

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
064	82-1-1	ST. CLAIR	7	1
ILLINOIS			CONTRACT NO. 76T47	

D-98-016-24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PROPOSED
HIGHWAY PLANS**

FAI 064 (I-64)
SEC 82-1-1
25TH STREET FLOW METER
ST. CLAIR COUNTY



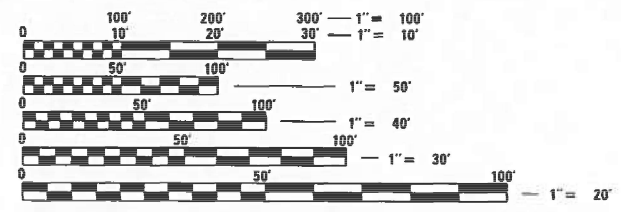
- INDEX OF SHEETS:**
- 1 COVER SHEET
 - 2 HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS
 - 3 SUMMARY OF QUANTITIES
 - 4 OVERALL SITE PLAN
 - 5 STRUCTURAL - PROCESS SITE PLAN
 - 6 STRUCTURAL - PROCESS VAULT PLAN
 - 7 ELECTRICAL - INSTRUMENTATION & CONTROL



DATE: 03/01/2024 DATE: 03/01/2024
 EXPIRATION: 11/30/25 EXPIRATION: 11/30/2025
 SHEET NUMBERS: 1 TO 6 SHEET NUMBERS: 7

C-98-052-24

PROJECT LOCATION
LATITUDE: 38°37'23.54"N
LONGITUDE: 90°7'38.53"W



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

ST. CLAIR COUNTY

LOCATION MAP (NTS)

GROSS LENGTH = NA
NET LENGTH = NA

PROJECT ENGINEER: RICHARD BARBEE
SQUAD LEADER: PHILIP SAWYER

CONTRACT NO. 76T47

DONOHUE
230 WEST MONROE STREET, SUITE 2925
CHICAGO, IL 60606
312-236-9147

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 19, 2024
Keith Brown REGIONAL ENGINEER

May 10, 2024 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS**

STATE HIGHWAY STANDARDS:

000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 001006 DECIMAL OF AN INCH AND OF A FOOT
 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 701456-05 PARTIAL EXIT RAMP CLOSURE, FREEWAY/EXPRESSWAY
 701901-09 TRAFFIC CONTROL DEVICES

GENERAL NOTES:

1. NOTE THAT DURING CONSTRUCTION, THE CONTRACTOR SHALL KEEP THE EXISTING GROUNDWATER WELLS OPERATIONAL. SHORT-TERM SHUTDOWN WILL BE PERMITTED WITH SPECIFIC WRITTEN PERMISSION (SEE SPECIAL PROVISIONS AND DRAWINGS).
2. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL TEMPORARY FACILITIES WITH THE FINAL LOCATION OF THE NEW WORK.
3. ANY NOTIFICATION TO ANY AGENCY MUST BE MADE THROUGH THE CONSTRUCTION MANAGER. NOTIFICATION SHALL BE MADE TO THE AGENCIES AND UTILITIES AT LEAST 10 DAYS PRIOR TO ANY CONSTRUCTION IN THE AREA AND SHALL COMPLY WITH ALL RESTRICTIONS FOR EQUIPMENT MOVEMENTS AND CLEARANCES IN REGARDS TO THEIR FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF ALL EMERGENCY SERVICES.
4. ILLINOIS STATE LAW REQUIRES A 48 HOUR NOTICE BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY.

UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:

AMEREN ILLINOIS ELECTRIC
AT&T
CHARTER/SPECTRUM COMM
CITY OF EAST ST. LOUIS
CLEARWAVE FIBER LLC
IL AMERICAN WATER - EAST ST. LOUIS
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE.
6. IDOT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUBCONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A S CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 681-346-3360 AND/OR THE HCCTP COORDINATOR AT 619-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
7. A FULL SURVEY WAS NOT PERFORMED AND THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS.

