CABLE TRENCHES

4" TOP SOIL SEED & MULCH

6" 9" 12" 15" 18" 21" 24"

18" TYP.

5" TYP.
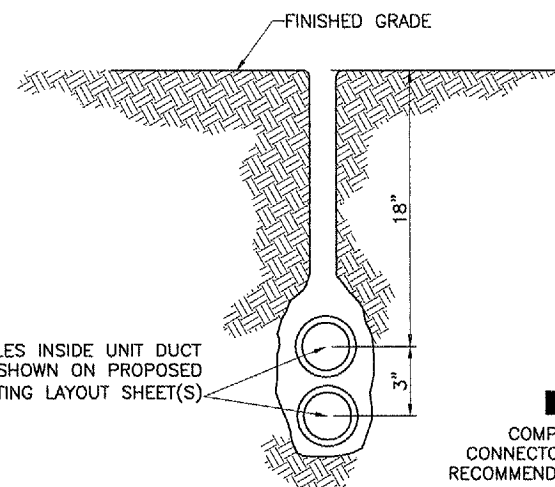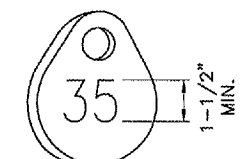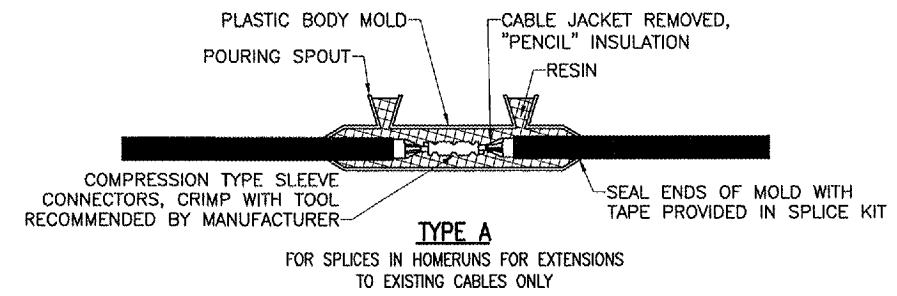
1 2 3 4 5 6 7

3" TYP. 3" TYP.

CABLE

NOTES:
DETAIL NUMBERS INDICATE NO. OF CABLES.

TRENCHES WITH MORE THAN SEVEN CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.

DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.

ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.
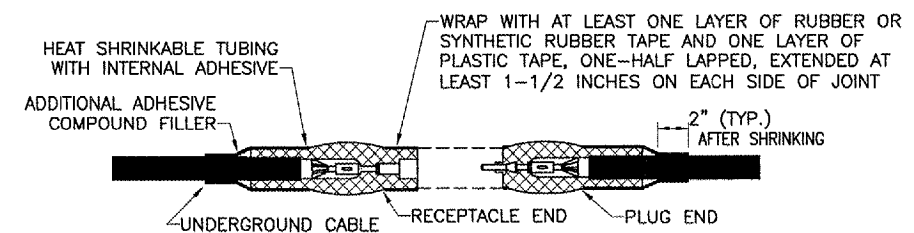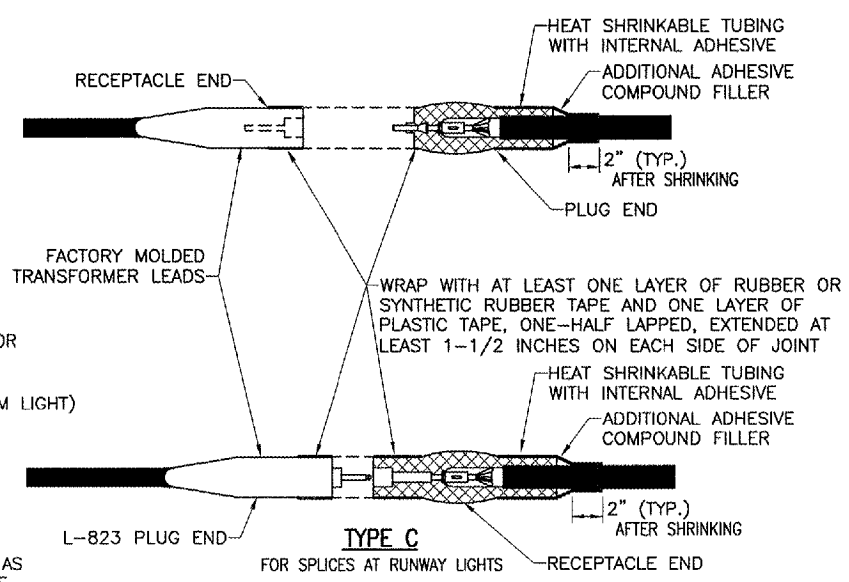
EARTH BACKFILL WILL HAVE MAXIMUM 1" SIZE PARTICLES AND WILL BE PLACED IN TWO LIFTS AS APPROXIMATELY SHOWN (TYPICAL FOR ALL TRENCHES)

CABLE TRENCHES
(NOT TO SCALE)

PLOWED CABLE

FINISHED GRADE

18"

3"

CABLES INSIDE UNIT DUCT AS SHOWN ON PROPOSED LIGHTING LAYOUT SHEET(S)

PLOWED CABLE
(NOT TO SCALE)

TAG DETAIL

35

1-1/2" MIN.

