

Upgrades to Pump Station "A" & "B"

PREPARED FOR

TOWN OF EDISTO BEACH COLLETON COUNTY, SOUTH CAROLINA

DECEMBER 2021

JOB # 21-028

Town of Edisto Beach, S.C.

Mayor

W. Crawford Moore, Jr.

Council

Jerome Kizer

Jay Watts

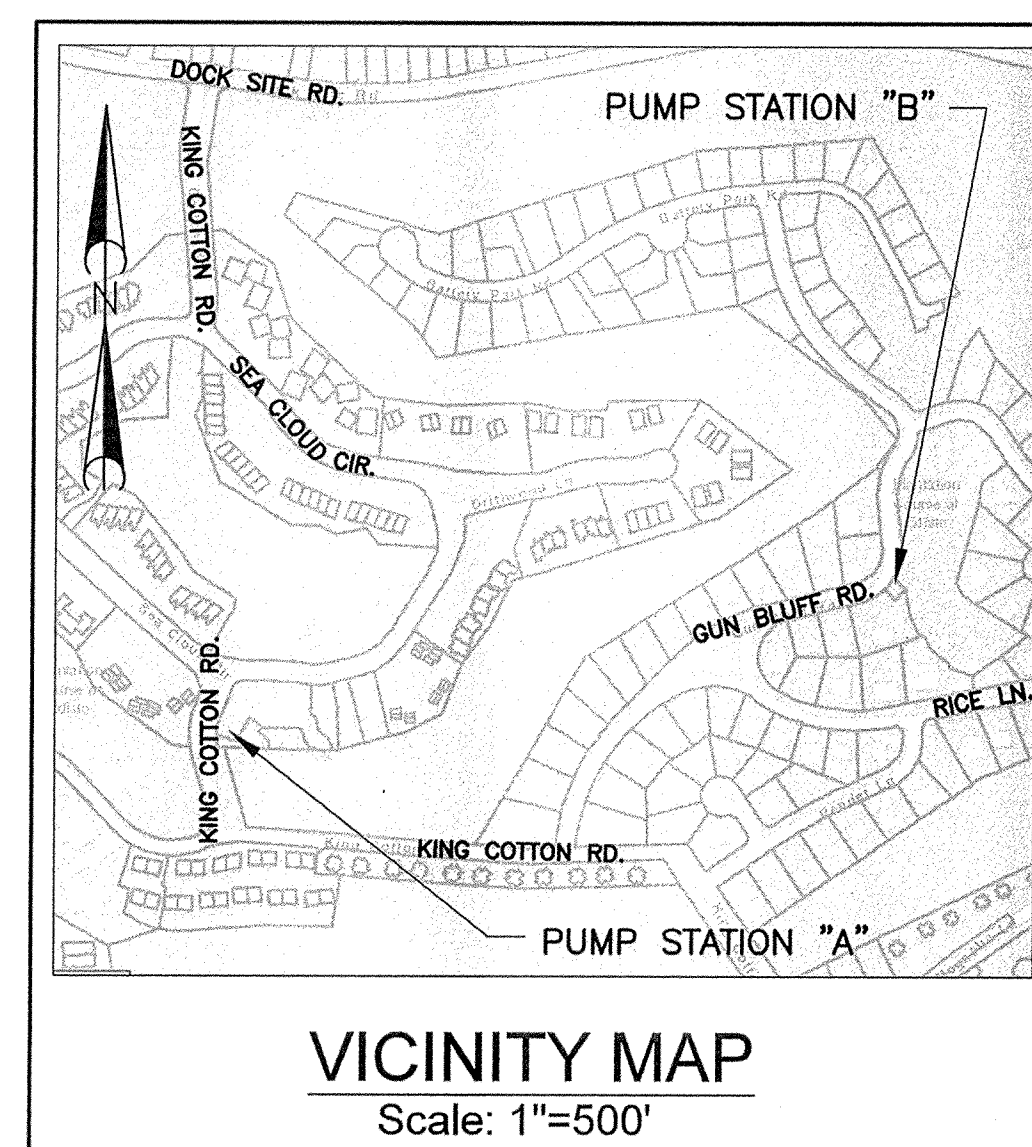
Robert Renner

Town Administrator

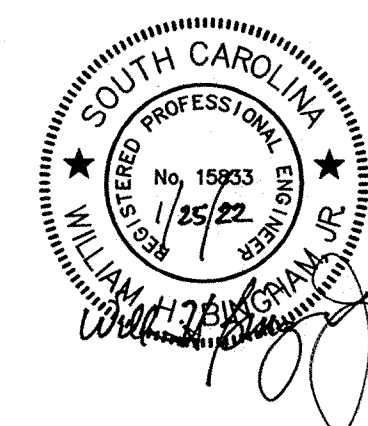
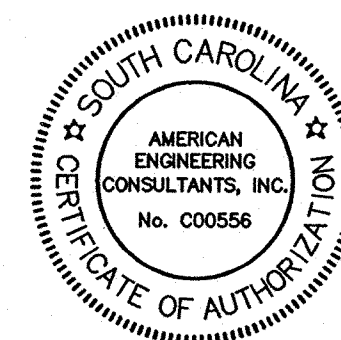
Iris Hill

Utilities Director

Patrick Zemp



Town of Edisto Beach



INDEX TO PLANS

Pump Station "A" & "B" Site Plans	1
Pump Station "A" - Existing Conditions and Demolition Plan	2
Pump Station "A" - Proposed Upgrades - Plan and Cross Sections Views	3
Pump Station "A" - Electrical - Plan and Cross Section Views	4
Pump Station "B" - Building Addition - Plan and Elevation Views	5
Pump Station "B" - Existing Conditions and Demolition Plan	6
Pump Station "B" - Proposed Upgrades - Plan and Cross Section Views	7
Pump Station "B" - Electrical - Plan and Cross Section Views	8
Pump Station "A" and "B" - Miscellaneous Details	9
Pump Station "A" and "B" - Electrical - Notes and Details	10



ENGINEERING CONSULTANTS, INC.

AMERICAN ENGINEERING CONSULTANTS, INC.

1300 12th Street • P.O. Box 2299 • Cayce, SC 29171

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GENERAL NOTES

1. CONTRACTORS SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND UTILITIES, AND ANY AND ALL DAMAGES RESULTING FROM THE FAILURE TO DO SO. CONTACT PALMETTO UTILITY PROTECTION SERVICE (PUPS) AT (800) 922-0983 AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION FOR LOCATION OF UTILITIES.
2. CONTRACTOR SHALL ABIDE BY ALL PROVISIONS OF THE COUNTY THAT THE PROJECT IS IN REGARDS TO STORM DRAINAGE AND EROSION CONTROL ORDINANCE AND THE SOUTH CAROLINA SEDIMENT REDUCTION ACT.
3. ALL CONSTRUCTION STAKING SHALL BE PROVIDED AT THE CONTRACTORS EXPENSE.
4. RECORD DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR TO THE ENGINEER AND CERTIFIED AS CORRECT BY REG. SCPLS.
5. CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY OBSTRUCTIONS (FENCES, MAILBOXES, ETC.) IN THE PATH OF CONSTRUCTION AND REPLACING THEM IN THE SAME CONDITION INITIALLY FOUND OR AS SHOWN IN CONTRACT DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WASTEWATER FLOWS AT ALL TIMES, WHETHER PERMANENT OR TEMPORARY IN NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES, FEES AND ANY CLEANUP COSTS ASSOCIATED WITH OVERFLOWS/SPILLS DURING CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE TO PROVIDE PUMPING BYPASSING AS PER THE APPROPRIATE SPECIFICATIONS.
8. CONTRACTOR SHALL INCORPORATE THE USE OF LINE STOPPERS AS NECESSARY TO AVOID ANY SPILL DURING TIE-IN/CONNECTIONS TO EXISTING LINES.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY OF THE EXISTING FACILITIES.
10. CONTRACTOR IS RESPONSIBLE FOR REMAINING IN COMPLIANCE WITH ALL OSHA STATE & FEDERAL REGULATIONS PERTAINING TO WORKING WITH WASTEWATER GASES, COMBUSTIBLE OXYGEN DEFICIENT ATMOSPHERES, AND CONFINED SPACES.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS ROAD IN GOOD CONDITION. ANY DETERIORATION OF ROAD DURING CONSTRUCTION SHALL BE PROMPTLY REPAIRED UPON COMPLETION OF CONSTRUCTION. ALL DISTURBED AREAS ALONG ACCESS ROAD SHALL BE SEEDED AND REFERTILIZED UPON COMPLETION OF CONSTRUCTION.
12. ANY EXISTING FENCE LINES SHALL BE REMOVED AND REINSTALLED AS REQUIRED FOR BYPASS PUMPING PURPOSES.
13. BIDDER SHALL VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE WORK TO BE PERFORMED IN ACCORDANCE TO THE CONTRACT DOCUMENTS.
14. COORDINATE WITH TOWN ON ANY ITEMS TO BE DEMOLISHED OR REMOVED TO DETERMINE WHICH ITEMS, IF ANY, ARE TO BE SALVAGED AND DELIVERED TO THE TOWN.
15. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AROUND SITES WHERE APPLICABLE.
16. NOTIFY CITY 48 HOURS BEFORE ANY BYPASS PUMPING ACTIVITIES BEGIN.
17. THESE NOTES APPLY TO ALL SHEETS IN THIS SET OF DRAWINGS.



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IE (A)=-5.35
IE (B)=-6.64

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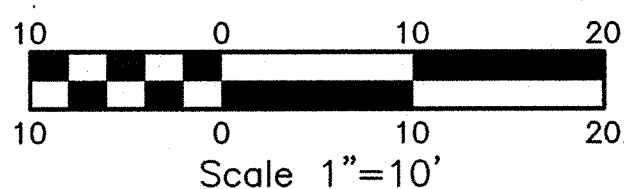
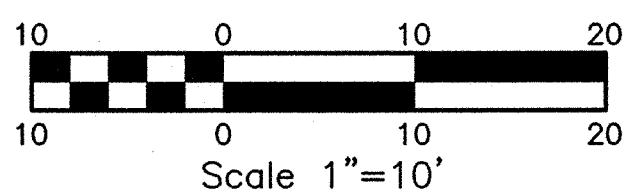
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SSMH #1
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SSMH #3
RIM=4.10

