

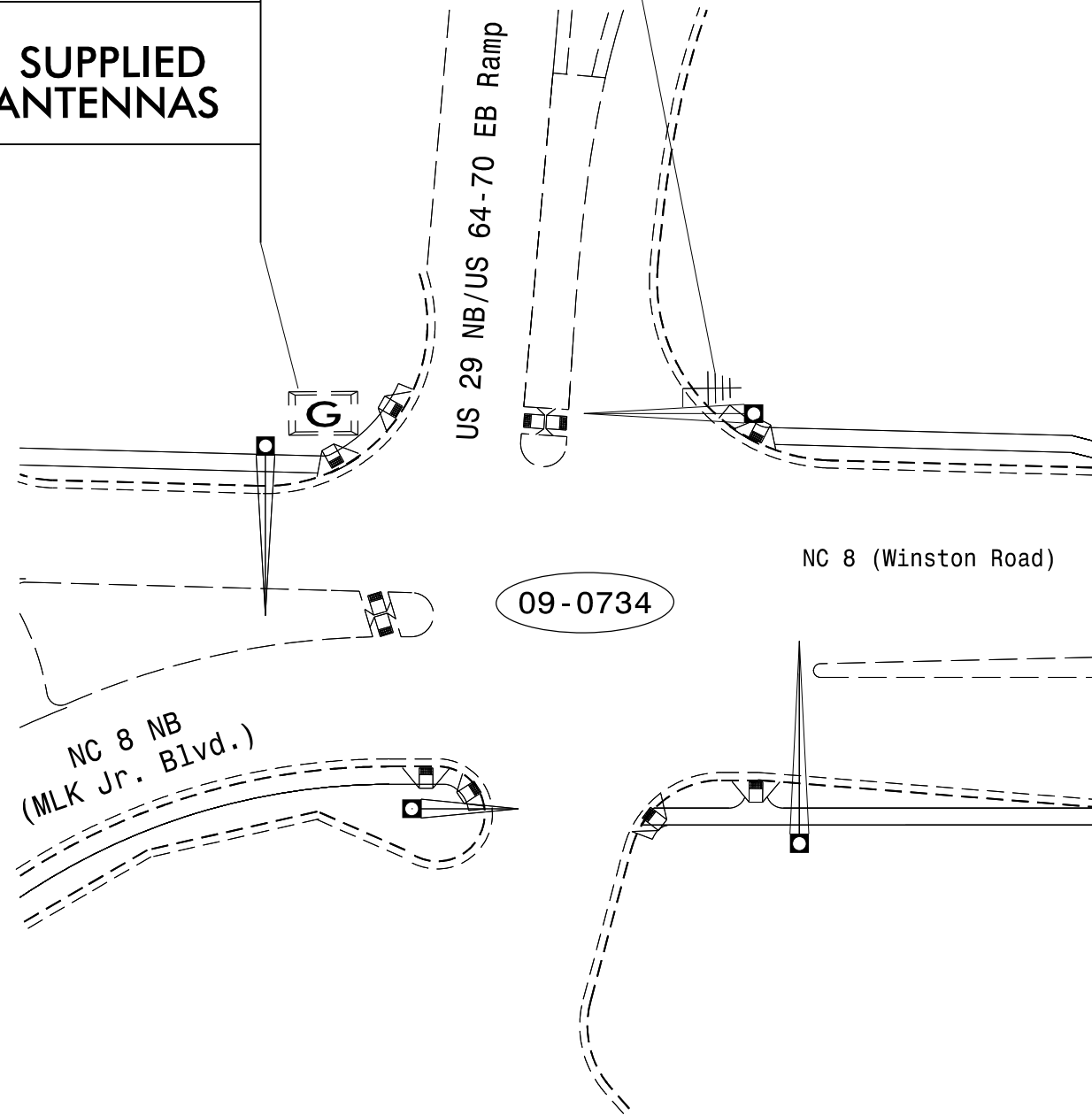
REMOVE EXISTING ANTENNA AND REPLACE WITH NEW 8.5 DB GAIN YAGI ANTENNA VERTICALLY POLARIZED AIMED TOWARD INTERSECTION 09-0735.

