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- 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 STUBOUTS
- 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
- 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
- 30A MODIFY EXISTING SPlice ENCLOSURE
- 31 INSTALL POLE MOUNTED SPlice CABINET
- 32 INSTALL BASE MOUNTED SPlice CABINET
- 33 REMOVE EXISTING SPlice CABINET

- 34 INSTALL CABINET FOUNDATION
- 35 INSTALL POLE MOUNTED CABINET
- 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 CABLE AND MESSENGER CABLE
- 49 REMOVE EXISTING COMMUNICATIONS 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 INSTALL DATA TRANCEIVER
- 60 INSTALL ETHERNET SWITCH
- 61 INSTALL UNIFIED CABLE

LEGEND

	NEW FIBER OPTIC COMMUNICATIONS CABLE
	NEW TWISTED PAIR COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE TO BE REMOVED
	NEW AERIAL GUY ASSEMBLY
	NEW CONDUIT
	EXISTING CONDUIT
	NEW DIRECTIONAL DRILLED CONDUIT
	NEW BORED AND JACKED CONDUIT
	NEW JUNCTION BOX
	EXISTING JUNCTION BOX
	NEW WOOD POLE
	EXISTING WOOD POLE
	NEW AERIAL SPICE ENCLOSURE
	NEW METAL POLE
	EXISTING METAL POLE
	NEW CCTV CAMERA ASSEMBLY
	EXISTING CCTV CAMERA ASSEMBLY
	NEW STANDARD GUY ASSEMBLY
	NEW STANDARD GUY USING EXISTING ANCHOR
	NEW SIDEWALK GUY ASSEMBLY
	NEW CABLE STORAGE RACKS (SNOW SHOES)
	EXISTING CONTROLLER AND CABINET
	EXISTING SPICE CABINET
	NEW SPICE CABINET
	SIGNAL POLE
	SIGNAL INVENTORY NUMBER

CONSTRUCTION NOTE SYMBOLOGY KEY

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

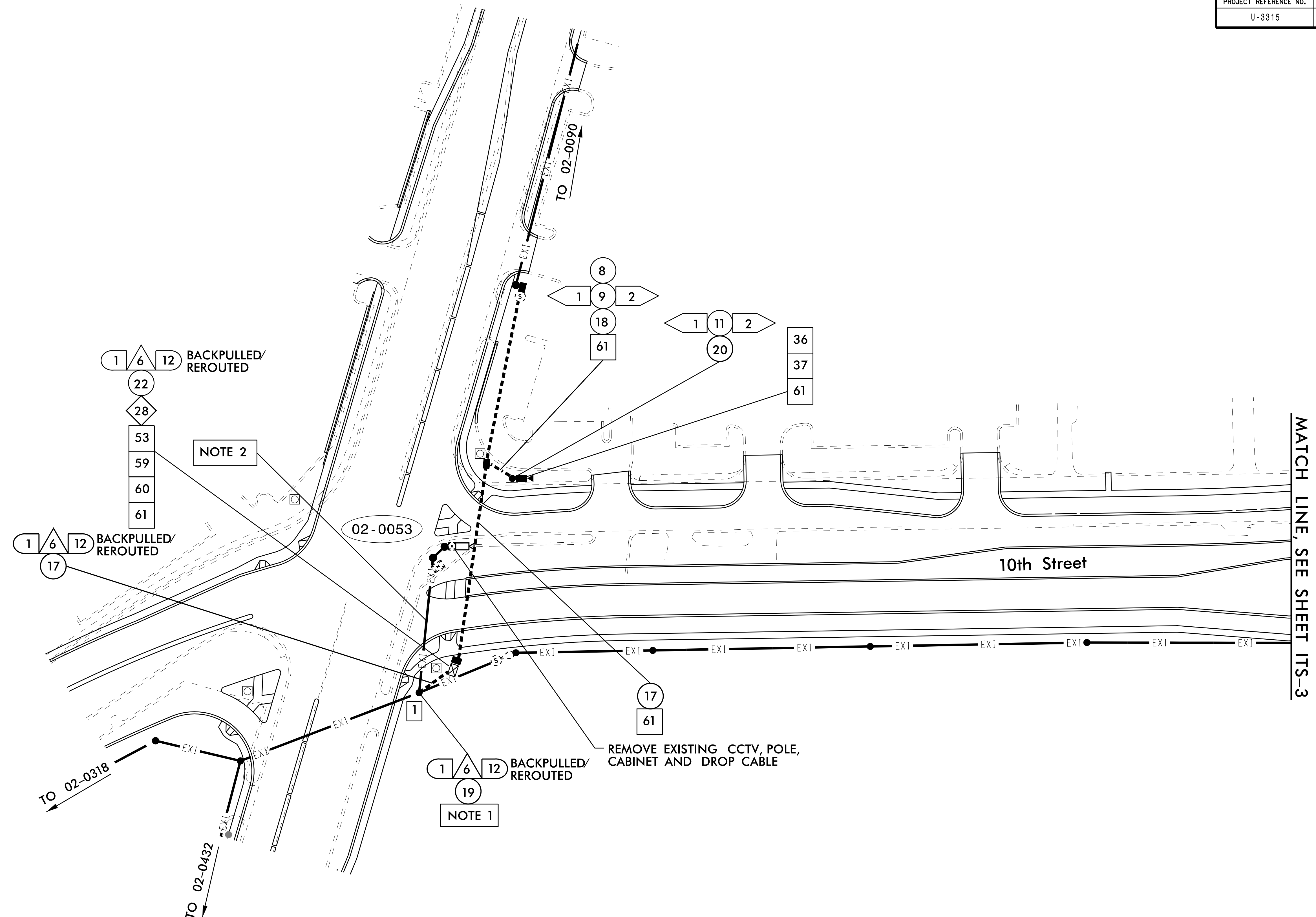
NUMBER OF CABLE(S)

NUMBER OF FIBERS/TWISTED PAIRS

NUMBER OF RISER(S)/CONDUIT(S)

DIAMETER OF RISER(S)/CONDUIT(S) (INCH)

	U-3315 INTERCONNECT		
	DIVISION 2	PITT COUNTY	
PLAN DATE: JUNE 2014		REVIEWED BY: SB PRIVETTE	
PREPARED BY: SP PENNINGTON		REVIEWED BY:	
SCALE 0 N/A	REVISIONS	INIT.	DATE
Prepared For: PLANS PREPARED IN THE OFFICE OF: Kimley-Horn NC License #F-0102 P.O. Box 33068 Raleigh, NC 27636 (919) 677-2000		DocuSigned by: Stephanie B. Privette 9/3/2014 CD0FEE0369C248A SIGNATURE DATE CADD Filename:	



- NOTE:**
1. INSTALL HEAT SHRINK RETROFIT KIT.
 2. REMOVE EXISTING 12F SMFO DROP CABLE FROM EXISTING SIGNAL CABINET. BACKPULL TO EXISTING WOOD POLE LABELED [1] AND RE-ROUTE TO NEW SIGNAL CABINET.
 3. RETURN EXISTING CAMERA TO CITY TRAFFIC ENGINEER.

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
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 P.O. Box 33068
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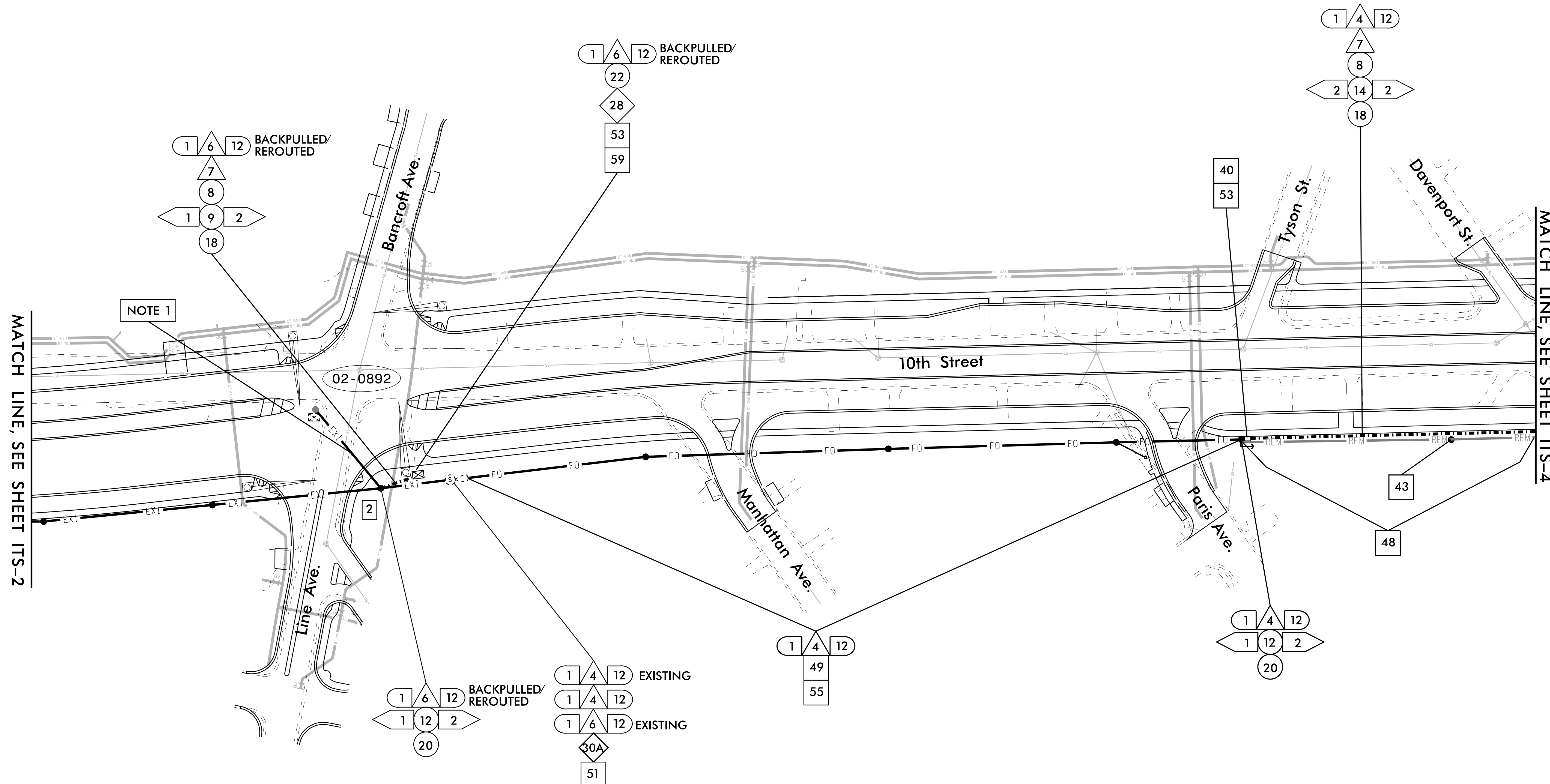