COMMITMENTS:

1. NONE THIS CONTRACT

MODEL, SHEET NAMES
FILE NAMES, SHEETS

	USER NAME = SBREMER	DESIGNED - KL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	25TH STREET FLOW METER				F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = AS NOTED	CHECKED - JG	REVISED -		HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS				064	82-1-I	ST. CLAIR	7	2
	PLOT DATE = 03-01-24	DATE - 03-01-2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 76T47				
												ILLINOIS	FED. AID PROJECT

100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				ST. CLAIR ROADWAY 0044	URBAN
20200100	EARTH EXCAVATION	CU YD	50	50	
20800150	TRENCH BACKFILL	CU YD	10	10	
28000400	PERIMETER EROSION BARRIER	FOOT	750	750	
67100100	MOBILIZATION	L SUM	1	1	
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1	
X5610018	FLOW METER	EACH	2	2	
X6026629	FORCEMAIN CLEANOUT VAULT	EACH	1	1	

• SPECIALTY ITEM

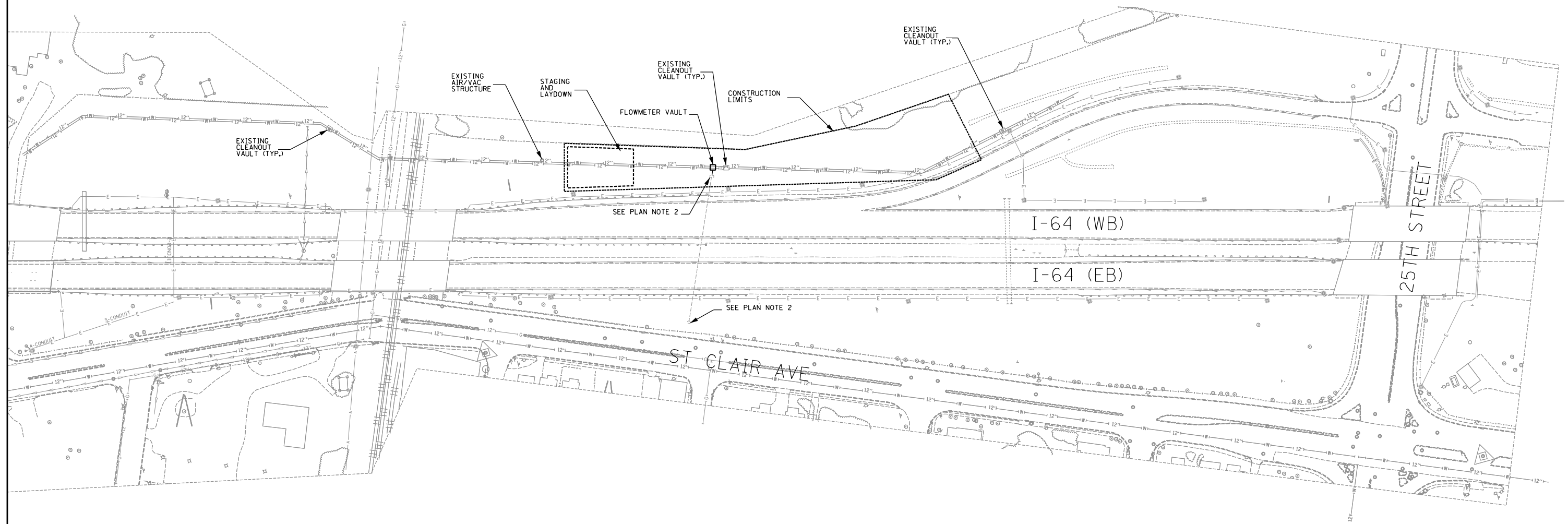
REV. - MS

MODEL: SMODELNAME\$
FILENAME: REFLE\$

	USER NAME = SBREMER	DESIGNED - KL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	25TH STREET FLOW METER				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = AS NOTED	DRAWN - SB	REVISED -		SUMMARY OF QUANTITIES				084	82-1-I	ST. CLAIR	7	3
	PLOT DATE = 03-01-24	CHECKED - JG	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 76T47		
	DATE - 03-01-2024	REVISED -							ILLINOIS FED. AID PROJECT				

PLAN NOTES:

1. DRAWINGS BASED ON ELECTRONIC FILES PROVIDED BY IDOT. LOCATIONS OF EXISTING INFRASTRUCTURE ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM LOCATION OF EXISTING INFRASTRUCTURE AND UTILITIES.
2. UTILITY SERVICE TO FLOWMETER VAULT TO BE COORDINATED AND INSTALLED BY AMEREN AND IDOT. AMEREN TO PROVIDE SERVICE AND SET METER ON NORTH SIDE OF ST CLAIR AVE. IDOT TO EXTEND SERVICE WITH CABLE AND CONDUIT TO DISCONNECT SWITCH ON ELECTRICAL EQUIPMENT RACK. IDOT TO BORE UNDER I-64. IDOT TO SET RACK ADJACENT TO FLOWMETER VAULT LOCATION WITH DISCONNECT SWITCH AND ENCLOSURE TO HOUSE FLOWMETER TRANSMITTERS AND MISSION ALARM SYSTEM. IDOT TO TERMINATE SERVICE CABLES AT DISCONNECT SWITCH. IDOT TO PROVIDE MISSION ALARM SYSTEM. ELECTRICAL WORK TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR FLOWMETER.
3. IDOT TO RESTORE ALL DISTURBED AREAS WITH TOPSOIL AND SEEDING.
4. CONTRACTOR TO PROVIDE SILT FENCE ON DOWNWARD SIDE OF AREAS DISTURBED BY CONSTRUCTION.



SCALE: 0 75 150 FT

CK-1

MODEL: S:\PROJECTS\76T47\FILES



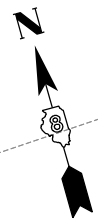
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**25TH STREET FLOW METER
OVERALL
SITE PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
064	82-1-1	ST. CLAIR	7	4
CONTRACT NO. 76T47				
		ILLINOIS	FED. AID PROJECT	



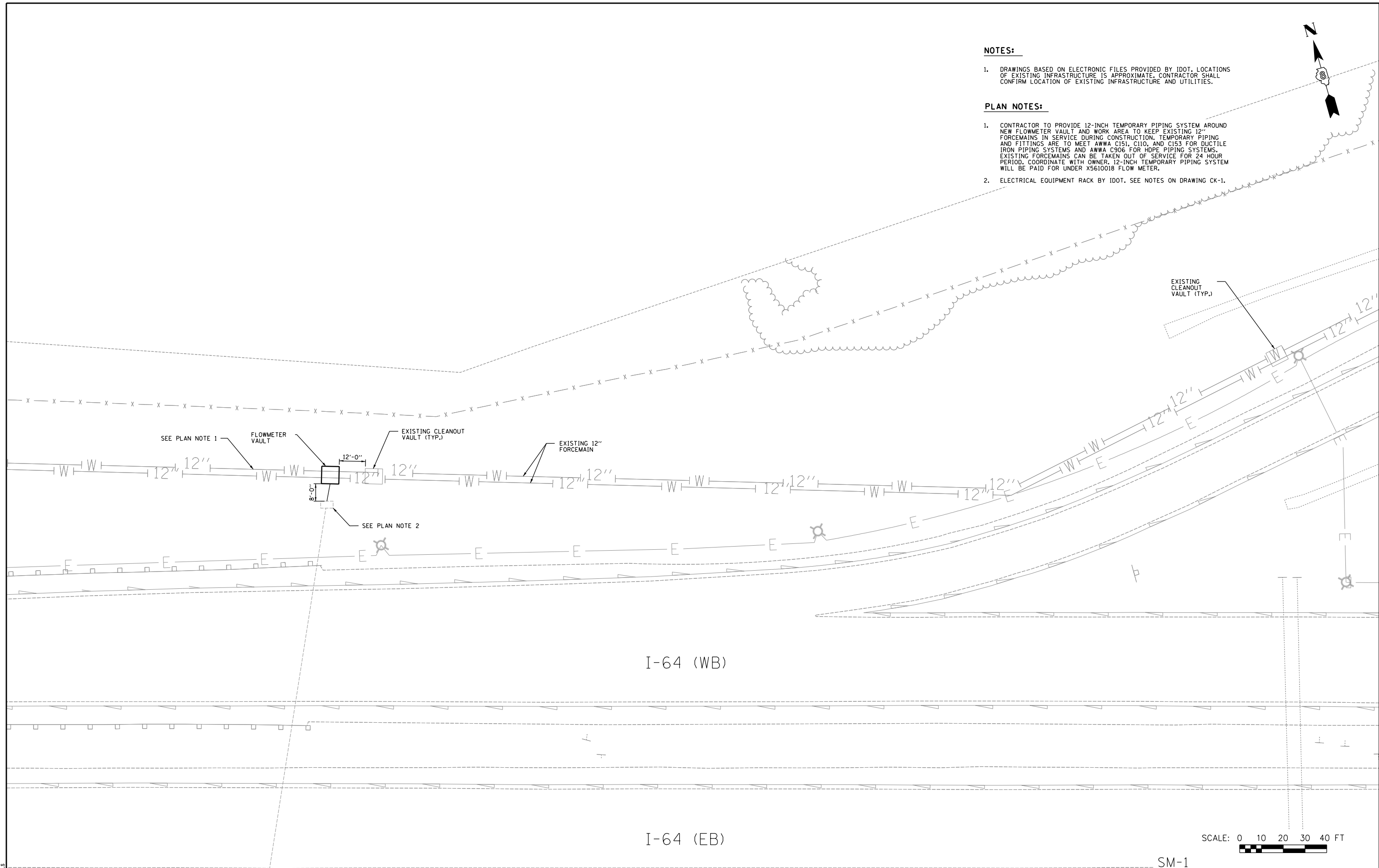
NOTES:

