

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
862.01	GUARDRAIL PLACEMENT
862.02	GUARDRAIL INSTALLATION
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL AND DELINEATION
1700.01	ELECTRICAL SERVICE OPTIONS
1715.01	UNDERGROUND CONDUIT
1716.01	JUNCTION BOXES
1725.01	INDUCTIVE DETECTIVE LOOPS
1751.01	CONTROLLERS AND CABINETS
1752.02	CONTROLLERS AND CABINETS - POWER, GROUND AND AUXILIARY POWER SYSTEMS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

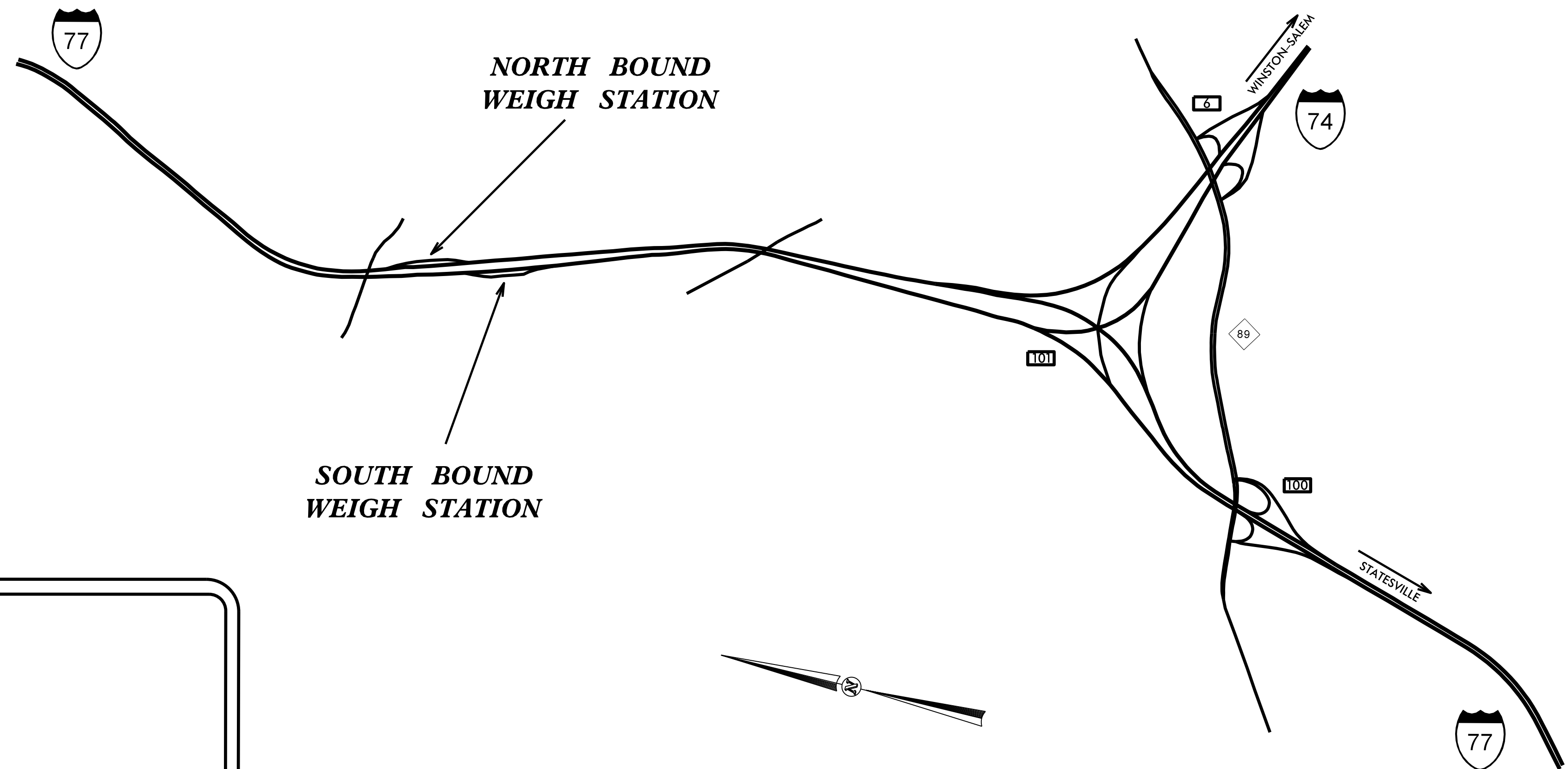
PLANS FOR PROPOSED

I-77 SOUTHBOUND WEIGH STATION UPGRADE

THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING EQUIPMENT AND MATERIALS FOR THE INSTALLATION OF A WEIGH IN MOTION SYSTEM, TRUCK BYPASS SYSTEM, TIRE MONITORING SYSTEM, AUTOMATED LICENSE PLATE READER, AND IMAGE CAPTURE CAMERA NEAR MT. AIRY, NORTH CAROLINA. RELATED MATERIALS CONSIST OF LOCAL CABINETS AND CONTROLLERS, WEIGH IN MOTION SENSORS, ALPR CAMERAS, SOFTWARE, INFRARED ILLUMINATORS, CMS, TMS SENSORS, DATABASE INTERFACE, METAL POLES, METAL POLES WITH MAST ARMS, METAL POLE FOUNDATION, IMAGE CAPTURE CAMERA ASSEMBLY, AND GUARDRAIL.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	33879.2.101	ITS-1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

WBS: 33879.2.101



2018 STANDARD SPECIFICATIONS

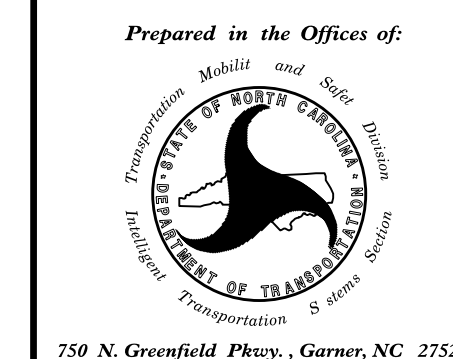
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INDEX OF PLANS

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ITS 2	LEGEND, GENERAL NOTES, AND ABBREVIATIONS
ITS 3	CONSTRUCTION NOTES
ITS 4	PROJECT AREA OVERVIEW
ITS 5-11	COMMUNICATIONS CABLE AND CONDUIT ROUTING
ITS 12	ADVANCE LOCATION AND WIM DETAIL
ITS 13	NOTIFICATION LOCATION, AVI READER, AND CHANGEABLE MESSAGE SIGNS
ITS 14	COMPLIANCE LOCATION DETAIL
ITS 15-16	SPLICE DETAILS
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SGN 1-7	SIGNING PLANS

NCDOT CONTACTS:
TRANSPORTATION MOBILITY AND SAFETY

ANDREW J. SKUCE, P.E.
ITS ENGINEER



ENGLISH

ALL DIMENSIONS IN THESE PLANS ARE IN FEET UNLESS OTHERWISE NOTED

Seal of Andrew J. Skuce, Professional Engineer, State of North Carolina, License No. 050152.

DocuSigned by:
Andrew J. Skuce
0262698C8B5C464

07/25/2023

2020 ITD

GENERAL NOTES

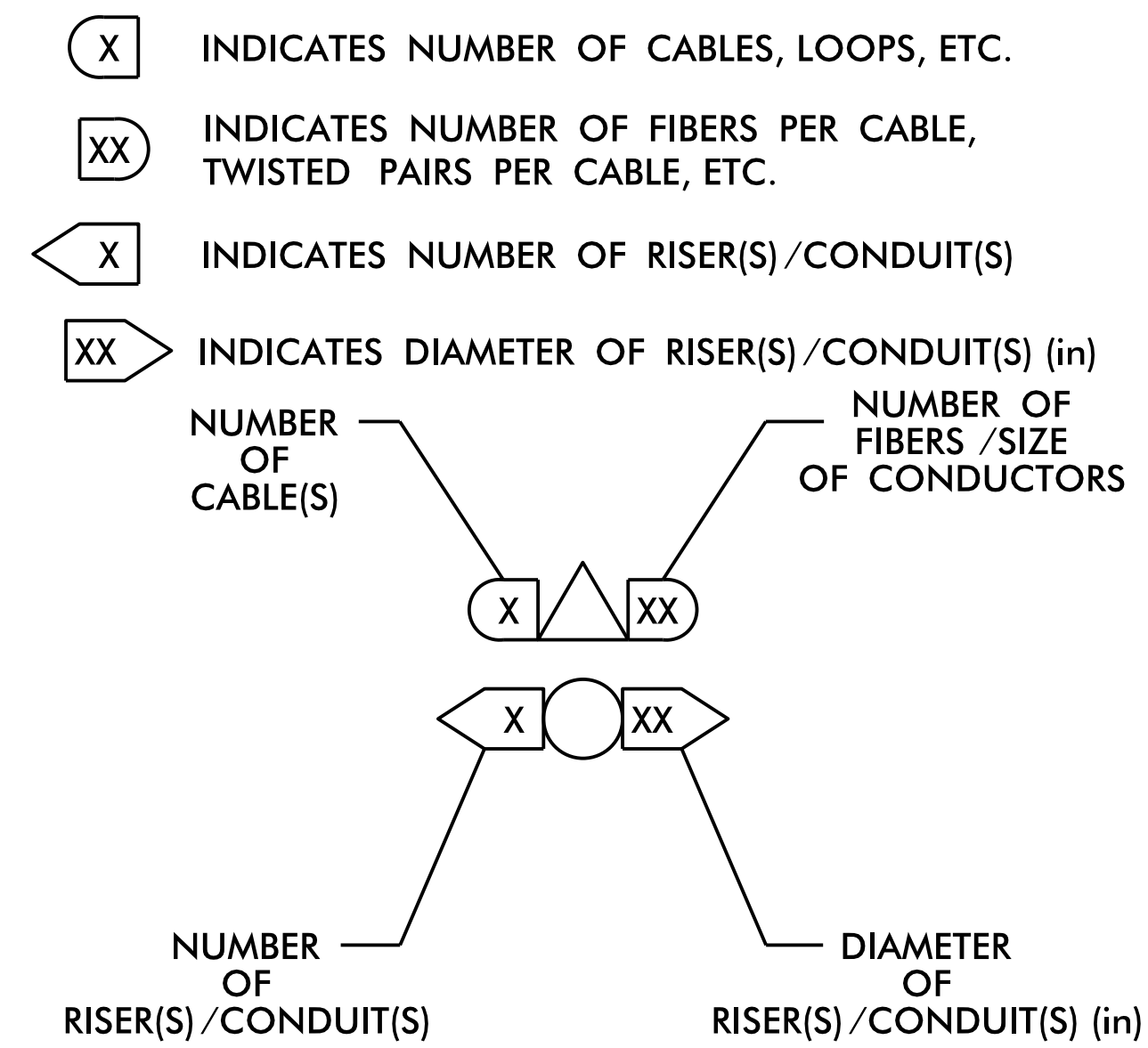
- OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO INSTALLATION FOR ITEMS TO BE INSTALLED AS PART OF THIS PROJECT.
- BURIED UTILITIES AND STRUCTURES: PIPELINES, STORM SEWERS, POWER CABLES, UTILITY CABLES, AND OTHER PUBLICLY AND PRIVATELY OWNED UNDERGROUND OBSTRUCTIONS MAY EXIST ADJACENT TO AND WITHIN THE ROADWAY RIGHT-OF-WAY WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT. INVESTIGATE THE LOCATION OF SUCH BURIED UTILITIES AND STRUCTURES WITH PUBLIC AND PRIVATE UTILITIES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER OF ALL AFFECTED UTILITIES FOR WORK THAT MAY IMPACT ANY UTILITY FACILITY.
- ALL WORK SHOWN ON THESE PLANS IS TO BE PERFORMED BY THE CONTRACTOR UNLESS IT IS SPECIFICALLY NOTED THAT THE WORK WILL BE PERFORMED BY OTHERS.
- WIM SYSTEM DETAILS AND TYPICALS ARE CONCEPTUAL. CONTRACTOR AND/OR WIM SYSTEM INSTALLER SHALL VERIFY LOCATIONS AND SENSOR INSTALLATION DETAILS BEFORE INSTALLATION. ANY CHANGES OR ADDITIONAL PLANS DEVELOPED BY THE CONTRACTOR AND/OR WIM SYSTEM INSTALLER SHALL BE SUBMITTED TO THE DEPARTMENT FOR APPROVAL.

LEGEND		
PROPOSED		EXISTING
	TRENCHED CONDUIT	
	DIRECTIONAL DRILLED CONDUIT	
	ELECTRICAL SERVICE	
	WOOD POLE	
	JUNCTION BOX	
	STANDARD INDUCTIVE LOOP DETECTOR	N/A
	CAMERA ASSEMBLY	N/A
	EQUIPMENT CABINET	
	PIEZOELECTRIC QUARTZ SENSOR	N/A
	TIRE MONITORING SENSOR	N/A
	GUARDRAIL	
	METAL POLE	
	CHANGEABLE MESSAGE SIGN	
	TRANSPONDER/AVI READER	

ABBREVIATIONS

AVI	AUTOMATIC VEHICLE IDENTIFICATION
ALPR	AUTOMATED LICENSE PLATE READER
HDPE	HIGH DENSITY POLYETHYLENE
L	LOOP DETECTOR
N.T.S.	NOT TO SCALE
WIM	WEIGH IN MOTION
PQS	PIEZOELECTRIC QUARTZ SENSOR
S	SENSOR
NCSHP	NORTH CAROLINA STATE HIGHWAY PATROL
TMS	TIRE MONITORING SENSOR

CONSTRUCTION NOTE SYMBOLOGY KEY



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	LEGEND, GENERAL NOTES AND ABBREVIATIONS	
	DIVISION 11 SURRY COUNTY NEAR MT. AIRY	PLAN DATE: JULY 2023 REVIEWED BY:
PREPARED BY: A. J. SKUCE	SCALE: NOT TO SCALE	REVISIONS INIT. DATE
DocuSigned by: <small>D262688C8B5C464</small>	DATE: 07/25/2023	

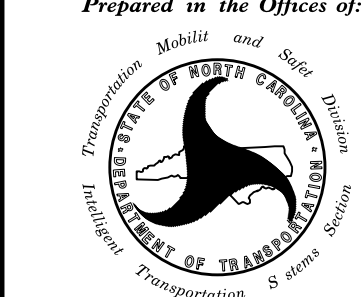
- 1 INSTALL THREE-WIRE COPPER FEEDER CONDUCTORS
- 2 INSTALL FOUR-WIRE COPPER FEEDER CONDUCTORS
- 3 NOT USED
- 3A INSTALL ALPR CABLE(S) *
- 3B INSTALL AVI CABLE(S) *
- 3C INSTALL WIMSORT SIGNAL CABLE(S) *
- 3D INSTALL PIEZOELECTRIC QUARTZ SENSOR CABLES *
- 3E INSTALL LOOP WIRE
- 3F INSTALL LEAD-IN CABLE
- 3G NOT USED *
- 3H INSTALL FOUR #8 COPPER FEEDER CONDUCTORS
- 3I INSTALL DMS CONTROL AND POWER CABLES
- 3J INSTALL TIRE MONITORING SENSOR CABLES
- 3K INSTALL COAXIAL CABLE
- 3L INSTALL CAT5 CABLE
- 4 SMFO CABLE
- 5 MMFO CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 8A SAW CUT PAVEMENT
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS

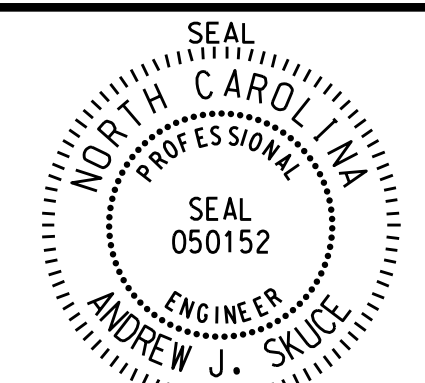
- 21A INSTALL CABLE(S) IN NEW CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 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 MODIFY EXISTING SPLICE CENTER
- 31 INSTALL POLE MOUNTED CABINET
- 32 INSTALL BASE MOUNTED CABINET WITH EXTENDER
- 33 REMOVE EXISTING SPLICE CABINET
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 INSTALL SPECIAL OVERSIZED 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 50 FEET OF COMMUNICATIONS CABLE
- 54 INSTALL STEP UP/DOWN TRANSFORMER
- 55 INSTALL INDUSTRIAL ETHERNET SWITCH

- 56 INSTALL VIDEO ENCODER
- 56A INSTALL VIDEO DECODER
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 58A INSTALL EQUIPMENT CABINET DISCONNECT
- 59 INSTALL PIEZOELECTRIC QUARTZ SENSORS
- 60 INSTALL AUTOMATED LICENSE PLATE RECOGNITION SYSTEM
- 61 INSTALL AUTOMATED USDOT RECOGNITION SYSTEM
- 62 INSTALL IMAGE CAPTURE CCTV CAMERA ASSEMBLY
- 63 INSTALL STANDARD INDUCTIVE LOOP
- 64 INSTALL OVERHEIGHT DETECTOR ASSEMBLY WITH METAL POLE AND FOUNDATION
- 65 INSTALL STEEL POLE, MASTARM AND FOUNDATION
- 66 INSTALL LED LANE CONTROL SIGN
- 67 INSTALL TRANSPONDER/AVI READER
- 68 INSTALL CHANGABLE MESSAGE SIGN, STRUCTURE, AND FOUNDATION
- 69 INSTALL STEEL POLE FOUNDATION
- 70 INSTALL TIRE MONITORING SENSORS
- 71 INSTALL TIRE MONITORING ELECTRONICS

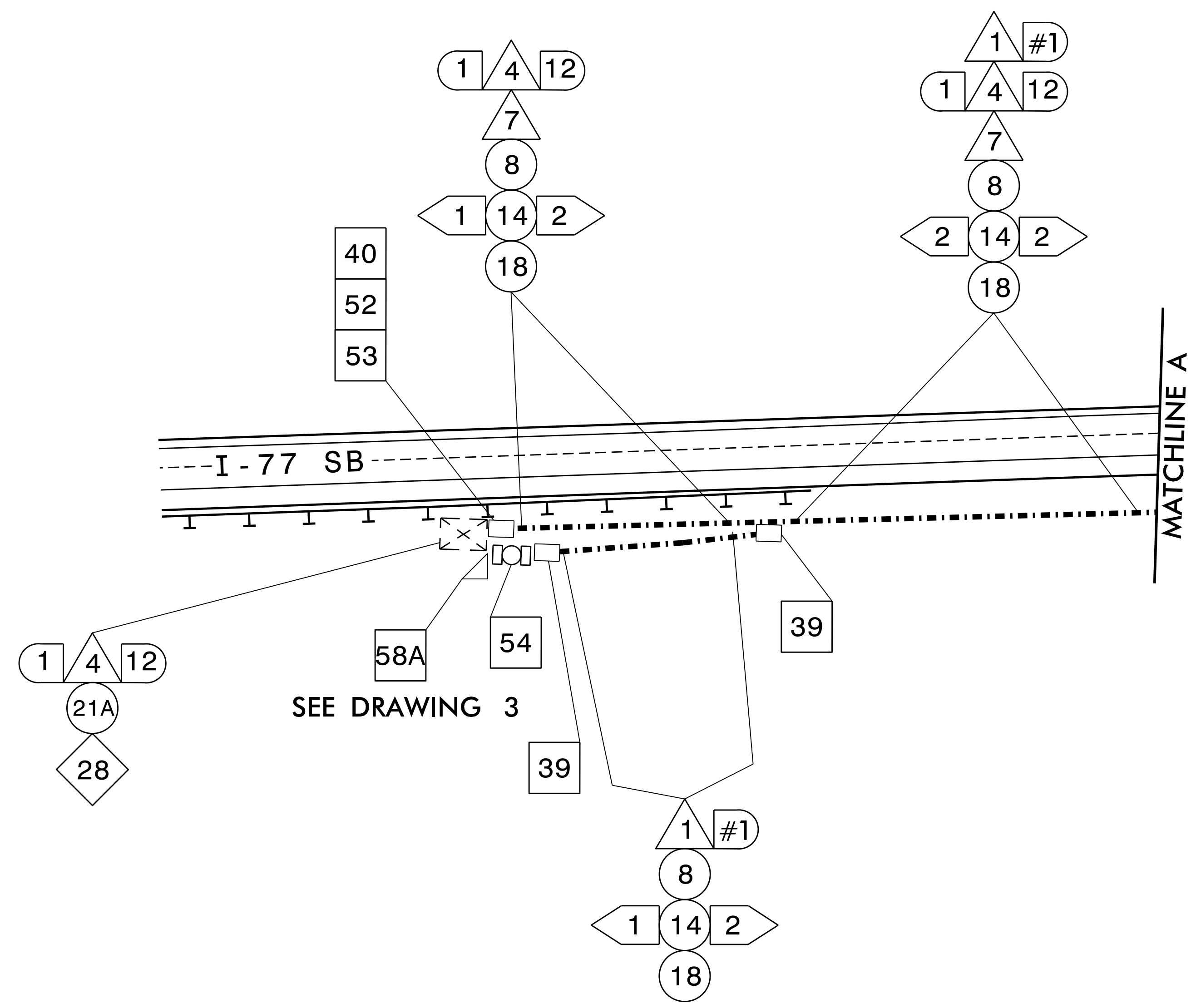
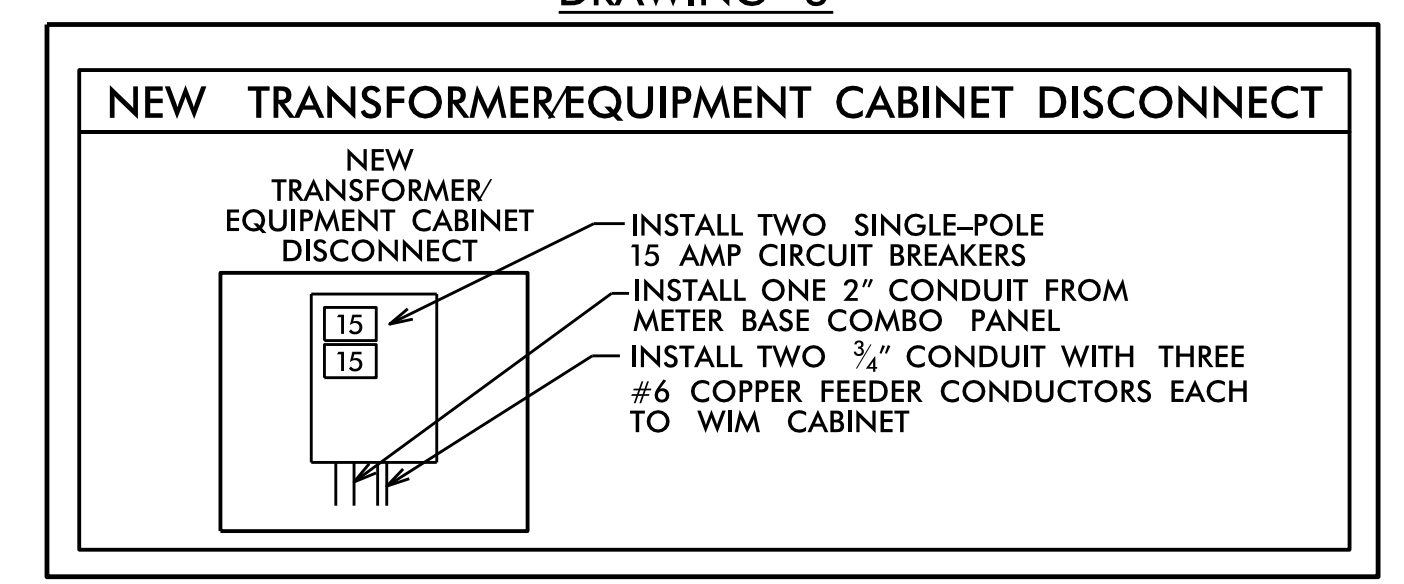
* CABLES SHALL BE PER EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND RATED FOR WET LOCATIONS.

DOCUMENT NOT CONSIDERED FINAL
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 Prepared in the Offices of: Transportation, Mobility and Smart Innovation DEPARTMENT OF TRANSPORTATION 750 N. Greenfield Place, Garner, NC 27529		CONSTRUCTION NOTES DIVISION 11 SURRY COUNTY NEAR MT. AIRY PLAN DATE: JULY 2023 REVIEWED BY: PREPARED BY: A. J. SKUCE	
SCALE	REVISIONS	INIT.	DATE
NOT TO SCALE			

 SEAL NORTH CAROLINA PROFESSIONAL SEAL 050152 ENGINEER ANDREW J. SKUCE	DocuSigned by: Andrew J. Skuce 0262886C8B5C464 07/25/2023 DATE
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DRAWING 3

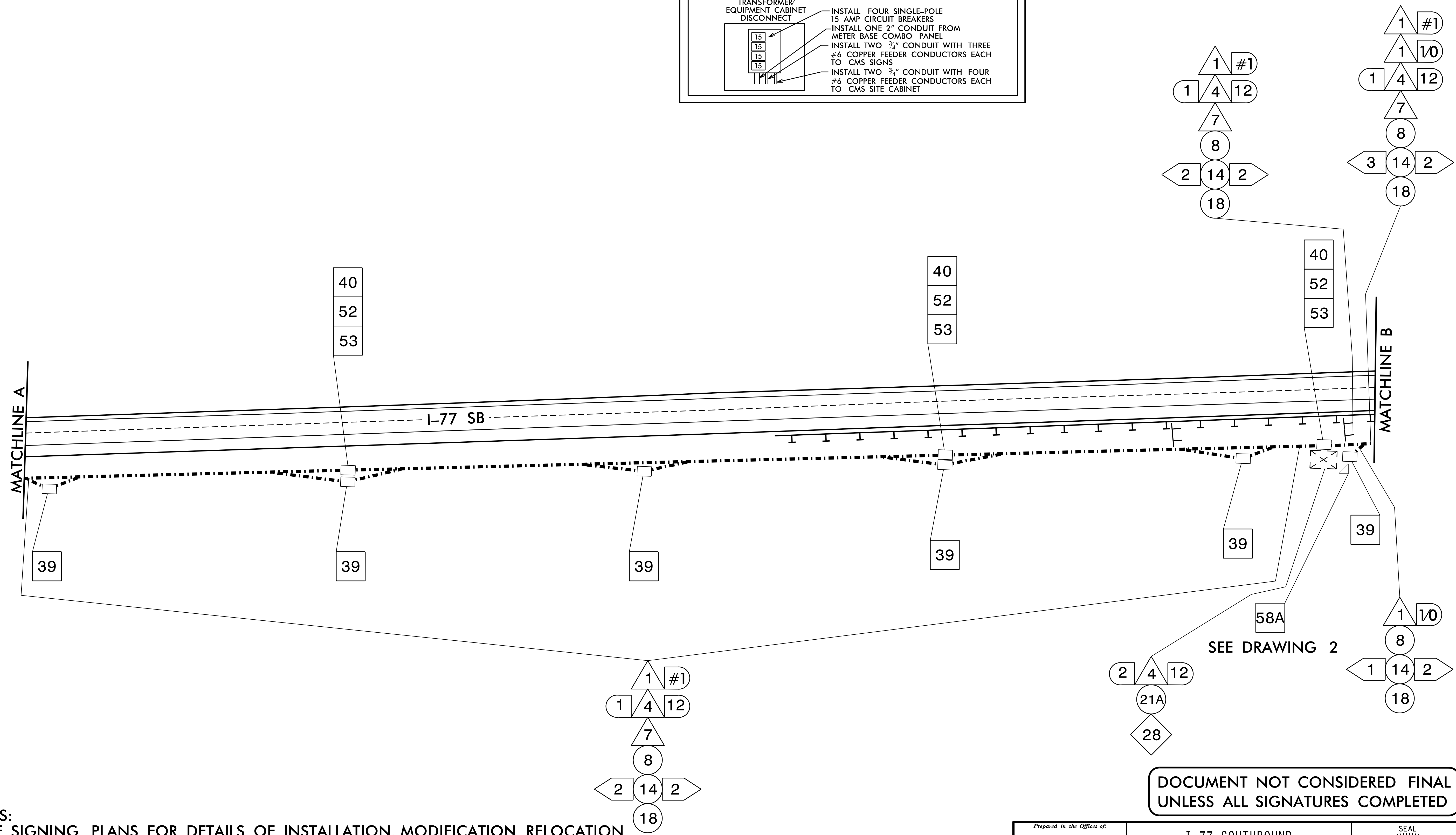
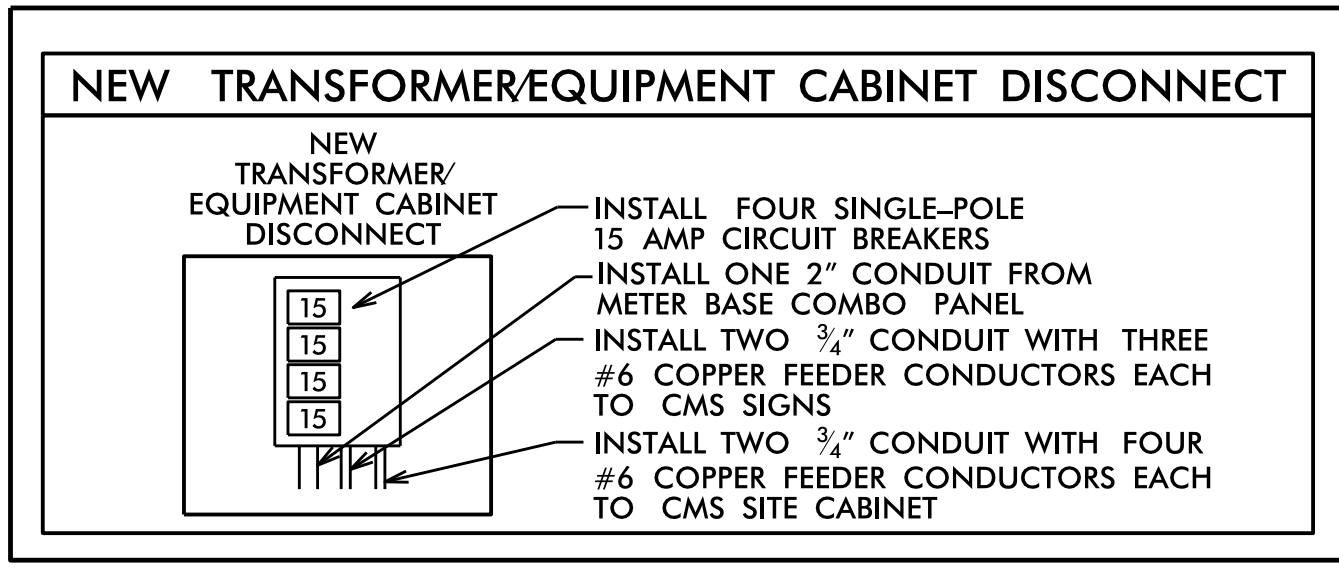


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 - CONTRACTOR SHALL VERIFY EQUIPMENT CABINET DISCONNECT BREAKER SIZE AND QUANTITY WITH WIM SYSTEM REQUIREMENTS BEFORE INSTALLATION.
 - CONTRACTOR SHALL VERIFY CONDUCTOR SIZES FOR COMPLIANCE WITH NEC AND NCDOT VOLTAGE DROP REQUIREMENTS.

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<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>I-77 SOUTHBOUND WEIGH STATION UPGRADE CABLE ROUTING PLANS</p>		
	<p>DIVISION 11 SURRY COUNTY MT. AIRY</p> <p>PLAN DATE: JULY 2023</p> <p>PREPARED BY: A. J. SKUCE</p>	<p>REVIEWED BY:</p> <p>REVISIONS</p>	
<p>SCALE: NTS</p>			

DRAWING 2



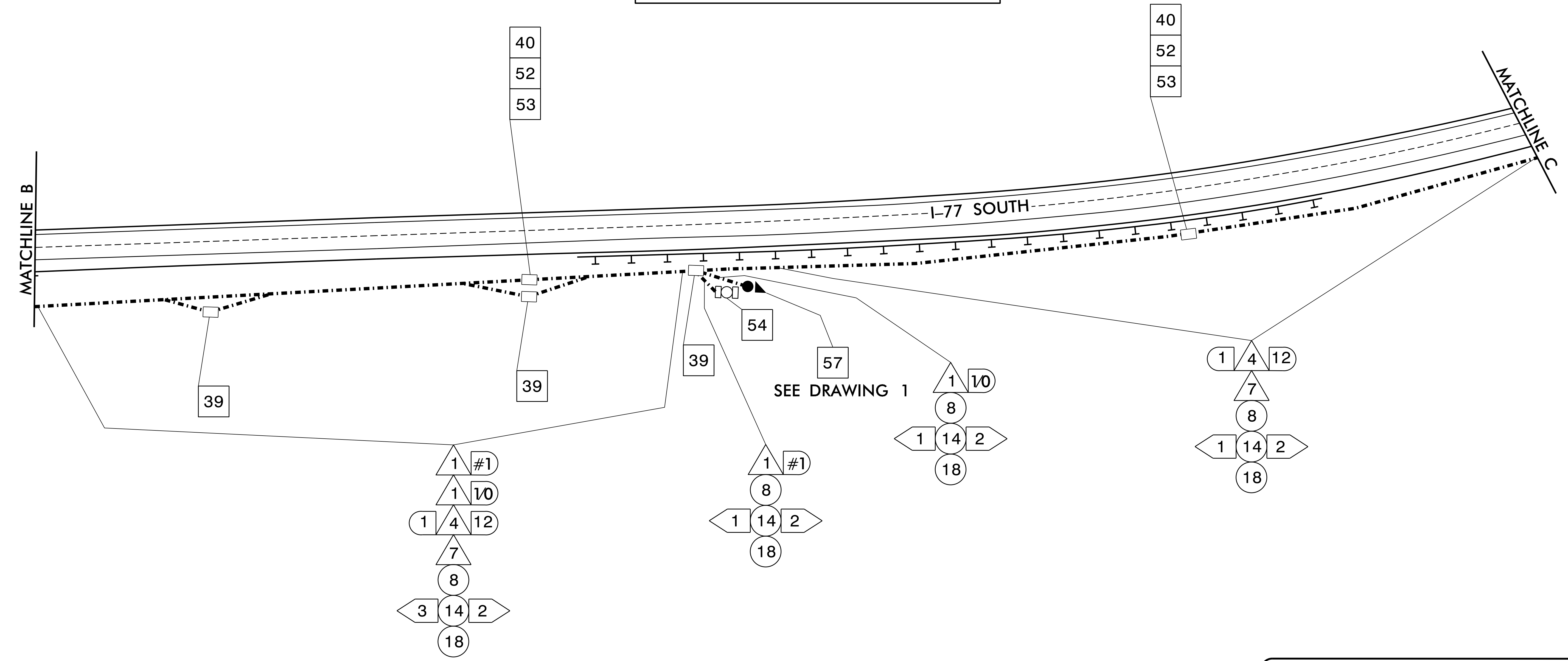
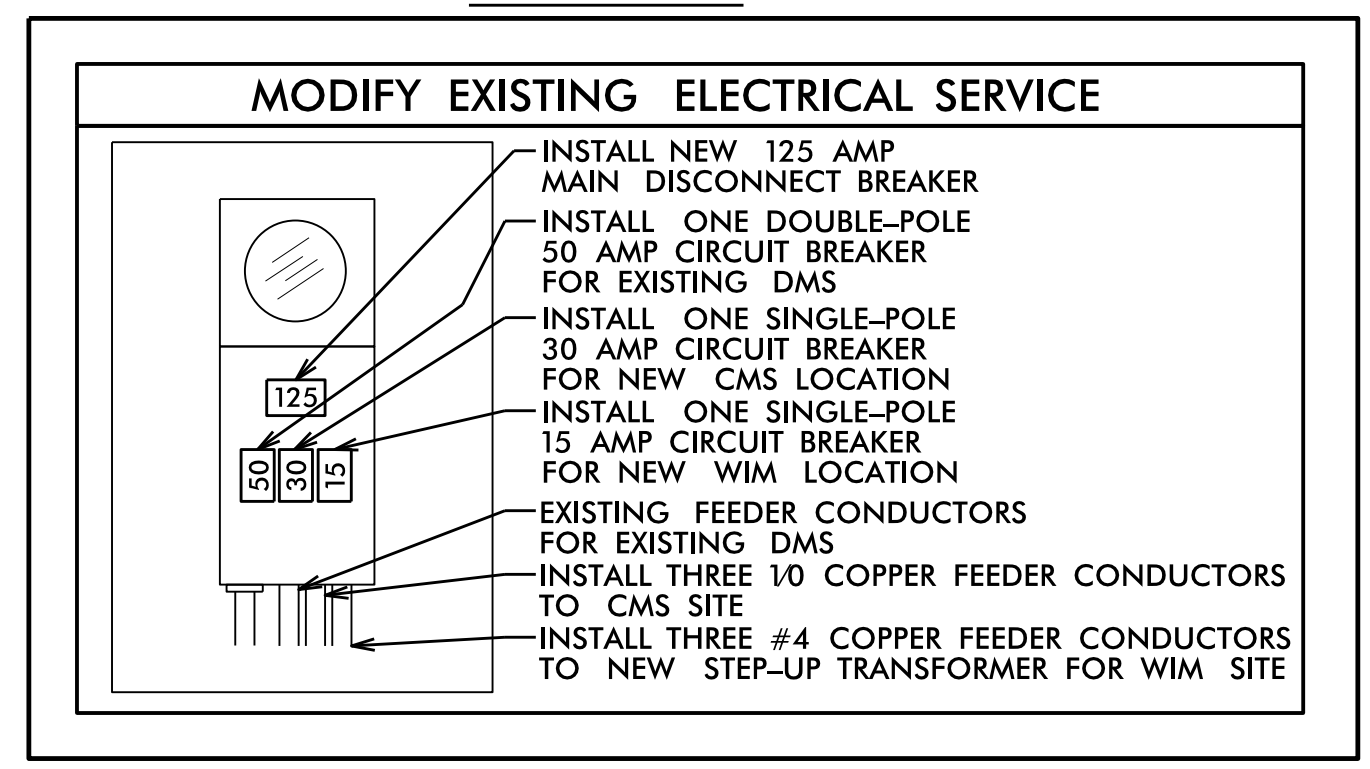
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DocuSigned by: Andrew J. Skuce 07/25/2023

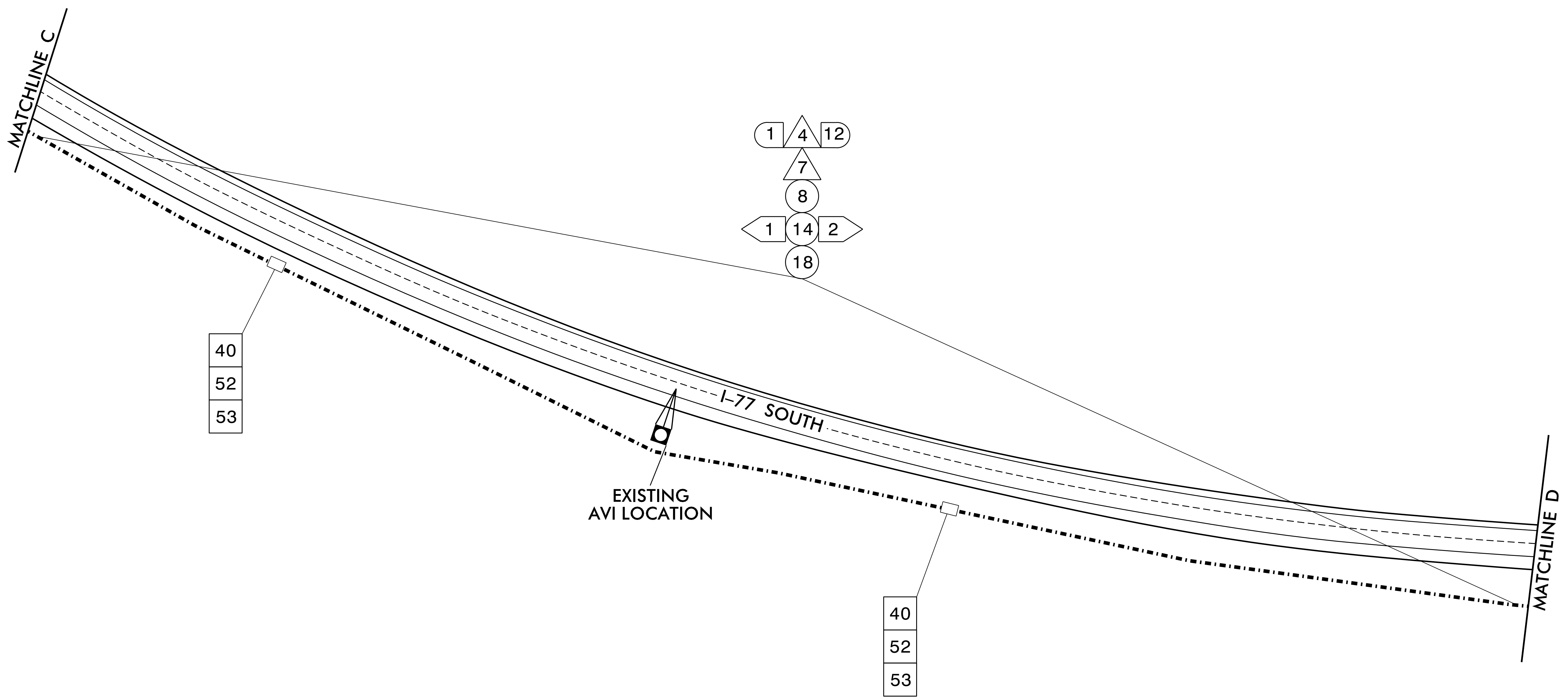
DRAWING 1



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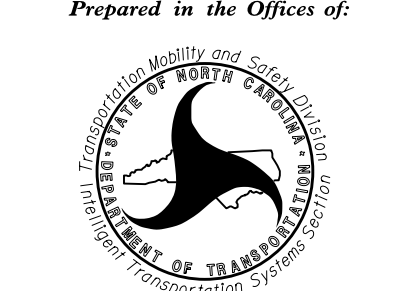
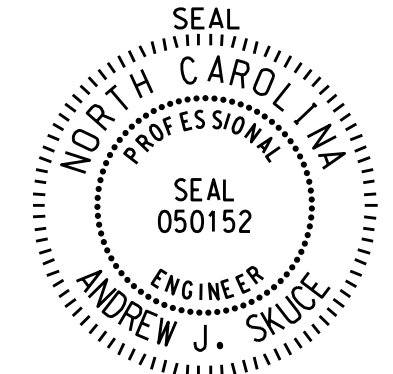
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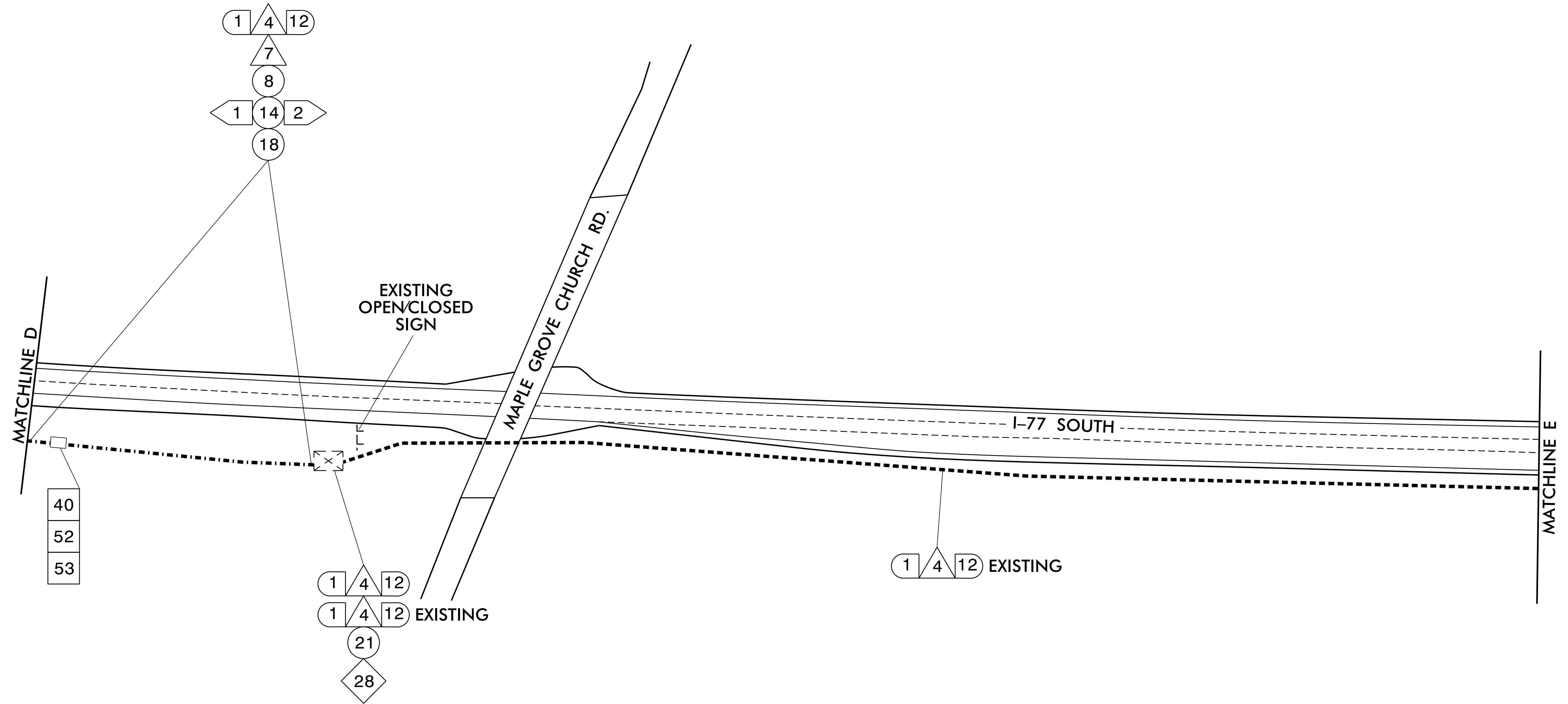
	I-77 SOUTHBOUND WEIGH STATION UPGRADE CABLE ROUTING PLANS		DIVISION 11 SURRY COUNTY MT. AIRY
	PLAN DATE: JULY 2023 PREPARED BY: A. J. SKUCE	REVIEWED BY: REVIEWED BY:	REVISIONS INIT. DATE



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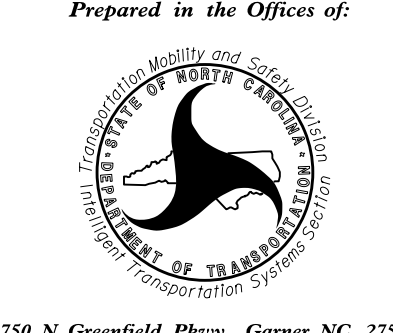
 <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	I-77 SOUTHBOUND WEIGH STATION UPGRADE CABLE ROUTING PLANS		 <small>SEAL 050152 ENGINEER ANDREW J. SKUCE</small>
	<small>DIVISION 11 SURRY COUNTY MT. AIRY</small>		
<small>SCALE</small> NTS	<small>PLAN DATE:</small> JULY 2023	<small>REVIEWED BY:</small>	<small>REVISIONS</small>
	<small>PREPARED BY:</small> A. J. SKUCE	<small>REVIEWED BY:</small>	<small>INIT.</small> <small>DATE</small>
			<small>DocuSigned by:</small> Andrew J. Skuce 07/25/2023 <small>DATE</small>

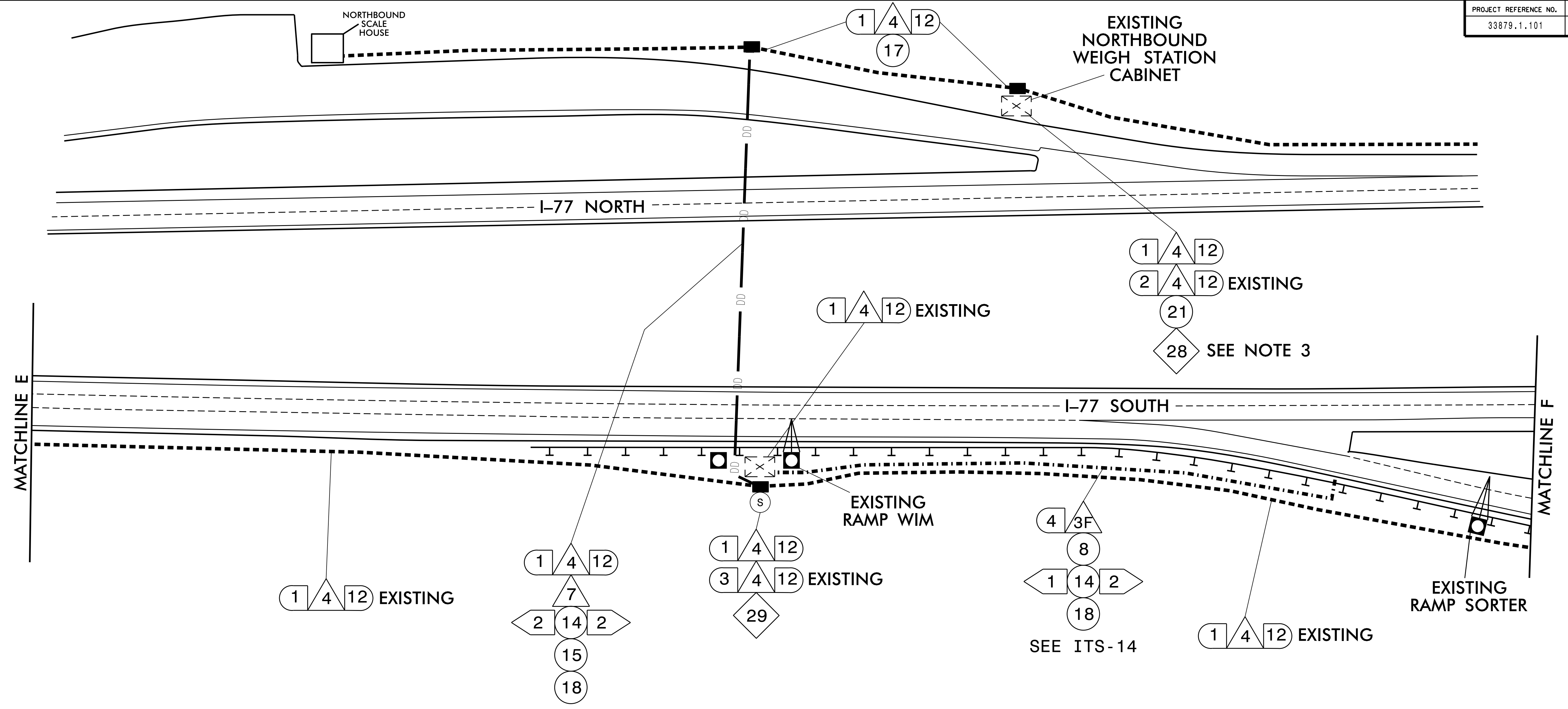


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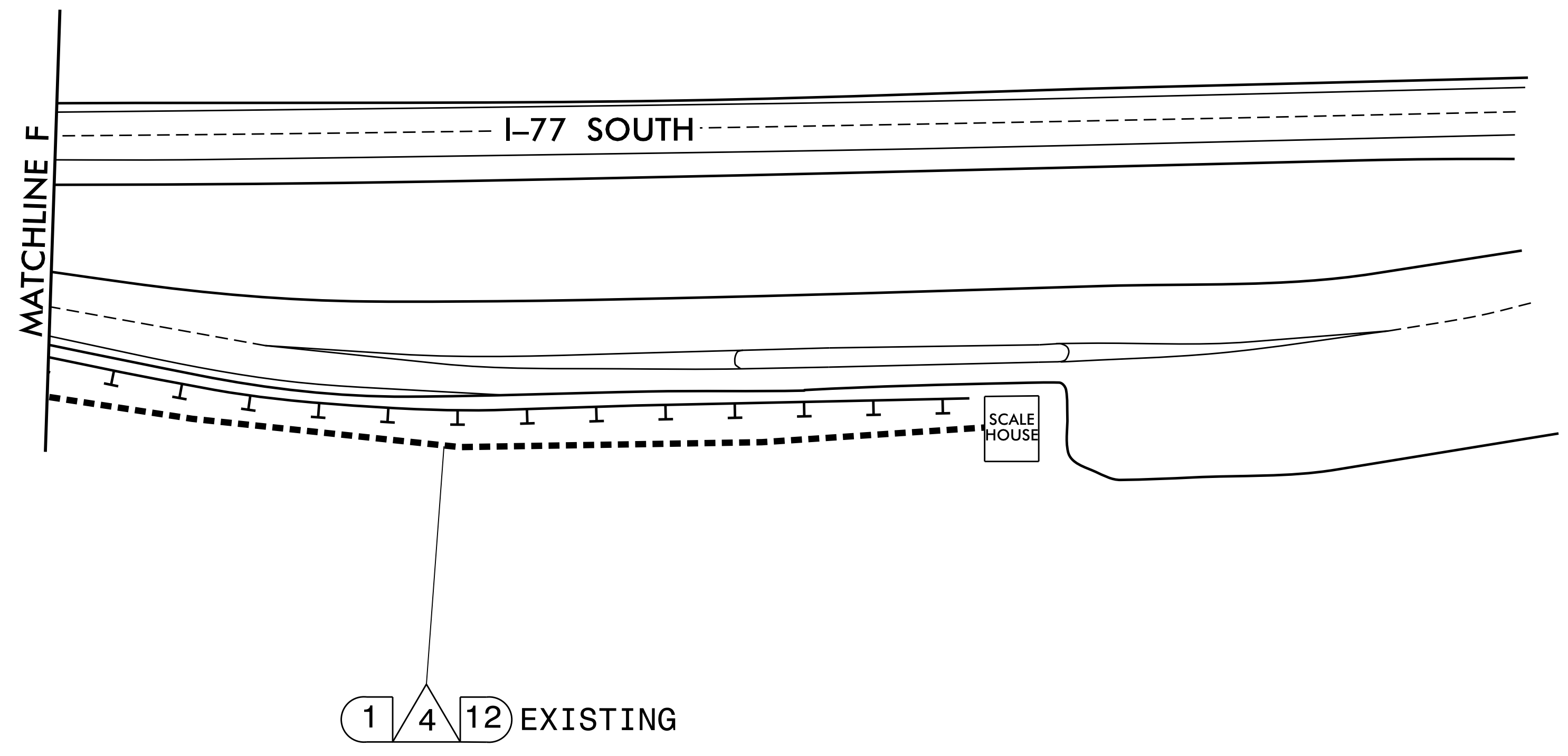
 <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	<p>I-77 SOUTHBOUND WEIGH STATION UPGRADE CABLE ROUTING PLANS</p>		<p>SEAL NORTH CAROLINA PROFESSIONAL ENGINEER ANDREW J. SKUCE 050152</p>
	<p>DIVISION 11 SURRY COUNTY MY, AIRY</p>	<p>07/25/2023</p>	
<p>SCALE NTS</p>	<p>PREPARED BY: A. J. SKUCE</p>	<p>REVIEWED BY:</p>	<p>DATE</p>
<p>REVISIONS</p>	<p>INIT.</p>	<p>DATE</p>	<p>DATE</p>



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 2. FIBER-OPTIC CABLE(S) SHALL BE ISOLATED FROM ALL OTHER CABLES USING ONE 2-INCH CONDUIT AND SEPARATE JUNCTION BOXES.
 3. INSTALL NEW 12-FIBER CABLE IN NEW INTERCONENCT CENTER IN EXISTING NORTHBOUND STATION CABINET. SEE SPLICE DETAILS FOR SPLICING REQUIREMENTS.
 4. MAINTAIN AND INTEGRATE EXISTING RAMP WIM.

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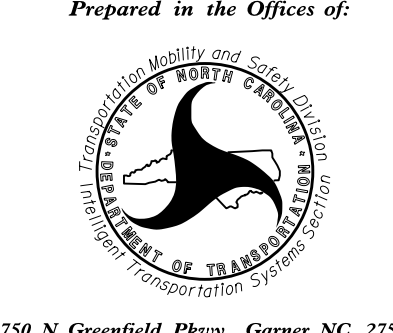
<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>Prepared in the Offices of:</p> <p>I-77 SOUTHBOUND WEIGH STATION UPGRADE CABLE ROUTING PLANS</p>		
	<p>DIVISION 11 SURRY COUNTY MT. AIRY</p> <p>PLAN DATE: JULY 2023</p> <p>PREPARED BY: A. J. SKUCE</p>	<p>REVIEWED BY:</p> <p>REVISIONS</p>	
<p>SCALE: NTS</p>	<p>DATE</p>		<p>DocuSigned by: Andrew J. Skuce</p>



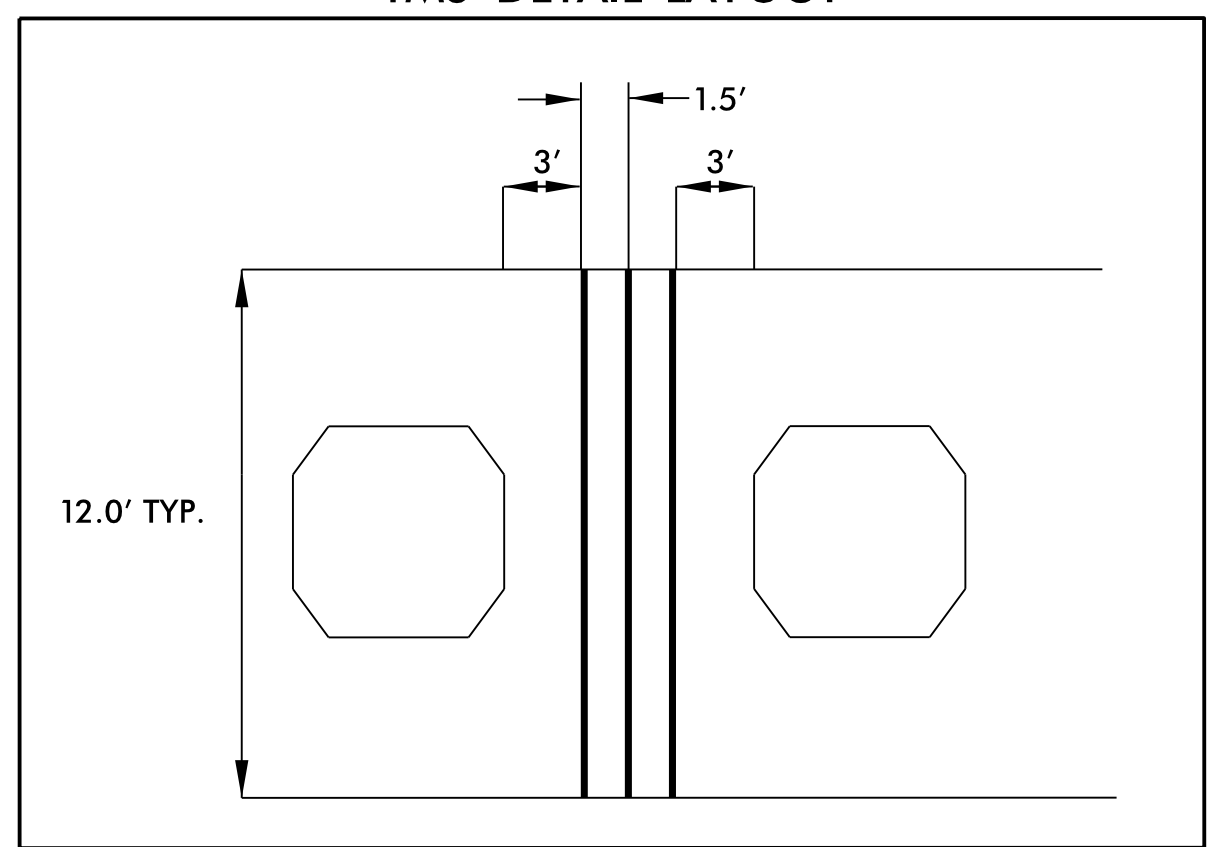
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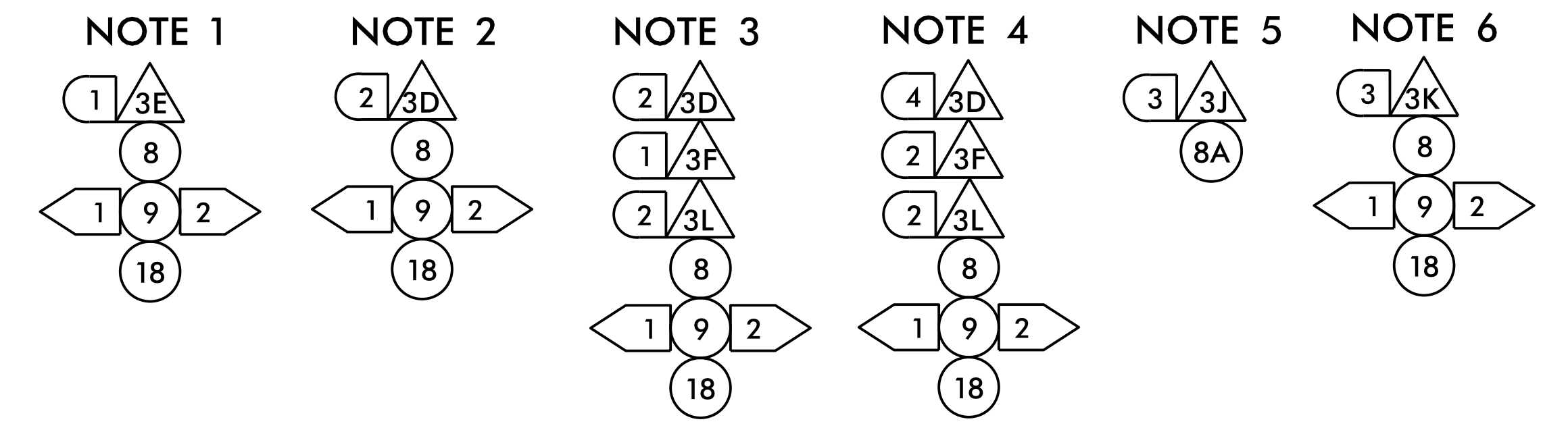
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	<small>DIVISION 11 SURRY COUNTY MT. AIRY</small>	<small>PLANNED BY: A. J. SKUCE</small>	
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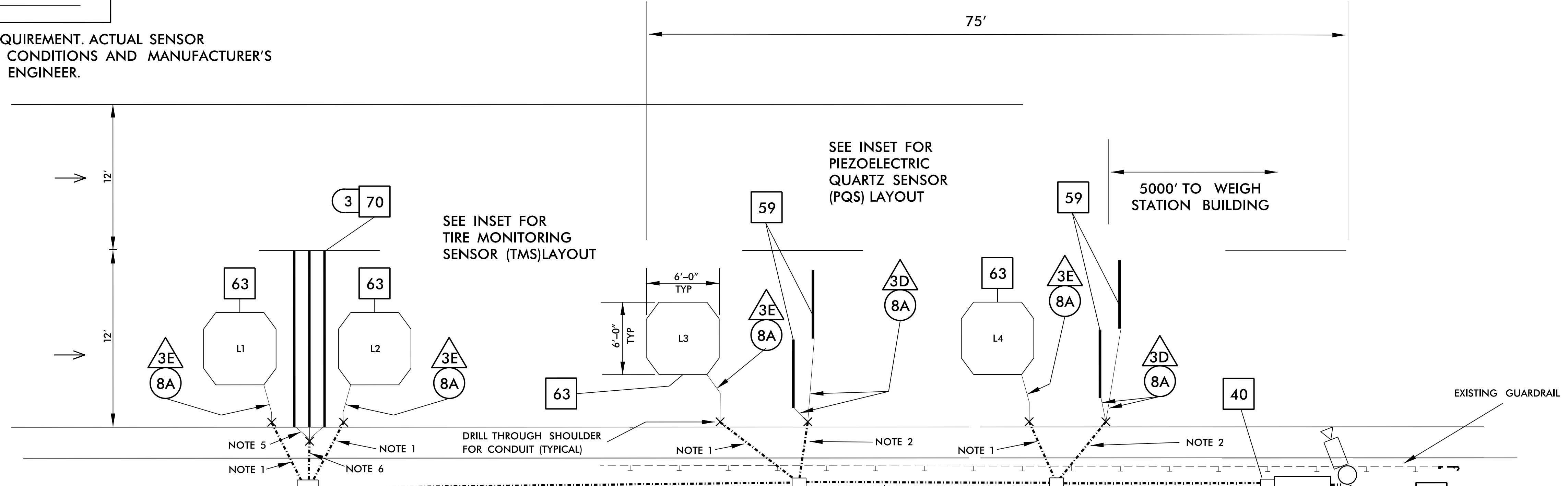
TMS DETAIL LAYOUT



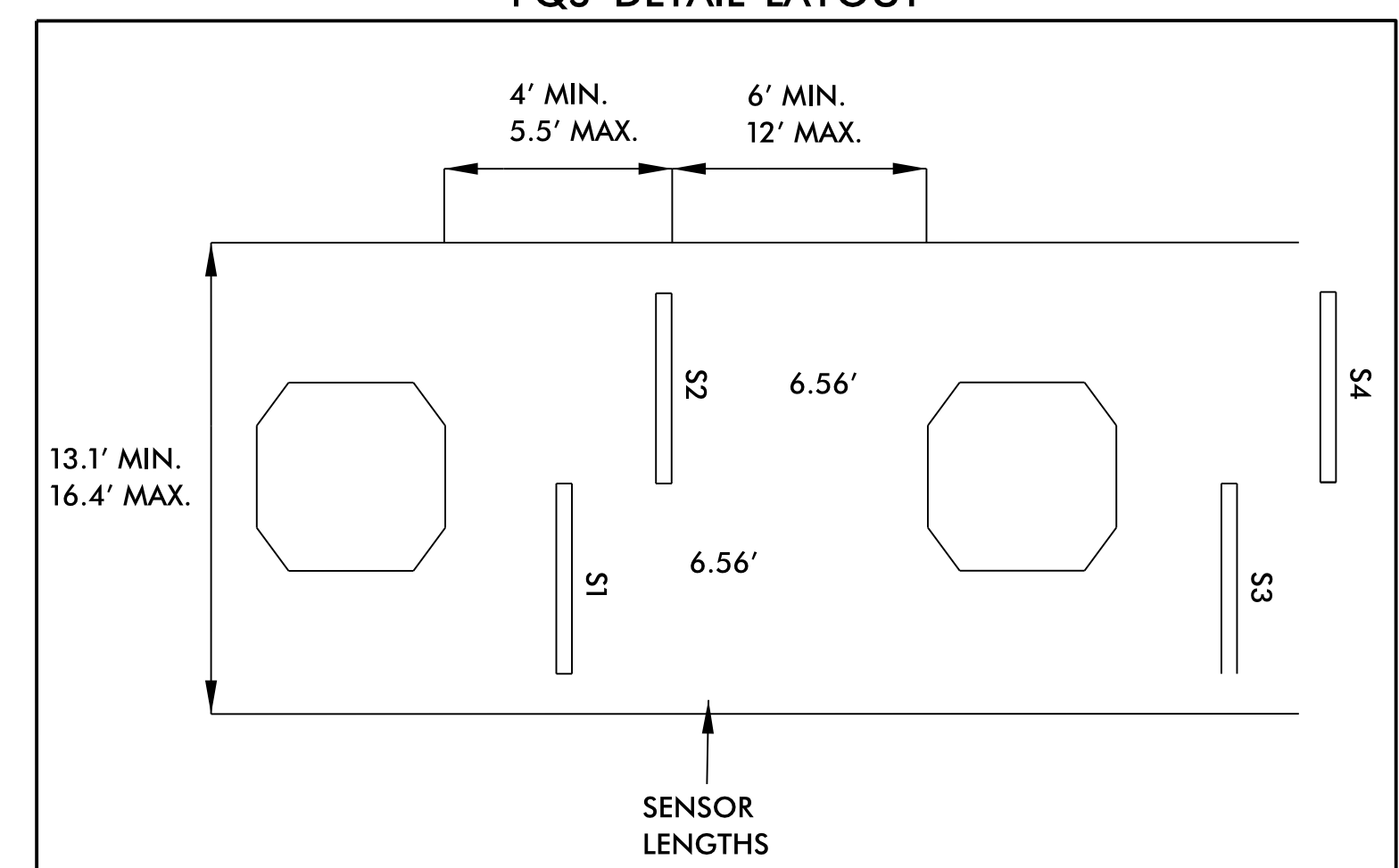
SENSOR SPACING SHOWN IS TYPICAL REQUIREMENT. ACTUAL SENSOR SPACING MAY BE ALTERED TO SUIT SITE CONDITIONS AND MANUFACTURER'S SPECIFICATIONS UPON APPROVAL BY THE ENGINEER.



I-77 SOUTHBOUND



PQS DETAIL LAYOUT

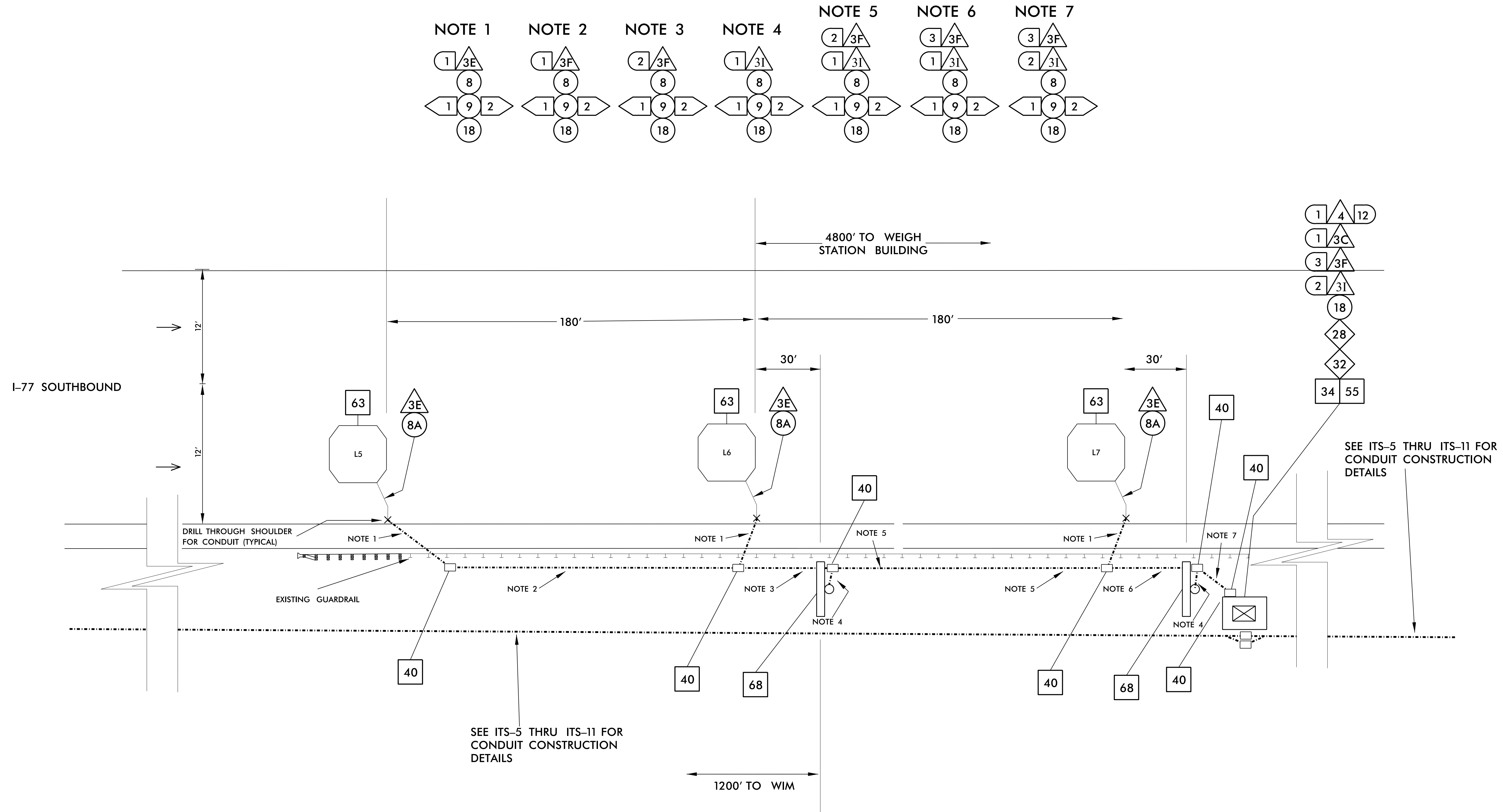


SENSOR SPACING SHOWN IS TYPICAL REQUIREMENT. ACTUAL SENSOR SPACING MAY BE ALTERED TO SUIT SITE CONDITIONS AND MANUFACTURER'S SPECIFICATIONS UPON APPROVAL BY THE ENGINEER.

- NOTES:
- A. EXISTING FIBER OPTIC CABLE AND CONDUIT SYSTEM RUNS FROM THE WEIGH STATION BUILDING TO THE EXISTING "OPEN/CLOSED" SIGN. IN ADDITION, THERE IS AN EXISTING QUEUE DETECTION SYSTEM AND OVERHEAD LIGHTING CIRCUITS ON THE RAMP. BEFORE BEGINNING ANY UNDERGROUND WORK CONTACT THE DIVISION TRAFFIC ENGINEER TO LOCATE THE EXISTING UNDERGROUND COMPONENTS.
 - B. PIEZOELECTRIC QUARTZ SENSOR AND INDUCTIVE LOOP SAW SLOTS, INCLUDING TAIL AND LEAD-IN SECTIONS, MUST BE DRY CUT.

<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>ADVANCE LOCATION AND WIM DETAIL</p>									
	<p>DIVISION 11 SURRY COUNTY MT. AIRY</p> <p>PLAN DATE: SEPTEMBER 2023 REVIEWED BY:</p> <p>PREPARED BY: A. J. SKUCE</p>	<p>SCALE: NOT TO SCALE</p>		<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	INIT.	DATE		
NO.	DESCRIPTION	INIT.	DATE							

DocuSigned by:
Andrew J. Skuce
 09/19/2023

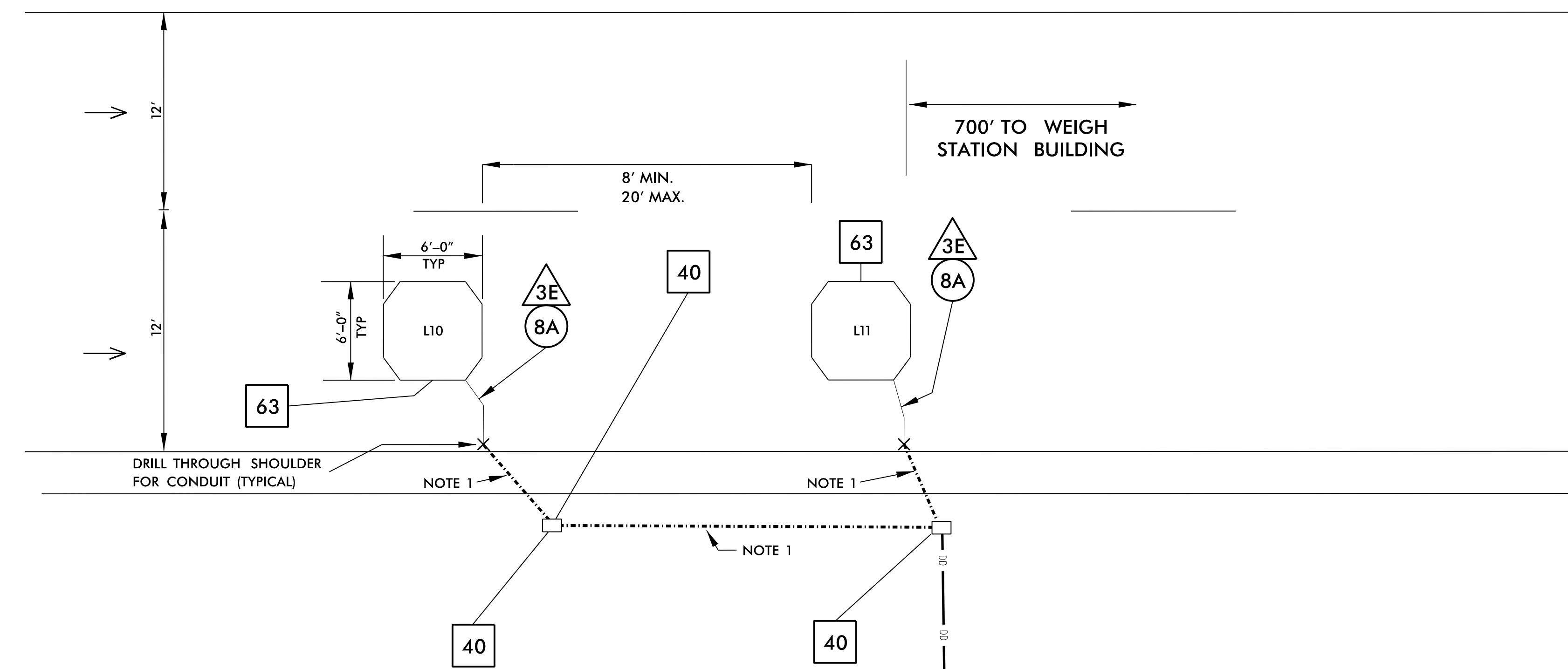


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

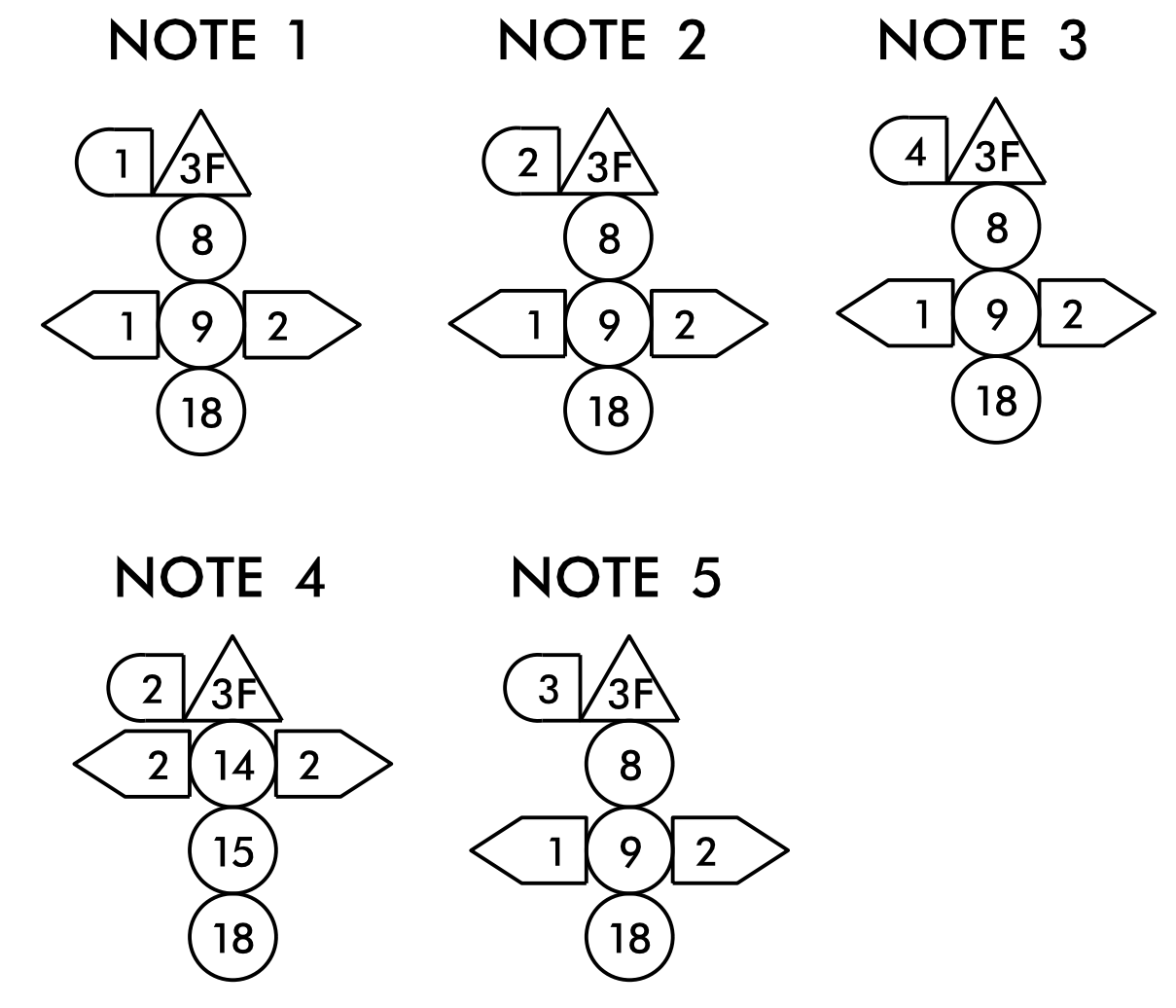
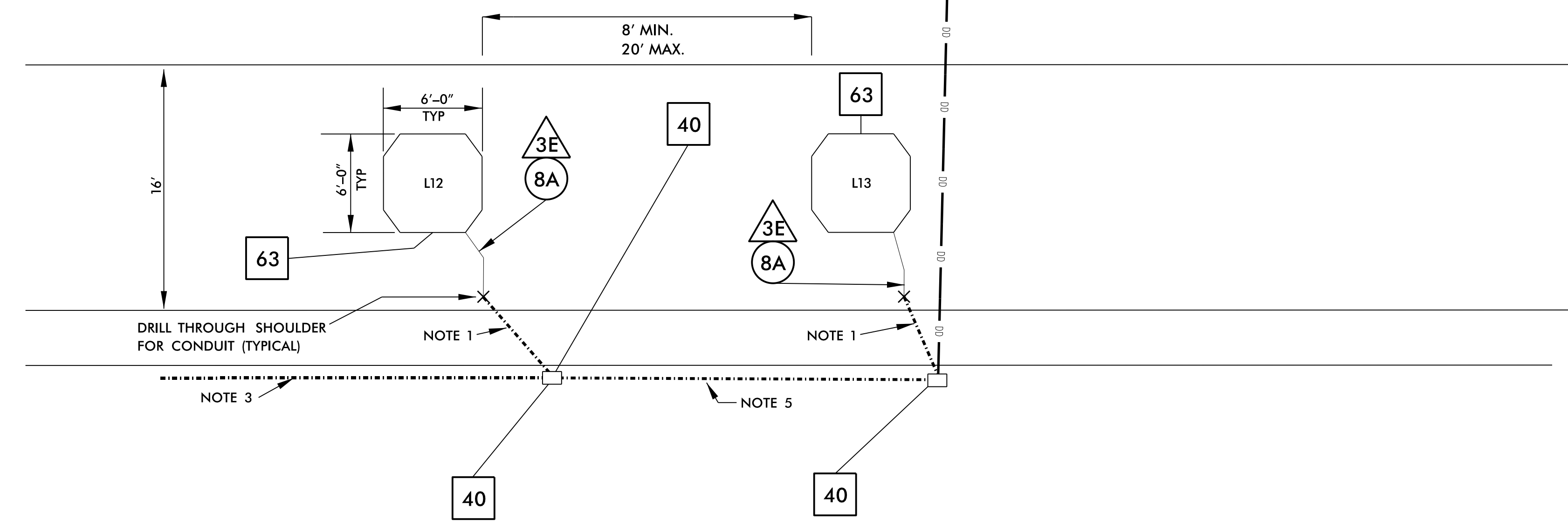
- NOTES:
- A. EXISTING FIBER OPTIC CABLE AND CONDUIT SYSTEM RUNS FROM THE WEIGH STATION BUILDING TO THE EXISTING "OPEN/CLOSED" SIGN. IN ADDITION, THERE IS AN EXISTING QUEUE DETECTION SYSTEM AND OVERHEAD LIGHTING CIRCUITS ON THE RAMP. BEFORE BEGINNING ANY UNDERGROUND WORK CONTACT THE DIVISION TRAFFIC ENGINEER TO LOCATE THE EXISTING UNDERGROUND COMPONENTS.
 - B. INDUCTIVE LOOP SAW SLOTS, INCLUDING TAIL AND LEAD-IN SECTIONS, CAN BE WET CUT AT THIS LOCATION.

<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<p>NOTIFICATION LOCATION, AVI READER, & CHANGEABLE MESSAGE SIGNS</p>		
	<p>DIVISION 11 SURRY COUNTY MT. AIRY</p> <p>PLAN DATE: JULY 2023</p> <p>PREPARED BY: A. J. SKUCE</p>	<p>REVIEWED BY:</p>	
<p>SCALE: NOT TO SCALE</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>09/19/2023</p> <p>DATE</p>

I-77 SOUTHBOUND
MAIN LINE

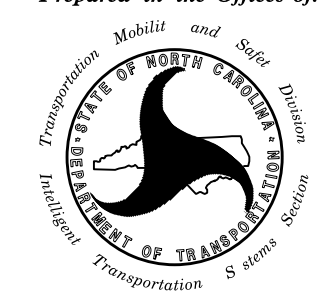
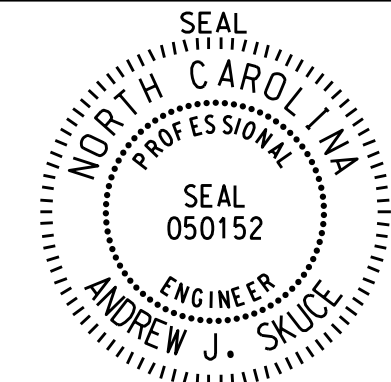


WEIGH STATION
RAMP LANE



- NOTES:
- A. EXISTING FIBER OPTIC CABLE AND CONDUIT SYSTEM RUNS FROM THE WEIGH STATION BUILDING TO THE EXISTING "OPEN/CLOSED" SIGN. IN ADDITION, THERE IS AN EXISTING QUEUE DETECTION SYSTEM AND OVERHEAD LIGHTING CIRCUITS ON THE RAMP. BEFORE BEGINNING ANY UNDERGROUND WORK CONTACT THE DIVISION TRAFFIC ENGINEER TO LOCATE THE EXISTING UNDERGROUND COMPONENTS.
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DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

 <small>Prepared in the Offices of: Progressive, Mobile, and Safe Division STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 750 N. Greenfield Pkwy., Garner, NC 27529</small>	COMPLIANCE LOCATION		 <small>DocuSigned by: Andrew J. Skuce D028B8C8B5C454</small>
	DIVISION 11 SURRY COUNTY MT. AIRY PLAN DATE: JULY 2023 REVIEWED BY: PREPARED BY: A. J. SKUCE	SCALE: NOT TO SCALE REVISIONS: _____ INIT.: _____ DATE: _____	
			09/19/2023 DATE

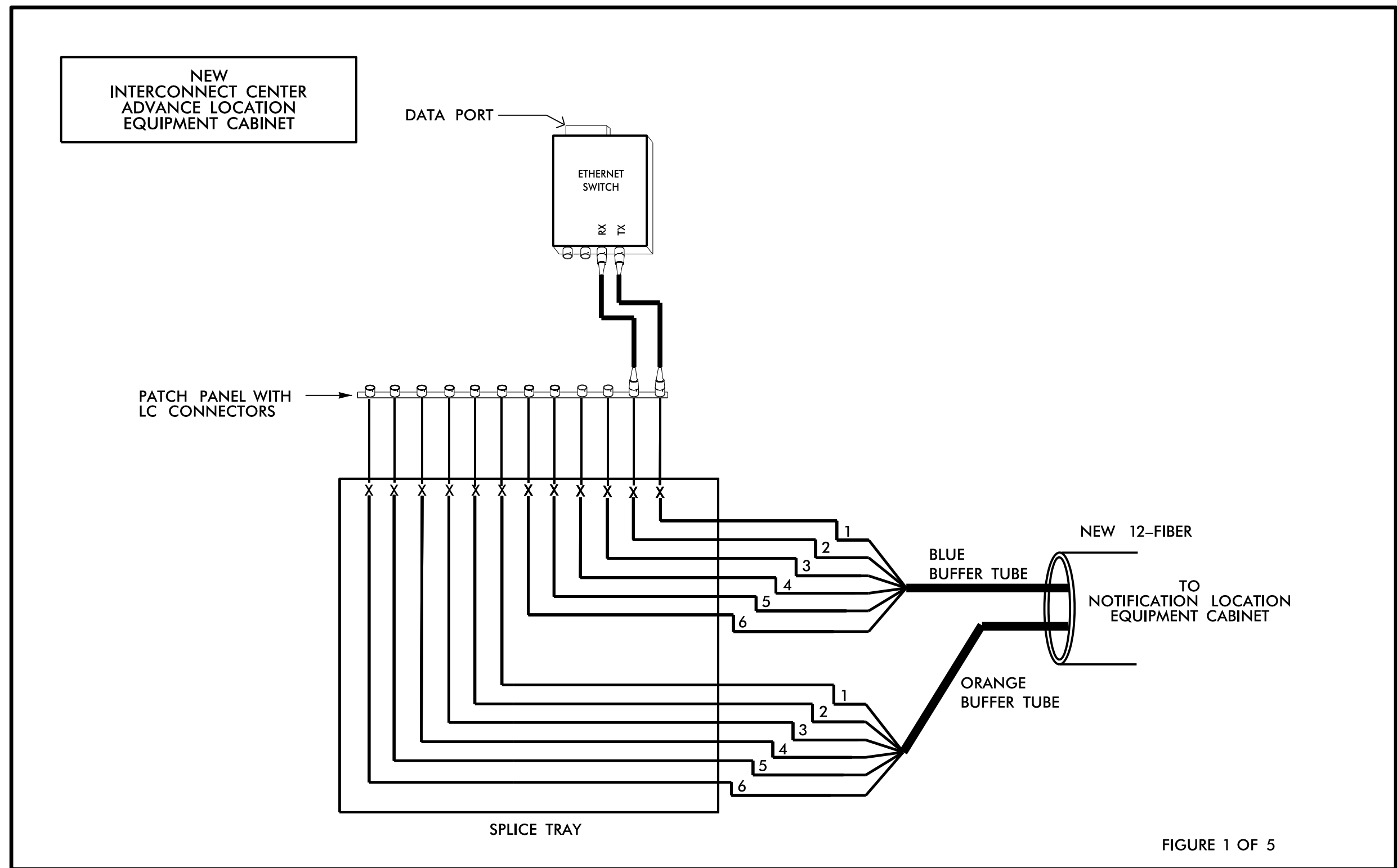


FIGURE 1 OF 5

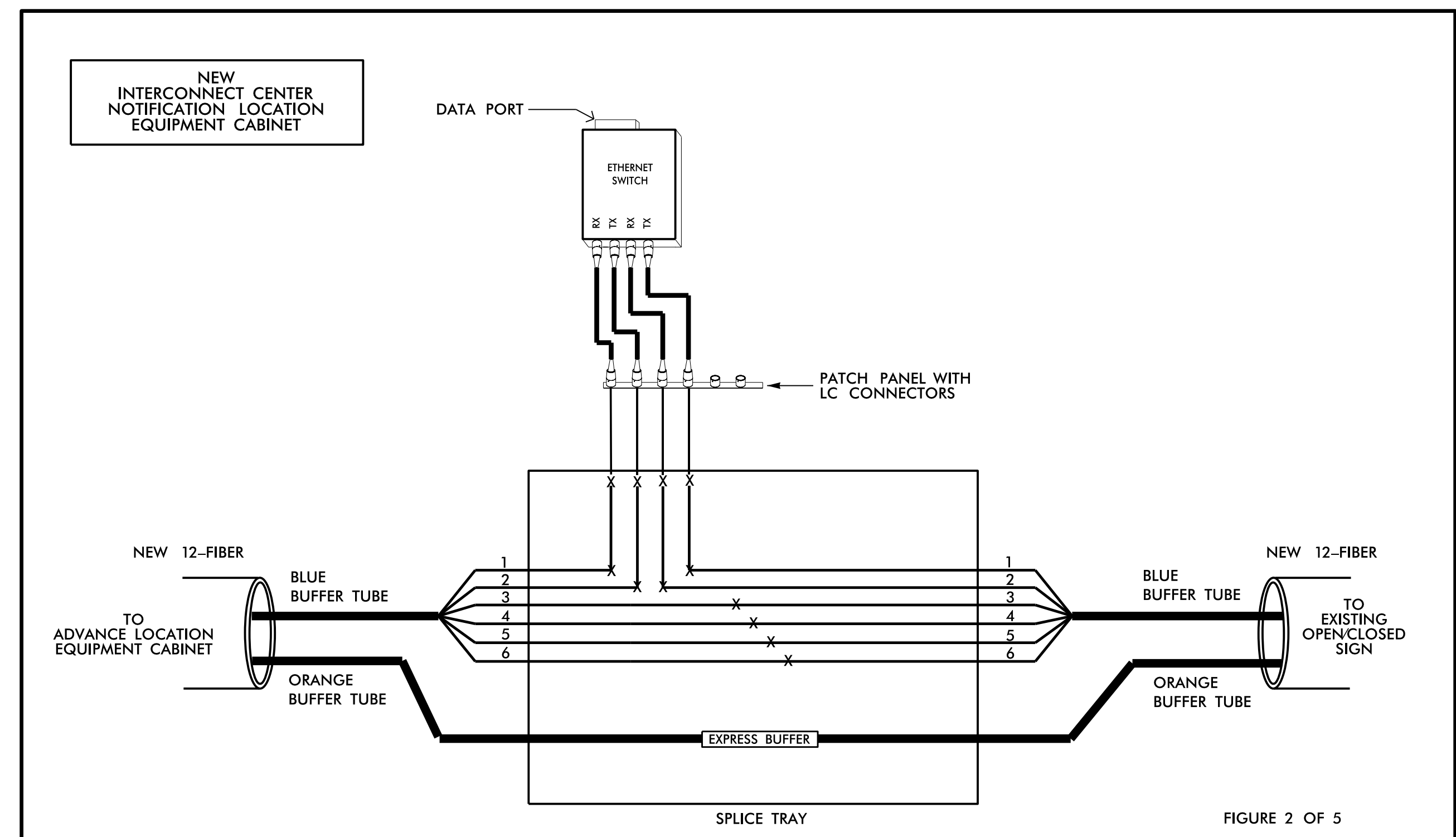


FIGURE 2 OF 5

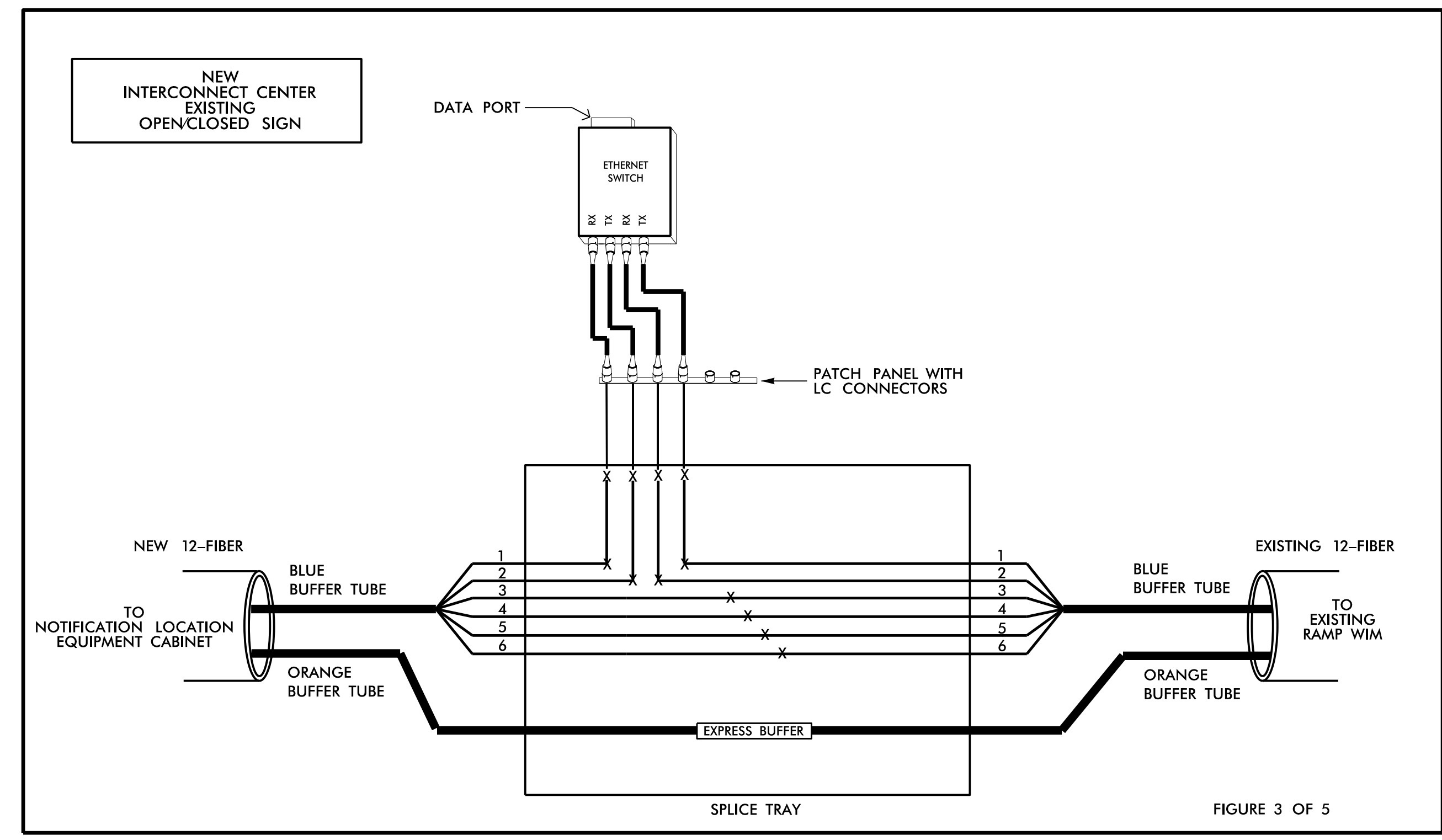


FIGURE 3 OF 5

COLOR CODE TIA/EIA 598-A		LEGEND
(1) BLUE	(7) RED	X = FUSION SPLICE
(2) ORANGE	(8) BLACK	C = CAP
(3) GREEN	(9) YELLOW	
(4) BROWN	(10) VIOLET	
(5) SLATE	(11) ROSE	
(6) WHITE	(12) AQUA	

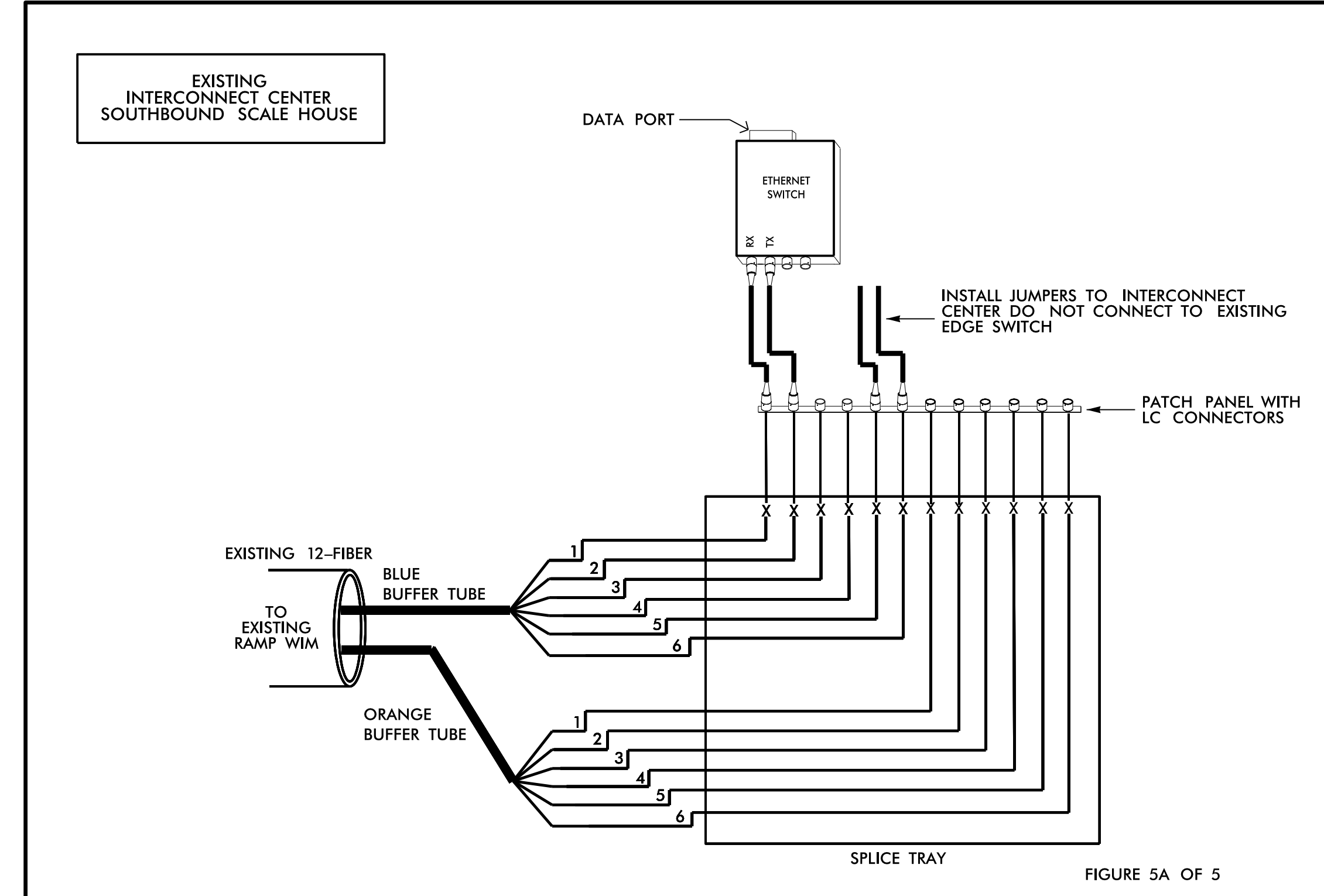
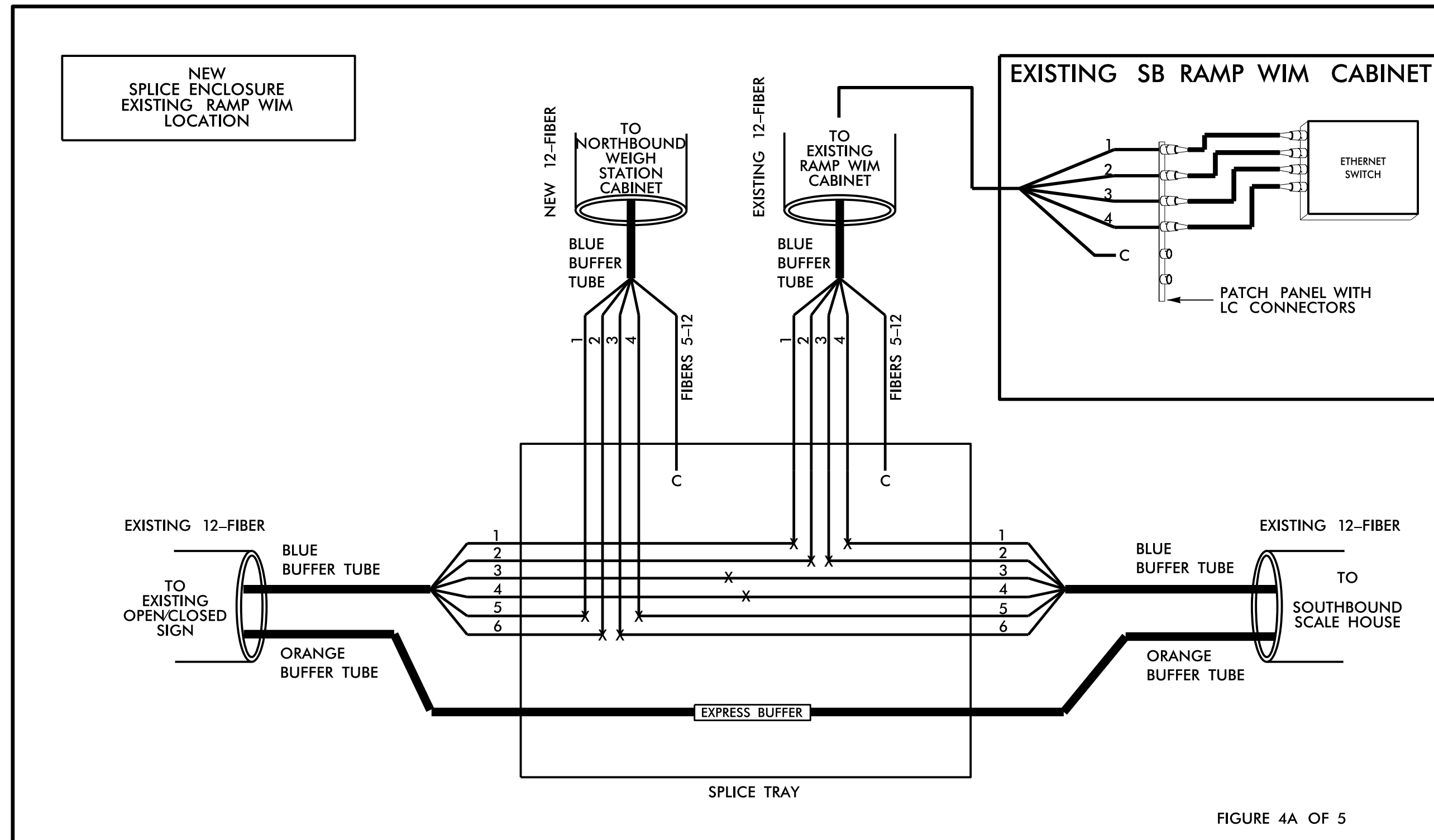
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

NOTES:

1. ETHERNET TERMINATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER TERMINATIONS.
2. COIL AND STORE ALL UNUSED FIBERS IN SPLICE TRAY.
3. COIL AND STORE ALL UNUSED BUFFER TUBES IN SPLICE TRAY.
4. SPLICE NEW FIBER AND RESPLICE EXISTING FIBER TO MATCH THESE SPLICE PLANS.

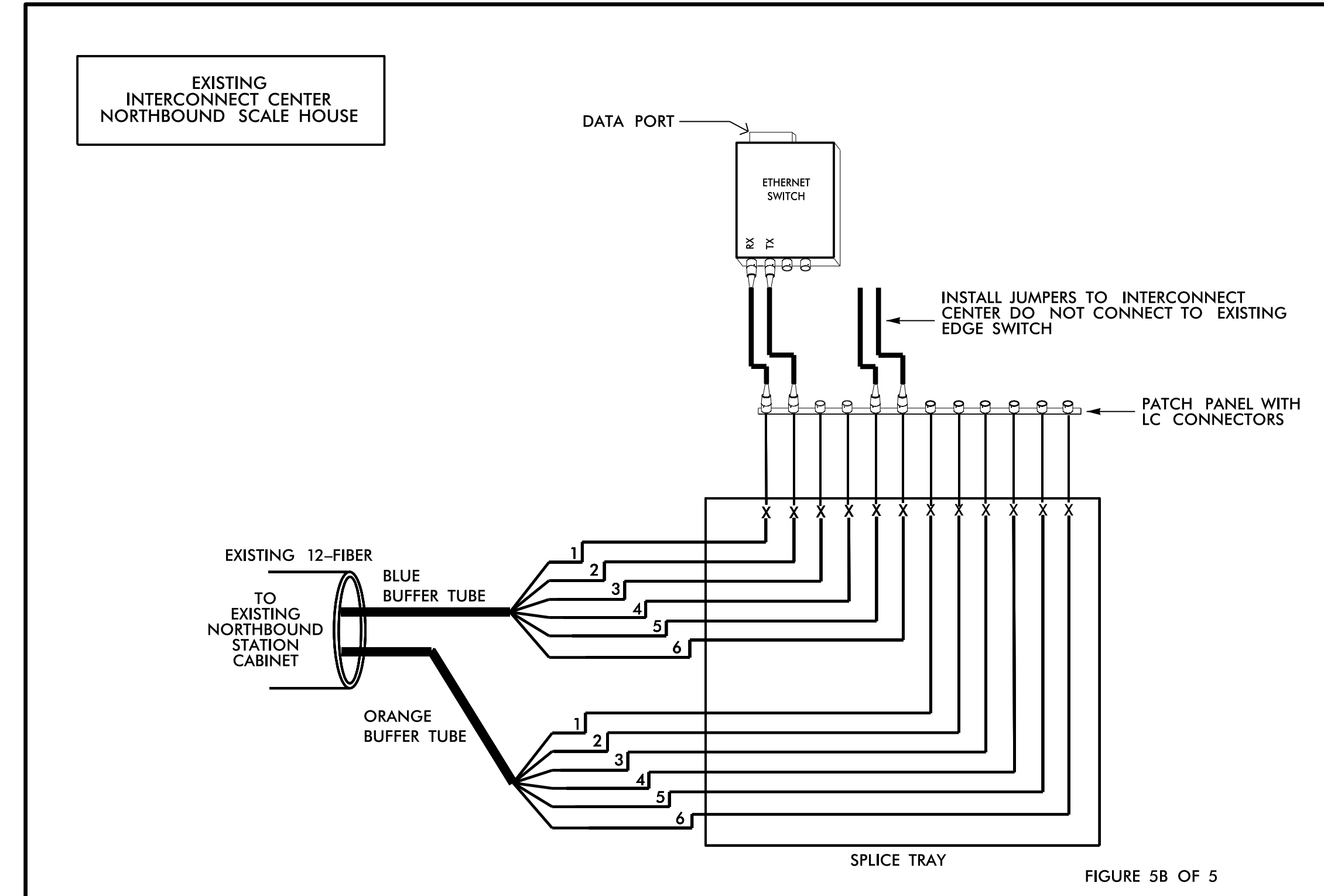
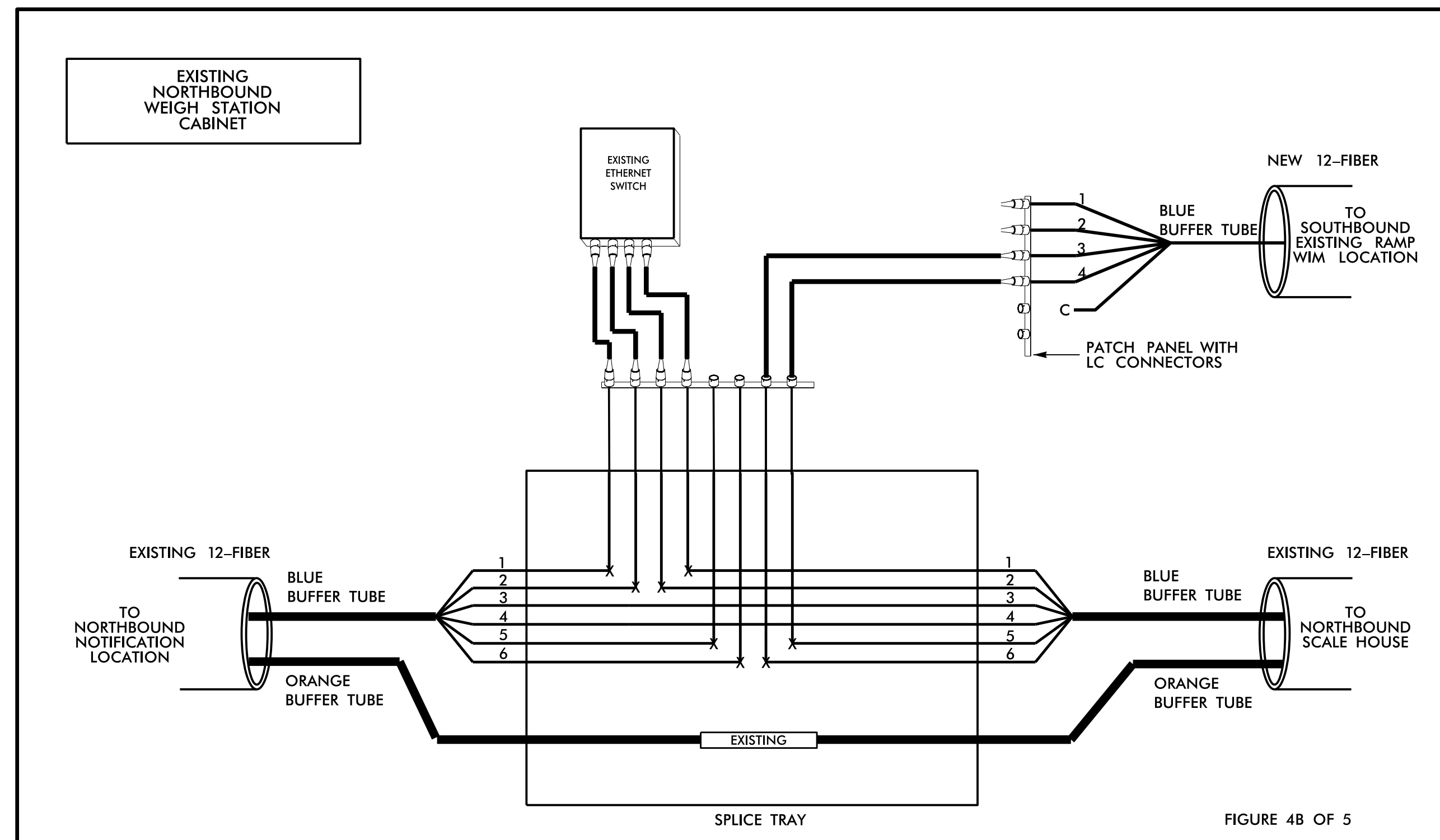
	SPLICE DETAIL		
	DIVISION 11 SURRY COUNTY MT. AIRY PLAN DATE: JULY 2023 REVIEWED BY: PREPARED BY: A. J. SKUCE		
Prepared in the Offices of: Progression, Mobility and Safety Division STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 750 N. Greenfield Pkwy., Garner, NC 27529			Drawn/Checked by: Andrew J. Skuce 0022888C885C484

07/25/2023
DATE



- COLOR CODE TIA/EIA 598-A
- (1) BLUE
 - (2) ORANGE
 - (3) GREEN
 - (4) BROWN
 - (5) SLATE
 - (6) WHITE
 - (7) RED
 - (8) BLACK
 - (9) YELLOW
 - (10) VIOLET
 - (11) ROSE
 - (12) AQUA

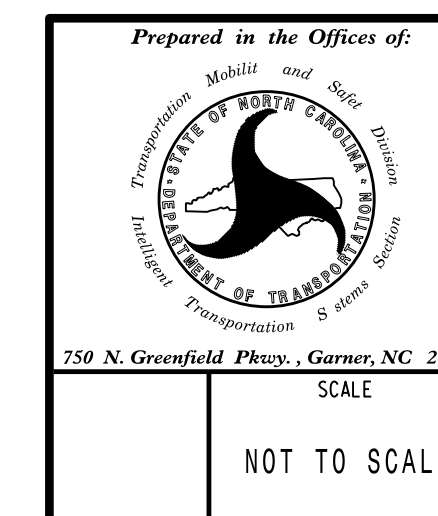
- LEGEND
- X = FUSION SPlice
 - C = CAP



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES:

1. ETHERNET TERMINATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER TERMINATIONS.
2. COIL AND STORE ALL UNUSED FIBERS IN SPlice TRAY.
3. COIL AND STORE ALL UNUSED BUFFER TUBES IN SPlice TRAY.
4. SPlice NEW FIBER AND RESPLICE EXISTING FIBER TO MATCH THESE SPlice PLANS.
5. CONTRACTOR SHALL VERIFY EXSITING SPlice ARRANGEMENT BEFORE MODIFYING EXISTING SPlices.

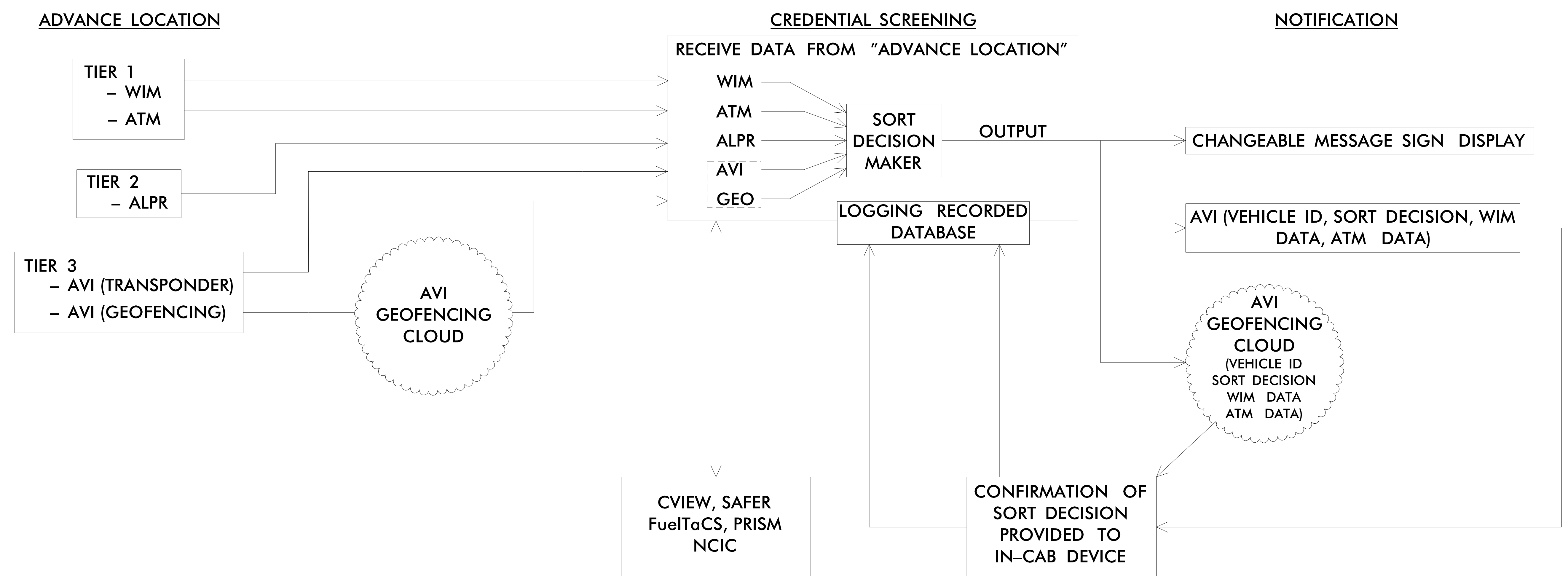


Prepared in the Offices of:		SPlice DETAIL	
DIVISION 11 SURRY COUNTY		MT. AIRY	
PLAN DATE: JULY 2023	REVIEWED BY:		
PREPARED BY: A. J. SKUCE	REVISIONS	INIT.	DATE
SCALE: NOT TO SCALE			

DocuSigned by:
Andrew J. Skuce
026288C88C464

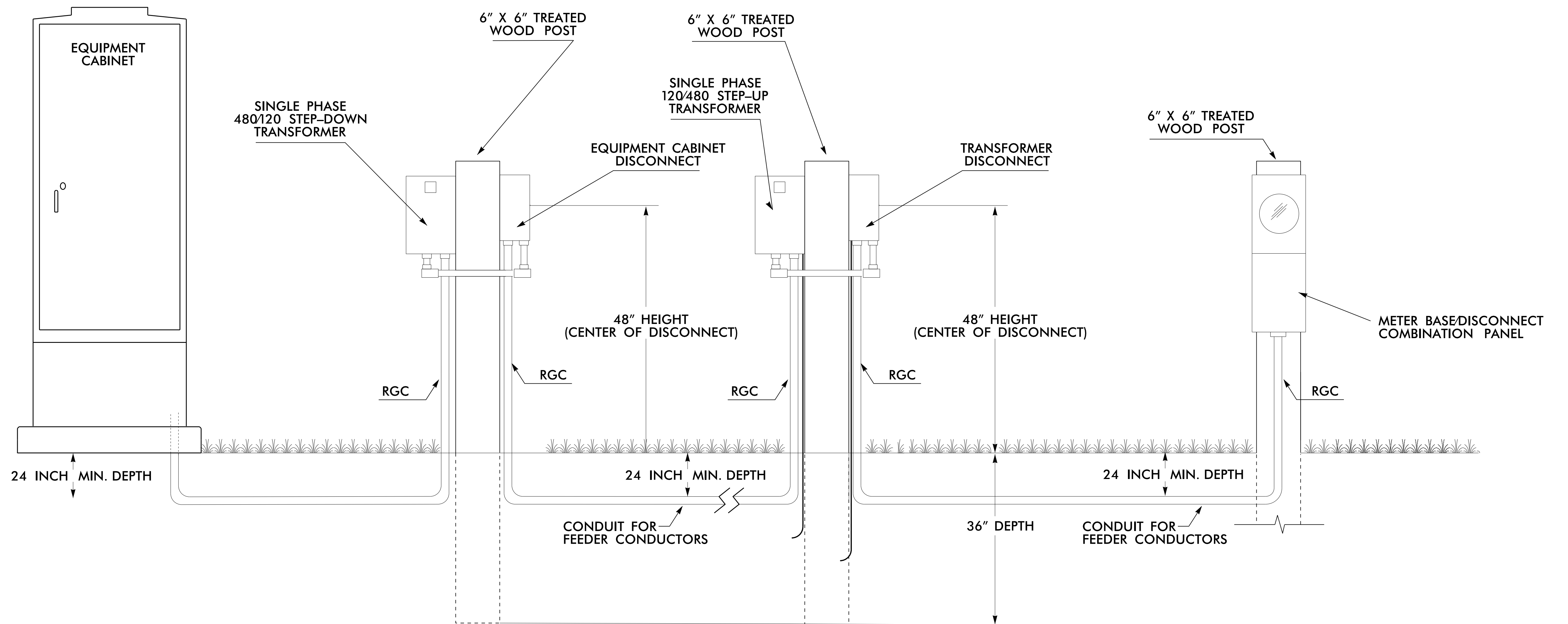
07/25/2023

DATE



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	SYSTEM SORT DECISION DATA FLOW	
	DIVISION 11 SURRY COUNTY MT. AIRY PLAN DATE: JULY 2023 PREPARED BY: A.J. SKUCE	REVIEWED BY: _____
SCALE: NOT TO SCALE	REVISIONS:	INIT. DATE:
DocuSigned by: 		07/25/2023 DATE



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

NOTES:


1. DETAIL DRAWING IS FOR LAYOUT PURPOSES ONLY. CONTRACTOR SHALL INSTALL AND GROUND ALL TRANSFORMERS IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES AND STANDARDS AND MANUFACTURER REQUIREMENTS. CONTRACTOR SHALL VERIFY ALL WIRE SIZES FOR APPROPRIATE VOLTAGE DROP.

	STEP-UP / STEP-DOWN TRANSFORMER		
	DIVISION 11 SURRY COUNTY MT. AIRY PLAN DATE: JULY 2023 REVIEWED BY: PREPARED BY: A. J. SKUCE		
750 N. Greenfield Pkwy., Garner, NC 27529 SCALE	REVISIONS _____ _____ _____	INIT. DATE _____ _____ _____	DocuSigned by: 0202883856464 07/25/2023 DATE

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
SURRY COUNTY**

I-74 EAST /I-77 SOUTHBOUND WEIGH STATION UPGRADE

PROJECT REFERENCE NO. 33879.2.91	SHEET NO. SIGN-01
DocuSigned by: <i>Jose G. Martinez</i> 4A7DB418C88481...	
APPROVED: _____	
DATE: 07/24/2023	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

WBS: 33879.2.91

2017 ITD

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.10	TYPE 'A' SIGNS
901.20	TYPE 'B' SIGNS
901.70	SIGN STRINGERS AND SUPPORT SPACING
901.80	SIGN MOUNTING DETAILS - FOR TYPE A AND TYPE B SIGNS
903.10	GROUND MOUNTED SIGN SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.20	SECONDARY SIGN MOUNTING
904.30	SUPPLEMENTAL SIGN MOUNTING

GENERAL NOTES

- . SIGNS FURNISHED BY STATE
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

PROJECT NOTES

- 1 DISPOSAL OF SIGN SYSTEM, WOOD
- 2 DISPOSAL OF SIGN SYSTEM, STEEL BEAM
- 3 DISPOSAL OF SIGN, A OR B (GROUND MOUNTED)
- 4 OPEN/CLOSE SIGN DEAD LOAD IS APPROXIMATELY 100 LBS. TO BE FIELD VERIFIED

SUMMARY OF QUANTITIES

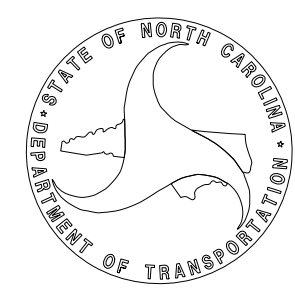
ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4054000000	902	PLAIN CONCRETE SIGN FOUNDATION	1	C.Y.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	314	LB.
4066000000	903	SUPPORTS, SIMPLE STEEL BEAM	930	LB.
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	2	EA.
4110000000	904	SIGN ERECTION, TYPE B (GROUND MOUNTED)	4	EA.
4152000000	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	1	EA.
4158000000	907	DISPOSAL OF SIGN SYSTEM, WOOD	2	EA.
4236000000	907	DISPOSAL OF SIGN, A OR B (GROUND MOUNTED)	1	EA.



INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	SUPPORT INFORMATION
SIGN-3	SIGN DESIGNS
SIGN-4-6	SIGNING PLAN SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

K. L. JORDAN SIGNING & DELINEATION REGIONAL ENGINEER
J. G. MARTINEZ, PE SIGNING & DELINEATION PROJECT DESIGN ENGINEER



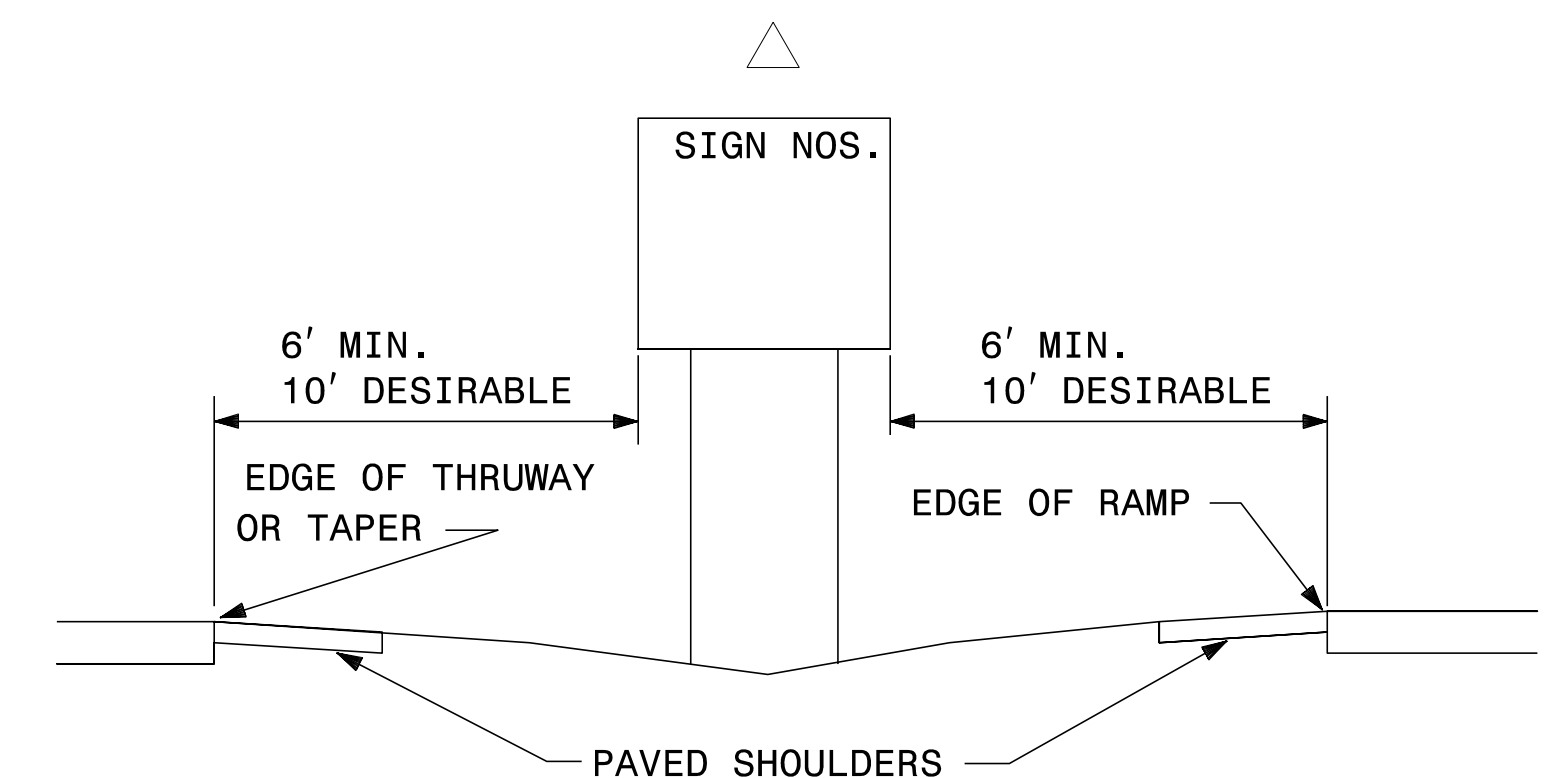
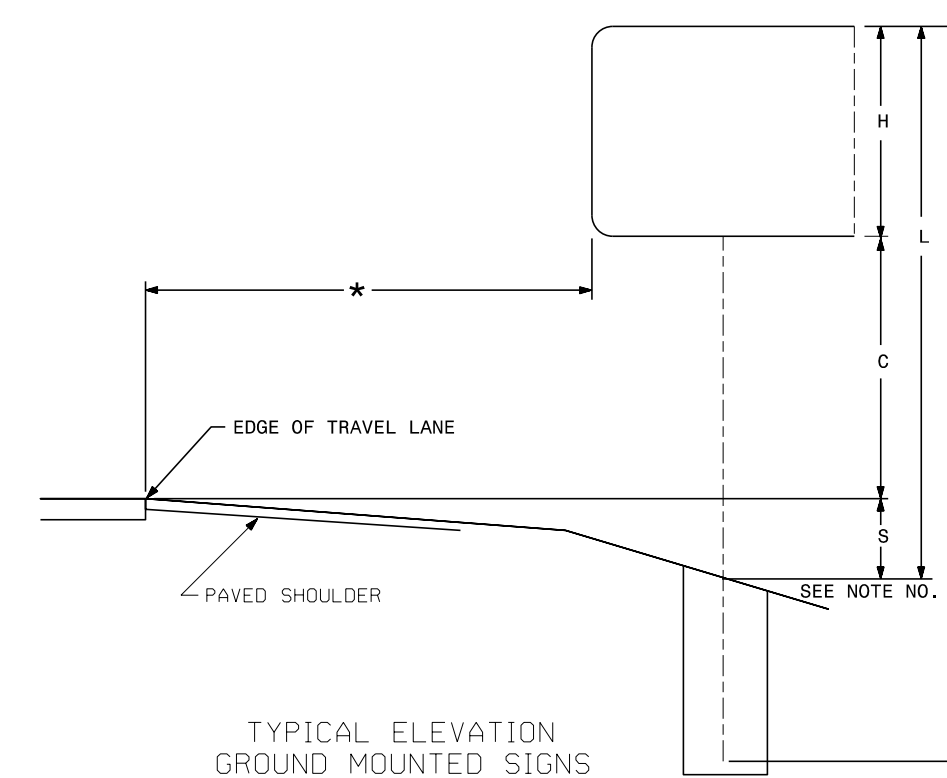
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APPROVED:  DocuSigned by: Jose G. Martinez 4A70B418C86461...	
DATE: 07/24/2023	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SIGN					ROADWAY STATION	NUMBER OF SUPPORTS	BEAM SECTION	SUPPORT TYPE BA or S	OMNI COUPLER	ATTACHMENT METHOD	MOUNTING METHOD	HORIZONTAL CLEARANCE* (ft.)	SUPPORT SPACING	LENGTH (ft)			LEFT SUPPORT (ft)			CENTER SUPPORT (ft)			RIGHT SUPPORT (ft)			SUPPORT WEIGHTS		FOOTINGS				FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)
NUMBER	TYPE	SIZE (in.)												SNS HT	MTG HT	EMBED-MENT	S	L	LENGTH	S	L	LENGTH	S	L	LENGTH	B/A (lbs.)	SIMPLE (lbs.)	DIAMETER (ft.)	DEPTH (ft.)	REINFORCED (c.y.)	PLAIN (c.y.)	
		w	x	h																												
101	A	96	x	72	SEE PLANS	2	S4x7.7	S	N/A	N/A	N/A	20.00	4.69	6.00	7.00	3.0	2.00	15.00	18.00	0.00	0.00	0.00	4.00	17.00	20.00	0.00	292.6	1.0	3.5	0.00	0.20	
102	B	126	x	48	SEE PLANS	2	S4x7.7	S	N/A	N/A	N/A	20.00	6.15	4.00	7.00	3.0	2.50	13.50	16.50	0.00	0.00	0.00	5.00	16.00	19.00	0.00	273.35	1.0	3.5	0.00	0.20	
103	B	126	x	48	SEE PLANS	2	S4x7.7	BA	N/A	N/A	N/A	18.00	6.15	4.00	7.00	3.0	3.00	14.00	17.00	0.00	0.00	0.00	4.50	15.50	18.50	313.35	0	1.0	3.5	0.00	0.20	
CMS-1	B	128	x	31	SEE ITS	2	S3x5.7	S	N/A	N/A	N/A	20.00	6.25	2.58	7.00	2.5	3.00	12.58	15.08	0.00	0.00	0.00	4.50	14.08	16.58	0.00	180.5	1.0	3	0.00	0.17	
CMS-2	B	128	x	31	SEE ITS	2	S3x5.7	S	N/A	N/A	N/A	20.00	6.25	2.58	7.00	2.5	3.00	12.58	15.08	0.00	0.00	0.00	5.00	14.58	17.08	0.00	183.35	1.0	3	0.00	0.17	
701	A	114	x	60	SEE PLANS	2	EXISTING	EXISTING	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
																	TOTAL	TOTAL	TOTAL				TOTAL									
																	313.35	929.80	0.00				0.94									
																	USE:	314.00	930.00	0.00				1.00								

* DO NOT BEGIN FABRICATION FOR TYPES A&B SIGNS MOUNTED ON STEEL SUPPORT UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED

NOTES

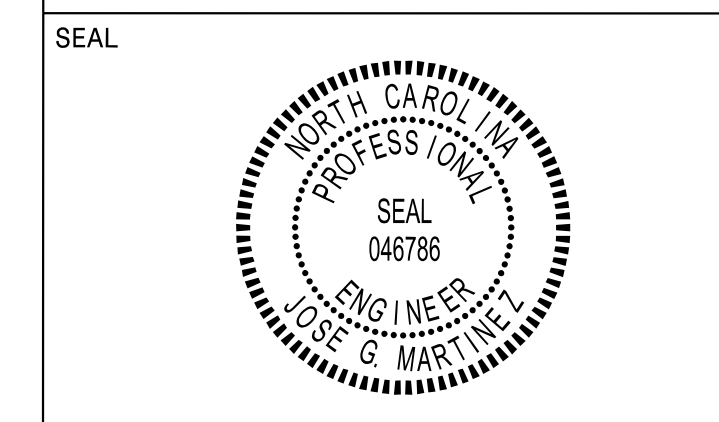
- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF TRAVEL LANE.
- FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES
- PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.



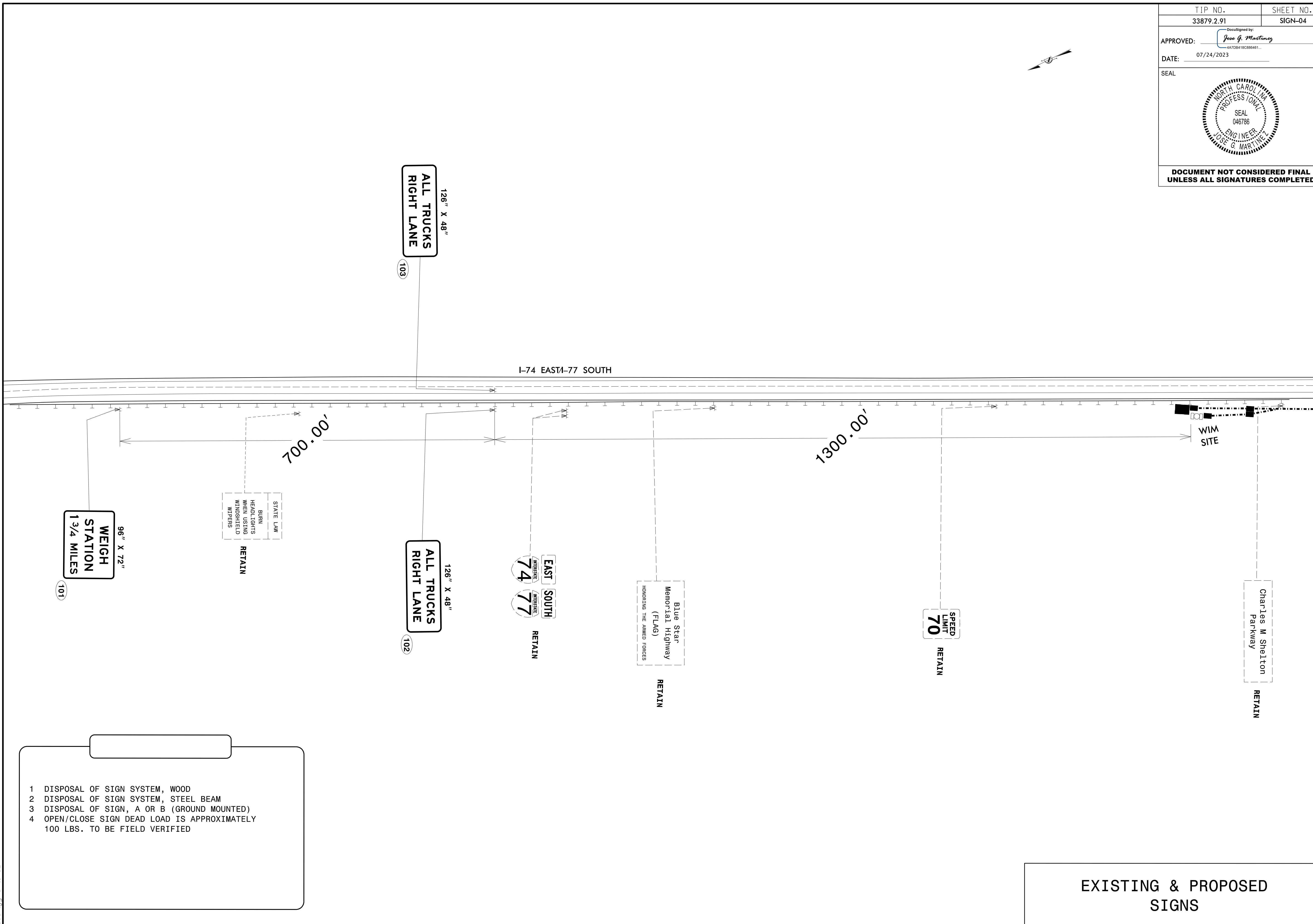
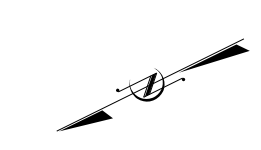
**TYPE "A" AND TYPE "B"
GROUND MOUNTED SIGNS**

07/24/23 U:\Projects\2023 Sign Designs\Div 11\Nt_Airy_WS_SB\Mt_Airy_SB_Weigh Station_Signing.dgn

APPROVED: *Jose G. Martinez*
DocuSigned by:
 Jose G. Martinez
 4A7DB418C886461
 DATE: 07/24/2023



**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



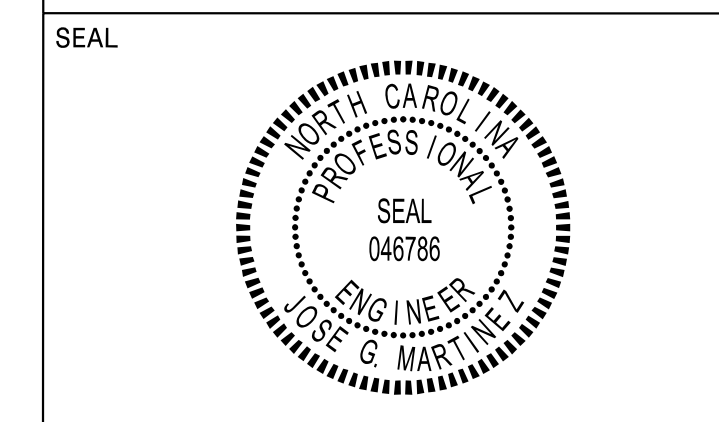
- 1 DISPOSAL OF SIGN SYSTEM, WOOD
- 2 DISPOSAL OF SIGN SYSTEM, STEEL BEAM
- 3 DISPOSAL OF SIGN, A OR B (GROUND MOUNTED)
- 4 OPEN/CLOSE SIGN DEAD LOAD IS APPROXIMATELY 100 LBS. TO BE FIELD VERIFIED

**EXISTING & PROPOSED
 SIGNS**

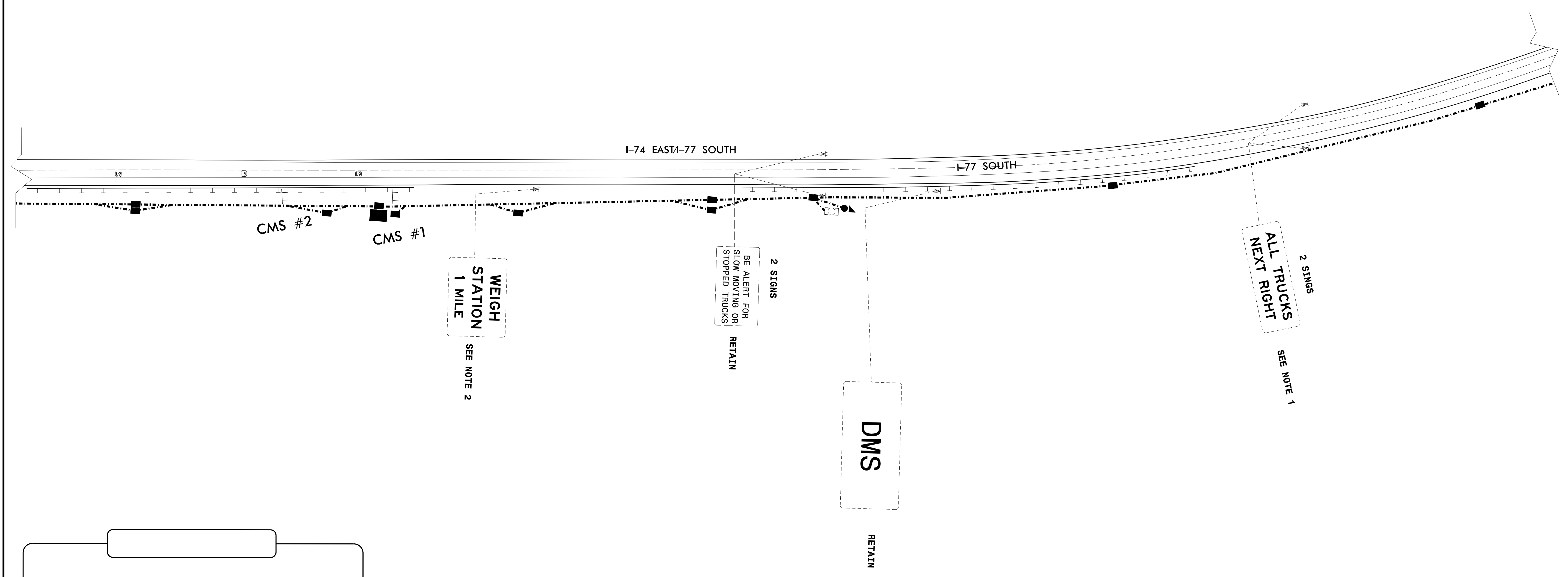
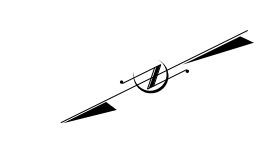
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 User: jgmar-tinez

APPROVED: *Jose G. Martinez*
DocuSigned by:
 Jose G. Martinez
 6A7DB418C886461

DATE: 07/24/2023



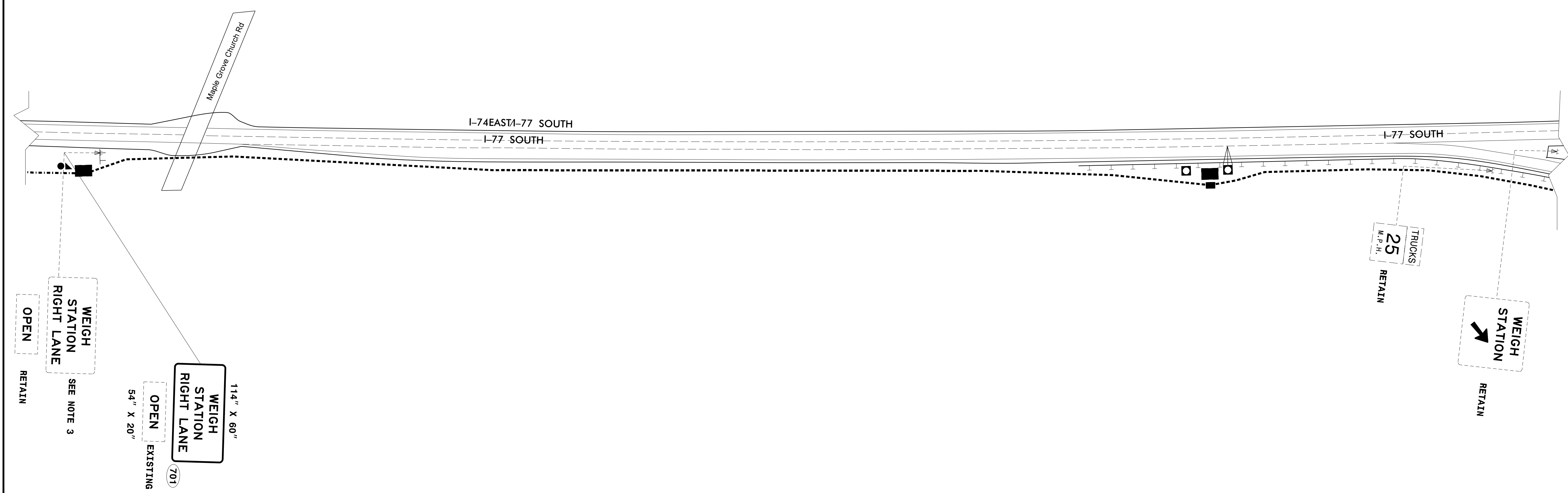
**DOCUMENT NOT CONSIDERED FINAL
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- 1 DISPOSAL OF SIGN SYSTEM, WOOD
- 2 DISPOSAL OF SIGN SYSTEM, STEEL BEAM
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**EXISTING & PROPOSED
 SIGNS**

07/24/23
 U:\Projects\2023 Sign Designs\Div 11\Mt_Airy_WS_SBA\Mt_Airy_SB_Weigh_Station_Signing_Sign_05.dgn
 User: jmartinez



- 1 DISPOSAL OF SIGN SYSTEM, WOOD
- 2 DISPOSAL OF SIGN SYSTEM, STEEL BEAM
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**EXISTING & PROPOSED
SIGNS**

07/24/23
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 User: jmartinez