ATTACH ANTENNA ALONG MAST ARM A MINIMUM OF 6 FEET AWAY FROM THE VERTICAL SHAFT MEMBER. SEE NOTES 1B AND 1D.

INSTALL ETHERNET EDGE SWITCH

REMOVE EXISTING RADIO AND REPLACE WITH NEW 900MHZ ETHERNET RADIO

INSTALL DEPARTMENT SUPPLIED CELL MODEM AND ANTENNAS

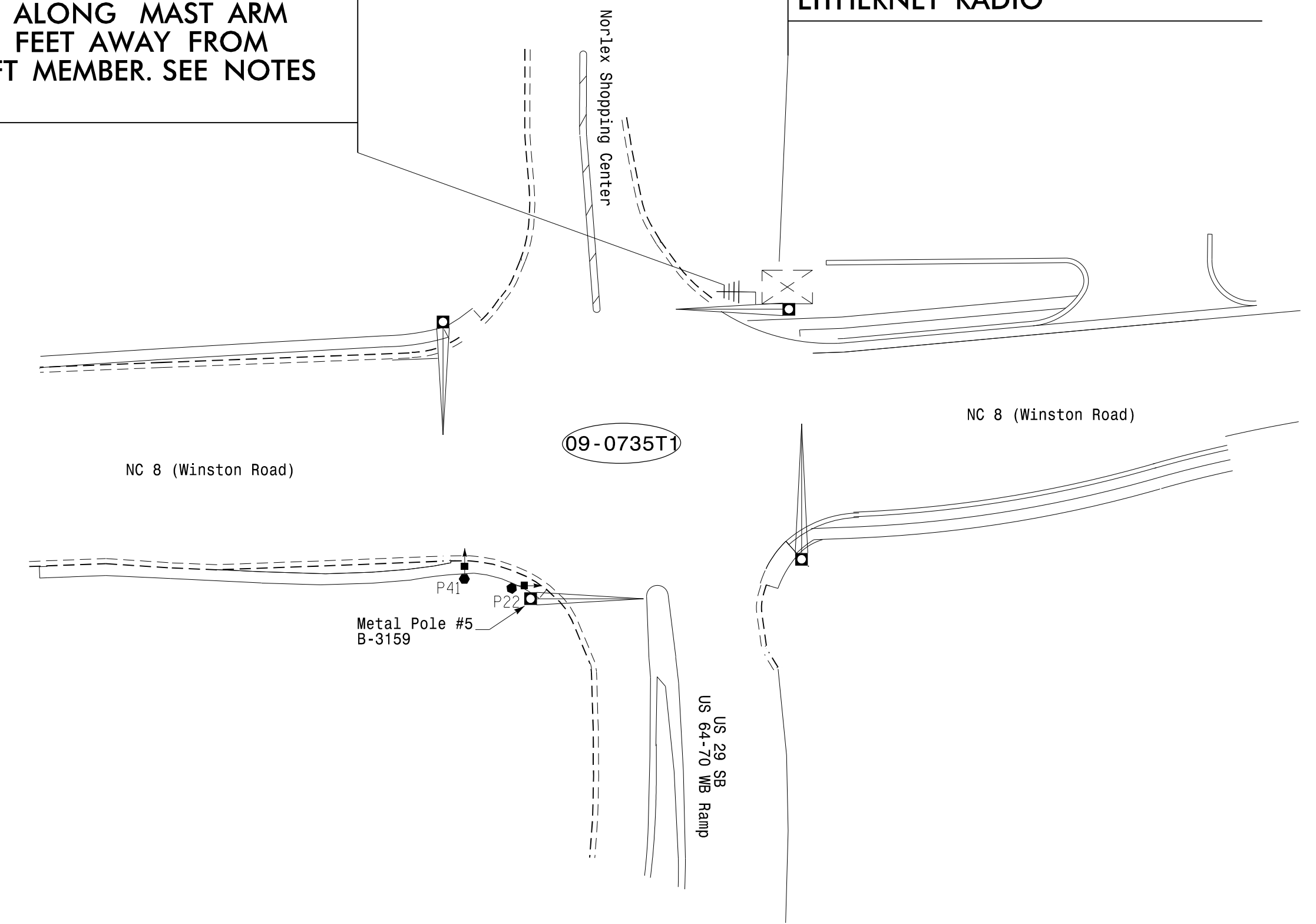


REMOVE EXISTING ANTENNA AND REPLACE WITH NEW 8.5 DB GAIN YAGI ANTENNA VERTICALLY POLARIZED AIMED TOWARD INTERSECTION 09-0734.

ATTACH ANTENNA ALONG MAST ARM A MINIMUM OF 6 FEET AWAY FROM THE VERTICAL SHAFT MEMBER. SEE NOTES 1B AND 1D.

INSTALL ETHERNET EDGE SWITCH

REMOVE EXISTING RADIO AND REPLACE WITH NEW 900MHZ ETHERNET RADIO



NOTES FOR WIRELESS COMMUNICATIONS:

- INSTALL COAXIAL CABLE:
 - ON WOOD POLES, REQUIRING A NEW RIGID GALVANIZED STEEL RISER, INSTALL A 2" RISER WITH WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - ON METAL POLES WITH MAST ARMS, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE MAST ARM; FIELD DRILL A 1/2" HOLE UP THROUGH THE BOTTOM OF MAST ARM FOR INSTALLATION OF THE COAXIAL CABLE TO THE ANTENNA. SEE "METAL POLE SUPPORTS" IN THE PSP'S FOR MORE INFORMATION.
 - ON METAL STRAIN POLES, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - BETWEEN THE POINT OF EXITING THE RISER, METAL POLE OR MAST ARM AND THE ANTENNA, SECURE THE COAXIAL CABLE TO THE STRUCTURE USING 3/4" STAINLESS STEEL STRAPS EVERY 12". SEE "METAL POLE SUPPORTS" IN THE PSP'S FOR MORE INFORMATION.
- IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER WITH A 2" WEATHERHEAD
- INSTALL WIRELESS ANTENNA ON POLE WITH RF WARNING SIGN.
(NOTE: RF WARNING SIGN NOT REQUIRED WHEN ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
- MAINTAIN PROPER CLEARANCE FROM ALL UTILITIES PER THE NATIONAL ELECTRICAL SAFETY CODE.
- INSTALL WIRELESS RADIO MODEM 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.)
- REFERENCE THE 2024 ROADWAY STANDARD DRAWINGS, SECTION 1736.01.
- CELL MODEM TO BE SUPPLIED BY THE DEPARTMENT. CONTACT THE DIVISION TRAFFIC ENGINEER AT (336) 747-7800 TO REQUEST THE CELL MODEM. ALLOW 8 WEEK LEAD TIME BEFORE ANTICIPATED DEPLOYMENT.

LEGEND

- YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION
- NEW YAGI ANTENNA (SINGLE)
- EXISTING YAGI ANTENNA (SINGLE)
- OMNI ANTENNA
- EXISTING CONTROLLER AND CABINET
- GATEWAY RADIO LOCATION
- SIGNAL INVENTORY NUMBER
- NEW METAL POLE W/MAST ARM
- EXISTING METAL POLE W/MAST ARM
- EXISTING WOOD POLE
- NEW METAL POLE
- SIGNAL POLE
- EXISTING METAL POLE
- NEW OVERSIZED JUNCTION BOX
- EXISTING OVERSIZED JUNCTION BOX
- NEW CONDUIT
- EXISTING COMMUNICATIONS CABLE

TRANSYSTEMS
 1 Glenwood Avenue
 Raleigh, NC 27603
 Tel: 919.789.9977
 Fax: 919.789.9591
 License: F-0453

Signal System #: D09-19_Lexington **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

 Prepared for the Offices of: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION Transportation Systems	WIRELESS COMMUNICATION PLAN		
	DIVISION 9 DAVIDSON CO. LEXINGTON		
PLAN DATE: MAY 2024	REVIEWED BY: G.G. MURR, JR.		G. G. MURR, JR. PROFESSIONAL ENGINEER 1445688E1C0D45B DATE: _____ SIGNATURE: _____ CADD Filename: U-5757_SCP
PREPARED BY: B.E. WYNN	REVISIONS		
SCALE: N/A	INIT.	DATE	