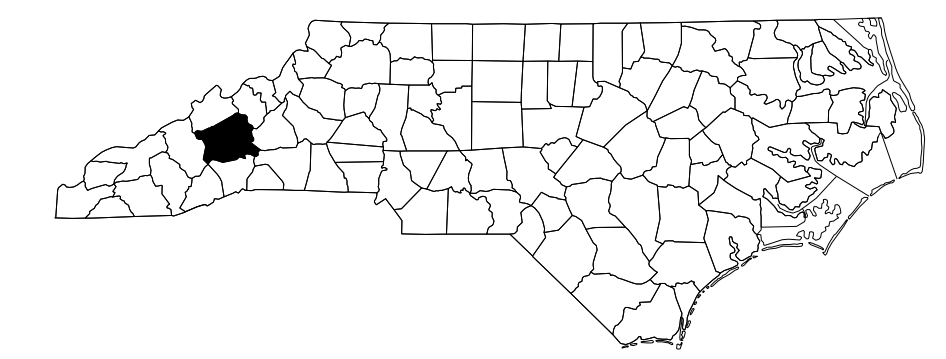
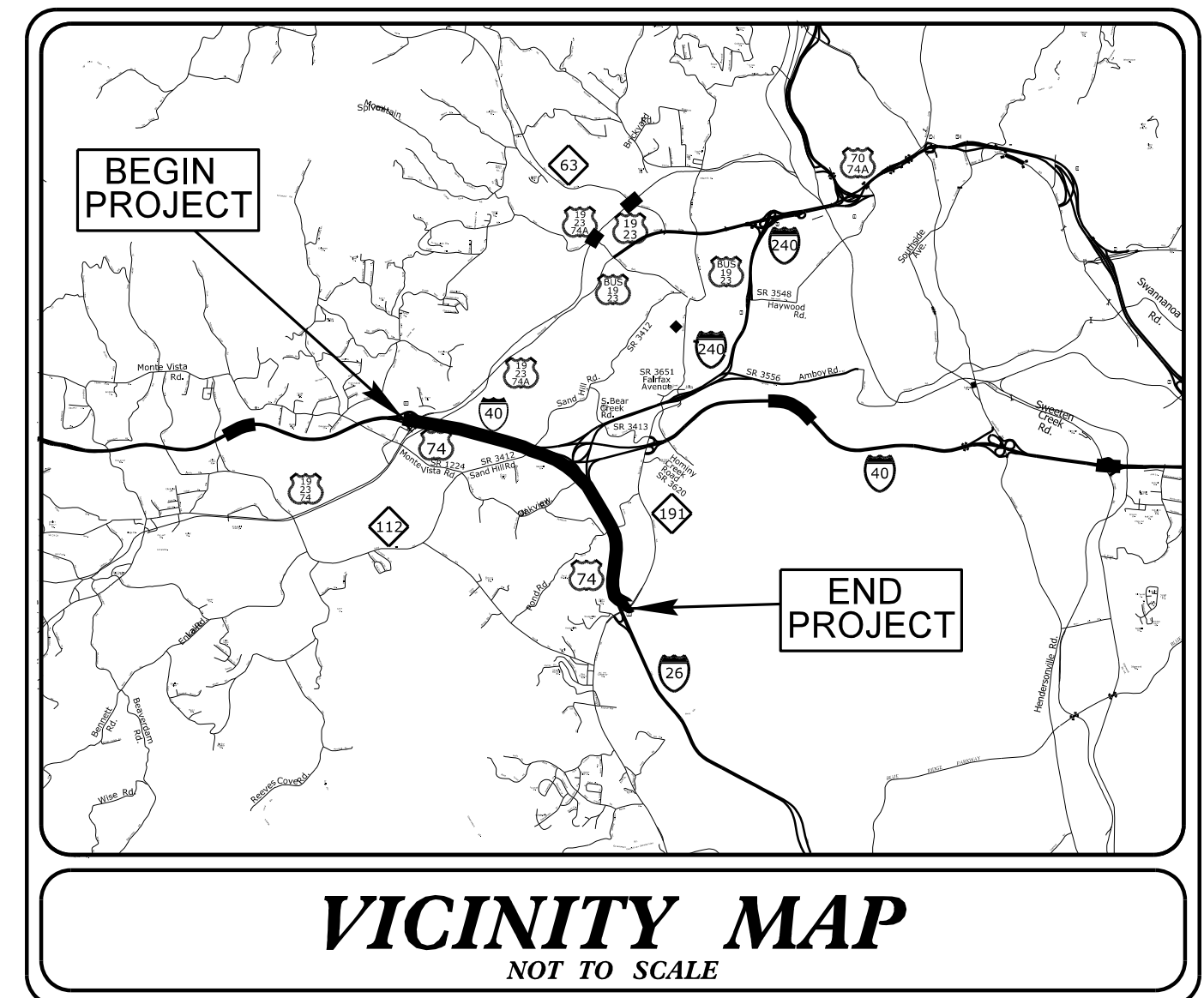


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

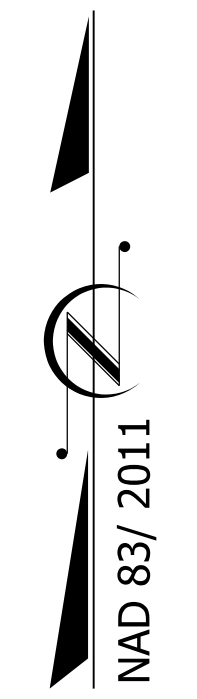
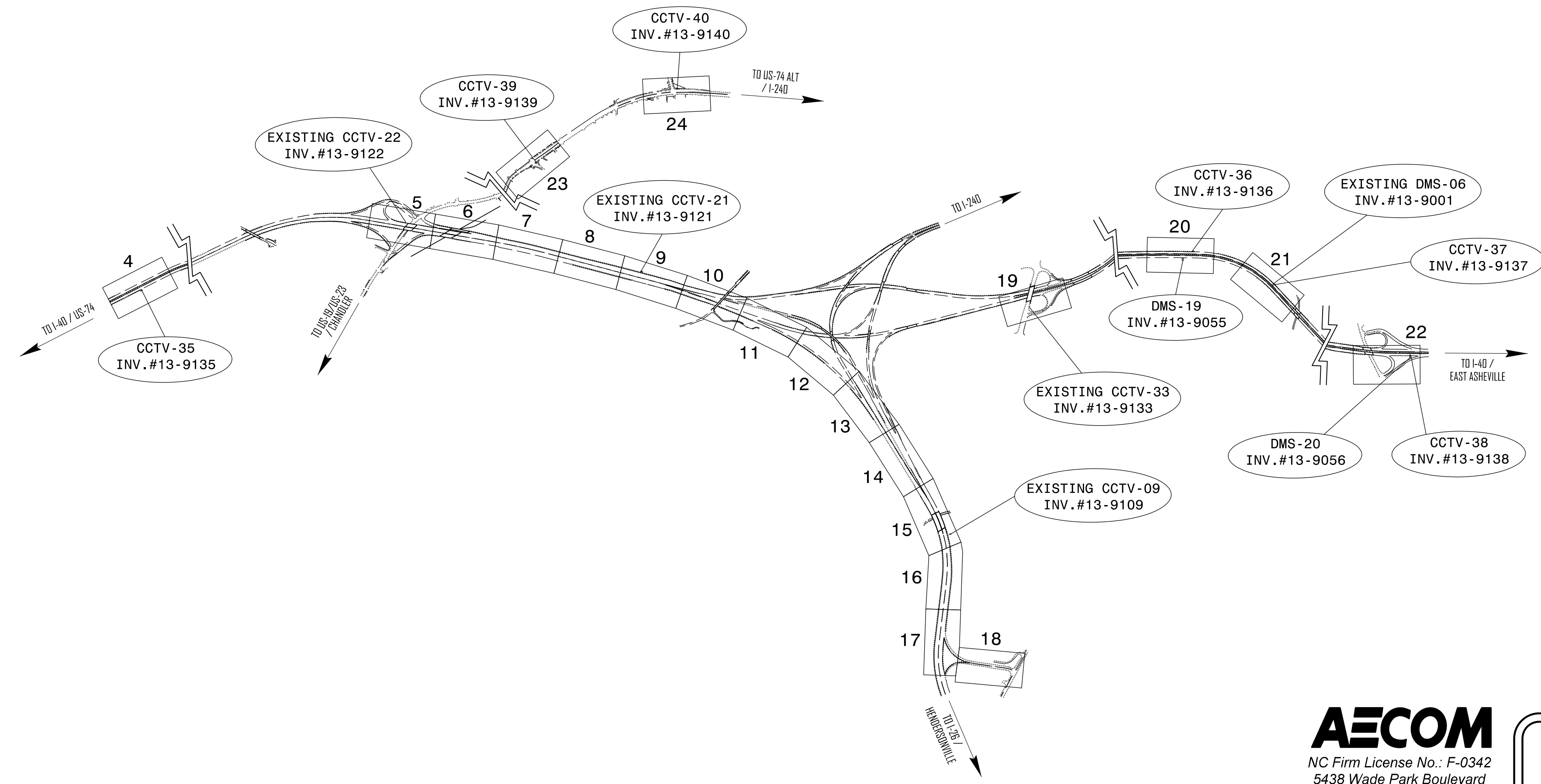
BUNCOMBE COUNTY

LOCATION: I-40 FROM EAST OF SR 1224 (MONTE VISTA ROAD) TO WEST OF SR 3412 (SAND HILL ROAD) AND I-40 AT I-26 AND US 19/23 (SMOKEY PARK HIGHWAY)

TYPE OF WORK: ITS - COMMUNICATIONS CABLE AND CONDUIT ROUTING SYSTEM, TWO (2) DYNAMIC MESSAGE SIGN AND TEN (10) CCTV'S



CONTRACT: C204878 TIP Project: I-2513 AA/AB



AECOM
NC Firm License No.: F-0342
5438 Wade Park Boulevard
Suite 200 Raleigh, NC 27607
Phone: 919-461-1100

Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

Sheet #	Description
ITS 1	Project Titlesheet
ITS 2	Construction Notes
ITS 3	General Notes
ITS 4 - 24	ITS Communication Cable and Conduit Routing Plans
ITS 25 - 27	Typical Details
ITS 28 - 29	Elevation Views
ITS 30 - 49	Splice Schematics and Details

NCDOT TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS UNIT
Contacts:
Andrew Skuce - ITS Development and Design Project Engineer
Alex Stewart - Regional ITS Engineer
Chad Franklin - Division 13 ITS Engineer
Steven Wyatt - Division 13 and 14 Systems Engineer

AECOM
Contacts:
John Sloan - Project Engineer
Rochelle Garrett - NC Signals and ITS Engineer

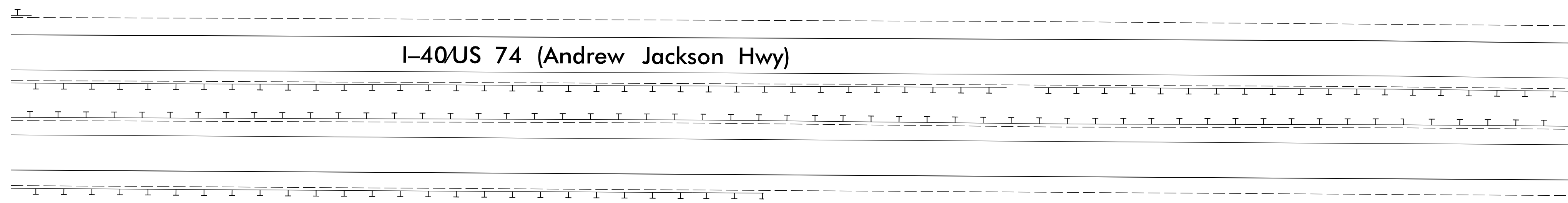
EXULT
Contacts:
Taylor Honeycutt - NC Signals and ITS Engineer

Prepared for the Office of:
DIVISION OF HIGHWAYS
TRANSPORTATION MOBILITY AND SAFETY DIVISION

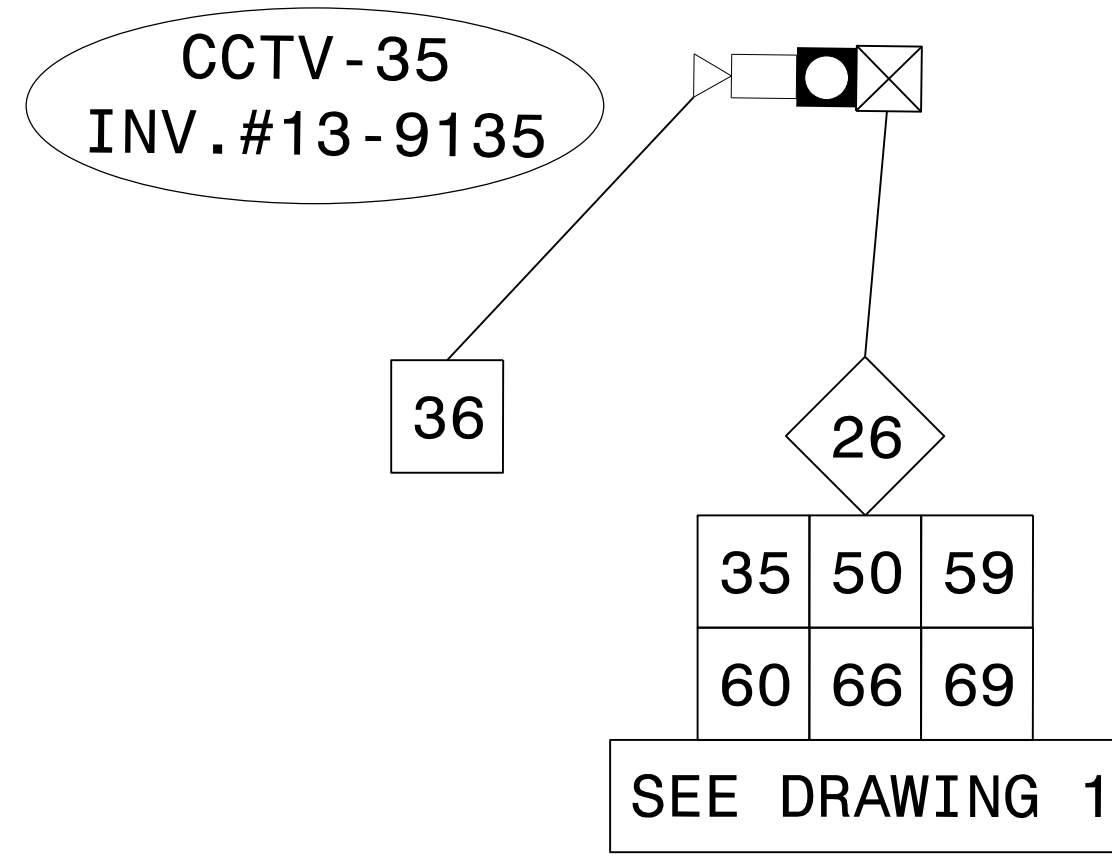
750 N. Greenfield Parkway, Garner, NC 27529

I:\19\2024\p\1\AECOM\ne-pw\bentley.com\AECOM_DS21_NA_2020\Documents\60646756-I-2513A\900-CAD GIS\910-CAD\70-NCDOT-TIP\Intelligent Transportation Systems\AA-AB\I-2513AA-AB ITS-tsh.dgn

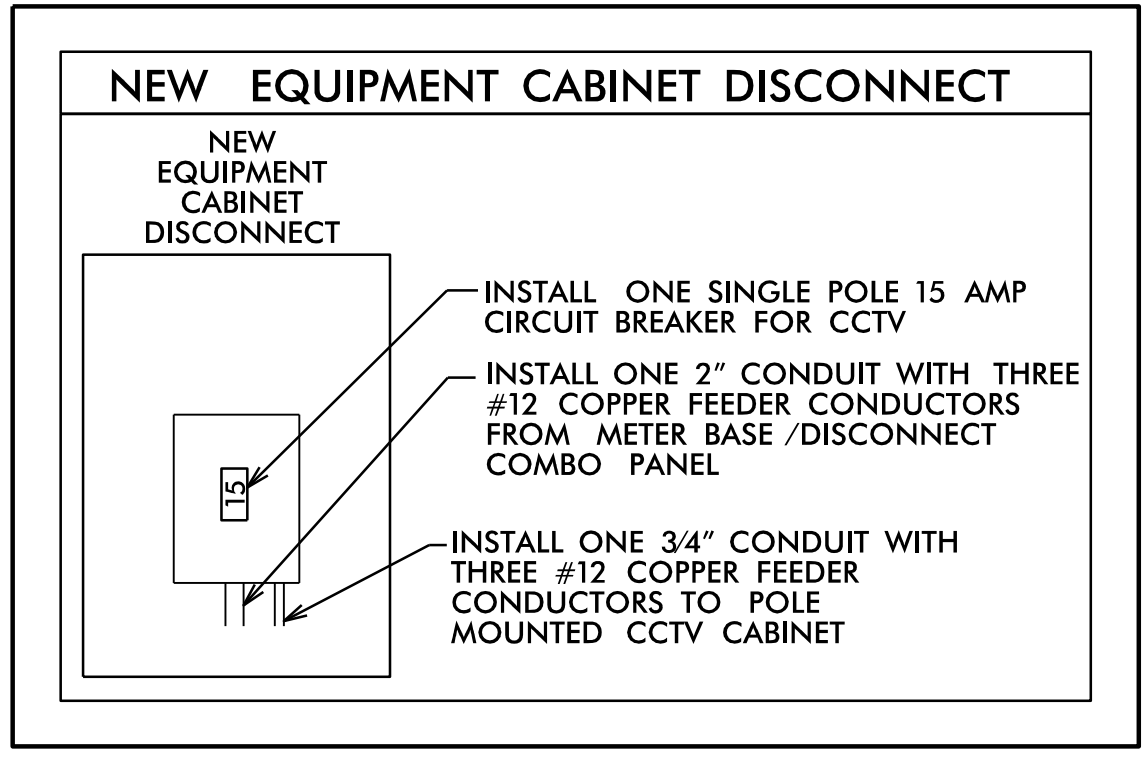
CCTV-35 GPS COORDINATES
 35.556425° N
 82.670238° W



To Existing CCTV-22
 →



DRAWING 1



NOTES:

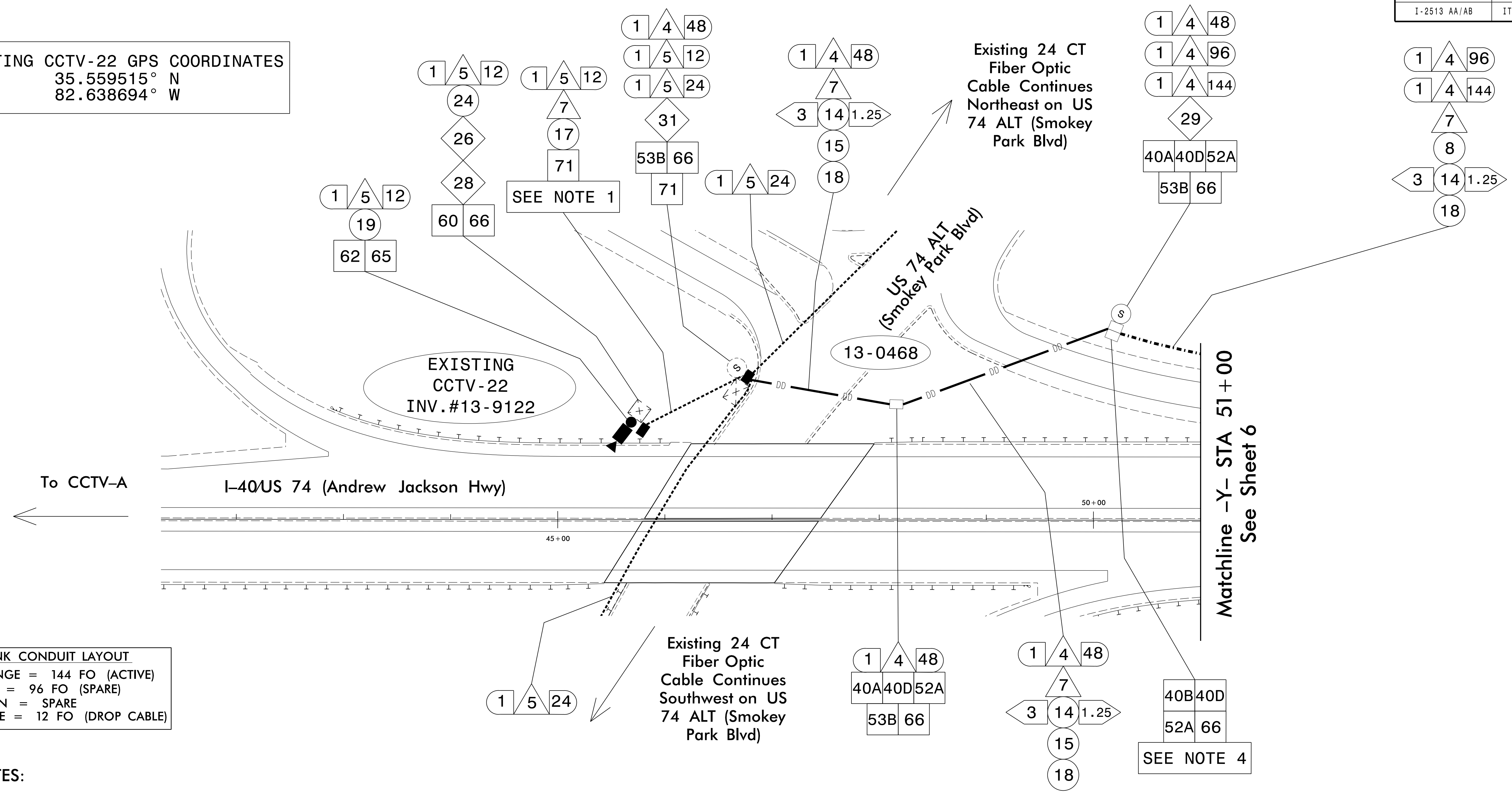
1. CONNECT CCTV POWER TO EXISTING ELECTRICAL POWER SOURCE IN CABINET.
2. MAINTAIN CAMERA FUNCTIONALITY THROUGHOUT THE LIFE OF THE PROJECT.
3. CONTACT ENGINEER TO REQUEST DIT SUPPLIED CELLULAR MODEM.

1/19/2024
 P:\4\AECOM\nc-pw-bentl\ey.com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\AB-ITS_PS1004.dgn
 T:\Tindal



Prepared for the Offices of:		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
ITS Communication Cable and Conduit Routing Plans		SEAL	
DIVISION 13	BUNCOMBE CO.	ASHEVILLE	
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh		
PREPARED BY: M. Tindal	REVIEWED BY: R. Garrett		
REVISIONS	INIT.	DATE	
DocuSigned by: Rachelle Garrett		1/19/2024	
SIGNATURE		DATE	
CADD File name:			

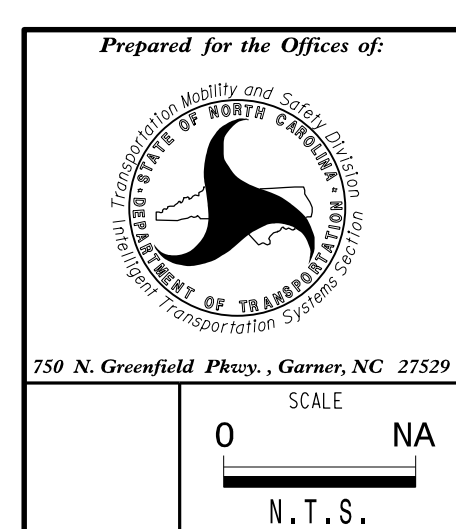
EXISTING CCTV-22 GPS COORDINATES
35.559515° N
82.638694° W



TRUNK CONDUIT LAYOUT
ORANGE = 144 FO (ACTIVE)
BLUE = 96 FO (SPARE)
GREEN = SPARE
WHITE = 12 FO (DROP CABLE)

- NOTES:
1. BACKPULL EXISTING DROP CABLE AND REROUTE TO THE NEW SPLICE ENCLOSURE AS SHOWN.
 2. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.
 3. MAINTAIN CAMERA FUNCTIONALITY THROUGHOUT THE LIFE OF THE PROJECT.
 4. WHEN SPLITTING CONDUIT BUNDLES ROUTE BLUE AND ORANGE CONDUITS INTO ITS JUNCTION BOX AND ROUTE GREEN CONDUIT INTO COMMERCIALIZATION JUNCTION BOX.

1/19/2024 10:44:33 AM C:\Users\paw_bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\00-CAD_0154910-CAD\70-NC001-TIP\Invel\igen\Transportation Systems\AA_AB\I-2513AA_AB_ITS_PS1005.dgn T:\ndm



ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

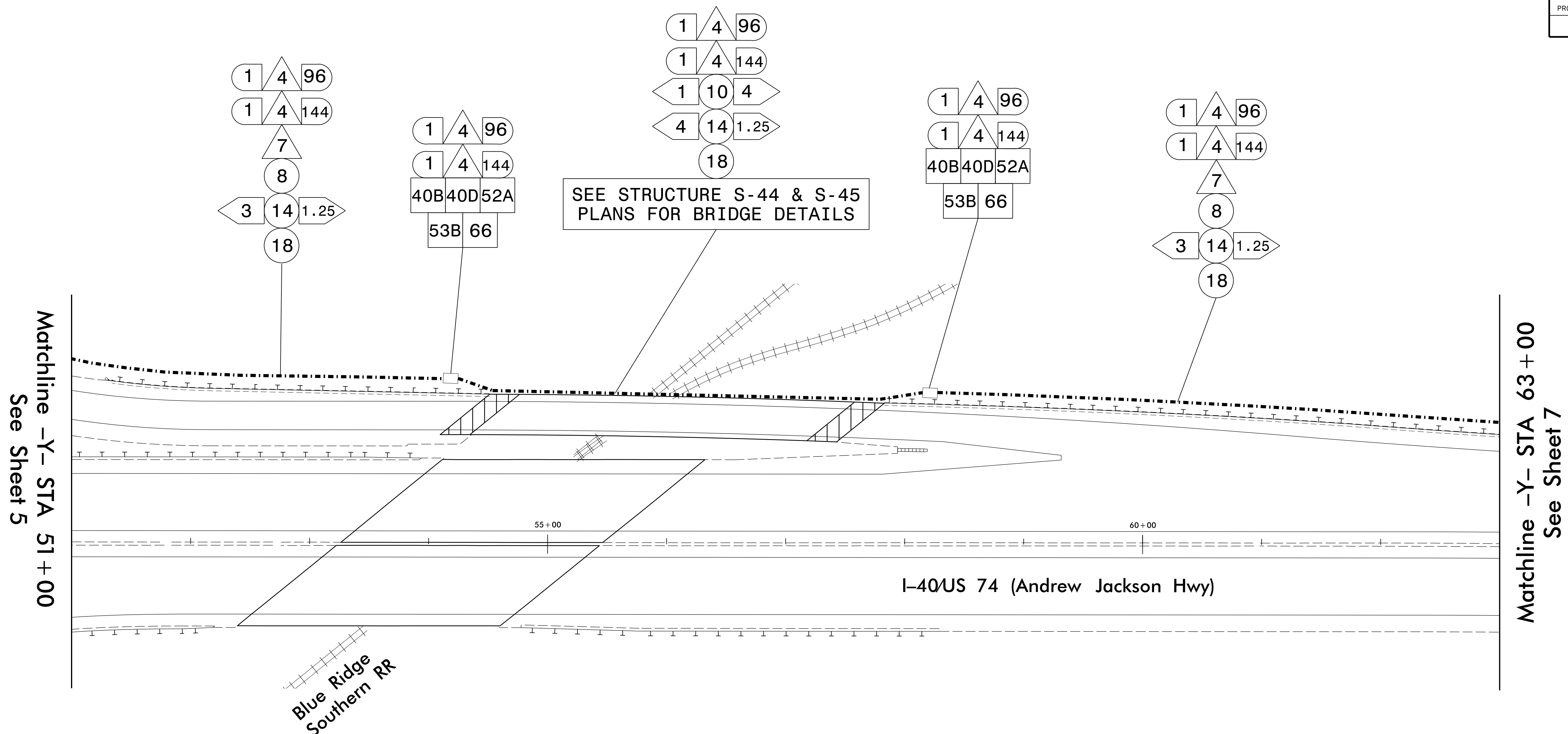
PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

REVISIONS	INIT.	DATE

DocuSigned by:
Rachelle Garrett 1/19/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SEE STRUCTURE S-44 & S-45
PLANS FOR BRIDGE DETAILS


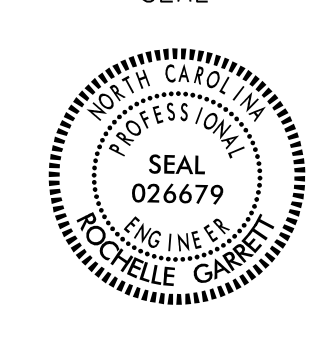
TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

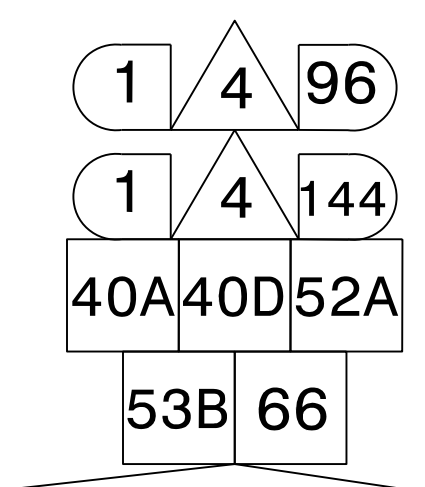
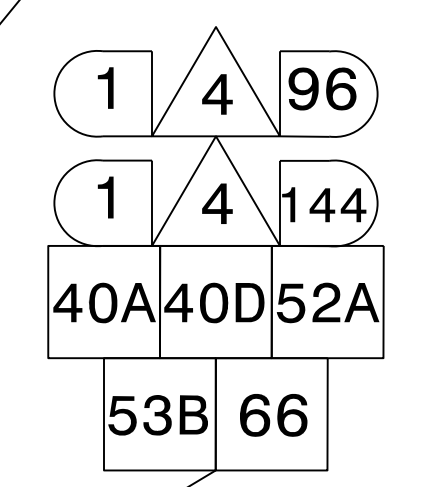
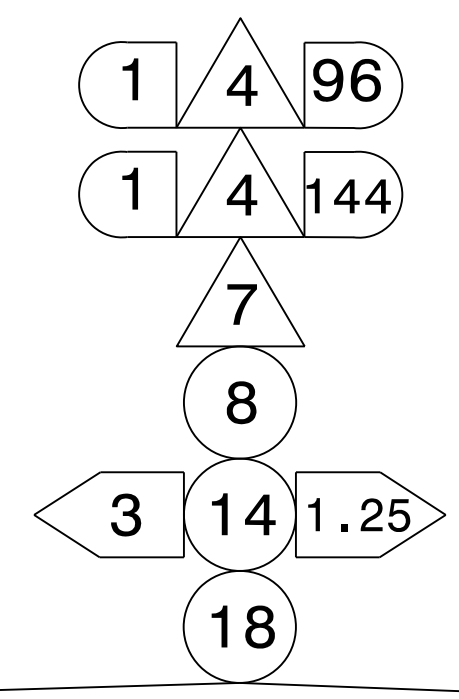
NOTES:

- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024
 P:\AECOM\nc-pw-bentl\ey.com\AECOM\B21_NA_2020\Documents\60646756-1-2513A\400-CAD_6154910-CAD\70-NC001-TIP\Intel\igen1_Transportation_Systems\AA_AB\I-2513AA_AB_ITS_PS1006.dgn
 T:\Tindal



Prepared for the Offices of:  750 N. Greenfield Pkwy., Garner, NC 27529		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
ITS Communication Cable and Conduit Routing Plans			
DIVISION 13 BUNCOMBE CO., ASHEVILLE		SEAL 	
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh	ENGINEER RACHELLE GARRETT	
PREPARED BY: M. Tindal	REVIEWED BY: R. Garrett	DOCUMENTED BY: Rachelle Garrett DATE: 1/19/2024	
SCALE: 0 NA N.T.S.	REVISIONS INIT. DATE	DATE	



Matchline -Y- STA 63+00
See Sheet 6

Matchline -Y- STA 75+00 See Sheet 8

I-40/US 74 (Andrew Jackson Hwy)

65+00

70+00

75+00

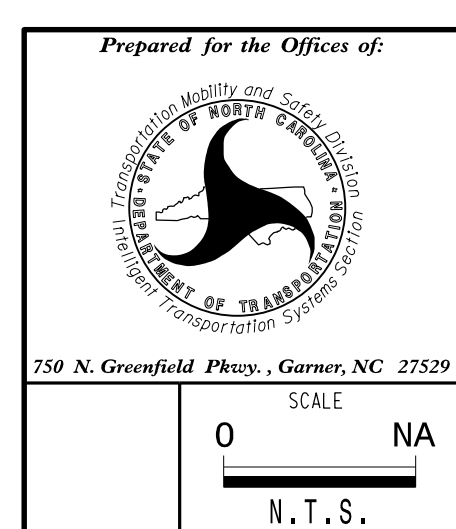
TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

NOTES:

- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024 10:44:33 AM C:\Users\paw.bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\900-CAD_6154910-CAD\70-NC001-TIP\Inlet\igen1_Transportation_Systems\AA_AB\I-2513AA_AB_ITS_PS107.dgn T.Tindal

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

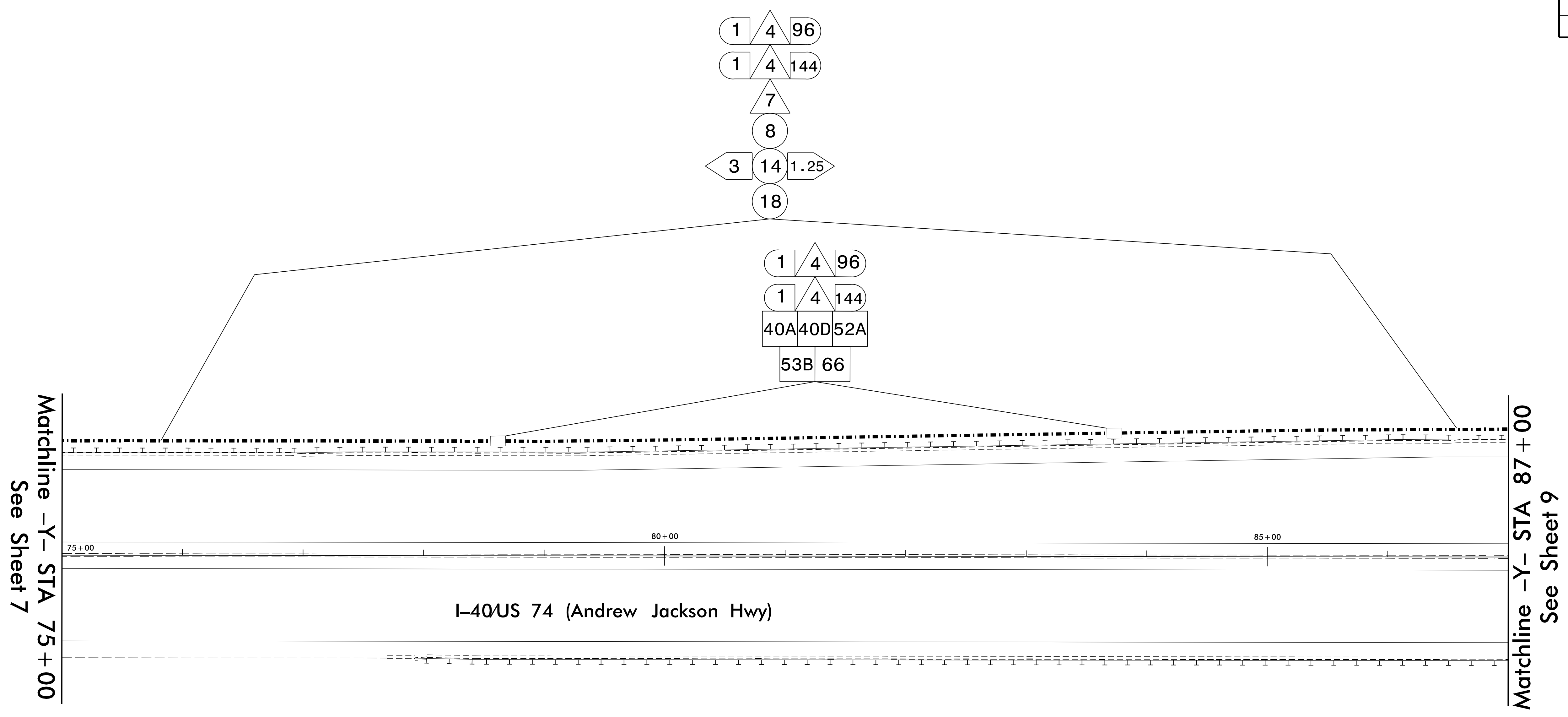
PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

REVISIONS	INIT.	DATE

Scale: 0 NA N.T.S.

SEAL

DocuSigned by:
 Rachel Garrett 1/19/2024



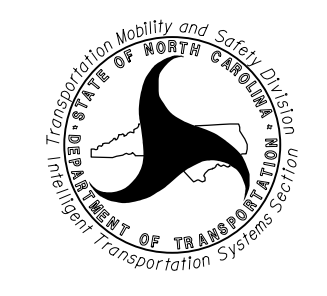

TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

NOTES:

1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

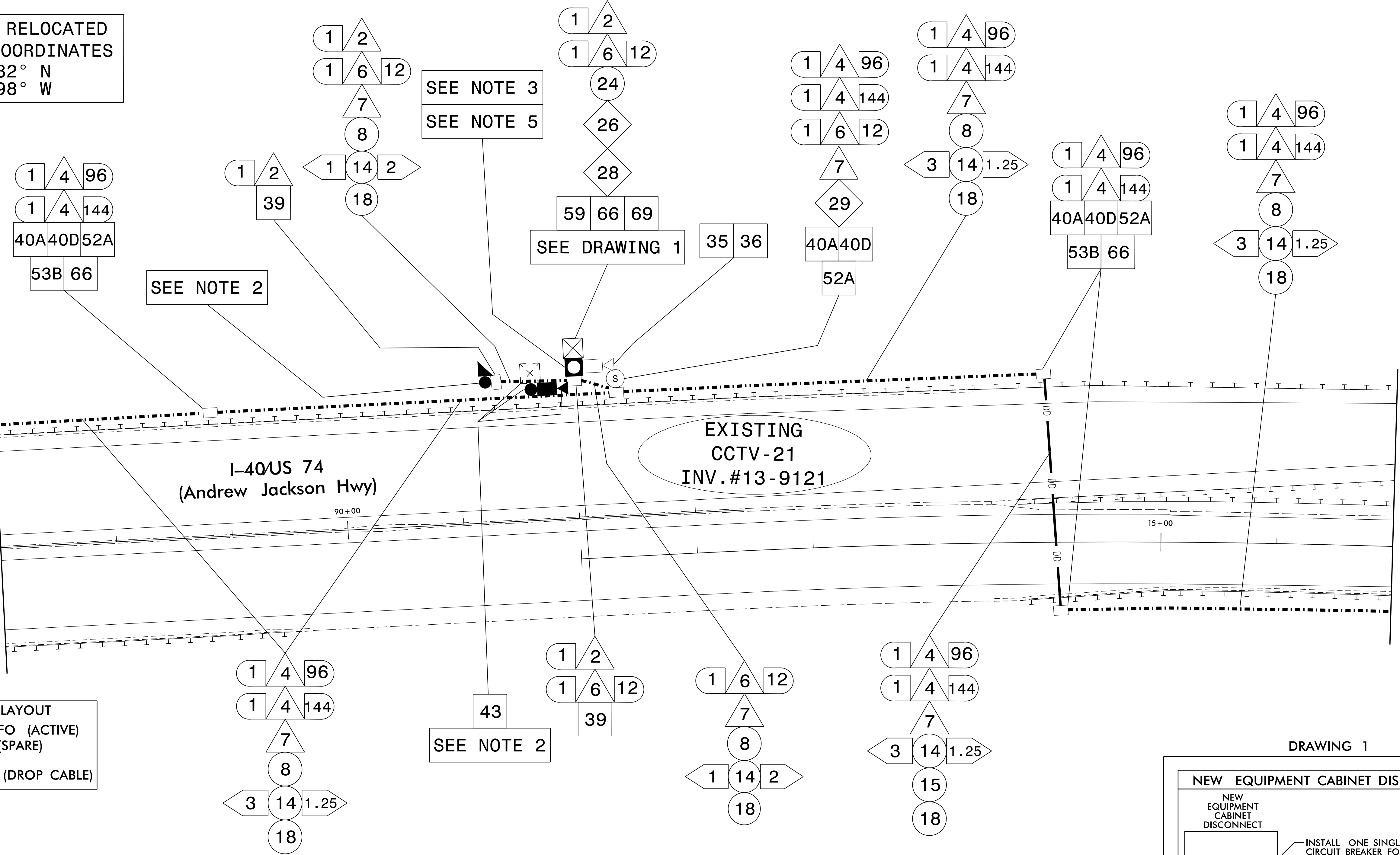
1/19/2024 10:44:44 a.m. \\paw-bent1\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\AB-ITS_PS\008.dgn T:\Tidal



Prepared for the Offices of: 		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
ITS Communication Cable and Conduit Routing Plans		SEAL 	
DIVISION 13 BUNCOMBE CO. ASHEVILLE		REVISIONS	
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh	INIT.	DATE
PREPARED BY: M. Tindal	REVIEWED BY: R. Garrett		
SCALE 0 NA N.T.S.		DocuSigned by: Rachelle Garrett 1/19/2024	

EXISTING AND RELOCATED
CCTV-21 GPS COORDINATES
35.557382° N
82.623298° W

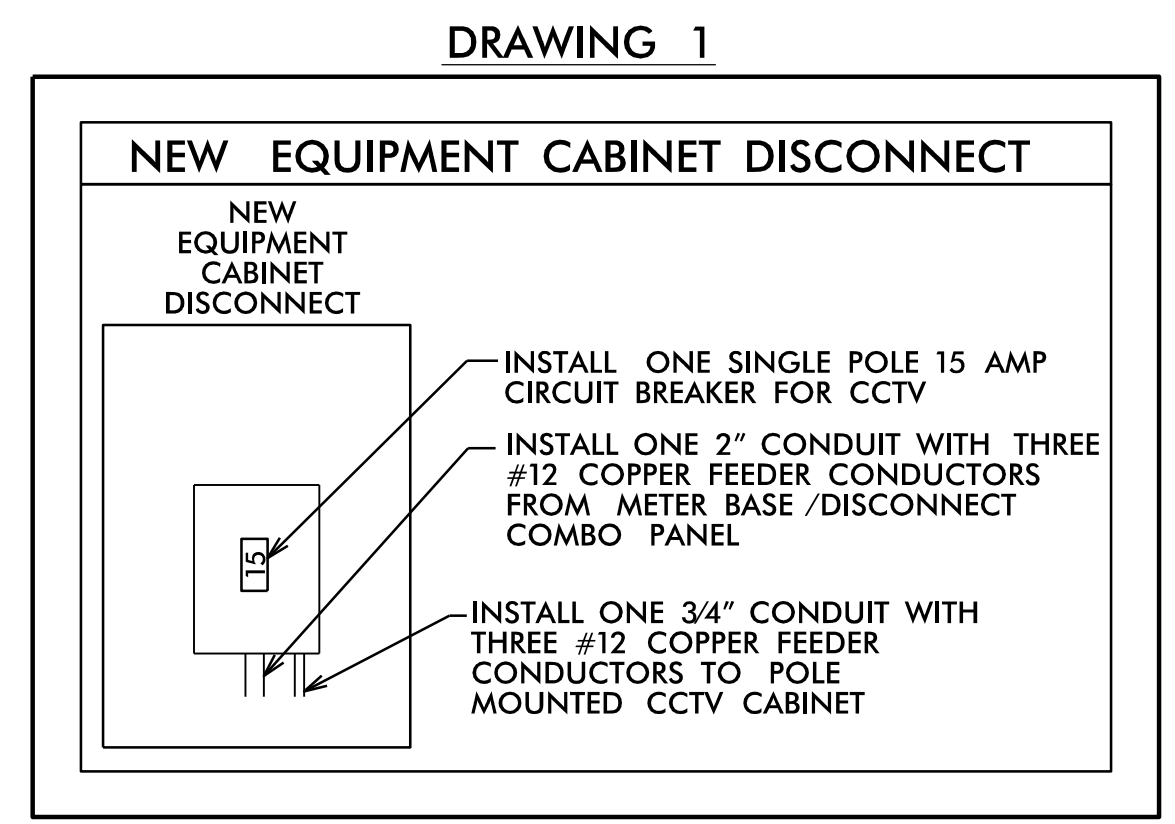
Matchline -Y- STA 87+00
See Sheet 8



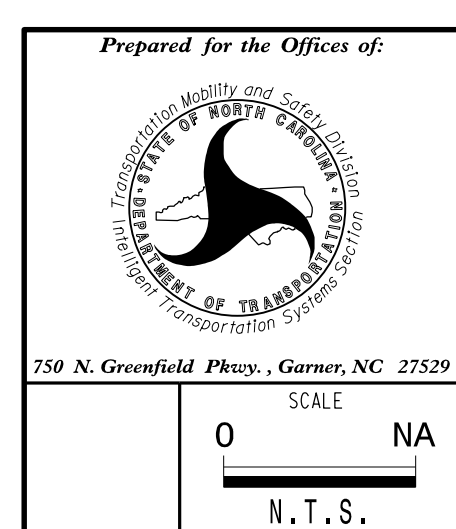
Matchline -RPC- STA 17+00
See Sheet 10

TRUNK CONDUIT LAYOUT
ORANGE = 144 FO (ACTIVE)
BLUE = 96 FO (SPARE)
GREEN = SPARE
WHITE = 12 FO (DROP CABLE)

- NOTES:**
- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.
 - REMOVE THE EXISTING CCTV WOOD CAMERA POLE AND EQUIPMENT. CONTACT THE MOUNTAIN REGION SYSTEMS ENGINEER FOR DIVISION 13 AND 14, STEVEN WYATT, AT (828) 250-3300 FOR INFORMATION ON WHERE TO RETURN THE EXISTING EQUIPMENT.
 - INSTALL NEW POLE FOUNDATION AND INSTALL EXISTING METAL POLE FROM STORAGE.
 - MAINTAIN CAMERA FUNCTIONALITY THROUGHOUT THE LIFE OF THE PROJECT.
 - DIVISION TO INSTALL LOWERING DEVICE ON EXISTING CCTV METAL POLE.



