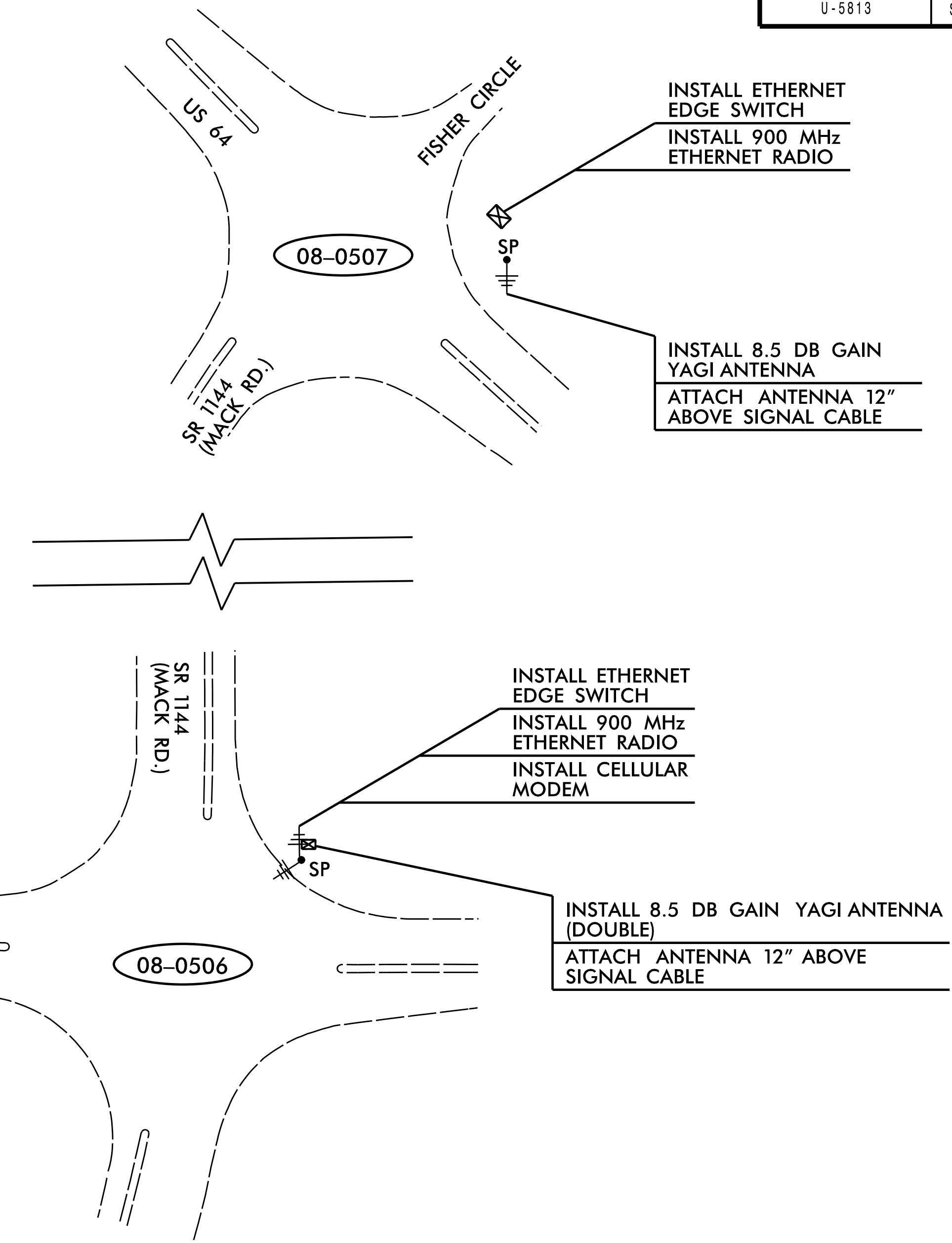


INSTALL 8.5 DB GAIN YAGI ANTENNA VERTICALLY POLARIZED
ATTACH ANTENNA 12" ABOVE SIGNAL CABLE

INSTALL ETHERNET EDGE SWITCH
INSTALL 900 MHz ETHERNET RADIO



INSTALL ETHERNET EDGE SWITCH
INSTALL 900 MHz ETHERNET RADIO
INSTALL CELLULAR MODEM

INSTALL 8.5 DB GAIN YAGI ANTENNA (DOUBLE)
ATTACH ANTENNA 12" ABOVE SIGNAL CABLE

NOTES FOR EXISTING COMMUNICATIONS CABLE:
1. REMOVE ALL EXISTING COMMUNICATIONS CABLE FROM INSIDE THE CONTROLLER CABINET AND THE RISER ASSEMBLY. LEAVE RISER ASSEMBLY IN PLACE.

NOTES FOR WIRELESS COMMUNICATIONS:

1. INSTALL COAXIAL CABLE:
 - A. ON WOOD POLES, REQUIRING A NEW RIGID GALVANIZED STEEL RISER, INSTALL A 2" RISER WITH WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - B. 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.
 - C. ON METAL STRAIN POLES, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - D. 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".
2. IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER.
3. INSTALL WIRELESS ANTENNA ON POLE WITH RF WARNING SIGN. (NOTE: RF WARNING SIGN NOT REQUIRED WHEN ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
4. MAINTAIN PROPER CLEARANCE FROM ALL UTILITIES PER THE NATIONAL ELECTRICAL SAFETY CODE.
5. REFERENCE "WIRELESS RADIO ANTENNA TYPICAL DETAILS" IN THE 2024 NCDOT ROADWAY STANDARD DRAWINGS.
6. RETURN EXISTING WIRELESS RADIO EQUIPMENT TO THE DIVISION 8 SIGNAL SHOP. THE DIVISION 8 OFFICE CAN BE REACHED AT 910-773-8000.
7. FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE DIVISION 8 DEPUTY TRAFFIC ENGINEER AT (910) 773-8000 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET SWITCH WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO: THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION. NOTIFY THE DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. WORK IS NOT COMPLETE UNTIL THE SIGNAL SYSTEM IS BACK UP AND FUNCTIONAL.

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Temporary Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	WIRELESS COMMUNICATIONS PLANS		
	Division 8	Asheboro	
PLANNED BY: T.R. Terrell	REVIEWED BY: J.A. Wagner	DATE: Sept 2021	DATE: 5/21/2024
PREPARED BY: T.R. Terrell	REVIEWED BY: N.R. Simmons	INITIALS: _____	DATE: _____
SCALE: 0 50 1"=50'		CADD File name: U5813_SCP-02.dgn	