

LTBBOI
Emmet County, Michigan
Wastewater Treatment Facility Upgrades

PROJ #240217	ADDENDUM #1	DATE:11/12/2024
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NOTICE: This Addendum No.1, issued in accordance with the Contract Documents, is incorporated into the Contract Documents and supersedes and updates all conflicting information and is hereby amended in certain particulars as follows:

Date: November 12, 2024

CHANGES TO THE PLANS:

1. SEE ATTACHED DRAWING SET
 - a. **Added Sheet A1- FLOOR PLAN**
 - b. **Added Sheet S1 – STRUCTURAL DETAILS**

ADDENDUM ACKNOWLEDGMENT:

This Addendum No. 1 shall be attached to and shall become a part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may result in the rejection of the Bid.

END SECTION

DISTRIBUTION: (via email)

All Plan Holders
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WASTEWATER TREATMENT FACILITY UPGRADES

FOR

LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS

EMMET COUNTY, MICHIGAN



PROJECT LOCATION

VICINITY MAP
NOT TO SCALE

OWNER

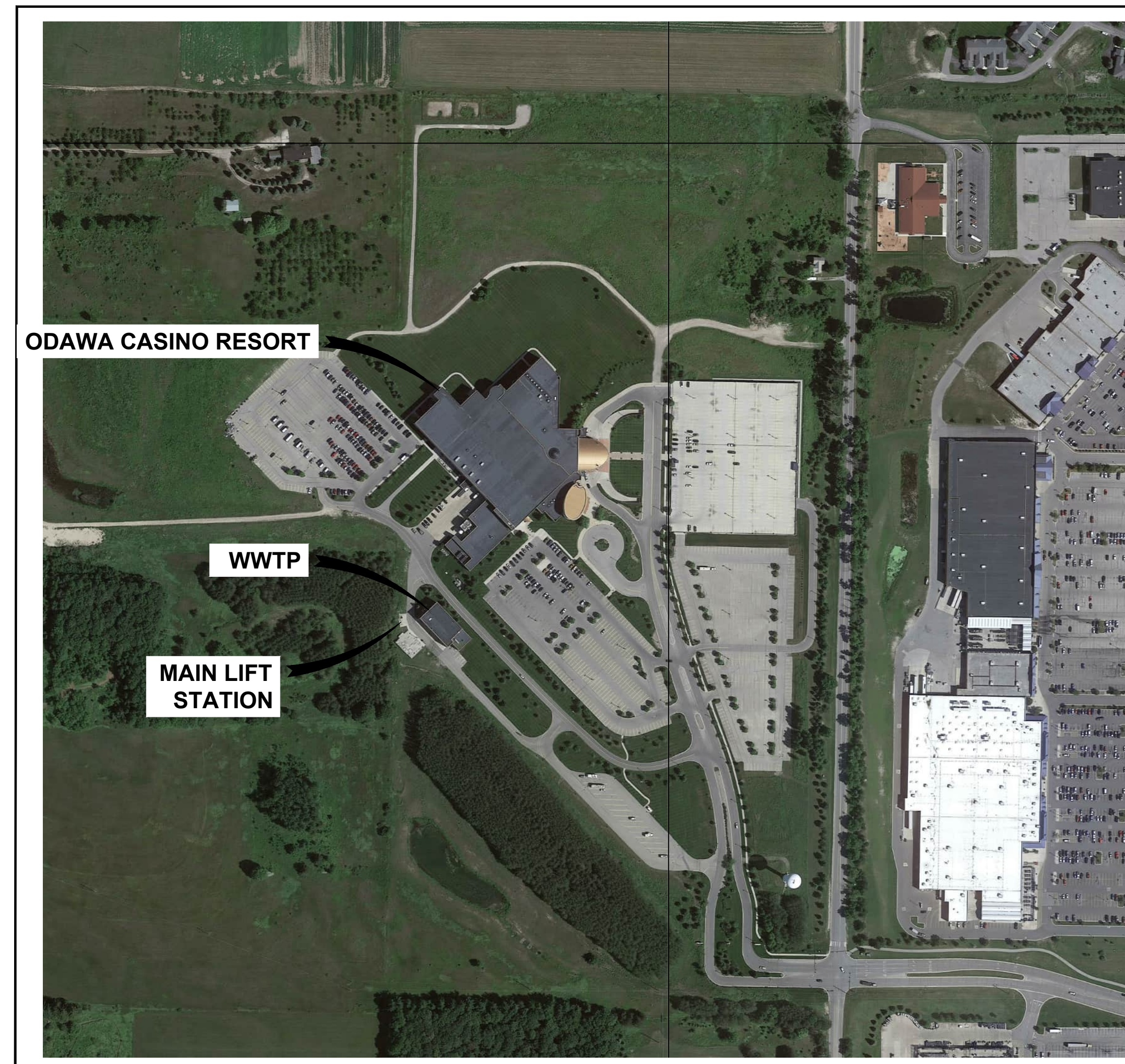
LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS
7500 Odawa Cir. Harbor Springs, Michigan, 49740
231.242.1400

ENGINEER

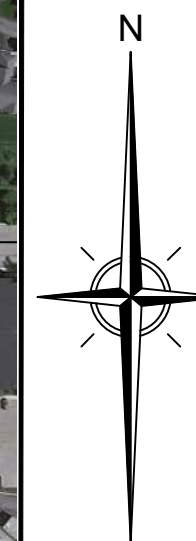
GOSLING CZUBAK ENGINEERING SCIENCES, INC.
1280 BUSINESS PARK DRIVE
TRAVERSE CITY, MICHIGAN, 49686-8607
231.946.9191 - 800.968.1062
www.goslingczubak.com info@goslingczubak.com

UTILITY CONTACTS

NAME OF OWNER	TYPE OF UTILITY
LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS 7500 ODAWA CIRCLE HARBOR SPRINGS, MI 49740 231.242.1420 CONTACT: DAUGHERTY A. JOHNSON	SEWER SYSTEM
DTE ENERGY 313.235.5111 CONTACT: BARBARA SAUNDERS	GAS
CONSUMER'S ENERGY 530 W WILLOW ST LANSING, MI 48906 517.374.2002 CONTACT: KURT GOLDING	ELECTRIC
CHARTER COMMUNICATIONS 1392 TRADE CENTRE DR TRAVERSE CITY, MI 49696 810.247.3899 CONTACT: PATRICK DELISI	CABLE TV
AT&T 54 N MILL ST, 4TH FLOOR PONTIAC, MI 48342 517.515.4794 CONTACT: HEATHER VALLEE-KNOBLAUCH	TELEPHONE
CENTURYLINK 203 W 9TH ST LORAIN, OH 44052 440.244.8415 CONTACT: BOBBY WALTERS	INTERNET
CHERRYLAND ELECTRIC COOP. 5930 US 31 S GRAWN, MI 49637 231.486.9239 CONTACT: JASON RICE	ELECTRIC



LOCATION MAP
NOT TO SCALE



SHEET LIST	
SHEET NUMBER	SHEET TITLE
COVER	COVER
C1	LIFT STATION PUMP REPLACEMENT PLAN
C2	SCREEN RELACEMENT PLAN
C3	TEMPORARY SCREENING PLAN
SE1	ELECTRICAL SITE PLAN
E0	ELECTRICAL LEGEND AND DETAILS
E1	ELECTRICAL FLOOR PLANS
E2	ELECTRICAL RISER DIAGRAM & PANEL SCHEDULE
A1	FLOOR PLAN
S1	STRUCTURAL DETAILS



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WASTEWATER TREATMENT FACILITY UPGRADES

Issue Date
11/11/2024
Project No.
240217
Sheet

COVER

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No.	Date	Revision	By

LEVEL SWITCH SCHEDULE

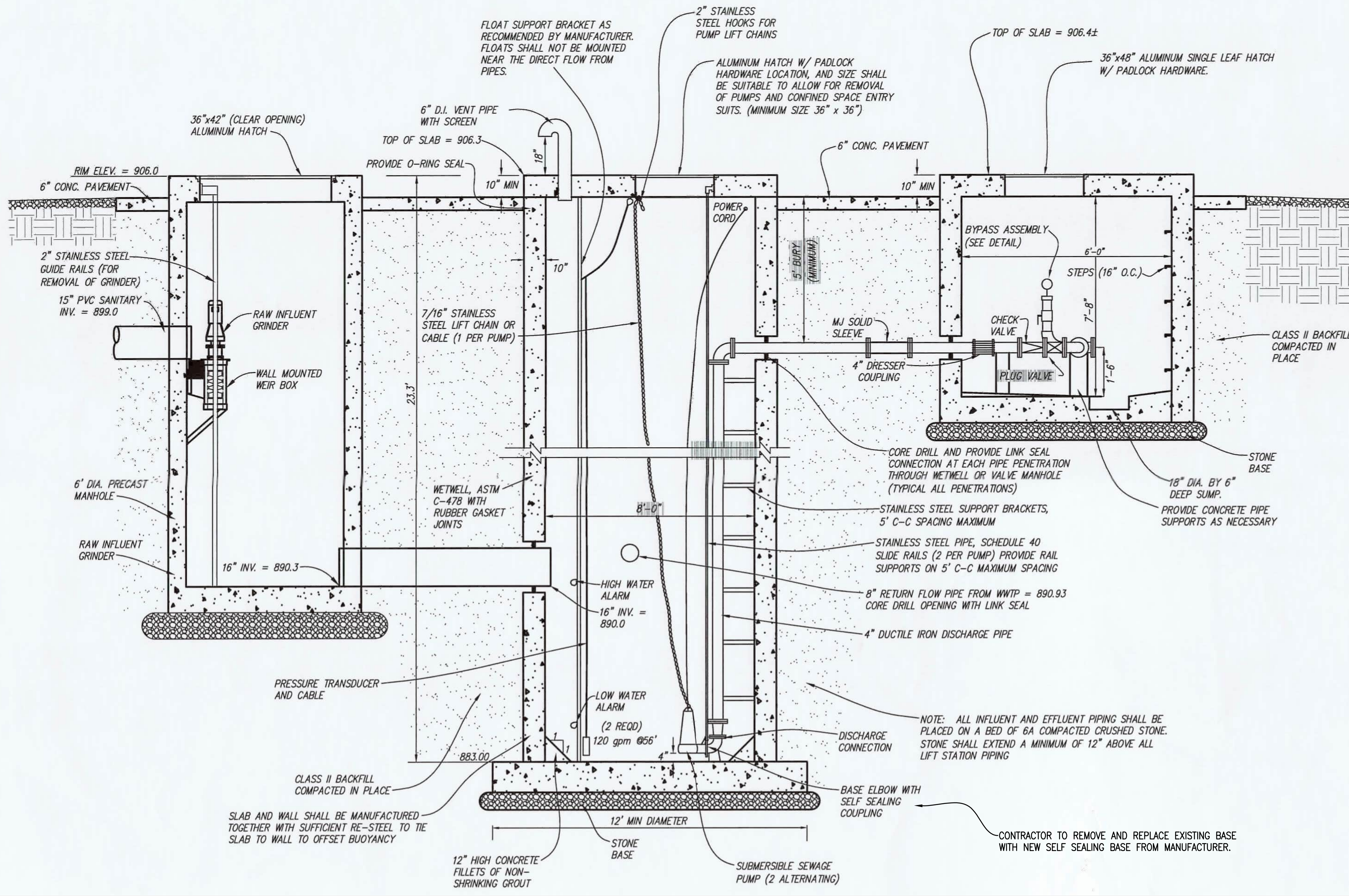
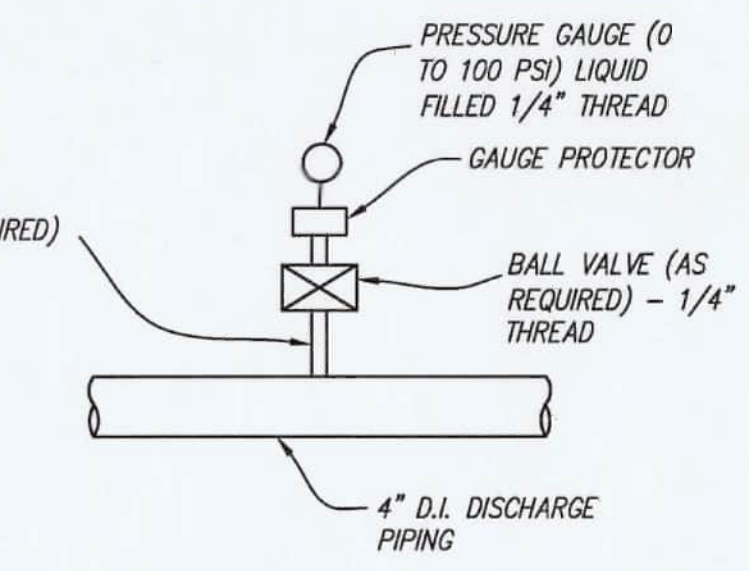
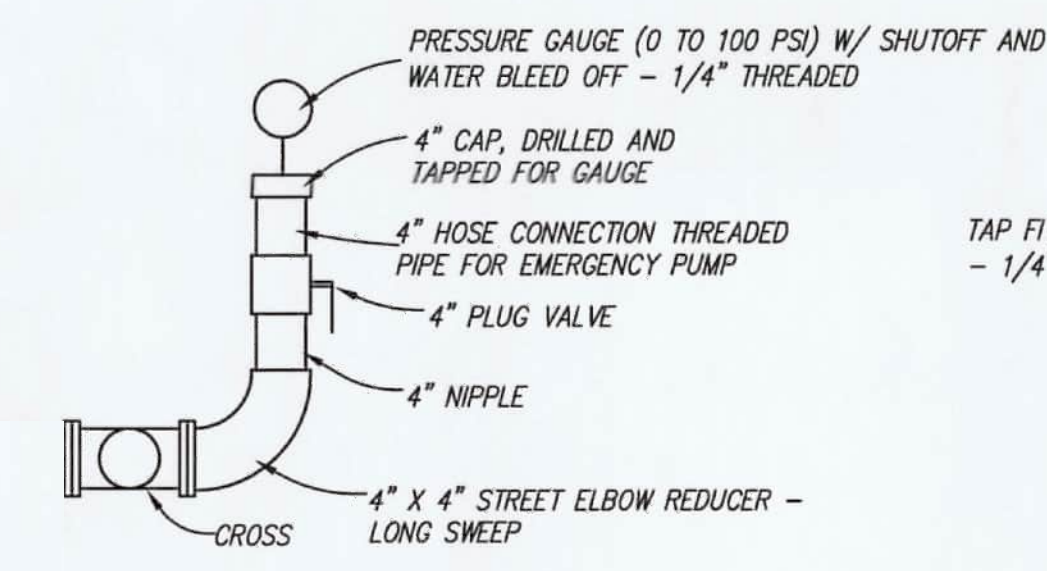
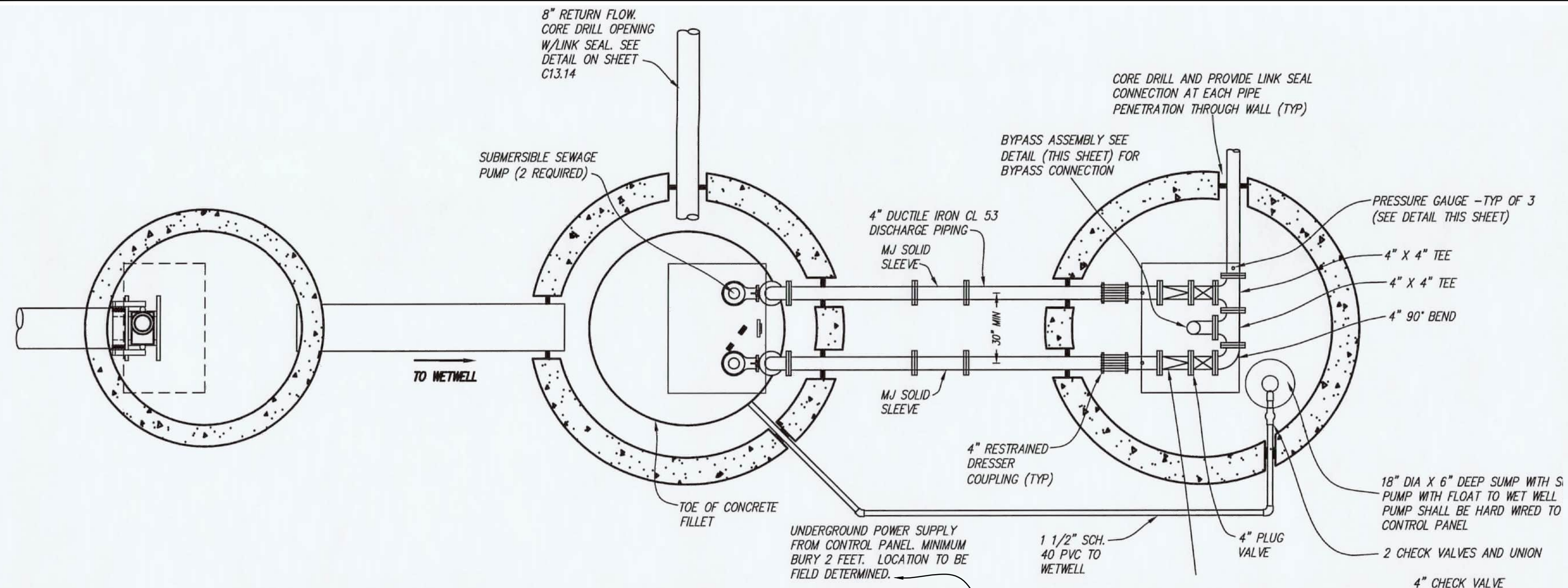
Level Setting (beginning at bottom)	Operation	Level
1	Low water alarm / Redundant off	885.80
2	High water alarm / All pumps on	889.50

NOTE:
 Float switch level settings shown are for information only. These may be adjusted during startup by the Engineer.

SUBMERSIBLE SEWAGE PUMP DATA

Number of pumps: 2 SUBMERSIBLE SEWAGE PUMPS WITH VARIABLE FREQUENCY DRIVES
 Design rate and head: 350 GPM AT 25 FT TDH
 Maximum speed: 1700 rpm
 Maximum horsepower: 5 horsepower
 Power: 460 VOLT, 3 Phase
 Motor Type: EXPLOSION PROOF

EXISTING PLANS DO NOT ACCURATELY REFLECT CURRENTLY INSTALLED EQUIPMENT. PROPOSED EQUIPMENT TO BE CAPABLE OF 350 GPM AT 42 FT TDH.



PUMP STATION NOTES:

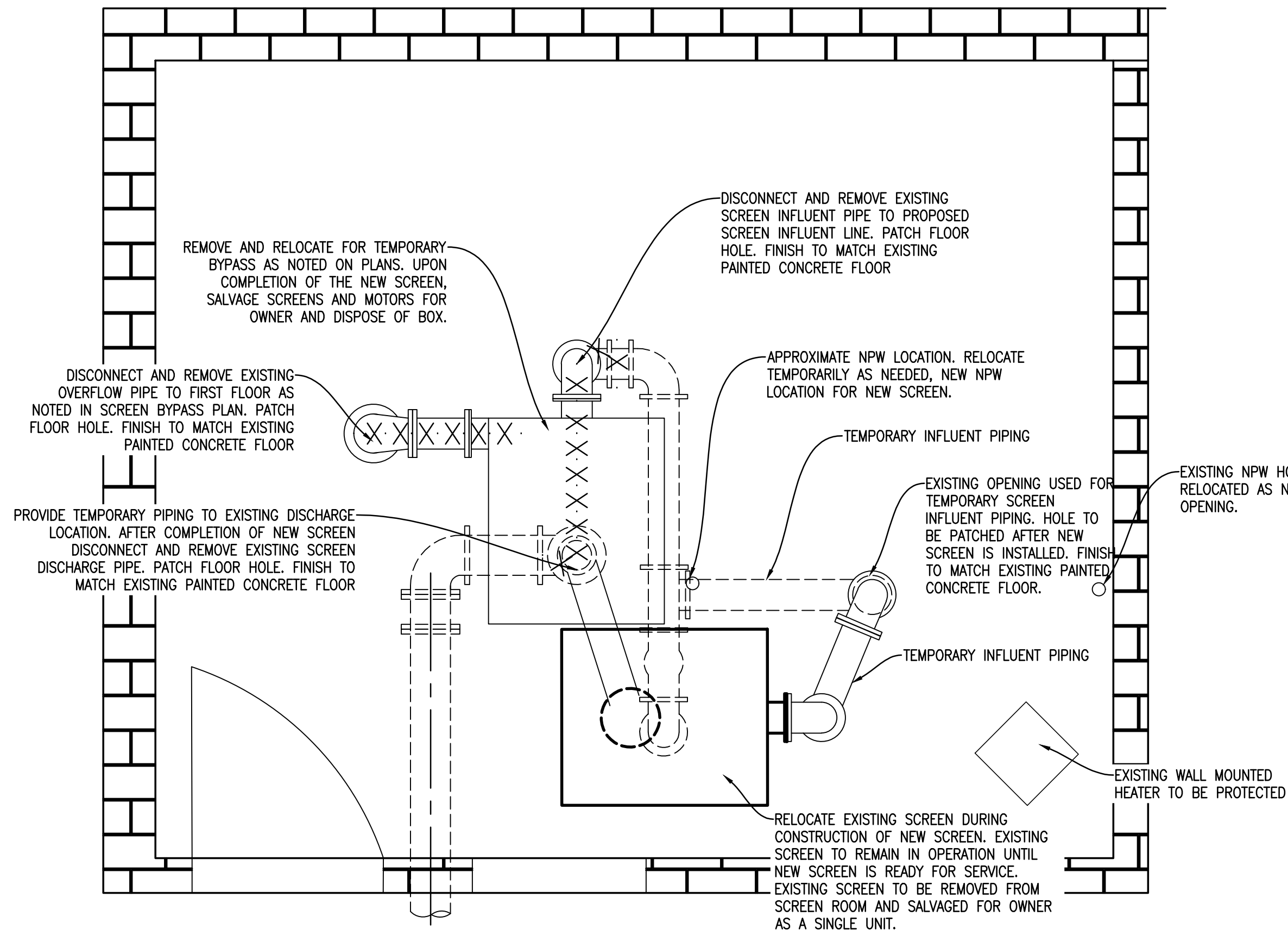
- ALL INFLUENT AND EFFLUENT PIPING SHALL BE PLACED ON A BED OF 6A COMPACTED CRUSHED STONE. STONE SHALL EXTEND A MINIMUM OF 12" ABOVE ALL LIFT STATION PIPING. THE WETWELL AND VALVE VAULT SHALL BE PLACED ON A BED OF CRUSHED STONE MATERIAL AT LEAST 18" DEEP. REMAINING BACKFILL SHALL BE SUITABLE ON SITE MATERIAL COMPACTED TO 95% WITHIN GRAVEL AREAS AND 90% OUTSIDE OF GRAVEL AREAS.
- PRIOR TO ORDERING WETWELL OR VALVE VAULT STRUCTURES, CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS WITH BUOYANCY CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER.
- CONTRACTOR TO VERIFY THAT HATCHES ARE LARGE ENOUGH AND POSITIONED TO REMOVE THE PUMPS SUPPLIED. ADJUSTMENTS TO HATCH SIZE TO ACCOMMODATE PUMPS SHALL BE PROVIDED AT NO ADDITIONAL COST TO PROJECT.
- ALL HATCHES SHALL BE DESIGNED FOR H-20 LOADING AND HAVE A PAD LOCK HASP AND LOCK. LOCK MUST BE PROVIDED BY OWNER.
- HATCH DIMENSIONS SHOWN ARE CLEAR SPACE DIMENSIONS.
- ALL PIPING WITHIN VALVE VAULT AND WETWELL SHALL BE DUCTILE IRON CL53 PIPE WITH FLANGED CONNECTIONS.
- LOCATION OF PUMP STATION TO BE COORDINATED WITH THE FINAL APPROVED WASTEWATER TREATMENT PLANT SITE PLAN.
- PUMP SIZES SHALL BE VERIFIED AFTER TREATMENT PLANT EQUIPMENT IS SELECTED. SIZES NOTED ON PLAN IS PRELIMINARY.

NOTES

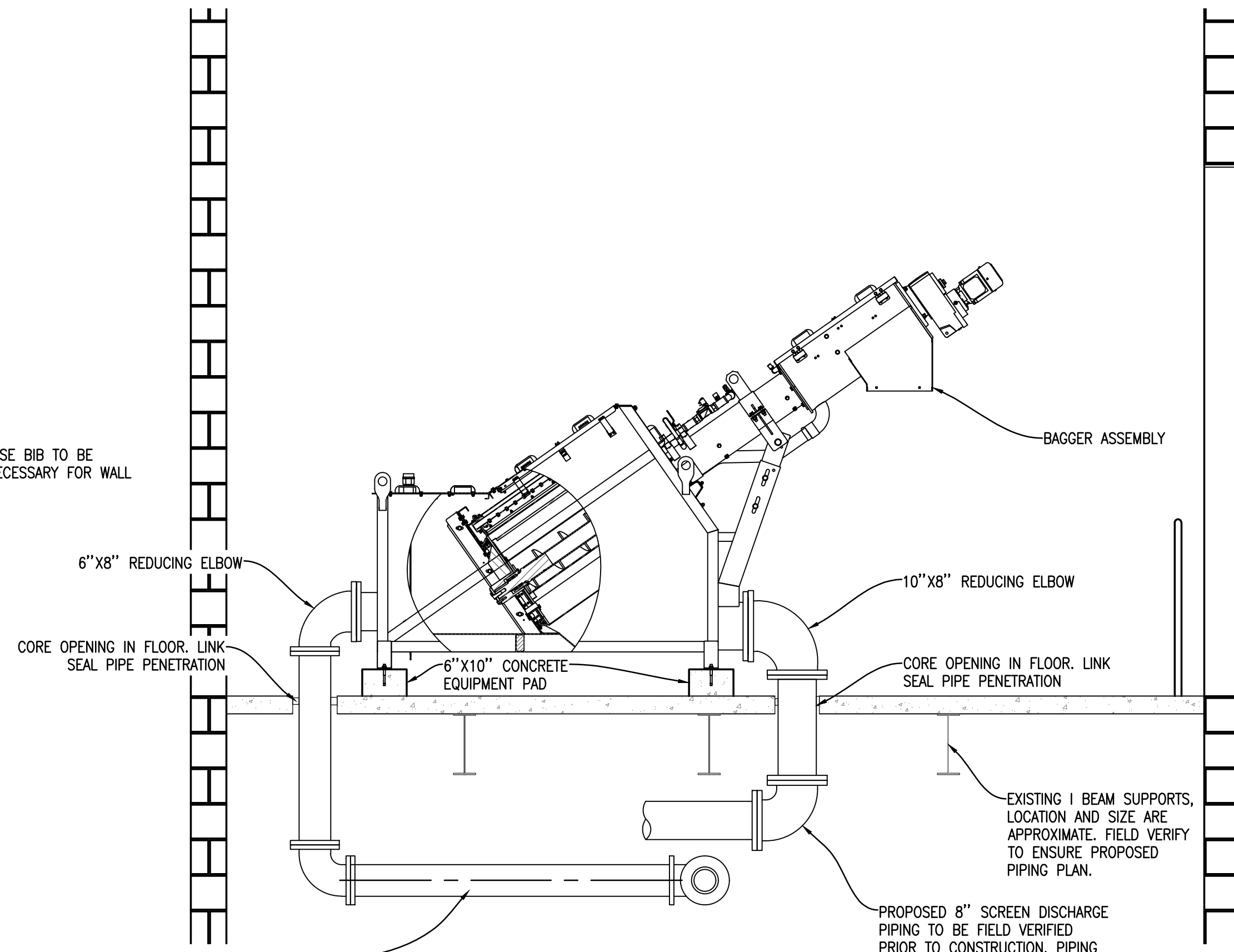
- DRAWING IS PROVIDED FROM ORIGINAL CONSTRUCTION PLANS. PLANS ARE NOT DOCUMENTED RECORD DRAWINGS. CONTRACTOR TO FIELD VERIFY PRIOR TO BIDDING.
- CONTRACTOR TO REMOVE AND DISPOSE OF EXISTING PUMPS, BASE, RAILS, LIFTING CHAINS AND PANEL.
- CONTRACTOR TO INSTALL NEW PUMPS, BASE, RAILS, LIFTING CHAIN AND PANEL UNDER A SINGLE SUPPLIER AS SPECIFIED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BY-PASS PUMPING REQUIRED DURING CONSTRUCTION. CONTRACTOR CAN ISOLATE WET WELL FROM GRINDER STATION AND VALVE VAULT. BY-PASS CONNECTION IN VALVE VAULT CAN BE UTILIZED DURING CONSTRUCTION.
- ALL LIFT STATION WORK TO BE COORDINATED WITH OWNER AND ENGINEER TO PREVENT CONFLICTS WITH OTHER IMPROVEMENT PROJECTS THAT MAY BE IN PROCESS.

FOR REFERENCE ONLY

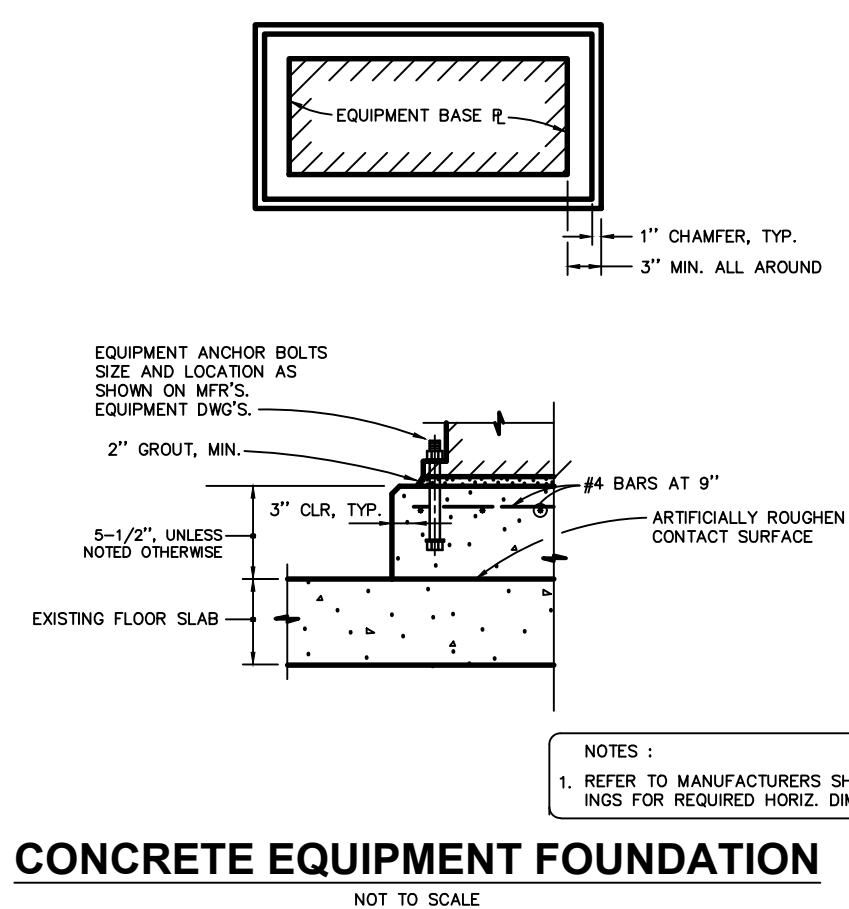
**LIFT STATION PUMP REPLACEMENT PLAN
 WASTEWATER TREATMENT FACILITY UPGRADES
 LTBB OF ODAWA INDIANS**



EXISTING SCREEN DEMO PLAN
 1/2" = 1'



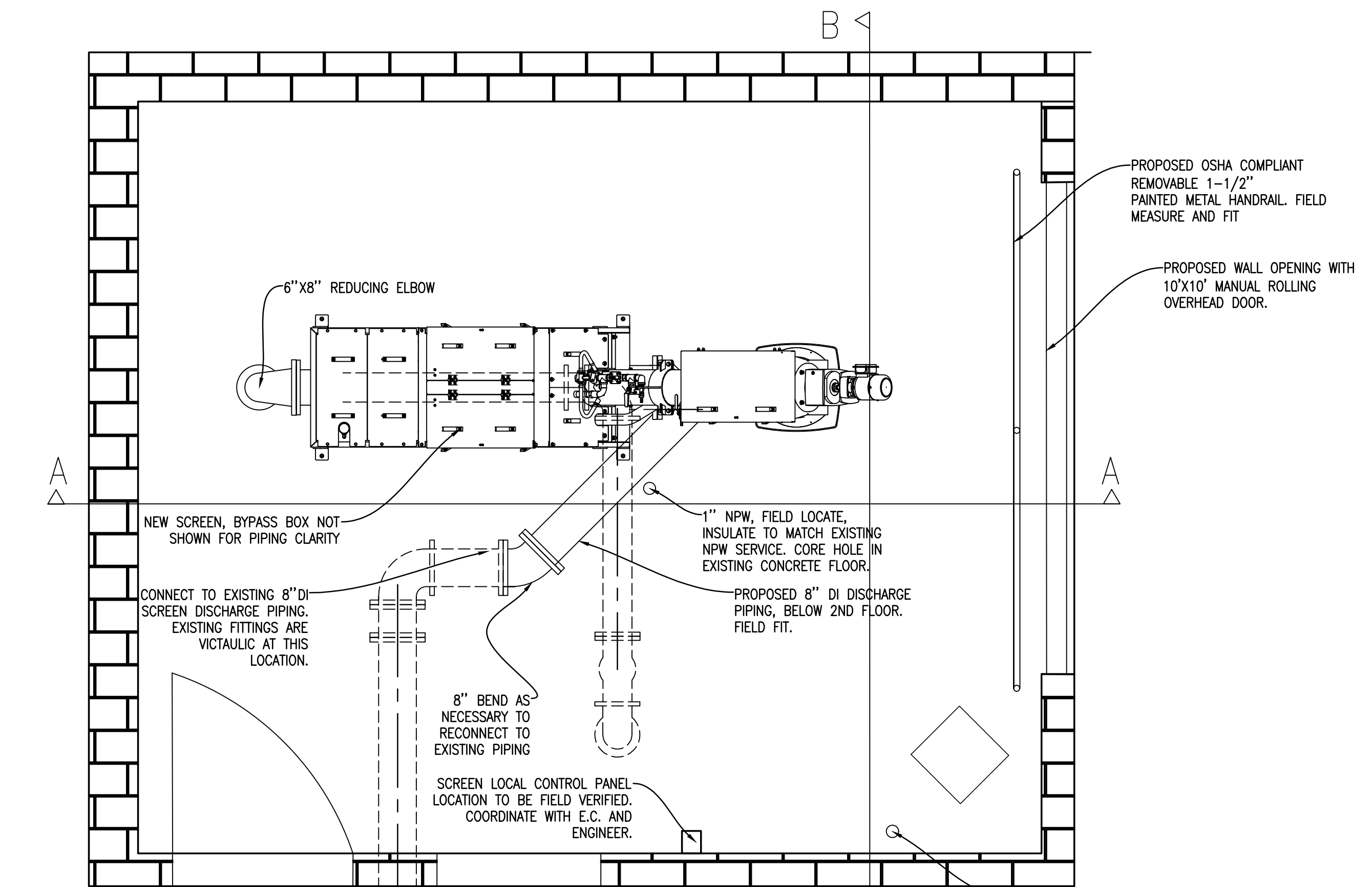
PROPOSED SCREEN SECTION A-A
 1/2" = 1'



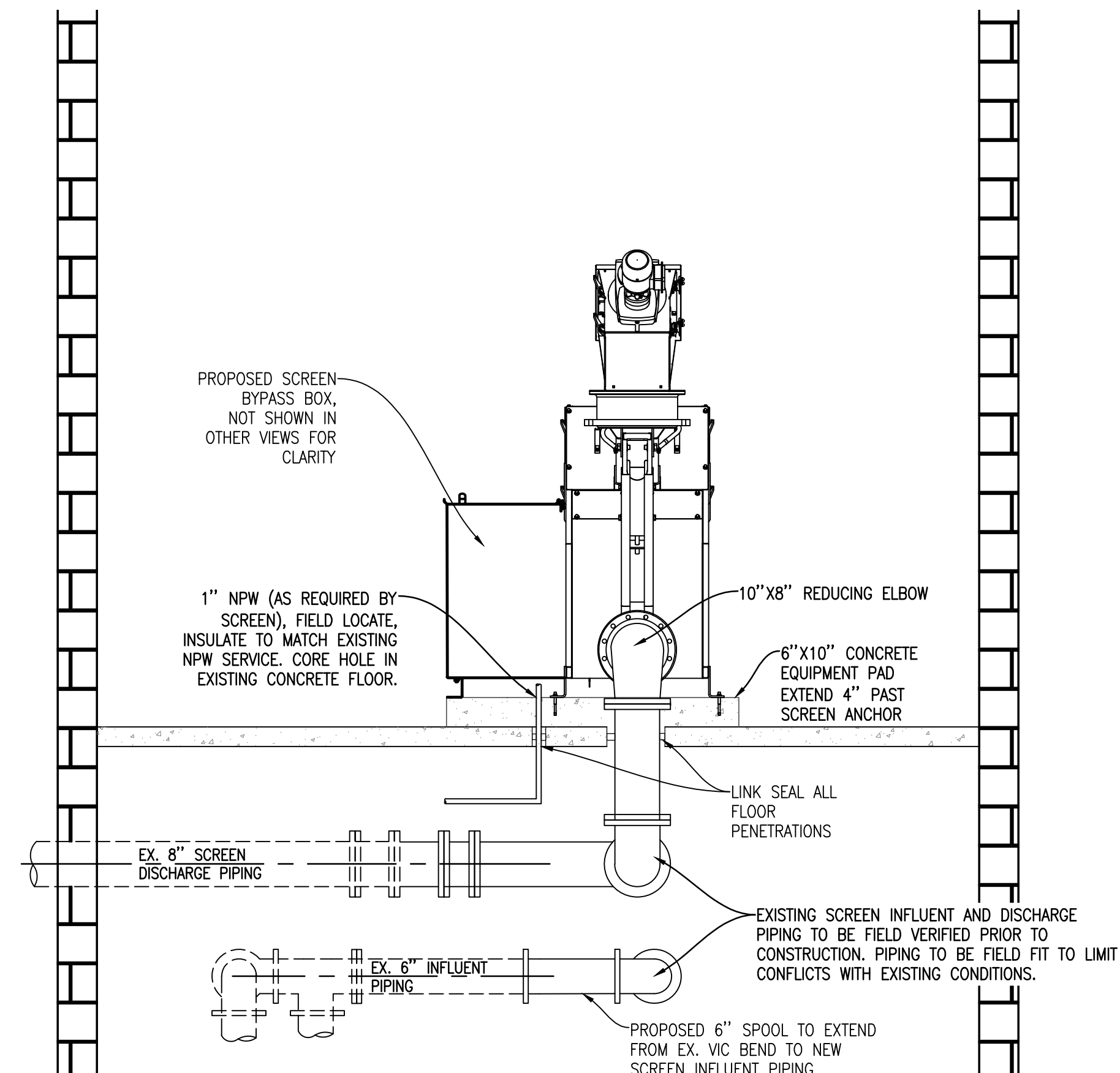
CONCRETE EQUIPMENT FOUNDATION
 NOT TO SCALE

NOTES

1. THE EXISTING WASTEWATER TREATMENT PLANT IS TO REMAIN IN OPERATION FOR THE DURATION OF CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY OR BYPASS MEASURES REQUIRED TO KEEP FACILITY OPERATIONAL DURING CONSTRUCTION.
3. ANY TIE-IN OR SHUT DOWNS REQUIRED FOR CONSTRUCTION SHALL BE COORDINATED AND APPROVED BY OWNER AND ENGINEER PRIOR TO WORK BEGINNING. ALL EXISTING BUILDING, PIPING AND EQUIPMENT CONDITIONS SHOWN ARE APPROXIMATE BASED ON PREVIOUS PLANS.
4. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND PIPING ARRANGEMENTS PRIOR TO CONSTRUCTION.
5. EXISTING PIPING CONSISTS OF VARIOUS SIZES AND TYPES OF FLANGES. PROPER CONNECTIONS SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. CONFLICTS IN PROPOSED PIPING PLAN SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION TO DEVELOP AN ALTERNATE PLAN.
7. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING A THROUGH SITE INVESTIGATION PRIOR TO BIDDING.
8. ANY EXISTING LIGHTING, PIPE SUPPORTS, EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED FOR PROPOSED SCREEN PIPING ARE THE RESPONSIBILITY OF THE CONTRACTOR.
9. CONTRACTOR TO SALVAGE EXISTING SCREEN FOR OWNER.
10. CONTRACTOR TO MATCH EXISTING MATERIAL, PAINTING, INSULATION OF EXISTING BUILDING AND PIPING FOR PROPOSED PLAN UNLESS OTHERWISE NOTED.
11. CONTRACTOR CAN USE CERTIFIED OPERATOR TO UTILIZE EXISTING OVERHEAD CRANE TO LIFT EXISTING AND PROPOSED SCREEN.



PROPOSED SCREEN PLAN
 1/2" = 1'



PROPOSED SCREEN SECTION B-B
 1/2" = 1'

No.	Date	Revision	By

SCREEN RELACEMENT PLAN
WASTEWATER TREATMENT FACILITY UPGRADES
 LTBB OF ODAWA INDIANS

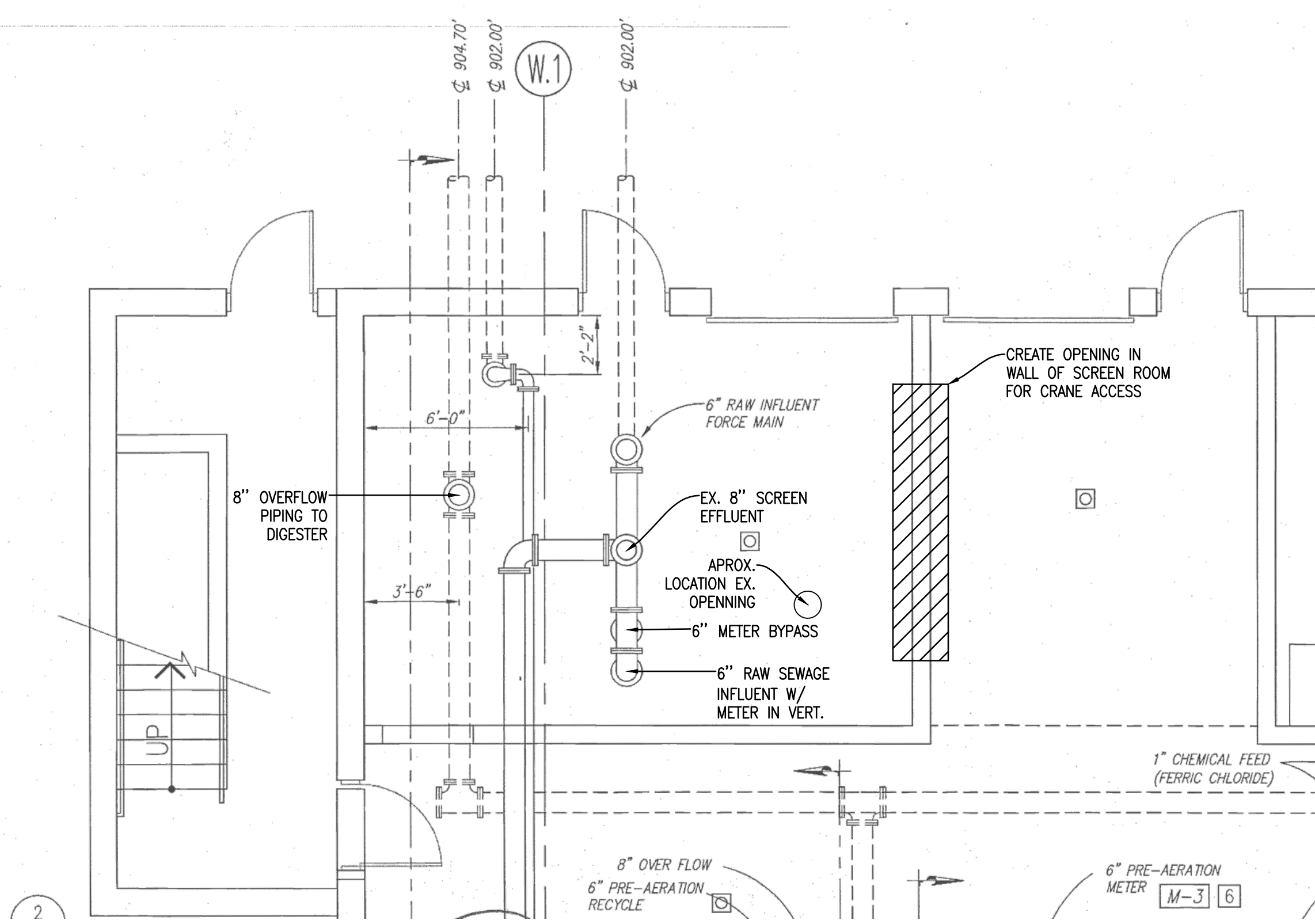
Date Issued: 11-11-24
 Date Surveyed: AUGUST 2024
 Designed By: GLW
 Drawn By: GLW
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Original sheet size is 22x34

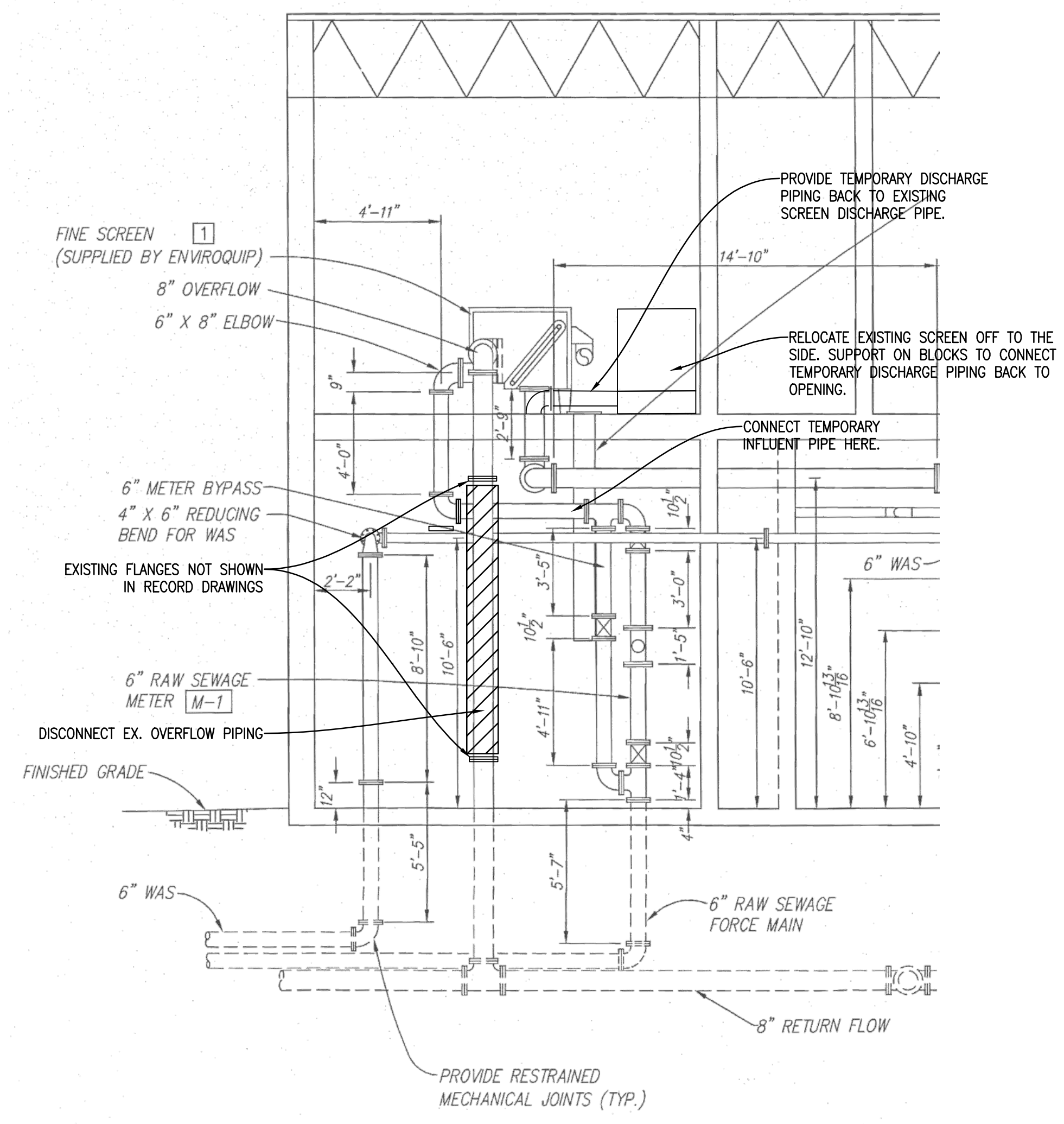
Location: SECTION 12
 T 34 N, R 06 W
 RESORT TOWNSHIP
 EMMET COUNTY, MI

Project Number: 240217

Sheet: **C2**



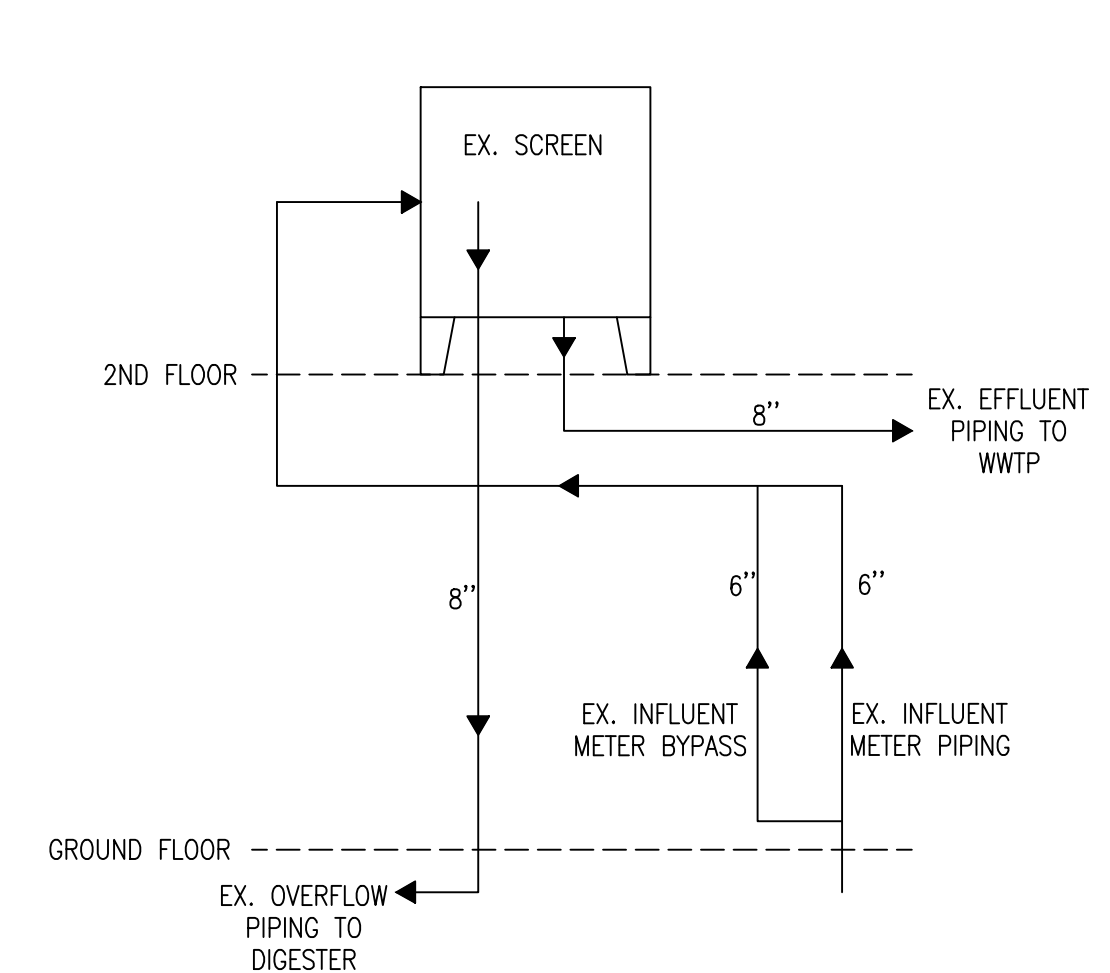
WWTP LOWER LEVEL PIPING PLAN
 SCALE: NOT TO SCALE



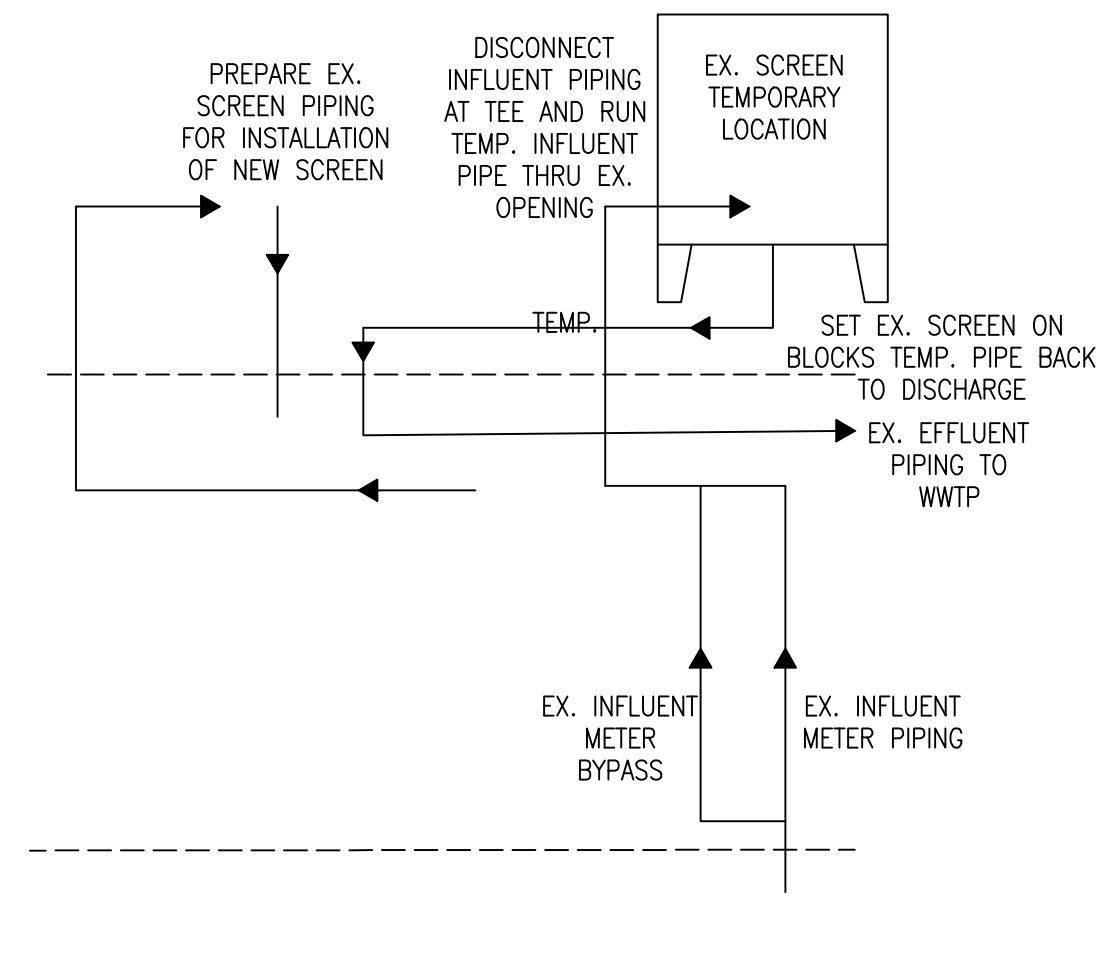
WWTP LOWER LEVEL PIPING SECTION
 SCALE: NOT TO SCALE

SUGGESTED SEQUENCE OF OPERATION

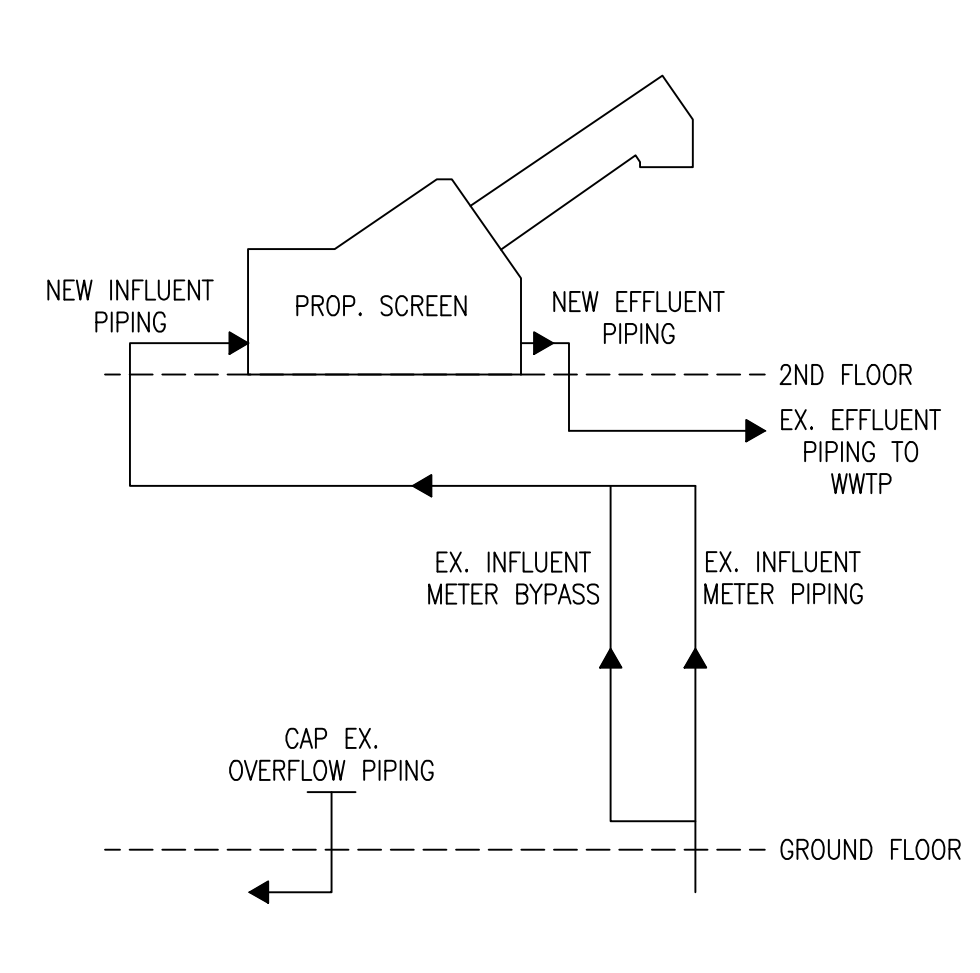
1. CONTRACTOR TO FIELD MEASURE AND VERIFY ALL PIPE SIZE AND BUILDING DIMENSIONS PRIOR TO CONSTRUCTION.
2. DISCONNECT WATER SERVICE LINE ON EXISTING EAST WALL OF SECOND FLOOR SCREEN ROOM.
3. CREATE OPENING IN EXISTING EAST CMU WALL OF SECOND FLOOR SCREEN ROOM LARGE ENOUGH TO REMOVE EXISTING SCREEN AND INSERT PROPOSED SCREEN.
4. PREPARE PIPING FOR TEMPORARY RELOCATION OF EXISTING SCREEN TO THE SIDE OF THE EXISTING SCREENING ROOM:
 - 4.1. DISCONNECT EXISTING OVERFLOW PIPING. BLIND FLANGE OVERFLOW ON SCREEN FOR TEMPORARY USE. OVERFLOW PIPE TO BE REMOVED DOWN TO FLANGE AT FIRST FLOOR.
 - 4.2. INSTALL TEMPORARY PIPING IN EXISTING UNUSED OPENING IN SCREENING ROOM FLOOR BACK TO EXISTING TEE DOWNSTREAM OF THE INFLUENT METER AND BYPASS LINE.
5. PREPARE TO RELOCATE EXISTING SCREEN TO TEMPORARY LOCATION IN THE SCREEN ROOM.
 - 5.1. PROVIDE PUMPING AND HAULING SERVICES AT INFLUENT LIFT STATION TO DIVERT ALL FLOW FROM THE WWTP FOR THE DURATION THAT THE SCREEN IS DISCONNECTED.
 - 5.2. DISCONNECT POWER, NON-POTABLE WATER CONNECTIONS, INFLUENT AND EFFLUENT PIPING FROM EXISTING SCREEN.
 - 5.3. MOVE EXISTING SCREEN TO TEMPORARY LOCATION.
 - 5.4. CONNECT TEMPORARY INFLUENT PIPING TO THE INFLUENT LINE JUST DOWNSTREAM OF TEE.
 - 5.5. RECONNECT EXISTING SCREEN TO TEMPORARY INFLUENT PIPING FROM INFLUENT PIPE AND EFFLUENT PIPE AS SHOWN IN PROCESS SCHEMATICS.
 - 5.6. RECONNECT NON-POTABLE WATER AND POWER TO EXISTING SCREEN AT TEMPORARY LOCATION.
6. WHILE THE TEMPORARY SCREENING SYSTEM IS RUNNING, PREPARE PIPING FOR INSTALLATION OF NEW SCREEN.
 - 6.1. INSTALL NEW PIPING AND FITTINGS IN SECOND FLOOR SCREEN ROOM TO ACCOMMODATE NEW SCREEN.
 - 6.2. LIFT NEW SCREEN TO SECOND FLOOR SCREEN ROOM AND INSTALL PER MANUFACTURER STANDARDS.
 - 6.3. RECONNECT FLOW TO WWTP THROUGH NEW SCREEN.
7. DISCONNECT TEMPORARY SCREEN AND REMOVE TEMPORARY POWER.
8. CAP EXISTING OVERFLOW PIPING AT FLOOR AND REMOVE EXISTING OVERFLOW PIPING THROUGH CEILING.
9. INSTALL REMOVABLE SAFETY RAILING ALONG NEW OPENING OF EAST WALL.



EXISTING PROCESS SCHEMATIC



TEMPORARY PROCESS SCHEMATIC



PROPOSED PROCESS SCHEMATIC

NOTES

1. DRAWING IS PROVIDED FROM ORIGINAL CONSTRUCTION PLANS. PLANS ARE NOT DOCUMENTED RECORD DRAWINGS. CONTRACTOR TO FIELD VERIFY PRIOR TO BIDDING.
2. SUGGESTED SEQUENCE OF OPERATION IS ONLY A SUGGESTION, CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY OR BYPASS MEASURES REQUIRED FOR THE DURATION OF CONSTRUCTION SO THAT THE OWNER CAN MAINTAIN OPERATION OF THE TREATMENT FACILITY.
3. ALL TEMPORARY SCREEN SET UP AND REMOVAL ARE TO BE BID AS INCIDENTAL TO THE NEW SCREEN WORK.

**TEMPORARY SCREENING PLAN
 WASTEWATER TREATMENT FACILITY UPGRADES
 LTBB OF ODAWA INDIANS**

Date Issued: 11-11-24
 Date Surveyed: AUGUST 2024
 Designed By: GLW
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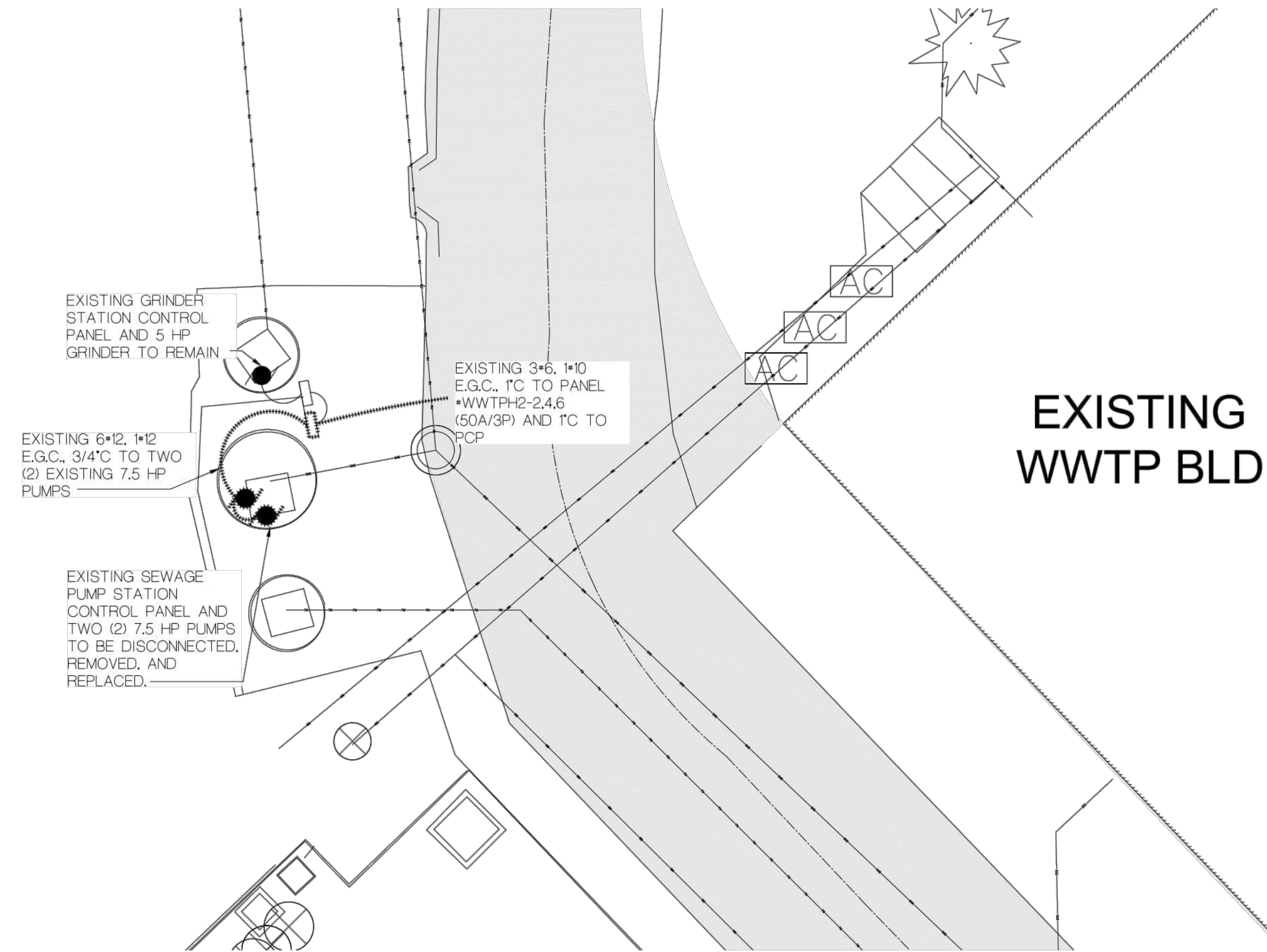
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 EMMET COUNTY, MI

Project Number: 240217

Sheet: **C3**

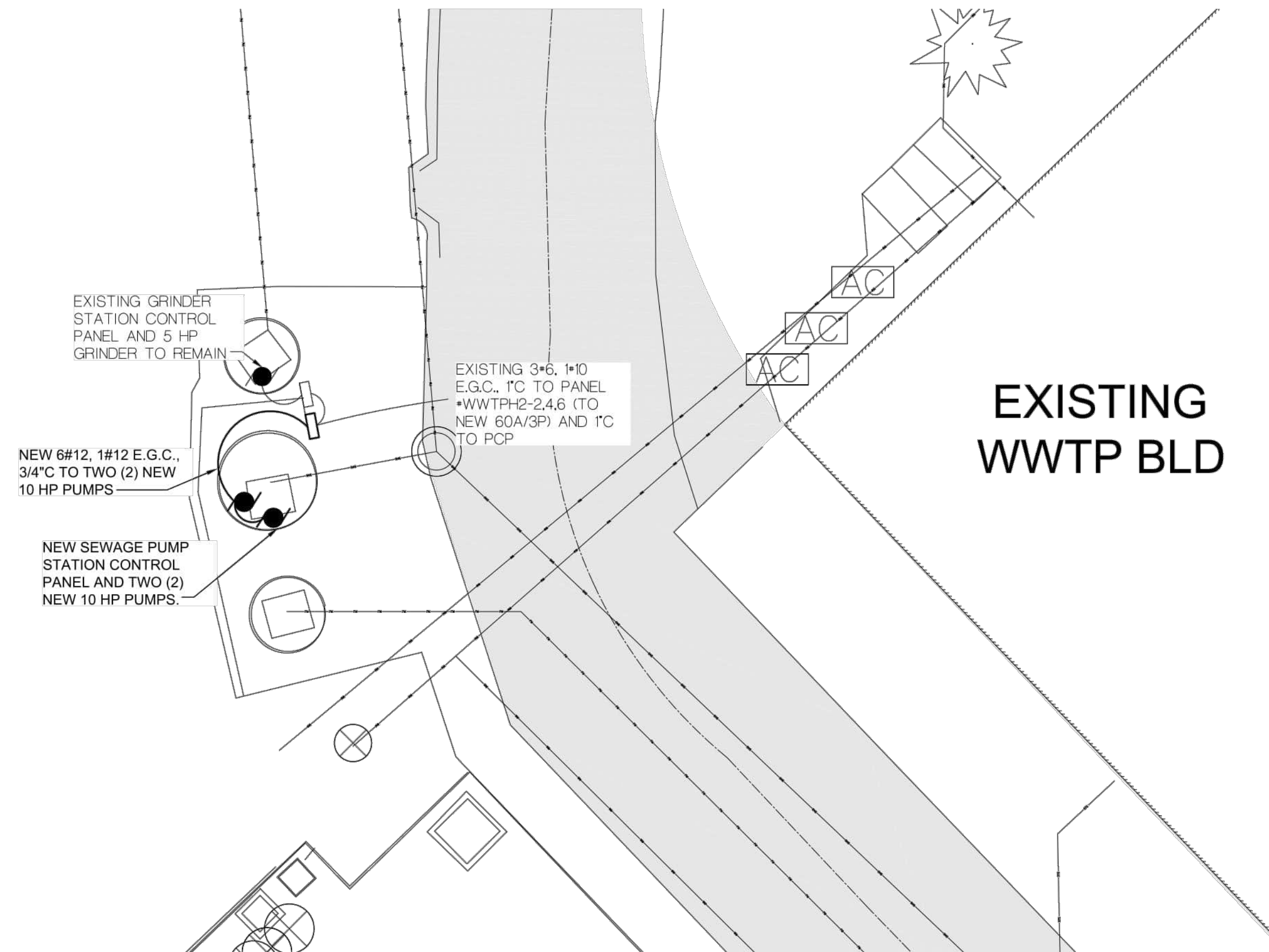


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ELECTRICAL DEMOLITION SITE PLAN

SCALE: 1" = 10'



ELECTRICAL SITE PLAN

SCALE: 1" = 10'



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**ELECTRICAL SITE PLAN
WASTEWATER TREATMENT FACILITY UPGRADES
LTBB OF ODAWA INDIANS**

Date Issued: 11/11/2024
Date Surveyed: AUGUST 2024
Designed By: JAV
Drawn By: JAV
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EMMET COUNTY, MI

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240217

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SE1

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**ELECTRICAL LEGEND, AND DETAILS
WASTEWATER TREATMENT FACILITY UPGRADES
LTBB OF ODAWA INDIANS**

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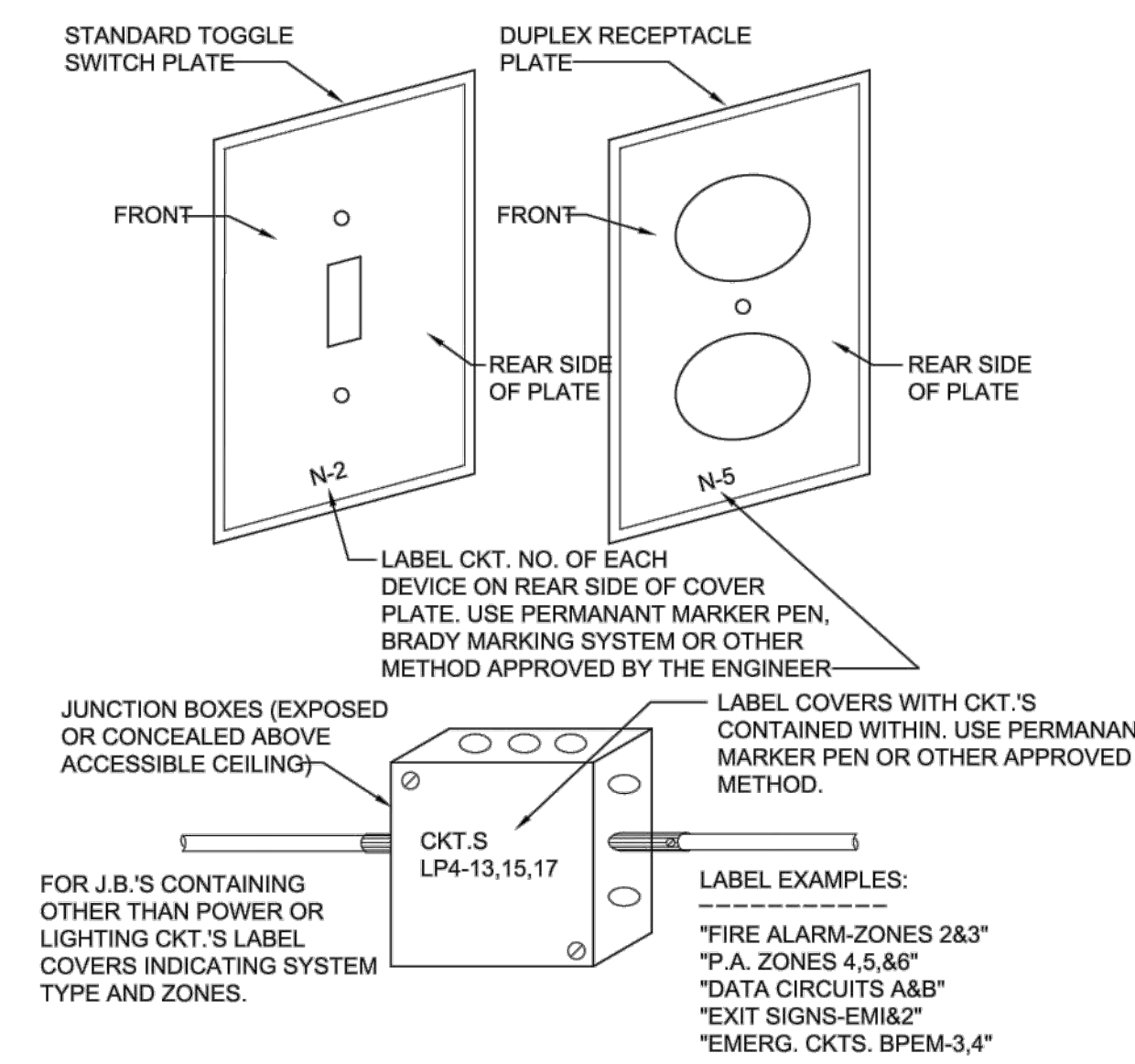
Project Number:
240217

Sheet:
E0

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	NOTES
	SINGLE POLE SWITCH	MOUNT @ 44" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	THREE-WAY SWITCH	MOUNT @ 44" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	FOUR-WAY SWITCH	MOUNT @ 44" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	WALL MOUNTED FIXTURE, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	ROUND FIXTURE, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	2'x4' FIXTURE, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	1'x4' FIXTURE, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	WALL MOUNTED FIXTURE, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	EXIT SIGN, TYPE X	SEE LIGHTING FIXTURE SCHEDULE FOR TYPES
	PHOTOCELL	INTERMATIC #K4321
	DUPLEX OUTLET - 20 AMP	MOUNT @ 16" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	DUPLEX OUTLET - WEATHER PROOF "IN-USE" COVER	MOUNT @ 24" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	DUPLEX OUTLET - GROUND FAULT - 20 AMP	MOUNT @ 16" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	DUPLEX OUTLET - DEDICATED CIRCUIT	MOUNT @ 16" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	208V, 4 WIRE OUTLET, AS SPECIFIED	MOUNT @ 16" A.F.F. TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED
	SINGLE-PHASE SPECIAL PURPOSE OUTLET, AS NOTED	REFER TO SHOP DRAWINGS FOR CONNECTION REQUIREMENTS
	THREE-PHASE SPECIAL PURPOSE OUTLET, AS NOTED	REFER TO SHOP DRAWINGS FOR CONNECTION REQUIREMENTS
	JUNCTION BOX WITH BLANK COVER, AS SPECIFIED	
	SINGLE-PHASE MOTOR, AS SPECIFIED	
	THREE-PHASE MOTOR, AS SPECIFIED	
	SINGLE-PHASE FUSED OR NON-FUSED DISCONNECT	
	SINGLE-PHASE MANUAL STARTER OR COMB. DISC./STARTER	
	THREE-PHASE FUSED OR NON-FUSED DISCONNECT	
	THREE-PHASE MANUAL STARTER OR COMB. DISC./STARTER	
	MOTOR TOGGLE SWITCH WITH THERMAL OVERLOAD AND LOCKOUT	SQUARE D #CLASS 2510 FGJ5P (SINGLE POLE)
	DISTRIBUTION POWER PANELS	REFER TO SPECIFICATIONS AND ONE-LINE DIAGRAM.
	LIGHTING/BRANCH CIRCUIT PANELS	REFER TO SPECIFICATIONS AND ONE-LINE DIAGRAM.
	DATA OUTLET	E.C. TO PROVIDE AND INSTALL 4" SQ. x 2-1/8" DEEP BOX WITH 2" DEEP PLASTER RING AND 1" CONDUIT STUBBED ABOVE CEILING.
	FIRE ALARM BOOSTER POWER SUPPLY - SIEMENS PAD-4 SERIES	ALL FIRE ALARM MATERIALS AND DEVICES SHALL BE COMPATIBLE WITH THE EXISTING SIEMENS SYSTEM DEVICES AND EQUIPMENT. CONTACT JEFFREY VANSKIVER - (616.293.3936 OR jeffrey.vanskiver@siemens.com) FOR BIDDING AND INSTALLATION INFORMATION.
	FIRE ALARM VISIBLE - SIEMENS ZR SERIES	MOUNT @ MIN. 80", MAX. 96" A.F.F.
	FIRE ALARM AUDIBLE/VISIBLE - SIEMENS ZH SERIES	MOUNT @ MIN. 80", MAX. 96" A.F.F.
	FIRE ALARM VISIBLE - EXPLOSION PROOF - CROUSE-HINDS XB11 SERIES	MOUNT @ MIN. 80", MAX. 96" A.F.F.
	FIRE ALARM SPEAKER - EXPLOSION PROOF - CROUSE-HINDS DB3B SERIES	MOUNT @ MIN. 80", MAX. 96" A.F.F.
	FIRE ALARM SMOKE DETECTOR	
	SECURITY CAMERA	E.C. TO PROVIDE AND INSTALL 4" SQ. x 2-1/8" DEEP WEATHERPROOF BOX WITH 2" DEEP PLASTER RING AND 1" CONDUIT TO SECURITY PANEL.

ELECTRICAL IDENTIFICATION



WIRE SIZE REQUIREMENTS

NOTE:
BASED ON A MAXIMUM OF 3.6-VOLT DROP (3%) ON 120V CIRCUITS.
WIRES FOR RUNS OVER 100'-0" SHALL BE DETERMINED ON THIS
A MAXIMUM OF A 3% DROP ALLOWED.

BRANCH CIRCUIT AMPS	LENGTH OF RUN - FROM PANEL TO FIRST CONNECTION - FEET								
	50'	60'	70'	80'	90'	100'	110'	120'	130'
15	#12	#12	#12	#10	#10	#10	#10	#10	#8
20	#12	#10	#10	#10	#10	#8	#8	#8	#8
30	#10	#10	#8	#8	#8	#6	#6	#6	#6

ABBREVIATIONS

1-21	PANEL 1, CIRCUIT 21	EMT	ELECTRICAL METALLIC TUBING	MC	MECHANICAL CONTRACTOR	RGS	RIGID GALVANIZED STEEL
A	AMPERES	ERV	ENERGY RECOVERY VENTILATOR	MCB	MAIN CIRCUIT BREAKER	TR	TAMPER RESISTANT
AC	ABOVE COUNTER	E-R	EXISTING TO BE RELOCATED	MDP	MAIN DISTRIBUTION PANEL	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
AFF	ABOVE FINISH FLOOR	ETR	EXISTING TO REMAIN	MLO	MAIN LUG ONLY	UGRD	UNDERGROUND
AFG	ABOVE FINISH GRADE	EWC	ELECTRIC WATER COOLER	NL	NIGHT LIGHT	UON	UNLESS OTHERWISE NOTED
BC	BELOW COUNTER	EWB	ELECTRIC WATER HEATER	NTS	NOT TO SCALE	V	VOLT
C	CONDUIT	EXP	EXPLOSION PROOF	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED	VFD	VARIABLE FREQUENCY DRIVE
C/B, CB	CIRCUIT BREAKER	G	GROUND	P	PUMP	VIF	VERIFY IN FIELD
DWG	DRAWING	GEC	GROUNDING ELECTRODE CONDUCTOR	PNL	PANEL	W	WIRE
E	EXISTING TO REMAIN	GFI	GROUND FAULT CIRCUIT INTERRUPTER	PS	PRIMARY SWITCH	WG	WIREGUARD
EC	ELECTRICAL CONTRACTOR	KCMIL	THOUSAND CIRCULAR MILS	PT	PRIMARY TRANSFORMER	WP	WEATHERPROOF
EF	EXHAUST FAN	KVA	KILOVOLT-AMPERES	PVC	POLYVINYL CHLORIDE	XFMR	TRANSFORMER
EGC	EQUIPMENT GROUNDING CONDUCTOR	KW	KILOWATTS	Q	QUADRIPLX (DOUBLE DUPLEX) RECEPTACLE		

NOTES

- ALL ELECTRICAL EQUIPMENT AND WIRING METHODS SHALL MEET 2023 N.E.C. CLASS 1, DIVISION 2, GROUP C & D HAZARDOUS LOCATIONS IN FINE SCREEN #W10.
- ALL ELECTRICAL PIPING IN CLASS 1, DIVISION 2, GROUPS C & D SHALL BE PVC COATED RIGID CONDUIT, SURFACE MOUNTED. ALL OTHER CONDUIT SHALL BE (GRS) UNLESS NOTED OTHERWISE ON THE DRAWINGS. USE PVC CONDUIT STRAPS.
- ALL NEW DUPLEX RECEPTACLES SHALL BE 20 AMP RATED.
- NOT USED.
- NOT USED.
- NOT USED.
- NOT USED.
- NOT USED.
- GROUNDING ELECTRODE CONDUCTOR (G.E.C.) AND/OR EQUIPMENT GROUNDING CONDUCTORS (E.G.C.) SHALL BE REQUIRED IN ALL CONDUIT, SIZED PER TABLES 250-66 & 250-122 RESPECTIVELY.
- REFER TO P&ID SHEETS (G-2 THROUGH G-5) AND SPECIFIED FUNCTIONAL INTENT FOR ADDITIONAL INSTRUMENTATION INFORMATION. REQUIRED TO BE INSTALLED BY E.C.
- E.C. SHALL COORDINATE CONDUIT ROUTING WITH PLUMBING, MECHANICAL AND LOW VOLTAGE CONTRACTORS.
- NOT USED.
- CIRCUITS WITH AN (*) DESIGNATE EXISTING CIRCUITS TAKEN FROM AN EXISTING DRAWING OR PANEL SCHEDULE AND SHALL BE FIELD VERIFIED. E.C. TO VERIFY ACTUAL CIRCUIT AND NOTIFY THE ENGINEER IF DISCREPANCIES ARE FOUND.
- E.C. SHALL FIELD VERIFY THAT ALL ADDITIONS AND CHANGES SHALL NOT OVERLOAD EXISTING CIRCUITS, PANELS OR TOTAL SERVICE.

NEW 15A/3P CIRCUIT BREAKER IN SPACES 25,27,29 OF EXISTING PANEL #WWTPH1 WITH 4#12, 1#12 E.G.C., 1" TO NEW SCREEN MOTOR CONTROL PANEL IN LOWER LEVEL.

REPLACE EXTG 50A/3P CIRCUIT BREAKER FEEDING EXISTING LIFT STATION WITH NEW 60A/3P CIRCUIT BREAKER. REUSE EXTG 3#6, 1#10 E.G.C., 1".

EXTG WWTPL3

EXTG EBI EWWTPH

EXTG MCC WWTPL

EXTG WWTPL2

EXTG T-WWTPL1 & T-WWTPL2 (abv)

EXTG WWTPL1

EXTG WWTPL2

EXTG WWTPL3

EXTG CB-WWTPL3

EXTG T-WWTPL3

EXTG SURGE TANK PUMP CONTROL PANEL

EXTG VFD WELL PUMPS *3

EXTG SINE WAVE FILTER FOR WELL PUMPS *3

EXTG FIRE ALARM SMOKE DETECTOR

EXTG WWTPL3

EXTG WWTPL1

EXTG WWTPL2

EXTG WWTPL3

EXTG WWTPL1

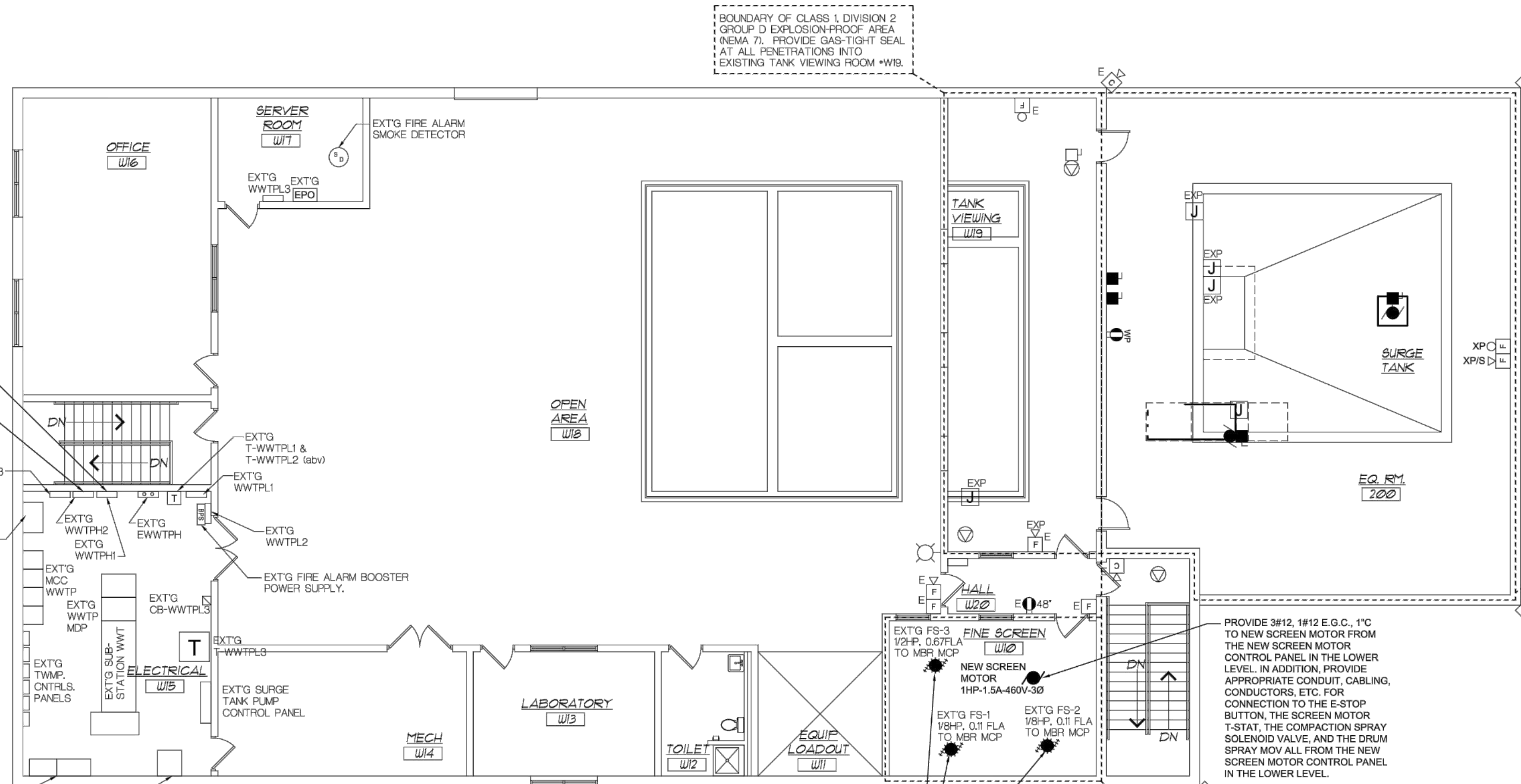
EXTG WWTPL2

EXTG WWTPL3

EXTG WWTPL1

EXTG WWTPL2

EXTG WWTPL3

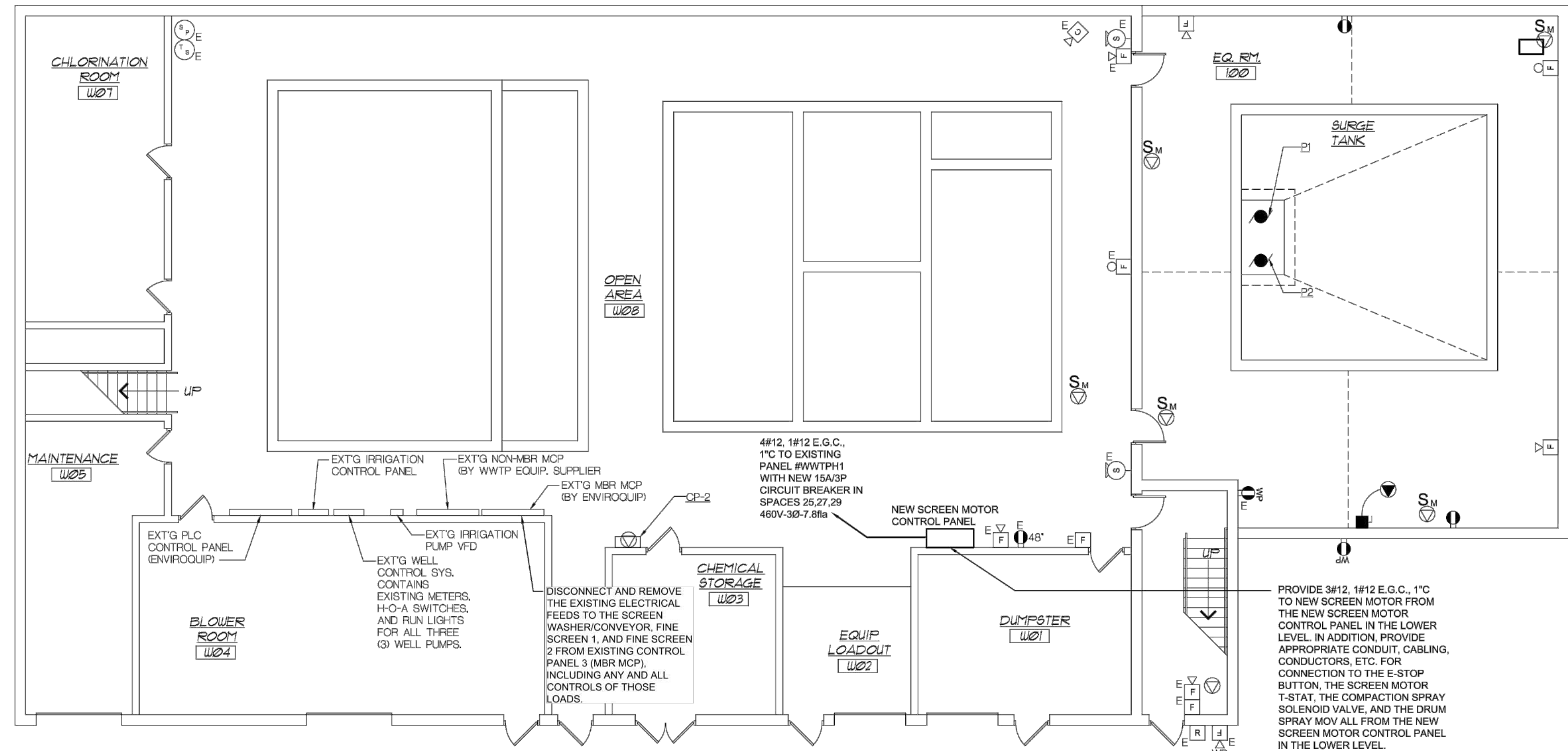


ELECTRICAL SECOND FLOOR PLAN
SCALE: 1" = 1/8"

DISCONNECT AND REMOVE THE TWO (2) EXISTING FINE SCREEN MOTORS AND THEIR ASSOCIATED ELECTRICAL CONNECTIONS/FEEDS AND CONTROLS TO THE EXISTING MBR MCP. REMOVE CONDUCTORS, EQUIPMENT, CONDUIT, ETC. BACK TO SOURCE AND DISCARD UNLESS IT CAN BE REUSED.

BOUNDARY OF CLASS 1, DIVISION 2 GROUP D EXPLOSION-PROOF AREA (NEMA 7). PROVIDE GAS-TIGHT SEAL AT ALL PENETRATIONS INTO FINE SCREEN #W10.

PROVIDE 3#12, 1#12 E.G.C., 1" TO NEW SCREEN MOTOR FROM THE NEW SCREEN MOTOR CONTROL PANEL IN THE LOWER LEVEL. IN ADDITION, PROVIDE APPROPRIATE CONDUIT, CABLING, CONDUCTORS, ETC. FOR CONNECTION TO THE E-STOP BUTTON, THE SCREEN MOTOR T-STAT, THE COMPACTION SPRAY SOLENOID VALVE, AND THE DRUM SPRAY MOV ALL FROM THE NEW SCREEN MOTOR CONTROL PANEL IN THE LOWER LEVEL.



ELECTRICAL FIRST FLOOR PLAN
SCALE: 1" = 1/8"

DISCONNECT AND REMOVE THE EXISTING ELECTRICAL FEEDS TO THE SCREEN WASHER/CONVEYOR, FINE SCREEN 1, AND FINE SCREEN 2 FROM EXISTING CONTROL PANEL 3 (MBR MCP), INCLUDING ANY AND ALL CONTROLS OF THOSE LOADS.

4#12, 1#12 E.G.C., 1" TO EXISTING PANEL #WWTPH1 WITH NEW 15A/3P CIRCUIT BREAKER IN SPACES 25,27,29 460V-30-7.8IIa

PROVIDE 3#12, 1#12 E.G.C., 1" TO NEW SCREEN MOTOR FROM THE NEW SCREEN MOTOR CONTROL PANEL IN THE LOWER LEVEL. IN ADDITION, PROVIDE APPROPRIATE CONDUIT, CABLING, CONDUCTORS, ETC. FOR CONNECTION TO THE E-STOP BUTTON, THE SCREEN MOTOR T-STAT, THE COMPACTION SPRAY SOLENOID VALVE, AND THE DRUM SPRAY MOV ALL FROM THE NEW SCREEN MOTOR CONTROL PANEL IN THE LOWER LEVEL.

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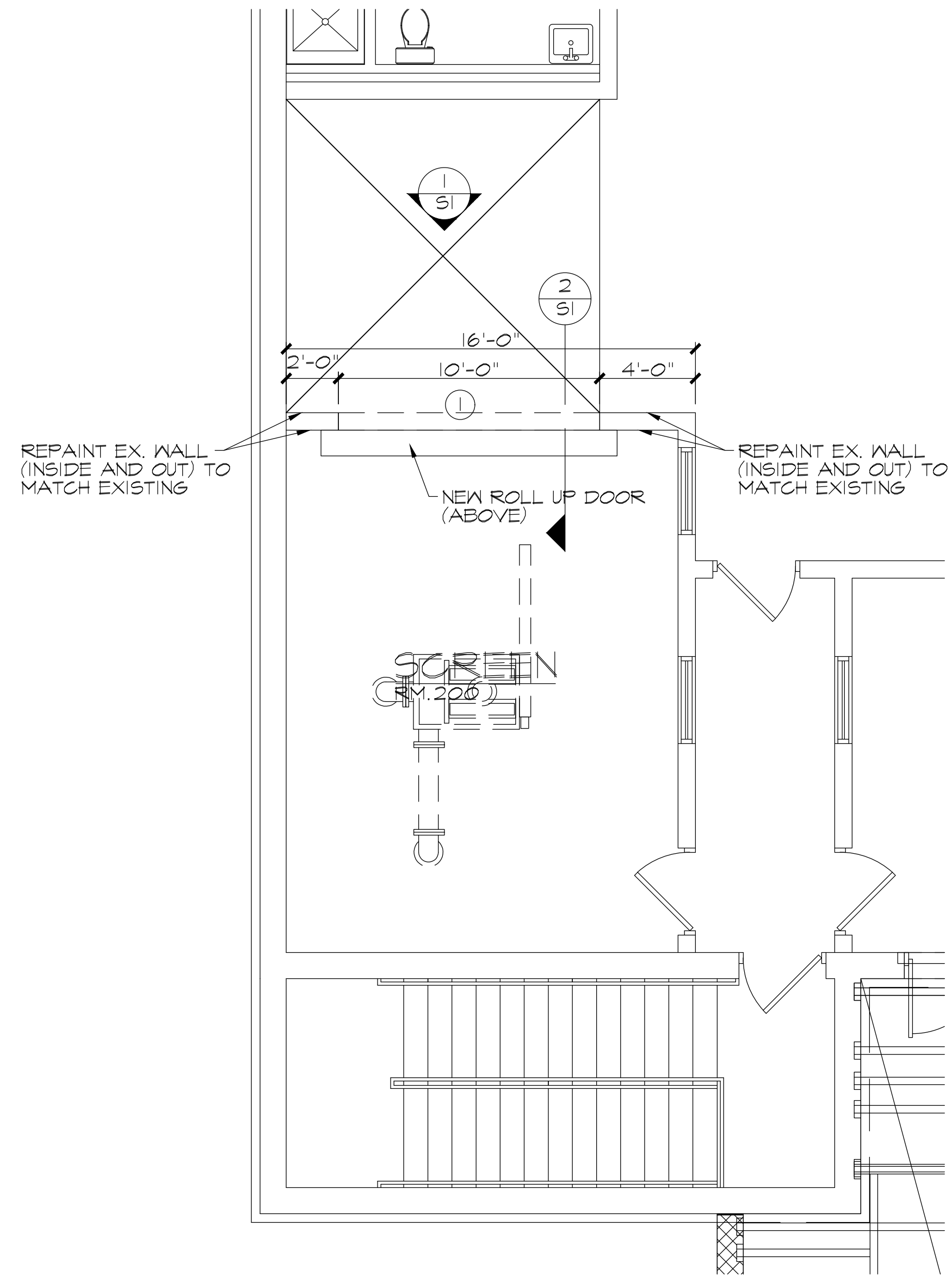
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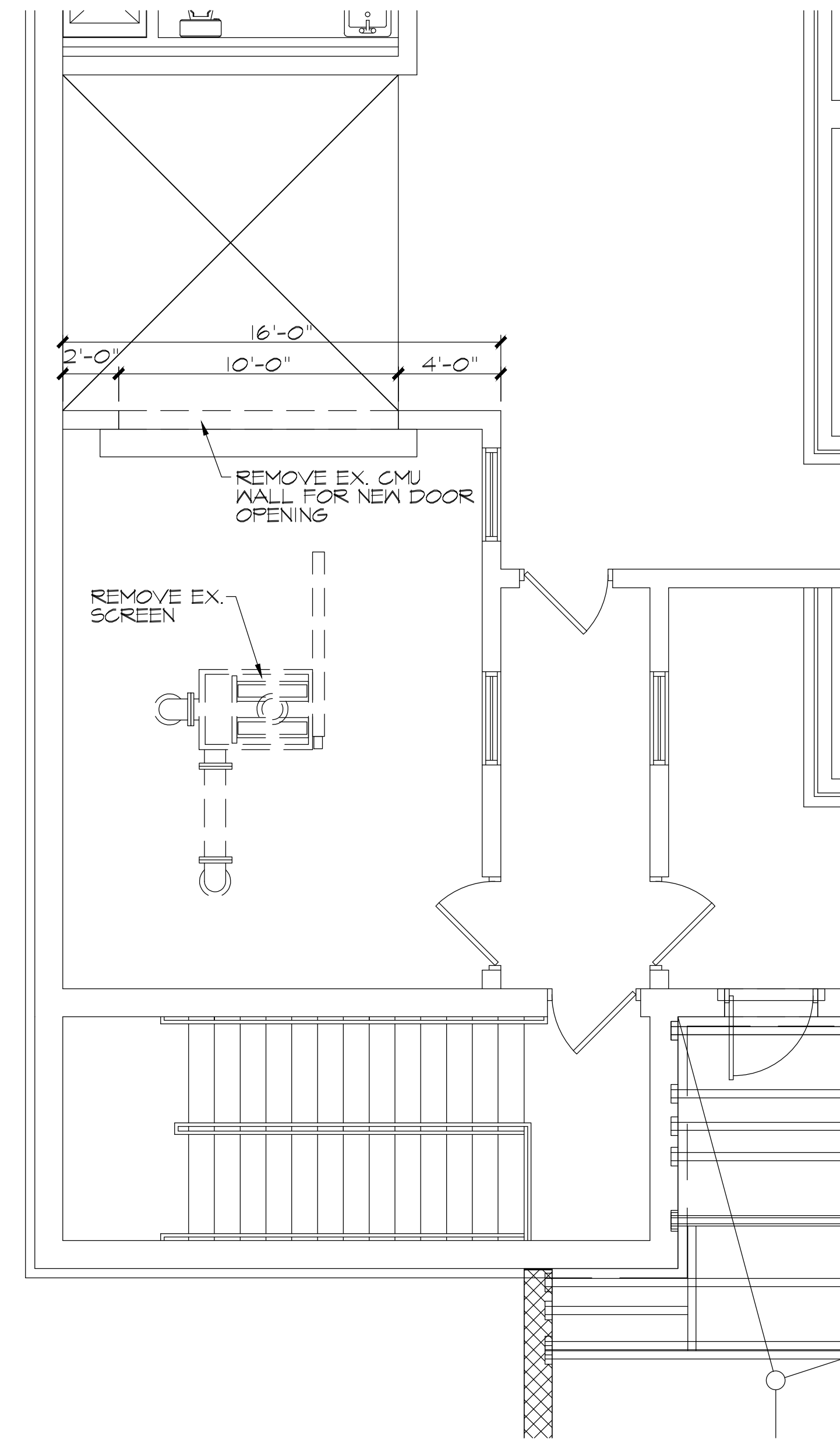
No.	Date	Revision	By

**ELECTRICAL FLOOR PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
LTBB OF ODAWA INDIANS**

Date Issued: 11/11/2024
Date Surveyed: AUGUST 2024
Designed By: JAV
Drawn By: JAV
Checked By: JAV
Scale: AS NOTED
Original sheet size is 22x34
Location: SECTION 12
T 34 N, R 08 W
RESORT TOWNSHIP
EMMET COUNTY, MI
Project Number: 240217
Sheet: **E1**

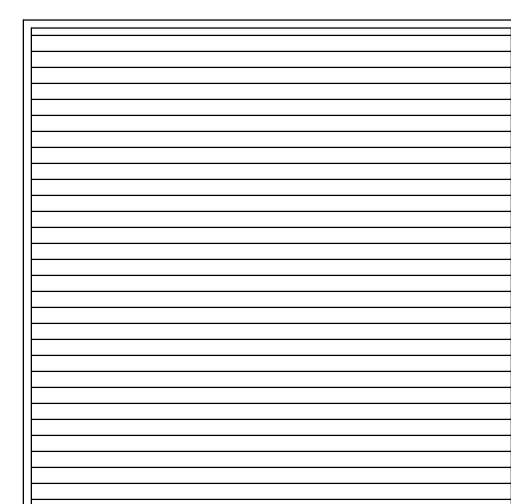


SECOND FLOOR FLOOR PLAN
 (2) AI SCALE: 1/4" = 1'-0"



SECOND FLOOR DEMOLITION PLAN
 (1) AI SCALE: 1/4" = 1'-0"

DOOR SCHEDULE											
NO.	DOOR LOCATION	SIZE	DOOR			FRAME			LABEL	HDWR	NOTES
			TYPE	MATERIAL	MATERIAL	HEAD	JAMB	SILL			
1	SCREEN (RM. 200)	10'-0" x 10'-0"	A	INS. SS MET.	--				1/2 HR		



(A)

HARDWARE SCHEDULE:

SET 1:
 (1) OVERHEAD DOOR HARDWARE
 MANUAL CHAIN DRIVEN OPERATION

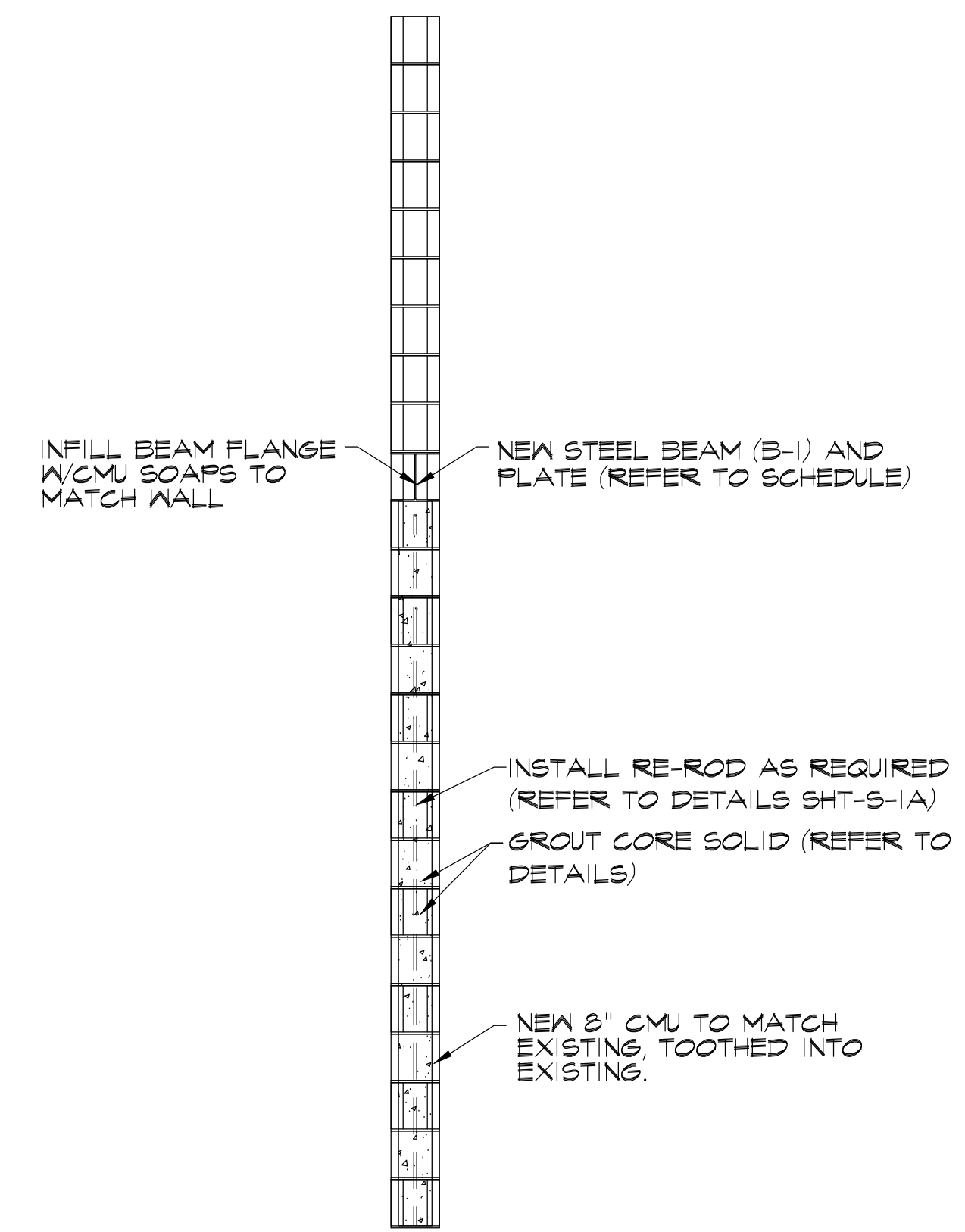
DOOR TO BE OVERHEAD DOOR CO.
 1/2 HR. FIRE-RATED INSULATED
 ROLLING SERVICE DOOR MODEL
 635, STAINLESS STEEL OR
 APPROVED EQUAL. ALL DOOR
 HARDWARE AND COMPONENTS TO
 BE STAINLESS STEEL.

No.	Date	Revision	By
1	11-12-24	ADDENDUM #1	GLW

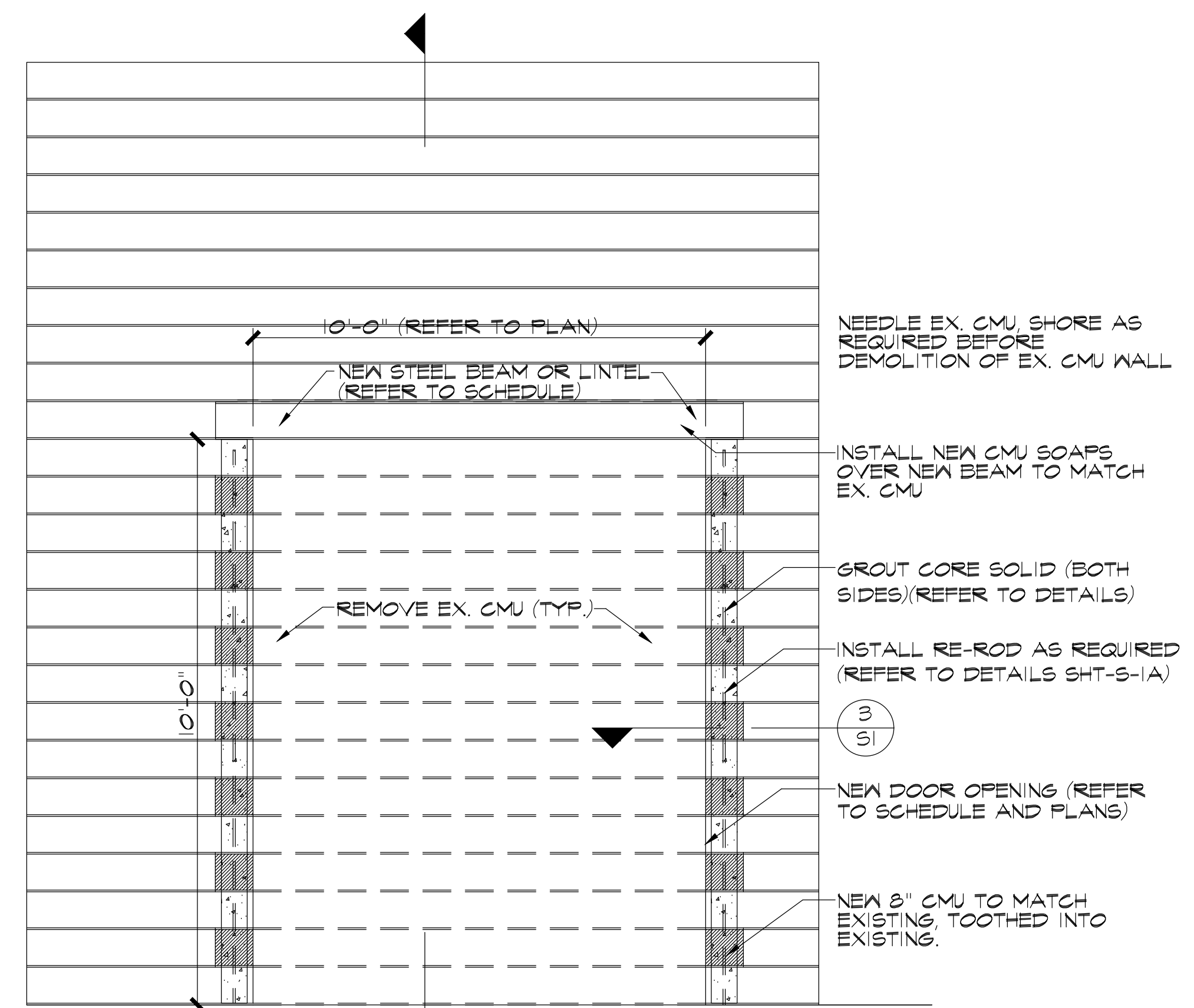
**FLOOR PLAN
 WASTEWATER TREATMENT FACILITY UPGRADES
 LTBB OF ODAWA INDIANS**

BEAM SCHEDULE:

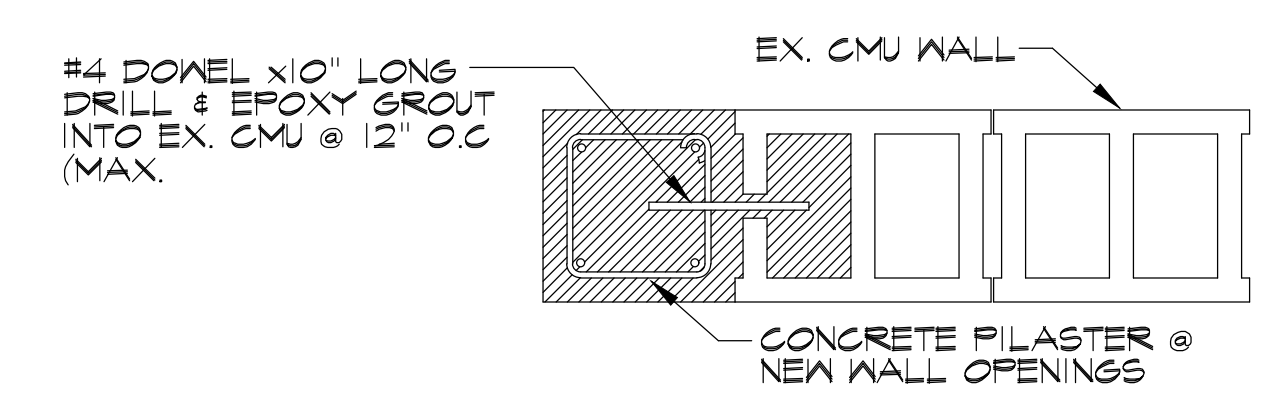
B-1: BEAM TO BE GALVANIZED
 W/CMU SOAPS TO MATCH WALL
 BEARING E.E.



TYP. MASONRY WALL SECTION
 SCALE: 1/2" = 1'-0"



TYP. MASONRY OPENING DETAIL
 SCALE: 1/2" = 1'-0"



TYP. MASONRY OPENING SECTION
 SCALE: NOT TO SCALE

No.	Date	Revision	By
1	11-12-24	ADDENDUM #1	GLW

STRUCTURAL DETAILS
WASTEWATER TREATMENT FACILITY UPGRADES
 LTBB OF ODAWA INDIANS

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