1/19/2024 P:\AECOM\nc-pw-bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\100-CAD_6154910-CAD\70-INDOT-TIP\Invt\11gen1 Transportation Systems\AA_AB\I-2513AA_AB_ITS_PS1009.dgn T:\Tindal



ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

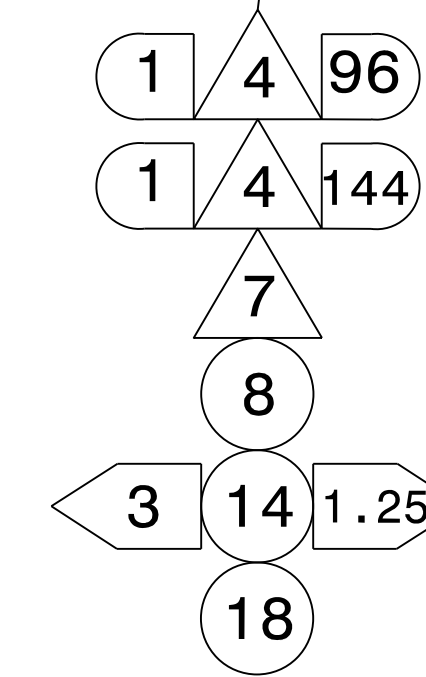
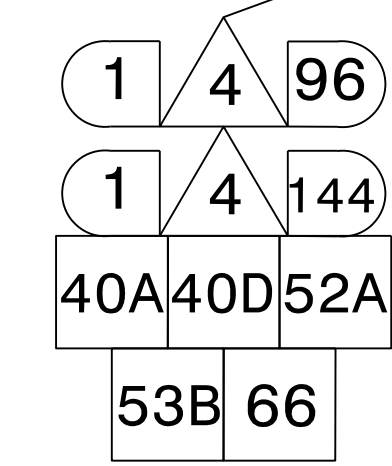
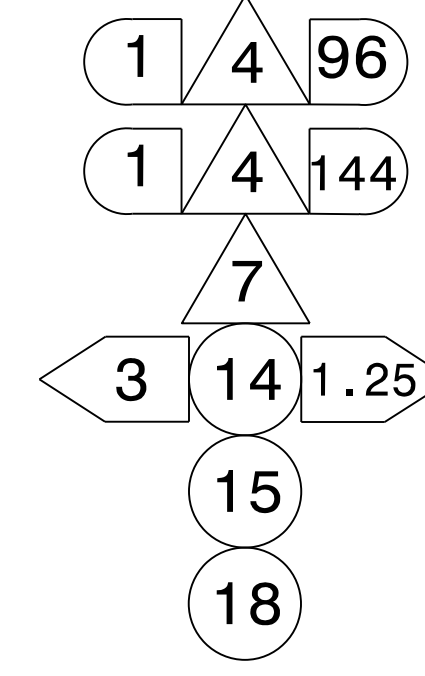
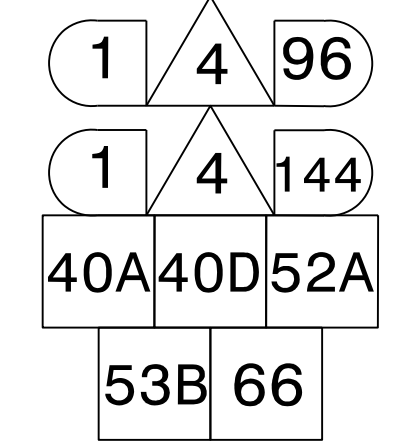
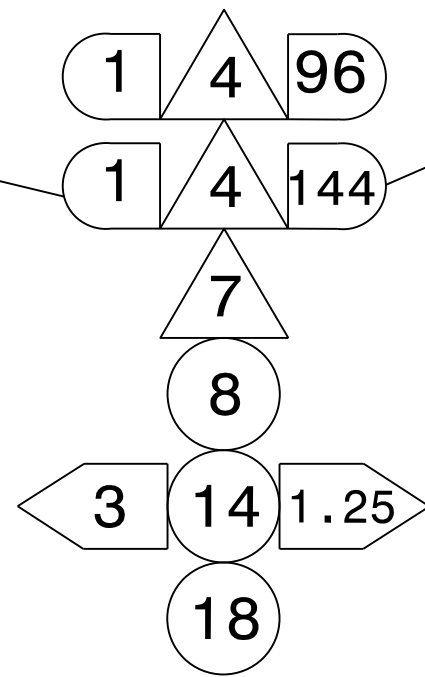
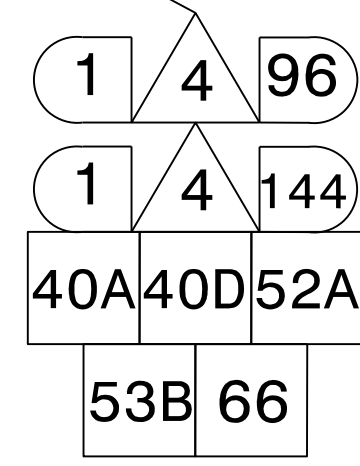
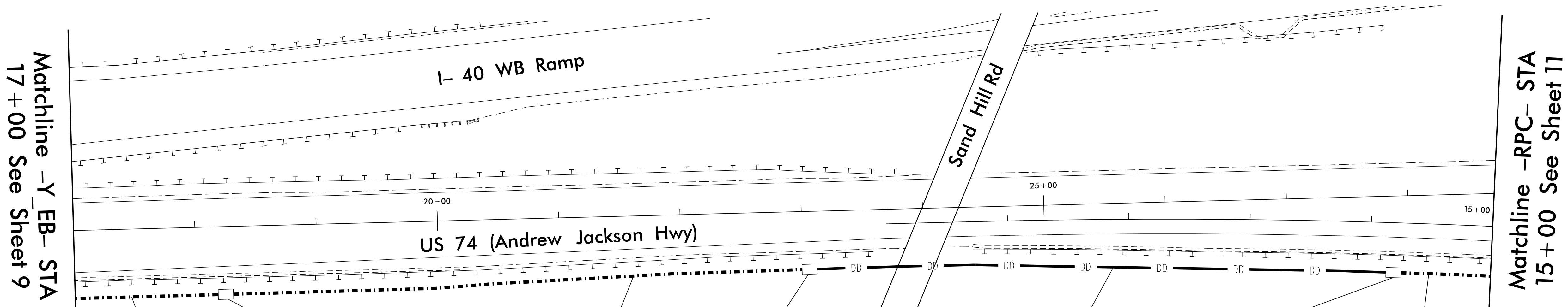
PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

REVISIONS	INIT.	DATE

DocuSigned by:
Rachelle Massett 1/19/2024
SIGNATURE DATE
CADD File name:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

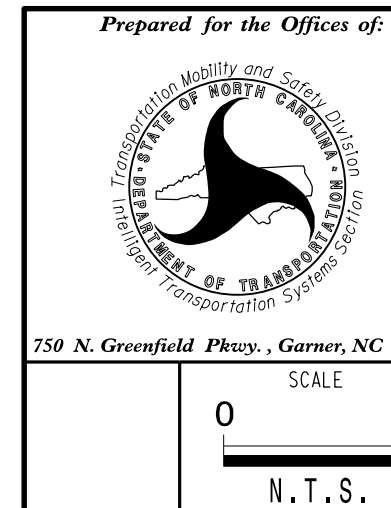


TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

NOTES:

- 1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024
 P:\a\acomm-nc-pw-bentl\ey-com-AECOM\B21_NA_2020\Documents\60646756-1-2513A\400-CAD_6154910-CAD\70-NC001-TIP\Inet\igen\Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH10.dgn
 T.Tindal



ITS Communication Cable and Conduit Routing Plans	
DIVISION 13	BUNCOMBE CO., ASHEVILLE
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh
PREPARED BY: M. Tindal	REVIEWED BY: R. Garrett
REVISIONS	INIT. DATE

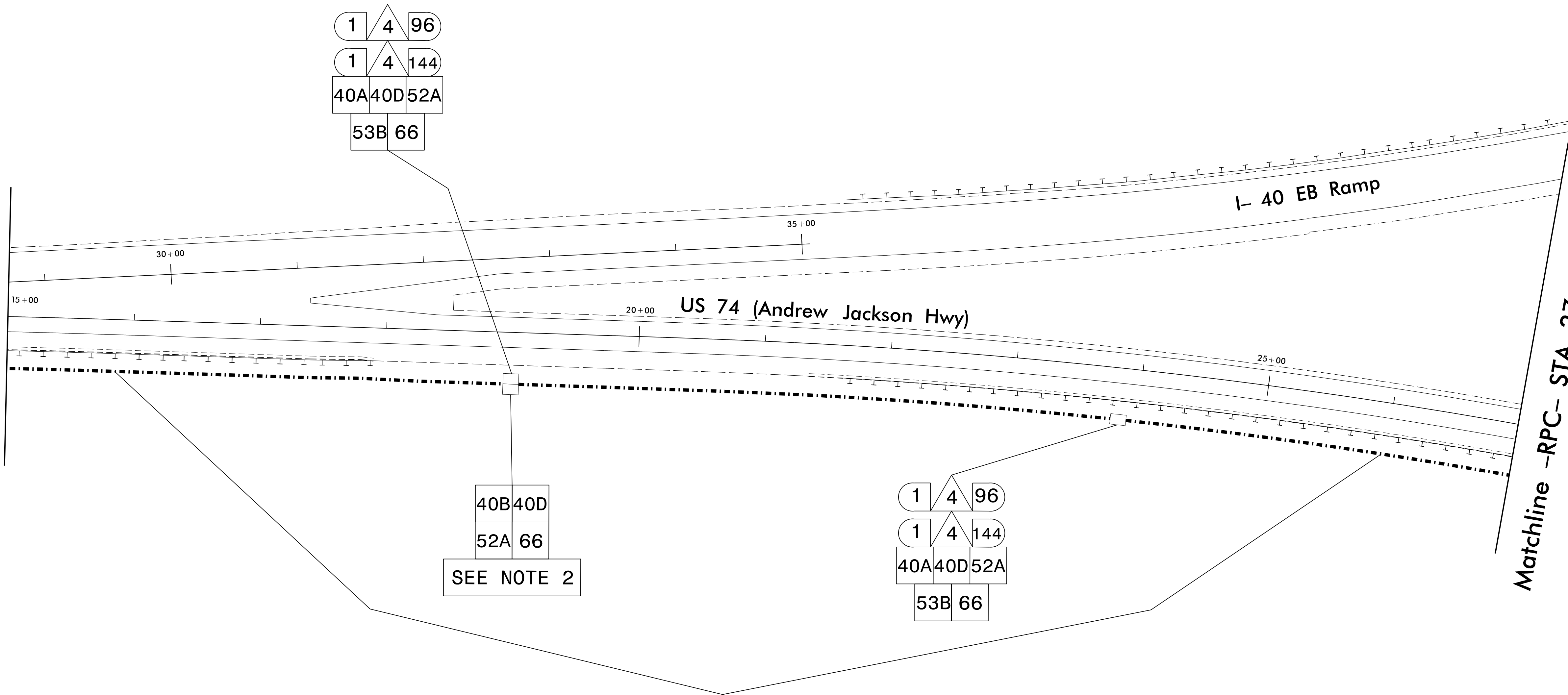
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DocuSigned by:
 Rachelle Massett 1/19/2024
 SIGNATURE DATE
 CADD Filename:

Matchline -RPC- STA 15+00
See Sheet 10

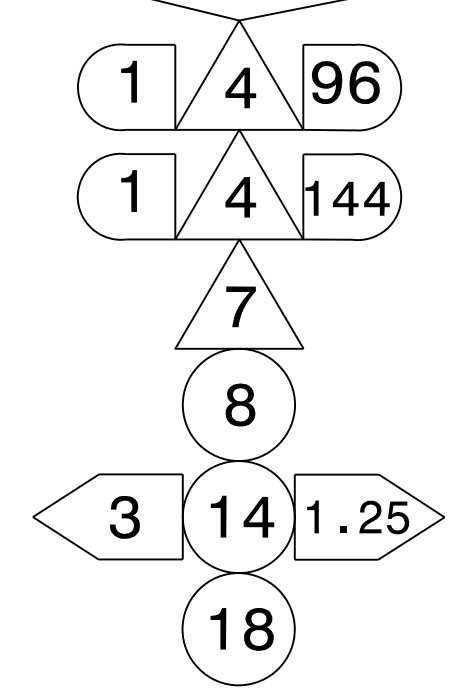
Matchline -RPC- STA 27+00 See Sheet 12



TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

NOTES:

1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.
2. WHEN SPLITTING CONDUIT BUNDLES ROUTE BLUE AND ORANGE CONDUITS INTO ITS JUNCTION BOX AND ROUTE GREEN CONDUIT INTO COMMERCIALIZATION JUNCTION BOX.



1/19/2024 10:44:33 AM C:\Users\paw.bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\100-CAD_6154910-CAD\70-INDOT-TIP\Intel\genl_Transportation_Systems\AA_AB\I-2513AA_AB_ITS_PSH11.dgn T.Tindal



Prepared for the Offices of:
 ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE
 PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh
 PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

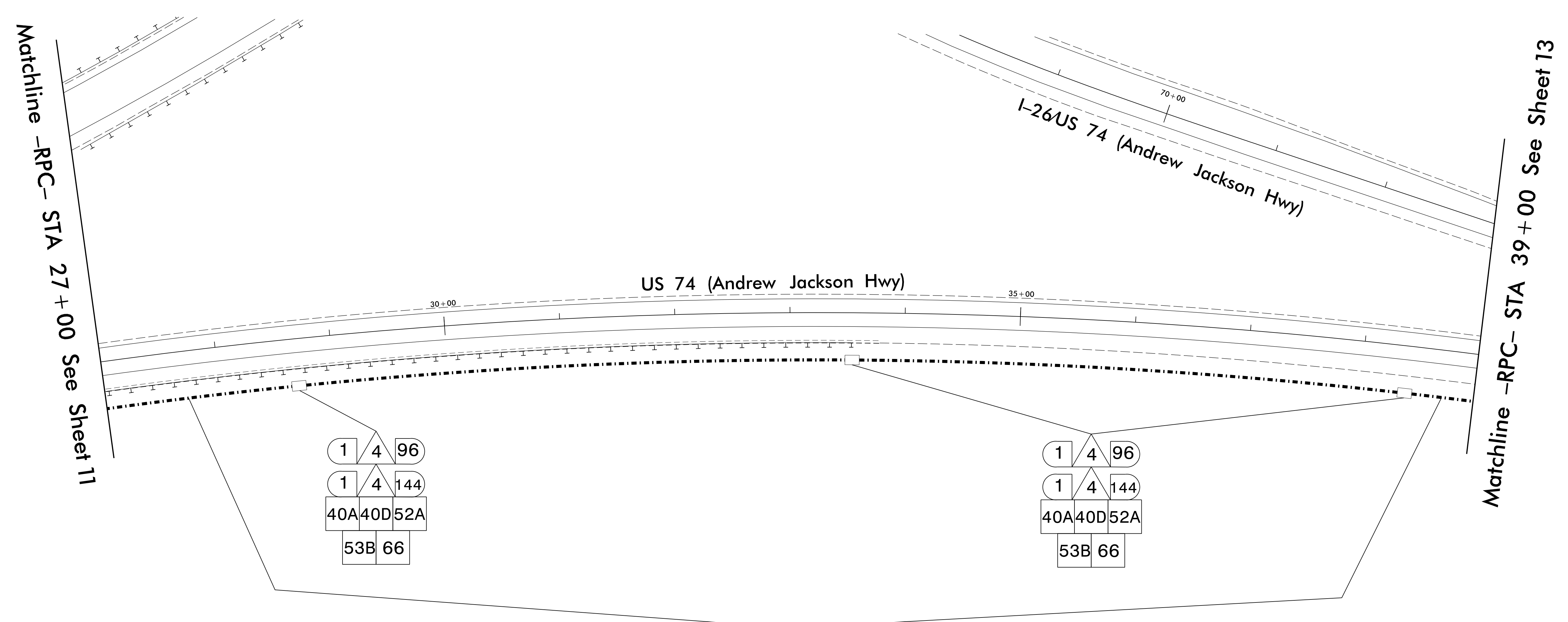
REVISIONS INIT. DATE

SCALE: 0 NA N.T.S.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 026679
 RACHELLE GARRETT

DocuSigned by:
 Rachelle Garrett 1/19/2024
 SIGNATURE DATE
 CADD Filename:



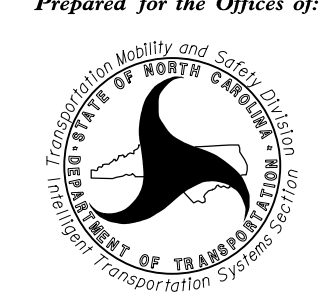
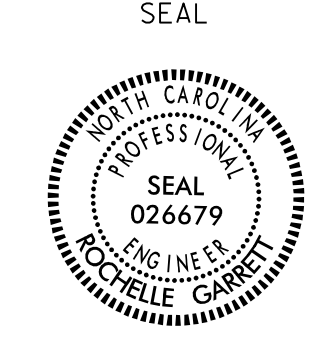
TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

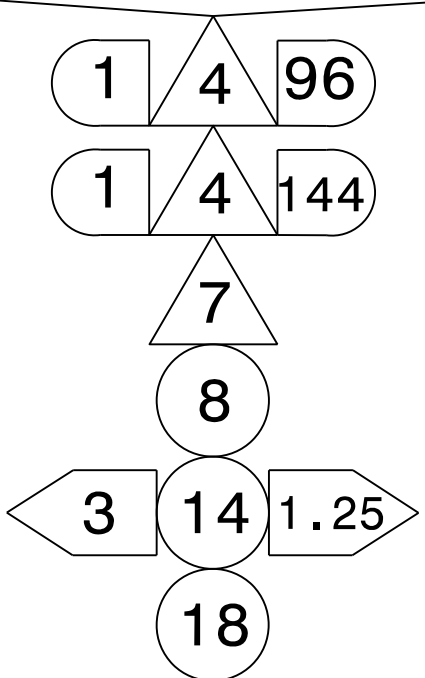
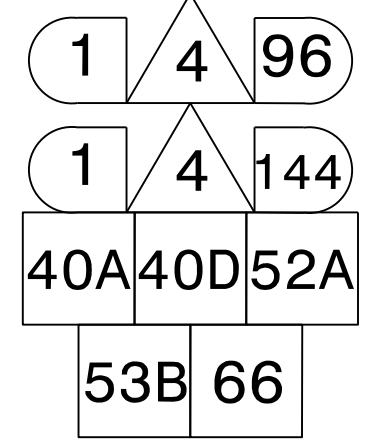
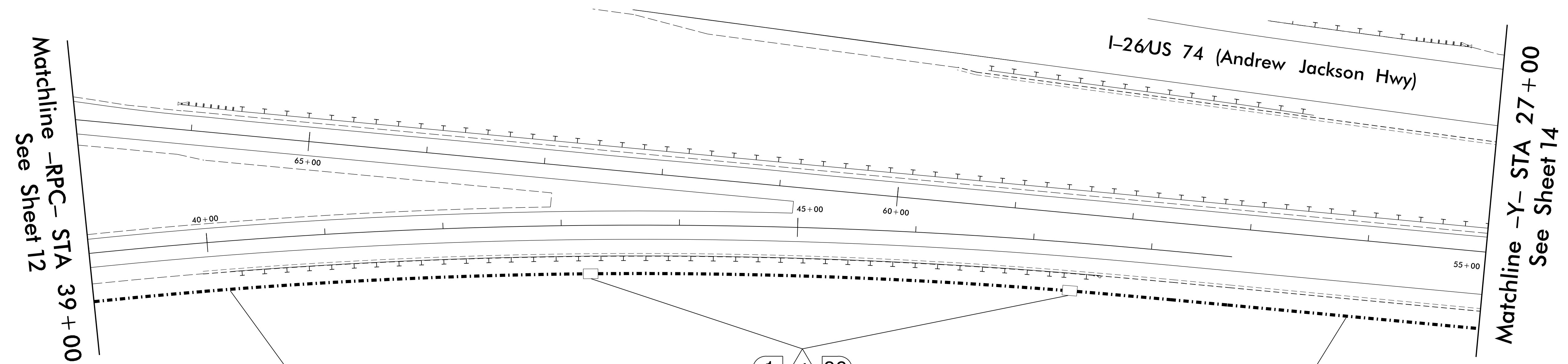
NOTES:

- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024
 P:\a\acomm-nc-pw-bentl\ey-com\AECOM\2513_AA_2020\Documents\60646756-1-2513AA\910-CAD\70-NC001-TIP\Invt\igen\Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH12.dgn
 T.Tindal



Prepared for the Offices of:  750 N. Greenfield Pkwy., Garner, NC 27529		ITS Communication Cable and Conduit Routing Plans DIVISION 13 BUNCOMBE CO., ASHEVILLE PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh PREPARED BY: M. Tindal REVIEWED BY: R. Garrett		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL  Rachelle Garrett 1/19/2024
SCALE: 0 NA N.T.S.		REVISIONS: INIT. DATE _____ _____		DocuSigned by: Rachelle Garrett 1/19/2024



TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE

NOTES:

- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024
 P:\a\acomm-nc-pw-bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513A\400-CAD_6154910-CAD\70-NC001-TIP\Intel\igen\Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH13.dgn
 T.Tindal

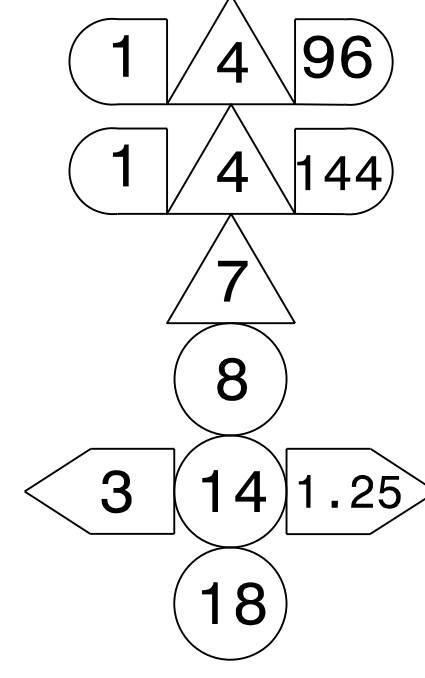
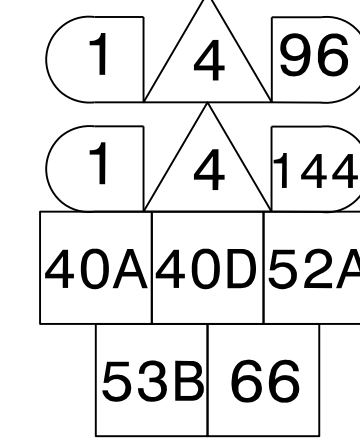
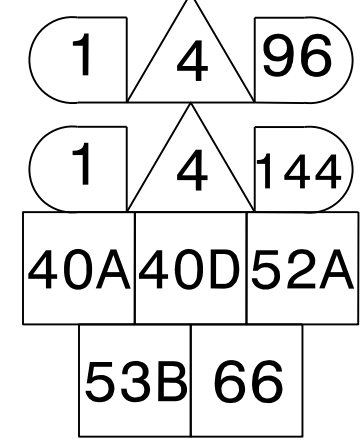
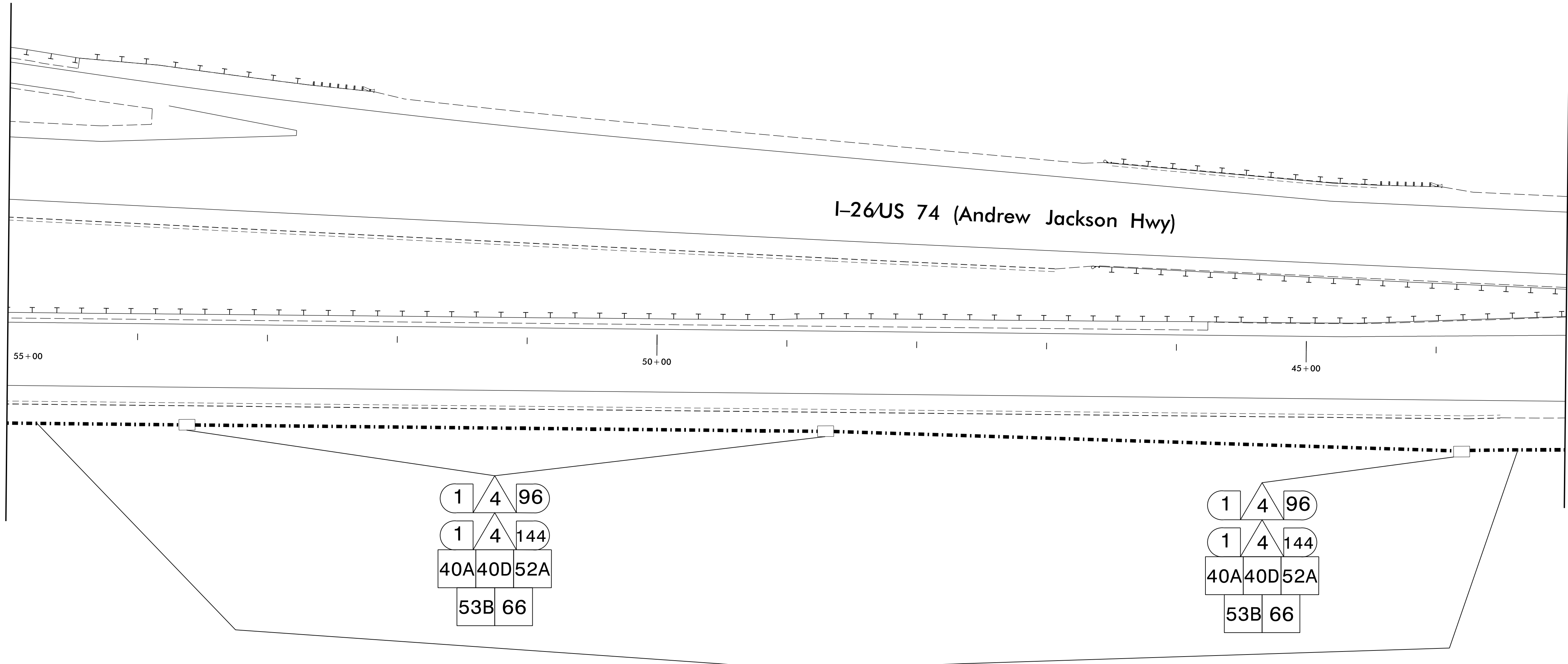


Prepared for the Offices of:		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
		SEAL 	
ITS Communication Cable and Conduit Routing Plans		DIVISION 13 BUNCOMBE CO. ASHEVILLE	
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh	PREPARED BY: M. Tindal REVIEWED BY: R. Garrett	
SCALE: 0 NA	REVISIONS	INIT.	DATE
N.T.S.			
DocuSigned by: 		1/19/2024 DATE	

Matchline -L1 EB- STA 55+00 See Sheet 13

Matchline -L1 EB- STA 47+00 See Sheet 15

I-26/US 74 (Andrew Jackson Hwy)

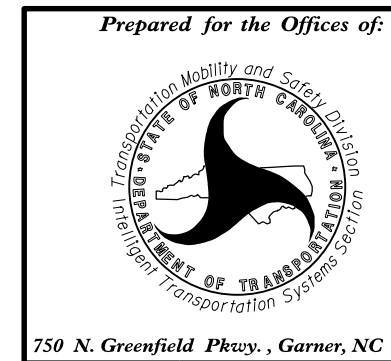


TRUNK CONDUIT LAYOUT
ORANGE = 144 FO (ACTIVE)
BLUE = 96 FO (SPARE)
GREEN = SPARE

NOTES:

1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024 10:44:33 AM C:\Users\pawbent\OneDrive\Documents\60646756-1-2513AA\100-CAD-6154910-CAD\70-NC001-TIP\In\11\gen1 Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH14.dgn T.Tindal



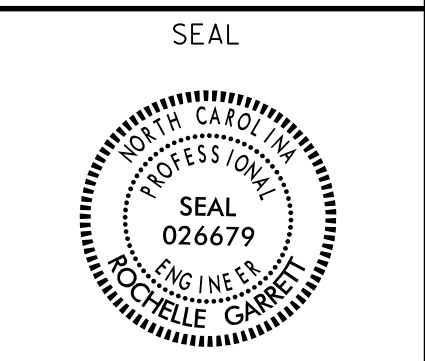
ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE
PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh
PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

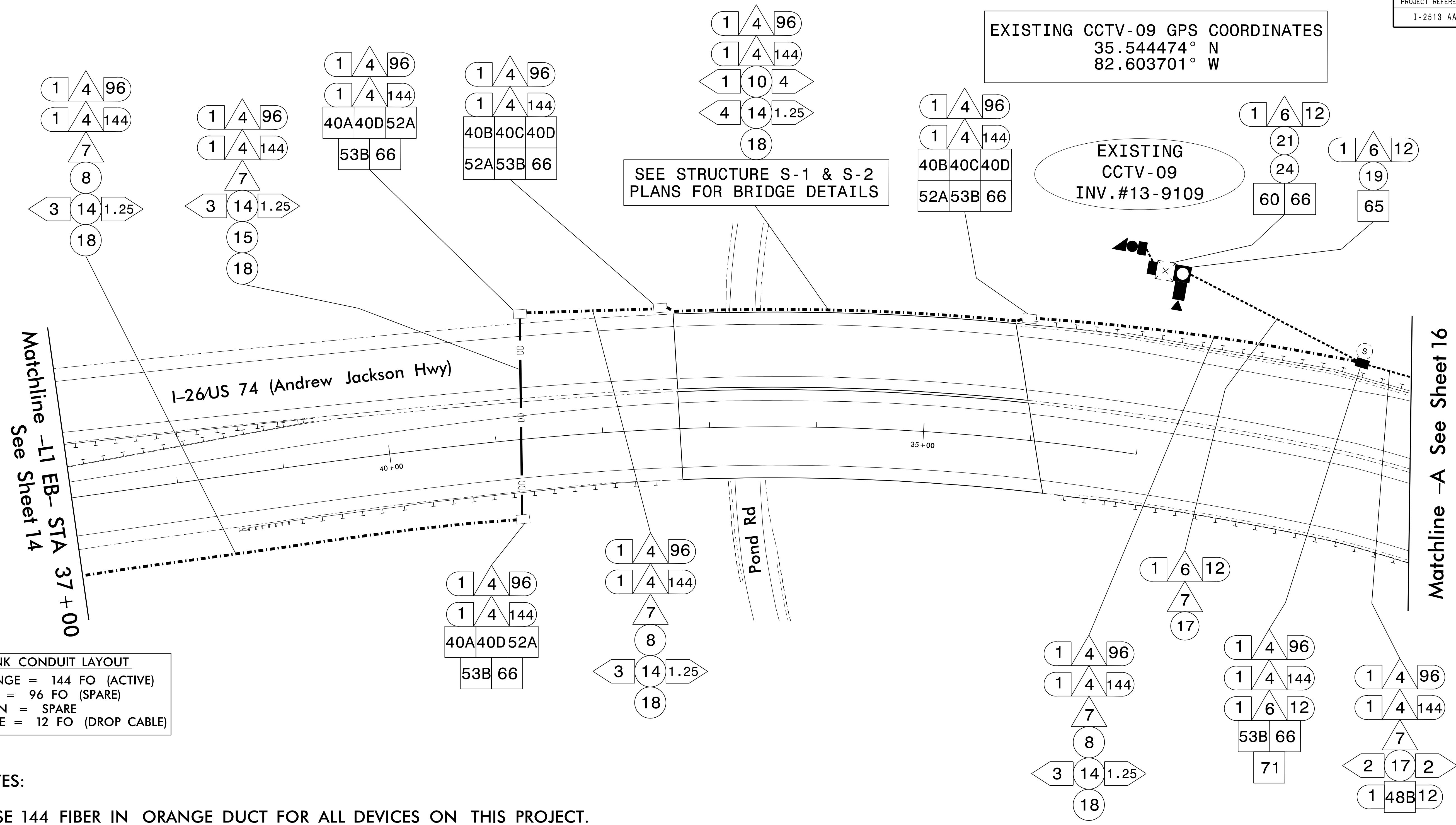
SCALE: 0 NA N.T.S.

Table with columns: REVISIONS, INIT., DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DocuSigned by: Rachel Garrett 1/19/2024



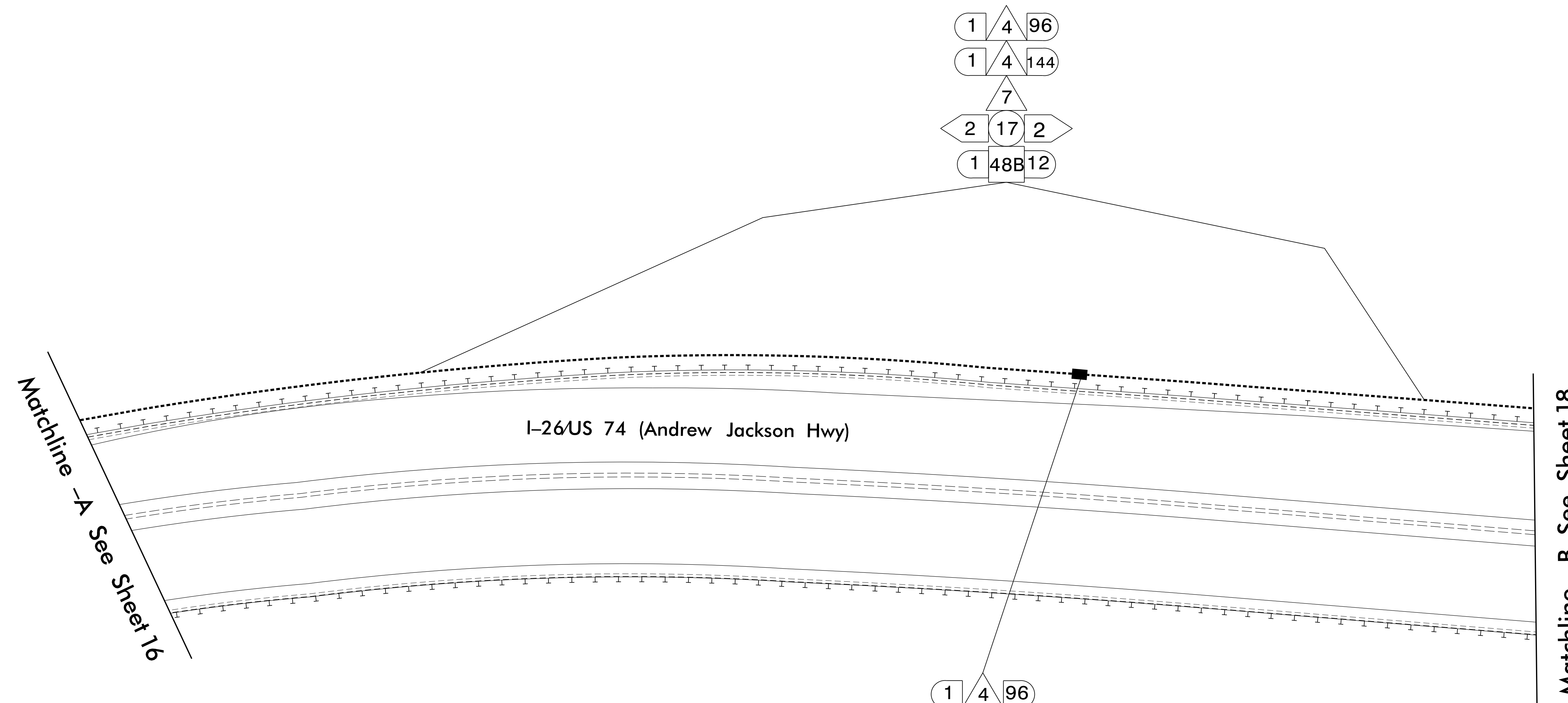
TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)
 GREEN = SPARE
 WHITE = 12 FO (DROP CABLE)

- NOTES:**
- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024 10:44:33 AM C:\Users\paw.dent\OneDrive\Documents\60646756-1-2513AA\100-CAD-0154910-CAD\70-NC001-TIP\Inet\igen\Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH15.dgn T:\ndm



Prepared for the Offices of:		ITS Communication Cable and Conduit Routing Plans	
DIVISION 13 BUNCOMBE CO. ASHEVILLE PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh PREPARED BY: M. Tindal REVIEWED BY: R. Garrett		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER RACHELLE GARRETT License No. 026679	
SCALE: 0 NA N.T.S.		REVISIONS: _____ INIT. DATE _____ _____ _____	
DocuSigned by: Rachelle Garrett 1/19/2024 Signature: _____ Date: _____ CADD Filename:		_____ _____ _____	

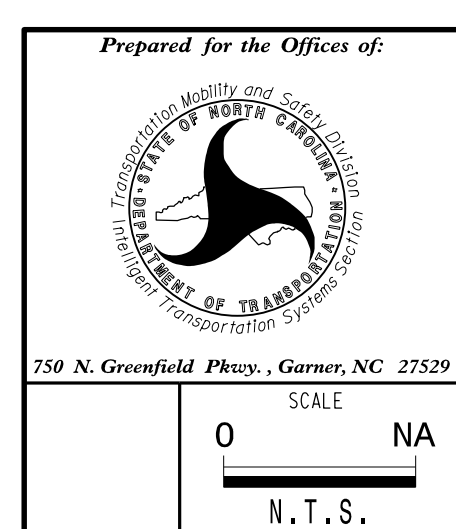


TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)

NOTES:

1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024 10:44:33 AM C:\Users\Tindal\Documents\60646756-1-2513AA\10-CAD\10-NC001-TIP\Intel\igen1 Transportation Systems\AA_AB\1-2513AA_AB_ITS_PSH16.dgn Tindal



ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

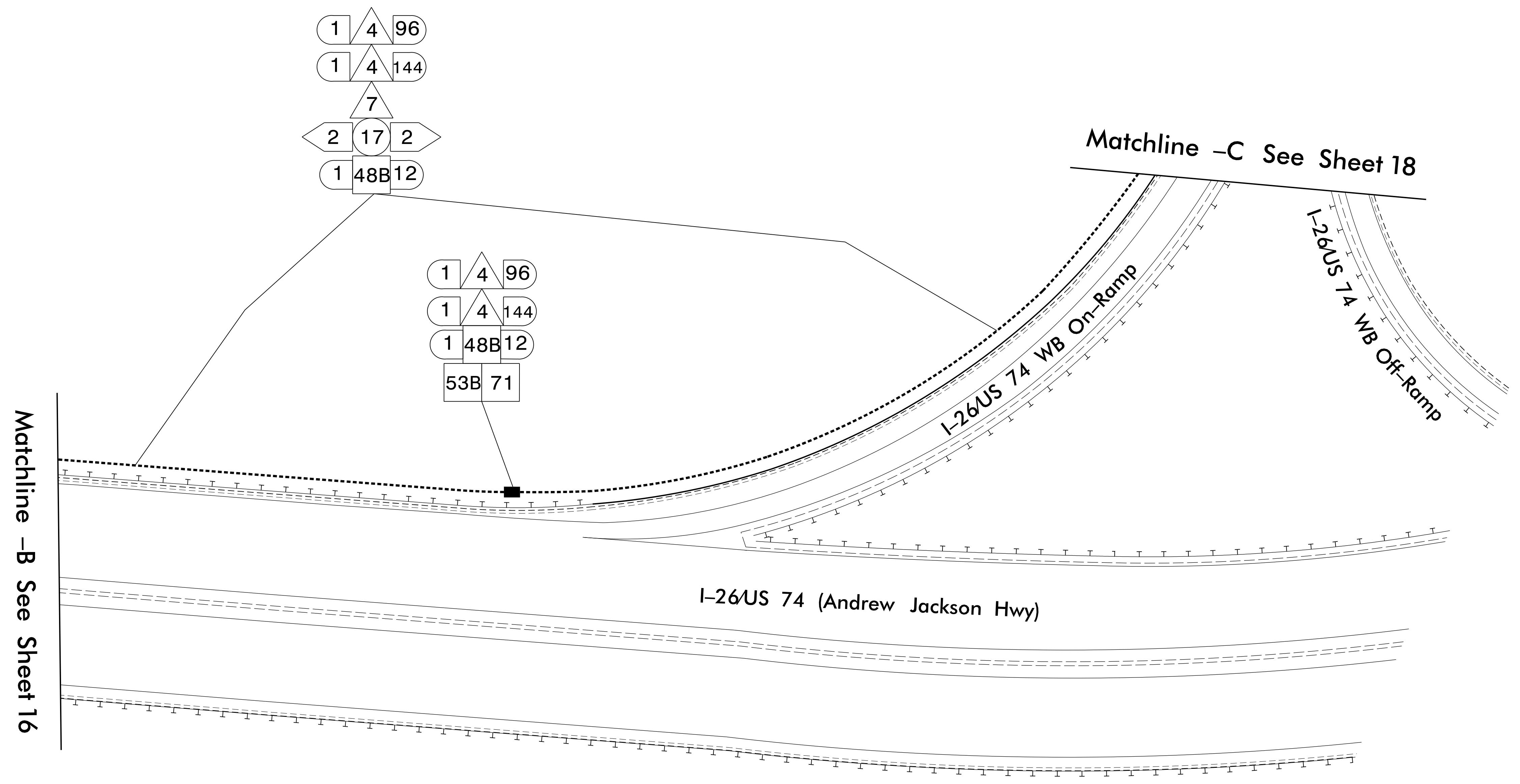
REVISIONS	INIT.	DATE

Scale: 0 NA N.T.S.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DocuSigned by:
 Rachelle Garrett 1/19/2024





TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)

NOTES:

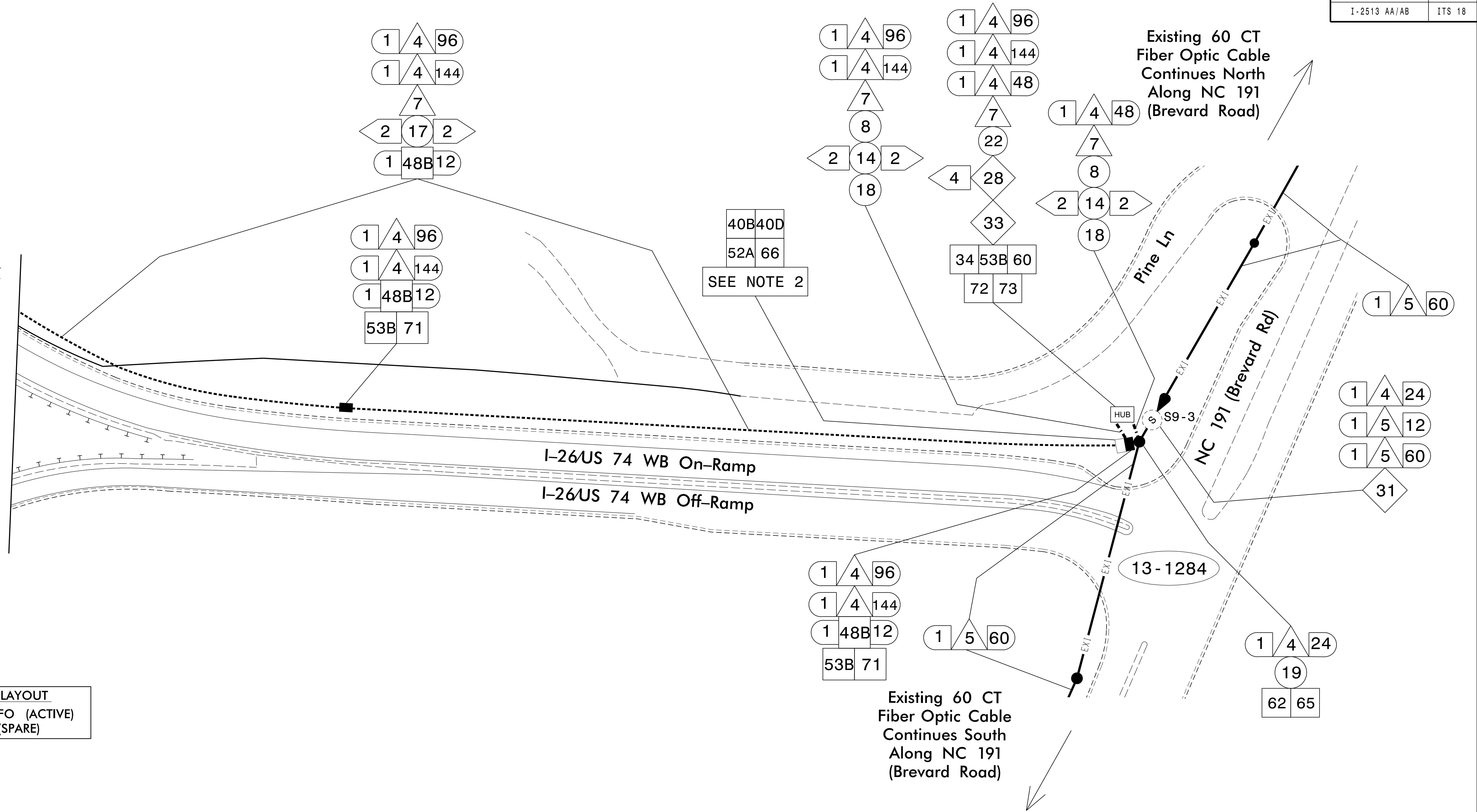
1. USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.

1/19/2024 10:44:33 AM C:\Users\Tindal\OneDrive\Documents\60646756-1-2513AA\100-CAD-6154910-CAD\70-NC001-TIP\Intel\igen1 Transportation Systems\AA_AB\I-2513AA_AB_ITS_PSH17.dgn Tindal



Prepared for the Offices of: 		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
ITS Communication Cable and Conduit Routing Plans		SEAL 	
DIVISION 13 BUNCOMBE CO. ASHEVILLE		PLANNING	
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh	DESIGNED BY: M. Tindal	REVIEWED BY: R. Garrett
REVISIONS	INIT.	DATE	DocuSigned by: Rachelle Garrett 1/19/2024
SCALE 0 _____ NA N.T.S.		DATE	

Matchline - C See Sheet 17



TRUNK CONDUIT LAYOUT
 ORANGE = 144 FO (ACTIVE)
 BLUE = 96 FO (SPARE)

- NOTES:**
- USE 144 FIBER IN ORANGE DUCT FOR ALL DEVICES ON THIS PROJECT.
 - INSTALL COMMERCIALIZATION JUNCTION BOX FOR FUTURE SPLICE ENCLOSURE.

1/19/2024 10:44:00 AM C:\Users\Tindal\Documents\60646756-1-2513AA-AB-ITS-PSH18.dgn Tindal



Prepared for the Offices of:
 ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

750 N. Greenfield Pkwy., Garner, NC 27529

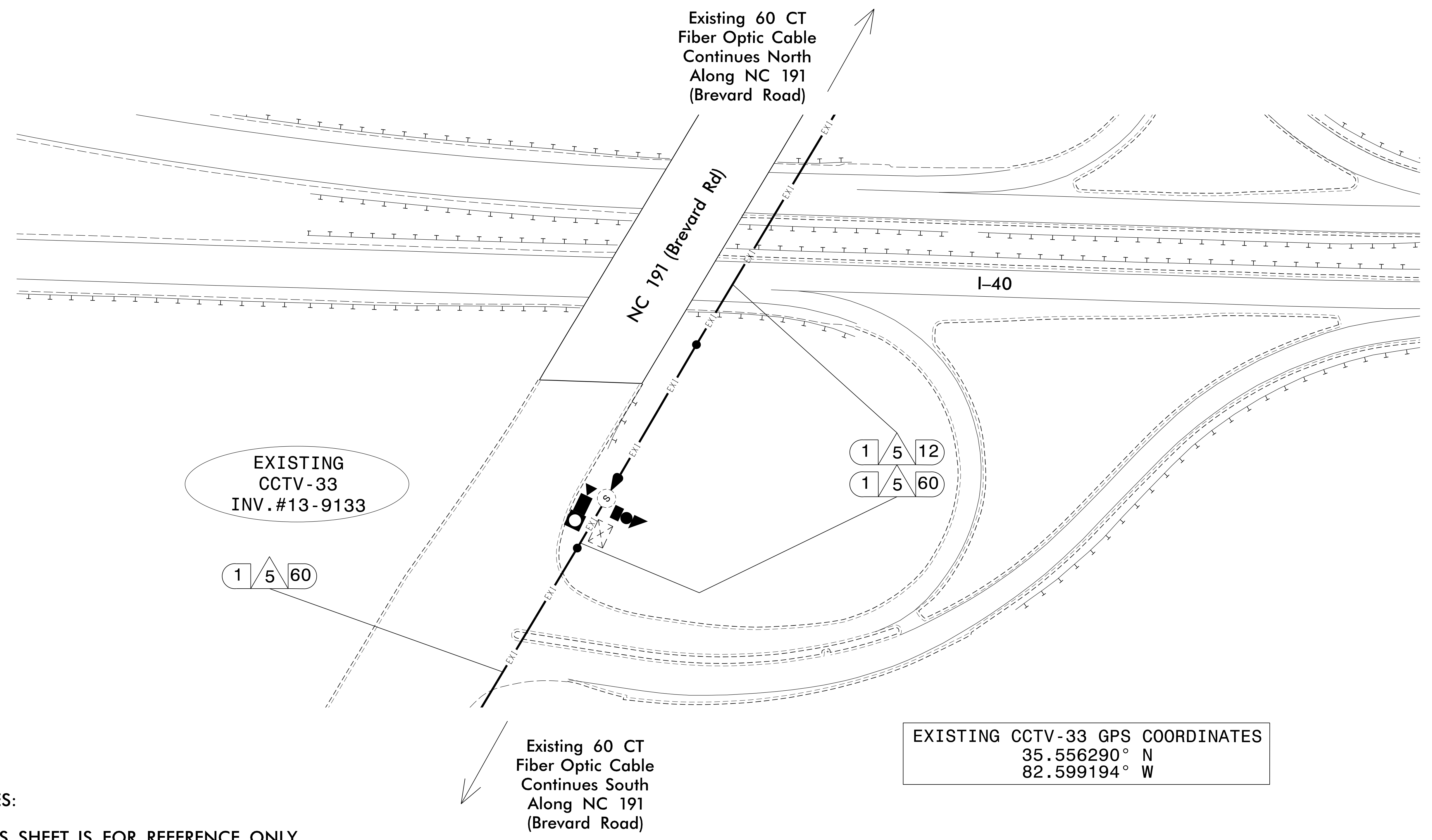
SCALE: 0 NA N.T.S.

REVISIONS: INIT. DATE

DocuSigned by: *Rachelle Massett* 1/19/2024

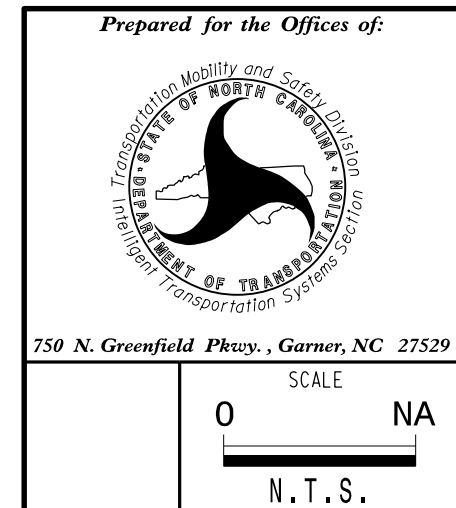
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: RACHELLE GARRETT, ENGINEER, SEAL 026679



NOTES:
 1. THIS SHEET IS FOR REFERENCE ONLY.

1/19/2024
 P:\4\AECOM\nc-pw-bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\910-CAD\GIS\910-CAD\70-NC001-TIP\Intel\igent_Transportation_Systems\AA_AB#_I-2513AA_AB_ITS_PSH19.dgn
 T.Tindal



ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

REVISIONS	INIT.	DATE

Scale: 0 NA N.T.S.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

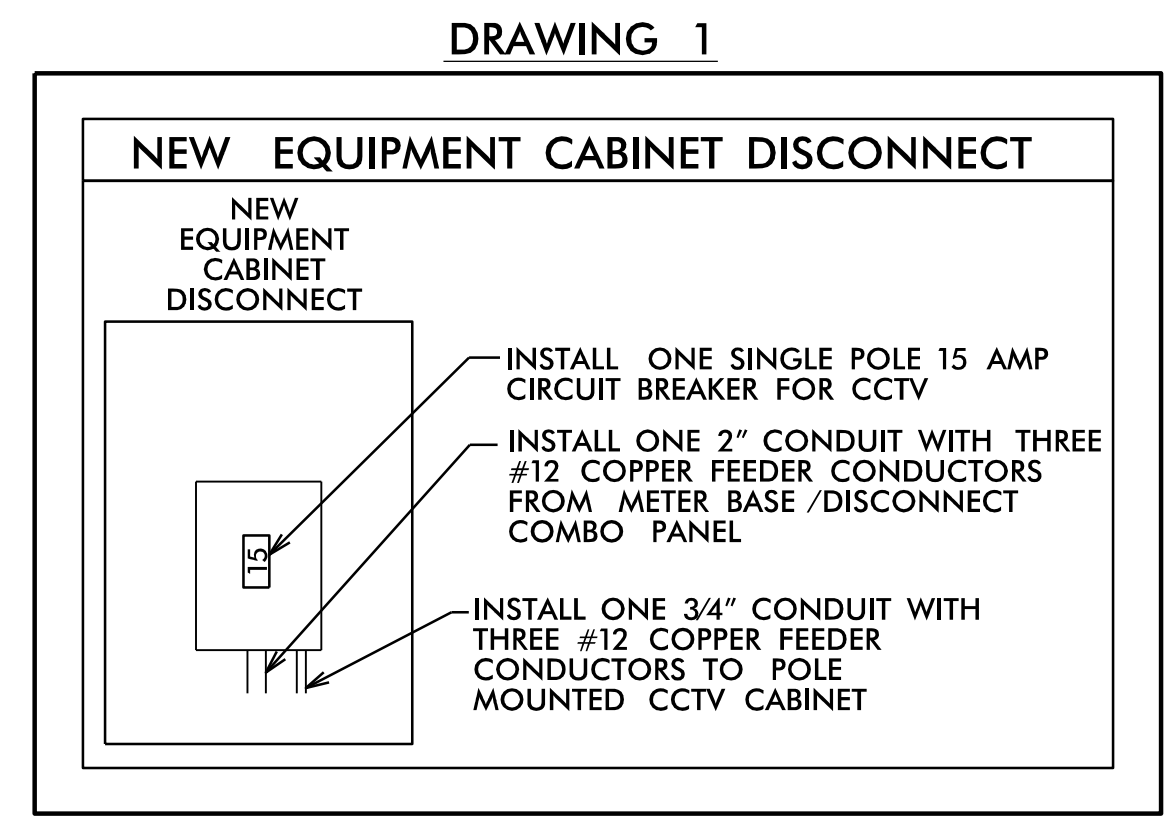
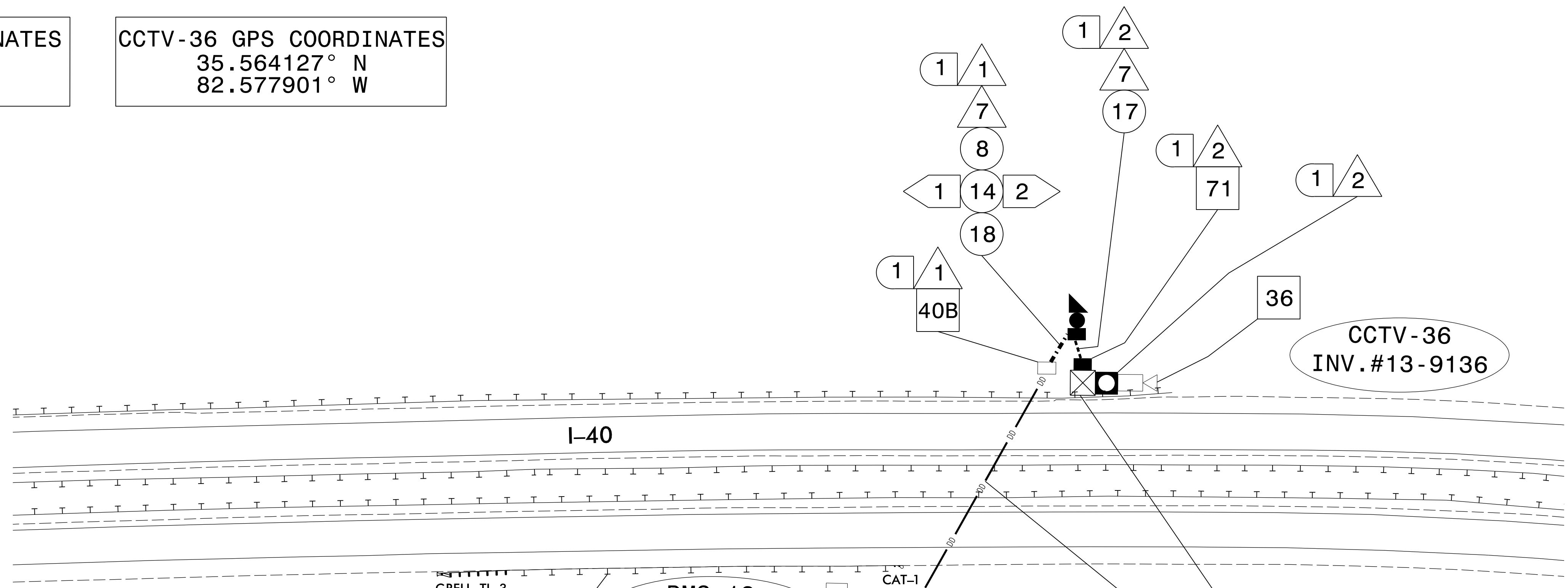
DocuSigned by:
 Rachelle Garrett 1/19/2024
 SIGNATURE DATE
 CADD Filename:

DMS-19 GPS COORDINATES
35.563712° N
82.578644° W

CCTV-36 GPS COORDINATES
35.564127° N
82.577901° W

To Existing
CCTV-33
INV.#13-1933
←

To Existing DMS-06
INV. #13-9001/
CCTV-37 INV.#13-9137
→



SEE NOTE 1

SEE DRAWING 1

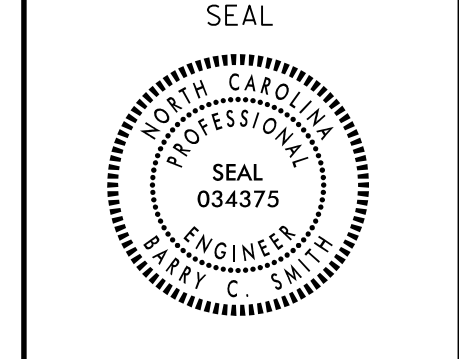
SEE DRAWING 1

NOTES:

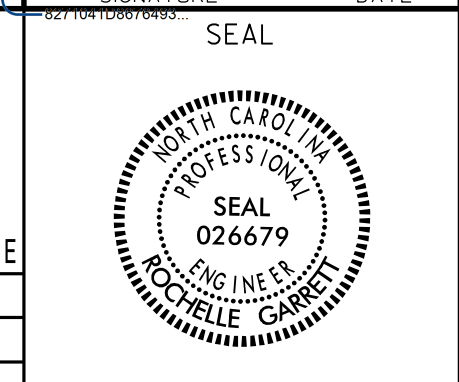
- 1. PROPOSED 262.5 FEET OF GUARDRAIL.
- 2. CONTACT ENGINEER TO REQUEST DIT SUPPLIED CELLULAR MODEM.

1/19/2024
D:\a\ecom\nc-pw-bentl\ey-com\AECOM\2521_NA_2020\Documents\60646756-1-2513AA\100-CAD-6154910-CAD\70-NC001-TIP\Intel\igen1_Transportation_Systems\AA_AB\I-2513AA_AB_ITS_PS\20.dgn
T.Tindal

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

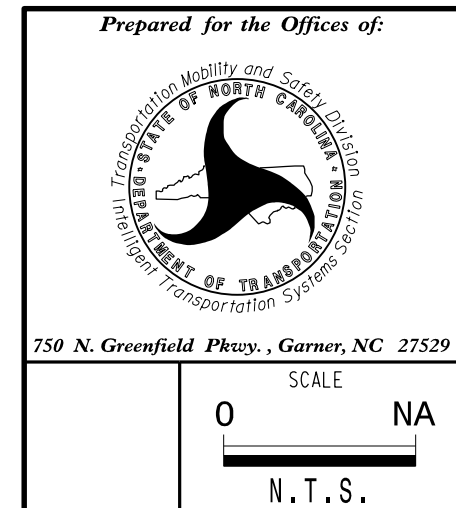


DocuSigned by:
Barry Smith 1/19/2024
SIGNATURE DATE



DocuSigned by:
Rachelle Garrett 1/19/2024
SIGNATURE DATE

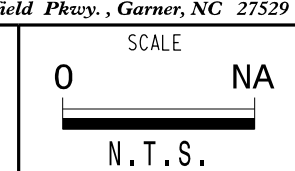
AECOM
NC Firm License No.: F-0342
5438 Wade Park Boulevard
Suite 200 Raleigh, NC 27607
Phone: 919-461-1100



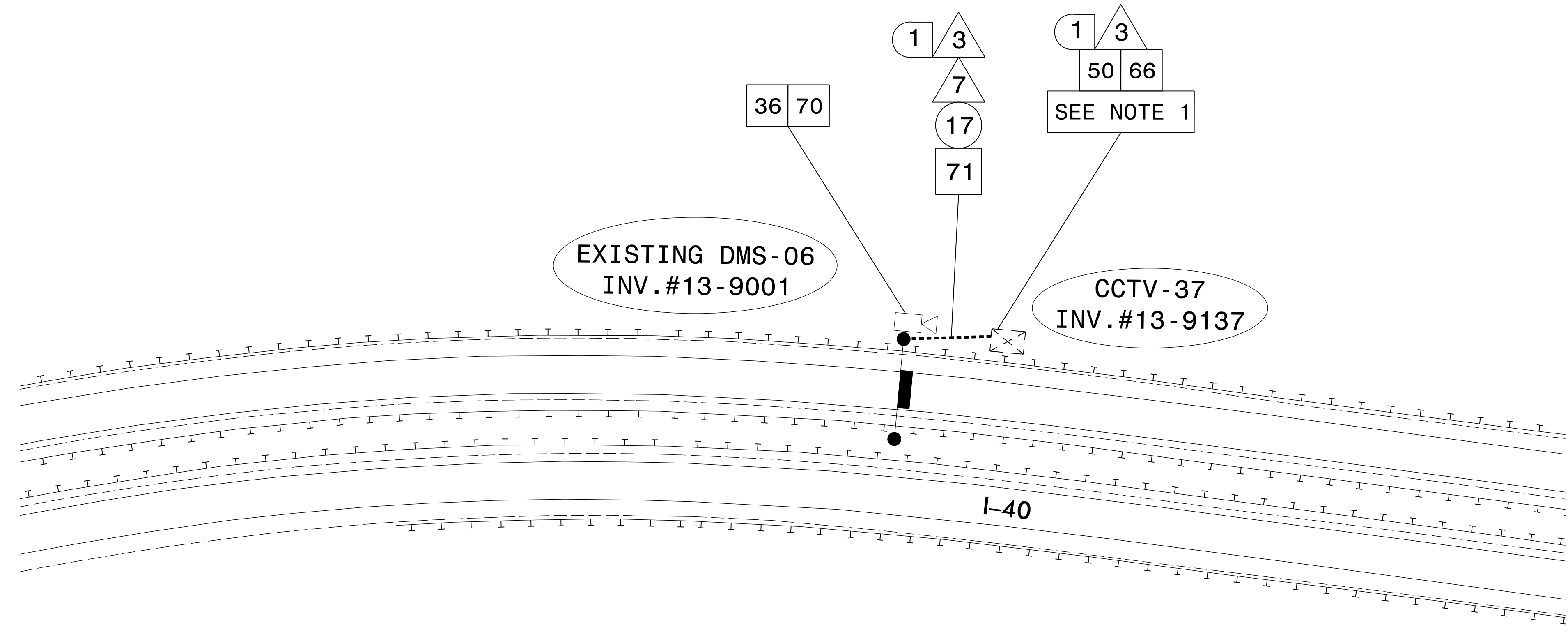
ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE
PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh
PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

REVISIONS	INIT.	DATE



CCTV-37/EXISTING DMS-06
GPS COORDINATES
35.562539° N
82.572834° W



To DMS-19
INV.#13-9055/
CCTV-36
INV.#13-9136
←


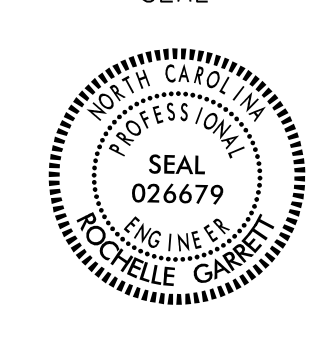
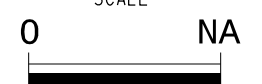
To DMS-20
INV.#13-9056/
CCTV-38
INV.#13-9138
→

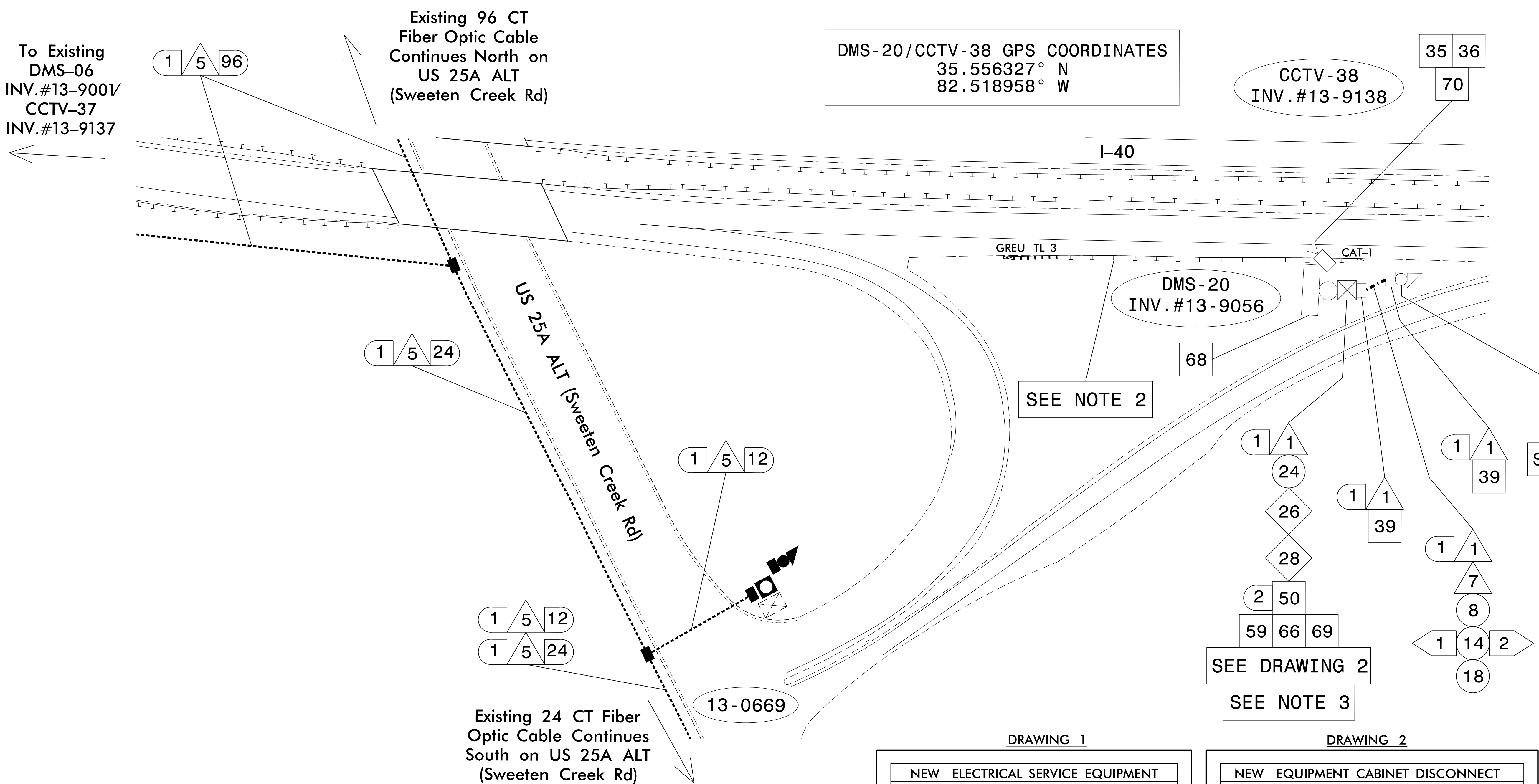
NOTES:

1. INSTALL CCTV POE INJECTOR AND ADDITIONAL CELLULAR MODEM FOR CCTV IN THE EXISTING DMS CABINET.
2. LOCATION OF EXISTING DMS-06 & NEW CCTV-37 IS BEYOND ROADWAY CONSTRUCTION LIMITS. INSTALL DMS MOUNTED CAMERA AND ACTIVATE DURING PHASE I CONSTRUCTION.
3. CONTACT ENGINEER TO REQUEST DIT SUPPLIED CELLULAR MODEM.

1/19/2024 10:44:43 AM \\pww-bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\AB-ITS_P5121.dgn T:\Tindal

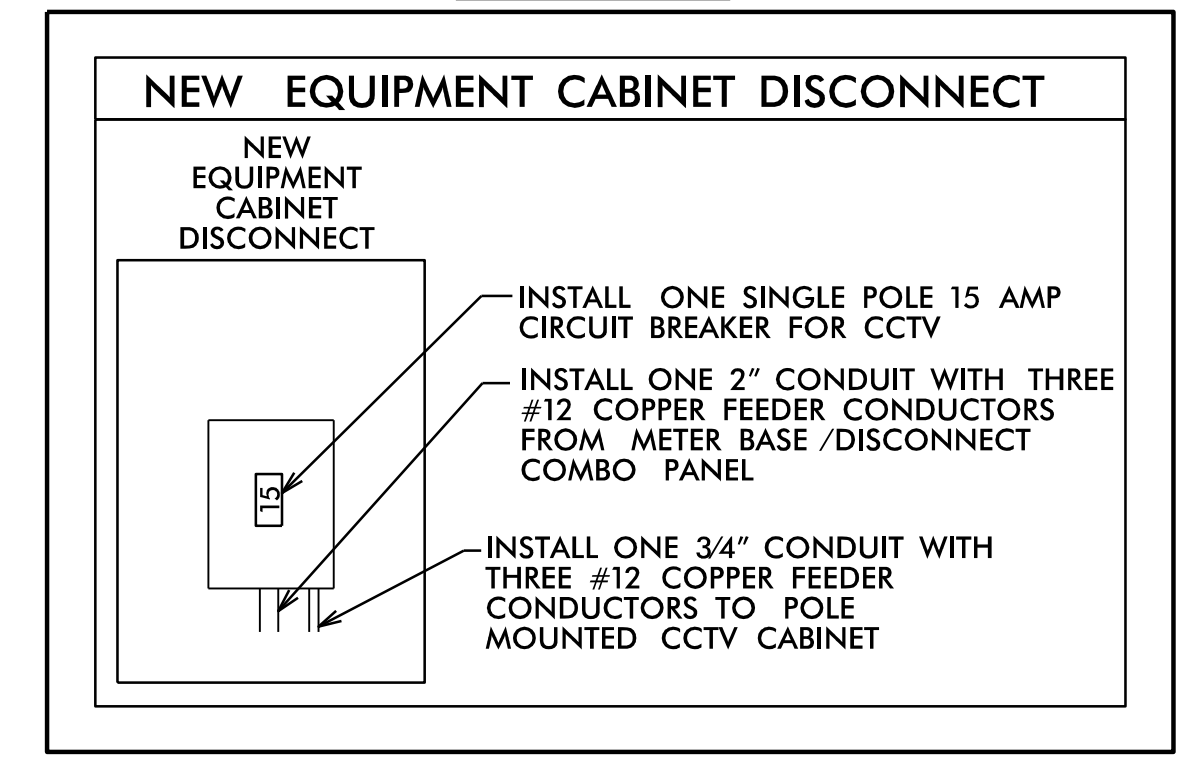
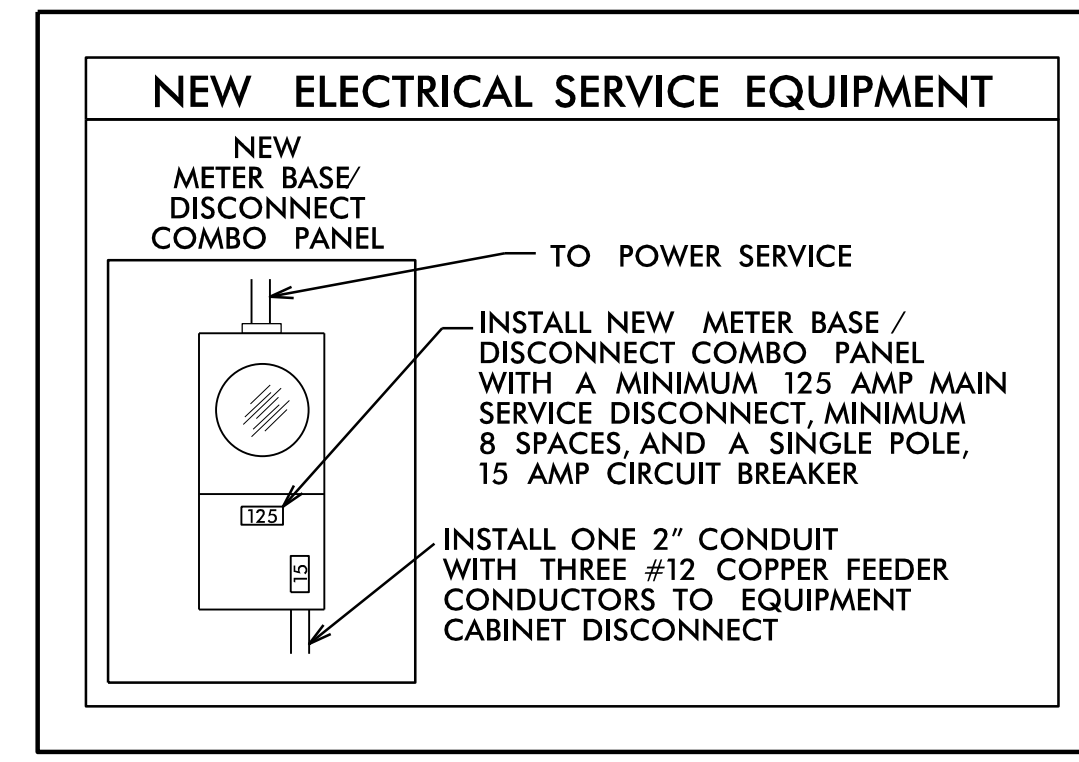


Prepared for the Offices of:  750 N. Greenfield Pkwy., Garner, NC 27529		ITS Communication Cable and Conduit Routing Plans DIVISION 13 BUNCOMBE CO., ASHEVILLE PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh PREPARED BY: M. Tindal REVIEWED BY: R. Garrett		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL  Rachelle Garrett 1/19/2024
SCALE  N.T.S.		REVISIONS INIT. DATE	DocuSigned by: Rachelle Garrett 1/19/2024 CADD Filename:	

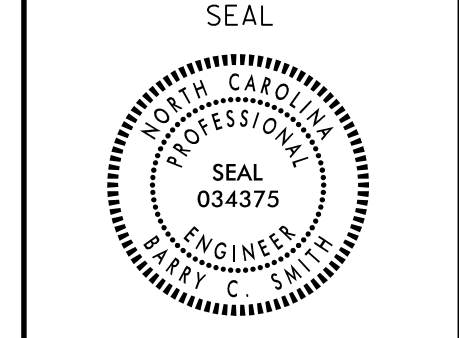


NOTE:

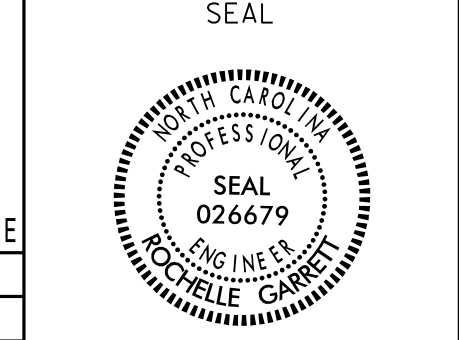
1. LOCATION OF NEW DMS-20 AND CCTV-38 IS BEYOND ROADWAY CONSTRUCTION LIMITS. INSTALL AND ACTIVATE THESE DEVICES DURING PHASE I CONSTRUCTION.
2. PROPOSED 262.5 FEET OF GUARDRAIL.
3. CONTACT ENGINEER TO REQUEST DIT SUPPLIED CELLULAR MODEM.



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DocuSigned by:
Barry Smith 1/19/2024



DocuSigned by:
Rachelle Garrett 1/19/2024

Prepared for the Offices of:

ITS Communication Cable and Conduit Routing Plans

DIVISION 13 BUNCOMBE CO. ASHEVILLE

PLAN DATE: January 2024 REVIEWED BY: M. Cavanaugh

PREPARED BY: M. Tindal REVIEWED BY: R. Garrett

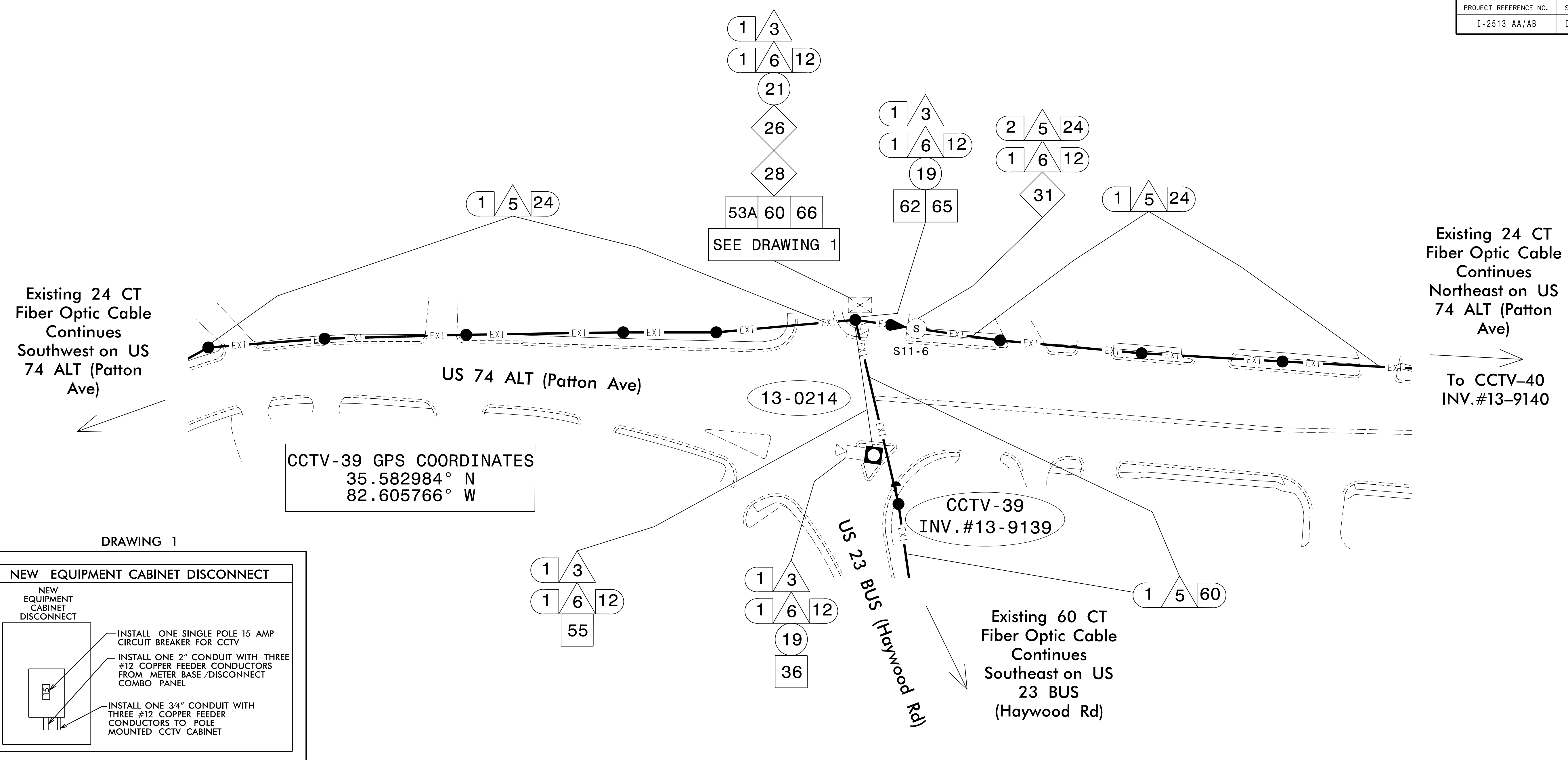
REVISIONS	INIT.	DATE

SCALE: 0 NA N.T.S.

