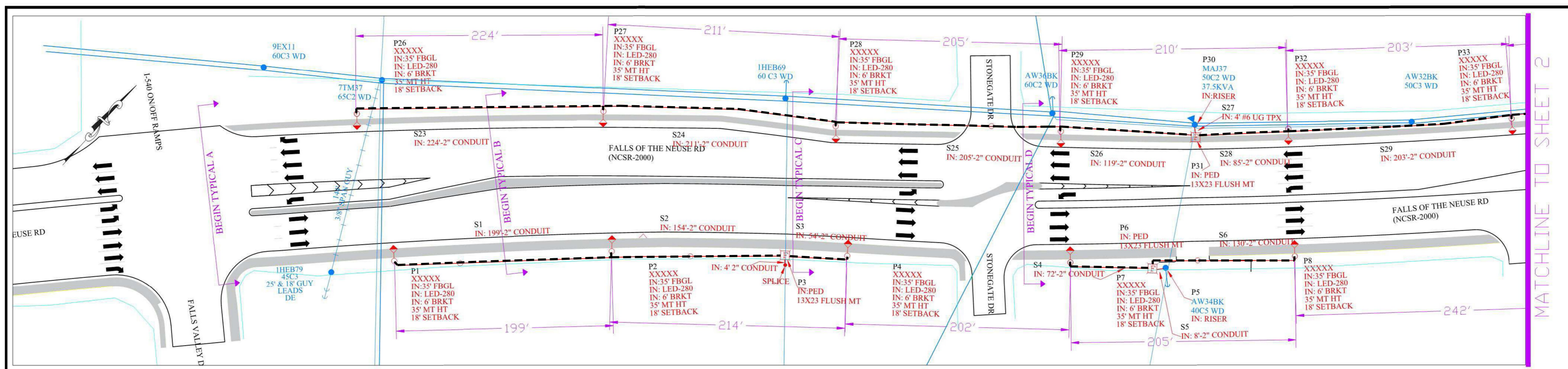


# USE FOR LIGHTING CONSTRUCTION ONLY



NTS

LEGEND

--- 2" PVC CONDUIT FURNISHED BY DUKE ENERGY AND TO BE INSTALLED BY CONTRACTOR FOR FUTURE DUKE ENERGY LIGHTING ALONG FALLS OF NEUSE ROAD

**NOTES**

- LIGHTING LEVELS ARE BASED ON TWO-SIDED STAGGERED ARRANGEMENT LIGHTING FOR THE ROADWAY.
- LUMINAIRES WILL BE 280 LED ROADWAY TYPE III, 4000K, RECTANGLE PATTERN WITH PHOTOCELLS AND BALLAST, RATED: 25,050 LUMENS 240V.
- ALL LIGHTING WITH UNDERGROUND SERVICE WILL BE INSTALLED ON NEW FIBERGLASS POLES LOCATED INSIDE OF ROAD RW.
- MOUNTING HEIGHT FOR LIGHTING FIXTURES: 35' WITH 6' BRACKET ON NEW FIBERGLASS POLES.
- MINIMUM SETBACK FOR NEW LIGHTING POLES 12' FROM EDGE OF TRAVEL LANE. DESIGN SETBACK IS 18'. SEE DRAWING FOR DETAILS.
- ALL POWER SOURCES WILL BE FROM DUKE ENERGY-PROGRESS FACILITIES.
- ALL CONSTRUCTION WILL COMPLY WITH NESC REQUIREMENTS AND DUKE ENERGY-PROGRESS SPECIFICATIONS. REFER TO THE DUKE ENERGY-PROGRESS DRAWINGS LISTED.
- THIS IS AN NCDOT ROADWAY. APPROVED NCDOT ENCROACHMENT MUST BE ON-SITE DURING CONSTRUCTION

