

# Construction Plans For CONTRACT 2 PUMP STATION NOS. 2 AND 11 IMPROVEMENTS

## Village of Elk Rapids - Antrim County - Michigan

Sections 20 & 21, Township 29N, Range 09W

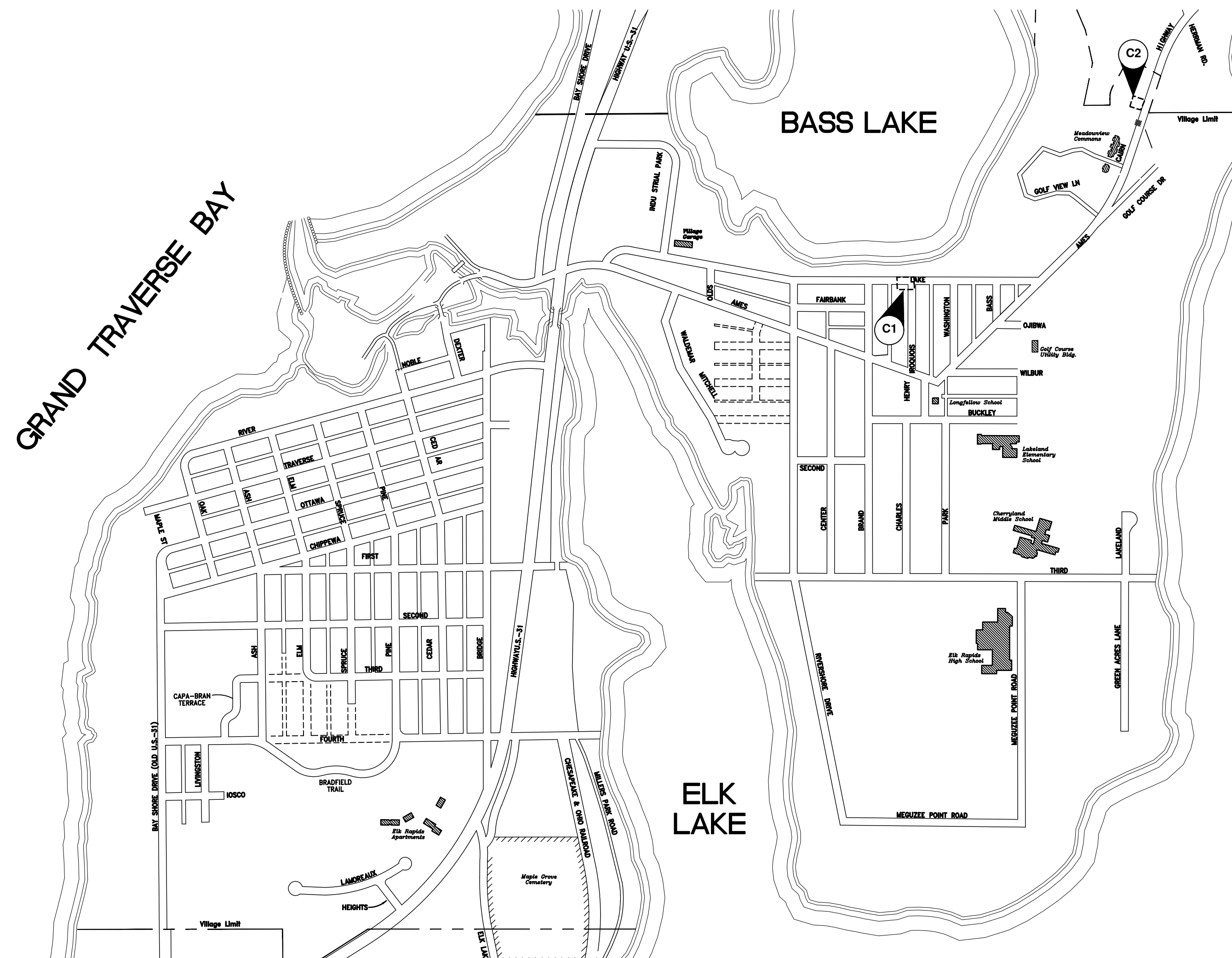
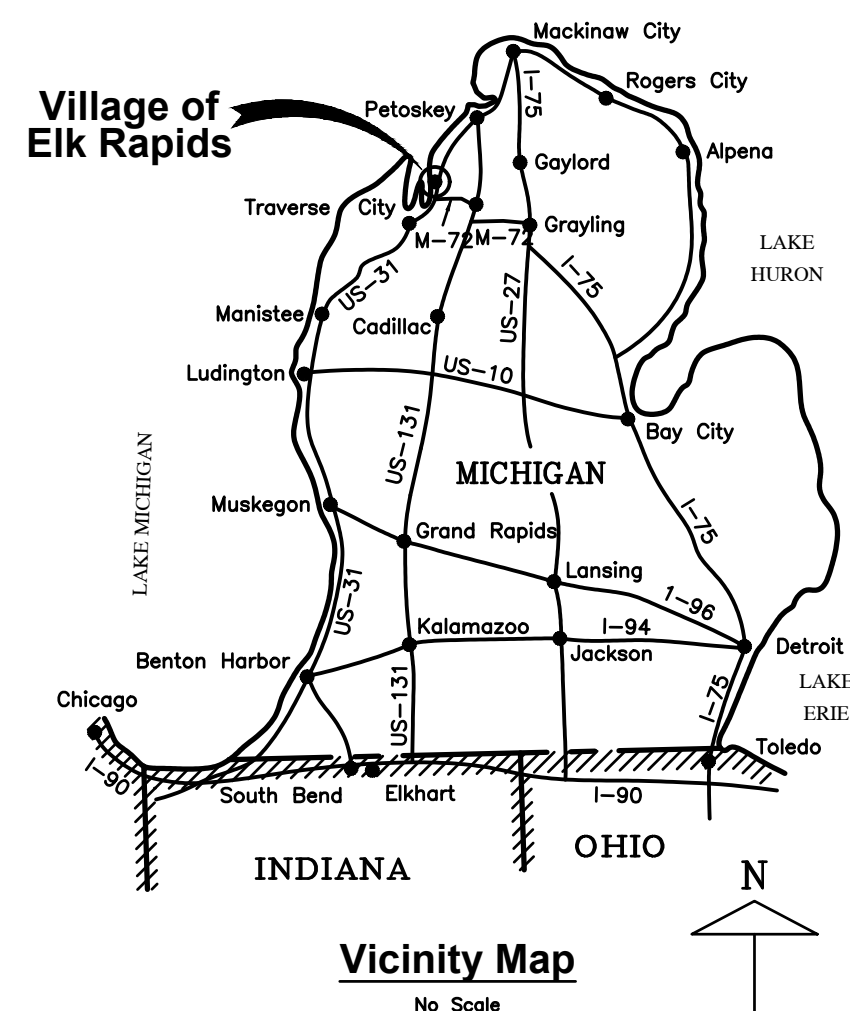
**Owner**

VILLAGE OF ELK RAPIDS  
P.O. BOX 398  
315 BRIDGE STREET  
ELK RAPIDS, MICHIGAN 49629  
(231) 264-9971 - (231) 264-9274



**Engineer**

GOSLING CZUBAK  
ENGINEERING SCIENCES, INC.  
1280 BUSINESS PARK DRIVE  
TRAVERSE CITY, MICHIGAN 49686-8607  
(231) 946-9191 - (800) 968-1062  
Fax : (231) 941-4603  
www.goslingczubak.com



Village of Elk Rapids  
Site Location Map

SCALE: 1" = 600'

**PUBLIC UTILITIES**

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY "MISS DIG" (1-800-482-7171) THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

**DTE ENERGY COMPANY  
GAS DISTRIBUTION**

1294 NORTH U.S. 31  
PETOSKEY, MI 49770  
231-258-3785

**DTE ENERGY COMPANY  
HIGH PRESSURE GAS TRANSMISSION**

250 MICHCON LN.,  
KALKASKA, MI 49646  
231-499-7646

**CHARTER COMMUNICATIONS VILLAGE OF ELK RAPIDS, DPW**

701 S. AIRPORT RD.  
TRAVERSE CITY, MI 49686  
231-929-7012 EXT. 102

**CONSUMERS ENERGY**

821 HASTINGS  
TRAVERSE CITY, MI 49686  
231-929-6244

MR. ALEX PRAY  
315 BRIDGE STREET  
P.O. BOX 398  
ELK RAPIDS, MI 49629  
231-264-9971

**AT&T**

142 E. STATE STREET  
TRAVERSE CITY, MI 49684  
231-941-2707

Sheet List Table

Sheet Number	Sheet Title
G1	COVER
G2	GENERAL NOTES AND SHEET LIST
C1	PROP. PS-2 SITE PLAN
C2	PROP. PS-11 SITE PLAN
C3	EXISTING PUMP STATION 11
C4	PROP. PS 11 PLAN AND SECTIONS
C5	EXISTING PUMP STATION 2 AND DEMOLITION PLAN
C6	PUMP STATION 11 DEMOLITION
C7	PROP. PS 2 PLAN AND SECTIONS
C8	PUMP STATION DETAILS
SE0.0	ELECTRICAL SCHEDULES & DETAILS - PS 2 & 11
SED1.0	PS2 EL DEMO
SED1.1	PS11 DEMO
SE1.0	PS2 SITE PLAN
SED1.1	PS11 SITE PLAN

**Gosling Czubak**  
engineering sciences, inc.  
1280 Business Park Dr.  
Traverse City, Michigan  
231-946-9191 phone  
info@goslingczubak.com  
www.goslingczubak.com

CIVIL ENGINEERING  
SURVEYING  
ENVIRONMENTAL SERVICES  
GEOTECHNICAL  
CONSTRUCTION SERVICES  
DRILLING  
LANDSCAPE ARCHITECTURE

No.	Date	Revision	By

**COVER**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMP.**  
**VILLAGE OF ELK RAPIDS**

Date Issued: APRIL 1, 2026  
Date Surveyed: 11/25/2024  
Designed By: TNK  
Drawn By: BAH  
Checked By: MJH  
Scale: AS NOTED  
Original sheet size is 22x34

Location:  
SECTION 21 T29N, R9W  
VILLAGE OF ELK RAPIDS  
ANTRIM COUNTY  
MICHIGAN

Project Number:  
240424

Sheet:  
**G1**

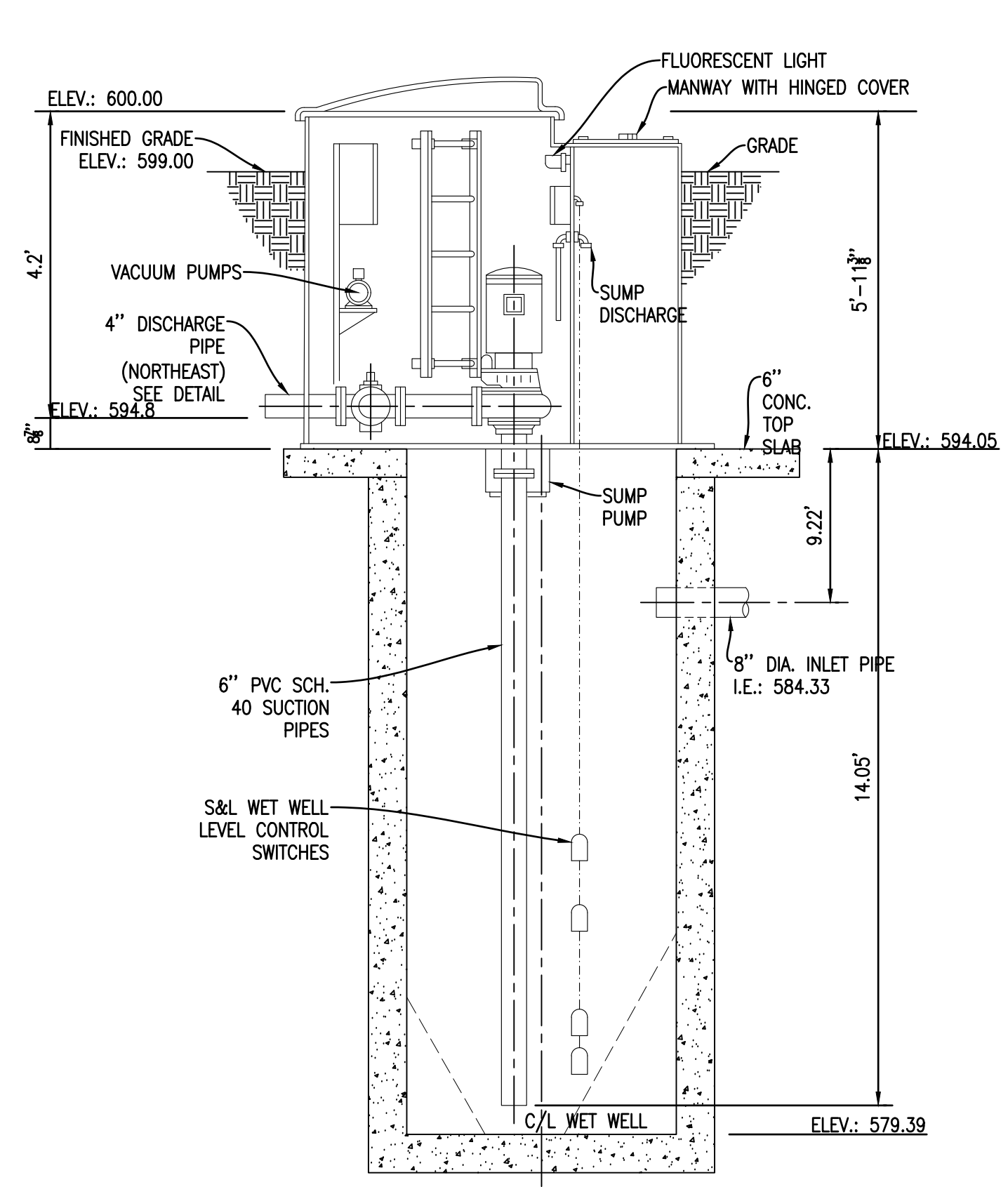


THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT 1 (800) 482-7171 OR 811 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.  
ORIGINAL SHEET SIZE IS 22x34 - HALF SCALE SHEET IS 11x17