U-3315 INTERCONNECT	
DIVISION 2	PITT COUNTY
GREENVILLE	
PLAN DATE: JUNE 2014	REVIEWED BY: SB PRIVETTE
PREPARED BY: SP PENNINGTON	REVIEWED BY:
REVISIONS	INIT. DATE

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 SEALS
 24432
 Stephanie B. Privette
 9/3/2014
 CADD Filename:

9/23/2014 4:04:47 PM susen.pennington K:\RAL_Roadway\01036175 U-3315\IT\Traffic Signals\K55 - Cable Routing\Incl_ITS\U3315-20140903cr2.dgn

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MATCH LINE, SEE SHEET ITS-2

MATCH LINE, SEE SHEET ITS-4

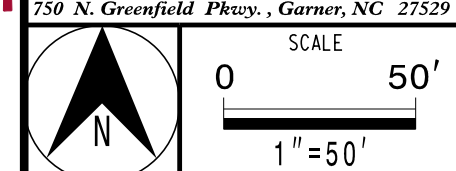
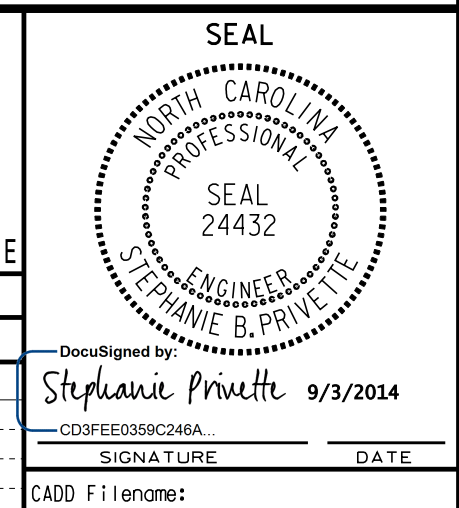
NOTE 1

NOTE:
 1. REMOVE EXISTING 12F SMFO DROP CABLE FROM EXISTING SIGNAL CABINET. BACKPULL TO EXISTING WOOD POLE LABELED [2] AND RE-ROUTE TO NEW SIGNAL CABINET.

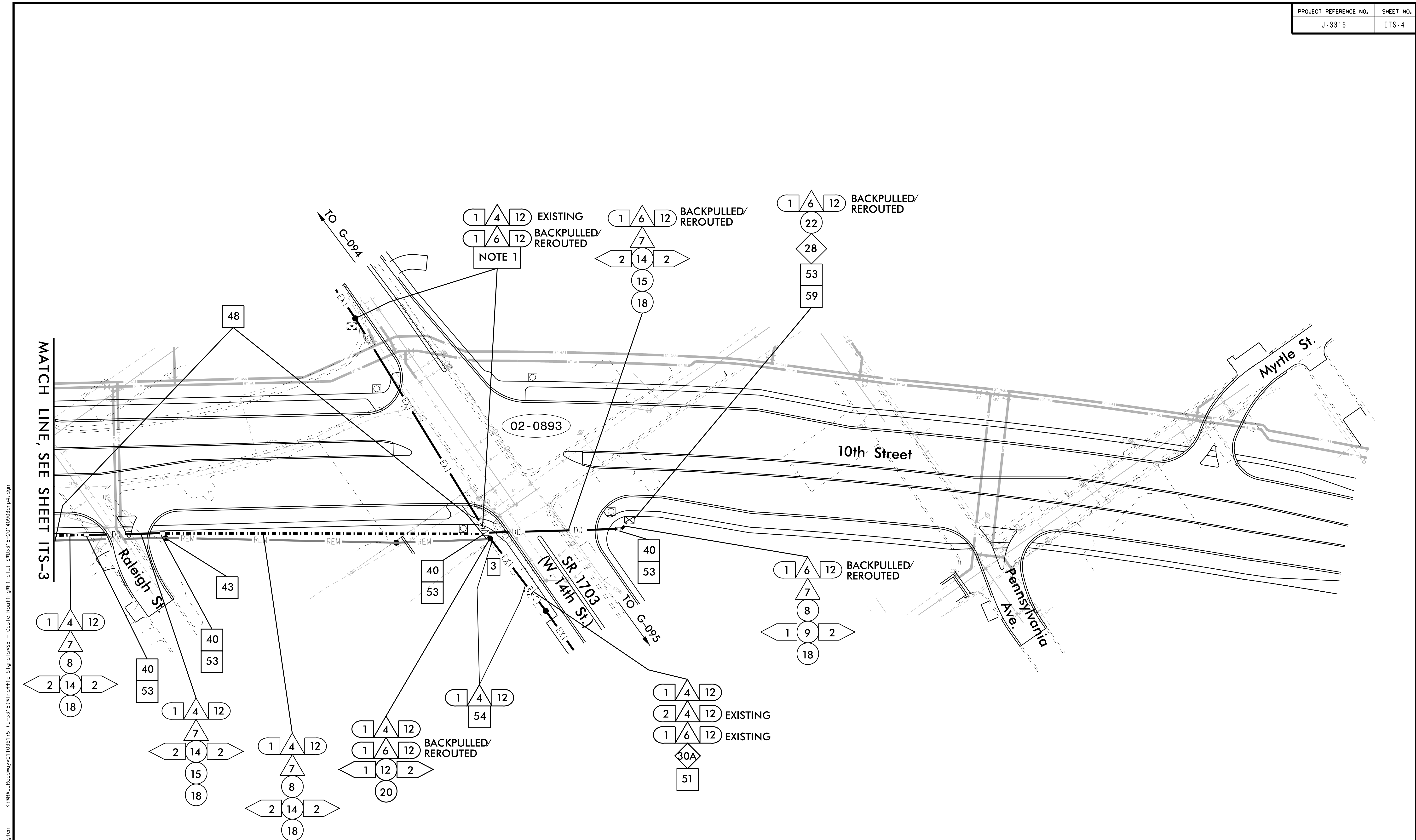
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U-3315 INTERCONNECT			
DIVISION 2		PITT COUNTY	
PLANNING		GREENVILLE	
PLAN DATE:	JUNE 2014	REVIEWED BY:	SB PRIVETTE
PREPARED BY:	SP PENNINGTON	REVIEWED BY:	
REVISIONS	INIT.	DATE	



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NOTE:
 1. REMOVE EXISTING 12F SMFO DROP CABLE FROM EXISTING SIGNAL CABINET. BACKPULL TO EXISTING WOOD POLE LABELED [3] AND RE-ROUTE TO NEW SIGNAL CABINET.

