

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

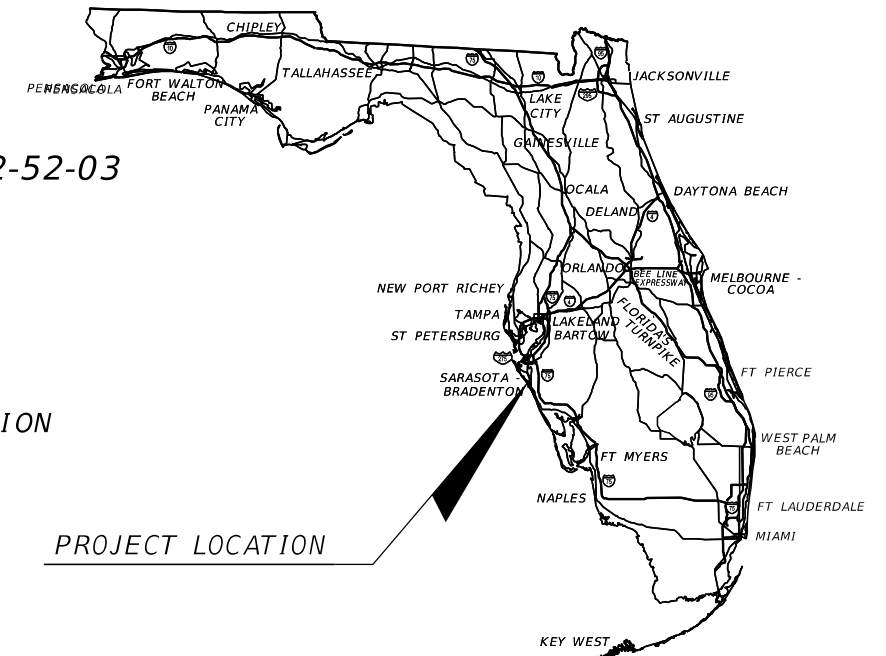
LIGHTING PLANS

FINANCIAL PROJECT ID 445926-2-52-01, 445926-2-52-02 & 445926-2-52-03

SARASOTA COUNTY (17030)

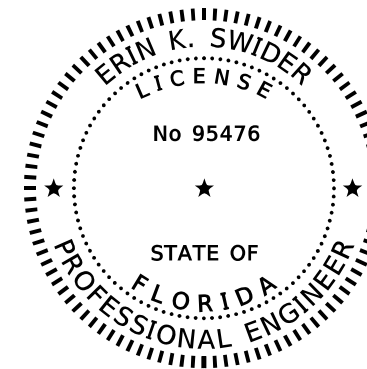
STATE ROAD NO. SR 789

WIDENING AND RECONSTRUCTION OF SR 789 EAST OF BIRD KEY DR.
INTERSECTION TO WEST OF SUNSET DR. / GOLDEN GATE POINT INTERSECTION



PROJECT LOCATION

THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY



ON THE DATE ADJACENT TO THE SEAL
PRINTED COPIES OF THIS DOCUMENT ARE
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ON ANY ELECTRONIC COPIES.

KIMLEY-HORN AND ASSOCIATES, INC.
1800 SECOND STREET, SUITE 900
SARASOTA, FLORIDA 34236
ERIN K. SWIDER, P.E. NO. 95476

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

LIGHTING PLANS
ENGINEER OF RECORD:

ERIN K. SWIDER, P.E.
P.E. LICENSE NUMBER 95476
KIMLEY HORN
1800 SECOND STREET, SUITE 900
SARASOTA, FLORIDA 34236
PHONE: (941) 379-7600
CONTRACT NO.: C9014
VENDOR NO.: F560885615-001

FDOT PROJECT MANAGER:

JEFF MEDNICK

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
	25	L-1

INDEX OF LIGHTING PLANS








SHEET NO.	SHEET DESCRIPTION
L-1	KEY SHEET
L-2	GENERAL NOTES & LEGEND
L-3	LIGHTING DATA TABLE
L-4 - L-5	LIGHTING PLAN SHEETS
L-6	SERVICE POINT DETAILS

PROJECT LOCATION URL:	https://tinyurl.com/yc7dvpe6
PROJECT LIMITS:	BEGIN STA. 121+00.00 - END STA. 133+65.23 BEGIN STA. 164+93.72 - END STA. 184+20.00
EXCEPTIONS:	BEGIN STA. 133+65.23 - END STA. 164+93.72
BRIDGE LIMITS:	BRIDGE NO. 170176 BEGIN STA. 133+65.23 - END STA. 164+93.72
RAILROAD CROSSING:	NONE

GENERAL NOTES

1. LIGHTING SYSTEM SHALL BE MAINTAINED BY CITY OF SARASOTA, CONTRACTOR SHALL COORDINATE INSPECTION PRIOR TO FINAL ACCEPTANCE
2. EXISTING LIGHTING SHALL BE MAINTAINED DURING CONSTRUCTION TO GREATEST EXTENT POSSIBLE UNTIL NEW SYSTEM IS OPERATIONAL.
3. IDENTIFICATION TAG: (SUBMIT DETAILS FOR APPROVAL.)
 - A. 2" X 4" (MAX.) ALUMINUM IDENTIFICATION TAG.
 - B. LOCATE ON THE INSIDE OF THE TRANSFORMER BASE AND VISIBLE FROM THE DOOR OPENING.
 - C. SECURE TO TRANSFORMER BASE WITH 1/8" DIAMETER STAINLESS STEEL RIVETS OR SCREWS.
 - D. INCLUDE THE FOLLOWING INFORMATION ON THE ID TAG:
 1. FINANCIAL PROJECT ID
 2. POLE HEIGHT
 3. MANUFACTURER'S NAME

LEGEND

- MANUFACTURER:
 GENERAL ELECTRIC PHOTOMETRIC CURVE NO.:
 ERL2_16C330.IES, ERL2_16D330.IES, ERL2_18D330.IES, ERL2_23B330.IES
 AS NOTED IN THE POLE DATA TABLE.
-  WAS USED AS THE BASIS OF DESIGN, WIRED FOR 240/480V OPERATION.
 SEE POLE DATA TABLE FOR WATTAGE, MOUNTING HEIGHT, ARM LENGTH, AND FULL IES DESIGNATION. NEW LIGHT POLE AND LUMINAIRE.
-  RELOCATE EXISTING POLE
-  EXISTING LIGHT POLE AND LUMINAIRE TO BE REMOVED.
-  PROPOSED LOAD CENTER
-  2" DIRECT BURIED CONDUIT
-  2" DIRECTIONAL DRILLED CONDUIT
-  PROPOSED LOCATION OF 13" X 24" LIGHTING PULL BOX

NEW CONSTRUCTION SIGNALIZED INTERSECTION CRITERIA

AVERAGE INITIAL INTENSITY: 3.0 H.F.C. / 1.5 V.F.C.

UNIFORMITY RATIO AVG. / MIN.: 4 : 1 OR LESS**

UNIFORMITY RATIO MAX. / MIN.: 10 : 1 OR LESS**

DESIGN WIND SPEED: 160 MPH

**ILLUMINATION UNIFORMITY RATIOS DO NOT APPLY TO V.F.C.

NOTE: ALL EXISTING LIGHTING WITHIN PROJECT LIMITS IS TO REMAIN UNLESS OTHERWISE NOTED.

12/21/2023 7:48:11 AM Steven.Hartl K:\SAR_Worksheets\VDOT\149748004_Gulfstream-Sunset_Lighting_GWNTLTD1.dgn

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

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ERIN K. SWIDER, P.E. LICENSE NUMBER: 95476 KIMLEY-HORN AND ASSOCIATES, INC. 1800 SECOND STREET, SUITE 900 SARASOTA, FL 34236		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	GENERAL NOTES & LEGEND
						SR 789	SARASOTA	445926-2-52-01	

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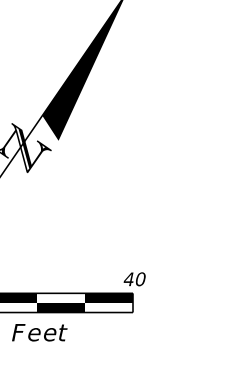
POLE DATA									
POLE NO.	CIRCUIT	STATION	OFFSET	LUMINAIRE WATTAGE	MOUNTING HEIGHT	ARM LENGTH	IES FILE	POLE SETBACK**	PAY ITEM
1	A-1	124+83.00	80.00 RT	194	35	12	ERL2_23B330	19.00'	715-61-242
2	A-1	125+03.75	47.50 LT	194	35	12	ERL2_23B330	3.12'	715-61-242
3	A-1	125+59.25	98.50 RT	120	35	12	ERL2_16C330	9.21'	715-61-242
4	A-1	125+61.00	56.00 LT	140	35	12	ERL2_18D330	2.92'	715-61-242
5	A-1	126+30.25	53.50 LT	140	35	12	ERL2_18D330	5.18'	715-61-242
6	A-1	126+39.25	76.50 RT	120	35	12	ERL2_16D330	15.01'	715-61-242
7	A-1	127+36.53	62.12 LT	194	35	12	ERL2_23B330	14.99'	715-61-242
EX 11	A-1	123+16.44	79.26 RT	EXIST.	EXIST.	EXIST.	EXIST.	24.03'	715-68-000
EX 12	A-1	123+83.51	80.03 RT	EXIST.	EXIST.	EXIST.	EXIST.	19.00'	715-68-000
EX 13	A-1	124+40.83	80.18 RT	EXIST.	EXIST.	EXIST.	EXIST.	19.00'	715-68-000
EX 14	A-1	125+01.12	79.61 RT	EXIST.	EXIST.	EXIST.	EXIST.	18.77'	715-68-000
EX 15	A-1	127+18.19	67.62 RT	EXIST.	EXIST.	EXIST.	EXIST.	19.70'	715-68-000
EX 16	A-1	128+18.63	61.42 LT	EXIST.	EXIST.	EXIST.	EXIST.	14.50'	715-68-000
EX 17	A-1	128+20.08	66.92 RT	EXIST.	EXIST.	EXIST.	EXIST.	19.00'	715-68-000
EX 18	A-1	129+18.67	61.42 LT	EXIST.	EXIST.	EXIST.	EXIST.	14.50'	715-68-000
EX 19	A-1	129+19.03	66.92 RT	EXIST.	EXIST.	EXIST.	EXIST.	19.00'	715-68-000
EX 20	A-1	130+18.32	0.53 LT	EXIST.	EXIST.	EXIST.	EXIST.	5.39'	---
EX 21	A-1	131+18.22	0.43 LT	EXIST.	EXIST.	EXIST.	EXIST.	3.67'	---
EX 22	A-1	132+18.92	1.52 LT	EXIST.	EXIST.	EXIST.	EXIST.	BARRIER MOUNT.	715-68-000
EX 23	A-1	133+18.17	0.44 LT	EXIST.	EXIST.	EXIST.	EXIST.	BARRIER MOUNT.	715-68-000
8	B-1	176+17.75	64.00 RT	194	35	12	ERL2_23B330	17.03'	715-61-242
9	B-1	177+53.00	63.00 RT	194	35	12	ERL2_23B330	16.14'	715-61-242
10	B-1	177+94.36	50.16 LT	194	35	12	ERL2_23B330	1.50'	715-61-242
11	B-1	178+66.75	65.75 RT	140	40	10	ERL2_18D330	14.33'	715-61-321
12	B-1	178+76.64	75.10 LT	140	35	12	ERL2_18D330	7.75'	715-61-242
13	B-1	178+99.50	154.25 LT	140	40	12	ERL2_18D330	1.54'	715-61-342
14	B-1	179+41.00	78.09 RT	140	35	12	ERL2_18D330	16.76'	715-61-242
15	B-1	179+62.89	69.09 LT	140	40	12	ERL2_18D330	10.08'	715-61-342
16	B-1	180+53.00	57.25 LT	194	35	12	ERL2_23B330	2.94'	715-61-242
17	B-1	181+24.25	56.00 RT	194	35	12	ERL2_23B330	2.83'	715-61-242
18	B-1	181+66.00	53.75 LT	194	35	12	ERL2_23B330	1.58'	715-61-242
EX 01	B-2	175+20.59	65.27 LT	EXIST.	EXIST.	EXIST.	EXIST.	16.50'	715-68-00
EX 02	B-1	175+20.82	60.99 RT	EXIST.	EXIST.	EXIST.	EXIST.	14.18'	---
EX 03	B-2	176+21.07	65.57 LT	EXIST.	EXIST.	EXIST.	EXIST.	16.50'	715-68-000
EX 04	B-2	177+20.77	65.48 LT	EXIST.	EXIST.	EXIST.	EXIST.	16.50'	715-68-000
EX 05	EX	182+55.00	51.00 RT	EXIST.	EXIST.	EXIST.	EXIST.	3.14'	---
EX 06	EX	184+00.80	43.49 LT	EXIST.	EXIST.	EXIST.	EXIST.	1.50'	715-68-000
EX 07	EX	183+93.00	63.50 RT	EXIST.	EXIST.	EXIST.	EXIST.	17.00'	715-68-000

**SETBACK MEASURED FROM NEAREST FACE OF CURB TO FACE OF POLE

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						SR 789	SARASOTA	445926-2-52-01	

LIGHTING DATA TABLE

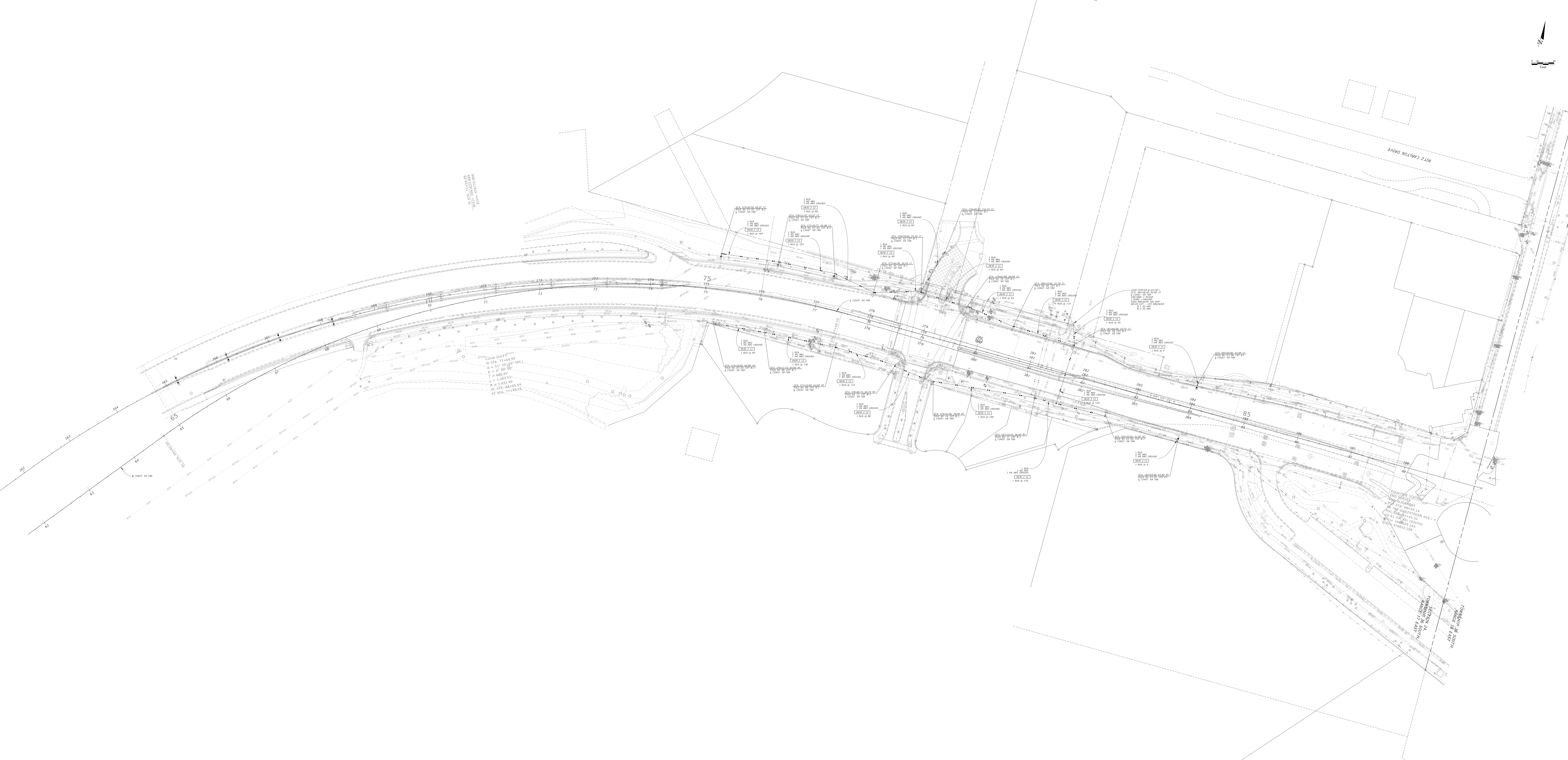
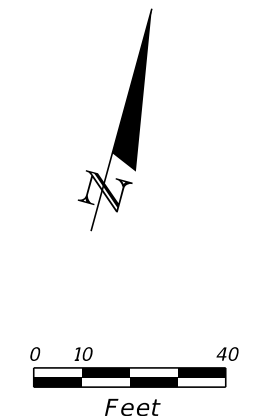
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Curve GULF1
 PI STA. 35+83.45
 Δ = 20° 18' 09" (LT.)
 D = 4' 15' 00"
 T = 241.38'
 L = 477.71'
 R = 1,348.14'
 PC STA. 33+42.07
 PT STA. 38+19.78

PI STA. 35+83.45
 PC STA. 33+42.07
 PT STA. 38+19.78
 ELEV = 474533.588

LOAD CENTER A
 STA. 124+88.37 89.57 FT
 E CONST. SR 789
 MAIN BREAKER
 BEGIN CAT. - CAT BREAKER
 END SERVICE LINE



PROPOSED LOAD CENTER A 240/480 V, SINGLE PHASE, 2 WIRE + GROUND STA. 124+88.37, 89.05' RT. (CL CONST. SR 789)					
LOAD CENTER DESIGNATION	MAIN & CIRCUIT BREAKER SIZES	# OF BRANCH CIRCUITS	TOTAL DEMAND LOAD (AMPS)	TOTAL DESIGN LOAD (AMPS)	# SERVICE ENTRANCE CONDUCTORS & CONDUIT AND BRANCH CIRCUIT SIZE
A	100 A, 2P	1	3.1	3.88	# 2 AWG
1	20 A, 2P		3.1	3.88	# 6 AWG

PROPOSED LOAD CENTER B 240/480 V, SINGLE PHASE, 2 WIRE + GROUND STA. 181+56.50, 92.00' LT. (CL CONST. SR 789)					
LOAD CENTER DESIGNATION	MAIN & CIRCUIT BREAKER SIZES	# OF BRANCH CIRCUITS	TOTAL DEMAND LOAD (AMPS)	TOTAL DESIGN LOAD (AMPS)	# SERVICE ENTRANCE CONDUCTORS & CONDUIT AND BRANCH CIRCUIT SIZE
B	100 A, 2P	2	5.9	7.38	# 2 AWG
1	20 A, 2P		4.7	5.88	# 6 AWG
2	20 A, 2P		1.2	1.50	# 6 AWG

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							L-6		

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