NOTE:
AFFIX NON-CORROSIVE TAG TO FIXTURE FACING RUNWAY WITH SET SCREW, WIRE TIE, OR METAL BAND. NUMERALS SHALL BE ENGRAVED FOR PERMANENT READABILITY.

TAG DETAIL
(NOT TO SCALE)

GROUND ROD

FINISHED GRADE

8" 6"

EXOTHERMIC WELDED CONNECTION (CADWELD, THERMOWELD, OR ULTRAWELD)

#6, BARE, STRANDED, COPPER COUNTERPOISE

5/8" X 8' MIN. GROUND ROD COPPERWELD OR EQUAL

NOTES:
TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN.

THE RESISTANCE TO GROUND OF THE COUNTERPOISE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.

COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.

GROUND ROD
(NOT TO SCALE)

LIGHT AND CABLE INSTALLATION DETAIL

10' TO PAVEMENT EDGE

1' 1'

TYPICAL LIGHT

L-830 TRANSFORMER

MIN. OF 3' OF SLACK IN EACH PRIMARY CABLE, BEND RADIUS 10" MIN.

1/C, #8, 5KV L-824 TYPE C CABLE

PLAN VIEW

FULL STRENGTH PAVEMENT

TYPICAL ELEVATED LIGHT

10' 2' 18"

1/C, #8, 5KV L-824 TYPE C CABLE

NOTES:
SEE PROPOSED LIGHTING LAYOUT SHEET FOR LIGHT LOCATIONS.

PROFILE VIEW

LIGHT AND CABLE INSTALLATION DETAIL
(NOT TO SCALE)

CABLE SPLICES

TYPE A

PLASTIC BODY MOLD
POURING SPOUT
CABLE JACKET REMOVED, "PENCIL" INSULATION
RESIN

COMPRESSION TYPE SLEEVE CONNECTORS, CRIMP WITH TOOL RECOMMENDED BY MANUFACTURER

SEAL ENDS OF MOLD WITH TAPE PROVIDED IN SPLICE KIT

TYPE A
FOR SPLICES IN HOMERUNS FOR EXTENSIONS TO EXISTING CABLES ONLY

TYPE B

HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE
ADDITIONAL ADHESIVE COMPOUND FILLER
WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDED AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT
2" (TYP.) AFTER SHRINKING

UNDERGROUND CABLE SPEC. L-824, TYPICAL
RECEPTACLE END
PLUG END

TYPE B
FOR SPLICES AT JUNCTION OF HOMERUN WITH LOOP CIRCUIT

TYPE C

RECEPTACLE END
FACTORY MOLDED TRANSFORMER LEADS
L-823 PLUG END
HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE
ADDITIONAL ADHESIVE COMPOUND FILLER
2" (TYP.) AFTER SHRINKING
PLUG END
WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDED AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT
HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE
ADDITIONAL ADHESIVE COMPOUND FILLER
2" (TYP.) AFTER SHRINKING
RECEPTACLE END
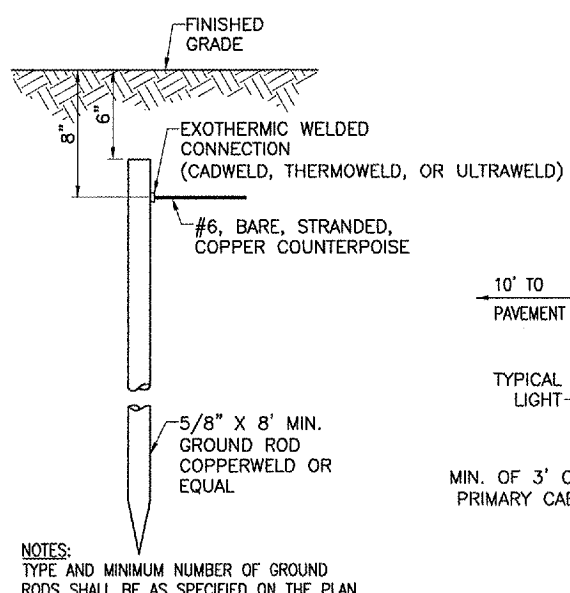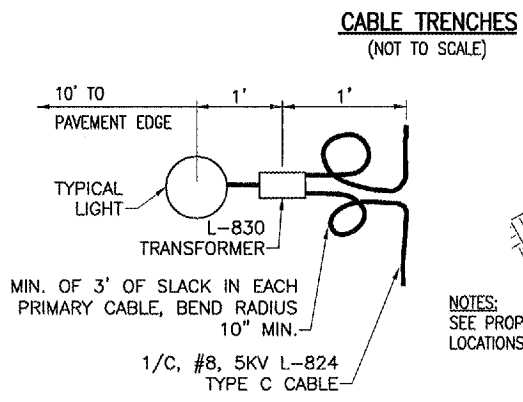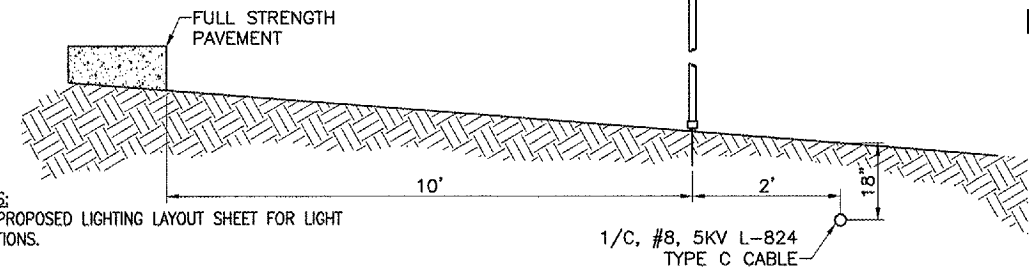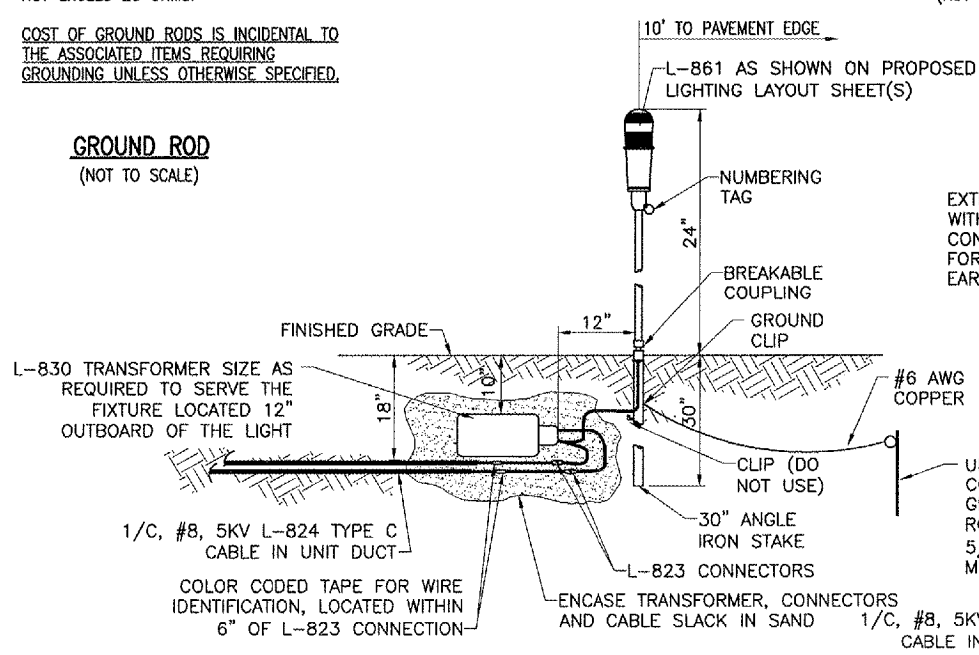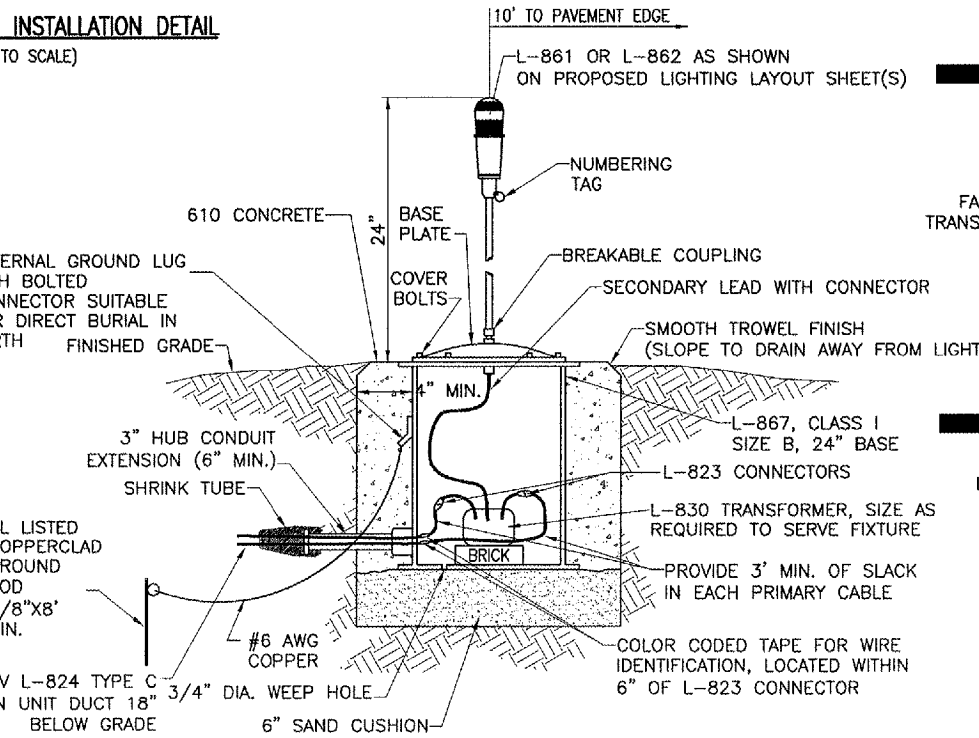
TYPE C
FOR SPLICES AT RUNWAY LIGHTS

NOTES:
SEE PROPOSED LIGHTING LAYOUT SHEET(S) FOR SPLICE TYPE.
(NOT TO SCALE)
INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.

CABLE SPLICES

MEDIUM INTENSITY LIGHT - STAKE MOUNTED

10' TO PAVEMENT EDGE

L-861 AS SHOWN ON PROPOSED LIGHTING LAYOUT SHEET(S)
NUMBERING TAG
BREAKABLE COUPLING
GROUND CLIP
24"
12"
FINISHED GRADE
18"
L-830 TRANSFORMER SIZE AS REQUIRED TO SERVE THE FIXTURE LOCATED 12" OUTBOARD OF THE LIGHT
#6 AWG COPPER
CLIP (DO NOT USE)
UL LISTED COPPERCLAD GROUND ROD 5/8"X8' MIN.
30" ANGLE IRON STAKE
1/C, #8, 5KV L-824 TYPE C CABLE IN UNIT DUCT
COLOR CODED TAPE FOR WIRE IDENTIFICATION, LOCATED WITHIN 6" OF L-823 CONNECTION
L-823 CONNECTORS
ENCASE TRANSFORMER, CONNECTORS AND CABLE SLACK IN SAND
1/C, #8, 5KV L-824 TYPE C CABLE IN UNIT DUCT 18" BELOW GRADE

MEDIUM INTENSITY LIGHT - STAKE MOUNTED
(NOT TO SCALE)

MEDIUM/HIGH INTENSITY LIGHT - BASE MOUNTED

10' TO PAVEMENT EDGE
L-861 OR L-862 AS SHOWN ON PROPOSED LIGHTING LAYOUT SHEET(S)
NUMBERING TAG
BASE PLATE
610 CONCRETE
24"
COVER BOLTS
BREAKABLE COUPLING
SECONDARY LEAD WITH CONNECTOR
SMOOTH TROWEL FINISH (SLOPE TO DRAIN AWAY FROM LIGHT)
EXTERNAL GROUND LUG WITH BOLTED CONNECTOR SUITABLE FOR DIRECT BURIAL IN EARTH
FINISHED GRADE
4" MIN.
3" HUB CONDUIT EXTENSION (6" MIN.)
SHRINK TUBE
BRICK
L-867, CLASS I SIZE B, 24" BASE
L-823 CONNECTORS
L-830 TRANSFORMER, SIZE AS REQUIRED TO SERVE FIXTURE
PROVIDE 3' MIN. OF SLACK IN EACH PRIMARY CABLE
#6 AWG COPPER
3/4" DIA. WEEP HOLE
6" SAND CUSHION
1/C, #8, 5KV L-824 TYPE C CABLE IN UNIT DUCT
COLOR CODED TAPE FOR WIRE IDENTIFICATION, LOCATED WITHIN 6" OF L-823 CONNECTOR

MEDIUM/HIGH INTENSITY LIGHT - BASE MOUNTED
(NOT TO SCALE)

LAYOUT	JAC	01/16/07
DRAWN	MDR	01/16/07
REVIEWED	CAH	01/26/07

RM Project No. 84507TXYD D800
Filename R-542ELE.DWG
Scale N/A
Date 01/16/07

APR 18, 2007 1:44 PM BAK
I:\AIRPORTS\ST LOUIS DOWNTOWN\84507TXYD\AIRPORT SHEETS\R-542ELE.DWG - ELECTRICAL DETAILS