1. DRAWINGS BASED ON ELECTRONIC FILES PROVIDED BY IDOT. LOCATIONS OF EXISTING INFRASTRUCTURE IS APPROXIMATE. CONTRACTOR SHALL CONFIRM LOCATION OF EXISTING INFRASTRUCTURE AND UTILITIES.

PLAN NOTES:

1. CONTRACTOR TO PROVIDE 12-INCH TEMPORARY PIPING SYSTEM AROUND NEW FLOWMETER VAULT AND WORK AREA TO KEEP EXISTING 12" FORCEMAINS IN SERVICE DURING CONSTRUCTION. TEMPORARY PIPING AND FITTINGS ARE TO MEET AWWA C151, C110, AND C153 FOR DUCTILE IRON PIPING SYSTEMS AND AWWA C906 FOR HDPE PIPING SYSTEMS. EXISTING FORCEMAINS CAN BE TAKEN OUT OF SERVICE FOR 24 HOUR PERIOD. COORDINATE WITH OWNER. 12-INCH TEMPORARY PIPING SYSTEM WILL BE PAID FOR UNDER X5610018 FLOW METER.

2. ELECTRICAL EQUIPMENT RACK BY IDOT. SEE NOTES ON DRAWING CK-1.



I-64 (WB)

I-64 (EB)

SCALE: 0 10 20 30 40 FT

SM-1

MODEL: SMOBREMAMES
FILENAME: SFEELS

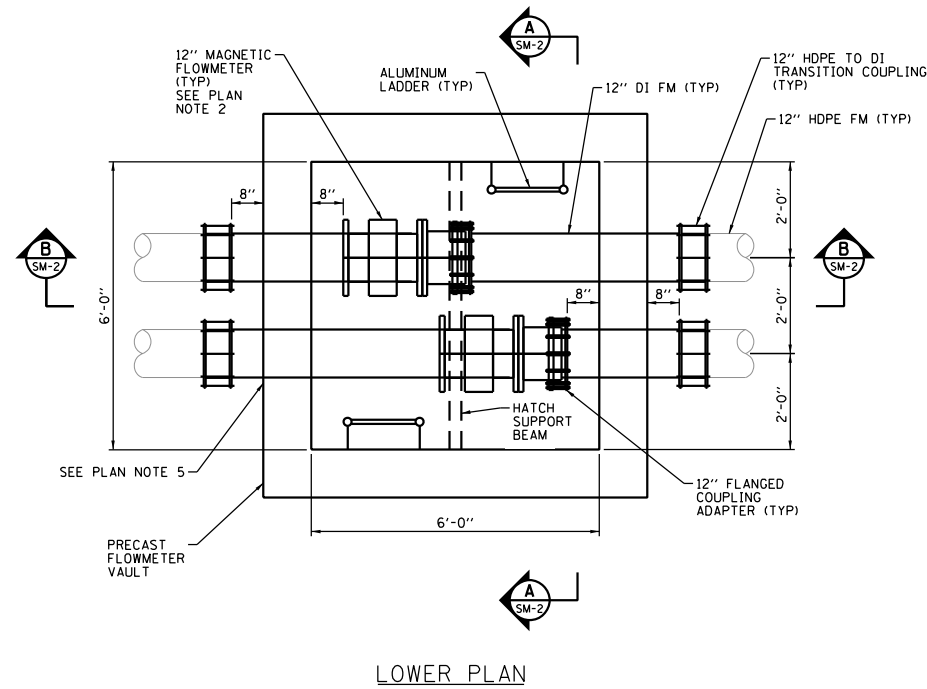
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	PLOT SCALE = AS NOTED	DRAWN - SB	REVISED -					064	82-1-I	ST. CLAIR	7	5
	PLOT DATE = 03-01-24	CHECKED - JG	REVISED -					CONTRACT NO. 76T47				
	DATE - 03-01-2024	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	FED. AID PROJECT