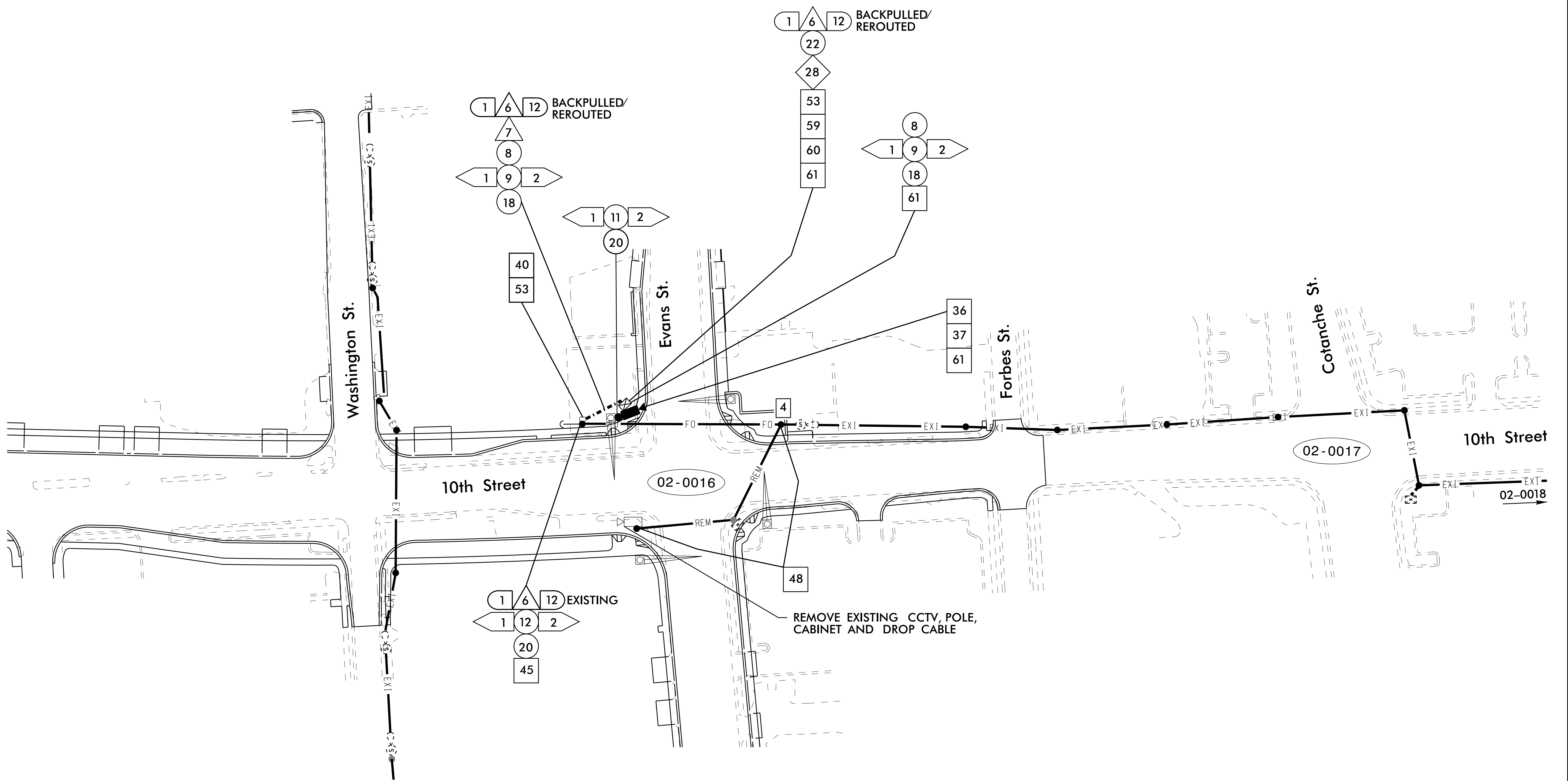
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U-3315 INTERCONNECT	
DIVISION 2	PITT COUNTY
PLAN DATE: JUNE 2014	REVIEWED BY: SB PRIVETTE
PREPARED BY: SP PENNINGTON	REVIEWED BY:
REVISIONS	INIT. DATE

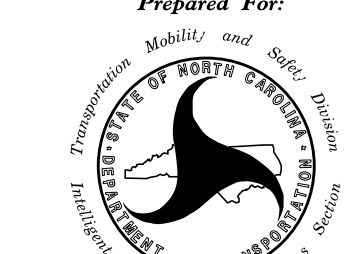

SEAL

DocuSigned by:
 Stephanie Privette 9/3/2014
 CDIFEE036C246A
 SIGNATURE DATE
 CADD File name:



- NOTE:**
1. REMOVE EXISTING 12F SMFO DROP CABLE FROM EXISTING SIGNAL CABINET. BACKPULL TO EXISTING WOOD POLE LABELED [4] AND RE-ROUTE TO NEW SIGNAL CABINET.
 2. RETURN EXISTING CAMERA TO CITY TRAFFIC ENGINEER.

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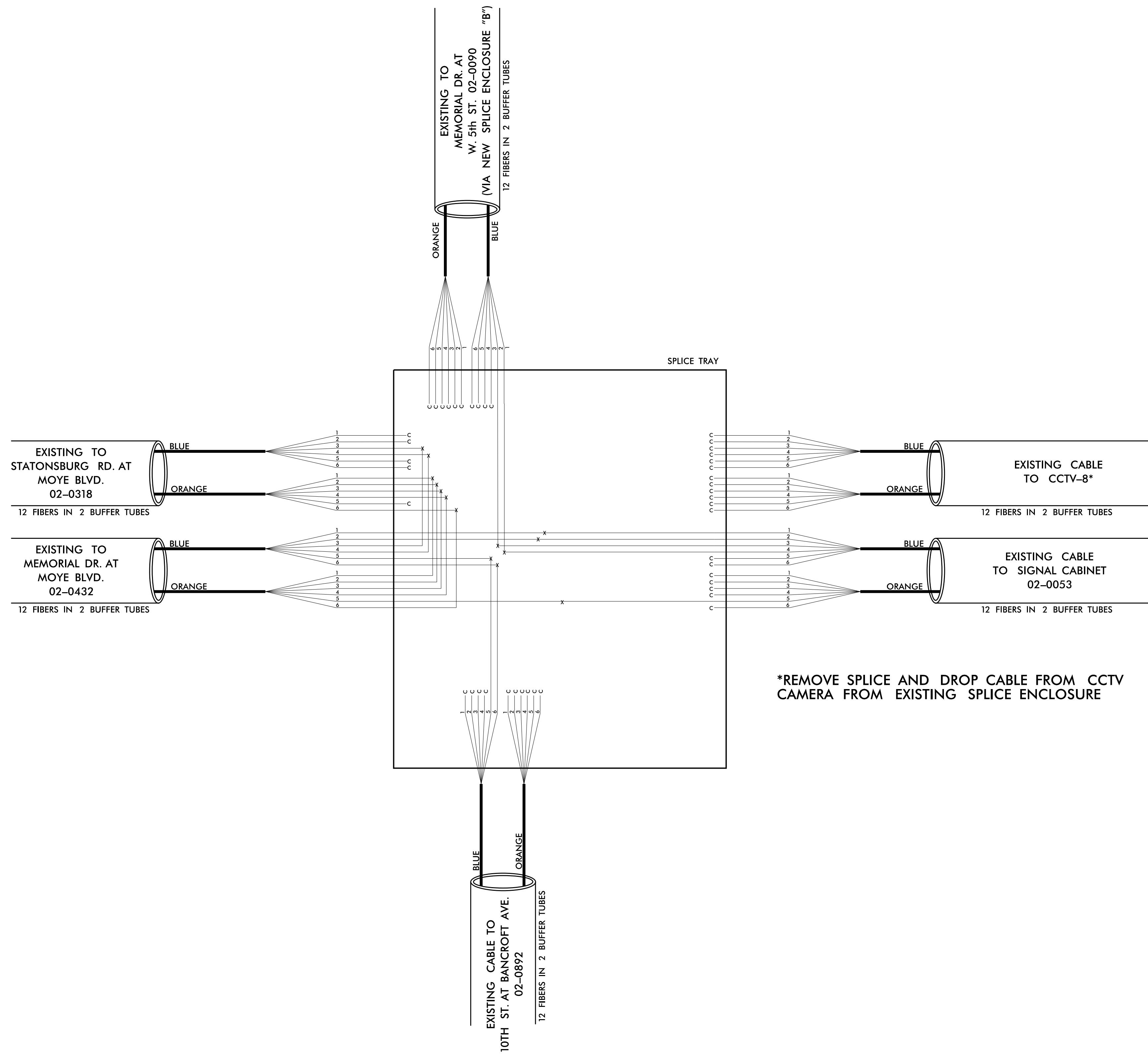
 Prepared For: Transportation Mobility and Safety Division NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 250 N. Greenfield Place, Garner, NC 27529	U-3315 INTERCONNECT		SEAL  NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 24432 STEPHANIE B. PRIVETTE
	DIVISION 2 PITT COUNTY GREENVILLE PLAN DATE: JUNE 2014 REVIEWED BY: SB PRIVETTE PREPARED BY: SP PENNINGTON REVIEWED BY:		
SCALE 0 50' 1" = 50'	REVISIONS _____ INIT. DATE		

