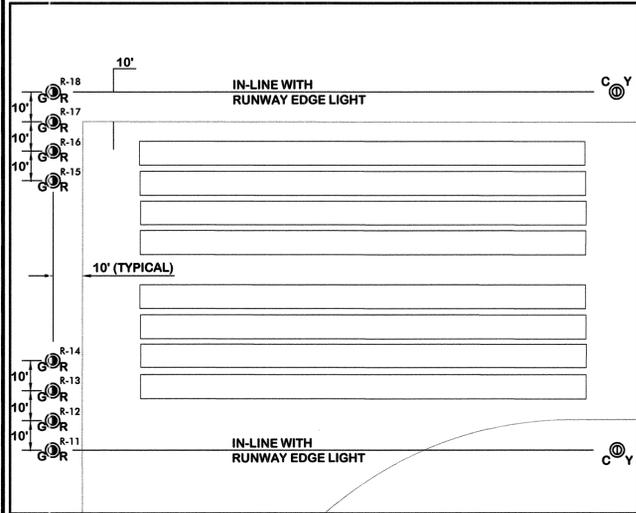


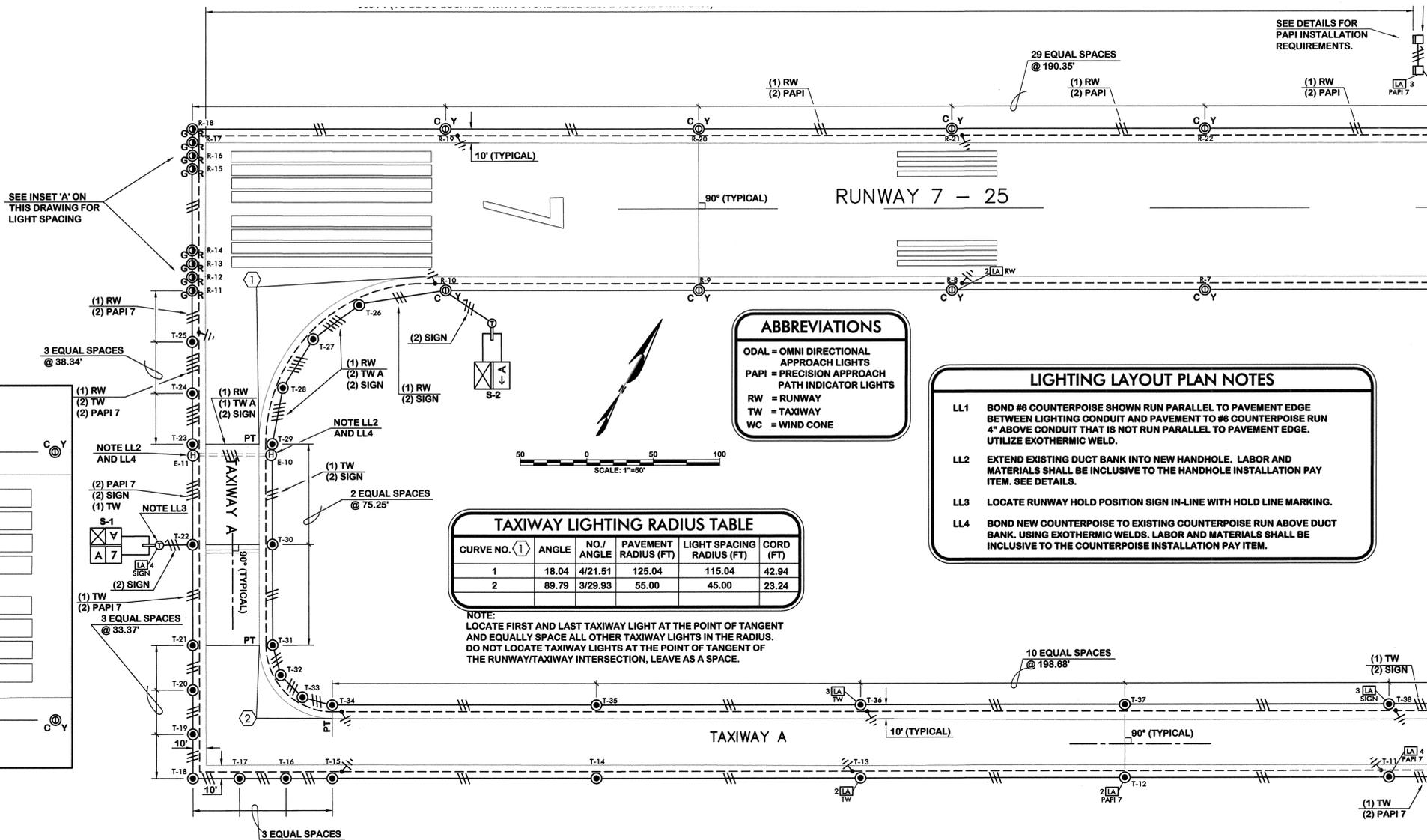
LIGHTING PLAN GENERAL NOTES

- GN1. DO NOT SCALE THESE DRAWINGS. DIMENSIONS SHALL BE VERIFIED FROM ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.
- GN2. SEE RUNWAY AND TAXIWAY LIGHT INSTALLATION DETAILS FOR LOCATION DISTANCE AWAY FROM PAVEMENT EDGE OR MARKING (TYPICAL).
- GN3. CONTRACTOR SHALL DETERMINE EXACT LOCATION FOR LIGHTS AND SIGNS SPACING BETWEEN UNITS BY MEASURING START AND END POINTS INDICATED AND EQUALLY SPACING BETWEEN. DO NOT SCALE DRAWING AND DO NOT SPACE USING DIMENSIONS SHOWN UNLESS START AND ENDING POINT IS FIELD MEASURED AND VERIFIED TO BE CORRECT. CONTRACTOR SHALL STAKE OUT LOCATION OF LIGHTS AND SIGNS FOR PROJECT ENGINEERS REVIEW PRIOR TO INSTALLATION.

SEE INSET 'A' ON THIS DRAWING FOR LIGHT SPACING



INSET 'A'
SCALE: 1"=30'



ABBREVIATIONS

- ODAL = OMNI DIRECTIONAL APPROACH LIGHTS
- PAPI = PRECISION APPROACH PATH INDICATOR LIGHTS
- RW = RUNWAY
- TW = TAXIWAY
- WC = WIND CONE

LIGHTING LAYOUT PLAN NOTES

