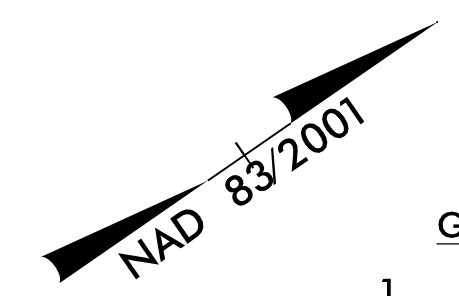


02/03/98

PROJECT REFERENCE NO. U-5604	SHEET NO. E4
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

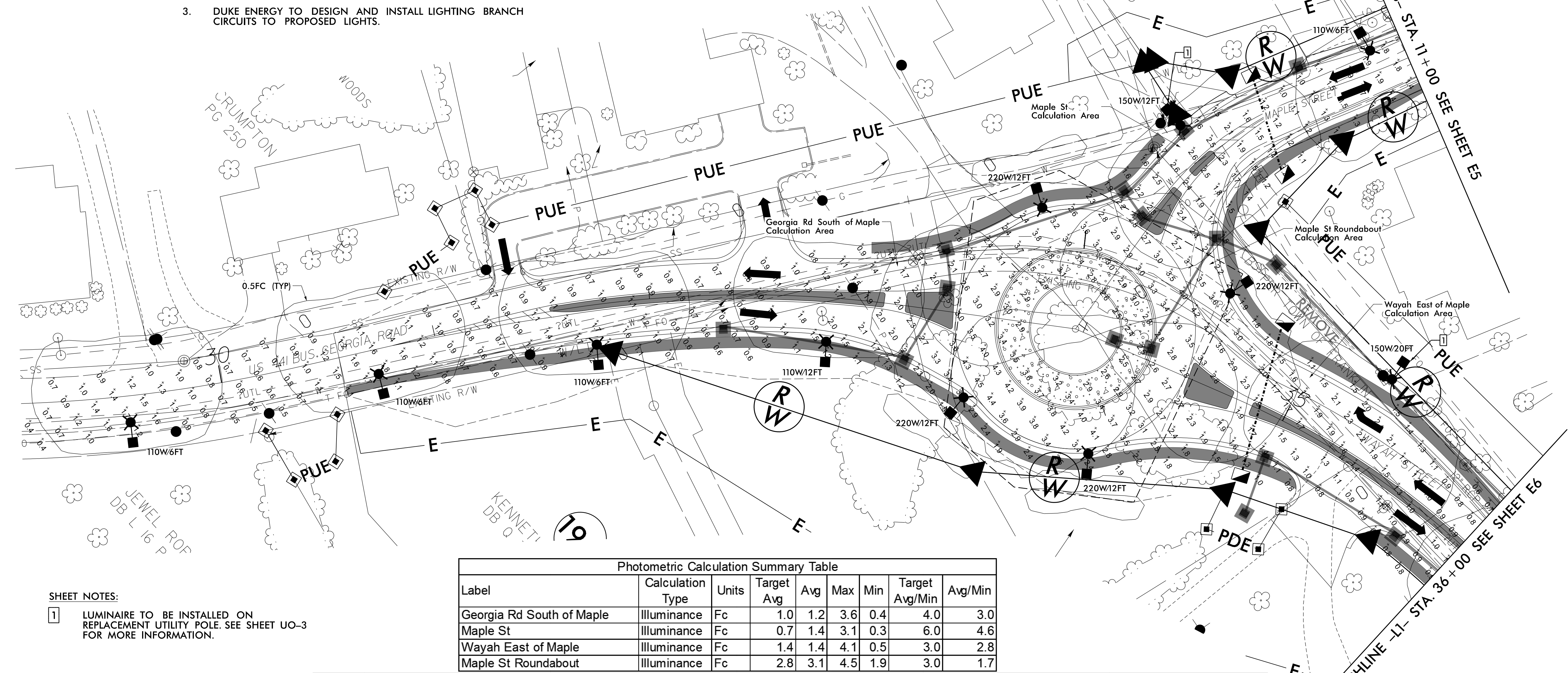


**GENERAL NOTES:**

- CONTRACTOR TO INSTALL CONDUITS UNDER ROADWAYS AS SHOWN IN PLANS FOR FUTURE USE BY DUKE ENERGY.
- DUKE ENERGY TO INSTALL ELECTRICAL SERVICE AND LIGHTING FIXTURES AT LOCATIONS SHOWN IN PLANS.
- DUKE ENERGY TO DESIGN AND INSTALL LIGHTING BRANCH CIRCUITS TO PROPOSED LIGHTS.

**LEGEND:**

- PROPOSED ROADWAY FIXTURE (SEE LUMINAIRE SUMMARY)
- EXISTING ROADWAY FIXTURE (SEE LUMINAIRE SUMMARY)
- PROPOSED ELECTRICAL SERVICE (BY OTHERS)
- PROPOSED ELECTRICAL JUNCTION BOXES
- PROPOSED (2) 2" CONDUITS FOR FUTURE USE



**SHEET NOTES:**

- LUMINAIRE TO BE INSTALLED ON REPLACEMENT UTILITY POLE. SEE SHEET UO-3 FOR MORE INFORMATION.

Label	Calculation Type	Units	Target Avg	Avg	Max	Min	Target Avg/Min	Avg/Min
Georgia Rd South of Maple	Illuminance	Fc	1.0	1.2	3.6	0.4	4.0	3.0
Maple St	Illuminance	Fc	0.7	1.4	3.1	0.3	6.0	4.6
Wayah East of Maple	Illuminance	Fc	1.4	1.4	4.1	0.5	3.0	2.8
Maple St Roundabout	Illuminance	Fc	2.8	3.1	4.5	1.9	3.0	1.7

**Luminaire Summary**

Quantity	Symbol	Description	Luminaire Lumens	Total Light Loss Factor	Luminaire Watts	Arrangement	Arm Length
21		Proposed 110W LED Duke Roadway Fixture Mounted at 30ft on a 12ft Arm and a Direct Bury (Type A) Pole (unless otherwise noted)	9337	0.85	108	SINGLE	12
2		Proposed 150W LED Duke Roadway Fixture Mounted at 30ft on a 12ft Arm and a Direct Bury (Type A) Pole (unless otherwise noted)	12641	0.85	146	SINGLE	12
11		Proposed 220W LED Duke Roadway Fixture Mounted at 20ft on a 12ft Arm and a Direct Bury (Type A) Pole (unless otherwise noted)	18641	0.85	216	SINGLE	12
21		Proposed 110W LED Duke Roadway Fixture Mounted at 30ft on a 6ft Arm and a Direct Bury (Type A) Pole (unless otherwise noted)	9337	0.85	108	SINGLE	6
3		Proposed 150W LED Duke Roadway Fixture Mounted at 30ft on a 20ft Arm and a Direct Bury (Type A) Pole (unless otherwise noted)	12641	0.85	146	SINGLE	20
6		Existing 150W HPS Flat Glass Duke Roadway Fixture	10721	0.69	193	SINGLE	6

2			
1			
Rev.	Date	Description	Approved
<b>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</b> DESIGN SERVICES      LIGHTING/ELECTRICAL SECTION			
Drawn By:	Approved By:	Dwg No.:	

\$\$\$SYTIME\$\$\$\$\$  
 \$\$\$DOWNS\$\$\$\$\$  
 \$\$\$USE R/WAVE\$\$\$\$\$