

LEE COUNTY BOARD OF
COUNTY COMMISSIONERS

PUBLIC WORKS ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
CONTRACT PLANS

PLANS OF PROPOSED

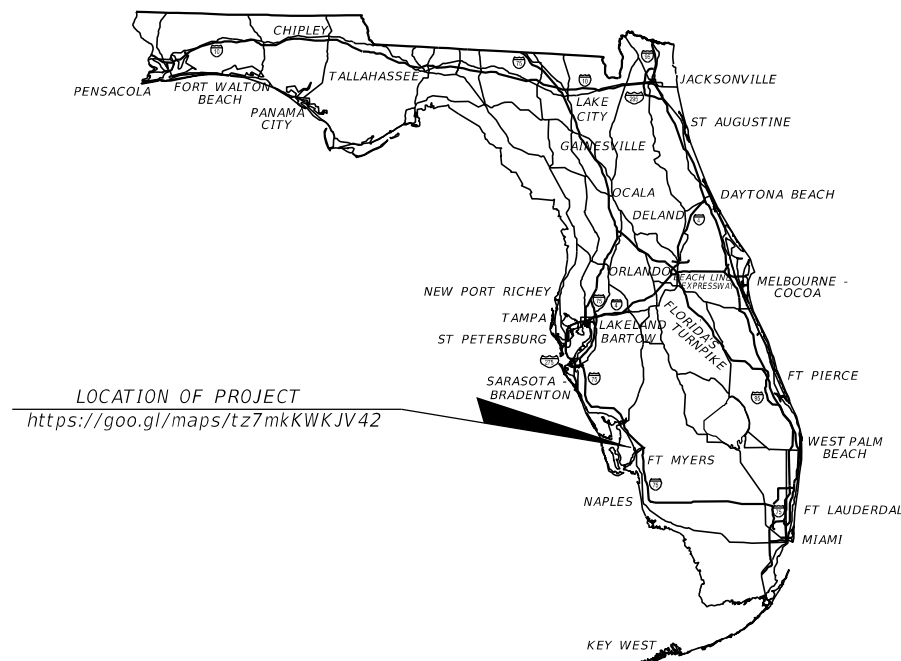
LITTLETON / KISMET REALIGNMENT

COUNTY PROJECT NO. CN160459DLK

LIGHTING PLANS

INDEX OF LIGHTING PLANS

SHEET NO.	SHEET DESCRIPTION
L-1	KEY SHEET
L-2	TABULATION OF QUANTITIES
L-3	GENERAL NOTES
L-4	POLE DATA AND LEGEND
L-5 - L-7	LIGHTING PLAN
L-8	SERVICE POINT/LOAD CENTER DETAIL
L-9	POLE DETAIL



**60% PLANS
IN PROGRESS**

LIGHTING PLANS
ENGINEER OF RECORD:

PHUC H. DUONG, P.E.
P.E. No.: 63835
GANNETT FLEMING
9119 CORPORATE LAKE DRIVE, SUITE 150
TAMPA, FL 33634-6323
CONTRACT No.: C-9E24
VENDOR No.: 25-1613591
CERTIFICATE OF AUTHORIZATION No.: 5564

LEE COUNTY PROJECT MANAGER:
VINCENT J. MILLER, P.E.

GOVERNING DESIGN STANDARDS:

Florida Department of Transportation, FY2018-19 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs)

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2018 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

SHEET NO.
L-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL		
			L-5		L-6		L-7												
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF																	
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF																	
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA																	
715-1-12	LIGHTING CONDUCTORS, F&I, INSULATED, NO.8 - 6	LF																	
715-1-13	LIGHTING CONDUCTORS, F&I, INSULATED, NO 4 - 2	LF																	
715-4-12	LIGHT POLE COMPLETE, FURNISH & INSTALL STANDARD POLE STANDARD FOUNDATION, 35' MOUNTING HEIGHT	EA																	
715-5-31	LUMINAIRE & BRACKET ARM- ALUMINUM, FURNISH & INSTALL NEW LUMINAIRE AND ARM ON NEW/EXISTING POLE	EA																	
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	EA																	
715-500-1	POLE CABLE DISTRIBUTION SYSTEM, CONVENTIONAL	EA																	

REVISIONS				PHUC H. DUONG, P.E. P.E. NO.: 63835 GANNETT FLEMING 9119 CORPORATE LAKE DR., SUITE 150 TAMPA, FLORIDA 33634 CERTIFICATE OF AUTHORIZATION No. 5564		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TABULATION OF QUANTITIES			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID				L-2
				NA	LEE	CN160459DLK						

GENERAL NOTES

1) BEFORE ANY PROJECT WORK BEGINS THERE SHALL BE A MAINTENANCE TRANSFER. THE MAINTENANCE WILL TRANSFER FROM LEE COUNTY DOT/TRAFFIC TO AN FDOT QUALIFIED ELECTRICAL CONTRACTOR NO LATER THAN THE DAY BEFORE THE PROJECT BEGINS. THE CONTRACTOR IS REQUIRED TO HAVE AN AUTHORIZED REPRESENTATIVE ONSITE TO ACCEPT THE MAINTENANCE TRANSFER AND TO WITNESS THE EXISTING CONDITION OF THE STREET LIGHTING SYSTEM.