MEMORIAL DRIVE AT STANTONSBURG RD/10TH ST. SIG. INVENTORY # 02-0053

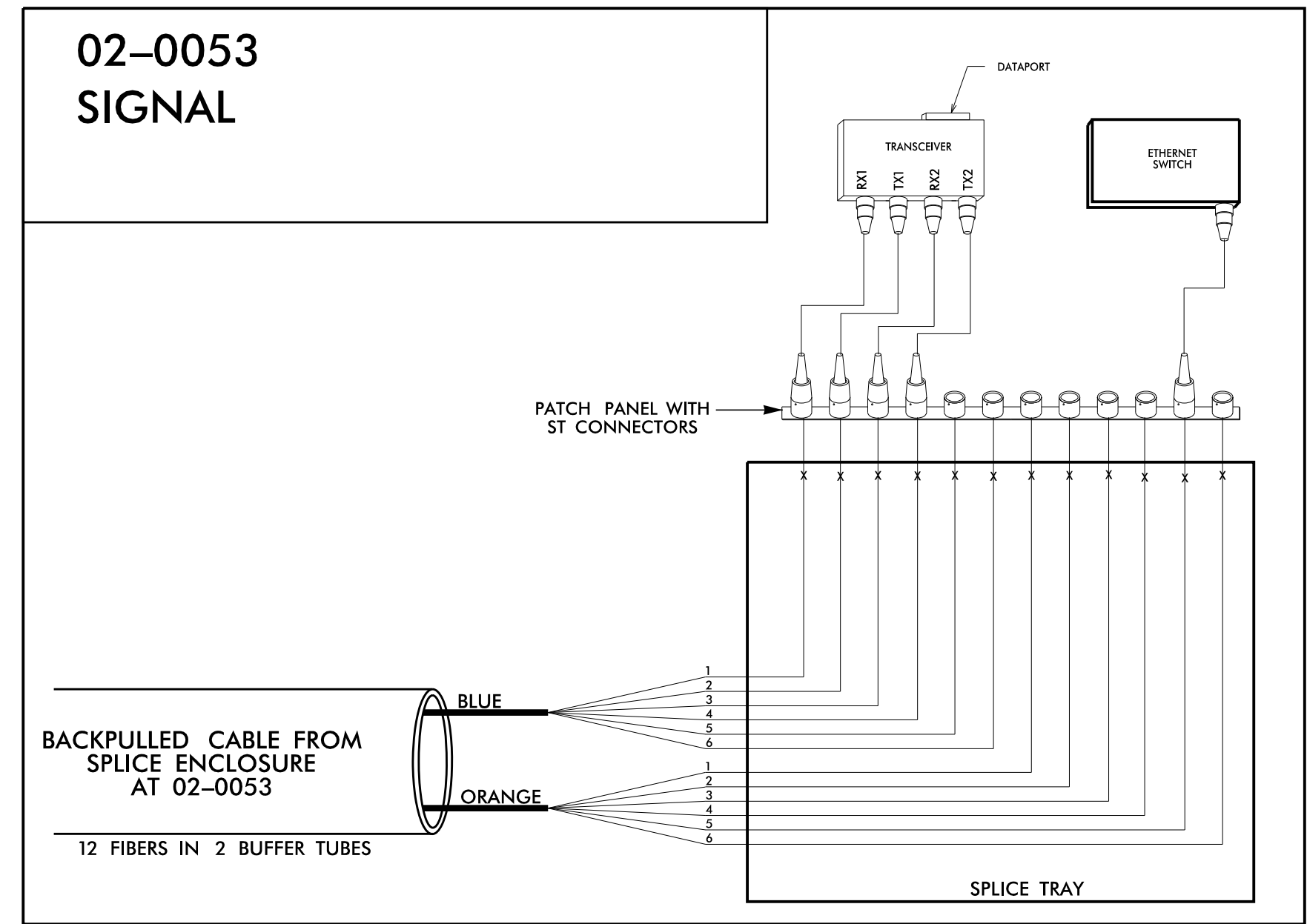
COLOR CODE TIA/EIA 598-A

LEGEND

- (1) BLUE
 - (2) ORANGE
 - (3) GREEN
 - (4) BROWN
 - (5) SLATE
 - (6) WHITE
- TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING / ENSURING PROPER TERMINATION.
- X - FUSION SPLICE INDIVIDUAL FIBER
 - C - CAP AND SEAL
- BUFFER SPLICE FUSION SPLICE ALL FIBER IN BUFFER TUBE COLOR TO COLOR

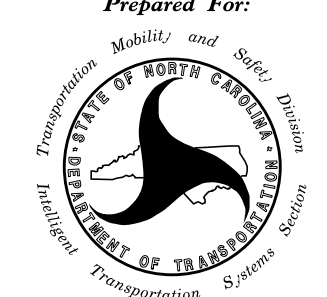
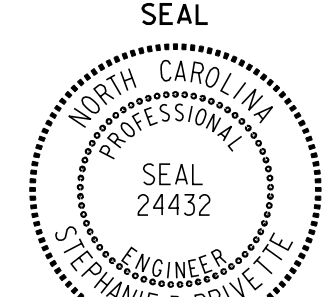


*REMOVE SPLICE AND DROP CABLE FROM CCTV CAMERA FROM EXISTING SPLICE ENCLOSURE



K:\RAL_Roadway\01036175 U-3315\IT\Traffic Signals\K55 - Cable Routing\ITL\ITSM\315-20140303\crs6.dgn 9/3/2014 4:04:52 PM susen.pennington

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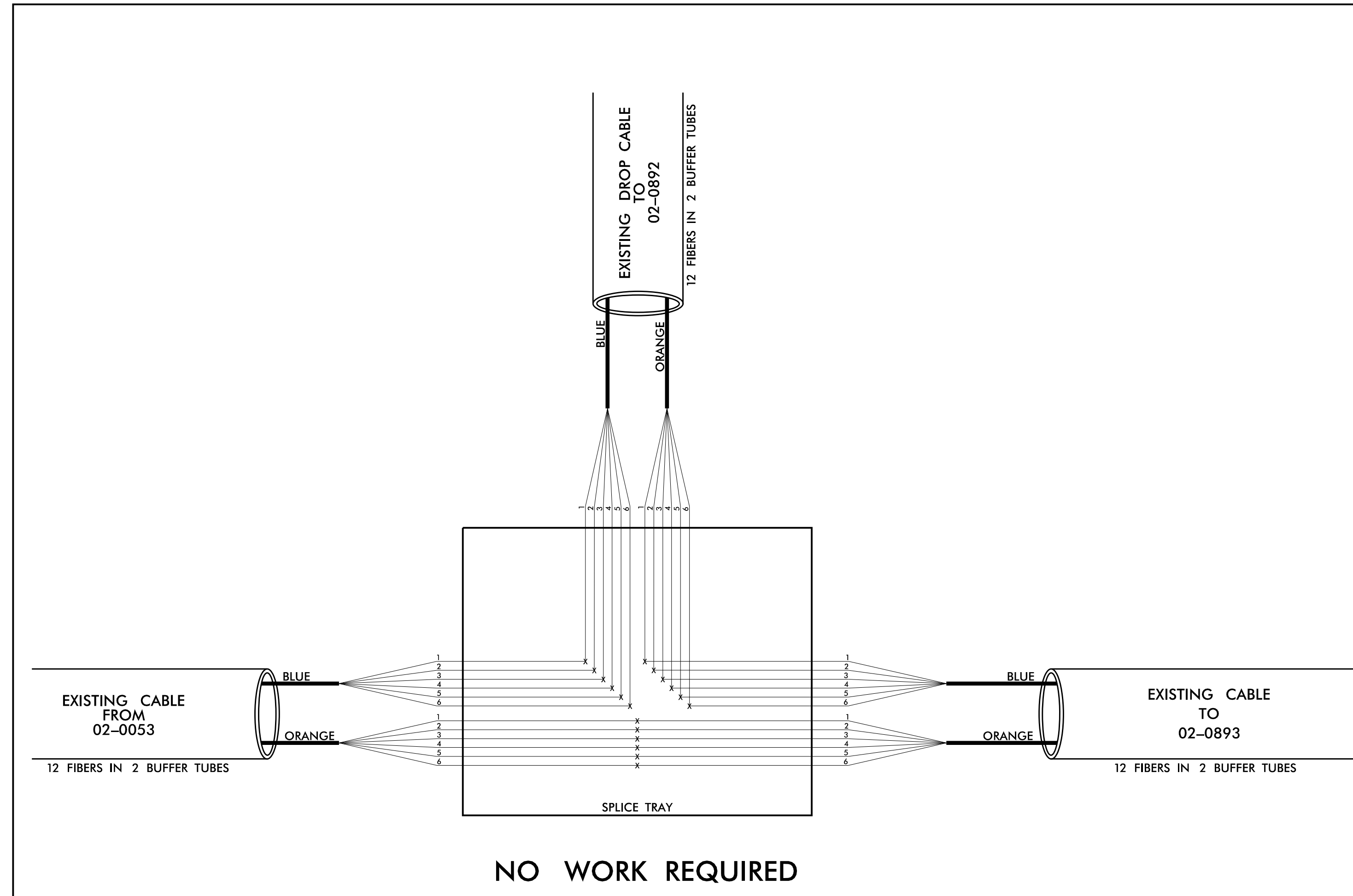
 Prepared For: Transportation Mobility and Safety Division DEPARTMENT OF TRANSPORTATION STATE OF NORTH CAROLINA	U-3315 INTERCONNECT SPLICING DETAILS		SEAL  NORTH CAROLINA PROFESSIONAL ENGINEER SEALS 24432 STEPHANIE B. PRIVETTE
	DIVISION 2 PITT COUNTY GREENVILLE	PLAN DATE: JUNE 2014 REVIEWED BY: SB PRIVETTE	
PREPARED BY: SP PENNINGTON	REVIEWED BY:	DATE:	DocuSigned by: Stephanie Privette 9/3/2014
SCALE: 0 N/A	REVISIONS:	INIT. DATE	SIGNATURE DATE
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10th STREET AT
BANCROFT AVE./LINE AVE.
SIG. INVENTORY 02-0892