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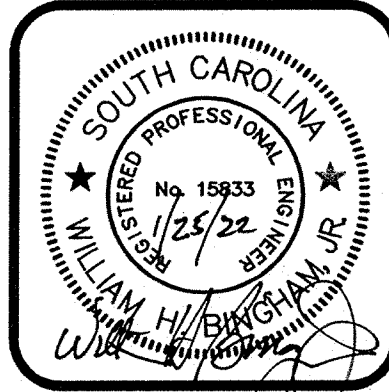
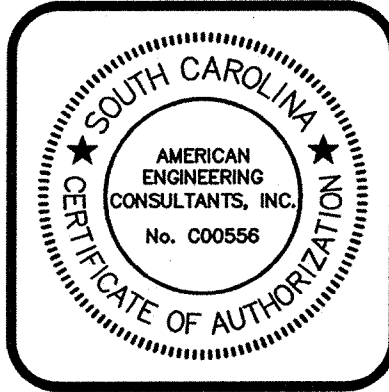
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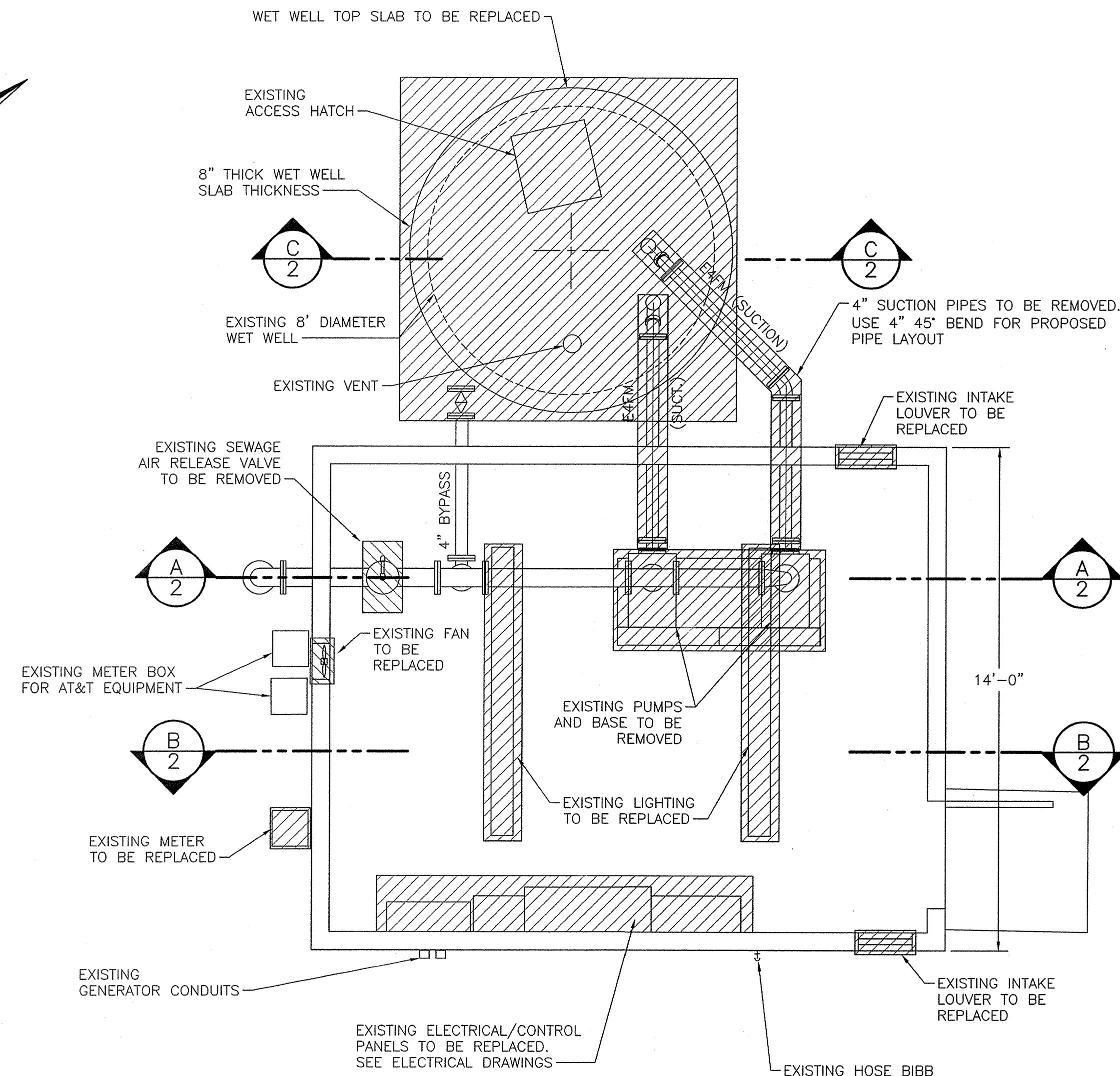
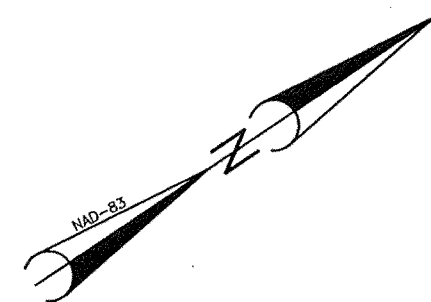
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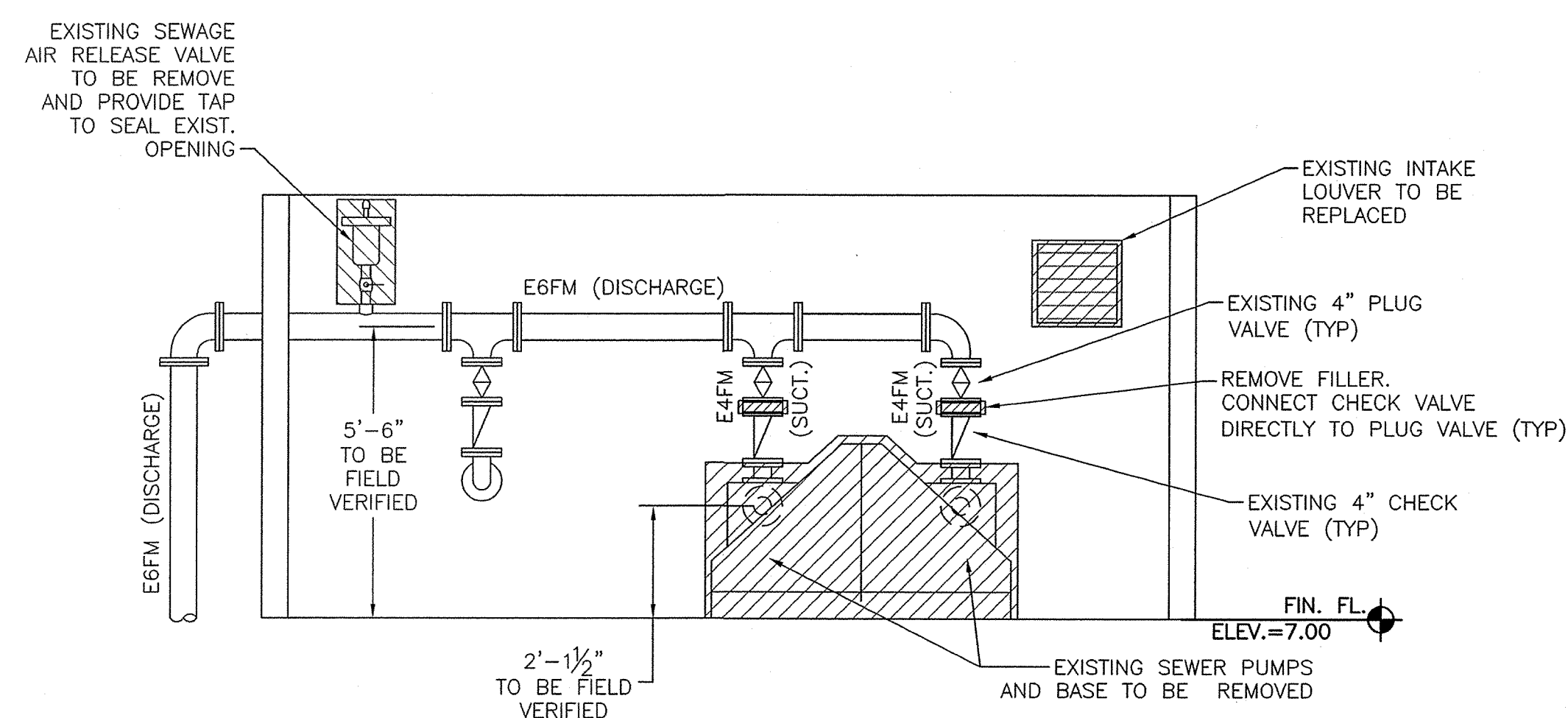
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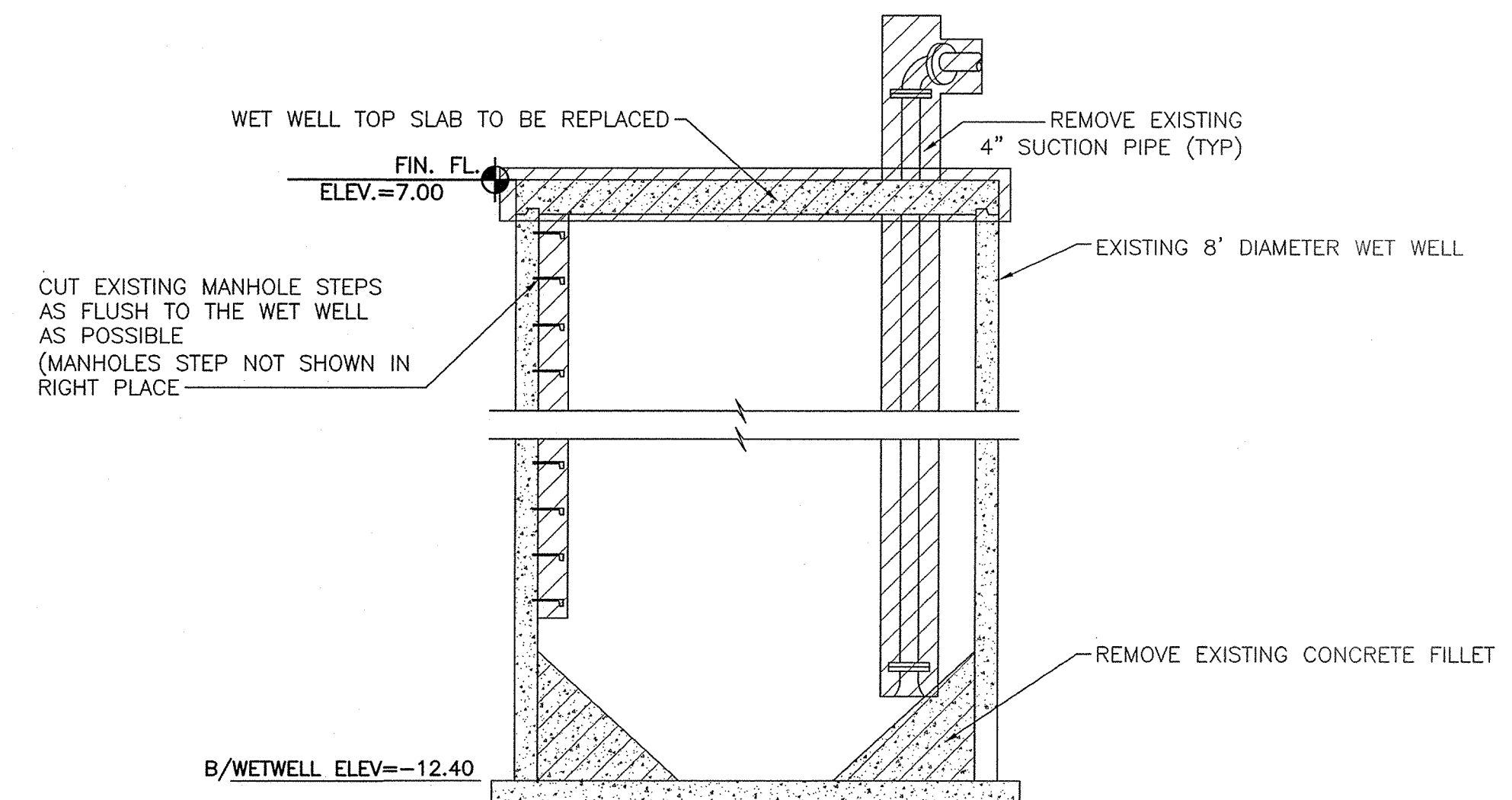
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JOB NO.	21-028



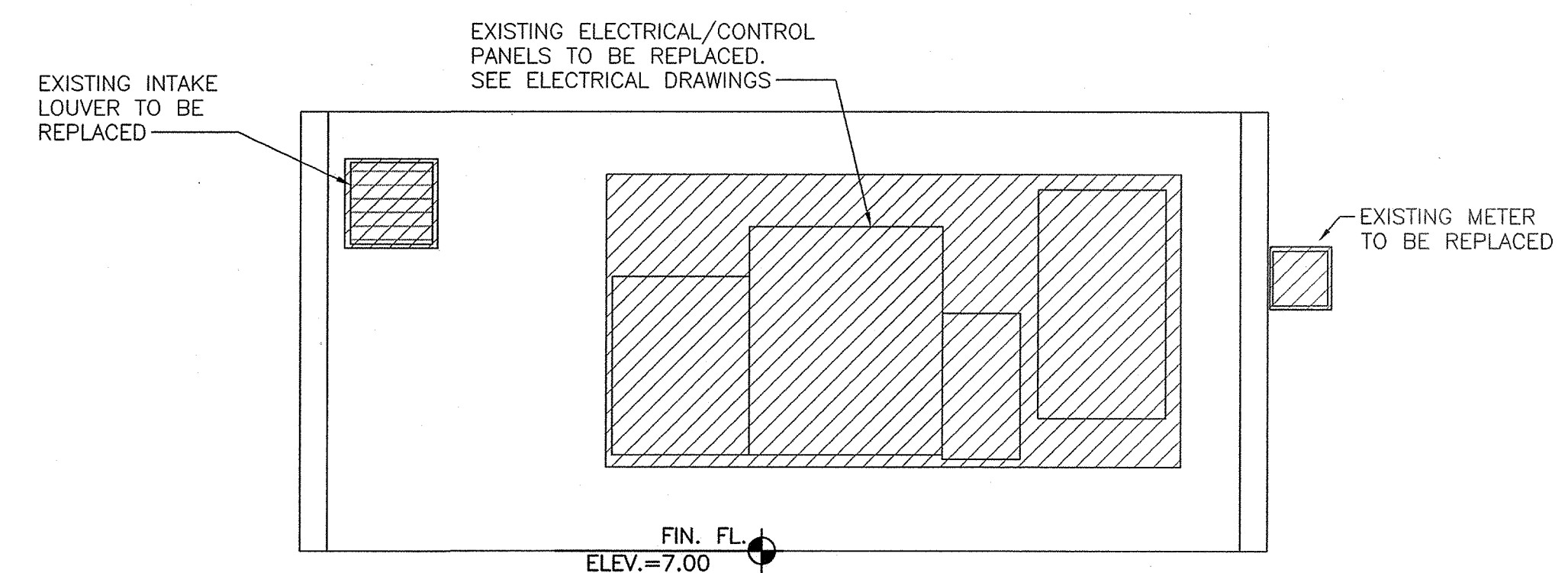
PLAN
SCALE: 3/8" = 1'-0"



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



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

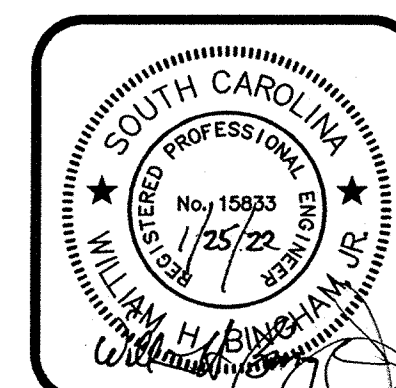
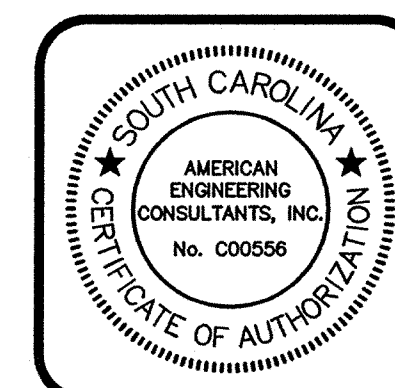
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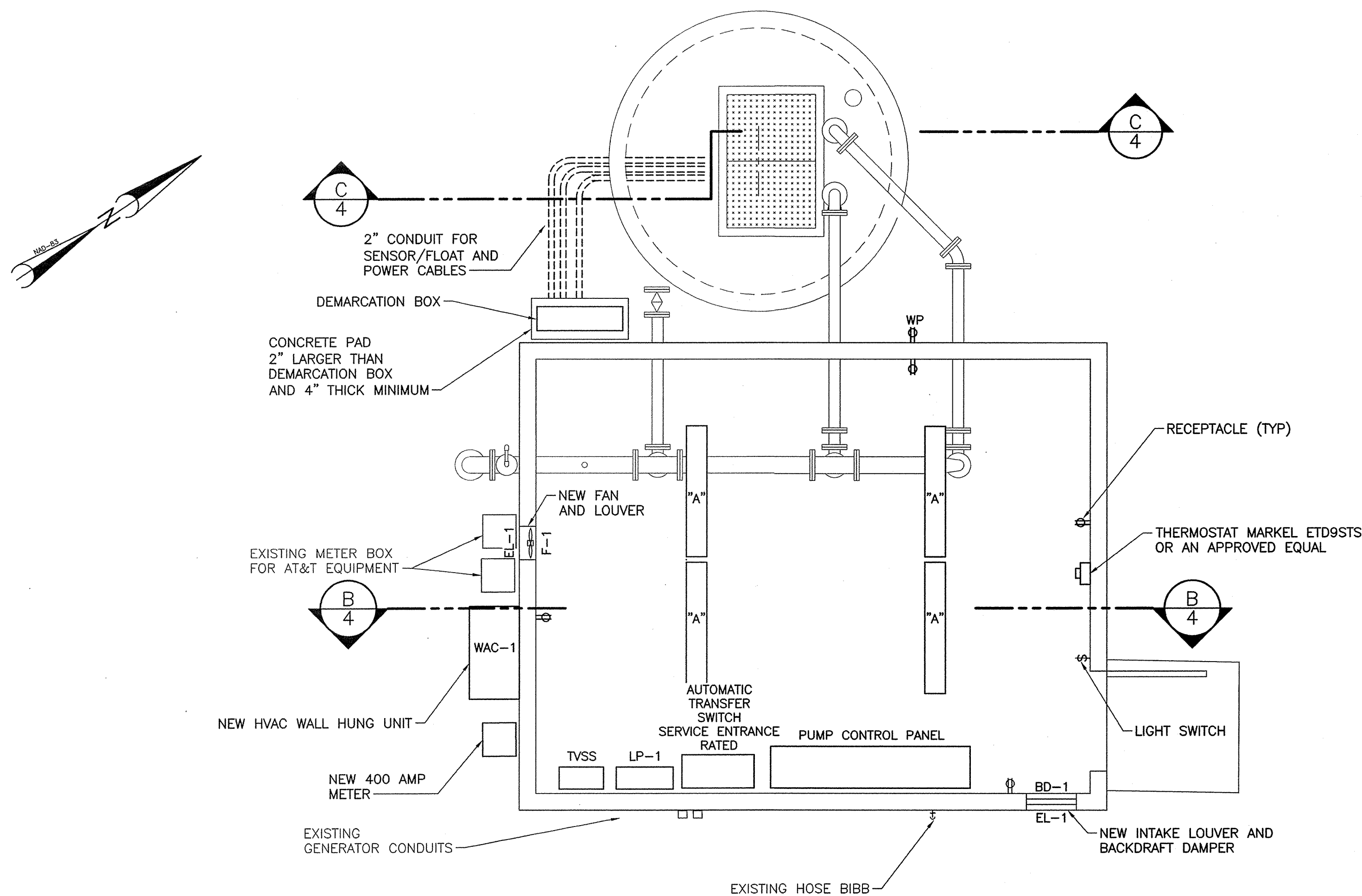


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LAYOUT	EXIST COND

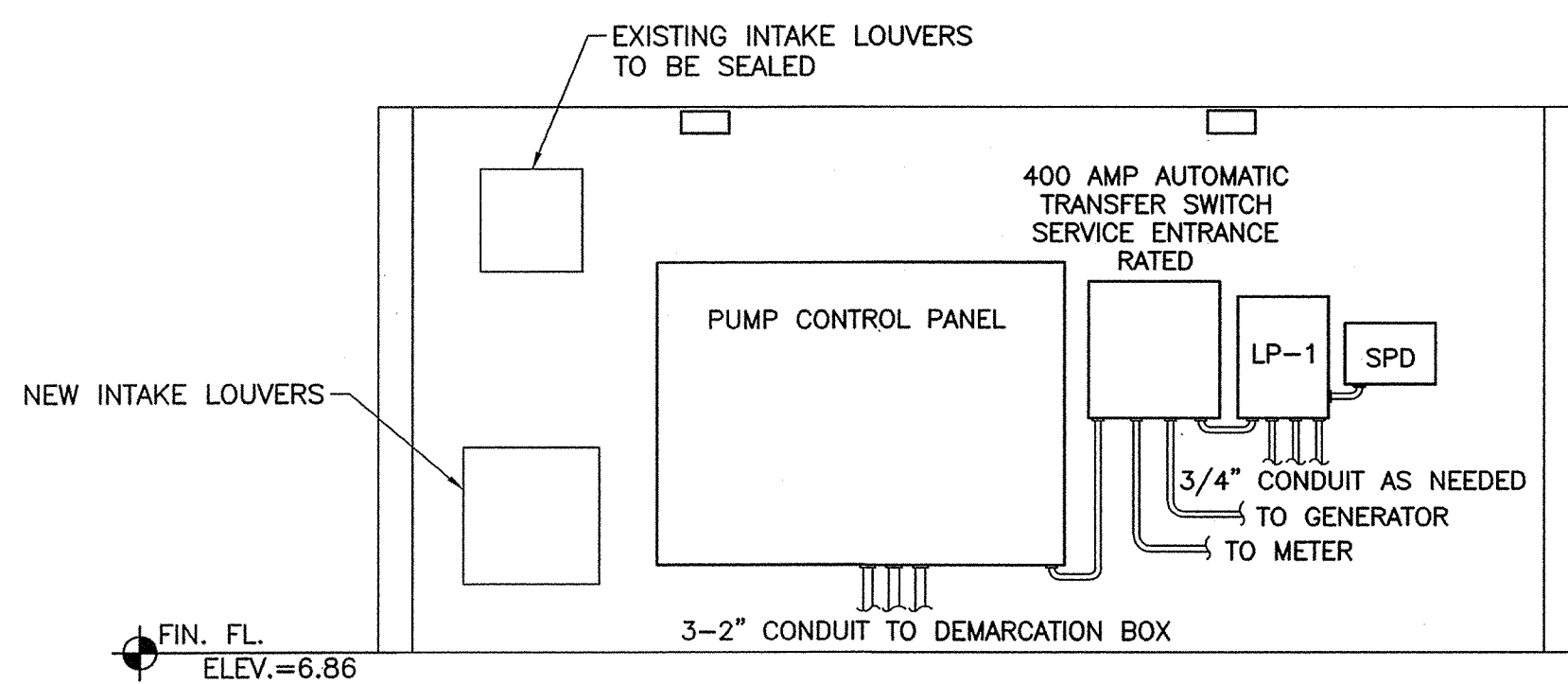
Upgrades to Pump
Station "A" & "B"
PREPARED FOR
Town of Edisto Beach
Colleton County, South Carolina

Pump Station "A" - Existing Conditions and Demolition Plan

DRAWING NO.
2
OF
10
FILE NO.



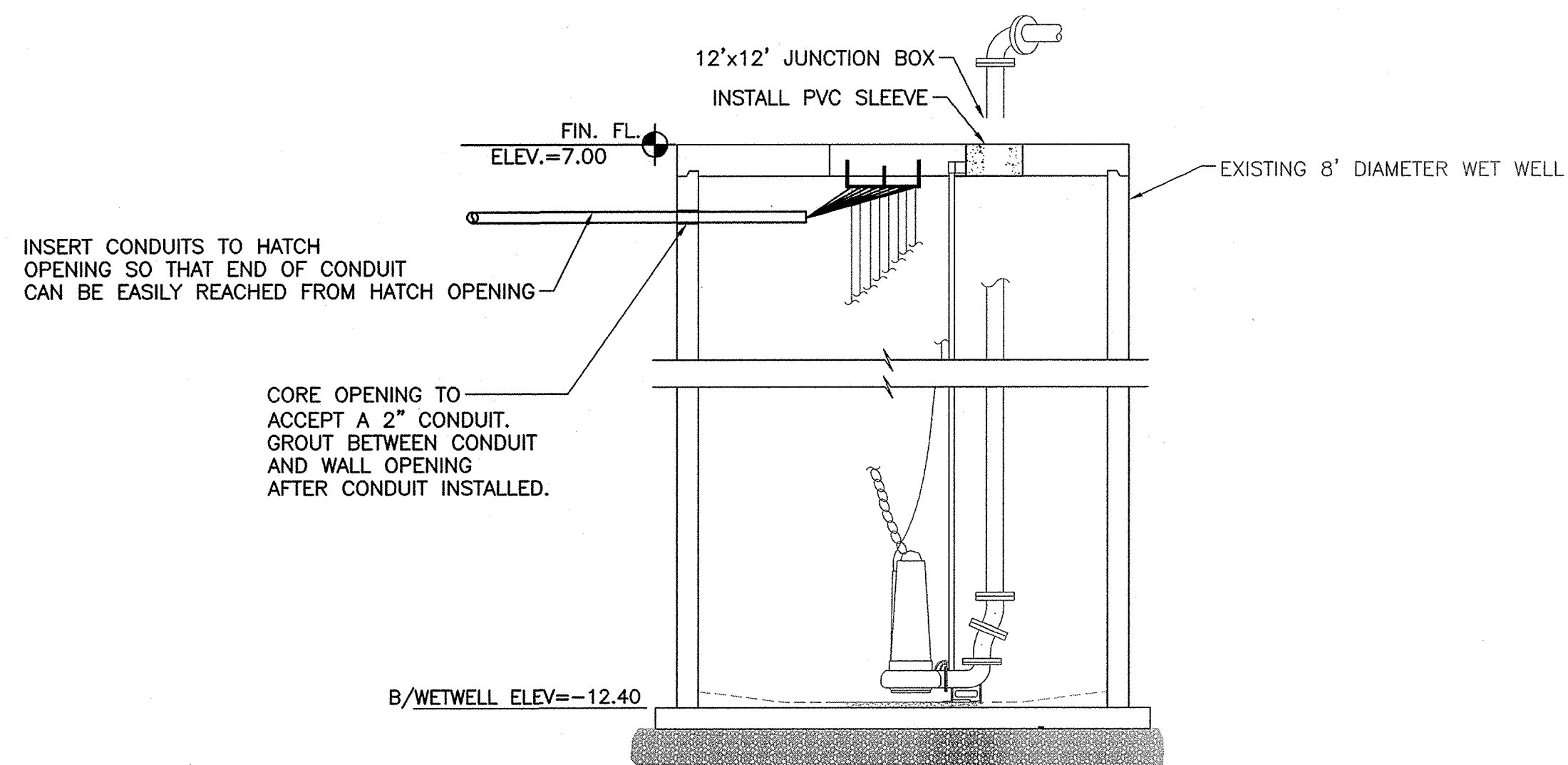
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SCALE: 3/8"=1'-0"



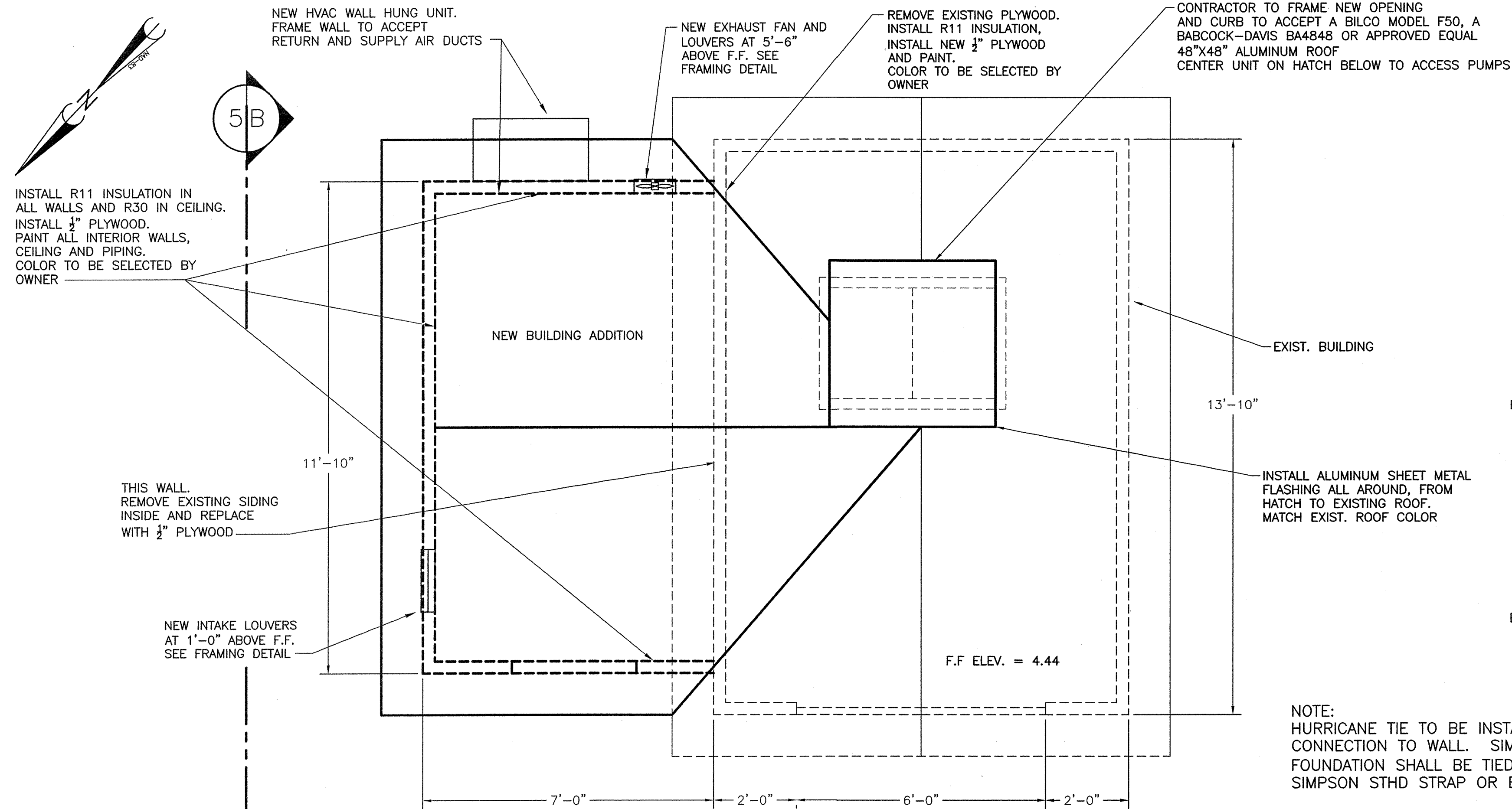
SECTION B-B
SCALE: 3/8" = 1'-0"

SCHEDULE - PANELBOARD LP-1					TYPE	MAIN BREAKER
200	AMP	10,000	AIR	120/240	V	1
FLUSH	☐	SURFACE	☒	30	TOTAL SPACES	200% NEUTRAL
NO.	LOAD	AMP	POLES	LOAD VA	REMARKS	
1	SPD	40	2			
3	SPD					
5	RECEPTACLE	20	1	360		
7	RECEPTACLE	20	1	900		
9	LIGHTS	20	1	720		
11	GENERATOR CHARGER	20	1	720		
13	GENERATOR HEATER	20	1	720		
15	SPARE	20	2	720		
17	SPARE					
19	SPARE	20	1	720		
21	SPARE	20	1			
23	SPACE	-	1			
25	SPACE	-	1			
27	SPACE	-	1			
29						
2	WAC-1	30	2	7200		
4						
6	EXHAUST FAN	20	1	900		
8	SPARE	20	1	1000		
10	SPARE	20	1	550		
12	SPARE	20	1	550		
14	SPARE	20	1	1500		
16	SPARE	20	1	1500		
18	SPARE	20	1	1500		
20	SPARE	20	1	500		
22	SPARE	20	1	500		
24	SPACE	-	1	-		
26	SPACE	-	1	-		
28	SPACE	-	1	-		
30	SPACE	-	1	-		

PANEL LP-1

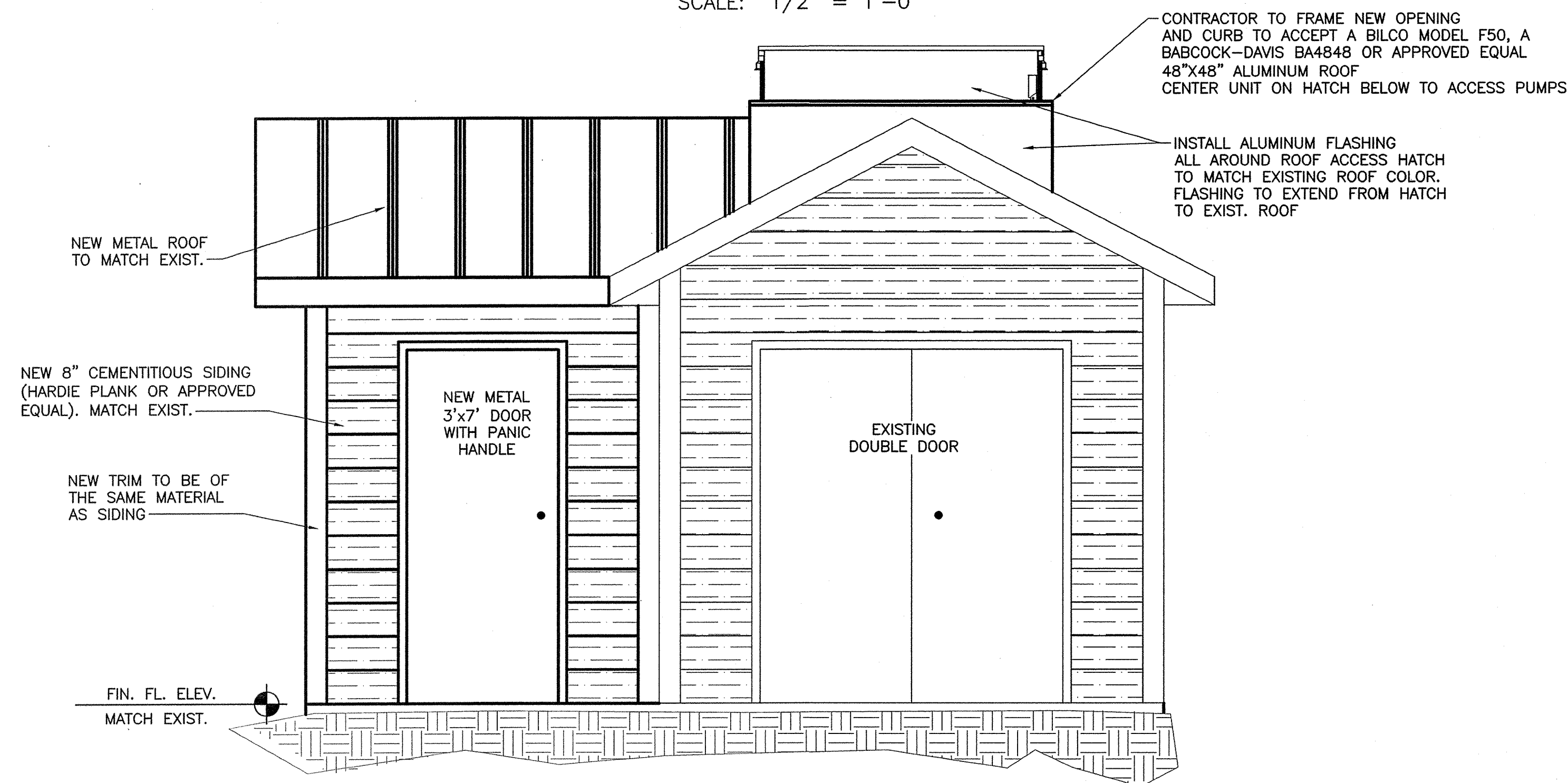


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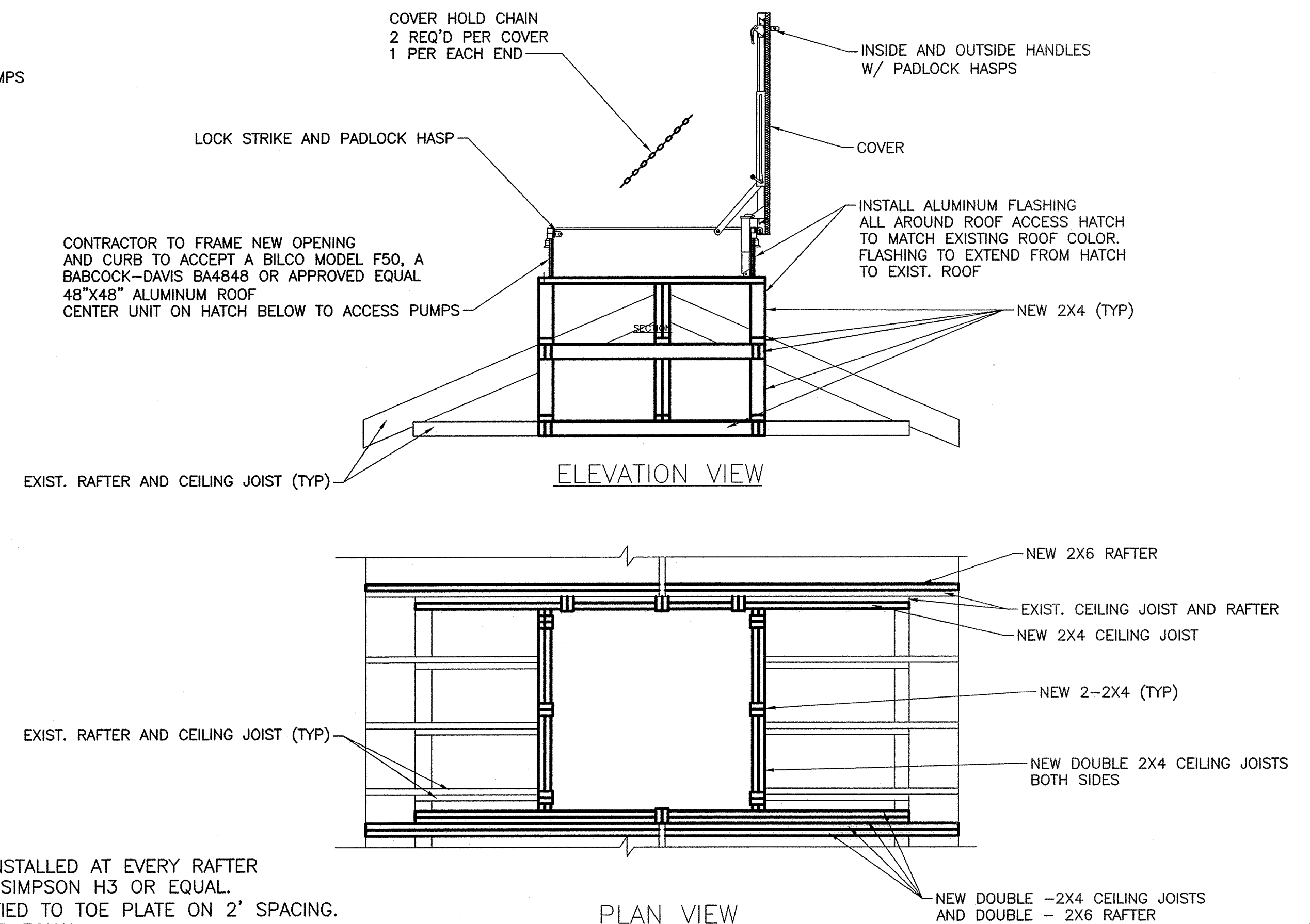
PLAN VIEW

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

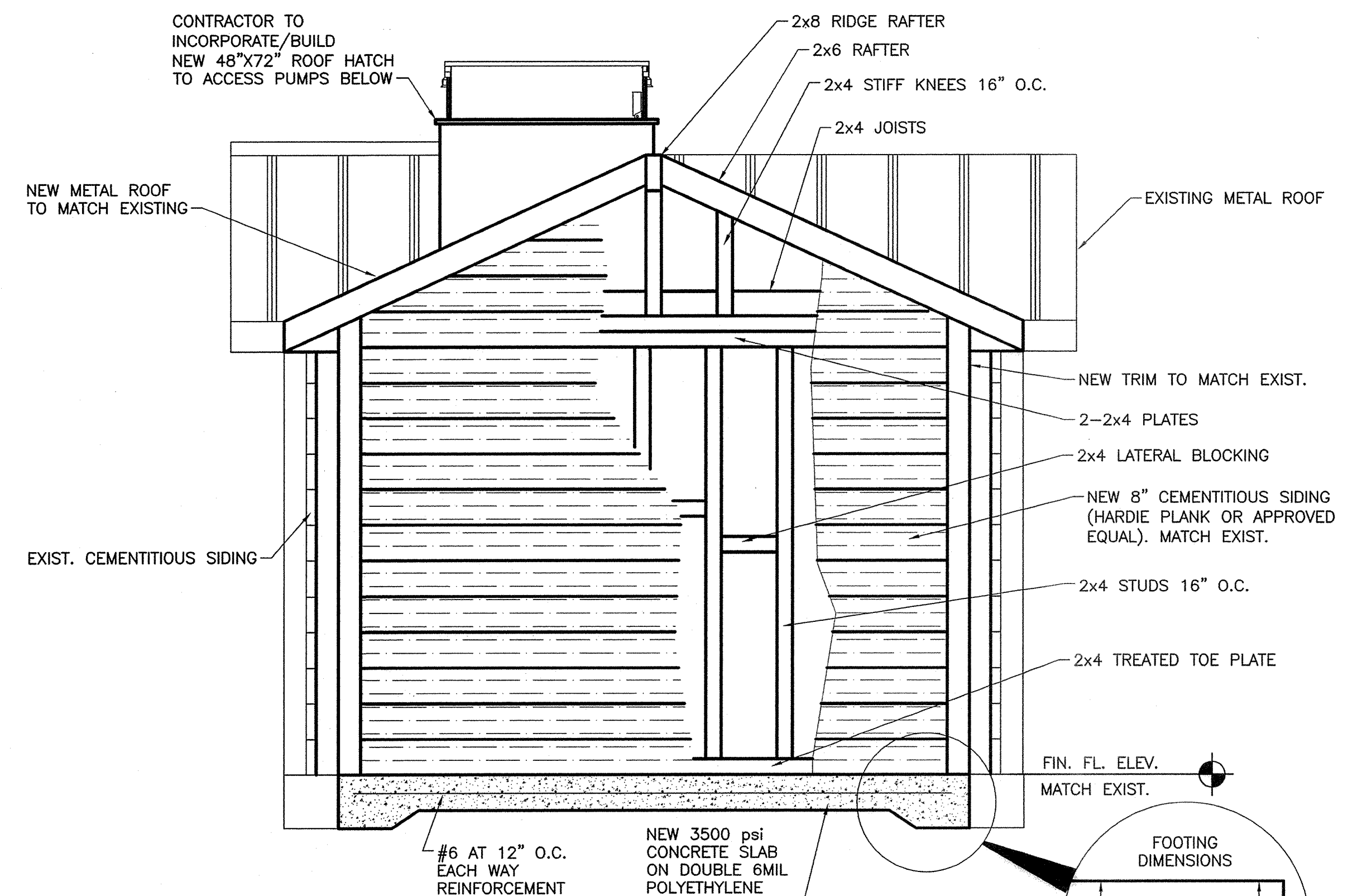


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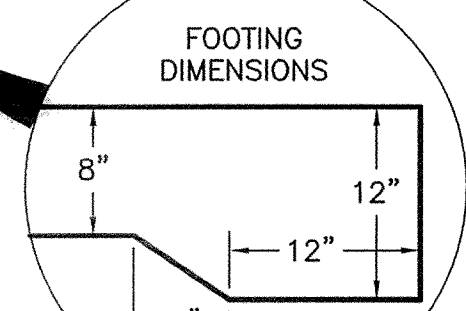


ROOF HATCH FRAMING DETAIL



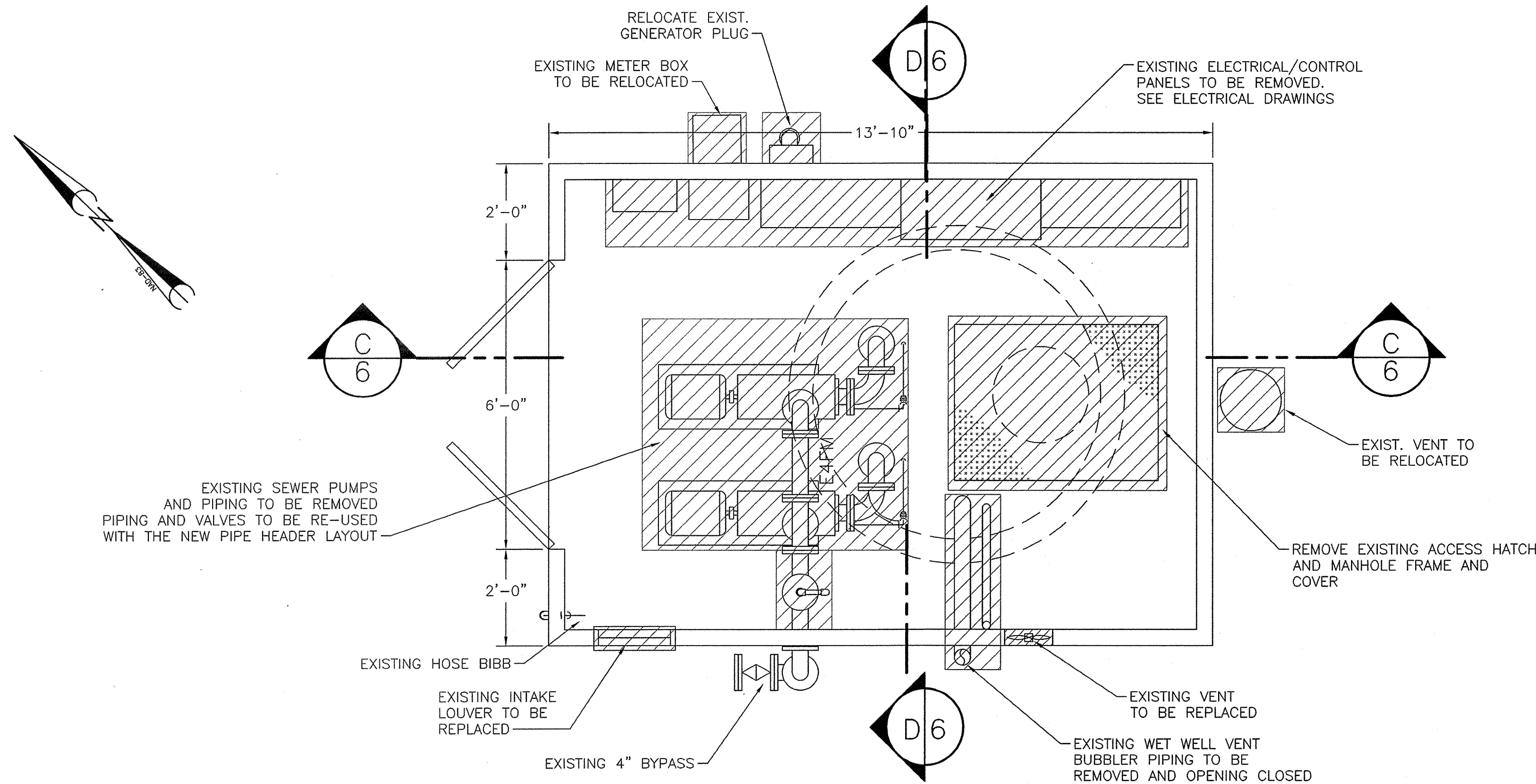
SECTION B

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



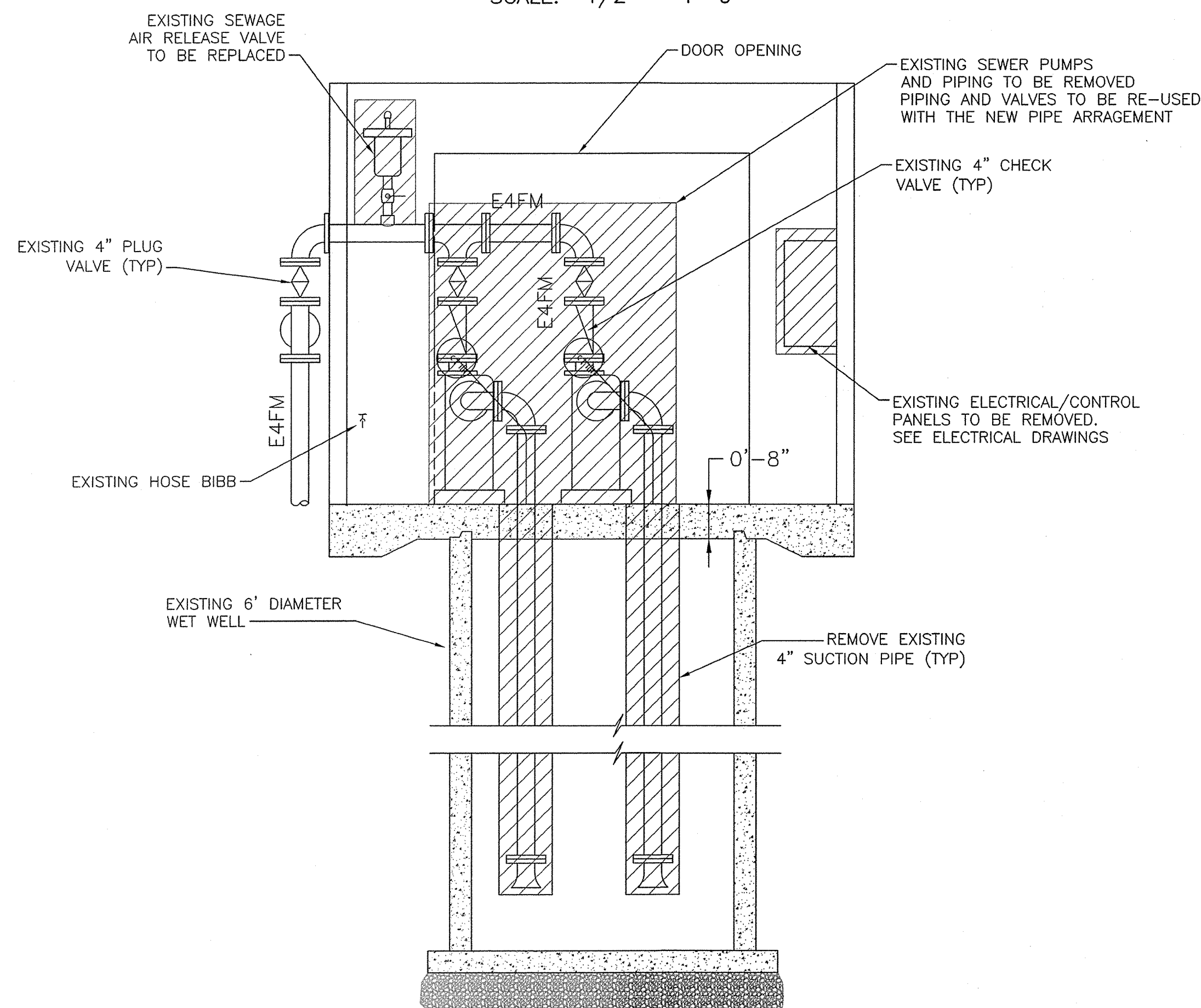
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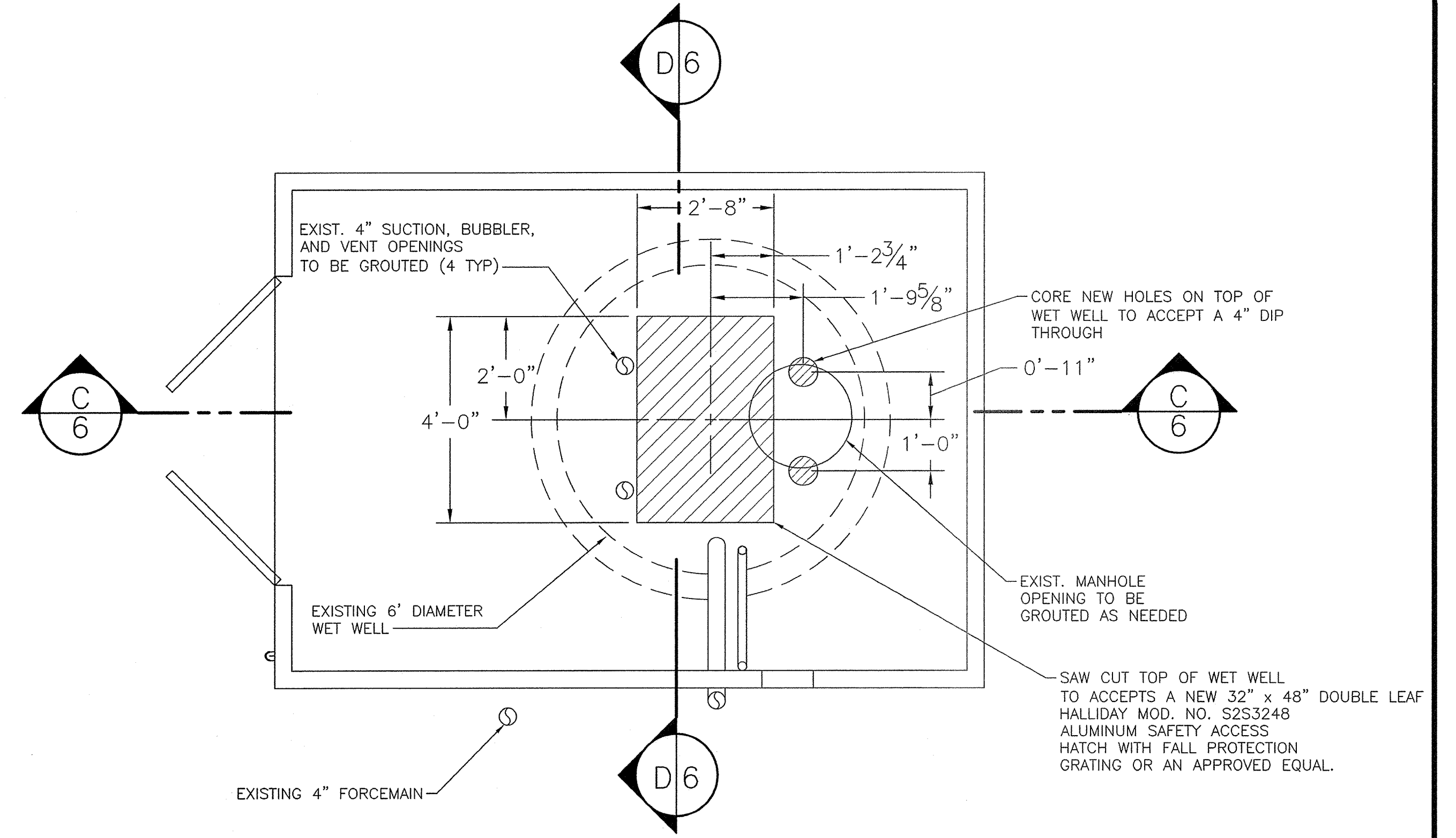
PLAN VIEW ABOVE THE PUMPS

