

INDEX OF SHEETS/DRAWINGS

| SHEET NO. | TITLE |
|-----------|-----------------------|
| 1 | COVER SHEET |
| 2 | GENERAL NOTES |
| 3 | SUMMARY OF QUANTITIES |
| 4 | SUMP PUMP #1 |
| 5 | MIXERS |
| 6 | LV SWITCHGEAR |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

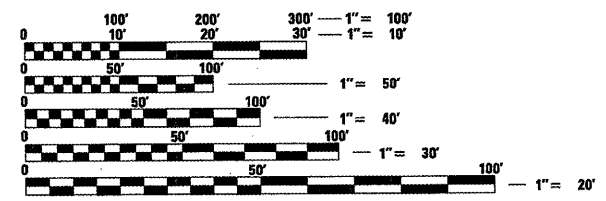
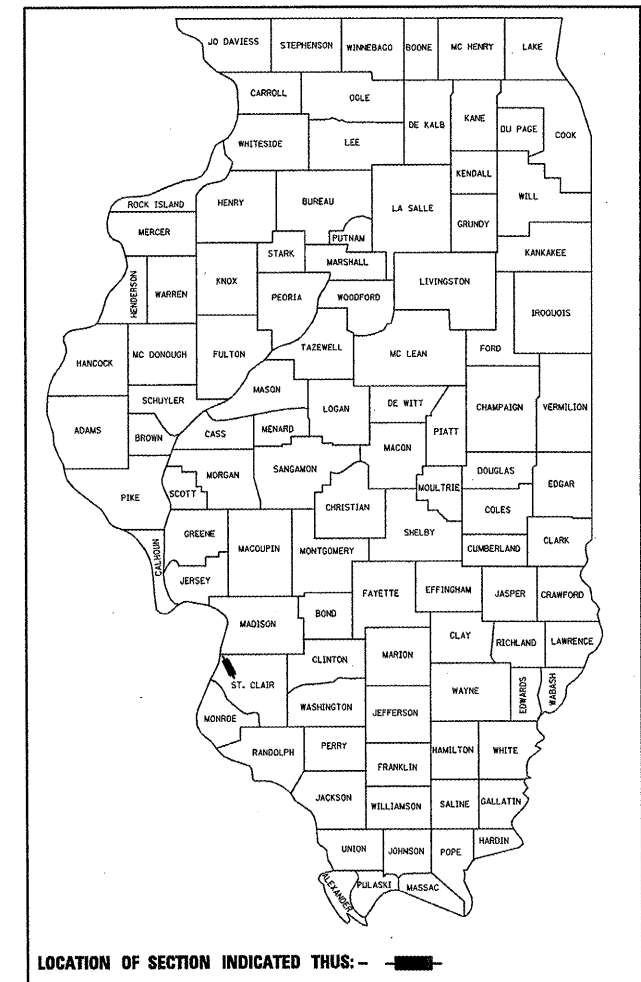
**PROPOSED
HIGHWAY PLANS**

**FAI ROUTE 70 (I-70)
SECTION 82-(1,2)T-18
BOWMAN AVENUE
PUMP STATION REHABILITATION
ST CLAIR COUNTY**

C-98-085-10

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------|----------|--------------------|-----------|
| 70 | 82-(1,2)T-17 | ST CLAIR | 6 | 1 |
| | | ILLINOIS | CONTRACT NO. 76E02 | |

D-98-066-10

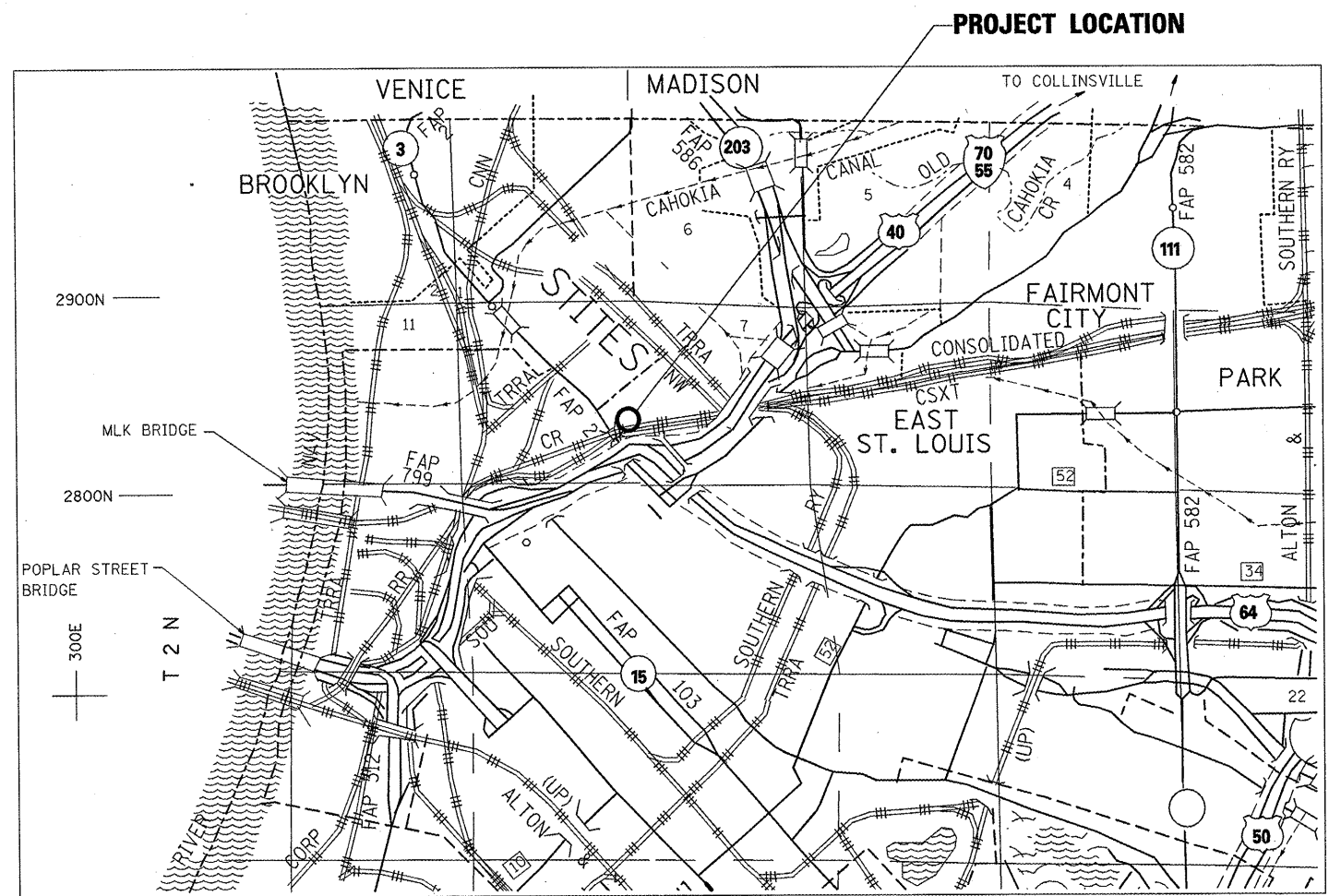


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

**PROJECT ENGINEER
PROJECT MANAGER**

CONTRACT NO. 76E02



LOCATION MAP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 10, 20 11

Mary C. Jamel
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25, 20 11
Scott E. Stitt P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

March 25, 20 11
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

SUMMARY OF QUANTITIES

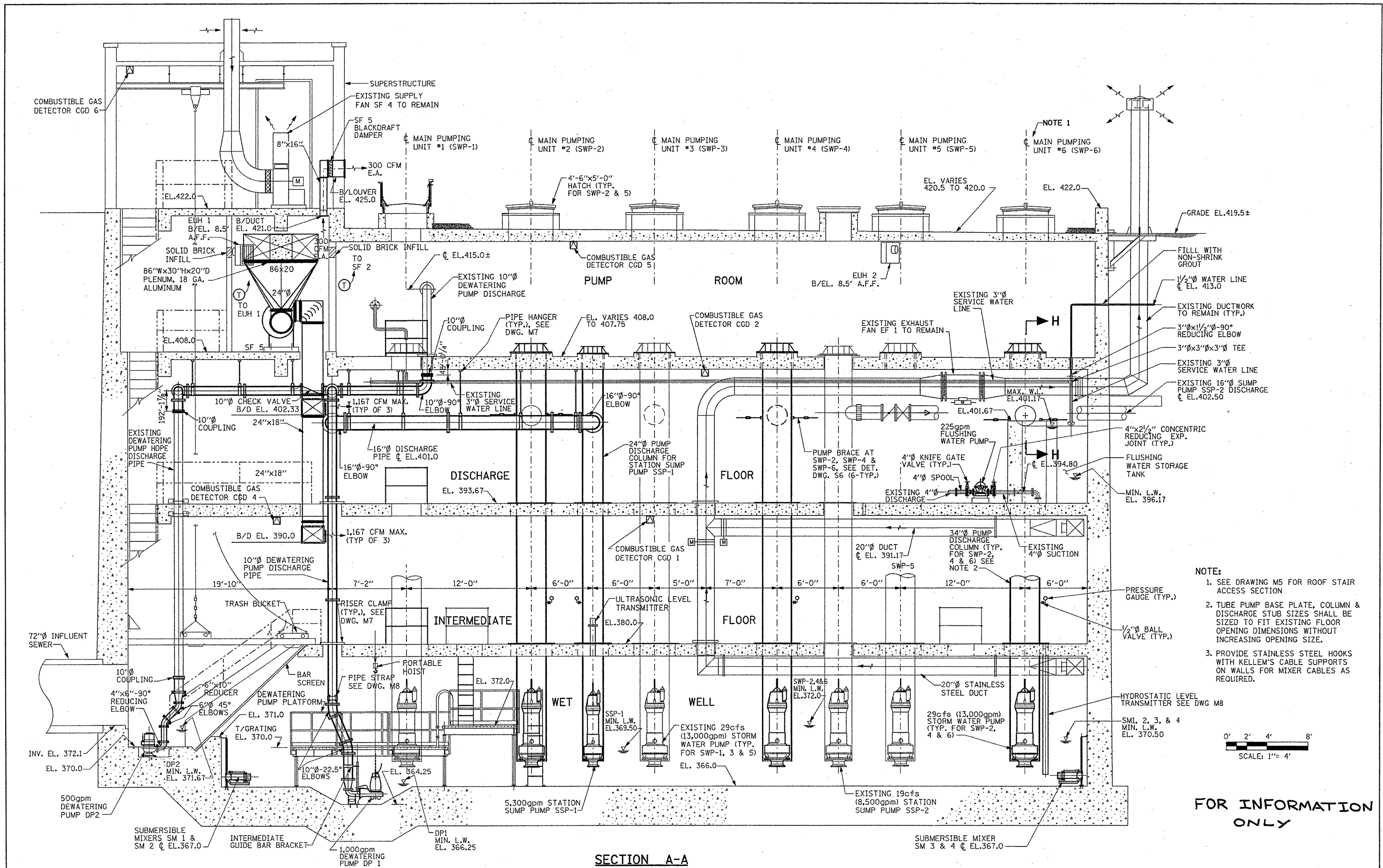
| SUMMARY OF QUANTITIES | | | URBAN TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | |
|-----------------------|-------------------|-------|------------------------------|--------------------------------|--|--|
| CODE NO | ITEM | UNIT | | ST CLAIR 0040 100% STATE | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | |
| X0462500 | SUBMERSIBLE PUMP | EACH | 1 | 1 | | |
| X0327020 | SUBMERSIBLE MIXER | EACH | 1 | 1 | | |
| X0327111 | MAGNUM BREAKER | EACH | 1 | 1 | | |

| | | | |
|---|------------------------------|------------|-----------|
| FILE NAME = | USER NAME = elfordb | DESIGNED - | REVISED - |
| ca:\pwwork\pwwork\elfordb\08187823\0876 | 02-shs-plan.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 100.0000' / IN. | CHECKED - | REVISED - |
| | PLOT DATE = 10/28/2010 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | |
|------------------------------|-----------|----|--------|--------------|
| SUMMARY OF QUANTITIES | | | | |
| SCALE: | SHEET NO. | OF | SHEETS | STA. TO STA. |

| | | | | |
|---|--------------|----------|-----------------|--------------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 70 | 82-(1,2)T-17 | ST CLAIR | 6 | 3 |
| CONTRACT NO. 76E02 | | | | |
| FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT | | | | |

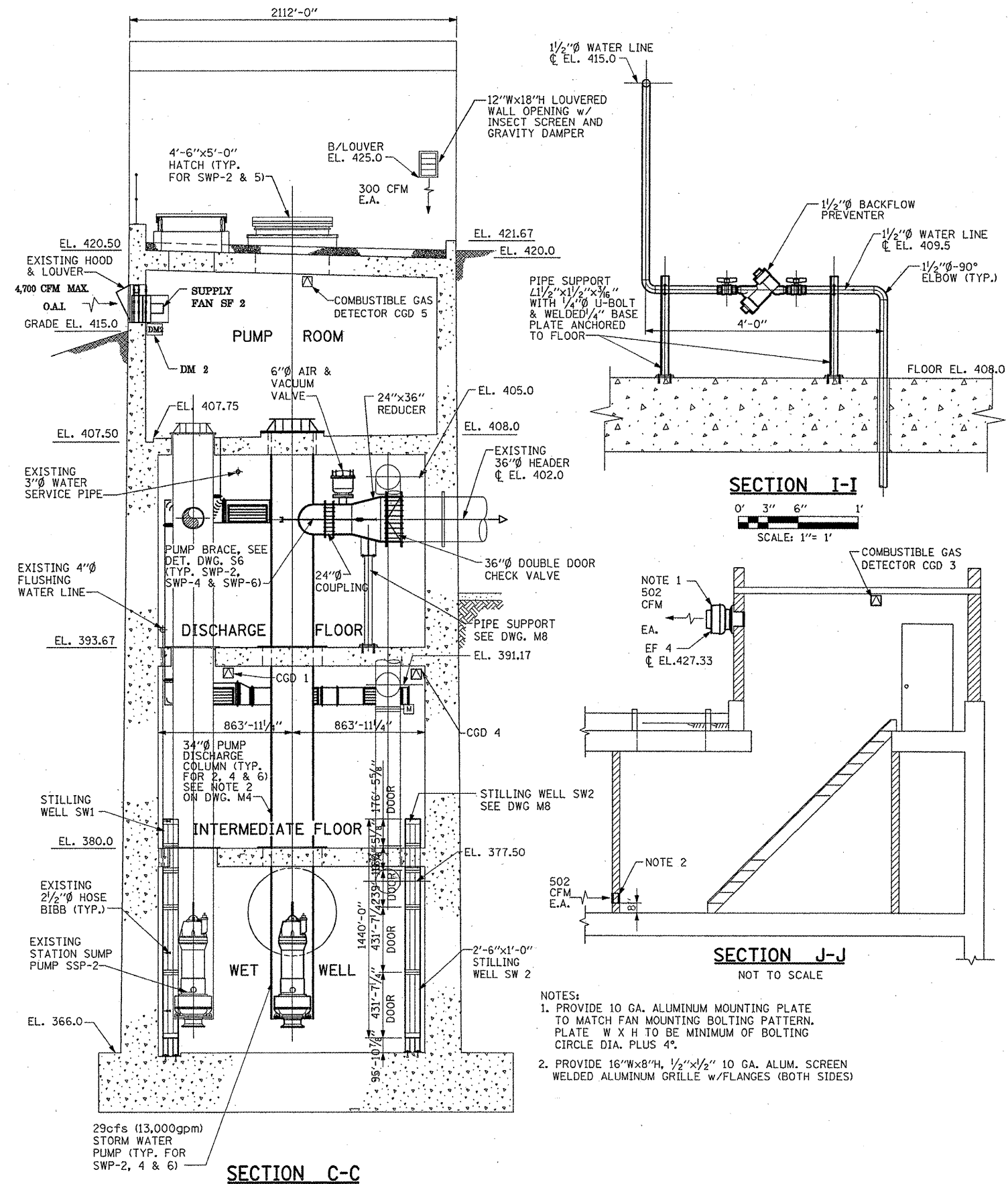


| | | | |
|--|---------------------|------------|-----------|
| FILE NAME = | USER NAME = alfordb | DESIGNED - | REVISED - |
| al\pwwork\pwwdot\alfordb\d0187823\d876-02-ahp-plan.dgn | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | |
|----------------------------|-----------|-----------|------|---------|
| MECHANICAL SECTIONS | | | | |
| SCALE: | SHEET NO. | OF SHEETS | STA. | TO STA. |

| | | | | |
|---------------------|---------------------------|--------------------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 70 | 82-11,217-17 | ST CLAIR | 6 | 4 |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | CONTRACT NO. 76E02 | | |



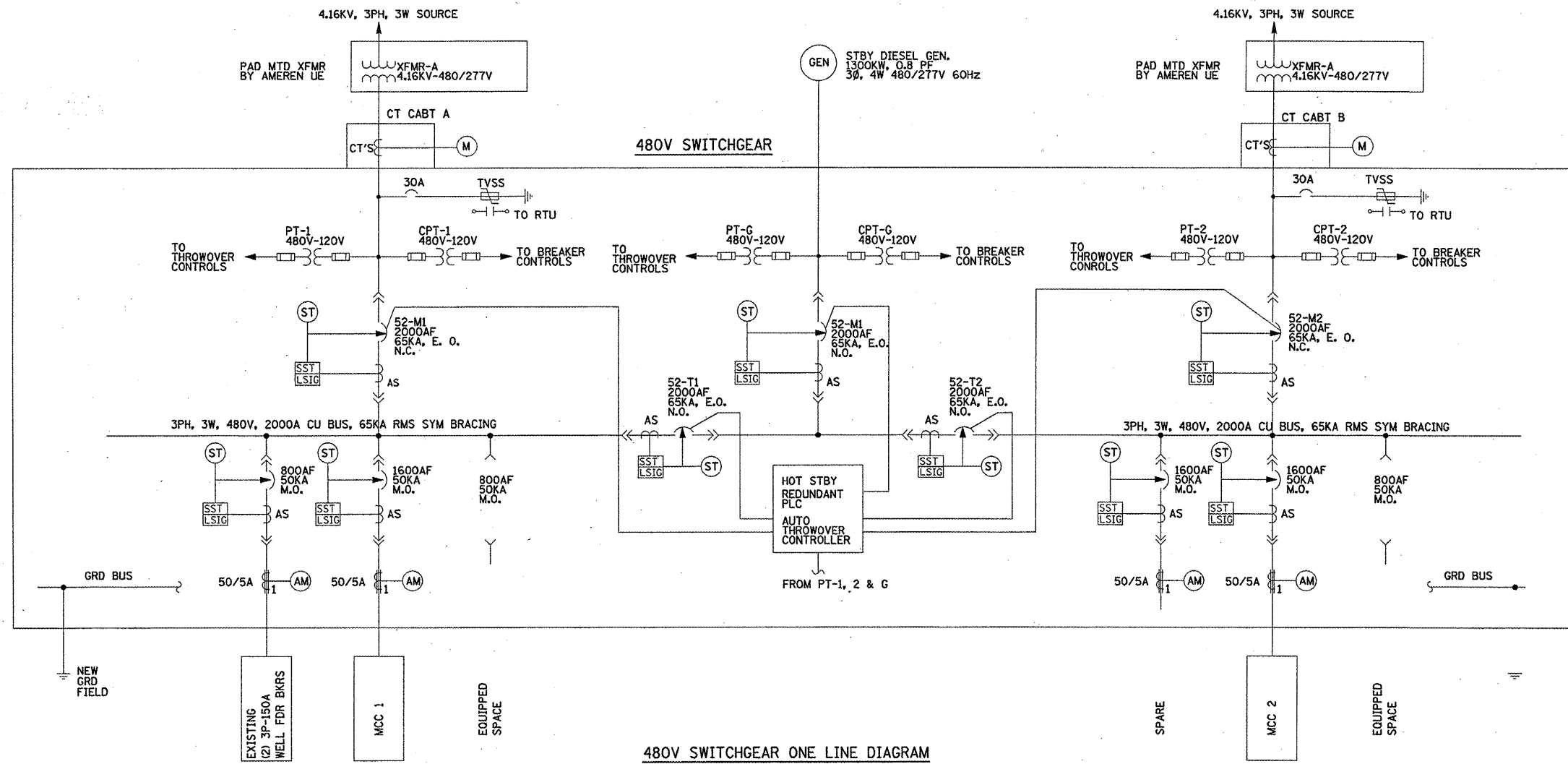
SECTION I-I
 0' 3" 6" 1'
 SCALE: 1"= 1'

SECTION J-J
 NOT TO SCALE

- NOTES:
1. PROVIDE 10 GA. ALUMINUM MOUNTING PLATE TO MATCH FAN MOUNTING BOLTING PATTERN. PLATE W X H TO BE MINIMUM OF BOLTING CIRCLE DIA. PLUS 4".
 2. PROVIDE 16"Wx8"H, 1/2"x1/2" 10 GA. ALUM. SCREEN WELDED ALUMINUM GRILLE w/FLANGES (BOTH SIDES)

FOR INFORMATION ONLY

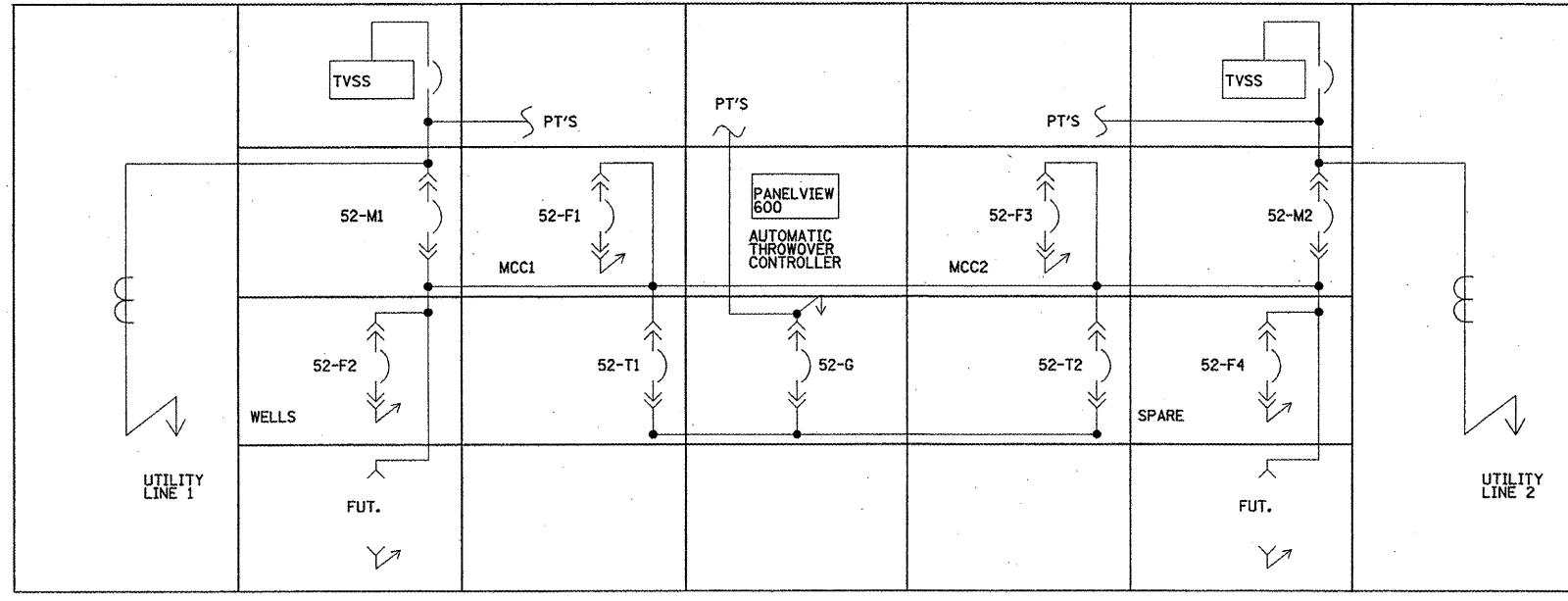
| | | | | | | | | | | |
|--|---------------------|------------|---|---|----------------------------|--------------|-----------|-----------|--------------|-----------|
| FILE NAME = | USER NAME = alfordb | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | MECHANICAL SECTIONS | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| alpw_work\pawdot\alfordb\d8187823\d876402-sht-plan.dgn | DRAWN - | REVISED - | 70 | | | 82-(1,2)T-17 | ST CLAIR | 6 | 5 | |
| PLOT SCALE = 814.7989 1/16 IN. | CHECKED - | REVISED - | CONTRACT NO. 76E02 | | | | | | | |
| PLOT DATE = 10/20/2010 | DATE - | REVISED - | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT | | | | | | | |
| | | | | | | SCALE: | SHEET NO. | OF SHEETS | STA. | TO STA. |



