# **LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT** HEADWORKS FACILITY, DIVERSION STRUCTURE A, AND DIVERSION STRUCTURE B REHABILITATION PROJECT

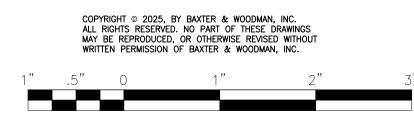


# **GOVERNING BOARD**

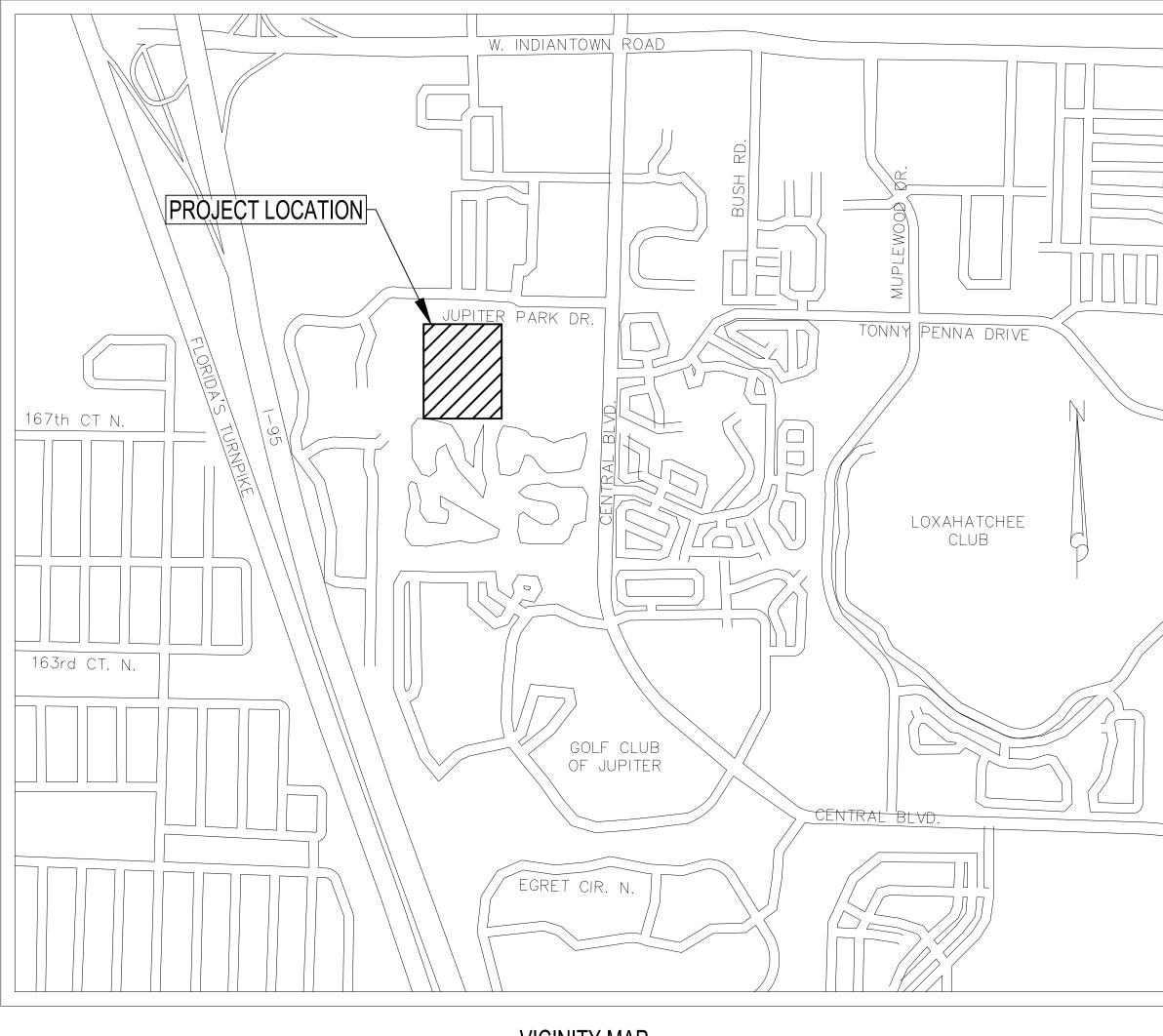
CHAIRMAN VICE CHAIRMAN TREASURER SECRETARY ASST. SEC'Y/TREASURER STEPHEN B. ROCKOFF GORDON M. BOGGIE CLINTON R. YERKES KEVIN L. BAKER DR. MATT H. ROSTOCK

EXISTING UTILITIES:

WHERE THE DRAWINGS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES. THE INFORMATION IS INCLUDED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE UTILITY LOCATIONS WERE DETERMINED FROM THE BEST AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATEVER WITH RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE DRAWINGS REGARDING THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION REGARDING THE LOCATION OF THE UTILITY FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THE FACILITIES.



LRECD\2400584-HEADWORKS AND A-STRU\CAD\01\_CIVIL 3D\01\_SHTS-PLANS\2400584\_COVER.DWG C



VICINITY MAP



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## INDEX TO DRAWINGS

<u>00 - GENERAL</u>

00-G-001 COVER

MECHANICAL GENERAL DETAILS AND SCHEDULES

## <u>06 - CIVIL</u>

00-G-055

06-C-100 06-C-106 06-C-107 06-C-108

### BYPASS SEQUENCING PLAN HEADWORKS FACILITY BYPASS SEQUENCING PLAN DIVERSION STRUCTURE A BYPASS SEQUENCING PLAN DIVERSION STRUCTURE E

GENERAL LAYOUT

## 12 - HEADWORKS FACILITY

12-M-100LOWER MECHANICAL PLAN12-M-101UPPER MECHANICAL PLAN12-M-300MECHANICAL SECTION12-M-500PHOTOS12-M-501PHOTOS12-M-502DETAILS

## 16 - DIVERSION STRUCTURE A

16-M-100 MECHANICAL PLAN AND SECTION16-M-500 PHOTOS16-M-501 DETAILS

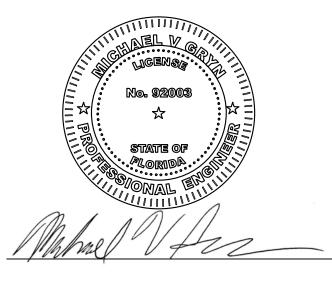
17 - DIVERSION STRUCTURE B 17-M-100 MECHANICAL PLAN AND SECTION



ADAM B. RAD

PROJECT MANAGER

PROJECT ENGINEER



ELECTRICAL ENGINEER

BAXTER & WOODMAN, INC. STATE OF FLORIDA - ENGINEERING BUSINESS REGISTRY LICENSE NO. 31795

	HYDRAULIC GATES SCHEDULE													
STRUCTURE # AND LOCATION	GATE NAME/LOCATION	OPENING DIMENSIONS	GATE TYPE	MOUNTING	MATERIAL	OPERATOR TYPE	ELECTRICALLY ACTUATED	INVERT ELEV. (FT)	OPERATING FLOOR ELEV. (FT)	OPERATING INVERT TO OPERATING FLOOR (FT)	TAG	Notes		
12 - HEADWORKS FACILITY	EAST FLUME CHANNEL SLIDE GATE	60" W X 30" H	SELF-CONTAINED, OPEN CHANNEL SLIDE GATE	WALL MOUNTED	STAINLESS STEEL	HANDWHEEL	Ν	N/A	40.50	N/A	G6-A	UPWARD OPENING		
12 - HEADWORKS FACILITY	WEST FLUME CHANNEL SLIDE GATE	60" W X 30" H	SELF-CONTAINED, OPEN CHANNEL SLIDE GATE	WALL MOUNTED	STAINLESS STEEL	HANDWHEEL	Ν	N/A	40.50	N/A	G6-B	UPWARD OPENING		
16 - DIVERSION STRUCTURE A	EAST WEIR GATE	36" W X 48" H	NON SELF-CONTAINED, WEIR GATE	WALL MOUNTED	STAINLESS STEEL	HANDWHEEL	Ν	18.00	25.50	7.50	16-A	DOWNWARD OPENING		
16 - DIVERSION STRUCTURE A	SOUTH WEIR GATE	36" W X 48" H	NON SELF-CONTAINED, WEIR GATE	WALL MOUNTED	STAINLESS STEEL	HANDWHEEL	N	18.00	25.50	7.50	16-B	DOWNWARD OPENING		
17 - DIVERSION STRUCTURE B	EAST WEIR GATE	48" W X 48" H	NON SELF-CONTAINED, WEIR GATE	WALL MOUNTED	STAINLESS STEEL	HANDWHEEL	N	14.00	22.00	8.00	GATE 'B'	DOWNWARD OPENING		

NOTES:

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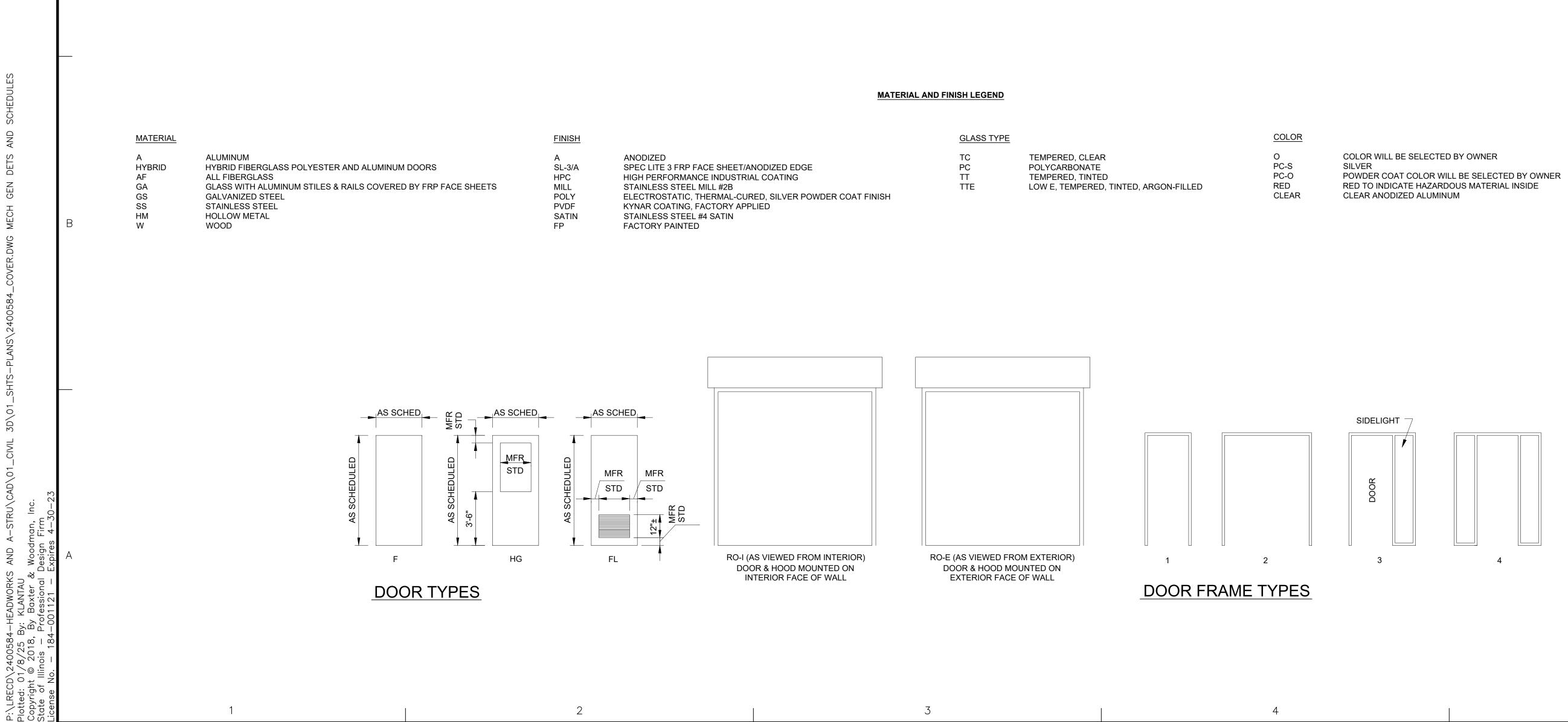
1. ALL MANUAL ACTUATORS COMPATIBLE WITH PORTABLE ELECTRIC OPERATOR. 2. ALL GATES 316 STAINLESS STEEL

3. ALL RISING STEMS.

4. DESIGN GATES FOR SEATING AND UNSEATING HEADS OF 20 FEET OR DESIGN HEAD, WHICHEVER IS GREATER. 5. DESIGN GATES TO A MAXIMUM ALLOWABLE LEAKAGE RATE OF 0.05 GALLONS PER MINUTE PER FOOT OF WETTED PERIMETER REGARDLESS OF DIRECTION OF HEAD UNBALANCE

2

	DOOR SCHEDULE															
DOOR NO.	LO	CATION		DOOR									FRAME		FIRE	
DOOK NO.	SECTION	ROOM	INTERIOR OR EXTERIOR	WIDTH	HEIGHT	ТҮРЕ	MATERIAL	FINISH	COLOR	GLASS	OPENING WIDTH	OPENING HEIGHT	ТҮРЕ	MATERIAL	FINISH	RATING
12-100	LOWER LEVEL	SCREENINGS ROOM	EXTERIOR	11'-0"	10'-8"	RO-I	GS	N/A	N/A	N/A	11'-0"	10'-8"	2	A	А	
12-101	LOWER LEVEL	SCREENINGS ROOM	EXTERIOR	3'-0"	7'-0"	F	A	А	CLEAR	N/A	3'-4"	7'-2"	1	A	А	
12-102	LOWER LEVEL	MCC ROOM	EXTERIOR	3'-6"	9'-0"	F	A	А	CLEAR	N/A	3'-10"	9'-2"	1	A	А	
12-103	LOWER LEVEL	MCC ROOM	EXTERIOR	3'-0"	7'-0"	F	A	А	CLEAR	N/A	3'-4"	7'-2"	1	A	А	



	3	4

## 5

REMARKS

# OTHER ABBREVIATIONS

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SITE ACCESS GATE NO. 1

12

-HEADWORKS FACILITY

- CONTRACTORS STORAGE AREA DIVERSION STRUCTURE A 16 STABILIZATION POND A

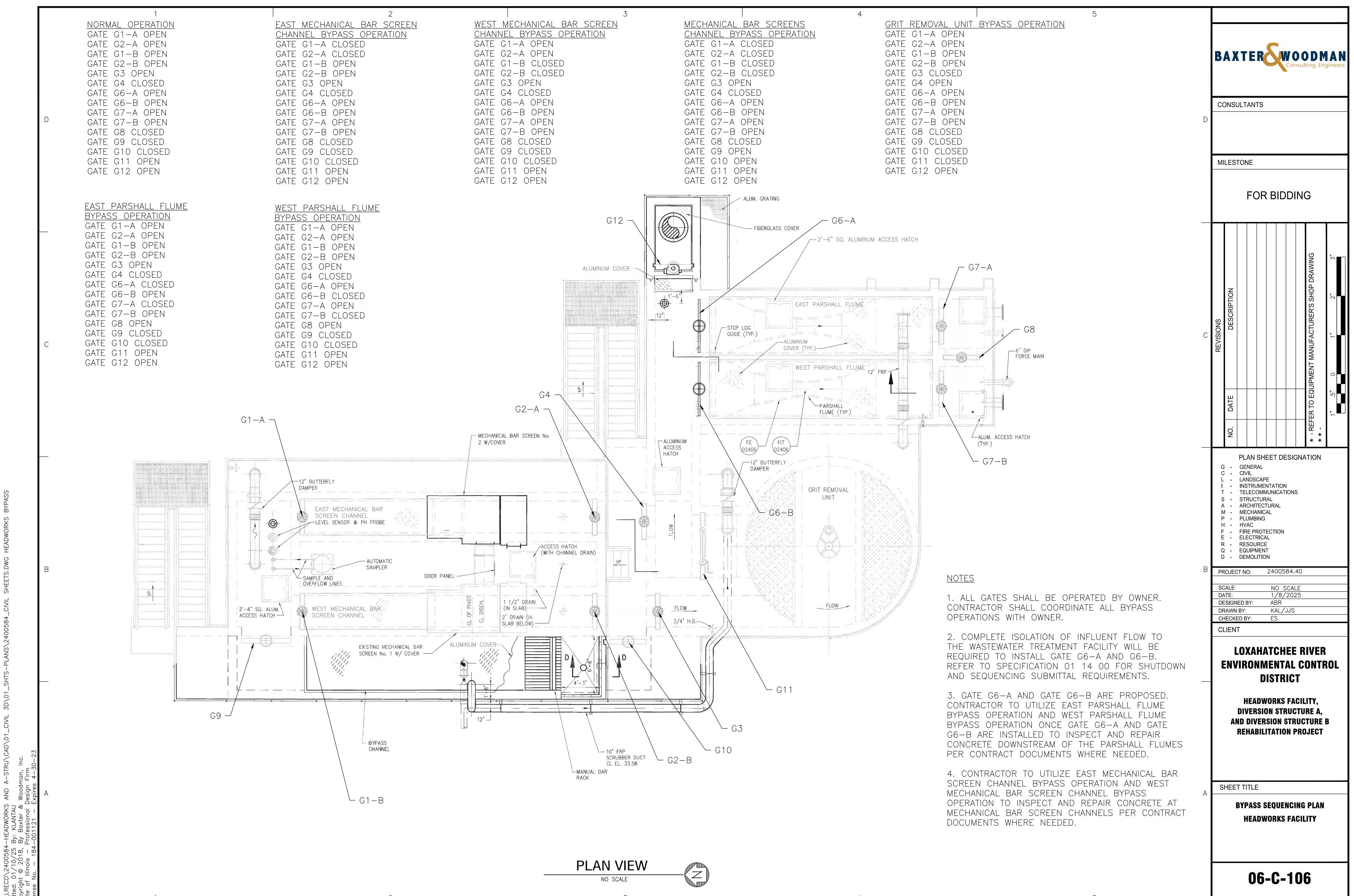
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IQ STORAGE LAKE NO.4

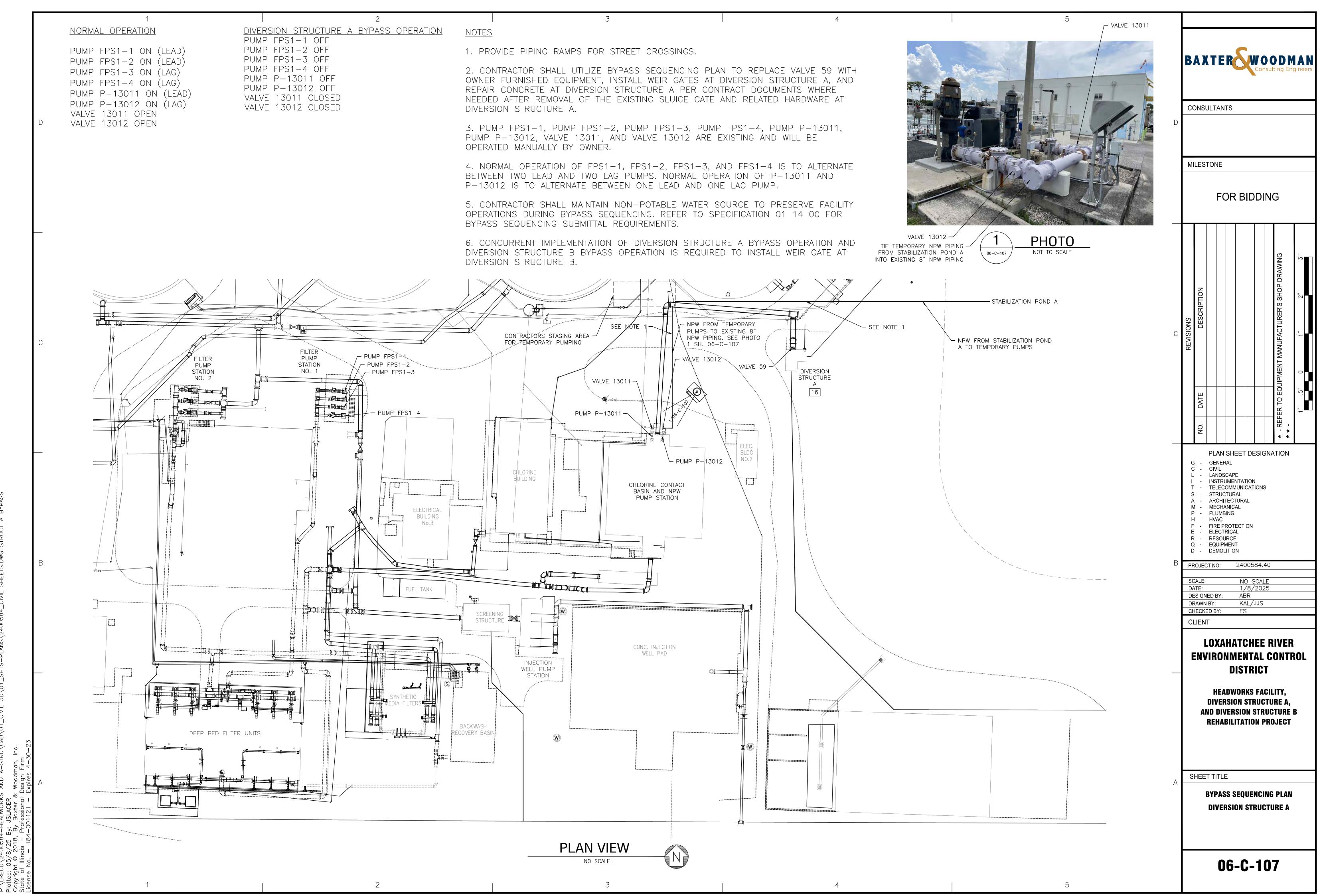


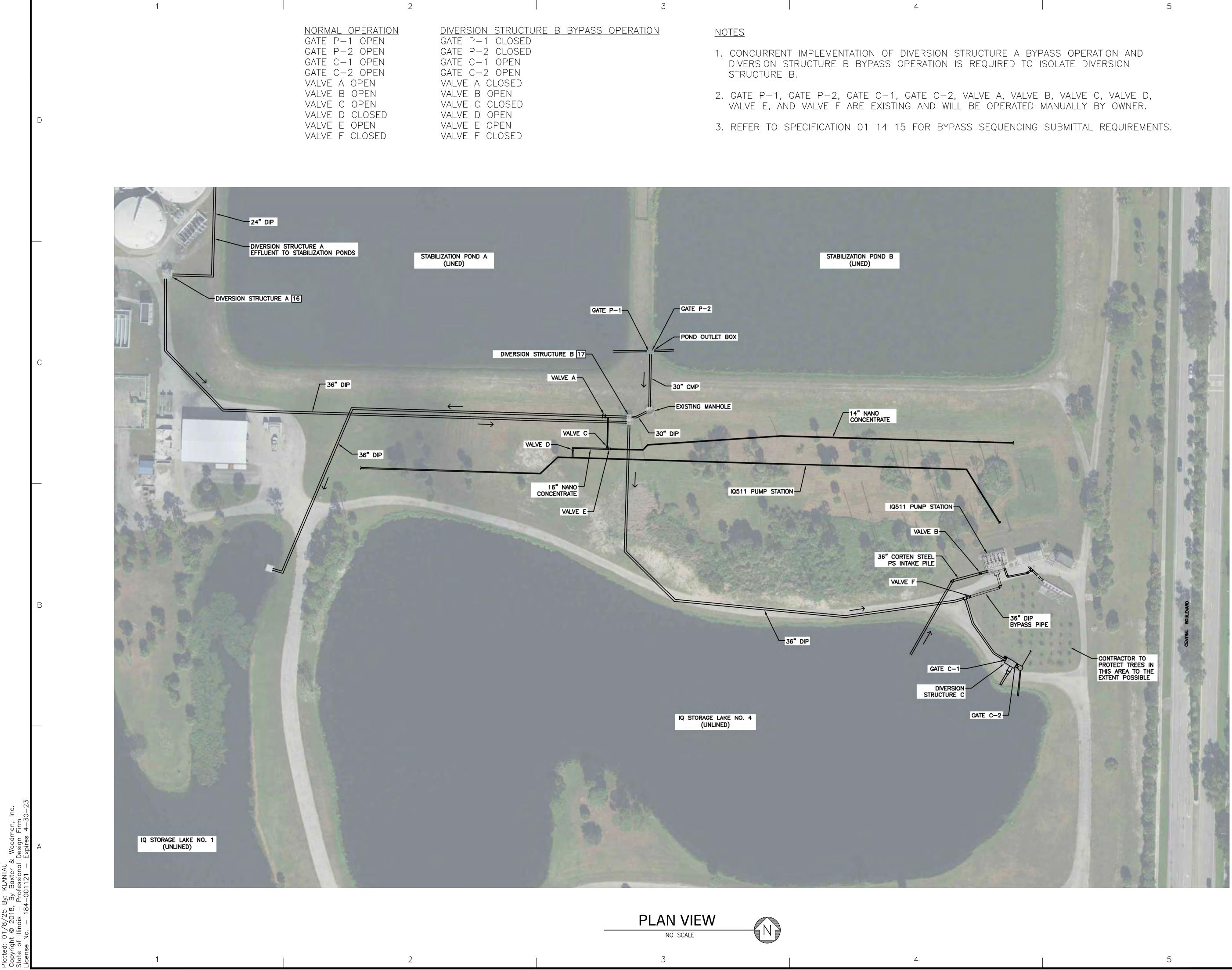
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STABILIZATION POND B	
DIVERSION STRUCTURE B 17	CENTRAL BLVD
STORAGE LAKE NO.4	

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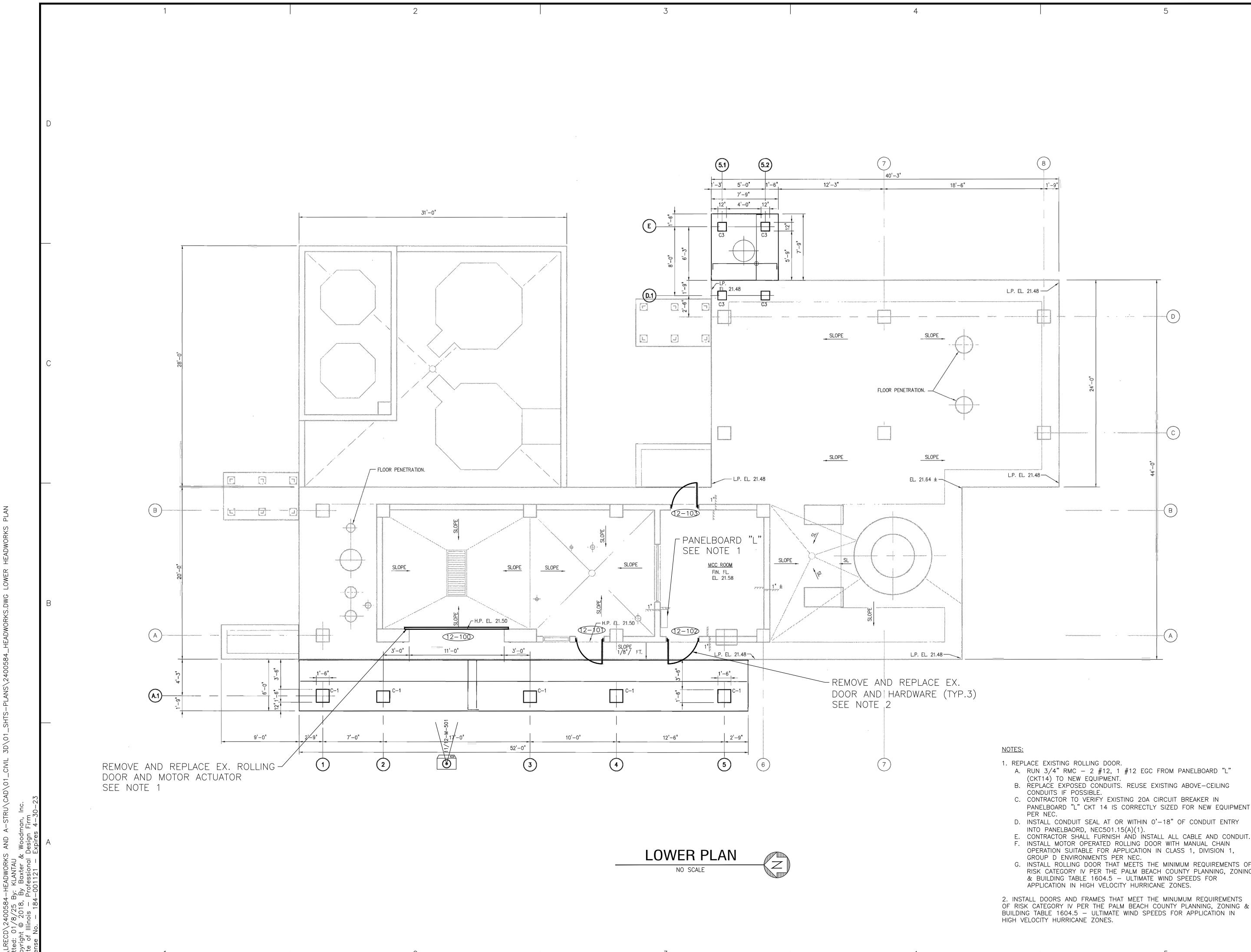




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<u>RSION STRUCTURE B BYPASS OPERATION</u> P-1 CLOSED	NOTES
P-2 CLOSED C-1 OPEN C-2 OPEN YE A CLOSED	<ol> <li>CONCURRENT IMPLEMENTATION OF DIVERSION STRUCTU DIVERSION STRUCTURE B BYPASS OPERATION IS REQU STRUCTURE B.</li> </ol>
É B OPEN É C CLOSED É D OPEN	2. GATE P-1, GATE P-2, GATE C-1, GATE C-2, VALVE VALVE E, AND VALVE F ARE EXISTING AND WILL BE OF
É E OPEN É F CLOSED	3. REFER TO SPECIFICATION 01 14 15 FOR BYPASS SEC

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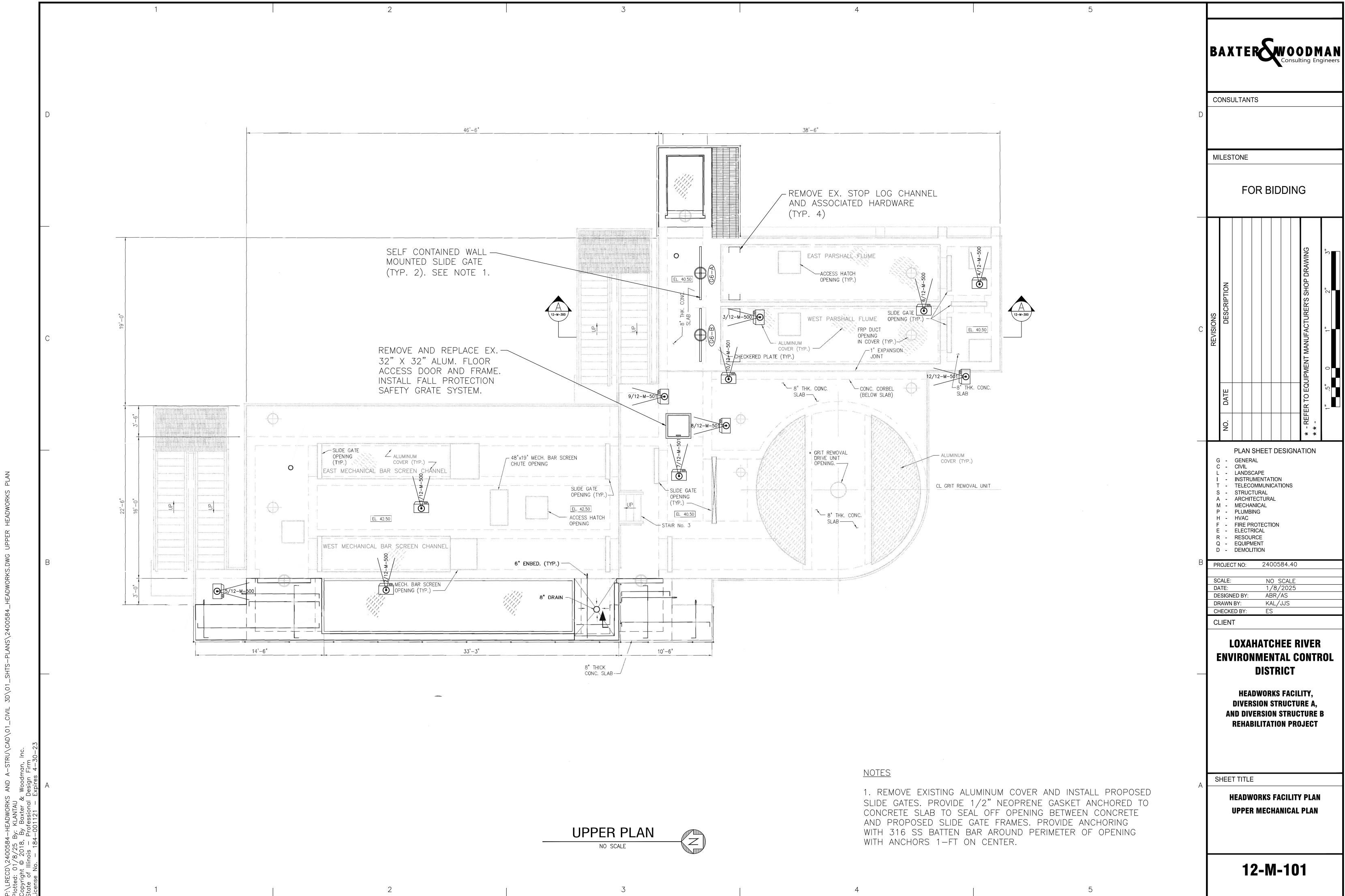
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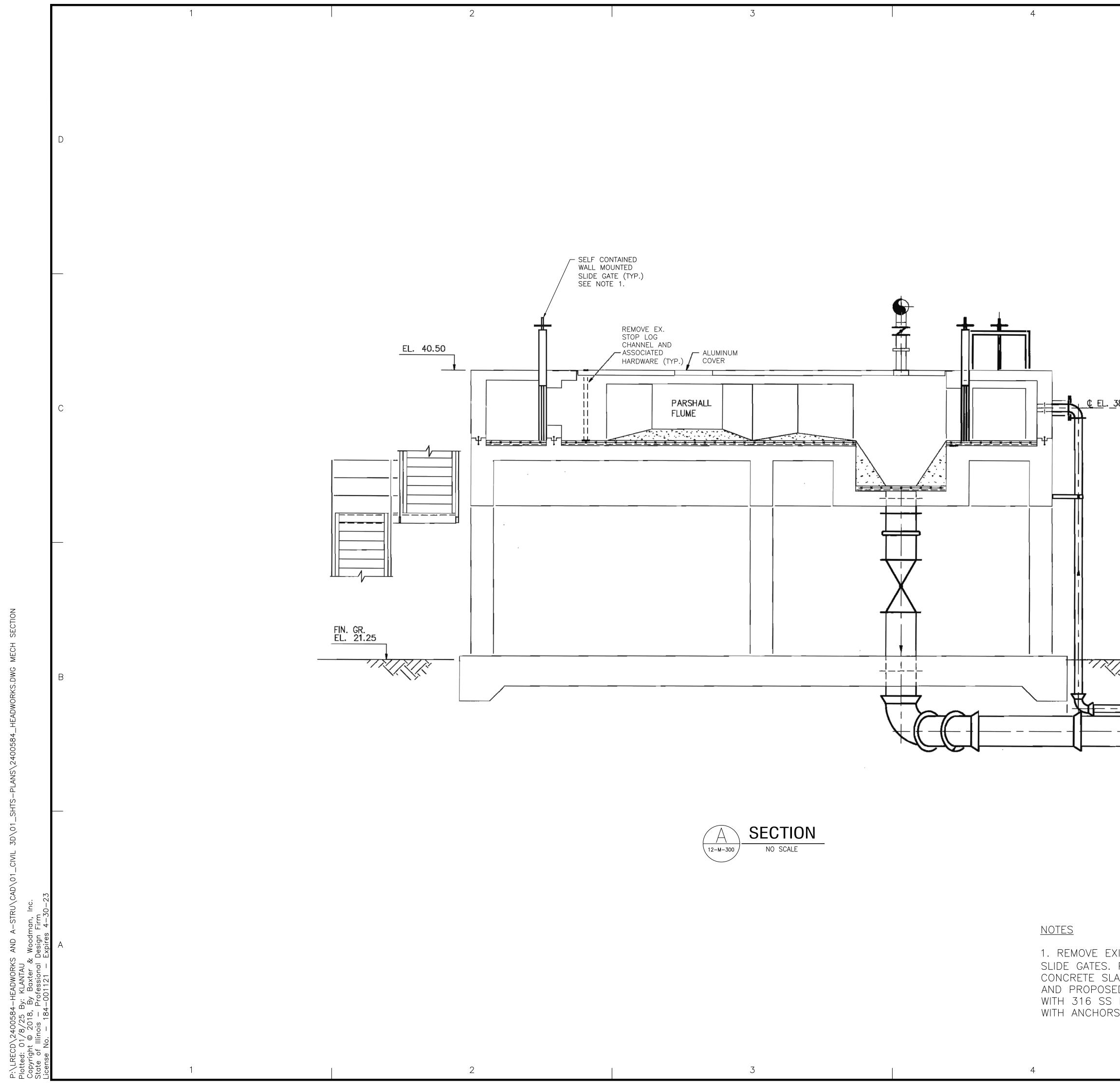
S

- A. RUN 3/4" RMC 2 #12, 1 #12 EGC FROM PANELBOARD "L"
- D. INSTALL CONDUIT SEAL AT OR WITHIN 0'-18" OF CONDUIT ENTRY
- INTO PANELBAORD, NEC501.15(A)(1). E. CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLE AND CONDUIT. F. INSTALL MOTOR OPERATED ROLLING DOOR WITH MANUAL CHAIN OPERATION SUITABLE FOR APPLICATION IN CLASS 1, DIVISION 1,
- G. INSTALL ROLLING DOOR THAT MEETS THE MINIMUM REQUIREMENTS OF RISK CATEGORY IV PER THE PALM BEACH COUNTY PLANNING, ZONING & BUILDING TABLE 1604.5 – ULTIMATE WIND SPEEDS FOR

2. INSTALL DOORS AND FRAMES THAT MEET THE MINUMUM REQUIREMENTS OF RISK CATEGORY IV PER THE PALM BEACH COUNTY PLANNING, ZONING & BUILDING TABLE 1604.5 – ULTIMATE WIND SPEEDS FOR APPLICATION IN HIGH VELOCITY HURRICANE ZONES.

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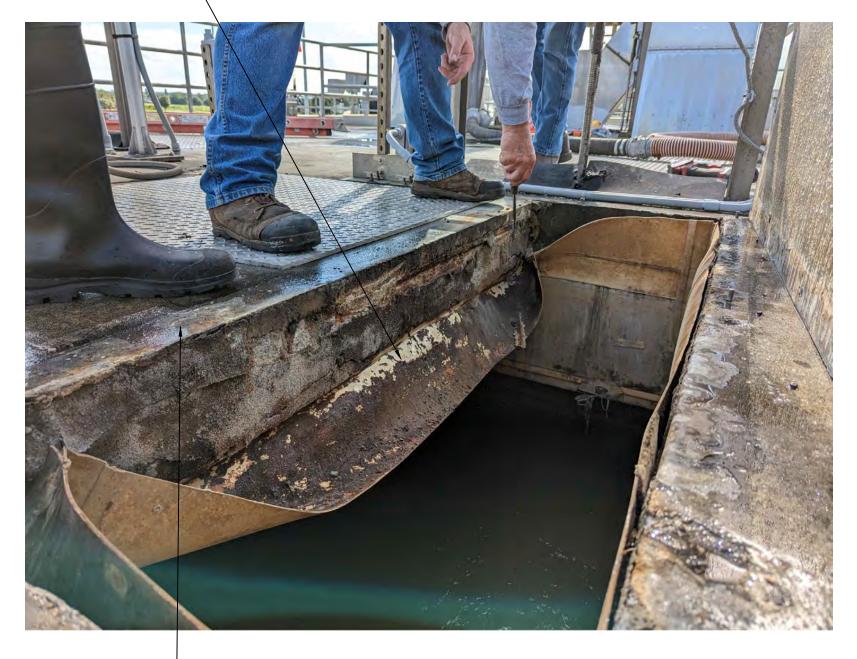


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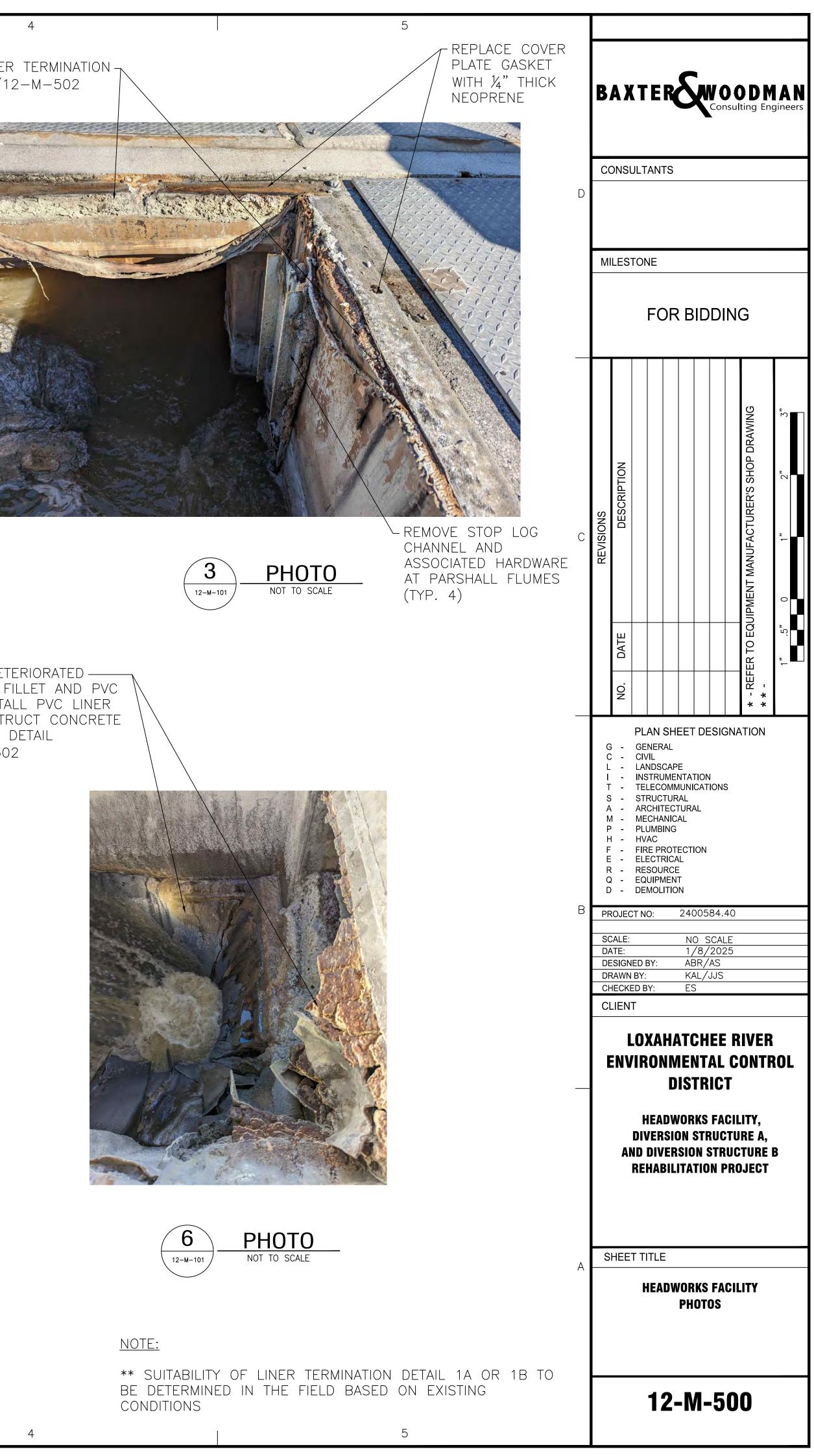
– REPAIR LINER TERMINATION  $\neg$ SEE DETAIL 3/12-M-502



LINSTALL ¼" THICK NEOPRENE GASKET FOR COVER PLATE



CONCRETE FILLET AND PVC LINER, INSTALL PVC LINER AND CONSTRUCT CONCRETE FILLET SEE DETAIL 4/12-M-502



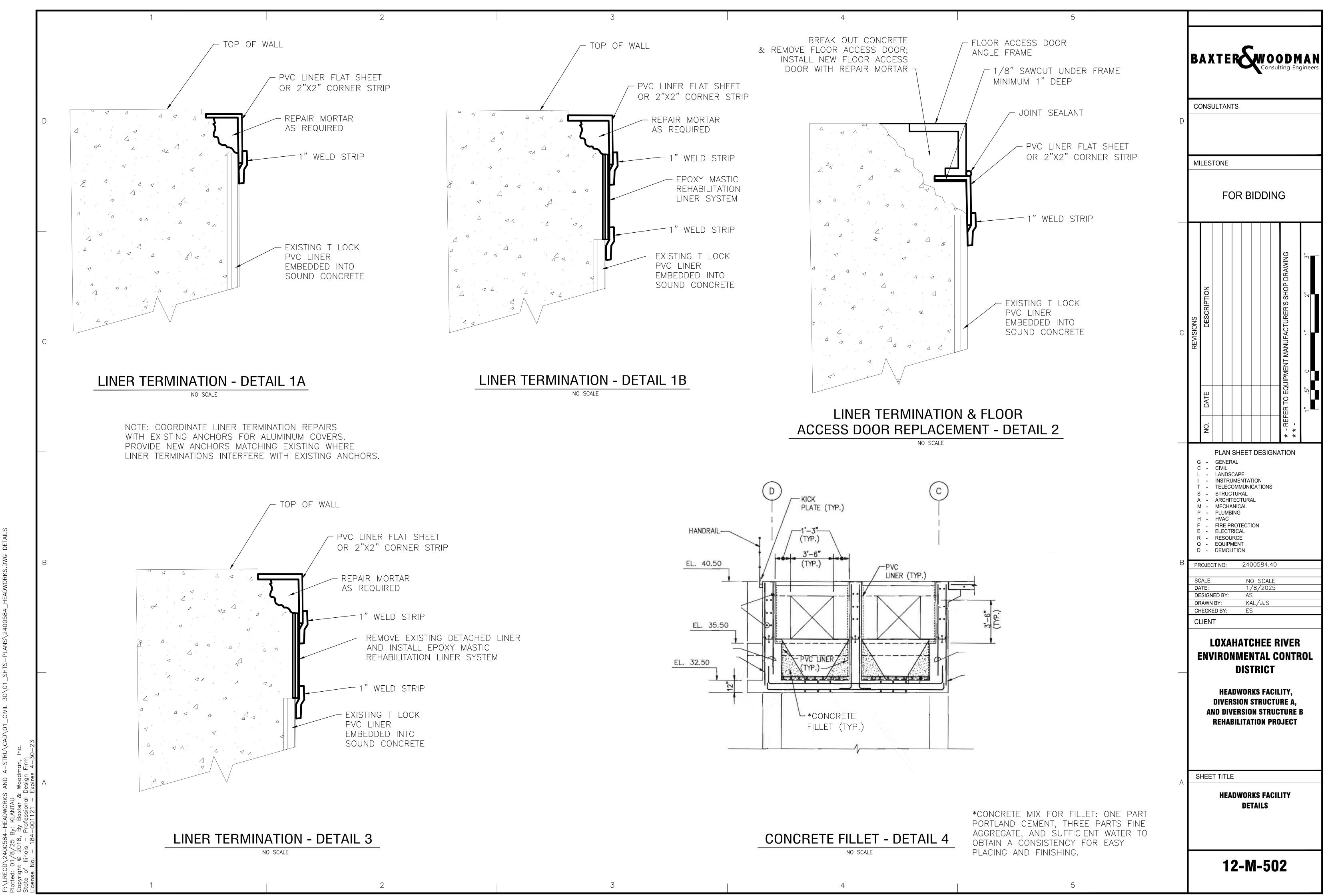


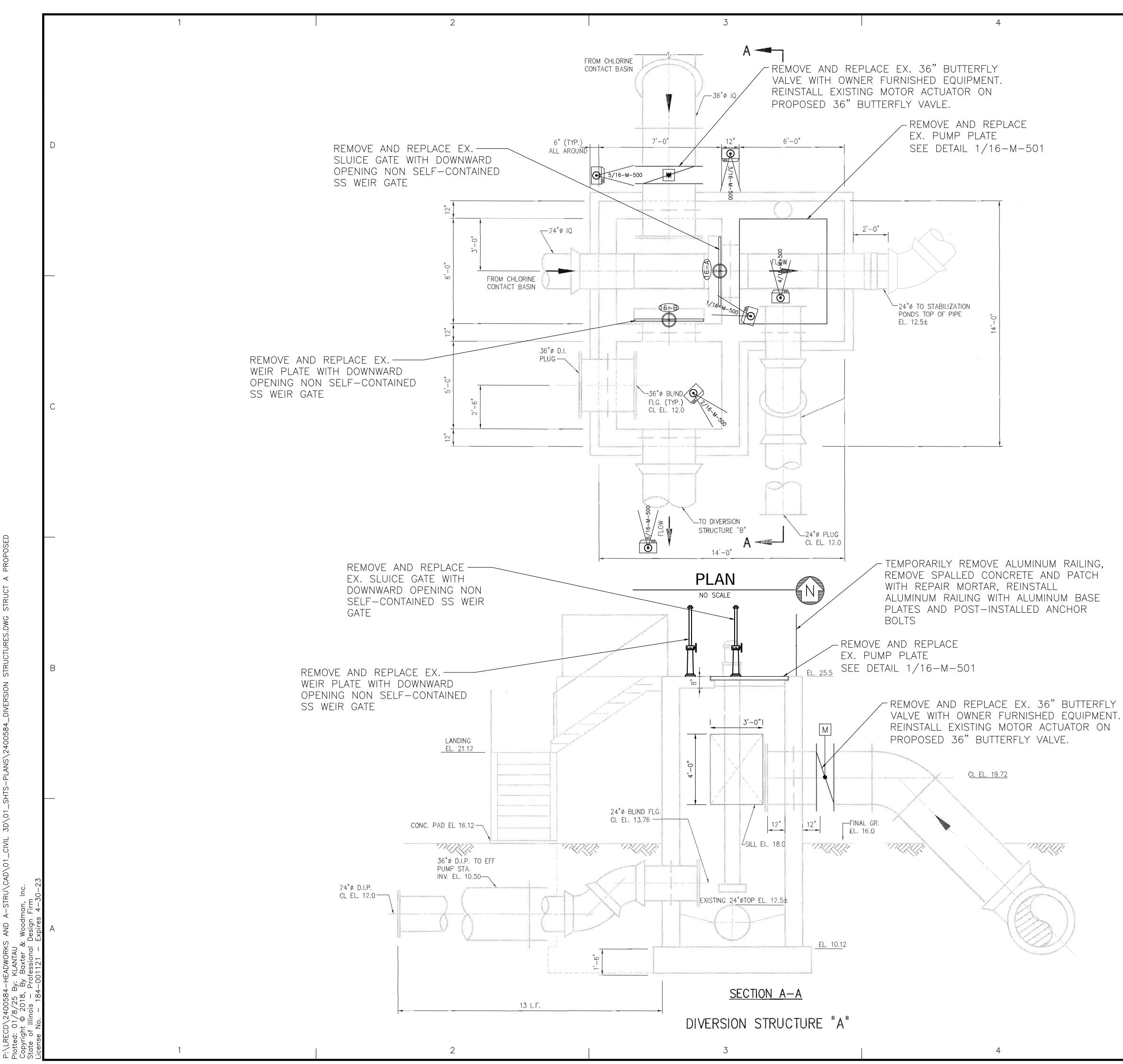
\*\* REPAIR LINER TERMINATION SEE DETAIL 1/12-M-502



\*\* SUITABILITY OF LINER TERMINATION DETAIL 1A OR 1B TO

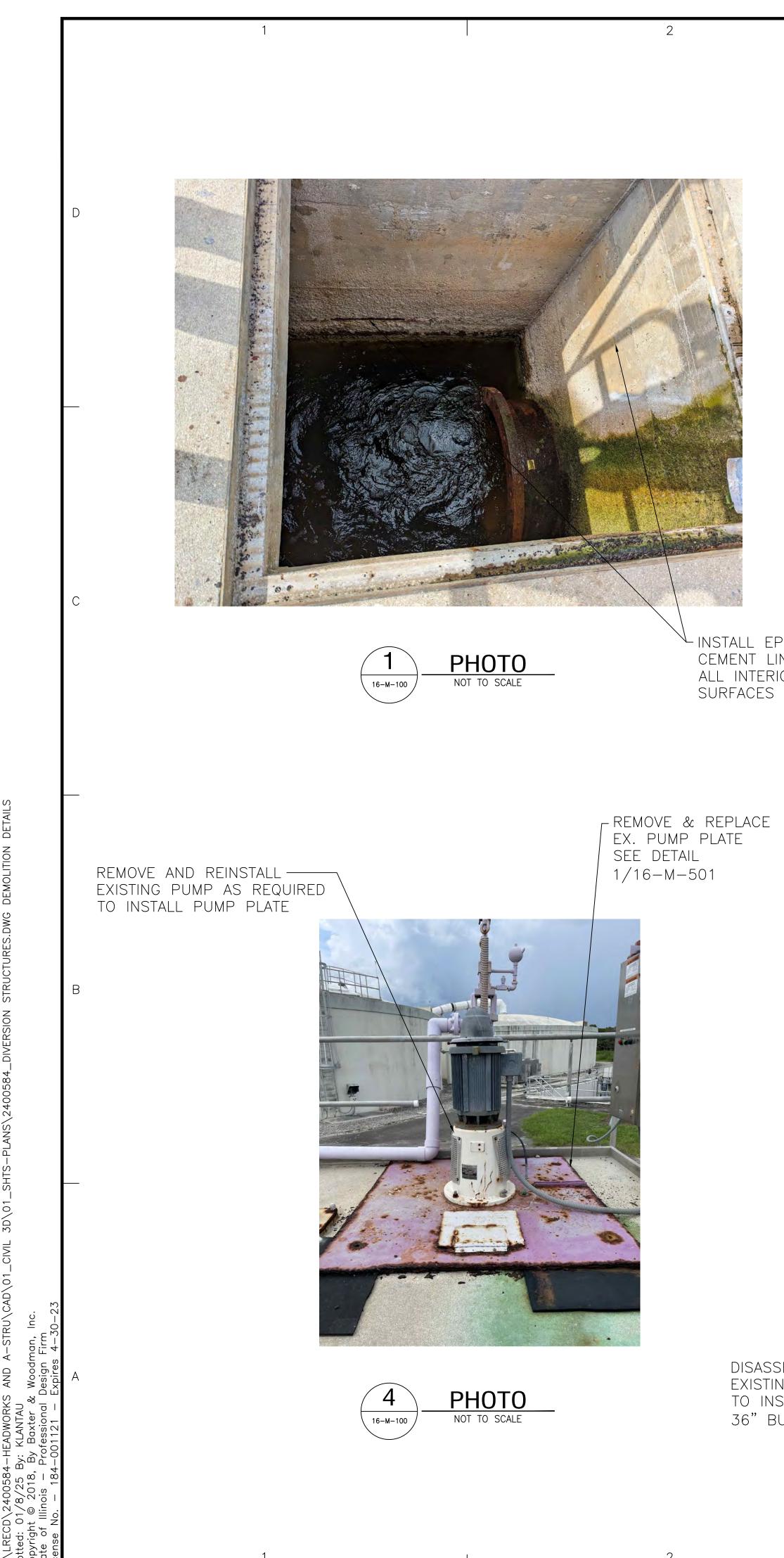
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2D\2400584-HEADWO 01/8/25 By: KLANT, ht © 2018, By Baxte + Illinnia - Profession





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└ INSTALL EPOXY-MODIFIED ----CEMENT LINING SYSTEM TO ALL INTERIOR CONCRETE



POST-INSTALLED ANCHOR BOLTS

REMOVE & REPLACEREMOVE AND REPLACE EX. 36"EX. PUMP PLATEBUTTERFLY VALVE WITH OWNERSEE DETAILFURNISHED EQUIPMENT. REINSTALL1/16-M-501EXISTING MOTOR ACTUATOR ON PROPOSED 36" BUTTERFLY VALVE.



36" BUTTERFLY VALVE



TEMPORARILY REMOVE ALUMINUM -/ RAILING, REMOVE SPALLED CONCRÉTE AND PATCH WITH REPAIR MORTAR, REINSTALL ALUMINUM RAILING WITH ALUMINUM BASE PLATES AND



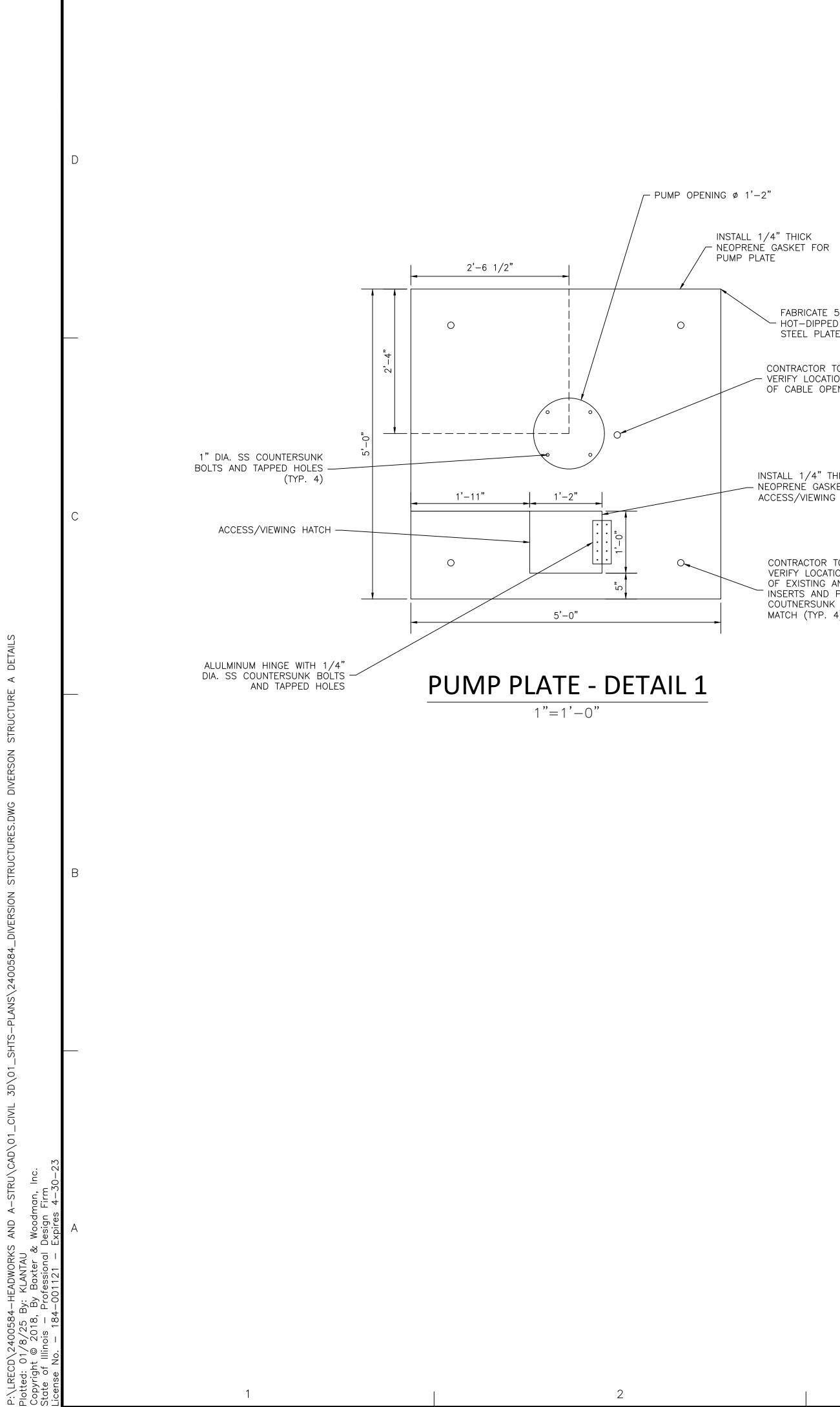
3PHOTO NOT TO SCALE 16-M-100



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16-M-100	NOT TO SCALE

└-remove dirt & ---VEGETATION WHERE IN CONTACT WITH ALUMINUM STRINGERS, POSTS & BASES

	BAXTER WOODMAN Consulting Engineers										
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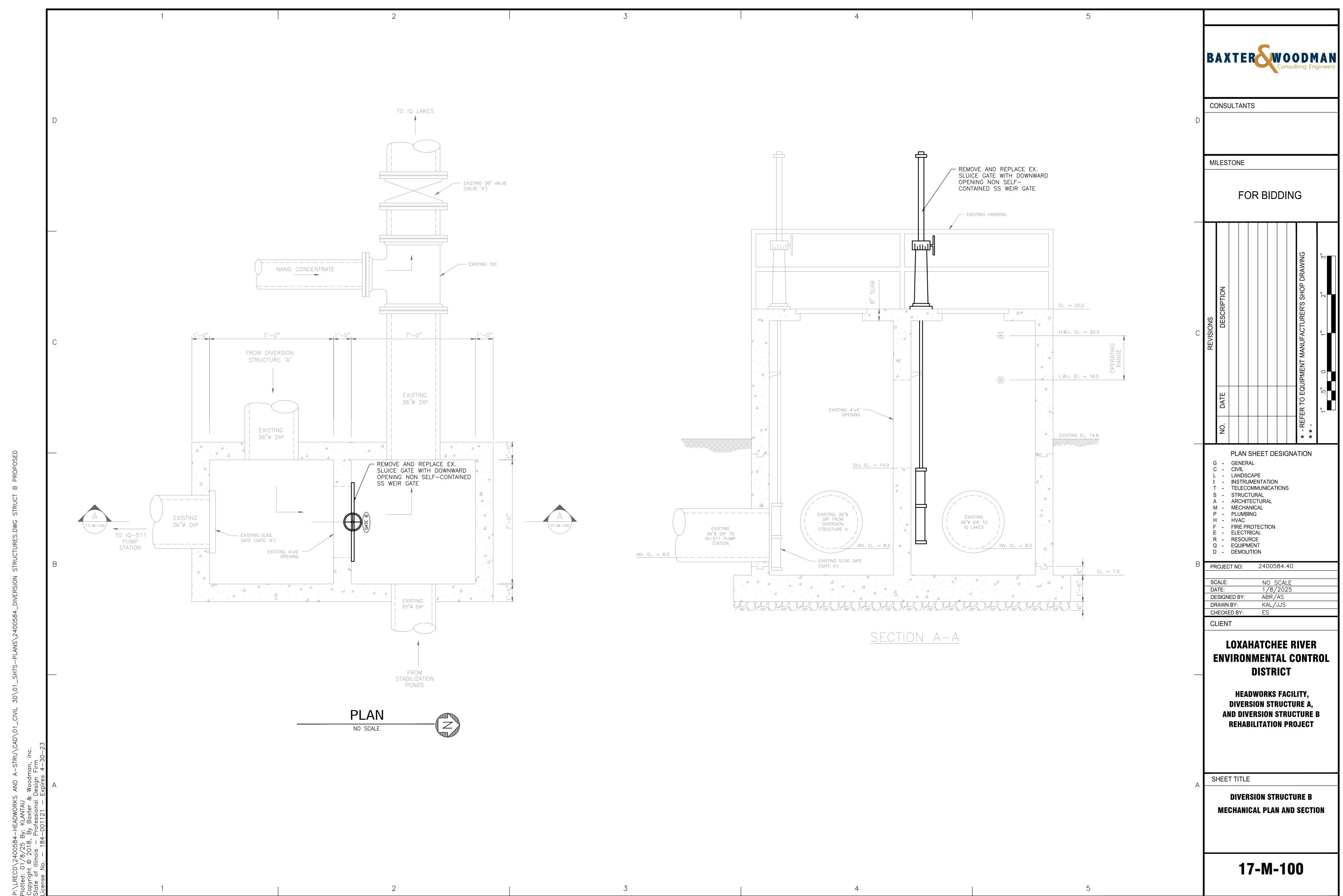


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FABRICATE 5/8" THICK HOT-DIPPED GALVANIZED STEEL PLATE
CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE OF CABLE OPENING
INSTALL 1/4" THICK — NEOPRENE GASKET FOR ACCESS/VIEWING HATCH
CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE OF EXISTING ANCHOR INSERTS AND PROVIDE SS COUTNERSUNK BOLTS TO MATCH (TYP. 4)

	BAXTER WOODMAN Consulting Engineers											
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