NOTES:

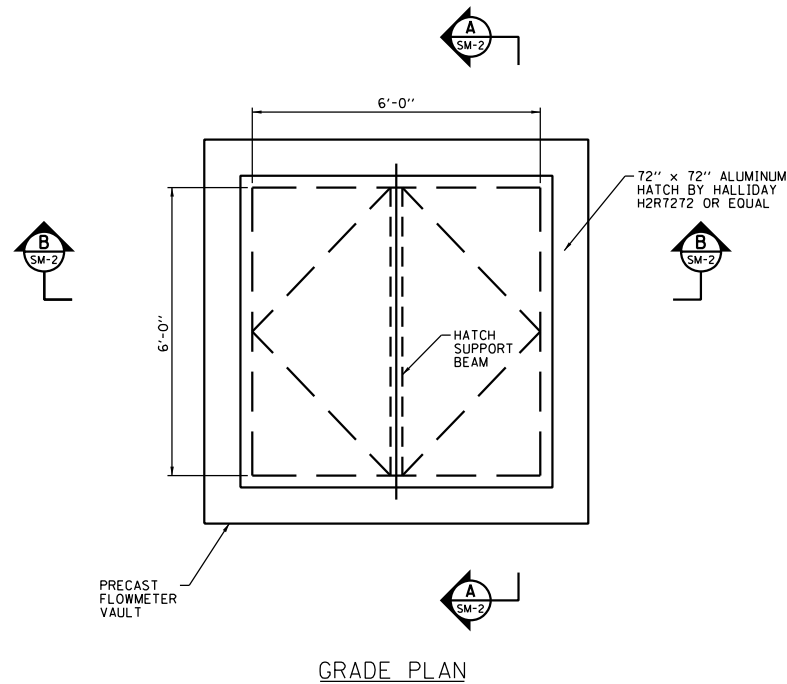
- DRAWINGS BASED ON ELECTRONIC FILES PROVIDED BY ILLINOIS DOT. LOCATIONS OF EXISTING INFRASTRUCTURE IS APPROXIMATE. CONTRACTOR SHALL CONFIRM LOCATION OF EXISTING INFRASTRUCTURE AND UTILITIES.
- CONTRACTOR TO PROVIDE ONE (1) 12-INCH DIA SPOOL PIECE CUT AT LENGTH OF MAGNETIC FLOWMETER FOR TEMPORARY USE WHEN FLOWMETER IS REMOVED.
- ALL FASTENING HARDWARE WITHIN THE VAULT SHALL BE STAINLESS STEEL, AND ALL FASTENERS SHALL INCLUDE ANTI-SIEZE LUBRICANT APPLIED DURING ASSEMBLY.
- CONTRACTOR TO PROVIDE SUPPORTS FOR PIPING AND EQUIPMENT, SEE SPECIAL PROVISIONS.
- WALL PENETRATION PER DETAIL M103

GENERAL NOTES:

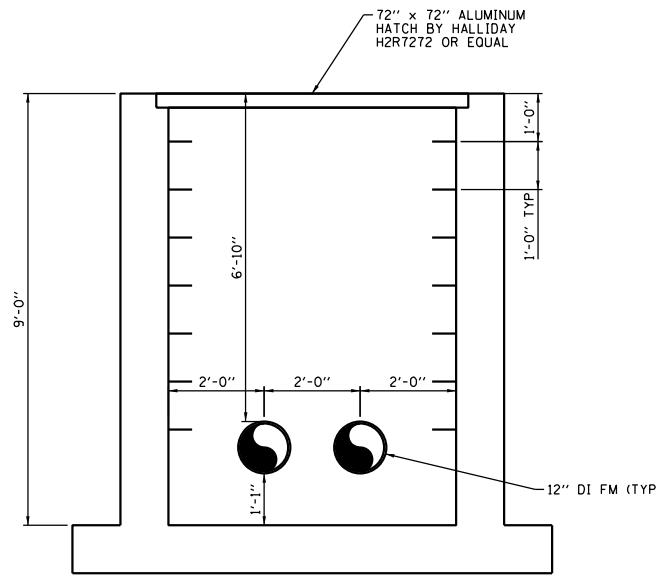
- PRECAST DESIGNER TO DESIGN STRUCTURE FOR UPLIFT ASSUMING GROUNDWATER AT GRADE.



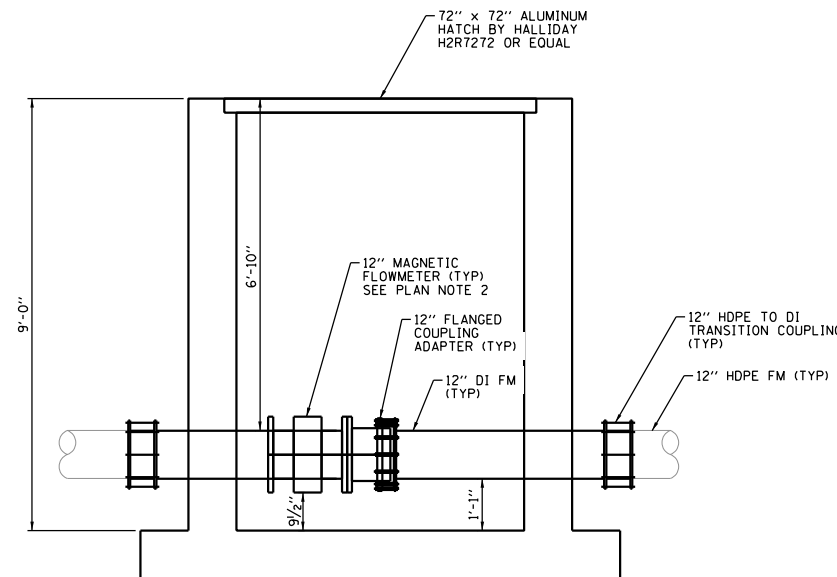
LOWER PLAN



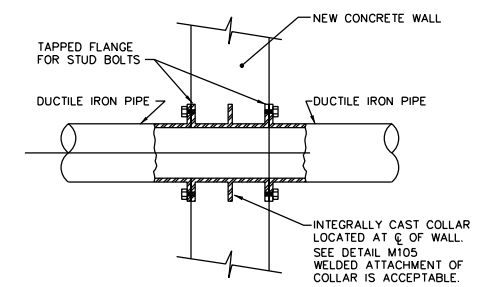
GRADE PLAN



SECTION A



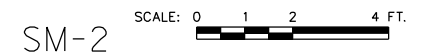
SECTION B



FLG / FLG DUCTILE IRON WALL PIPE DETAIL M103
NTS

NOMINAL PIPE DIA (INCHES)	MINIMUM COLLAR DIMENSIONS		STEEL COLLAR	
	INTEGRALLY CAST D.I. COLLAR THICKNESS (INCHES)	INTEGRALLY CAST D.I. COLLAR DIAMETER (INCHES)	STEEL COLLAR THICKNESS (INCHES)	STEEL COLLAR DIAMETER (INCHES)
4	0.50	8.00	0.25	6.80
6	0.50	10.00	0.25	8.90
8	0.50	12.50	0.25	11.05
10	0.50	14.50	0.25	13.10
12	0.50	16.50	0.25	15.20
14	0.75	19.50	0.25	17.30
16	0.75	21.75	0.25	19.40
18	0.75	23.75	0.38	22.50
20	0.75	25.75	0.38	24.60
24	0.75	30.25	0.38	28.80
30	1.00	36.50	0.50	36.00
36	1.00	43.00	0.50	42.30
42	1.25	49.50	0.75	50.75
48	1.25	56.50	0.75	57.05
54	1.50	63.00	1.00	66.06
60	1.50	70.25	1.00	70.11

DUCTILE IRON WALL AND FLOOR TYPE COLLAR DIMENSIONS DETAIL M105
NTS



MODEL, SHEET NAMES, FILE NAMES, SHEETS



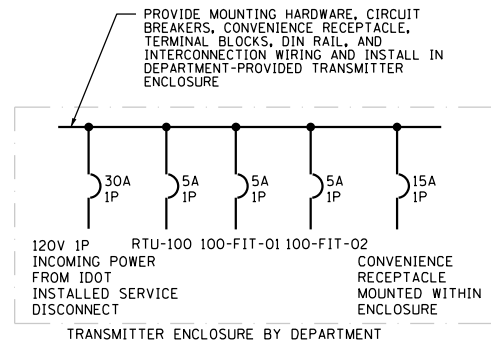
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PLOT SCALE = AS NOTED	DRAWN - SB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

