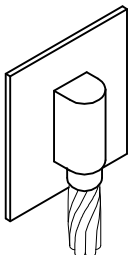


CABLE TO GROUND ROD



CABLE TO SURFACE

DETAIL NOTES

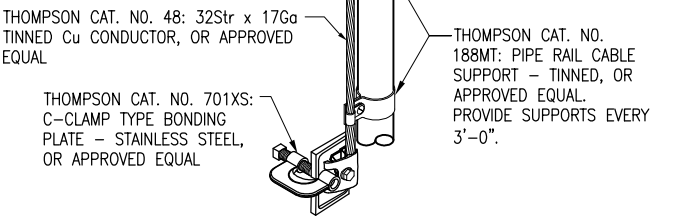
- EXOTHERMIC WELDS SHALL BE CADWELD AS MANUFACTURED BY ERICO PRODUCTS, SOLON, OHIO, ULTRAWELD AS MANUFACTURED BY HARGER LIGHTNING PROTECTION & GROUNDING EQUIPMENT, GRAYSLAKE, IL, THERMOWELD AS MANUFACTURED BY CONTINENTAL INDUSTRIES, TULSA, OKLAHOMA OR APPROVED EQUAL. VERIFY PROPER SIZES, MOLDS, TYPES, AND REQUIREMENTS FOR THE RESPECTIVE APPLICATION WITH THE MANUFACTURER, AND INSTALL PER THEIR DIRECTIONS.
- FOR APPLICATIONS TO GALVANIZED STEEL OR PAINTED STEEL, REMOVE GALVANIZING AND/OR PAINT & CLEAN THE SURFACE TO EXPOSE BARE STEEL BEFORE MAKING EXOTHERMIC WELD CONNECTION.
- VERIFY EXOTHERMIC MOLDS ARE SUITABLE FOR USE WITH THE RESPECTIVE TYPE (SOLID OR STRANDED) & SIZE CONDUCTOR.

EXOTHERMIC WELD DETAILS

NOT TO SCALE

THOMPSON CAT. NO. 48: 32Str x 17Ga TINNED Cu CONDUCTOR, OR APPROVED EQUAL

THOMPSON CAT. NO. 701XS: C-CLAMP TYPE BONDING PLATE - STAINLESS STEEL, OR APPROVED EQUAL

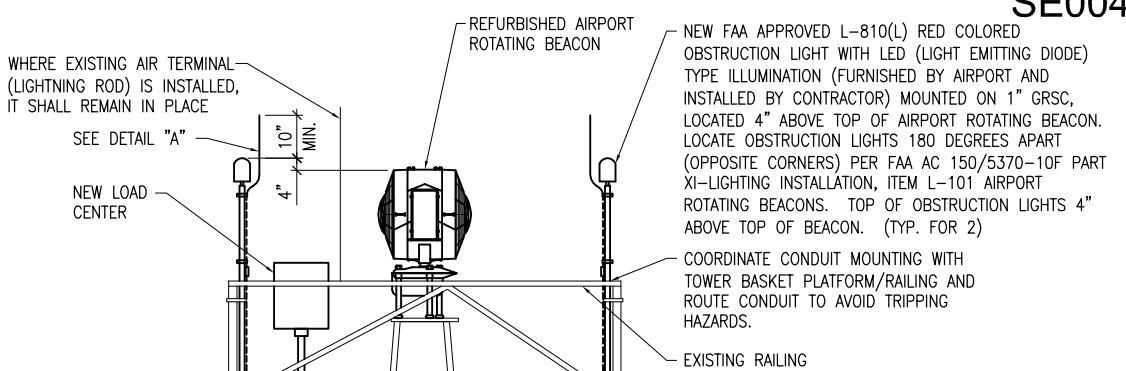


DETAIL A

NOT TO SCALE

NOTES

- REFERENCES TO THOMPSON ARE THOMPSON LIGHTNING PROTECTION INC., 901 SIBLEY MEMORIAL HWY, ST. PAUL, MN 55188, PHONE: 651-455-7661, 800-777-1230, FAX: 651-455-2545.
- VERIFY LIGHTNING PROTECTION COMPONENTS AND CATALOG NUMBERS WITH THE RESPECTIVE LIGHTNING PROTECTION EQUIPMENT MANUFACTURER.
- CLEAN ALL CONNECTIONS TO EXPOSE BARE METAL.

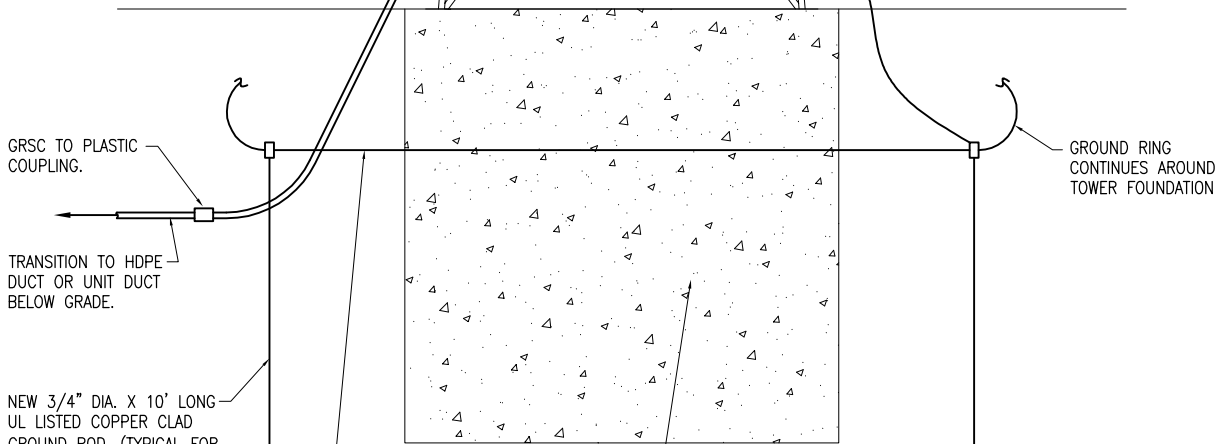


EXISTING BASKET PLATFORM
LIQUID-TIGHT FLEXIBLE METAL CONDUIT. REPLACE EXISTING CONDUIT WITH NEW CONDUIT.
J-BOX OR CONDUIT FITTING

REFURBISHED AIRPORT ROTATING BEACON
NEW FAA APPROVED L-810(L) RED COLORED OBSTRUCTION LIGHT WITH LED (LIGHT EMITTING DIODE) TYPE ILLUMINATION (FURNISHED BY AIRPORT AND INSTALLED BY CONTRACTOR) MOUNTED ON 1" GRSC, LOCATED 4" ABOVE TOP OF AIRPORT ROTATING BEACON. LOCATE OBSTRUCTION LIGHTS 180 DEGREES APART (OPPOSITE CORNERS) PER FAA AC 150/5370-10F PART XI-LIGHTING INSTALLATION, ITEM L-101 AIRPORT ROTATING BEACONS. TOP OF OBSTRUCTION LIGHTS 4" ABOVE TOP OF BEACON. (TYP. FOR 2)
COORDINATE CONDUIT MOUNTING WITH TOWER BASKET PLATFORM/RAILING AND ROUTE CONDUIT TO AVOID TRIPPING HAZARDS.
EXISTING RAILING

2#8 XLP-USE
1#8 NEUTRAL
1#8 GND
IN 1.25" GRSC FROM VAULT TO BEACON LOAD CENTER.

#1/0 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR. BOND TO TOWER FRAME AT OPPOSITE CORNERS (2 LOCATIONS) WITH EXOTHERMIC WELD



GRSC TO PLASTIC COUPLING.

TRANSITION TO HDPE DUCT OR UNIT DUCT BELOW GRADE.

NEW 3/4" DIA. X 10' LONG UL LISTED COPPER CLAD GROUND ROD. (TYPICAL FOR 4) LOCATE GROUND RODS AT EACH CORNER OF TOWER FOUNDATION. GROUND RODS SHALL NOT BE SPACED LESS THAN 10 FEET APART.

#1/0 BARE CU GROUND RING 30" MIN. BELOW GRADE.

EXISTING TOWER FOUNDATION

LIGHTNING PROTECTION DETAIL FOR AIRPORT ROTATING BEACON

NOT TO SCALE

AIRPORT ROTATING BEACON LOAD CENTER SCHEDULE

CKT #	DUTY	SIZE	SIZE	DUTY	CKT #
1	BLANK		30A 1P	SURGE PROTECTOR (PHASE A)	2
3	BLANK		30A 1P	SURGE PROTECTOR (PHASE B)	4
5	AIRPORT ROTATING BEACON	15A 1P		BLANK	6
7	OBSTRUCTION LIGHTS	15A 1P		BLANK	8
9	BLANK			BLANK	10
11	BLANK			BLANK	12



100 AMP, 120/240 VAC, 1 PHASE, 3 WIRE, 12 CIRCUIT LOAD CENTER WITH MAIN LUGS IN A NEMA 3R RAIN PROOF ENCLOSURE, SQUARE D CAT. NO. Q0112L125GRB WITH EQUIPMENT GROUND BAR KIT OR APPROVED EQUAL. CONFIRM LOAD CENTER IS MADE IN THE USA TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN REQUIREMENT.

NOTES

- INCLUDE EQUIPT GROUND BAR KIT.
- ALL BREAKERS SHALL HAVE 10,000 AIC RATING AT 120/240 VAC.
- PHASE "A" SHALL BE SWITCHED THROUGH A LIGHTING CONTACTOR AT THE VAULT. PHASE "B" SHALL BE UNSWITCHED.
- INCLUDE ENGRAVED PHENOLIC LEGEND PLATE LABELED ARB PANEL, 120/240 VAC, 1PH, 3W, FED FROM VAULT.
- SURGE PROTECTORS SHALL BE SUITABLE FOR 120VAC, 1PH, 2W PLUS GROUND, 30KA (MINIMUM) SURGE CURRENT RATING, JOSLYN MODEL 1260-21 OR LIGHTING PROTECTION CORP. MODEL LPC 11765-132, OR APPROVED EQUAL. FURNISH & INSTALL TWO SURGE PROTECTORS (ONE FOR EACH PHASE).
- LOAD CENTER SHALL BE MANUFACTURED IN THE UNITED STATES TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN REQUIREMENTS. PROVIDE CERTIFICATION OF MANUFACTURE IN THE UNITED STATES WITH SHOP DRAWING SUBMITTAL.

REVISION	DATE	UPDATE PER
12-2 &	03/09/12	PER FAA PGL
		EB67D

SHELBY COUNTY AIRPORT
SHELBYVILLE, ILLINOIS

A.I.P. PROJ.: 3-17-0093-B11

IL PROJ.: 2H0-4149

Hanson Proj. No. 10A00047	Revision	12/09/11
Filename E-507.DWG	Scale	NOT TO SCALE
Scale	NOT TO SCALE	02/18/12
Date	LAYOUT	KNL
	DRAWN	CWS
	REVIEWED	KNL/CAH

HANSON
Professional Services Inc. 2012
Hanson Professional Services Inc.
1525 South Sixth Street
Springfield, Illinois 62703-2986
Ph: (217) 788-2450 Fax: (217) 788-2503
www.hanson-inc.com
Offices Nationwide

CONSTRUCT VAULT,
LIGHT TAXIWAY &
INSTALL NAVAIDS
AIRPORT ROTATING
BEACON UPGRADE
DETAILS AND NOTES