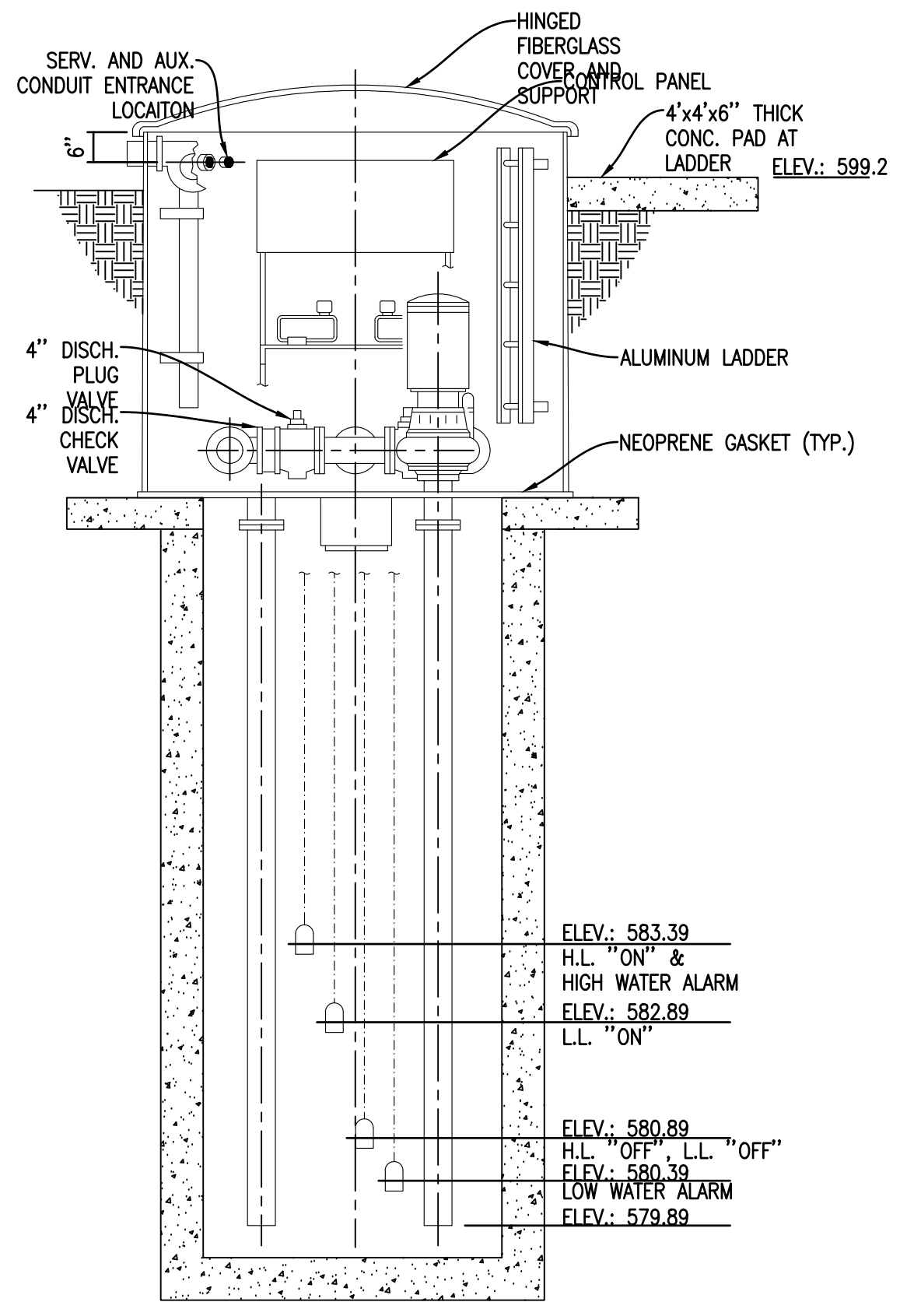




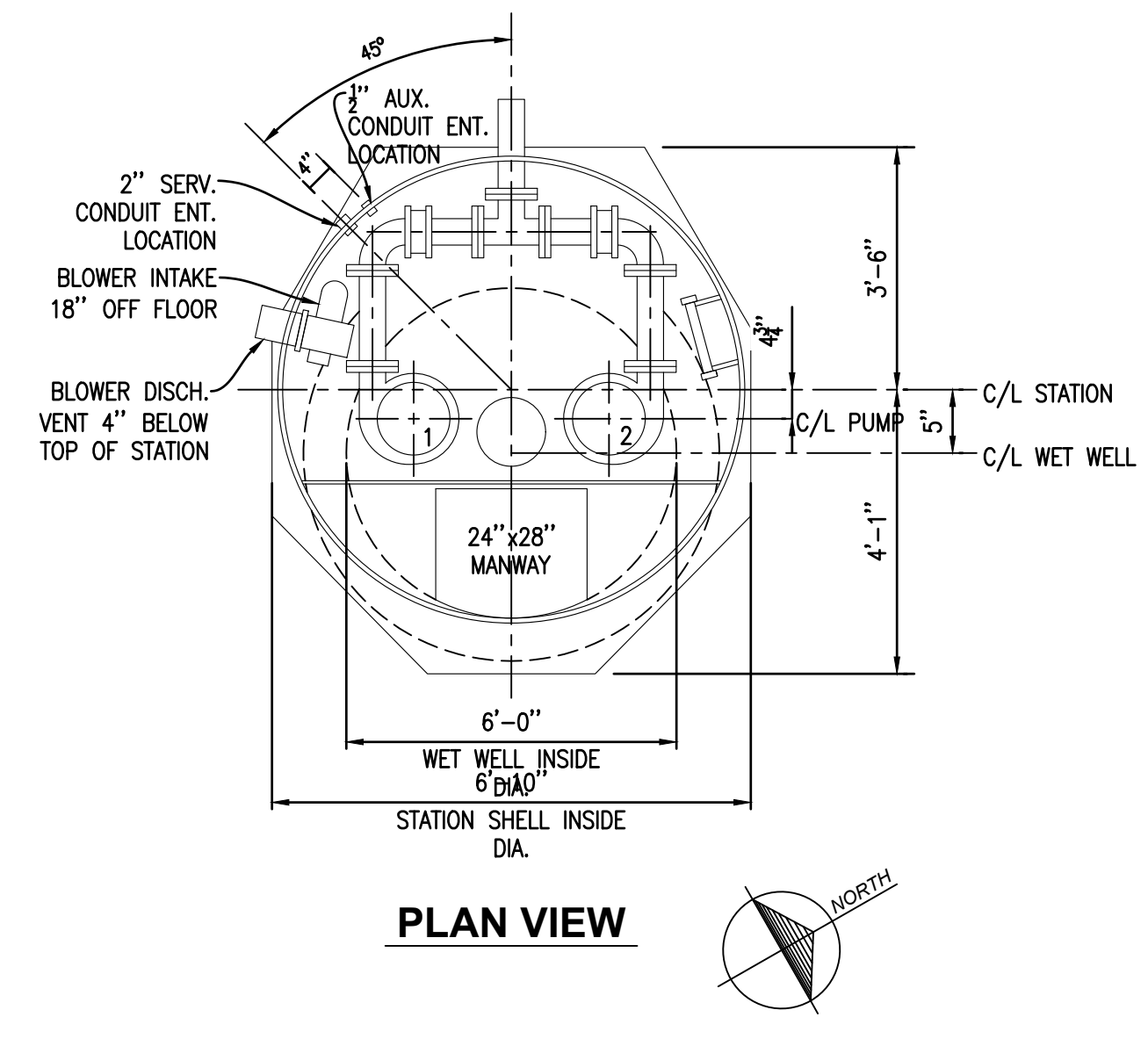




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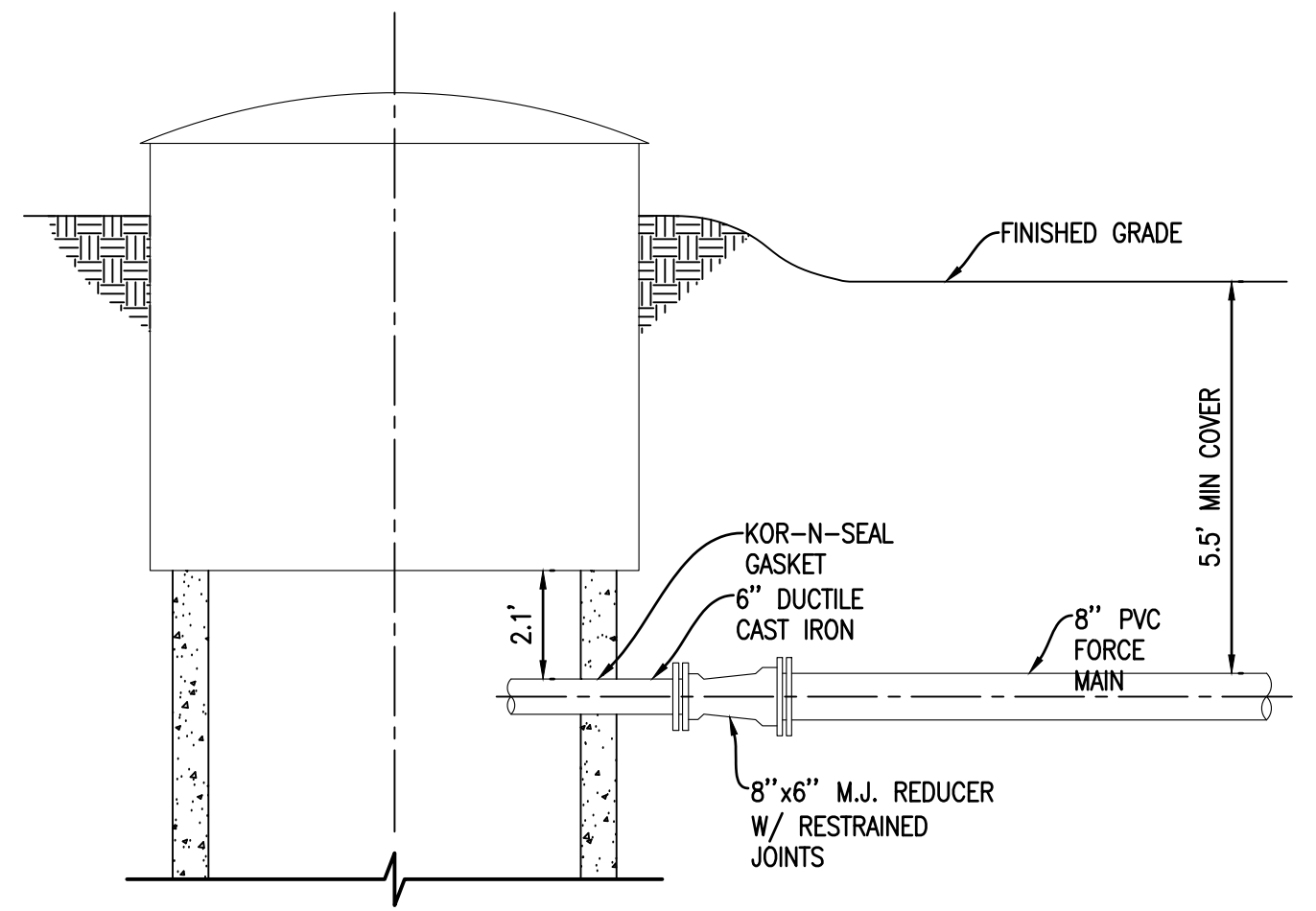


**SECTIONAL ELEVATION**



**PLAN VIEW**

**WET WELL MOUNTED PUMP STATION NO. 11**  
 NO SCALE



**PUMP STATION DISCHARGE CONNECTION DETAIL**  
 NO SCALE

**NOTES**

- SEE SHEET G2 GENERAL NOTES, FOR WATER UTILITY NOTES, SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND DRAWING LEGEND.
- SEE SHEET C36 FOR STANDARD DETAILS.
- SEE SHEET FOR PUMP STATION NO. 2 DETAILS.
- SEE SHEET FOR PUMP STATION NO. 11 DETAILS.

No.	Date	By	Revision

**EXISTING PUMP STATION 11**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
**VILLAGE OF ELK RAPIDS**

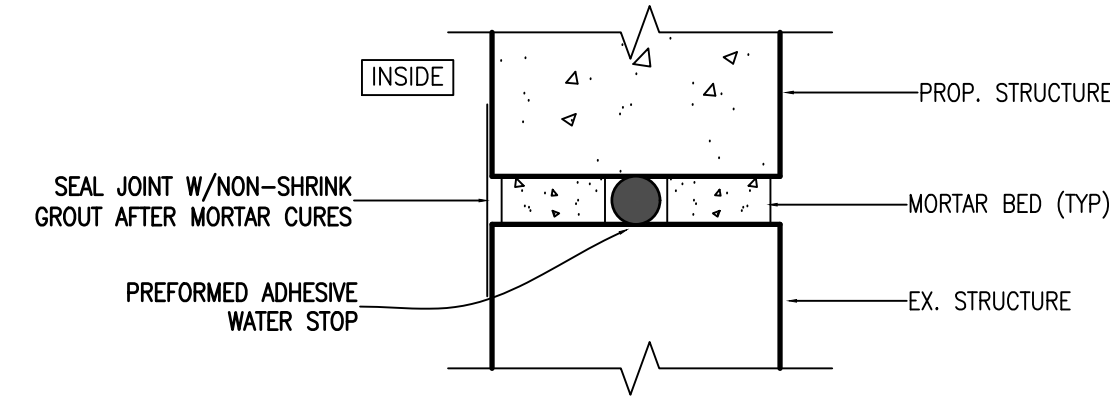
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 Date Surveyed: 11/25/2024  
 Designed By: TNK  
 Drawn By: TNK  
 Checked By: MJH  
 Scale: AS NOTED

