



4#400 MCM AND 1#1/0 IN EACH 4' CONDUIT FROM CT CABINET

SERVICE ENTRANCE 2-4' CONDUITS FROM POWER POLE TO CT CABINET. CONDUITS MINIMUM OF 30" BELOW GRADE

FUTURE LOCATION OF FUTURE TRANSFER SWITCH

600 AMP, 3 POLE, FUSED DISCONNECT SWITCH, NEMA 1 ENCLOSURE

4'X4' WIREWAY FROM DISC. SW. TO 120/240 VOLT, 3 PHASE, 4 WIRE POWER PANEL WITH 8#400 MCM AND 2#1/0 1/C, 600 VOLT WIRES

3#4/0 AND 1#2, DIRECT BURIAL WIRES TO MAINTENANCE BUILDING EXISTING SINGLE PHASE PWR. PANEL. SEE SHEET E-6 FOR CONTINUATION

4'X4' L.V.W. AT CEILING DROP TO TOP OF 600 AMP PANEL WITH 4#2, AND 4#6 1/C, 600V WIRES

BARE CU#1/0 TO PWR. PNL. GROUND BUS-DIRECT BURY

2' CONDUIT WITH 12#12 AND 6#8, 1/C, 600V WIRES FOR BEACON, WIND TEE, POLE LTS., RADIO CONTROL, PHOTO CELLS, AND CONTROL POWER

GROUND FIELD WITH 3-5/8" DIA X 10' COPPERWELD RODS TIED TOGETHER WITH BARE CU#1/0 WIRE AND EXTENDED TO PWR. PNL. TOP OF RODS 1' BELOW GRADE. ROD TO WIRE CONNECTIONS TO BE ONE SHOT THERMOWELD.

RADIO RECEIVER ABOVE INTERFACE CAB. 6#12, 1/C, 600V WIRES IN 1' CONDUIT SEE THIS SHEET FOR WIRING DETAILS

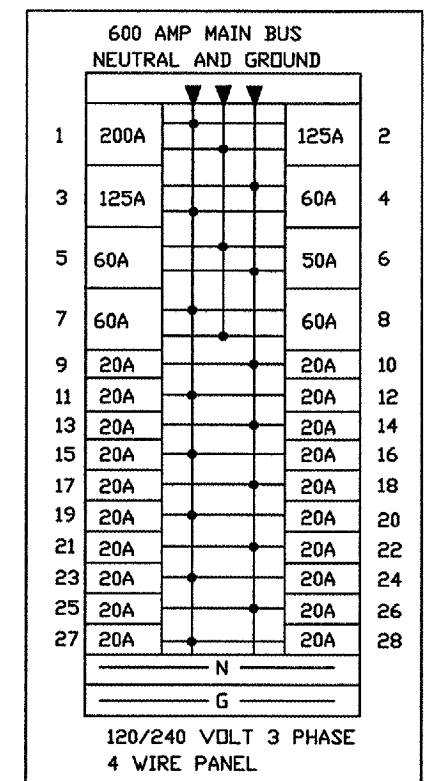
30 AMPERE, 2 POLE CONTACTORS WITH 120 VOLT COIL FOR BEACON, WIND TEE AND POLE LIGHT CONTROL. 2#8 AND 3#12 WIRES IN 1' CONDUIT FROM EACH CONTACTOR TO INTERFACE PANEL. SEE THIS SHEET FOR WIRING DETAILS.

4'X4' LOW VOLTAGE WIREWAY (L.V.W.) WITH 4#6, 6#8 AND 4#2 WIRES

4'X4' CONTROL WIREWAY (C.W.) WITH 6#12 WIRES, 1/C, 600V

BARE CU #1/0 FROM GROUND BUS IN POWER PANEL TO VAULT GROUND BUS

CKT.NO.	DESCRIPTION
1	MAINTENANCE BUILDING
2	RUNWAY 3-21 REGULATOR
3	TAXIWAY CIRCUIT NO. 1
4	RUNWAY 10-28 REGULATOR
5	TAXIWAY CIRCUIT NO. 2
6	UNIT HEATER
7	SPARE
8	SPARE
9	BEACON-GFI TYPE BREAKER
10	WIND TEE-GFI TYPE BREAKER
11	APRON POLE LIGHTS-GFI TY. BKR.
12	RADIO CONTROLLER
13	PHOTOCELLS
14	CONTROL POWER
15	CONTROL POWER
16	ROOM LIGHTS
17	ROOM LIGHTS
18	ROOM RECEPTACLES
19	ROOM RECEPTACLES
20	EXHAUST FAN AND INTAKE LOUVER
21-28	SPARES



POWER PANEL DETAIL
NO SCALE

NOTE: SEE SHEET E-2 FOR VAULT LIGHTING AND RECEPTACLE DETAILS.

NOTE: PROVIDE 1/8"X3/4" GROUND BUS FROM DOOR AROUND TO BEHIND REGULATORS UNDER C.W. UP TO HI-VOLTAGE JUNCTION BOX. GROUND 20 KW REGULATORS WITH BARE CU#4 WIRE AND GROUND 7.5 KW REGULATORS WITH BARE CU#8 WIRE FROM REGULATORS TO GROUND BUS.

17' - 4"

1/8"X3/4" COPPER VAULT GROUND BUS EXTENDING TO DOOR OPENING

30"X30"X12" NEMA 4 JUNCTION BOX FOR FIELD LIGHTING AND WIND TEE CABLES

4' CONDUIT 2' BELOW GRADE WITH 10#8, 1/C, 5KV CABLES FOR FIELD LIGHTING AND WIND TEE CABLES
SPARE 4' CONDUIT

4#12 IN C.W.
2#6 AND 6#8 IN L.V.W.
6#8 IN H.V.W.

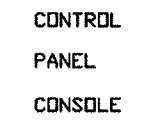
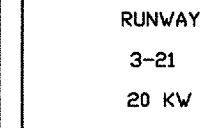
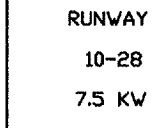
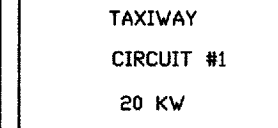
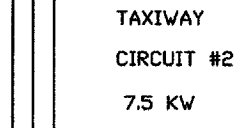
8#12 IN C.W.
2#6, 6#8 AND
2#2 IN L.V.W.
4#8 IN H.V.W.

12#12 IN C.W.
4#6, 6#8 AND
2#2 IN L.V.W.
2#8 IN H.V.W.

18#12 IN C.W.
4#6, 6#8 AND
4#2 IN L.V.W.

1/8"X3/4" COPPER VAULT GROUND BUS

4'X4' HIGH VOLTAGE WIREWAY WITH 10#8, 1/C, 5KV CABLES FOR FIELD LIGHTING AND WIND TEE CABLES



3' CONDUIT STUB 2' BELOW GRADE FOR BEACON AND POLE LIGHT WIRES 4#8, 1/C, 5KV

4' - 6"

4'X4' C.W.

4'X4' L.V.W.

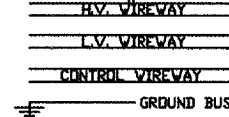
4'X4' H.V.W.

4'X4' HIGH VOLTAGE WIREWAY (H.V.W.)

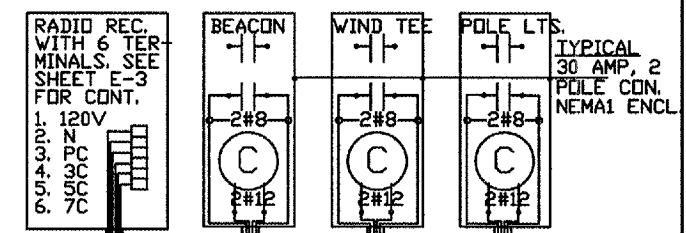
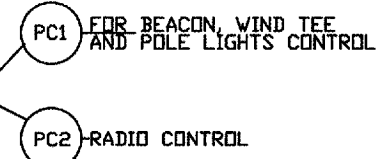
21' - 4"

SERIES CUTOUT IN CABINET- 1 FOR EACH REGULATOR CIRCUIT

SERIES CUTOUT IN NEMA 1 CABINET WITH HINGED COVER INSTALLED ABOVE H.V. WIREWAY (TYPICAL FOR EACH REGULATOR)



TYPICAL ARRANGEMENT OF WIREWAYS ON WALL



TOP OF INTERFACE CABINET SEE SHEET E-3 FOR CONTINUATION

RADIO REC., BEACON, WIND TEE AND APRON POLE LIGHTS CONTACTORS AND WIRING DETAILS

NOTES:
1. ALL CONTROL WIRING SHALL BE NO. 12 AWG MINIMUM.
2. ALL WIRING BETWEEN THE REGULATORS AND THE WIREWAYS SHALL BE INSTALLED IN FLEXIBLE METAL CONDUIT.



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SHEET NO.
E-1
OF 6 SHEETS

GALESBURG MUNICIPAL AIRPORT
GALESBURG, ILLINOIS

VAULT POWER DETAILS

HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

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