2) ANY DEFICIENCIES THAT MAY BE FOUND ON THE DAY OF THE MAINTENANCE TRANSFER SHALL BE REPAIRED BY LEE COUNTY TRAFFIC AT THAT TIME. AFTER ANY DEFICIENCIES HAVE BEEN CORRECTED ON THE DAY OF THE TRANSFER, ANY AND ALL DEFICIENCIES FOUND FROM THAT DAY AND TIME SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3) CONTRACTOR MAINTENANCE RESPONSIBILITIES: CONTRACTOR SHALL PROVIDE 24-HOUR CONTACT PERSON(S), TELEPHONE NUMBERS AND E-MAIL ADDRESSES AT THE TIME OF TRANSFER. FAILURE TO RESPOND TO MAINTENANCE RESPONSIBILITIES IN A TIMELY MANNER WILL TRIGGER A "VENDOR/CONTRACTOR COMPLAINT" NOTICE TO LEE COUNTY CONTRACTS AS WELL AS FDOT. TIMELY MANNER IN RESPONSE TO MAINTENANCE RESPONSIBILITIES IS DEFINED AS RESPONSE TO SITE NO LATER THAN TWO (2) HOURS AFTER NOTIFICATION. IN THE EVENT THAT LEE COUNTY FORCES ARE CALLED OUT TO RESPOND, THE CONTRACTOR WILL BE BILLED THE ENTIRE COST AS A "DEDUCT" ON THE NEXT PAYMENT REQUEST. BEING AN "OUT OF TOWN" CONTRACTOR DOES NOT RELIEVE THIS RESPONSIBILITY.

4) LOCATES: ONE (1) COURTESY LOCATE SHALL BE PERFORMED BY LEE COUNTY SIGNALS AT THE START OF THE PROJECT AT THE CONTRACTOR'S REQUEST. THE CONTRACTOR SHALL DOCUMENT THE LOCATION OF THE EXISTING UNDERGROUND AND ABOVE GROUND FACILITIES. AFTER THE COURTESY LOCATE, ALL LOCATES WITHIN THE PROJECT LIMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED IN A TIMELY MANNER. TIMELY MANNER IN RESPONSE TO LOCATES IS DEFINED AS LOCATE SHALL BE PERFORMED NO LATER THAN TWENTYFOUR (24) HOURS AFTER NOTIFICATION OR AS REQUIRED BY FLORIDA STATUTE. LEE COUNTY SIGNALS WILL ADVISE THE CONTRACTOR VIA E-MAIL OR FAX OF SUNSHINE LOCATE REQUESTS WITHIN THE WORK ZONE. ANY DAMAGE INCURRED DUE TO CONTRACTOR FAILURE TO LOCATE SHALL BE REPAIRED BY THE CONTRACTOR. SHOULD LEE COUNTY FORCES BE CALLED OUT TO MAKE REPAIRS DUE TO CONTRACTOR REFUSAL OR INABILITY TO MAKE REPAIRS, THE CONTRACTOR WILL BE BILLED THE ENTIRE COST AS A "DEDUCT" ON THE NEXT PAYMENT REQUEST AND WILL TRIGGER A "VENDOR/CONTRACTOR COMPLAINT" NOTICE TO BE FILED WITH LEE COUNTY CONTRACTS AS WELL AS FDOT. BEING AN "OUT OF TOWN" CONTRACTOR DOES NOT RELIEVE THIS RESPONSIBILITY.

5) DAMAGE TO EXISTING FACILITIES: ANY DAMAGE TO LEE COUNTY FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR. REPAIRS SHALL BE MADE TO ENSURE FACILITIES ARE LIKE NEW OR BETTER. ANY DAMAGE TO EXISTING COMMUNICATION LINES SHALL NECESSITATE THE REMOVAL OF ALL DAMAGED LINES AND THE REPULLING OF NEW CABLE. SPLICING OF COMMUNICATION LINES WILL NOT BE ALLOWED. CAUTION SHALL BE EXERCISED DURING EXCAVATION NEAR EXISTING LEE COUNTY FIBER OPTIC LINES, SINCE MANY ENTITIES USE THESE FACILITIES. SHOULD DAMAGE OCCUR TO FIBER OPTIC LINES, LEE COUNTY WILL DECIDE WHICH QUALIFIED FIBER OPTIC SPLICING COMPANY WILL BE USED TO MAKE REPAIRS. CONTRACTOR WILL BE RESPONSIBLE FOR ALL REPAIR COSTS INCURRED, WHETHER REPAIRS ARE MADE BY LEE COUNTY OR A THIRD PARTY.

6) EXISTING EQUIPMENT: SHALL BE RETURNED TO LEE COUNTY DOT/TRAFFIC IN GOOD OPERATING CONDITION AND IN THE SAME CONDITION AS ON THE DAY OF THE MAINTENANCE TRANSFER AT 5650 ENTERPRISE PARKWAY, FORT MYERS, FL 33905 IN A TIMELY MANNER. TIMELY MANNER FOR EXISTING EQUIPMENT IS DEFINED AS NO LATER THAN 72 HOURS AFTER DISCONNECTION. THE CONTRACTOR SHALL NOTIFY LEE COUNTY OF THE DISCONNECTION 24 HOURS IN ADVANCE TO SCHEDULE THE DELIVERY OF THE EQUIPMENT SO THAT DELIVERY TAKES PLACE DURING A REGULAR BUSINESS DAY AND HOURS. FAILURE TO PERFORM AS OUTLINED IN THIS PARAGRAPH WILL RESULT IN NO INSPECTION AT COMPLETION UNTIL CONTRACTOR IS IN COMPLIANCE WITH THIS REQUIREMENT. LEE COUNTY SIGNALS WILL WITHHOLD PAYMENT REQUESTS UNTIL LEE COUNTY PROPERTY IS DELIVERED TO 5650 ENTERPRISE PARKWAY, FORT MYERS, FL 33905.

7) TWENTY-FOUR (24) HOUR NOTICE IS REQUIRED TO THE INSPECTOR SHOWN IN THE PLAN SET GENERAL NOTES. SHOULD THE INFORMATION BE MISSING, THE CONTRACTOR IS HEREBY DIRECTED TO CALL LEE COUNTY SIGNALS AT 239-533-9500 AND ASK FOR THE SIGNAL INSPECTION DEPARTMENT.

REVISIONS				PHUC H. DUONG, P.E. P.E. NO.: 63835 GANNETT FLEMING 9119 CORPORATE LAKE DR., SUITE 150 TAMPA, FLORIDA 33634 CERTIFICATE OF AUTHORIZATION No. 5564	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. L-3
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					NA	LEE	CN160459DLK	

GENERAL NOTES







POLE DATA

POLE NO.	CIRCUIT	STATION	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM	OPTION
1	A-1	9+81.58	8.0'	149	30'	4' FROM EOP	715-4-12	NEW
2	A-1	10+40.70	8.0'	149	30'	17' FROM EOP	715-4-12	NEW
3	A-1	10+66.17	8.0'	149	30'	10' FROM EOP	715-4-12	NEW
4-EXT	UNK	NA	8.0'	149	TBD	NA	715-5-31	RETRO
1	A-2	22+01.53	8.0'	177	30'	16' FROM EOP	715-4-12	NEW
2	A-2	22+77.69	8.0'	177	30'	18' FROM EOP	715-4-12	NEW
3	A-2	24+20.41	8.0'	177	30'	24' FROM EOP	715-4-12	NEW
4	A-2	25+09.56	8.0'	177	30'	24' FROM EOP	715-4-12	NEW
5	A-2	24+74.87	8.0'	177	30'	18' FROM EOP	715-4-12	NEW
6	A-2	23+19.34	8.0'	177	30'	18' FROM EOP	715-4-12	NEW
7	A-2	23+93.48	8.0'	177	30'	10' FROM EOP	715-4-12	NEW
8	A-2	23+00.34	8.0'	177	30'	20' FROM EOP	715-4-12	NEW
9	A-2	22+17.28	8.0'	177	30'	19' FROM EOP	715-4-12	NEW

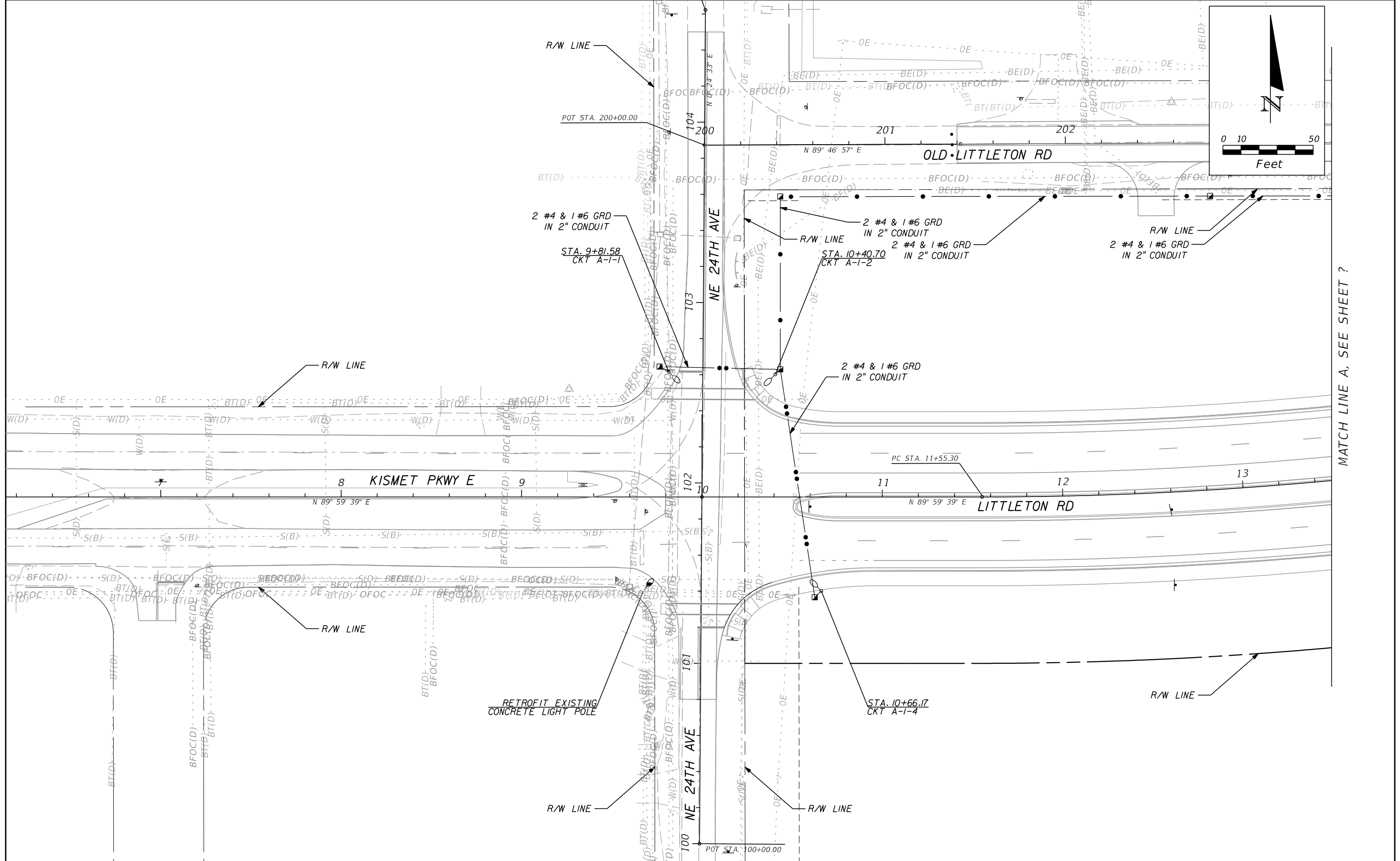
CONVENTIONAL LIGHTING DESIGN CRITERIA

Average Initial Horizontal Intensity 3.0 Foot Candles
 Average Initial Vertical Intensity 2.3 Foot Candles
 Uniformity Ratio Avg./Min. 4:1 Or Less
 Max./Min. 10:1 Or Less
 Wind Speed 170 MPH

LEGEND

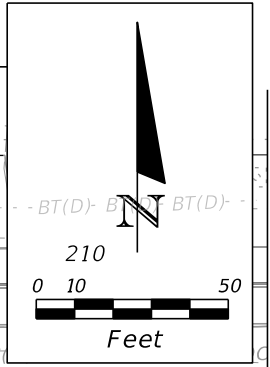
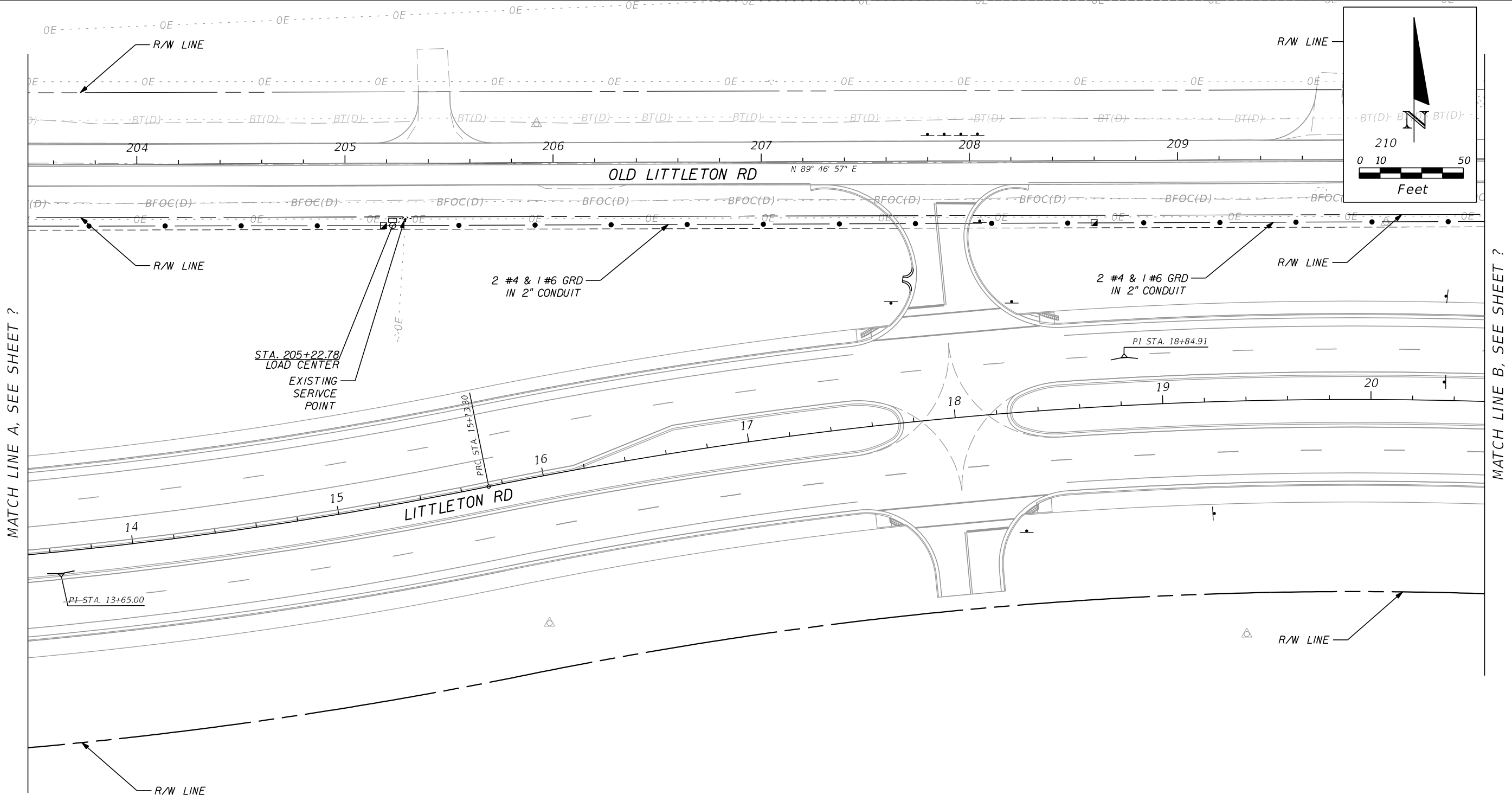
SYMBOLS	DESCRIPTION
	Single arm conventional LED luminaire. Designed for Type distribution. Luminaire wired for ___ volt operation. Pole mounting height __ ft. Use curve ____ or equal.
	Single arm conventional LED luminaire. Designed for Type distribution. Luminaire wired for ___ volt operation. Pole mounting height __ ft. Use curve ____ or equal.
	Schedule 40 PVC conduit with THW or THWN conductors inside (conduit and conductor size as shown on plan sheets). Run one (1) 6 AWG copper bond conductor (TW green insulation) inside conduit with other conductors.
	Galvanized metal conduit with THW or THWN conductors inside (conduit and conductor size as shown on plan sheets).
	Pull box. For specifications see Section 635 of Standard Specifications For Road And Bridge Construction.
	Distribution point. For requirements see Index No. 17504 of Design Standards.

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	COUNTY PROJECT NO		L-4
					NA	LEE	CN160459DLK		



MATCH LINE A, SEE SHEET ?

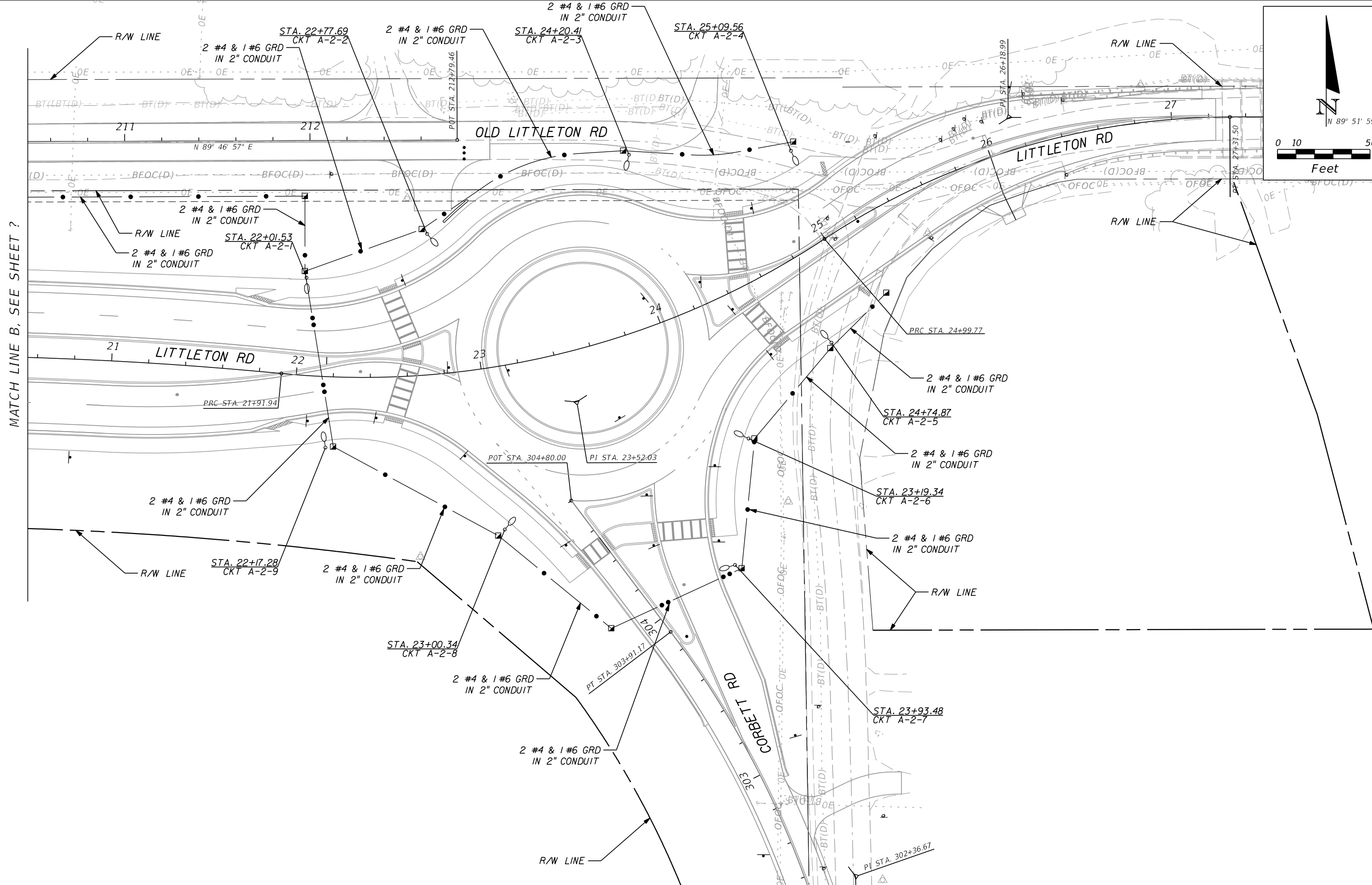
REVISIONS				PHUC H. DUONG, P.E. P.E. NO.: 63835 GANNETT FLEMING 9119 CORPORATE LAKE DR., SUITE 150 TAMPA, FLORIDA 33634 CERTIFICATE OF AUTHORIZATION No. 5564	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. L-5
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	COUNTY PROJECT NO.	
				NA	LEE	CN160459DLK	LIGHTING PLAN	



MATCH LINE A, SEE SHEET ?

MATCH LINE B, SEE SHEET ?

REVISIONS				PHUC H. DUONG, P.E. P.E. NO.: 63835 GANNETT FLEMING 9119 CORPORATE LAKE DR., SUITE 150 TAMPA, FLORIDA 33634 CERTIFICATE OF AUTHORIZATION No. 5564	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<h2>LIGHTING PLAN</h2>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	COUNTY PROJECT NO.		
					NA	LEE	CN160459DLK		L-6



MATCH LINE B, SEE SHEET ?

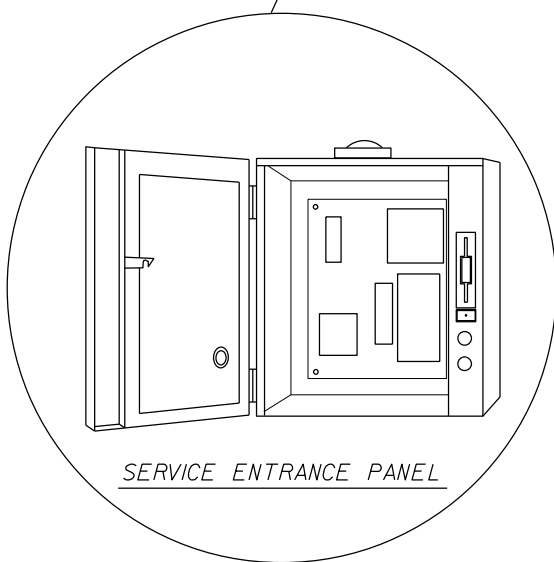
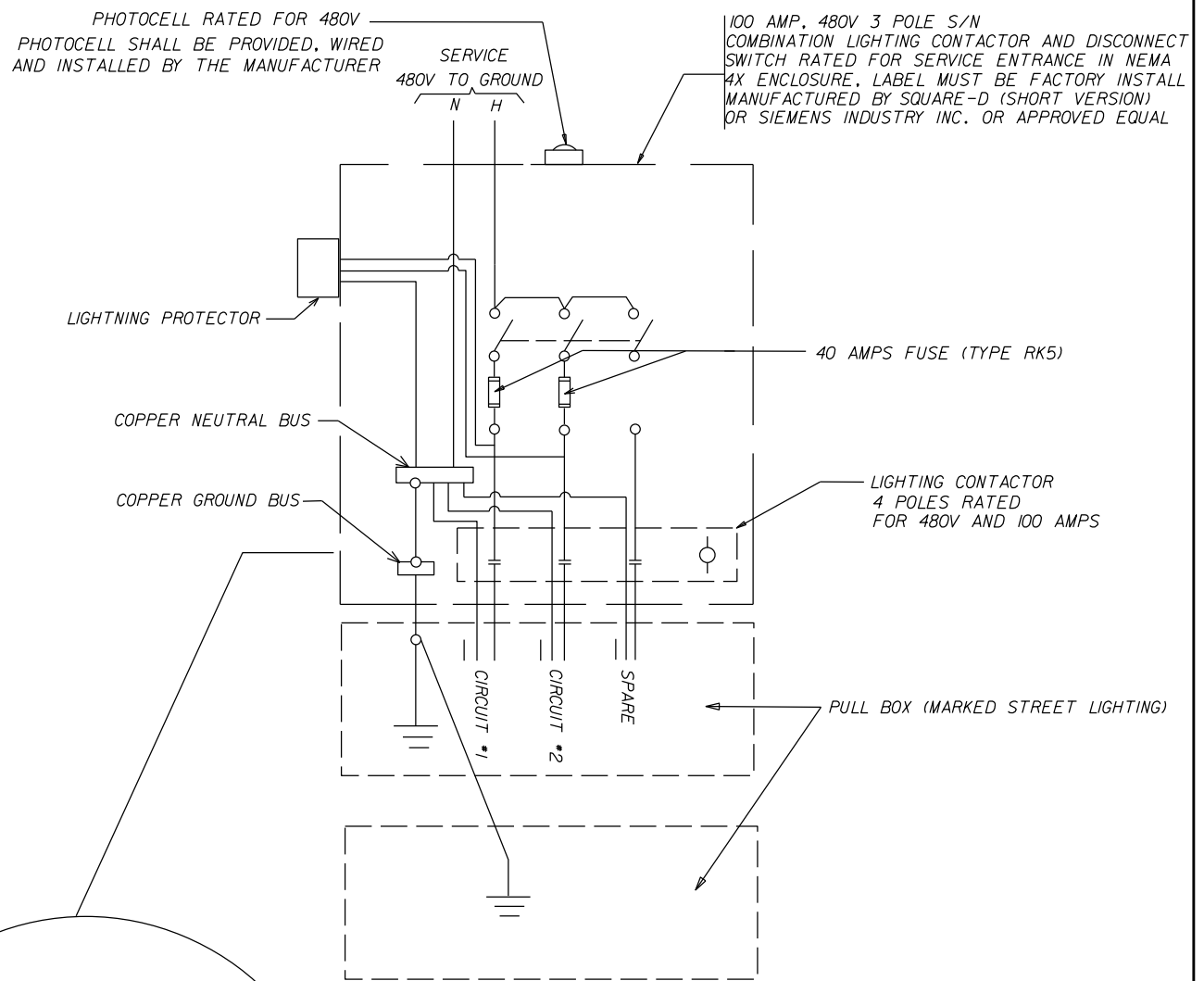
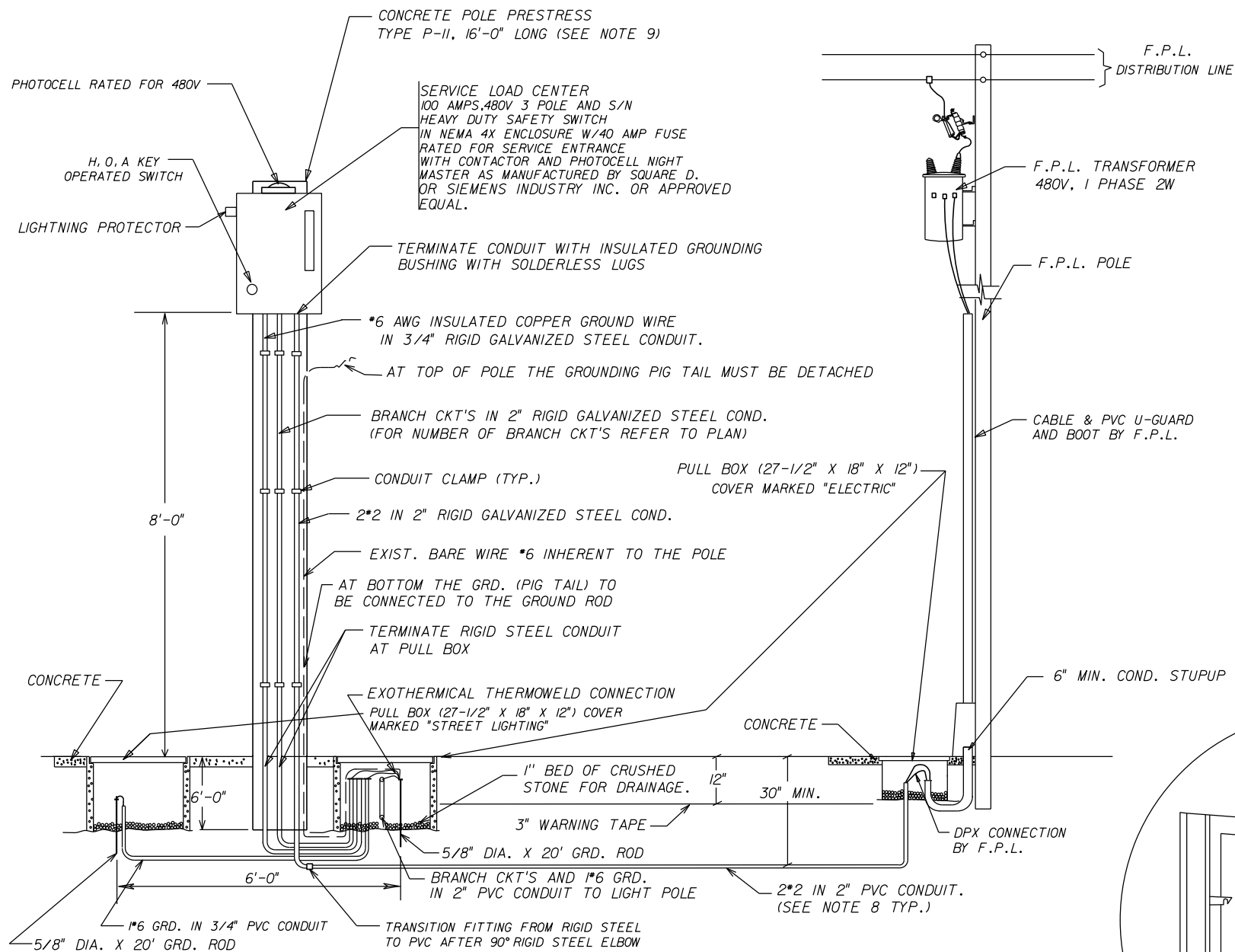
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

PHUC H. DUONG, P.E.
 P.E. NO.: 63835
 GANNETT FLEMING
 9119 CORPORATE LAKE DR., SUITE 150
 TAMPA, FLORIDA 33634
 CERTIFICATE OF AUTHORIZATION No. 5564

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	COUNTY PROJECT NO
NA	LEE	CN160459DLK

LIGHTING PLAN

SHEET NO.
L-7



NOTES:

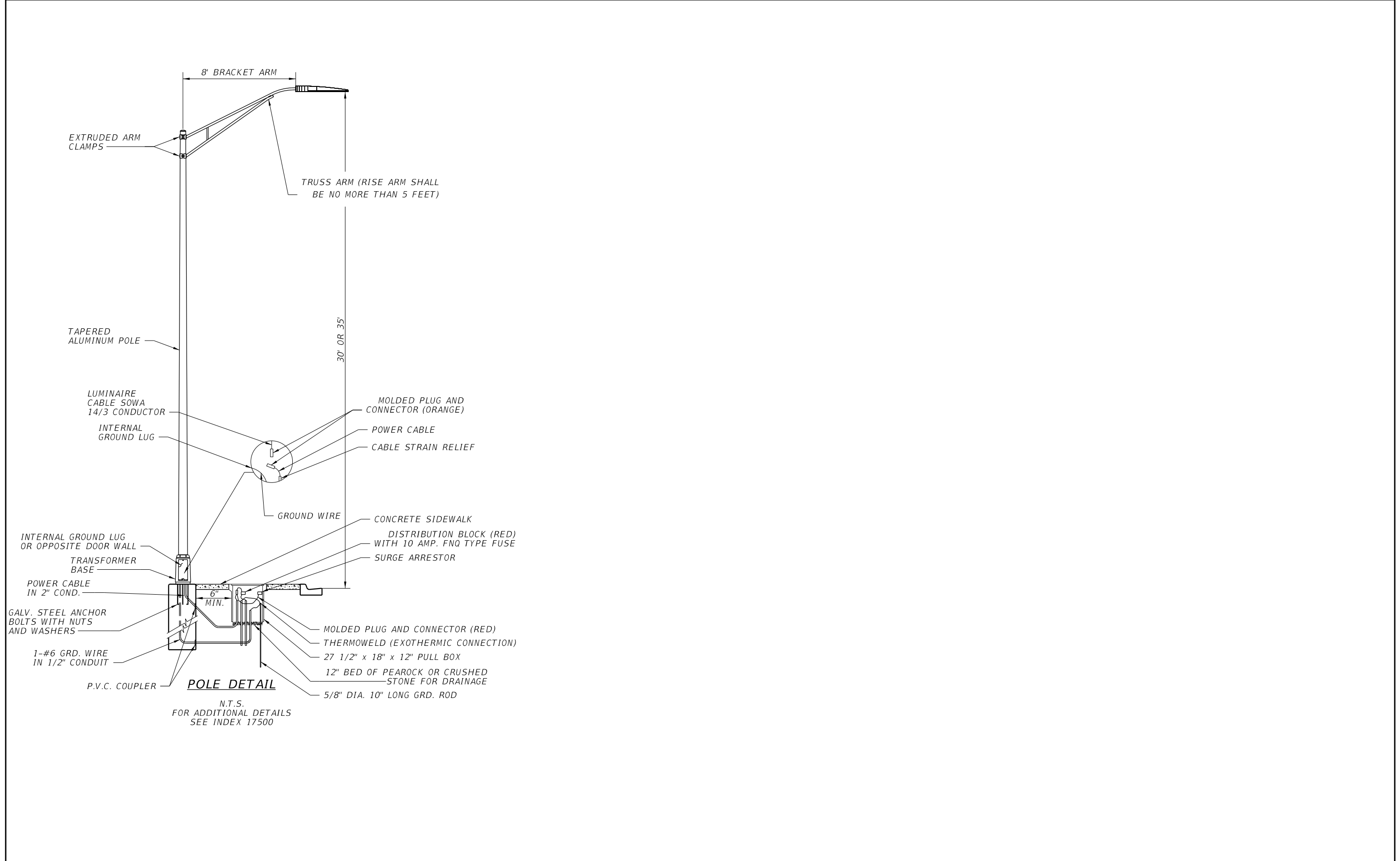
SERVICE POINT DETAIL
N.T.S

1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH.
3. A 600V LIGHTNING PROTECTOR SHALL BE WIRED INSIDE THE ENCLOSURE. NO SPLICING IN ENCLOSURE.
4. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
5. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE OF \$148.00. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-II) THIS LAYOUT HAVE BEEN APPROVED BY THE MAINTENANCE AGENCY (MIAMI-DADE COUNTY).
6. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
7. PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACE AT LEAST 6FT.
8. ALL CONDUCTOR SHALL BE TYPE THWN-2. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED, EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
9. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
10. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE OF 148.00 DOLLARS. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-II) THIS LAYOUT HAVE BEEN APPROVED BY THE MAINTENANCE AGENCY (MIAMI-DADE COUNTY AND F.D.O.T. DISTRICT SIX)

II. LIGHTNING PROTECTOR TO BE WIRED ON LOAD SIDE OF DISCONNECT SWITCH.

*NOTE TO DESIGNER: TO BE USED FOR 2 CIRCUITS ONLY.

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	COUNTY PROJECT NO	
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POLE DETAIL

N.T.S.
FOR ADDITIONAL DETAILS
SEE INDEX 17500

REVISIONS				PHUC H. DUONG, P.E. P.E. NO.: 63835 GANNETT FLEMING 9119 CORPORATE LAKE DR., SUITE 150 TAMPA, FLORIDA 33634 CERTIFICATE OF AUTHORIZATION No. 5564	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. LUMINAIRE DETAIL L-9
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	COUNTY PROJECT NO	
					NA	LEE	CN160459DLK	