

THIS PROJECT TO BE LET TO CONTRACT
WITH FINANCIAL PROJECT ID(S):
453730-1-56-01

CONTRACT PLANS COMPONENTS

ROADWAY
SIGNING AND PAVEMENT MARKING
LIGHTING

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

LIGHTING PLANS

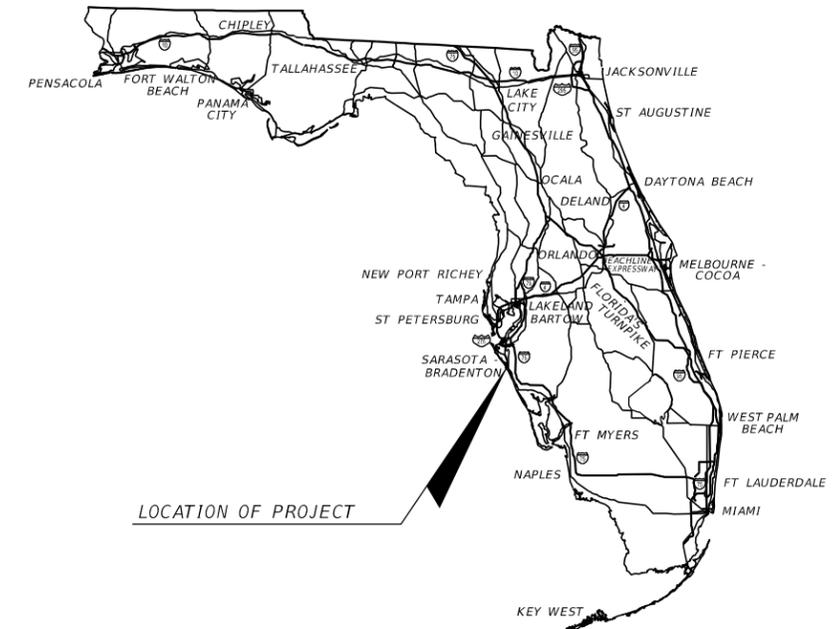
FINANCIAL PROJECT ID 453730-1-52-01, 453730-1-52-02

(FEDERAL FUNDS)

MANATEE COUNTY (13080)

STATE ROAD NO. 789 (GULF OF MEXICO DR.)

MODERN ROUNDABOUT IMPROVEMENT DESIGN



INDEX OF LIGHTING PLANS

| SHEET NO. | SHEET DESCRIPTION |
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| L-2 | SIGNATURE SHEET |
| L-3 | POLE DATA AND LEGEND |
| L-4 - L-6 | LIGHTING PLAN SHEETS |
| L-7 | SERVICE POINT DETAILS |

PROJECT LOCATION URL: <https://tinyurl.com/475kffht>

PROJECT LIMITS: BEGIN MP 3.980 - END MP 4.405

EXCEPTIONS: NONE

BRIDGE LIMITS: NONE

RAILROAD CROSSING: NONE

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2026-27 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>

APPLICABLE IRs: N/A

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, FY2026-27 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

**LIGHTING PLANS
ENGINEER OF RECORD:**

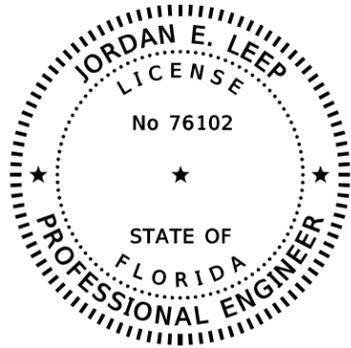
JORDAN E. LEEP, P.E.
P.E. LICENSE NUMBER 76102
KIMLEY-HORN AND ASSOCIATES, INC.
1800 2ND STREET, SUITE 900
SARASOTA, FL 34236
PHONE (941) 379-7600
CONTRACT NO.: CAD90
VENDOR NO.: F560885615202

FDOT PROJECT MANAGER:

JOEL HOBBS, P.E.

| CONSTRUCTION CONTRACT NO. | FISCAL YEAR | SHEET NO. |
|---------------------------|-------------|-----------|
| T1935 | 27 | L-1 |

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



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

SIGNATURE MUST BE VERIFIED ON
ANY ELECTRONIC COPIES.

KIMLEY-HORN AND ASSOCIATES, INC.
1800 2ND STREET, SUITE 900
SARASOTA, FL 34236
JORDAN E. LEEP, P.E. NO. 76102

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

LIGHTING PLANS

| SHEET NO. | SHEET DESCRIPTION |
|-----------|-----------------------|
| L-1 | KEY SHEET |
| L-2 | SIGNATURE SHEET |
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| L-4 - L-6 | LIGHTING PLAN SHEETS |
| L-7 | SERVICE POINT DETAILS |

| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SIGNATURE SHEET | SHEET NO. |
|-----------|-------------|------|-------------|---|--|--|---------|----------------------|-----------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | | L-2 |
| | | | | | | SR 789 | MANATEE | 453730-1-52-01 | | |

Lighting Data Table

| Pole No. | Eastings | Northing | Baseline | Station | Offset | Foundation | Arm Length | Arm Rise | Mount Height | Luminaire Angle (deg) | Quantity Luminaire s | Type | Make\Model | Lumens | IES Dist Type | CCT (K) | Tilt (deg) | Luminaire Watts | Luminaire Volts | Load Center No. | Circuit No. | Maint. Agency | Pay Item |
|----------|-----------|------------|-------------|-----------|-----------|----------------|------------|----------|--------------|-----------------------|----------------------|------|-----------------------|--------|---------------|---------|------------|-----------------|-----------------|-----------------|-------------|---------------|------------|
| 1 | 433910.76 | 1127782.57 | CL_CONSTGMD | 210+22.50 | 52.25 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 2 | 433792.96 | 1127818.28 | CL_CONSTGMD | 211+02.25 | 41.75 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 3 | 433611.37 | 1127848.96 | CL_CONSTGMD | 211+88.75 | 201.00 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 4 | 433847.68 | 1127933.61 | CL_CONSTGMD | 211+91.25 | 50.00 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 5 | 433743.60 | 1127948.36 | CL_CONSTGMD | 212+38.00 | 44.20 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 6 | 433826.76 | 1128007.12 | CL_CONSTGMD | 212+70.00 | 52.50 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 7 | 433674.13 | 1127975.18 | CL_CONSTGMD | 212+81.86 | 103.00 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 8 | 433703.55 | 1128016.70 | CL_CONSTGMD | 213+12.50 | 63.50 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 9 | 433793.93 | 1128089.45 | CL_CONSTGMD | 213+60.50 | 42.00 RT | SPREAD FOOTING | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 10 | 433813.65 | 1128095.14 | CL_CONSTGMD | 213+61.50 | 62.50 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 11 | 433768.02 | 1128148.18 | CL_CONSTGMD | 214+24.75 | 29.25 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 1 | FPL | 0715 61842 |
| 12 | 433961.46 | 1128147.17 | CL_CONSTGMD | 213+80.25 | 218.25 RT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 13 | 433696.68 | 1128244.32 | CL_CONSTGMD | 215+31.50 | 25.25 LT | SPREAD FOOTING | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | A | 2 | FPL | 0715 61842 |
| 14 | 434179.29 | 1127241.95 | CL_CONSTGMD | 204+18.50 | 31.75 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | EX-1 | EX-1 | FDOT | 0715 61842 |
| 15 | 434140.92 | 1127282.18 | CL_CONSTGMD | 204+71.75 | 33.25 LT | SHAFT | 12 | 0 | 32 | 0 | 1 | LED | VISIONAIRE / BLX-II-4 | 14065 | III | AMBER | 0 | 211 | 120 | EX-1 | EX-1 | FDOT | 0715 61842 |

* SETBACK MEASURED FROM NEAREST EDGE OF PAVEMENT TO FACE OF POLE
 ALL PROPOSED POLES MUST MATCH TOWN OF LONGBOAT KEY PREFERENCES PRIOR TO INSTALLATION.
 CONTRACTOR WILL USE CARE WHEN CONSTRUCTING NEAR EXISTING LIGHT POLES TO AVOID DAMAGE,
 ANY DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WILDLIFE-SENSITIVE CONVENTIONAL LIGHTING

ARTERIALS / COLLECTORS CRITERIA

AVERAGE INITIAL INTENSITY: 1.0-1.5 H.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.