- LL1 BOND #6 COUNTERPOISE SHOWN RUN PARALLEL TO PAVEMENT EDGE BETWEEN LIGHTING CONDUIT AND PAVEMENT TO #6 COUNTERPOISE RUN 4" ABOVE CONDUIT THAT IS NOT RUN PARALLEL TO PAVEMENT EDGE. UTILIZE EXOTHERMIC WELD.
- LL2 EXTEND EXISTING DUCT BANK INTO NEW HANDHOLE. LABOR AND MATERIALS SHALL BE INCLUSIVE TO THE HANDHOLE INSTALLATION PAY ITEM. SEE DETAILS.
- LL3 LOCATE RUNWAY HOLD POSITION SIGN IN-LINE WITH HOLD LINE MARKING.
- LL4 BOND NEW COUNTERPOISE TO EXISTING COUNTERPOISE RUN ABOVE DUCT BANK. USING EXOTHERMIC WELDS. LABOR AND MATERIALS SHALL BE INCLUSIVE TO THE COUNTERPOISE INSTALLATION PAY ITEM.

TAXIWAY LIGHTING RADIUS TABLE

CURVE NO.	ANGLE	NO./ANGLE	PAVEMENT RADIUS (FT)	LIGHT SPACING RADIUS (FT)	CORD (FT)
1	18.04	4/21.61	125.04	115.04	42.94
2	89.79	3/29.93	55.00	45.00	23.24

NOTE: LOCATE FIRST AND LAST TAXIWAY LIGHT AT THE POINT OF TANGENT AND EQUALLY SPACE ALL OTHER TAXIWAY LIGHTS IN THE RADIUS. DO NOT LOCATE TAXIWAY LIGHTS AT THE POINT OF TANGENT OF THE RUNWAY/TAXIWAY INTERSECTION, LEAVE AS A SPACE.

LIGHTING LAYOUT PLAN LEGEND

<p> L-861E LED MEDIUM INTENSITY RUNWAY THRESHOLD LIGHT WITH G=GREEN/R=RED SPLIT GLOBE LENS, L-867 BASE MOUNTED IN EARTH SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-861 LED MEDIUM INTENSITY RUNWAY EDGE LIGHT WITH C=CLEAR/Y=YELLOW SPLIT GLOBE LENS, L-867 BASE MOUNTED IN EARTH SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-861 LED MEDIUM INTENSITY RUNWAY EDGE LIGHT WITH 360° CLEAR LENS, L-867 BASE MOUNTED IN EARTH SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-861 LED MEDIUM INTENSITY RUNWAY EDGE LIGHT WITH Y=YELLOW/C=CLEAR SPLIT GLOBE LENS, L-867 BASE MOUNTED IN EXISTING BITUMINOUS PAVED SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-852D LED MODIFIED IN-PAVEMENT MEDIUM INTENSITY RUNWAY EDGE LIGHT, L-868B BASE MOUNTED, WITH C=CLEAR/Y=YELLOW/C=CLEAR FILTERS. LIGHT MOUNTED IN EXISTING BITUMINOUS PAVEMENT. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO BASE. CONNECT JUMPER TO GROUND ROD USING EXOTHERMIC WELD. GROUND ROD, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION. SEE DETAILS.</p> <p> L-852D LED MODIFIED IN-PAVEMENT MEDIUM INTENSITY RUNWAY EDGE LIGHT, L-868B BASE MOUNTED, WITH C=CLEAR/Y=YELLOW/C=CLEAR FILTERS. LIGHT MOUNTED IN EXISTING BITUMINOUS PAVEMENT. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION. SEE DETAILS.</p>	<p> L-861T LED MEDIUM INTENSITY TAXIWAY LIGHT, L-867 BASE MOUNTED IN EARTH SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-861T LED MEDIUM INTENSITY TAXIWAY LIGHT, L-867 BASE MOUNTED IN EXISTING BITUMINOUS PAVED SHOULDER. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO LIGHT BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION.</p> <p> L-852T LED IN-PAVEMENT MEDIUM INTENSITY TAXIWAY EDGE LIGHT, L-868B BASE MOUNTED, WITH BLUE COLOR. LIGHT MOUNTED IN EXISTING BITUMINOUS PAVEMENT. PROVIDE #6 BARE SOLID COPPER JUMPER BONDED TO BASE. CONNECT JUMPER TO GROUND RODS USING EXOTHERMIC WELD. GROUND RODS, #6 JUMPER AND CONNECTION SHALL BE INCLUSIVE TO THE LIGHT INSTALLATION. SEE DETAILS.</p> <p> SIZE 2, STYLE 5, L-858 GUIDANCE SIGN MOUNTED ON NEW CONCRETE PAD IN EARTH SHOULDER. SEE SIGN SCHEDULE.</p> <p> SIZE 2, STYLE 5, L-858 GUIDANCE SIGN MOUNTED ON NEW CONCRETE PAD IN EXISTING BITUMINOUS PAVED SHOULDER. SEE SIGN SCHEDULE.</p> <p> L-867D (16" DIA.x24"D.) LIGHT BASE WITH CONCRETE ENCASUREMENT USED AS HANDHOLE FOR DIRECTIONAL BORE CONDUIT TO ADJACENT IN-PAVEMENT LIGHT. INSTALL IN EARTH SHOULDER. PROVIDE 3/8" THICK STEEL BLANK COVER PLATE WITH GASKET. SEE DETAILS.</p> <p> L-867E MODIFIED (24" DIA.x24"D.) LIGHT BASE WITH CONCRETE ENCASUREMENT USED AS HANDHOLE FOR DIRECTIONAL BORE CONDUIT TO ADJACENT HANDHOLE. INSTALL IN EARTH SHOULDER. PROVIDE 1/2" THICK STEEL BLANK COVER PLATE WITH GASKET. SEE DETAILS.</p>	<p> L-867E MODIFIED (24" DIA.x24"D.) LIGHT BASE WITH CONCRETE ENCASUREMENT USED AS HANDHOLE FOR DUCT BANK EXTENSION. INSTALL IN EARTH SHOULDER. PROVIDE 1/2" THICK STEEL BLANK COVER PLATE WITH GASKET. SEE DETAILS.</p> <p> L-867E MODIFIED (24" DIA.x24"D.) LIGHT BASE WITH CONCRETE ENCASUREMENT USED AS HANDHOLE FOR DUCT BANK EXTENSION. INSTALL IN EXISTING BITUMINOUS PAVEMENT. PROVIDE 1/2" THICK STEEL BLANK COVER PLATE WITH GASKET. SEE DETAILS.</p> <p> L-867E MODIFIED (24" DIA.x24"D.) LIGHT BASE WITH CONCRETE ENCASUREMENT USED AS HANDHOLE IN EARTH SHOULDER. PROVIDE 1/2" THICK STEEL BLANK COVER PLATE WITH GASKET. SEE DETAILS.</p> <p> 1/C #8 5KV, L-824C CABLES IN A 2" SCHEDULE 40 PVC CONDUIT RUN UNDERGROUND. CONDUIT SHALL CONTAIN ONE (1) #6 GREEN EQUIPMENT SAFETY GROUND WITH 600V TYPE XHHW-2 INSULATION. SEE DETAIL. SLASH MARKS DENOTES NUMBER OF 5 KV CABLES WHERE MORE THAN ONE(1) IS REQUIRED. SYMBOL " - / - " WHERE SHOWN, DENOTES 1 - 1/C #6 BARE SOLID COPPER COUNTERPOISE INSTALLED 4" ABOVE CONDUIT WHERE CONDUIT IS NOT RUN PARALLEL TO TAXIWAY OR RUNWAY PAVEMENT EDGE.</p> <p> 1 - 1/C #8 5KV CABLES IN A 2" SCHEDULE 40 PVC CONDUIT TRENCHED IN EXISTING BITUMINOUS SHOULDER PAVEMENT WITH CONCRETE BACKFILL. CONDUIT SHALL CONTAIN ONE (1) #6 GREEN EQUIPMENT SAFETY GROUND WITH 600V TYPE XHHW-2 INSULATION. SEE DETAIL. SLASH MARKS DENOTES NUMBER OF 5KV CABLES WHERE MORE THAN ONE(1) IS REQUIRED. SYMBOL " - / - " WHERE SHOWN, DENOTES 1 - 1/C #6 SOLID COPPER COUNTERPOISE INSTALLED 4" ABOVE CONDUIT.</p> <p> 2" HDPE DIRECTIONAL BORE CONDUIT. CONDUIT SHALL CONTAIN ONE (1) #6 GREEN EQUIPMENT SAFETY GROUND WITH 600V TYPE XHHW-2 INSULATION. SEE DETAIL. SYMBOL " - / - " DENOTES 1 - 1/C #6 STRANDED COPPER COUNTERPOISE STRAPPED TO THE EXTERIOR OF THE HDPE CONDUIT AND PULLED THROUGH THE BORE HOLE. BOND COUNTERPOISE USING EXOTHERMIC WELDS. CABLE TYPE, SIZE AND QUANTITY AS SHOWN ON DRAWINGS.</p> <p> #2/0 BARE STRANDED COPPER CONDUCTOR ENCASED IN GROUND ENHANCEMENT MATERIAL FOR SUPPLEMENTAL GROUNDING. SEE DETAILS.</p>	<p> 2" SCHEDULE 40 PVC CONDUIT RUN UNDERGROUND WITH POWER AND/OR CONTROL WIRING FOR RUNWAY 25 ODAL SYSTEM. PROVIDE 1-1/2" #6 BARE SOLID COPPER COUNTERPOISE RUN 4" ABOVE CONDUIT. SEE DRAWINGS FOR CABLE TYPE, QUANTITY AND SIZES REQUIRED.</p> <p> 1 - 1/2" #6 BARE SOLID COPPER COUNTERPOISE IN EARTH TRENCH INSTALLED ONE HALF DISTANCE BETWEEN TAXIWAY OR RUNWAY PAVEMENT EDGE WHERE AIRFIELD LIGHTING CIRCUIT IS RUN PARALLEL TO PAVEMENT EDGE. SEE DETAILS.</p> <p> EXISTING DUCT BANK. FIELD VERIFY SIZE, QUANTITY AND EXACT LOCATION. LOCATIONS SHOWN ARE APPROXIMATE.</p> <p> 3/4" DIA. X 20 FT. SECTIONAL GROUND RODS, COPPER CLAD STEEL DRIVEN TO DEPTH OF 20'-6" USED FOR COUNTERPOISE GROUND. BOND TO COUNTERPOISE WIRE USING EXOTHERMIC WELD. GROUND RODS AND CONNECTION SHALL BE INCLUSIVE TO COUNTERPOISE INSTALLATION.</p> <p> NUMBER IN HEXAGON DENOTES TAXIWAY LIGHT SPACING IN RADIUS. SEE TAXIWAY LIGHTING RADIUS TABLE.</p> <p> # - LETTER INDICATES THE CIRCUIT.</p> <p> # - NUMBER INDICATES THE LIGHT I.D. TAG. I.D. NUMBERING SHALL BE AS DIRECTED BY THE OWNER.</p> <p> FIELD LIGHTNING ARRESTOR (FLA) FOR PROTECTION OF 6.6 AMPERE SERIES AIRFIELD LIGHTING CIRCUITS. SEE SPECIFICATION "L-125". LETTERS DENOTE CIRCUIT I.D. FOR INSTALLATION. NUMERALS DENOTE SEQUENCE OF INSTALLATION IN CIRCUIT. SEE DETAILS.</p> <p> VOLTAGE POWERED ODAL LIGHT STATION. PROVIDE AND INSTALL NEW LIGHT STATION CABINET COMPLETE, INCLUDING FLASH HEAD. PROVIDE GROUNDING SYSTEM MODIFICATIONS AS INDICATED ON THE DRAWINGS. EXISTING TOWER TO REMAIN IN PLACE.</p>
--	--	--	--

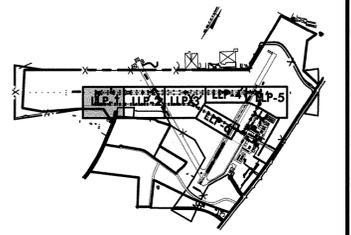
MATCH LINE - SEE DRAWING LLP-2 FOR CONTINUATION

AIKEN MUNICIPAL AIRPORT
AIKEN, SOUTH CAROLINA

THE LPA GROUP
TRANSPORTATION CONSULTANTS

ATLANTA, GA BATON ROUGE, LA CHARLESTON, SC CHARLOTTE, NC CHICAGO, IL COLUMBIA, SC GREENSBORO, NC GULFPORT, MS JACKSONVILLE, FL KNOXVILLE, TN MOBILE, AL ORLANDO, FL RALEIGH, NC RICHMOND, VA SARASOTA, FL TALLAHASSEE, FL TAMPA, FL WEST PALM BEACH, FL

Designer: FME/RES	Checked by: GHL
Technician: MTW	Project Number: 05500005



KEY PLAN

REVISIONS			
No.	Description	Date	By

Project Name:
AIRFIELD LIGHTING REHABILITATION

Drawing Name:
LIGHTING LAYOUT PLAN NO. 1

FAA A.I.P. Project Number:
3-45-0002-12-2010 & -14-2011

Date: MAY, 2011	Division: AIRPORTS
Scale:	Sheet Number:
1"=50'	Drawing Number: LLP-1

C:\ELECTRICAL\CLIENTS\Aiken2010\Runway 7-25 and Taxiway Lighting\DWG-SINGLE-PHASE-RUNWAY LAYOUT PLAN.dwg Last Modified: May 20, 2011 - 2:33pm Plotted on: May 24, 2011 - 9:52am by TWhite