

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

FAI 70 (I-55/64)
SECTION 82-4PS-2
MISSOURI AVENUE PUMP STATION
SECURITY SYSTEMS
ST. CLAIR COUNTY

C-98-116-21

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-4PS-2	ST. CLAIR	4	1
		ILLINOIS	CONTRACT NO. 76P90	

D-98-085-21



PLANS PREPARED BY:
KLINGNER & ASSOCIATES, P.C.
 Engineers • Architects • Surveyors

Quincy, Illinois www.klingner.com
 816 North 24th Street Galesburg, IL Burlington, IA
 217.223.3670 Peña, IA Hannibal, MO Columbia, MO
 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

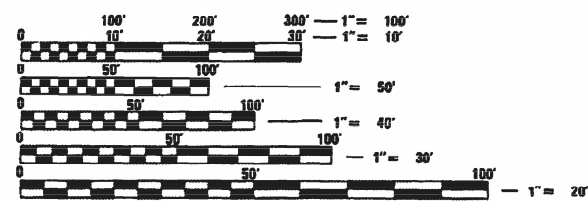
SUBMITTED Dec, 16, 2021
Keith Roberts
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 4, 2022
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

February 4, 2022
Stephen M. Smith
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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 OF THE STATE OF ILLINOIS**

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- 1 COVER SHEET
 - 2 GENERAL NOTES
 - 3 SUMMARY OF QUANTITIES
 - 4 LOW VOLTAGE PLAN

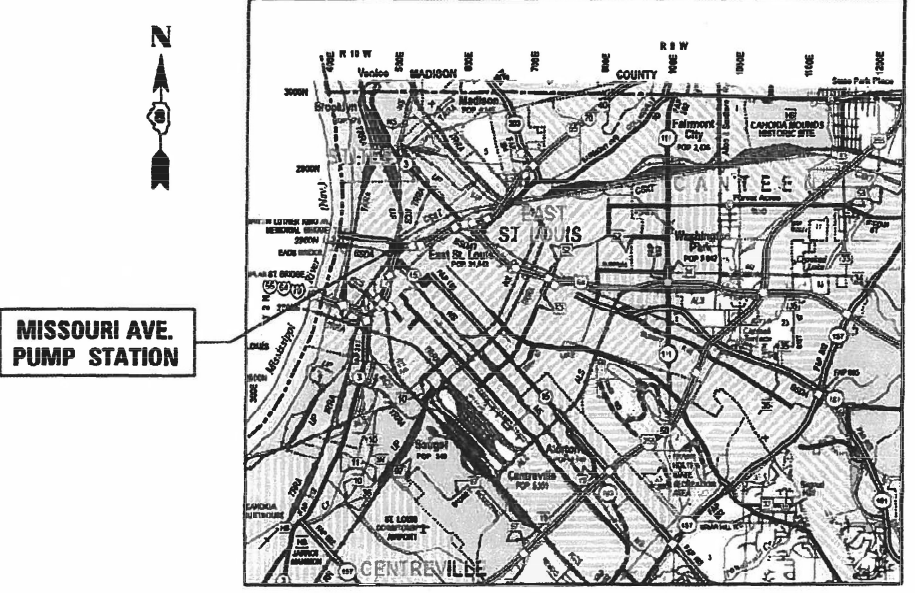


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER CHERYL KEPLAR 618-346-3186
 PROJECT MANAGER PHILLIP SAWYER 618-346-3275

CONTRACT NO. 76P90



ST. CLAIR COUNTY

GROSS LENGTH = N/A
 NET LENGTH = N/A

AARON M. SCHAFER
 062-065354
 REGISTERED PROFESSIONAL ENGINEER
 OF ILLINOIS

AARON M. SCHAFER
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF ILLINOIS NO. 062-065354
 LICENSE EXPIRES FEBRUARY 28, 2022

12/9/2021
 DATE

GENERAL NOTES

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD, AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS.
2. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOAD. THE CONTRACTOR IS RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT USED IN CONSTRUCTING THIS PROJECT.
3. THE EXISTING PUMP STATION BUILDING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENFORCE ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
5. ALL CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS AND SPECIAL PROVISIONS CAREFULLY, VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO AGREEING TO PERFORM THE WORK. FAILURE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE CONTRACTOR FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
6. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE THAT IS CAUSED TO THE EXISTING PUMP STATION BUILDING.
7. DRAWINGS ARE NOT TO SCALE.
8. THE DEPARTMENT RESERVES THE RIGHT TO NOTIFY THE CONTRACTOR TO CHANGE THE CONSTRUCTION SCHEDULE IF NEEDED TO ENSURE PROPER DEWATERING NEEDS FOR THE DEPARTMENT.
9. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS 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 COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION TO PREPARE THEM FOR A 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 618-346-3360 AND/OR THE HCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
10. TO SCHEDULE A SITE VISIT, THE CONTRACTOR SHOULD CONTACT PETE SAWYER AT 618-346-3275.

