

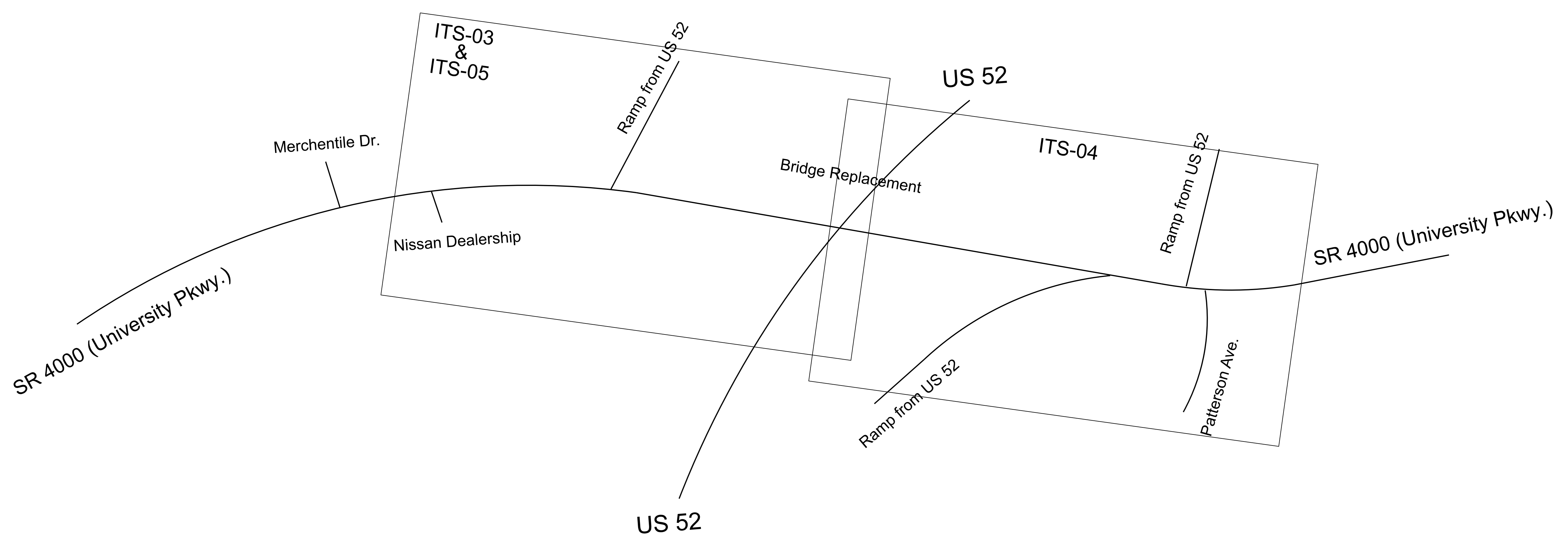
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## FORSYTH COUNTY

LOCATION: UNIVERSITY PARKWAY AND US 52

TYPE OF WORK: RELOCATE FIBER AND CONDUIT DURING PHASE 1  
OF CONSTRUCTION. INSTALL NEW CCTV ON NEW  
METAL POLE IN FINAL PHASE.

PROJECT: BR-0168



**NCDOT CONTACT:**  
**TRANSPORTATION MOBILITY AND SAFETY**  
MATTHEW T. CARLISLE, PE  
ACTING STATE TRANSPORTATION SYSTEMS  
MANAGEMENT & OPERATIONS ENGINEER

 <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		<b>SEAL</b>  <small>DocuSigned by: Nathan Dominguez #C009594A38434</small>
	Prepared in the Offices of: Division 9      Forsyth County      Winston-Salem PLAN DATE: February 2026      REVIEWED BY: N. Dominguez, PE PREPARED BY: L.E. Neal	REVISIONS INIT.      DATE	

- 1 INSTALL 3-WIRE FEEDER CONDUCTORS
- 2 INSTALL ETHERNET CABLE
- 3 EXISTING ETHERNET (OR COAX) CABLE
- 4 INSTALL SMFO CABLE
- 5 EXISTING SMFO 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 NEW POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 INSTALL NEW ETHERNET EDGE SWITCH
- 27 INSTALL NEW FIBER OPTIC TRANSCEIVER
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPLICE ENCLOSURE
- 30 INSTALL AERIAL SPLICE ENCLOSURE
- 31 MODIFY EXISTING INTERCONNECT CENTER / SPLICE ENCLOSURE
- 32 INSTALL POLE MOUNTED SPLICE CABINET
- 33 INSTALL BASE MOUNTED SPLICE CABINET

