AWG	1"	BUNDLED ANALOG SIGNALS
	P1	POWER	480VAC	PVC,GRC	4-PP-01	U/G,S	VFD-P-201	3C	#10AWG	-	#10AWG	1"	WELL PUMP POWER
	P2	POWER	480VAC	PVC,GRC	VFD-P-201	U/G	P-2101-JB	3C	#10AWG	-	#10AWG	1"	WELL PUMP POWER VIA JUNCTION BOX
		CONTROL	24VDC	PVC,GRC	VFD-P-201	U/G	P-2101-JB	3C	#14AWG	-	#10AWG	3/4"	WELL PUMP TEMP/MOISTURE ALARM
	P3	POWER	480VAC	PVC,GRC	P-2101-JB	U/G	P-201	VENDOR					WELL PUMP TEMP/MOISTURE ALARM
	COMMS	COMMS	-	PVC,GRC	VFD-P-201	S	LCP-400	CAT6	-	-	-	3/4"	VFD COMMS
PIT-2101	C1	INSTRUMENT	24VDC	PVC,GRC	LCP-400	U/G,S	C-2101-JB	1PR	#16AWG	-	#16AWG	3/4"	ANALOG PRESSURE INDICATION VIA JUNCTION BOX AT AREA 2 WELL PUMP
	C2	INSTRUMENT	24VDC	PVC,GRC	C-2101-JB	U/G	PIT-2101	1PR	#16AWG	-	#16AWG	3/4"	ANALOG PRESSURE INDICATION WITHIN VALVE VAULT NO.1
NOTES													
	1	CABLE AND CONDUIT SCHEDULE SHOWS INDIVIDUAL RUNS TO CONVEY DESIGN INTENT. WHERE ACCEPTABLE IN N.E.C., CONTRACTOR PERMITTED TO REDUCE THE NUMBER OF CONDUIT RUNS BY COMBINING LIKE SIGNALS AND CABLES .											
	2	DO NOT COMBINE PARALLEL RUNS IN A SINGLE CONDUIT RUN.											
	3	UNDER THE 'VIA' HEADING IN THE TABLE FOR CONDUIT ROUTING, ALL UNDERGROUND CONDUIT RUNS TO BE PVC. EXIT ABOVE GRADE WITH GRC. SURFACE CONDUIT TO BE GRC.											
	4	WHERE CONDUITS ARE DENOTED AS SURFACE INSTALLATION, CONTRACTOR MAY RUN CONDUITS UNDERGROUND OR IN-SLAB WHERE ACCEPTABLE.											
LEGEND													
	U/G	UNDERGROUND CONDUIT INSTALLATION											
	S	SURFACE CONDUIT INSTALLATION											
	PVC	POLYVINYL CHLORIDE											
	GRC	GALVANIZED RIGID CONDUIT											

AREA 2 - CABLE AND CONDUIT SCHEDULE

SCALE: NTS

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Revision

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Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

File Name: 02267BCH-2E-2

STN

Dwn.

DESIGN

Dsgn.

CHKS

Chkd.

2024.12.27

YYYY.MM.DD

Title

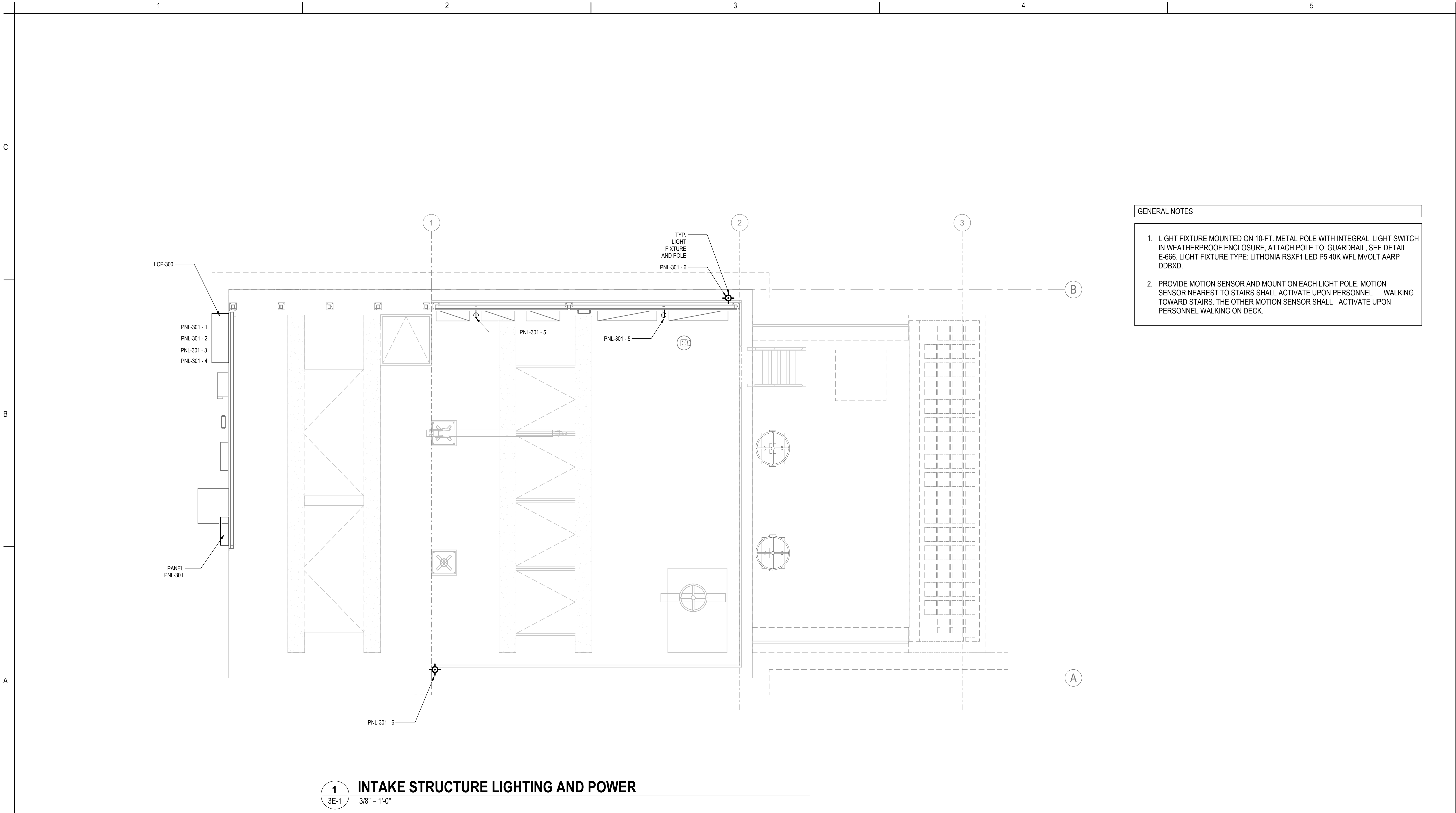
WELL No.1 CABLE AND CONDUIT SCHEDULE

Project No.
224202267

Revision

Scale
NONE

Drawing No.
2E-2



- GENERAL NOTES
1. LIGHT FIXTURE MOUNTED ON 10-FT. METAL POLE WITH INTEGRAL LIGHT SWITCH IN WEATHERPROOF ENCLOSURE, ATTACH POLE TO GUARDRAIL, SEE DETAIL E-666. LIGHT FIXTURE TYPE: LITHONIA RSXF1 LED P5 40K WFL MVOLT AARP DDBXD.
 2. PROVIDE MOTION SENSOR AND MOUNT ON EACH LIGHT POLE. MOTION SENSOR NEAREST TO STAIRS SHALL ACTIVATE UPON PERSONNEL WALKING TOWARD STAIRS. THE OTHER MOTION SENSOR SHALL ACTIVATE UPON PERSONNEL WALKING ON DECK.

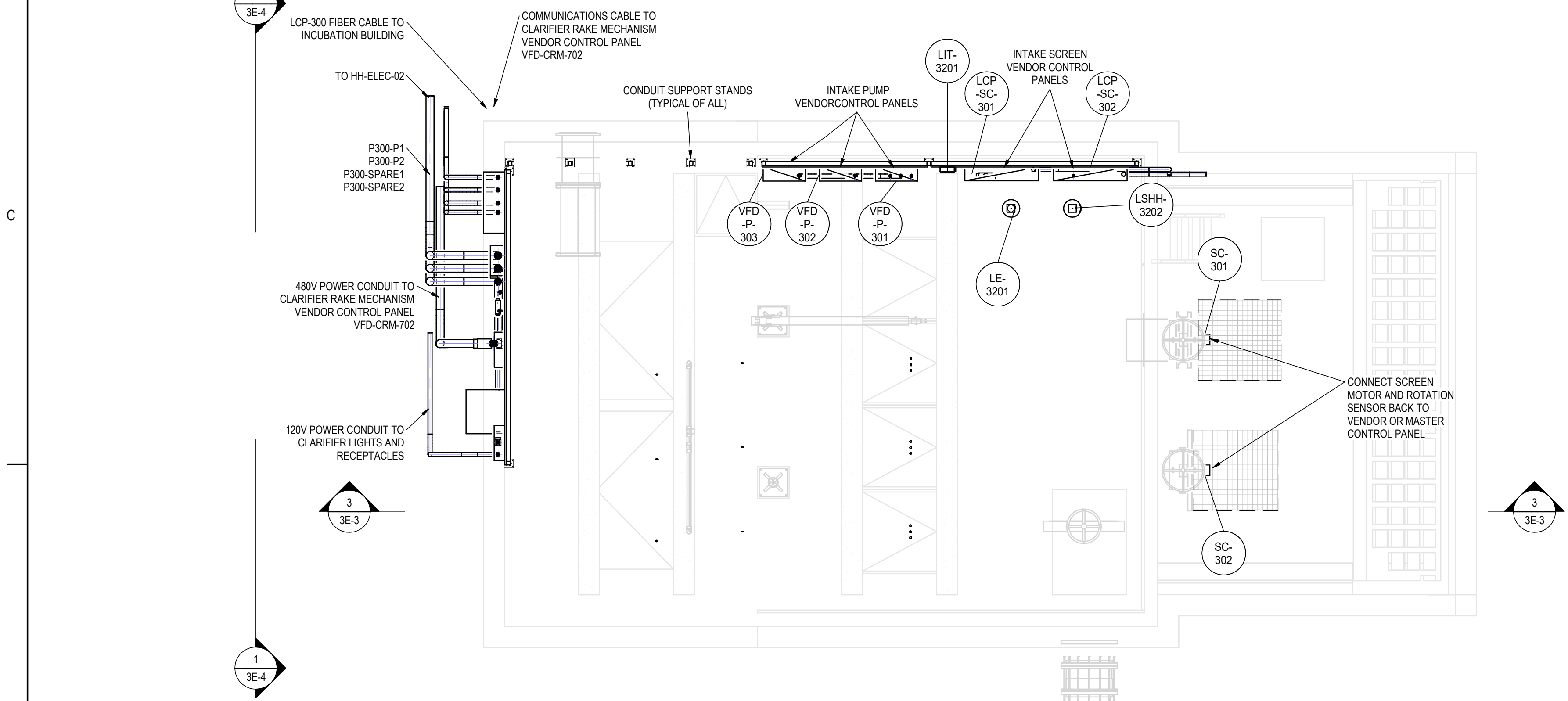
1 INTAKE STRUCTURE LIGHTING AND POWER
3E-1 3/8" = 1'-0"

Revision <table><tr><td>0</td><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr></table>	0	By	Appd	YYYY.MM.DD	100% DESIGN <table><tr><td>CR</td><td>JCD</td><td>2025.01.14</td></tr><tr><td>By</td><td>Appd</td><td>YYYY.MM.DD</td></tr></table> Issued	CR	JCD	2025.01.14	By	Appd	YYYY.MM.DD	Permit/Seal 2/12/2025	Consultant	OFFICE LEGAL ENTITY OFFICE ADDRESS LINE 1 OFFICE ADDRESS LINE 2 OFFICE CITY, XX XXX XXX Tel: (000) 000.0000 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY PROJECT ADDRESS File Name: N/A Author: Dwn. Designer: Dsgn. Checker: Chkd. 2024.12.13 YYYY.MM.DD	Title INTAKE STRUCTURE ELECTRICAL LIGHTING AND POWER PLAN Project No. 224202267 Revision 0 Scale 3/8" = 1'-0" Drawing No. 3E-1
0	By	Appd	YYYY.MM.DD														
CR	JCD	2025.01.14															
By	Appd	YYYY.MM.DD															

CB

A

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- GENERAL NOTES
1.

CONFIRM INSTALLATION LOCATION OF RADAR LEVEL SENSOR ON SITE.
2.

COORDINATE THE ROUTING OF UNDERGROUND CONDUITS FOR POWER AND CONTROL FROM THE INCUBATION BUILDING TO THE INTAKE STRUCTURE.
3.

INTAKE SCREEN VENDOR CONTROL PANELS:

A. SCREEN MOTOR AND INSTRUMENTATION SYSTMS SHALL COME COMPLETE WITH VENDOR CABLING WHICH CONNECTS FROM THE FIELD DEVICES TO THE INTAKE SCREEN CONTROL PANELS ON THE UPPER LEVEL. CONFIRM CONDUIT AND CABLING ROUTING ON SITE.

B. ROUTE VENDOR CONTROL AND POWER ABLE FROM INTAKE PUMPS TO VFD PANELS ON UPPER LEVEL.

C. INTAKE PUMPS TO COM COMPLETE WITH MOISTURE AND TEMERATURE SENSORS WHICH SHALL BE INTEGRAL TO THE PUMP VFD PANEL. VERIFY CABLE LENGTHS PRIOR TO ORDERING.

D. VENDOR PANELS TO BE TYPE 4X.

E. VENDOR PANELS SHALL BE LOCKABLE WITH EXTERIOR DOOR (BLANK) AND DEADFRONT COVER (INTERIOR) WITH DISCONNECT, SWITCHES, INDICATORS, ETC. NO EXPOSED LIVE PARTS SHALL BE PRESENT WHEN OPENING EXTERIOR DOOR.
4.

NOT ALL CONDUIT AND CABLES SHOWN ON THIS DRAWING. REFER TO THE CONDUIT AND CABLE SCHEDULE ON 3E-5 FOR INSTRUMENTATION AND POWER REQUIREMENTS FOR AREA 3.
5.

INSTALL ALL CONDUITS AND CABLES PER THE CONDUIT AND CABLE SCHEDULES. CONDUIT ROUTING TO BE VERIFIED ON SITE AGAINST SITE CONDITIONS. COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES TO AVOID CONFLICTS.
6.

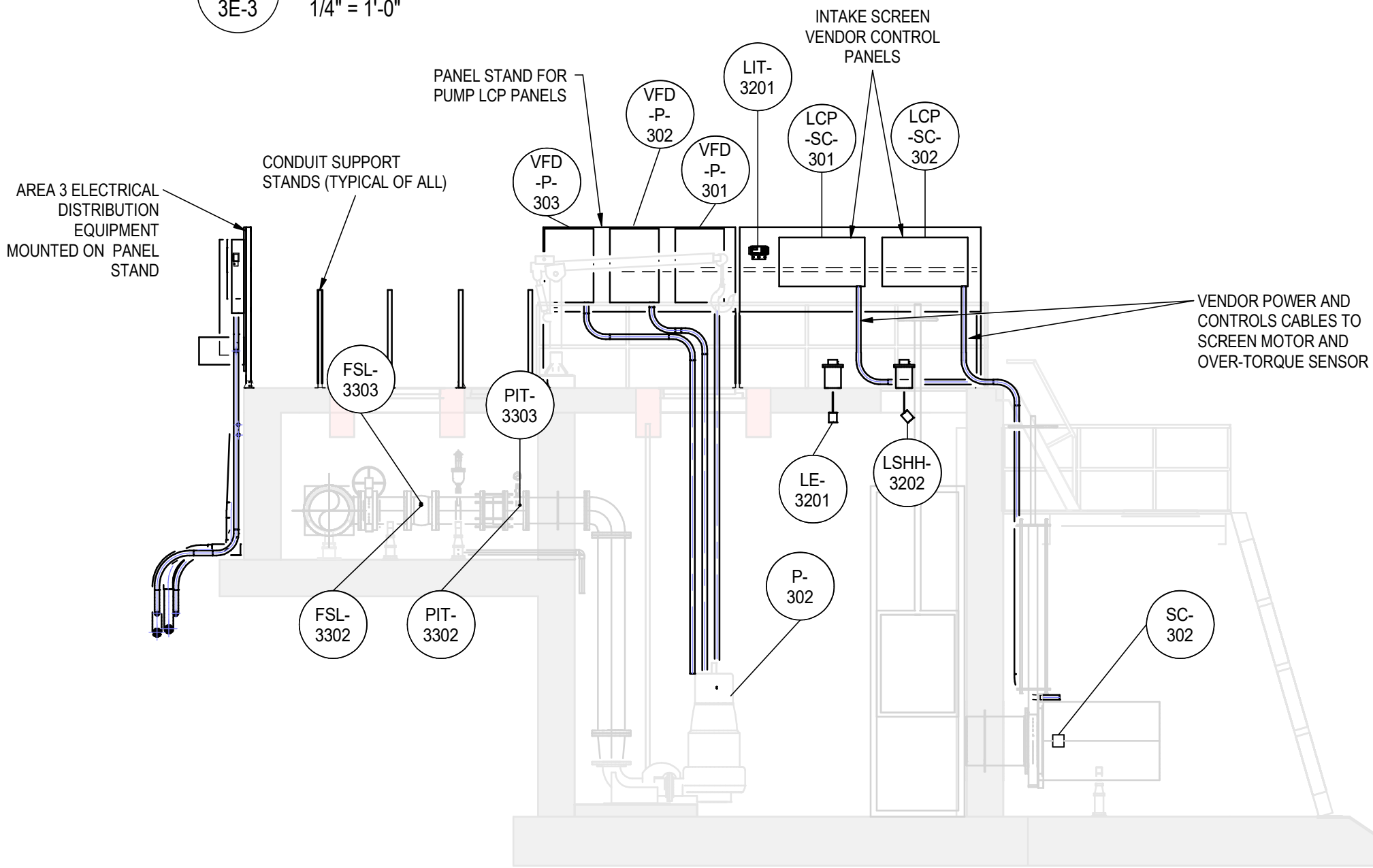
VFD'S SHALL BE IN TYPE 4X ENCLSOURES. VFD CABINETS TO HAVE EXTERIOR DOOR (BLANK) AND DEADFRONT COVER (INTERIOR) WITH DISCONNECT, SWITCHES, INDICATORS, ETC. NO SWITCHES OR DISPLAYS SHALL BE VISIBLE FROM OUTSIDE THE PANEL. NO EXPOSED LIVE PARTS SHALL BE PRESENT WHEN OPENING EXTERIOR DOOR.