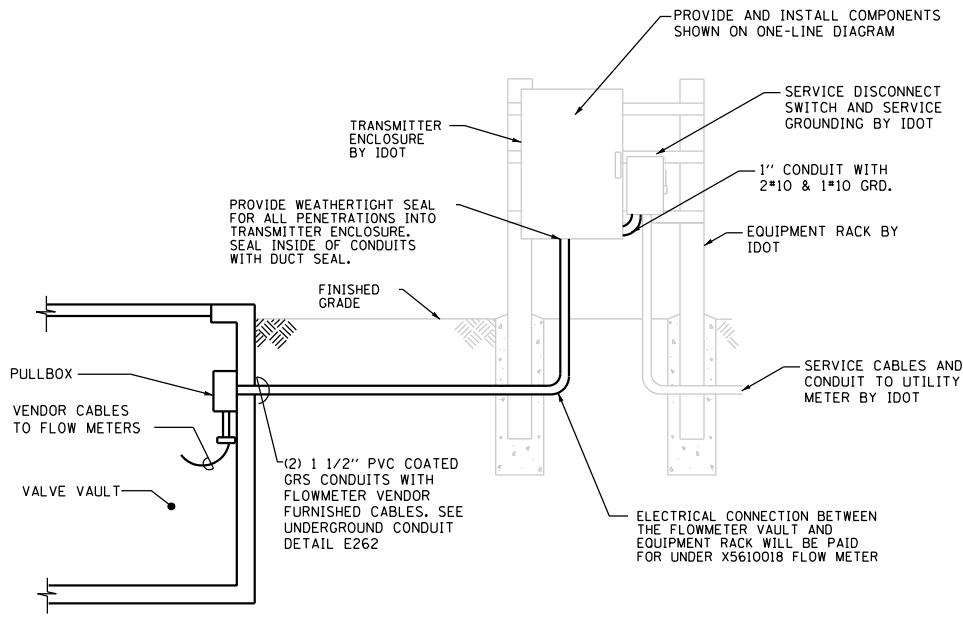
25TH STREET FLOW METER
STRUCTURAL - PROCESS
VAULT PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

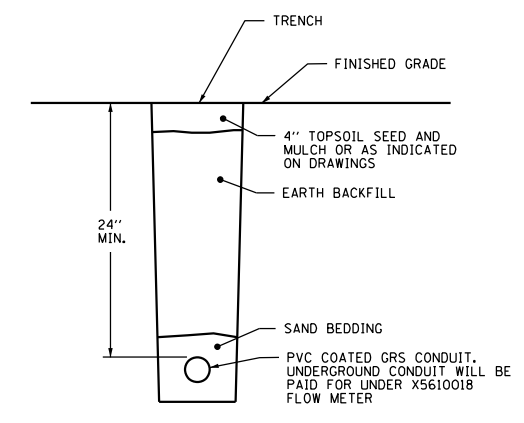
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064	82-1-I	ST. CLAIR	7	6
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ILLINOIS FED. AID PROJECT				



ONE-LINE DIAGRAM
NTS



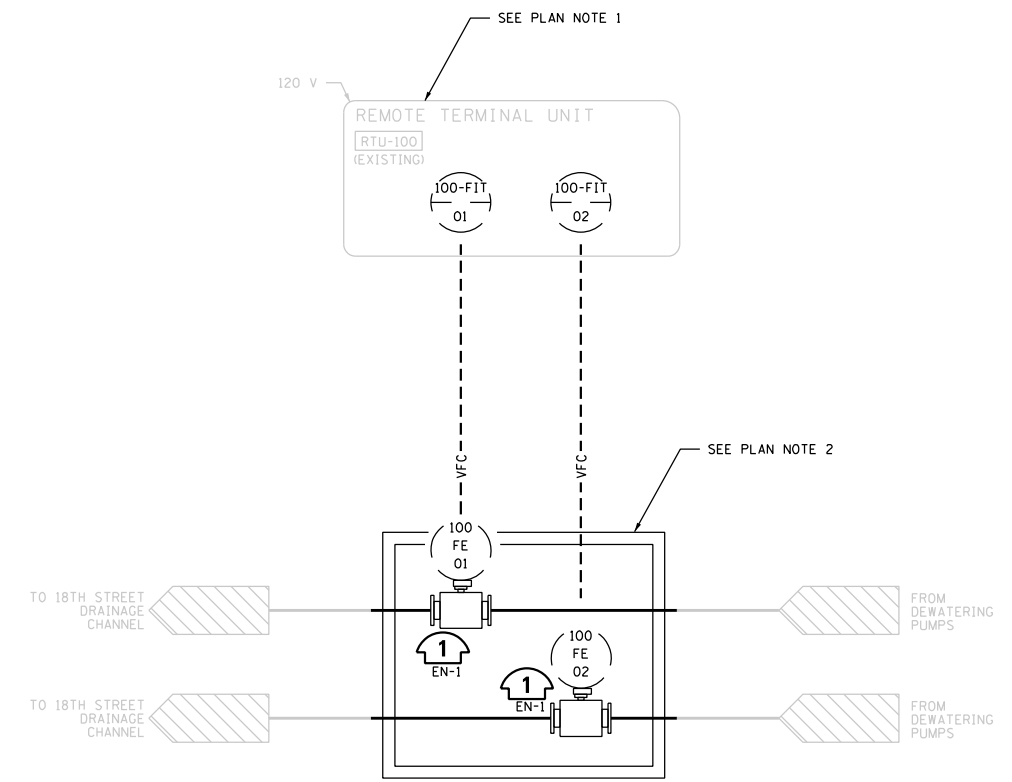
EQUIPMENT MOUNTING DETAIL E061
NTS



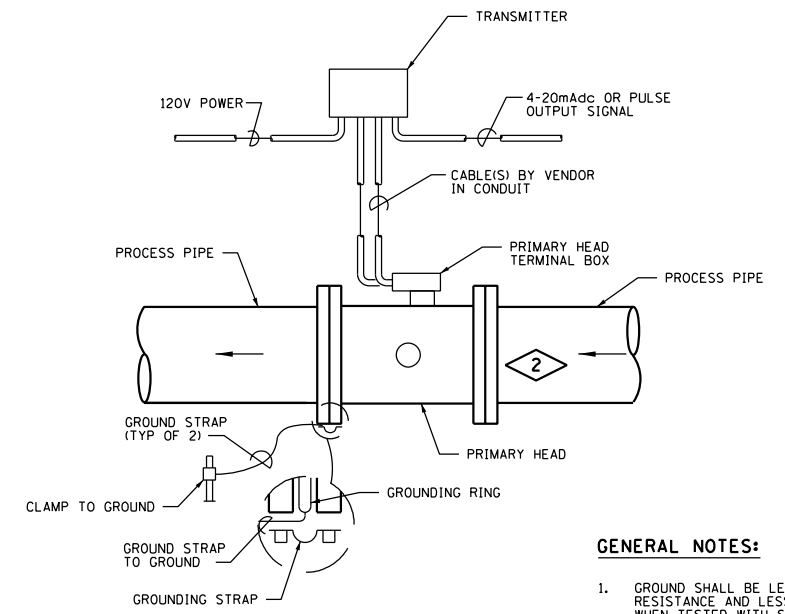
UNDERGROUND CONDUIT DETAIL E262
NTS

PLAN NOTES:

- DEPARTMENT-PROVIDED AND INSTALLED EXISTING ENCLOSURE. COORDINATE INSTALLATION OF FLOW TRANSMITTERS WITH THE DEPARTMENT. TRANSMISSION AND INTERROGATION OF SIGNALS AT REMOTE LOCATION IS RESPONSIBILITY OF THE DEPARTMENT.
- ALL FASTENERS INSTALLED BELOW GRADE SHALL BE STAINLESS STEEL AND INCLUDE GENERAL PURPOSE ANTI-SEIZE LUBRICANT (LOCTITE C5-A) APPLIED DURING ASSEMBLY.



FLOWMETER VAULT
NTS



ELECTROMAGNETIC FLOWMETER W/REMOTE CONVERTOR/TRANSMITTER
NTS

GENERAL NOTES:

- GROUND SHALL BE LESS THAN 0.5 OHM RESISTANCE AND LESS THAN 100 MILLIVOLT WHEN TESTED WITH STANDARD METHODS.
- LENGTH OF COIL DRIVE AND FIELD CURRENT CABLES SHALL NOT EXCEED MAXIMUM LENGTH AS ESTABLISHED BY MANUFACTURER.

1
EN-1

EN-1

MODEL, SHOP DRAWINGS, FIELD NOTES, SEE ELS



USER NAME = SBREMER	DESIGNED - FM	REVISED -
PLOT SCALE = AS NOTED	DRAWN - SB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

25TH STREET FLOW METER			
ELECTRICAL - INSTRUMENTATION & CONTROL			
PLAN			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

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064	82-1-I	ST. CLAIR	7	7
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