

LOCATE GND ROD NOT LESS THAN 10 FEET APART FROM OTHER GND RODS

3/4" x 10' UL LISTED COPPER CLAD GROUND ROD, MIN. BURY 30" BELOW FINISHED GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE EXOTHERMIC WELD

SMOOTH FORMED CONCRETE PIER 12" DIA. BY 36" DEEP. CONCRETE SHALL BE PER ITEM 610.

30A, 3P WITH S/N, 600 VAC HEAVY DUTY SAFETY SWITCH IN A NEMA 3R AND 12 ENCLOSURE

HOT DIPPED GALVANIZED STRUT, UNISTRUT P1000HG OR APPROVED EQUAL BOLT AS REQUIRED WITH CORROSION RESISTANT HARDWARE

2" GRSC SUPPORT POST. ADJUST HEIGHT SUCH THAT THE SUPPORT POST DOES NOT EXTEND MORE THAN 4' ABOVE FINISHED GRADE.

1" SCHED 40 PVC
FRANGIBLE COUPLING WITH FLOOR FLANGE MOUNT FOR 2" POST. COORDINATE ANCHOR BOLTS INTO FOUNDATION

FRANGIBLE COUPLINGS WITHIN 1" OF FINISHED GRADE (TYP.)

R.E.I.L. (MASTER UNIT)

3/8" THICK STEEL BASE PLATE WITH 2" NPT HOLE COMPATIBLE WITH THE RESPECTIVE REIL MFR

SMOOTH TROWEL FINISH (SLOPE TO DRAIN)

#6 AWG SOLID COPPER CONDUCTOR (COUNTERPOISE/SHIELD) INSTALL APPROX 10" ABOVE POWER & CONTROL CONDUCTORS

R.E.I.L. (SLAVE UNIT)

2" GRSC (TYP.)

INTERNAL GROUND STRAP/LUG ON BASE CAN (TYP.)

L-867, CLASS 1A, SIZE D, 24" BASE

610 CONCRETE 4" MIN. THICK

3" SCHED 40 PVC

1 #8 USE, 1 #8 NEUTRAL IN 1" SCHED 40 PVC OR UNIT DUCT FROM RESPECTIVE SPLICE CAN

1 #8 USE, 1 #8 NEUTRAL, 1 #8 GND IN 1" SCHED 40 PVC

#6 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR

#6 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR CONTINUOUS FROM REIL ENCLOSURE FRAME TO GND ROD

3/4" x 10' UL LISTED COPPER CLAD GROUND ROD, MIN. BURY 30" BELOW FINISHED GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE EXOTHERMIC WELD

GRSC TO PVC ADAPTER

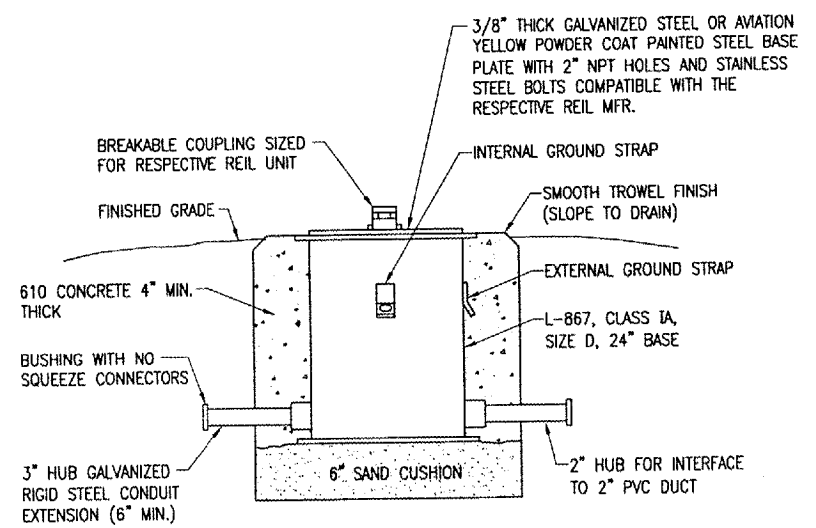
POWER & CONTROL WIRING BETWEEN REIL UNITS IN 2" SCHED 40 PVC CONDUIT (INCIDENTAL TO ITEM AR125967)

SPLICE #6 AWG CU & CONNECT TO INTERNAL GROUND LUG WITH UL LISTED BOLTED GROUND CONNECTOR (TYP.)

GRSC TO PVC ADAPTER AT HUB CONNECTION

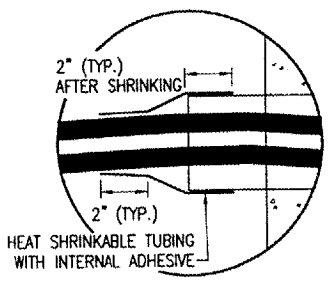
3/4" x 10' UL LISTED COPPER CLAD GROUND ROD, MIN. BURY 30" BELOW FINISHED GRADE. ALL CONNECTIONS TO GROUND ROD SHALL BE EXOTHERMIC WELD

REIL INSTALLATION DETAIL
NOT TO SCALE



REIL BASE DETAIL
(NOT TO SCALE)

NOTE:
FOR THE PURPOSE OF ENHANCING SAFETY, EACH BASE MUST HAVE INSTALLED, BY THE MANUFACTURER, AN INTERNAL AND EXTERNAL GROUND STRAP THAT IS AVAILABLE FOR THE PURPOSE OF ATTACHING A GROUND LUG THAT IS CONNECTED TO AN EARTH GROUND OR A SAFETY GROUND CONDUCTOR INSTALLED WITH THE RESPECTIVE CIRCUIT. FOR AIRPORT PROJECTS RECEIVING FEDERAL FUNDS THIS REQUIREMENT IS MANDATORY PER FAA AC 150/5345-42F.



SHRINK TUBE DETAIL
(NOT TO SCALE)

REIL RELOCATION NOTES

1. THE EXISTING REILS ARE GODFREY ENGINEERING PART NO. GE420-100F. THE MANUFACTURER IS NO LONGER IN BUSINESS. CONTRACTOR SHALL CONFIRM & RECORD EXISTING WIRING & CONNECTIONS PRIOR TO RELOCATING REIL UNITS. VERIFY INSTALLATION & WIRING REQUIREMENTS WITH THE RESPECTIVE REIL MANUFACTURER'S INSTRUCTIONS.
2. THE PROPOSED 120 VAC POWER CABLES FROM THE EXISTING SPLICE CAN TO THE SAFETY SWITCH AT THE MASTER REIL UNIT SHALL BE 2-1/C #8 XLP-USE 600V UG CABLE (HOT & NEUTRAL) IN 1" UNIT DUCT OR SCHED 40 PVC CONDUIT. THE PROPOSED 120 VAC POWER CABLES FROM THE SAFETY SWITCH TO THE REIL MASTER UNIT SHALL BE 3-1/C #8 XLP-USE 600V UG CABLE (HOT, NEUTRAL, & GND) IN 1" SCHED 40 PVC CONDUIT. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL THE POWER AND CONTROL CABLES BETWEEN THE MASTER AND SLAVE REIL UNITS. THE SIZE, TYPE AND NUMBER OF CABLES TO BE INSTALLED BETWEEN THE REIL UNITS SHALL BE AS DETAILED HEREIN AND PER THE MANUFACTURER'S RECOMMENDATIONS. THE CABLE WILL BE TRENCHED AT A MINIMUM DEPTH OF 18". ALL POWER, CONTROL, & GROUNDING CONDUCTORS WILL BE INCIDENTAL TO ITEM AR125967 RELOCATE REILS.
3. ANY AND ALL TRENCHES AND DISTURBED AREAS WILL BE BACKFILLED AND RESTORED TO A SMOOTH GRADE AND SEEDDED TO THE SATISFACTION OF THE ENGINEER. ALL TRENCH SETTLEMENT SHALL BE CORRECTED FOR A PERIOD OF ONE YEAR. RESTORATION, GRADING, AND SEEDING OF AREAS DISTURBED DURING THE REIL RELOCATION AND INSTALLATION OF THE PROPOSED CABLE WILL BE INCIDENTAL TO ITEM AR125967 RELOCATE REILS.
4. SAFETY SWITCH FOR REILS SHALL BE LOCATED OUTSIDE OF THE RUNWAY SAFETY AREA (80' MIN. PERPENDICULAR FROM RUNWAY PAVEMENT EDGE).
5. REILS SHALL BE AIMED AT ANGLE 10 DEGREES VERTICALLY AND TOED OUT 15 DEGREES FROM THE LINE PARALLEL TO THE RUNWAY CENTERLINE.
6. RELOCATION OF REILS SHALL BE PAID FOR UNDER ITEM AR125967 RELOCATE REILS - PER PAIR.

REVISION	DATE

CARMI MUNICIPAL AIRPORT
CARMI, ILLINOIS

IL PROJ.: CUL-3683 A.I.P. PROJ.: 3-17-0109-B7

REVISION	DATE

HANSON

Hanson Professional Services Inc.
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Springfield, Illinois 62703-2886
Offices Nationwide

EXTEND PARTIAL
PARALLEL TAXIWAY

REIL
INSTALLATION
DETAILS

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