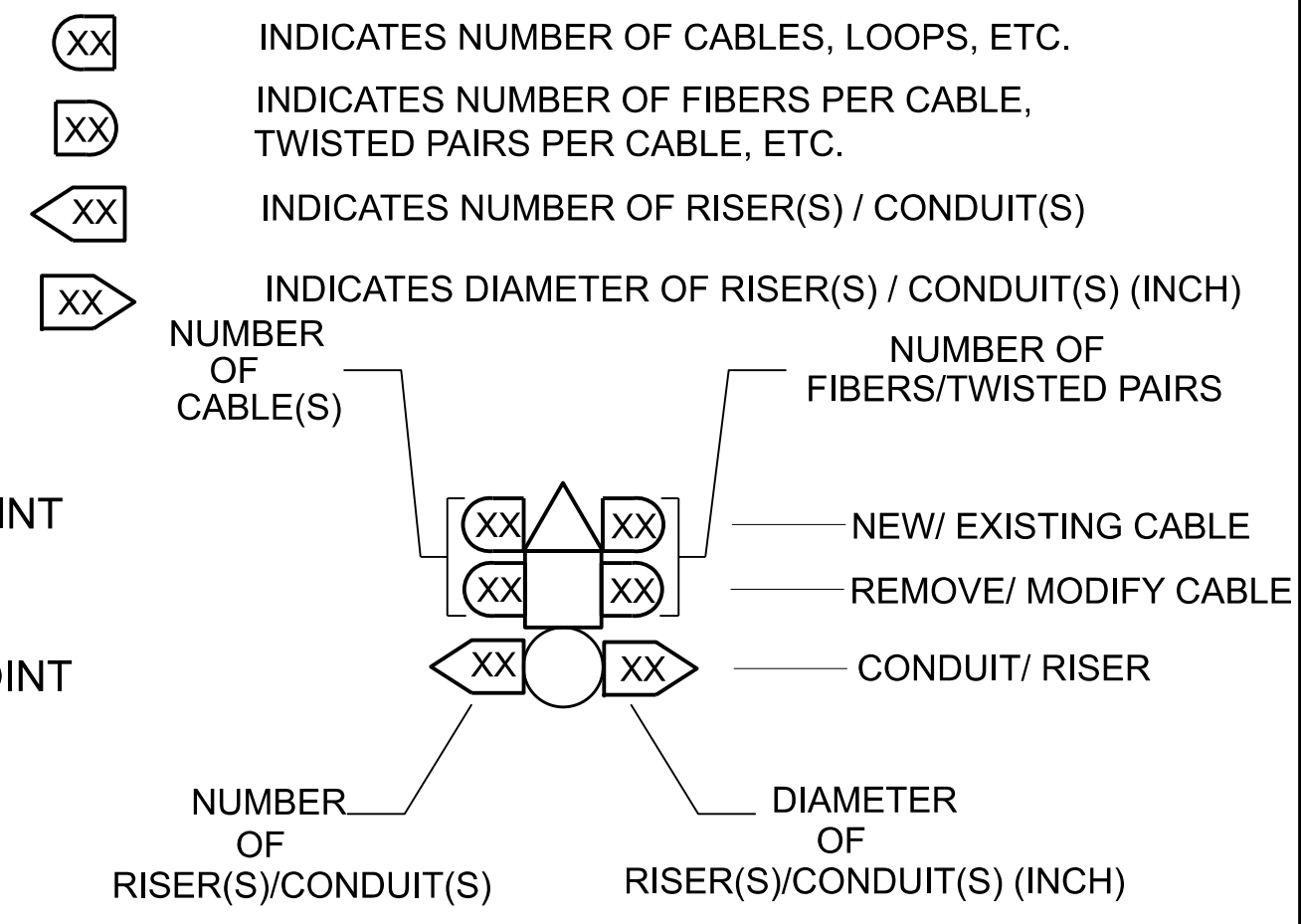
- 34 INSTALL CABINET FOUNDATION
- 35 INSTALL CCTV CAMERA POLE MOUNTED CABINET
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL STANDARD SIZE JUNCTION BOX
- 40A INSTALL OVERSIZED JUNCTION BOX
- 40B INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")
- 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
- 48A REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 48B REMOVE EXISTING COMMUNICATIONS CABLE
- 49 BACK PULL EXISTING COMMUNICATIONS CABLE
- 50 INSTALL CELL MODEM AND ANTENNA
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52A INSTALL DELINEATOR MARKER
- 52B INSTALL JUNCTION BOX MARKER
- 53A STORE 20 FEET OF COMMUNICATIONS CABLE
- 53B STORE 50 FEET OF EACH COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING 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 INSTALL NEW EQUIPMENT CABINET DISCONNECT
- 60 BOND TRACER WIRE TO EQUIPMENT GROUND BUS  
DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS  
BOND RISER AND MESSENGER CABLE TO POLE GROUND
- 61
- 62 BOND RISER TO POLE GROUND
- 63
- 64 BOND MESSENGER CABLE TO POLE GROUND
- 65 INSTALL HEAT SHRINK TUBING RETROFIT KIT
- 66 INSTALL MOLDABLE DUCT SEAL
- 67 SLACK SPAN

**LEGEND**

	FO	NEW FIBER OPTIC 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

NEW		EXISTING
	JUNCTION BOXES	
	WOOD POLE	
	AERIAL SPLICE ENCLOSURE	
	UNDERGROUND SPLICE ENCLOSURE	
	METAL POLE	
	CCTV ASSEMBLY	
	STANDARD GUY ASSEMBLY	
	SIDEWALK GUY ASSEMBLY	
	CABLE STORAGE RACKS (SNOW SHOES)	
	SIGNAL/EQUIPMENT CABINET	
	SPLICE CABINET	
	FLAT PANEL ANTENNA (SINGLE)	
	YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION	
	YAGI ANTENNA (SINGLE)	
	ELECTRICAL SERVICE	
	SIGNAL POLE	
	ITS DEVICE NUMBER	

**CONSTRUCTION NOTE SYMBOLOGY KEY**



**ATTACHMENT POINT:**

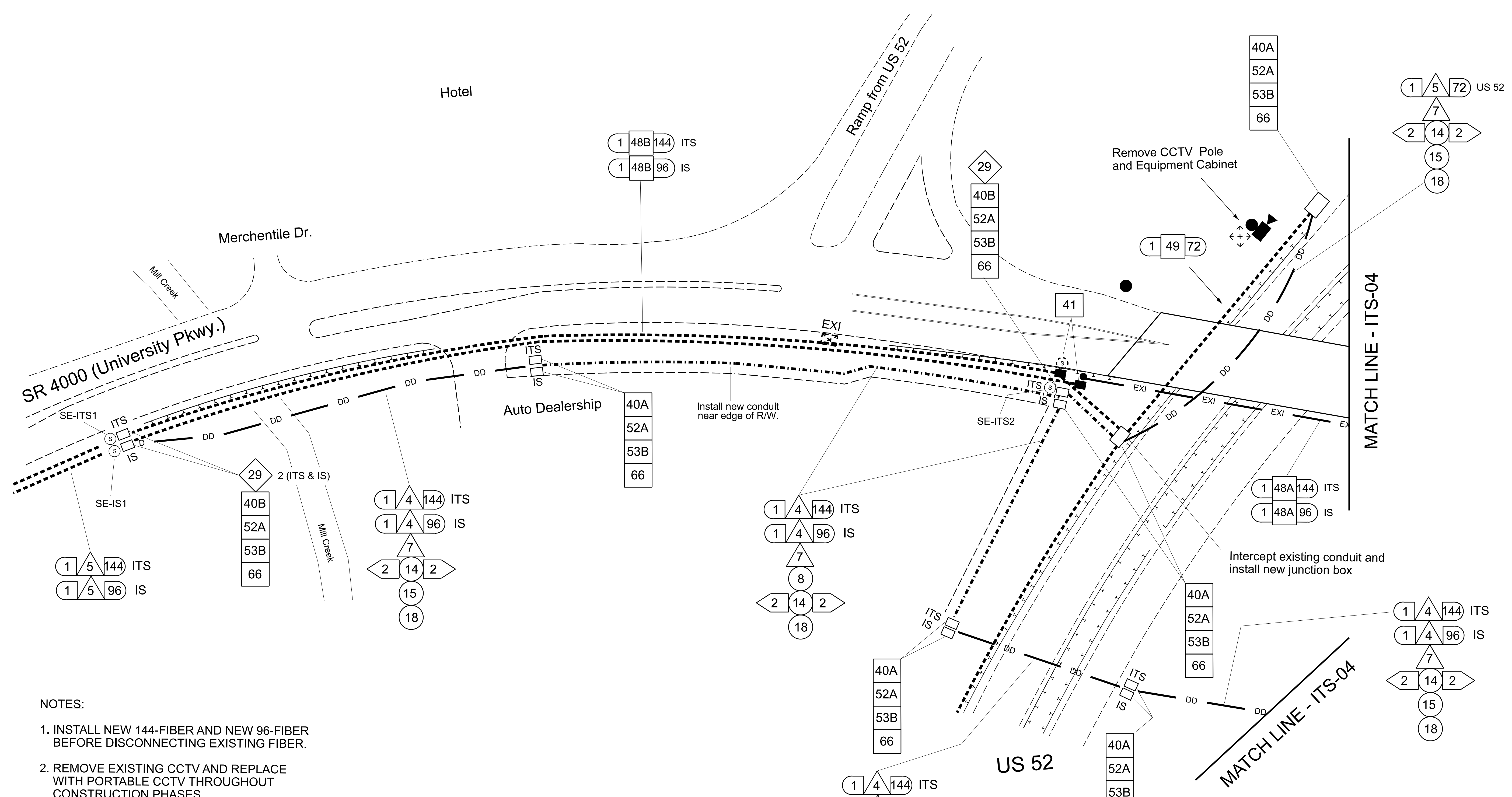
YYY DISTANCE ABOVE (IN)/ATTACHMENT POINT REFERENCE POINT

YYY  
XX"/SS REFERENCE POINT DISTANCE BELOW (IN)/ATTACHMENT POINT

"SS" REFERENCE LOCATION  
FS = FRONT SIDE OF POLE  