SIGNALIZED INTERSECTIONS (ROUNDAABOUT) CRITERIA

AVERAGE INITIAL INTENSITY: 1.5-3.0 H.F.C. / 1.0 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.

MIDBLOCK CROSSWALK CRITERIA

AVERAGE INITIAL INTENSITY: 1.0 V.F.C.
 UNIFORMITY RATIO AVG. / MIN.: N/A
 UNIFORMITY RATIO MAX. / MIN.: N/A
 DESIGN WIND SPEED: 160 MPH

PAY ITEM NOTE

- PAY ITEM 0715-61-842 - INCLUDES POLES WITH A MOUNTING HEIGHT OF 32'.

LEGEND

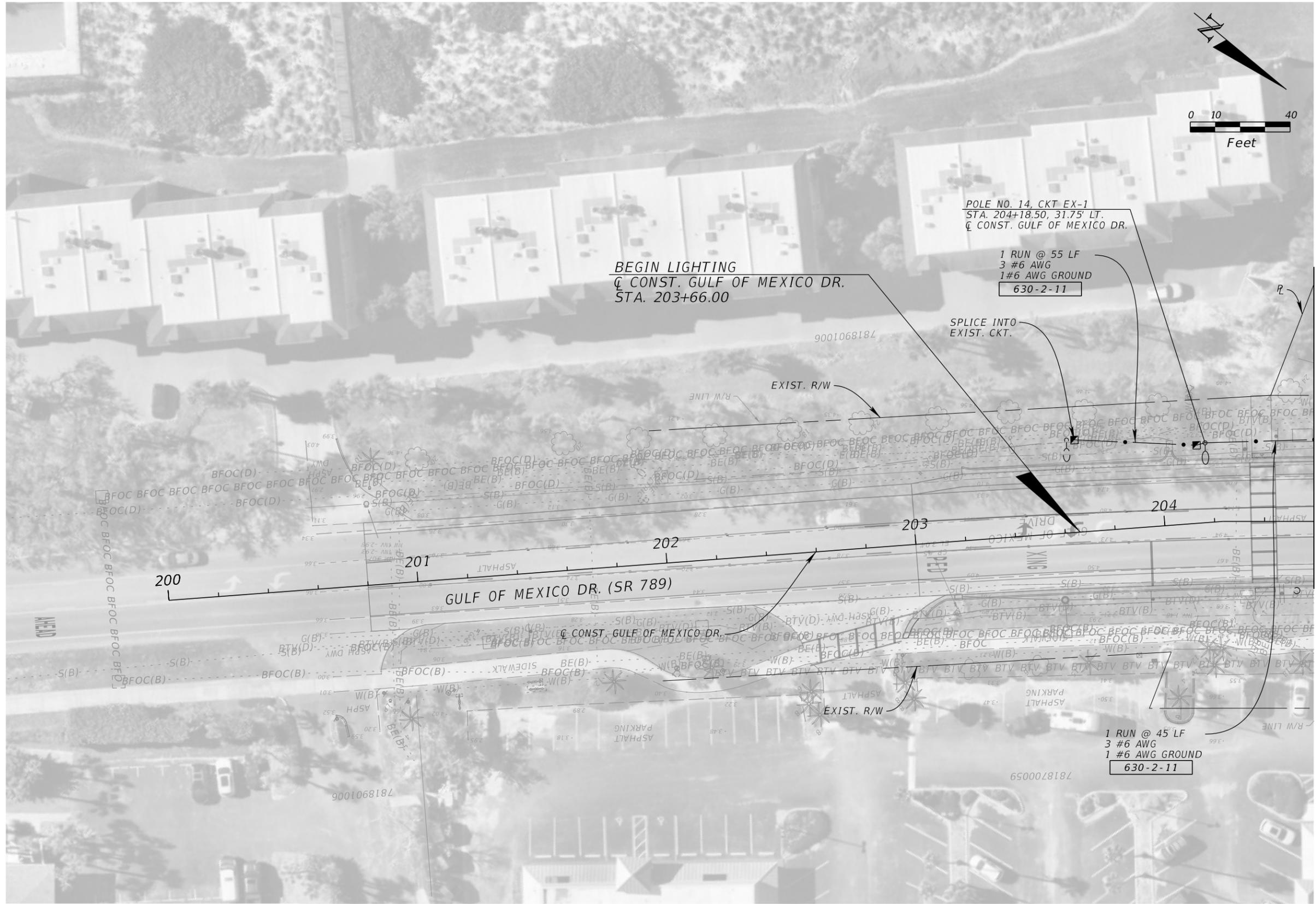
MANUFACTURER:
 VISIONAIRE LIGHTING BLX-II WILDLIFE CERTIFIED PHOTOMETRIC
 CURVE NO.: BLX-II_4_T3_128LC_5_AMBER.ies
 WAS USED AS THE BASIS OF DESIGN, WIRED FOR 120V OPERATION. SEE
 POLE DATA TABLE FOR WATTAGE, MOUNTING HEIGHT, ARM LENGTH, AND
 FULL IES DESIGNATION. NEW LIGHT POLE AND LUMINAIRE.