DocuSigned by:
Rachelle Garrett 1/19/2024

AECOM
NC Firm License No.: F-0342
5438 Wade Park Boulevard
Suite 200 Raleigh, NC 27607
Phone: 919-461-1100

1/19/2024 P:\a\acomm-nc-pw-bentl\ey-com-ae-com-ds21_na_2020\documents\60646756-1-2513AA-AB-ITS-PSI022.dgn T:\na\im



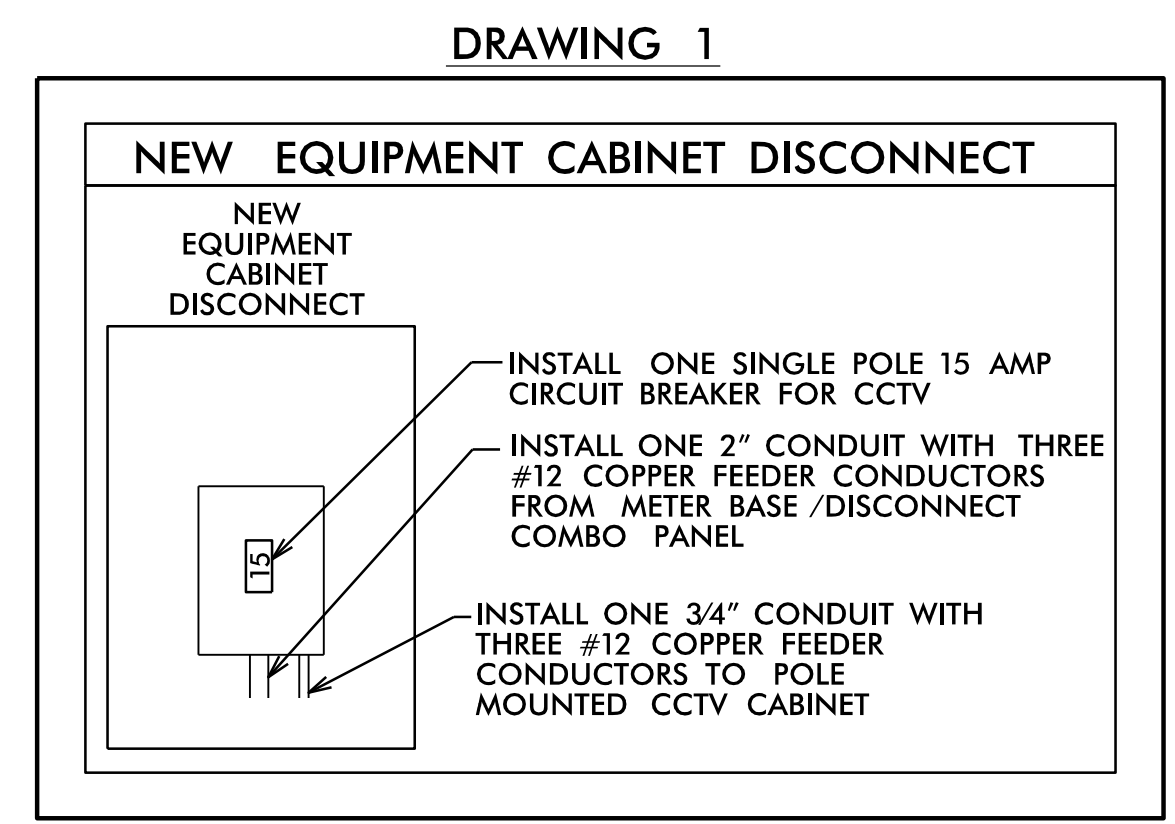
Existing 24 CT Fiber Optic Cable Continues Southwest on US 74 ALT (Patton Ave)

Existing 24 CT Fiber Optic Cable Continues Northeast on US 74 ALT (Patton Ave)
To CCTV-40 INV.#13-9140

CCTV-39 GPS COORDINATES
35.582984° N
82.605766° W

CCTV-39 INV.#13-9139

Existing 60 CT Fiber Optic Cable Continues Southeast on US 23 BUS (Haywood Rd)



NOTES:

1. LOCATION OF EXISTING CCTV-39 IS BEYOND ROADWAY CONSTRUCTION LIMITS. INSTALL SIGNAL POLE MOUNTED CCTV CAMERA AND ACTIVATE DURING PHASE I OF CONSTRUCTION.

1/19/2024 10:44:43 a.m. \\pww-bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\AB-ITS_P51023.dgn T:\ndm



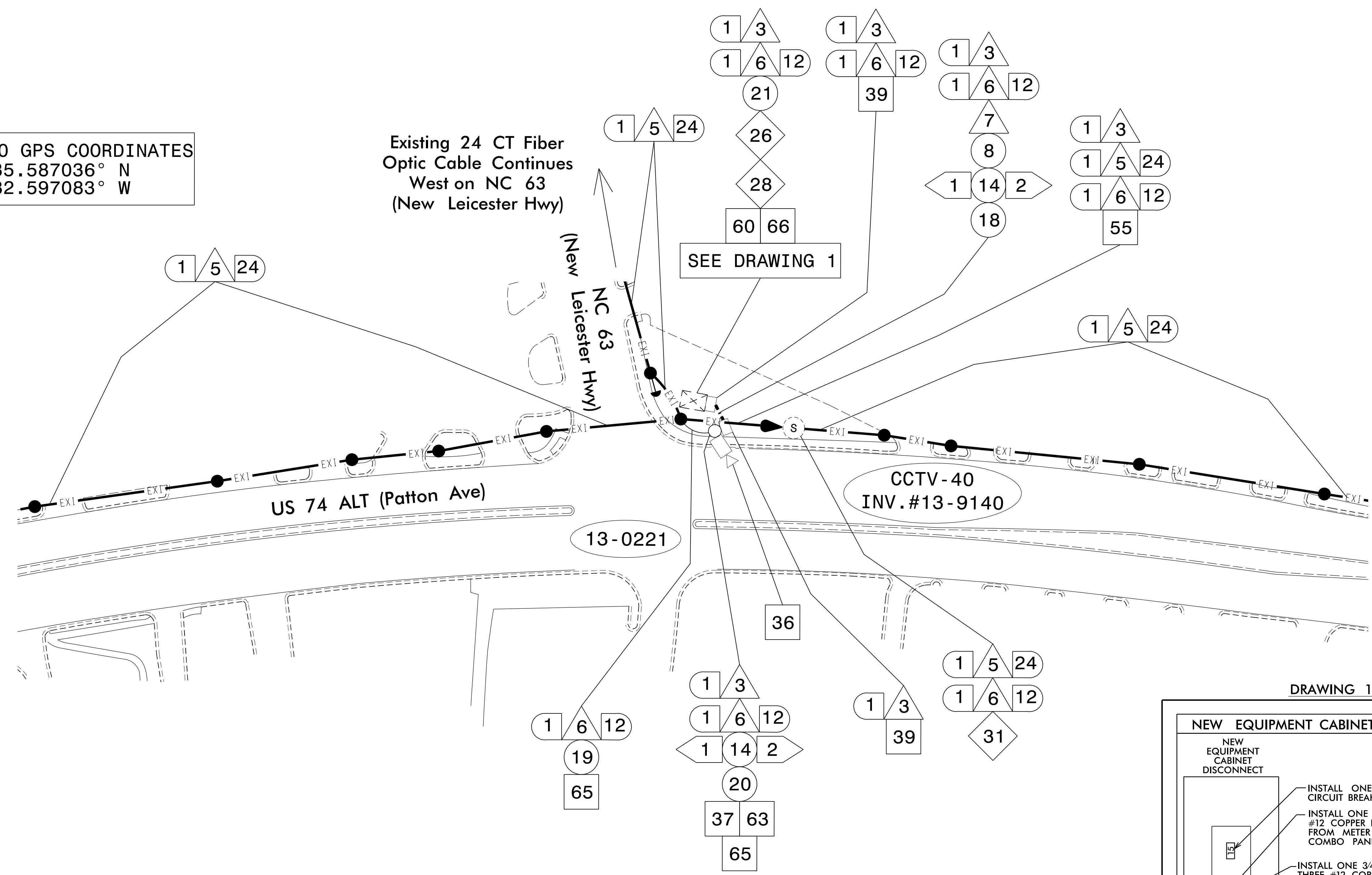
Prepared for the Offices of:		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
		ITS Communication Cable and Conduit Routing Plans	
		DIVISION 13 BUNCOMBE CO., ASHEVILLE	
PLAN DATE: January 2024		REVIEWED BY: M. Cavanaugh	
PREPARED BY: M. Tindal		REVIEWED BY: R. Garrett	
SCALE: 0 NA N.T.S.		REVISIONS: _____ INIT. DATE _____	
DocuSigned by: <i>Rachelle Massett</i> 1/19/2024		SEAL:	

CCTV-40 GPS COORDINATES
35.587036° N
82.597083° W

Existing 24 CT Fiber
Optic Cable Continues
West on NC 63
(New Leicester Hwy)

Existing 24 CT
Fiber Optic Cable
Continues
Northeast on US
74 ALT (Patton
Ave)

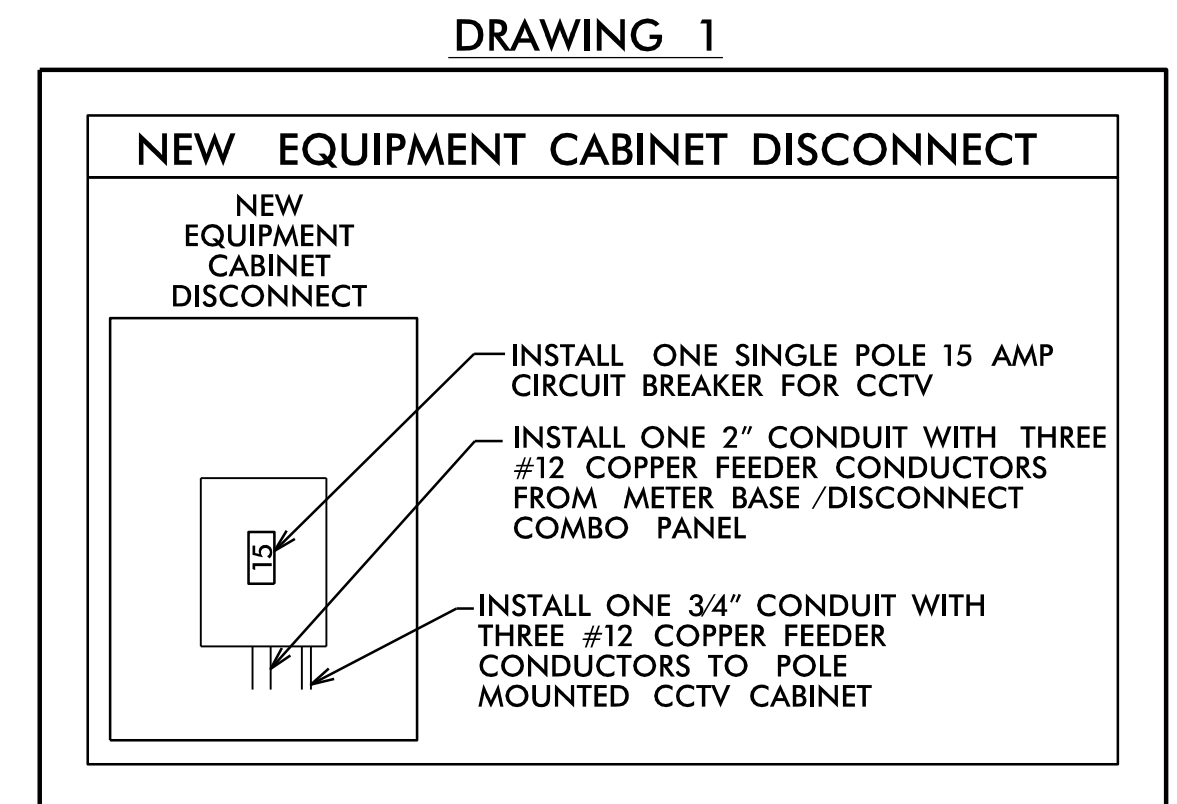
Existing 24 CT
Fiber Optic Cable
Continues
Northeast on US
74 ALT (Patton
Ave)



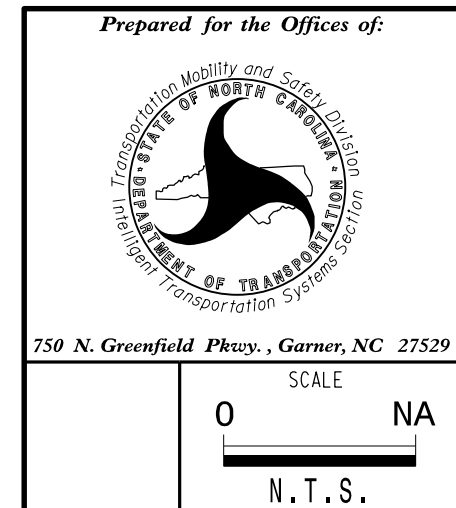
To CCTV-39
INV.#13-9139

NOTES:

- 1. LOCATION OF NEW CCTV-40 IS BEYOND ROADWAY CONSTRUCTION LIMITS. INSTALL WOOD POLE MOUNTED CAMERA AND ACTIVATE DURING PHASE I OF CONSTRUCTION.



1/19/2024 10:44:44 AM C:\Users\paw_bentl\ey-com\AECOM\B21_NA_2020\Documents\60646756-1-2513AA\AB\ITS_P1924.dgn T:\na\m



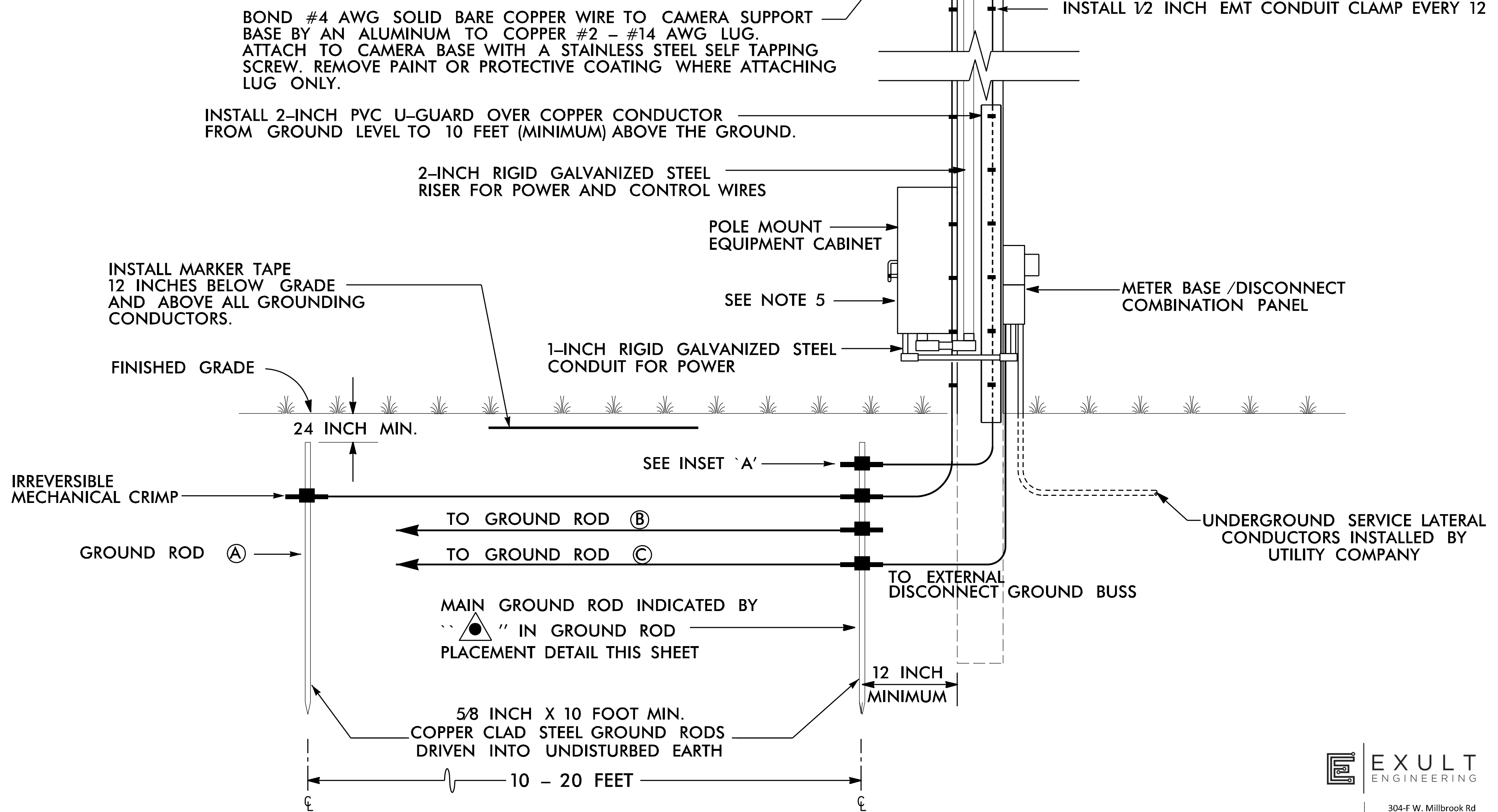
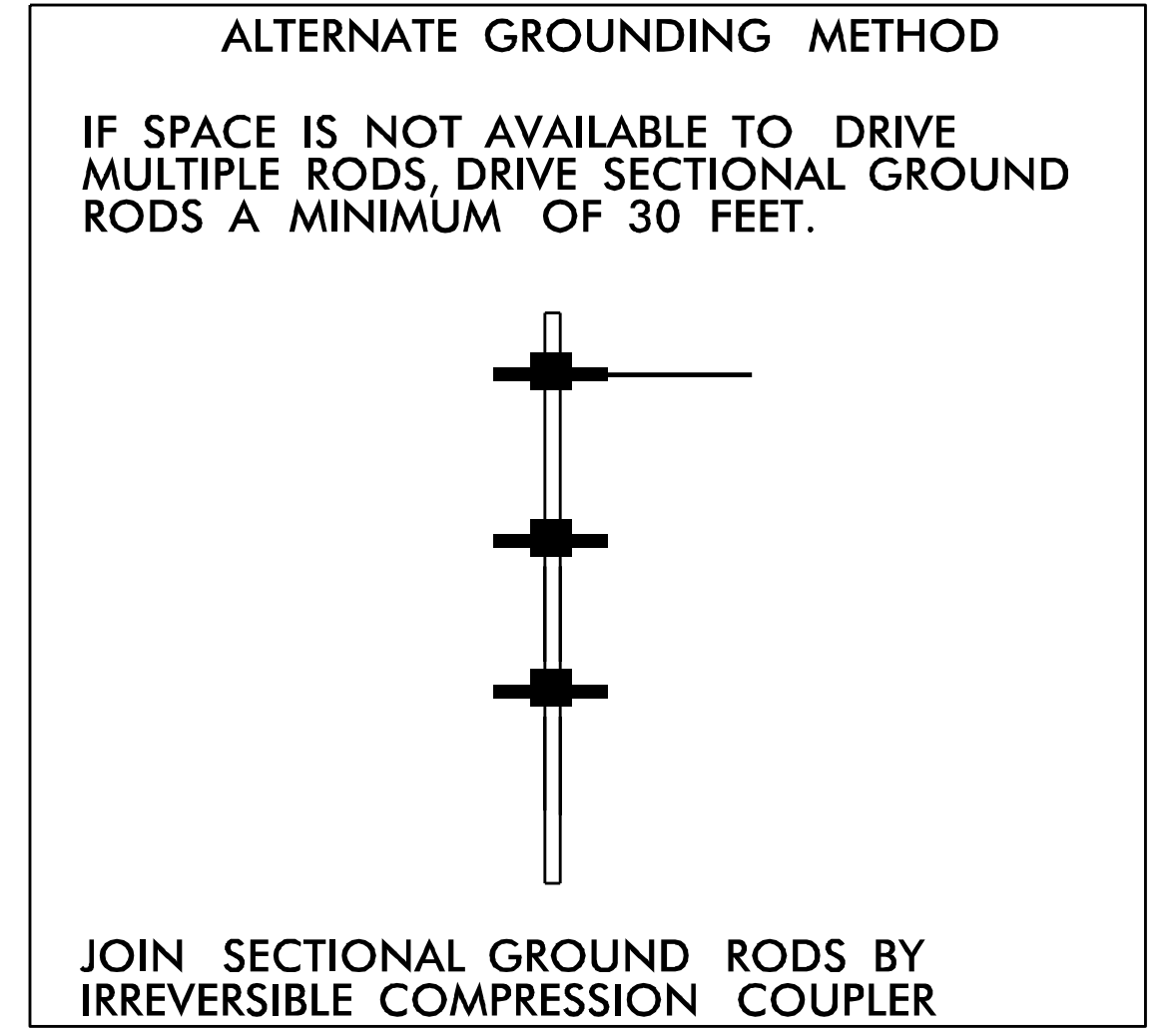
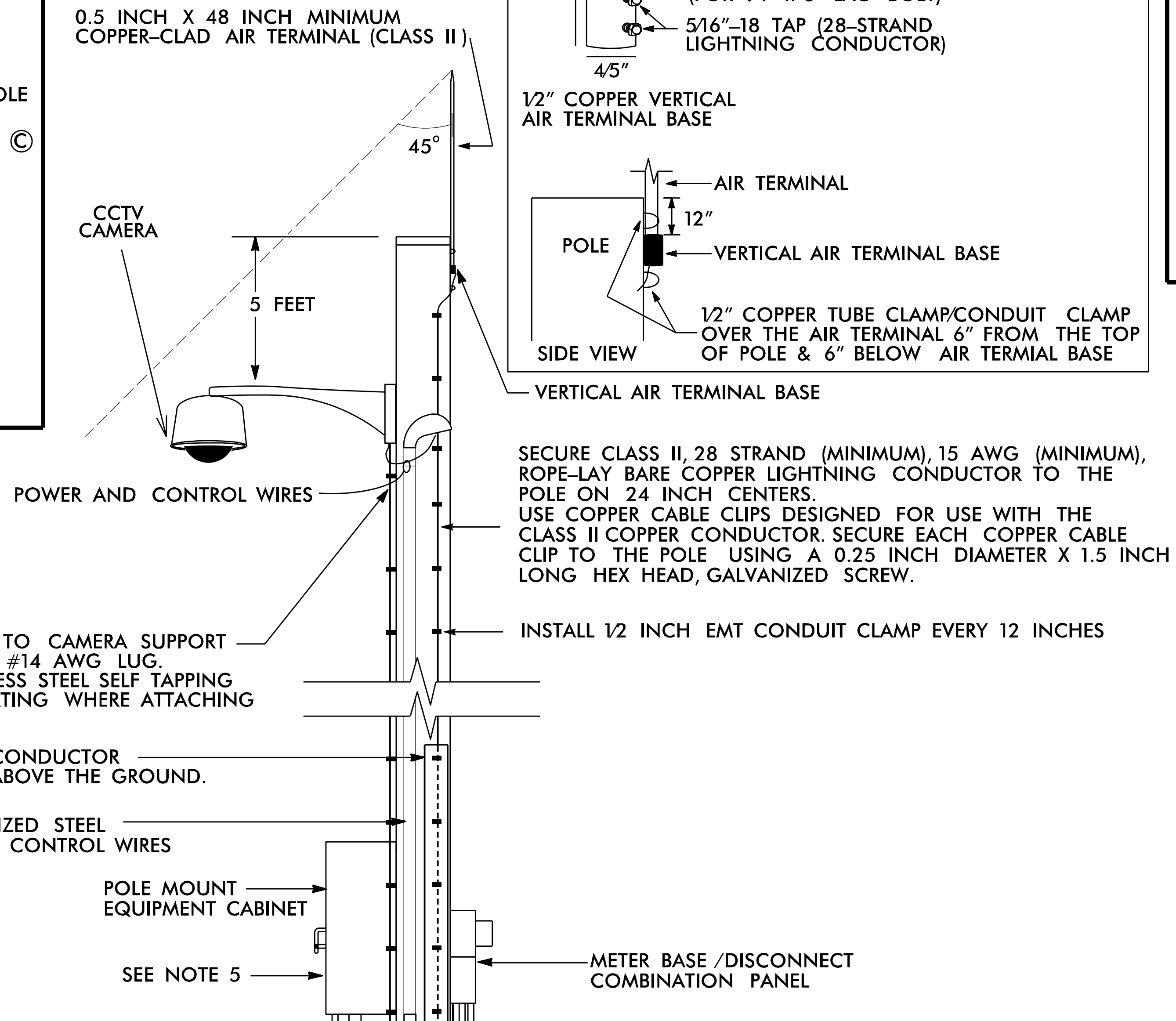
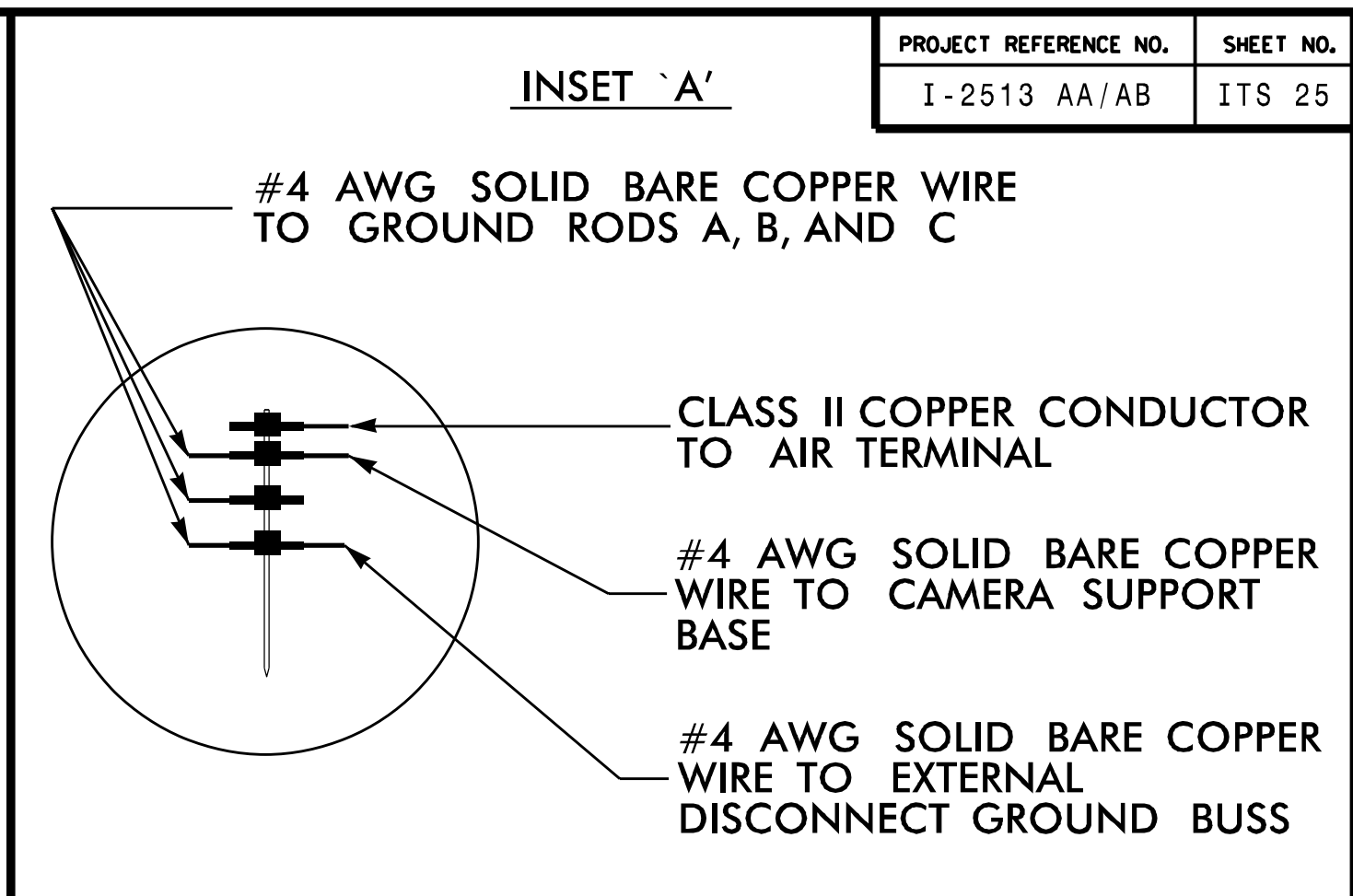
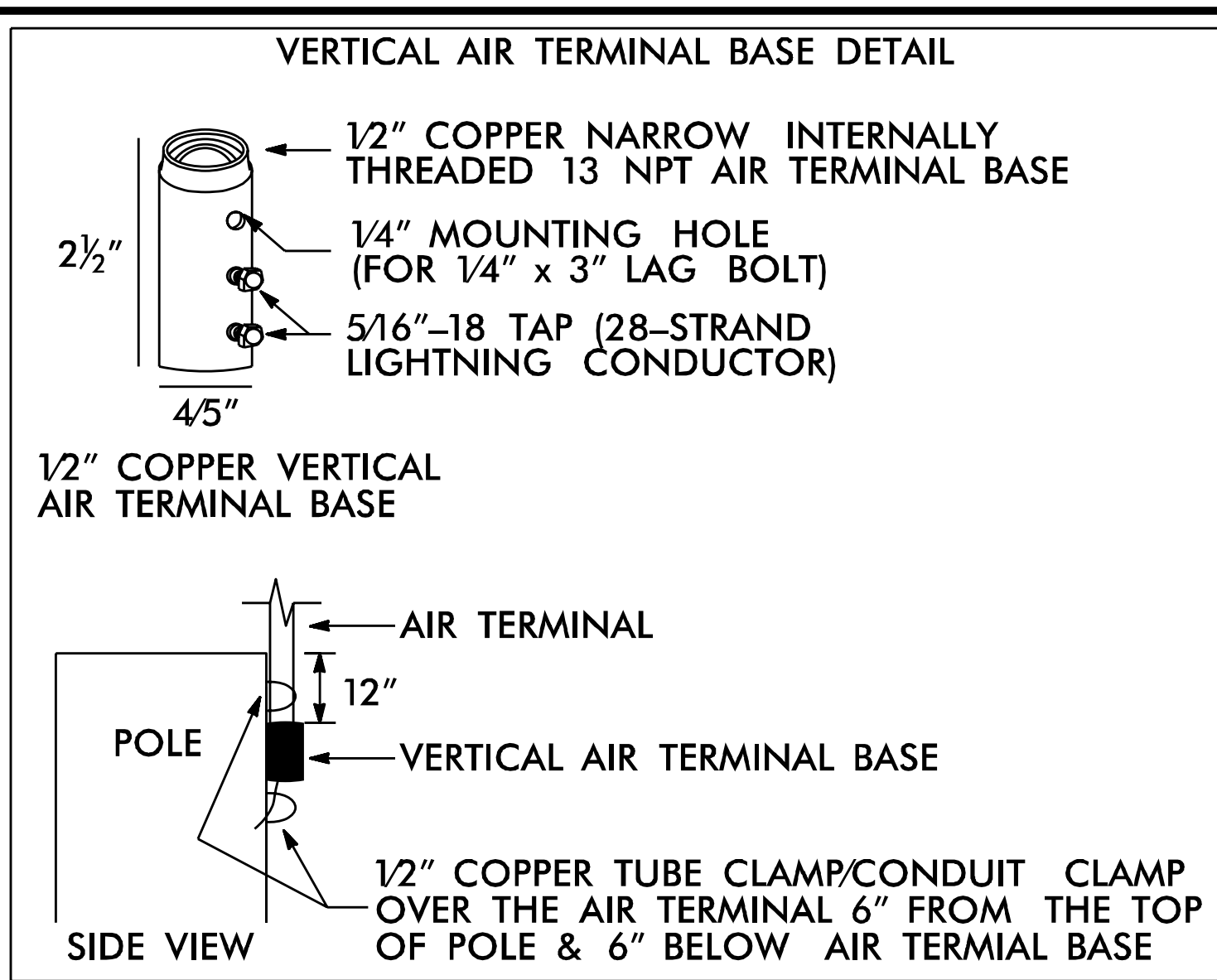
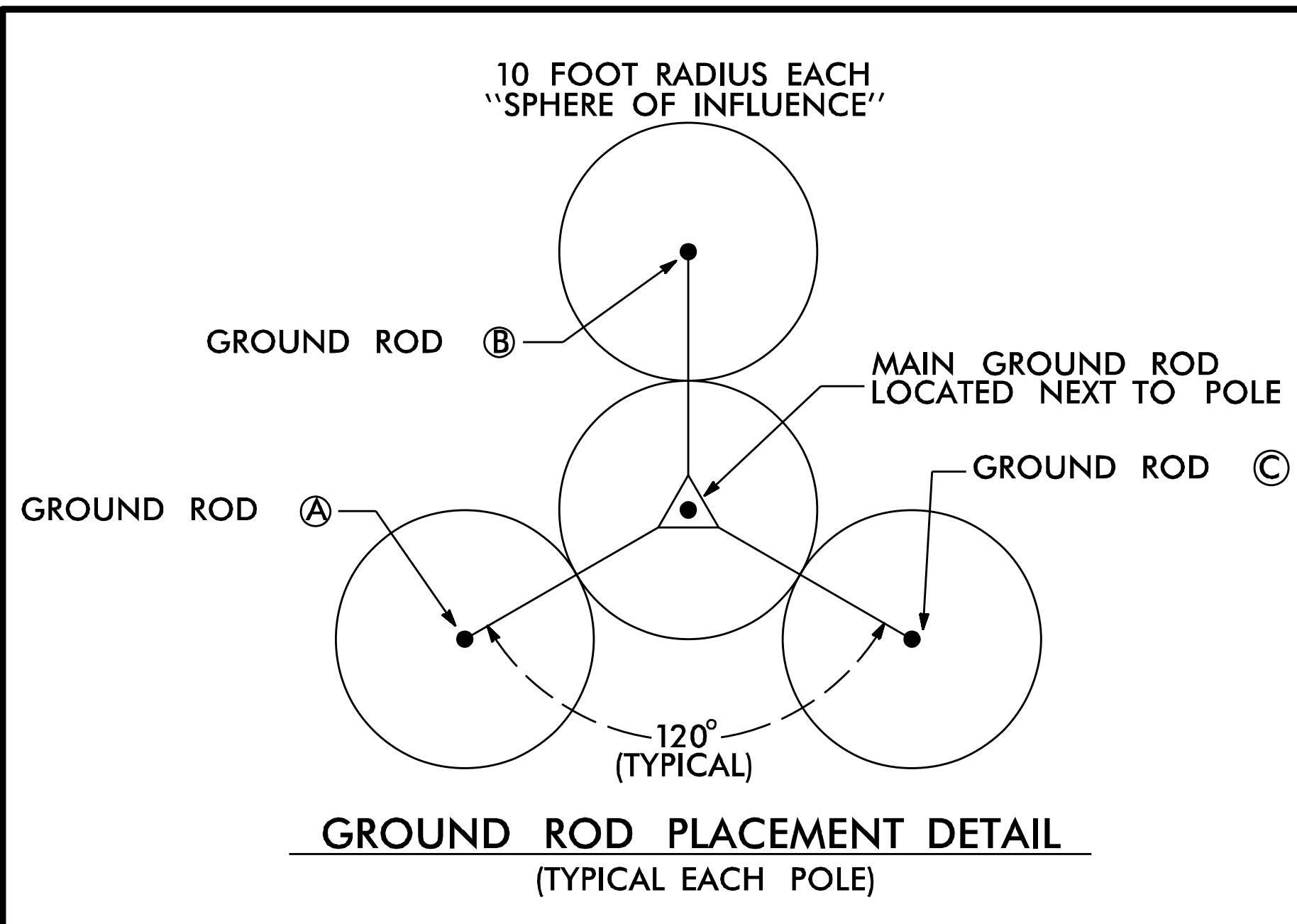
ITS Communication Cable and Conduit Routing Plans

DIVISION 13	BUNCOMBE CO.	ASHEVILLE
PLAN DATE: January 2024	REVIEWED BY: M. Cavanaugh	
PREPARED BY: M. Tindal	REVIEWED BY: R. Garrett	
REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DocuSigned by:
Rachel Garrett
1/19/2024



NOTES

1. BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE-LAY BARE COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
2. ALL CONNECTIONS TO GROUND RODS SHOULD BE MADE WITH AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
3. REFER TO STANDARD DRAWING 1700-2 FOR ALTERNATE GROUND ROD INSTALLATION METHOD AS APPROVED BY THE ENGINEER.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
5. REMOVE BONDING JUMPER BETWEEN EQUIPMENT CABINET GROUND BUSS AND NEUTRAL BUSS.

