



CONFINED  
SPACE ENTRY  
PERMIT  
REQUIRED

# LIFT STATION UPGRADE MASTER LIFT STATION 12A REHAB 404-6022287

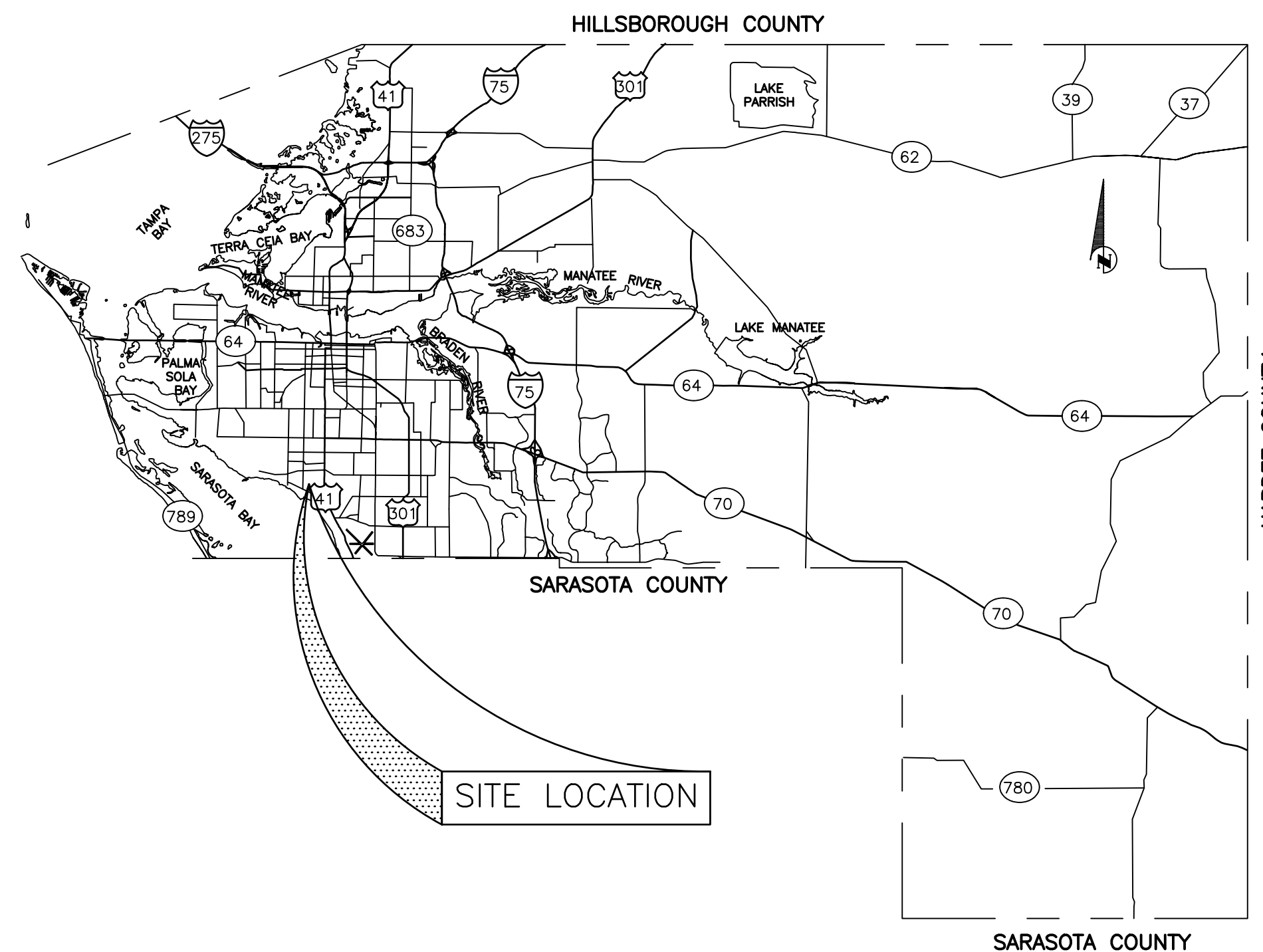
NOVEMBER 2015

100% PLANS

LIFT STATION UPGRADE  
MASTER LIFT STATION 12A REHAB  
COVER SHEET



VICINITY MAP  
N.T.S.



**PROJECT DESCRIPTION**

REMOVE AND REPLACE EXISTING FIBERGLASS DECKING AND ISOLATION GATES

REMOVE AND REPLACE EXISTING ALUM. SAFETY RAIL SYSTEM WITH A BASIC IN-LINE TWO-RAIL FIBERGLASS GUARDRAIL SYSTEM THAT MEETS OR EXCEEDS CURRENT OSHA REQUIREMENTS.

REPAIR, REHAB EXISTING WET WELL CONCRETE STRUCTURE AND APPLY NEW PROTECTIVE SPRAY LINER.

REMOVE AND REPLACE EX. WET WELL LIGHTS WITH LED EXPLOSION-PROOF (CLASS I, DIVISION I) AND CORROSION RESISTANT LIGHTS.

REMOVE AND REPLACE EXISTING DIMINUTOR, BAR SCREEN, CONTROL PANEL AND ACCESS HATCH

REMOVE AND INSTALL NEW EXTERIOR LIGHTING, CONDUIT, ETC ALONG THE EAST SIDE OF THE MLS BUILDING.

INSTALL A NEW ABB MAG METER INSIDE A NEW METER VAULT, REPLACE A PORTION OF THE EXISTING FORCE MAIN, AND INSTALL A NEW BY-PASS PUMPING RISER SYSTEM.

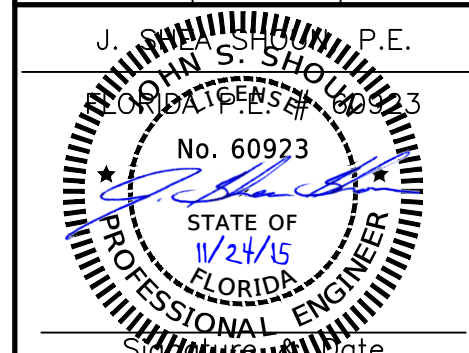
REMOVE AND REPLACE EXISTING WET WELL ACCESS DOOR WITH NEW ALUMINUM DOOR AND FRAME.

NO.	INDEX OF SHEETS
1.	COVER SHEET
2.	PLAN VIEWS
3.	SECTION VIEWS
4.	WET WELL FRAMING
5.	DETAILS
6.	STAIRS DETAILS

MASTER LIFT STATION 12A	
ITEM	VALUE
RTU	139
STREET ADDRESS	2007 BAY DR
CITY	BRADENTON
SEC./TWN./RGE	22/35/17
DESIGN FLOW	3,000 GPM @ 93' TDH
COMMINUTOR ACCESS HATCH DIMENSIONS *	30" X 29.5" & 30" X 23.5"
INFLUENT CHANNEL DIMENSIONS *	4' DEEP X 3' WIDE

\* CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS

NO.	REVISION DESCRIPTION	BY	DATE

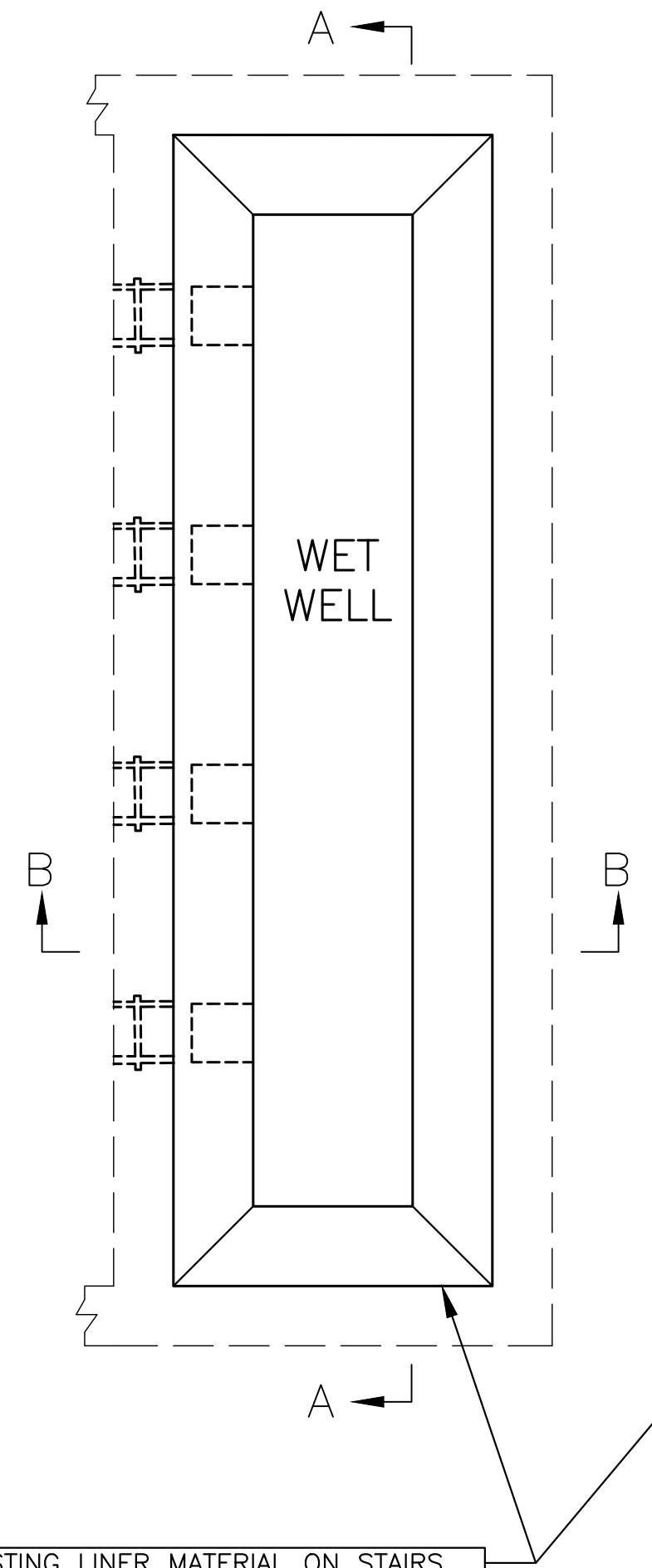


COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\W\Engineering\Share\U\I\Eng Design\PROJ\404-6022287\12A Rehab\DWG\active\MLS 12A Rehab\DWG\active\MLS 12A Plans\404-6022287.dwg, 1 Cover, 11/24/2015 10:38 AM Shea Shoun, 1:1, ANSI full bleed D, (34.00 x 22.00 inches)

LIFT STATION UPGRADE  
MASTER LIFT STATION 12A REHAB  
PLAN VIEW

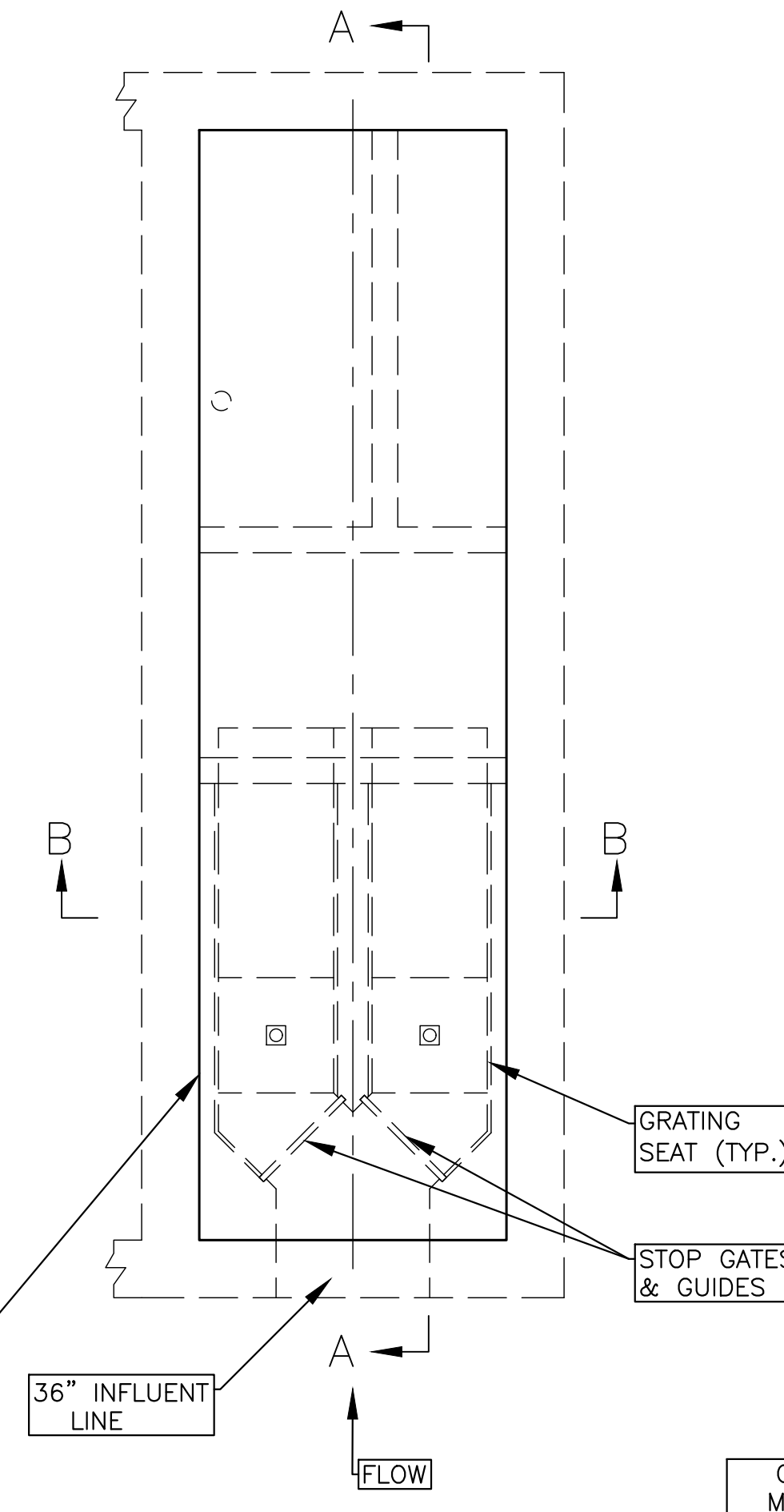
PLAN-WET WELL  
BOTTOM LEVEL

NTS



PLAN-WET WELL  
INTERMEDIATE LEVEL

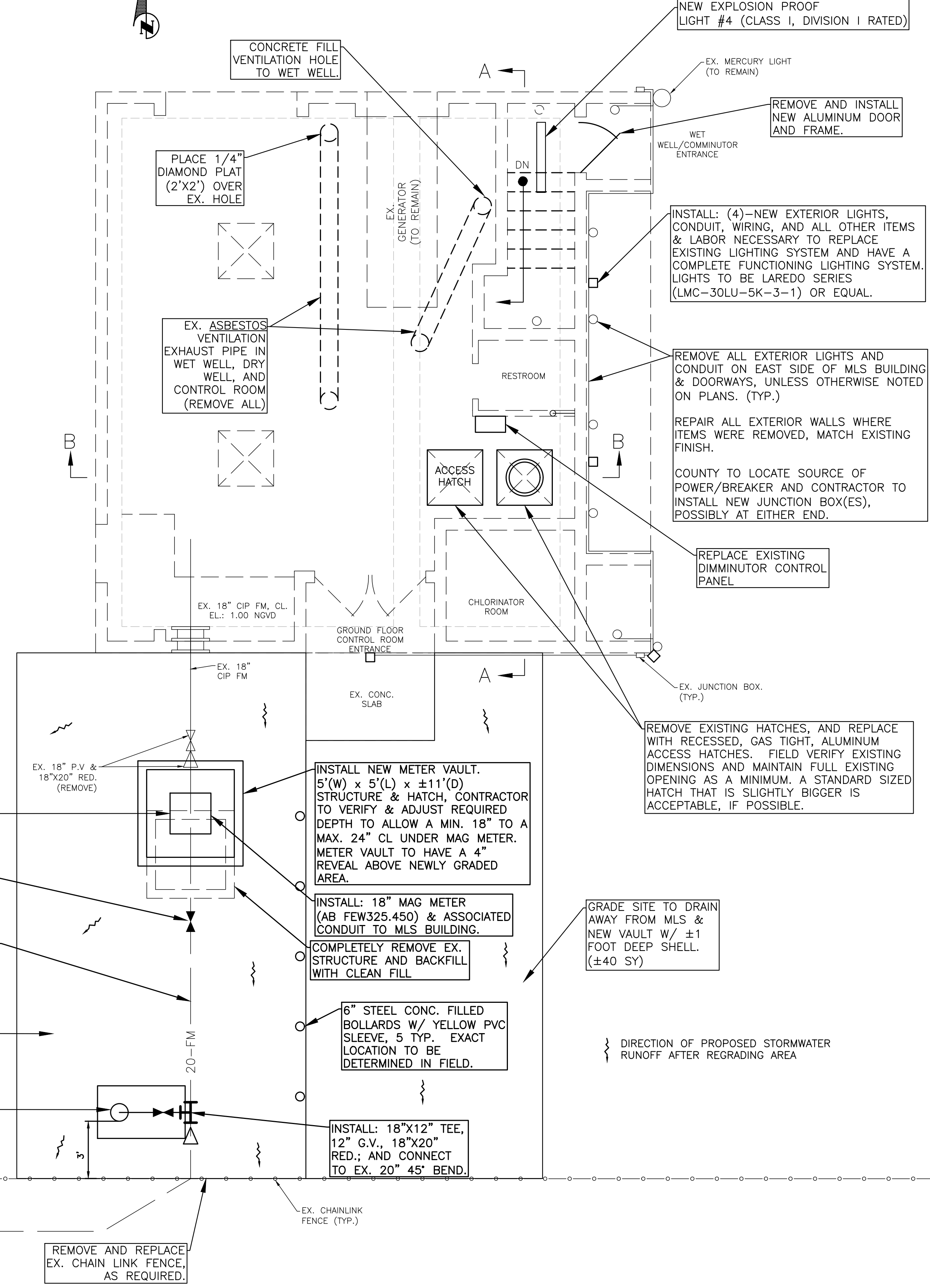
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PLAN-GROUND FLOOR

NTS

CONFINED SPACE  
ENTRY PERMIT  
REQUIRED



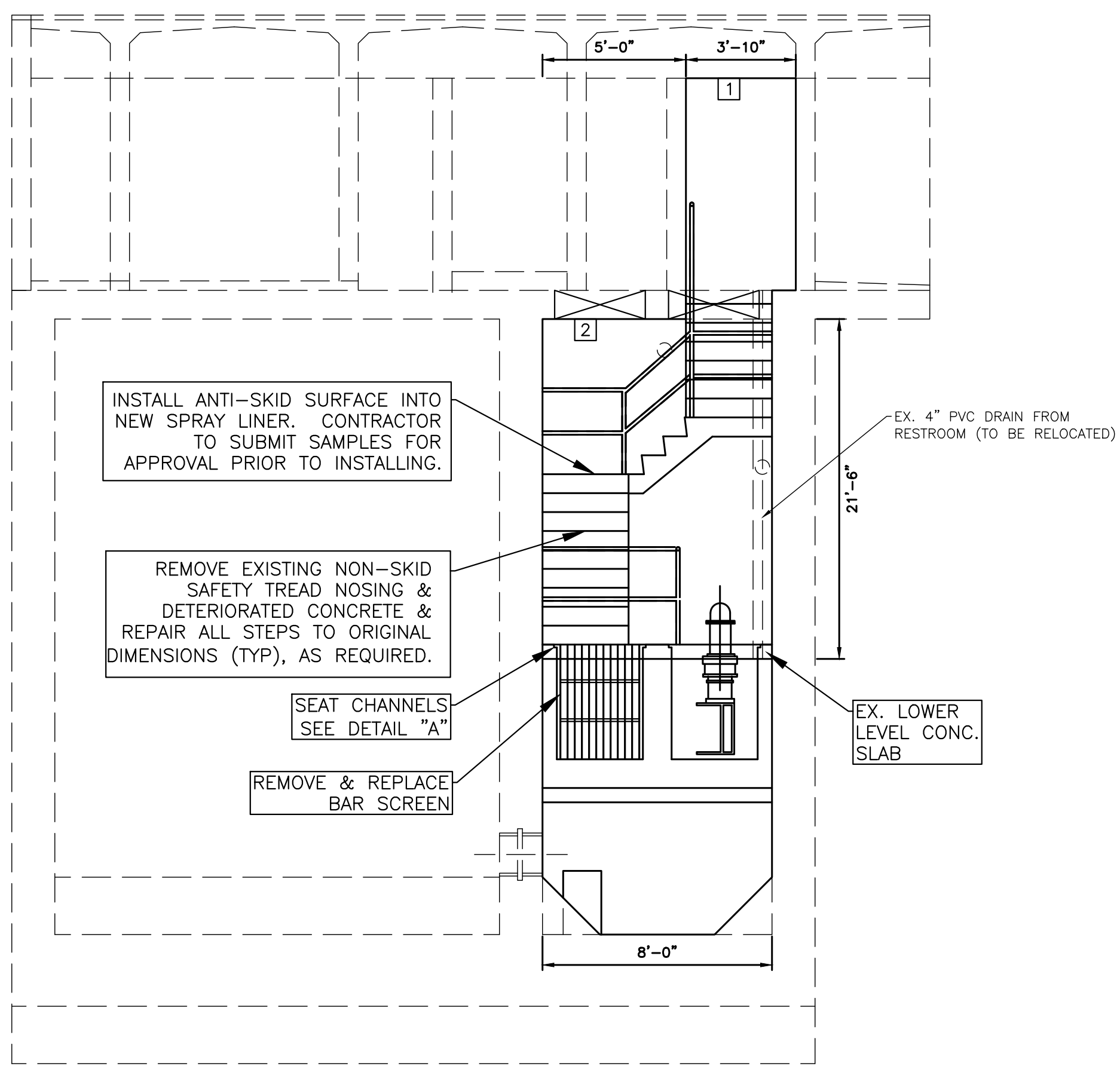
1. REMOVE EXISTING LINER MATERIAL ON STAIRS, WALLS, FLOORS, AND CEILING.
2. PRESSURE CLEAN AND REMOVE ALL DETERIORATED CONCRETE AS DIRECTED BY COUNTY PERSONNEL.
3. CLEAN AND COAT EXPOSED REINFORCING STEEL PRIOR TO PATCHING.
4. RESTORE CONCRETE TO ORIGINAL PROFILE, OR AS DIRECTED BY COUNTY PERSONNEL.
5. AFTER RESTORATION INSTALL NEW SPRAY LINER.
6. INSPECTION OF WORK MUST BE PERFORMED BY COUNTY PERSONNEL PRIOR TO COMMENCING TO NEXT STAGE.

