

DATE	REVISION

QUINCY REGIONAL AIRPORT
BALDWIN FIELD
ADAMS COUNTY, ILLINOIS

QUINCY Regional Airport
Baldwin Field
Adams County, Illinois

IL PROJ.: UIN-3618 A.I.P. PROJ.: 3-17-0085-XX

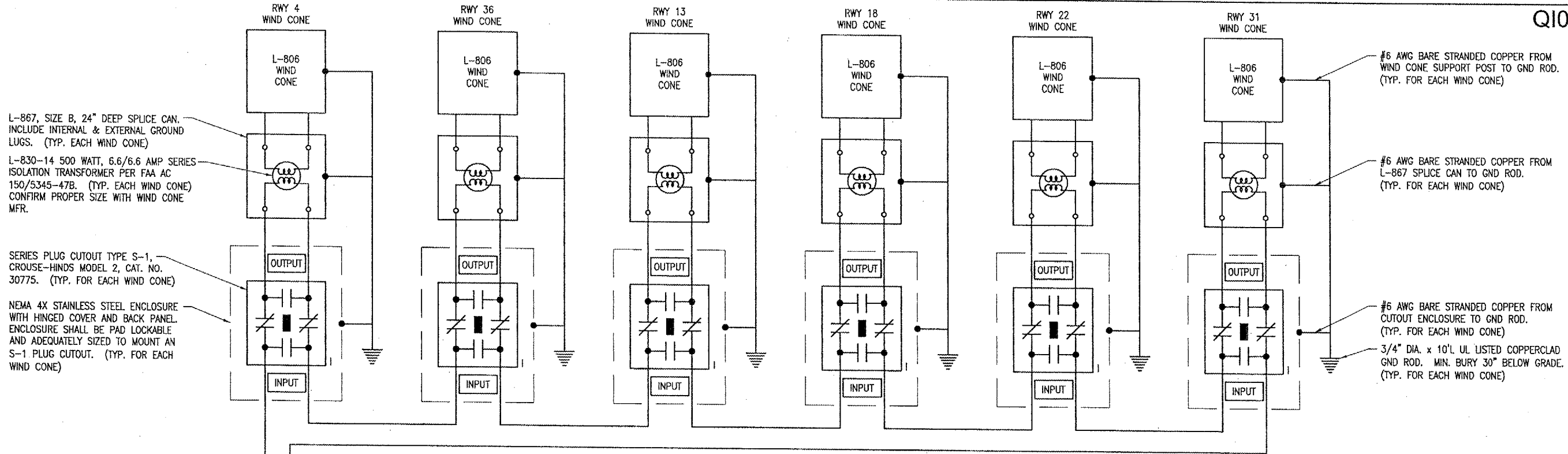
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HANSON

Hanson Professional Services Inc.
1525 South Sixth Street
Springfield, Illinois 62703-2886
Offices Nationwide

INSTALL
WIND CONES

PROPOSED
HIGH VOLTAGE
WIRING SCHEMATIC



L-867, SIZE B, 24" DEEP SPLICE CAN. INCLUDE INTERNAL & EXTERNAL GROUND LUGS. (TYP. EACH WIND CONE)

L-830-14 500 WATT, 6.6/6.6 AMP SERIES ISOLATION TRANSFORMER PER FAA AC 150/5345-47B. (TYP. EACH WIND CONE) CONFIRM PROPER SIZE WITH WIND CONE MFR.

SERIES PLUG CUTOUIT TYPE S-1, CROUSE-HINDS MODEL 2, CAT. NO. 30775. (TYP. FOR EACH WIND CONE)

NEMA 4X STAINLESS STEEL ENCLOSURE WITH HINGED COVER AND BACK PANEL. ENCLOSURE SHALL BE PAD LOCKABLE AND ADEQUATELY SIZED TO MOUNT AN S-1 PLUG CUTOUIT. (TYP. FOR EACH WIND CONE)

#6 AWG BARE STRANDED COPPER FROM WIND CONE SUPPORT POST TO GND ROD. (TYP. FOR EACH WIND CONE)

#6 AWG BARE STRANDED COPPER FROM L-867 SPLICE CAN TO GND ROD. (TYP. FOR EACH WIND CONE)

#6 AWG BARE STRANDED COPPER FROM CUTOUIT ENCLOSURE TO GND ROD. (TYP. FOR EACH WIND CONE)

3/4" DIA. x 10'L UL LISTED COPPERCLAD GND ROD. MIN. BURY 30" BELOW GRADE. (TYP. FOR EACH WIND CONE)

#8 AWG FAA L-824 TYPE C, 5000V CABLE (TYP.)

NEMA 1 OR NEMA 12 ENCLOSURE WITH HINGED COVER AND BACK PANEL. ENCLOSURE SHALL BE PAD LOCKABLE AND ADEQUATELY SIZED FOR EQUIPMENT AND TO MOUNT TWO TYPE S-1 PLUG CUTOUIT ADJACENT TO EACH OTHER. S1-A CUTOUIT SHALL BE WIRED AS A LOAD DISCONNECT SWITCH THAT WILL DISCONNECT THE LOAD AND SHORT THE CCR OUTPUT WHEN THE PLUG/HANDLE IS REMOVED. S1-B CUTOUIT SHALL BE WIRED AS AN INTENTIONAL GROUNDING SWITCH THAT WILL GROUND ONE SIDE OF THE SERIES CIRCUIT LOOP WHEN THE PLUG/HANDLE IS REMOVED.

SERIES PLUG CUTOUIT TYPE S-1, CROUSE-HINDS CAT. NO. 30775, OR APPROVED EQUAL (HANDLE/PLUG INSERTED) TYP. FOR 2

#8 AWG FAA L-824 TYPE C, 5000V CABLE IN CONDUIT AND/OR WIREWAY. PROVIDE 1" LIQUID TIGHT FLEX METAL CONDUIT AT CONNECTION TO REGULATOR

L-861 30W QUARTZ FIXTURE WITH RED LENS. MOUNT TO TOP OF ENCLOSURE

L-830 30/45W SERIES ISOLATION TRANSFORMER PER FAA AC 150/5345-47A OR 150/5345-47B. INSTALL IN BOTTOM OF ENCLOSURE

LEGEND PLATE

#8 AWG FAA L-824 TYPE C, 5000V, JUMPER

#6 AWG CU

VAULT GND BUS

#8 AWG FAA L-824 TYPE C, 5000V GND CABLE IN 1" SCHED 40 PVC CONDUIT

VAULT GND BUS

NOTES

1. PROVIDE PHENOLIC ENGRAVED LEGEND PLATES FOR CONSTANT CURRENT REGULATOR NOTING THE REGULATOR DESIGNATION, L-806 WIND CONES SERVED AND THE POWER SOURCE AND CIRCUIT NUMBER.
2. PLUG CUTOUIT CABINET SHALL BE FURNISHED WITH A PHENOLIC ENGRAVED LEGEND PLATE THAT IDENTIFIES THE RESPECTIVE CIRCUIT OR REGULATOR AND THE VOLTAGE SYSTEM (5000 VOLTS). INCLUDE AN ADDITIONAL LEGEND PLATE LABELED "CAUTION OPERATE CUTOUIT WITH CCR SHUT OFF".
3. PROVIDE PHENOLIC ENGRAVED LEGEND PLATES FOR EACH CUTOUIT TO IDENTIFY THE FUNCTION OF EACH RESPECTIVE CUTOUIT.
4. PROVIDE ADEQUATE WORKING SPACE IN FRONT OF EACH CUTOUIT ENCLOSURE TO MEET NEC CLEARANCE REQUIREMENTS.
5. CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD.
6. HIGH VOLTAGE CABLE SPLICES SHALL BE IN L-867 SPLICE CANS OR CUTOUIT ENCLOSURES.
7. LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE U.L. LISTED TO MEET THE REQUIREMENTS OF NEC 350.6, SUITABLE FOR GROUNDING AND SUNLIGHT RESISTANT. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO CCR'S & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60. EXTERNAL BONDING JUMPERS USED WITH CCR INSTALLATIONS SHALL BE #6 AWG COPPER (MINIMUM). DO NOT INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS NOT U.L. LISTED.

LEGEND

- "I" DENOTES PLUG CUTOUIT WITH PLUG INSERTED
- "P" DENOTES PLUG CUTOUIT WITH PLUG PULLED
- "CCR" DENOTES CONSTANT CURRENT REGULATOR

HIGH VOLTAGE WIRING SCHEMATIC