

120/240 VAC, 1 PH, 3W  
ELECTRIC UTILITY SERVICE  
FROM EXISTING UTILITY  
PAD MOUNT XFMR

UTILITYMETER BASE PER  
SERVING ELECTRIC UTILITY  
COMPANY REQUIREMENTS

2 #6 THWN, 1 #6 NEUTRAL,  
1 #6 GND IN 1.25" GRSC  
NIPPLE

2 #10 THWN, 1 #10 NEUTRAL,  
1 #10 GND IN 1" GRSC NIPPLE

2 #10 THWN, 1 #10 NEUTRAL,  
1 #10 GND IN 3/4" LTFMC

250 VA, 120 VAC TO 132 VAC  
BOOST TRANSFORMER FOR RWY  
30 WIND CONE

CONTRACTOR SHALL FURNISH & INSTALL  
2" SCHED 40 PVC CONDUIT OR 2"  
GRSC WITH GRSC ELBOWS FROM METER  
BASE TO PAD MOUNT TRANSFORMER.  
SERVICE CONDUCTORS WILL BE  
FURNISHED & INSTALLED BY THE  
ELECTRIC UTILITY COMPANY.  
COORDINATE CONDUIT ENTRY TO PAD  
MOUNT TRANSFORMER WITH THE  
SERVING ELECTRIC UTILITY COMPANY.

30 AMP, 2 POLE WITH SOLID NEUTRAL,  
240 VAC HEAVY DUTY FUSIBLE SAFETY  
SWITCH IN A NEMA 4 STAINLESS STEEL  
ENCLOSURE UL LISTED SUITABLE FOR  
SERVICE ENTRANCE, SQUARE D CLASS  
3110, CAT. NO. H221DS WITH NEUTRAL  
KIT & GROUND BAR, OR APPROVED  
EQUAL. PROVIDE 2-20 AMP UL LISTED  
CLASS RK5 FUSES AS MANUFACTURED  
BY BUSSMANN. INCLUDE 2 SPARE  
FUSES OF SAME SIZE & TYPE.

BONDING JUMPER

#6 BARE STRANDED COPPER GROUNDING  
ELECTRODE CONDUCTOR. INSTALL IN 1"  
SCHED 40 PVC FROM SAFETY SWITCH TO  
1' BELOW GRADE. CONNECT TO GND  
ROD WITH EXOTHERMIC WELD

3/4" DIA x 10'L UL LISTED  
COPPERCLAD GND ROD. MIN.  
BURY 30" BELOW GRADE.

3-1/C #6 XLP-USE 600V  
UG CABLE IN UNIT DUCT  
(ITEM AR108656)

L-867, SIZE B, 24" DEEP SPLICE  
CAN WITH INTERNAL & EXTERNAL  
GROUND STRAPS & 3/4" THICK  
STEEL COVER PLATE

#6 BARE STRANDED  
COPPER FROM SPLICE CAN  
TO GROUND ROD.

#6 BARE STRANDED COPPER FROM WIND  
CONE SUPPORT POLE TO GROUND ROD.  
PROVIDE UL LISTED PIPE CLAMP FOR  
CONNECTION TO POLE. CONNECTION TO  
GND ROD SHALL BE EXOTHERMIC WELD.

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BURY 30" BELOW GRADE.

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### ELECTRICAL ONE LINE DIAGRAM FOR RUNWAY 24 & RUNWAY 30 WIND CONES

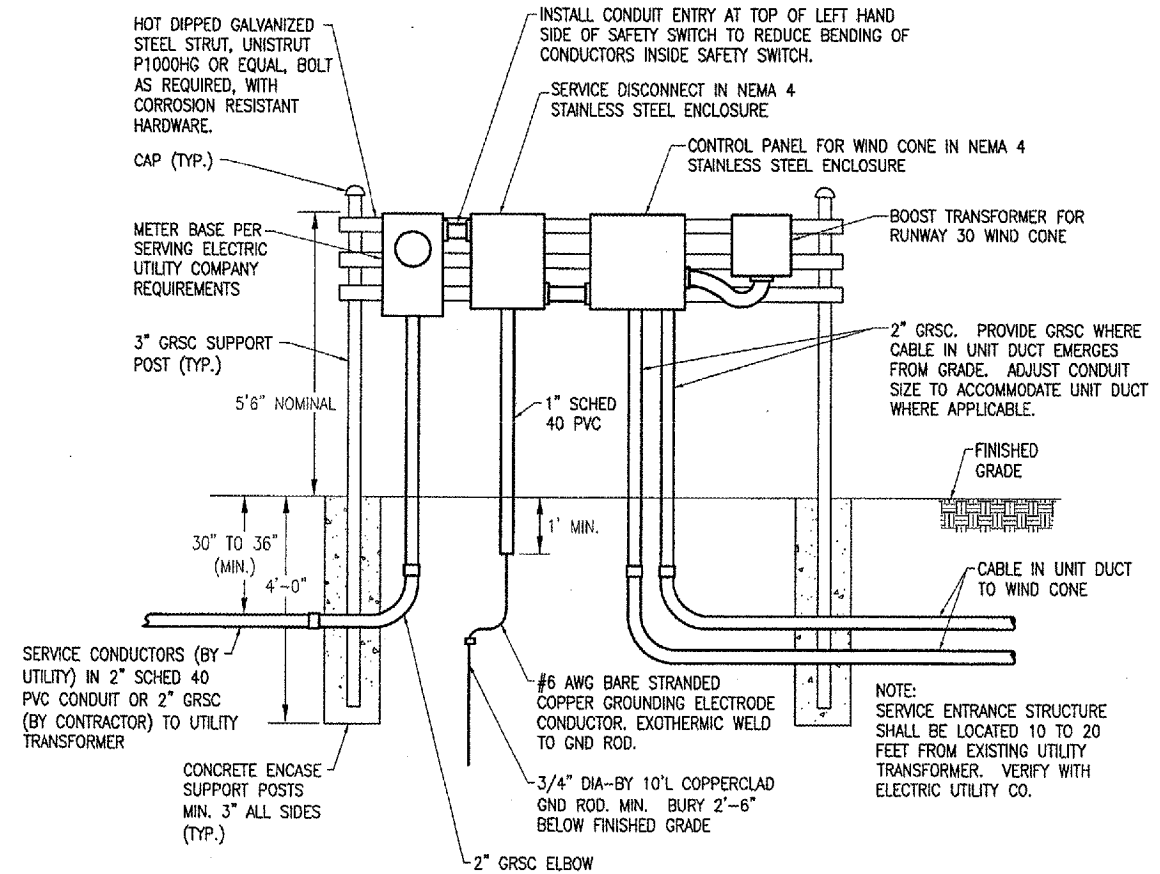
#### ELECTRICAL NOTES

DE265

- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA70 (MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE AIRPORT DIRECTOR, AND THE RESIDENT ENGINEER.
- CONTRACTOR SHALL COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY (AMEREN IP, 2460 NORTH JASPER STREET, DECATUR, IL 62526, ATTN. MS. TAMMY HAUGERUD, H-15, PHONE: 217-412-6455) & THE AIRPORT DIRECTOR. NOTE THE NEW SERVICES FOR THE WINDCONES ARE TO BE OBTAINED FROM EXISTING UTILITY TRANSFORMERS THAT SERVE FAA FACILITIES AND EQUIPMENT. ARRANGE WITH THE AIRPORT DIRECTOR TO CONTACT THE RESPECTIVE FAA PERSONNEL AND NOTIFY THEM OF ANY SCHEDULED POWER OUTAGES.
- ALL EQUIPMENT NOT LABELED AS EXISTING IS NEW.
- PROVIDE NEMA 4 HUBS FOR ALL CONDUIT ENTRIES INTO NEMA 4 RATED ENCLOSURES.
- ALL CONDUCTORS/WIRING SHALL BE COPPER.
- ELECTRIC SERVICE & WIND CONE CONTROL WORK SHALL BE PAID FOR UNDER THE FOLLOWING:  
AR800580 "ELECTRICAL SERVICE FOR RWY 24 & RWY 30 WIND CONES" PER LUMP SUM
- WIND CONES SHALL BE PAID FOR UNDER AR107408.
- CABLE IN UNIT DUCT SHALL HAVE COLOR CODED INSULATION AS FOLLOWS:

#### 120 VAC CIRCUITS

PHASE A      BLACK  
PHASE B      RED OR BLACK WITH RED TAPE  
NEUTRAL      WHITE  
GROUND      GREEN



### SERVICE ENTRANCE ELEVATION

NOT TO SCALE

BY	
REVISION	
DATE	

DECATUR, ILLINOIS

Proj. No.	802-041XXD
File Name	E-601.DWG
Scale	AS SHOWN
Date	XX/XX/XX
LAYOUT	KNL 04/22/05
DRAWN	MY 04/25/05
REVIEWED	CAH 06/07/05

**HANSON**  
Engineers, Architects, Scientists  
1826 South Sixth Street  
Springfield, Illinois 62703-2888  
Offices Nationwide

TAXIWAY G WIDENING  
PHASE II  
ELECTRICAL ONE LINE  
DIAGRAM FOR RUNWAY 24  
& RUNWAY 30 WIND CONES