- GENERAL NOTES**
1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: WILLIAM LORENZO, P.E. AND CAN BE REACHED AT (941) 708-7450; x 7338
  2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH NICK WAGNER, LIFT STATION SUPERINTENDENT, 941-792-8811 X5377.
  3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
  4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
  5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
  6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE COUNTY TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
  7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.
  8. THE CONFIGURATION OF THE MASTER LIFT STATION SHOWN ON THESE GRAPHICS MAY BE MIRRORED TO THE ACTUAL STRUCTURE. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITION, ELEVATIONS, CONFIGURATIONS, ETC FOR ACCURACY.
  9. CONTRACTOR IS RESPONSIBLE FOR ALL LABOR, MEASUREMENTS, AND ALL MATERIALS REQUIRED TO COMPLETE THE JOB AS INTENDED.
  10. CONTRACTOR IS RESPONSIBLE FOR DETERMINING QUANTITIES TO MEET OR EXCEED OSHA REQUIREMENTS FOR THE PROPOSED GUARDRAIL SYSTEM.
  11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE ENTIRE GUARDRAIL SYSTEM FOR REVIEW TO THE COUNTY PRIOR TO PURCHASING AND INSTALLING MATERIALS.

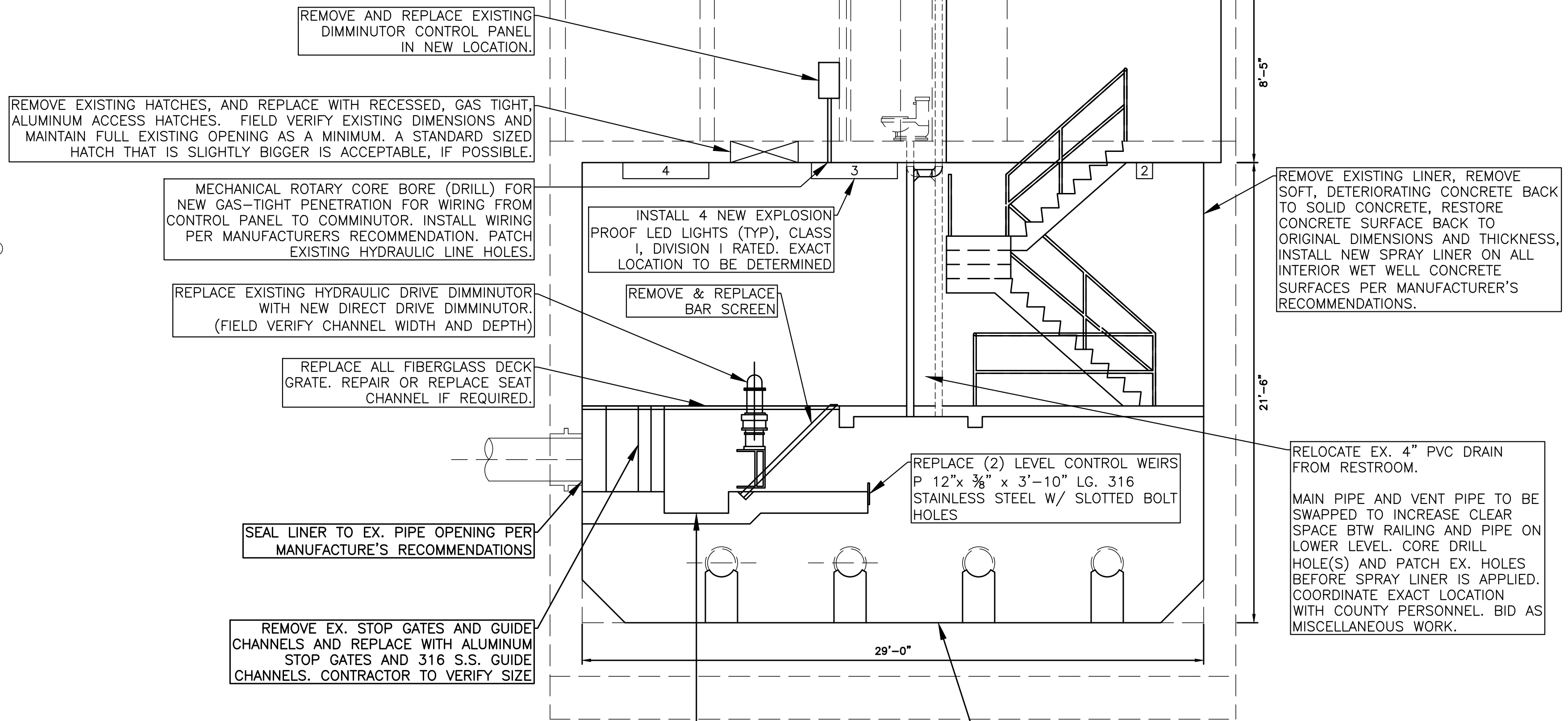
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	404-6022287	
SURVEY #	-	
SEC./TWN./RGE	22/35/17	
VERT. SCALE	NTS	
HORZ. SCALE	1"=4'	
	BY	DATE
SURVEYED	-	-
DESIGNED	JSS	3/15
DRAWN	JSS	3/15
CHECKED	-	3/15

J. William Lorenzo, P.E.  
Professional Engineer  
No. 60923  
STATE OF FLORIDA  
1/24/15  
Date



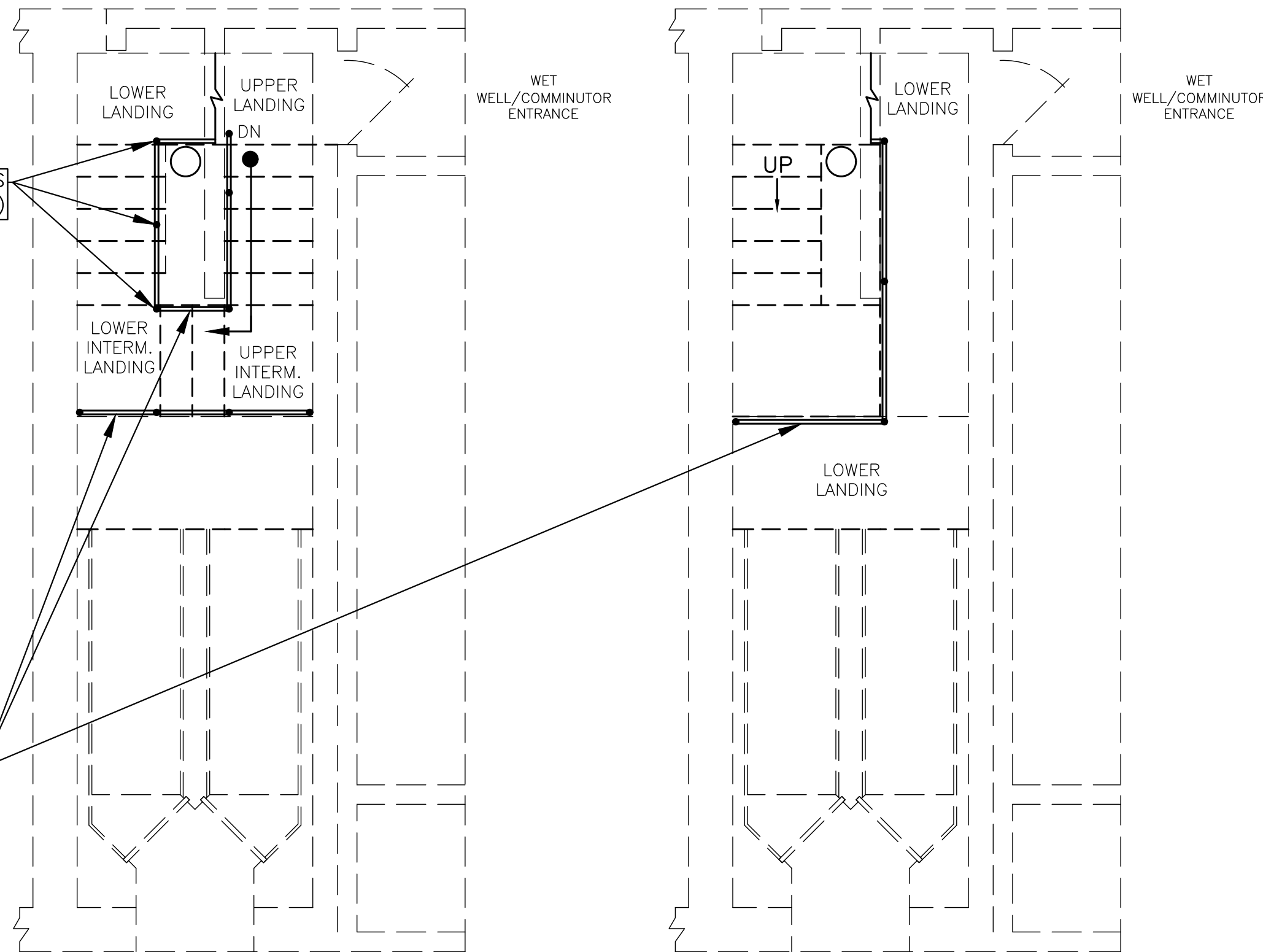
**SECTION BB**  
NTS



**SECTION AA**  
NTS

1. REMOVE EXISTING LINER MATERIAL ON WALLS, FLOORS, AND CEILING.
2. VERIFY LIMITS OF DEMOLITION AND RESTORATION OF WALLS, FLOORS, AND CEILING WITH COUNTY PERSONNEL PRIOR TO COMMENCING WORK.
3. PRESSURE CLEAN AND REMOVE ALL DETERIORATED CONCRETE.
4. CLEAN AND COAT EXPOSED REINFORCING STEEL PRIOR TO PATCHING.
5. RESTORE CONCRETE TO ORIGINAL PROFILE.
6. STOP ALL GROUND WATER INFILTRATION.
7. AFTER RESTORATION INSTALL NEW SPRAY LINER.

CONCRETE REPAIRS AND NEW LINER SHALL BE APPLIED BEFORE NEW FIBERGLASS MOUNTING HARDWARE AND GUARDRAIL SYSTEM IS INSTALLED. ALL HARDWARE TO BE INSTALLED PER MANUFACTURE'S RECOMMENDATIONS.



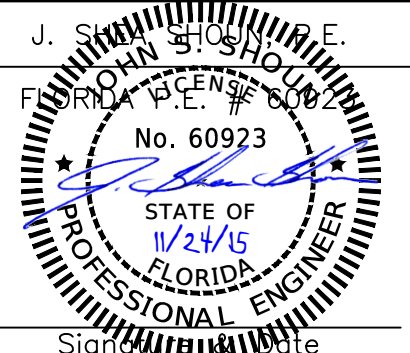
**GUARDRAIL LAYOUT**  
NTS

REMOVE AND REPLACE ALL EXISTING SAFETY RAIL W/ FIBERGLASS GUARDRAIL SYSTEM & FITTINGS. RAILING ENDS SHALL BE POST MOUNTED AND SHALL BE MOUNTED ON TOP OF FLOORING/STEPS PER MANUFACTURE'S RECOMMENDATIONS. FIBERGLASS TOE BOARD SHALL BE PROVIDED ON ALL OPEN-SIDED FLOORS. ALL MOUNTING/FASTENING HARDWARE AND RIVETS SHALL BE 316 STAINLESS STEEL

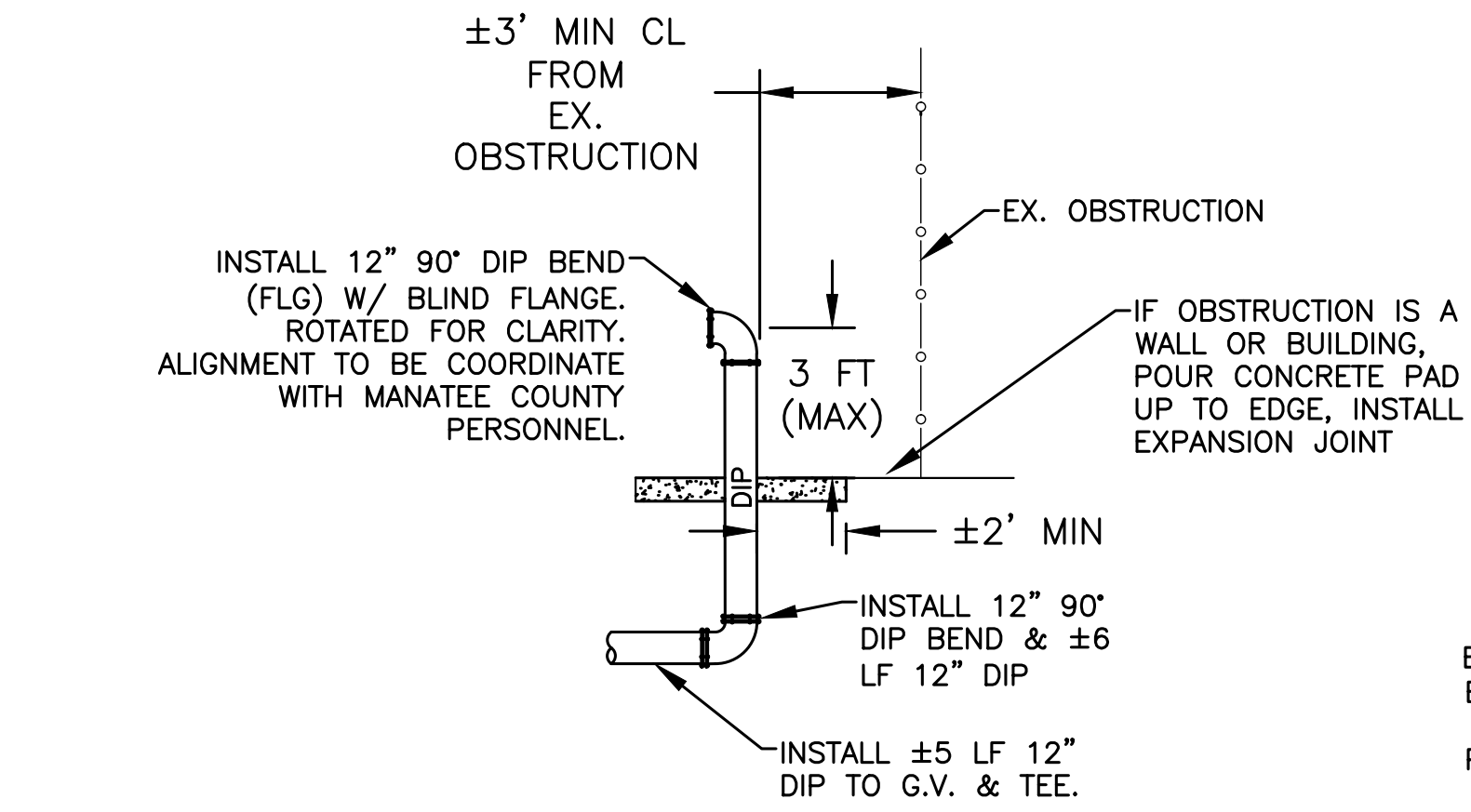
**COMMUNOTOR NOTES:**

1. ELECTRICAL LINE NEEDS TO BE ROUTED FROM THE NEW CONTROL BOX TO THE NEW COMMUNOTOR. CURRENT LINES ARE ROUTED THRU THE EX. HATCH, THIS WILL NO LONGER BE ACCEPTABLE. SEE NOTE ABOVE.
2. THE CONTRACTOR IS TO PROVIDE A COMPLETE AND OPERATIONAL UNIT, INCLUDING ALL LABOR, ASSOCIATED PARTS, FITTINGS, AND 3 O&M MANUALS.
3. SEE SPECIFICATION SECTION 16108 FOR MORE DETAILS.

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	BY	DATE	
SURVEYED	-	-	
DESIGNED	JSS	3/15	
DRAWN	JSS	3/15	
CHECKED	-	3/15	



### BY-PASS RISER PIPE DETAIL



NTS

EPCON CERAMIC 6" EPOXY AND 3/4" 316 S.S. THRD. ROD ANCHORS WITH 7" EMBEDMENT IN CONCRETE (TYP)

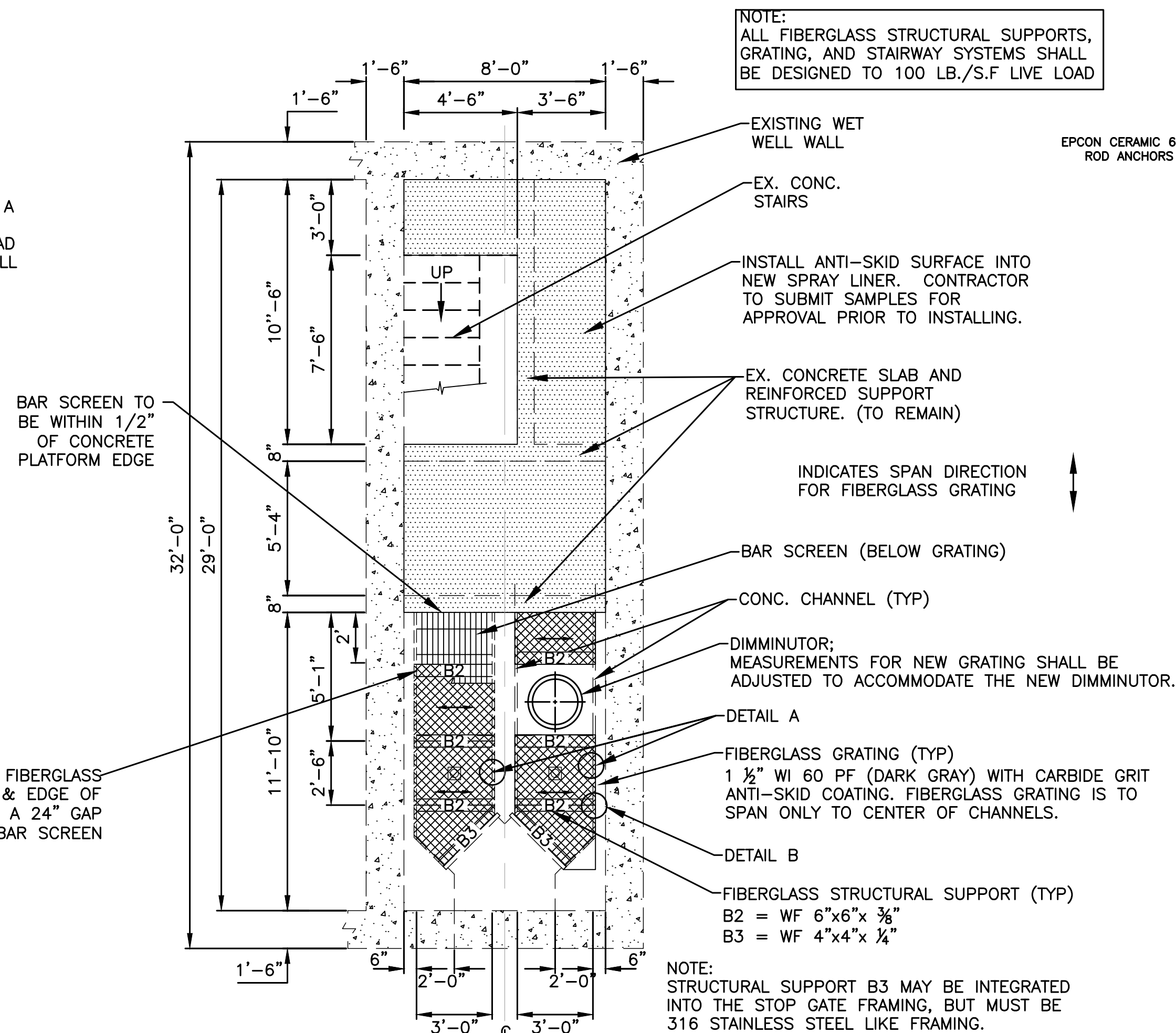
EX. WET WELL OR CONCRETE WALL W/ LINER

3"x3"x 1/4" FIBERGLASS ANGLE

### DETAIL "C" GRATING SUPPORT

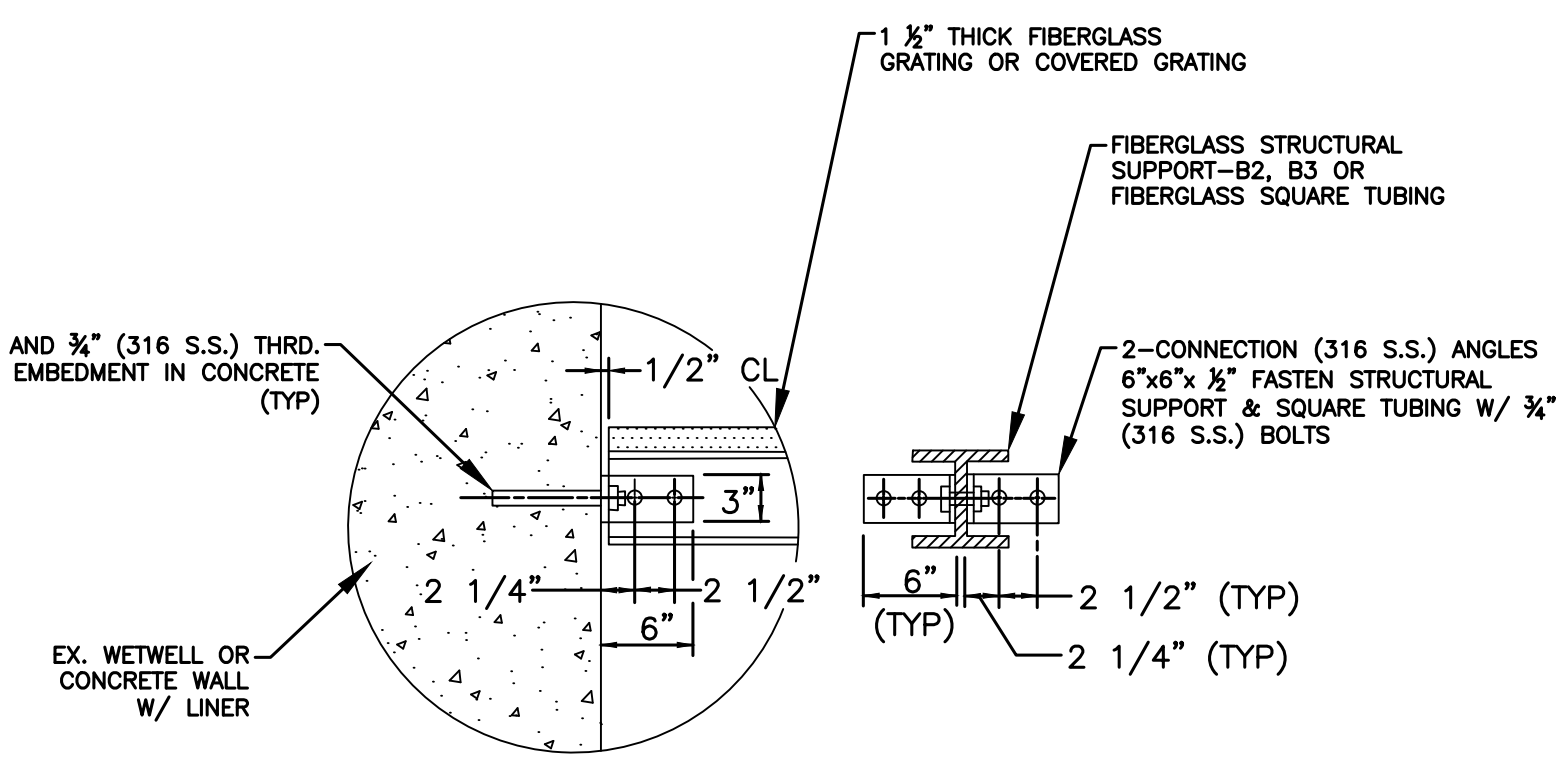
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### WET WELL BOTTOM LEVEL SURFACE/GRATING DETAILS

