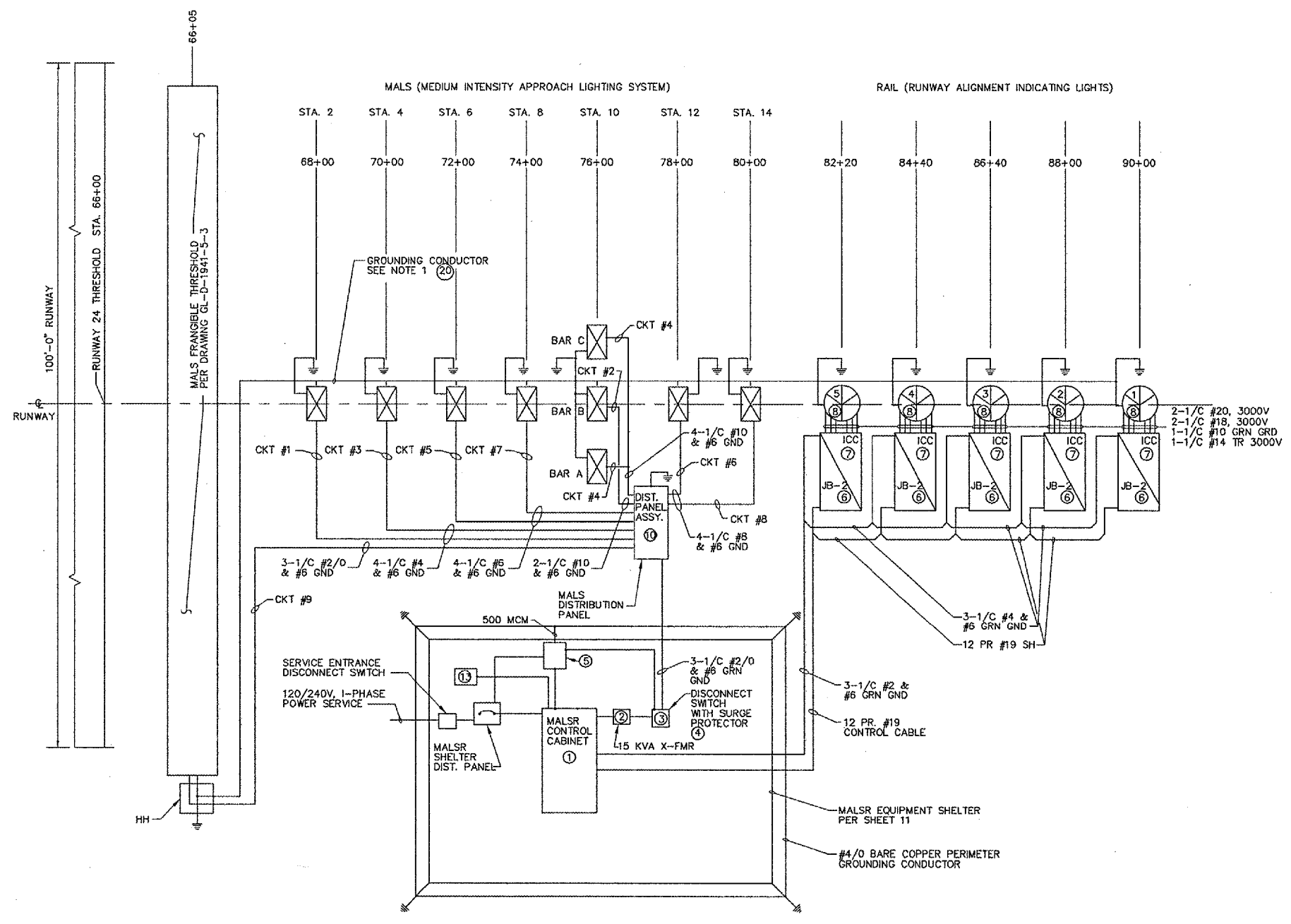
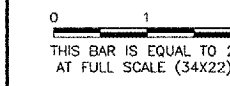


NOTES:

1. THE GROUND CONDUCTOR IS 10" ABOVE AND IN THE SAME TRENCH AS THE POWER CABLES RUNNING FROM STATION TO STATION.
2. AT THE MALSR CONTROL CABINET, ALL UNUSED CONDUCTORS OF THE CONTROL CABLE ARE GROUNDED. ELSEWHERE, ALL CONDUCTORS WHICH ARE NOT USED ARE TURNED BACK AND INSULATED, AND DRESSED FLAT AGAINST THE INTERIOR OF THE JB-2 BOX.
3. THE FLASHERS FIRE IN SEQUENCED TOWARD THE RUNWAY, STARTING AT THE OUTERMOST UNIT. CONTROL TERMINALS 9 (MEDIUM INTENSITY STEP) AND 10 (HIGH INTENSITY STEP) ARE COMMON FOR ALL FLASHERS. EACH FLASHER REQUIRES AN INDIVIDUAL CONDUCTOR FOR THE TRIGGER CIRCUIT. FLASHERS ARE NUMBERED IN FIRING SEQUENCE PER THIS SHEET.
4. THE WIRES RUNNING FROM EACH INDIVIDUAL FLASHER CONTROL CABINET TO THE FLASHER SPADE LUG CONNECTORS ARE THE 1/C, 3000V WIRES WHICH COME WITH THE FLASHER EQUIPMENT. (IF ADDITIONAL WIRE QUANTITIES ARE NEEDED, THE CONTRACTOR SHALL FURNISH THEM. THE WIRES MUST MEET MILITARY SPECIFICATION MIL-76B).
5. CONNECTION IS MADE TO THE TRANSFORMER TAP WHICH GIVES THE VOLTAGE CLOSEST TO 120/240V AT THE MALSR DISTRIBUTION PANEL WHEN LAMPS ARE BURNING AT THE HIGH BRIGHTNESS STEP.
6. THE LUGS OF TBI IN THE JB-2 BOXES AND LUGS 10,11,12, OF 1TBI IN THE MALSR CONTROL CABINET ARE REPLACED WITH LUGS LARGE ENOUGH TO ACCEPT THE CABLES INDICATED.
7. ITEM ③ IS HEAVY DUTY NEMA 1 DISCONNECT SWITCH PER SPECIFICATION FAA-GL-918C, PARAGRAPH 16.A13.
8. POWER DISTRIBUTION PANEL - 100A, 120/240 VAC, 12 POLE, MAIN LUGS ONLY INTERIOR MOUNTED IN 36"x30"x8" NEMA 4 ENCLOSURE. MAIN LUGS ONLY INTERIOR SHALL BE SQUARE D, CLASS 1630, CAT. NO. N00D12L100CU WITH 8 EACH 15A, 1 POLE BOLT-ON BREAKERS, CAT. NO. Q08115, 4 EACH 20A, 1 POLE BOLT-ON BREAKERS, CAT. NO. Q08120, DEAD FRONT TRIM, SOLID NEUTRAL AND GROUND BAR. ENCLOSURE SHALL BE HOFFMAN CAT. NO. A-36H30BLP WITH PANEL CAT. NO. A36P30. CONDUIT HUBS SHALL BE WEATHERTIGHT.
9. NOT USED
10. GROUND PLATE SHALL BE PER SHEET 34.
11. COIL ④ OF 12 PR# 19 CONTROL CABLE INSIDE THE CONTROL BOX ⑭
12. WHERE SPECIFIC MANUFACTURERS OF EQUIPMENT ARE GIVEN, THE CONTRACTOR MAY SUBMIT ALTERNATE EQUIPMENT EQUAL TO THAT PROPOSED FOR CONSIDERATION BY THE ENGINEER.

REVISIONS

| NUMBER | BY | DATE |
|--------|----|------|
| | | |
| | | |
| | | |



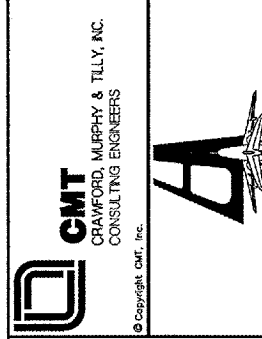
| CABLE LEGEND | | | | | | | | |
|--------------|--------|---|---|---|---|---|---|---|
| FROM STA | TO STA | A | B | C | D | E | F | G |
| 66+05 | 68+00 | 2 | | | | | | 3 |
| 68+00 | 70+00 | 3 | 2 | | | | | 3 |
| 70+00 | 72+00 | 3 | 3 | | | | | 3 |
| 72+00 | 74+00 | 4 | 3 | 2 | | | | 3 |
| 74+00 | 76+00 | 4 | 3 | 3 | | | | 3 |
| 76+00 | 77+23 | 3 | 3 | 3 | 1 | | 3 | 3 |
| 77+23 | 78+00 | | | | | | | |
| 78+00 | 80+00 | 3 | | 3 | 3 | 1 | | 2 |
| P&C STATION | 76+00 | 2 | | | | 3 | 2 | 3 |
| 80+00 | 85+00 | 2 | | | | 3 | 1 | |
| 82+20 | 90+00 | 2 | 3 | | | | | 1 |

A=1/C #6 BARE COPPER GROUNDING CONDUCTOR
 B=1/C #4 TYPE U.S.E. POWER CABLE
 C=1/C #6 TYPE U.S.E. POWER CABLE
 D=1/C #2 TYPE U.S.E. POWER CABLE
 E=12 PR. #19 CONTROL CABLE
 F=1/C #2/0, TYPE U.S.E. POWER CABLE
 G=1/C #8, TYPE U.S.E. POWER CABLE

| SYMBOL | DESCRIPTION |
|--------|--|
| ☒ | LIGHT BAR, 5 EACH, PAR 38, 120 V 120 W MISER |
| ⊙ | SEQUENCED FLASHERS |
| ⚡ | GROUND ROD |

TYPICAL MALSR WIRING SHOWN. ACTUAL CONFIGURATION AND CONNECTIONS MAY VARY ACCORDING TO SPECIFIC EQUIPMENT MANUFACTURER'S REQUIREMENTS.

**FREEPORT - ALBERTUS AIRPORT
 FREEPORT, ILLINOIS**
 ILLINOIS PROJECT: FEP-3132 / A.I.P. PROJECT: 3-17-0045-B16
**MALSR SYSTEM WIRING DIAGRAM
 SHEET 1**



| | |
|--------------|----------|
| DESIGN BY: | CMT |
| DRAWN BY: | CMT |
| CHECKED BY: | |
| APPROVED BY: | |
| DATE: | 06/17/05 |
| JOB No: | 02294-08 |