Location:  
 SECTION 21 T29N, R9W  
 VILLAGE OF ELK RAPIDS  
 ANTRIM COUNTY  
 MICHIGAN

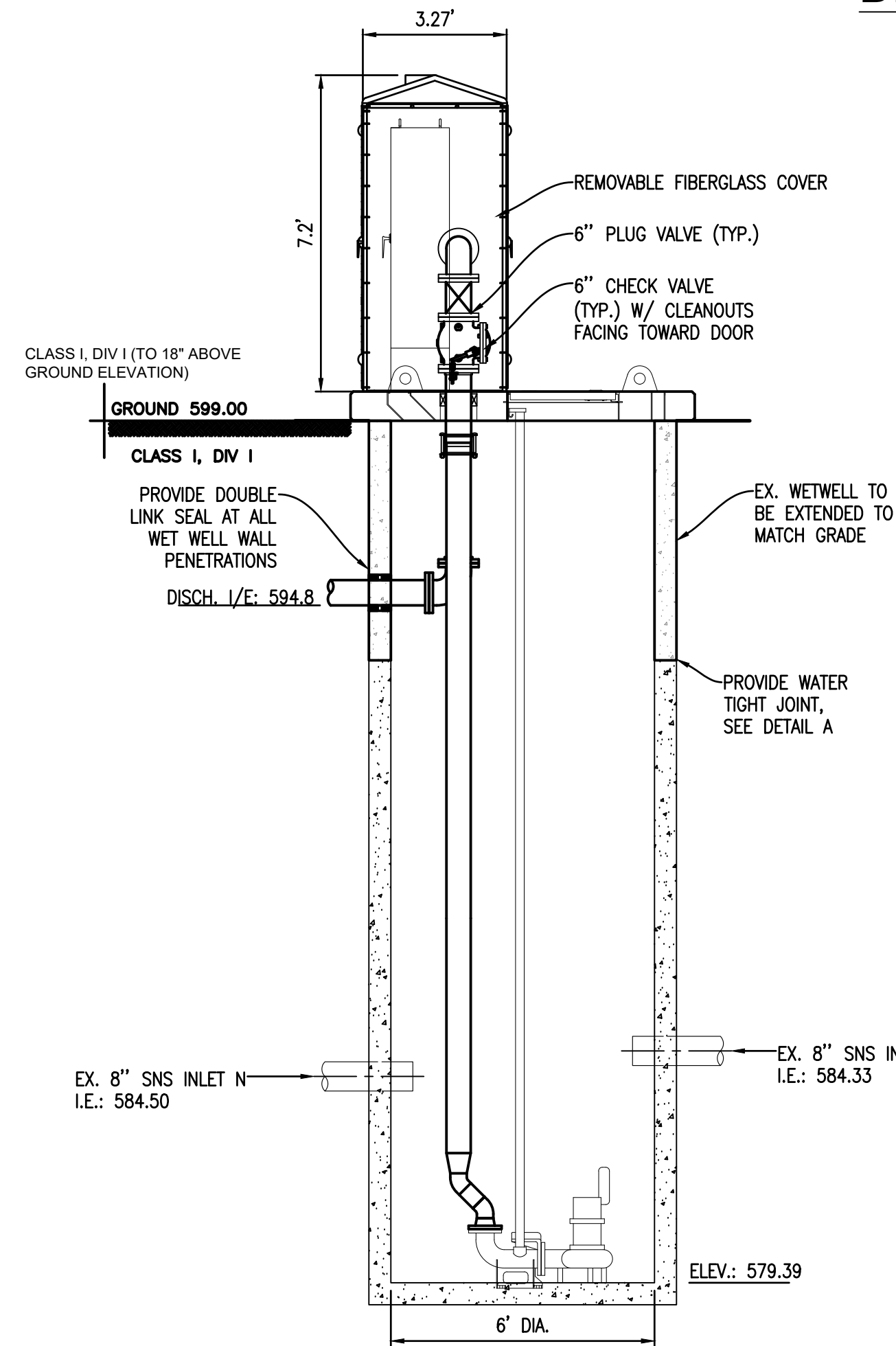
Project Number:  
 240424

Sheet:  
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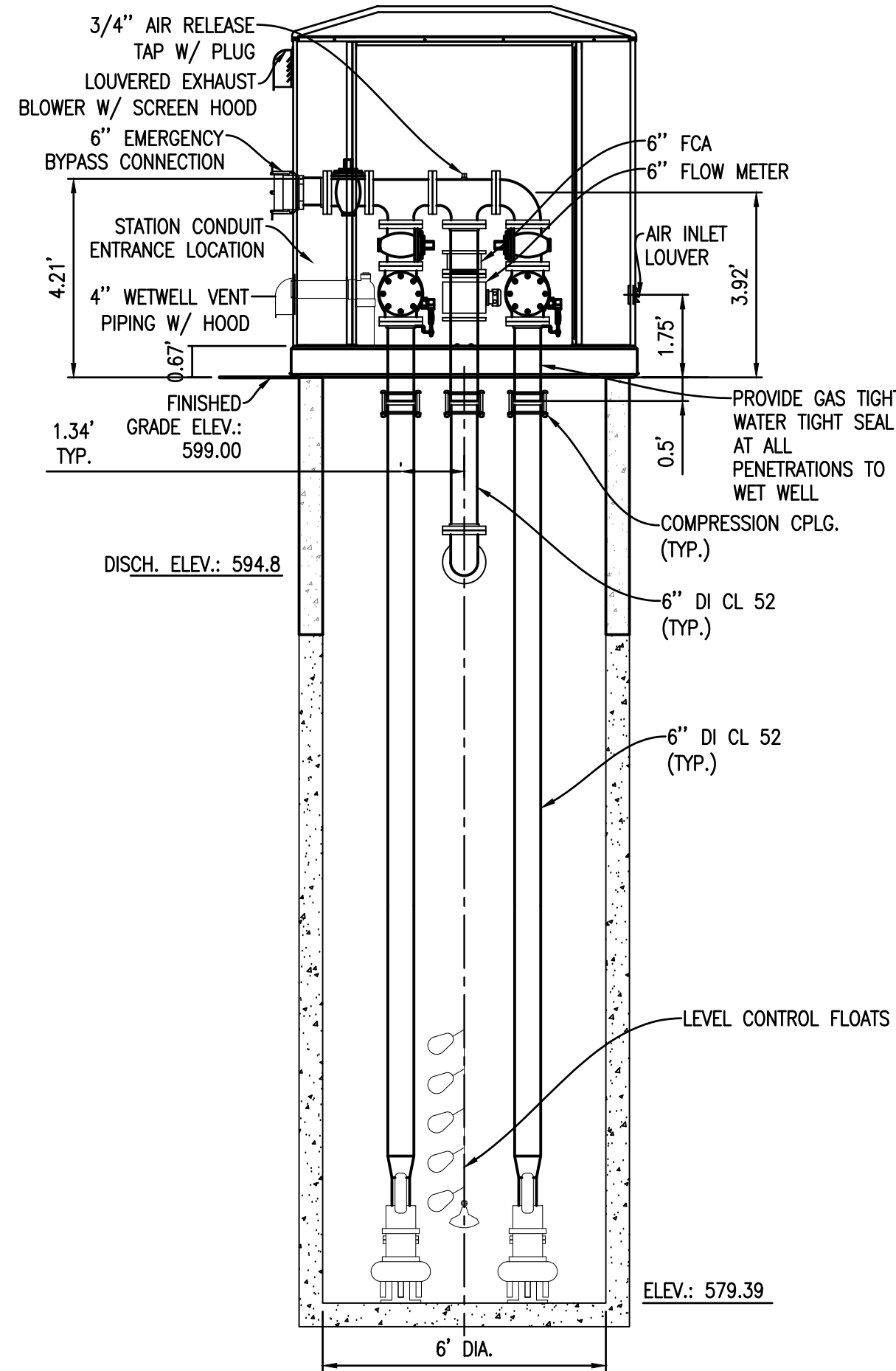
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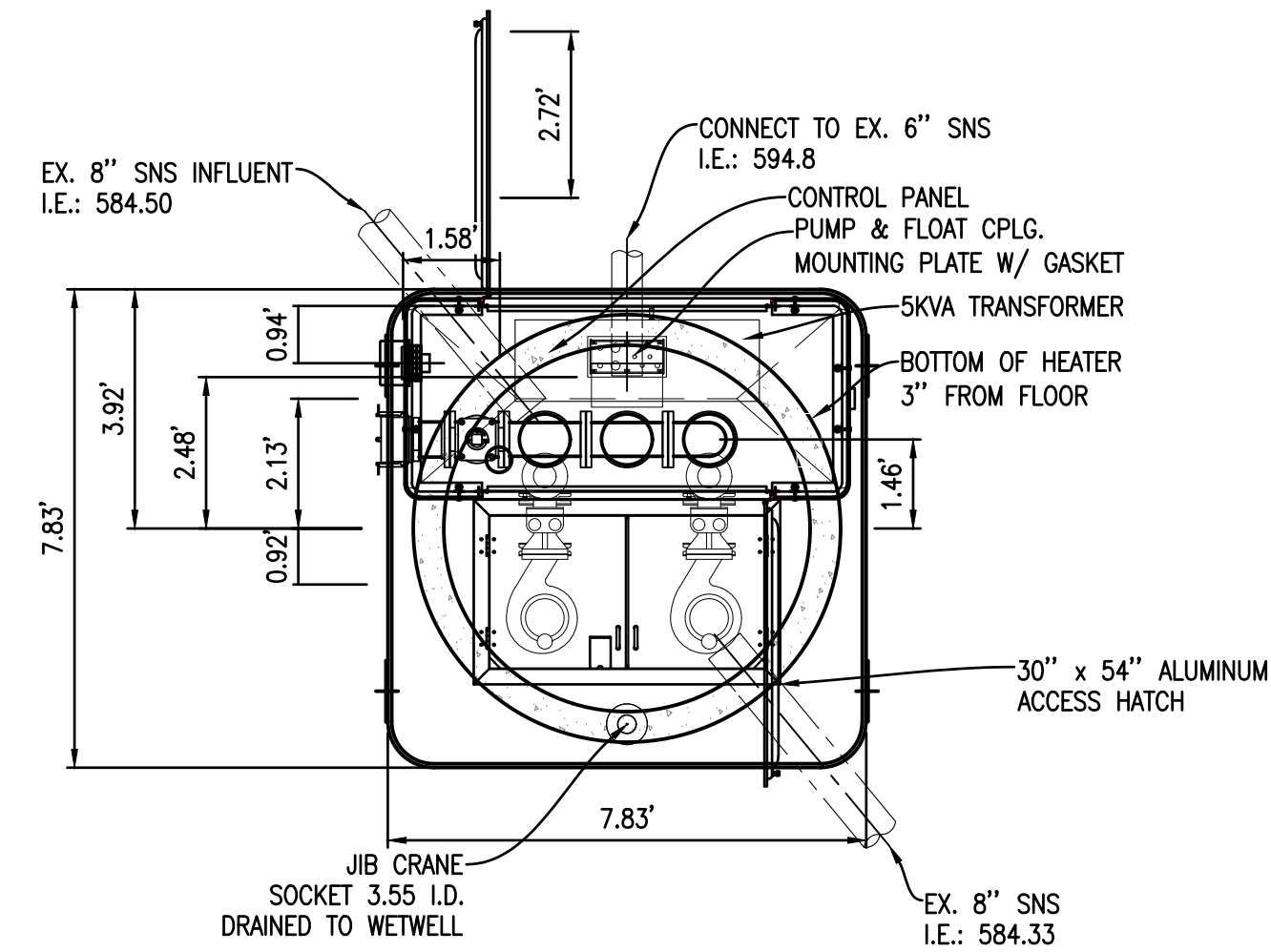
**DETAIL A**  
 NOT TO SCALE



**CROSS SECTION**  
 SCALE: 1" = 3'-0"



**SECTIONAL ELEVATION**  
 SCALE: 1" = 3'-0"

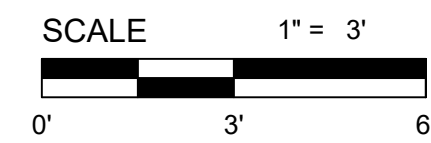


**PLAN VIEW**  
 SCALE: 1" = 3'-0"

PUMP ON/OFF/ALARM LEVEL:	
HWL ALARM:	583.39
LAG ON:	583.39
LEAD ON:	582.89
PUMPS OFF:	580.89
LWL ALARM:	580.39
FIELD VERIFY FLOAT ELEVATIONS WITH THE ENGINEER.	

**PAINT REQUIREMENTS**  
 PIPING EXTERIOR AND STEEL SURFACES  
 APPLY 6 MILS EPOXY ENAMEL.

- GENERAL NOTES:**
- ALL WORK REQUIRED BY THE CONTRACTOR HAS BEEN LABELED. ANY OTHER WORK WOULD BE PART OF THE PUMP STATION PACKAGE.
  - ALL WASTEWATER EXPOSED MATERIALS IN CLASS I, DIV I AREA ARE TO BE STAINLESS STEEL (S.S.).
  - CONTRACTOR TO COORDINATE ALL POWER AND CONTROL CONDUIT/WIRING TO AND FROM PUMPS/FLOATS AND CP. ALL MATERIALS SHALL BE SUPPLIED AND INSTALLED BY EC THAT ARE NOT SHOWN ON THIS PLAN FOR CLARITY PURPOSED.