◆ PROPOSED 120V SERVICE POINT
 □ PROPOSED LOAD CENTER
 —●— 2" DIRECT BURIED CONDUIT
 —●●— 2" DIRECTIONAL DRILLED CONDUIT
 ■ PROPOSED LOCATION OF 13" X 24" LIGHTING PULL BOX
 <X> EXISTING LIGHT POLE AND LUMINAIRE TO BE REMOVED.
 <) > EXISTING LIGHT POLE AND LUMINAIRE TO REMAIN.
 - - - - - REMOVE EXIST. CONDUIT AND CONDUCTOR

| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. L-3 |
|-----------|-------------|------|-------------|---|--|--|---------|----------------------|-------------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | | | SR 789 | MANATEE | 453730-152-01 | |

POLE DATA AND LEGEND

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



MATCH LINE - STA. 204+60.00

| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | LIGHTING PLAN SHEET (1) | SHEET NO. |
|-----------|-------------|------|-------------|---|--|--|---------|----------------------|-------------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | | L-4 |
| | | | | | | SR 789 | MANATEE | 453730-1-52-01 | | |

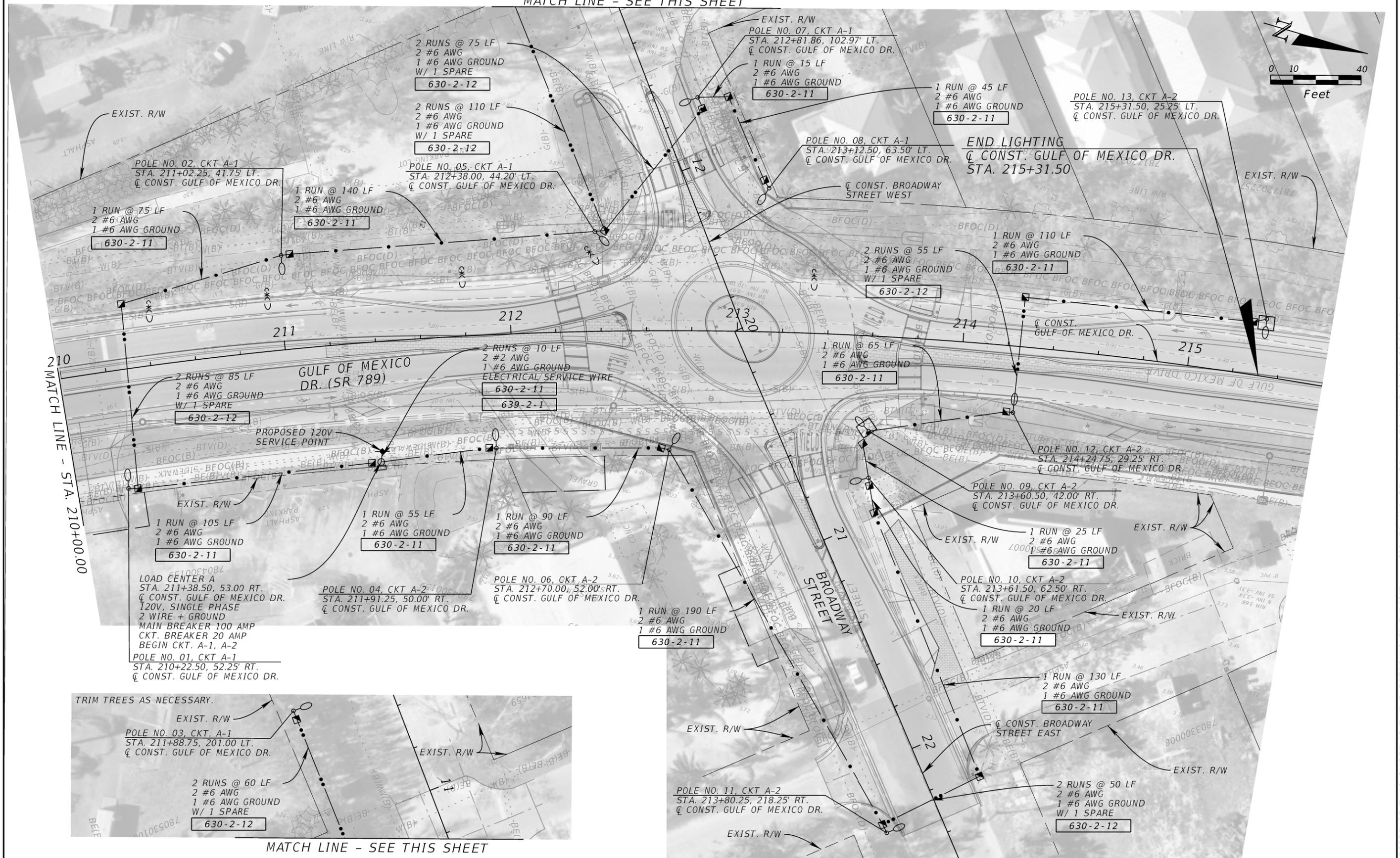
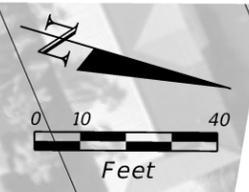
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| REVISIONS | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. |
|--------------------------------|-------------|--------------------|-------------|---|--------|----------------------|----------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | SR 789 | MANATEE | 453730-1-52-01 |
| LIGHTING PLAN SHEET (2) | | | | | | | L-5 |

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

MATCH LINE - SEE THIS SHEET



MATCH LINE - SEE THIS SHEET

| REVISIONS | | | | ENGINEER OF RECORD | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. |
|-----------|-------------|------|-------------|---|--|---------|----------------------|---|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | SR 789 | MANATEE | 453730-1-52-01 | LIGHTING PLAN SHEET (3) L-6 |

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

PROPOSED LOAD CENTER A
 120 V, SINGLE PHASE, 2 WIRE + GROUND
 STA. 211+38.50, 53.00 RT. (CL CONST. GULF OF MEXICO DR.)

| LOAD CENTER DESIGNATION | CKT. | 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, 1P | 2 | 22.9 | 28.63 | # 2 AWG |
| | 1 | 20 A, 1P | | 10.6 | 13.25 | # 6 AWG |
| | 2 | 20 A, 1P | | 12.3 | 15.38 | # 6 AWG |

| REVISIONS | | | | ENGINEER OF RECORD | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | <i>SERVICE POINT DETAILS</i> | SHEET NO. |
|-----------|-------------|------|-------------|---|--|--------|----------------------|------------------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | JORDAN E. LEEP, P.E. LICENSE NUMBER: 76102 KIMLEY-HORN AND ASSOCIATES, INC. 1800 2ND STREET, SUITE 900 SARASOTA, FL 34236 | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | | L-7 |
| | | | | | | SR 789 | MANATEE | | |

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