D:\B\Files\10198\Work Order - 11 - Phase II Pump Station Blanket Agreement\Bannan and MD Ave. (76P90)\CAD\ Sheets\0876P90-ht-gencost.dgn

REV. - MS

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 616 N. 24TH ST. QUINCY, ILLINOIS 62301 217.223.3670
 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

USER NAME = oms	DESIGNED	AMS	REVISED	-
	DRAWN	AMS	REVISED	-
PLOT SCALE = 2" @ 1" = 7' 0"	CHECKED	EBB	REVISED	-
PLOT DATE = 12/8/2021	DATE	12/08/2021	REVISED	-

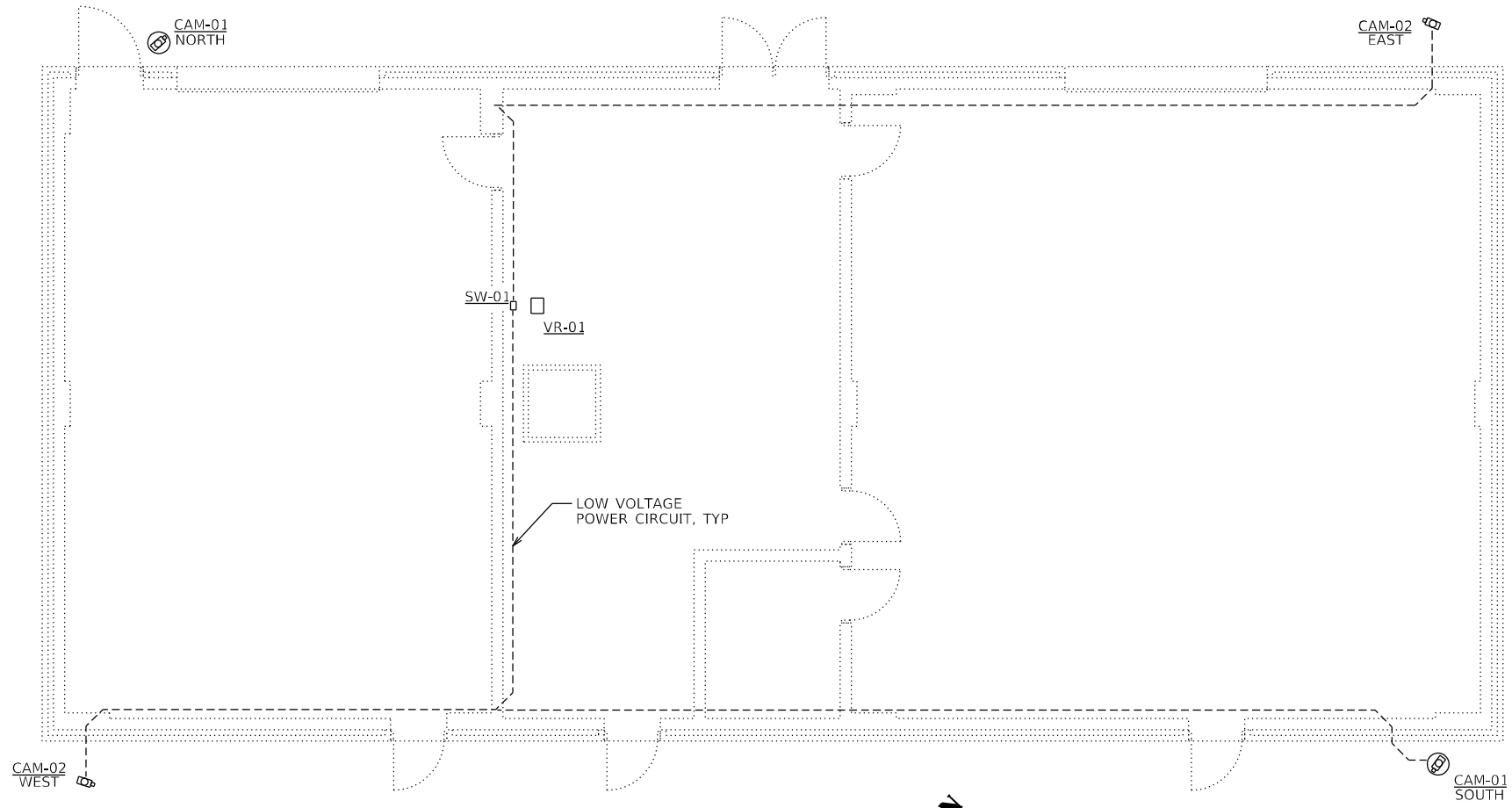
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CHECKED	EBB	REVISED	-
DATE	12/08/2021	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISSOURI AVENUE PUMP STATION
GENERAL NOTES**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-4PS-2	ST. CLAIR	4	2
CONTRACT NO. 76P90				
ILLINOIS FED. AID PROJECT				



LOW VOLTAGE PLAN

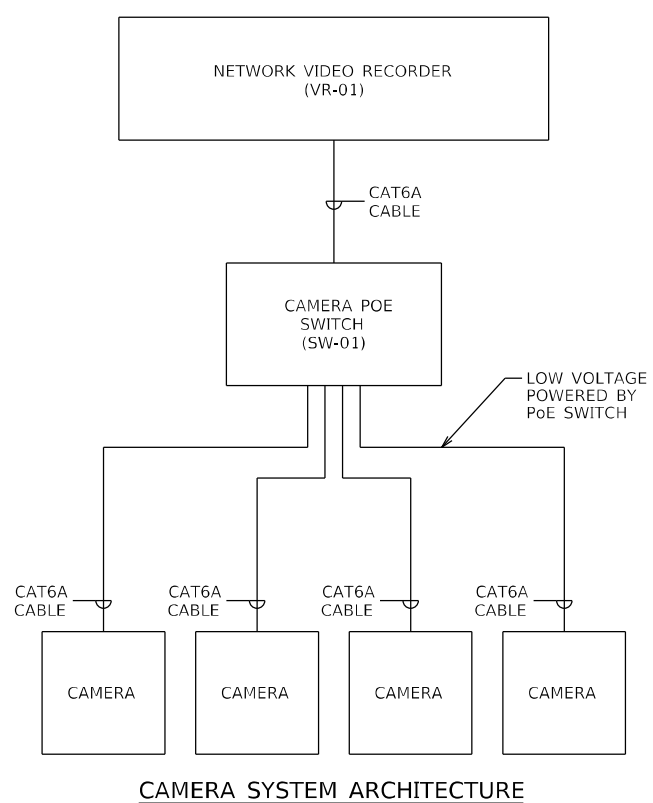
GENERAL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING, INSTALLING AND COMMISSIONING A FULLY FUNCTIONING SECURITY CAMERA SYSTEM.
2. THE COST OF ALL WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE OF "PUMP STATION ELECTRICAL WORK".

GENERAL ELECTRICAL NOTES:

1. APPLICABLE STANDARDS: NFPA-70, NFPA-101, STATE BUILDING CODES, AND THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1971 AND ALL AMENDMENTS THERETO; EQUIPMENT, DEVICES, APPARATUS, SYSTEMS, AND INSTALLATIONS SHALL BE ENTIRELY SUITABLE AND SAFE FOR EACH INTENDED APPLICATION AND BE IN FULL COMPLIANCE WITH APPLICABLE STANDARDS, REQUIREMENTS, RULES, REGULATIONS, CODES, STATUTES, ORDINANCES, ETC., OF MUNICIPAL, COUNTY, AND STATE GOVERNMENTS, OWNER'S INSURANCE COMPANY, LOCAL UTILITIES, AND LABOR REGULATIONS. NOTHING CONTAINED IN THESE PLANS AND SPECIFICATIONS SHALL BE CONSTRUED TO CONFLICT WITH THESE LAWS, CODES, AND ORDINANCES.
2. DRAWINGS ARE SCHEMATIC AND SHOW APPROXIMATE LOCATIONS OF ELECTRICAL EQUIPMENT. EXACT LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR AND VERIFIED IN THE FIELD PRIOR TO ROUGH-IN.
3. INSTALLATIONS WHICH INCLUDE ELECTRICAL FIXTURES, DEVICES, CONDUIT, SWITCHES, PANELS, HANGERS, WIRE, CABLE, STANDARDS, ETC., MUST BE ENTIRELY SUITABLE FOR TEMPERATURES, HUMIDITY, DAMP AREAS, VOLTAGE, FREQUENCY, AND ALL INSTALLATION CONDITIONS ENCOUNTERED.
4. INSTALLATION MUST BE ENTIRELY SAFE IN EVERY RESPECT, AND MUST NOT CREATE ANY CONDITIONS OF ANY KIND WHICH WILL BE HARMFUL TO ANY OCCUPANT OF THE BUILDING. IF CONTRACTOR BELIEVES THAT INSTALLATION WILL NOT BE SAFE FOR ALL PEOPLE, HE/SHE SHALL SO REPORT IN WRITING TO ENGINEER BEFORE ANY EQUIPMENT IS PURCHASED OR WORK IS INSTALLED, GIVING EXACT RECOMMENDATIONS, AND REASONS FOR THEM.
5. GROUNDING: ALL GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC).
6. INSTALLATION OF ELECTRICAL DEVICES SHALL BE COORDINATED WITH OTHER TRADES AS NECESSARY TO PREVENT ANY CONFLICTS DURING CONSTRUCTION.
7. EQUIPMENT GROUNDING CONDUCTORS SHALL BE PULLED WITH ALL BRANCH CIRCUITS. CONDUIT SHALL NOT BE USED AS A GROUND U.N.O.
8. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, ACCESSORIES, TOOLS, EQUIPMENT, TRANSPORTATION, LABOR, SERVICES AND OPERATIONS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM.
9. ELECTRICAL CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ARRANGE FOR ALL INSPECTIONS REQUIRED BY STATE OR LOCAL AUTHORITIES.
10. MATERIALS MUST BE NEW, IN FIRST CLASS CONDITION.
11. CONDUIT SHALL BE SEPARATELY HUNG AND ANCHORED, FREE TO EXPAND AND CONTRACT QUIETLY, WITHOUT IMPOSING STRAINS ON STRUCTURE, DEVICES, AND EQUIPMENT. CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES.
12. CONTRACTOR TO MAINTAIN THE EXISTING BUILDING FIRE RATING THROUGHOUT CONSTRUCTION.

ELECTRICAL SYMBOLS	
	LOW VOLTAGE POWER CIRCUIT
	SECURITY CAMERA (PAN/TILT/ZOOM)
	SECURITY CAMERA (FIXED)



CAMERA SYSTEM ARCHITECTURE

SECURITY CAMERA SCHEDULE

MARK	MANUFACTURER	MODEL	LENS TYPE	FOCAL LENGTH	RESOLUTION	FIELD OF VIEW	POWER TYPE	ENCLOSURE TYPE	ENCLOSURE RATING	ACCESSORIES		REMARKS
										DESCRIPTION	ORDERING CODE	
CAM-01	BOSCH	MIC-7522-Z30W	VARI-FOCAL	6.6 mm - 198 mm	2MP	3 - 58 DEGREES	PoE	SPHERE	IP66	ILLUMINATOR WALL MOUNT BRACKET	MIC-ILW-400 MIC-WMB-WD	
CAM-02	BOSCH	NDE-8503-R	VARI-FOCAL	3.9 mm - 10 mm	6MP	37 DEGREES	PoE	DOME	IP66	PENDANT WALL MOUNT	NDA-U-WMT	

VIDEO RECORDER SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	CHANNELS	REMARKS
VR-01	BOSCH	DIP-5244GP-4HD	OUT-OF-BOX IP VIDEO RECORDING AND MANAGMENT	8	

PoE SWITCH SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	CHANNELS	POWER ADAPTER		REMARKS
					MANUFACTURER	MODEL	
SW-01	NETGEAR	GS116PP	PoE SWITCH	16	NETGEAR	EPS200W	

CAMERA SEQUENCE OF OPERATIONS:

1. DURING NORMAL HOURS (TBD BY OWNER):
 - a. WHEN EAST CAM-02 DETECTS TARGET OBJECT:
 - i. EAST CAM-02 SHALL START RECORDING.
 - ii. NORTH CAM-01 SHALL RECORD/TRACK TARGET OBJECT.
 - b. WHEN WEST CAM-02 DETECTS TARGET OBJECT:
 - i. WEST CAM-02 SHALL START RECORDING.
 - ii. SOUTH CAM-01 SHALL RECORD/TRACK TARGET OBJECT.
2. DURING OFF HOURS (TBD BY OWNER):
 - a. WHEN EAST CAM-02 DETECTS TARGET OBJECT:
 - i. EAST CAM-02 SHALL START RECORDING.
 - ii. NORTH CAM-01 ILLUMINATOR SHALL TURN ON.
 - iii. NORTH CAM-01 SHALL RECORD/TRACK TARGET OBJECT.
 - b. WHEN WEST CAM-02 DETECTS TARGET OBJECT:
 - i. WEST CAM-02 SHALL START RECORDING.
 - ii. SOUTH CAM-01 ILLUMINATOR SHALL TURN ON.
 - iii. SOUTH CAM-01 SHALL RECORD/TRACK TARGET OBJECT.



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USER NAME = oms	DESIGNED JLD	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN JLD	REVISED -
PLOT DATE = 12/8/2021	CHECKED DAS	REVISED -
	DATE 12/08/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISSOURI AVENUE PUMP STATION
LOW VOLTAGE PLAN**

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-4PS-2	ST. CLAIR	4	4
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