**PROPOSED PUMP STATION NO. 11**  
 SCALE: 1" = 3'-0"

No.	Date	Revision	By

**PROP. PS 11 PLAN AND SECTIONS**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
**VILLAGE OF ELK RAPIDS**

Date Issued: APRIL 1, 2026  
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 Checked By: MJH  
 Scale: AS NOTED  
 Original sheet size is 22x34

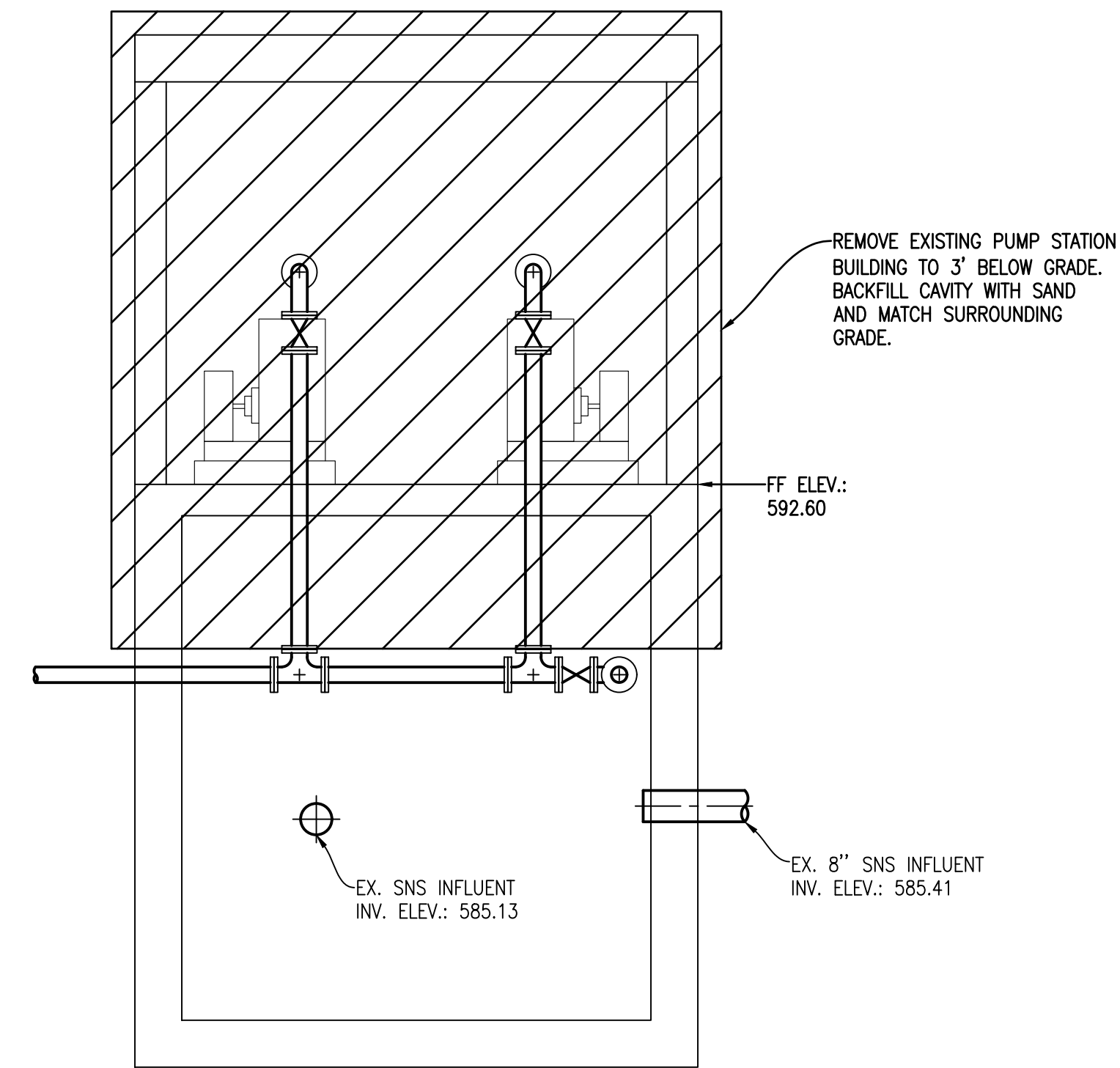
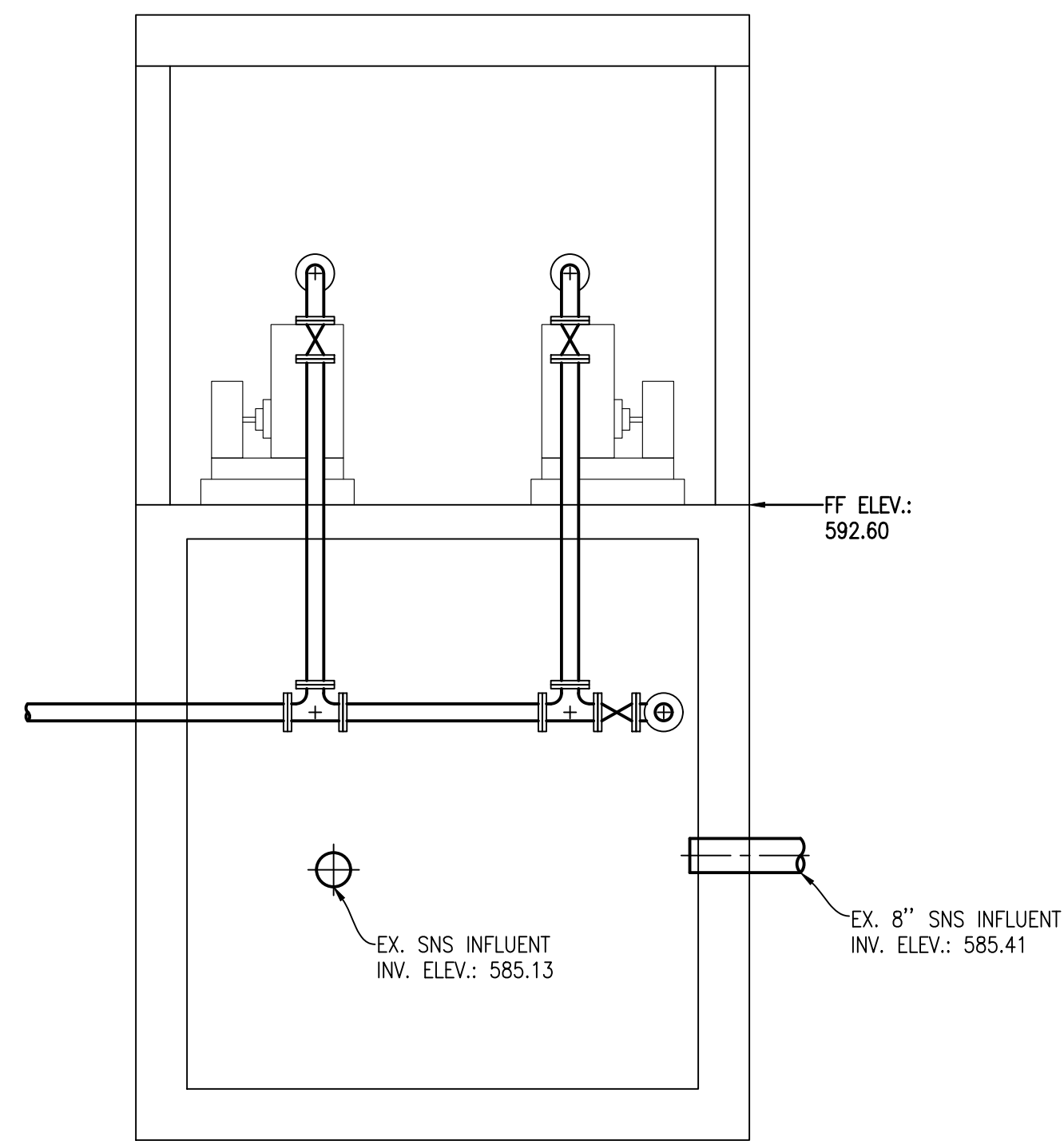
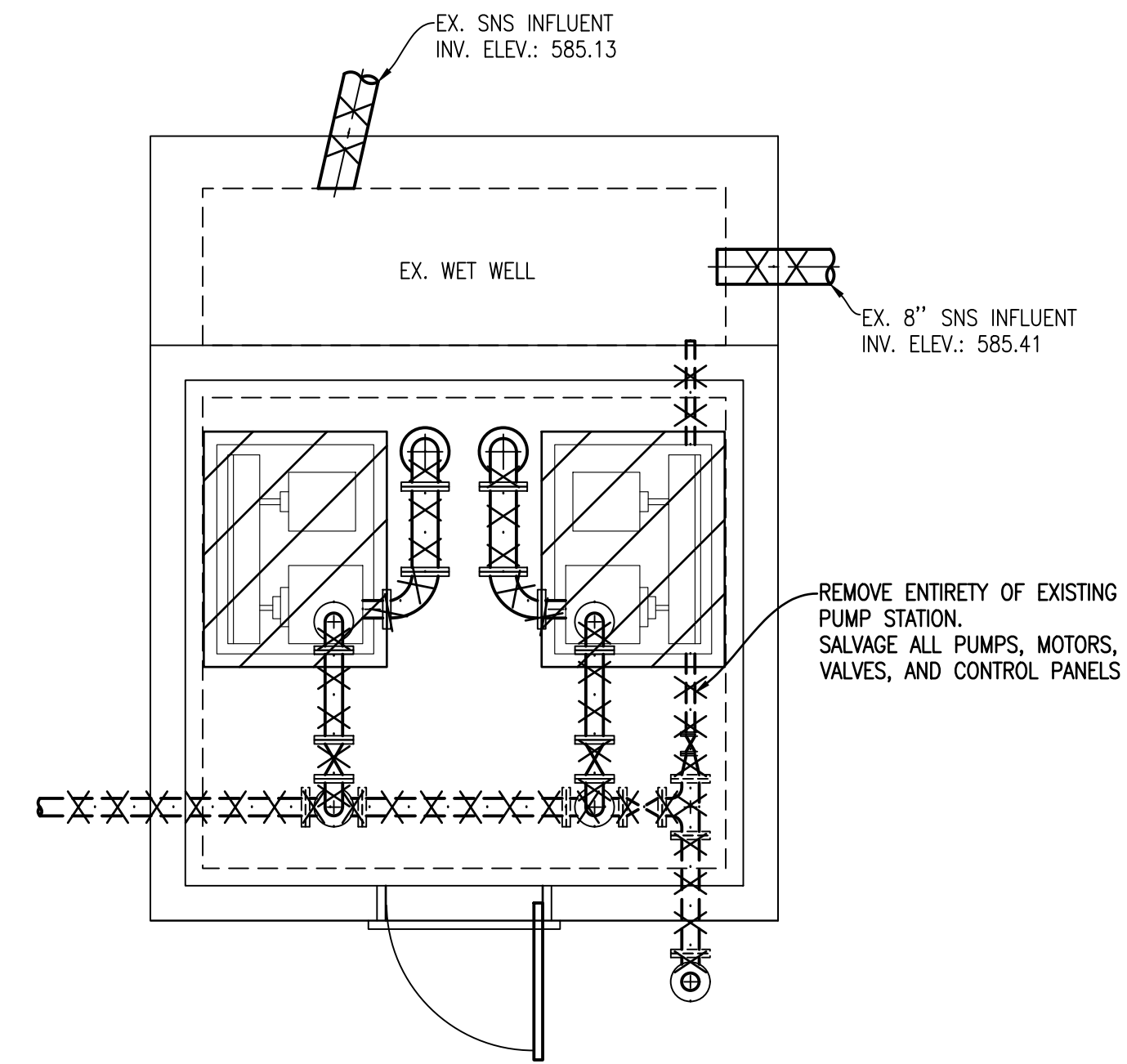
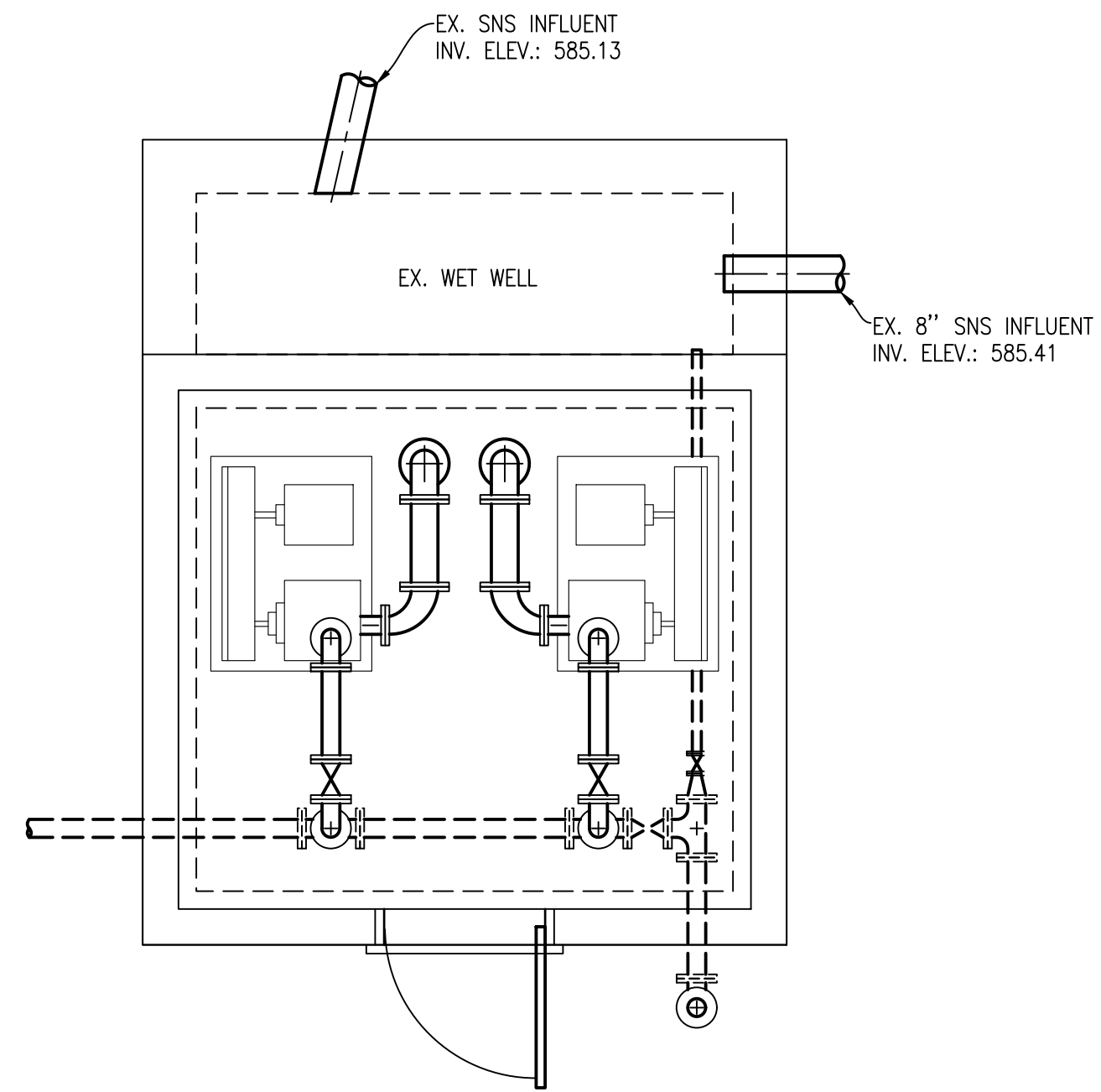
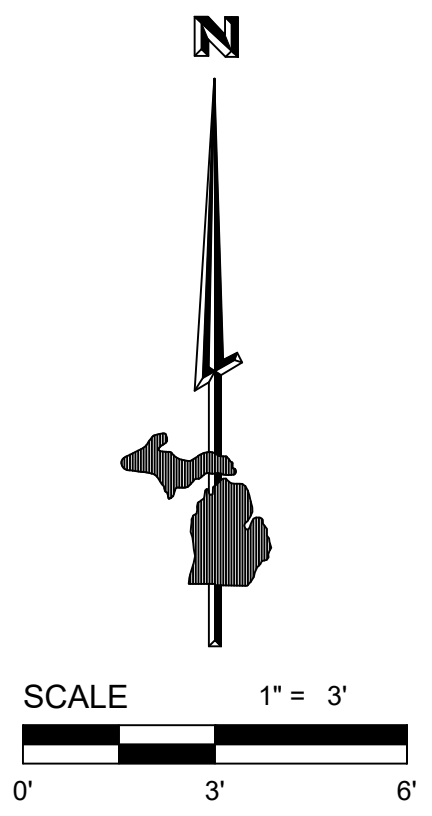
Location:  
 SECTION 21 T29N, R9W  
 VILLAGE OF ELK RAPIDS  
 ANTRIM COUNTY  
 MICHIGAN

Project Number:  
 240424

Sheet:

**NOTES**

- SEE SHEET G2 GENERAL NOTES, FOR WATER UTILITY NOTES, SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND DRAWING LEGEND.
- SEE SHEET C36 FOR STANDARD DETAILS.
- SEE SHEET FOR PUMP STATION NO. 2 DETAILS.
- SEE SHEET FOR PUMP STATION NO. 11 DETAILS.



**EXISTING PUMP STATION NO. 2**  
 SCALE: 1" = 3'-0"

**EXISTING PUMP STATION NO. 2**  
 SCALE: 1" = 3'-0"

No.	Date	Revision	By

**EXISTING PUMP STATION 2 AND DEMOLITION PLAN**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
**VILLAGE OF ELK RAPIDS**

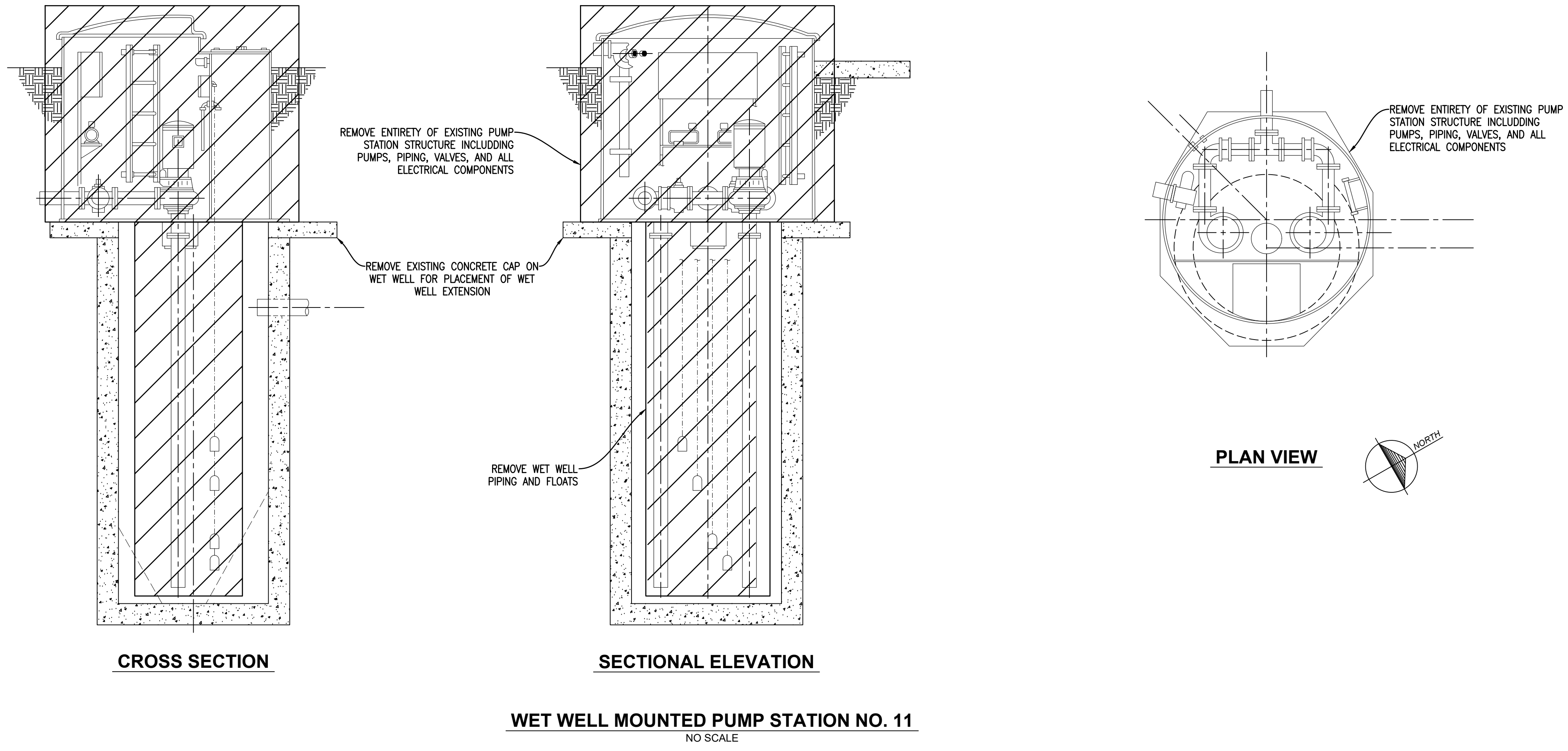
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 Date Surveyed: 11/25/2024  
 Designed By: TNK  
 Drawn By: TNK  
 Checked By: MJH  
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 Original sheet size is 22x34

Location:  
 SECTION 21 T29N, R9W  
 VILLAGE OF ELK RAPIDS  
 ANTRIM COUNTY  
 MICHIGAN

Project Number:  
 240424

Sheet:  
**C5**

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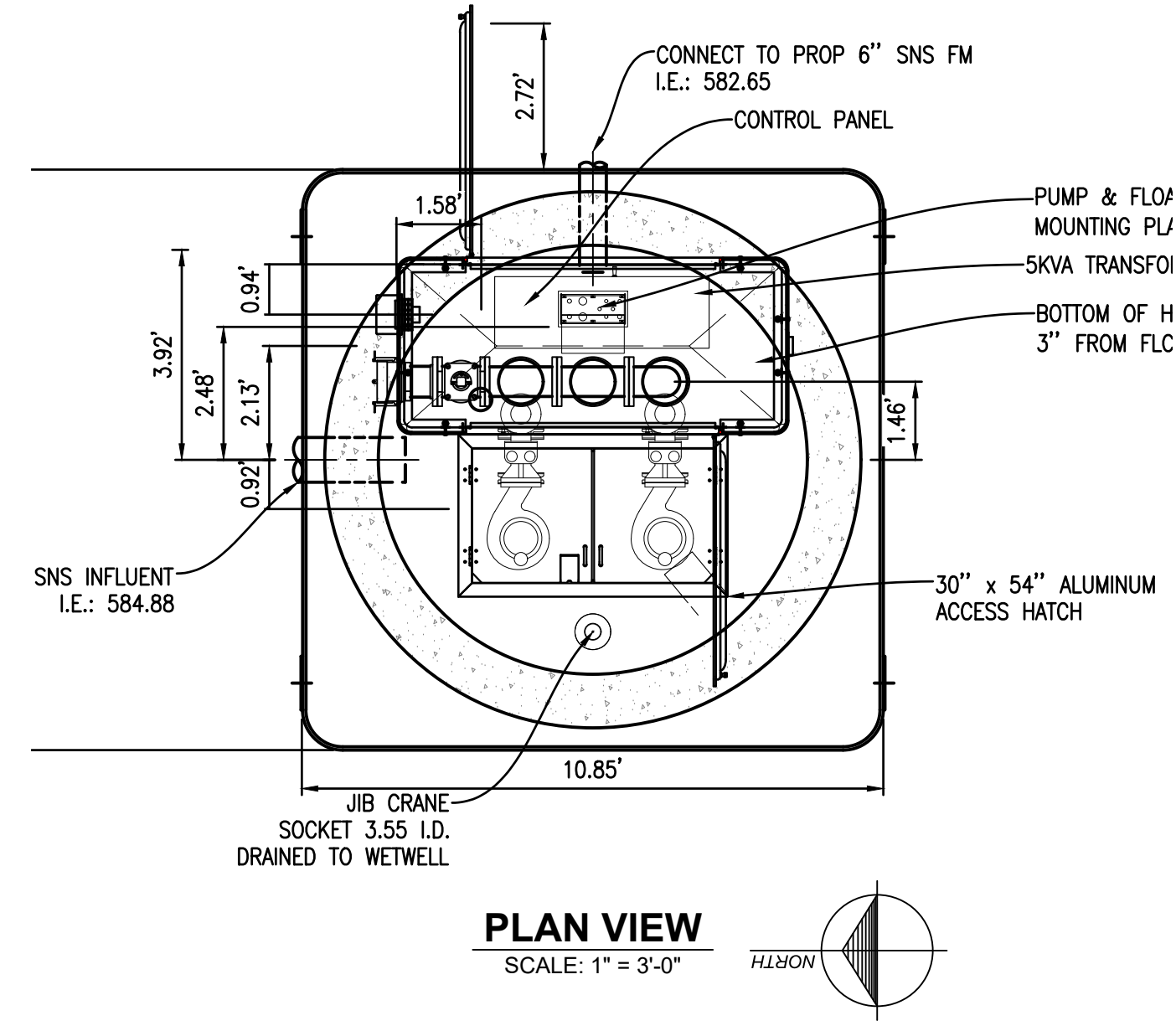
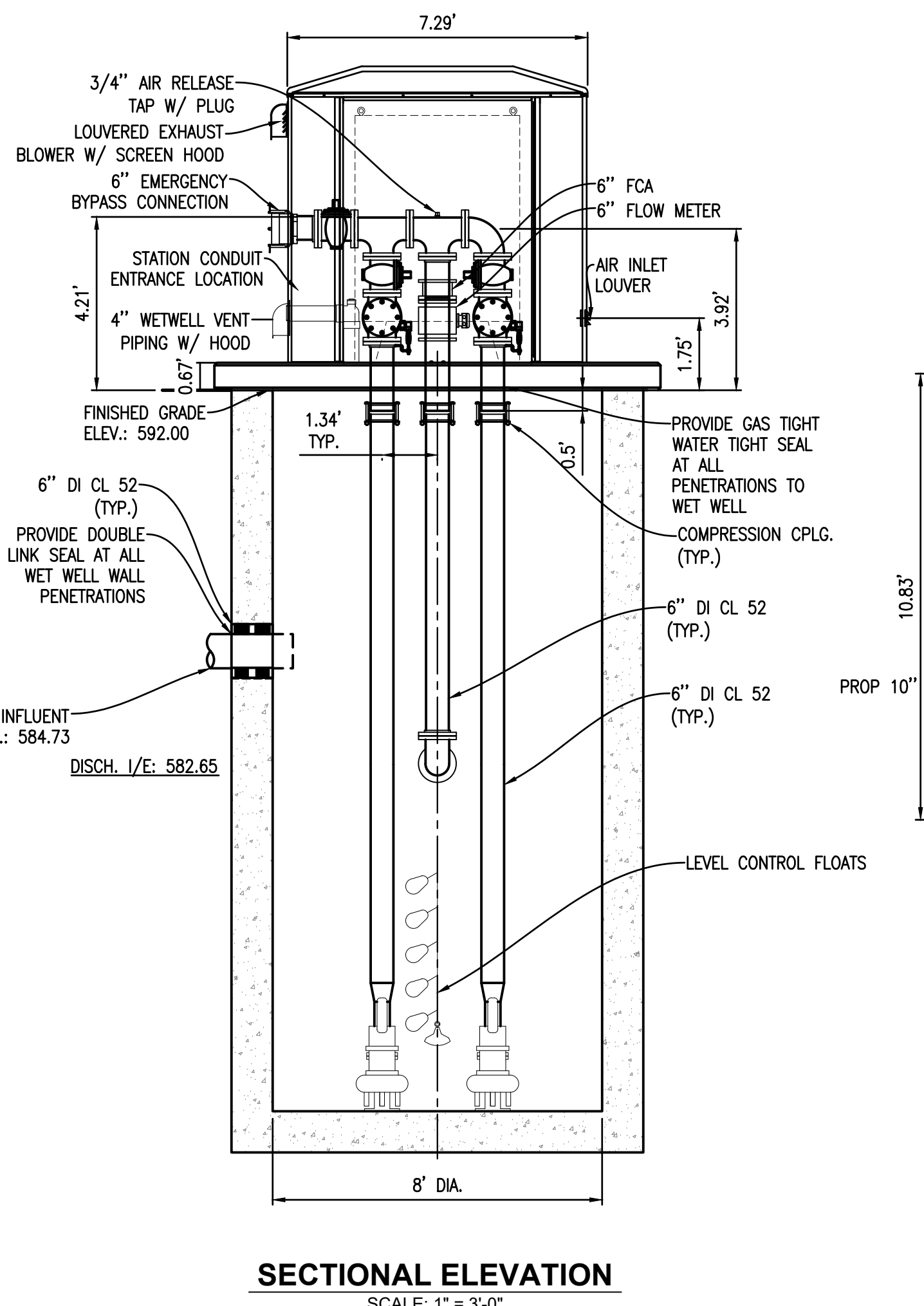
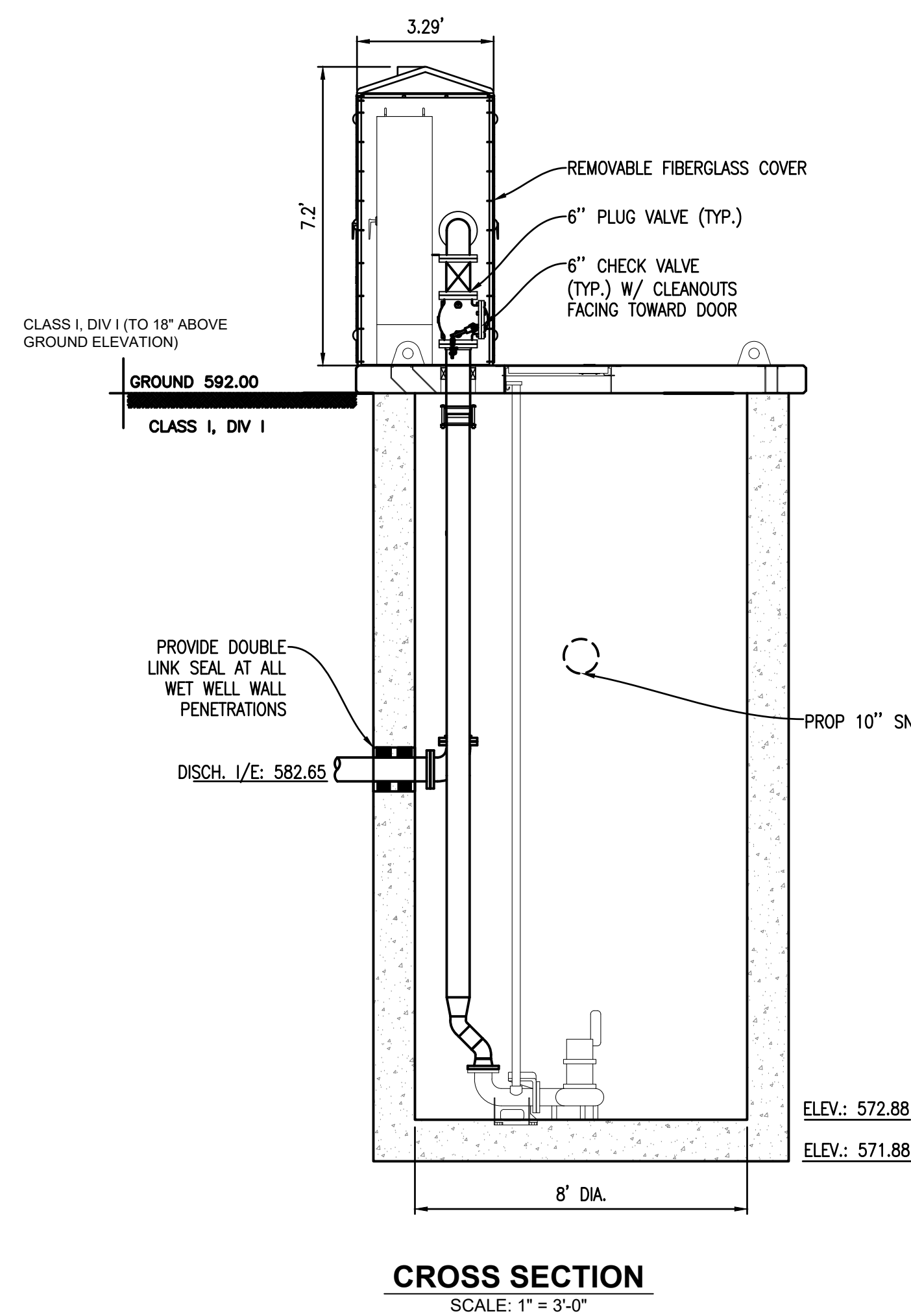
**DEMOLITION NOTES**

1. ENTIRE EX. PUMP STATION TO BE REMOVED AND REPLACED WITH PROP. PUMP STATION 11 ON SHEET C34.
2. REMOVAL ITEMS INCLUDE:
  - 2.1. EX. PUMP STATION STRUCTURE
  - 2.2. ALL PUMPS, PIPING, AND VALVES
  - 2.3. CONTROL PANEL, VACUUM PUMPS, FLOATS, AND ALL OTHER ASSOCIATED EQUIPMENT
3. EXISTING CONCRETE WET WELL TO REMAIN IN PLACE
4. EXISTING INFLUENT AND EFFLUENT PIPING TO THE WET WELL TO REMAIN
5. SEE SHEET G2 GENERAL NOTES, FOR WATER UTILITY NOTES, SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND DRAWING LEGEND.
6. SEE SHEET C36 FOR STANDARD DETAILS.
7. SEE SHEET FOR PUMP STATION NO. 2 DETAILS.
3. SEE SHEET FOR PUMP STATION NO. 11 DETAILS.

No.	Date	Revision	By

**PUMP STATION 11 DEMOLITION**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
**VILLAGE OF ELK RAPIDS**

Date Issued:	APRIL 1, 2026
Date Surveyed:	11/25/2024
Designed By:	TNK
Drawn By:	TNK
Checked By:	MJH
Scale:	AS NOTED
Original sheet size is 22x34	
Location: SECTION 21 T29N, R9W VILLAGE OF ELK RAPIDS ANTRIM COUNTY MICHIGAN	
Project Number:	240424
Sheet:	<b>C6</b>



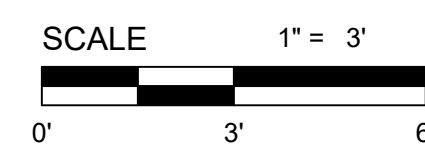
**PUMP ON/OFF/ALARM LEVEL:**

HWL ALARM:	579.88
LAG ON:	579.38
LEAD ON:	578.88
PUMPS OFF:	576.88
LWL ALARM:	576.88

FIELD VERIFY FLOAT ELEVATIONS WITH THE ENGINEER.

**PAINT REQUIREMENTS**  
 PIPING EXTERIOR AND STEEL SURFACES  
 APPLY 6 MILS EPOXY ENAMEL.

- GENERAL NOTES:**
- ALL WORK REQUIRED BY THE CONTRACTOR HAS BEEN LABELED. ANY OTHER WORK WOULD BE PART OF THE PUMP STATION PACKAGE.
  - ALL WASTEWATER EXPOSED MATERIALS IN CLASS I, DIV I AREA ARE TO BE STAINLESS STEEL (S.S.).
  - CONTRACTOR TO COORDINATE ALL POWER AND CONTROL CONDUIT/WIRING TO AND FROM PUMPS/FLOATS AND CP. ALL MATERIALS SHALL BE SUPPLIED AND INSTALLED BY EC THAT ARE NOT SHOWN ON THIS PLAN FOR CLARITY PURPOSED.



**PROPOSED PUMP STATION NO. 2**  
 SCALE: 1" = 3'-0"

**NOTES**

- SEE SHEET G2 GENERAL NOTES, FOR WATER UTILITY NOTES, SOIL EROSION AND SEDIMENTATION CONTROL NOTES AND DRAWING LEGEND.
- SEE SHEET C36 FOR STANDARD DETAILS.
- SEE SHEET FOR PUMP STATION NO. 2 DETAILS.
- SEE SHEET FOR PUMP STATION NO. 11 DETAILS.

No.	Date	Revision	By

**PROP. PS 2 PLAN AND SECTIONS  
 CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.  
 VILLAGE OF ELK RAPIDS**

Date Issued: APRIL 1, 2026  
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 SECTION 21 T29N, R9W  
 VILLAGE OF ELK RAPIDS  
 ANTRIM COUNTY  
 MICHIGAN





Project Number:  
 240424

Sheet:  
**C7**

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## ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	NOTES
	THREE-PHASE MOTOR, AS SPECIFIED	
	THREE-PHASE FUSED OR NON-FUSED DISCONNECT	
	THREE-PHASE ELECTRICAL PANELBOARD	
	ELECTRIC METER	

## GENERAL NOTES

1. WORK SHALL COMPLY WITH THE LATEST EDITION OF N.E.C., LOCAL AND STATE CODES, ORDINANCES, AND REGULATIONS, INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).
2. THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY ALL FEES, AND ARRANGE FOR ALL INSPECTIONS FOR HIS WORK. AT THE COMPLETION OF ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL FURNISH THE OWNER WITH ALL CERTIFICATES OF FINAL INSPECTION AND APPROVALS. UTILITY COSTS ASSOCIATED WITH BRINGING POWER TO THE SITE SHALL BE PAID FOR BY THE OWNER.
3. COORDINATE ALL NEW ELECTRICAL UNDERGROUND WORK WITH EXISTING AND NEW UTILITIES BEFORE INSTALLATION. SEVENTY-TWO HOURS BEFORE ANY EXCAVATING WORK IS DONE, RELATIVE TO ELECTRICAL WORK, CONTACT "MISS DIG" (TOLL FREE) AT (800) 482-7171.
4. ALL ELECTRICAL MATERIALS SHALL BE NEW AND BEAR THE "UL" LABEL OR LISTING.
5. ALL BRANCH CIRCUIT WIRE SHALL BE COPPER, MINIMUM SIZE #12 A.W.G., INSTALLED IN CONDUIT, MINIMUM SIZE 1/2", AND SHALL BE TYPE "THHN", "THWN", OR "THWN-2" UNLESS OTHERWISE NOTED ON PLANS.
6. ALL CONDUIT BELOW GRADE SHALL BE GALVANIZED RIGID CONDUIT. ALL OTHER CONDUIT SHALL BE GRS, EMT, OR SCH. 40 PVC AS NOTED ON THE PLANS. MIN. 1/2" SIZE. GALVANIZED RIGID CONDUIT SHALL BE USED IN ALL CLASS 1, DIV. 1 & 2 LOCATIONS PER N.E.C. ART. 500, 501, & 502.
7. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE BEFORE HE SUBMITS HIS BID TO FAMILIARIZE HIMSELF WITH ACTUAL JOB CONDITIONS AND TO CHECK FOR ANY INTERFERENCE BETWEEN HIS WORK AND THAT OF OTHER TRADES AND/OR ANY APPARENT VIOLATIONS OF LOCAL OR STATE CODES, LAWS, ORDINANCES, AND REGULATIONS.
8. ALL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE N.E.C. AND ALL LOCAL CODES.
9. ALL DISCONNECT SWITCHES SHALL BE 250V OR 600V HEAVY DUTY TYPE NEMA 1 FOR INDOOR USE AND NEMA 3R FOR OUTDOOR USE. G.E., CUTLER-HAMMER, OR SQUARE D.
10. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK INSTALLED UNDER HIS CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER THE ACCEPTANCE OF THE BUILDING BY THE OWNER, AND SHOULD DEFECTS OCCUR WITHIN THIS PERIOD, REPAIR AND /OR REPLACE DEFECTIVE ITEMS AT NO EXPENSE TO THE OWNER.
11. NOT USED
12. ALL WORK WITHIN CLASS 1, DIV. 1 & 2 SHALL COMPLY WITH ARTICLES 500, 501, 502, 511, 511.1, 514, & 515 OF THE N.E.C.
13. ELECTRICAL CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH LOCAL UTILITY COMPANY. FAULT CURRENT WAS NOT AVAILABLE AT TIME OF DESIGN. FOR PURPOSES OF BIDDING, ASSUME ALL SWITCH GEAR TO BE 100,000 A.I.C. RATED. ALL SWITCH GEAR SHALL BE U.L.S.E. LABELED FOR INTENDED USE.
14. THE ELECTRICAL CONTRACTOR SHALL VERIFY IN THE FIELD THAT BRANCH CIRCUITS AND/OR FEEDERS DO NOT EXCEED THE FOLLOWING LENGTHS FOR THE GIVEN VOLTAGES. IF THEY DO, THE RESPECTIVE CIRCUITS AND/OR FEEDER CONDUCTORS AND CONDUIT SHALL BE INCREASED AS FOLLOWS:
  - A. 120V BRANCH CIRCUITS AND/OR FEEDERS OVER 100' IN LENGTH SHALL BE INCREASED ONE WIRE GAUGE SIZE. CONDUIT SHALL BE INCREASED IF REQ'D.
  - B. 208/240V BRANCH CIRCUITS AND OR FEEDERS OVER 200' IN LENGTH SHALL BE INCREASED ONE WIRE GAUGE SIZE. CONDUIT SHALL BE INCREASED IF REQ'D.
15. THE ELECTRICAL CONTRACTOR SHALL SIZE ALL OUTLETS AND JUNCTION BOXES PER THE 2023 N.E.C.
16. NOT USED
17. NO SPLICES SHALL BE PERFORMED ON LOW VOLTAGE WIRING OR MANUFACTURER SUPPLIED CABLING.
18. CONTRACTOR SHALL LEAVE A MINIMUM OF 10 FEET OF WIRING BEYOND TERMINATION POINT WHERE TERMINATION IS PROVIDED BY OTHERS.
19. E.C. SHALL ENSURE THAT CONDUCTOR ENCLOSED-LOOP AREA IS TO BE MINIMIZED BY ADJACENT ROUTING OF RELATED CONDUCTORS.
20. E.C. SHALL INSTALL CONTROL AND POWER CIRCUITS IN SEPARATE CONDUITS/RACEWAYS.
21. 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.
22. E.C. SHALL VERIFY ALL INSTRUMENTATION LOCATIONS WITH THE ENGINEER PRIOR TO INSTALLATION.
23. E.C. SHALL VERIFY ALL EQUIPMENT LOCATIONS WITH THE ENGINEER PRIOR TO INSTALLATION.
24. E.C. SHALL ADD ANY NECESSARY FLUSH-GRADE BOXES SO AS NOT TO EXCEED MORE THAN 360° OF BENDS FROM BOX TO BOX.
25. E.C. SHALL ENSURE THAT CONDUCTOR ENCLOSED-LOOP AREA IS TO BE MINIMIZED BY ADJACENT ROUTING OF RELATED CONDUCTORS.
26. E.C. SHALL INSTALL CONTROL AND POWER CIRCUITS IN SEPARATE CONDUITS/RACEWAYS.

## 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	EWL	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	QUADRIplex (DOUBLE DUPLEX) RECEPTACLE		

## 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.

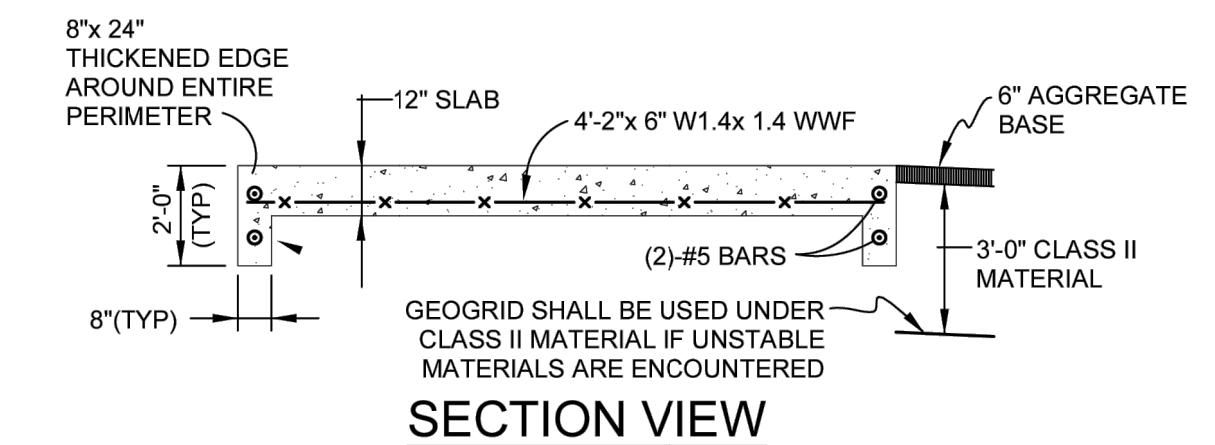
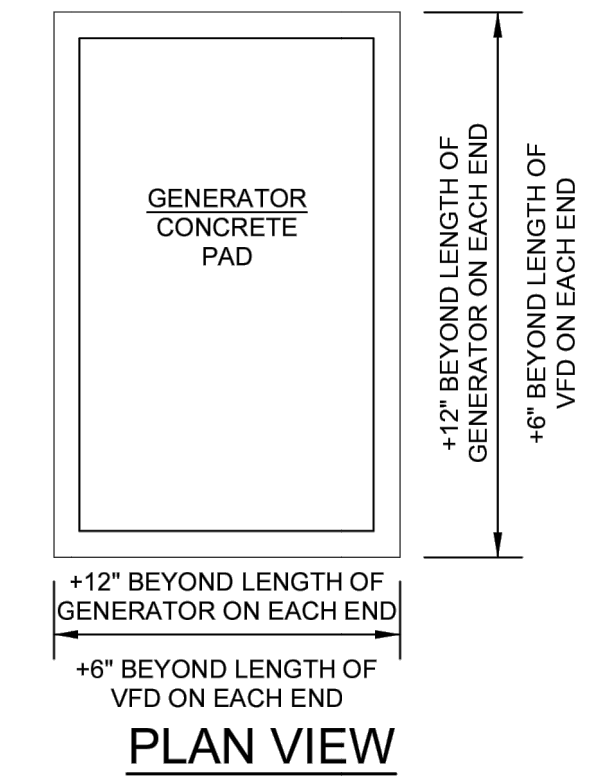
BRANCH CIRCUIT AMPS	LENGTH OF RUN - FROM PANEL TO FIRST CONNECTION - FEET									
	50'	60'	70'	80'	90'	100'	110'	120'	130'	
15	#12	#12	#12	#10	#10	#10	#10	#10	#8	
20	#12	#10	#10	#10	#10	#10	#8	#8	#8	
30	#10	#10	#8	#8	#8	#6	#6	#6	#6	

## GENERAL ELECTRICAL NOTES

1. 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.
2. E.C. SHALL VERIFY ALL INSTRUMENTATION LOCATIONS WITH THE ENGINEER PRIOR TO INSTALLATION.
3. E.C. SHALL VERIFY ALL EQUIPMENT LOCATIONS WITH THE ENGINEER PRIOR TO INSTALLATION.
4. E.C. SHALL ADD ANY NECESSARY FLUSH-GRADE BOXES SO AS NOT TO EXCEED MORE THAN 360° OF BENDS FROM BOX TO BOX.
5. E.C. SHALL ENSURE THAT CONDUCTOR ENCLOSED-LOOP AREA IS TO BE MINIMIZED BY ADJACENT ROUTING OF RELATED CONDUCTORS.
6. E.C. SHALL INSTALL CONTROL AND POWER CIRCUITS IN SEPARATE CONDUITS/RACEWAYS.

## GENERATOR CONCRETE PAD DETAILS

NOT TO SCALE



No.	Date	Revision	By

**ELECTRICAL SCHEDULES & DETAILS - PS 2 & 11**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
VILLAGE OF ELK RAPIDS

Date Issued:	April 1, 2026
Date Surveyed:	
Designed By:	JAV
Drawn By:	LMD
Checked By:	JAV
Scale:	AS NOTED
Original sheet size is 22x34	
Location: SECTION 21 T29N, R9W VILLAGE OF ELK RAPIDS ANTRIM COUNTY MICHIGAN	
Project Number: 240424	
Sheet: <b>SE0.0</b>	





Know what's below.  
Call before you dig.



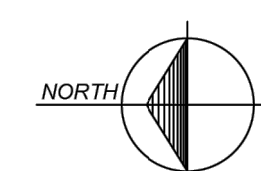
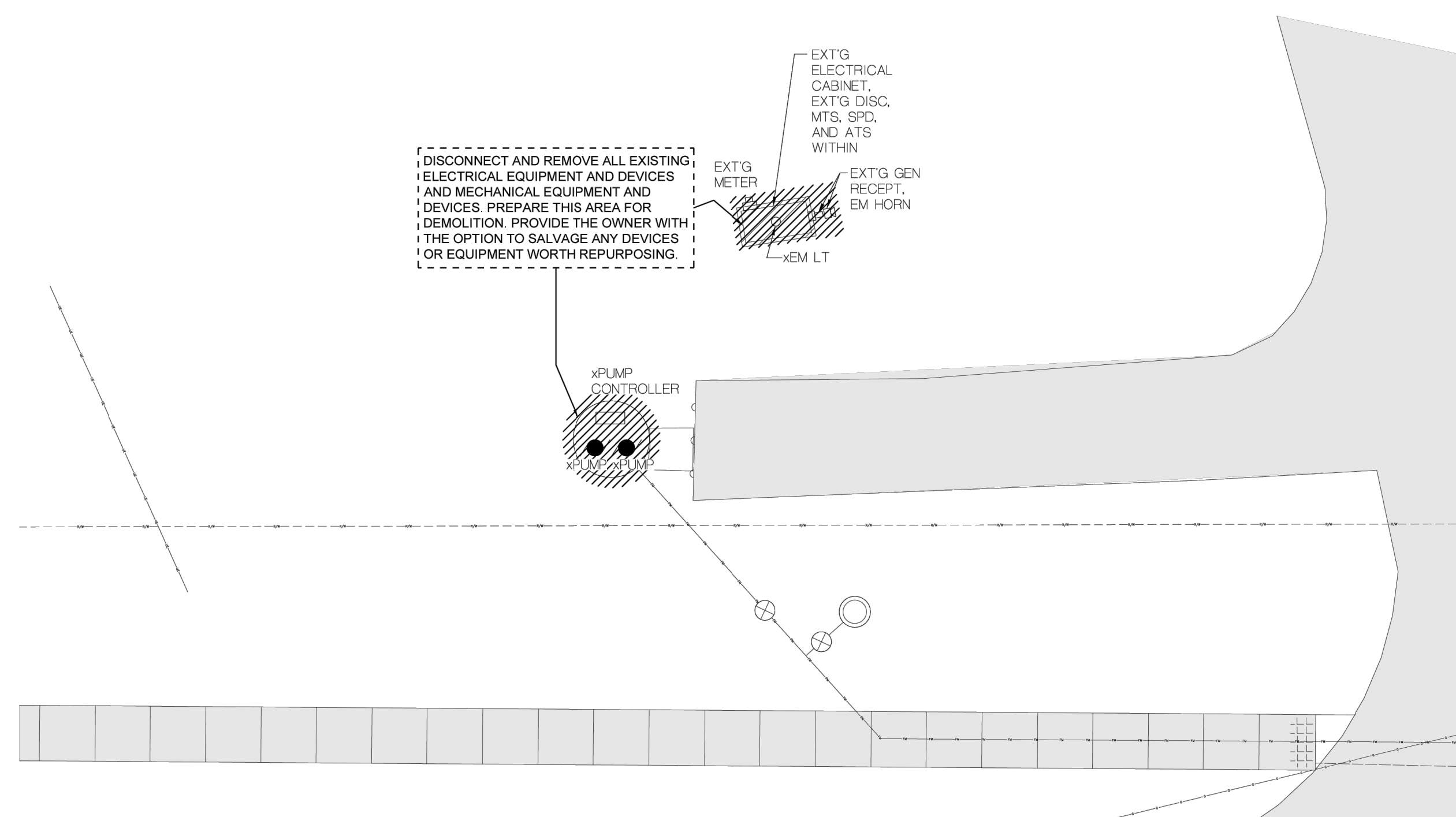
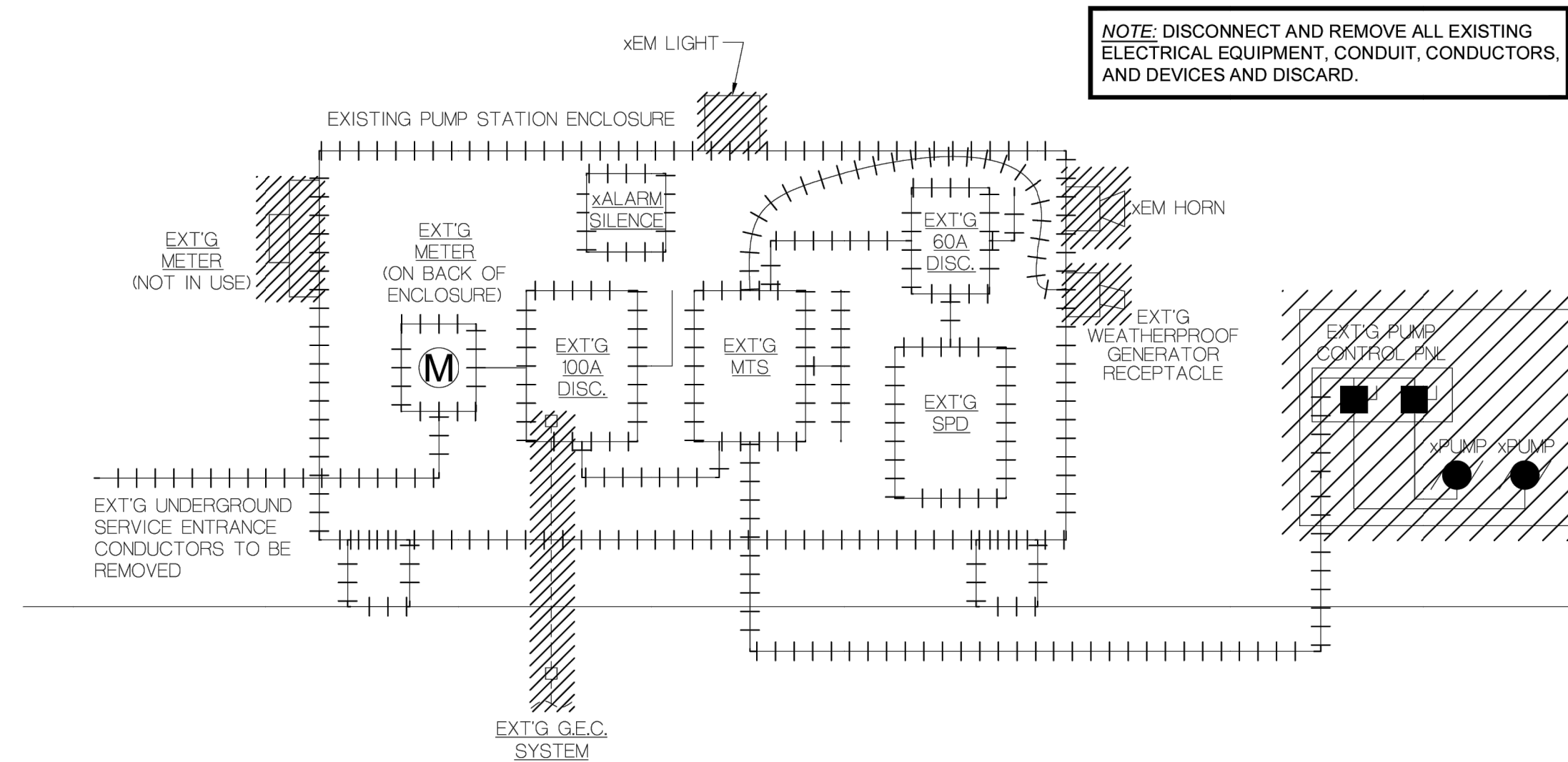
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### EXISTING ELECTRICAL RISER DIAGRAM

NO SCALE



### ELECTRICAL DEMOLITION SITE PLAN - PUMP STATION #11

SCALE: 1" = 10'-0"

No.	Date	Revision	By

**ELECTRICAL DEMO SITE PLAN - PUMP STATION 11**  
**CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.**  
VILLAGE OF ELK RAPIDS

Date Issued: April 1, 2026  
Date Surveyed:  
Designed By: JAV  
Drawn By: LMD  
Checked By: JAV  
Scale: AS NOTED

Original sheet size is 22x34  
Location:  
SECTION 21 T29N, R9W  
VILLAGE OF ELK RAPIDS  
ANTRIM COUNTY  
MICHIGAN

Project Number:  
240424

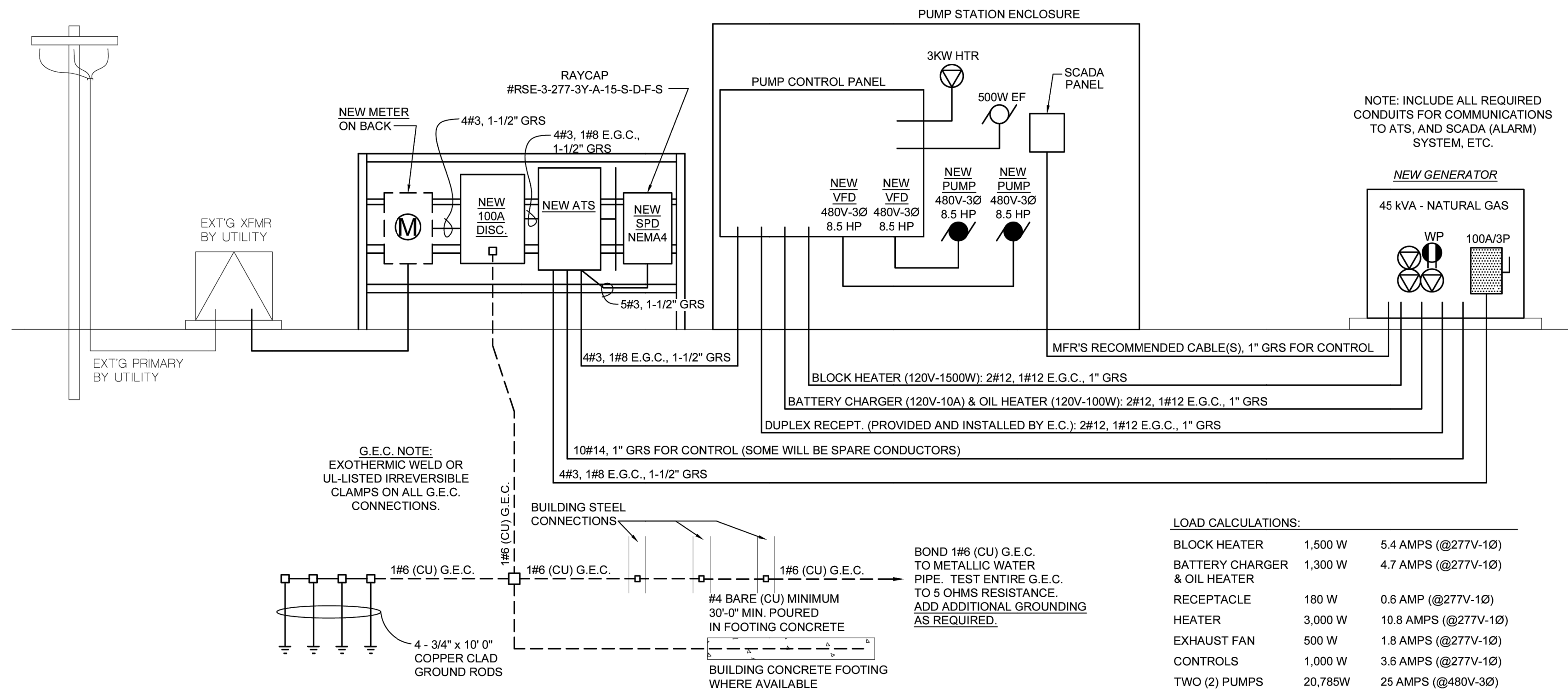
Sheet:  
**SED1.1**

T:\BUSINESS\Projects\Gosling Czubak\010-EB-Elk Rapids Sanitary Pump Stations #2 & #11\nealis\SED1.dwg Plot Date: 3/22/2026 2:28 PM Plotted By: Jason VanBrocklin 3/27/2026 8:42 AM



PROPOSED ELECTRICAL RISER DIAGRAM

NO SCALE



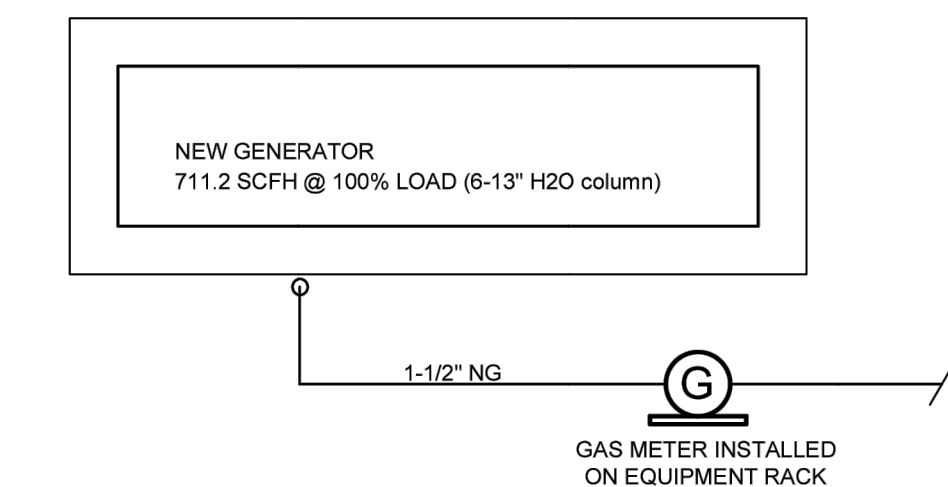
LOAD CALCULATIONS:

BLOCK HEATER	1,500 W	5.4 AMPS (@277V-1Ø)
BATTERY CHARGER & OIL HEATER	1,300 W	4.7 AMPS (@277V-1Ø)
RECEPTACLE	180 W	0.6 AMP (@277V-1Ø)
HEATER	3,000 W	10.8 AMPS (@277V-1Ø)
EXHAUST FAN	500 W	1.8 AMPS (@277V-1Ø)
CONTROLS	1,000 W	3.6 AMPS (@277V-1Ø)
TWO (2) PUMPS	20,785W	25 AMPS (@480V-3Ø)
<b>TOTAL LOAD:</b>	<b>28,265 W</b>	<b>34 AMPS (@480V-3Ø)</b>

THE FAULT CURRENT AVAILABLE AT THE LOAD SIDE OF THE TRANSFORMER WAS NOT AVAILABLE AT THE TIME OF DESIGN. THE CONTRACTOR IS TO CONFIRM THIS VALUE WITH THE UTILITY AND ALL NEW EQUIPMENT SHALL BE APPROPRIATELY SIZED BASED ON THIS INFO.

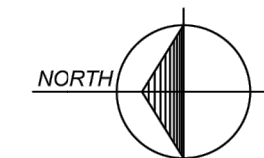
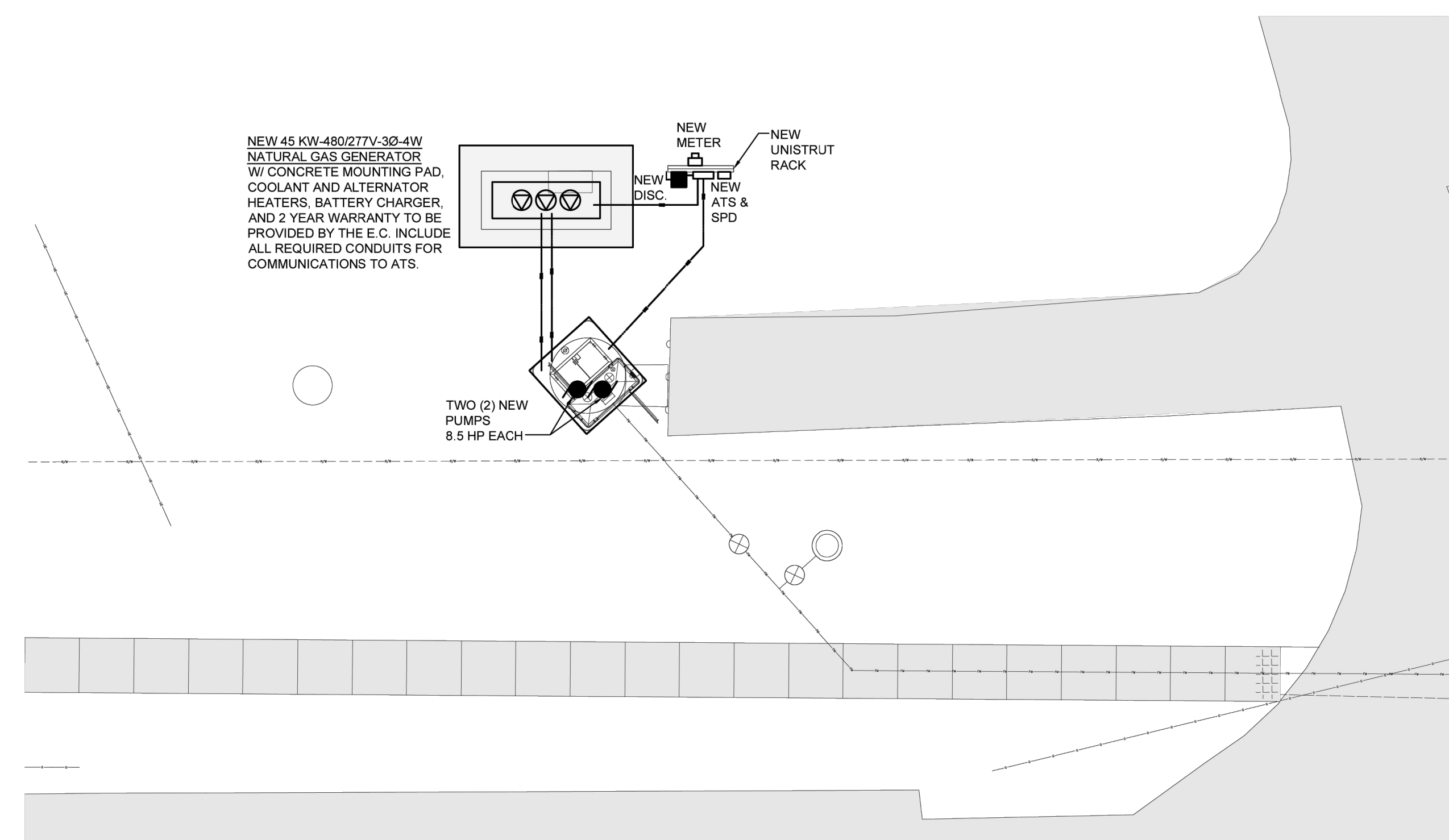
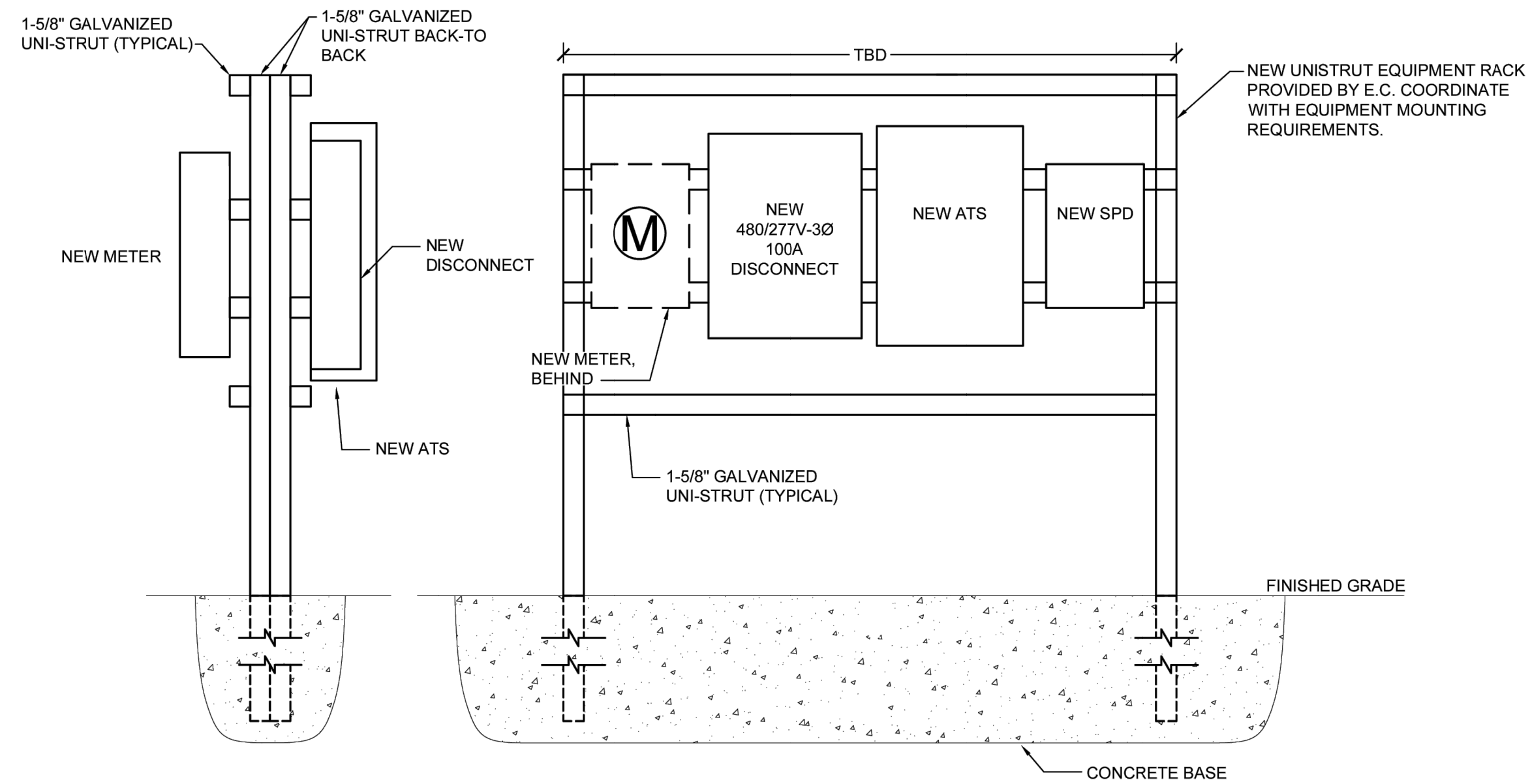
GAS DETAIL

SCALE: NONE



ELECTRICAL EQUIPMENT RACK DETAIL

SCALE: NONE



ELECTRICAL SITE PLAN - PUMP STATION #11

SCALE: 1" = 10'-0"



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No.	Date	Revision	By

ELECTRICAL SITE PLAN - PUMP STATION 11  
 CONTRACT 2 PUMP STATION NOS. 2 & 11 IMPS.  
 VILLAGE OF ELK RAPIDS

Date Issued: April 1, 2026  
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