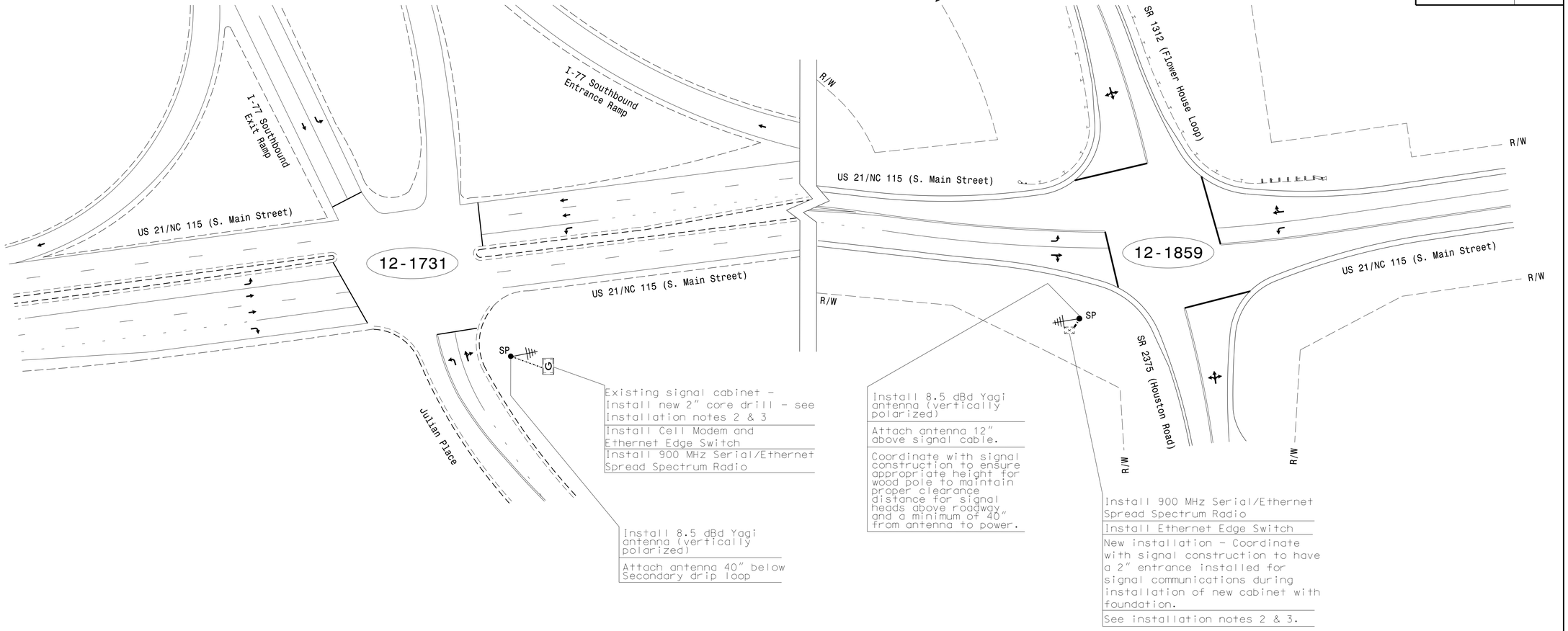
Docusign Envelope ID: 146ECB8F-98C7-44AB-94DA-73C983B75A42

PROJECT REFERENCE NO.	SHEET NO.
R-5711	SCP-1



PROJECT NOTES

1. Expand the existing US 21/NC 115 (Troutman) closed loop system to inlude a wireless link between:
   1. 12-1731 US 21/NC 115 at Julian PL/On-ramp and Off-ramp of I-77.
   2. 12-1859 US 21/NC 115 at Flower House Loop/Houston RD.
2. At new equipment locations, coordinate installation of a separate 2" conduit for coaxial cable in trench with signal cabling between the controller cabinet and pole for the antenna.

INSTALLATION NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024. See RSD 1736.01 for Spread Spectrum Radio drawing.
2. On wood poles, requiring a new rigid galvanized steel riser, install a 2" riser with weatherhead and route the coaxial cable to the antenna.
3. If an existing 2" spare rigid galvanized steel riser is available, install the coaxial cable in the spare riser.
4. Install wireless antenna on pole with RF warning sign. (Note: RF warning sign not required when antenna is installed on an NCDOT-owned pole.)
5. Maintain proper clearance from all utilities per the National Electric Safety Code.
6. Install wireless serial/Ethernet radio with exterior disconnect switch located on cabinet. (Note: RF antenna disconnect switch and decal are not required when the antenna is installed on an NCDOT-owned pole.)
7. Request a cell modem from Deputy Division Traffic Engineer (980)552-4215 and allow Division an eight week lead time to acquire the cell modem.

LEGEND

YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION	EXISTING METAL POLE WITH MASTARM
YAGI ANTENNA (SINGLE)	NEW WOOD POLE
OMNI ANTENNA	EXISTING WOOD POLE
NEW CONDUIT	SP SIGNAL POLE
EXISTING CONDUIT	NEW STANDARD GUY ASSEMBLY
NEW OVERSIZED JUNCTION BOX	NEW STANDARD GUY USING EXISTING ANCHOR
EXISTING OVERSIZED JUNCTION BOX	NEW SIDEWALK GUY ASSEMBLY
XX-XXXX SIGNAL INVENTORY NUMBER	EXISTING CONTROLLER AND CABINET
	G GATEWAY RADIO LOCATION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRMP
DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR. SUITE 220
CHARLOTTE, NC 28262
PHONE: 704-549-4260
NC LICENSE NO. F-1524
www.drmp.com

Prepared for the Offices of:
North Carolina Department of Transportation — Mobility and Safety Division — Traffic Engineering Branch
750 N.Greenfield Pkwy,Garner,NC 27529

012-10 TROUTMAN
US 21/NC 115 CLS

Division 12 Iredell County near Troutman

PLAN DATE:	March 2025	REVIEWED BY:	BN Groome
PREPARED BY:	DJ White	REVIEWED BY:	LM Moon

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME

Signed by: Brittany Groome 1E0934DE1064484 10/13/2025
DATE

SIG. INVENTORY NO. 12-1859

17-SEP-2025 11:44
R:\R-5711\Signals\Design\System\R-5711_SCP-1.dgn
DWhite AT RAL-DWHITE