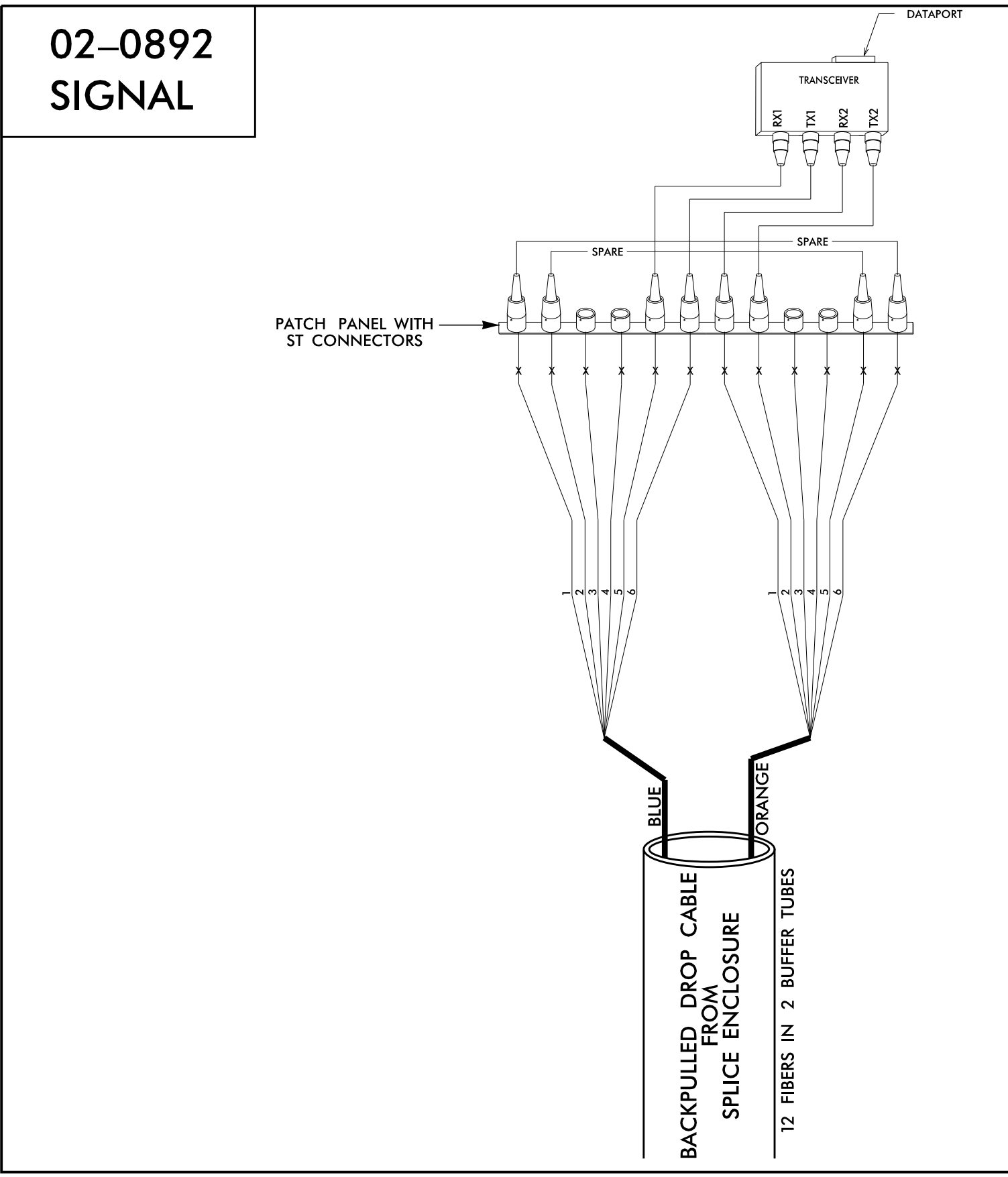
COLOR CODE
TIA/EIA 598-A

LEGEND

- TERMINATION CONFIGURATIONS ARE GENERIC.
CONTRACTOR IS RESPONSIBLE FOR
DETERMINING / ENSURING PROPER TERMINATION.
- (1) BLUE
 - (2) ORANGE
 - (3) GREEN
 - (4) BROWN
 - (5) SLATE
 - (6) WHITE
- X - FUSION SPLICE INDIVIDUAL FIBER
C - CAP AND SEAL
- BUFFER SPLICE FUSION SPLICE ALL FIBER
IN BUFFER TUBE COLOR TO COLOR



02-0892
SIGNAL



	U-3315 INTERCONNECT SPLICING DETAILS		
	DIVISION 2 PITT COUNTY GREENVILLE		
Prepared For: Transportation Mobility and Safety Division STATE OF NORTH CAROLINA Department of Transportation	PLAN DATE: JUNE 2014	REVIEWED BY: SB PRIVETTE	Signed by: Stephanie Privette 9/3/2014 SEAL 24432 ENGINEER STEPHANIE B. PRIVETTE
250 N. Greenfield Place, Garner, NC 27529	PREPARED BY: SP PENNINGTON	REVIEWED BY:	
PLANS PREPARED IN THE OFFICE OF: Kimley»Horn NC License #F-0102 P.O. Box 33088 Raleigh, NC 27636 (919) 677-2000	SCALE: 0 N/A	REVISIONS:	INIT. DATE

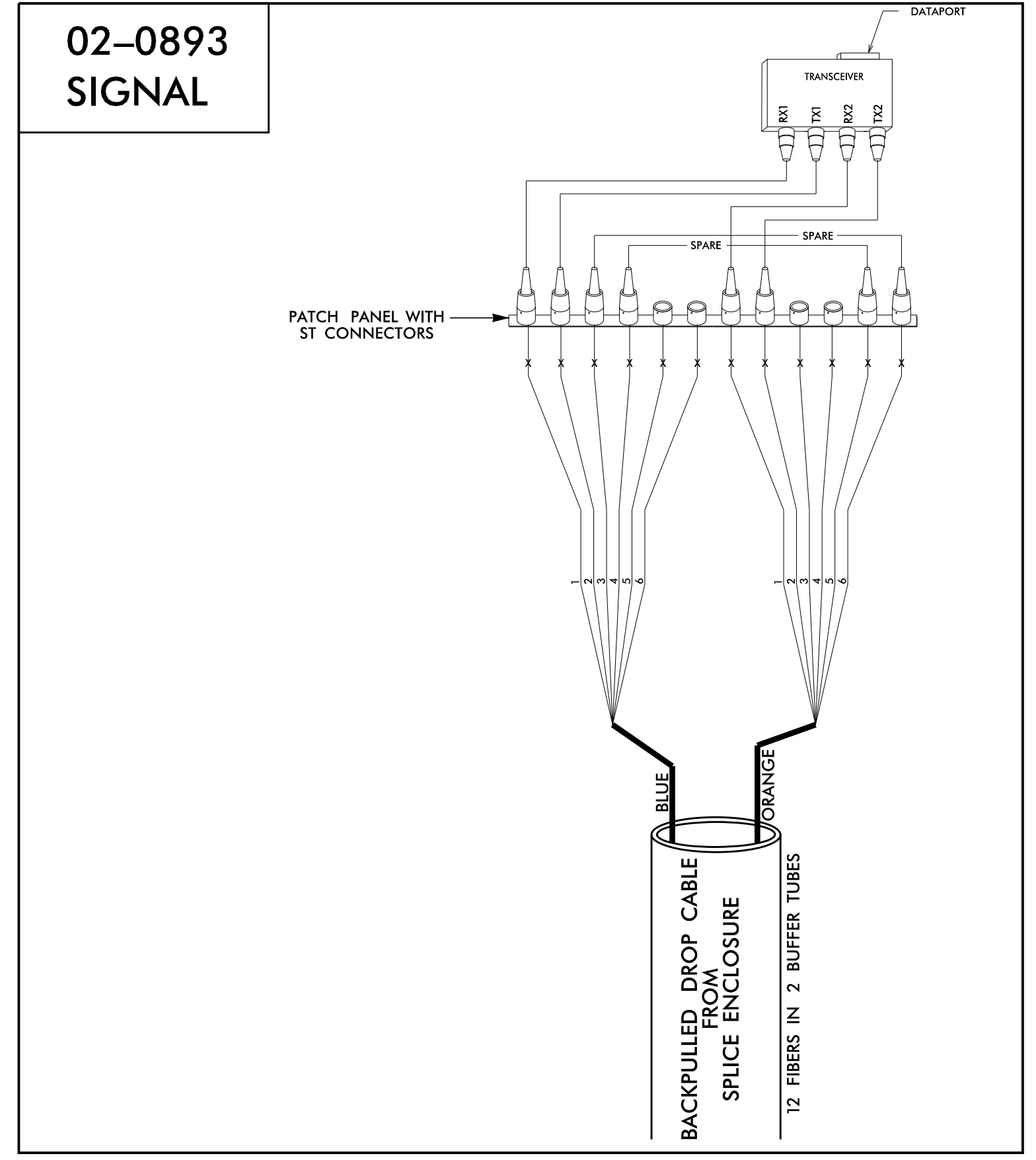
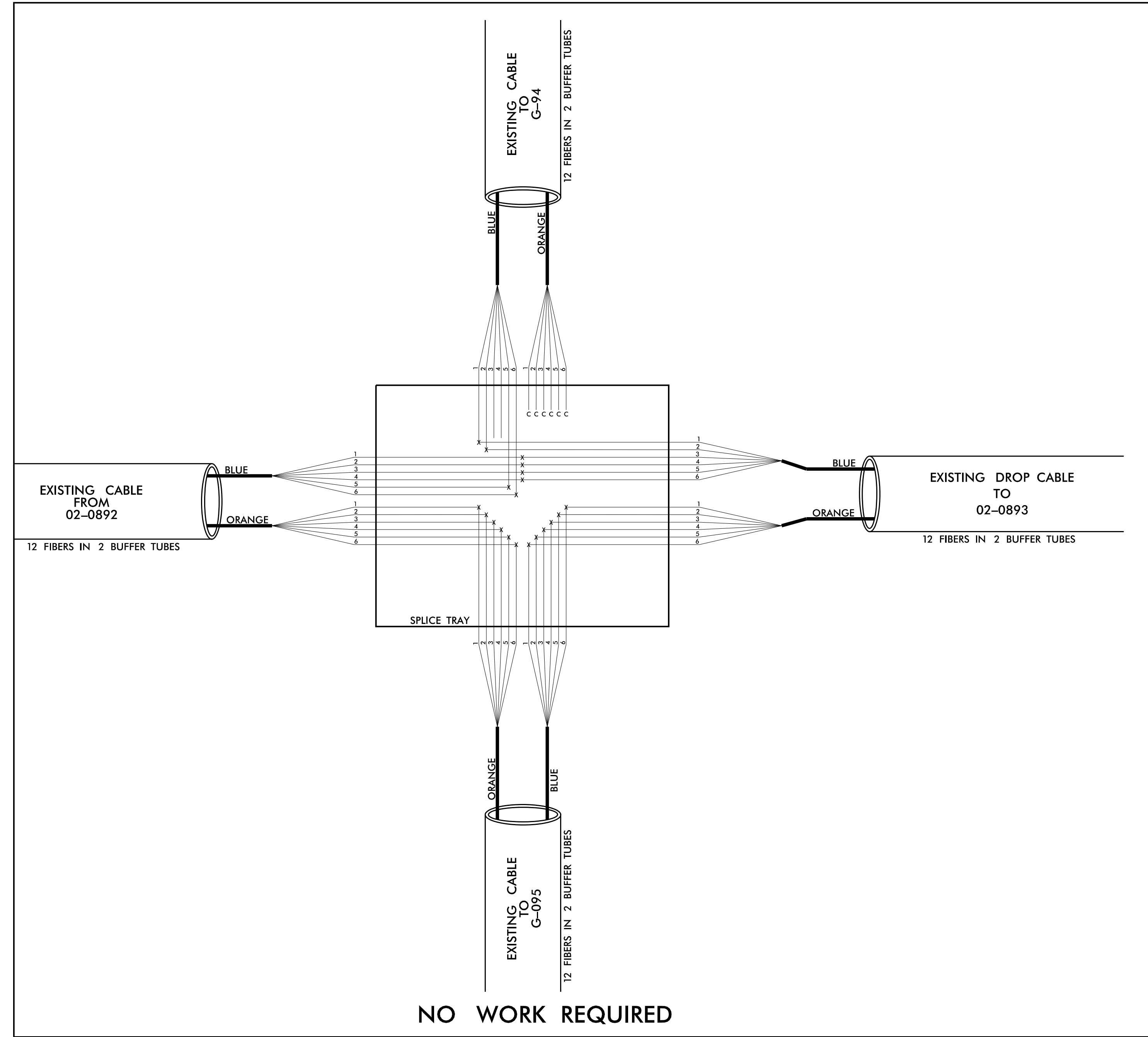
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10th STREET AT 14th STREET
SIG. INVENTORY 02-0893