BS = BACK SIDE OF POLE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:  750 N. Greenfield Pkwy., Garner, NC 27529	<b>CONSTRUCTION NOTES</b>		SEAL  SEAL 055078 NATHAN P. DOMINGUEZ ENGINEER 02/13/2026
	Division 9      Forsyth County      Winston-Salem PLAN DATE: February 2026      REVIEWED BY: N. Dominguez, PE PREPARED BY: L.E. Neal	REVISIONS      INT.      DATE	
DocuSigned by: Nathan Dominguez 4C2B854458434			



NOTES:

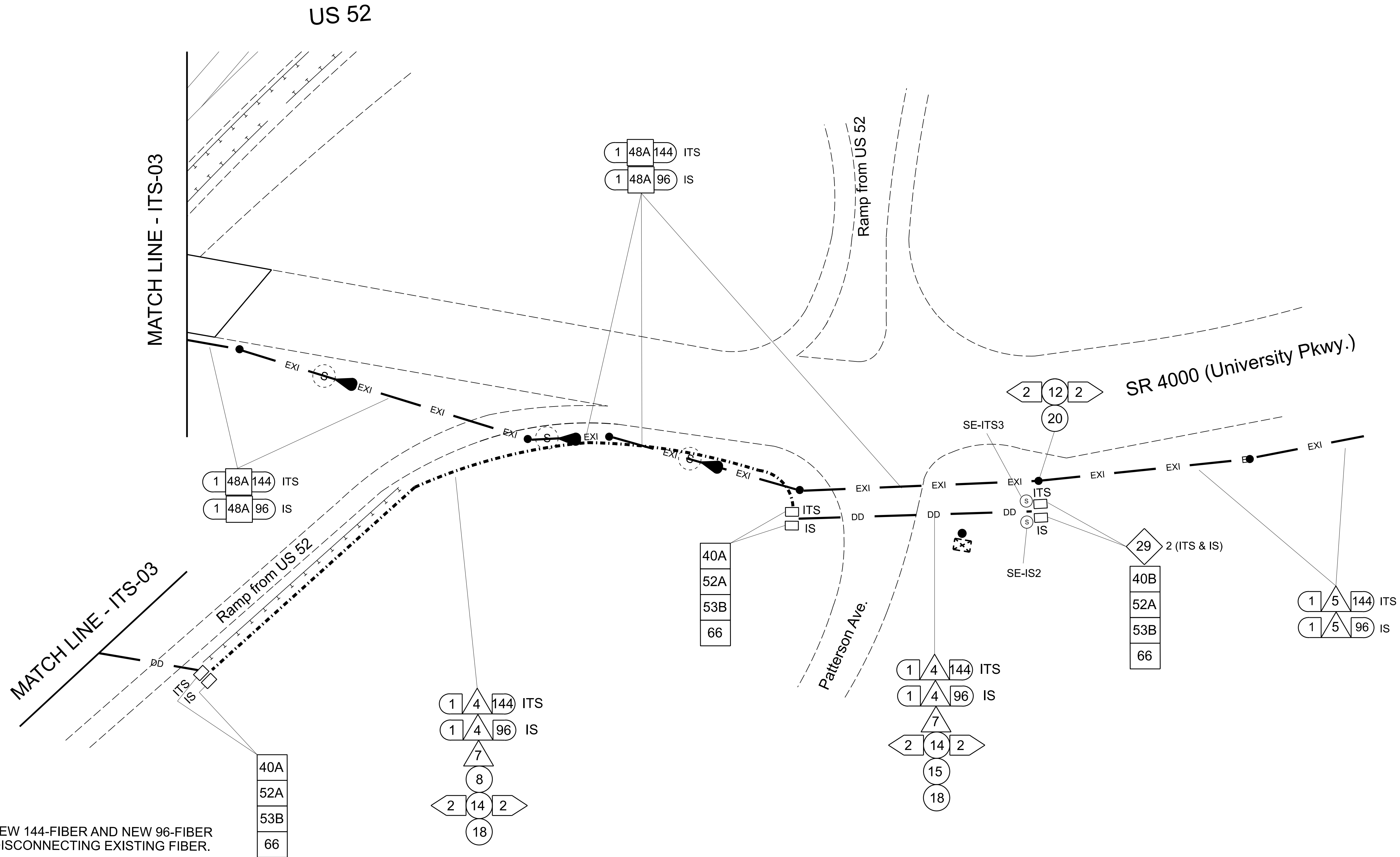
1. INSTALL NEW 144-FIBER AND NEW 96-FIBER BEFORE DISCONNECTING EXISTING FIBER.
2. REMOVE EXISTING CCTV AND REPLACE WITH PORTABLE CCTV THROUGHOUT CONSTRUCTION PHASES.
3. BACK PULL 72-FIBER. REINSTALL IN NEW CONDUIT TO NEW SPLICE ENCLOSURE.
4. IN PHASE 1, REMOVE FIBER FROM CONDUIT, CUT CONDUIT 30" BELOW GRADE, AND ABANDON IN PLACE.
5. IN FINAL PHASE, INSTALL NEW CCTV ON 50' METAL POLE AS SHOWN IN PLANS.

PHASE 1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		<p>SEAL</p>							
	<p>Division 9 Forsyth County Winston-Salem</p> <p>PLAN DATE: FEBRUARY 2026 REVIEWED BY: N. DOMINGUEZ, PE</p> <p>PREPARED BY: L.E. NEAL</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	DESCRIPTION				<p>INIT. DATE</p> <table border="1"> <tr> <td> </td> <td> </td> </tr> </table>
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Prepared in the Offices of:  
 750 N. Greenfield Pkwy., Garner, NC 27529  
 SCALE: 0 N/A



**NOTES:**

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- |     |
|-----|
| 40A |
| 52A |
| 53B |
| 66  |

# PHASE 1

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	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		
	Division 9      Forsyth County      Winston-Salem	PLAN DATE: FEBRUARY 2026      REVIEWED BY: N. DOMINGUEZ, PE	
750 N. Greenfield Pkwy., Garner, NC 27529	SCALE: 0      N/A	REVISIONS:	INT.      DATE
DocuSigned by: <i>Nathan Dominguez</i>			SEAL





NEW UNDERGROUND  
SPLICE ENCLOSURE  
(SE-IS1)  
  
WEST OF MILL CREEK

LEGEND  
X = FUSION SPLICE  
E = EXISTING SPLICE  
C = CAP IN TRAY

COLOR CODE  
TIA/EIA 598-A

(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

EXPRESS = EXPRESS ALL FIBERS/  
BUFFER TUBES

BUFFER SPLICE = SPLICE ALL FIBERS/  
BUFFER TUBES

Notes:  
Unused fibers left coiled and stored in splice tray.  
Unused Buffer Tubes left coiled and stored in splice tray.



# PHASE 1

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>Univeristy Parkway IS Splicing Detail</p>		<p>SEAL</p>					
	<p>Division 9 Forsyth County Winston-Salem</p> <p>PLAN DATE: FEBRUARY 2026 PREPARED BY: L.E. NEAL REVIEWED BY: N. DOMINGUEZ, PE</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DESCRIPTION	DATE		
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<p>SCALE: 0 N/A</p>	<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>							

NEW UNDERGROUND  
SPLICE ENCLOSURE  
(SE-ITS1)

WEST OF MILL CREEK

LEGEND  
X = FUSION SPLICE  
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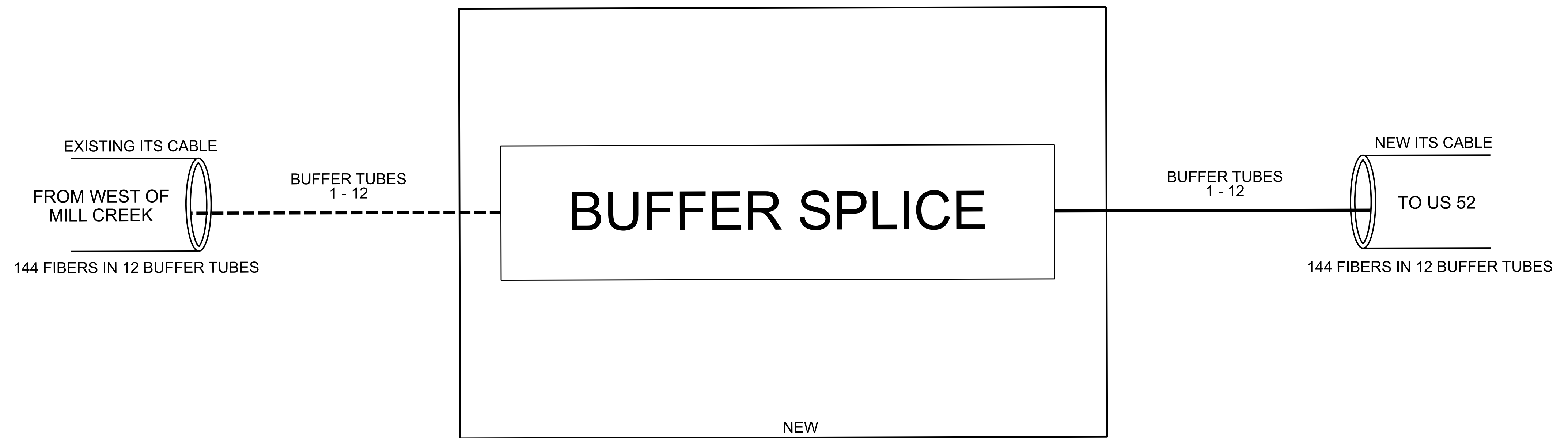
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# PHASE 1

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<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>Prepared in the Offices of:</p> <p><b>University Parkway ITS Splicing Detail</b></p>		<p>SEAL</p> <p>DocuSigned by: Nathan Dominguez</p>		
	<p>Division 9 Forsyth County Winston-Salem</p> <p>PLAN DATE: FEBRUARY 2026 PREPARED BY: L.E. NEAL REVIEWED BY: N. DOMINGUEZ, PE</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>		INIT.	DATE
INIT.	DATE				

NEW UNDERGROUND  
SPLICE ENCLOSURE  
(SE-ITS2)  
  
UNIVERSITY PARKWAY AT US 52

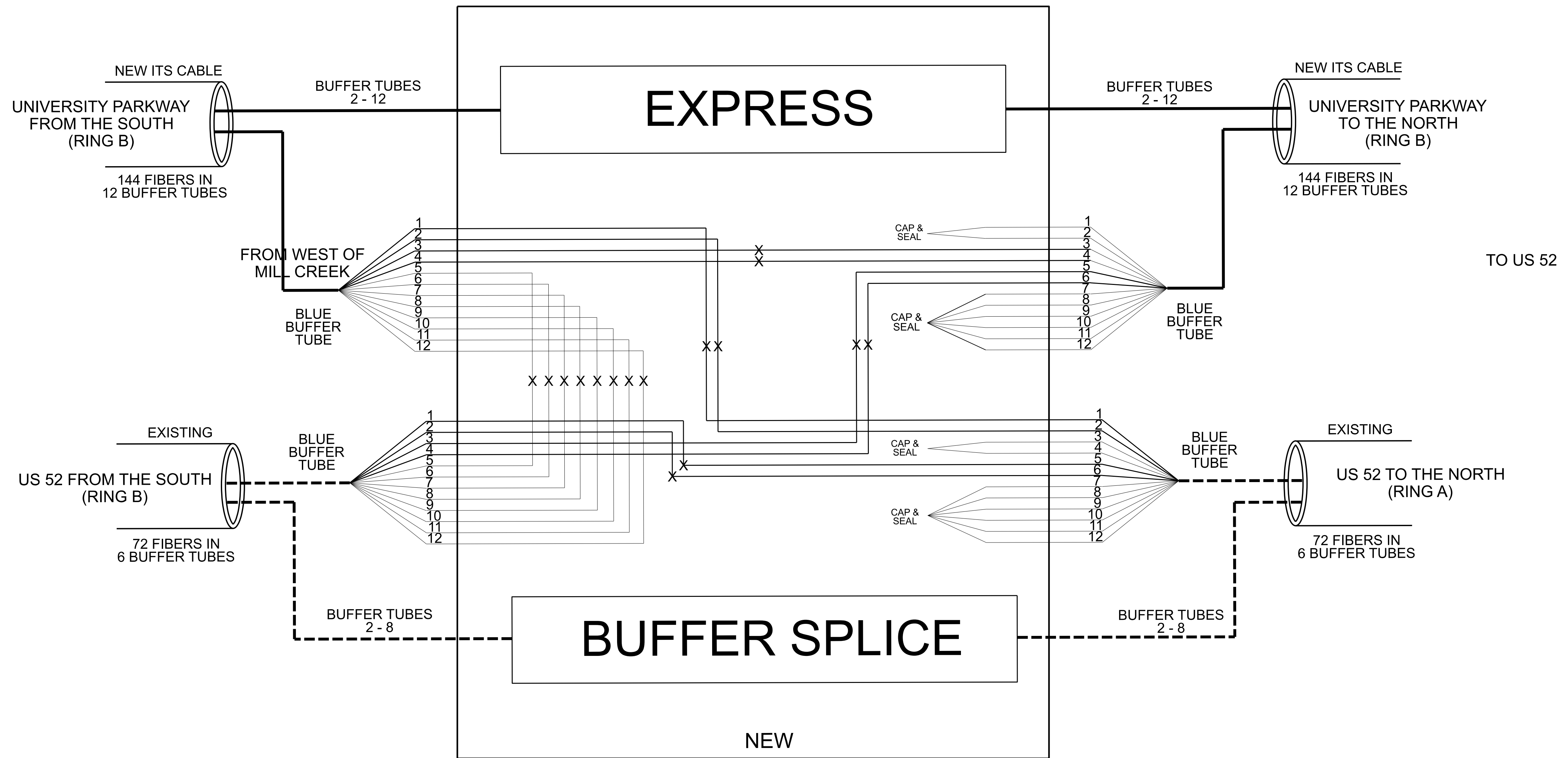
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BUFFER TUBES

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NOTES:

1. GREEN BUFFER TUBE IN UNIVERSITY PARKWAY CABLE IS RESERVED FOR WINSTON-SALEM SIGNAL SYSTEM.
2. COORDINATE WORK SHOWN IN THESE PLANS WITH SIGNAL SYSTEM SPLICE PLANS. (SEE SCP 6)

PHASE 1

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<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>University Parkway ITS Splicing Detail</p>		<p>SEAL</p> <p>DocuSigned by: <i>Nathan Dominguez</i> 1/27/2026</p>							
	<p>Division 9 Forsyth County Winston-Salem</p> <p>PLAN DATE: FEBRUARY 2026 PREPARED BY: L.E. NEAL REVIEWED BY: N. DOMINGUEZ, PE</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DESCRIPTION	DATE				<p>INIT. DATE</p> <table border="1"> <tr> <td> </td> <td> </td> </tr> </table>
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NEW UNDERGROUND  
SPLICE ENCLOSURE  
(SE-IS2)  
  
EAST OF PATTERSON AVE.

LEGEND  
X = FUSION SPLICE  
E = EXISTING SPLICE  
C = CAP IN TRAY

COLOR CODE  
TIA/EIA 598-A

- |            |             |
|------------|-------------|
| (1) BLUE   | (7) RED     |
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BUFFER TUBES

Notes:  
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PHASE 1

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<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>University Parkway IS Splicing Detail</p>		<p>SEAL</p> <p>DocuSigned by: <i>Nathan Dominguez</i> 4CE0B9594A58434</p>						
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NEW UNDERGROUND  
SPLICE ENCLOSURE  
(SE-ITS3)  
  
EAST OF PATTERSON AVE.

LEGEND  
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TIA/EIA 598-A

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PHASE 1

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	<p>Division 9 Forsyth County Winston-Salem</p>	<p>PLANNED BY: L.E. NEAL REVIEWED BY: N. DOMINGUEZ, PE</p>	
<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>PLAN DATE: FEBRUARY 2026</p>	<p>PREPARED BY: L.E. NEAL</p>	<p>DATE: 02/13/2026</p>
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<p>DocuSigned by: <i>Nathan Dominguez</i></p>			<p>SEAL</p>

MODIFY UNDERGROUND  
SPLICE ENCLOSURE  
(SE-ITS2)  
  
UNIVERSITY PARKWAY AT US 52 RAMPS

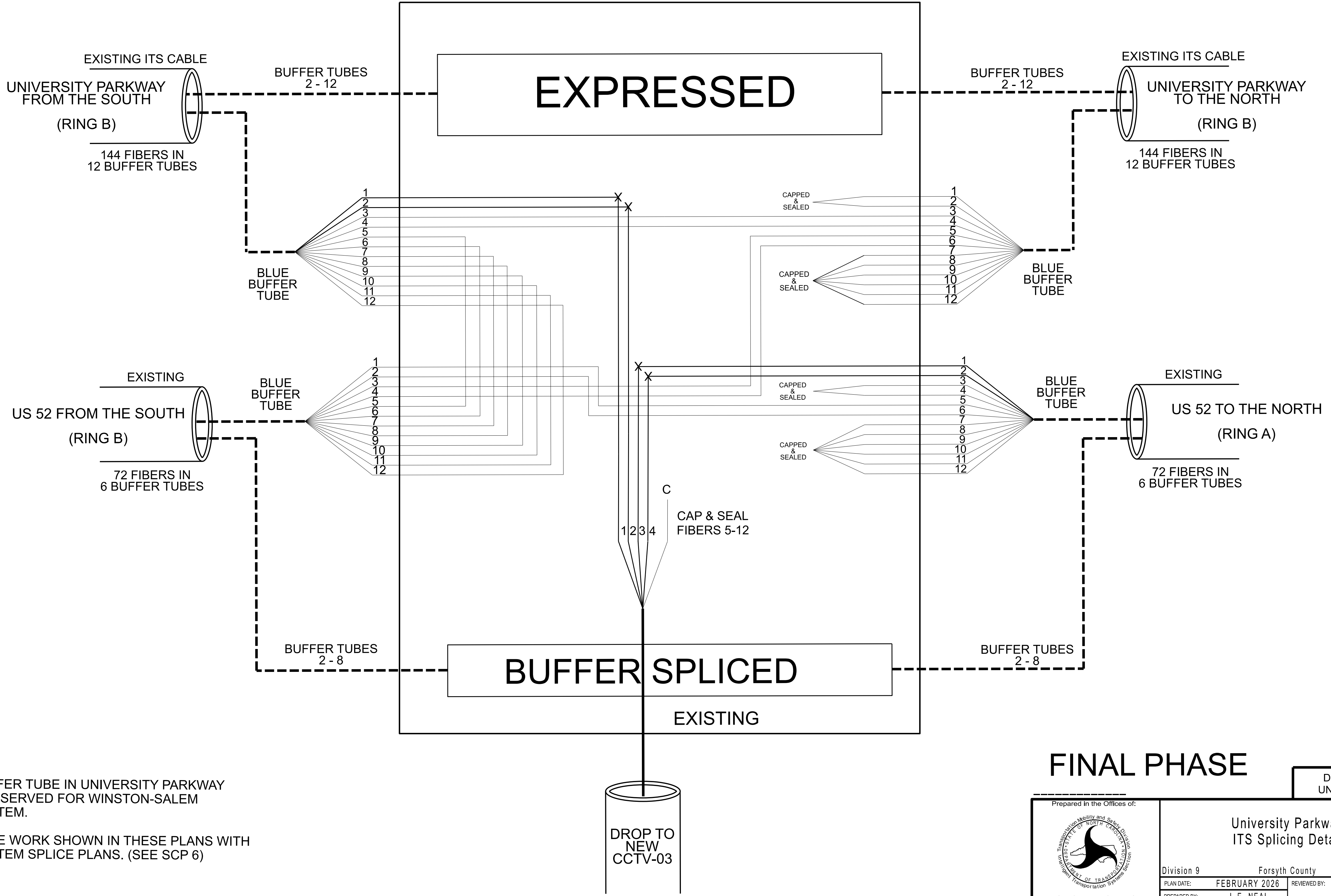
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2. COORDINATE WORK SHOWN IN THESE PLANS WITH SIGNAL SYSTEM SPLICE PLANS. (SEE SCP 6)

**FINAL PHASE**

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