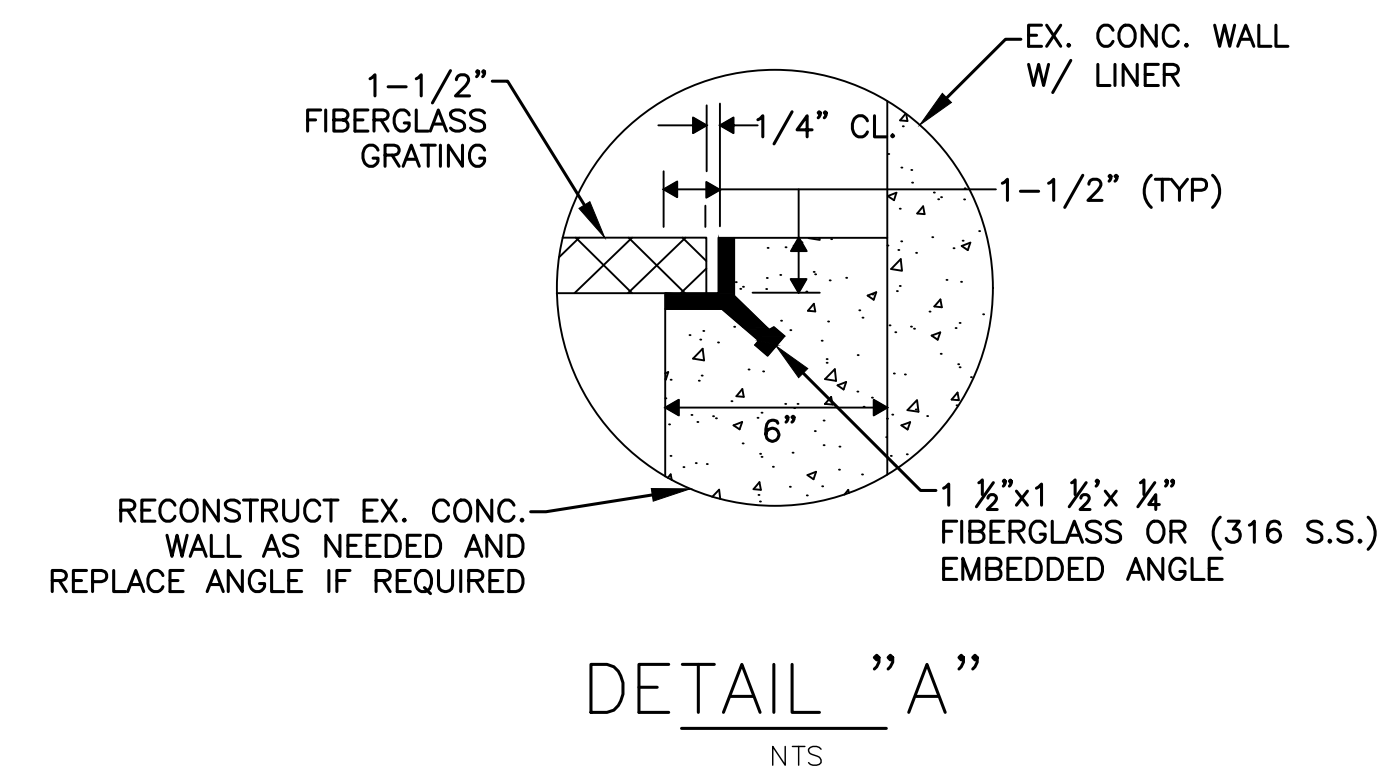


NTS

### DETAIL "B" B2, B3 & SQUARE TUBING CONNECTIONS

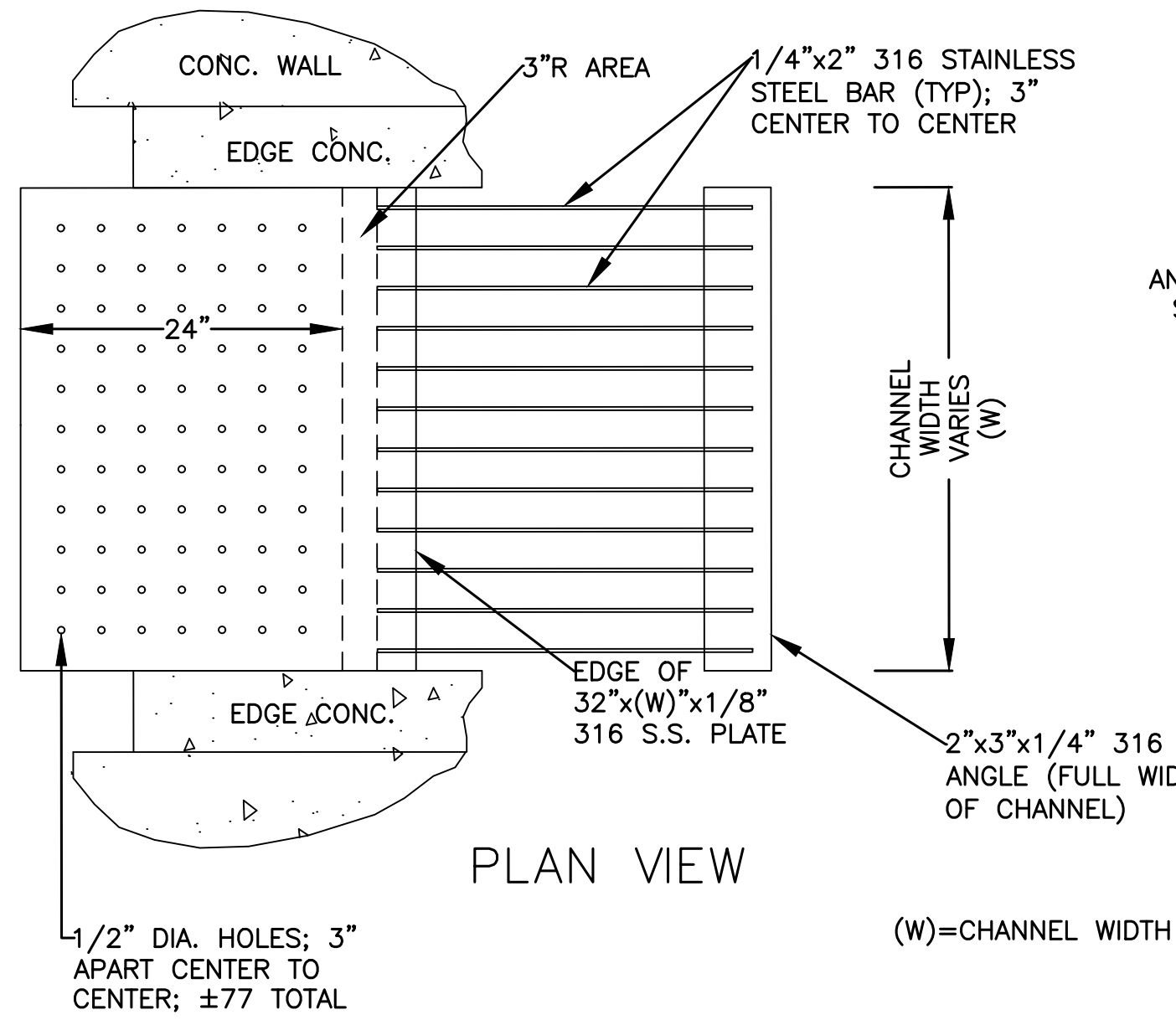


### DETAIL "A"



NOTE:  
ALL MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL (S.S.), UNLESS OTHERWISE NOTED.

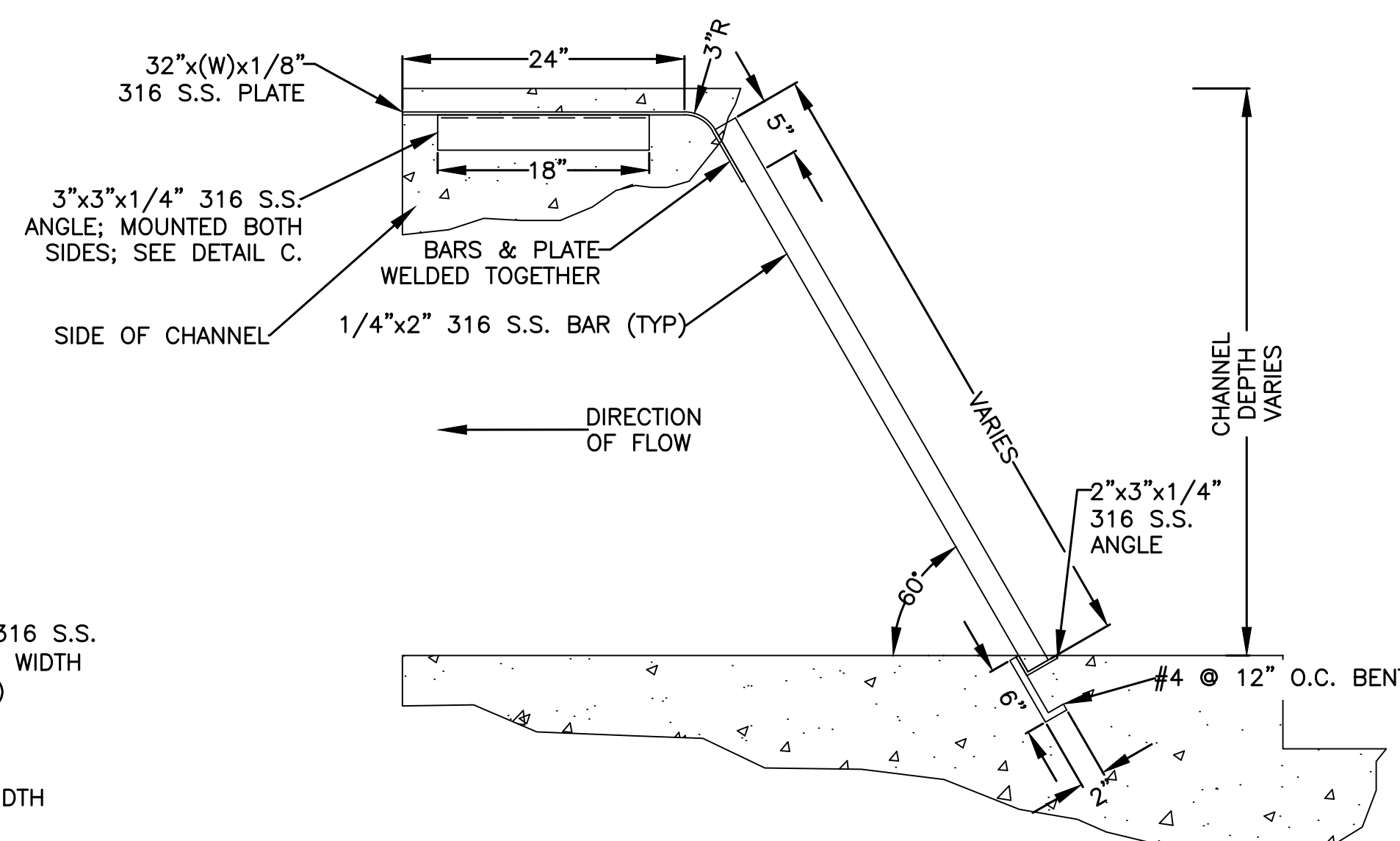
### PLAN VIEW



### BAR SCREEN DETAIL

NTS

### PROFILE VIEW

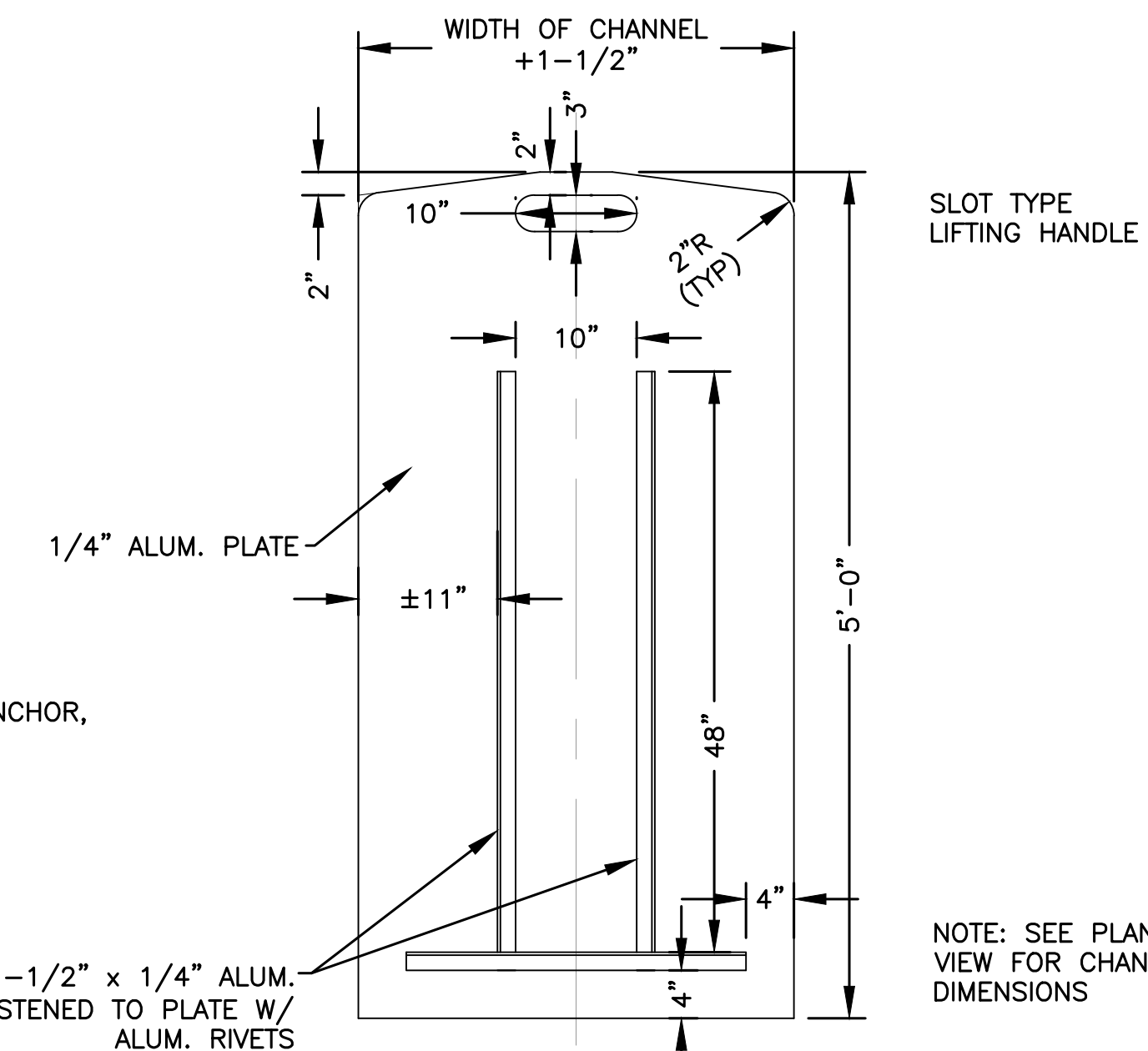


1/4" ALUM. STOP GATE

GUIDE WITH ANCHOR, (316 S.S.)

### STOP GATE GUIDE DETAIL

NTS



### STOP GATE DETAIL

NTS

**LIFT STATION UPGRADE**

**MASTER LIFT STATION 12A REHAB**

**WET WELL FRAMING**

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HORZ. SCALE	NTS		
		BY	DATE
SURVEYED	-	-	-
DESIGNED	JSS	3/15	
DRAWN	JSS	3/15	
CHECKED	-	3/15	

J. SHANNON S. SHANNON, P.E.  
FLORIDA PROFESSIONAL ENGINEER  
No. 60923  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER