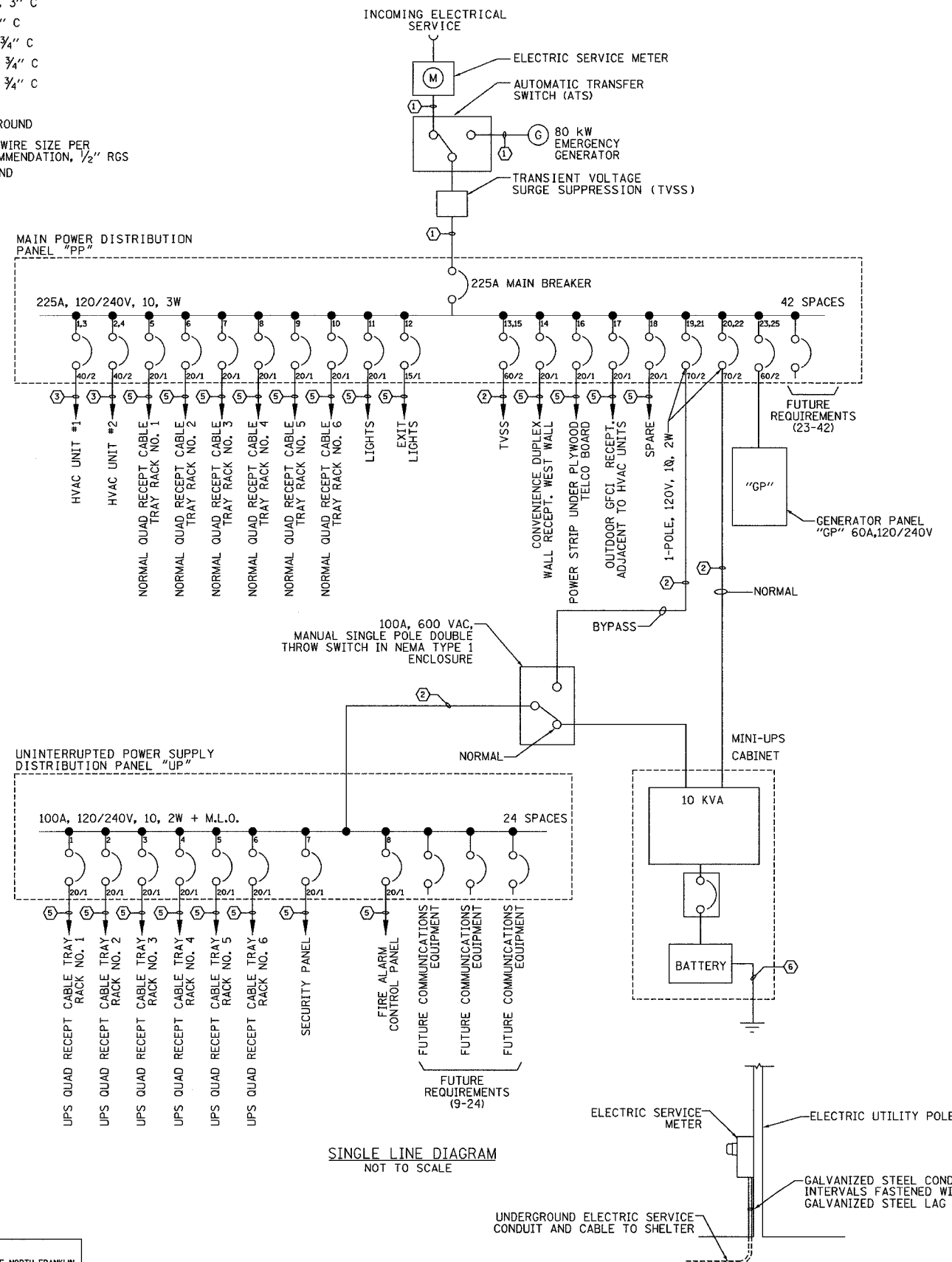


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	853
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
62583				

- ① (3) #4/0 & (1) #2 GND, 3" C
- ② (2) #3 & (1) #8 GND, 1" C
- ③ (2) #8 & (1) #10 GND, 3/4" C
- ④ (2) #10 & (1) #12 GND, 3/4" C
- ⑤ (2) #12 & (1) #12 GND, 3/4" C
- ⑥ #6 GND WIRE, 3/4" C
- ⑦ #4/0, BARE COPPER GROUND
- ⑧ QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 1/2" RGS
- ⑨ #8 BARE COPPER GROUND



SINGLE LINE DIAGRAM  
NOT TO SCALE

ELECTRICAL SERVICE SCHEMATIC  
NOT TO SCALE

### PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #3/0  
1P, 225A

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	CIRCUIT	LOAD PER PHASE(W)		UNIT (W)	QTY	DESCRIPTION
			A	B					A	B			
HVAC UNIT 1 (36K BTU)	1	10300	5150	5150	40	2	6	1	5150	10300	1		HVAC UNIT 2 (36K BTU)
NORMAL QUAD RECEPTACLE - RACK 1	1	900	900		20	1	12	2	900	900	1		NORMAL QUAD RECEPTACLE - RACK 2
NORMAL QUAD RECEPTACLE - RACK 3	1	900	900		20	1	12	3	900	900	1		NORMAL QUAD RECEPTACLE - RACK 4
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900		20	1	12	4	900	900	1		NORMAL QUAD RECEPTACLE - RACK 6
LIGHTS	8	50		400	20	1	12	5		35	1		EXIT LIGHT
TVSS	1	N/A			60	2	4	6		180	5		DUPLEX RECEPTACLE
OUTDOOR GFCI RECEPTACLE	1	180	180		20	1	12	7		180	5		RECEPTACLE- POWER STRIP
UPS BYPASS (LOAD NOT INCLUDED IN TOTALS)					70	2	2	8					SPARE
GENERATOR PANEL "GP"					60	2	6	9		2000	4000	1	UPS INPUT (10 KVA)
SPACE													SPACE
SUBTOTAL LEFT			1980	6450					9850	8985	SUBTOTAL RIGHT		TOTAL LOAD:
VOLTAGE: 120/240V			CYCLES: 60 HZ PHASE: 1 WIRES: 3						11830	15435	SUBTOTAL		27,265
SOLID NEUTRAL: 225 AMPS			MAIN BREAKER: 225 AMP FRAME 225 AMP TRIP						MANUFACTURER: SQUARE D				1. BOLT ON BRANCH BREAKERS
MAIN LUGS: - AMPS MAIN COPPER BUS: 225 AMPS									TYPE AND CAT. NO.: -00140M200-				2. ALL COPPER CURRENT CARRYING PARTS
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									NO EQUAL: <input checked="" type="checkbox"/> APPROVED EQUAL: <input type="checkbox"/>				3. Ⓢ = SHUNT TRIP

### PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #3/0  
1P, 100A

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	CIRCUIT	LOAD PER PHASE(W)		UNIT (W)	QTY	DESCRIPTION
			A	B					A	B			
UPS QUAD RECEPTACLE - CAB 1	1	900	900		20	1	12	1	900	900	1		UPS QUAD RECEPTACLE - CAB 2
UPS QUAD RECEPTACLE - CAB 3	1	900	900		20	1	12	2	900	900	1		UPS QUAD RECEPTACLE - CAB 4
UPS QUAD RECEPTACLE - CAB 5	1	900	900		20	1	12	3	900	900	1		UPS QUAD RECEPTACLE - CAB 6
SECURITY PANEL	1	260		260	20	1	12	4		260	260	1	FIRE ALARM CONTROL PANEL
SPACE													SPACE
SUBTOTAL LEFT			1800	1160					1800	1160	SUBTOTAL RIGHT		TOTAL LOAD:
VOLTAGE: 120/240V			CYCLES: 60 HZ PHASE: 1 WIRES: 2						3600	2320	SUBTOTAL		5,920
SOLID NEUTRAL: 100 AMPS			MAIN BREAKER: 100 AMP FRAME 100 AMP TRIP						MANUFACTURER: SQUARE D				1. BOLT ON BRANCH BREAKERS
MAIN LUGS: - AMPS MAIN COPPER BUS: 100 AMPS									TYPE AND CAT. NO.: -00140M200-				2. ALL COPPER CURRENT CARRYING PARTS
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>									NO EQUAL: <input checked="" type="checkbox"/> APPROVED EQUAL: <input type="checkbox"/>				3. Ⓢ = SHUNT TRIP

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31st STREET to I-57  
I-55 SHELTER (R01)  
POWER SINGLE LINE DIAGRAM  
SCALE: NOT TO SCALE  
DATE: October 29, 2004  
DRAWN BY: JM  
CHECKED BY: CS

**Edwards AND Kelcey**  
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11/23/2004 07:29:13 AM