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



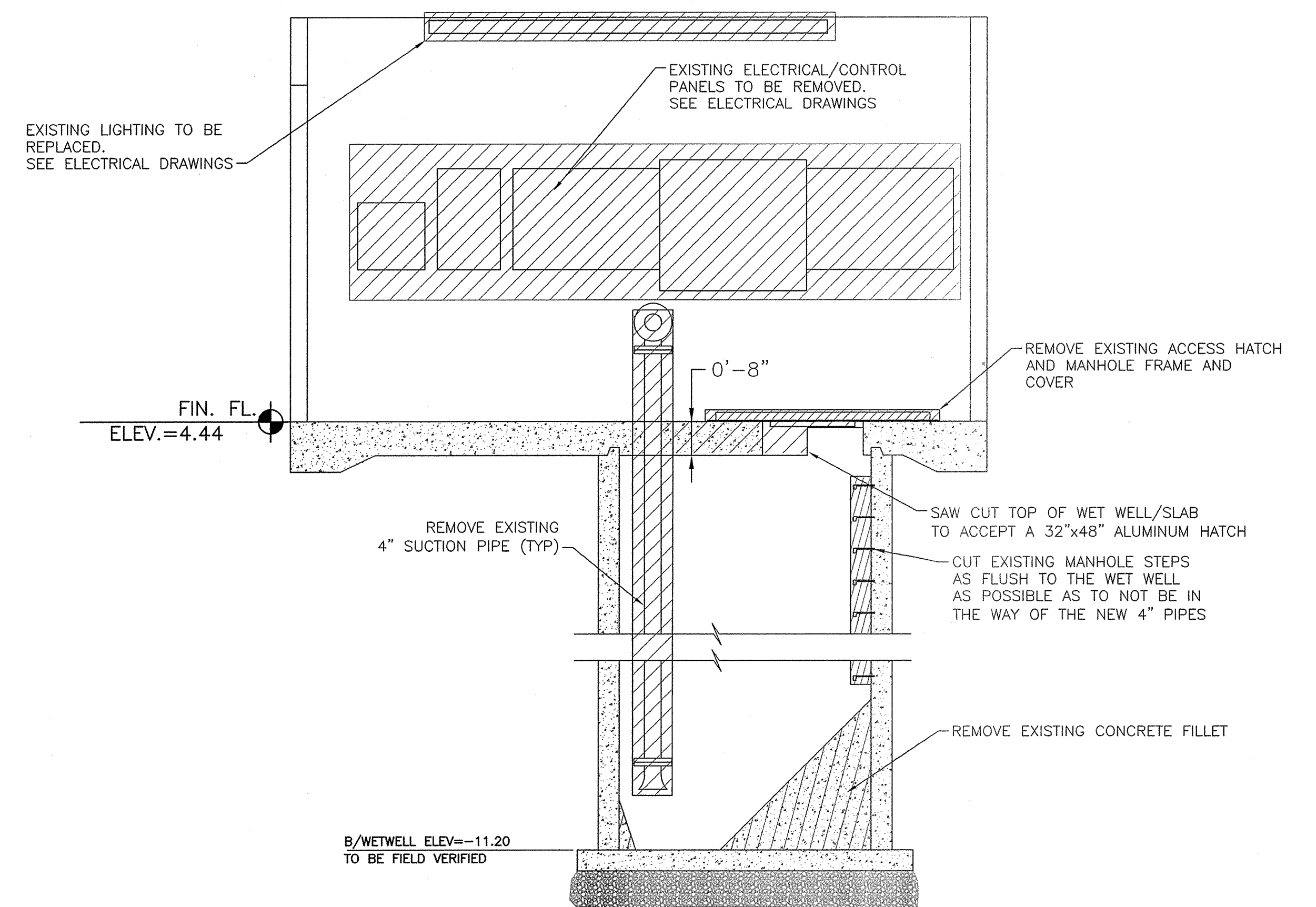
SECTION D-6

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



PLAN VIEW AT TOP OF THE SLAB

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



SECTION C-6

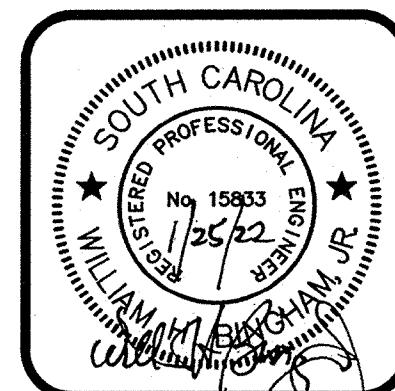
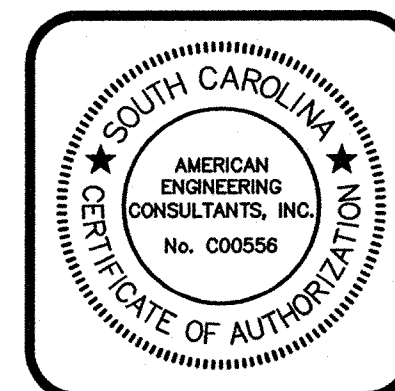
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DESIGNED	BMC
CHECKED	WHB
JOB NO.	21-028
CAD FILE	PS-B
LAYOUT	EXIST COND

Upgrades to Pump Station "A" & "B"

PREPARED FOR

Town of Edisto Beach

Colleton County, South Carolina

Pump Station "B" - Existing Conditions and Demolition Plan

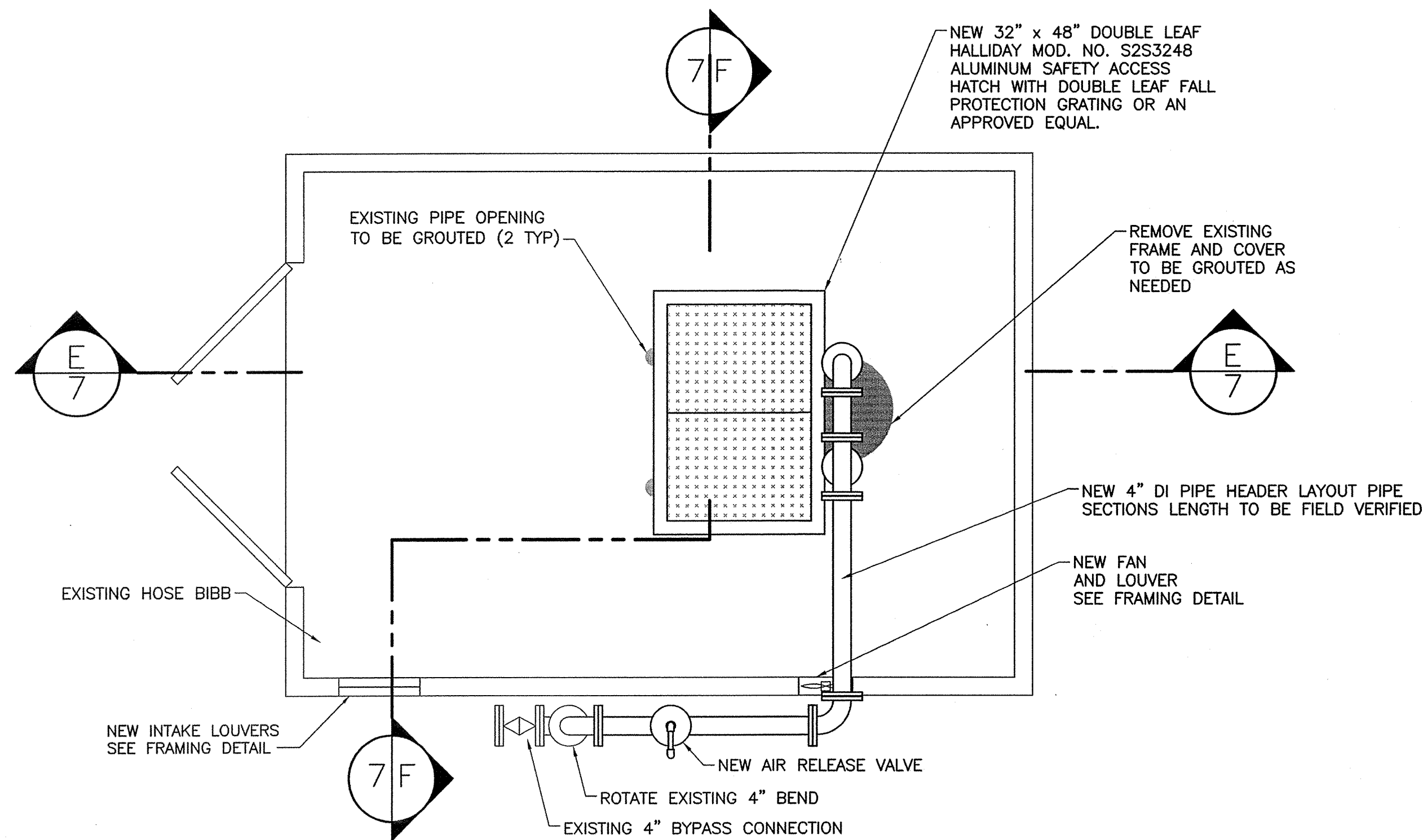
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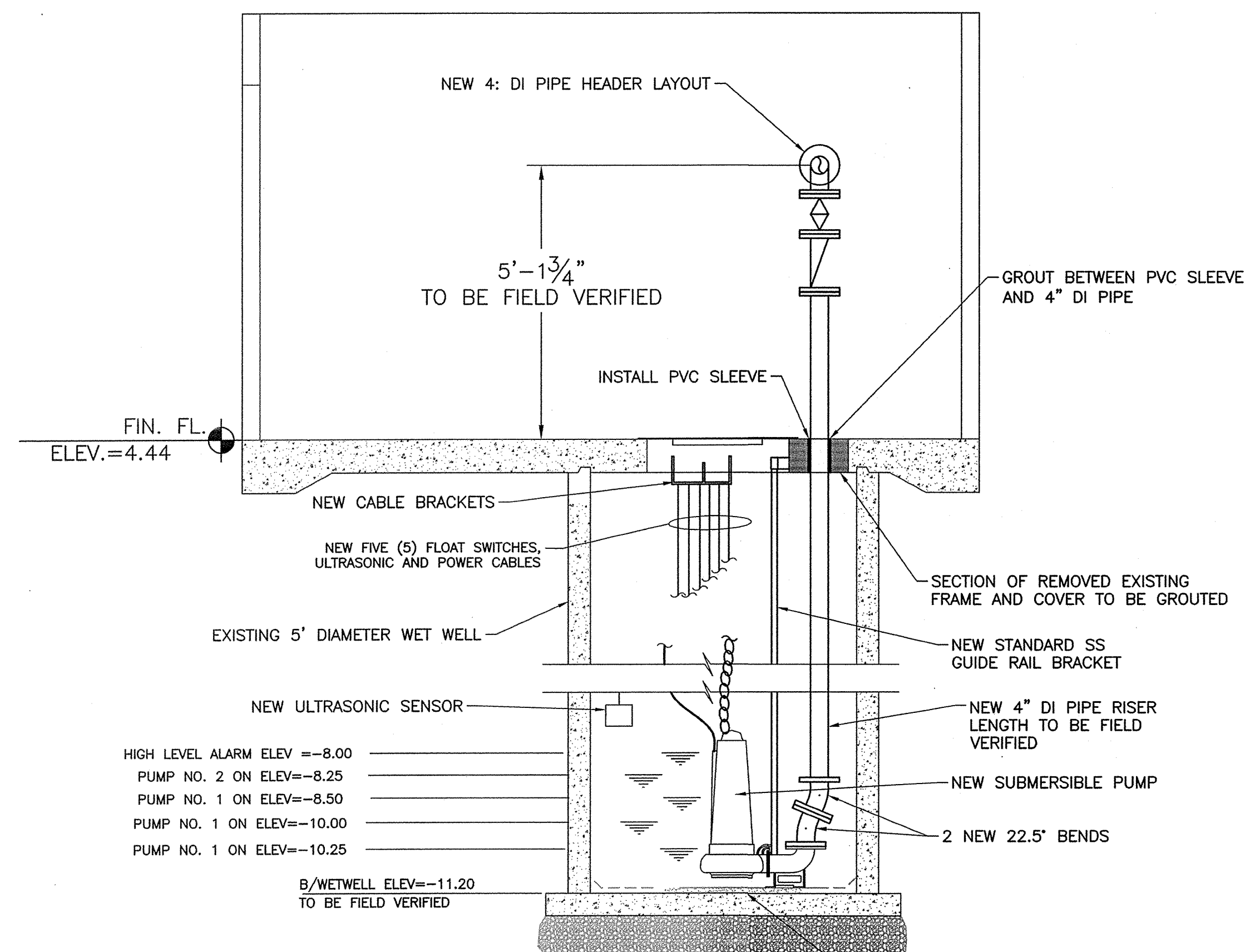
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FILE NO.



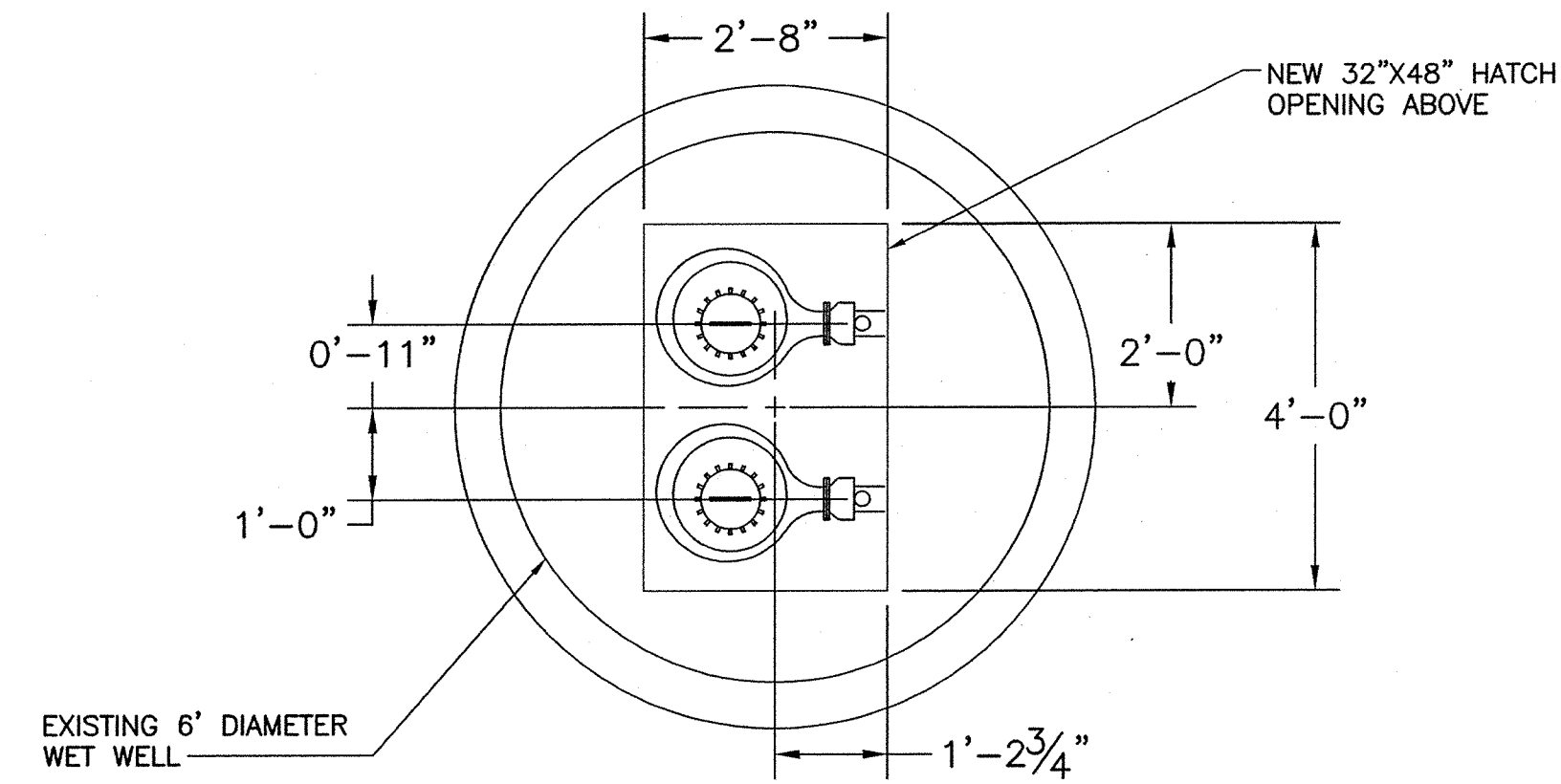
PLAN VIEW ABOVE THE PIPING

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



SECTION E-7

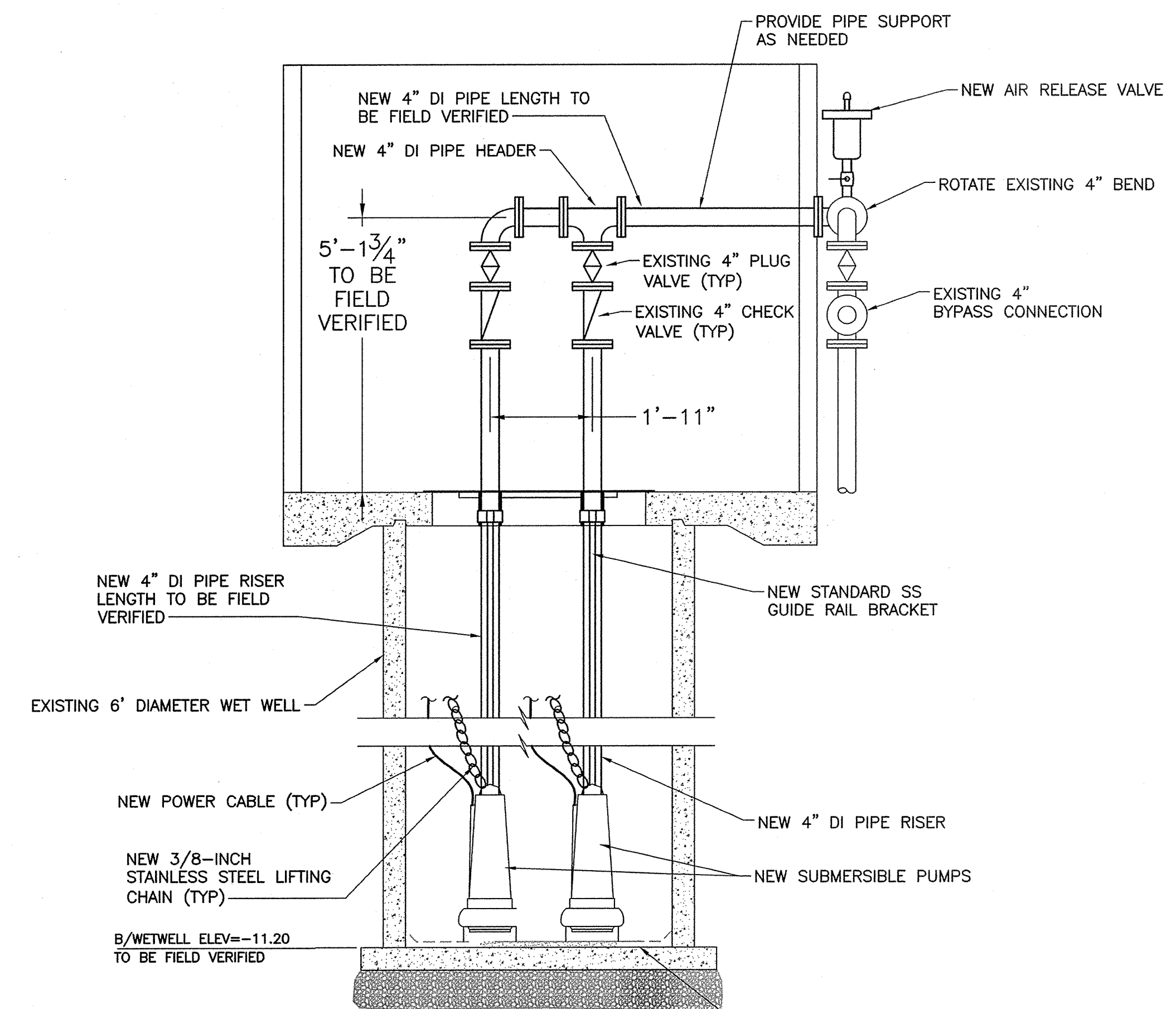
SCALE: 1/2" = 1'-0"



PLAN VIEW BELOW THE SLAB

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

NOTE:
ALL EXPOSED PIPING, INCLUDING NEW VENT
TO BE PAINTED. COLOR TO BE SELECTED BY OWNER



SECTION F-7

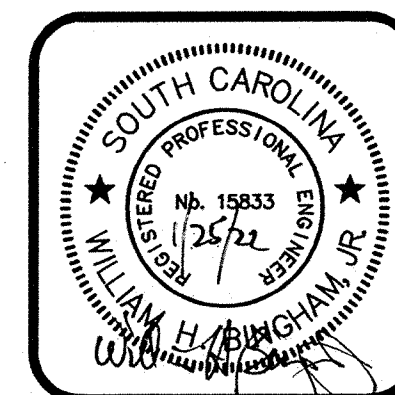
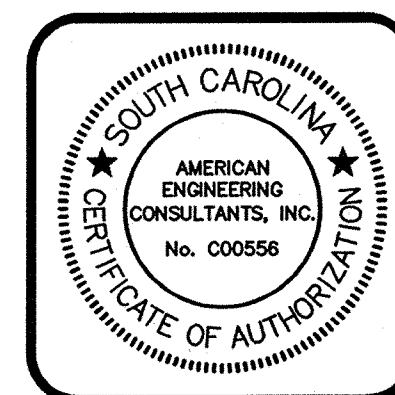
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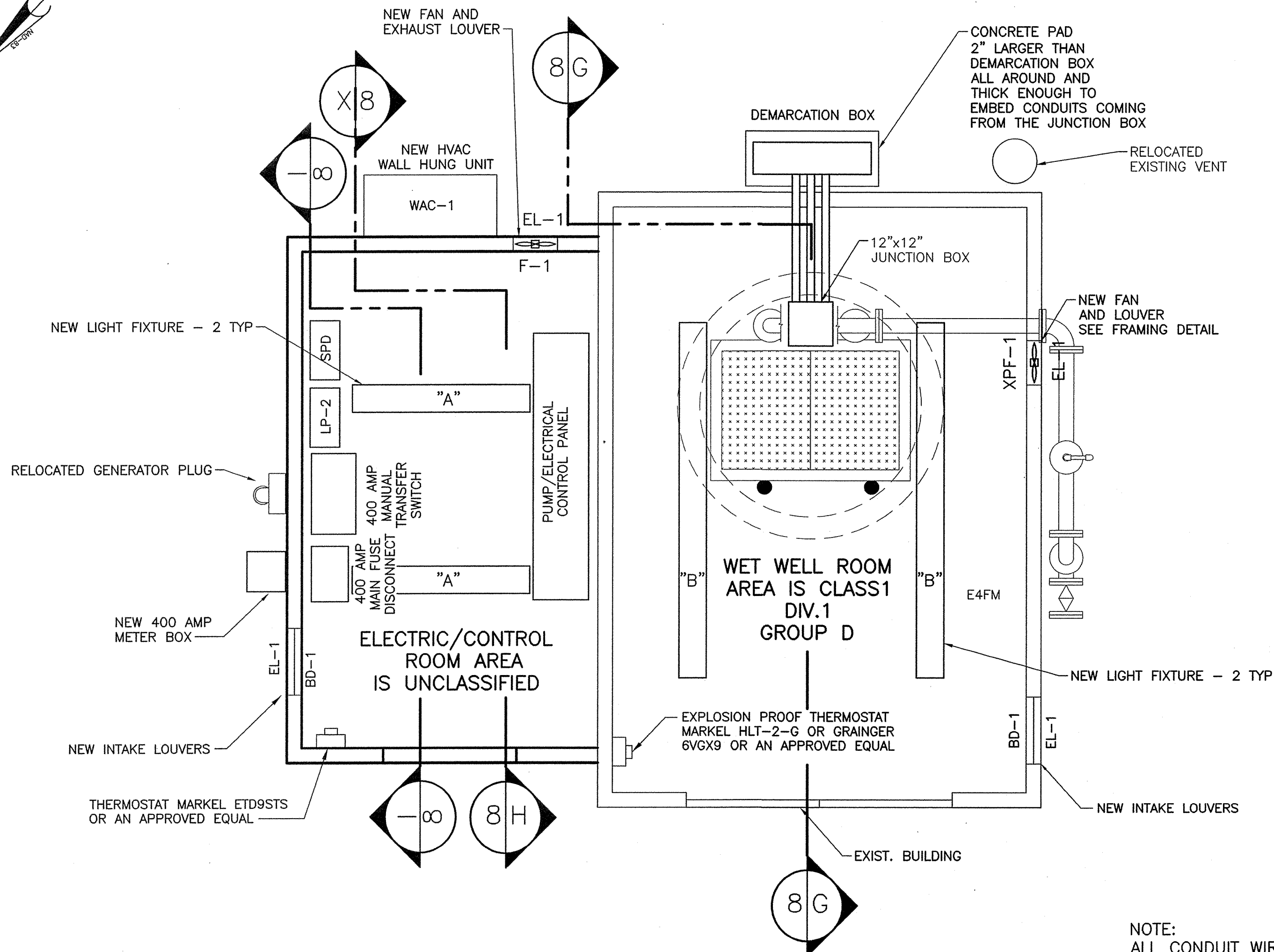
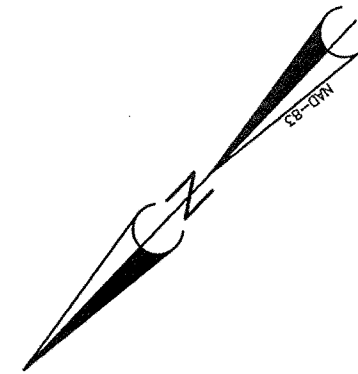
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CAD FILE	PS-B
LAYOUT	IMPROVEMENTS

Upgrades to Pump
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PREPARED FOR
Town of Edisto Beach
Colleton County, South Carolina
Pump Station "B" - Proposed Upgrades - Plan and Cross Section Views

DRAWING NO.	7
OF	10
FILE NO.	

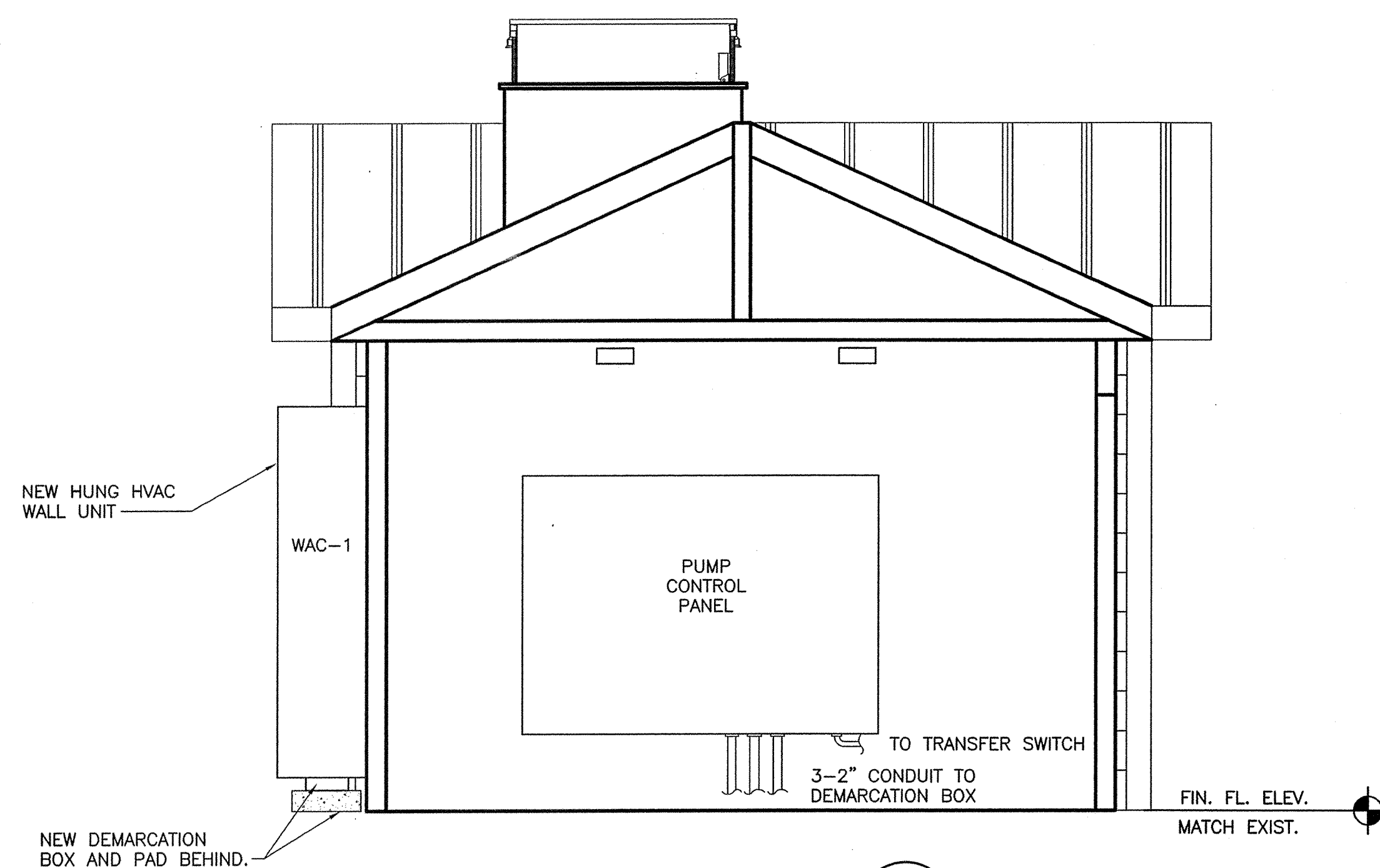


PLAN VIEW
SCALE: 1/2" = 1'-0"

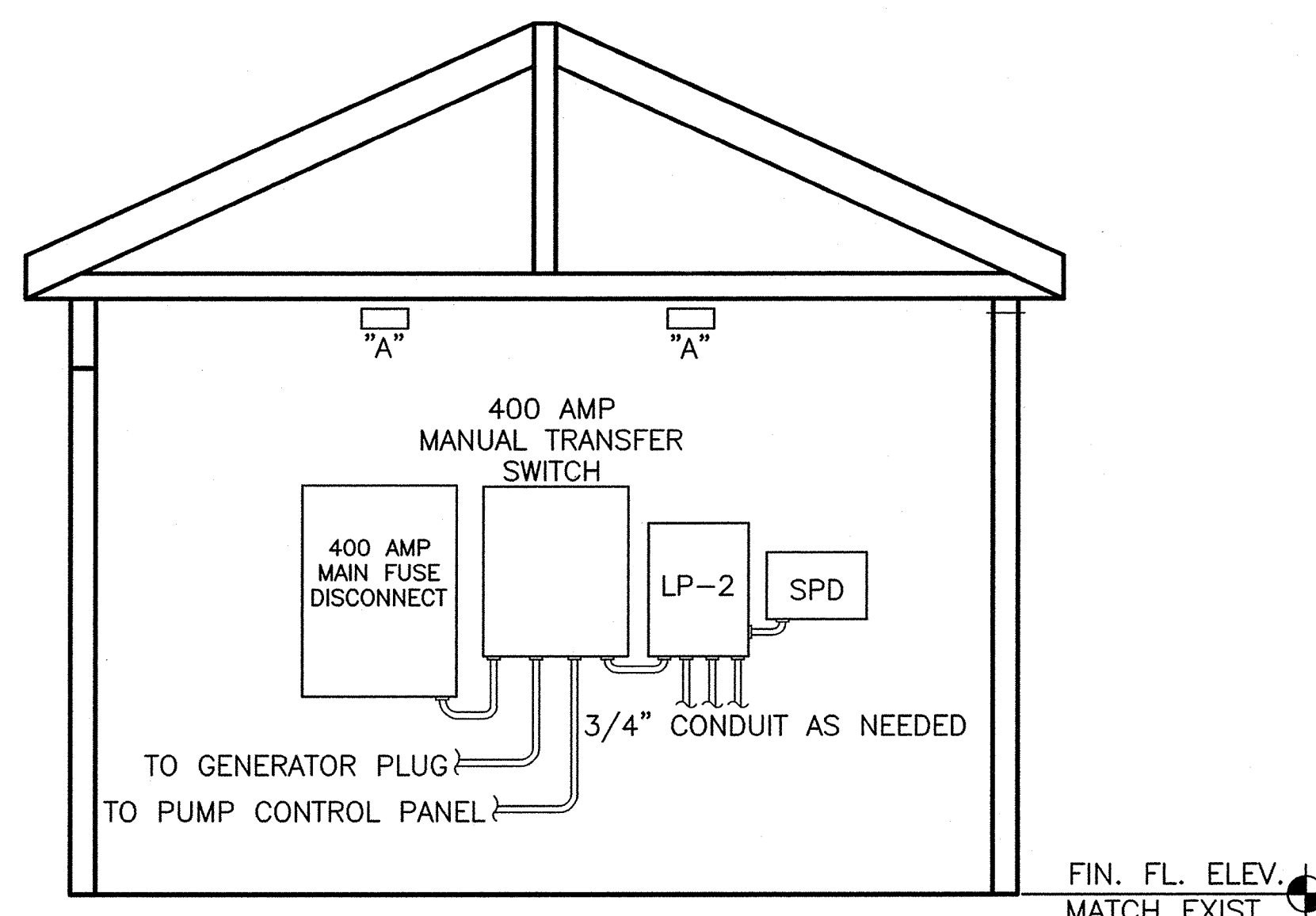
NOTE:
ALL CONDUIT WIRING INSIDE CLASSIFIED AREAS
SHALL COMPLY WITH REQUIREMENTS OF NEC
CLASS 1, DIV-1, GROUP C & D W/SEAL OFFS
IN ALL CONDUITS

SCHEDULE - PANELBOARD LP-2 TYPE MAIN BREAKER				
200 AMP 10,000 AIR 120/240 V 1 PH. 3 W.				
FLUSH ☐ SURFACE ☒ 30 TOTAL SPACES 200% NEUTRAL				
NO.	LOAD	AMP	POLES	LOAD VA
1	SPD	40	2	
3	SPD			
5	RECEPTACLE	20	1	360
7	RECEPTACLE	20	1	900
9	LIGHTS	20	1	720
11	LIGHTS	20	1	720
13	SPARE	20	1	720
15	SPARE	20	1	720
17	SPARE	20	1	720
19	SPARE	20	1	1500
21	SPARE	20	1	
23	SPACE	20	1	
25	SPACE	20	1	
27	SPACE	20	1	
29				
2	WAC-1	30	2	7200
4				
6	EXHAUST FAN	20	1	900
8	SPARE	20	1	1000
10	SPARE	20	1	550
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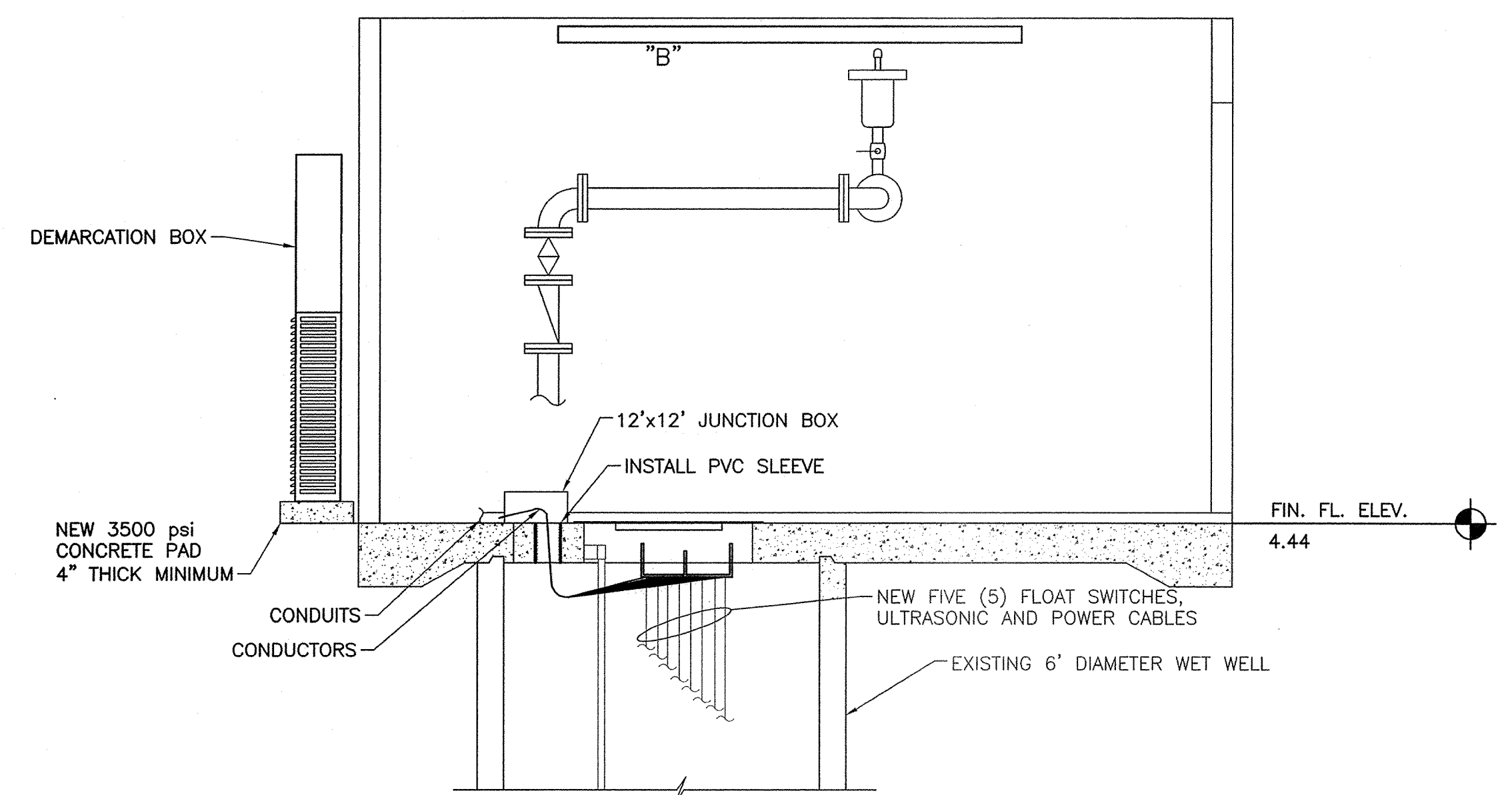
PANEL LP-2



SECTION H
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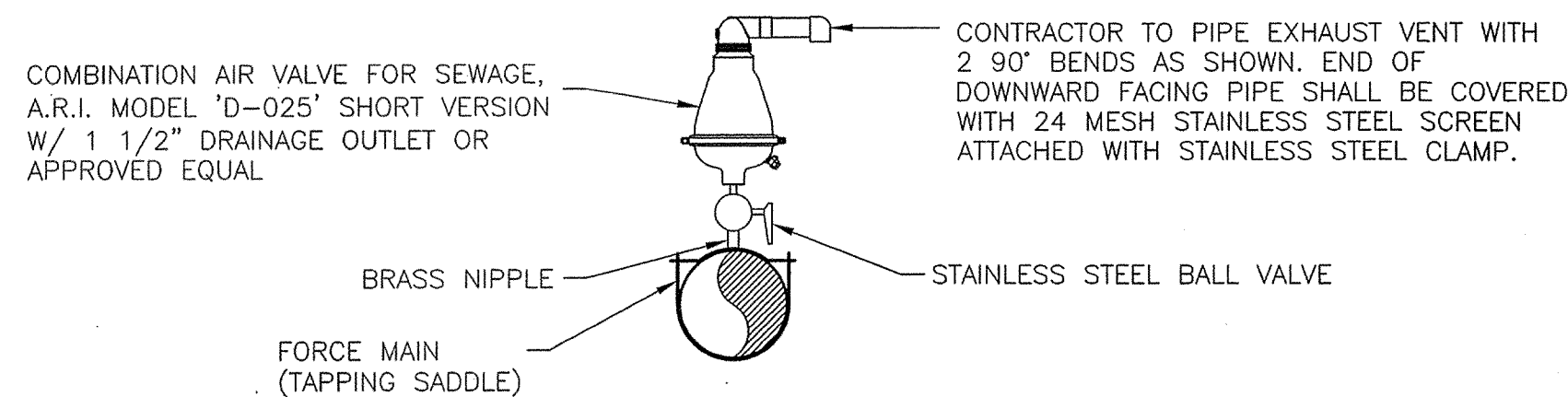
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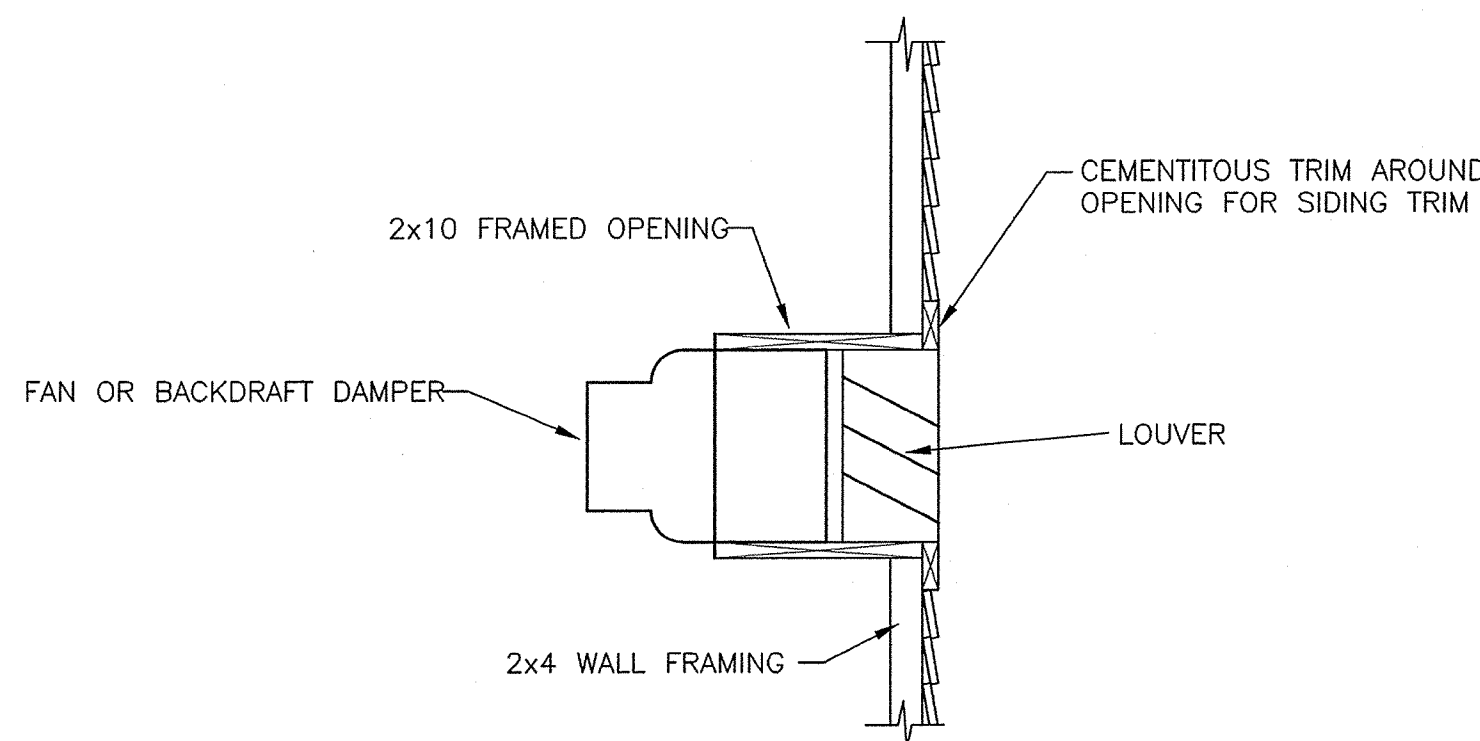
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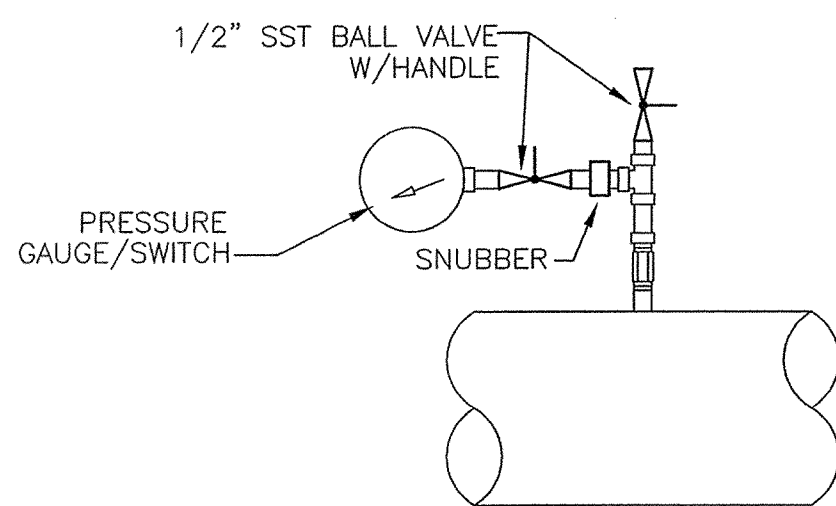
NO.	DATE	REVISION	BY



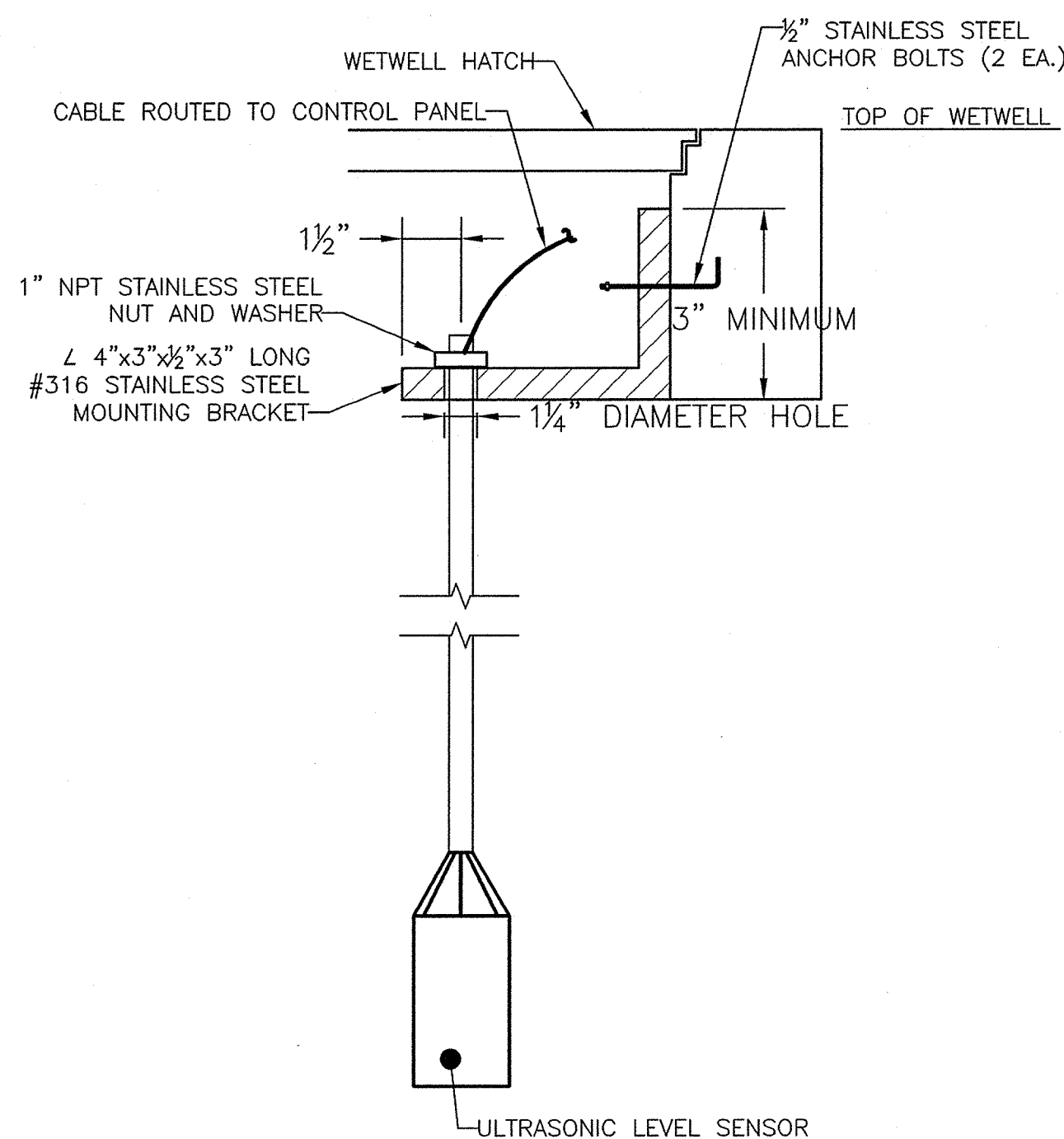
FORCE MAIN AIR RELEASE VALVE MANHOLE
NOT TO SCALE



FAN/LOUVER FRAMING DETAIL
NOT TO SCALE

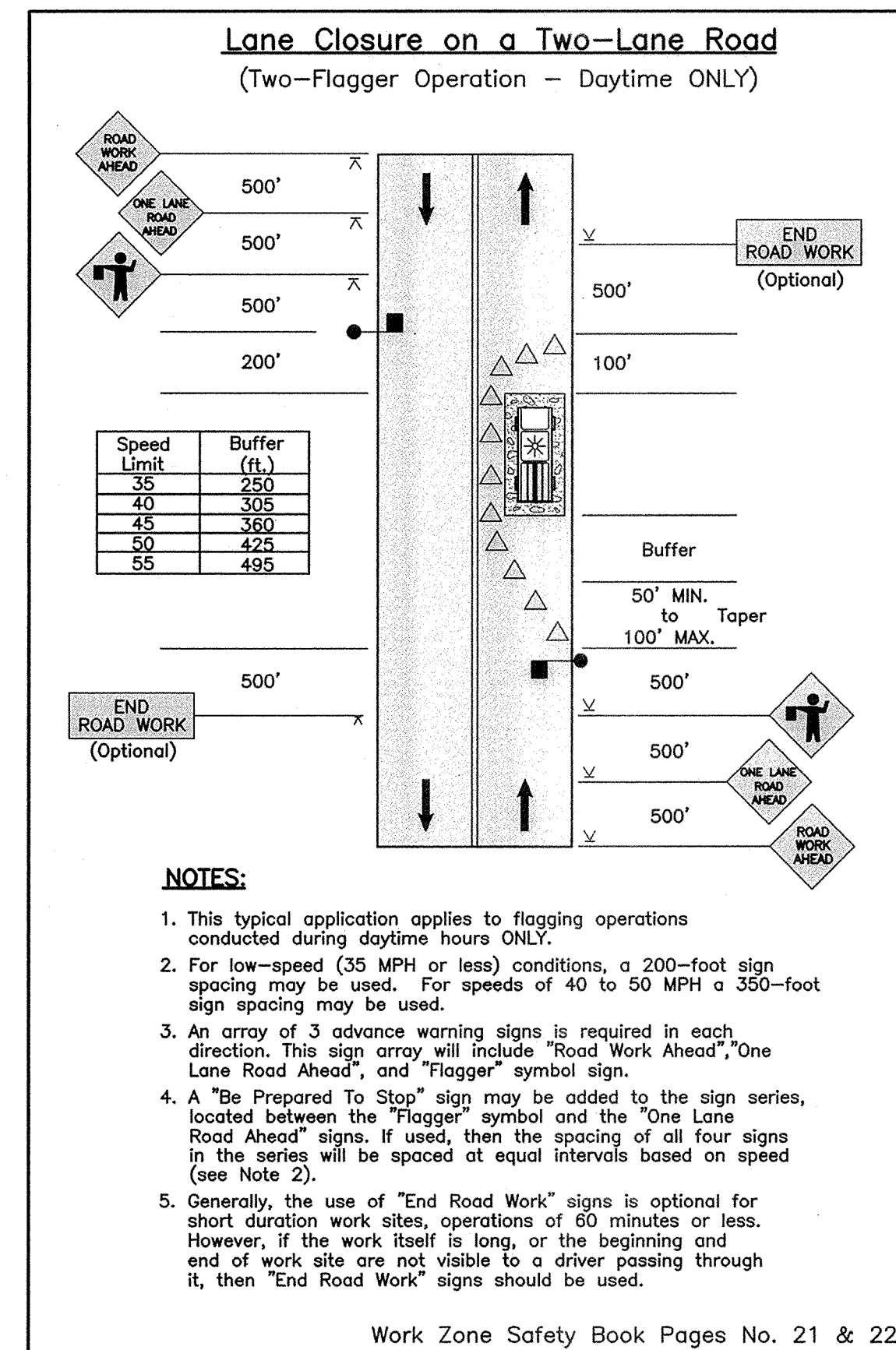


**PRESSURE GAUGE/SWITCH
TYP. INSTALLATION DETAIL**
NOT TO SCALE



NOTE:
LOCATE PER MANUFACTURER'S RECOMMENDATIONS TO AVOID INTERFERENCE FROM PUMPS, WALL ETC. IN THE WETWELL.

SENSOR MOUNTING PLATE
NOT TO SCALE



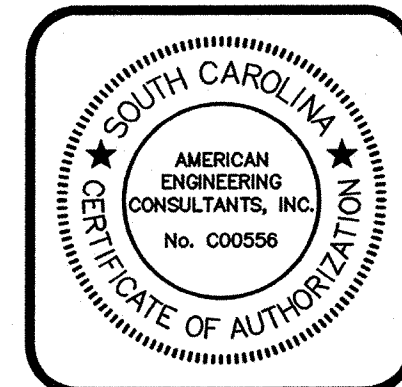
- NOTES:**
1. This typical application applies to flagging operations conducted during daytime hours ONLY.
 2. For low-speed (35 MPH or less) conditions, a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
 3. An array of 3 advance warning signs is required in each direction. This sign array will include "Road Work Ahead", "One Lane Road Ahead", and "Flagger" symbol sign.
 4. A "Be Prepared To Stop" sign may be added to the sign series, located between the "Flagger" symbol and the "One Lane Road Ahead" signs. If used, then the spacing of all four signs in the series will be spaced at equal intervals based on speed (see Note 2).
 5. Generally, the use of "End Road Work" signs is optional for short duration work sites, operations of 60 minutes or less. However, if the work itself is long, or the beginning and end of work site are not visible to a driver passing through it, then "End Road Work" signs should be used.

1/18/2022 3:04 PM ARVAS08 P:\21-028\DWGS\A AND B MISC DETAILS.DWG

NO	DATE	REVISION	BY

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1/18/2022 3:08 PM ARVAS09 P:\21-028\DWGS\PS-A AND BLEET DETAILS.DWG

VENTILATING EQUIPMENT SCHEDULE

SYMBOL	MFR.	MODEL NO.	FAN				MOTOR			CAPACITY		SPACES SERVED	TYPE FAN	CONTROLS	MATERIAL	REMARKS
			TYPE	DIA.	RPM	MAX. SONES	NO. OF SPEEDS	HP OR AMPS	VOLTAGE CHAR.	CFM	S.P. (IN)					
XPF-1	CANARM	AX-20-4	PROP	20"	1725	18	1	1/3 HP	115-1-60	3140	0.25	PS-B	SIDEWALL PROP	THERMOSTAT	ALUMINUM	1, 2, 3, 4, 5, 6
F-1	CANARM	AX-20-4	PROP	20"	1725	18	1	1/3 HP	115-1-60	3140	0.25	PS-A PS-B	SIDEWALL PROP	THERMOSTAT	ALUMINUM	1, 2, 3, 4, 5, 6
EL-1	CANARM	EL4-24X24	-	-	-	-	-	-	-	-	-	PS-A PS-B	FIXED LOUVER	-	ALUMINUM	24" X 24", 6
BD-1	CANARM	SR124X24	-	-	-	-	-	-	-	-	-	PS-A PS-B	BACKDRAFT DAMPER	-	ALUMINUM	24" X 24", 6

- FURNISH WITH DISCONNECT.
- FURNISH WITH INTEGRAL SHUTTER.
- FURNISH WITH EXPLOSION PROOF MOTOR.
- FURNISH WITH CLASS 1 DIV 1 WALL SWITCH LARSEN EPS-25A OR EQUAL.
- FURNISH WITH MARKEL HLT-2-G THERMOSTAT FOR CLASS 1 DIV 1 OR EQUAL.
- EQUAL PRODUCTS BY MARVAIR OR OTHER MANUFACTURERS WILL BE ACCEPTED.

WALL AIR CONDITIONER SCHEDULE

SYMBOL	MFR.	MODEL NO.	INDOOR FAN			UNIT VOLTAGE CHAR.	MCA (AMPS)/MaxFS (AMPS)	TOTAL COOLING 95°F O.A. M.B.H.	AIR TEMP. ENTERING EVAP. DB/WB(°F)	UNIT EER/ MIN EER PER ASHRAE 90.1	REFRIG.	ELECTRIC HEATING		MIN. OUTDOOR AIR-CFM	WEIGHT (LBS)	REMARKS
			C.F.M.	ESP (IN)	NO. OF SPEEDS							HEATER MBH	HEATER KW			
WAC-1	BARD	W18AB-A05YXSX5F	600	0.1	1	230-1-60	30/30	18	80/67	11.3/10.7	R-410A	17.0	5.0	0	370	1, 2, 3, 4, 5, 6, 7, 8

- FURNISH WITH CIRCUIT BREAKER DISCONNECT.
- FURNISH WITH LOW AMBIENT COOLING OPERATION CONTROL AND FILTER PRESSURE SWITCH.
- FURNISH WITH FULL FLOW TEMPERATURE CONTROLLED ECONOMIZER.
- PROVIDE WITH STAINLESS STEEL CONSTRUCTION.
- PROVIDE WITH SPECIAL PROTECTIVE COATING ON EVAPORATOR AND CONDENSER COILS AND INSIDE/OUTSIDE OF UNIT.
- FURNISH WITH SIDEWALL SUPPLY AND RETURN GRILLE.
- FURNISH WITH MANUAL FRESH AIR DAMPER AND DISPOSABLE FILTER.
- EQUAL PRODUCTS BY MARVAIR OR OTHER MANUFACTURERS WILL BE ACCEPTED.

FIXTURE SCHEDULE

SYMBOL	MFR.	MODEL NO.	VOLTAGE	SPACES SERVED	TYPE	CONTROLS	MATERIAL	REMARKS
A	LITHONIA	CSVT						