COLOR CODE
TIA/EIA 598-A

LEGEND

- TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING / ENSURING PROPER TERMINATION.
- (1) BLUE
 - (2) ORANGE
 - (3) GREEN
 - (4) BROWN
 - (5) SLATE
 - (6) WHITE
- X - FUSION SPLICE INDIVIDUAL FIBER
C - CAP AND SEAL
- BUFFER SPLICE FUSION SPLICE ALL FIBER IN BUFFER TUBE COLOR TO COLOR



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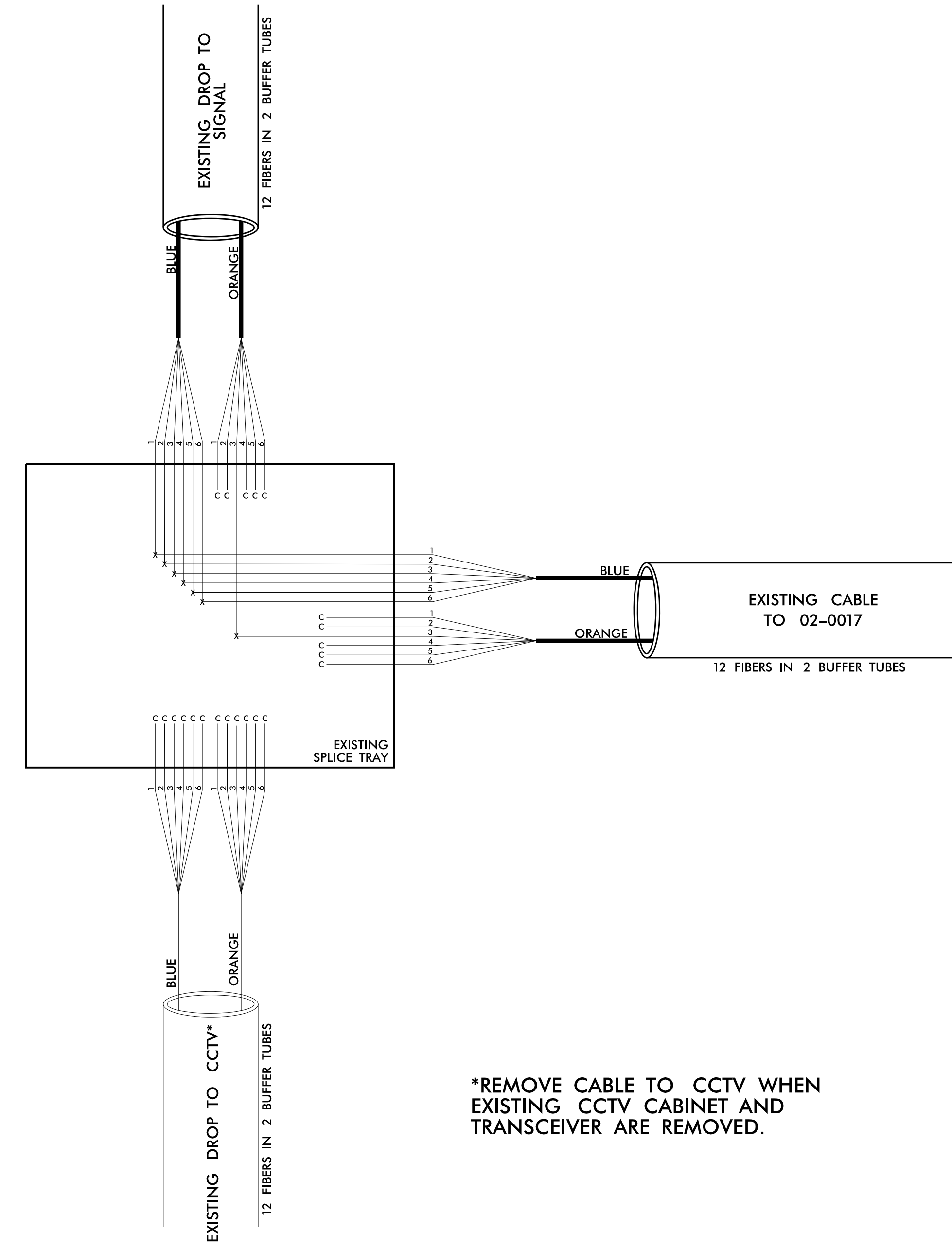
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	<p>DIVISION 2 PITT COUNTY GREENVILLE</p>							
<p>PLAN DATE: JUNE 2014</p>	<p>REVIEWED BY: SB PRIVETTE</p>							
<p>PREPARED BY: SP PENNINGTON</p>	<p>REVIEWED BY:</p>							
<p>SCALE: 0 N/A</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	INIT.	DATE				<p>DocuSigned by: <i>Stephanie B. Privette</i> 9/3/2014</p>
REVISIONS	INIT.	DATE						
<p>CADD Filename:</p>								

10TH ST. AT EVANS ST.
SIG. INVENTORY #02-0016

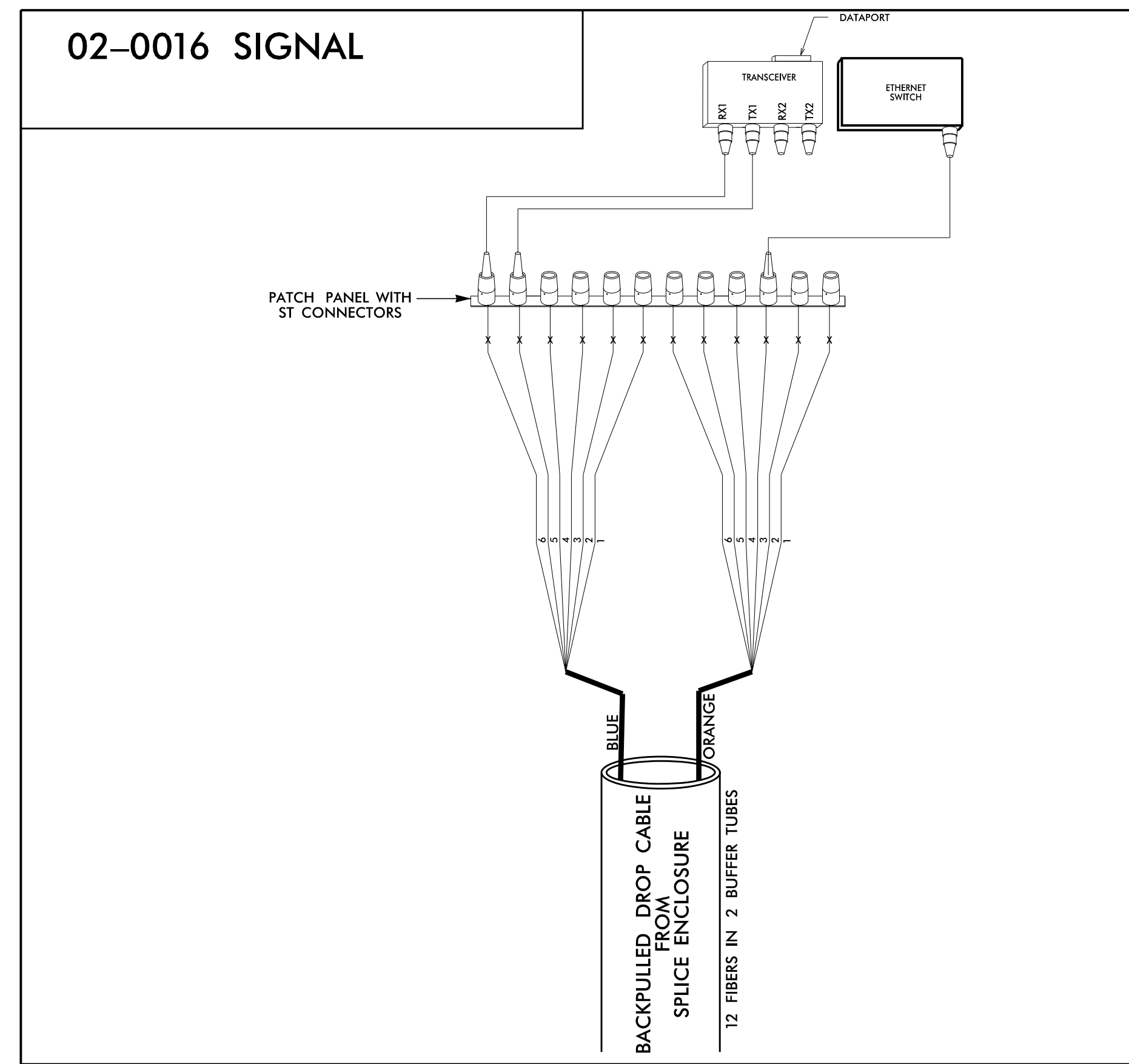
COLOR CODE
TIA/EIA 598-A

LEGEND

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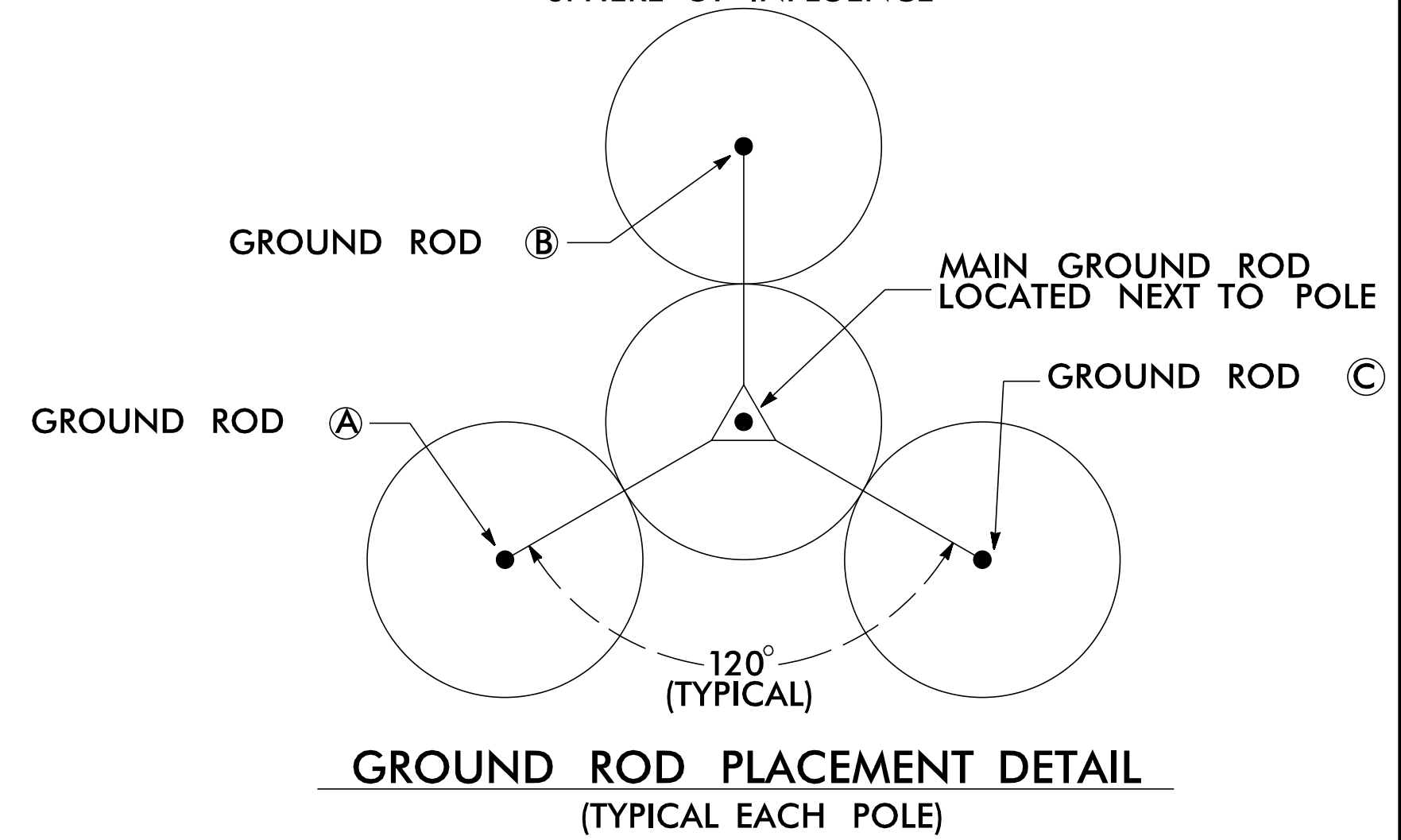


*REMOVE CABLE TO CCTV WHEN EXISTING CCTV CABINET AND TRANSCEIVER ARE REMOVED.

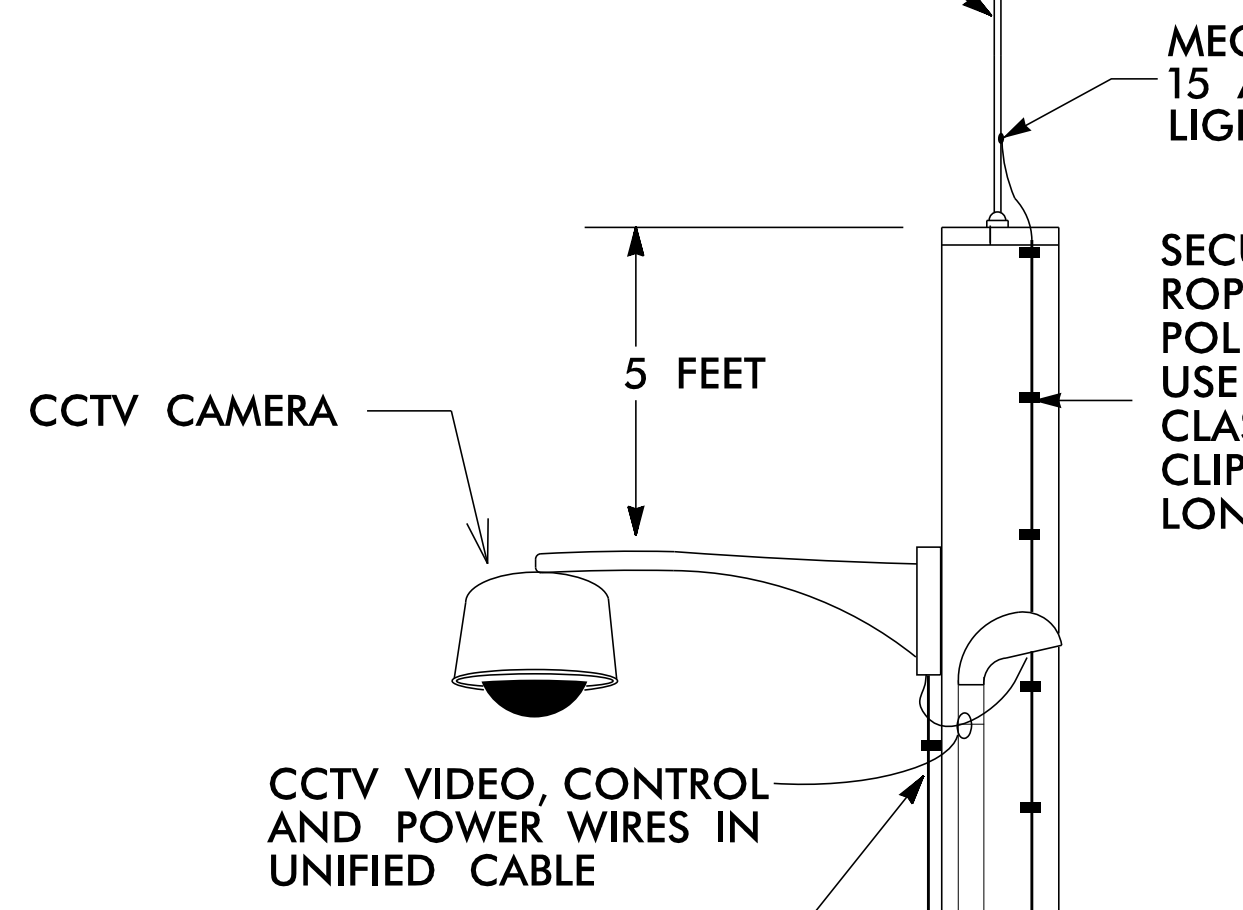


	U-3315 INTERCONNECT SPlicing DETAILS		
	DIVISION 2 PITT COUNTY GREENVILLE		
PLAN DATE: JUNE 2014	REVIEWED BY: SB PRIVETTE	PREPARED BY: SP PENNINGTON REVIEWED BY:	
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PLANS PREPARED IN THE OFFICE OF: Kimley»Horn NC License #F-0102 P.O. Box 33088 Raleigh, NC 27636 (919) 677-2000		Signed by: <i>Stephanie Privette</i> 9/3/2014 SEAL 24432 SIGNATURE DATE CADD Filename:	

10 FOOT RADIUS EACH "SPHERE OF INFLUENCE"



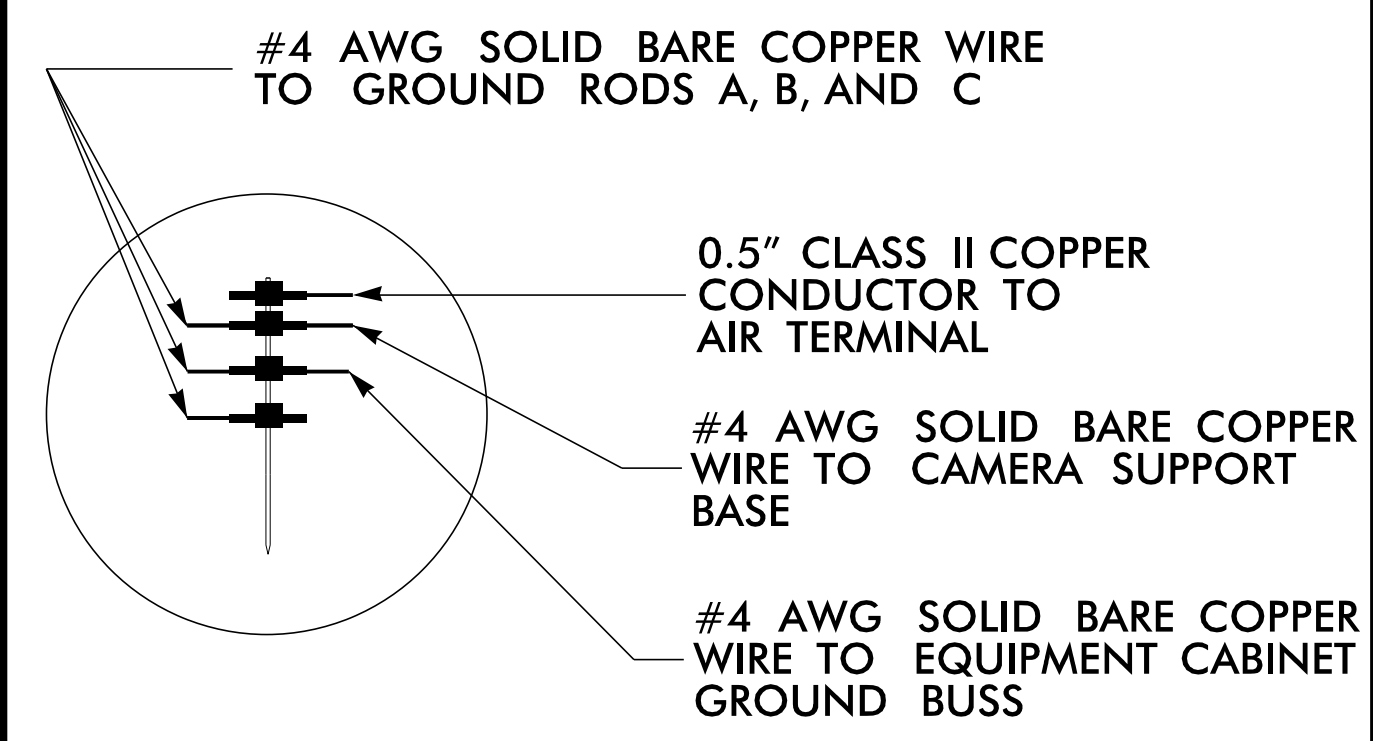
0.5 INCH X 36 INCH MINIMUM COPPER-CLAD AIR TERMINAL (CLASS II)



MECHANICALLY BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE LAY BARE COPPER LIGHTNING CONDUCTOR TO THE AIR TERMINAL.

SECURE CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM), ROPE-LAY BARE COPPER LIGHTNING CONDUCTOR TO THE POLE ON 24 INCH CENTERS. USE COPPER CABLE CLIPS DESIGNED FOR USE WITH THE CLASS II COPPER CONDUCTOR. SECURE EACH COPPER CABLE CLIP TO THE POLE USING A 0.25 INCH DIAMETER X 1.5 INCH LONG HEX HEAD, GALVANIZED SCREW.

INSET 'A'

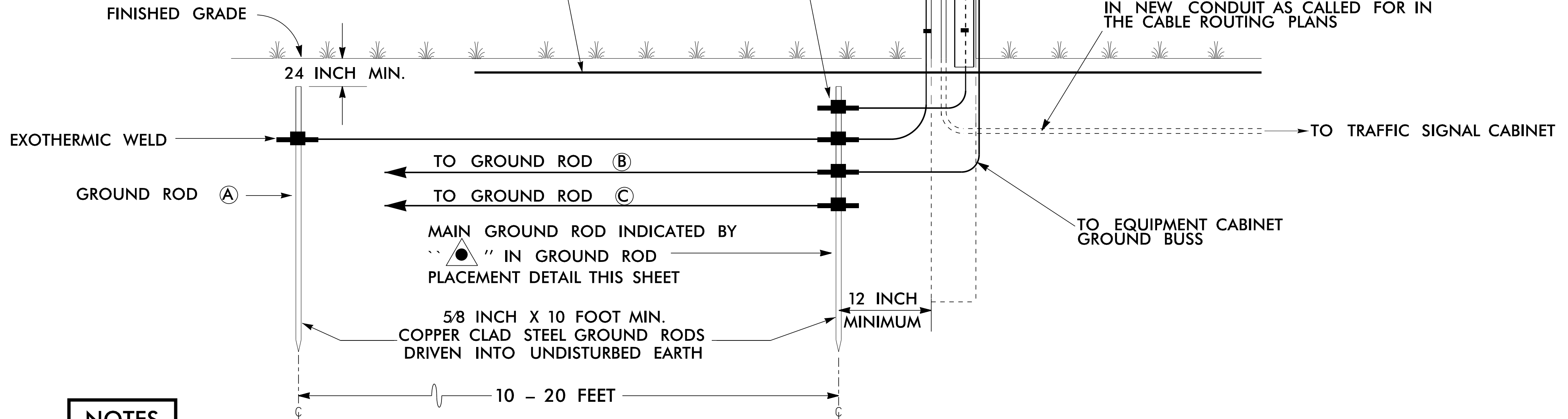


BOND #4 AWG SOLID BARE COPPER WIRE TO CAMERA SUPPORT BASE BY AN ALUMINUM TO COPPER #2 - #14 AWG LUG. ATTACH TO CAMERA BASE WITH A STAINLESS STEEL SELF TAPPING SCREW. REMOVE PAINT OR PROTECTIVE COATING WHERE ATTACHING LUG ONLY.

INSTALL 2-INCH PVC U-GUARD OVER COPPER CONDUCTOR FROM GROUND LEVEL TO 10 FEET (MINIMUM) ABOVE THE GROUND.

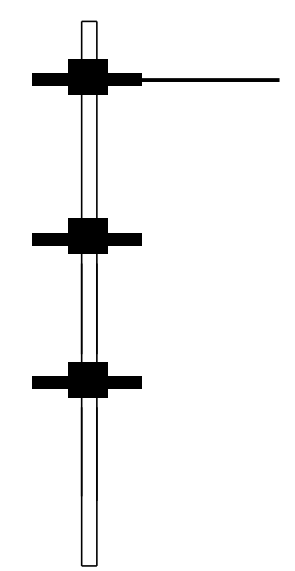
2-INCH RIGID GALVANIZED STEEL RISER FOR UNIFIED CABLE

INSTALL MARKER TAPE 12 INCHES BELOW GRADE AND ABOVE ALL GROUNDING CONDUCTORS.



ALTERNATE GROUNDING METHOD

IF SPACE IS NOT AVAILABLE TO DRIVE MULTIPLE RODS, DRIVE SECTIONAL GROUND RODS A MINIMUM OF 30 FEET.



JOIN SECTIONAL GROUND RODS BY EXOTHERMIC WELDING CONNECTION

NOTES

1. BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE-LAY BARE COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN EXOTHERMIC WELD METHOD. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
2. EXOTHERMICALLY WELD ALL CONNECTIONS TO GROUND RODS.
3. THE CONTRACTOR MAY, UPON APPROVAL OF THE ENGINEER, INSTALL A 30-FOOT SECTIONAL GROUND ROD FOR INSTANCES WHEN CONDITIONS WILL NOT ALLOW FOR THE INSTALLATION OF THE 3 - RADIAL GROUND RODS.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.

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	U-3315 INTERCONNECT CCCTV CAMERA INSTALLATION FOR WOOD POLES UNDERGROUND ELECTRICAL SERVICE DIVISION 2 PITT COUNTY GREENVILLE	
	PLAN DATE: JUNE 2014 PREPARED BY: SP PENNINGTON	REVIEWED BY: SB PRIVETTE REVIEWED BY:
SCALE: 0 N/A	REVISIONS:	INIT. DATE:
DocuSigned by: Stephanie B. Privette 9/5/2014		DATE: