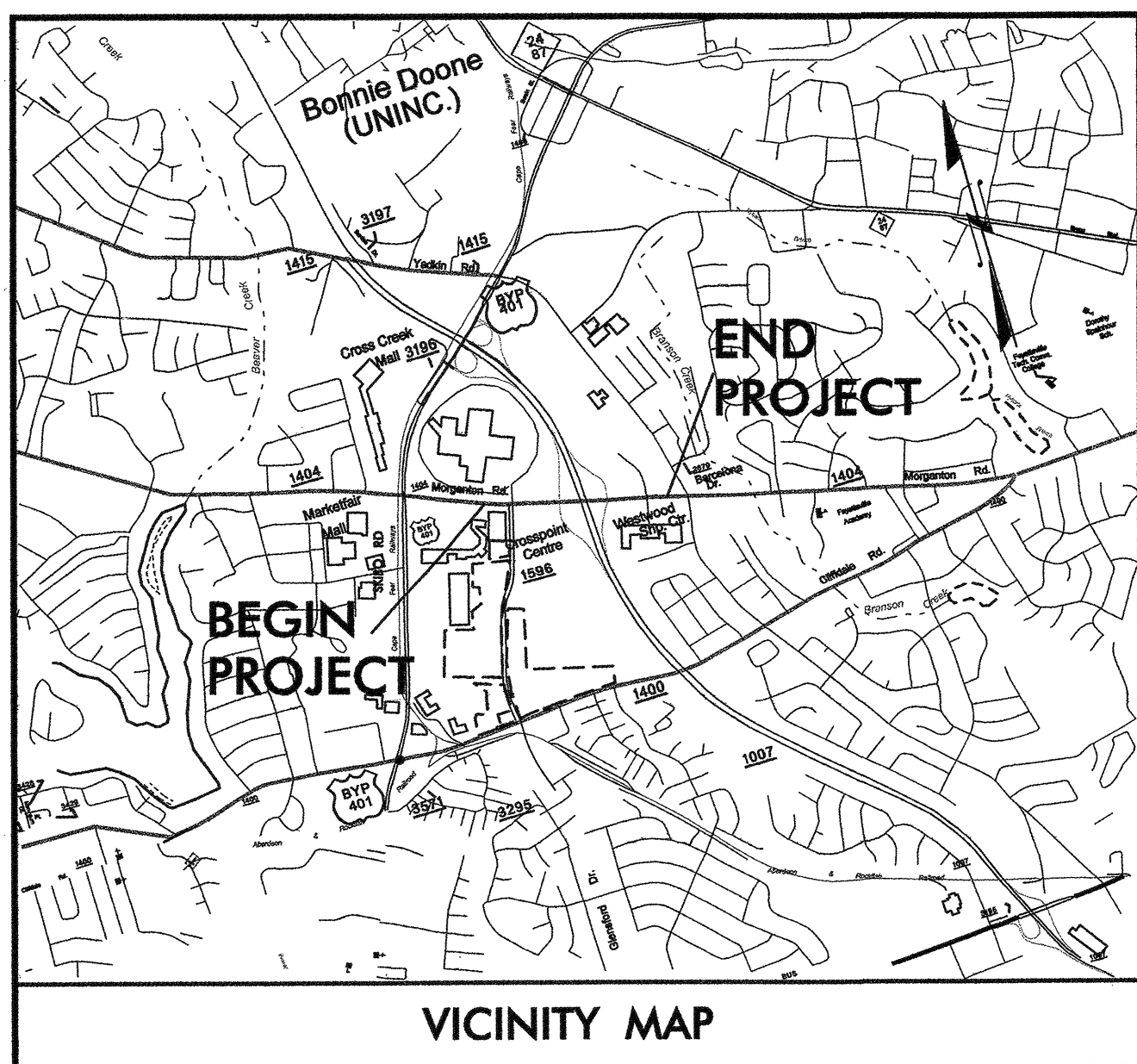


U-4756

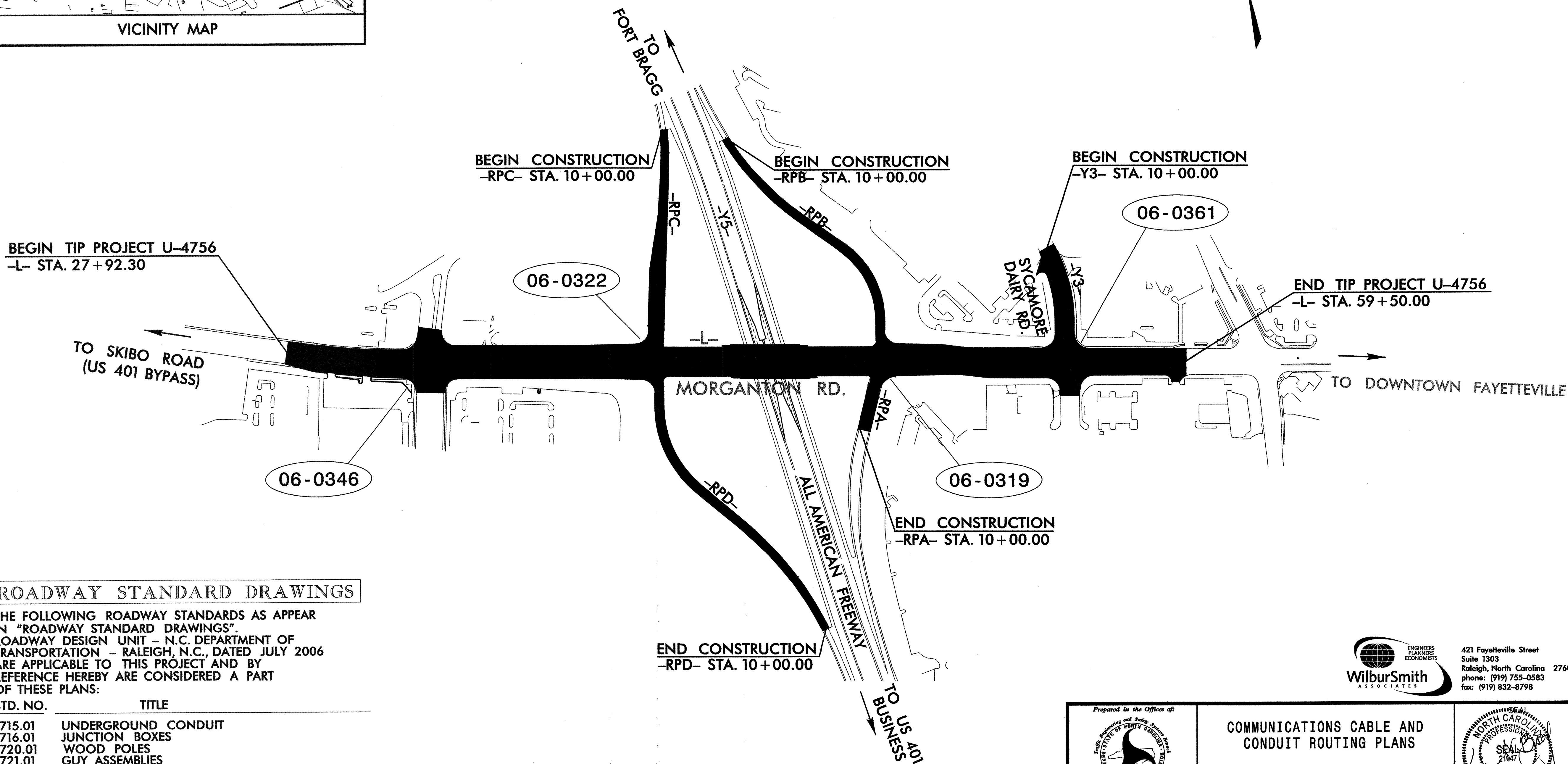


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY

LOCATION: Morganston Road from west of Glensford Drive to east of Sycamore Dairy Road

TYPE OF WORK: Communications Cable and Conduit Routing



ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS", ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1715.01	UNDERGROUND CONDUIT
1716.01	JUNCTION BOXES
1720.01	WOOD POLES
1721.01	GUY ASSEMBLIES
1730.01	FIBER OPTIC CABLE - SPARE CABLE STORAGE
1730.02	FIBER OPTIC CABLE - CONDUIT INSTALLATION
1733.01	DELINTEATOR MARKERS
1740.01	METAL POLES

NCDOT CONTACT:
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
G.G. MURR, JR., PE - INTELLIGENT TRANSPORTATION SYSTEMS ENGINEER

WilburSmith
ASSOCIATES
421 Fayetteville Street
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phone: (919) 755-0583
fax: (919) 832-8798

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS	
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE	
Prepared in the Offices of: 	PLAN DATE: June 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Privette REVIEWED BY:
122 N. McDowell St., Raleigh, NC 27603	REVISIONS _____ _____ _____	SIGNATURE _____ DATE _____ CADD File name:

PROJECT:

- 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 2 INSTALL REA, PE - 38, (FIGURE 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 3 INSTALL REA, PE - 39, (UNDERGROUND) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 4 INSTALL SMFO CABLE
- 5 INSTALL MMFO CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 26A TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN CCTV CONTROLLER CABINET
- 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPLICE ENCLOSURE
- 30 INSTALL AERIAL SPLICE ENCLOSURE
- 31 INSTALL POLE MOUNTED SPLICE CABINET
- 32 INSTALL BASE MOUNTED SPLICE CABINET

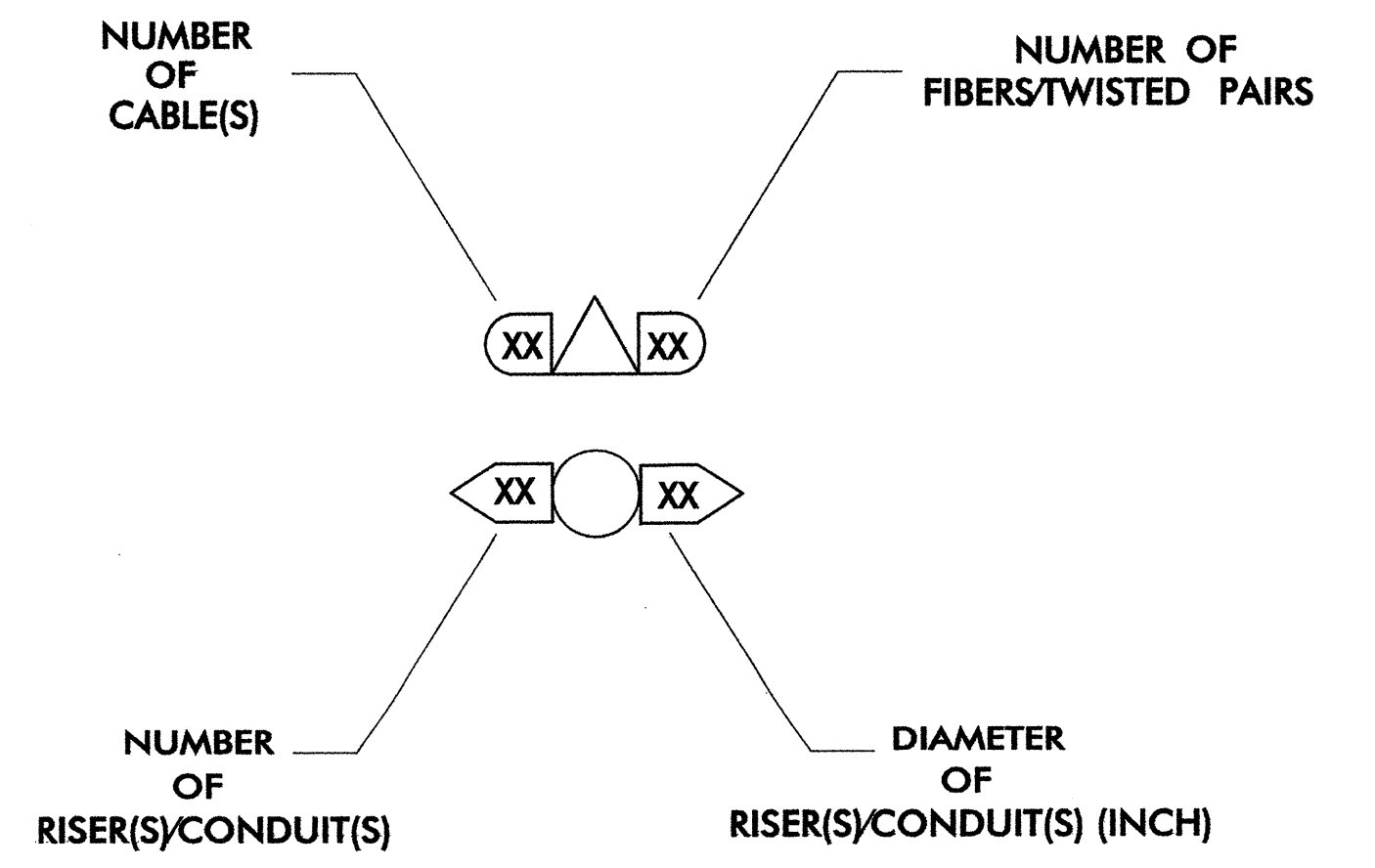
- 33 REMOVE EXISTING SPLICE CABINET
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL WOOD POLE
- 43 REMOVE EXISTING WOOD POLE
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48 REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 49 REMOVE EXISTING MESSENGER CABLE
- 50 INSTALL TELEPHONE SERVICE
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52 INSTALL DELINEATOR MARKER
- 53 STORE 20 FEET OF COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE
- 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE
- 56 LASH CABLE(S) TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 59 RELOCATE EXISTING CCTV CAMERA ASSEMBLY

LEGEND

- FO NEW FIBER OPTIC COMMUNICATIONS CABLE
- TWIST PR NEW TWISTED PAIR COMMUNICATIONS CABLE
- EXI EXISTING COMMUNICATIONS CABLE
- REM EXISTING COMMUNICATIONS CABLE TO BE REMOVED
- NEW AERIAL GUY ASSEMBLY
- NEW CONDUIT
- EXISTING CONDUIT
- DD NEW DIRECTIONAL DRILLED CONDUIT
- B&J NEW BORED AND JACKED CONDUIT
- NEW JUNCTION BOX
- EXISTING JUNCTION BOX
- NEW WOOD POLE
- EXISTING WOOD POLE
- AERIAL SPLICE ENCLOSURE
- NEW METAL POLE
- EXISTING METAL POLE
- EXISTING CCTV ASSEMBLY
- NEW STANDARD GUY ASSEMBLY
- NEW SIDEWALK GUY ASSEMBLY
- NEW CABLE STORAGE RACKS (SNOW SHOES)
- EXISTING CONTROLLER AND CABINET
- EXISTING SPLICE CABINET
- NEW SPLICE CABINET
- SP SIGNAL POLE
- XX-XXXX SIGNAL INVENTORY NUMBER

CONSTRUCTION NOTE SYMBOLOGY KEY

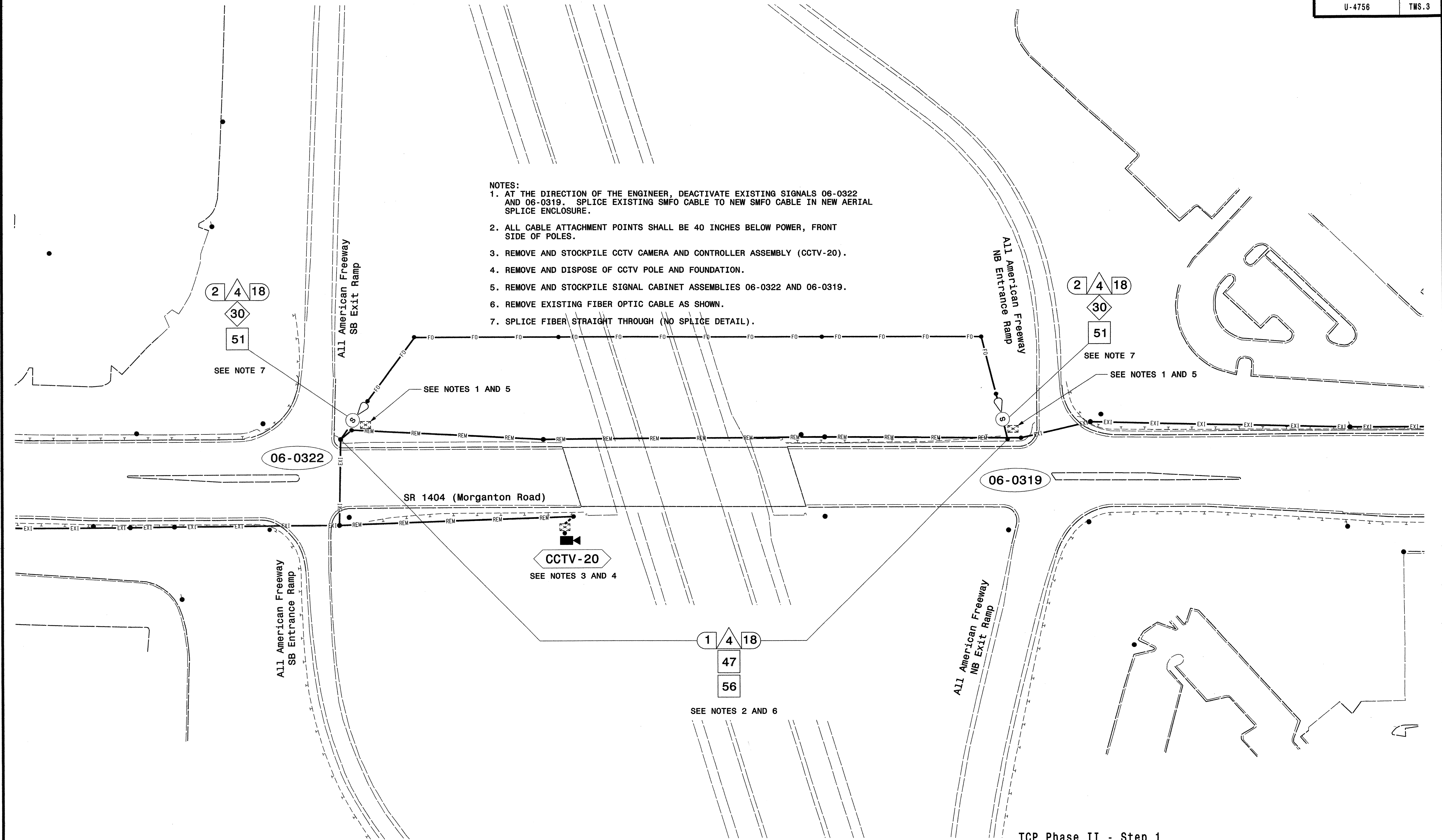
- XX INDICATES NUMBER OF CABLES, LOOPS, ETC.
- XX INDICATES NUMBER OF FIBERS PER CABLE, TWISTED PAIRS PER CABLE, ETC.
- XX INDICATES NUMBER OF RISER(S)/CONDUIT(S)
- XX INDICATES DIAMETER OF RISER(S)/CONDUIT(S) (INCH)



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	CONSTRUCTION NOTES		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: MAY 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Swinton REVIEWED BY:	
SIGNATURE _____ DATE _____		CADD Filename:	

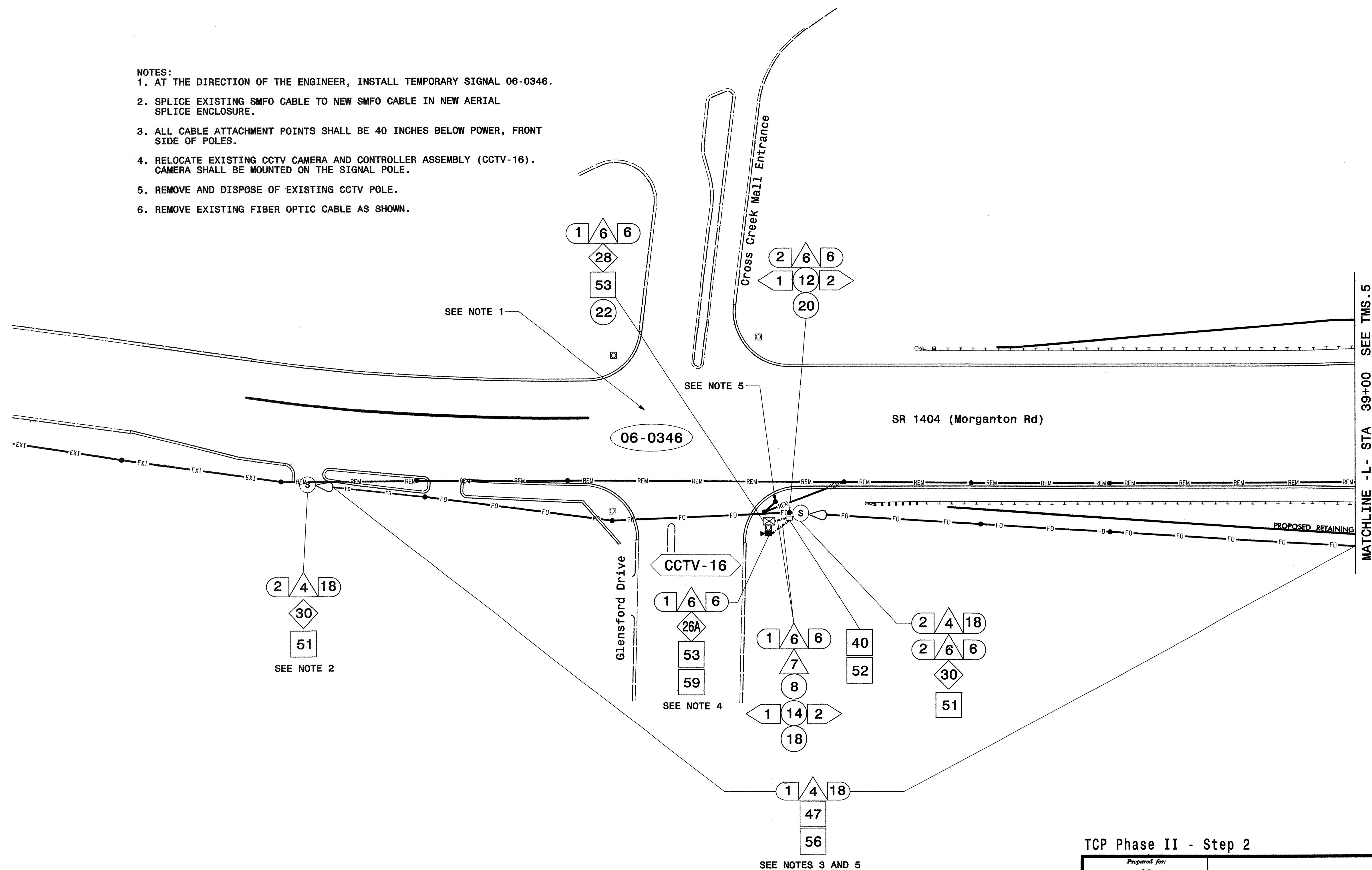
- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, DEACTIVATE EXISTING SIGNALS 06-0322 AND 06-0319. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 2. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES.
 3. REMOVE AND STOCKPILE CCTV CAMERA AND CONTROLLER ASSEMBLY (CCTV-20).
 4. REMOVE AND DISPOSE OF CCTV POLE AND FOUNDATION.
 5. REMOVE AND STOCKPILE SIGNAL CABINET ASSEMBLIES 06-0322 AND 06-0319.
 6. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.
 7. SPLICE FIBER STRAIGHT THROUGH (NO SPLICE DETAIL).



TCP Phase II - Step 1

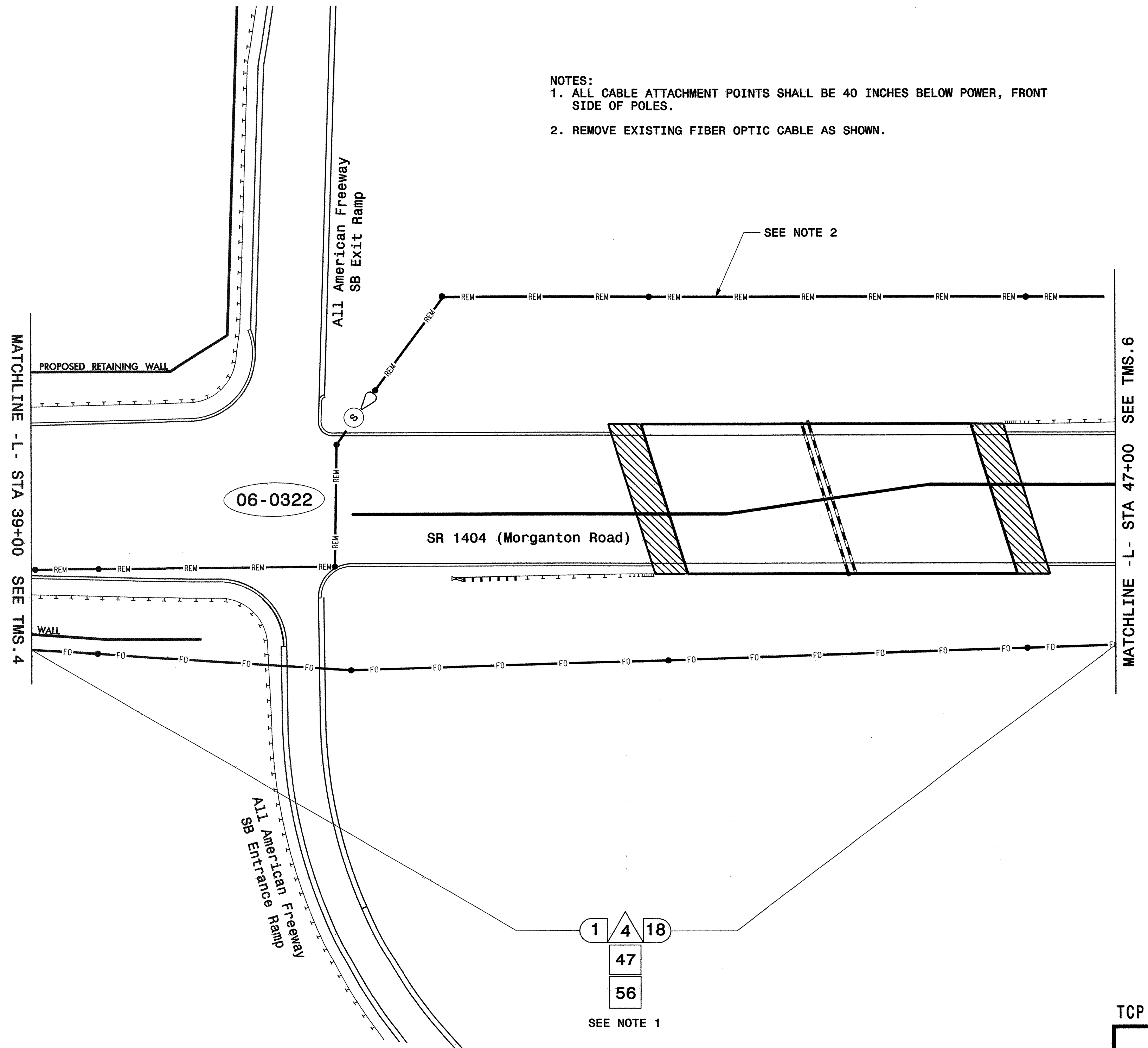
	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Privette REVIEWED BY:	
122 N. McDowell St., Raleigh, NC 27603 SCALE 0 50 1"=50'	REVISIONS _____ _____ _____	INIT. DATE _____ _____ _____	SIGNATURE DATE _____ _____

- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, INSTALL TEMPORARY SIGNAL 06-0346.
 2. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES.
 4. RELOCATE EXISTING CCTV CAMERA AND CONTROLLER ASSEMBLY (CCTV-16). CAMERA SHALL BE MOUNTED ON THE SIGNAL POLE.
 5. REMOVE AND DISPOSE OF EXISTING CCTV POLE.
 6. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.



TCP Phase II - Step 2

	<p>COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD</p>		
	<p>DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE</p>	<p>PLANNED BY: K. Bisby</p>	
<p>122 N. McDowell St., Raleigh, NC 27603</p>	<p>SCALE: 1" = 50'</p>	<p>PREPARED BY: K. Bisby</p>	<p>REVIEWED BY: D. Privette</p>
<p>0 50</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>SIGNATURE DATE</p>
<p>CADD Filename:</p>			



NOTES:
 1. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES.
 2. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.

SEE NOTE 2

1 4 18


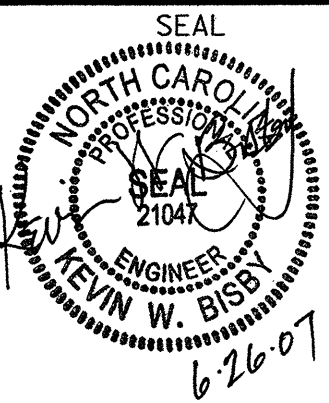
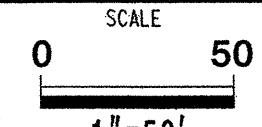
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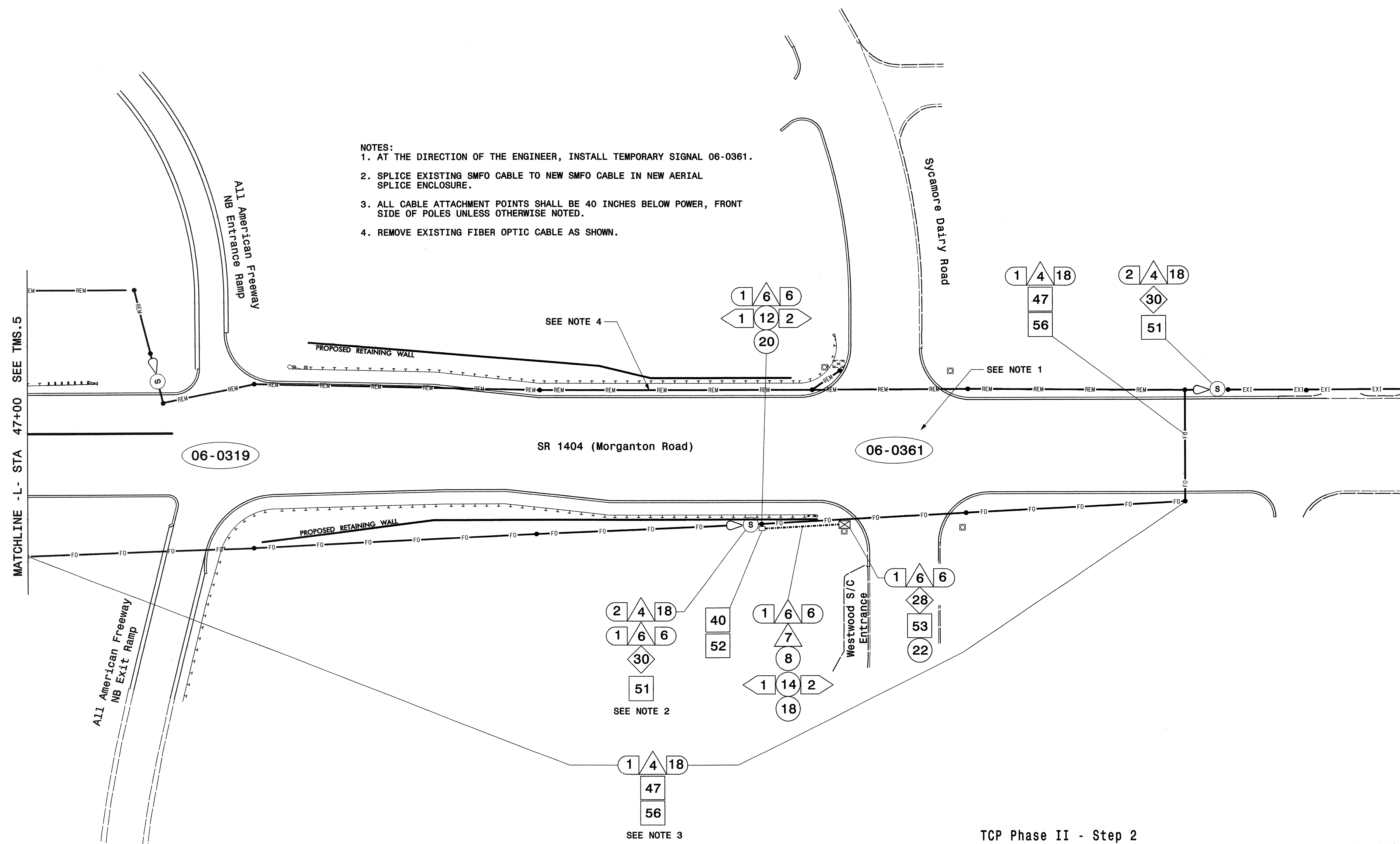
56

SEE NOTE 1

TCP Phase II - Step 2

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	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:	REVISIONS INIT. DATE	
122 N. McDowell St., Raleigh, NC 27603 SCALE  1" = 50'	SIGNATURE DATE CADD: FT1 entame		



- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, INSTALL TEMPORARY SIGNAL 06-0361.
 2. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES UNLESS OTHERWISE NOTED.
 4. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.

MATCHLINE -L- STA 47+00 SEE TMS.5

06-0319

SR 1404 (Morganton Road)

06-0361

All American Freeway
NB Exit Ramp

All American Freeway
NB Entrance Ramp

Sycamore Dairy Road

Westwood S/C
Entrance

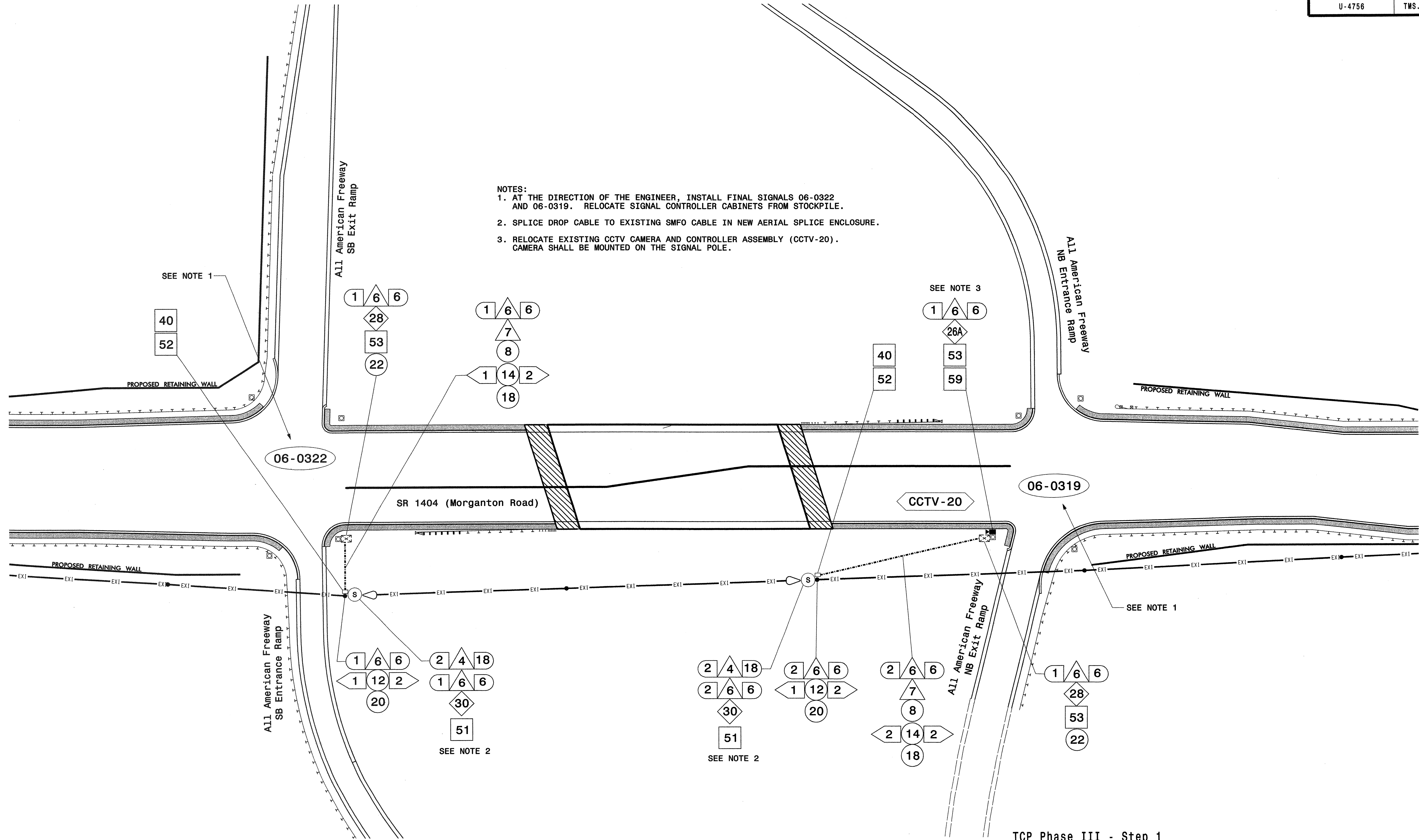
SEE NOTE 2

SEE NOTE 3

TCP Phase II - Step 2

	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD	
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE	
122 N. McDowell St., Raleigh, NC 27603 SCALE 0 50 1"=50'	PLAN DATE: June 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Privette REVIEWED BY:
REVISIONS _____ _____ _____		SIGNATURE DATE 6-26-07

- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, INSTALL FINAL SIGNALS 06-0322 AND 06-0319. RELOCATE SIGNAL CONTROLLER CABINETS FROM STOCKPILE.
 2. SPLICE DROP CABLE TO EXISTING SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. RELOCATE EXISTING CCTV CAMERA AND CONTROLLER ASSEMBLY (CCTV-20). CAMERA SHALL BE MOUNTED ON THE SIGNAL POLE.

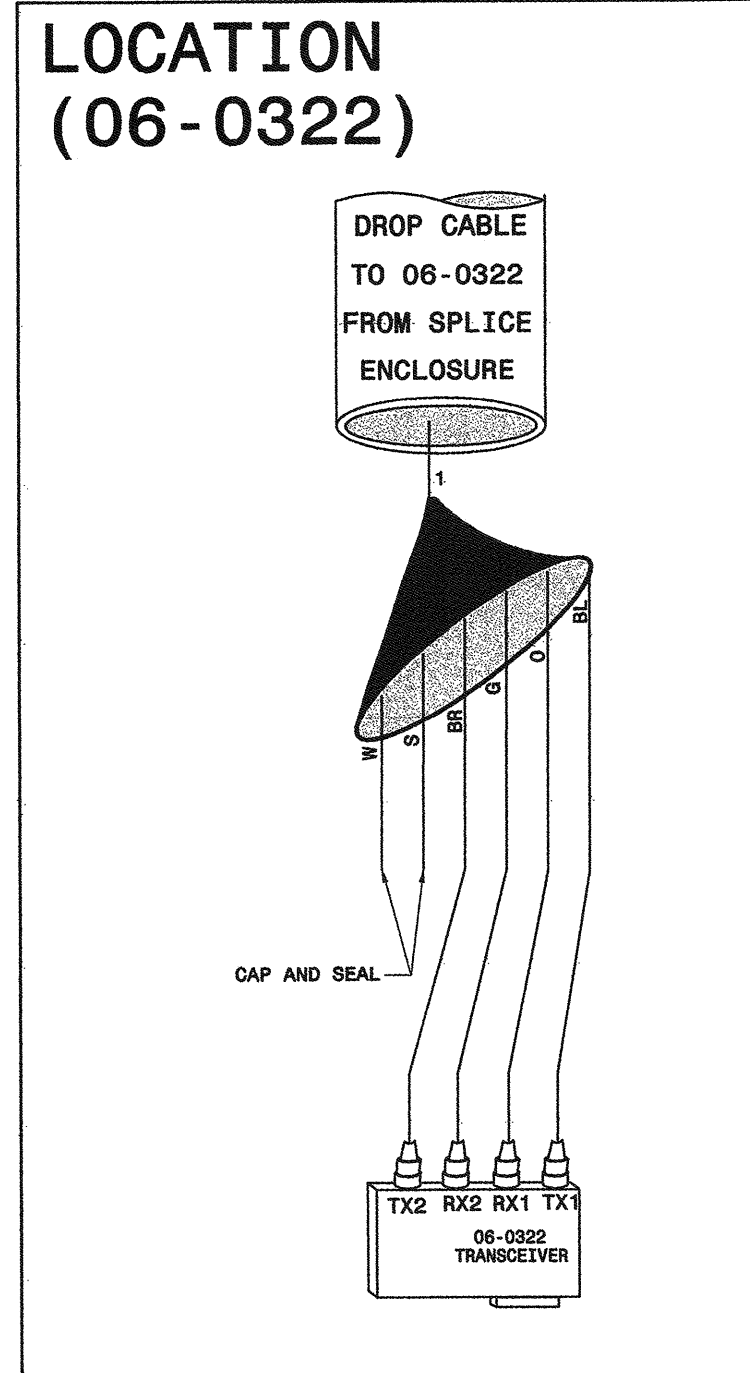
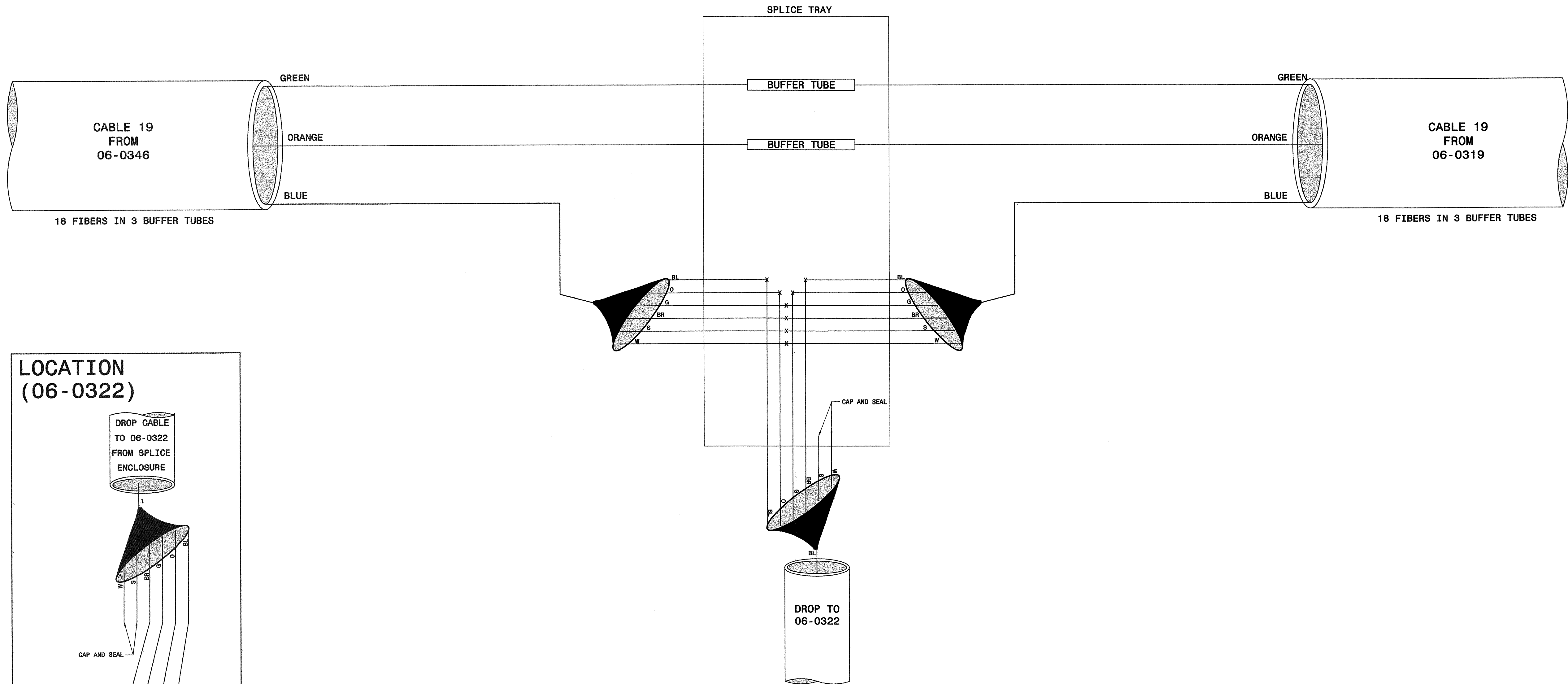


TCP Phase III - Step 1

	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE		
Prepared for: 	PLAN DATE: June 2007	REVIEWED BY: D. Privette	SIGNATURE: <i>Kevin W. Bisby</i> DATE: 6-26-07
122 N. McDowell St., Raleigh, NC 27603	PREPARED BY: K. Bisby	REVIEWED BY:	
SCALE: 1"=50' 	REVISIONS:	INIT.:	DATE:

06-0322
 SR 1404 MORGANTON ROAD AT ALL AMERICAN FREEWAY SB RAMPS

EXPRESS GREEN AND ORANGE BUFFER TUBES.

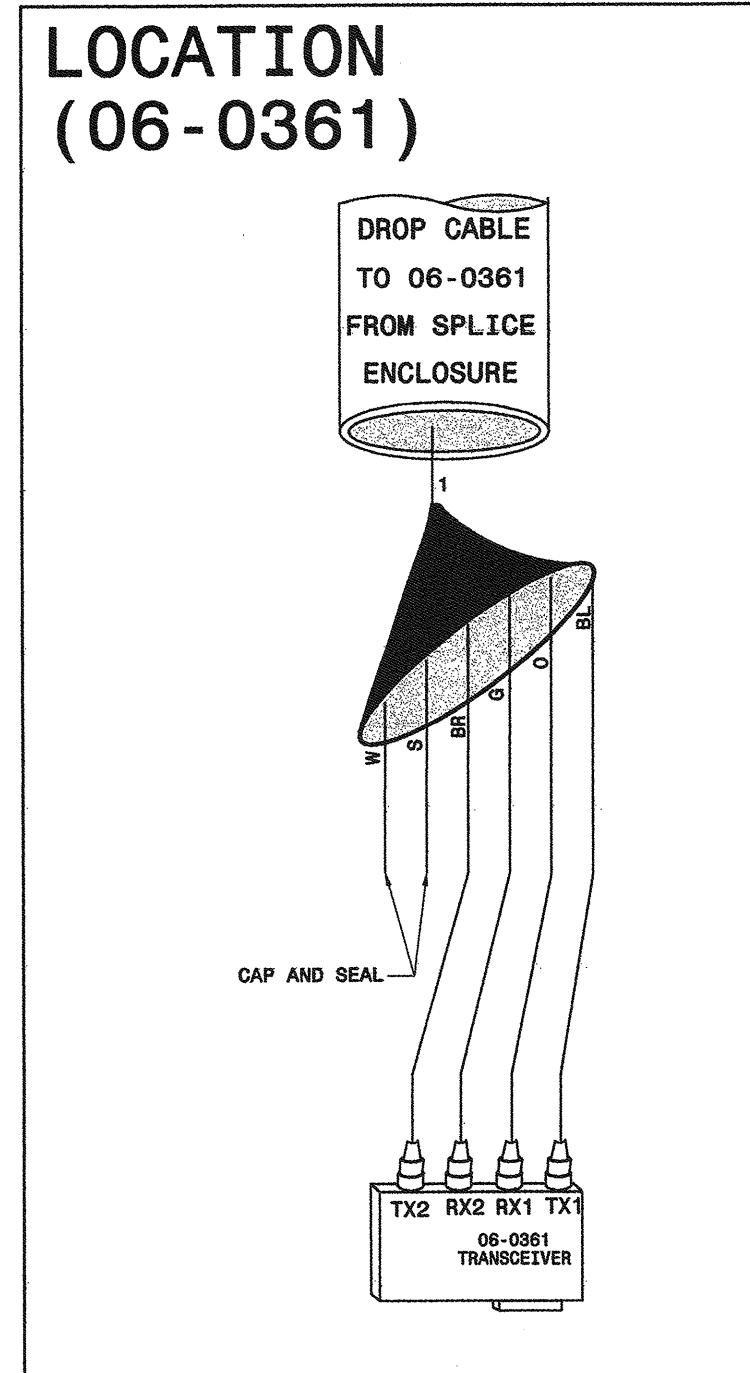
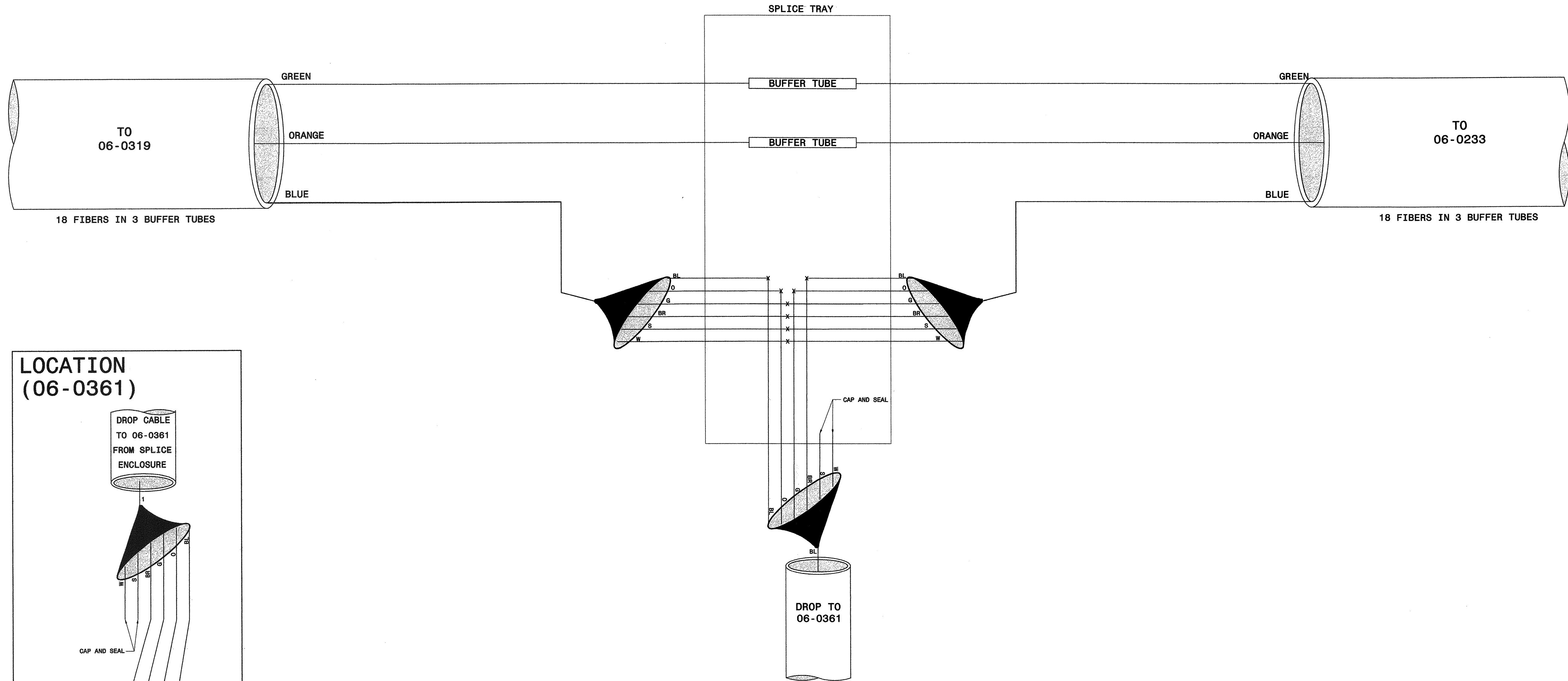


FINAL SPLICE DETAIL - TCP PHASE III STEP 1

<p>Prepared for: Traffic Management Systems, Inc. 122 N. McDowell St., Raleigh, NC 27603</p>	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE		
PLAN DATE: June 2007	REVIEWED BY: D. Privette		SIGNATURE: <i>[Signature]</i> DATE: 6-26-07
PREPARED BY: K. Bisby	REVIEWED BY:		
REVISIONS	INIT.	DATE	SEAL
CAD: F11enonez			

06-0361
 SR 1404 MORGANTON ROAD AT SYCAMORE DAIRY ROAD

EXPRESS GREEN AND ORANGE BUFFER TUBES.



FINAL SPLICE DETAIL - TCP PHASE II STEP 2

	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE		
PLAN DATE: June 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Privette		SIGNATURE: <i>[Signature]</i> DATE: 6-26-07
REVISIONS:	INIT.:	DATE:	