EXULT ENGINEERING
304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5425
www.exultengineering.com

Plans Prepared For:
EXULT ENGINEERING
250 N. Greenfield Place, Garner, NC 27529

CCTV CAMERA INSTALLATION FOR WOOD POLES WITH UNDERGROUND ELECTRICAL SERVICE

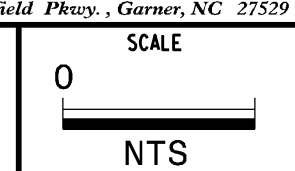
DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

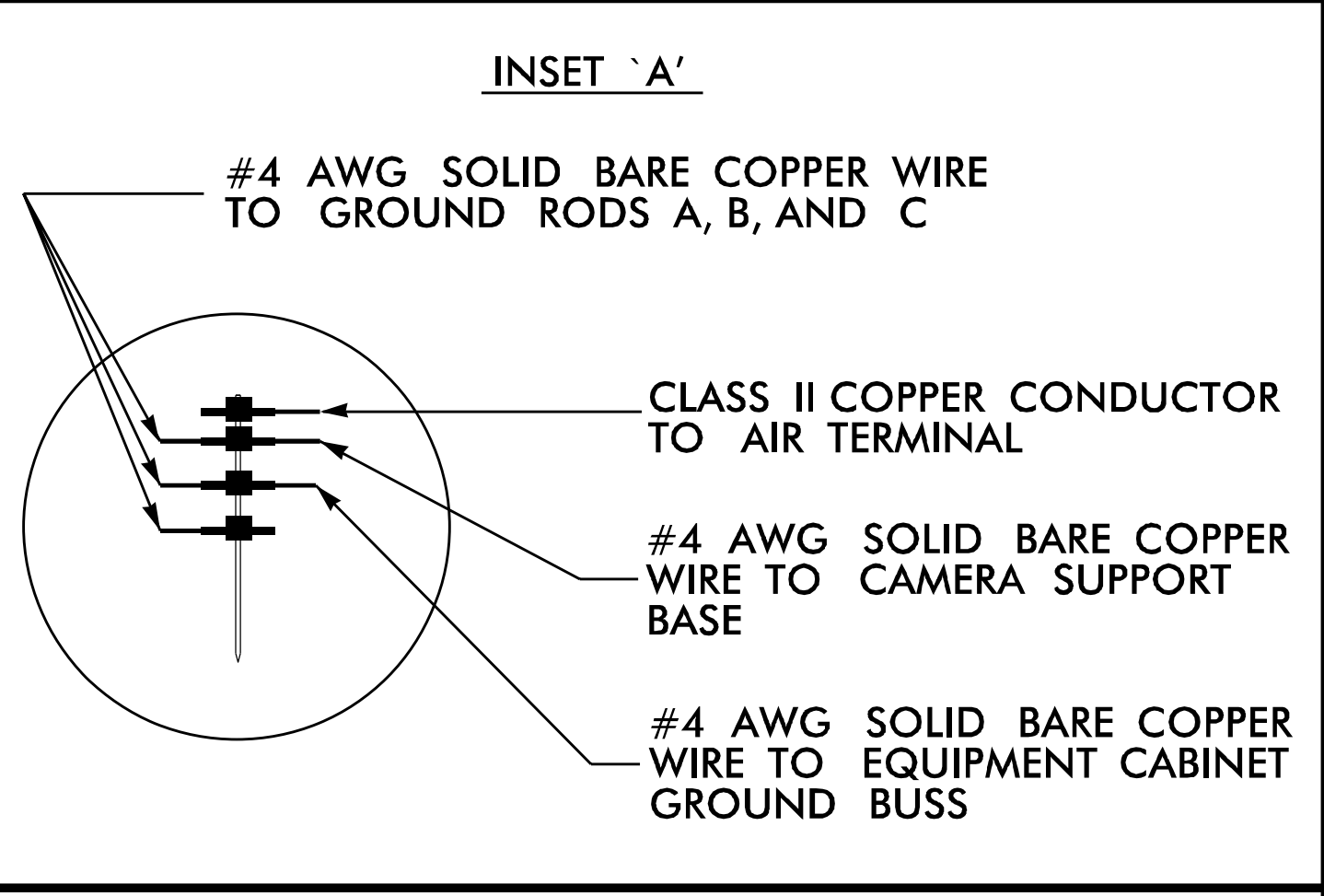
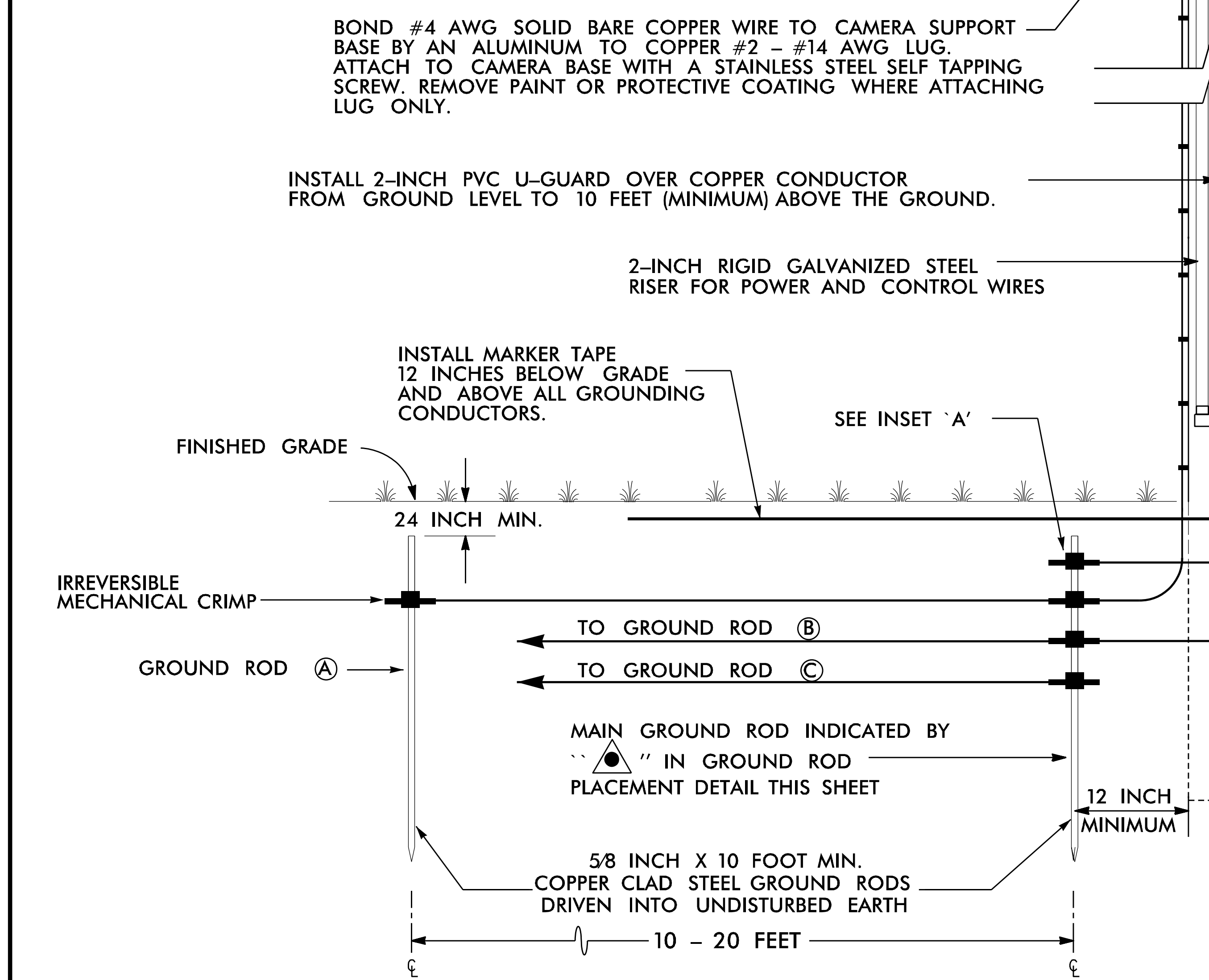
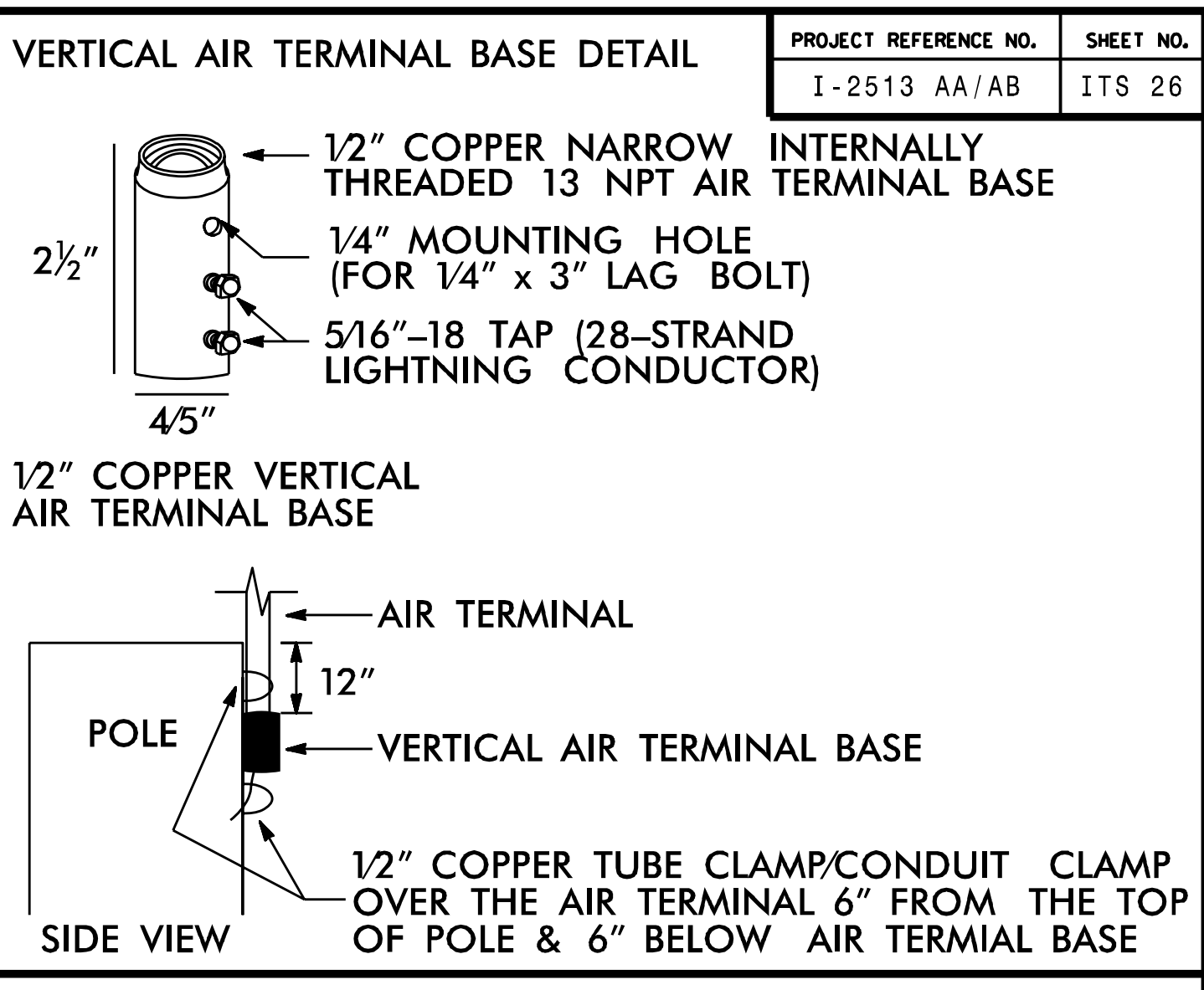
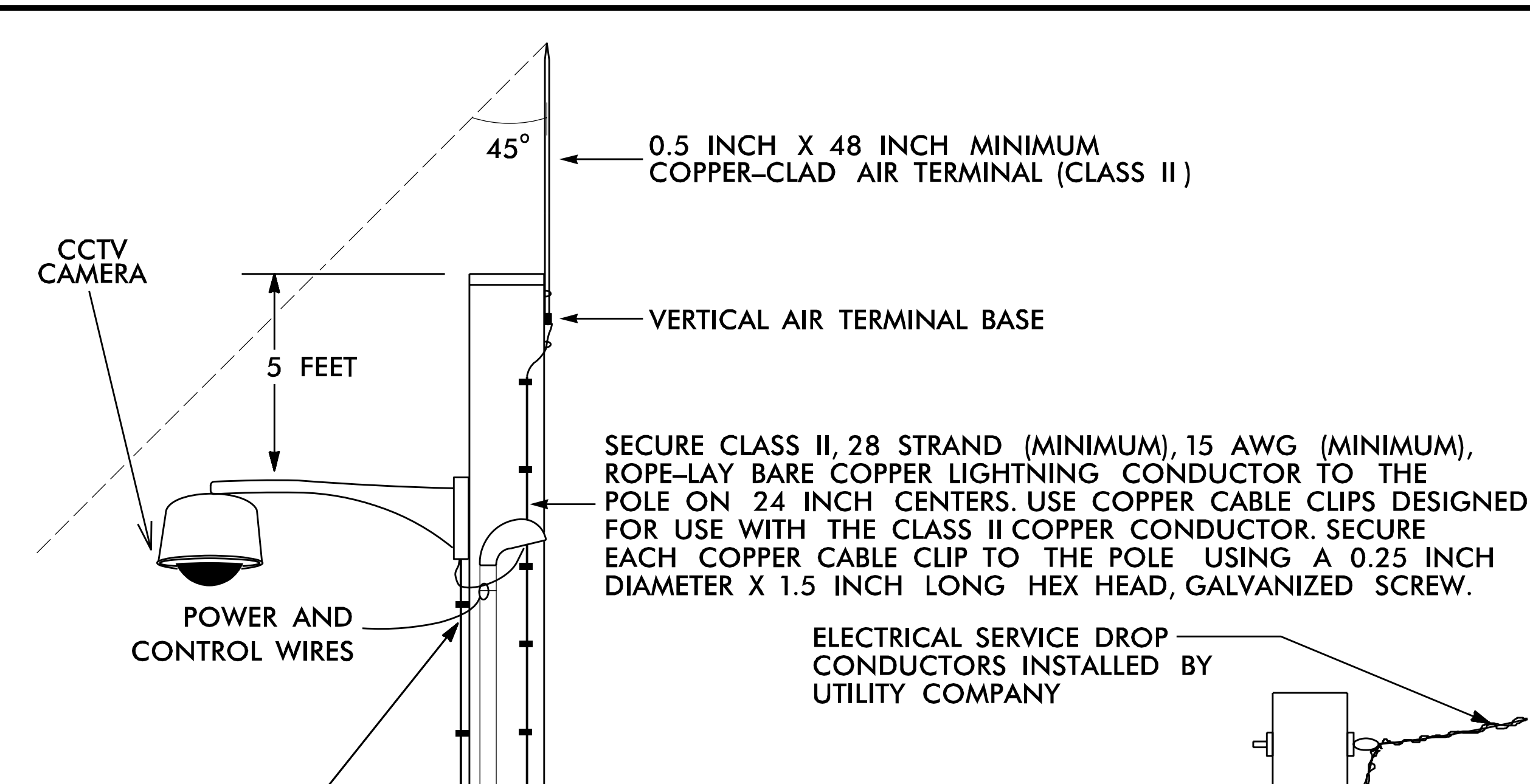
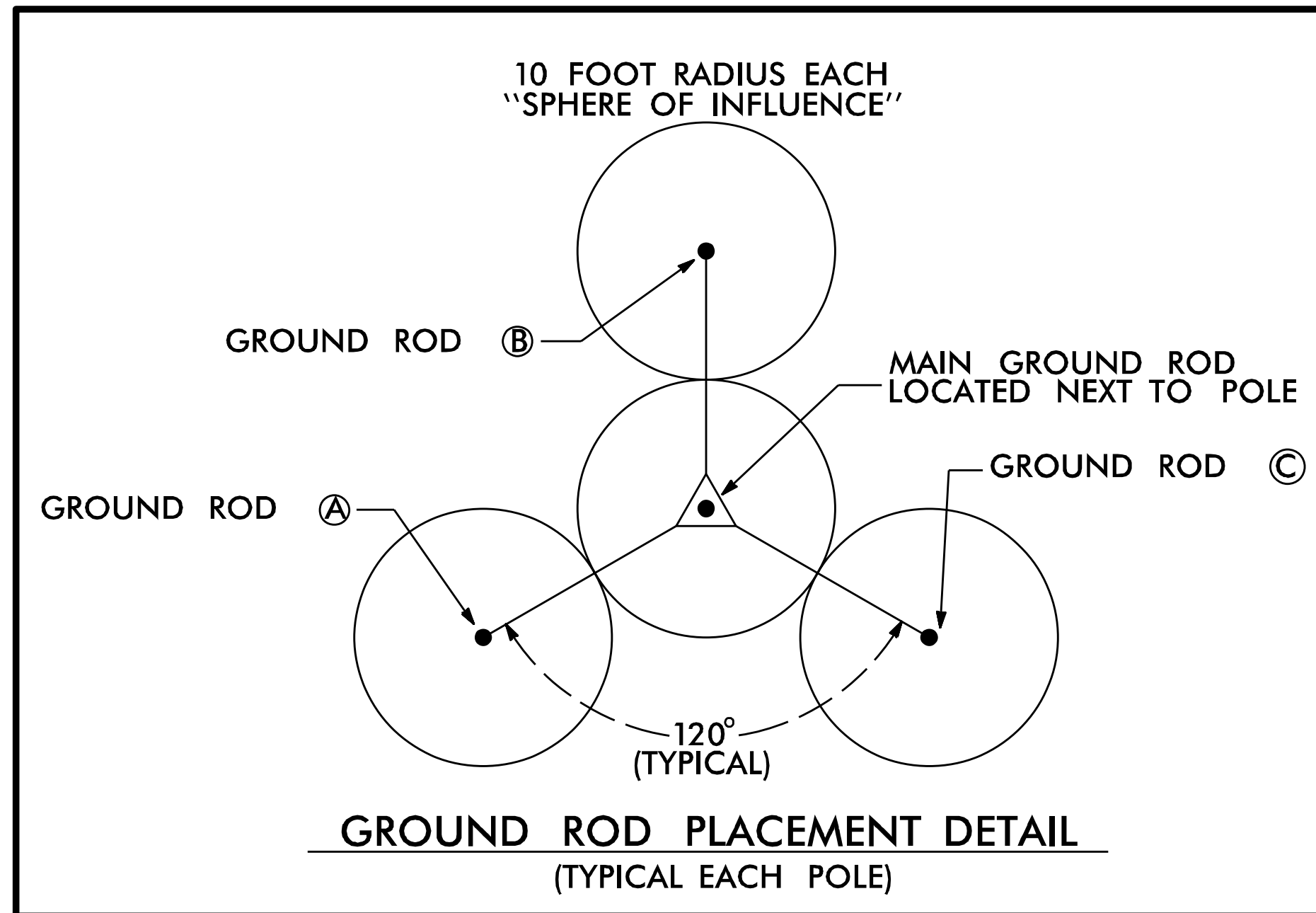
PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT
PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 043814
TAYLOR A. HONEYCUTT

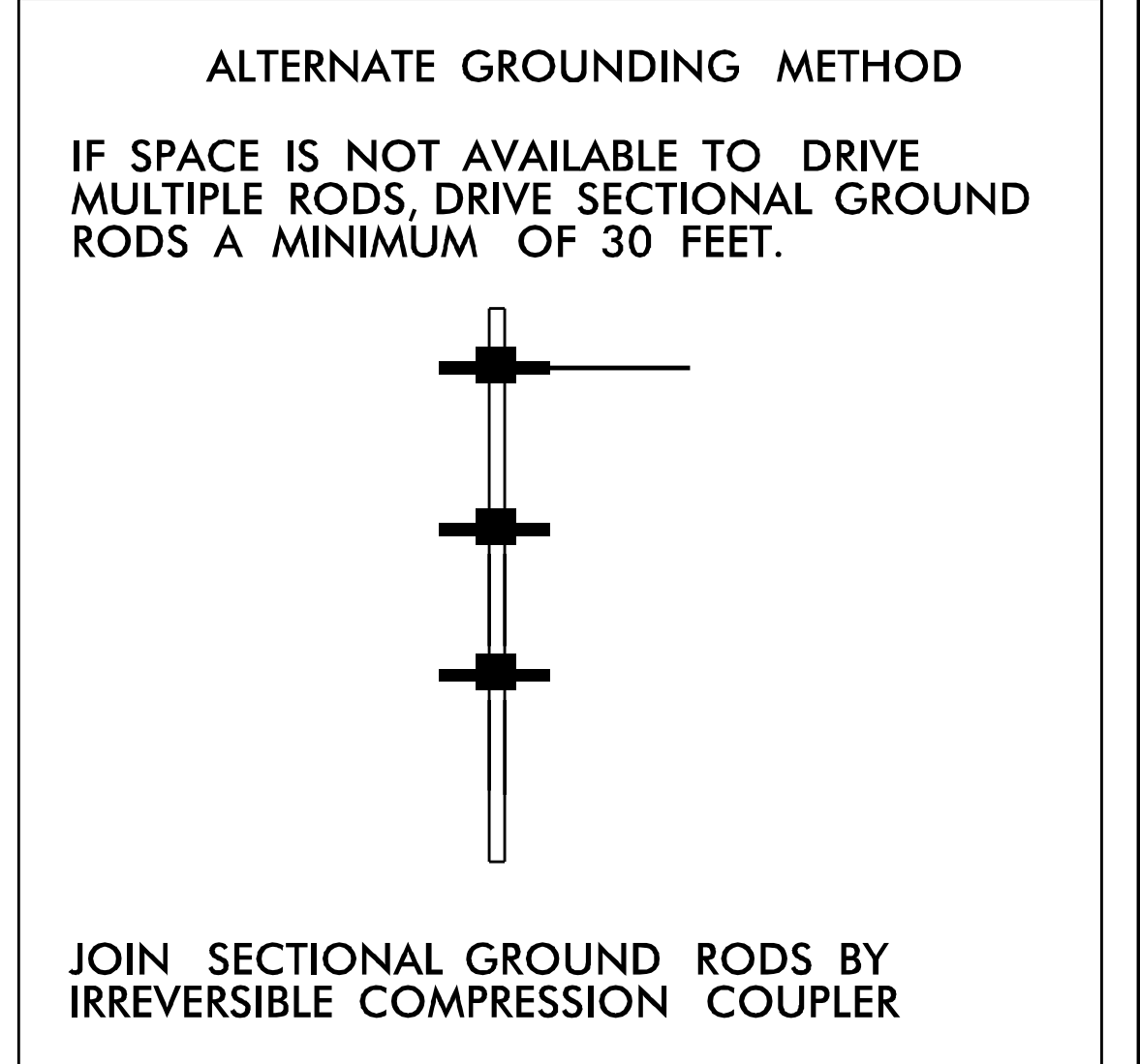
SIGNATURE DATE





INSTALL ELECTRICAL SERVICE POLE NEAR RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.

- NOTES**
1. BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE-LAY BARE COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
 2. ALL CONNECTIONS TO GROUND RODS SHOULD BE MADE WITH AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
 3. REFER TO STANDARD DRAWING 1700-2 FOR ALTERNATE GROUND ROD INSTALLATION METHOD AS APPROVED BY THE ENGINEER.
 4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
 5. REMOVE BONDING JUMPER BETWEEN EQUIPMENT CABINET GROUND BUSS AND NEUTRAL BUSS.



EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5435
www.exultengineering.com

NC License #C-4445

Plans Prepared For:

250 N. Greenfield Place, Garner, NC 27529

CCTV CAMERA INSTALLATION FOR WOOD POLES WITH AERIAL ELECTRICAL SERVICE

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

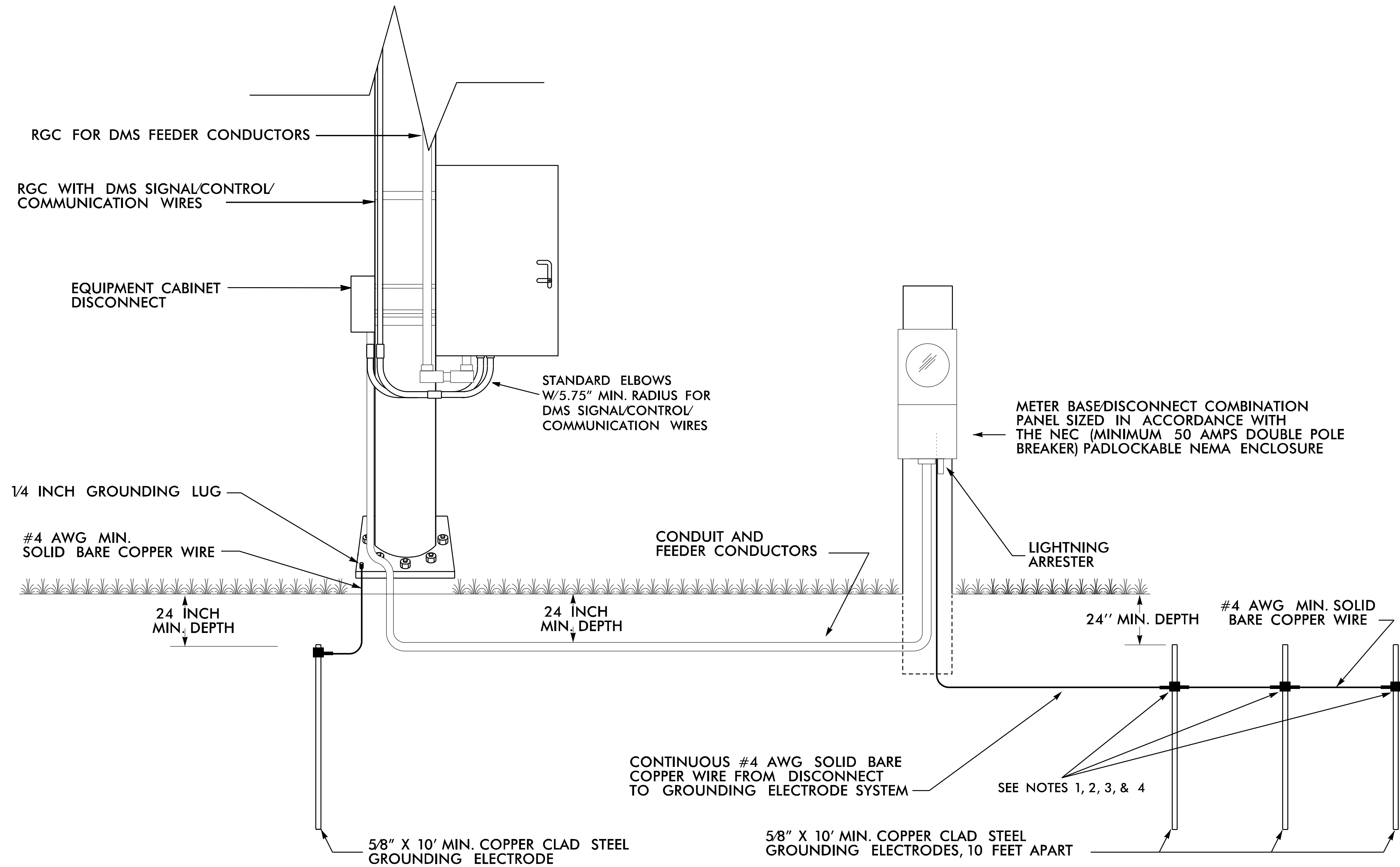
PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT
PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SIGNATURE _____ DATE _____

SEAL

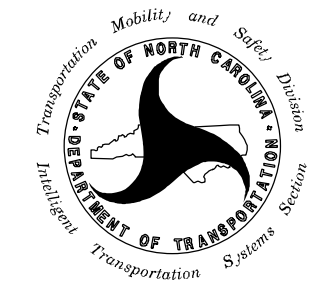
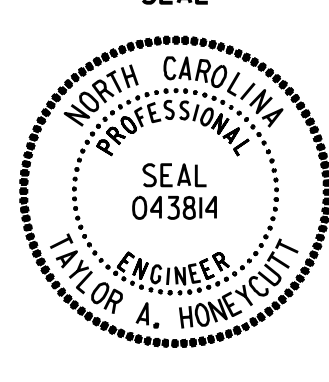
TAYLOR A. HONEYCUTT



NOTES

1. INSTALL A MINIMUM OF THREE (3) GROUNDING ELECTRODES SPACED A MINIMUM OF 10 FEET APART. ENSURE THAT EXISTING UNDERGROUND FACILITIES ARE NOT DAMAGED DURING INSTALLATION.
2. TEST GROUNDING SYSTEM USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE TWENTY (20) OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER TO MEET THIS REQUIREMENT.
3. EXOTHERMICALLY WELD ALL CONNECTIONS TO GROUND RODS.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
5. REMOVE BONDING JUMPER IN EQUIPMENT CABINET IF INSTALLED BETWEEN AC NEUTRAL AND EQUIPMENT GROUND.
6. BOND ALL RIGID GALVANIZED STEEL CONDUITS ENTERING THE CABINET TO "EQUIPMENT GROUND".
7. INSTALL CONDUIT BETWEEN DISCONNECT AND CABINET.
8. ENSURE EQUIPMENT GROUND IS ELECTRICALLY BONDED TO CABINET.


EXULT
 ENGINEERING
 NC License #C-4445
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

Plans Prepared For:  DEPARTMENT OF TRANSPORTATION 250 N. Greenfield Place, Garner, NC 27529	DYNAMIC MESSAGE SIGN WITH UNDERGROUND ELECTRICAL SERVICE		SEAL  TAYLOR A. HONEYCUTT											
	DIVISION 13 BUNCOMBE COUNTY ASHEVILLE PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT	<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> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE								
REVISIONS	INIT.	DATE												
SCALE 0 NTS	SIGNATURE _____ DATE _____													

DMS-19 COORDINATES
 LATITUDE: 35.563712 N
 LONGITUDE: 82.578644 W

ESTIMATED DIMENSION: 21'7" x 7'11"
 MAXIMUM DEADLOAD: 3,000 LBS

EXISTING MAINTENANCE PLATFORM

DMS-19-40-48E

25' MINIMUM
 CLEARANCE
 TO BOTTOM
 OF DMS

FACE OF
 POLE

TRAVEL LANE

PAVED SHLDR

10'

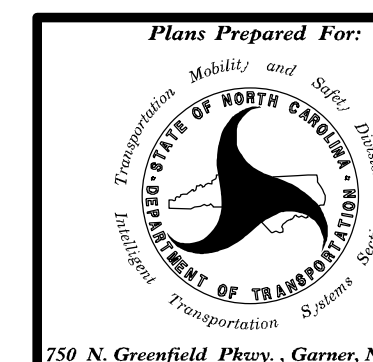
PROPOSED GUARDRAIL

EOT

I-40 EASTBOUND



NC License #C-4445
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5435
 www.exultengineering.com



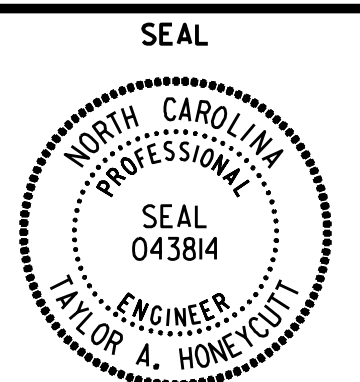
DMS-19-40-48E
 DMS Upgrade Plans
 Elevation View

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

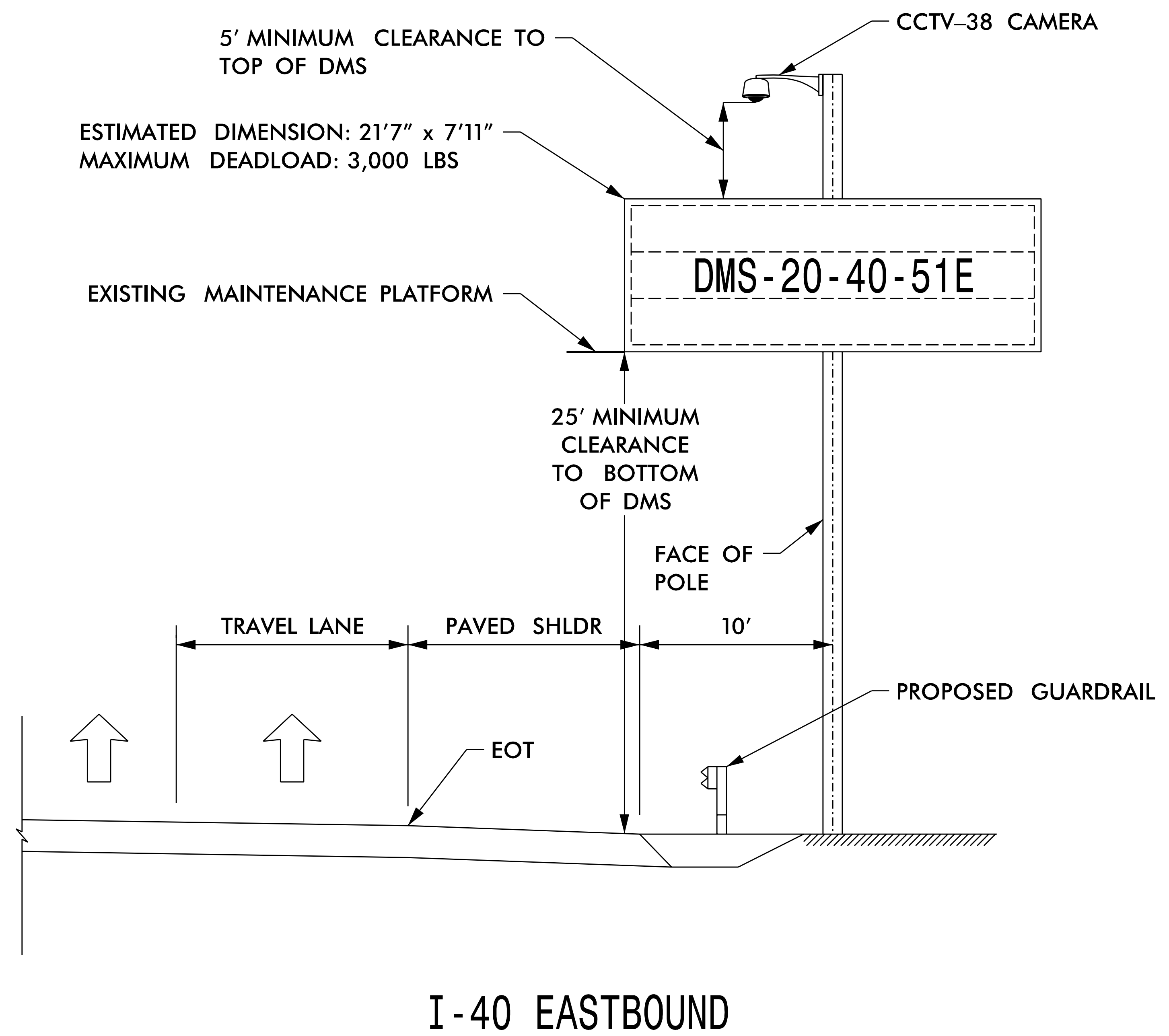
REVISIONS	INIT.	DATE



SIGNATURE DATE

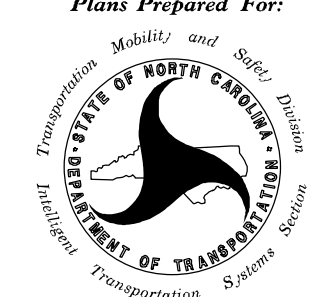
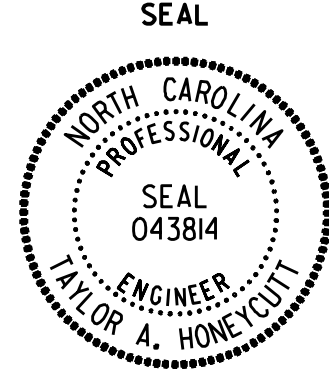
SCALE
 0
 NTS

DMS-20 COORDINATES
 LATITUDE: 35.556327 N
 LONGITUDE: 82.518958 W



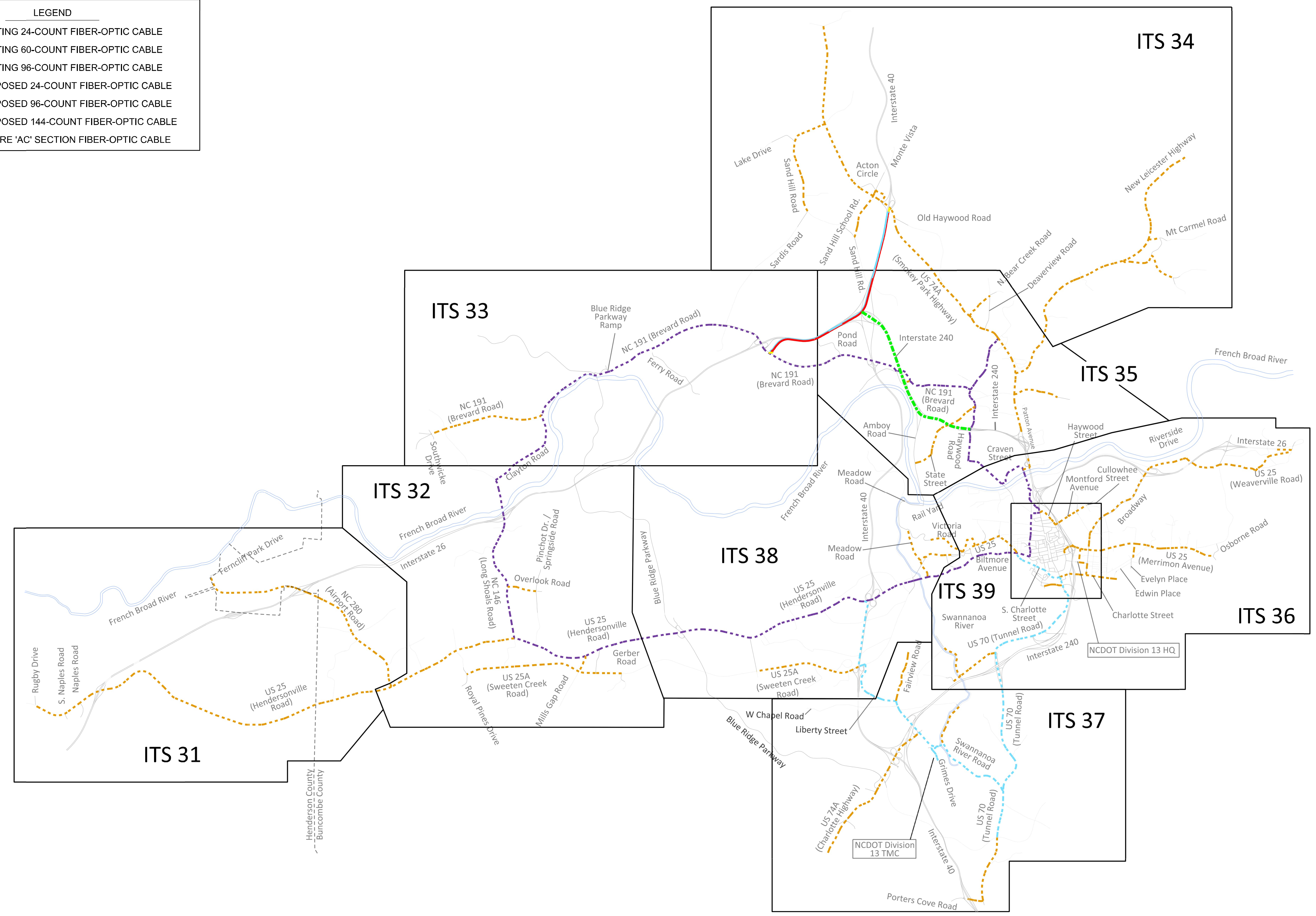
I-40 EASTBOUND

EXULT
 ENGINEERING
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5435
 www.exultengineering.com

 <small>250 N. Greenfield Place, Garner, NC 27529</small>	DMS-20-40-51E DMS Upgrade Plans Elevation View		SEAL  SEAL 043814 TAYLOR A. HONEYCUTT ENGINEER
	DIVISION 13 BUNCOMBE COUNTY ASHEVILLE		
PLAN DATE: JANUARY 2024 PREPARED BY: M. STANLEY	REVIEWED BY: T. HONEYCUTT REVIEWED BY: C. DAGERHARDT		
SCALE 0 NTS	REVISIONS _____ _____ _____	INIT. DATE _____ _____ _____	
SIGNATURE		DATE	

LEGEND

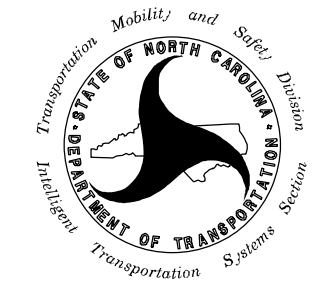
- - - EXISTING 24-COUNT FIBER-OPTIC CABLE
- - - EXISTING 60-COUNT FIBER-OPTIC CABLE
- - - EXISTING 96-COUNT FIBER-OPTIC CABLE
- PROPOSED 24-COUNT FIBER-OPTIC CABLE
- PROPOSED 96-COUNT FIBER-OPTIC CABLE
- PROPOSED 144-COUNT FIBER-OPTIC CABLE
- - - FUTURE 'AC' SECTION FIBER-OPTIC CABLE



EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

NC License #C-4445

Plans Prepared For:

 250 N. Greenfield Place, Garner, NC 27529

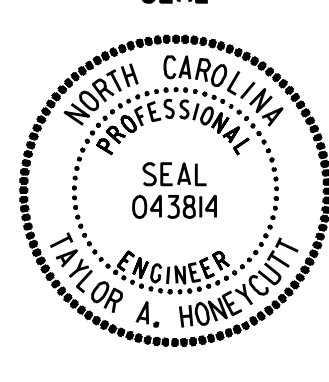
I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT
PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

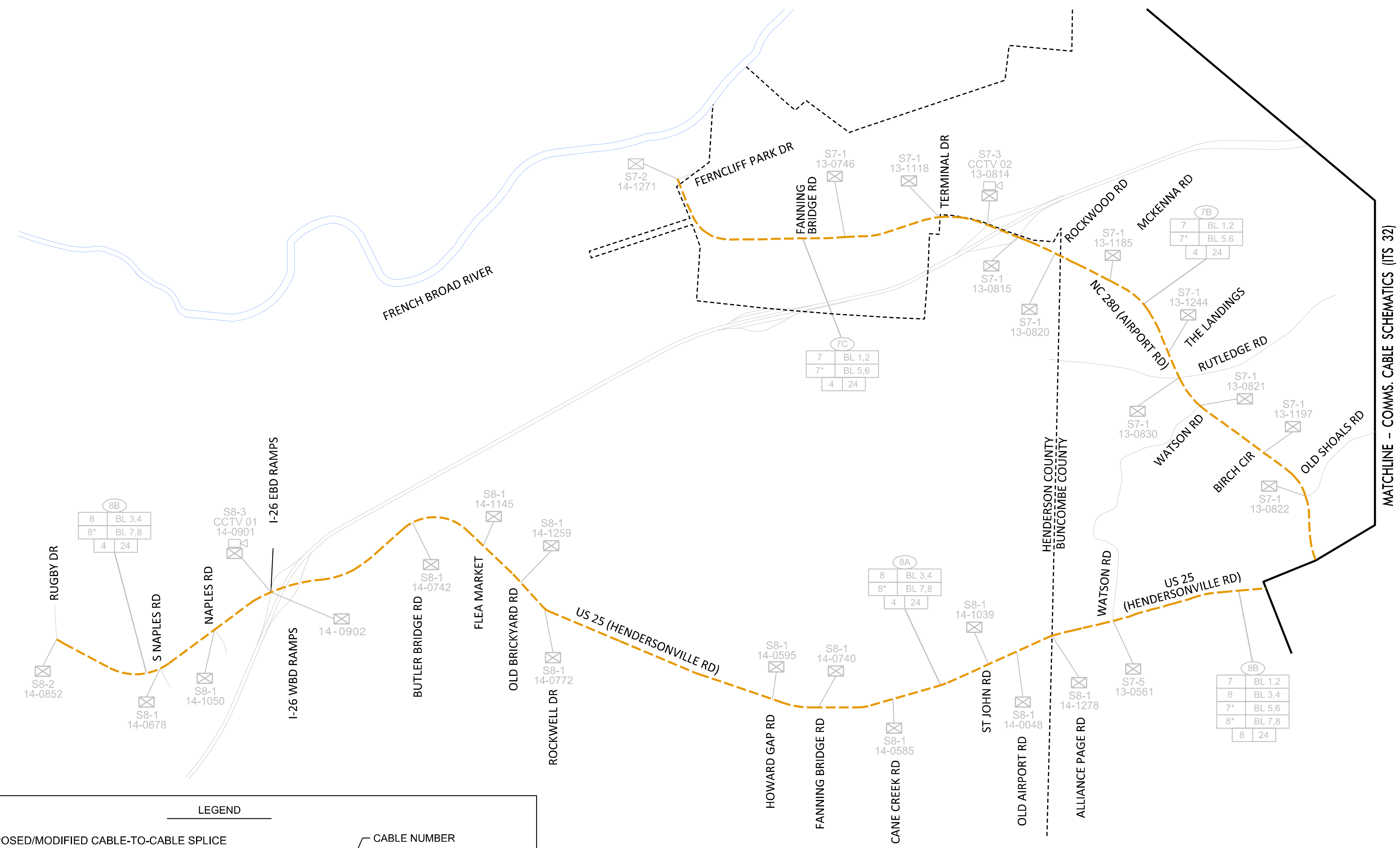
SEAL



TAYLOR A. HONEYCUTT
ENGINEER
SEAL 043814

SIGNATURE DATE

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.



LEGEND

- S** PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- C** CABLE-TO-CABLE SPLICE
- F** END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- ⊗** DROP SPLICE TO SIGNAL CABINET
- ⊗** DROP SPLICE TO CCTV
- ⊗** DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- - -** EXISTING 24-COUNT FIBER-OPTIC CABLE
- S#-##** SPLICE NUMBER
- COA-###** CITY SIGNAL INVENTORY NUMBER
- 13-####** STATE SIGNAL INVENTORY NUMBER

CABLE NUMBER

RING I.D.

20	OR 1,2
20*	OR 3,4
21	OR 7,8
21*	OR 9,10
8	36

FIBERS USED FOR EACH RING

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

*** DENOTES SECONDARY PATH**

CHANNEL'S RING PATH HAS BEEN MODIFIED/ADDED

RING ID SUFFIX:

- F** INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T** INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

NC License #C-4445

Plans Prepared For:
STATE OF NORTH CAROLINA
Department of Transportation

250 N. Greenfield Place, Garner, NC 27529

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

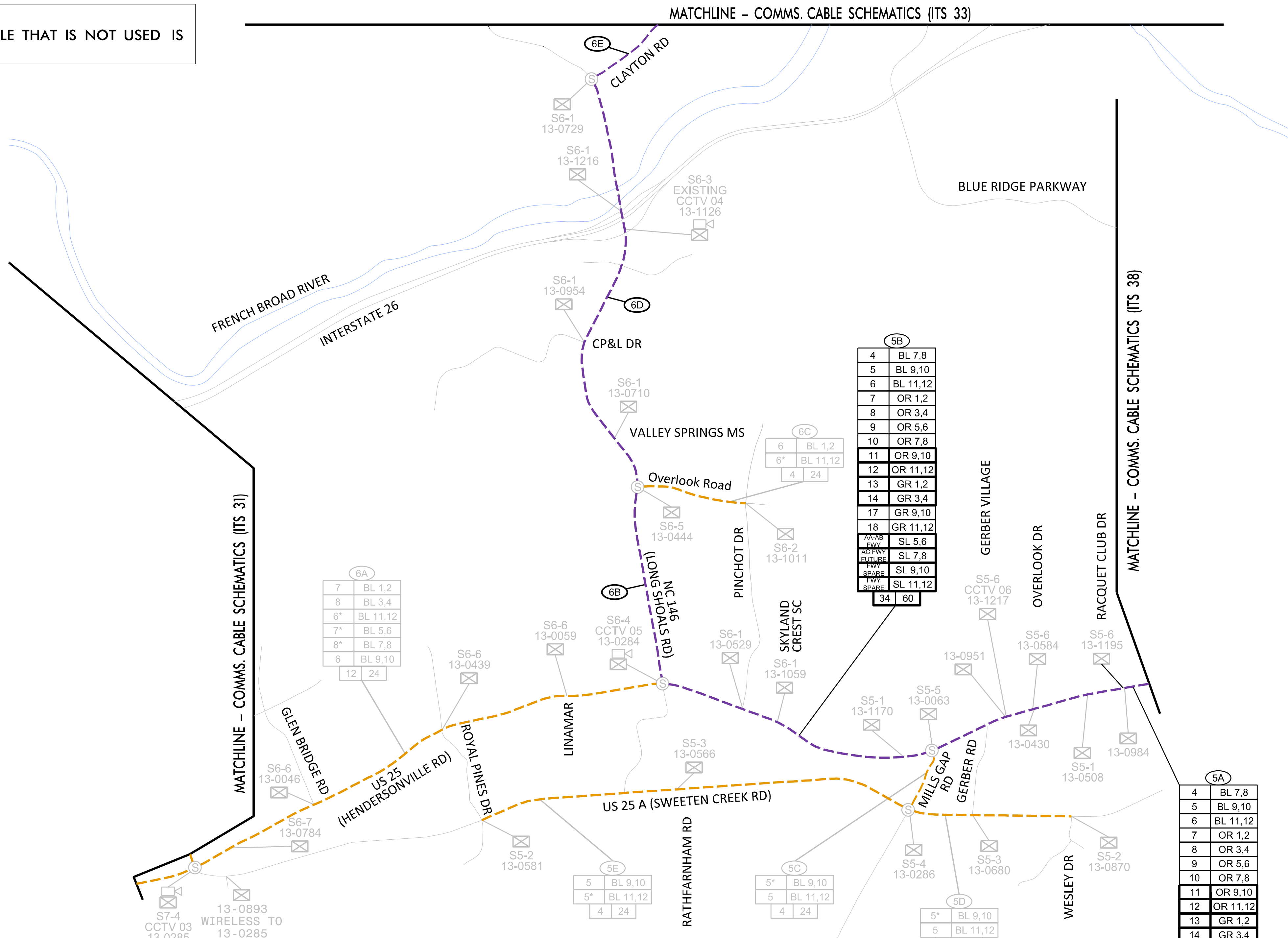
REVISIONS	INIT.	DATE

SEAL

TAYLOR A. HONEYCUTT
ENGINEER
SEAL 043814

SIGNATURE DATE

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.



6B		6D		6E	
4	BL 7,8	4	BL 7,8	4	BL 7,8
5	BL 9,10	5	BL 9,10	5	BL 9,10
6	BL 11,12	6	BL 11,12	6	BL 11,12
7	OR 1,2	7	OR 1,2	7	OR 1,2
8	OR 3,4	8	OR 3,4	8	OR 3,4
9	OR 5,6	9	OR 5,6	9	OR 5,6
10	OR 7,8	10	OR 7,8	10	OR 7,8
11	OR 9,10	11	OR 9,10	11	OR 9,10
12	OR 11,12	12	OR 11,12	12	OR 11,12
13	GR 1,2	13	GR 1,2	13	GR 1,2
14	GR 3,4	14	GR 3,4	14	GR 3,4
17	GR 9,10	17	GR 9,10	17	GR 9,10
18	GR 11,12	18	GR 11,12	18	GR 11,12
AA-AB	SL 5,6	AA-AB	SL 5,6	AA-AB	SL 5,6
AC-FWY	SL 7,8	AC-FWY	SL 7,8	AC-FWY	SL 7,8
FUTURE	SL 9,10	FUTURE	SL 9,10	FUTURE	SL 9,10
FWY	SL 11,12	FWY	SL 11,12	FWY	SL 11,12
SPARE		SPARE		SPARE	
34	60	34	60	34	60

LEGEND

- PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- CABLE-TO-CABLE SPLICE
- END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- DROP SPLICE TO SIGNAL CABINET
- DROP SPLICE TO CCTV
- DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- S#-## SPLICE NUMBER
- COA-### CITY SIGNAL INVENTORY NUMBER
- 13-#### STATE SIGNAL INVENTORY NUMBER

CABLE NUMBER

20	OR 1,2
20*	OR 3,4
21	OR 7,8
21*	OR 9,10
8	36

RING I.D.

FIBERS USED FOR EACH RING

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

* DENOTES SECONDARY PATH

RING ID SUFFIX:

- F INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

EXULT ENGINEERING

304-F.W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

NC License #C-4445

Plans Prepared For:
STATE OF NORTH CAROLINA
Department of Transportation

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

SCALE: 0 NTS

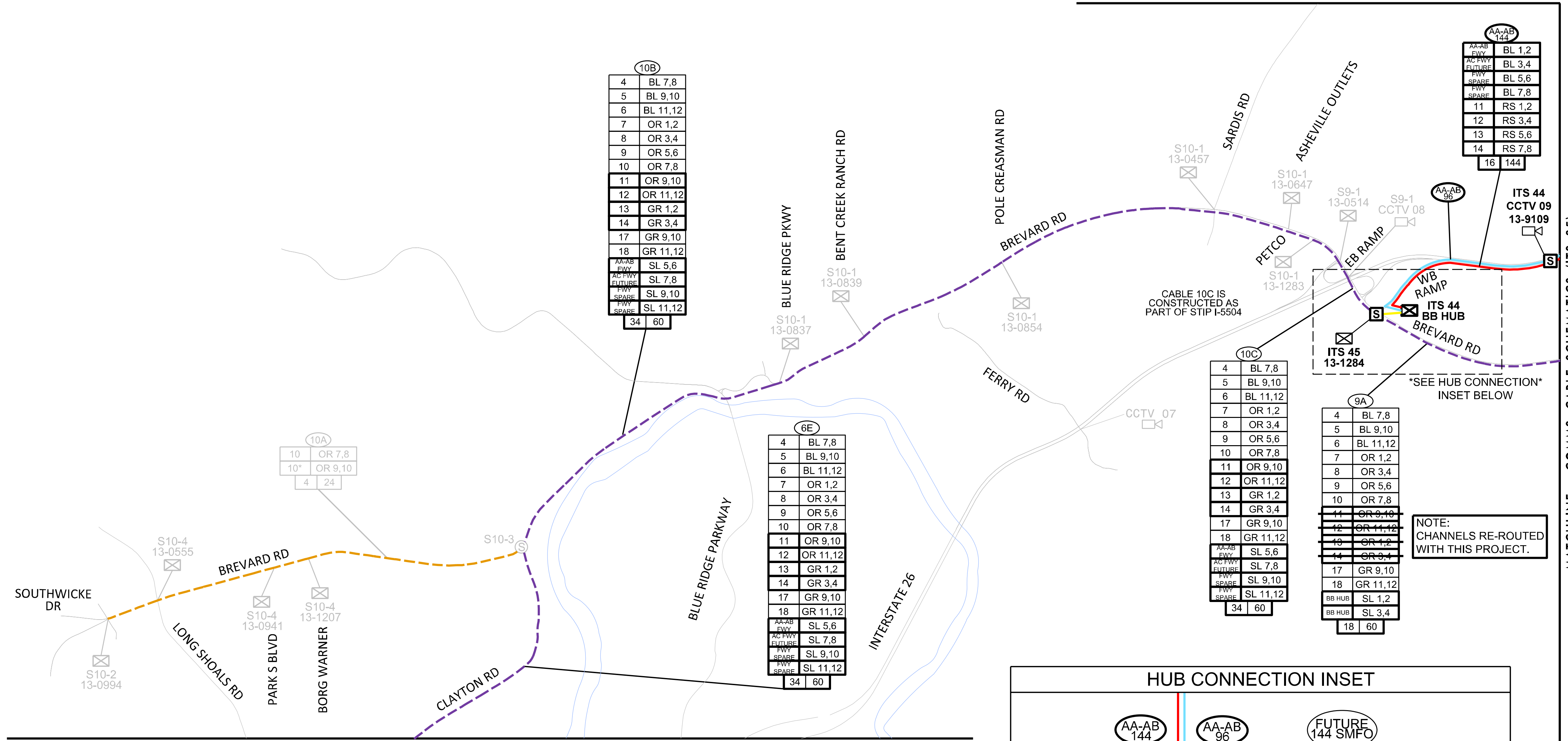
REVISIONS: INIT. DATE

SIGNATURE: DATE

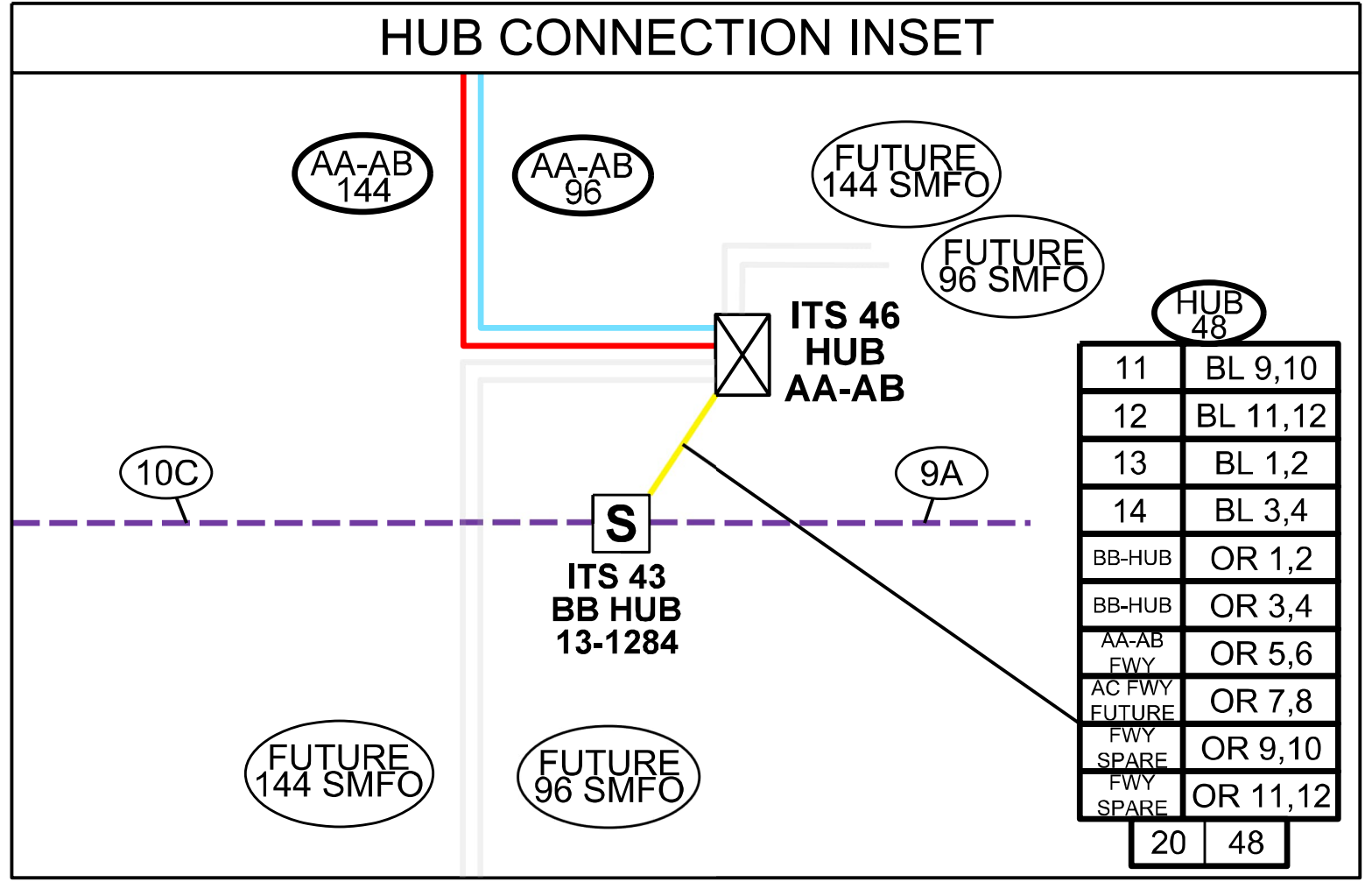
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 043814
TAYLOR A. HONEYCUTT

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 34)



MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 32)



LEGEND

- S** PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- ⊙** CABLE-TO-CABLE SPLICE
- ⊕** END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- ⊗** DROP SPLICE TO SIGNAL CABINET
- ⊘** DROP SPLICE TO CCTV
- ⊙** DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- PROPOSED 48-COUNT FIBER-OPTIC CABLE
- PROPOSED 96-COUNT FIBER-OPTIC CABLE
- PROPOSED 144-COUNT FIBER-OPTIC CABLE
- S#-##** SPLICE NUMBER
- COA-###** CITY SIGNAL INVENTORY NUMBER
- 13-####** STATE SIGNAL INVENTORY NUMBER

CABLE NUMBER

20	OR 1,2
20*	OR 3,4
21	OR 7,8
21*	OR 9,10
8	36

RING I.D.

CHANNEL'S RING PATH HAS BEEN MODIFIED/ADDED

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

* DENOTES SECONDARY PATH

RING ID SUFFIX:

- F** INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T** INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

Plans Prepared For:

250 N. Greenfield Place, Garner, NC 27529

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

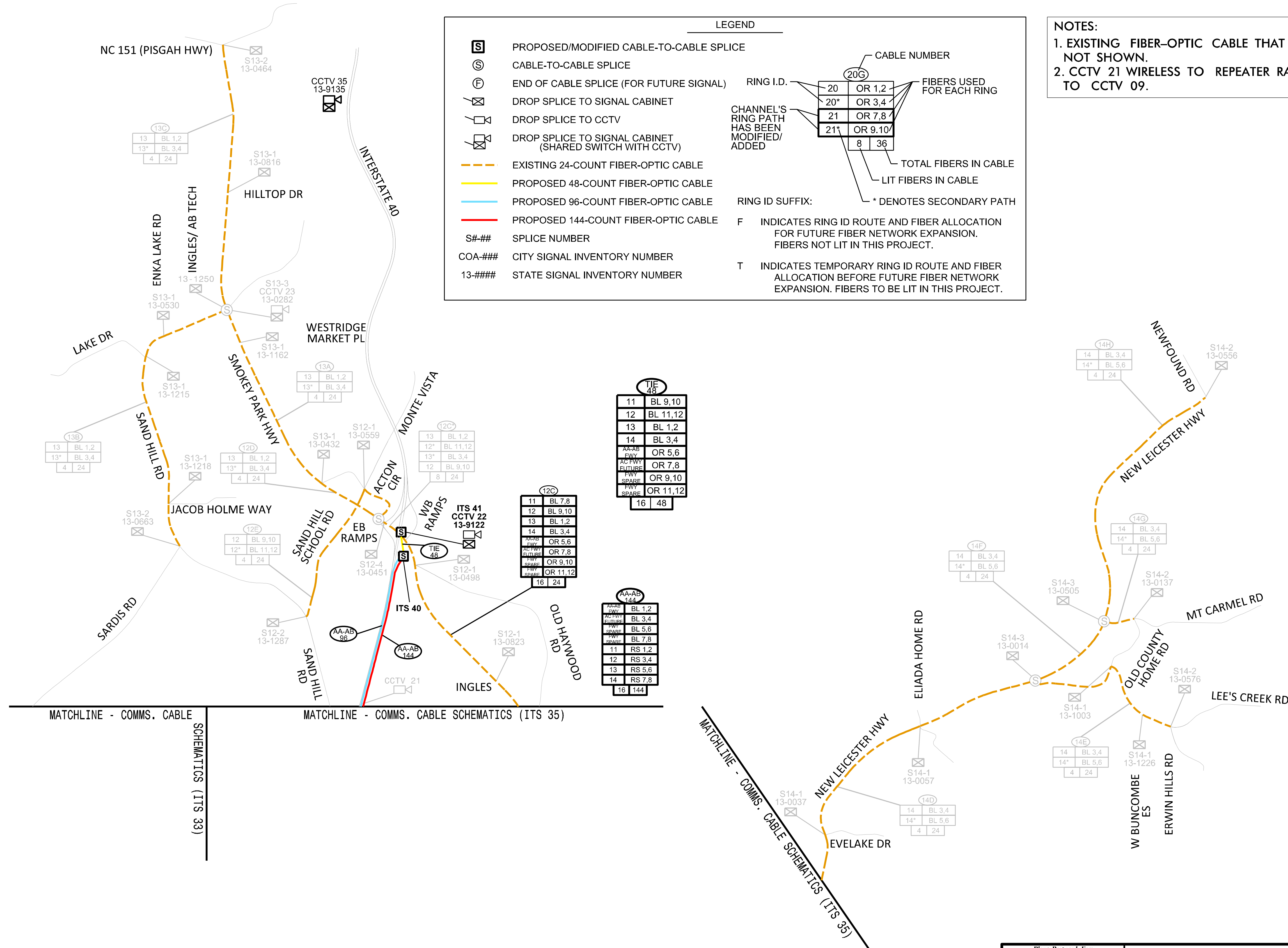
SCALE: 0 NTS

REVISIONS	INIT.	DATE

SEAL

TAYLOR A. HONEYCUTT

SIGNATURE DATE



LEGEND

- S** PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- ⊙** CABLE-TO-CABLE SPLICE
- ⊖** END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- ⊗** DROP SPLICE TO SIGNAL CABINET
- ⊘** DROP SPLICE TO CCTV
- ⊙** DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- PROPOSED 48-COUNT FIBER-OPTIC CABLE
- PROPOSED 96-COUNT FIBER-OPTIC CABLE
- PROPOSED 144-COUNT FIBER-OPTIC CABLE
- S###** SPLICE NUMBER
- COA-###** CITY SIGNAL INVENTORY NUMBER
- 13-####** STATE SIGNAL INVENTORY NUMBER

RING I.D.:

20	OR 1.2
20*	OR 3.4
21	OR 7.8
21*	OR 9.10
8	36

CHANNEL'S RING PATH HAS BEEN MODIFIED/ADDED

RING ID SUFFIX:

- F** INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T** INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

CABLE NUMBER

FIBERS USED FOR EACH RING

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

*** DENOTES SECONDARY PATH**

NOTES:

- EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.
- CCTV 21 WIRELESS TO REPEATER RADIO AND THEN TO CCTV 09.

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 33)

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 35)

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 35)

TIE 48

11	BL 9,10
12	BL 11,12
13	BL 1,2
14	BL 3,4
AA-AB FUTURE	OR 5,6
AC FUTURE	OR 7,8
FWY FUTURE	OR 9,10
FWY SPARE	OR 11,12
16	48

AA-AB 144

FWY	BL 1,2
AC FUTURE	BL 3,4
FWY SPARE	BL 5,6
FWY SPARE	BL 7,8
11	RS 1,2
12	RS 3,4
13	RS 5,6
14	RS 7,8
16	144

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

NC License #C-4445

Plans Prepared For:

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

250 N. Greenfield Street, Garner, NC 27529

I-2513 Splice Schematic

DIVISION 13	BUNCOMBE COUNTY	ASHEVILLE
PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT	
PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT	
SCALE: 0 NTS	REVISIONS	INIT. DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 043814

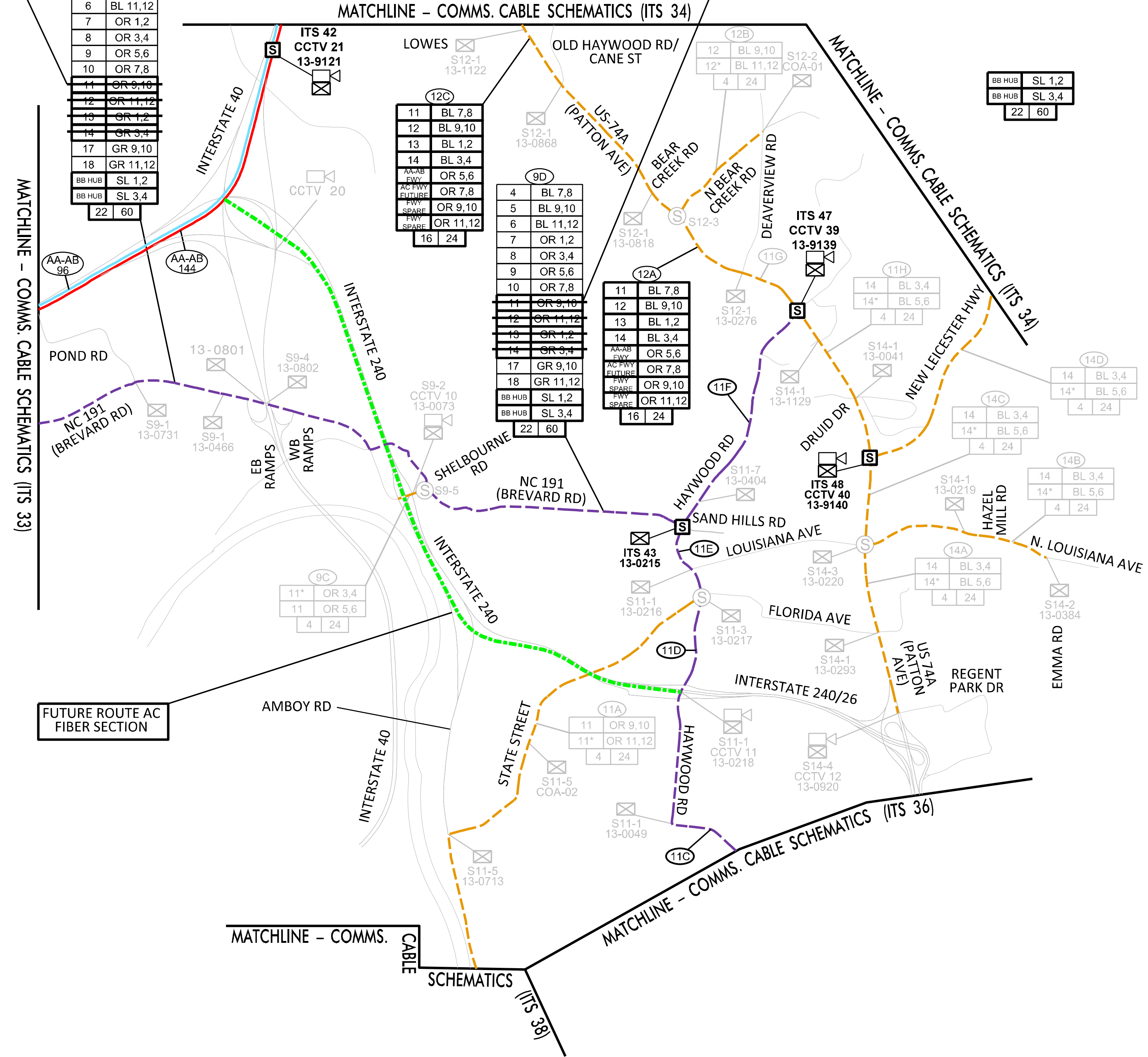
TAYLOR A. HONEYCUTT

SIGNATURE DATE

NOTE: CHANNELS RE-ROUTED WITH THIS PROJECT.

NOTE: CHANNELS RE-ROUTED WITH THIS PROJECT.

NOTE: CHANNELS RE-ROUTED WITH THIS PROJECT.



4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	OR 1,2
14	OR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
22	60

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB FUTURE	SL 5,6
FWY SPARE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
38	60

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB FUTURE	SL 5,6
FWY SPARE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
38	60

13	OR 1,2
14	OR 3,4
11	OR 9,10
12	OR 11,12
13*	OR 1,2
14*	OR 3,4
14*	OR 9,10
12*	OR 11,12
AC/AB FUTURE	SL 5,6
AC/AB FUTURE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
16	60

12	BL 9,10
12*	BL 11,12
13	BL 1,2
13*	BL 3,4
8	24

AA/AB FUTURE	BL 1,2
AC/AB FUTURE	BL 3,4
FWY SPARE	BL 5,6
FWY SPARE	BL 7,8
FWY SPARE	BL 9,10
FWY SPARE	BL 11,12
11	RS 7,8
12	RS 9,10
13	RS 1,2
14	RS 3,4
16	144

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

LEGEND

- S** PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- ⊙** CABLE-TO-CABLE SPLICE
- ⊕** END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- ⊗** DROP SPLICE TO SIGNAL CABINET
- ⊘** DROP SPLICE TO CCTV
- ⊙** DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- PROPOSED 96-COUNT FIBER-OPTIC CABLE
- PROPOSED 144-COUNT FIBER-OPTIC CABLE
- FUTURE 'AC' SECTION FIBER-OPTIC CABLE
- S###** SPLICE NUMBER
- COA-###** CITY SIGNAL INVENTORY NUMBER
- 13-####** STATE SIGNAL INVENTORY NUMBER

RING ID SUFFIX:

- F** INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T** INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

CABLE NUMBER

CHANNLE'S RING PATH HAS BEEN MODIFIED/ADDED

FIBERS USED FOR EACH RING

20	OR 1,2
20*	OR 3,4
21	OR 7,8
21*	OR 9,10
8	36

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

*** DENOTES SECONDARY PATH**

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

Plans Prepared For:
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

250 N. Greenfield Place, Garner, NC 27529

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 043814

TAYLOR A. HONEYCUTT

SIGNATURE DATE

15A

1	BL 1,2
2	BL 3,4
3	BL 5,6
15	GR 5,6
16	GR 7,8
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
20	60

15D

15*	BL 5,6
4	24

11C

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB	SL 5,6
AC/FWY	SL 7,8
FWY	SL 9,10
FWY	SL 11,12
FWY	SL 11,12
FWY	SL 11,12
38	60

11B

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB	SL 5,6
AC/FWY	SL 7,8
FWY	SL 9,10
FWY	SL 11,12
FWY	SL 11,12

2B

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB	SL 5,6
AC/FWY	SL 7,8
FWY	SL 9,10
FWY	SL 11,12
FWY	SL 11,12
58	96

3B

3	BL 5,6
3*	BL 7,8
4	24

3C

3	BL 5,6
3*	BL 7,8
4	24

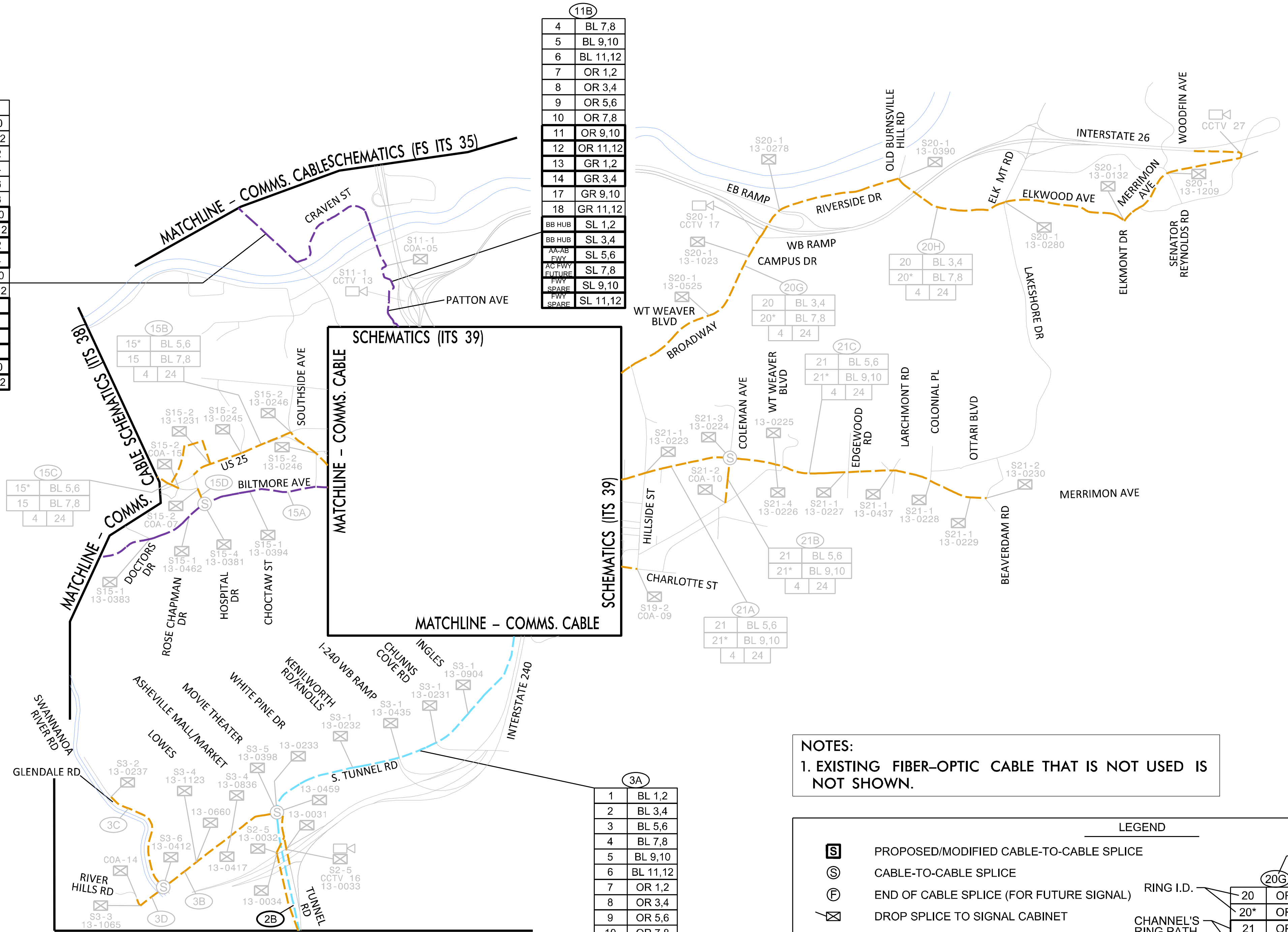
3D

3	BL 5,6
3*	BL 7,8
4	24

INV. NO.	MINOR STREET NAME
13-0031	I-240 EB OFF
13-0032	I-240 EB ON
13-0033	I-240 WB ON
13-0034	I-240 WB OFF
13-0417	WHOLE FOODS
13-0660	BEST BUY/OVERLOOK VILLAGE
13-1065	WOOD AVENUE
COA-07	VICTORIA RD
13-0247	SHORT COXE AVE
13-1231	HOSPITAL DR
COA-15	LILY CARMICHAEL DR
13-0245	CHOCTAW RD

3A

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
BB HUB	SL 3,4
AA/AB	SL 5,6
AC/FWY	SL 7,8
FWY	SL 9,10
FWY	SL 11,12
FWY	SL 11,12
58	96



NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

LEGEND

- PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- CABLE-TO-CABLE SPLICE
- END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- DROP SPLICE TO SIGNAL CABINET
- DROP SPLICE TO CCTV
- DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- EXISTING 96-COUNT FIBER-OPTIC CABLE
- SPLICE NUMBER
- CITY SIGNAL INVENTORY NUMBER
- STATE SIGNAL INVENTORY NUMBER

RING I.D.:

20	OR 1,2
20*	OR 3,4
21	OR 7,8
21*	OR 9,10
8	36

TOTAL FIBERS IN CABLE
LIT FIBERS IN CABLE
* DENOTES SECONDARY PATH

RING ID SUFFIX:

- F INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

EXULT ENGINEERING
304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

Plans Prepared For:
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Division 13
259 N. Greenfield Place, Garner, NC 27529

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

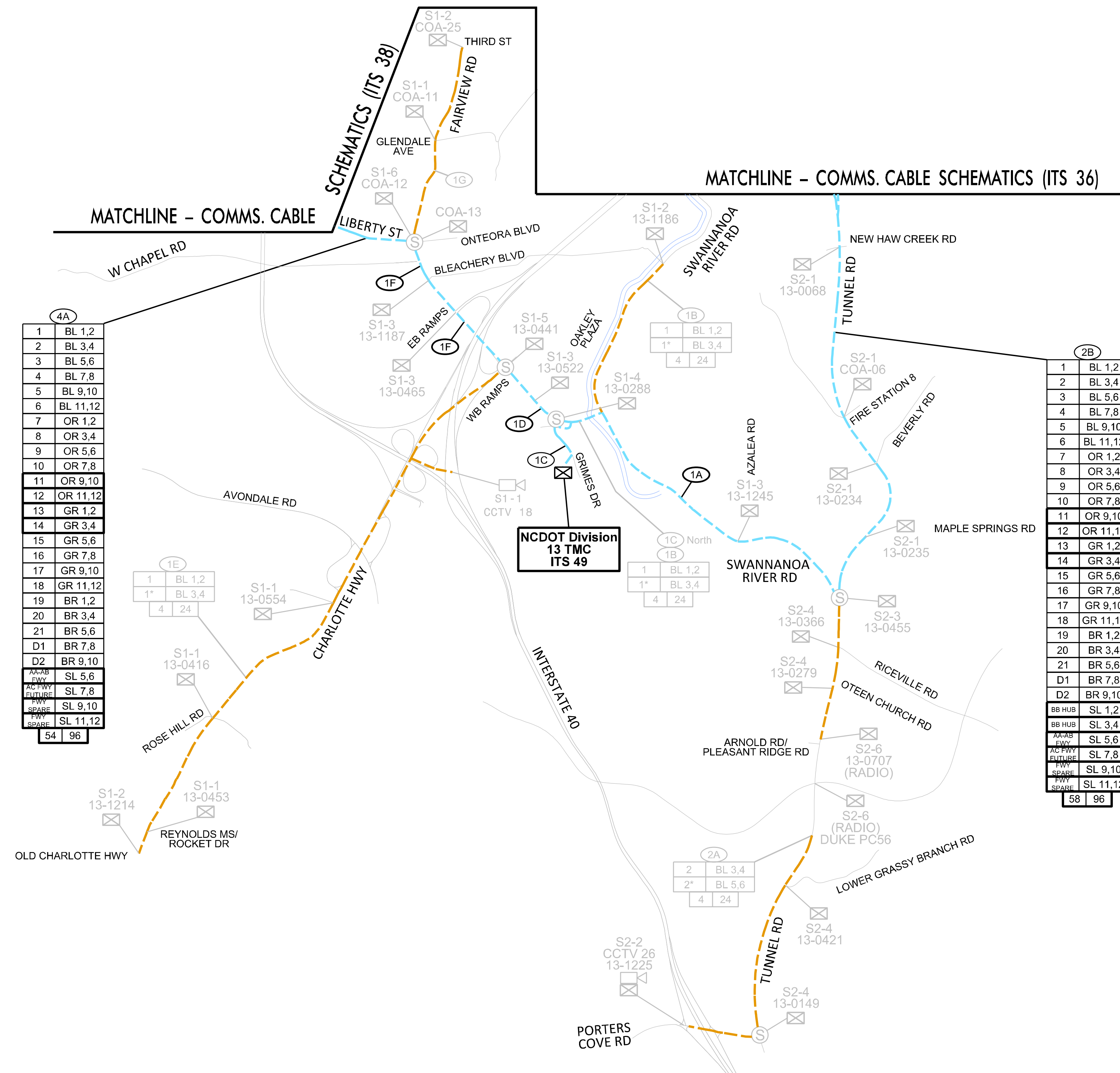
PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 043814
TAYLOR A. HONEYCUTT

SIGNATURE DATE



4A

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AA/AB FUTURE	SL 5,6
AC FUTURE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
54	96

1E

1	BL 1,2
1*	BL 3,4
4	24

S1-1 13-0554

1	BL 1,2
1*	BL 3,4
4	24

S1-1 13-0416

1	BL 1,2
1*	BL 3,4
4	24

S1-1 13-0453

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-1214

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-0453

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-1214

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-0453

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-1214

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-0453

1	BL 1,2
1*	BL 3,4
4	24

S1-2 13-1214

1	BL 1,2
1*	BL 3,4
4	24

1A

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
AA/AB FUTURE	SL 3,4
AC FUTURE	SL 5,6
FWY SPARE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
58	96

South 1C

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AA/AB FUTURE	SL 5,6
AC FUTURE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
54	96

North 1D

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
AA/AB FUTURE	SL 3,4
AC FUTURE	SL 5,6
FWY SPARE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
58	96

1E

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AA/AB FUTURE	SL 5,6
AC FUTURE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
54	96

1F

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AA/AB FUTURE	SL 5,6
AC FUTURE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
54	96

2B

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
AA/AB FUTURE	SL 3,4
AC FUTURE	SL 5,6
FWY SPARE	SL 7,8
FWY SPARE	SL 9,10
FWY SPARE	SL 11,12
58	96

1G

1	BL 1,2
1*	BL 3,4
4	24

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

LEGEND

- S** PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- S** CABLE-TO-CABLE SPLICE
- F** END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- ⊗** DROP SPLICE TO SIGNAL CABINET
- ⊗** DROP SPLICE TO CCTV
- ⊗** DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- - - EXISTING 24-COUNT FIBER-OPTIC CABLE
- - - EXISTING 96-COUNT FIBER-OPTIC CABLE
- S### SPLICE NUMBER
- COA-#### CITY SIGNAL INVENTORY NUMBER
- 13-#### STATE SIGNAL INVENTORY NUMBER

CABLE NUMBER

RING I.D.

CHANNEL'S RING PATH HAS BEEN MODIFIED/ADDED

FIBERS USED FOR EACH RING

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

*** DENOTES SECONDARY PATH**

RING ID SUFFIX:

- F** INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T** INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

Plans Prepared For:
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Division 13

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SEAL

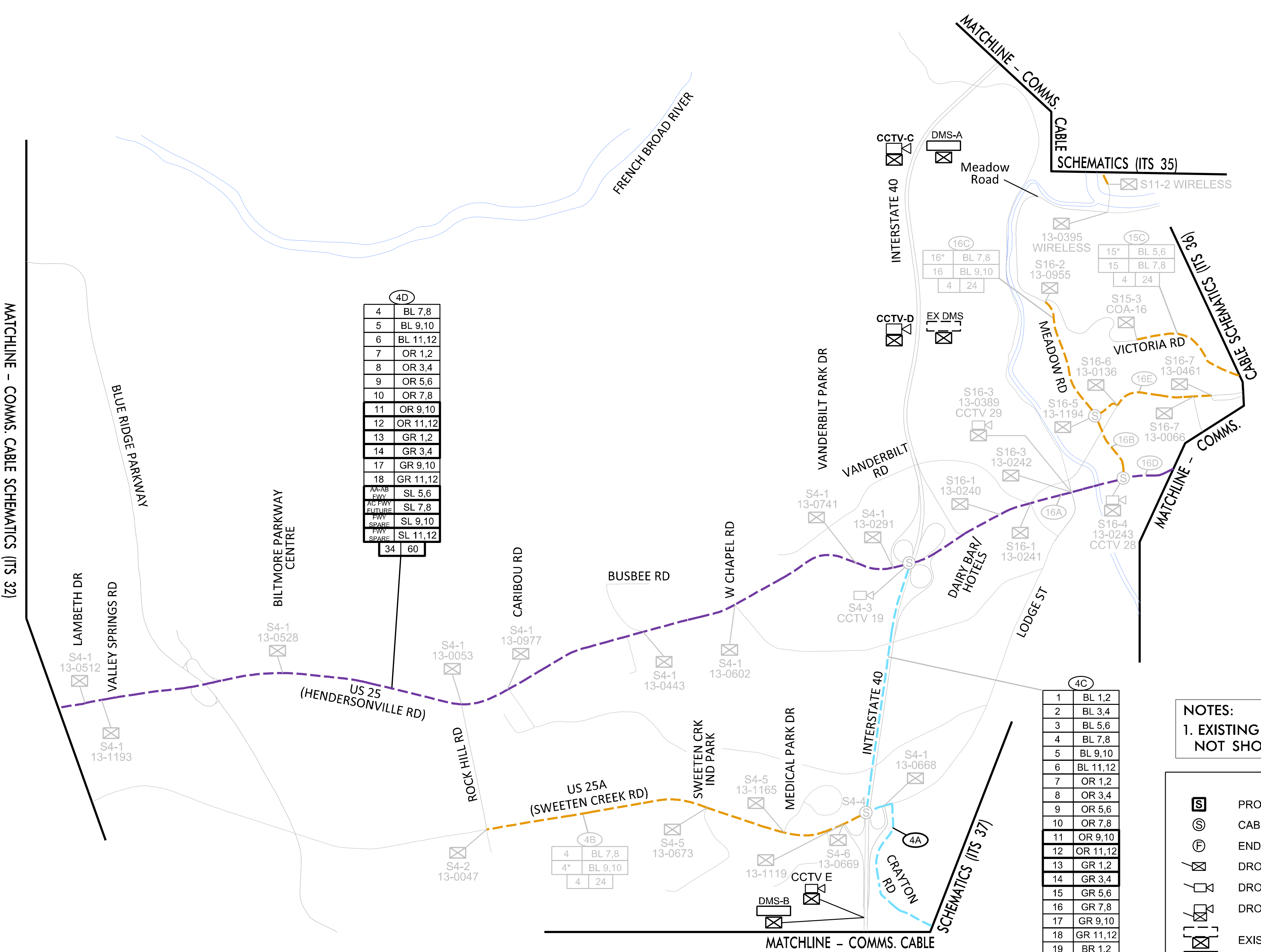
NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 043814

TAYLOR A. HONEYCUTT

SIGNATURE DATE

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 32)



4	BL 7.8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
AAAB FWY	SL 5,6
AC FWY	SL 7,8
FTL/USE	SL 9,10
FWY SPARE	SL 11,12
34	60

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AAAB FWY	SL 5,6
AC FWY	SL 7,8
FTL/USE	SL 9,10
FWY SPARE	SL 11,12
54	96

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
AAAB FWY	SL 5,6
AC FWY	SL 7,8
FTL/USE	SL 9,10
FWY SPARE	SL 11,12
54	96

1	BL 1,2
2	BL 3,4
3	BL 5,6
15	GR 5,6
16	GR 7,8
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
20	60

16*	BL 7,8
4	24

1	BL 1,2
2	BL 3,4
3	BL 5,6
15	GR 5,6
16	GR 7,8
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
20	60

16*	BL 7,8
4	24

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

INV. NO.	MINOR STREET NAME
COA-16	FERNIHURST DR
13-0136	SHORT MCDOWELL ST
13-0241	VANDERBILT RD/ ALL SOULS CRESCENT
13-1194	SHORT MCDOWELL ST

LEGEND

- PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- CABLE-TO-CABLE SPLICE
- END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- DROP SPLICE TO SIGNAL CABINET
- DROP SPLICE TO CCTV
- DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING DMS BOARD
- PROPOSED DMS BOARD
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- EXISTING 96-COUNT FIBER-OPTIC CABLE
- S#-### SPLICE NUMBER
- COA-#### CITY SIGNAL INVENTORY NUMBER
- 13-#### STATE SIGNAL INVENTORY NUMBER

RING I.D. SUFFIX:

- F INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

CABLE NUMBER

FIBERS USED FOR EACH RING

TOTAL FIBERS IN CABLE

LIT FIBERS IN CABLE

* DENOTES SECONDARY PATH

EXULT ENGINEERING
304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

Plans Prepared For:
STATE OF NORTH CAROLINA
Department of Transportation
250 N. Greenfield Place, Garner, NC 27529

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

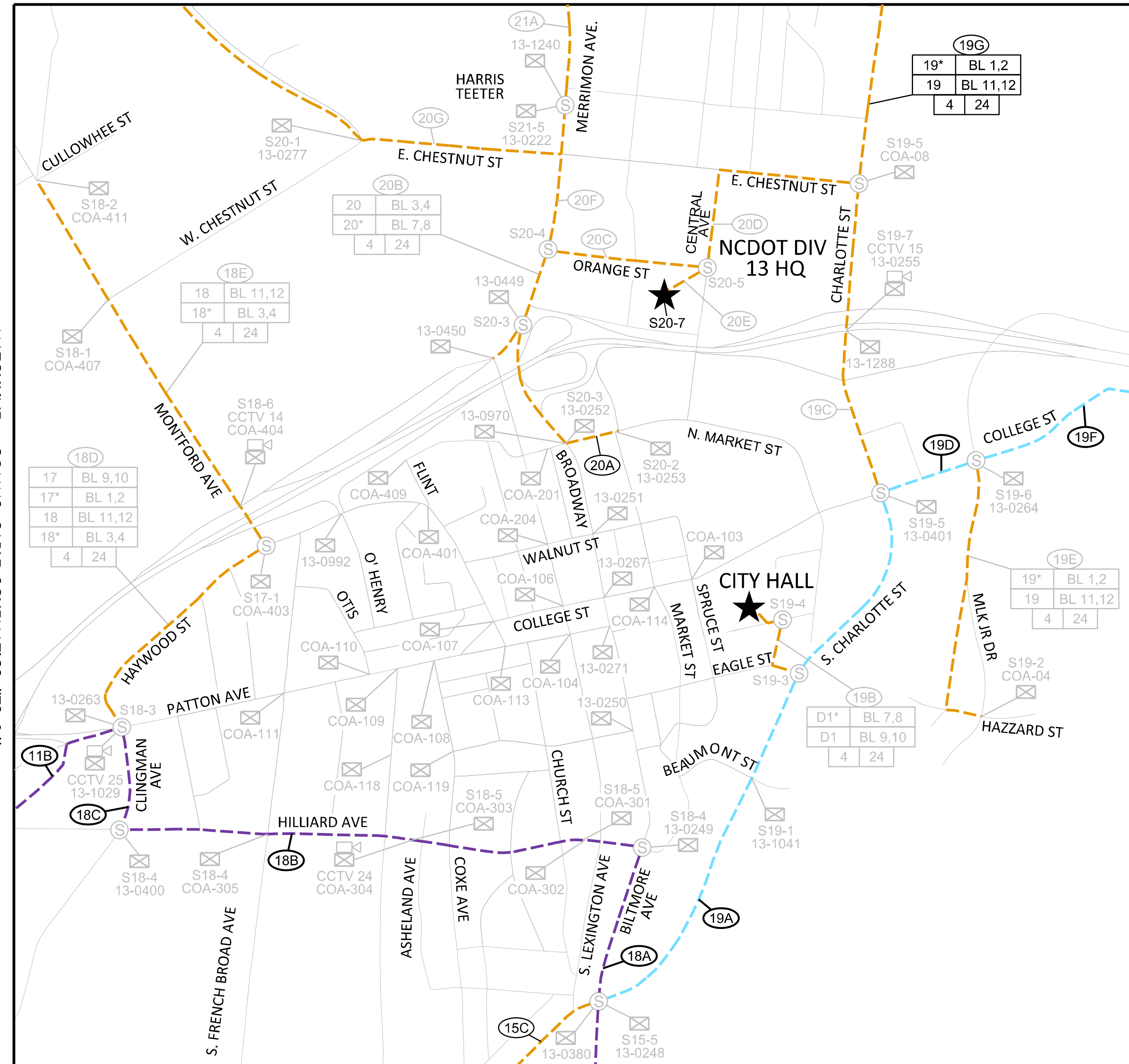
REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 043814
TAYLOR A. HONEYCUTT

SIGNATURE DATE

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 36)



MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 36)

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 36)

MATCHLINE - COMMS. CABLE SCHEMATICS (ITS 36)

11B

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
38	60

21A

21	BL 5,6
21*	BL 9,10
4	24

15C

15*	BL 5,6
15	BL 7,8
4	24

19G

19*	BL 1,2
19	BL 11,12
4	24

20A

20	BL 3,4
20*	BL 7,8
4	24

20C

20	BL 3,4
20*	OR 3,4
21	BL 5,6
21*	OR 5,6
4	24

20D

20	BL 3,4
20*	OR 3,4
21	BL 5,6
21*	OR 5,6
D2*	BL 9,10
D2	OR 9,10
12	24

20E

D2*	BL 9,10
D2	BL 11,12
4	24

20F

20	BL 3,4
20*	BL 7,8
21	BL 5,6
21*	BL 9,10
4	24

20G

20	BL 3,4
20*	BL 7,8
4	24

18A

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
38	60

18B

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
38	60

18C

4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
17	GR 9,10
18	GR 11,12
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
38	60

19A

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
58	96

19C

19*	BL 1,2
19	BL 11,12
20	BL 3,4
20*	OR 3,4
21	BL 5,6
21*	OR 5,6
D2*	BL 9,10
D2	OR 9,10
16	24

19D

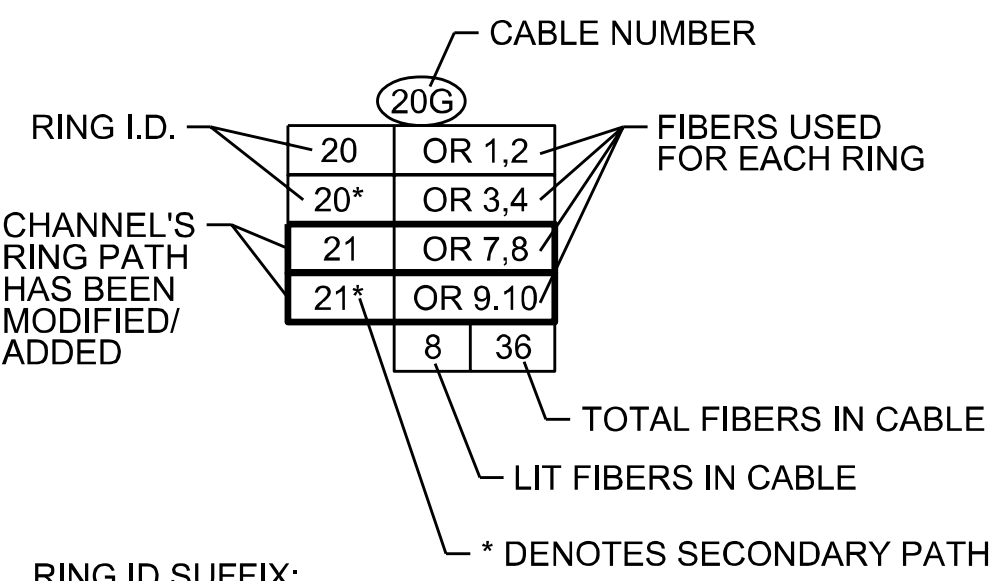
1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
58	96

19F

1	BL 1,2
2	BL 3,4
3	BL 5,6
4	BL 7,8
5	BL 9,10
6	BL 11,12
7	OR 1,2
8	OR 3,4
9	OR 5,6
10	OR 7,8
11	OR 9,10
12	OR 11,12
13	GR 1,2
14	GR 3,4
15	GR 5,6
16	GR 7,8
17	GR 9,10
18	GR 11,12
19	BR 1,2
20	BR 3,4
21	BR 5,6
D1	BR 7,8
D2	BR 9,10
BB HUB	SL 1,2
BB HUB	SL 3,4
AA-AB	SL 5,6
AC-FWY	SL 7,8
FUTURE	SL 9,10
FWY	SL 11,12
SPARE	SL 11,12
58	96

LEGEND

- PROPOSED/MODIFIED CABLE-TO-CABLE SPLICE
- CABLE-TO-CABLE SPLICE
- END OF CABLE SPLICE (FOR FUTURE SIGNAL)
- DROP SPLICE TO SIGNAL CABINET
- DROP SPLICE TO CCTV
- DROP SPLICE TO SIGNAL CABINET (SHARED SWITCH WITH CCTV)
- EXISTING 24-COUNT FIBER-OPTIC CABLE
- EXISTING 60-COUNT FIBER-OPTIC CABLE
- EXISTING 96-COUNT FIBER-OPTIC CABLE
- S#-### SPLICE NUMBER
- COA-### CITY SIGNAL INVENTORY NUMBER
- 13-#### STATE SIGNAL INVENTORY NUMBER



- RING ID SUFFIX:
- F INDICATES RING ID ROUTE AND FIBER ALLOCATION FOR FUTURE FIBER NETWORK EXPANSION. FIBERS NOT LIT IN THIS PROJECT.
- T INDICATES TEMPORARY RING ID ROUTE AND FIBER ALLOCATION BEFORE FUTURE FIBER NETWORK EXPANSION. FIBERS TO BE LIT IN THIS PROJECT.

INV. NO.	MINOR STREET NAME
13-0248	SOUTHSIDE AVE
13-0380	SHORT COXE AVE
COA-404	CHERYL ST

NOTES:
1. EXISTING FIBER-OPTIC CABLE THAT IS NOT USED IS NOT SHOWN.

EXULT ENGINEERING
304-F.W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

I-2513 Splice Schematic

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SEAL

TAYLOR A. HONEYCUTT

SIGNATURE DATE

PROPOSED NCDOT SPLICE ENCLOSURE ALONG I-40 /US 74 (SEE ITS 5 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

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

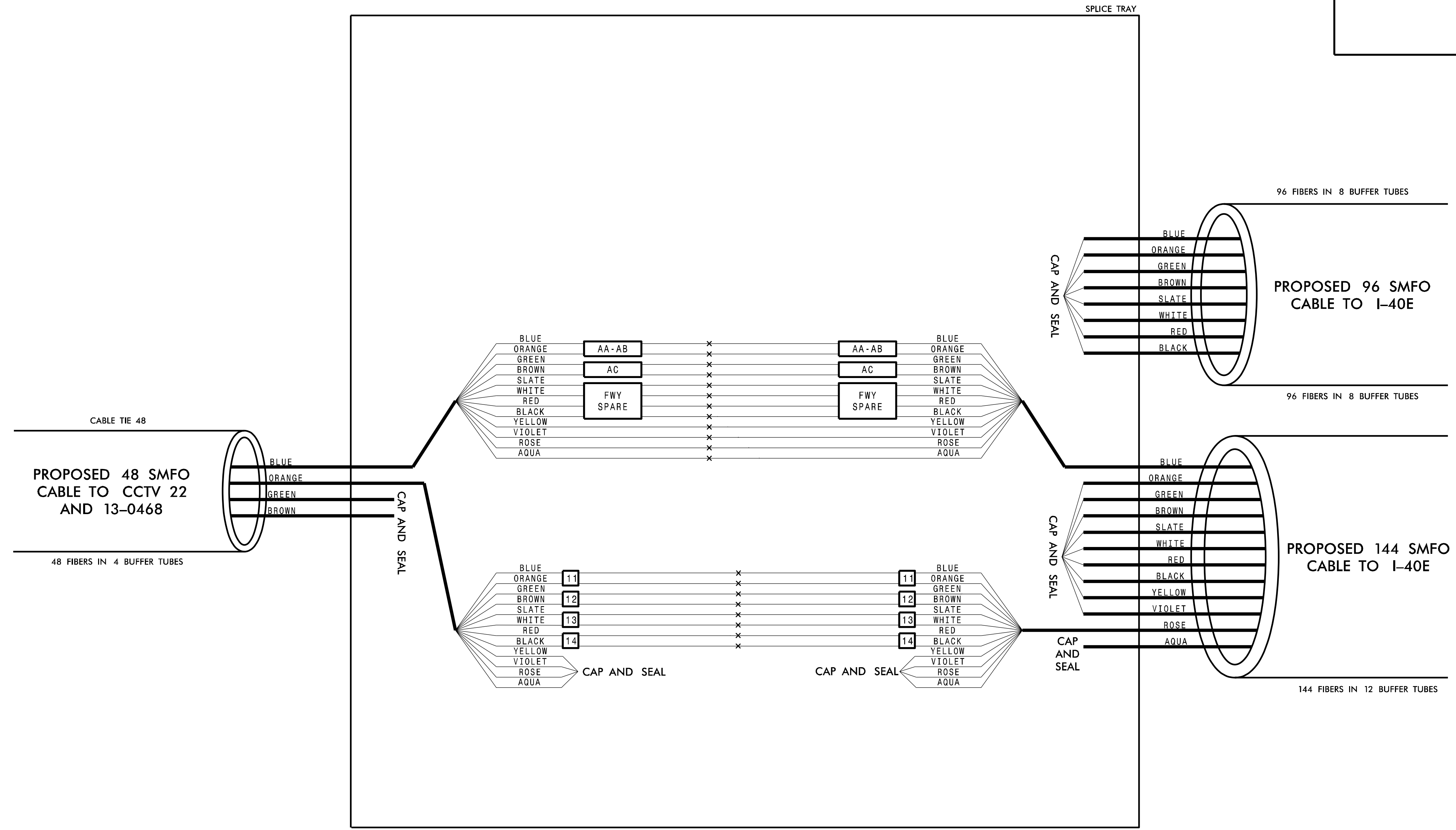
LEGEND

- X - FUSION SPLICE INDIVIDUAL FIBER
- O - EXISTING SPLICE
- - EXPRESS INDIVIDUAL FIBER

EXPRESS: EXPRESS ENTIRE BUFFER TUBE
SPLICE: SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE



Plans Prepared For:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
250 N. Greenfield Place, Garner, NC 27529

SCALE: 0 NTS

I-2513 Splice Details

DIVISION 13	BUNCOMBE COUNTY	ASHEVILLE
PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT	
PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT	
REVISIONS	INIT.	DATE

SEAL

TAYLOR A. HONEYCUTT
ENGINEER
SEAL 043814

SIGNATURE DATE

NC License #C-4445

EXISTING NCDOT SPLICE ENCLOSURE ALONG I-40 /US 74 (SEE ITS 5 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

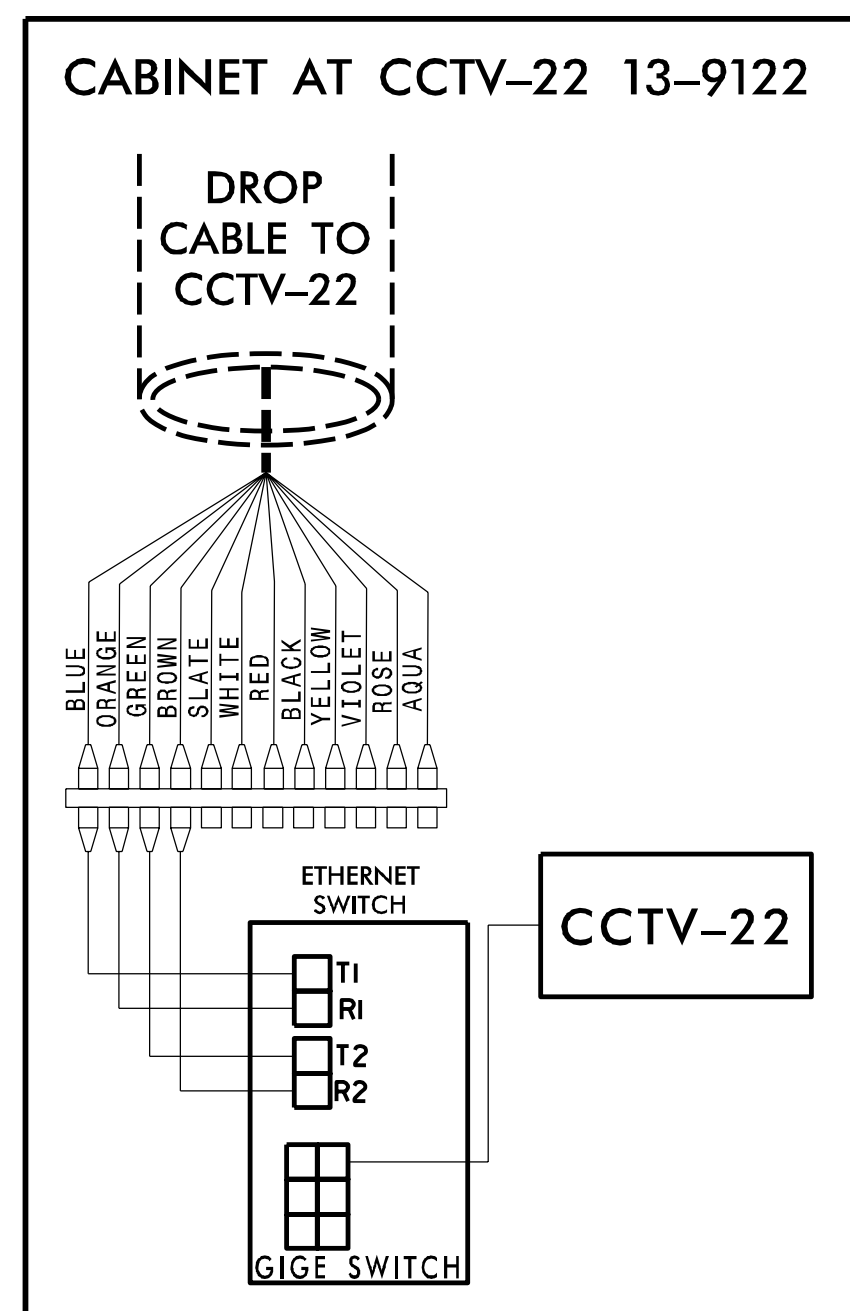
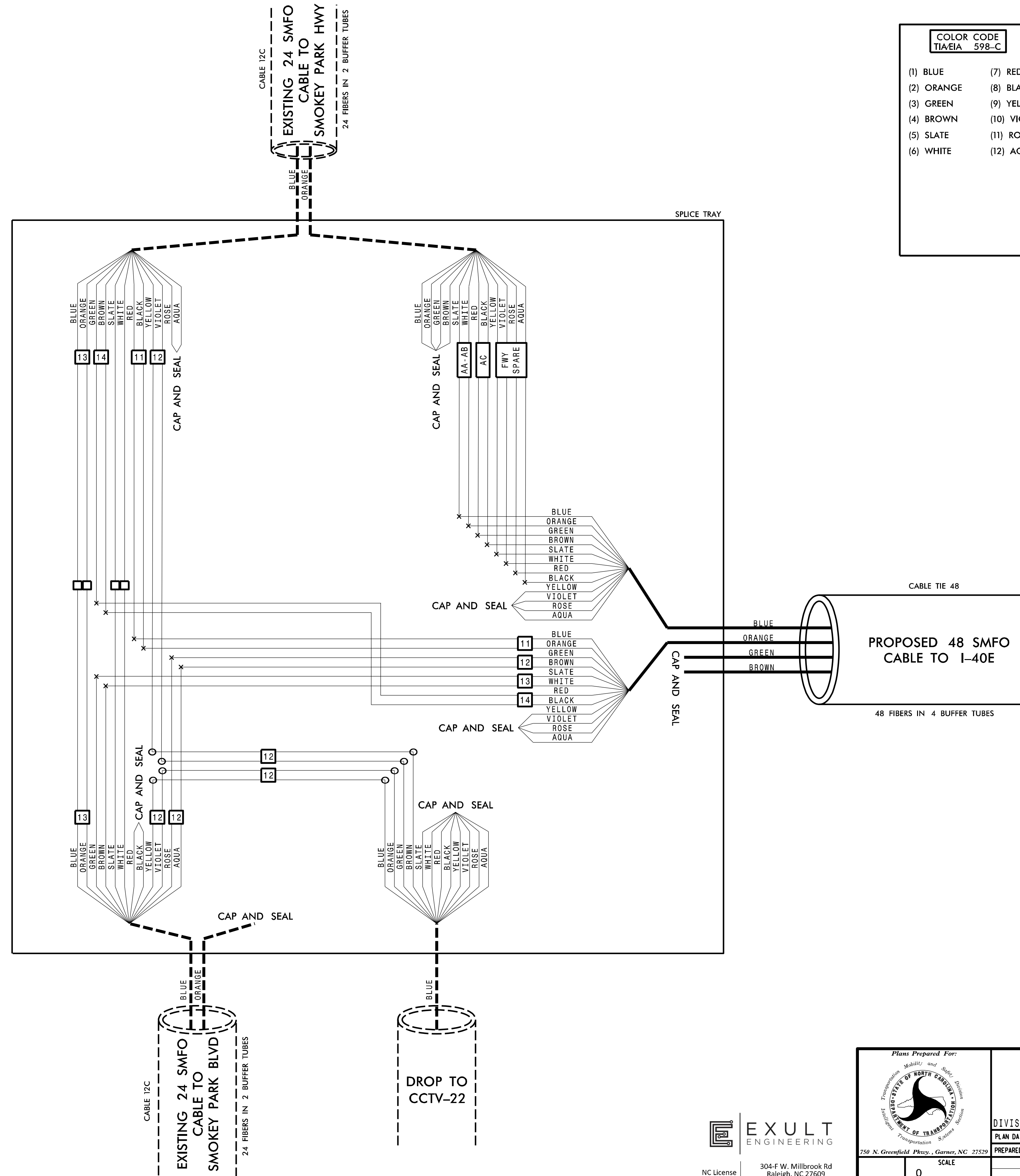
(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

LEGEND

X - FUSION SPLICE INDIVIDUAL FIBER
 O - EXISTING SPLICE
 □ - EXPRESS INDIVIDUAL FIBER

EXPRESS - EXPRESS ENTIRE BUFFER TUBE
 SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:
 1. FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
 2. ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
 3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

EXULT ENGINEERING
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

Plans Prepared For:
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Division 13 BUNCOMBE COUNTY ASHEVILLE

I-2513 Splice Details

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT
 PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

SCALE: 0 NTS

REVISIONS: INIT. DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 043814 ENGINEER TAYLOR A. HONEYCUTT

SIGNATURE: DATE:

PROPOSED NCDOT SPLICE ENCLOSURE ALONG I-40 /US-74 (SEE ITS 9 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

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

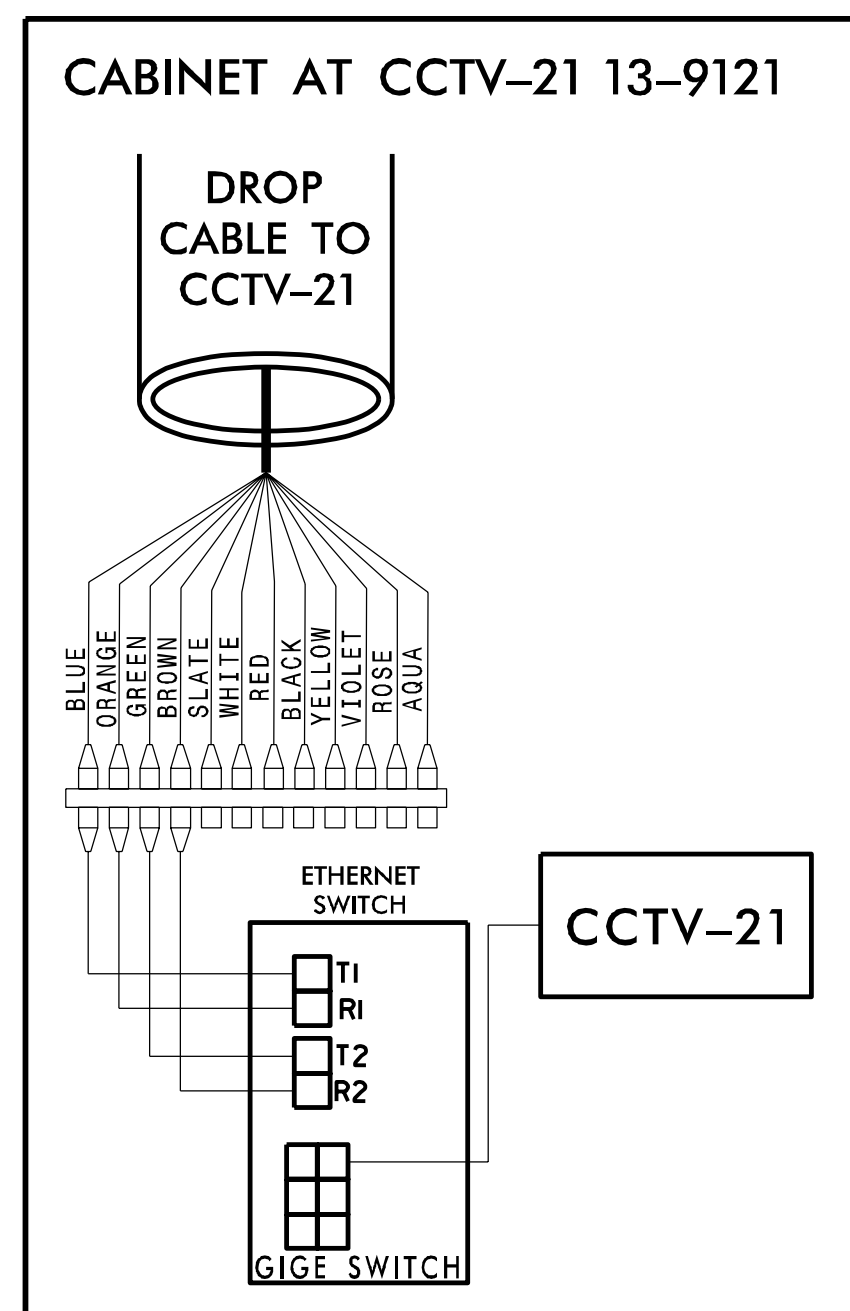
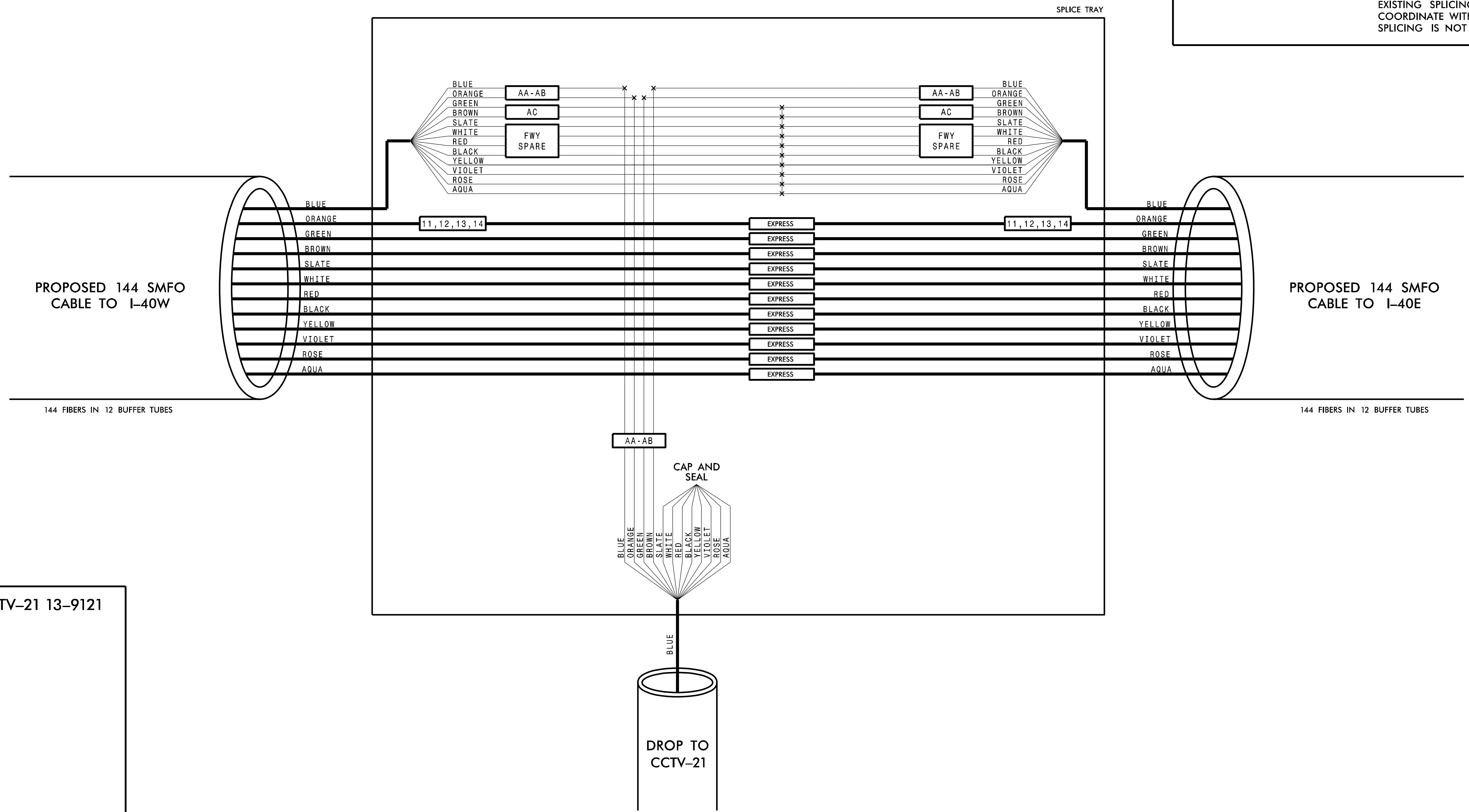
LEGEND

X - FUSION SPLICE INDIVIDUAL FIBER
 O - EXISTING SPLICE
 □ - EXPRESS INDIVIDUAL FIBER

EXPRESS - EXPRESS ENTIRE BUFFER TUBE
 SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

EXULT ENGINEERING

304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5435
 www.exultengineering.com

NC License #C-4445

Plans Prepared For:
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

I-2513 Splice Details

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SCALE: 0 NTS

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 043814 ENGINEER TAYLOR A. HONEYCUTT

SIGNATURE: DATE:

EXISTING NCDOT SPLICE ENCLOSURE AT HAYWOOD ROAD AT NC 191 (BREVARD ROAD)/DUNWELL AVENUE

COLOR CODE
TIA/EIA 598-C

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

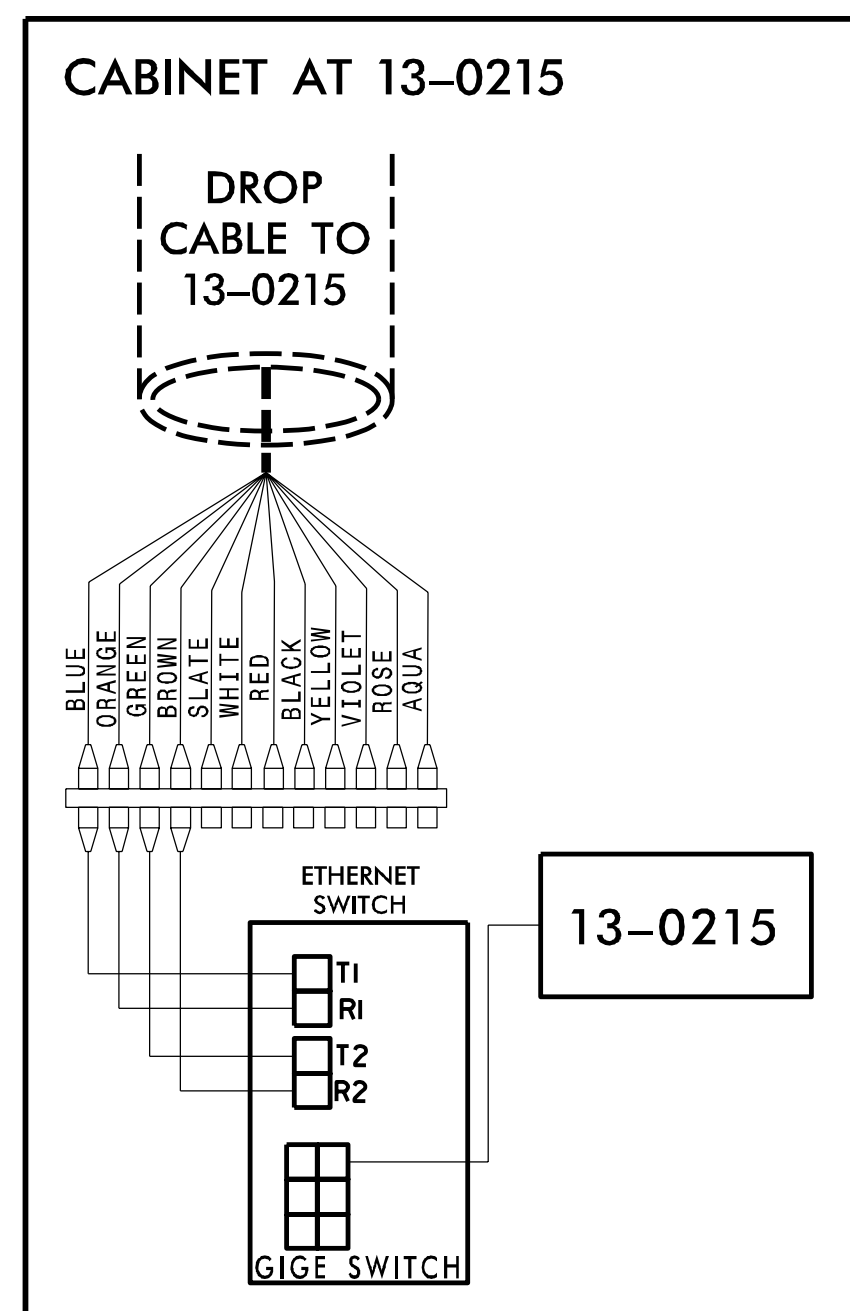
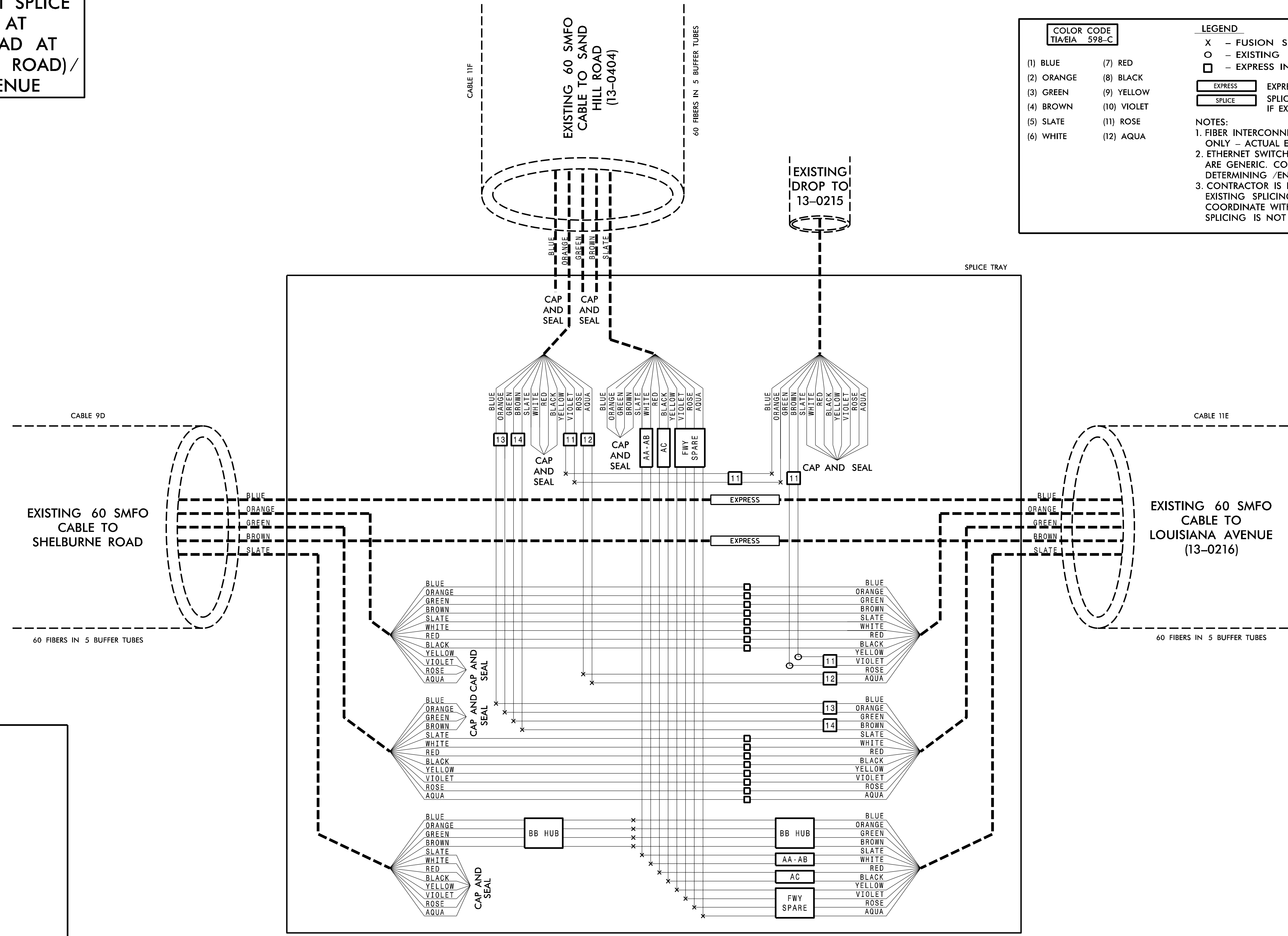
LEGEND

- X - FUSION SPLICE INDIVIDUAL FIBER
- O - EXISTING SPLICE
- - EXPRESS INDIVIDUAL FIBER

EXPRESS - EXPRESS ENTIRE BUFFER TUBE
SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

EXULT ENGINEERING
304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com



I-2513 Splice Details

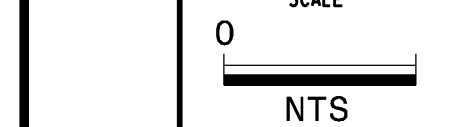
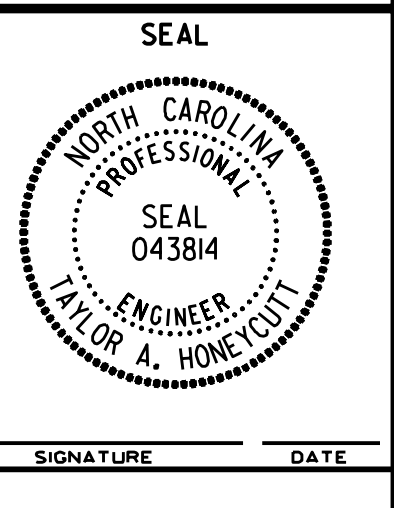
DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SIGNATURE _____ DATE _____



