

CONTRACT PLANS COMPONENTS

- ROADWAY PLANS
- SIGNING AND PAVEMENT MARKING PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF LIGHTING PLANS

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| L-2 | LIGHTING LEGEND |
| L-3 | LIGHTING DATA TABLE |
| L-4 - L-9 | LIGHTING PLAN |

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

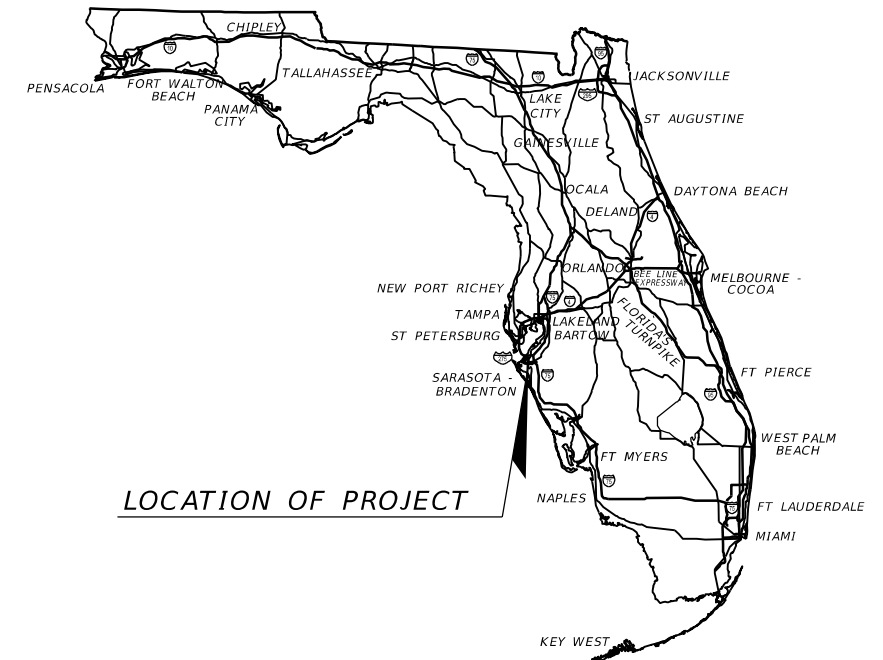
LIGHTING PLANS

FINANCIAL PROJECT ID 447379-1-52-01
(FEDERAL FUNDS)

MANATEE COUNTY (13130)

STATE ROAD NO. 55 (S TAMiami TRAIL)

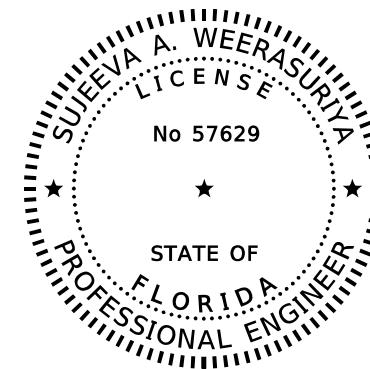
RRR FROM 23RD AVE W TO 39TH ST E



LOCATION OF PROJECT

| | |
|-----------------------|---|
| PROJECT LOCATION URL: | https://tinyurl.com/2nvfs7yc |
| PROJECT LIMITS: | BEGIN MP 1.126 - END MP 6.000 |
| EXCEPTIONS: | MP 1.661 - MP 1.738 MP 2.143 - MP 2.181 |
| BRIDGE LIMITS: | BR#130053 MP 2.617 - MP 3.038 BR#130002 MP 4.032 - MP 4.065 BR#130008 MP 4.261 - MP 4.293 BR#130009 MP 5.342 - MP 5.408 |
| RAILROAD CROSSING: | DOT/AAR CROSSING NO. 624712-B CSX MP AZA 917.00, CSXT, INC. MP 1.661 DOT/AAR CROSSING NO. 624612-W CSX MP SWC 870.56, CSXT, INC. MP 4.264 DOT/AAR CROSSING NO. 624730-Y CSX MP AZA 913.1, CSXT, INC. MP 5.342 |

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY



ON THE DATE ADJACENT TO THE SEAL

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LIGHTING PLANS
ENGINEER OF RECORD:

SUJEEVA A. WEERASURIYA, P.E.
P.E. LICENSE NUMBER 57629
PATEL, GREENE & ASSOCIATES, LLC
12570 TELECOM DRIVE
TEMPLE TERRACE, FL 33637
CONTRACT NO.: CAK18
VENDOR NO.: F452209743-001

FDOT PROJECT MANAGER:

SCOTT MCCALL, P.E.

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2024-25 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, FY 2024-25 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

| CONSTRUCTION CONTRACT NO. | FISCAL YEAR | SHEET NO. |
|---------------------------|-------------|-----------|
| T1910 | 25 | L-1 |

GENERAL NOTES

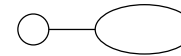
1. SPARE CONDUIT AT PAVEMENT CROSSINGS SHALL BE CAPPED AT BOTH ENDS.
2. SHOP DRAWING SUBMITTAL DATA SHALL INCLUDE A COMPUTER PRINTOUT SHOWING HORIZONTAL FOOT-CANDLE LEVELS TO BE OBTAINED USING THE SUBMITTED LUMINAIRES ON THIS PROJECT. AT FINAL INSPECTION VERIFY THE HORIZONTAL FOOT-CANDLE LEVELS ON THE ROADWAY WITH AN APPROVED CURRENTLY CALIBRATED LIGHT METER, AND SUBMIT REPORT FOR APPROVAL.
3. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (N.E.C), THE NATIONAL ELECTRICAL SAFETY CODE, AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROMPTLY GROUNDED AND BONDED PER THE N.E.C. REQUIREMENTS.
4. INSTALL LIGHTNING ARRESTORS, PROPERLY GROUNDED, IN POWER (SECONDARY) ENTRANCES, ON OUTSIDE OF ENCLOSURES.
5. IN ACCORDANCE WITH N.E.C., IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACOID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL, IDENTIFYING CIRCUIT FOR EACH LUMINAIRE AT ACCESS HANDHOLE FOR EACH POLE.
6. CITY OF PALMETTO AND CITY OF BRADENTON (FOR FDOT POLES) ARE THE MAINTAINING AGENCIES FOR THE LIGHT POLES.
7. FOR RAILROAD REQUIREMENTS WHEN WORKING NEAR OR WITHIN RAILROAD RIGHT-OF-WAY, SEE SHEET 26 IN THE ROADWAY PLANS.

DESIGN CRITERIA

SIGNALIZED INTERSECTION (Retrofit):

| | |
|--|--|
| Average Horizontal Initial Intensity | 1.5 Foot Candles (Std.) 1.0 Foot Candles (Min.) |
| Average Vertical Initial Intensity | 1.5 Foot Candles (Std.) 1.0 Foot Candles (Min.) |
| Uniformity Ratio Ang./Min. | 4:1 Or Less |
| Max./Min. | 10:1 Or Less |
| Veiling Luminance Ratio $L_{V(Max)}/L_{AVG}$ | N/A |

Design Wind Speed - 140 MPH



NEW LIGHT POLE, F&I

Designed for an American Electric Autobahn 2 Series ATB2_P604_R4_3K 264 Watt LED luminaire with 3000K color temperature, Roadway Type IV distribution. Pole mounting height is 40 feet mounted on a standard light pole. Lighting basis of design used photometric curve number ATB2_P604_R4_3K with output lumens of 32,447.

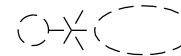
Designed for an American Electric Autobahn 2 Series ATB2_P602_R4_3K 196 Watt LED luminaire with 3000K color temperature, Roadway Type IV distribution. Pole mounting height is 35 feet mounted on a standard light pole. Lighting basis of design used photometric curve number ATB2_P602_R4_3K with output lumens of 26,278.



RETROFIT NEW LUMINAIRE ON EXISTING POLE / ARM

Designed for an American Electric Autobahn 2 Series ATB2_P604_R4_3K 264 Watt LED luminaire with 3000K color temperature, Roadway Type IV distribution. Pole mounting height is 40 feet mounted on a standard light pole. Lighting basis of design used photometric curve number ATB2_P604_R4_3K with output lumens of 32,447.

Designed for an American Electric Autobahn 2 Series ATB2_P602_R4_3K 196 Watt LED luminaire with 3000K color temperature, Roadway Type IV distribution. Pole mounting height is 35 feet mounted on a standard light pole. Lighting basis of design used photometric curve number ATB2_P602_R4_3K with output lumens of 26,278.



EXISTING POLE TO BE REMOVED

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| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. |
|-----------|-------------|------|-------------|---|--|--|---------|----------------------|--------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | SUJEEVA A. WEERASURIYA, P.E. LICENSE NUMBER: 57629 PATEL, GREENE & ASSOCIATES, LLC 12570 TELECOM DRIVE TEMPLE TERRACE, FL 33637 | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | |
| | | | | | | SR 55 | MANATEE | 447379-1-52-01 | L-2 |

LIGHTING LEGEND

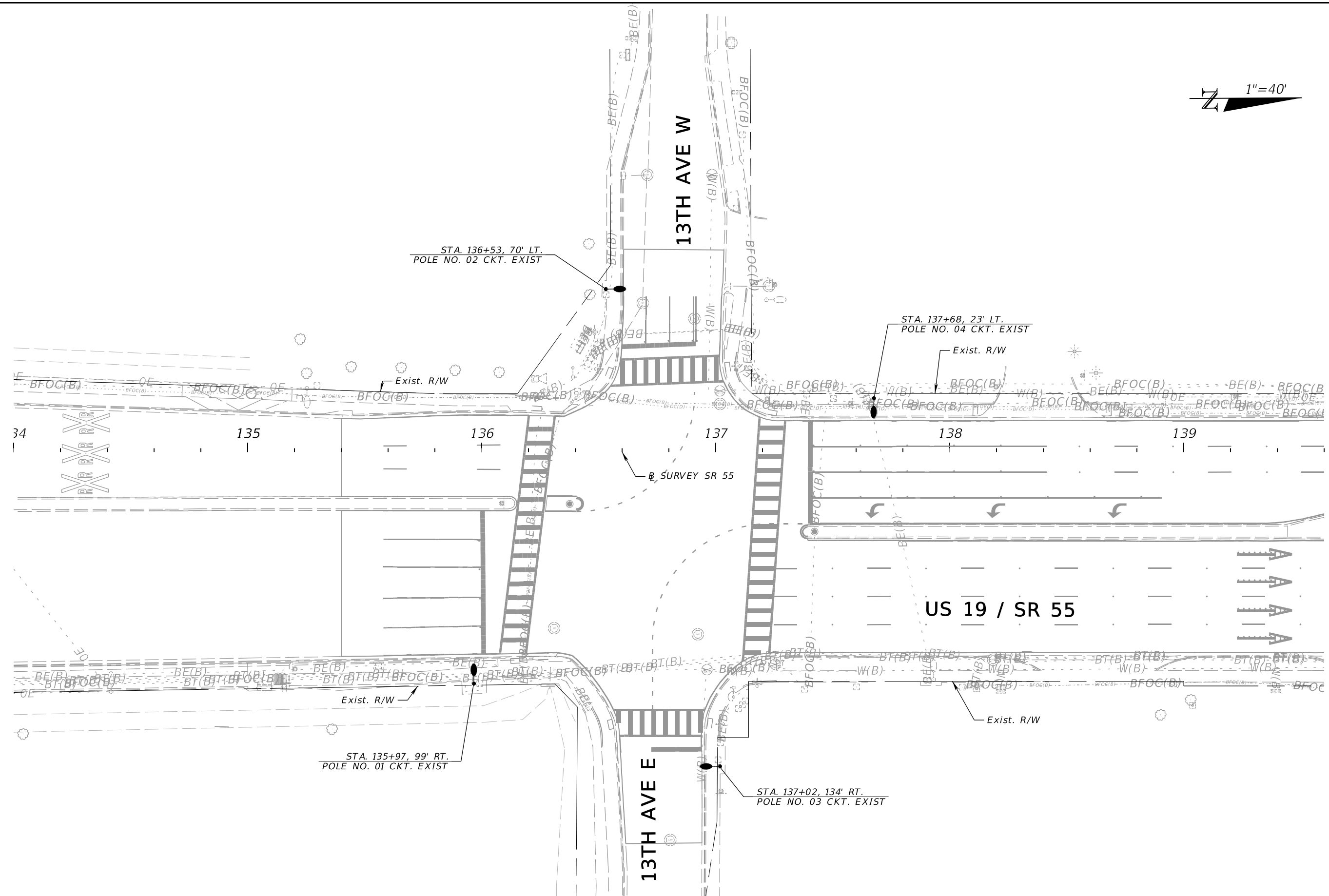
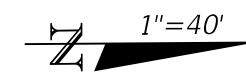
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| Lighting Data Table | | | | | | | | | | |
|---------------------|---------|---------|---------------|------------|--------------|------------|---------------|-----------------|------------|--------------------|
| Pole No. | Station | Offset | Circuit | Arm Length | Mount Height | Tilt (deg) | Input Voltage | Luminaire Watts | Pay Item | Maintaining Agency |
| 1 | 135+97 | 99' RT | Exist | 8' | 40' | 0 | 120 | 264 | 0715 11211 | City of Bradenton |
| 2 | 136+53 | 70' LT | Exist | 8' | 35' | 0 | 120 | 196 | 0715 11211 | City of Bradenton |
| 3 | 137+02 | 134' RT | Exist | 8' | 35' | 0 | 120 | 196 | 0715 11211 | City of Bradenton |
| 4 | 137+68 | 23' LT | Exist | 8' | 40' | 0 | 120 | 264 | 0715 11211 | City of Bradenton |
| 5 | 148+99 | 93' RT | Exist | 8' | 40' | 0 | 120 | 264 | 0715 11211 | City of Bradenton |
| 6 | 149+59 | 55' LT | Exist | 8' | 35' | 0 | 480 | 196 | 0715 11211 | City of Bradenton |
| 7 | 149+55 | 132' RT | Exist | 8' | 40' | 0 | 120 | 264 | 0715 11211 | City of Bradenton |
| 8 | 151+21 | 24' LT | Exist | 8' | 40' | 0 | 480 | 264 | 0715 11211 | City of Bradenton |
| 9 | 161+99 | 60' LT | Exist | 8' | 35' | 5 | 480 | 264 | 0715 11211 | City of Bradenton |
| 10 | 163+35 | 77' LT | Exist B-1 | 8' | 35' | 5 | 240 | 196 | 0715 61211 | City of Bradenton |
| 11 | 163+93 | 58' LT | Exist | 8' | 40' | 5 | 480 | 264 | 0715 11211 | City of Bradenton |
| 12 | 230+66 | 54' LT | Exist | 8' | 35' | 0 | 480 | 136 | 0715 11211 | City of Bradenton |
| 13 | 230+68 | 66' RT | Exist | 8' | 35' | 0 | 480 | 136 | 0715 11211 | City of Bradenton |
| 14 | 231+65 | 91' RT | Exist Ckt A-4 | 8' | 35' | 0 | 480 | 196 | 0715 61211 | City of Palmetto |
| 15 | 231+83 | 54' LT | Exist | 8' | 35' | 0 | 480 | 136 | 0715 11211 | City of Palmetto |
| 16 | 232+43 | 56' RT | Exist | 15' | 40' | 0 | 480 | 264 | 0715 11211 | City of Palmetto |
| 18 | 283+70 | 43' RT | Exist | 15' | 40' | 0 | 480 | 264 | 0715 11211 | City of Palmetto |
| 19 | 284+69 | 116' LT | Exist | 8' | 40' | 0 | 480 | 196 | 0715 11211 | City of Palmetto |
| 20 | 284+92 | 97' RT | Exist | 0' | 40' | 0 | 480 | 196 | 0715 11211 | City of Palmetto |
| 21 | 285+19 | 47' LT | Exist Ckt A-3 | 8' | 35' | 0 | 480 | 264 | 0715 61211 | City of Palmetto |
| 22 | 304+04 | 27' RT | Exist | 15' | 40' | 0 | 480 | 264 | 0715 11211 | City of Palmetto |
| 23 | 304+32 | 69' RT | Exist | 8' | 35' | 0 | 480 | 196 | 0715 11211 | City of Palmetto |
| 24 | 305+01 | 100' LT | Exist | 8' | 35' | 0 | 480 | 196 | 0715 11211 | City of Palmetto |
| 25 | 305+99 | 60' LT | Exist | 15' | 40' | 0 | 480 | 196 | 0715 11211 | City of Palmetto |

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| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | LIGHTING DATA TABLE | SHEET NO. |
|-----------|-------------|------|-------------|---|--|--|---------|----------------------|---------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | SUJEEVA A. WEERASURIYA, P.E. LICENSE NUMBER: 57629 PATEL, GREENE & ASSOCIATES, LLC 12570 TELECOM DRIVE TEMPLE TERRACE, FL 33637 | | ROAD NO. | COUNTY | FINANCIAL PROJECT ID | | L-3 |
| | | | | | | SR 55 | MANATEE | 447379-1-52-01 | | |

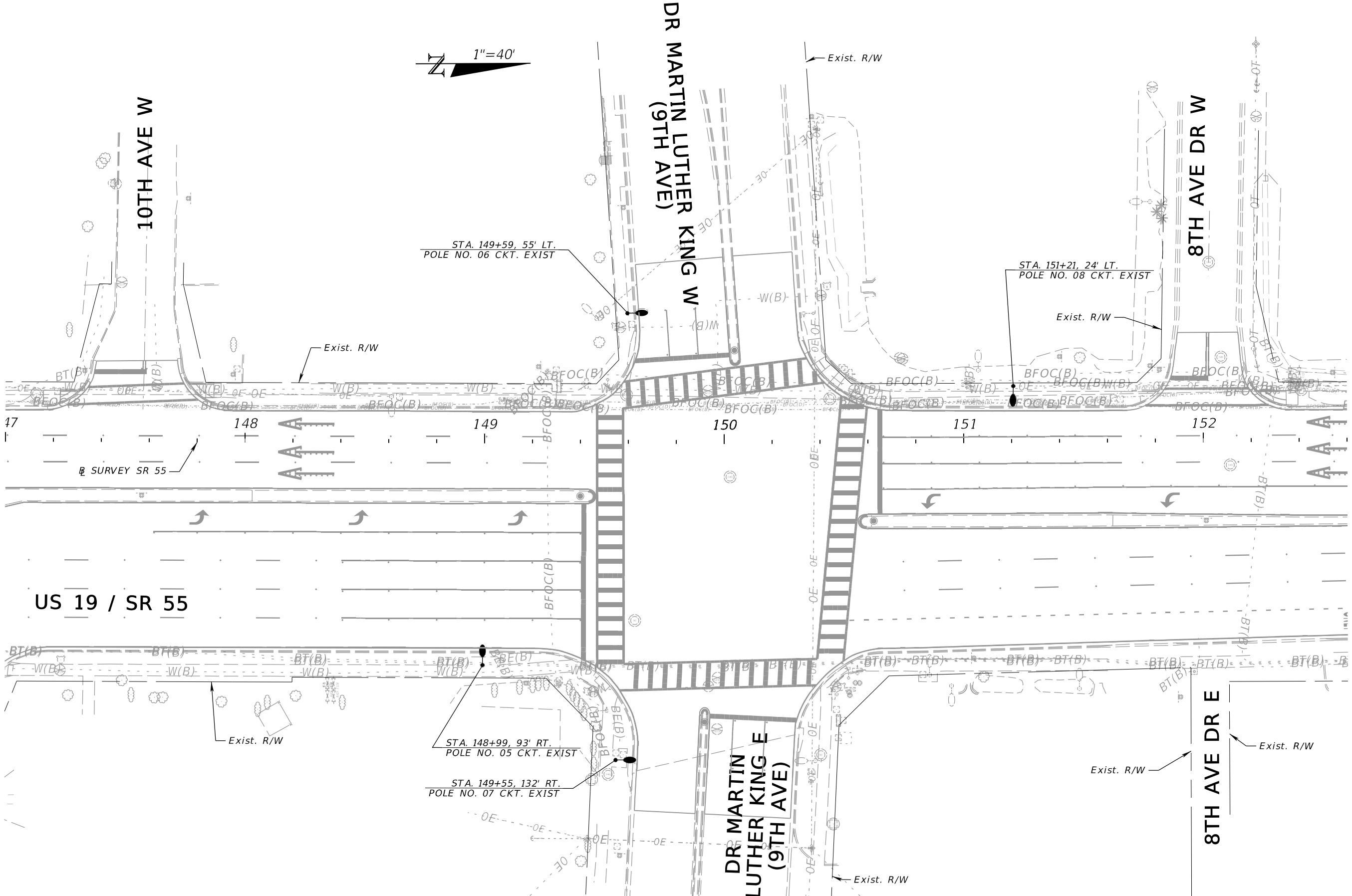
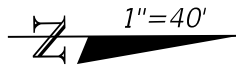
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| REVISIONS | | | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. |
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| LIGHTING PLANS | | | | | | | | | |
| | | | | | | | | | L-4 |

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| REVISIONS | | | |
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| DATE | DESCRIPTION | DATE | DESCRIPTION |
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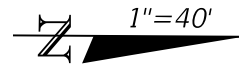
ENGINEER OF RECORD
 SUJEEVA A. WEERASURIYA, P.E.
 LICENSE NUMBER: 57629
 PATEL, GREENE & ASSOCIATES, LLC
 12570 TELECOM DRIVE
 TEMPLE TERRACE, FL 33637

| | | |
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| STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | |
| ROAD NO. | COUNTY | FINANCIAL PROJECT ID |
| SR 55 | MANATEE | 447379-1-52-01 |

LIGHTING PLANS

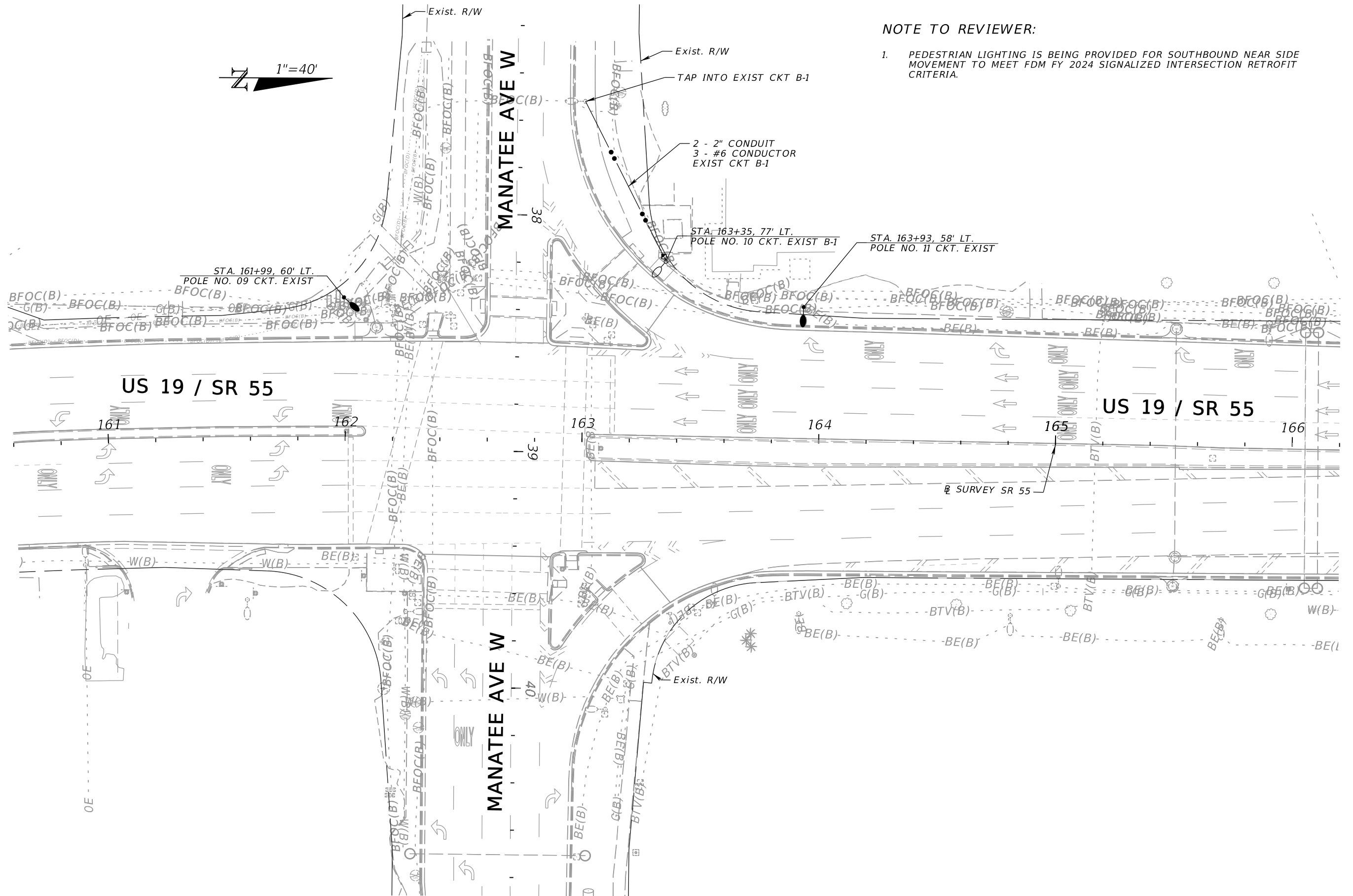
SHEET NO.
 L-5

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NOTE TO REVIEWER:

1. PEDESTRIAN LIGHTING IS BEING PROVIDED FOR SOUTHBOUND NEAR SIDE MOVEMENT TO MEET FDM FY 2024 SIGNALIZED INTERSECTION RETROFIT CRITERIA.

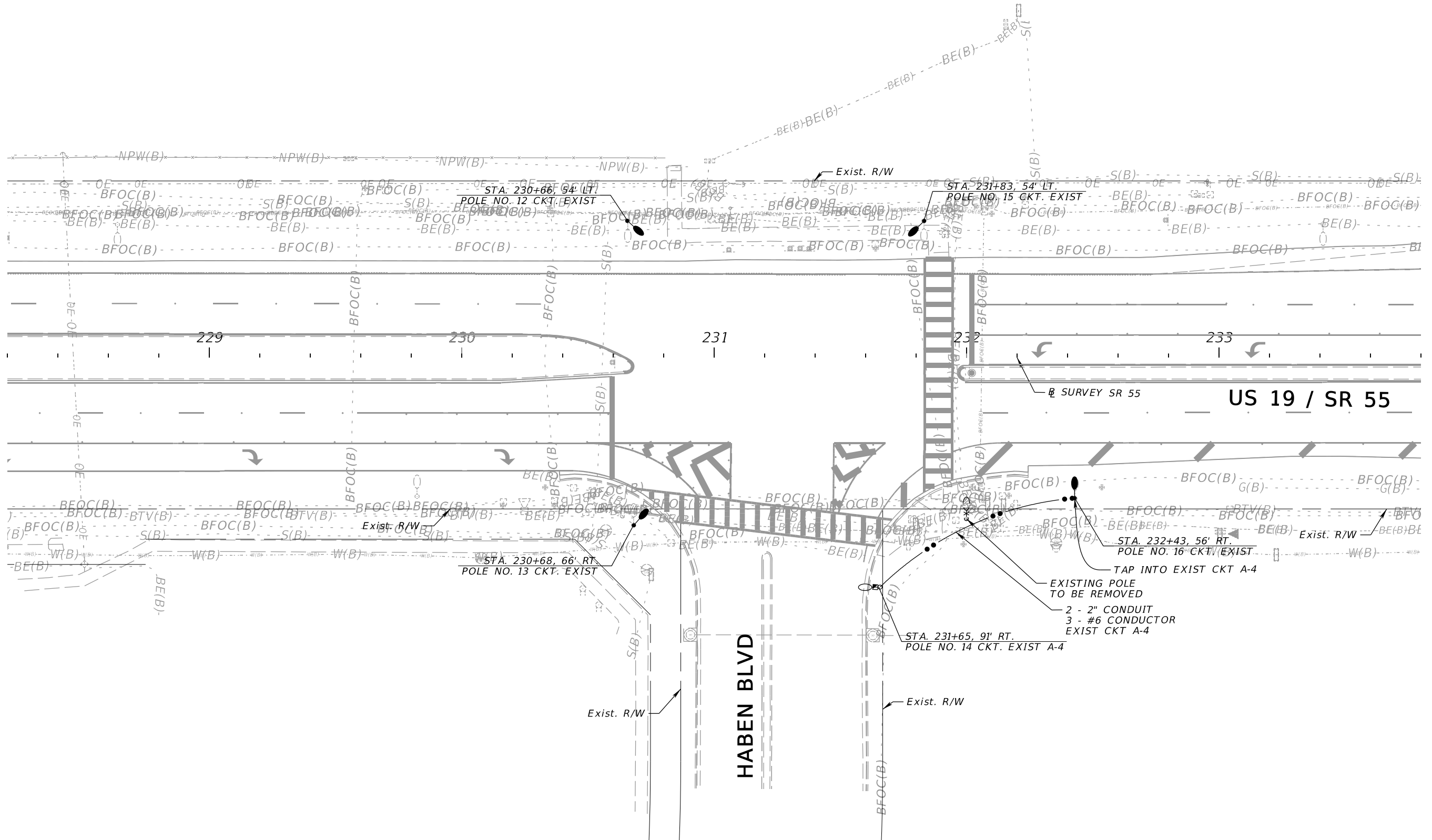
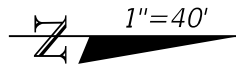


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| REVISIONS | | REVISIONS | | ENGINEER OF RECORD | | STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | | SHEET NO. |
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| | | | | SUJEEVA A. WEERASURIYA, P.E. LICENSE NUMBER: 57629 PATEL, GREENE & ASSOCIATES, LLC 12570 TELECOM DRIVE TEMPLE TERRACE, FL 33637 | | SR 55 | MANATEE | 447379-1-52-01 | L-6 |

LIGHTING PLANS

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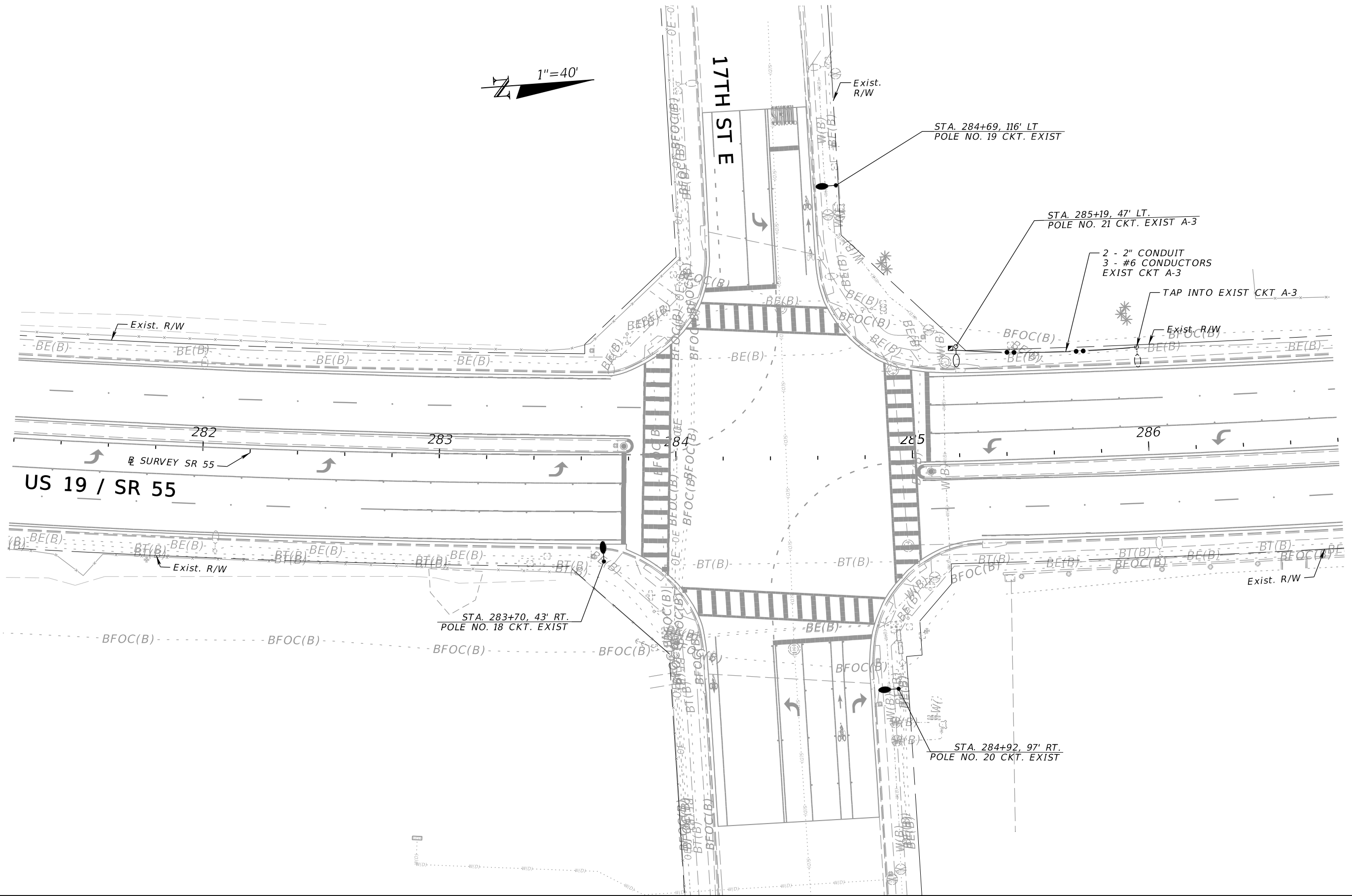
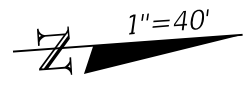


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| | | | | SUJEEVA A. WEERASURIYA, P.E. LICENSE NUMBER: 57629 PATEL, GREENE & ASSOCIATES, LLC 12570 TELECOM DRIVE TEMPLE TERRACE, FL 33637 | | SR 55 | MANATEE | 447379-1-52-01 | L-7 |

LIGHTING PLANS

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| REVISIONS | | REVISIONS | |
|-----------|-------------|-----------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

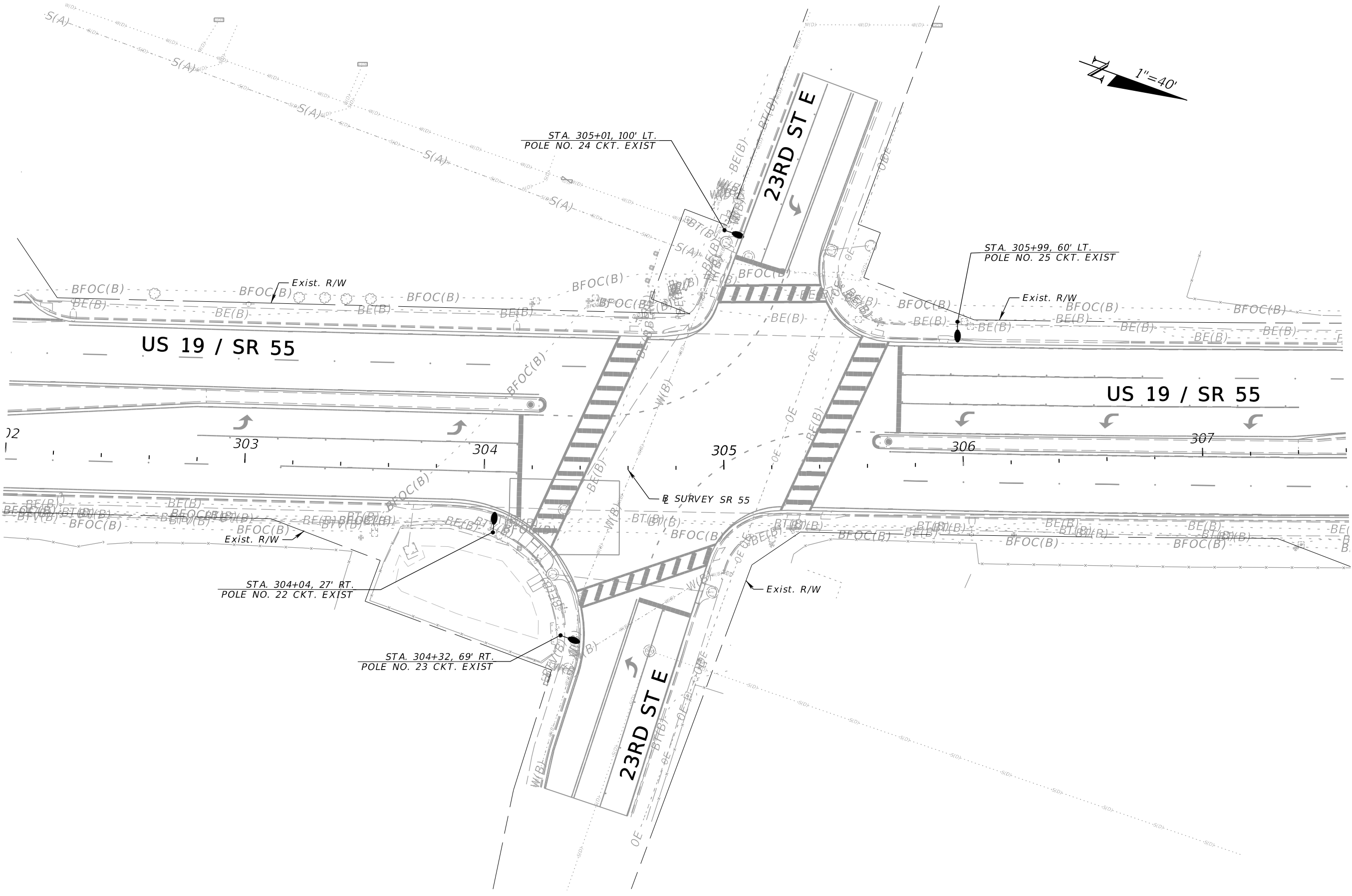
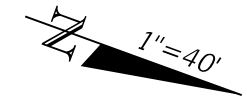
ENGINEER OF RECORD
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 LICENSE NUMBER: 57629
 PATEL, GREENE & ASSOCIATES, LLC
 12570 TELECOM DRIVE
 TEMPLE TERRACE, FL 33637

| | | |
|-------------------------------------|---------|----------------------|
| STATE OF FLORIDA | | |
| DEPARTMENT OF TRANSPORTATION | | |
| ROAD NO. | COUNTY | FINANCIAL PROJECT ID |
| SR 55 | MANATEE | 447379-1-52-01 |

LIGHTING PLANS

SHEET NO.
 L-8

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| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ENGINEER OF RECORD
 SUJEEVA A. WEERASURIYA, P.E.
 LICENSE NUMBER: 57629
 PATEL, GREENE & ASSOCIATES, LLC
 12570 TELECOM DRIVE
 TEMPLE TERRACE, FL 33637

| STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION | | |
|--|---------|----------------------|
| ROAD NO. | COUNTY | FINANCIAL PROJECT ID |
| SR 55 | MANATEE | 447379-1-52-01 |

LIGHTING PLANS

SHEET NO.
 L-9

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