1

PLAN VIEW - UPPER LEVEL

3E-3

1/4" = 1'-0"

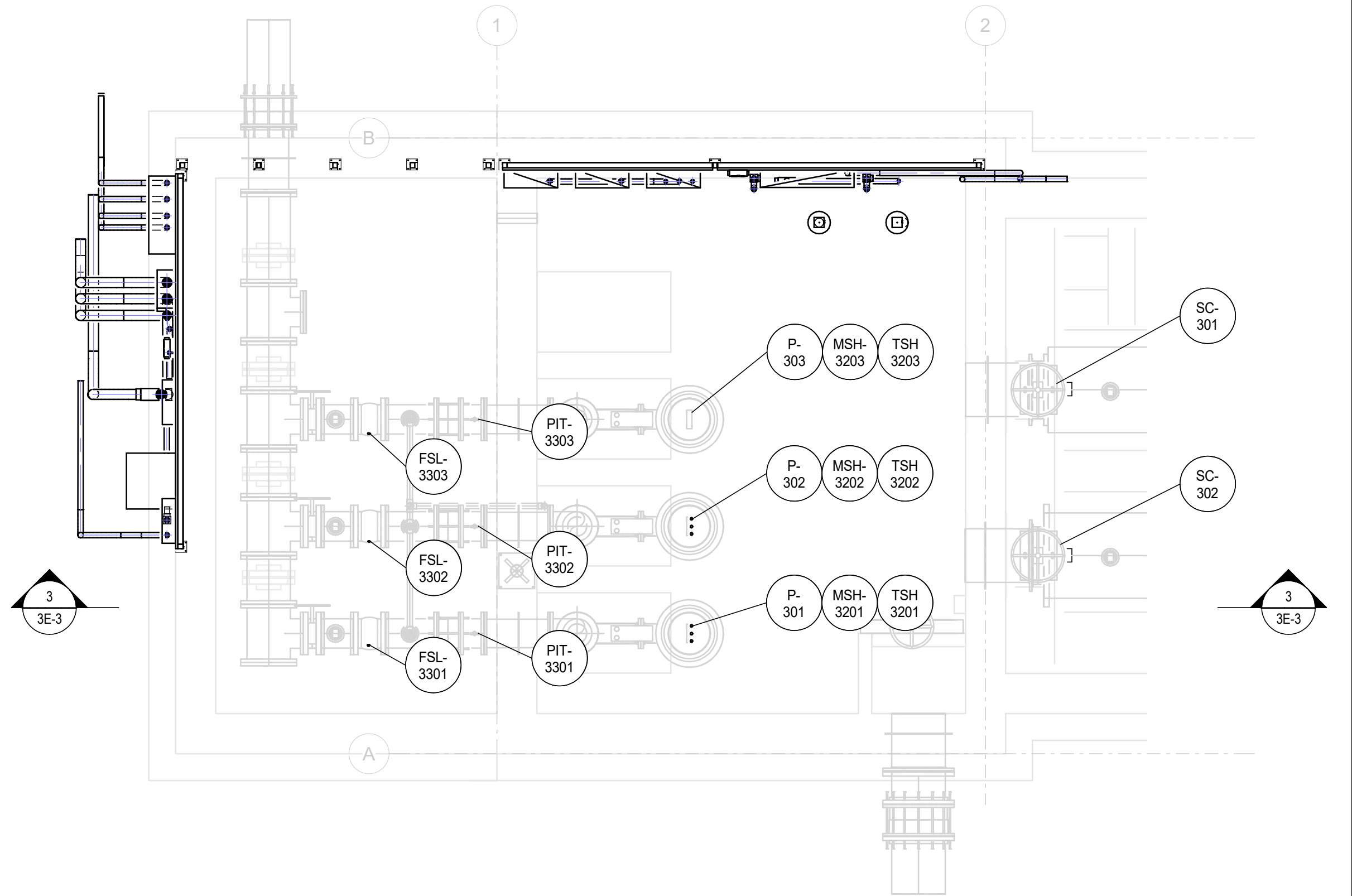


3

SECTION - PUMPED INTAKE

3E-3

3/16" = 1'-0"



2

PLAN VIEW - LOWER LEVEL

3E-3

1/4" = 1'-0"

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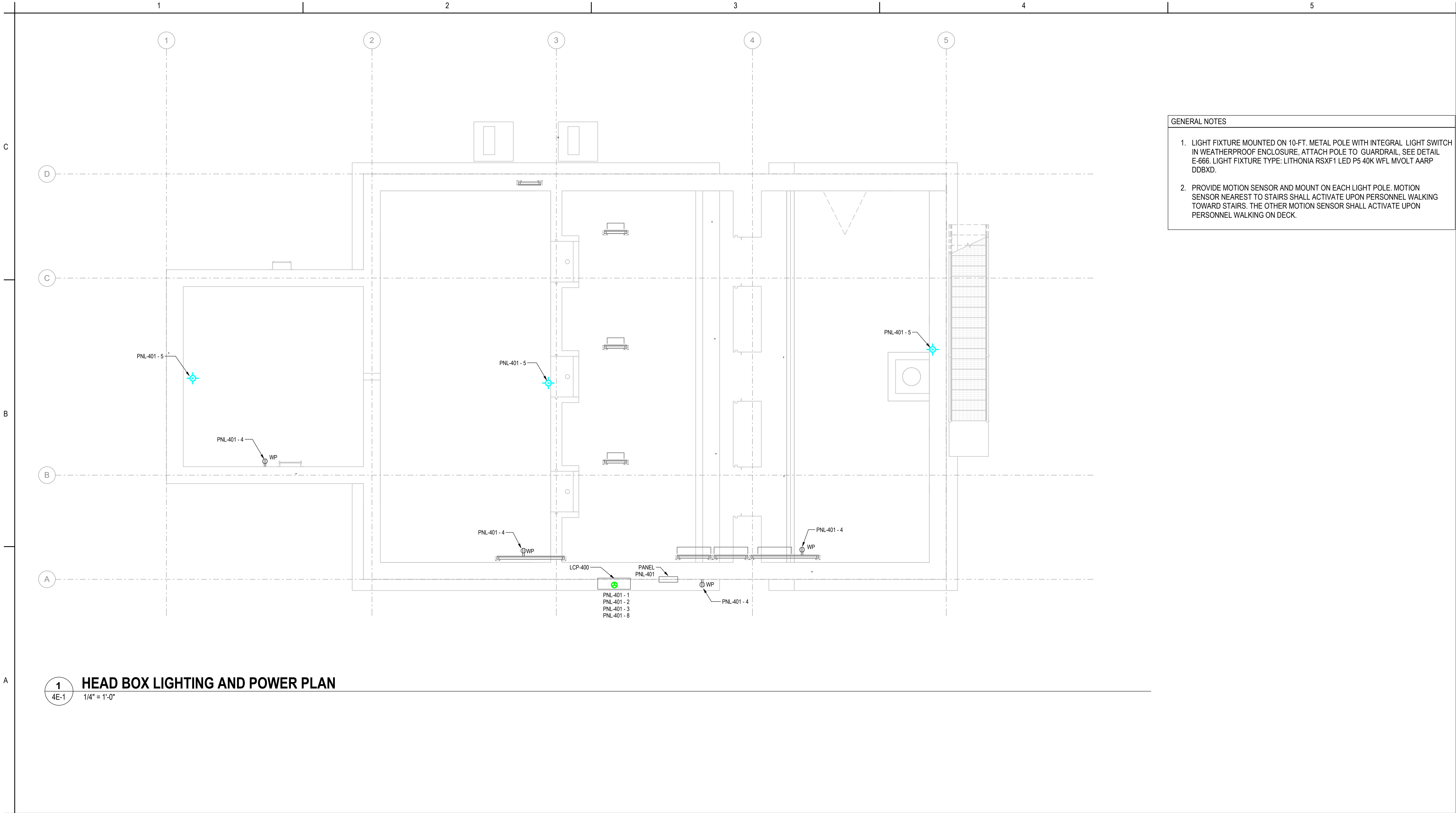


1
3E-4

2
3E-4

1. CONDUIT SUPPORTS STANDS FOR EXPOSED CONDUITS ARE SHOWN AS TYPICAL. SPACING OF SUPPORT STANDS TO BE BASED ON THE SMALLEST DIAMETER CONDUIT.
2. CONDUIT ROUTING SHOWN TO CONVEY GENERAL INTENT. CONFIRM ALL CONDUIT ROUTING ON SITE.
3. NOT ALL CONDUIT AND CABLES SHOWN ON THIS DRAWING. REFER TO THE CONDUIT AND CABLE SCHEDULE ON 3E-5 FOR INSTRUMENTATION AND POWER REQUIREMENTS FOR AREA 3.
4. INSTALL ALL CONDUITS AND CABLES PER THE CONDUIT AND CABLE SCHEDULES. CONDUIT ROUTING TO BE VERIFIED ON SITE AGAINST SITE CONDITIONS. COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES TO AVOID CONFLICTS.
5. FLOW METER FIT-7103 FOR VELOCITY FLOW METER IN MANHOLE. CABLE FROM FIT-7103 TO BE VENDOR PROVIDED EXTENSION CABLE REFER TO JF-1.

Click location in Project Information>



- GENERAL NOTES
1. LIGHT FIXTURE MOUNTED ON 10-FT. METAL POLE WITH INTEGRAL LIGHT SWITCH IN WEATHERPROOF ENCLOSURE, ATTACH POLE TO GUARDRAIL, SEE DETAIL E-666. LIGHT FIXTURE TYPE: LITHONIA RSXF1 LED P5 40K WFL MVOLT AARP DDBXD.
 2. PROVIDE MOTION SENSOR AND MOUNT ON EACH LIGHT POLE. MOTION SENSOR NEAREST TO STAIRS SHALL ACTIVATE UPON PERSONNEL WALKING TOWARD STAIRS. THE OTHER MOTION SENSOR SHALL ACTIVATE UPON PERSONNEL WALKING ON DECK.

1 HEAD BOX LIGHTING AND POWER PLAN
1/4" = 1'-0"

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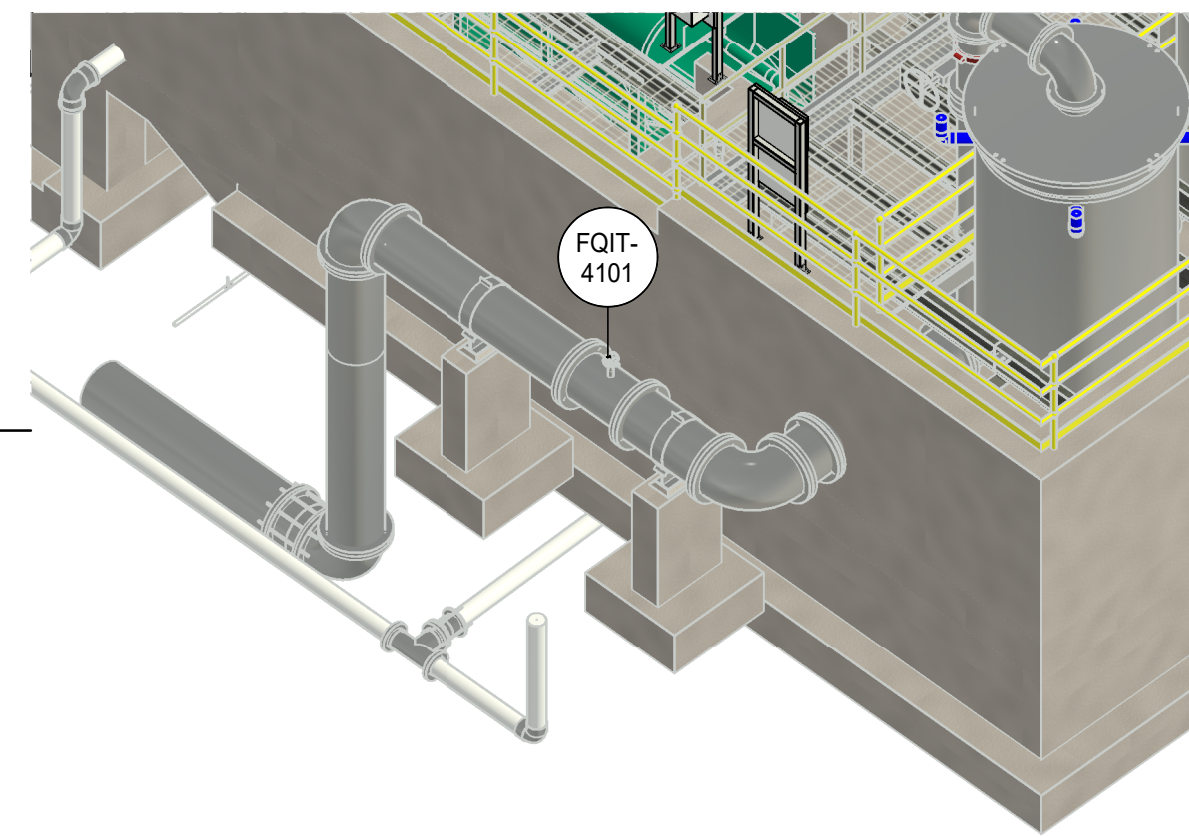


Client/Project TULALIP TRIBES	CLR	CLR	LPS	09/05/24
BATTLE CREEK HATCHERY	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD
PROJECT ADDRESS				
File Name: N/A				

Title HEAD BOX ELECTRICAL LIGHTING AND POWER PLAN	Project No. 224202267	Scale 1/4" = 1'-0"
Revision 0	Drawing No. 4E-1	

CBA

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4
4E-3



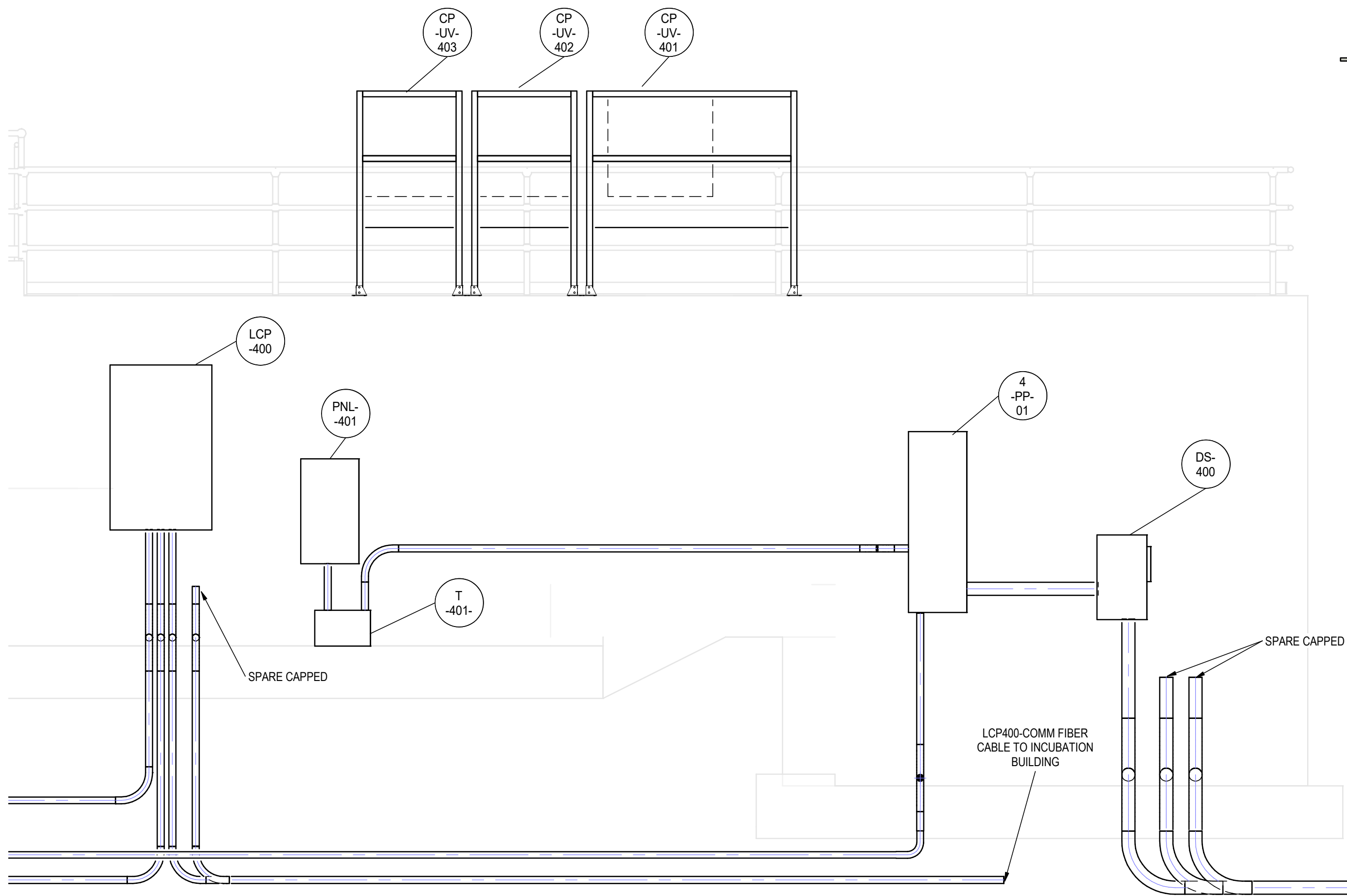
1. CONFIRM LOCATION OF RADAR LEVEL, DISSOLVED OXYGEN, AND HIGH LEVEL SWITCH SENSOR INSTALLATION LOCATIONS ON SITE.
2. WALL MOUNT LEVEL INDICATING TRANSMITTER AND DISSOLVED OXYGEN TRANSMITTER ON THE HEAD BOX GRADE LEVEL. CONFIRM MOUNTING LOCATIONS IN SITE AND COORDINATE PROPER VENDOR CABLE LENGTHS PRIOR TO ORDERING INSTRUMENTS.
3. WALL MOUNT VFD CABINET (VFD-P-201) ON THE EXTERIOR OF THE WELL WATER STORAGE TANK CONFIRM EXACT PLACEMENT OF VFD PANEL ON SITE.
4. COORDINATE THE ROUTING OF UNDERGROUND CONDUITS FOR POWER AND CONTROL FROM THE INCUBATION BUILDING TO THE WELL WATER STORAGE TANK AND FROM THE WELL WATER STORAGE TANK TO THE WELL PUMP NO.1.
5. VFD-02-01 SHALL BE:
 - A. RATED AT 480VAC, 3 PHASE, 15HP, 60HZ, UL
 - B. LOCKED WITHIN A TYPE 4X, 60KVA ENCLOSURE COMPLETE WITH DISCONNECT
 - C. LINE REACTOR / DC CHOKe
 - D. dv/dt FILTER ON OUTPUT
 - E. FREE STANDING ENCLOSURE FOOT KIT (16")
 - F. RUN PILOT LIGHT
 - G. FAULT PILOT LIGHT
 - H. SPEED POTENTIOMETER
 - I. EMI / RFI FILTER
 - J. PANEL HEATER
 - K. HAND / OFF / AUTO SWITCH
 - L. TAMPER PROOF
 - M. TYPE FRANKLIN VFD XS4B0240-3A OR APPROVED ALTERNATE
 - N. BLANK EXTERIOR DOOR
 - O. INTERIOR DEADFRONT COVER WITH SWITCHES, INDICATORS, LIGHTS, ETC. NO EXPOSED LIVE PARTS ON INTERIOR COVER
6. COORDINATE LOCATION OF TEMPERATURE AND LEVEL SENSOR INSTALLS ON SITE THROUGH THE TOP OF THE WELL WATER STORAGE TANK.
7. NOT ALL CONDUIT AND CABLES SHOWN ON THIS DRAWING. REFER TO THE CONDUIT AND CABLE SCHEDULE ON 4E-5 FOR INSTRUMENTATION AND POWER REQUIREMENTS FOR AREA 4.
8. INSTALL ALL CONDUITS AND CABLES PER THE CONDUIT AND CABLE SCHEDULES. CONDUIT ROUTING TO BE VERIFIED ON SITE AGAINST SITE CONDITIONS. COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES TO AVOID CONFLICTS.
9. REFER TO 2E-2 FOR CONDUIT AND CABLE SCHEDULE FOR AREA 2 (WELL NO. 1).
10. VENDOR PANELS TO BE TYPE 4X.
11. VENDOR PANELS SHALL BE LOCKABLE WITH EXTERIOR DOOR (BLANK) AND DEADFRONT COVER (INTERIOR) WITH DISCONNECT, SWITCHES, INDICATORS ETC. NO EXPOSED LIVE PARTS SHALL BE PRESENT WHEN OPENING EXTERIOR DOOR.

Exhibit Page 199 of 220

C

B

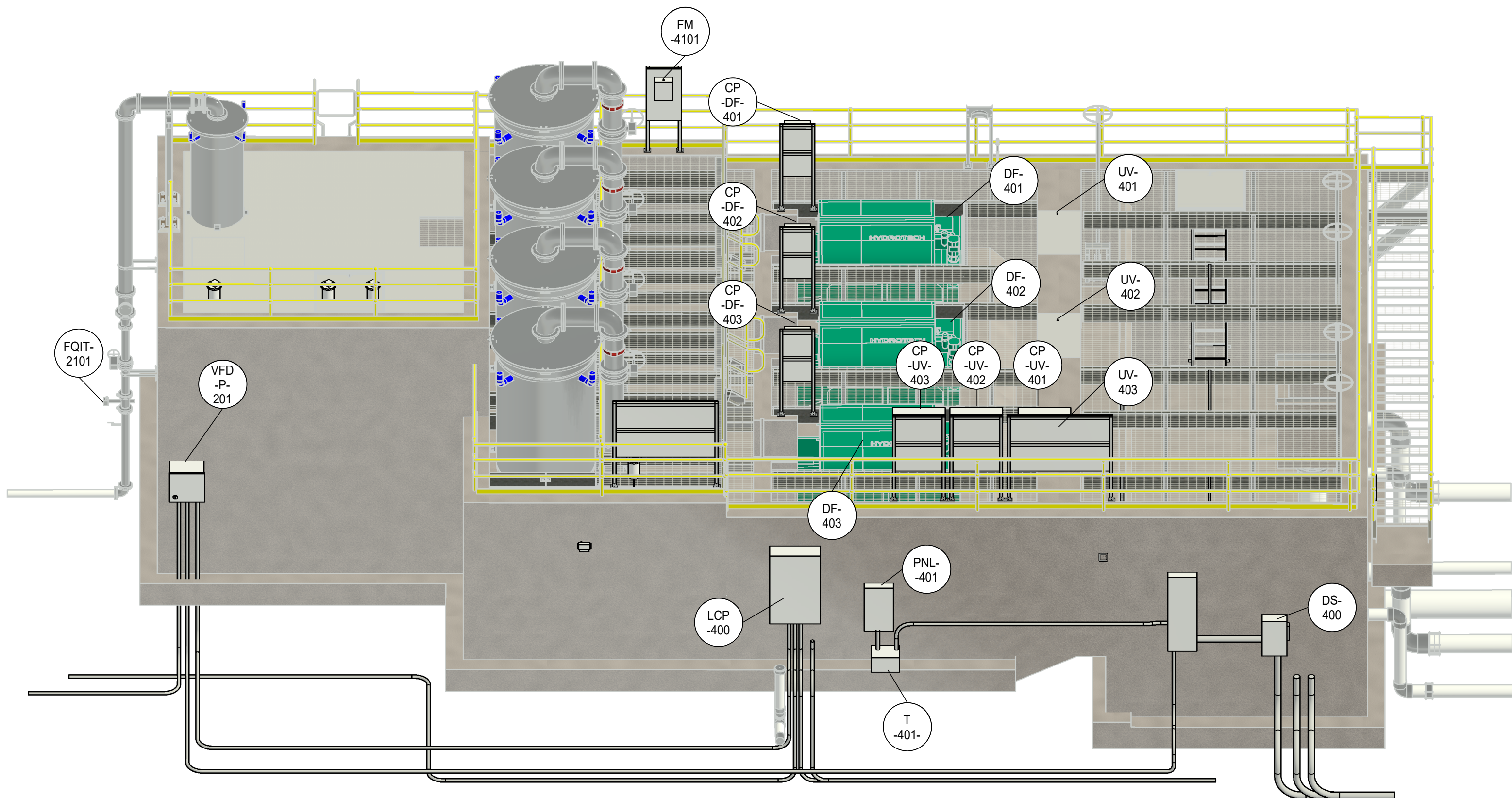
A



1

AREA 4 - ELECTRICAL DISTRIBUTION

3/8" = 1'-0"

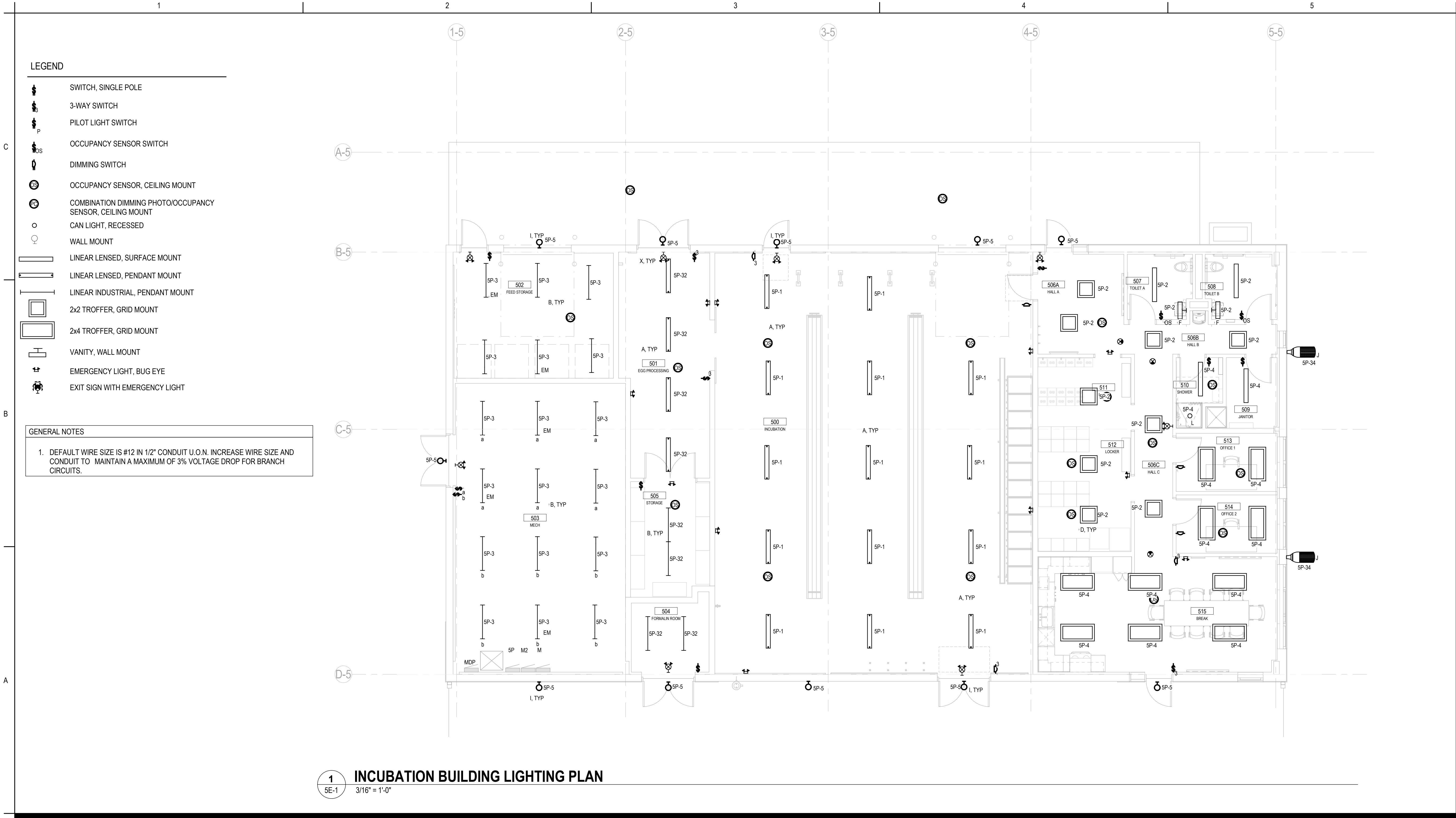


2

HEADWORKS -BLDG

4E-4

0 Revision By Appd YYYY.MM.DD	0 Issued By Appd YYYY.MM.DD	Permit/Seal 2/12/2025	Consultant	Stantec Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: N/A JM JS JR 2024.12.27 Dwn. Dsgn. Chkd. YYYY.MM.DD	Title HEAD BOX ELECTRICAL DSTRIBUTION Project No. 224202267 Revision 0 Scale 3/8" = 1'-0" Drawing No. 4E-4

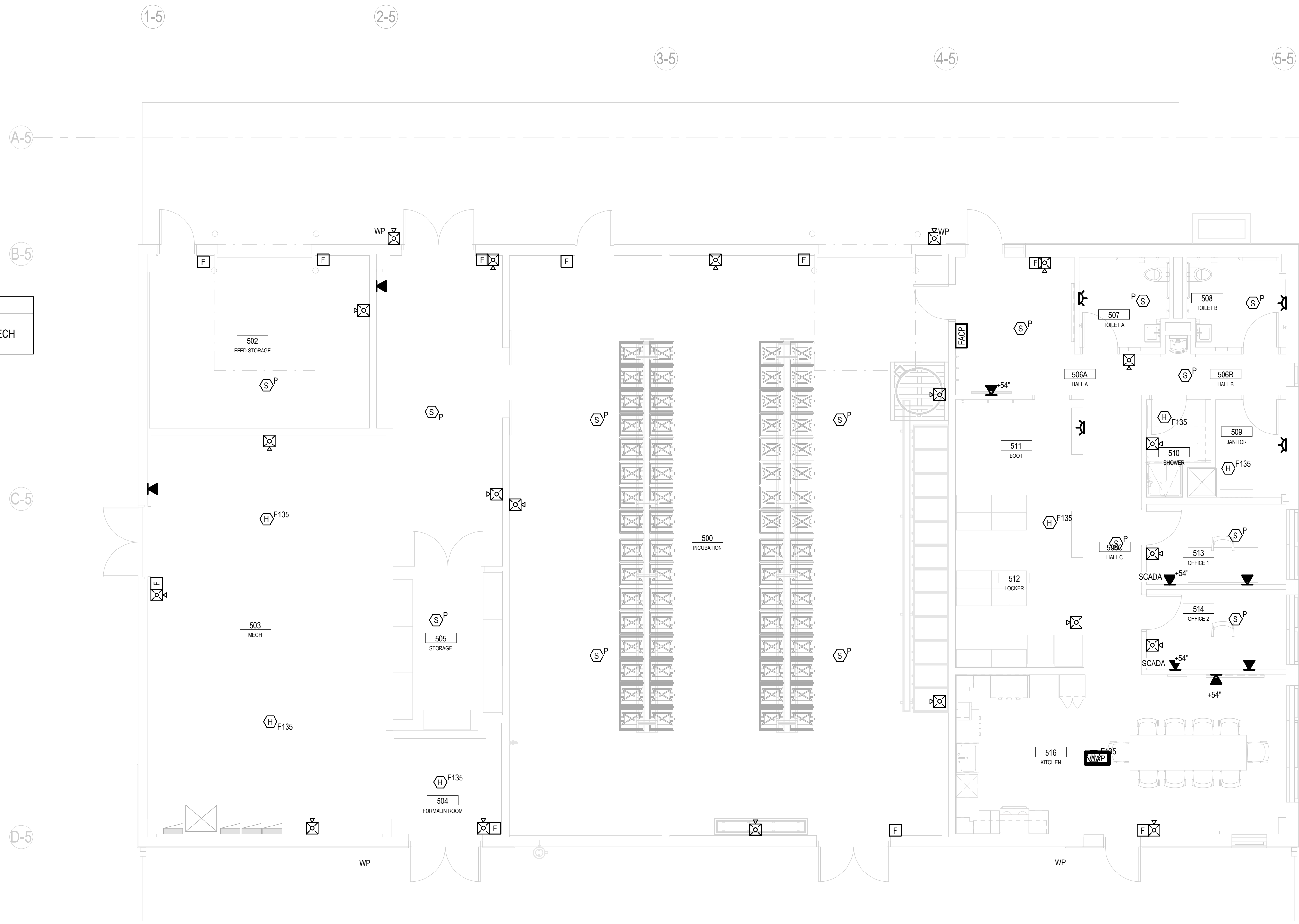


LEGEND

	WIRELESS ACCESS POINT
	TELEPHONE/DATA OUTLET (2-PORTS)
	SMOKE DETECTOR
	HEAT DETECTOR (RATE OF RISE)
	HORN / STROBE
	STROBE
	PULL - STATION

GENERAL NOTES

1. ROUTE COMMUNICATION CABLES TO NETWORKING RACK LOCATED IN MECH 503 (SEE SHEET 1/5E-9)



1

5E-3

INCUBATION BUILDING SYSTEMS PLAN

$$3/16'' = 1'-0''$$
[illegible]

A	CR	JCD	2025.01.14
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Client/Project
Tulalip Tribe

Battle Creek Hatchery

File Name: N/A

CLR
Dwn.

 CLR

 Dsgn.

LPS	2
Chkd.	Y

2022.11.23
YYY.MM.DD

Title

INCUBATION BUILDING ELECTRICAL SYSTEMS PLAN

Project No.
224202267

Revision
0

Scale
As indicated

Drawing No.

5E-3

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B

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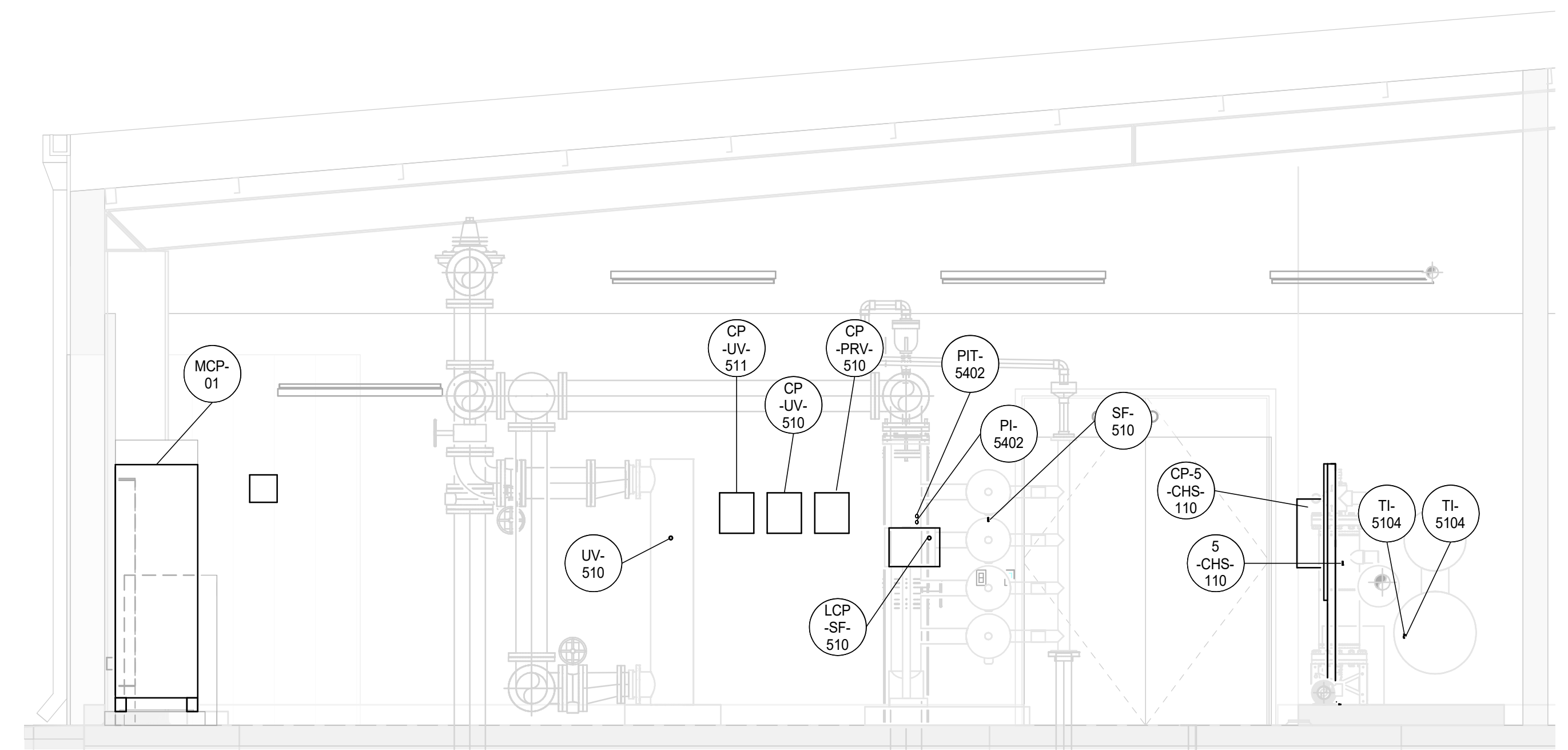
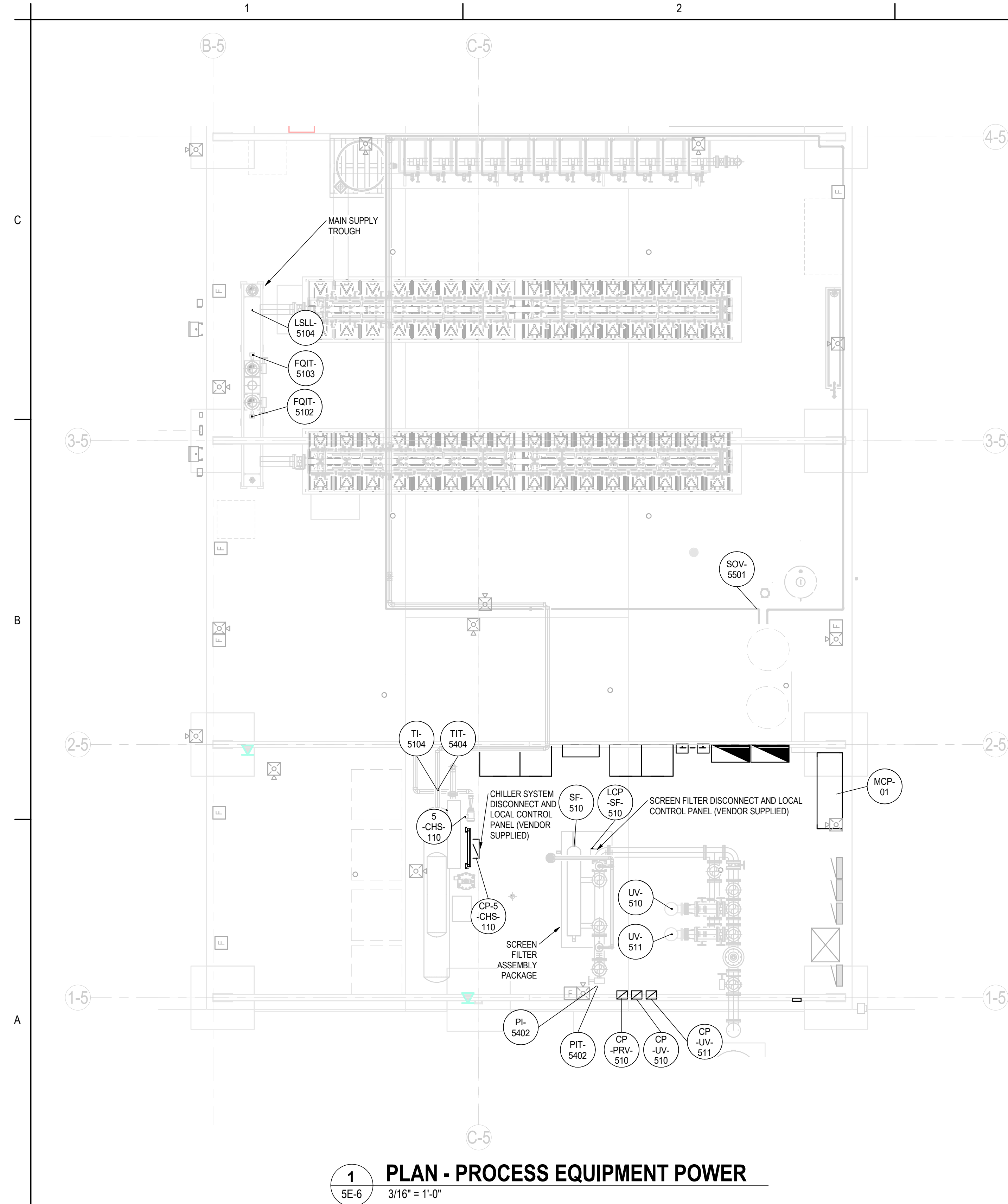
ORIGINAL SHEET - ANSI D

Stantec														Panel					
Name: 5P				Volts: 208Y/120V				Mains Type: MLO				Type:							
Location: MECH 503				Phases: 3				Mains Rating: 225 A				AIC Rating: 22kAIC							
Supply From: MDP				Wires: 4				Max Rating: 150 A				Mounting: Surface							
Serves:								Lugs: Single Lugs				Enclosure: Type 1							
Notes:																			
**- ROUTE THRU LIGHTING CONTACTOR LCC-1 LOCATED IN MECH 503																			
CKT	Circuit Description			Trip	Poles	CB	A		B		C		CB	Poles	Trip	Circuit Description			CKT
1	LTS - 500 INCUBATION			20 A	1		336	759						1	20 A	LTS - 506 HALL, 507&8 TO, 511 BT, 512...			2
3	LTS - 502 FEED STO & 503 MECH			20 A	1				612	690				1	20 A	LTS - 509 JAN, 510 SHO, 513&514 OFF,...			4
5	LTS - EXTERIOR**			20 A	1						572	720		1	20 A	REC - 500 INCUBATION			6
7	REC - 501 EGG PROCESS			20 A	1		733	300						1	20 A	DISHWASHER			8
9	REC - 506A&B HALL			20 A	1				900	720				1	20 A	REC - 515 BREAK			10
11	REMOTE GEN PANEL & LCC-1			20 A	1						500	540		1	20 A	REC - 500 INCUBATION			12
13	REC - MECH 503			20 A	1		360	553						1	20 A	REC - OVER THE COUNT & TP-1			14
15	REC - 515 BREAK (REFRIGERATOR)			20 A	1				300	540				1	20 A	REC - OVER THE COUNTER			16
17	REC -515 BREAK (KH-1 RANGE HOOD)			20 A	1						400	4000		2	50 A	ELEC RANGE			18
19	REC - 514 OFFICE			20 A	1		720	4000					--	--	--				20
21	REC - 507 & 508 TOILET, FV-1			20 A	1				920	900				1	20 A	REC - 511 BOOT			22
23	REC - 513 OFFICE			20 A	1						540	900		1	20 A	REC - 511 BOOT			24
25	REC - EXTERIOR			20 A	1		1080	2500						2	20 A	ELECTRIC CLOTHES DRYER			26
27	REC - 502 FEED STORAGE			20 A	1				360	2500			--	--	--				28
29	REC - 509 JAN & 510 SHOWER			20 A	1						360	180		1	20 A	REC - WASHER			30
31	REC - HOT WATER DISPENSER			20 A	1		1300	232						1	20 A	LTS - 501 EGG, 504 FORMALIN, 505 STO			32
33										932				1	20 A	LTS - SITE**			34
35	OHD-1 AND OHD-2			20 A	1						1392	360		1	20 A	REC - MECH 503 NETWORKING...			36
37							300							1	20 A	MCP-01 COOLING FAN			38
39	Spare			20 A	1	--			0	300				1	20 A	MCP-01			40
41	FACP			20 A	1						300	300		1	20 A	MCP-01			42
43							0						--	1	20 A	Spare			44
45									0				--	1	20 A	Spare			46
47											0		--	1	20 A	Spare			48
49																			50
51																			52
53																			54
Total Load:							12.90 kVA		9.64 kVA		10.76 kVA								
Total Amps:							109 A		80 A		91 A								
Load Classification							Connected Load		Demand Factor		Estimated Demand		Panel Totals						
Electric Clothes Dryer							5000 VA		100.00%		5000 VA								
Electric Range - 3.5 kW to 8.75 kW							8000 VA		80.00%		6400 VA		Total Conn. Load: 33181 VA						
Equipment							500 VA		100.00%		500 VA		Total Est. Demand: 32651 VA						
HVAC							26 VA		125.00%		33 VA		Total Conn.: 92 A						
Heating							20 VA		100.00%		20 VA		Total Est. Demand: 91 A						
Kitchen Equipment - Non-Dwelling Unit							2000 VA		90.00%		1800 VA								
Lighting							4105 VA		125.00%		5131 VA								
Motor							1392 VA		112.50%		1566 VA								
Receptacle							11640 VA		100.00%		11640 VA								
Computer							900 VA		100.00%		900 VA								
Fire Alarm Panel							300 VA		100.00%		300 VA								
CB Legend (blank = circuit breaker):																			
G = GFCI S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated † = Existing Circuit ‡ = Revised Circuit																			
Notes:																			

LIGHT FIXTURE SCHEDULE											
ID	DESCRIPTION	FIXTURE			COLOR TEMP	CONTROL	MOUNTING	MTG HEIGHT	CLG TYPE	MANUFACTURERS CATALOG NO.	NOTES
		VOLTAGE	WATTS	LUMENS							
A	LINEAR WET LOCATION	120	26	4174	4000K	OC	PENDANT	10'-0"	STR	LITHONIA FEM L48 4000LM IMAFD WD MVOLT GZ10 40K 80	
B	LINEAR INDUSTRIAL	120	34	5147	4000K	OC	PENDANT	8'-0"	STR	LITHONIA ZL1N L48 5000LM MVOLT 40K 80CRI	
C	2x4 LED TROFFER	120	36	4968	4000K	OC	RECESSED	8'-0"	GRID	LITHONIA 2GTL 4 48L GZ10 LP840	
D	2x2 LED TROFFER	120	34	3986	4000K	OC	RECESSED	8'-0"	GRID	LITHONIA 2GTL 2 40L GZ10 LP840	
E	LED WRAPAROUND 1X4	120	49	4000	4000K	OC	SURFACE	8'-0"	GWB	LITHONIA FML4W 48 4000LM 840	
F	VANITY	120	18	1800	4000K	OC	SURFACE	7'-0"	WALL	LITHONIA WL2 18L EZ1 LP840	
H	8" CAN DOWNLIGHT	120	25	2572	4000K	OC	RECESSED	8'-0"	GRID	LITHONIA LBR8 20LM 40K AR WD	
I	BUILDING EXTERIOR	120	52	7753	4000K	PHOTOCELL	SURFACE	VARIES	WALL	LITHONIA WDGE3 LED P1 40K 80CRI R4 MVOLT SRM DDBXD	
J	AREA LIGHTING	120	486	57549	4000K	PHOTOCELL	SURFACE	VARIES	WALL	LITHONIA DSX2 LED P8 40K 70CRI TFTM MVOLT SPA DDBXD	
L	6" RECESSED CAN LIGHT SHOWER	120	20	1729	4000K	OC	RECESSED	8'-0"	GWB	GOTHAM EVO6SH 4000 20 DFFAMF SOL MVOLT	
X	COMBINATION EXIT EMERGENCY LIGHT	120	-	-	GREEN		SURFACE	7'-6"	WALL	LITHONIA LHQM LED G	
EM	BUG EYE EMERGENCY LIGHT	120	-	-	-		SURFACE	7'-6"	WALL	LITHONIA ELM4L	
ABBREVIATIONS:						GENERAL NOTES:					
GWB = GYPSUM WALL BOARD GRID = LAY-IN GRID STR = EXPOSED STRUCTURE						1. MOUNTING HEIGHTS SHOWN ARE TYPICAL FOR FIXTURE TYPE UNLESS OTHERWISE INDICATED ON THE PLANS. 2. FIXTURE TYPES INDICATED IN EACH ROOM ON THE PLANS ARE TYPICAL FOR ALL FIXTURES USING THE SAME SYMBOL IN THAT ROOM UNLESS OTHERWISE INDICATED.					

Stantec									
Name: MDP			Volts: 208Y/120V			Mains Type: MCB			Type:
Location: MECH 503			Phases: 3			Mains Rating: 400 A			AIC Rating: 22 kAIC
Supply From:			Wires: 4						Mounting: Surface
Serves:						Lugs:			Enclosure: Type 1
Notes:									
#	Description			Load	Trip	Poles	Type	Remarks	
1	5P			33181	150 A	3			
2	M			35243	225 A	3			
3	M2			38788	200 A	3			
4	GEN-PNL			15311	60 A	3			
5	PNL-301			4000	50 A	3			
6	PNL-401			3900	50 A	3			
7	PNL-601			7700	50 A	3			
8	Spare			0	100 A	3	--		
9									
10									
11									
12									
Total Conn. Load:				137.87 KVA					
Total Amps:				383 A					
Load Classification		Connected Load	Demand Factor	Estimated Demand		Panel Totals			
Electric Clothes Dryer		5000 VA	100.00%	5000 VA					
Electric Range - 3.5 kW to 8.75 kW		8000 VA	80.00%	6400 VA		Total Conn. Load: 137870 VA			
Equipment		15811 VA	100.00%	15811 VA		Total Est. Demand: 151926 VA			
HVAC		56309 VA	125.00%	70386 VA		Total Conn.: 383 A			
Heating		12020 VA	100.00%	12020 VA		Total Est. Demand: 422 A			
Kitchen Equipment - Non-Dwelling Unit		2000 VA	90.00%	1800 VA					
Lighting		4536 VA	125.00%	5670 VA					
Motor		7081 VA	108.78%	7702 VA					
Power		15600 VA	100.00%	15600 VA					
Receptacle		12000 VA	100.00%	12000 VA					
Computer		900 VA	100.00%	900 VA					
Fire Alarm Panel		300 VA	100.00%	300 VA					
Legend:									
CB = Circuit Breaker C = HACR Rated F = Fused Switch G = GFCI H = HID Rated M = Motor Circuit Protection S = Shunt Trip # = See Notes † = Existing Circuit ‡ = Revised Circuit									
Notes:									

CBA<<Pick location in Project Information>



2 **LCP PANELS**
5E-6 3/8" = 1'-0"

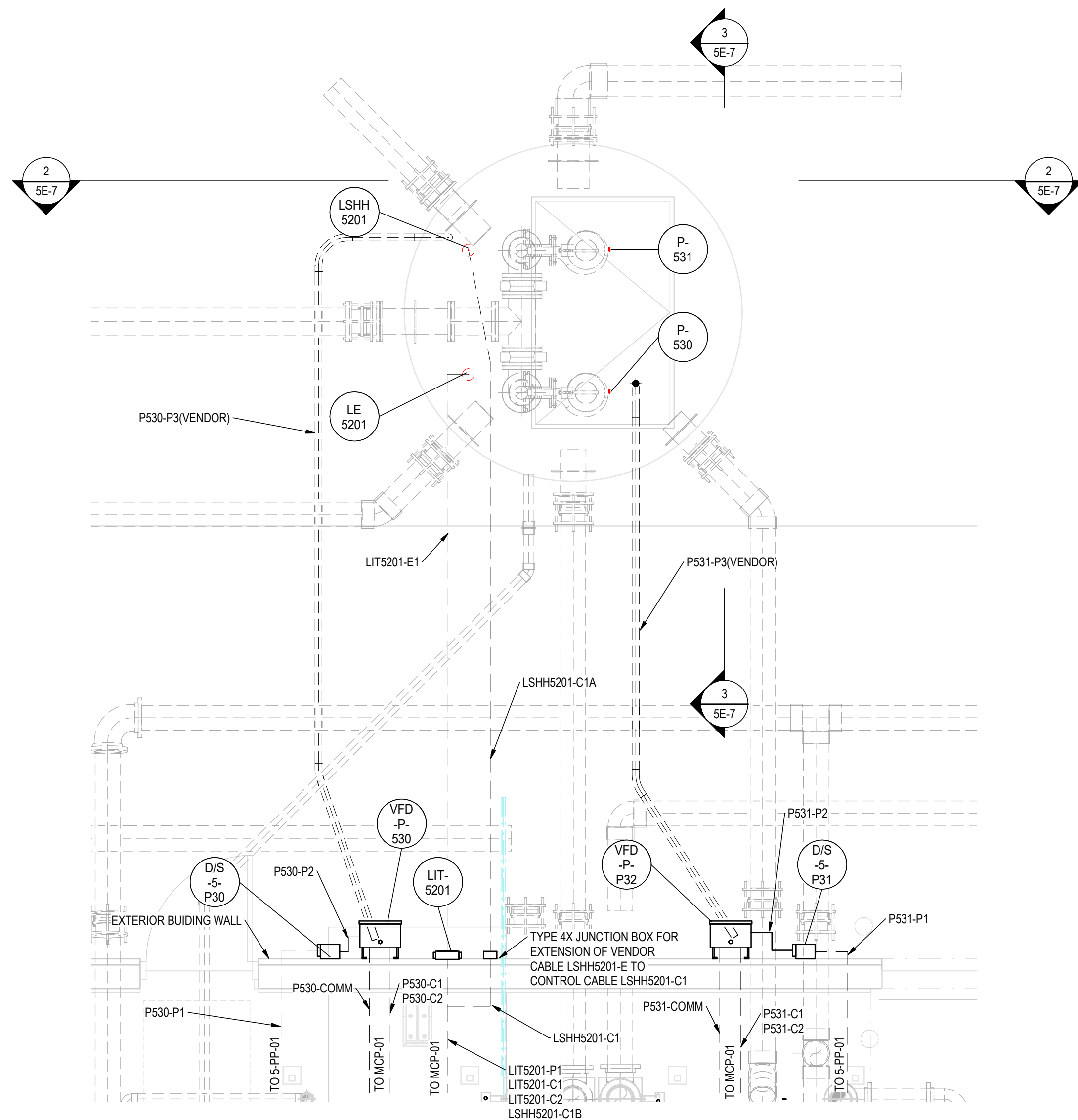
1 PLAN - PROCESS EQUIPMENT POWER

0 Revision By Appd YYYY.MM.DD				A 100% DESIGN Issued JM By JCD Appd 2025.01.14 YYYY.MM.DD				Permit/Seal  2/12/2025				Consultant  Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions, DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.				Client/Project Logo 				Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: N/A JM JSD JR 2024.12.27 Dwn. Dsgn. Chkd. YYYY.MM.DD				Title INCUBATION BUILDING ELECTRICAL PLAN & SECTIONS FOR PROCESS EQUIPMENT Project No. 224202267 Revision 0 Scale As indicated Drawing No. 5E-6			

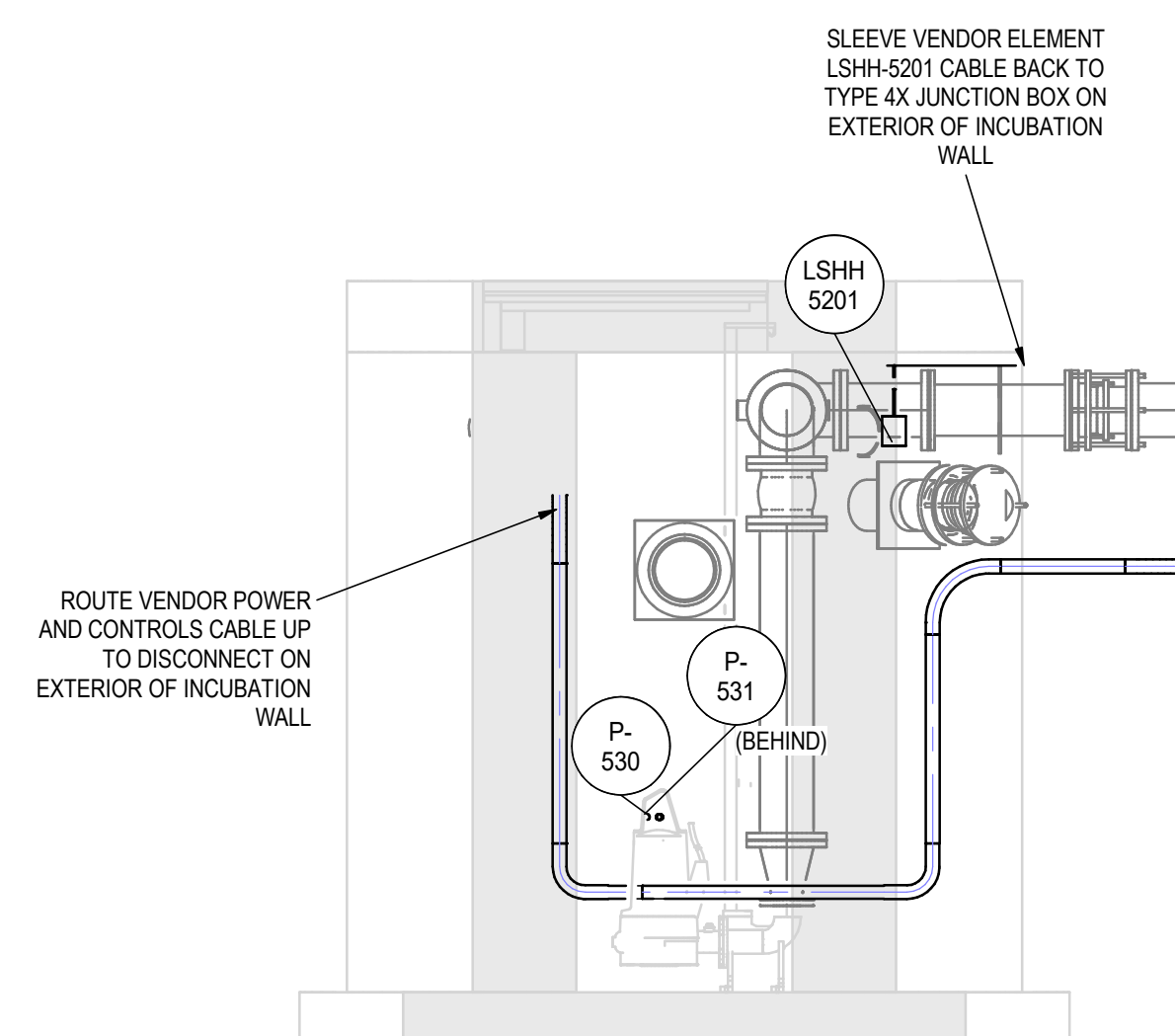
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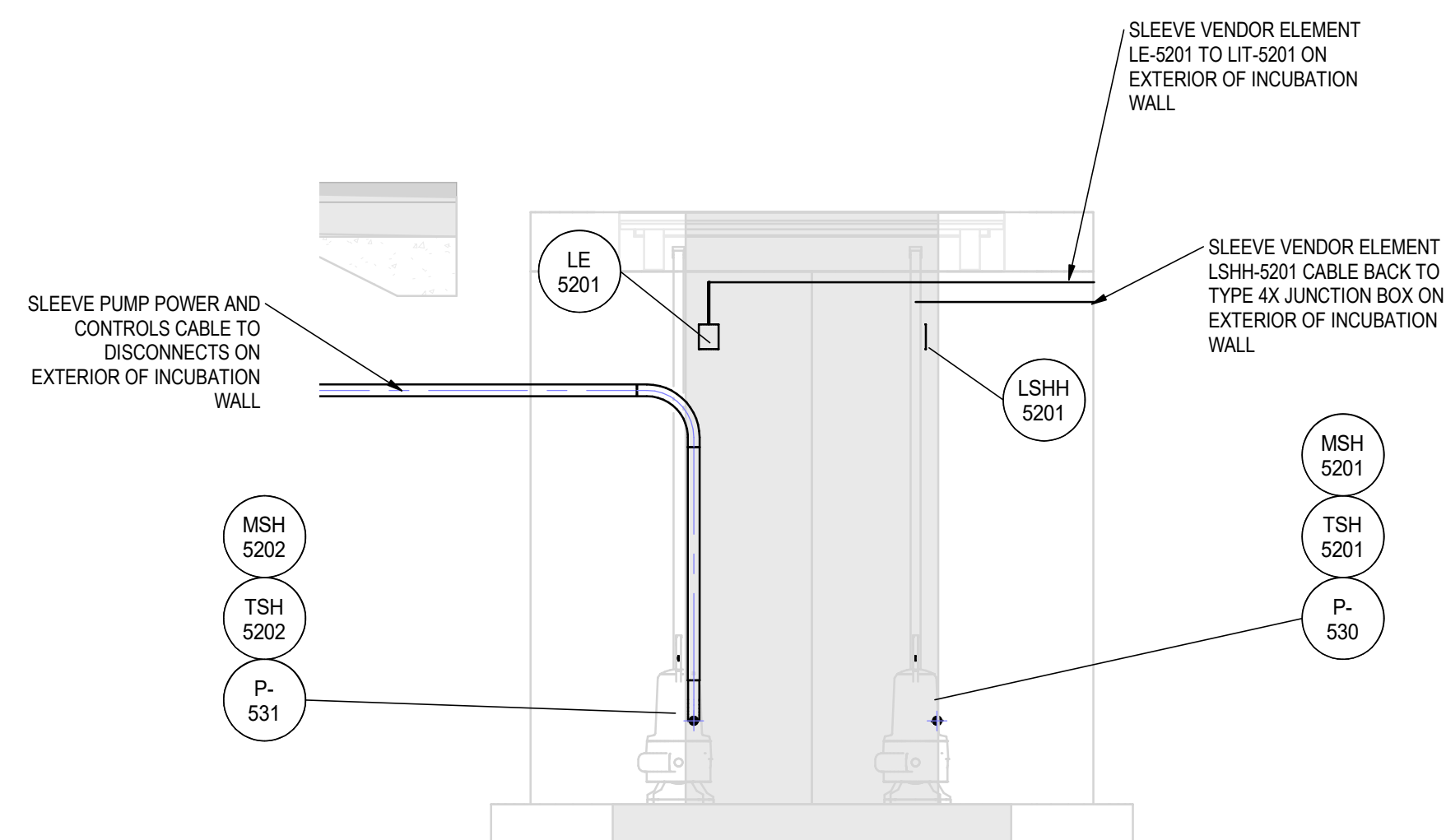
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1 PLAN - REUSE PUMP STATION
5E-7 3/8" = 1'-0"



2 **Section 2**
5E-7 $3/8" = 1'-0"$



3

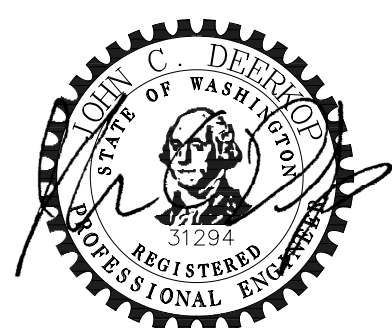
5E-7

Section 3

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

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BATTLE CREEK HATCHERY

File Name: N/A

— JM

JS

JR

2024.12.27

Title

INCUBATION BUILDING REUSE PUMP STATION ELECTRICAL PLAN & SECTIONS

Project No. _____

224202267

Revision

C

Scale
3/8" = 1'-0"

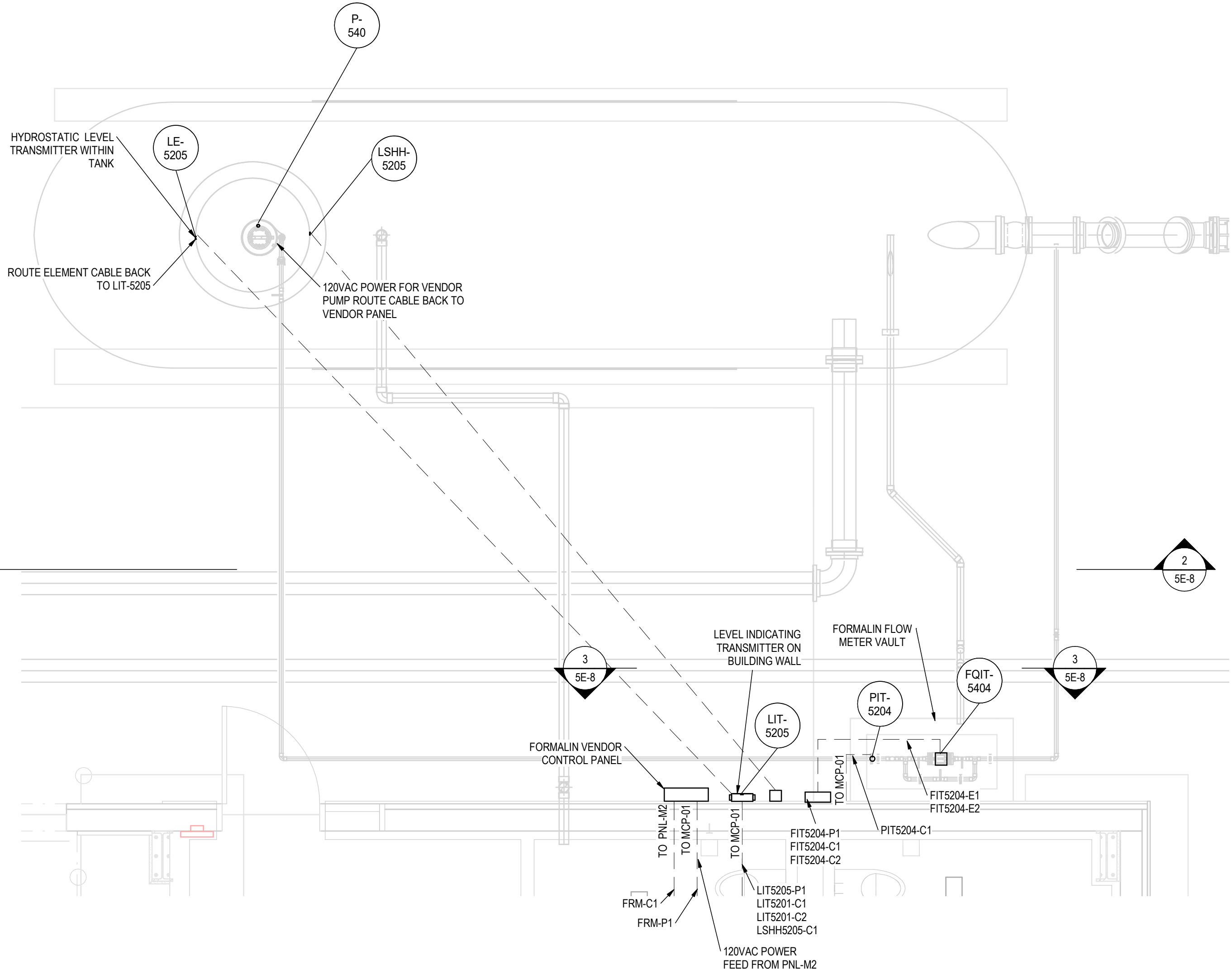
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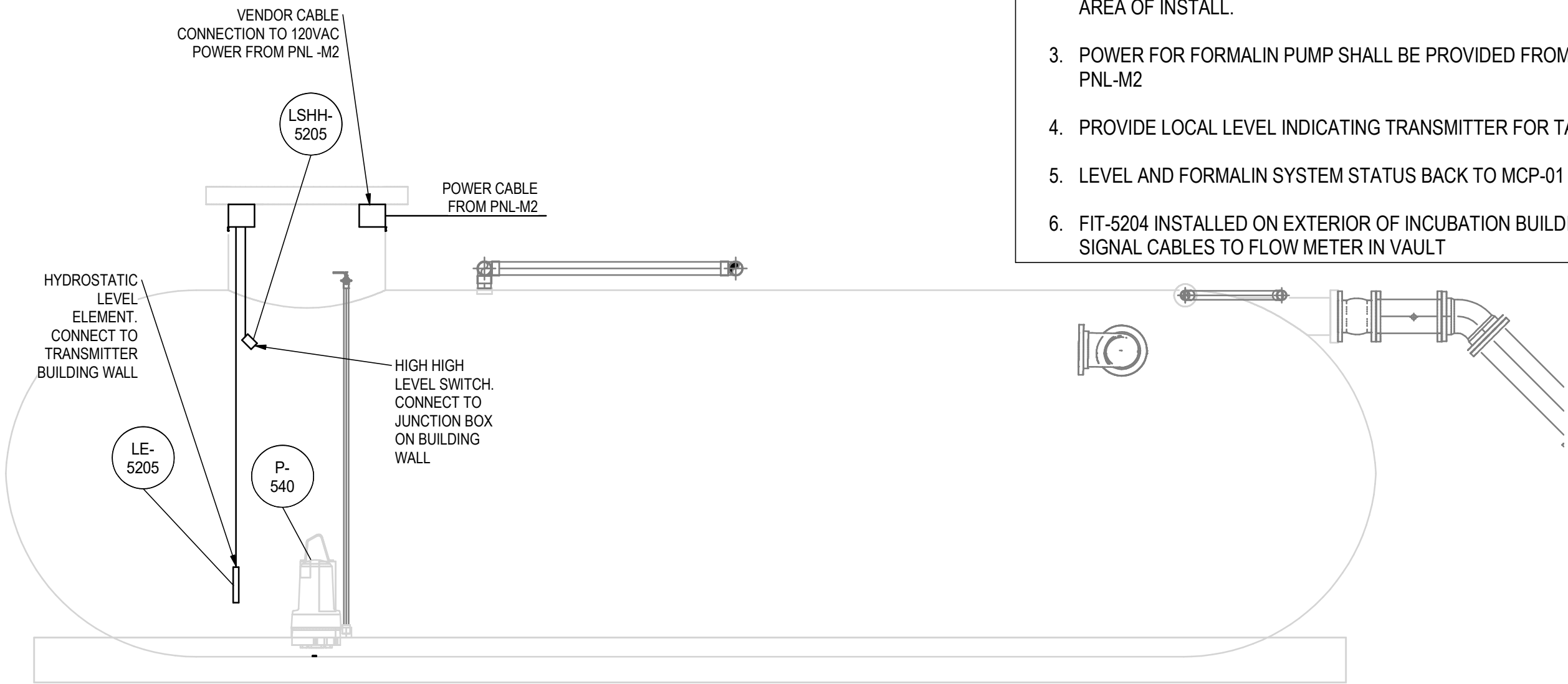


1

5E-8

PLAN - FORMALIN TANK

3/8" = 1'-0"

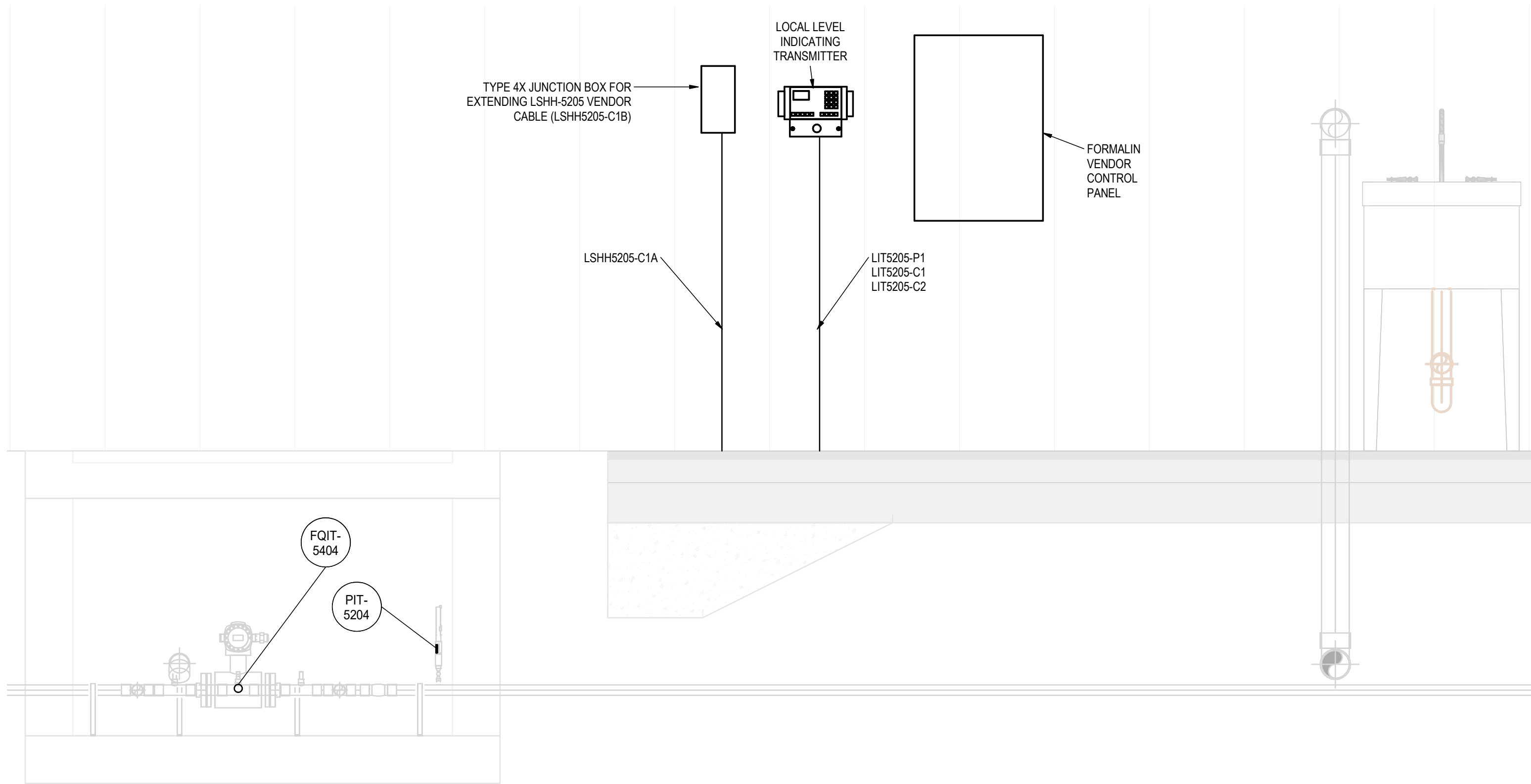


2

5E-8

SECTION - FORMALIN TANK

3/8" = 1'-0"



3

5E-8

SECTION - FORMALIN FLOW METER VAULT & BUILDING WALL

1" = 1'-0"

- GENERAL NOTES
1.

COORDINATE WITH FORMALIN TANK VENDOR FOR MOTOR CONNECTION AND LEVEL INSTRUMENTS TO FIELD WIRING. WIRING BOXES AND CONNECTIONS TO BE RATED FOR THE AREA OF INSTALL.
2.

ALL EQUIPMENT INSTALLED IN THE FORMALIN TANK SHALL BE RATED FOR THE AREA OF INSTALL.
3.

POWER FOR FORMALIN PUMP SHALL BE PROVIDED FROM THE 102/208VAC PNL-M2
4.

PROVIDE LOCAL LEVEL INDICATING TRANSMITTER FOR TANK LEVEL.
5.

LEVEL AND FORMALIN SYSTEM STATUS BACK TO MCP-01
6.

FIT-5204 INSTALLED ON EXTERIOR OF INCUBATION BUILDING. CONNECT VENDOR SIGNAL CABLES TO FLOW METER IN VAULT

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Revision

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JM JCD 2025.01.14
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BATTLE CREEK HATCHERY

File Name: N/A

JM JS JR 2024.12.27
Dwn. Dsgn. Chkd. YYYY.MM.DD

Title

INCUBATION BUILDING FORMALIN
METERING TANK ELECTRICAL PLAN &
SECTION

Project No.

224202267

Revision

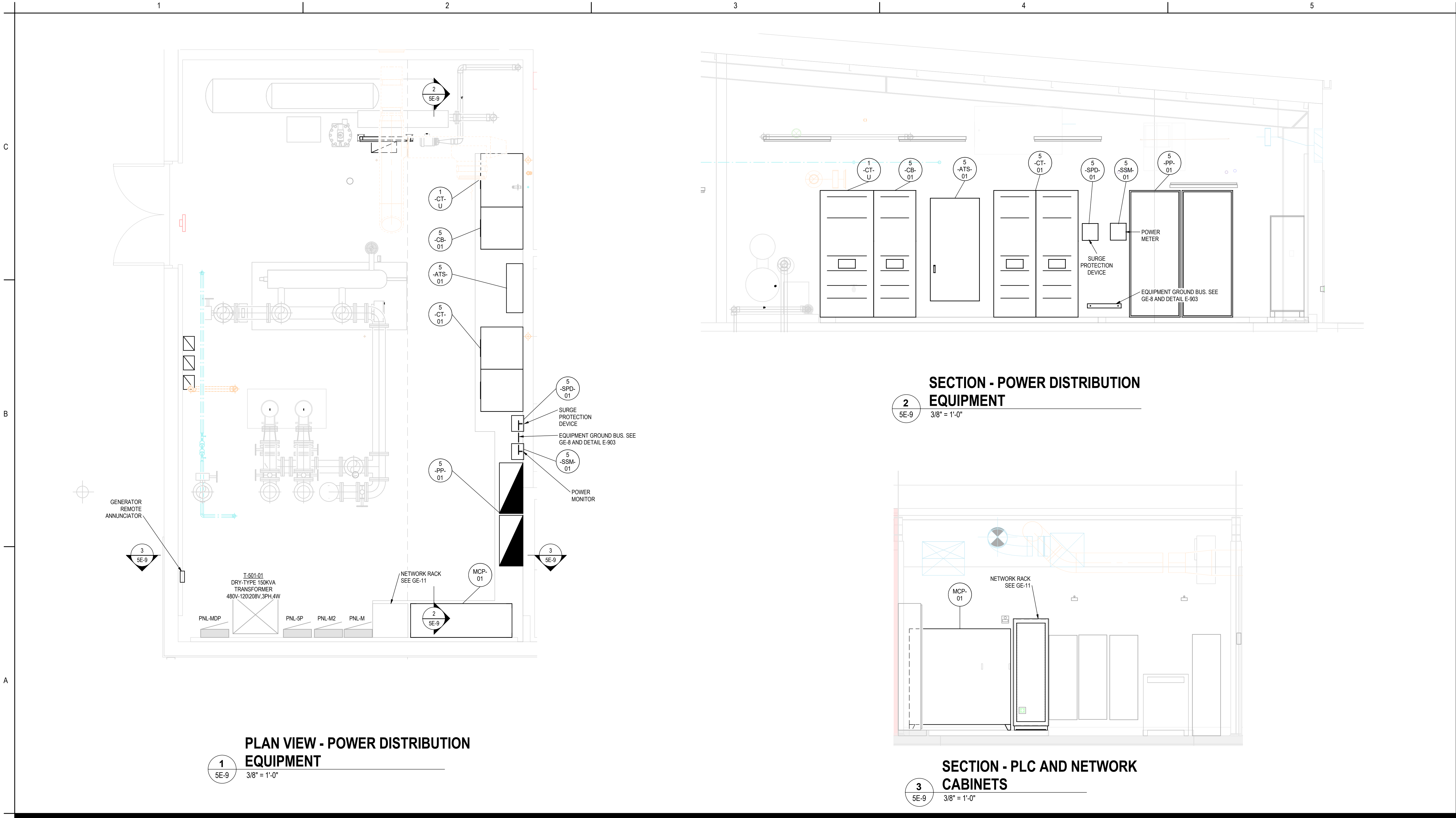
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Scale

As indicated

Drawing No.

5E-8



1
5E-9
3/8" = 1'-0"

PLAN VIEW - POWER DISTRIBUTION EQUIPMENT

2
5E-9
3/8" = 1'-0"

SECTION - POWER DISTRIBUTION EQUIPMENT

3
5E-9
3/8" = 1'-0"

SECTION - PLC AND NETWORK CABINETS

Revisions <table><thead><tr><th>Revision</th><th>By</th><th>Appd</th><th>YYYY.MM.DD</th></tr></thead><tbody><tr><td>0</td><td></td><td></td><td></td></tr></tbody></table>	Revision	By	Appd	YYYY.MM.DD	0				Revisions <table><thead><tr><th>Revision</th><th>By</th><th>Appd</th><th>YYYY.MM.DD</th></tr></thead><tbody><tr><td>0</td><td></td><td></td><td></td></tr></tbody></table>	Revision	By	Appd	YYYY.MM.DD	0				Permit/Seal 2/12/2025	Consultant	Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Logo	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: N/A JM JS JR 2024.12.27 Dwn. Dsgn. Chkd. YYYY.MM.DD	Title INCUBATION BUILDING - POWER DISTRIBUTION EQUIPMENT LAYOUT Project No. 224202267 Revision 0 Scale 3/8" = 1'-0" Drawing No. 5E-9
Revision	By	Appd	YYYY.MM.DD																				
0																							
Revision	By	Appd	YYYY.MM.DD																				
0																							

C

AREA #5 INCUBATION														
DEVICE GROUP	CABLE/CONDUIT TAG (INDIVIDUAL)	APPLICATION	VOLTS	CONDUIT TYPE	RUN			CONDUCTORS				CONDUIT	SIZE	COMMENTS
					FROM	VIA	TO	WIRE COUNT	WIRE SIZE (CU.)	SPARE	GROUND/ BOND/SHLD			
PNLM	PNLM-P1	POWER	208VAC	PVC, GRC	PNL-MDP	U/G, S	PNLM	4C	#4/0AWG	-	#4AWG	2 1/2"		
PNLM2	PNLM2-P1	POWER	208VAC	PVC, GRC	PNL-MDP	U/G, S	PNLM2	4C	#1AWG	-	#6AWG	2"		
PNL-5P	PNL5P-P1	POWER	208VAC	PVC, GRC	PNL-MDP	U/G, S	PNL-5P	4C	#1AWG	-	#6AWG	2"		
5-SPD-01	5SPD01-P1	POWER	480VAC	PVC, GRC	5-PP-01	S	5-SPD-01	4C	#4AWG	1C	#6AWG	1 1/2"		
PNLM-MDP	PNLMMDP-P1	POWER	480VAC	PVC, GRC	5-PP-01	U/G, S	T-501-01	3C	#4/0AWG	-	#4AWG	2 1/2"		
PNLM-MDP	PNLMMDP-P2	POWER	208VAC	PVC, GRC	T-501-01	U/G, S	PNLM-MDP	4C	300kcmlil	-	#4AWG	3"		
PNLM-MDP	PNLMMDP-P3	POWER	208VAC	PVC, GRC	T-501-01	U/G, S	PNLM-MDP	4C	300kcmlil	-	#4AWG	3"		
P-530 SUBMERSIBLE REUSE PUMP	P530-C1	CONTROLS	24VDC	PVC, GRC	VFD-P-530	U/G, S	MCP-01	14C	#14AWG	2C	#14AWG	1"		BUNDLED DIGITAL SIGNALS
	P530-C2	CONTROLS	24VDC	PVC, GRC	VFD-P-530	U/G, S	MCP-01	2PR	#16AWG	-	#14AWG	1"		BINDLED ANALOG SIGNALS
	P530-COMM	COMMS	-	PVC, GRC	VFD-P-530	S	MCP-01	CAT6	-	-	-	3/4"		
	P530-P1	POWER	480VAC	PVC, GRC	5-PP-01	U/G, S	P-530-D/S	3C	#8AWG	-	#10AWG	1"		
	P530-P2	POWER	480VAC	PVC, GRC	P-530-D/S	S	VFD-P-510	3C	#8AWG	-	#10AWG	1"		
	P530-P3	POWER	480VAC	PVC, GRC	VFD-P-530	U/G, S	P-530	VENDOR						
P-531 SUBMERSIBLE REUSE PUMP	P531-C1	CONTROLS	24VDC	PVC, GRC	VFD-P-531	U/G, S	MCP-01	14C	#14AWG	2C	#14AWG	1"		BUNDLED DIGITAL SIGNALS
	P531-C2	CONTROLS	24VDC	PVC, GRC	VFD-P-531	U/G, S	MCP-01	2PR	#16AWG	-	#14AWG	1"		BINDLED ANALOG SIGNALS
	P531-COMM	COMMS	-	PVC, GRC	VFD-P-531	S	MCP-01	CAT6	-	-	-	3/4"		
	P531-P1	POWER	480VAC	PVC, GRC	5-PP-01	U/G, S	P-531-D/S	4C	#8AWG	-	#10AWG	1"		
	P531-P2	POWER	480VAC	PVC, GRC	P-531-D/S	S	VFD-P-511	4C	#8AWG	-	#10AWG	1"		
	P531-P3	POWER	480VAC	PVC, GRC	VFD-P-531	U/G, S	P-531-D/S	VENDOR						
UV-510 ELECTRICAL CABINET UV PANEL	UV510-C1	CONTROL	24VDC	PVC, GRC	CP-UV-510	S	MCP-01	8C	#14AWG	2C	#14AWG	1"		BUNDLED DIGITAL SIGNALS
	UV510-C2	CONTROL	24VDC	PVC, GRC	CP-UV-510	S	MCP-01	2PR	#16AWG	-	#14AWG	3/4"		BUNDLED ANALOG SIGNALS
	UV510-C3	CONTROL	24VDC	PVC, GRC	CP-UV-510	S	UV-510	VENDOR						UV CONTROL (VENDOR)
	UV510-P1	POWER	480VAC	PVC, GRC	4-PP-01	S	CP-UV-510	4C	#6AWG	-	#8AWG	1 1/2"		
	UV510-P2	POWER	480VAC	PVC, GRC	CP-UV-510	S	UV LAMPS	VENDOR						UV LAMPS (POWER)
	UV510-COMM1	COMMS	-	PVC, GRC	CP-UV-510	U/G, S	MCP-01	CAT6	-	-	-	3/4"		
UV-511 ELECTRICAL CABINET UV PANEL	UV511-C1	CONTROL	24VDC	PVC, GRC	CP-UV-511	S	MCP-01	8C	#14AWG	2C	#14AWG	1"		BUNDLED DIGITAL SIGNALS
	UV511-C2	CONTROL	24VDC	PVC, GRC	CP-UV-511	S	MCP-01	2PR	#16AWG	-	#14AWG	3/4"		BUNDLED ANALOG SIGNALS
	UV511-C3	CONTROL	24VDC	PVC, GRC	CP-UV-511	S	UV-511	VENDOR						UV CONTROL (VENDOR)
	UV511-P1	POWER	480VAC	PVC, GRC	4-PP-01	S	CP-UV-511	4C	#6AWG	-	#8AWG	1 1/2"		
	UV511-P2	POWER	480VAC	PVC, GRC	CP-UV-511	S	UV LAMPS	VENDOR						UV LAMPS (POWER)
	UV511-COMM1	COMMS	-	PVC, GRC	CP-UV-511	U/G, S	MCP-01	CAT6	-	-	-	3/4"		
SF-510 SCREEN FILTER ASSEMBLY	SFVCP-C1	CONTROLS	24VDC	PVC, GRC	VFD-SF-510	U/G, S	MCP-01	20C	#14AWG	2C	#14AWG	1 1/2"		
	SFVCP-P1	POWER	480VAC	PVC, GRC	VFD-SF-510	U/G, S	5-PP-01	4C	?	?	?	?		
	FQIT5403-C1	CONTROLS	24VDC	PVC, GRC	FQIT-5403	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL PULSE
FQIT-5403	FQIT5403-C2	CONTROLS	24VDC	PVC, GRC	FQIT-5403	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	FQIT5403-P1	POWER	24VDC	PVC, GRC	FQIT-5403	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
	PRV510-P1	POWER	120VAC	PVC, GRC	CP-PRV510	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		CONTROL PANEL/SOLENOID PANEL
CP-PRV-510	PRV510-C1	CONTROLS	24VDC	PVC, GRC	CP-PRV510	S	MCP-01	4PR	#16AWG	1PR	#14AWG	3/4"		VALVE POSITION INDICATION, POSITION COMMAND, FAULT
	PRV510-C2	CONTROLS	24VDC	PVC, GRC	PRV-510	S	CP-PRV510	1PR	#16AWG	-	#14AWG	3/4"		VALVE POSITION INDICATION
	PRV510-P2	POWER	120VAC	PVC, GRC	CP-PRV510	S	PRV-SOL1	2C	#14AWG	-	#14AWG	3/4"		
	PRV510-P3	POWER	120VAC	PVC, GRC	CP-PRV510	S	PRV-SOL2	2C	#14AWG	-	#14AWG	3/4"		

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DEVICE GROUP	CABLE/CONDUIT TAG (INDIVIDUAL)	APPLICATION	VOLTS	CONDUIT TYPE	RUN			CONDUCTORS				CONDUIT	SIZE	COMMENTS
					FROM	VIA	TO	WIRE COUNT	WIRE SIZE (CU.)	SPARE	GROUND/ BOND/SHLD			
TIT-5404	TIT5404-C1	CONTROLS	24VDC	PVC, GRC	TIT-5404	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
PIT-5401	PIT5401-C1	CONTROLS	24VDC	PVC, GRC	PIT-5401	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
PIT-5402	PIT5402-C1	CONTROLS	24VDC	PVC, GRC	PIT-5402	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
5-CHS-110 CHILLER	5CHS110-C1	CONTROLS	24VDC	PVC, GRC	5-CHS-110	U/G, S	MCP-01	10C	#14AWG	2C	#14AWG	1 1/2"		
LSHH-5201	LSHH5201-C1	COMMS	24VDC	PVC, GRC	5-CHS-110	U/G, S	MCP-01	CAT6	-	-	-	3/4"		
LSLL-5101	LSHH5101-C1	CONTROLS	24VDC	PVC, GRC	LSHH-5201	U/G, S	MCP-01	VENDOR						
LIT-5201	LIT5201-C1	CONTROLS	24VDC	PVC, GRC	LIT-5201	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	LIT5201-C2	CONTROLS	24VDC	PVC, GRC	LIT-5201	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL SIGNAL
	LIT5201-E1	CONTROLS	-	PVC, GRC	LIT-5201	U/G, S	LE-5201	VENDOR						
	LIT5201-P1	POWER	24VDC	PVC, GRC	LIT-5201	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
LIT-5204	LIT5204-C1	CONTROLS	24VDC	PVC, GRC	LIT-5204	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	LIT5204-C2	CONTROLS	24VDC	PVC, GRC	LIT-5204	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL SIGNAL
	LIT5204-E1	CONTROLS	-	PVC, GRC	LIT-5204	U/G, S	LE-5204	VENDOR						
	LIT5204-P1	POWER	24VDC	PVC, GRC	LIT-5204	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
LSHH-5204	LSHH5204-C1	CONTROLS	24VDC	PVC, GRC	LSHH-5204	U/G, S	MCP-01	VENDOR						
P520 FORMALIN DILUTION PUMP	P520-C1	CONTROLS	24VDC	PVC, GRC	VFD-P-520	U/G, S	MCP-01	14C	#14AWG	2C	#14AWG	1"		BUNDLED DIGITAL SIGNALS
	P520-C2	CONTROLS	24VDC	PVC, GRC	VFD-P-520	U/G, S	MCP-01	2PR	#16AWG	-	#14AWG	1"		BINDLED ANALOG SIGNALS
	P520-P1	POWER	120VAC	PVC, GRC	PNL-M2	U/G, S	VFD-P-520	2C	#14AWG	-	#14AWG	3/4"		
PIT-5204	P520-P2	POWER	120VAC	PVC, GRC	VFD-P-520	U/G, S	P-520	VENDOR						
	PIT5204-C1	CONTROLS	24VDC	PVC, GRC	PIT-5204	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
PIT-5402	PIT5402-C1	CONTROLS	24VDC	PVC, GRC	PIT-5402	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
FQIT-5404	FQIT5404-C1	CONTROLS	24VDC	PVC, GRC	FQIT-5404	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL PULSE
	FQIT5404-C2	CONTROLS	24VDC	PVC, GRC	FQIT-5404	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	FQIT5404-P1	POWER	24VDC	PVC, GRC	FQIT-5404	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
FQIT-5102	FQIT5102-C1	CONTROLS	24VDC	PVC, GRC	FQIT-5102	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL PULSE
	FQIT5102-C2	CONTROLS	24VDC	PVC, GRC	FQIT-5102	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	FQIT5102-P1	POWER	24VDC	PVC, GRC	FQIT-5102	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
FQIT-5101	FQIT5101-C1	CONTROLS	24VDC	PVC, GRC	FQIT-5101	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		DIGITAL PULSE
	FQIT5101-C2	CONTROLS	24VDC	PVC, GRC	FQIT-5101	U/G, S	MCP-01	1PR	#16AWG	-	#14AWG	3/4"		ANALOG SIGNAL
	FQIT5101-P1	POWER	24VDC	PVC, GRC	FQIT-5101	U/G, S	MCP-01	2C	#14AWG	-	#14AWG	3/4"		
SOV-5501	SOV5501-C1	CONTROLS	24VDC	PVC, GRC	SOV-5501	U/G, S	LCP-500	4C	#14AWG	-	#14AWG	3/4"		DIGITAL SIGNALS
	SOV5501-P1	POWER	120VAC	PVC, GRC	SOV-5501	U/G, S	LCP-500	4C	#12AWG	-	#14AWG	3/4"		
WH-1 DOMESTIC WATER HEATER	WH1-P1	POWER	480VAC	PVC, GRC	5-PP-01	S	WH-1	4C	#8AWG	-	#10AWG	2"		
	ATS02-COMM	COMMS	-	PVC, GRC	1-ATS-02	S	MCP-01	CAT6	-	-	-	3/4"		
AREA #5 MASTER CONTROL PANEL (MCP-01)	C500-COM	COMMS	-	-	MCP-01	S	NETWORK PANEL	CAT6	-	-	-	3/4"		ETHERNET
	MCP01-P1	POWER	120VAC	-	PNLM-5P	S	MCP-01	2C	#12AWG	-	#14AWG	3/4"		MCP PANEL POWER
	MCP01-P2	POWER	120VAC	-	PNLM-5P	S	MCP-01	2C	#12AWG	-	#14AWG	3/4"		MCP PANEL HEATER POWER

NOTES	1	CABLE AND CONDUIT SCHEDULE SHOWS INDIVIDUAL RUNS TO CONVEY DESIGN INTENT. WHERE ACCEPTABLE IN N.E.C., CONTRACTOR PERMITTED TO REDUCE THE NUMBER OF CONDUIT RUNS
	2	DO NOT COMBINE PARALLEL RUNS IN A SINGLE CONDUIT RUN.
	3	UNDER THE 'VIA' HEADING IN THE TABLE FOR CONDUIT ROUTING, ALL UNDERGROUND CONDUIT RUNS TO BE PVC. EXIT ABOVE GRADE WITH GRC. SURFACE CONDUIT TO BE GRC.
	4	WHERE CONDUITS ARE DENOTED AS SURFACE INSTALLATION, CONTRACTOR MAY RUN CONDUITS UNDERGROUND OR IN-SLAB WHERE ACCEPTABLE
LEGEND		
U/G UNDERGROUND CONDUIT INSTALLATION		
S SURFACE CONDUIT INSTALLATION		
PVC POLYVINYL CHLORIDE		
GRC GALVANIZED RIGID CONDUIT		

AREA 5 - CABLE AND CONDUIT SCHEDULE

SCALE: NTS

Revision By Appd YYYY-MM-DD	Permit/Seal  2/12/2025	Consultant	Client/Project Logo 	Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY	Title INCUBATION BUILDING ELECTRICAL CABLE AND CONDUIT SCHEDULE Project No. 224202267 Revision 0	Scale AS NOTED Drawing No. 5E-10
	A 100% DESIGN JM JCD 2025.01.14 Issued By Appd YYYY-MM-DD		Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT			

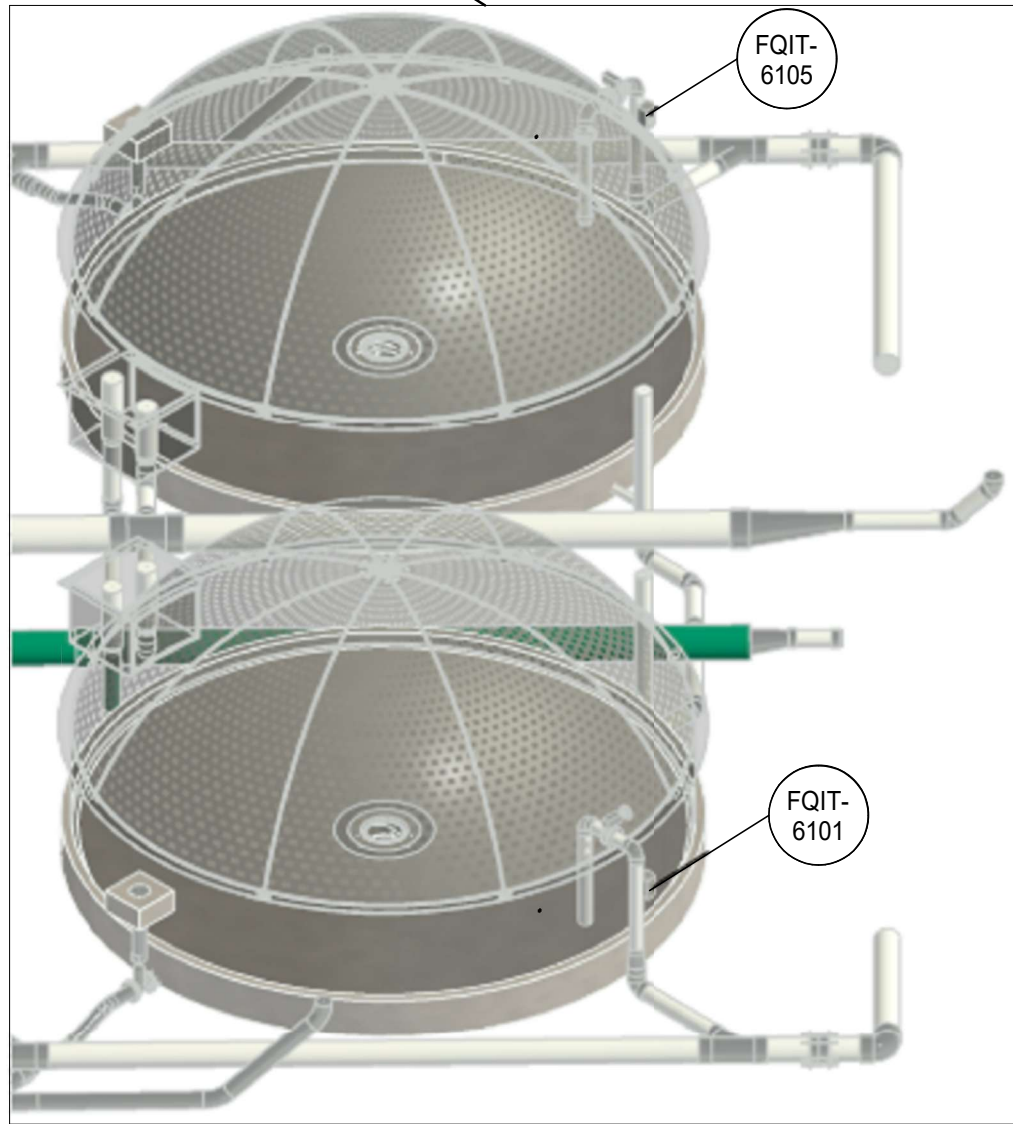
CBA

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6E-3

GENERAL NOTES
1. FLOW METER TO BE ULTRASONIC CLAMP ON STYLE. CONFIRM EXACT PLACEMENT ON SITE. 2. ROUTE POWER AND CONTROLS UNDERGROUND FROM LC-600 TO TANK FLOW METERS. COORDINATE UNDERGROUND CONDUIT ROUTING ON SITE FOR FLOW METERS.



				Permit/Seal  4/20/2026				Consultant  Stantec Consulting Services Inc. 2353 130th Avenue NE Suite 200 Bellevue, 98005-1759 Tel: (425) 896-6900 • www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing. Any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.				Client/Project Logo 				Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: N/A JMJAJR2026.04.17 Dwn.Dsgn.Chkd.YYYY.MM.DD				Title REARING TANKS ELECTRICAL AND PROCESS PLAN Project No. 224202267 Scale 1/8" = 1'-0" Revision 0 Drawing No. 6E-3			
0 Revision By Appd YYYY.MM.DD				A FINAL DESIGN ISSUED JMJCD2026.04.17 By Appd YYYY.MM.DD																			

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AREA #6 REARING TANKS														
DEVICE GROUP	CABLE/CONDUIT TAG (INDIVIDUAL)	APPLICATION	VOLTS	CONDUIT TYPE	RUN			CONDUCTORS				CONDUIT	COMMENTS	
					FROM	VIA	TO	WIRE COUNT	WIRE SIZE (CU.)	SPARE	GROUND/ BOND/SHLD	TYPE		
FQIT-6101	FQIT6101-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6101	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6101-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6101	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6101-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6101	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6102	FQIT6102-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6102	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6102-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6102	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6102-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6102	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6103	FQIT6103-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6103	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6103-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6103	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6103-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6103	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6104	FQIT6104-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6104	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6104-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6104	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6104-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6104	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6105	FQIT6105-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6105	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6105-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6105	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6105-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6105	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6106	FQIT6106-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6106	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6106-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6106	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6106-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6106	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6107	FQIT6107-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6107	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6107-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6107	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6107-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6107	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6108	FQIT6108-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6108	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6108-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6108	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6108-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6108	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6109	FQIT6109-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6109	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6109-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6109	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6109-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6109	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
FQIT-6110	FQIT6110-C1	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6110	2C	#14AWG	-	#14AWG	3/4"	DIGITAL PULSE	
	FQIT6110-C2	CONTROLS	24VDC	PVC,GRC	LCP-600	U/G,S	FQIT-6110	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL	
	FQIT6110-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	FQIT-6110	2C	#14AWG	-	#14AWG	3/4"	FLOW METER POWER	
LCP-600	C601-COM	COMMS	-	PVC,GRC	LCP-600	U/G,S	MCP-01	FIBER	-	-	-	3/4"		
	LCP601-P1	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	PNL-601	2C	#12AWG	-	#14AWG	3/4"		
PNL601	LCP601-P2	POWER	120VAC	PVC,GRC	LCP-600	U/G,S	PNL-601	2C	#12AWG	-	#14AWG	3/4"		
	PNL601-P1	POWER	120/208V	PVC,GRC	PNL-MDP	U/G,S	PNL-601	4C	#2AWG	-	#4AWG	2"	FEEDER FROM INCUBATION BUILDING	
NOTES														
1 CABLE AND CONDUIT SCHEDULE SHOWS INDIVIDUAL RUNS TO CONVEY DESIGN INTENT. WHERE ACCEPTABLE IN N.E.C, CONTRACTOR PERMITTED TO REDUCE THE NUMBER OF CONDUIT RUNS BY COMBINING LIKE SIGNALS AND CABLES .														
2 DO NOT COMBINE PARALLEL RUNS IN A SINGLE CONDUIT RUN.														
3 UNDER THE 'VIA' HEADING IN THE TABLE FOR CONDUIT ROUTING, ALL UNDERGROUND CONDUIT RUNS TO BE PVC. EXIT ABOVE GRADE WITH GRC. SURFACE CONDUIT TO BE GRC.														
4 WHERE CONDUITS ARE DENOTED AS SURFACE INSTALLATION, CONTRACTOR MAY RUN CONDUITS UNDERGROUND OR IN-SLAB WHERE ACCEPTABLE														
LEGEND														
U/G UNDERGROUND CONDUIT INSTALLATION														
S SURFACE CONDUIT INSTALLATION														
PVC POLYVINYL CHLORIDE														
GRC GALVANIZED RIGID CONDUIT														

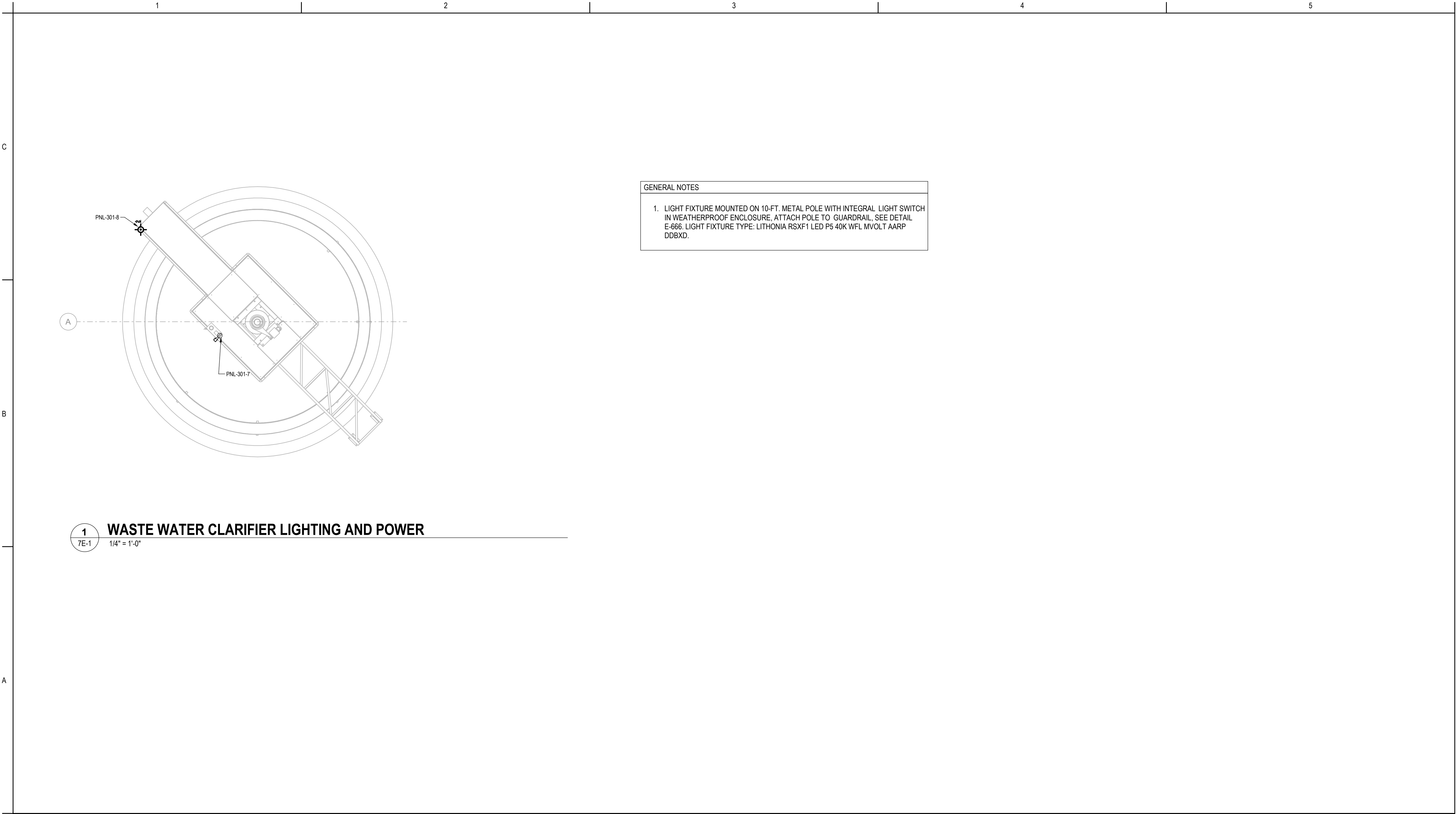
AREA 6 - CABLE AND CONDUIT SCHEDULE

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Revision By Appd YYYY.MM.DD				Permit/Seal  2/12/2025				Consultant  Stantec Consulting Services Inc 1687 114th Ave SE, Suite 100 Bellevue, WA 98004 Tel: (425) 896-6900 www.stantec.com Copyright Reserved The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.				Client/Project Logo 				Client/Project TULALIP TRIBES BATTLE CREEK HATCHERY File Name: 02267BCH-6E-4 STN Dwn. DESJ Dsgn. CHRS Chkd. 2024.12.27 YYYY.MM.DD				Title REARING TANKS ELECTRICAL CABLE AND CONDUIT SCHEDULE Project No. 224202267 Revision 0 Scale AS NOTED Drawing No. 6E-4			

ORIGINAL SHEET - ANSI D



- GENERAL NOTES
1.

LIGHT FIXTURE MOUNTED ON 10-FT. METAL POLE WITH INTEGRAL LIGHT SWITCH IN WEATHERPROOF ENCLOSURE, ATTACH POLE TO GUARDRAIL, SEE DETAIL E-666. LIGHT FIXTURE TYPE: LITHONIA RSXF1 LED P5 40K WFL MVOLT AARP DDBXD.

1

7E-1

WASTE WATER CLARIFIER LIGHTING AND POWER

1/4" = 1'-0"

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Client/Project Logo



Client/Project

TULALIP TRIBES

BATTLE CREEK HATCHERY

PROJECT ADDRESS

File Name: N/A

CLR

CLR

LPS

09/05/24

Dwn.

Dsgn.

Chkd.

YYYY.MM.DD

Title

WASTE WATER CLARIFIER ELECTRICAL LIGHTING AND POWER PLAN

Project No.
224202267

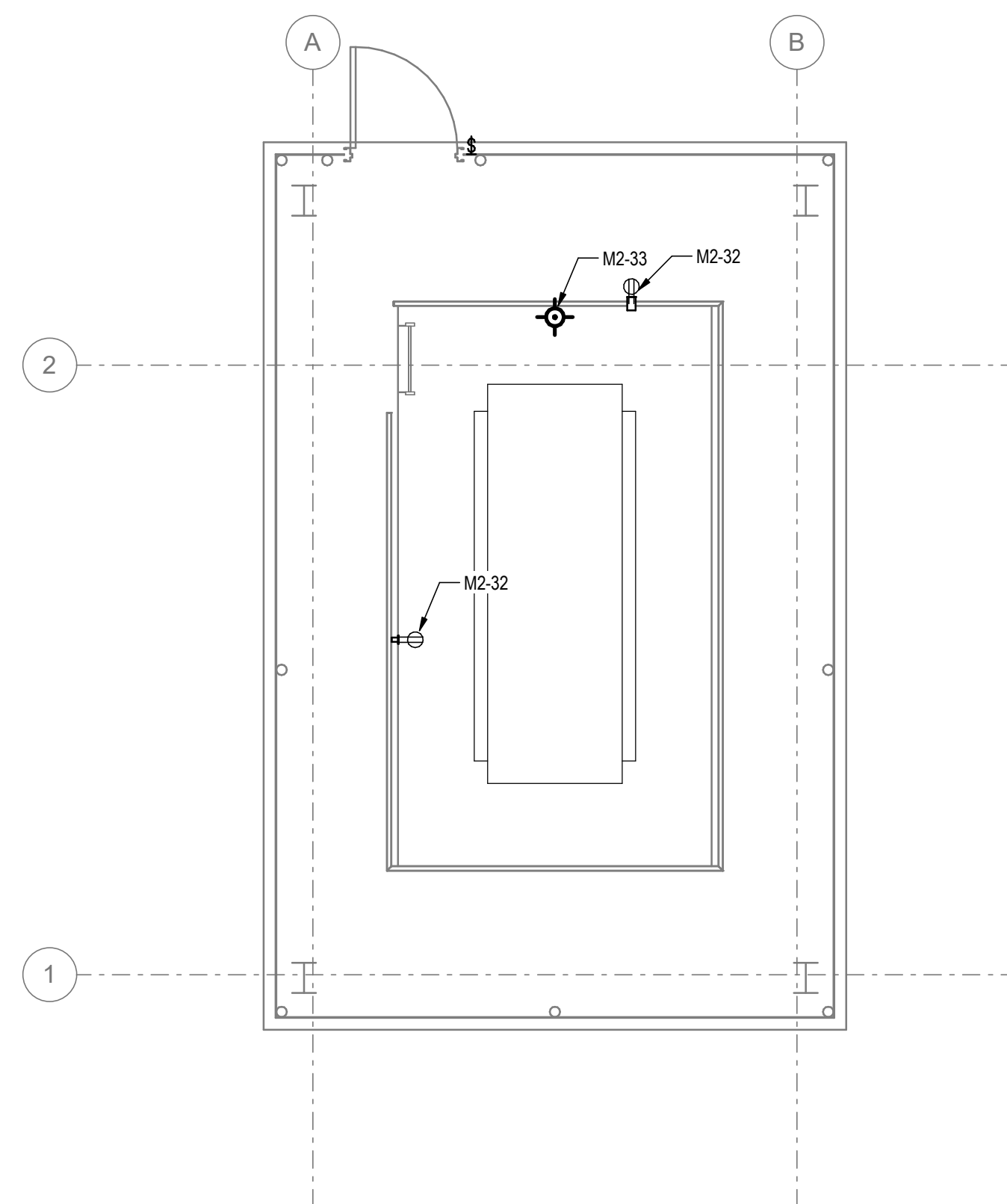
Revision
0

Scale
1/4" = 1'-0"

Drawing No.
7E-1

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ORIGINAL SHEET - ANSI D



GENERAL NOTES

1. LIGHT FIXTURE MOUNTED ON 10-FT. METAL POLE WITH INTEGRAL LIGHT SWITCH IN WEATHERPROOF ENCLOSURE, ATTACH POLE TO GUARDRAIL, SEE DETAIL E-666. LIGHT FIXTURE TYPE: LITHONIA RSXF1 LED P5 40K WFL MVOLT AARP DDBXD.

1 EFFLUENT DRUM FILTER SUMP LIGHTING AND POWER PLAN

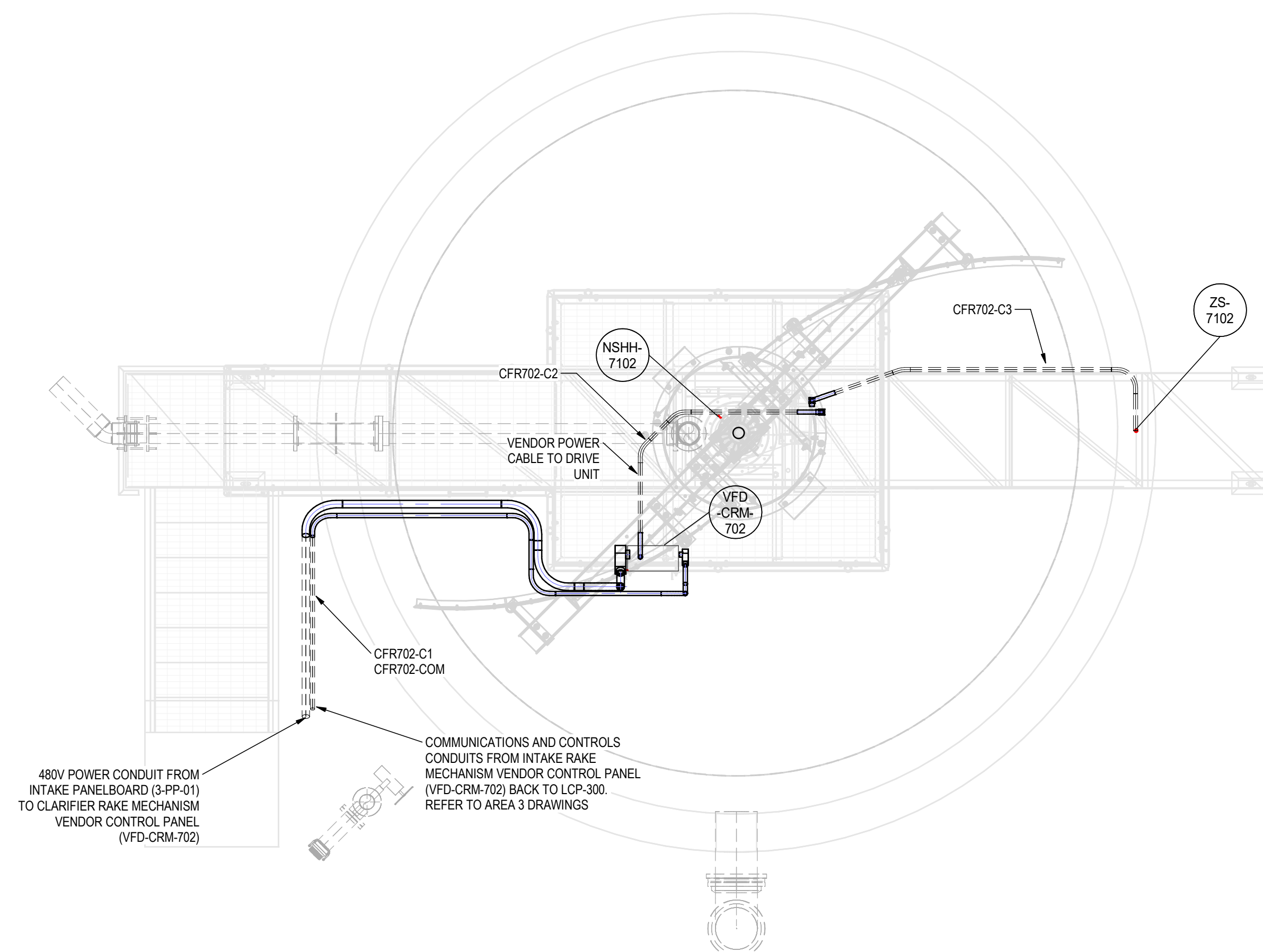
7E-2

$1/4'' = 1'-0''$

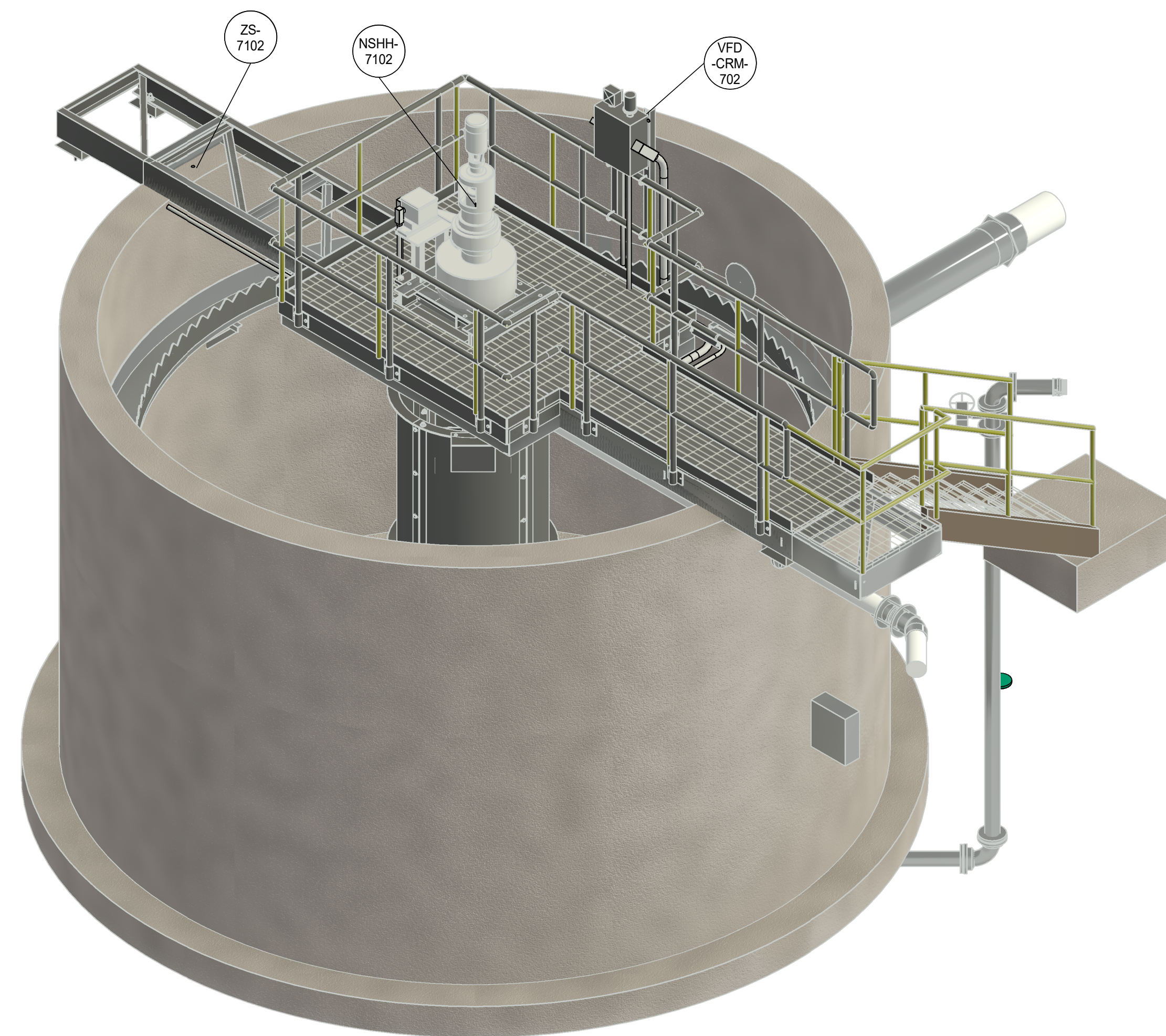
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GENERAL NOTES

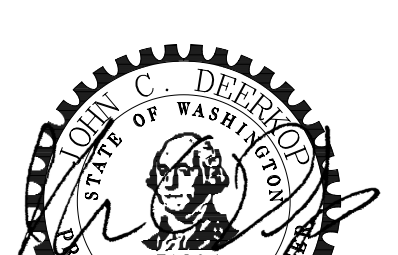
1. COORDINATE ALL ELECTRICAL, CONTROLS, AND INSTRUMENTATION WORK WITH THE CLARIFIER SCREEN VENDOR. MAKE ALL NECESSARY FIELD CONNECTIONS TO VENDOR SYSTEM MOTOR AND CONTROLS.
2. CONFIRM CONDUIT ROUTING ON SITE FOR INCOMING POWER AND COMMUNICATIONS/CONTROLS.
3. REFER TO 7E-1 FOR INFORMATION ON GENERAL LIGHTING AND POWER FOR CLARIFIER AREA. INCOMING 120/208V POWER FEED FROM PNL-301 IN AREA 3. REFER TO PANEL SCHEDULE ON 3E-2.



1 PLAN - CLARIFIER



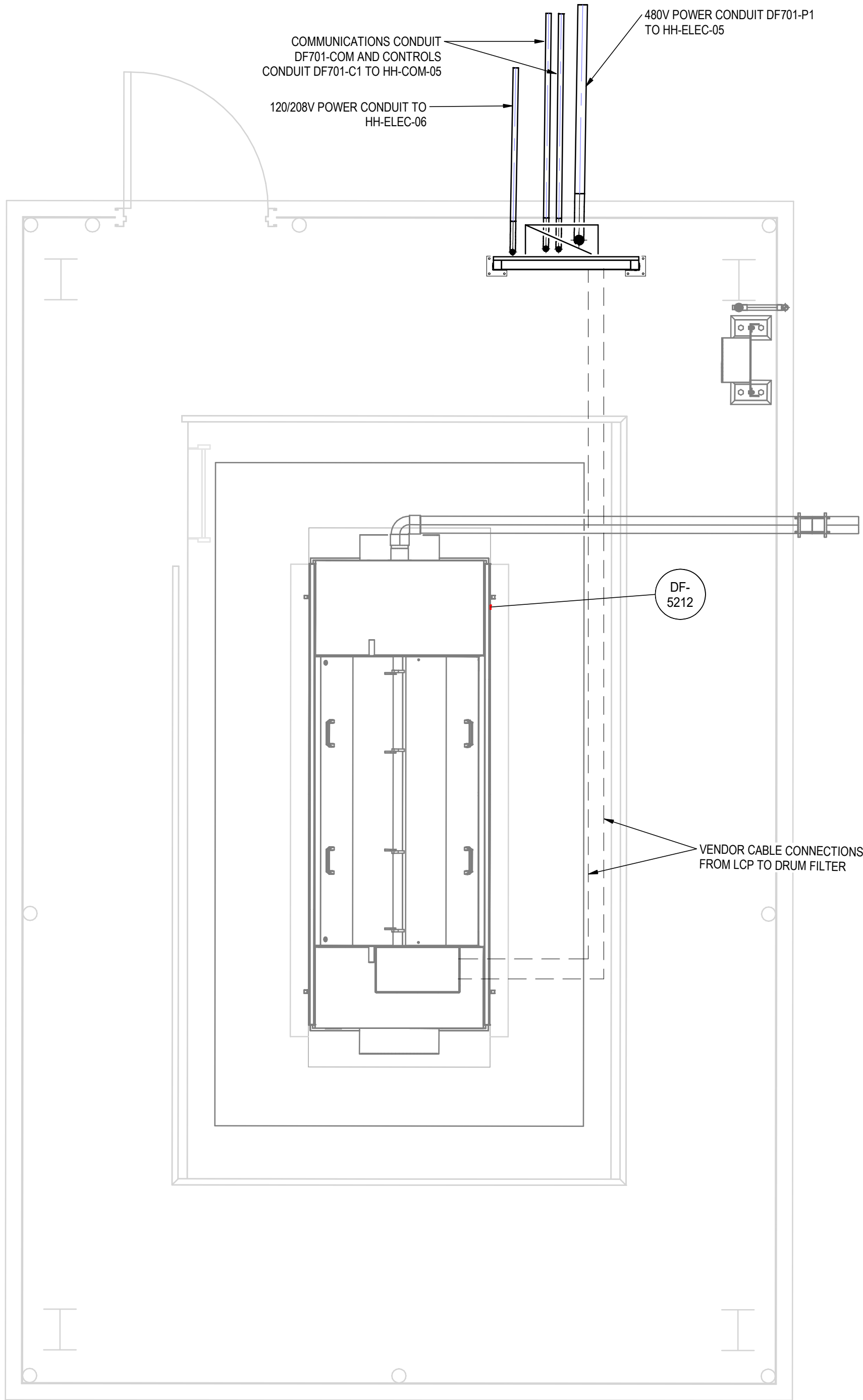
2 WASTE WATER CLARIFIER 3D VIEW

				Permit/Seal				Consultant				Client/Project Logo				Client/Project TULALIP TRIBES				Title WASTE WATER CLARIFIER ELECTRICAL PROCESS PLAN							
																											
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Revision				By Appd YYYY.MM.DD				A 100% DESIGN Issued				JM JCD By Appd YYYY.MM.DD								Project No. 224202267 Revision 0				Scale 3/8" = 1'-0" Drawing No. 7E-3			

C

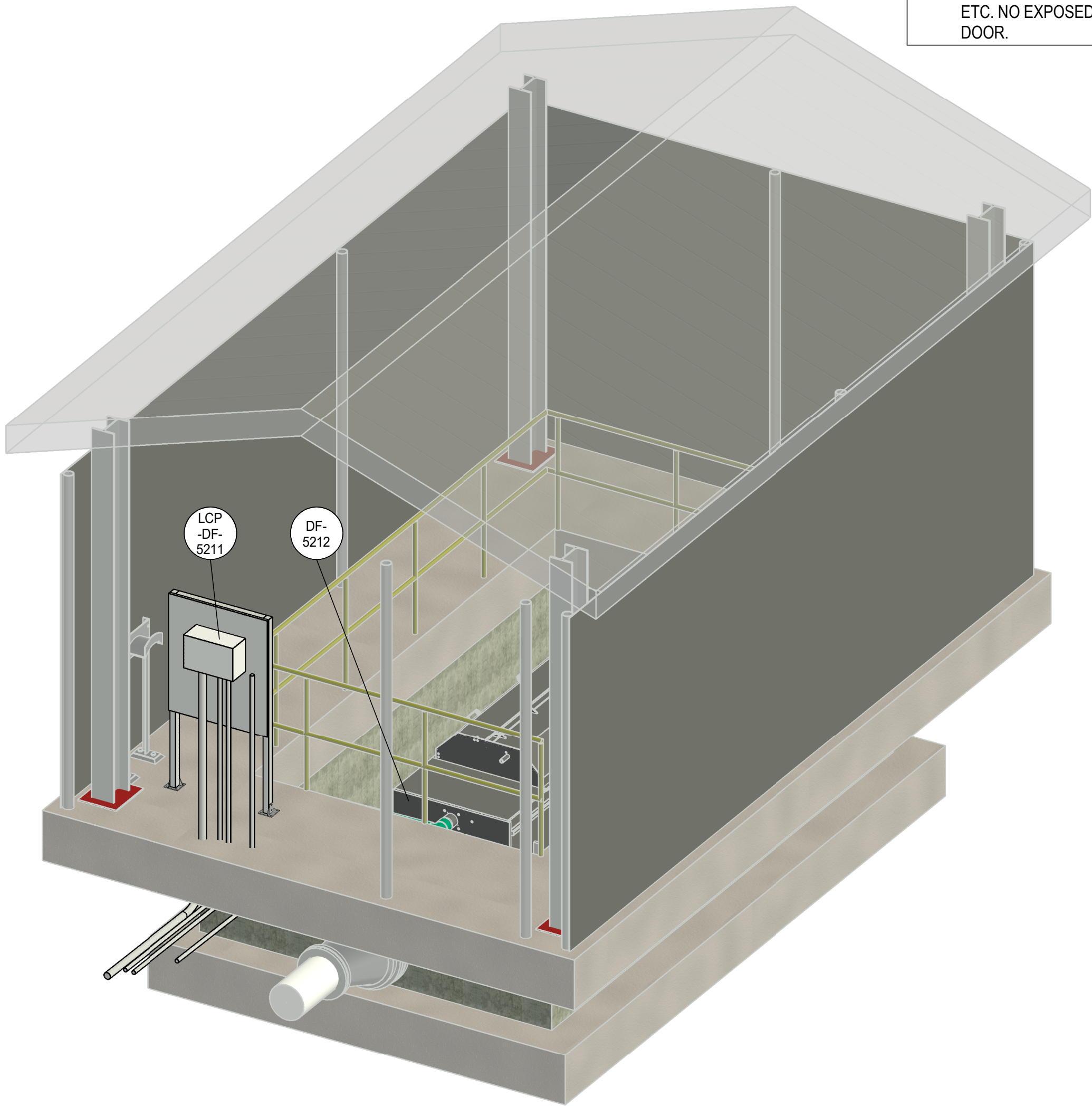
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EFFLUENT DRUM FILTER SUMP - ELECTRICAL PLAN

1
7E-4
1/2" = 1'-0"



EFFLUENT DRUM FILTER SUMP 3D VIEW

2
7E-4
N.T.S

- GENERAL NOTES
- COORDINATE ALL ELECTRICAL, CONTROLS, AND INSTRUMENTATION WORK WITH THE DRUM FILTER SCREEN AND SUMP VENDOR. MAKE ALL NECESSARY FIELD CONNECTIONS TO VENDOR SYSTEM MOTOR AND CONTROLS.
 - CONFIRM CONDUIT ROUTING ON SITE FOR CONNECTION TO VENMODR SYSTEM.
 - REFER TO 7E-2 FOR INFORMATION ON GENERAL LIGHTING AND POWER FOR DRUM FILTER SUMP AREA.
 - INCOMING 120/208V POWER FEED FOR LIGHTS AND RECEPTACLES FROM PANEL PNL-M2 IN THE INCUBATION BUILDING.
 - CONTROLS AND COMMUNICATIONS CONDUITS TO NETWORK CABINET AND MCP-01 IN INCUBATION BUILDING.
 - VENDOR PANELS TO BE TYPE 4X.
 - VENDOR PANELS SHALL BE LOCKABLE WITH EXTERIOR DOOR (BLANK) AND DEADFRONT COVER (INTERIOR) WITH DISCONNECT, SWITCHES, INDICATORS, ETC. NO EXPOSED LIVE PARTS SHALL BE PRESENT WHEN OPENING EXTERIOR DOOR.

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2353 130th Avenue NE Suite 200
Bellevue, 98005-1759
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Client/Project Logo

Client/Project	TULALIP TRIBES
	BATTLE CREEK HATCHERY
File Name: N/A	JM JS JR 2024.12.27 Dwn. Dsgn. Chkd. YYYY.MM.DD

Title	
EFFLUENT DRUM FILTER SUMP ELECTRICAL PROCESS PLAN	
Project No. 224202267	Scale 1/2" = 1'-0"
Revision 0	Drawing No. 7E-4

C

AREA #7 EFFLUENT DRUM FILTER SUMP AND CLARIFIER RAKE MECHANISM													
DEVICE GROUP	CABLE/CONDUIT TAG (INDIVIDUAL)	APPLICATION	VOLTS	CONDUIT TYPE	RUN			CONDUCTORS				CONDUIT	COMMENTS
					FROM	VIA	TO	WIRE COUNT	WIRE SIZE (CU.)	SPARE	GROUND/ BOND/SHLD	TYPE	
CFR-702 CLARIFIER RAKE MECHANISM	CFR702-C1	CONTROLS	24VDC	PVC,GRC	LCP-300	U/G,S	VFD-CRM-702	18C	#14AWG	2C	#14AWG	1 1/2"	BUNDLED DIGITAL SIGNALS
	CFR702-C2	CONTROLS	24VDC	PVC,GRC	VFD-CRM-702	S	CFR-702	VENDOR				1"	CLARIFIER RAKE OVER-TORQUE SWITCH
	CFR702-C3	CONTROLS	24VDC	PVC,GRC	VFD-CRM-702	S	ZS-7102	2C	#14AWG	-	#14AWG	3/4"	CLARIFIER RAKE POSITION SWITCH
	CFR702-COM	COMMS	-	PVC,GRC	VFD-CRM-702	U/G,S	LCP-300	CAT8	-	-	-	3/4"	
	CFR702-P1	POWER	480VAC	PVC,GRC	3-PP-01	U/G,S	VFD-CRM-702	3C	#8AWG	-	#8AWG	1"	480VAC POWER TO VFD PANEL
	CFR702-P2	POWER	120VAC	PVC,GRC	PNL-301	U/G,S	AREA 7	8C	#10AWG	2C		1 1/2"	CLARIFIER LIGHTING AND RECEPTACLES
FQIT-7103	FQIT7103-C1	CONTROL	24VDC	PVC,GRC	FQIT-7103	S	LCP-300	2C	#14AWG	-	#14AWG	3/4"	DIGITAL SIGNAL
	FQIT7103-C2	CONTROL	24VDC	PVC,GRC	FQIT-7103	S	LCP-300	1PR	#16AWG	-	#14AWG	3/4"	ANALOG SIGNAL
	FQIT7103-P1	POWER	24VDC	PVC,GRC	FQIT-7103	S	LCP-300	2C	#14AWG	-	#14AWG	3/4"	FLOW METER DISPLAY POWER
	FE7103-E1	INSTRUMENT	-	PVC,GRC	FQIT-7103	U/G,S	FQIT-7103-JB	VENDOR					VENDOR CABLE (EXTENSION) FROM FQIT-7103 TO JB. CONFIRM LENGTH WITH SUPPLIER
	FE7103-E2	INSTRUMENT	-	PVC	FQIT-7103-JB	U/G	FE-7103	VENDOR					VENDOR CABLE CONNECTED TO INSTRUMENT
	DF701-C1	CONTROL	24VDC	PVC,GRC	LCP-DF-701	U/G,S, HH-COM-05	MCP-01	20C	#14AWG	2C	#14AWG	1 1/2"	DIGITAL SIGNAL
LCP-DF-701 EFFLUENT DRUM FILTER SUMP	DF701-COM	COMMS	-	PVC,GRC	LCP-DF-701	U/G,S, HH-COM-05	MCP-01	FIBER	-	-	-	3/4"	COMMUNICATIONS
	DF701-P1	POWER	480VAC	PVC,GRC	3-PP-01	U/G,S, HH-ELEC-05	LCP-DF-701	3C	#10AWG	-	#12AWG	1 1/2"	480VAC POWER
	DF701-P2	POWER	120VAC	PVC,GRC	PNL-M2	U/G,S, HH-ELEC-06	AERA 7	8C	#10AWG	4C	#12AWG	1 1/2"	120VAC POWER
NOTES													
1 CABLE AND CONDUIT SCHEDULE SHOWS INDIVIDUAL RUNS TO CONVEY DESIGN INTENT. WHERE ACCEPTABLE IN N.E.C., CONTRACTOR PERMITTED TO REDUCE THE NUMBER OF CONDUIT RUNS BY COMBINING LIKE SIGNALS AND CABLES.													
2 DO NOT COMBINE PARALLEL RUNS IN A SINGLE CONDUIT RUN.													
3 UNDER THE 'VIA' HEADING IN THE TABLE FOR CONDUIT ROUTING, ALL UNDERGROUND CONDUIT RUNS TO BE PVC. EXIT ABOVE GRADE WITH GRC. SURFACE CONDUIT TO BE GRC.													
4 WHERE CONDUITS ARE DENOTED AS SURFACE INSTALLATION, CONTRACTOR MAY RUN CONDUITS UNDERGROUND OR IN-SLAB WHERE ACCEPTABLE													
LEGEND													
U/G UNDERGROUND CONDUIT INSTALLATION													
S SURFACE CONDUIT INSTALLATION													
PVC POLYVINYL CHLORIDE													
GRC GALVANIZED RIGID CONDUIT													

B

AREA 7 - CABLE AND CONDUIT SCHEDULE

SCALE: NTS

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