PROPOSED NCDOT SPLICE ENCLOSURE ALONG I-26 /US-74 (SEE ITS 15 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

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

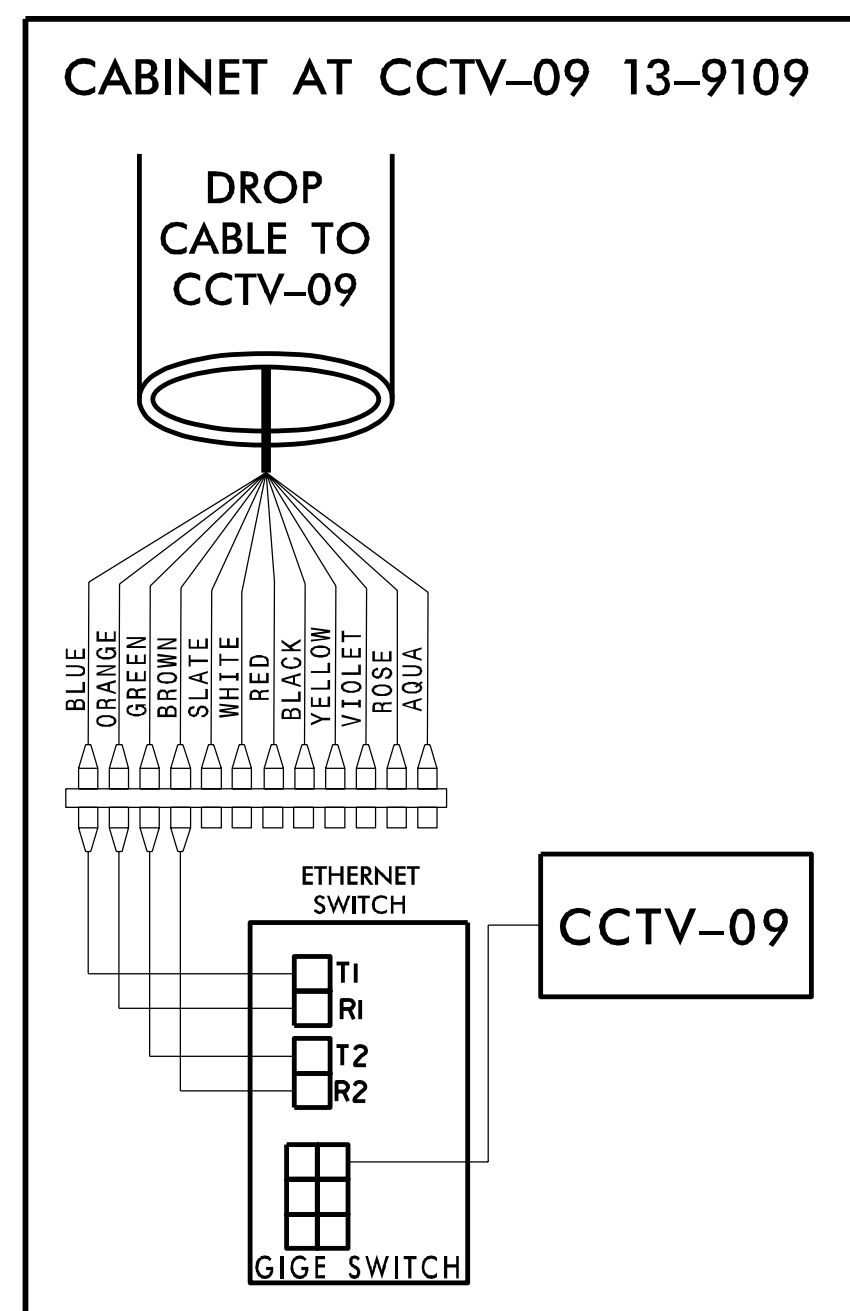
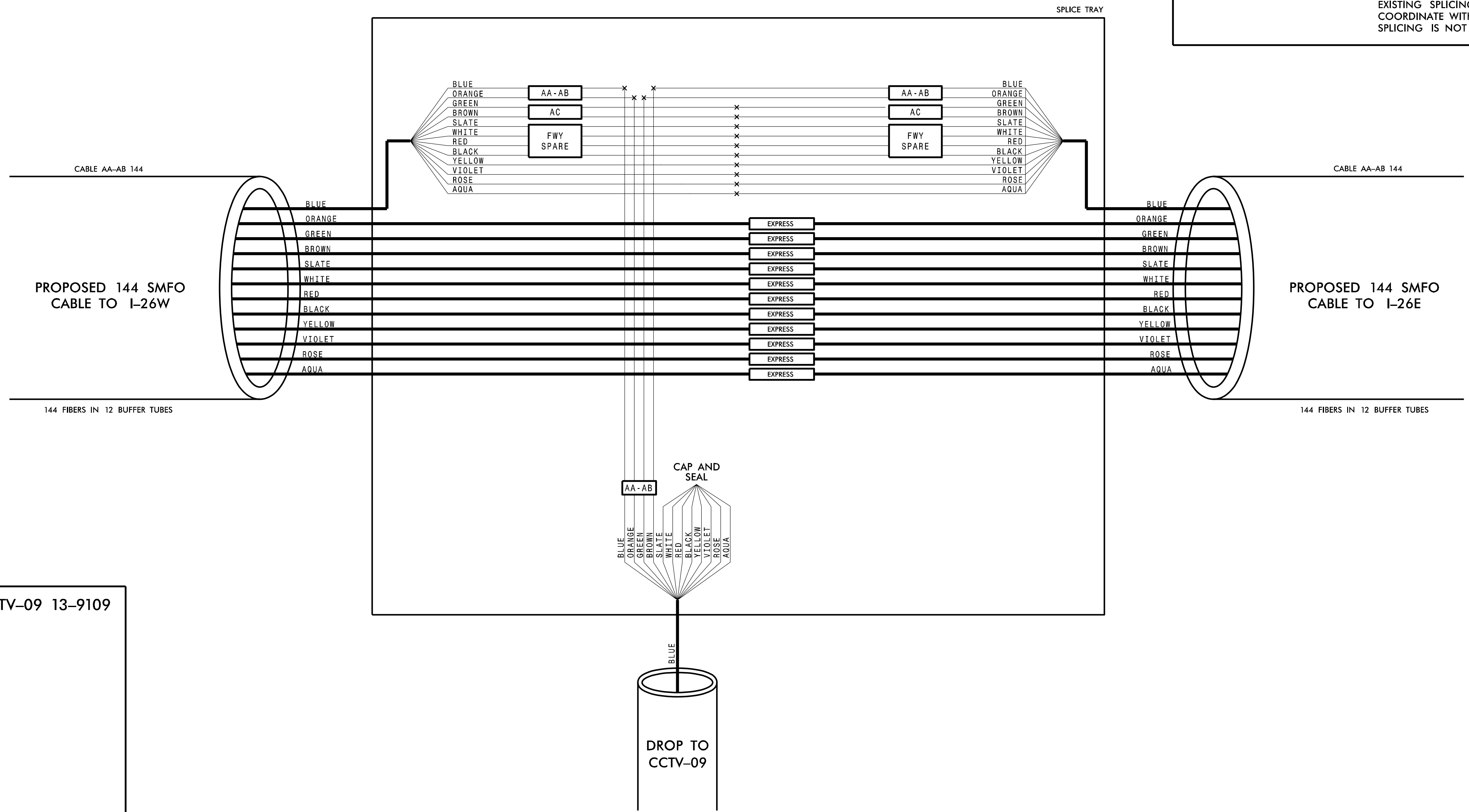
LEGEND

- X - FUSION SPLICE INDIVIDUAL FIBER
- O - EXISTING SPLICE
- - EXPRESS INDIVIDUAL FIBER

EXPRESS: EXPRESS ENTIRE BUFFER TUBE
SPLICE: SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

I-2513 Splice Details

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SCALE: 0 NTS

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 043814 ENGINEER TAYLOR A. HONEYCUTT

SIGNATURE: DATE:

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

NC License #C-4445

EXISTING NCDOT SPLICE ENCLOSURE AT NC-191 AND I-26 WESTBOUND RAMPS (SEE ITS 18 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

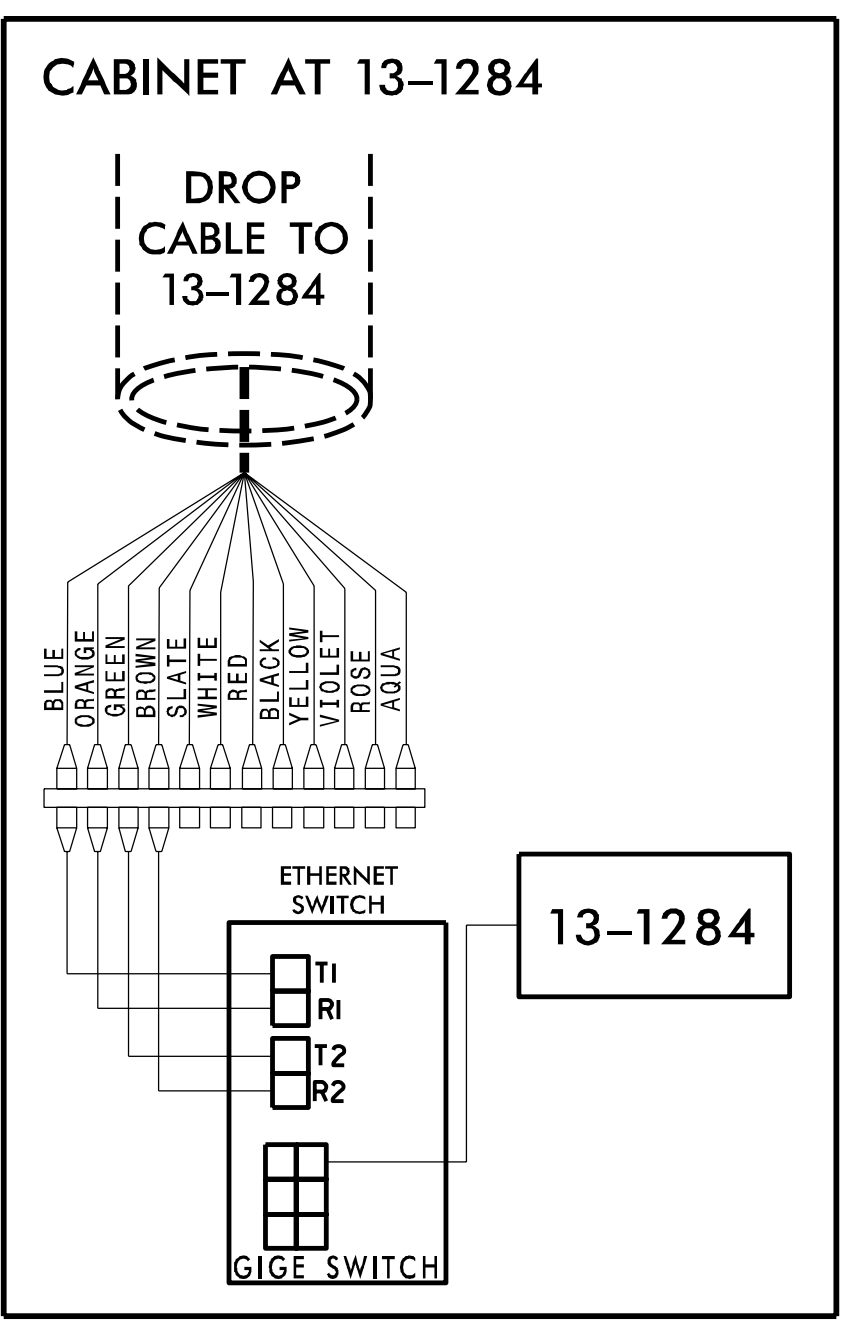
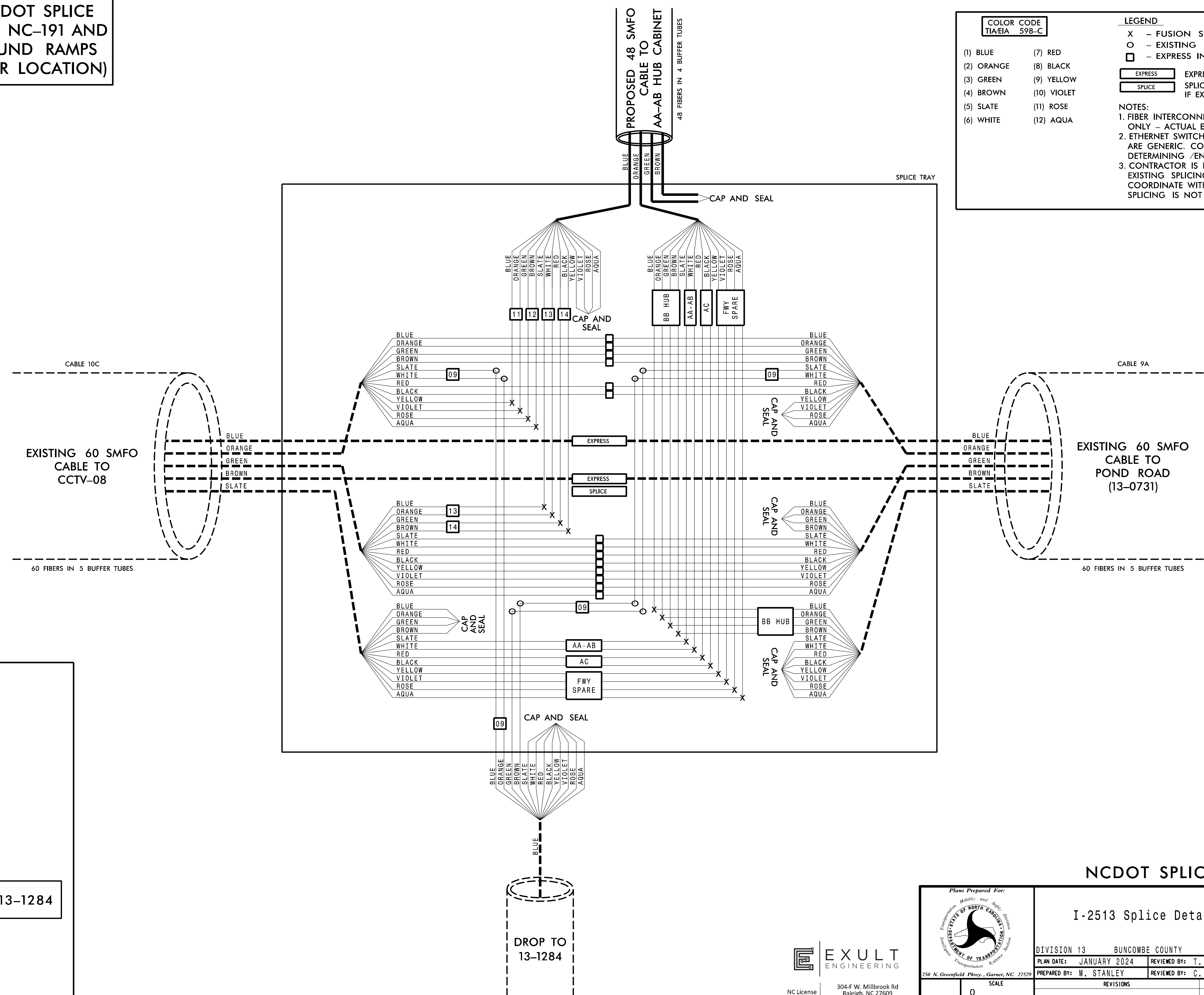
(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

LEGEND

- X - FUSION SPLICE INDIVIDUAL FIBER
- O - EXISTING SPLICE
- - EXPRESS INDIVIDUAL FIBER
- EXPRESS - EXPRESS ENTIRE BUFFER TUBE
- SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

I-2513 Splice Details

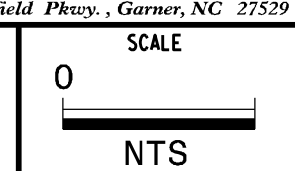
<p>Plans Prepared For: Department of Transportation 250 N. Greenfield Place, Garner, NC 27529</p>	DIVISION 13 BUNCOMBE COUNTY ASHEVILLE			
	PLAN DATE: JANUARY 2024	REVIEWED BY: T. HONEYCUTT		SEAL TAYLOR A. HONEYCUTT ENGINEER NO. 043814 NORTH CAROLINA PROFESSIONAL
	PREPARED BY: M. STANLEY	REVIEWED BY: C. DAGERHARDT		SIGNATURE _____ DATE _____

REVISIONS	INIT.	DATE

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5426
www.exultengineering.com

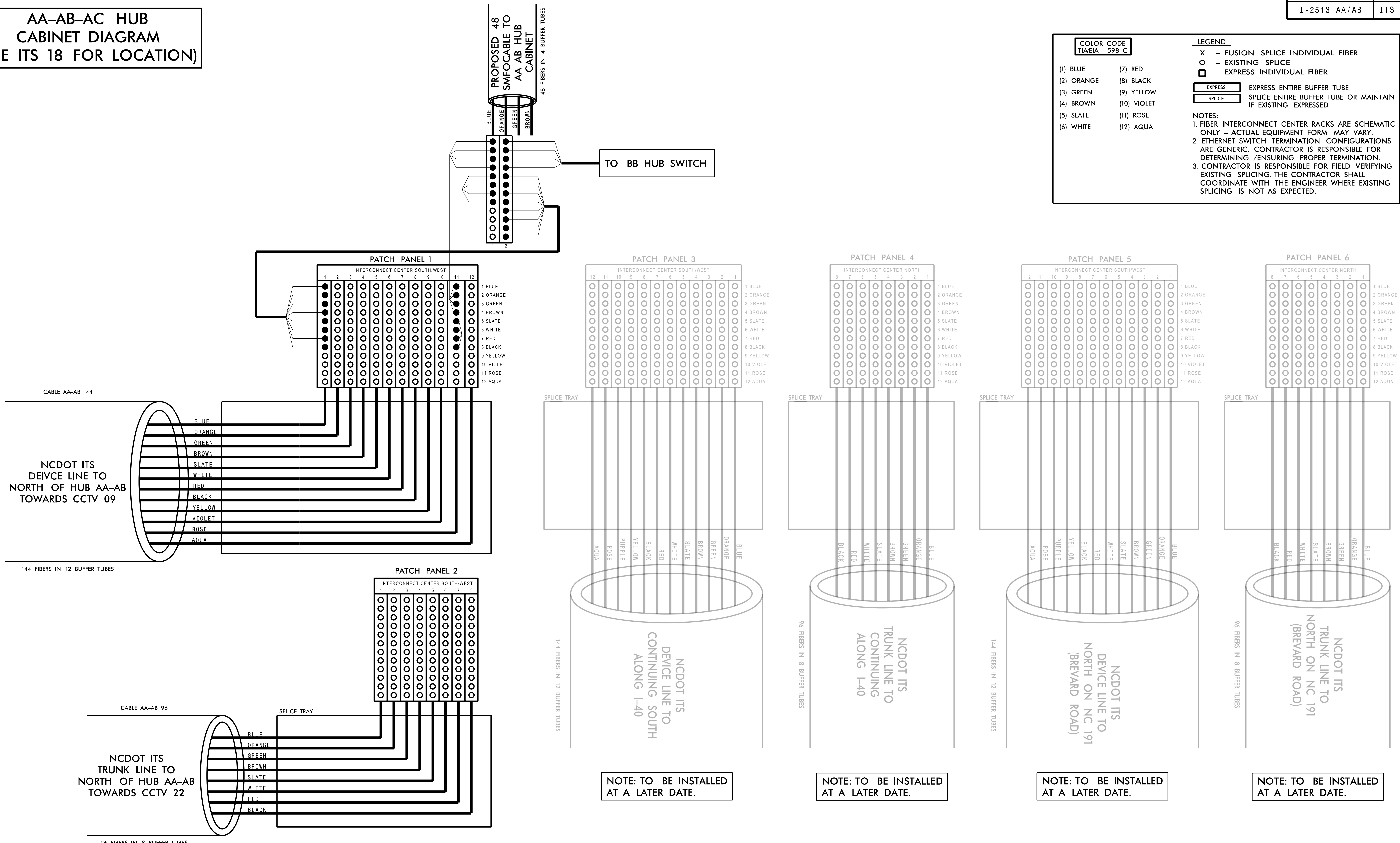
NC License #C-4445



**AA-AB-AC HUB
CABINET DIAGRAM
(SEE ITS 18 FOR LOCATION)**

COLOR CODE TIA/EIA 598-C		LEGEND	
(1) BLUE	(7) RED	X	- FUSION SPlice INDIVIDUAL FIBER
(2) ORANGE	(8) BLACK	O	- EXISTING SPlice
(3) GREEN	(9) YELLOW	□	- EXPRESS INDIVIDUAL FIBER
(4) BROWN	(10) VIOLET	EXPRESS	EXPRESS ENTIRE BUFFER TUBE
(5) SLATE	(11) ROSE	SPlice	SPlice ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED
(6) WHITE	(12) AQUA		

NOTES:
 1. FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
 2. ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
 3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPlicing. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPlicing IS NOT AS EXPECTED.



NCDOT SPlice

EXULT ENGINEERING
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

<p>Plans Prepared For: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION Division of Transportation Planning</p>	<p>I-2513 Splice Details</p>								
	<p>DIVISION 13 BUNCOMBE COUNTY ASHEVILLE</p>								
	<p>PLAN DATE: JANUARY 2024</p>	<p>REVIEWED BY: T. HONEYCUTT</p>							
<p>PREPARED BY: M. STANLEY</p>	<p>REVIEWED BY: C. DAGERHARDT</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>SIGNATURE _____ DATE _____</p>
REVISIONS	INIT.	DATE							

SCALE
 0 NTS

NC License #C-4445

EXISTING NCDOT SPLICE ENCLOSURE AT PATTON AVENUE AND HAYWOOD ROAD (SEE ITS 23 FOR LOCATION)

EXISTING 60 SMFO CABLE TO SAND HILL ROAD (13-0404)

EXISTING IDROP TO 13-0214

COLOR CODE
TIA/EIA 598-C

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

LEGEND

X - FUSION SPLICE INDIVIDUAL FIBER
 O - EXISTING SPLICE
 □ - EXPRESS INDIVIDUAL FIBER

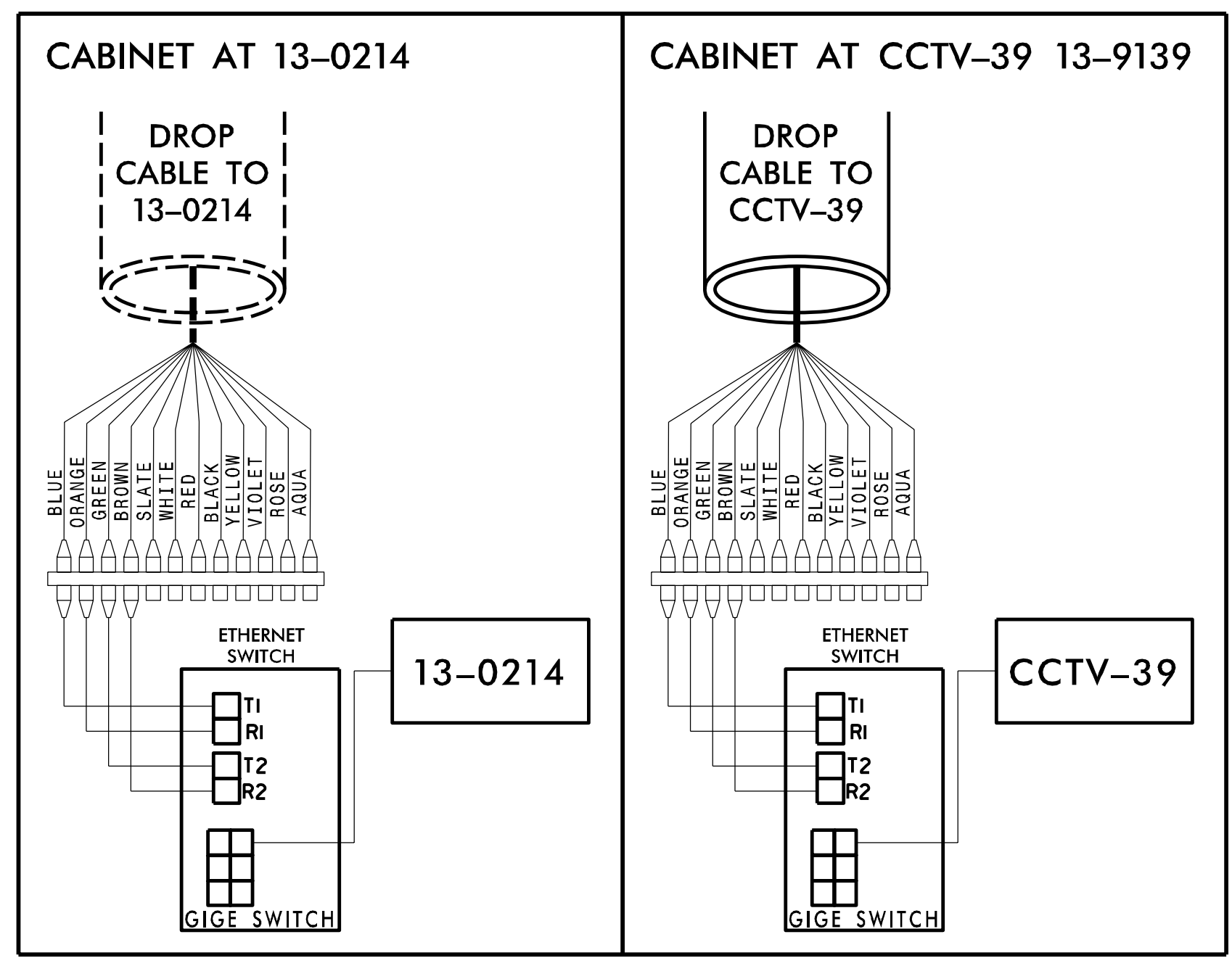
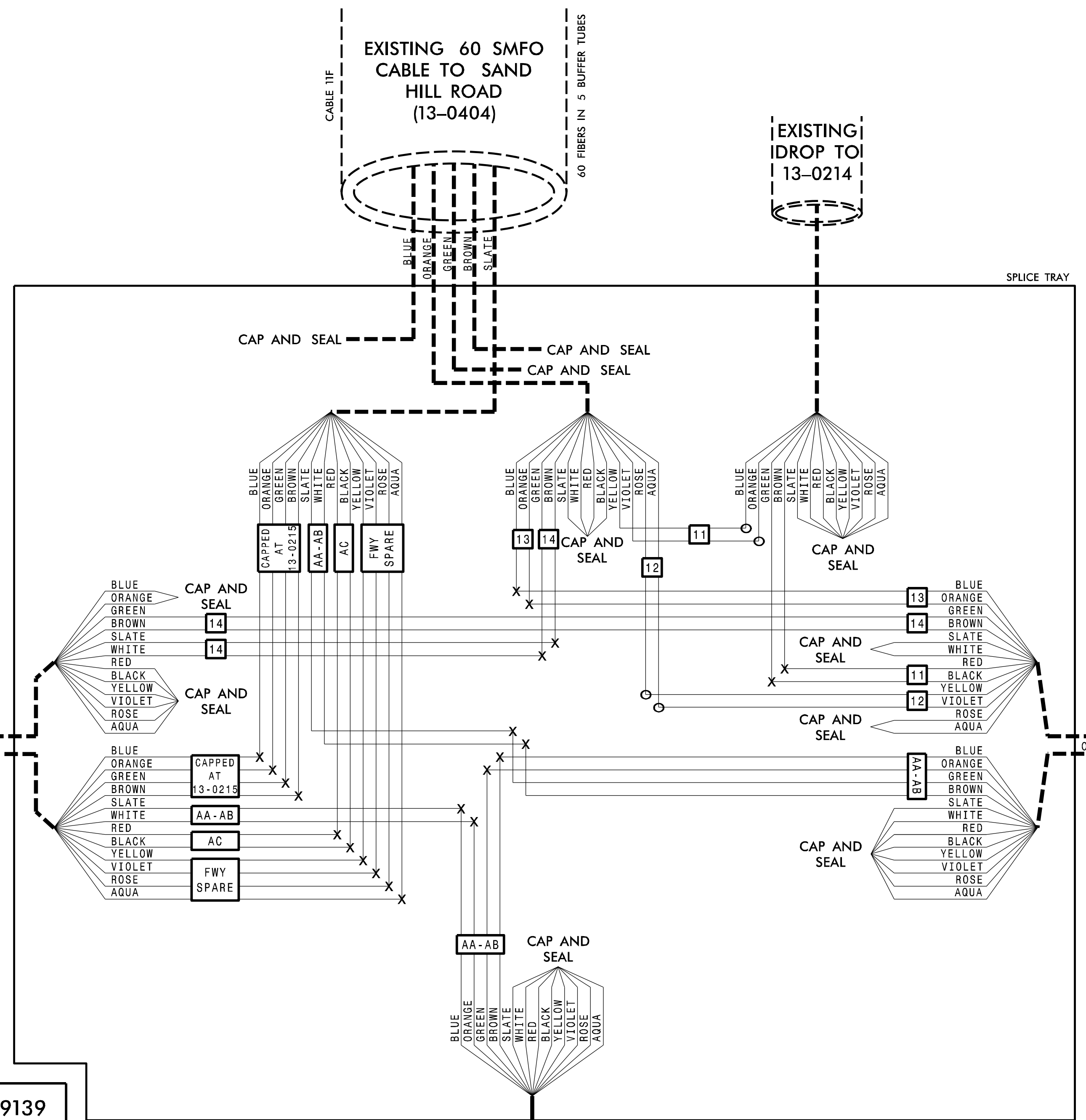
EXPRESS - EXPRESS ENTIRE BUFFER TUBE
 SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.

EXISTING 24 SMFO CABLE TO DEARVIEW ROAD (13-0276)

EXISTING 24 SMFO CABLE TO WILBURN ROAD (13-1129)



EXULT ENGINEERING

304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

NC License #C-4445

NCDOT SPLICE

I-2513 Splice Details

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

SCALE: 0 NTS

REVISIONS: INIT. DATE

SIGNATURE: DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 043814 ENGINEER TAYLOR A. HONEYCUTT

EXISTING NCDOT SPLICE ENCLOSURE AT PATTON AVENUE AND NEW LECEISTER HIGHWAY (SEE ITS 24 FOR LOCATION)

COLOR CODE
TIA/EIA 598-C

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

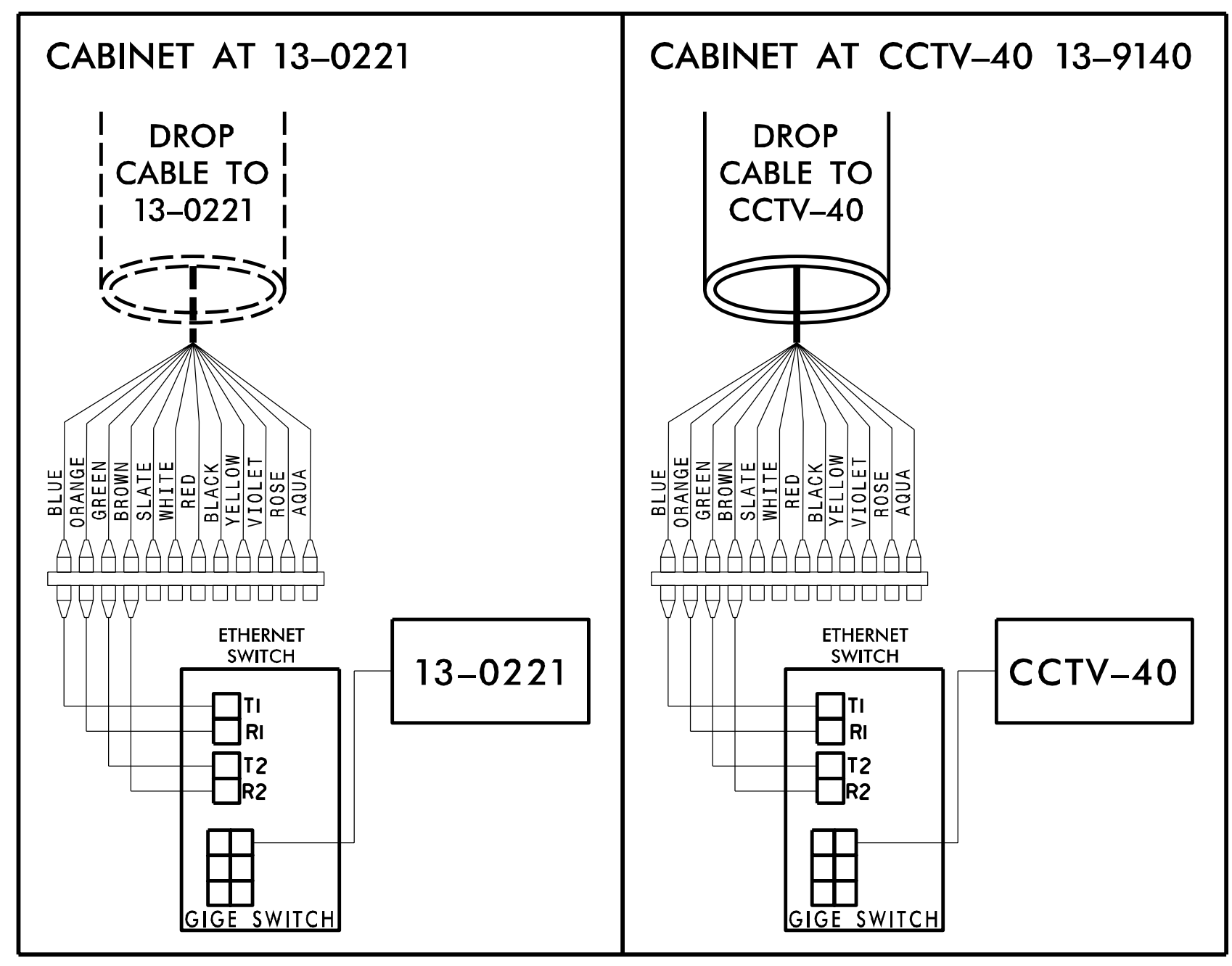
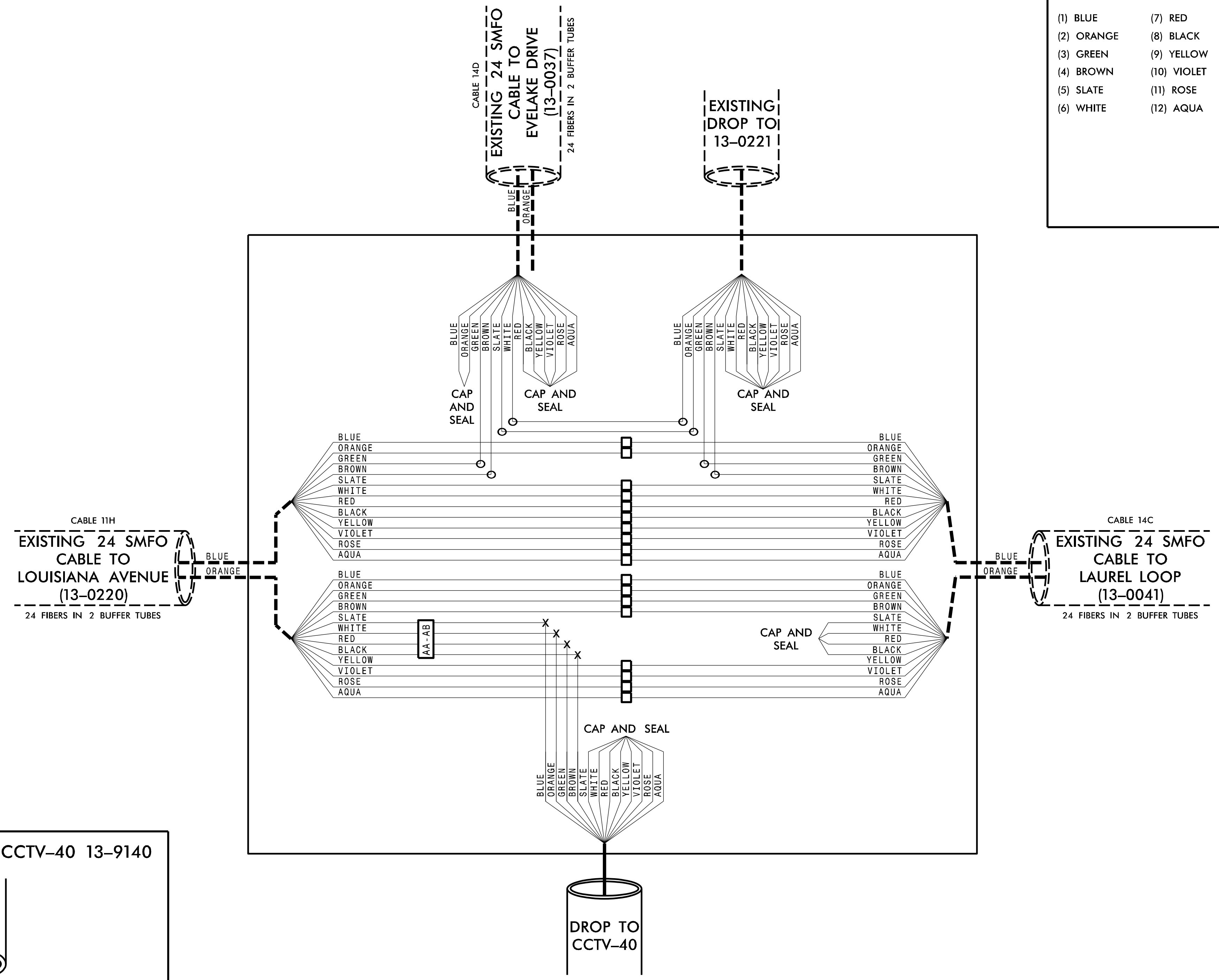
LEGEND

X - FUSION SPLICE INDIVIDUAL FIBER
 O - EXISTING SPLICE
 □ - EXPRESS INDIVIDUAL FIBER

EXPRESS - EXPRESS ENTIRE BUFFER TUBE
 SPLICE - SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



EXULT ENGINEERING

304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

NC License #C-4445

NCDOT SPLICE

I-2513 Splice Details

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

SCALE: 0 NTS

REVISIONS: INIT. DATE

SIGNATURE: DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 043814 ENGINEER TAYLOR A. HONEYCUTT

NCDOT DIVISION 13
TMC CABINET DIAGRAM

COLOR CODE
TIA/EIA 598-C

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

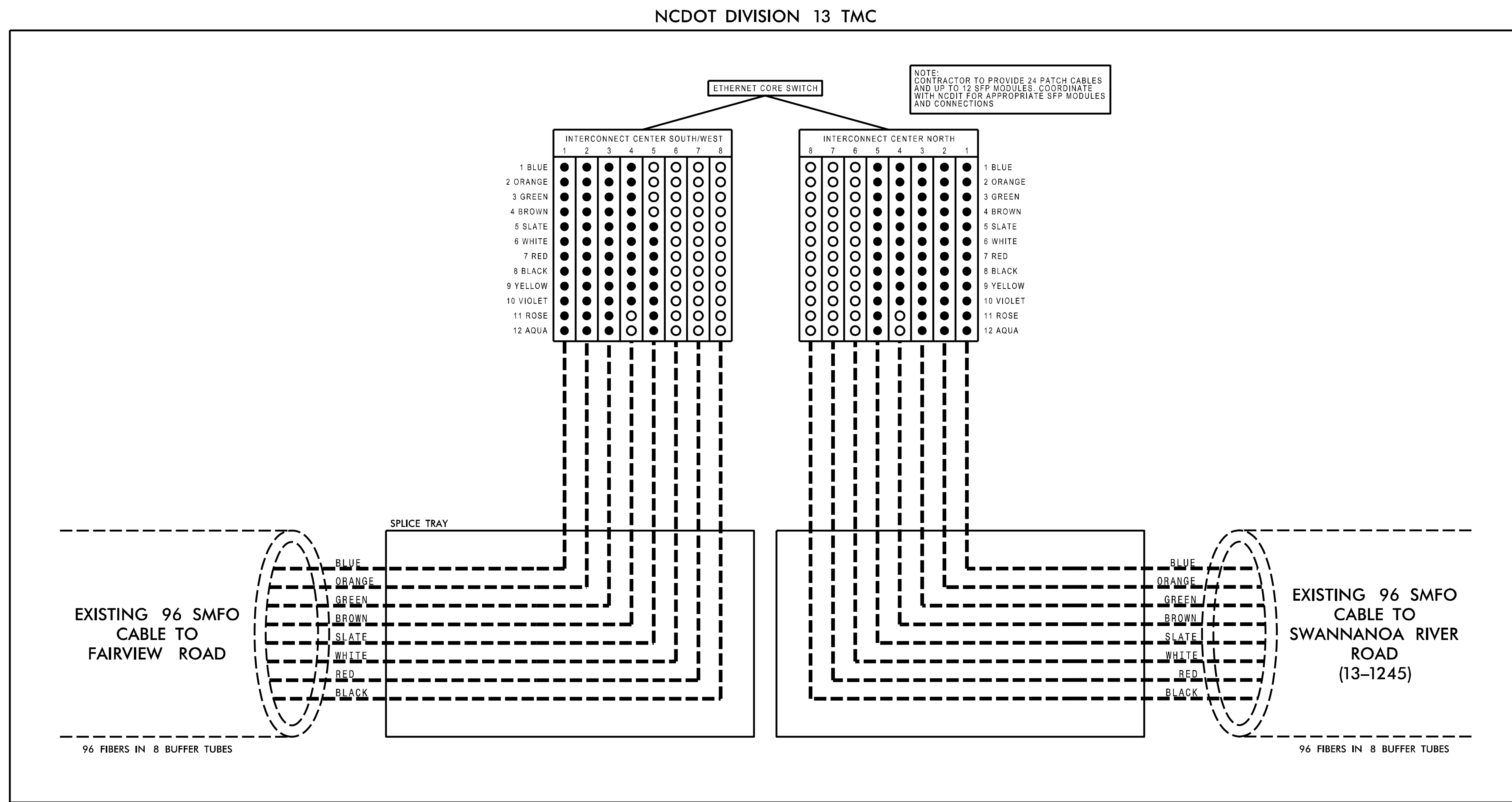
LEGEND

- X - FUSION SPLICE INDIVIDUAL FIBER
- O - EXISTING SPLICE
- - EXPRESS INDIVIDUAL FIBER

EXPRESS: EXPRESS ENTIRE BUFFER TUBE
SPLICE: SPLICE ENTIRE BUFFER TUBE OR MAINTAIN IF EXISTING EXPRESSED

NOTES:

- FIBER INTERCONNECT CENTER RACKS ARE SCHEMATIC ONLY - ACTUAL EQUIPMENT FORM MAY VARY.
- ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING /ENSURING PROPER TERMINATION.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING SPLICING. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER WHERE EXISTING SPLICING IS NOT AS EXPECTED.



NCDOT SPLICE

EXULT ENGINEERING

304-F W. Millbrook Rd
Raleigh, NC 27609
984.500.5435
www.exultengineering.com

NC License #C-4445

Plans Prepared For:
Department of Transportation
Division of Transportation Planning

I-2513 Splice Details

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JANUARY 2024 REVIEWED BY: T. HONEYCUTT

PREPARED BY: M. STANLEY REVIEWED BY: C. DAGERHARDT

REVISIONS	INIT.	DATE

SCALE: 0 NTS

SEAL

SIGNATURE DATE