**FALLS OF NEUSE RD (NCSR-2000)**

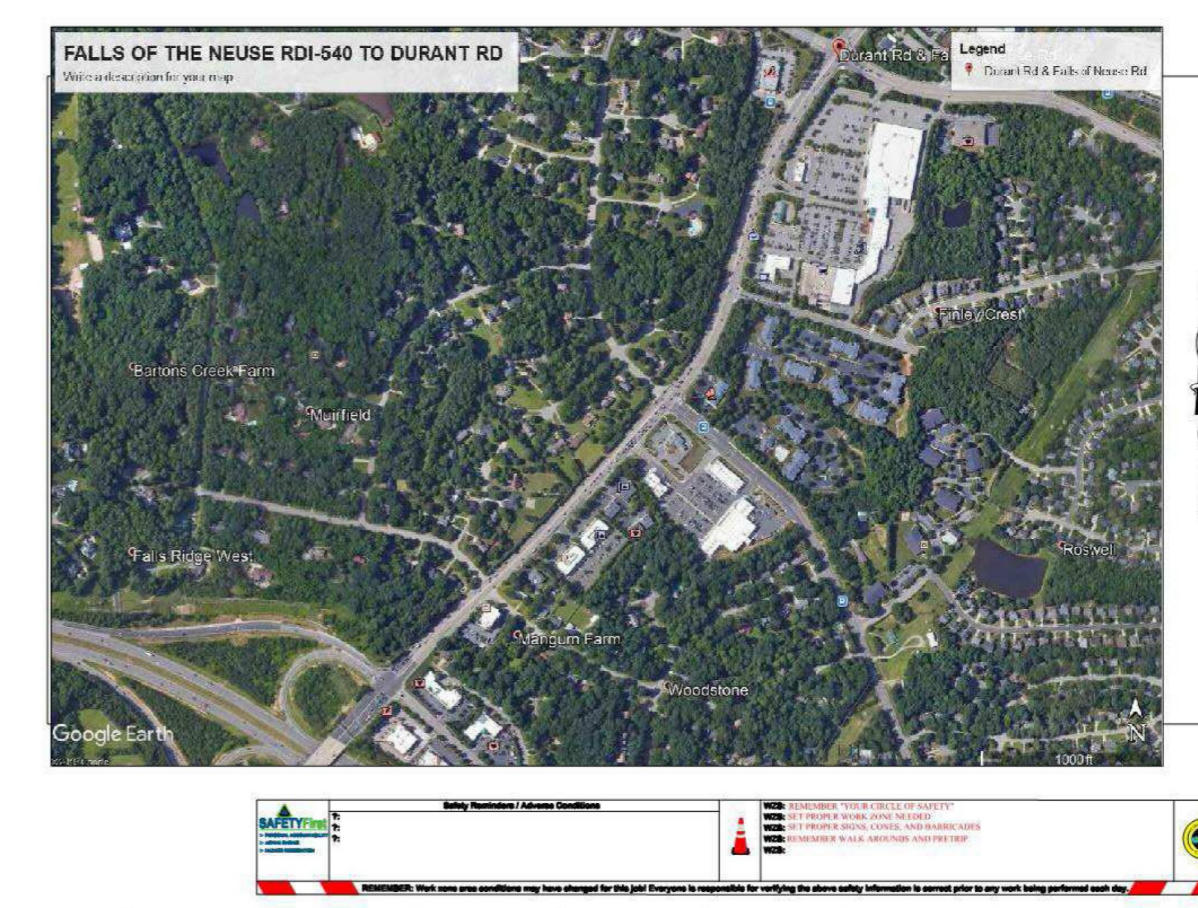
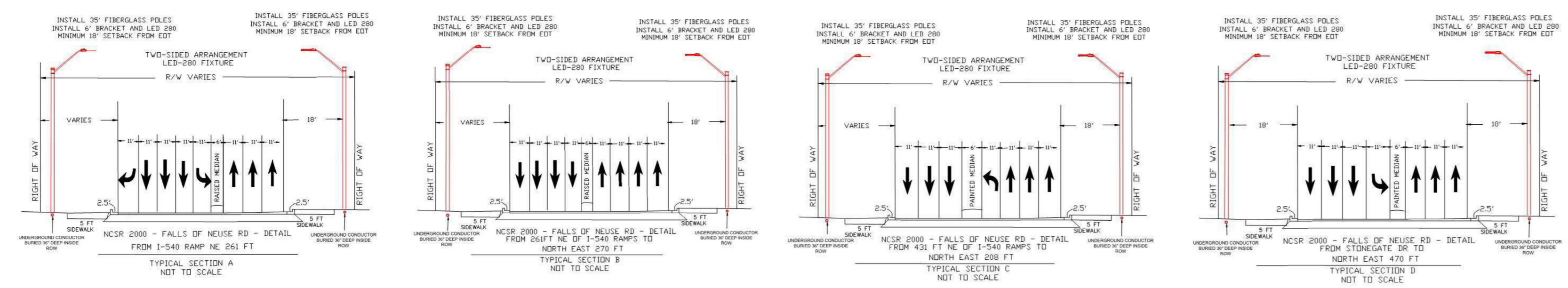
IES REQUIREMENTS	MINOR ARTERIAL/COMMERCIAL	ACTUAL
Ave. Maint. FC :	1.4 MIN.	1.37
Ave. / Min. Ratio :	4:1 MAX.	3.64
Veil. Lum. Max Ratio :	0.3:1 MAX.	0.3

LIGHTING LEVELS CALCULATED USING ALADAN/LITEPRO  
 AVG DAILY TRAFFIC: 48,000  
 DESIGN SPEED LIMIT: 45 MPH  
 ACTUAL SPEED LIMIT: 45 MPH  
 AVG SPAN DISTANCE: 199 FEET

FOR CONSTRUCTION DETAILS, REFER TO THE FOLLOWING SPECIFICATION DRAWINGS

DRAWING NUMBER	DRAWING TITLE
30.02-104	LIGHTING BRACKETS FOR STEEL (AND FIBERGLASS) POLES
30.09-15	MOUNTING HEIGHT FOR LUMINAIRES
30.09-01	FIBERGLASS POLE LIGHTING DETAILS

PROPOSED	EXISTING	REMOVE	ABANDON	LEGEND
[Symbol]	[Symbol]	[Symbol]	[Symbol]	LED LUMINAIRE
[Symbol]	[Symbol]	[Symbol]	[Symbol]	DECORATIVE LUMINAIRE
[Symbol]	[Symbol]	[Symbol]	[Symbol]	FIBERGLASS/STEEL LIGHTING POLE
[Symbol]	[Symbol]	[Symbol]	[Symbol]	WOOD POLE
[Symbol]	[Symbol]	[Symbol]	[Symbol]	FOREIGN POLE
[Symbol]	[Symbol]	[Symbol]	[Symbol]	TRANSFORMER (POLE MOUNTED)
[Symbol]	[Symbol]	[Symbol]	[Symbol]	STREET LIGHT CIRCUIT UNDERGROUND
[Symbol]	[Symbol]	[Symbol]	[Symbol]	STREET LIGHT CIRCUIT OVERHEAD
[Symbol]	[Symbol]	[Symbol]	[Symbol]	PH PRIMARY CIRCUIT
[Symbol]	[Symbol]	[Symbol]	[Symbol]	R/W/PROPERTY LINES
[Symbol]	[Symbol]	[Symbol]	[Symbol]	SECONDARY FLUSH MOUNT PEDESTAL
[Symbol]	[Symbol]	[Symbol]	[Symbol]	TRANSFORMER (PAD MOUNTED)
[Symbol]	[Symbol]	[Symbol]	[Symbol]	CONDUIT



NO.	DATE	REVISION	BY

**LIGHTING DESIGN TOLERANCE**

The Designer shall be responsible for the lighting design and shall provide all necessary information that may be required by Duke Energy. Any inaccuracies in the original information, references, or specifications, lighting data, geometry, including elevation differences, reflective properties of surrounding surfaces, atmospheric change or differences in the digital work, or spacing from luminaire offset, those listed in this design may produce different results from the intended design. Normal tolerances of various types, including, but not limited to, manufacturing and construction, will also affect results.



**PROPRIETARY & CONFIDENTIAL**

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STREET LIGHTING ARRANGEMENT FOR FALLS OF THE NEUSE (NCSR-2000) I-540 TO DURANT RALEIGH NC	
Designed by	DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
Reviewed by	CHARLES JONES
Date	2-18-2020
Description	WR 34443477
Drawing No.	U-5826
Scale	1" = 40'
Size	Drawing size "D"
Shr.	1 OF 4

2			
1			
Rev.	Date	Description	Approved
<b>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</b> ROADWAY DESIGN LIGHTING/ELECTRICAL SECTION <b>LIGHTING LAYOUT</b> <b>ELECTRICAL CONDUIT SYSTEM</b> WAKE COUNTY			
Drawn By:	AB	Approved By:	Dwg No.:

02-MAR-2020 14:23  
 R:\Lighting\Lighting Design\U-5826.1&e-Duke-ECS.dgn  
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