480V SWITCHGEAR ONE LINE DIAGRAM

- LEGEND:**
- AS CURRENT SENSOR
 - CT CURRENT TRANSFORMER
 - EO ELECTRIC OPERATOR
 - MO MANUALLY OPERATED
 - MCCB MOLDED CASE CIRCUIT BREAKER
 - PT POTENTIAL TRANSFORMER
 - CPT CONTROL POWER TRANSFORMER
 - CLF INDICATES CURRENT LIMITING TYPE
 - ↕ HIGH VOLTAGE CABLE LOAD BREAK CONNECTOR
 - ⊞ FUSE
 - ⊞ AS DRAW OUT TYPE LOW VOLTAGE POWER CIRCUIT BREAKER WITH BUILT-IN CURRENT SENSOR
 - ⊞ SST L SIG SOLID STATE TRIP DEVICE
 - LOWER LETTERS: L - LONG TIME DELAY, S - SHORT TIME DELAY, I - INSTANTANEOUS, G - GROUND FAULT
 - ⊞ ST SHUNT TRIP
 - ⊞ AM AMMETER

- NOTES:**
1. SPACE SHALL BE PREPARED TO ACCEPT A FUTURE BREAKER.
 2. ALL BREAKERS SHALL HAVE DIGITRIP DT-1150, WITH SYSTEM COMMUNICATION.



480V SWITCHGEAR FRONT ELEVATION

FOR INFORMATION ONLY

| | | | | | | | | | | |
|--|---------------------|------------|-----------|---|---|---|--------------|----------|--------------|-----------|
| FILE NAME = | USER NAME = sifordb | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | BOWMAN AVENUE PUMP STATION SWITCHGEAR ONE LINE DIAGRAM & ELEVATION | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ct:\pw_work\pwsdgt\alfordb\c0187823\d876182-sht-plan.dgn | | DRAWN - | REVISED - | | | 70 | 82-(1,2)T-17 | ST CLAIR | 6 | 6 |
| PLOT SCALE = 814.7989' / IN. | | CHECKED - | REVISED - | | | CONTRACT NO. 76E02 | | | | |
| PLOT DATE = 10/20/2010 | | DATE - | REVISED - | | | SCALE: SHEET NO. OF SHEETS STA. TO STA. | | | | |
| | | | | | | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT | | | | |