

2023 ITD WBS: 33879.2.107 / 33879.2.108 / 49600.7.3

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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS.

Table with 2 columns: STD. NO. and TITLE. Lists various roadway standards such as Guardrail Placement, Work Zone Warning Signs, Pavement Markings, etc.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

HALIFAX COUNTY

PLANS FOR PROPOSED

I-95 NORTHBOUND / SOUTHBOUND WEIGH STATION UPGRADES

LOCATION: I-95 FROM NC 33 (SWIFT CREEK SCHOOL ROAD) TO NC 481
TYPE OF WORK: FURNISHING AND INSTALLING EQUIPMENT AND MATERIALS FOR THE INSTALLATION OF WEIGH IN MOTION SYSTEMS, BYPASS SYSTEMS, TIRE MONITORING SYSTEMS, AUTOMATED LICENSE PLATE READERS, IMAGE CAPTURE CAMERAS, AND TRAFFIC SURVEY GROUP (TSG) DATA COLLECTION AT THE EXISTING NORTHBOUND AND SOUTHBOUND I-95 WEIGH STATIONS NEAR WHITAKERS, NORTH CAROLINA. RELATED MATERIALS CONSIST OF LOCAL CABINETS AND CONTROLLERS, WEIGH IN MOTION SENSORS, ALPR CAMERAS, SOFTWARE, INFRARED ILLUMINATORS, CMS, TMS SENSORS, DATABASE INTERFACE, IMAGE CAPTURE CAMERA ASSEMBLIES, LANE CONTROL SIGNS, METAL POLES WITH MAST ARMS, METAL POLE FOUNDATIONS, SIGNING, PAVEMENT MARKINGS, AND GUARDRAIL.

Table with columns: STATE, STATE PROJECT REFERENCE NO., SHEET NO., STATE PROJ. NO., F.A. PROJ. NO., DESCRIPTION. Includes project numbers and sheet number ITS-1.

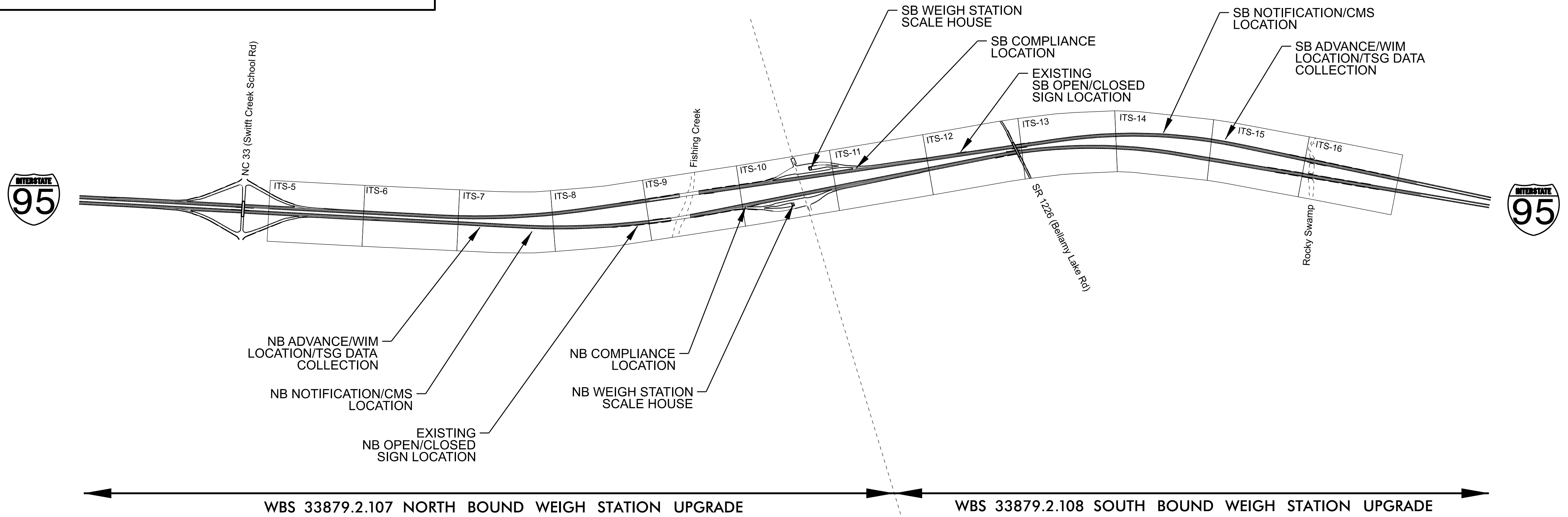
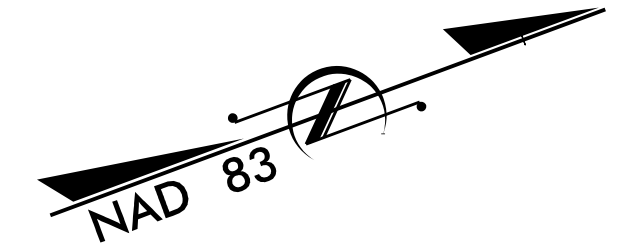


Table with 2 columns: SHEET # and LOCATION/DESCRIPTION. Lists sheet numbers and their corresponding descriptions, such as Title Sheet, Legend, Project Area Overview, etc.

Prepared For: NCDOT CONTACTS: TRANSPORTATION MOBILITY & SAFETY DIVISION INTELLIGENT TRANSPORTATION SYSTEMS & SIGNALS UNIT. Includes logo of the North Carolina Department of Transportation and contact information for Alex D. Stewart and Andrew Skuce.

Prepared By: SUMMIT DESIGN AND ENGINEERING SERVICES. NC FIRM LICENSE No: P-0339. SUMMIT CONTACTS: Greg Fuller, PE - Traffic & ITS Department Manager; Tom Parker - Senior Project Manager; Sherry Yow - Senior Project Manager; James Smith, PE - Project Manager; Spencer Merritt, PE - Transportation Design Manager.

Professional Engineer Seal for James D. Smith, State of North Carolina, License No. 053312. Includes a date stamp: 7/19/2024.

GENERAL NOTES

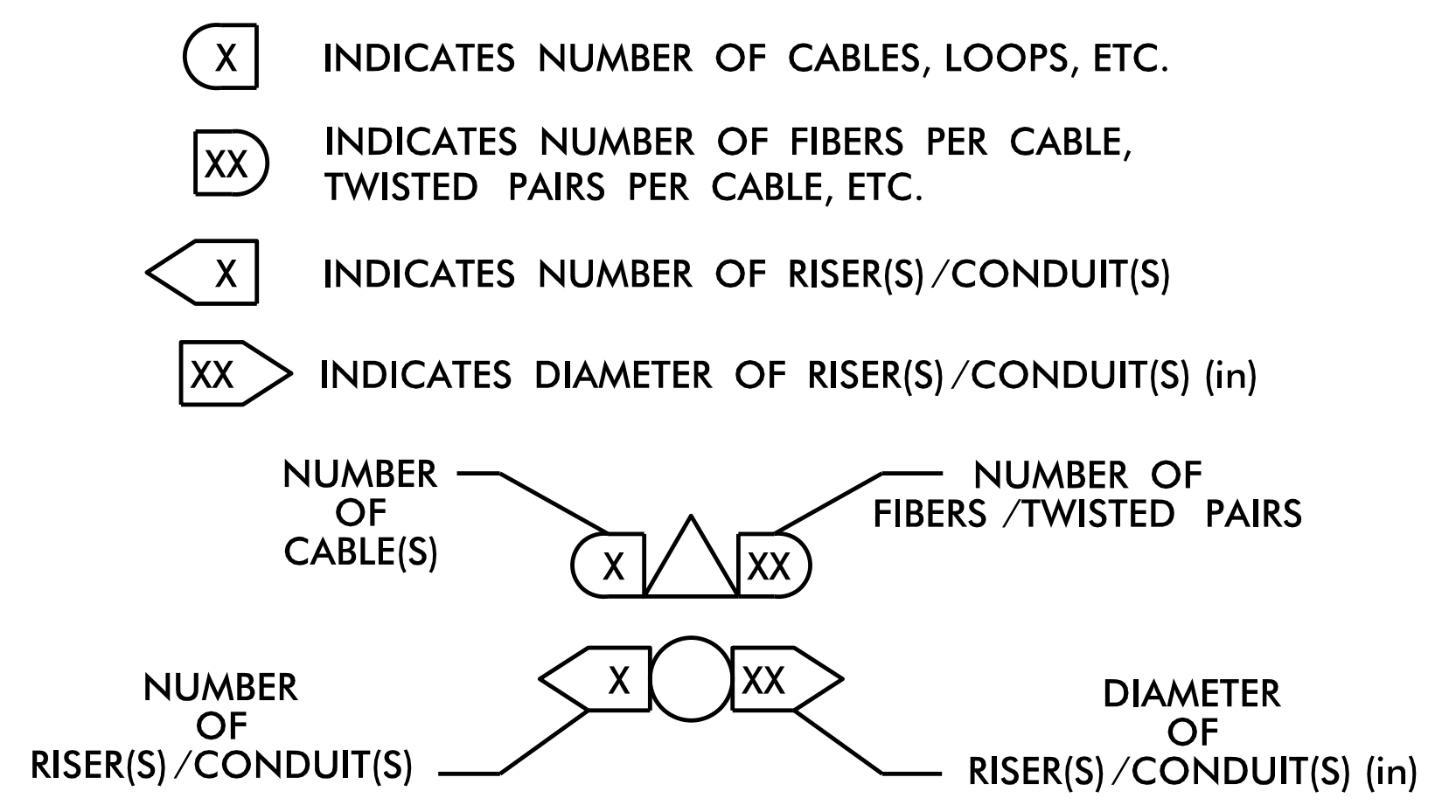
- OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO INSTALLATION FOR ITEMS TO BE INSTALLED AS PART OF THIS PROJECT.
- BURIED UTILITIES AND STRUCTURES: PIPELINES, STORM SEWERS, POWER CABLES, UTILITY CABLES, AND OTHER PUBLICLY AND PRIVATELY OWNED UNDERGROUND OBSTRUCTIONS MAY EXIST ADJACENT TO AND WITHIN THE ROADWAY 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 PRIOR TO THE BEGINNING CONSTRUCTION.

ABBREVIATIONS

| | |
|-------|-------------------------------------|
| ALPR | AUTOMATED LICENSE PLATE READER |
| CMS | CHANGEABLE MESSAGE SIGN |
| HDPE | HIGH DENSITY POLYETHYLENE |
| ILL | ILLUMINATOR |
| L | LOOP DETECTOR |
| NCSHP | NORTH CAROLINA STATE HIGHWAY PATROL |
| NTS | NOT TO SCALE |
| OCS | OPEN / CLOSED SIGN |
| S | SENSOR |
| TMS | TIRE MONITORING SENSOR |
| TSG | TRAFFIC SURVEY GROUP |
| WIM | WEIGH IN MOTION |
| WSS | WIM STRIP SENSORS |

| PROPOSED | LEGEND | EXISTING |
|----------|----------------------------------------------------|----------|
| | TRENCHED CONDUIT | |
| | DIRECTIONAL DRILLED CONDUIT | |
| | ELECTRICAL SERVICE | |
| | JUNCTION BOX | |
| | STANDARD INDUCTIVE LOOP DETECTOR | N/A |
| | CAMERA ASSEMBLY | N/A |
| | POLE/POST MOUNTED EQUIPMENT CABINET | N/A |
| | BASE MOUNTED EQUIPMENT CABINET | N/A |
| | STRAIN GUAGE STRIP SENSOR | N/A |
| | TIRE MONITORING SENSOR | N/A |
| | GUARDRAIL | |
| | METAL POLE WITH MAST ARM | |
| | METAL POLE | N/A |
| | WOOD POLE | N/A |
| | ELECTRICAL SERVICE / ELECTRICAL SERVICE DISCONNECT | N/A |
| | STEP UP/STEP DOWN TRANSFORMER | N/A |
| | CHANGEABLE MESSAGE SIGN | N/A |
| | TWO-SECTION TRAFFIC SIGNAL | N/A |

CONSTRUCTION NOTE SYMBOLOGY KEY



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| | | | | |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------|
| NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For: 250 N. Greenfield Place, Garner, NC 27529 | Halifax County NB / SB Weigh Station Legend and General Notes | | SEAL 053312 JAMES D. SMITH ENGINEER |
| | | Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker PREPARED BY: J. Smith REVIEWED BY: E. Sirgany | REVISIONS INIT. DATE | |


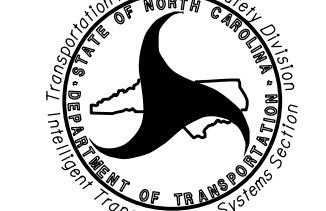
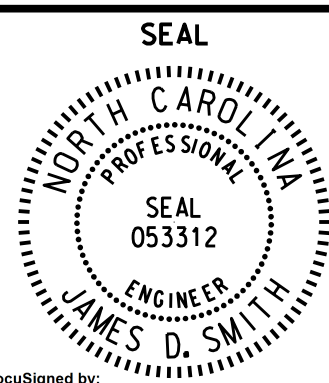
- 1 INSTALL 3-WIRE COPPER FEEDER CONDUCTORS
- 2 INSTALL 4-WIRE COPPER FEEDER CONDUCTORS
- 3 INSTALL CAT5E CABLE
- 3A INSTALL ALPR CABLE(S) *
- 3B INSTALL AVI CABLE(S) *
- 3C INSTALL WIMSORT SIGNAL CABLE(S) *
- 3D INSTALL WIM SENSOR CABLES *
- 3E INSTALL LOOP WIRE
- 3F INSTALL LEAD-IN CABLE
- 3G INSTALL CCTV VIDEO AND POWER CABLES *
- 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 INSTALL SMFO CABLE
- 5 EXISTING SMFO 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

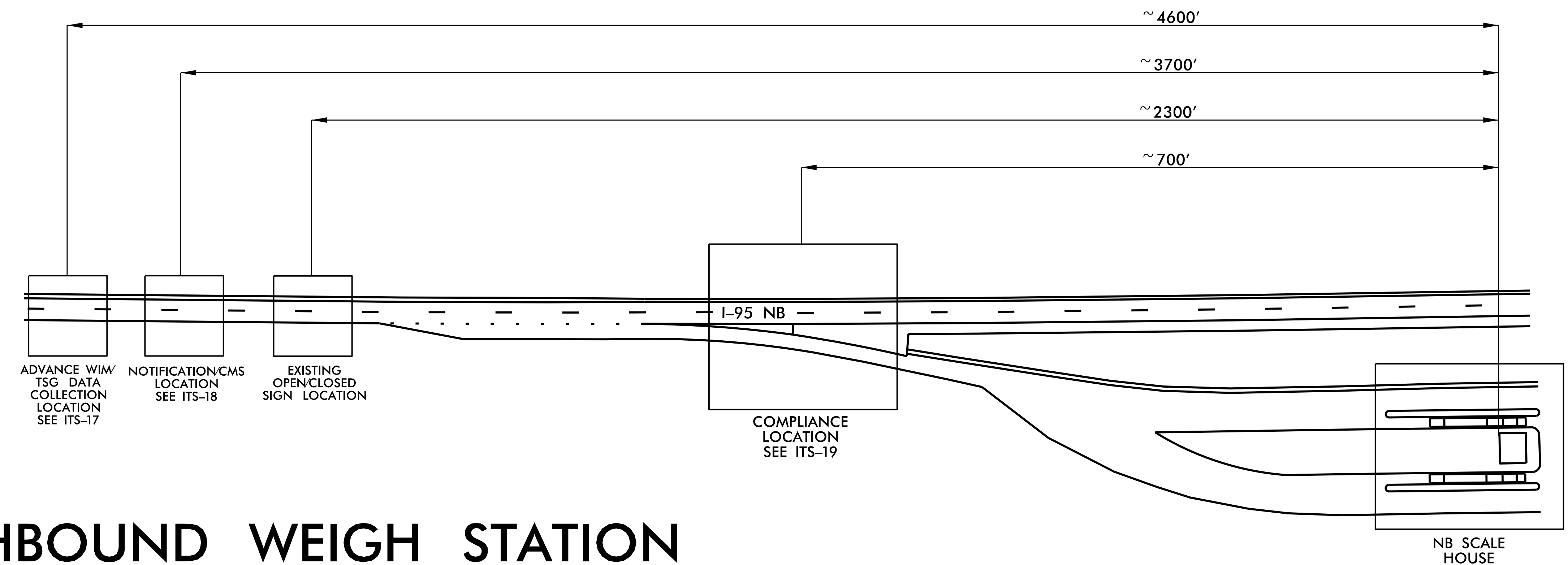
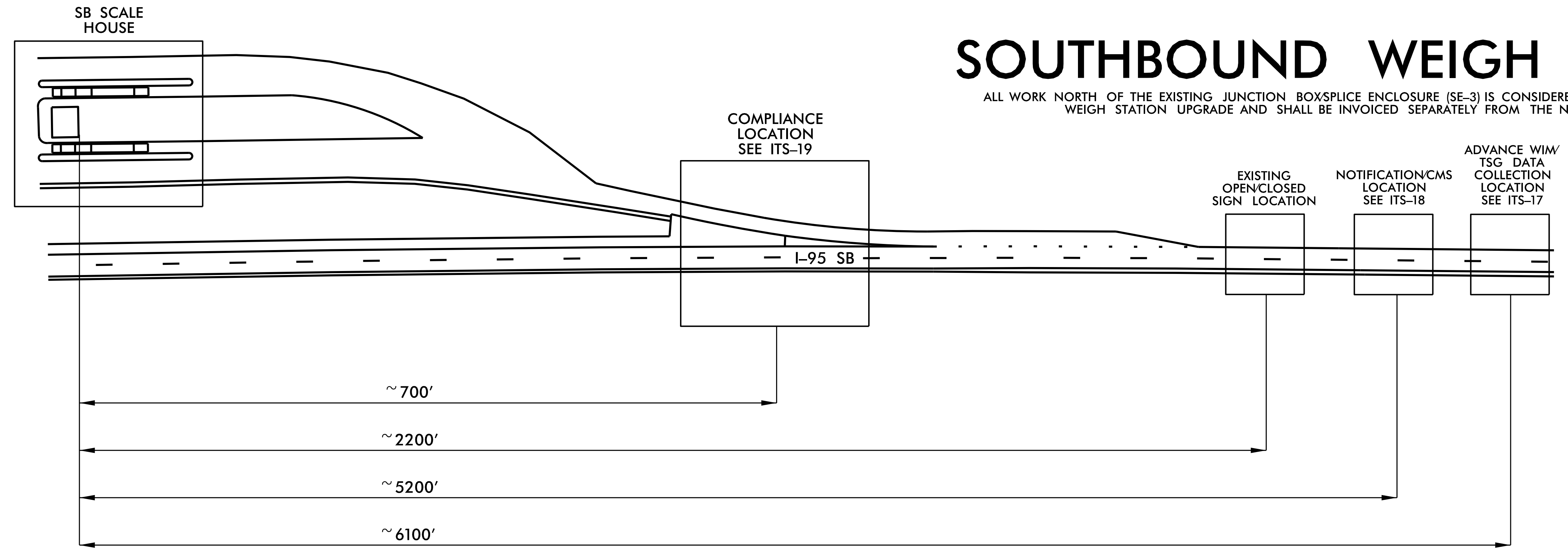
- 21A INSTALL CABLE(S) IN NEW CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 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 6" x 6" x 8' WOOD POST
- 39 INSTALL STANDARD JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 INSTALL SPECIAL OVERSIZED JUNCTION BOX
- 41A INSTALL SPECIAL OVERSIZED JUNCTION BOX (BROADBAND)
- 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 ISOLATION TRANSFORMER

- 55 INSTALL INDUSTRIAL ETHERNET SWITCH
- 56 INSTALL VIDEO ENCODER
- 56A INSTALL VIDEO DECODER
- 57 INSTALL STEP-UP /STEP-DOWN TRANSFORMER
- 58 INSTALL NEW ELECTRICAL SERVICE
- 58A INSTALL EQUIPMENT CABINET DISCONNECT
- 58B MODIFY EXISTING ELECTRICAL SERVICE EQUIPMENT
- 59 INSTALL WIM 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
- 72 MODIFY EXISTING OPEN/CLOSED SIGN
- 73 INSTALL TWO-SECTION TRAFFIC SIGNAL

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

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|  NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For:  250 N. Greenfield Place, Garner, NC 27529 SCALE N/A | Halifax County NB / SB Weigh Station Construction Notes Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker PREPARED BY: J. Smith REVIEWED BY: E. Sirgany |  SEAL 053312 JAMES D. SMITH ENGINEER | | | | | | | | |
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| | <table border="1" style="width: 100%; border-collapse: collapse;"> <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> </tbody> </table> | | REVISIONS | INIT. | DATE | | | | | | |
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NOTE:
DISTANCES SHOWN ARE TYPICAL AND MAY BE FIELD ADJUSTED UPON APPROVAL BY THE ENGINEER.

SUMMIT
DESIGN AND ENGINEERING SERVICES

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(919) 732-6676 (FAX)

Prepared For:

250 N. Greenfield Place, Garner, NC 27529

SCALE: N/A

Halifax County
NB / SB Weigh Station
Project Area Overview

Division 4 Halifax County Whitakers

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PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

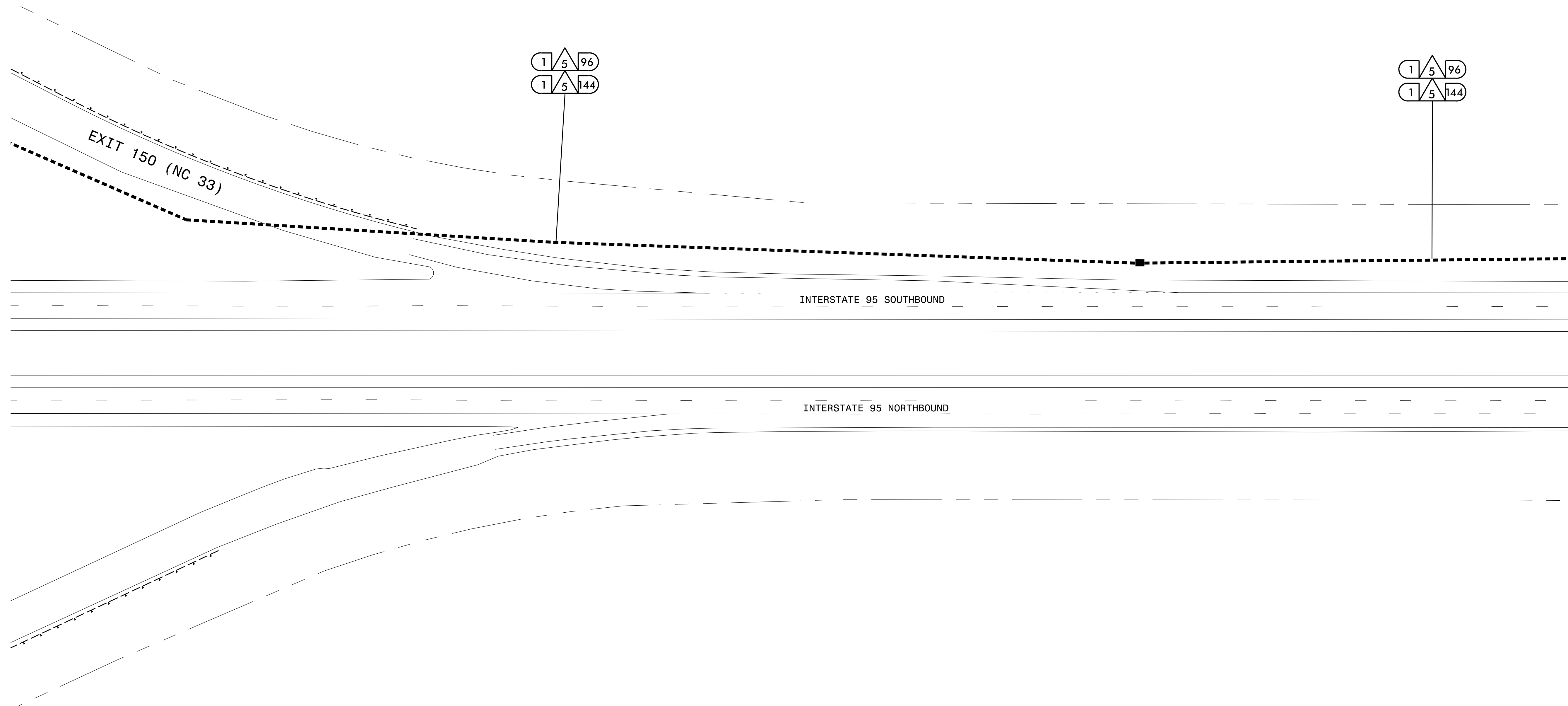
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SEAL

DocuSigned by:
James D. Smith
7/3/2024

NO WORK THIS SHEET



- NOTES:**
1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 2. DO NOT INSTALL ELECTRICAL POWER CONDUCTORS AND FIBER-OPTIC CABLE INSIDE SAME CONDUIT OR JUNCTION BOX.
 3. SEE SIGNING PLANS FOR DETAILS ON INSTALLATION, MODIFICATION, RELOCATION, OR REMOVAL OF SIGNING.

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Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For:

750 N. Greenfield Pkwy., Garner, NC 27529

SCALE
0 50
1"=50'

Halifax County
NB / SB Weigh Station
Cable Routing Plans

Division 4 Halifax County Whitakers

PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker

PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

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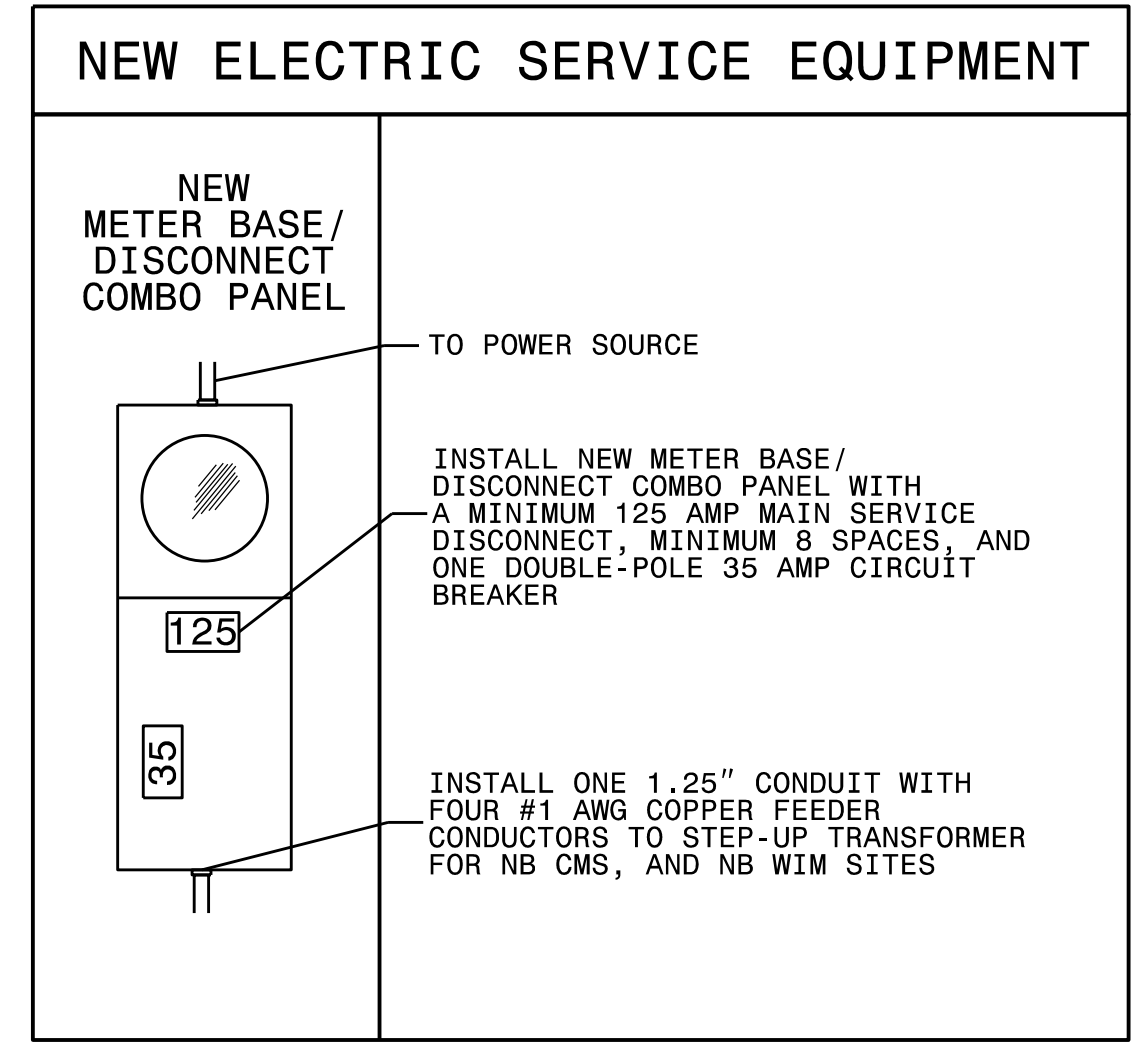
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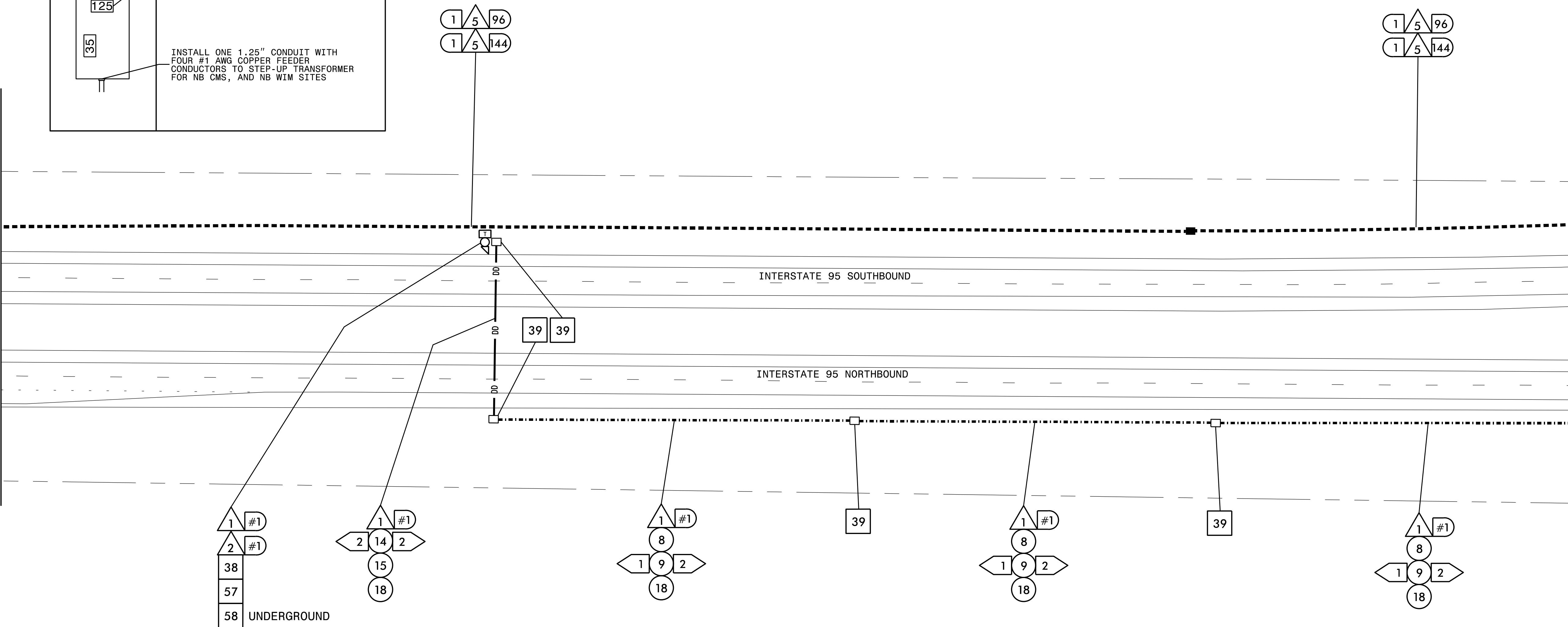
DATE

DRAWING #1



SEE MATCH LINE SHEET ITS-5

SEE MATCH LINE SHEET ITS-7



SEE DRAWING #1

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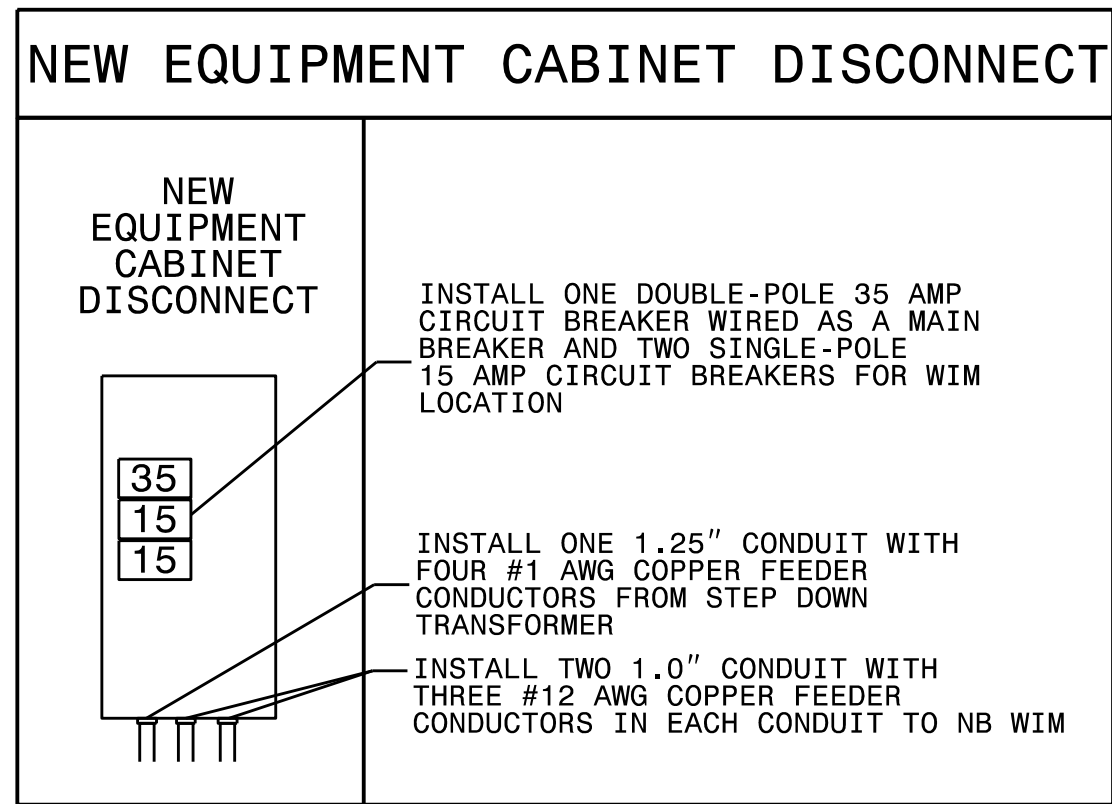
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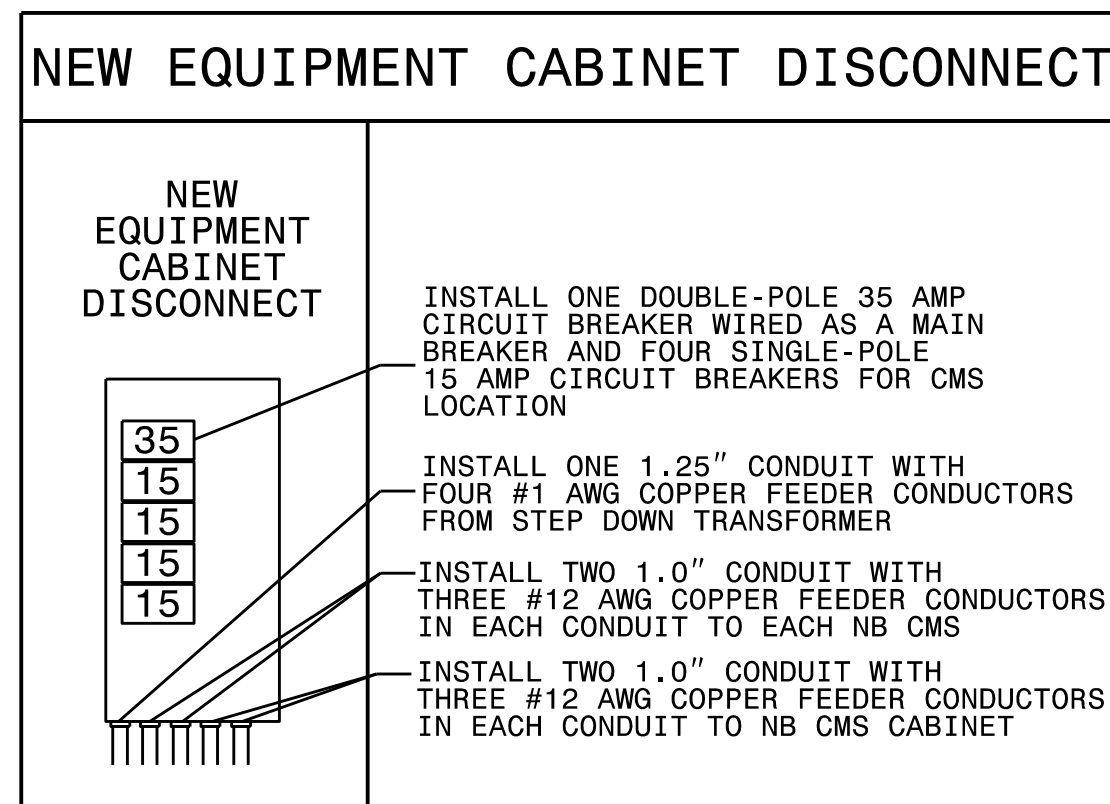
James D. Smith
Professional Engineer
053312

4/23/2024

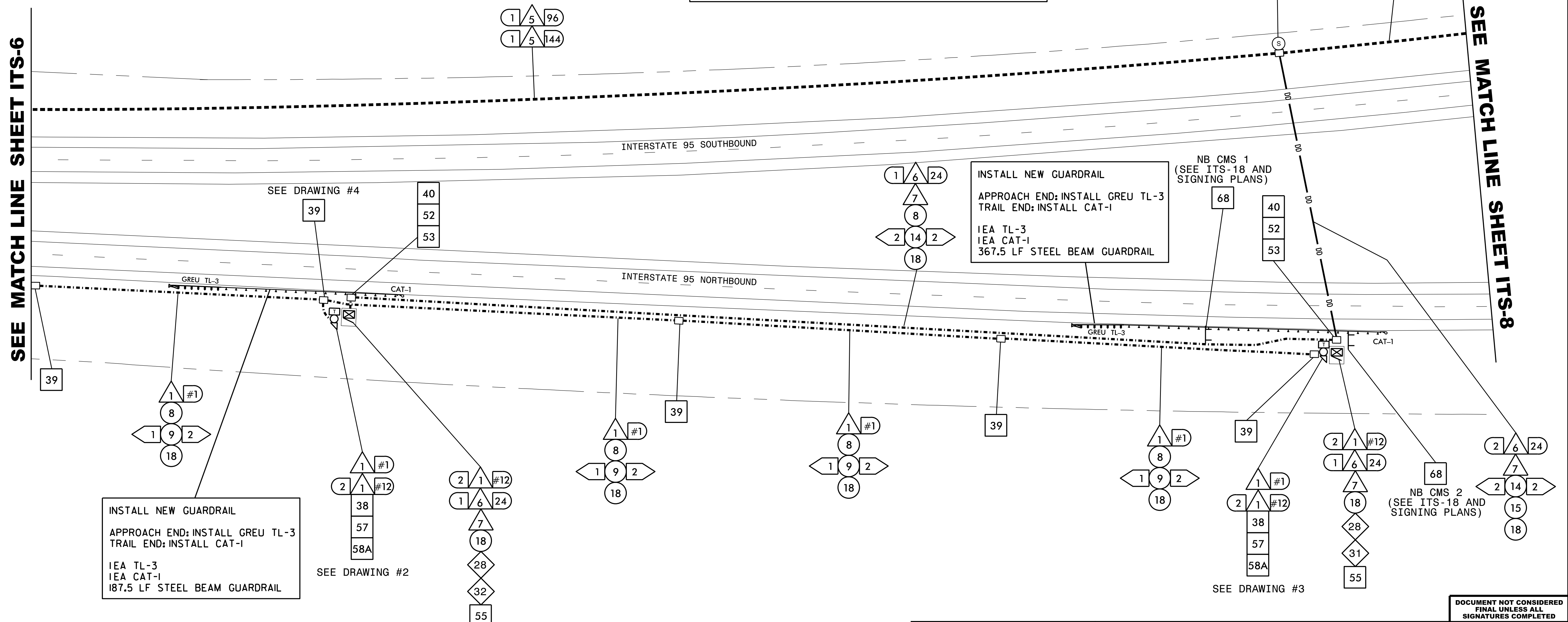
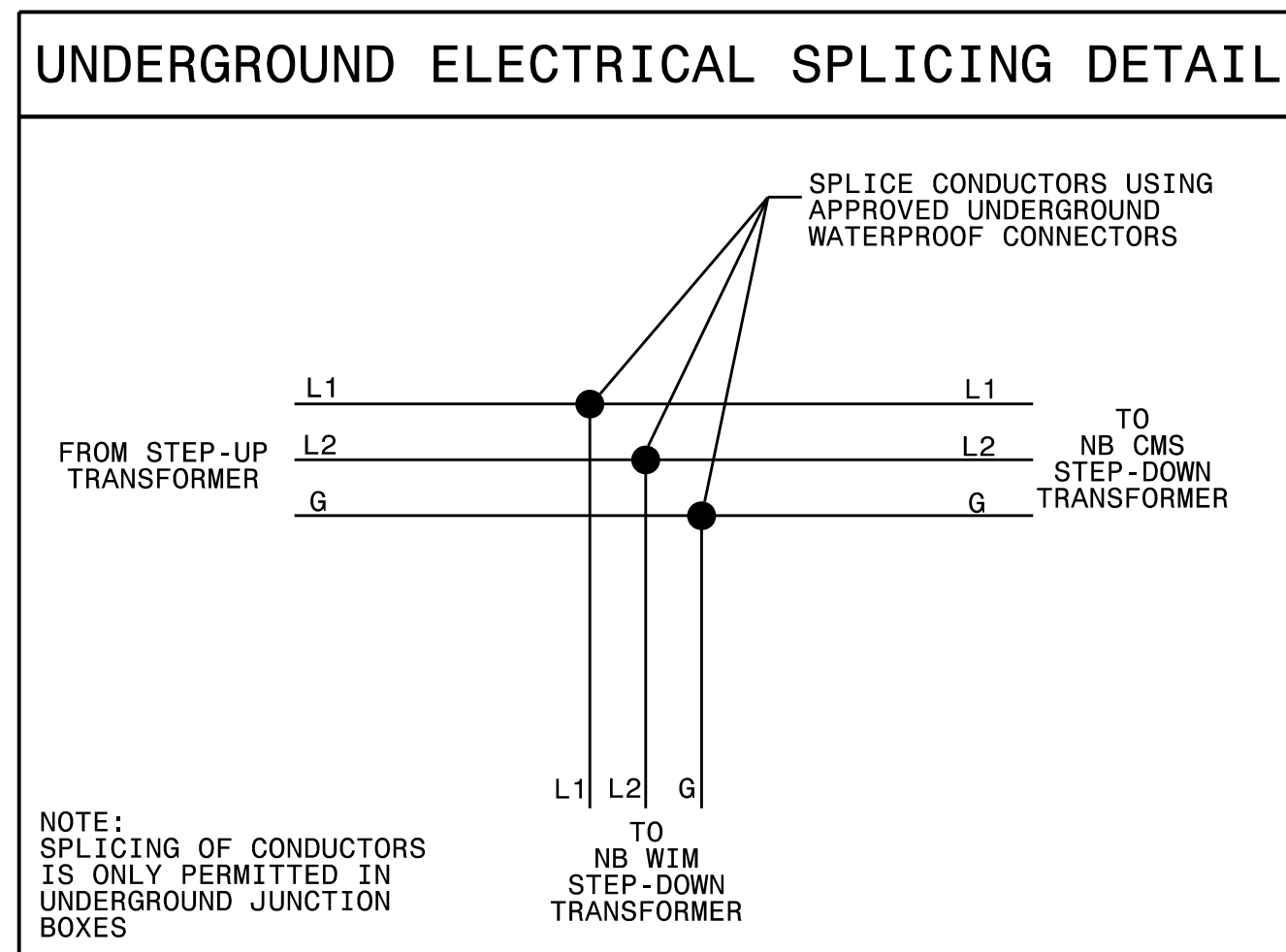
DRAWING #2



DRAWING #3



DRAWING #4



- NOTES:
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 3. SEE SIGNING PLANS FOR DETAILS ON INSTALLATION, MODIFICATION, RELOCATION, OR REMOVAL OF SIGNING.
 4. REPLACE EXISTING BELOW GRADE OVER-SIZED JUNCTION BOX WITH NEW AT GRADE SPECIAL OVER-SIZED JUNCTION BOX. TRANSFER EXISTING MARKER BALL TO NEW JUNCTION BOX, INSTALL NEW GROUND ROD, CONCRETE APRON, AND ISOLATION TEST SWITCH. SEE PROJECT SPECIAL PROVISIONS FOR MORE DETAILS.

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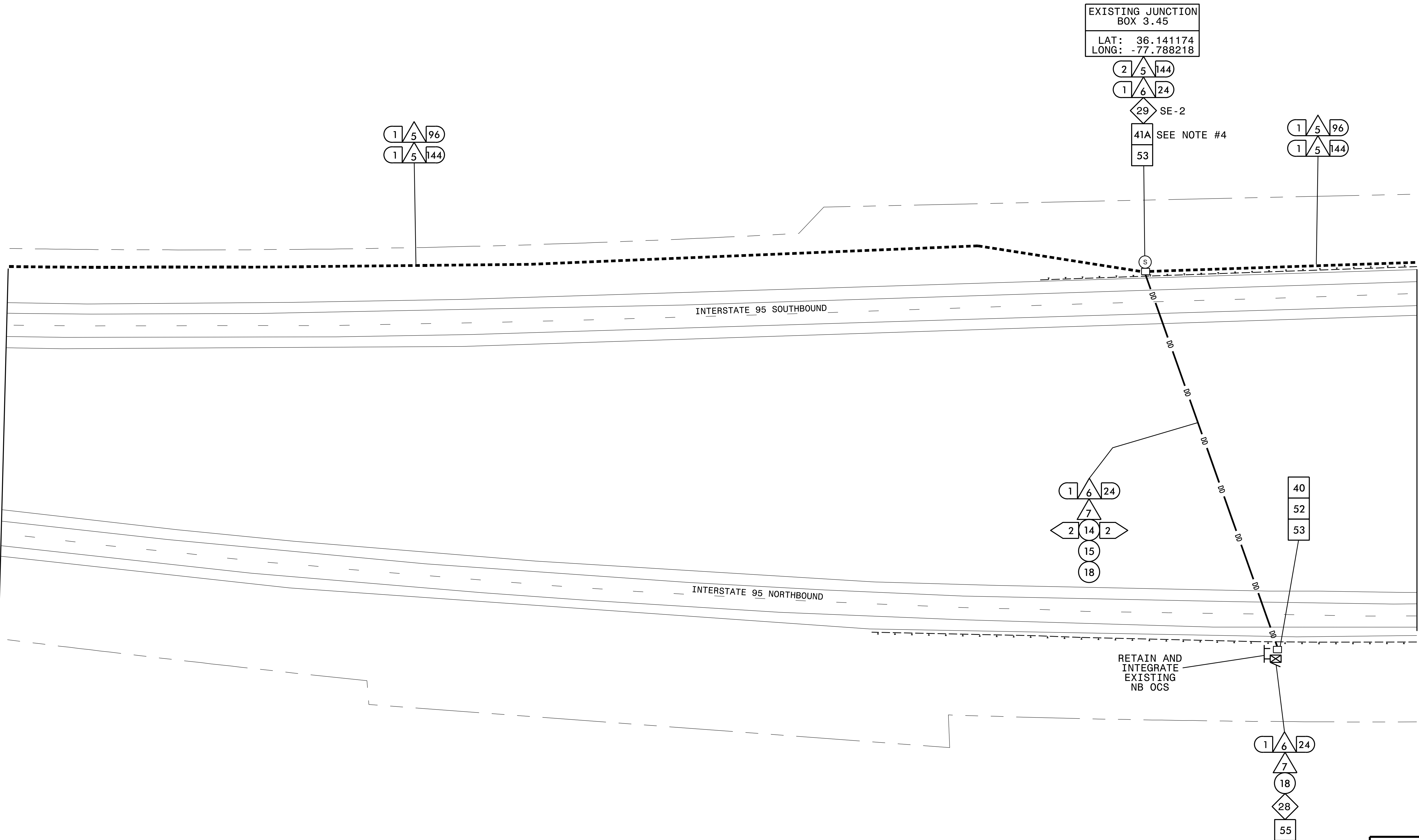
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SEAL

 JAMES D. SMITH
 ENGINEER
 DATE: 7/3/2024

SEE MATCH LINE SHEET ITS-7

SEE MATCH LINE SHEET ITS-9



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1"=50'

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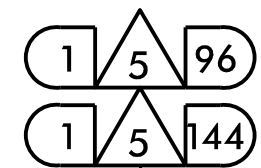
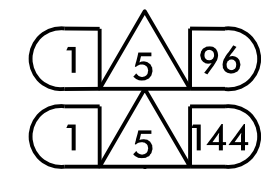
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James D. Smith
ENGINEER

DocuSigned by:
James D. Smith
4/23/2024

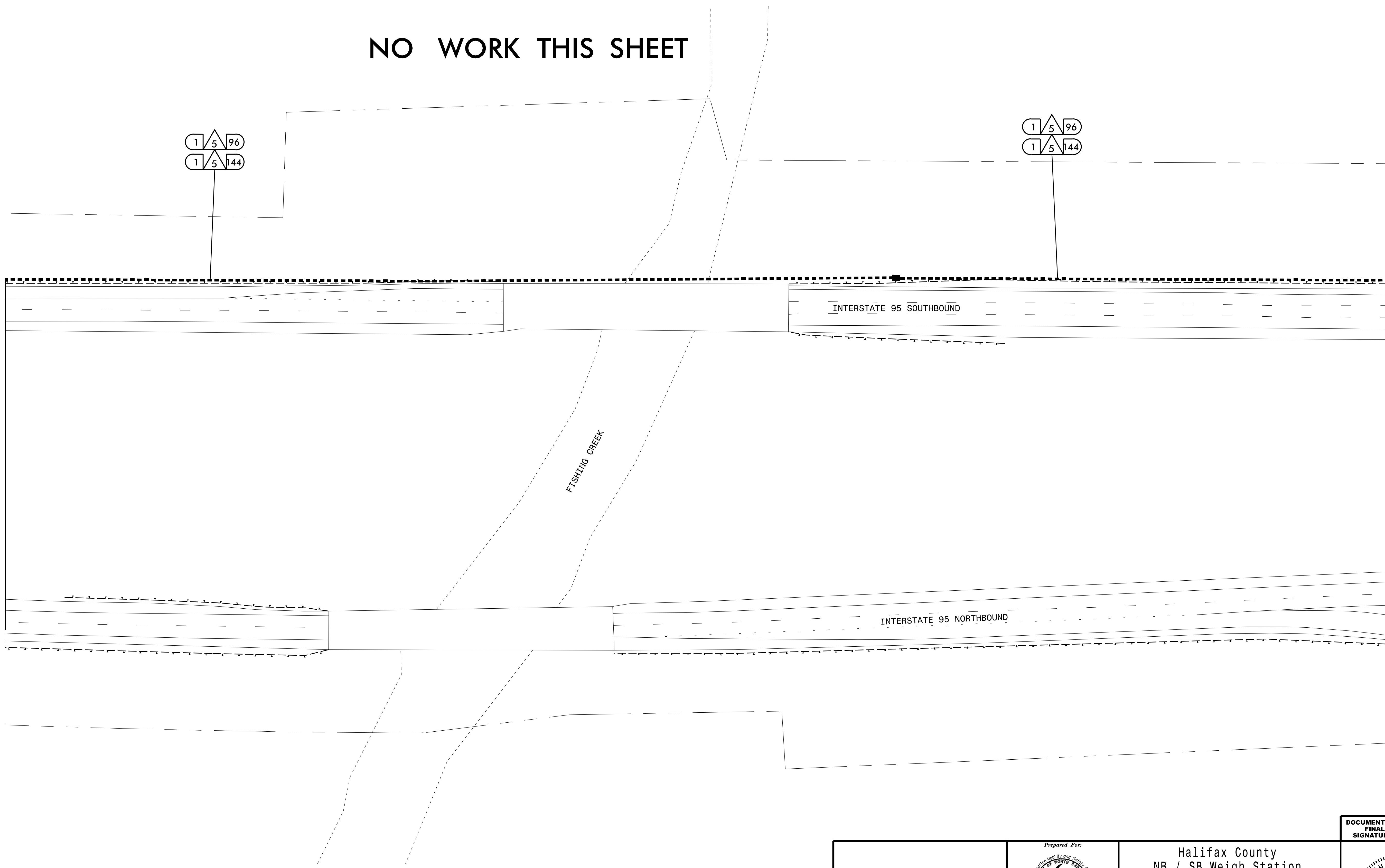
DATE

NO WORK THIS SHEET



SEE MATCH LINE SHEET ITS-8

SEE MATCH LINE SHEET ITS-10



- NOTES:
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| | |
|----------------------------------------------------------------|-------------------------------|
| Halifax County NB / SB Weigh Station Cable Routing Plans | |
| Division 4 | Halifax County Whitakers |
| PLAN DATE: February 2024 | REVIEWED BY: S. Yow/T. Parker |
| PREPARED BY: J. Smith | REVIEWED BY: E. Sirgany |
| REVISIONS | INIT. DATE |

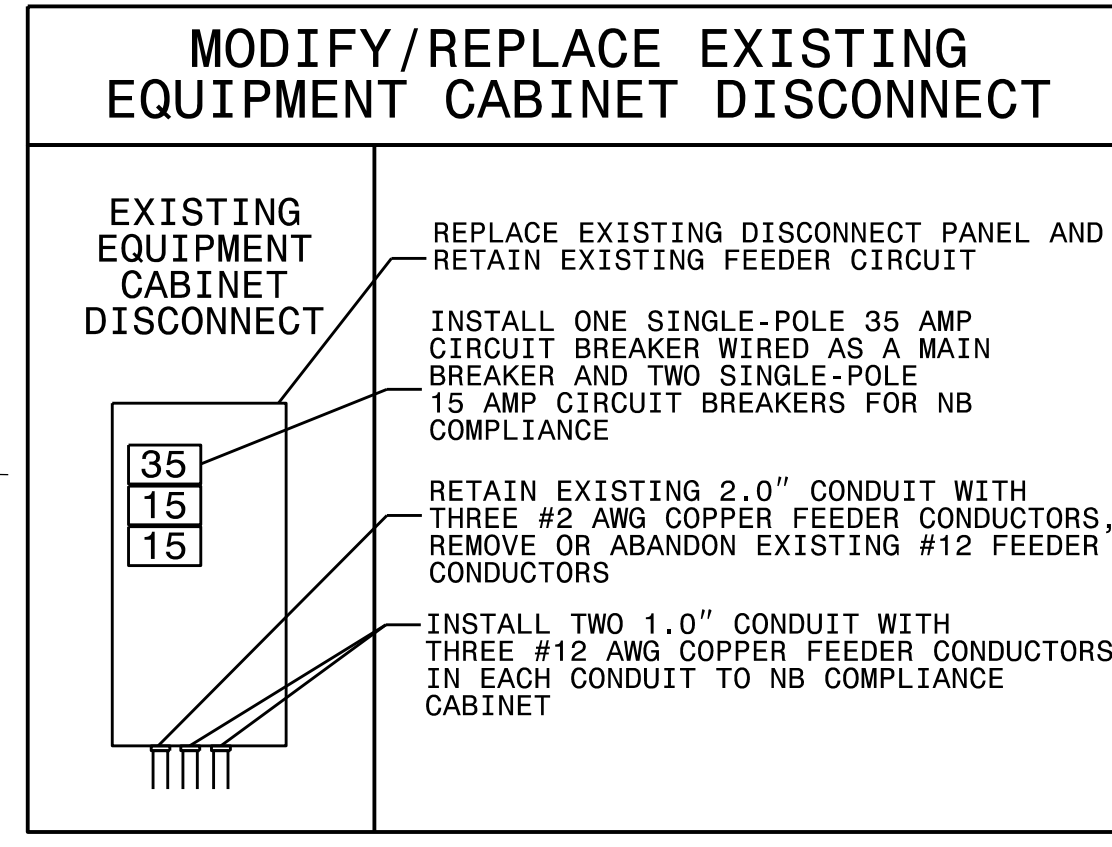
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James D. Smith
4/23/2024

WBS 33879.2.107 NORTH BOUND WEIGH STATION UPGRADE

WBS 33879.2.108 SOUTH BOUND WEIGH STATION UPGRADE

DRAWING #5



EXISTING JUNCTION BOX 3.47
 LAT: 36.147421
 LONG: -77.786190

INSTALL ONE 24-FIBER DROP CABLE IN EXISTING CONDUIT INTO SCALE HOUSE AND TERMINATE IN EXISTING EQUIPMENT RACK

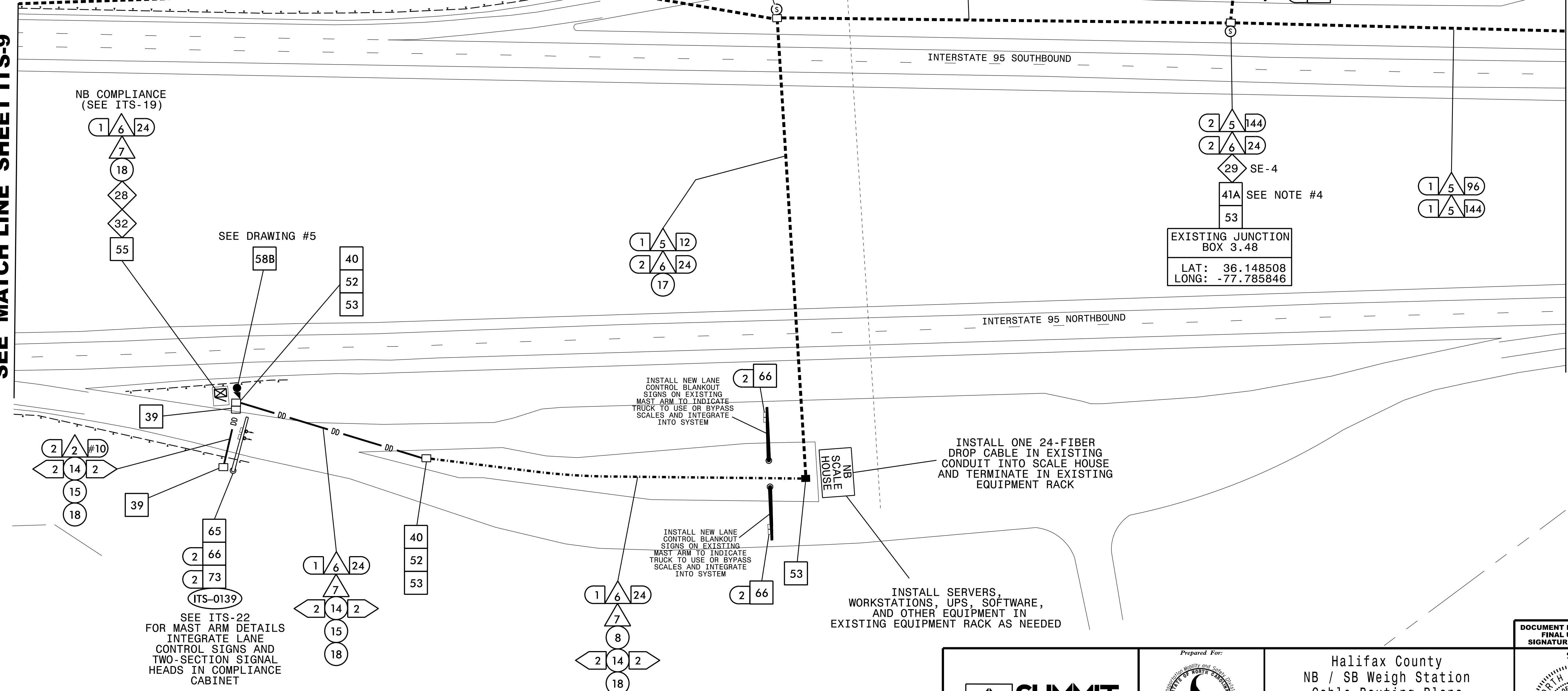
INSTALL SERVERS, WORKSTATIONS, UPS, SOFTWARE, AND OTHER EQUIPMENT IN EXISTING EQUIPMENT RACK AS NEEDED

INSTALL NEW LANE CONTROL BLANKOUT SIGNS ON EXISTING MAST ARM TO INDICATE TRUCK TO USE OR BYPASS SCALES AND INTEGRATE INTO SYSTEM

INSTALL NEW LANE CONTROL BLANKOUT SIGNS ON EXISTING MAST ARM TO INDICATE TRUCK TO USE OR BYPASS SCALES AND INTEGRATE INTO SYSTEM

SEE MATCH LINE SHEET ITS-9

SEE MATCH LINE SHEET ITS-11



- NOTES:**
1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 2. DO NOT INSTALL ELECTRICAL POWER CONDUCTORS AND FIBER-OPTIC CABLE INSIDE SAME CONDUIT OR JUNCTION BOX.
 3. SEE SIGNING PLANS FOR DETAILS ON INSTALLATION, MODIFICATION, RELOCATION, OR REMOVAL OF SIGNING.
 4. REPLACE EXISTING BELOW GRADE OVER-SIZED JUNCTION BOX WITH NEW AT GRADE SPECIAL OVER-SIZED JUNCTION BOX. TRANSFER EXISTING MARKER BALL TO NEW JUNCTION BOX, INSTALL NEW GROUND ROD, CONCRETE APRON, AND ISOLATION TEST SWITCH. SEE PROJECT SPECIAL PROVISIONS FOR MORE DETAILS.

SUMMIT
 DESIGN AND ENGINEERING SERVICES

NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

750 N. Greenfield Pkwy., Garner, NC 27529
 SCALE 0 50
 1"=50'

Halifax County
 NB / SB Weigh Station
 Cable Routing Plans

Division 4 Halifax County Whitakers

PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker

PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

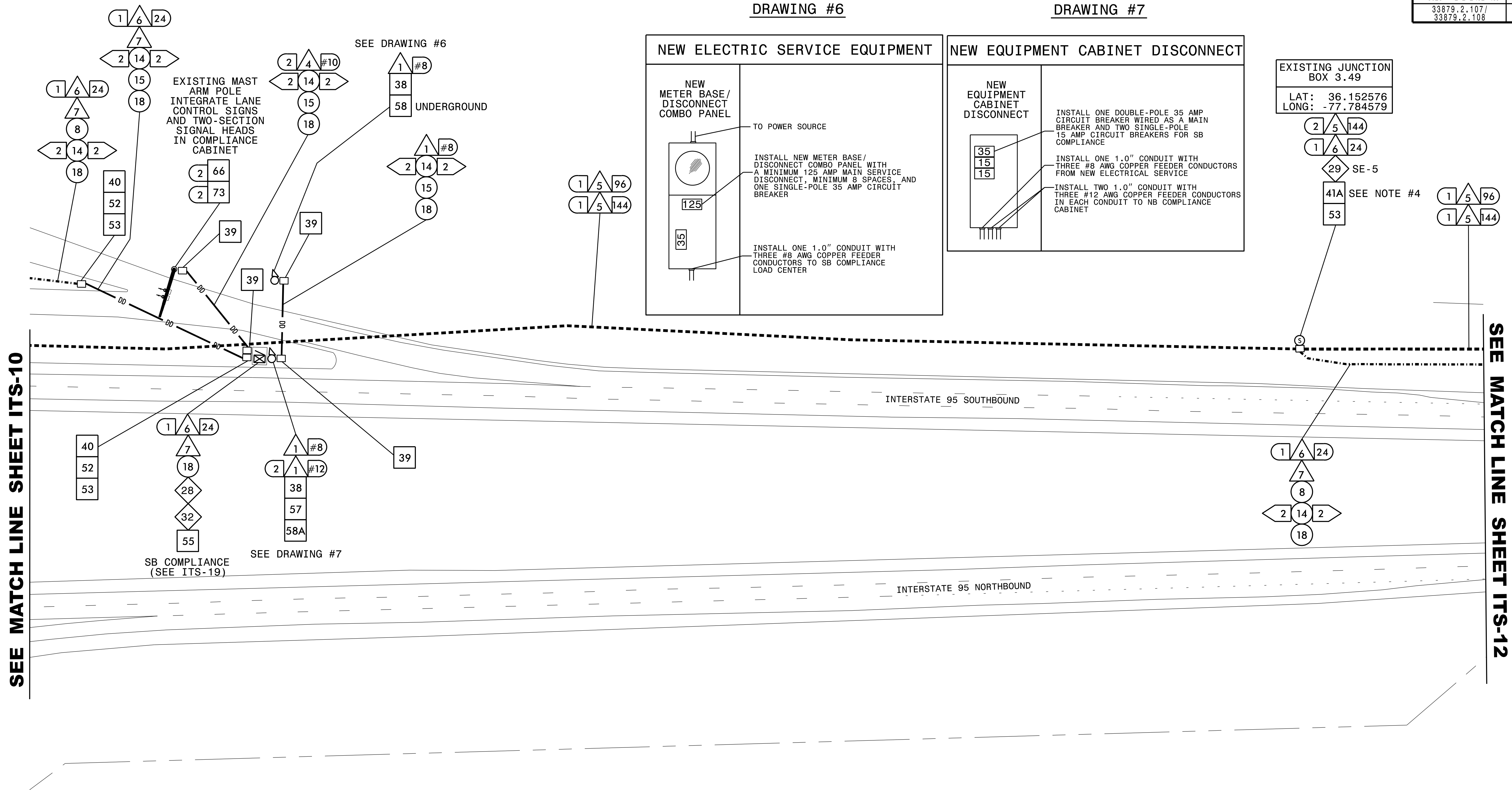
| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

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SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 JAMES D. SMITH
 SEAL 053312
 4/23/2024

DRAWING #6

DRAWING #7

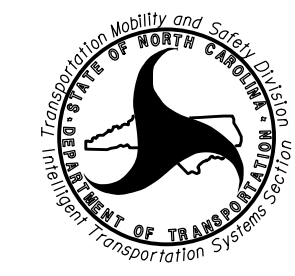


NOTES:

1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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NC FIRM LICENSE No: P-0339
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Hillsborough, NC 27278
(919) 732-3883
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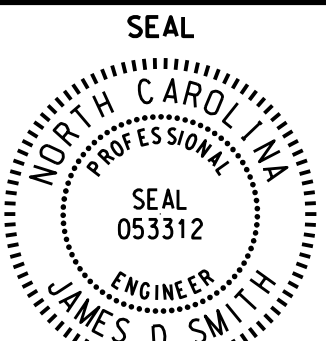
Prepared For:

 750 N. Greenfield Pkwy., Garner, NC 27529
 SCALE
 0 50
 1"=50'

Halifax County
NB / SB Weigh Station
Cable Routing Plans

Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

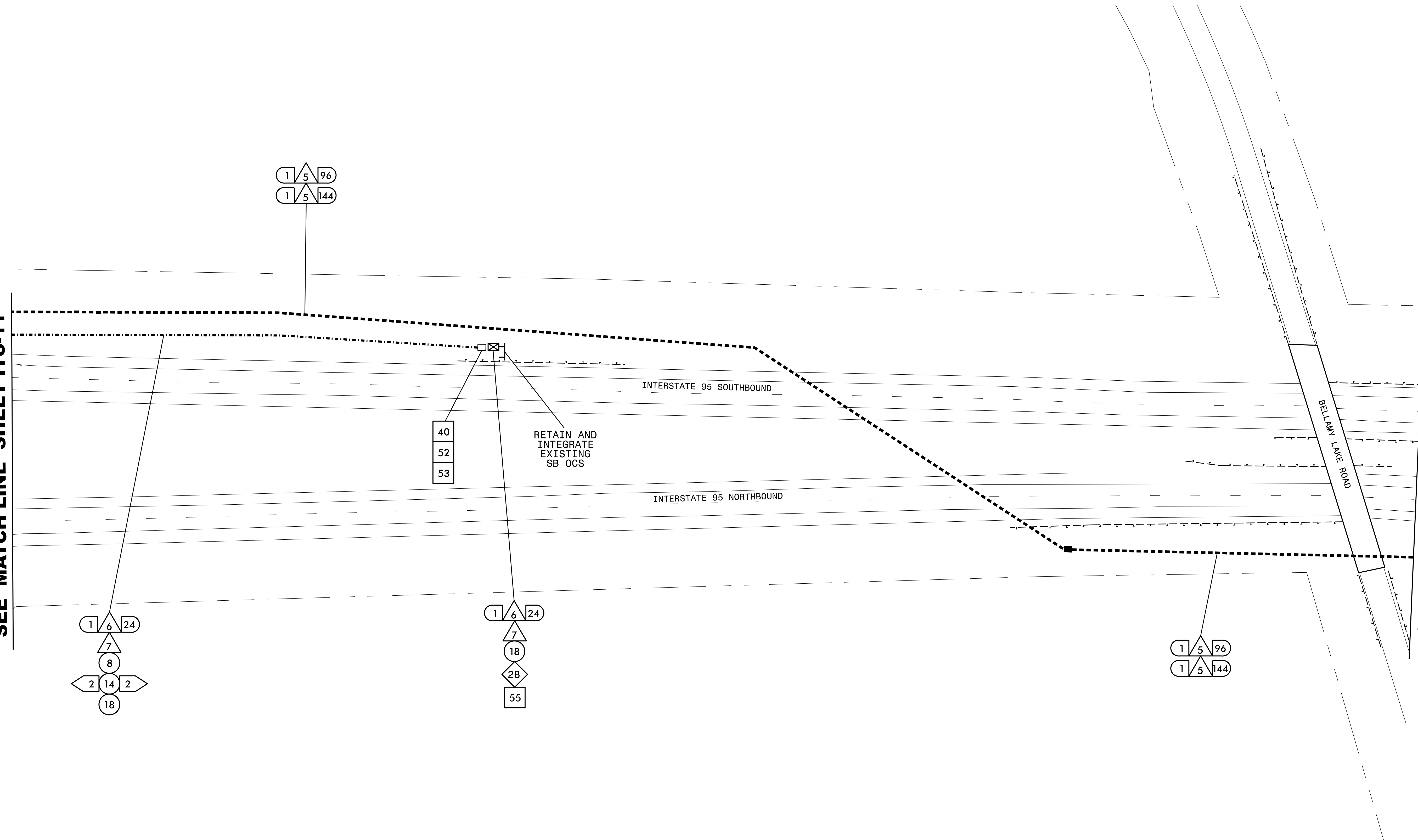
| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

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SEAL

 JAMES D. SMITH
 ENGINEER
 4/23/2024
 DATE

SEE MATCH LINE SHEET ITS-11

SEE MATCH LINE SHEET ITS-13



NOTES:
 1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 2. DO NOT INSTALL ELECTRICAL POWER CONDUCTORS AND FIBER-OPTIC CABLE INSIDE SAME CONDUIT OR JUNCTION BOX.
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 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

 750 N. Greenfield Pkwy., Garner, NC 27529

Halifax County
 NB / SB Weigh Station
 Cable Routing Plans
 Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

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 SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 SEAL
 053312
 ENGINEER
 JAMES D. SMITH

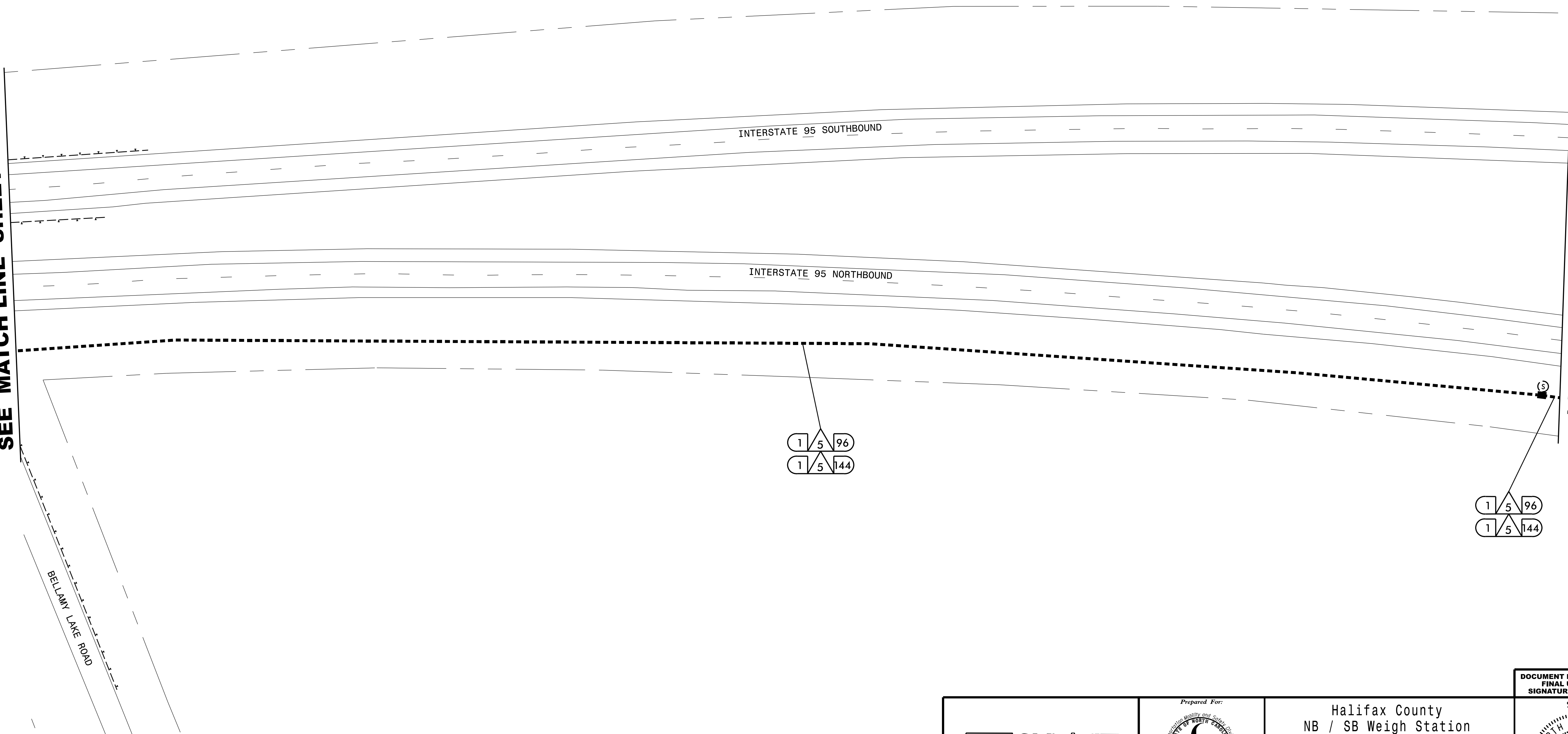
4/23/2024
 DATE

SCALE
 0 50
 1"=50'

NO WORK THIS SHEET

SEE MATCH LINE SHEET ITS-12

SEE MATCH LINE SHEET ITS-14



- NOTES:
1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 2. DO NOT INSTALL ELECTRICAL POWER CONDUCTORS AND FIBER-OPTIC CABLE INSIDE SAME CONDUIT OR JUNCTION BOX.
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NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For:

750 N. Greenfield Place, Garner, NC 27529

Halifax County
NB / SB Weigh Station
Cable Routing Plans

Division 4 Halifax County Whitakers

PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker

PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
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SEAL

James D. Smith
Professional Engineer
053312

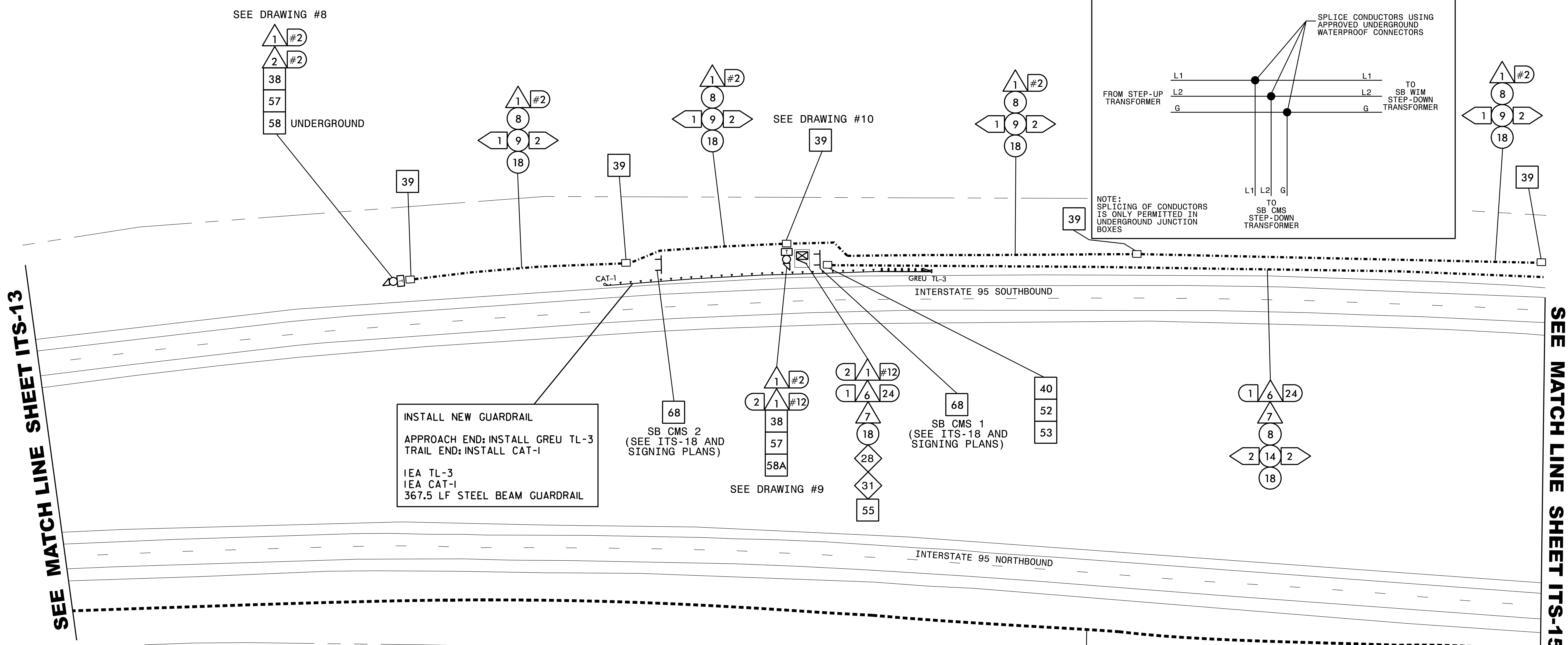
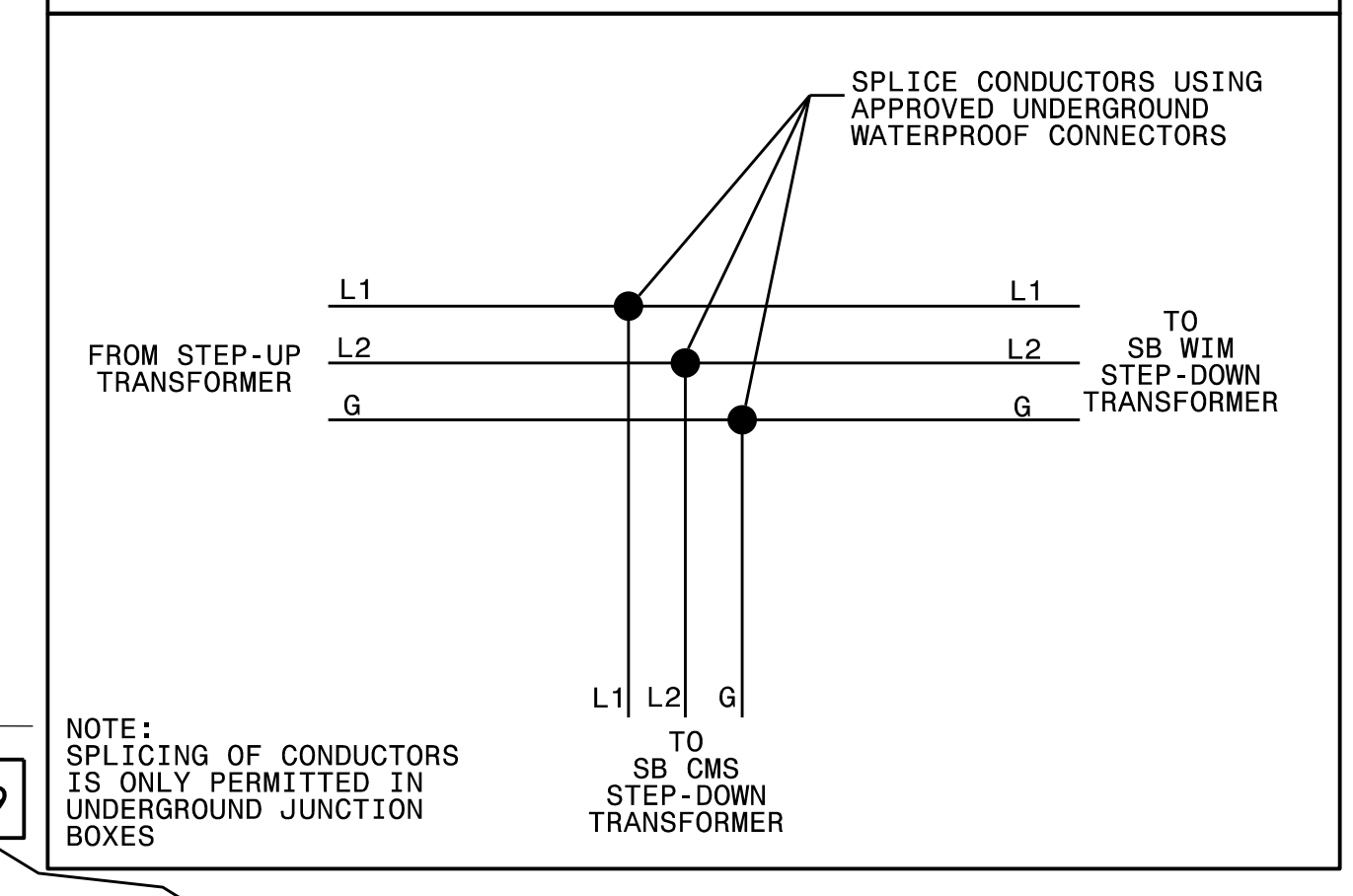
DocuSigned by:
James D. Smith
4/23/2024

SCALE

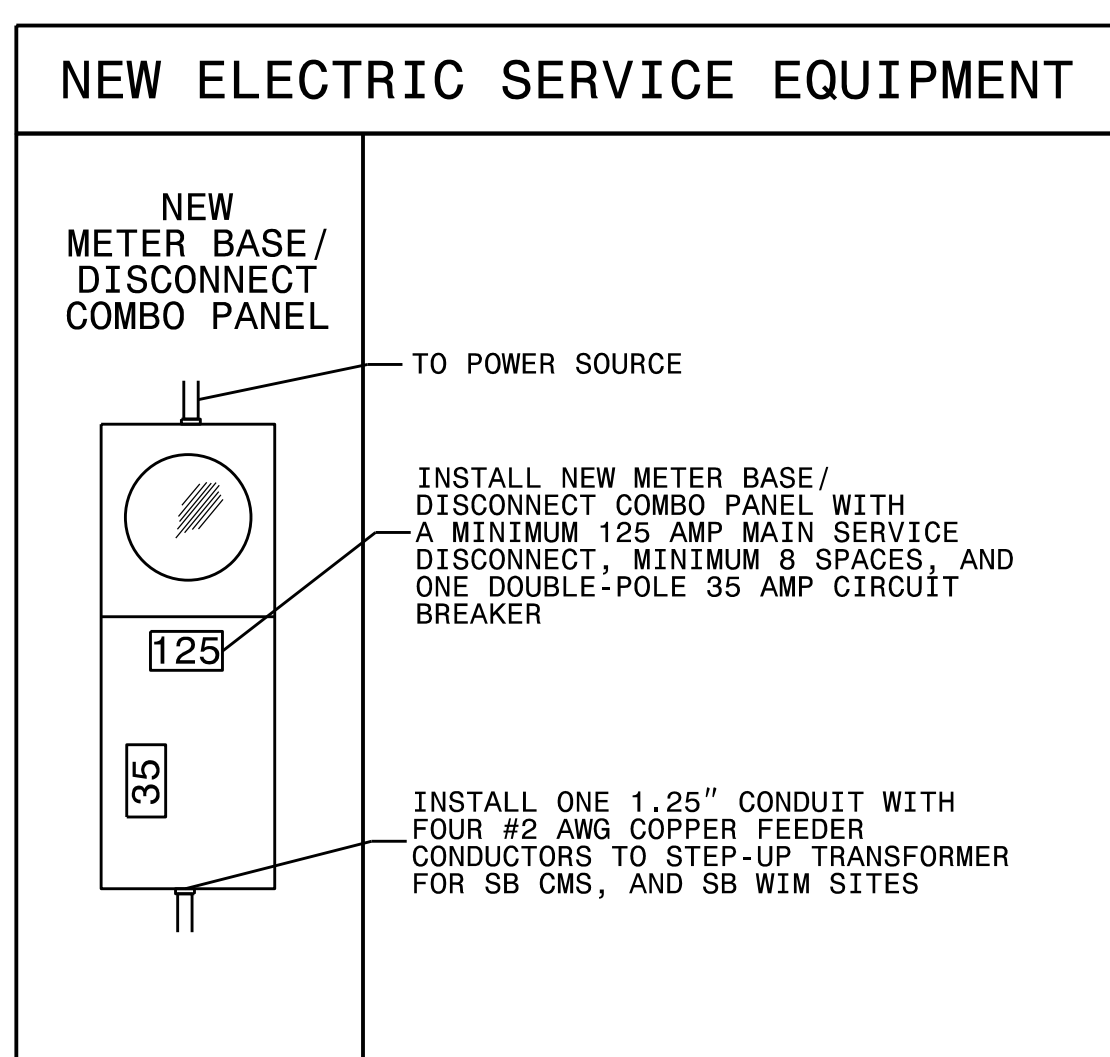
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1"=50'

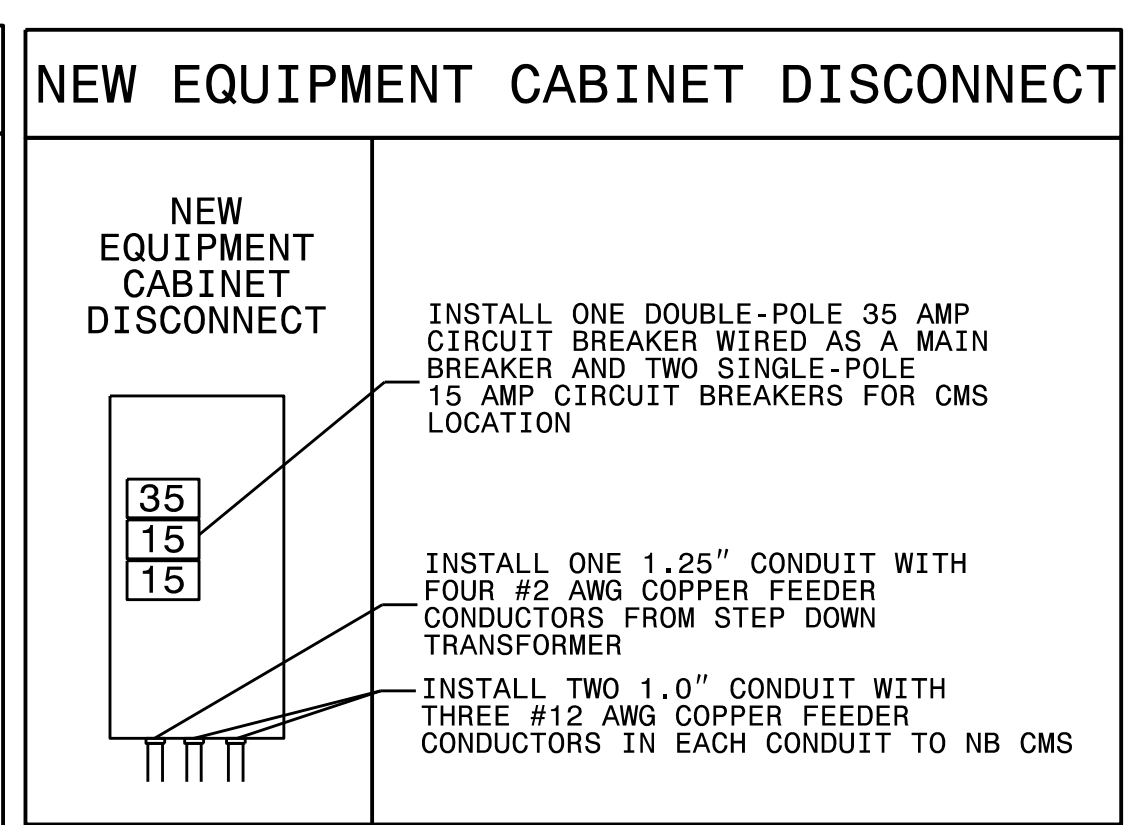
UNDERGROUND ELECTRICAL SPLICING DETAIL



DRAWING #8



DRAWING #9



NOTES:
 1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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SUMMIT
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 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

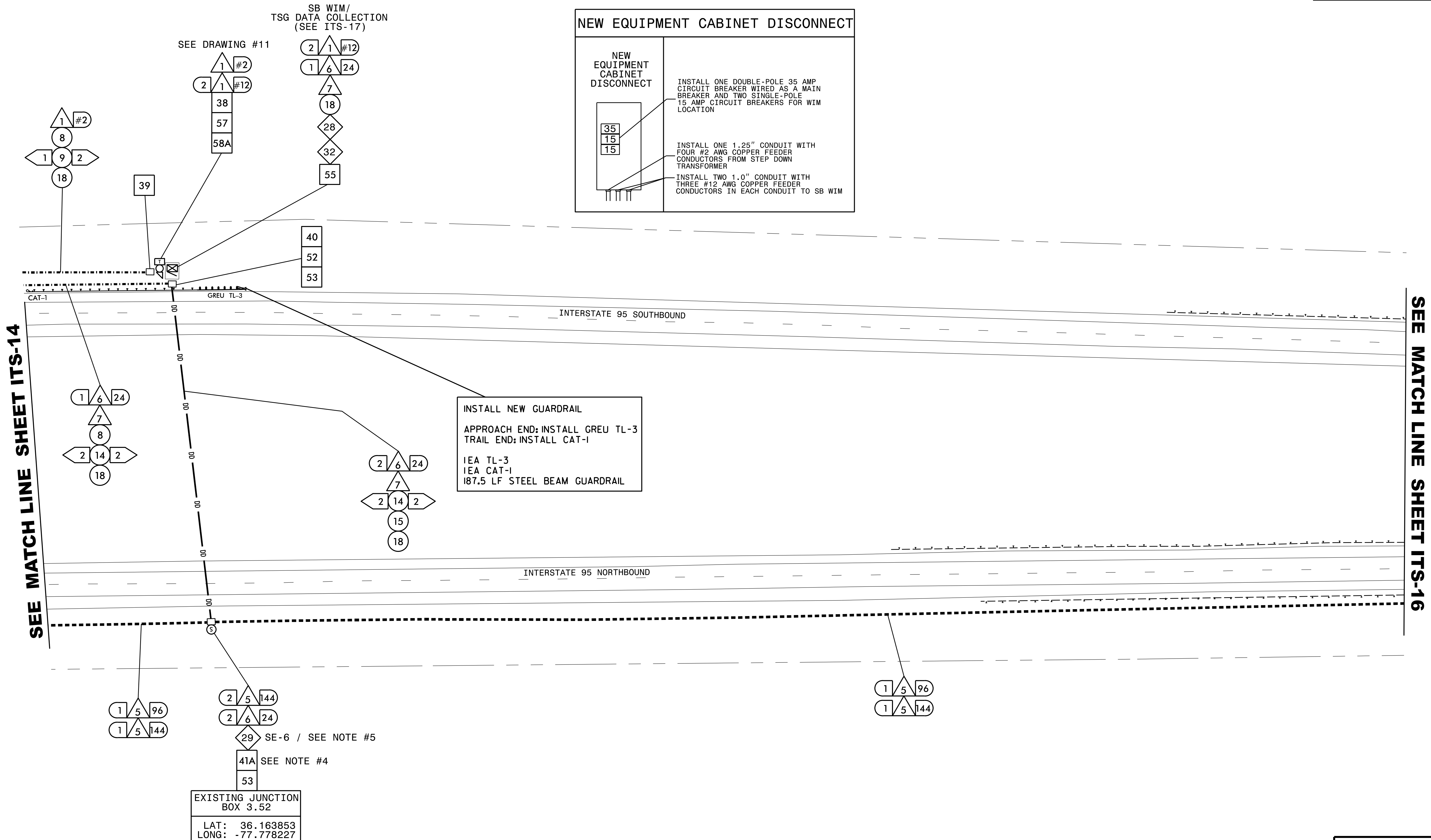
 750 N. Greenfield Pkwy., Garner, NC 27529
 SCALE 1"=50'

Halifax County
 NB / SB Weigh Station
 Cable Routing Plans
 Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 JAMES D. SMITH
 SEAL 053312
 DATE 4/23/2024

DRAWING #11

| | |
|------------------------------|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| 33879.2.107 / 33879.2.108 | ITS-15 |



NEW EQUIPMENT CABINET DISCONNECT

| | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NEW EQUIPMENT CABINET DISCONNECT | <p>INSTALL ONE DOUBLE-POLE 35 AMP CIRCUIT BREAKER WIRED AS A MAIN BREAKER AND TWO SINGLE-POLE 15 AMP CIRCUIT BREAKERS FOR WIM LOCATION</p> <p>INSTALL ONE 1.25" CONDUIT WITH FOUR #2 AWG COPPER FEEDER CONDUCTORS FROM STEP DOWN TRANSFORMER</p> <p>INSTALL TWO 1.0" CONDUIT WITH THREE #12 AWG COPPER FEEDER CONDUCTORS IN EACH CONDUIT TO SB WIM</p> |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

INSTALL NEW GUARDRAIL
 APPROACH END: INSTALL GREU TL-3
 TRAIL END: INSTALL CAT-1
 IEA TL-3
 IEA CAT-1
 187.5 LF STEEL BEAM GUARDRAIL

EXISTING JUNCTION BOX 3.52
 LAT: 36.163853
 LONG: -77.778227

- NOTES:**
1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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 5. INSTALL NEW SPLICE ENCLOSURE FOR SPLICING DROP FIBERS. PROTECT AND RETAIN EXISTING 96-FIBER SPLICE ENCLOSURE.

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

 730 N. Greenfield Pkwy., Garner, NC 27529

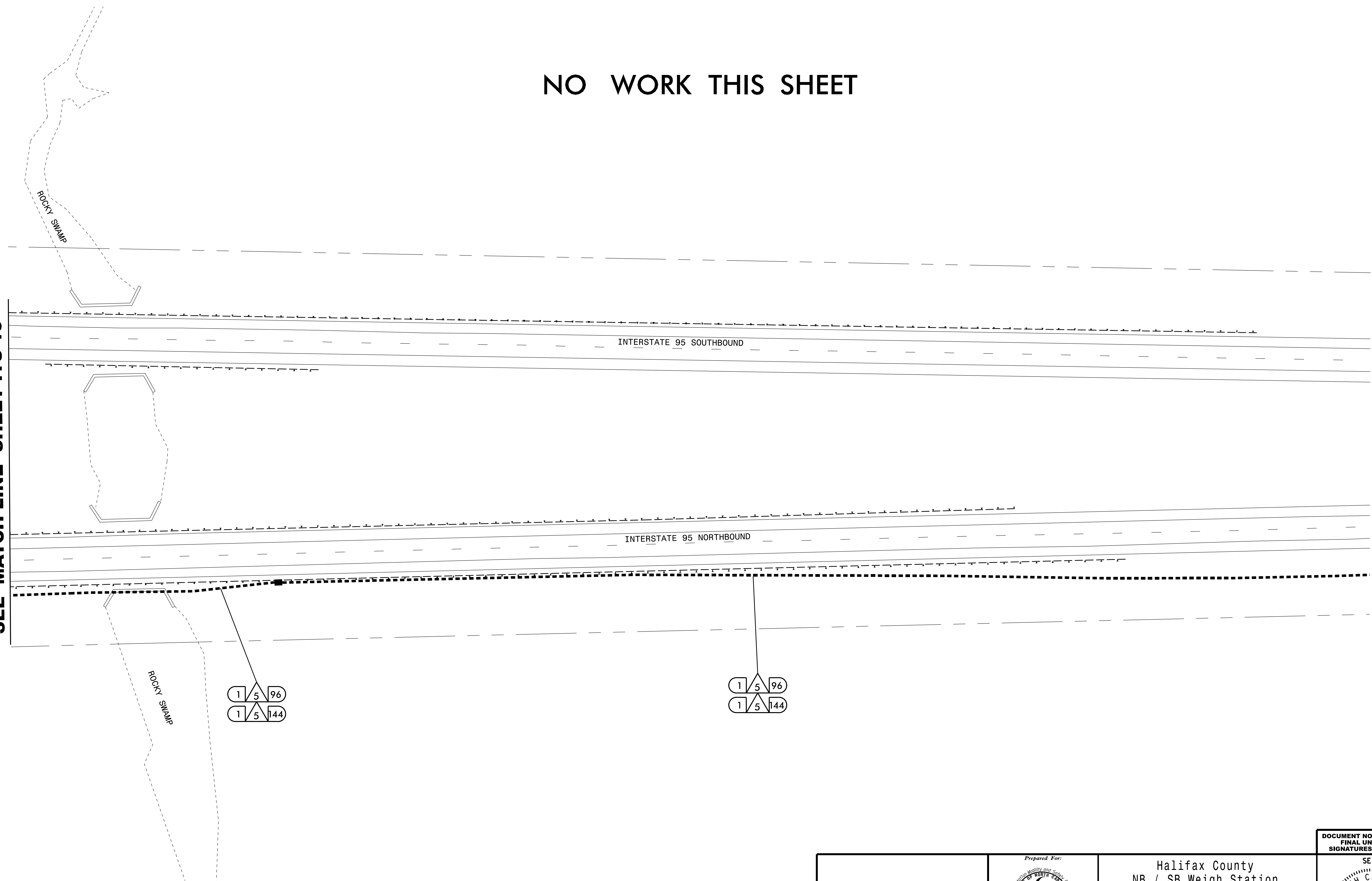
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|----------------------------------------------------------------|-------------------------------|
| Halifax County NB / SB Weigh Station Cable Routing Plans | |
| Division 4 | Halifax County Whitakers |
| PLAN DATE: February 2024 | REVIEWED BY: S. Yow/T. Parker |
| PREPARED BY: J. Smith | REVIEWED BY: E. Sirgany |
| REVISIONS | INIT. DATE |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 JAMES D. SMITH
 053312
 7/3/2024

NO WORK THIS SHEET

SEE MATCH LINE SHEET ITS-15



- NOTES:
1. MAINTAIN A MINIMUM OF SIX (6) FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

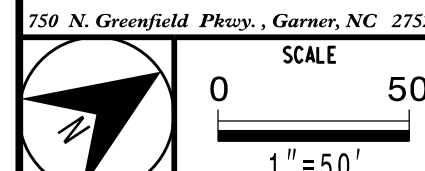
Prepared For:

750 N. Greenfield Pkwy., Garner, NC 27529

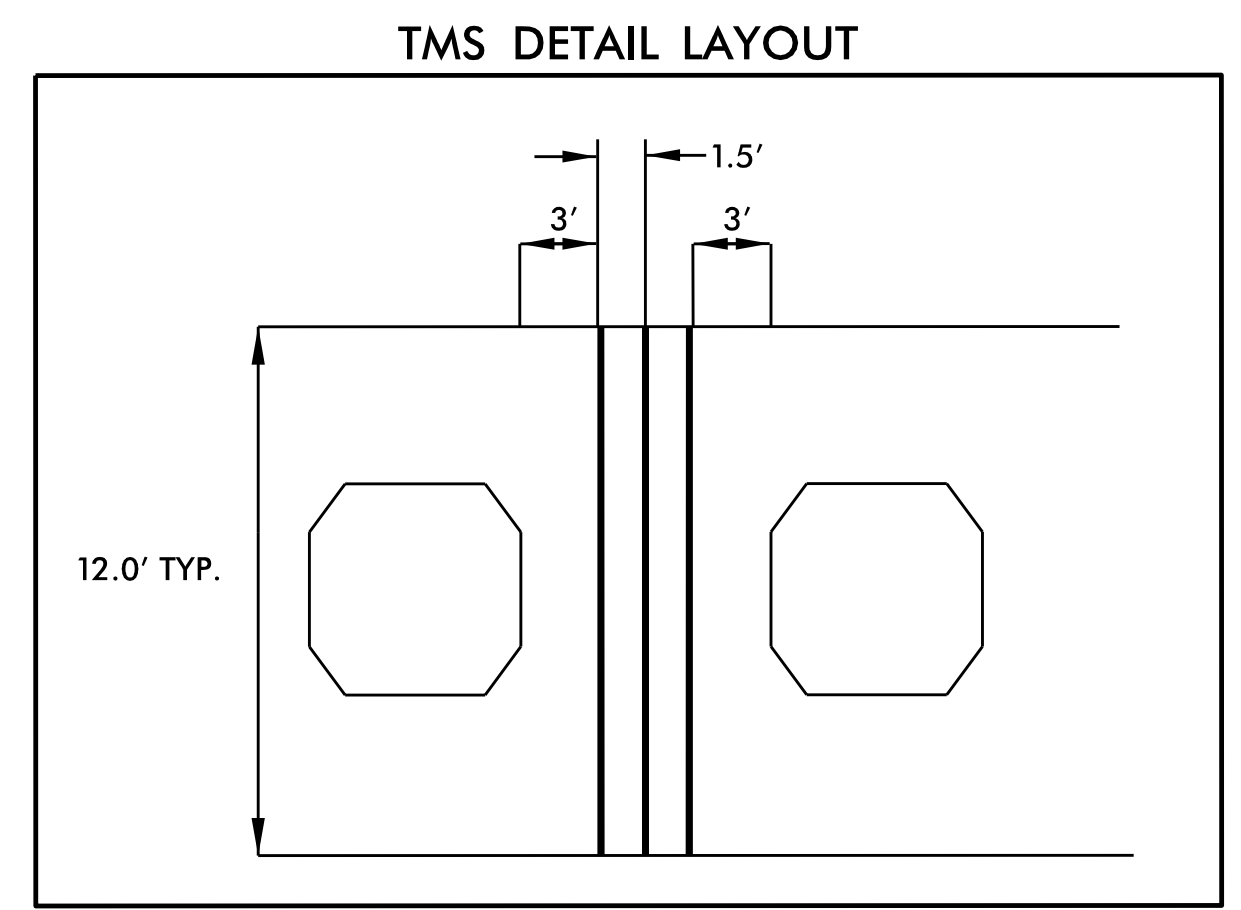
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|----------------------------------------------------------------|-------------------------------|
| Halifax County NB / SB Weigh Station Cable Routing Plans | |
| Division 4 | Halifax County Whitakers |
| PLAN DATE: February 2024 | REVIEWED BY: S. Yow/T. Parker |
| PREPARED BY: J. Smith | REVIEWED BY: E. Sirgany |
| REVISIONS | INIT. DATE |
| | |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

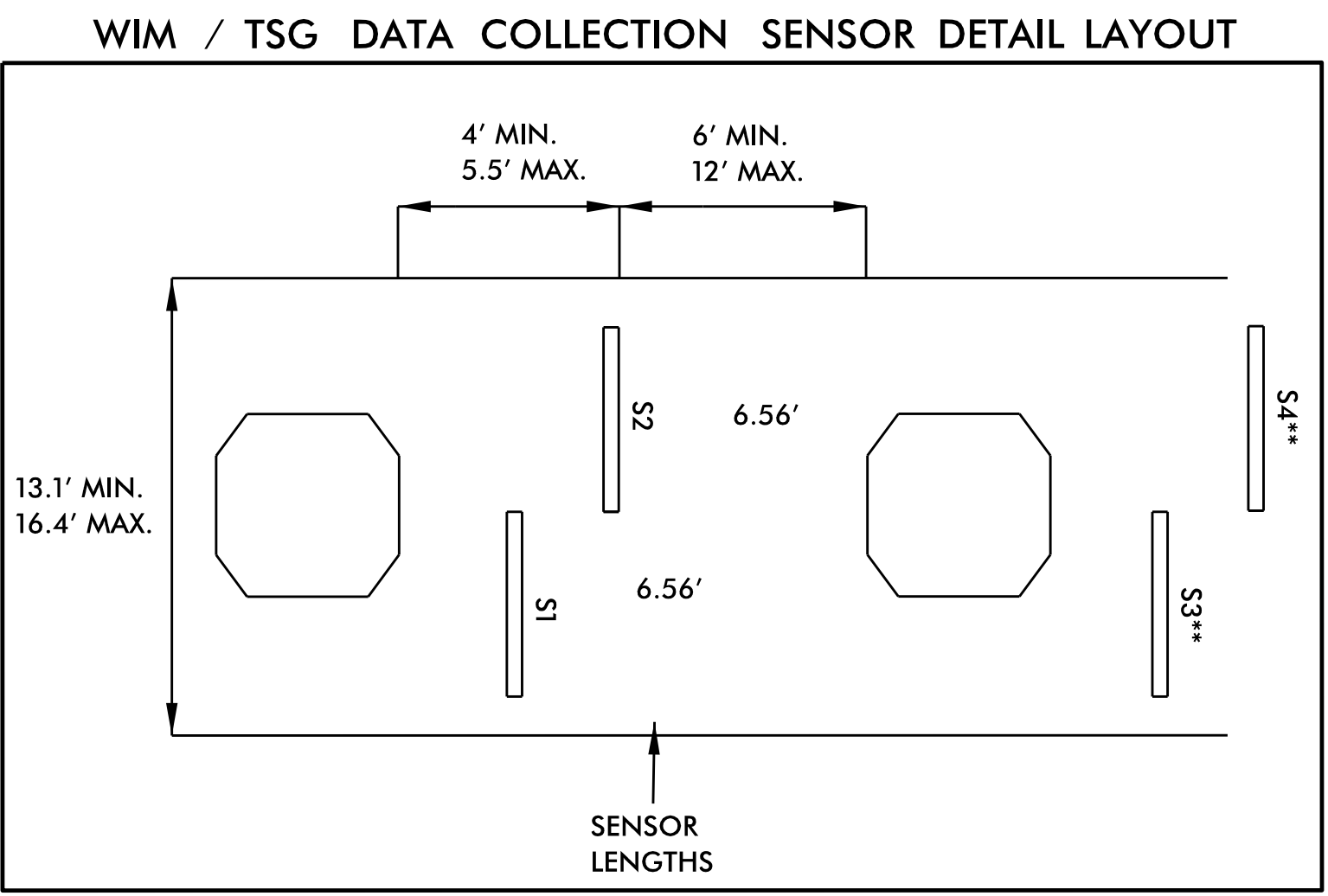
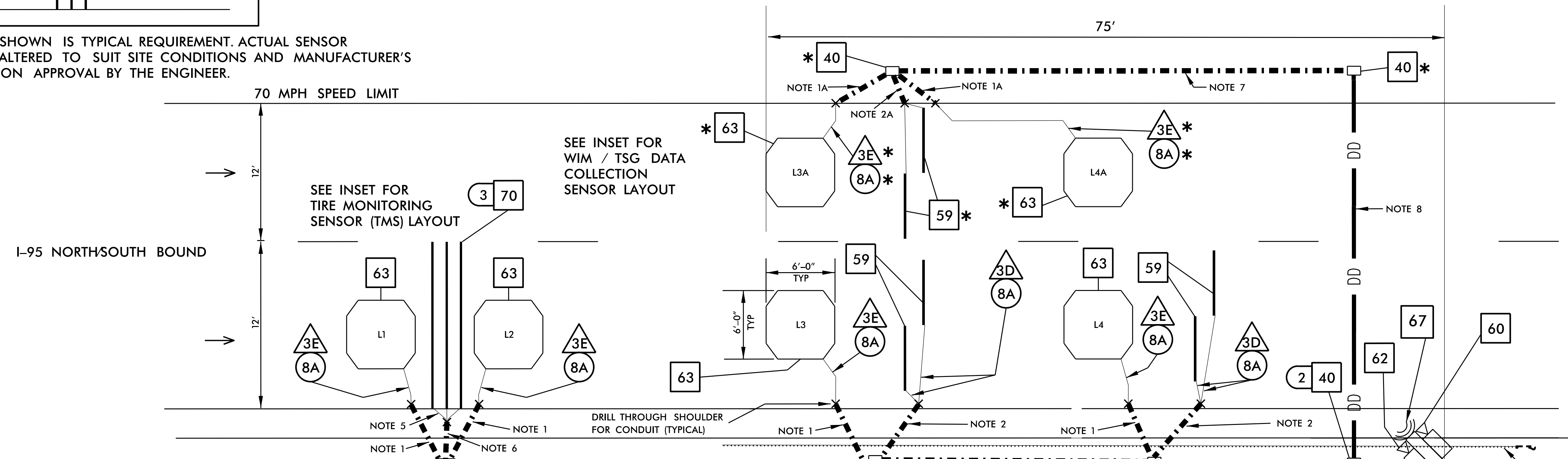
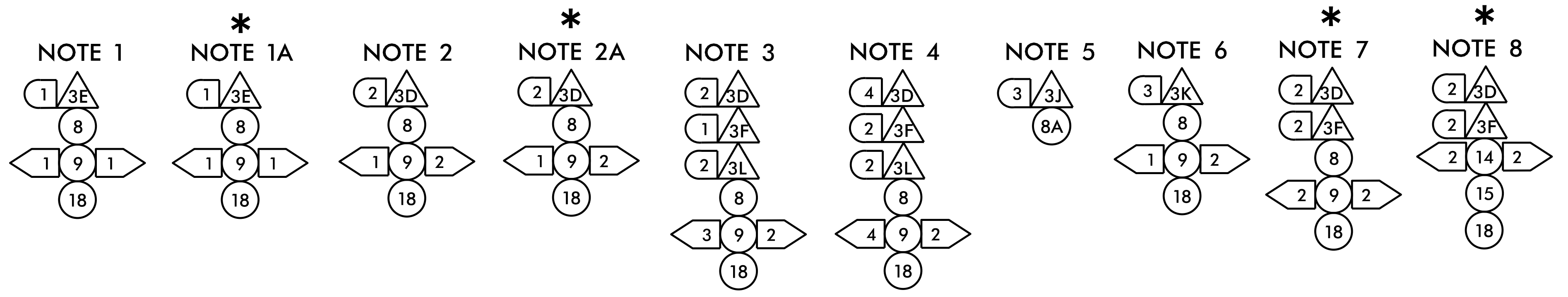
SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
JAMES D. SMITH
053312



4/23/2024 DATE



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.



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.
 ** NOTE - SENSORS S3 AND S4 ARE ONLY INCLUDED IN THE WIM LANE.

- NOTES:
- A. SENSORS AND INDUCTIVE LOOP SAW SLOTS, INCLUDING TAIL AND LEAD-IN SECTIONS MUST BE COMPLETELY DRY BEFORE INSTALLING WIRES AND SEALANT.
 - B. SEE CABLE ROUTING PLANS FOR ELECTRICAL SERVICE AND FIBER-OPTIC CABLE DETAILS.
 - C. ITEMS MARKED WITH "*" FOR TSG DATA COLLECTION ARE TO BE TRACKED AND PAID FOR UNDER WBS # 49600.7.3.

SUMMIT
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 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

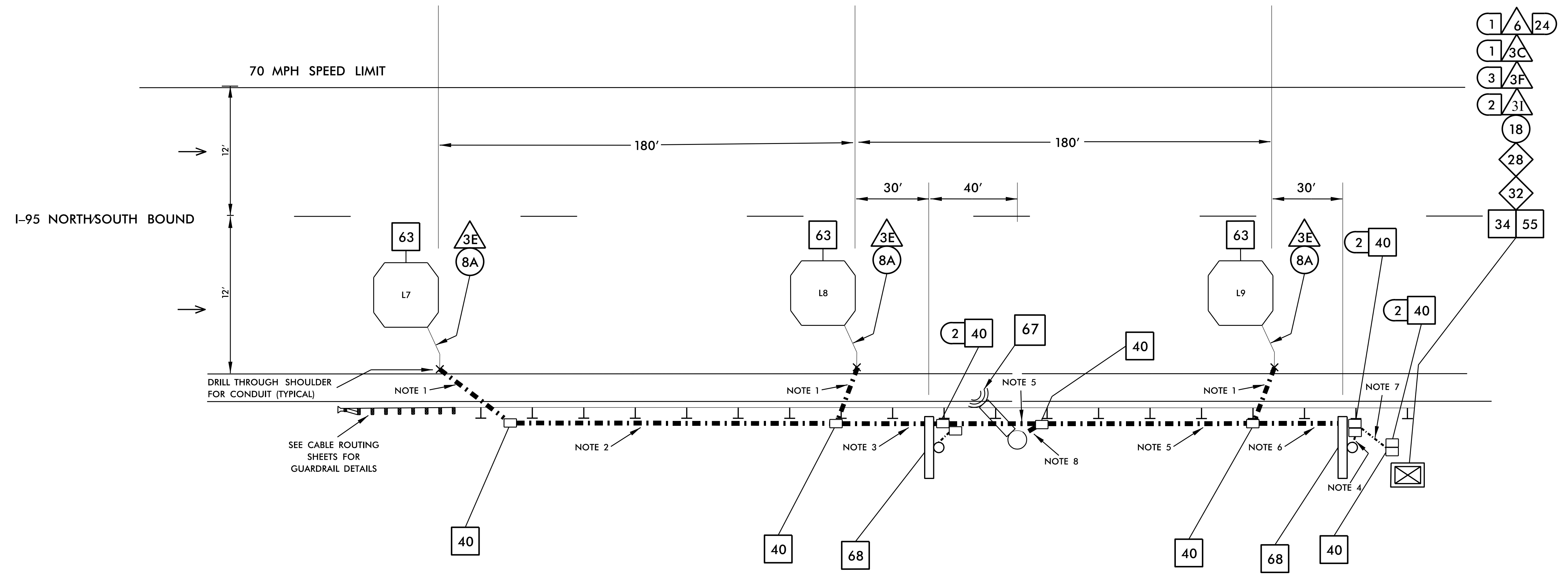
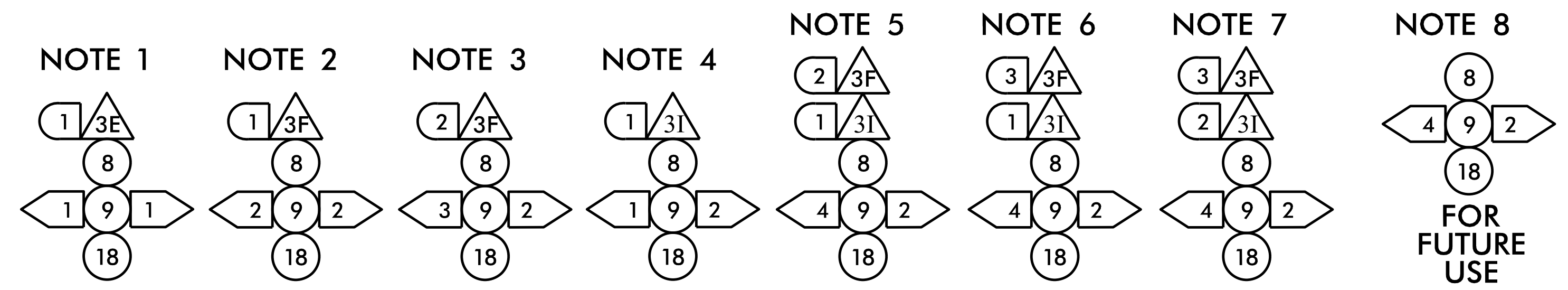
 SCALE: N/A

Halifax County
 NB / SB Weigh Station
 Advance Location and WIM
 Location Details
 Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
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| | | |

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SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 053312
 JAMES D. SMITH
 7/19/2024
 DATE



NOTES:

A. INDUCTIVE LOOP SAW SLOTS, INCLUDING TAIL AND LEAD-IN SECTIONS, MUST BE COMPLETELY DRY BEFORE INSTALLING WIRES AND SEALANT.

B. SEE CABLE ROUTING PLANS FOR ELECTRICAL SERVICE AND FIBER-OPTIC CABLE DETAILS.

C. THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS ARE CONCEPTUAL AND MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. CONSULT THE DIVISION AND THE ENGINEER TO COORDINATE GUARDRAIL INSTALLATION.

Prepared For:

NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

250 N. Greenfield Place, Garner, NC 27529

SCALE: N/A

Halifax County
NB / SB Weigh Station
Notification and
CMS Location Details

Division 4 Halifax County Whitakers

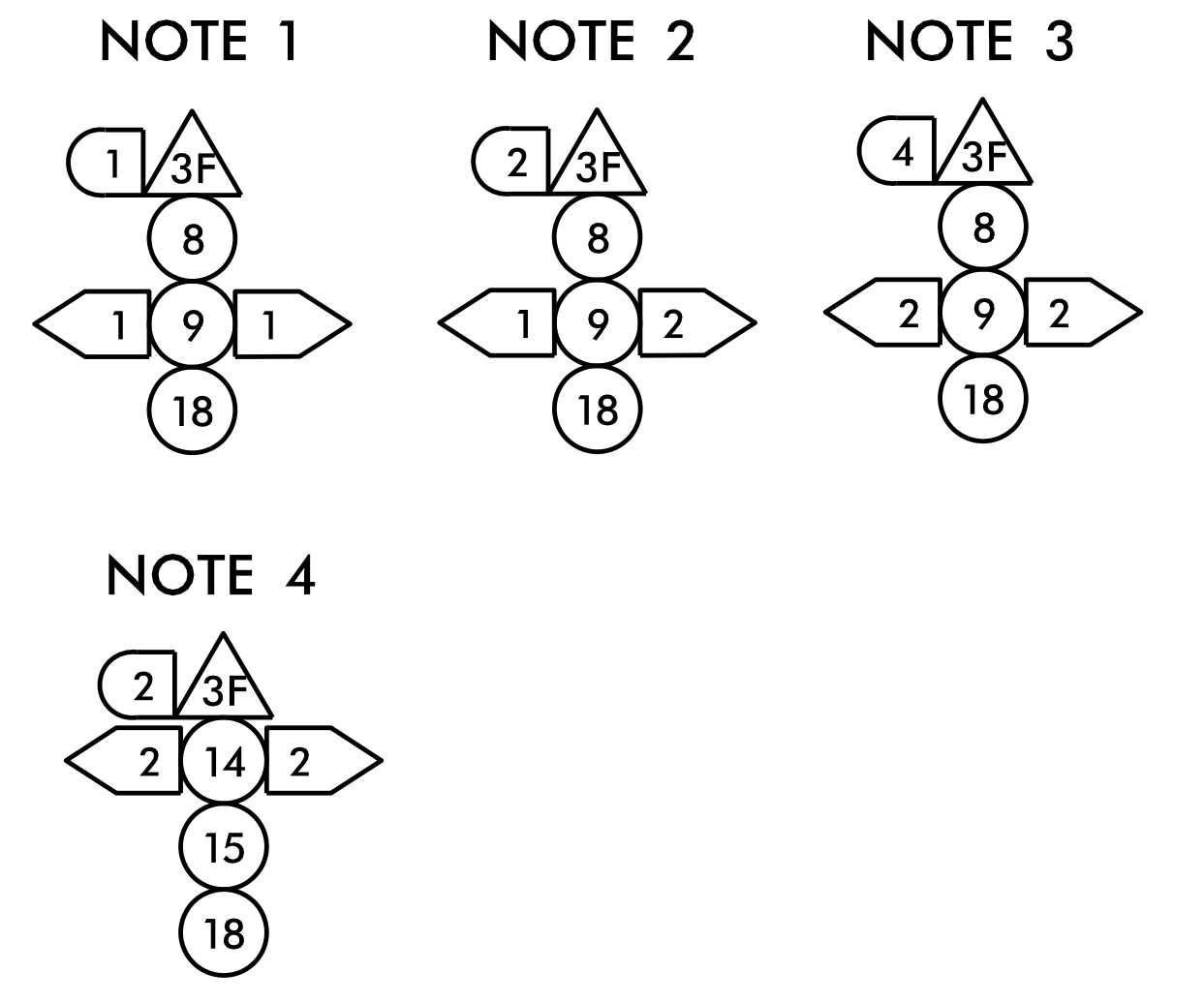
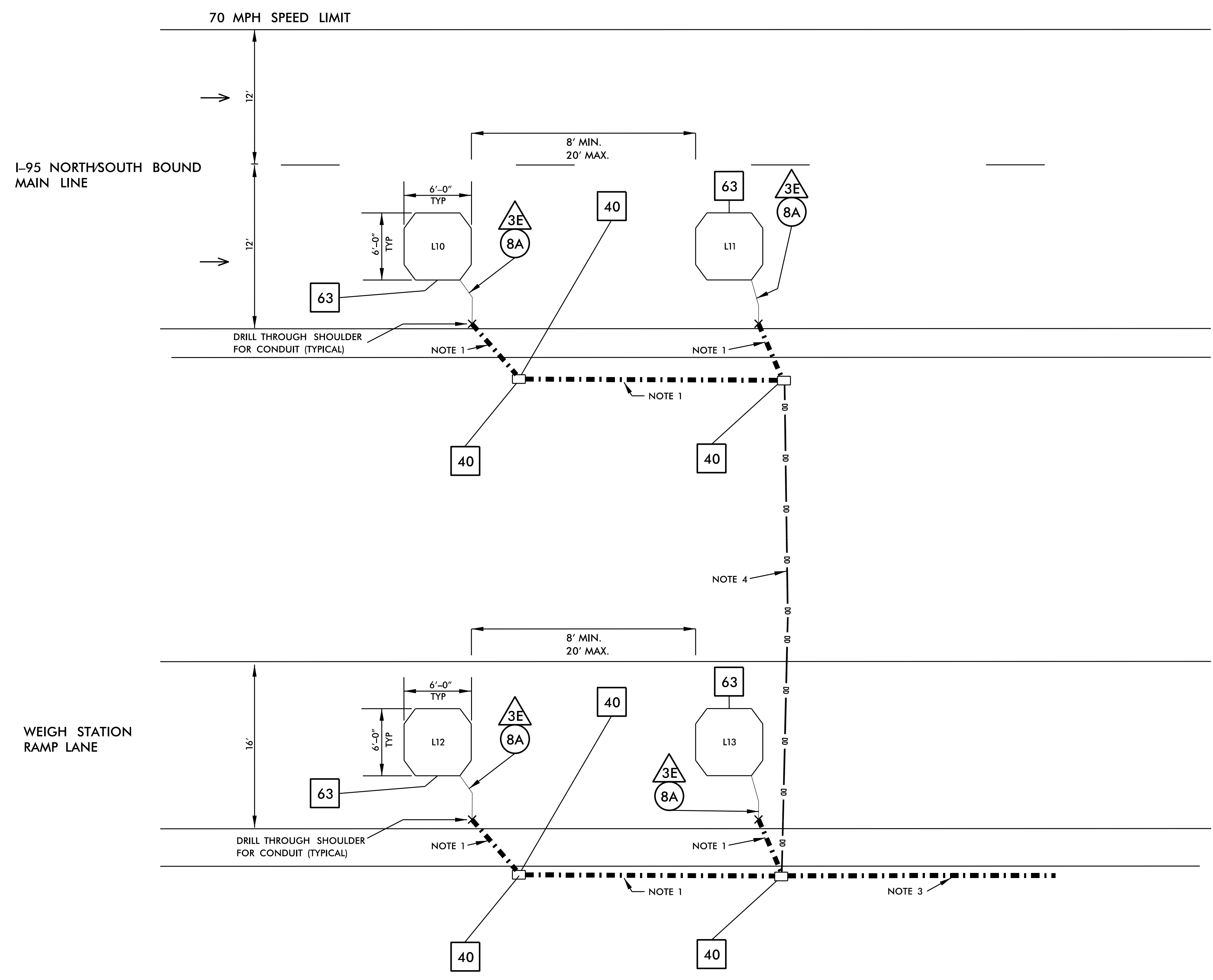
PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker

PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

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DocuSigned by:
James D. Smith
4/23/2024



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SUMMIT
 DESIGN AND ENGINEERING SERVICES
 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

 250 N. Greenfield Place, Garner, NC 27529
 SCALE: N/A

Halifax County
 NB / SB Weigh Station
 Compliance Location Details
 Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

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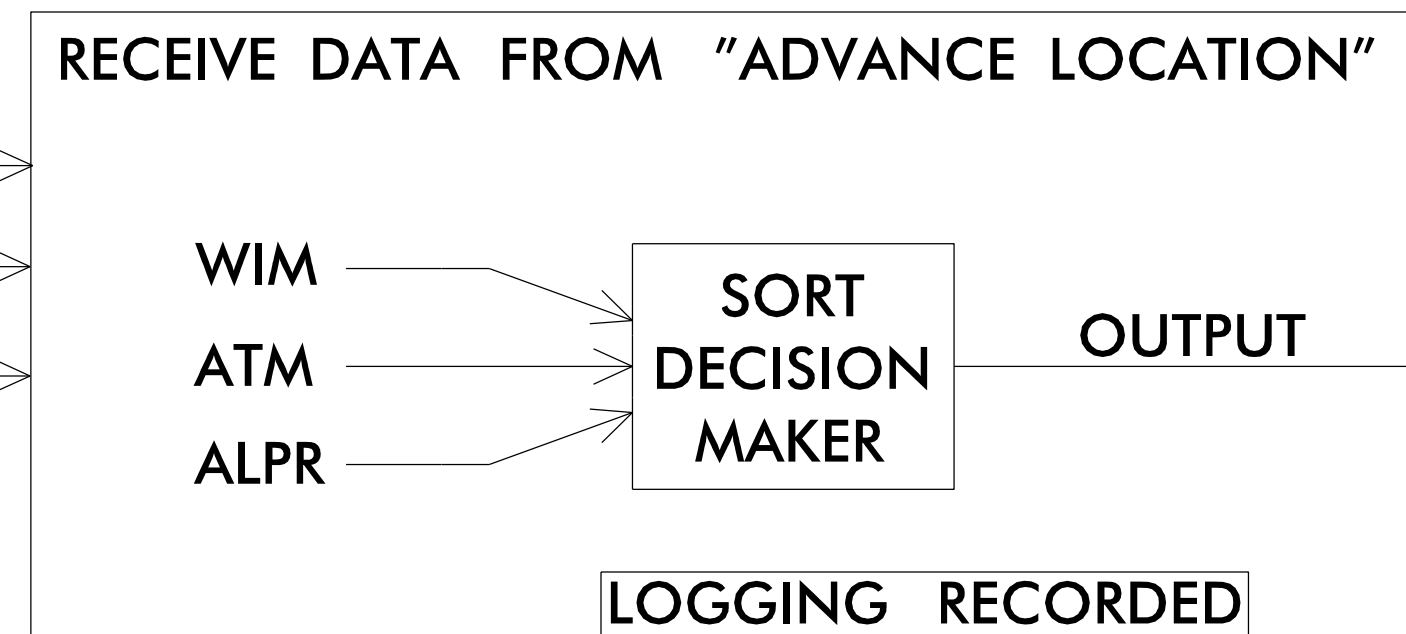
SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 053312
 JAMES D. SMITH
 4/23/2024

ADVANCE LOCATION

TIER 1
- WIM
- ATM

TIER 2
- ALPR

CREDENTIAL SCREENING



NOTIFICATION

CHANGEABLE MESSAGE SIGN DISPLAY



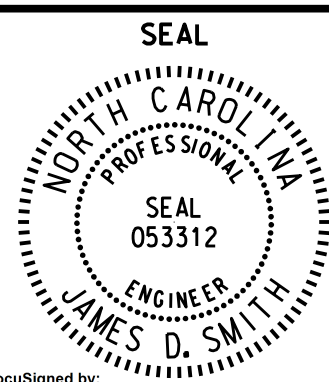
VEHICLE ID, SORT DECISION,
WIM DATA, ATM DATA

CVIEW, SAFER
FuelTaCS, PRISM
NCIC

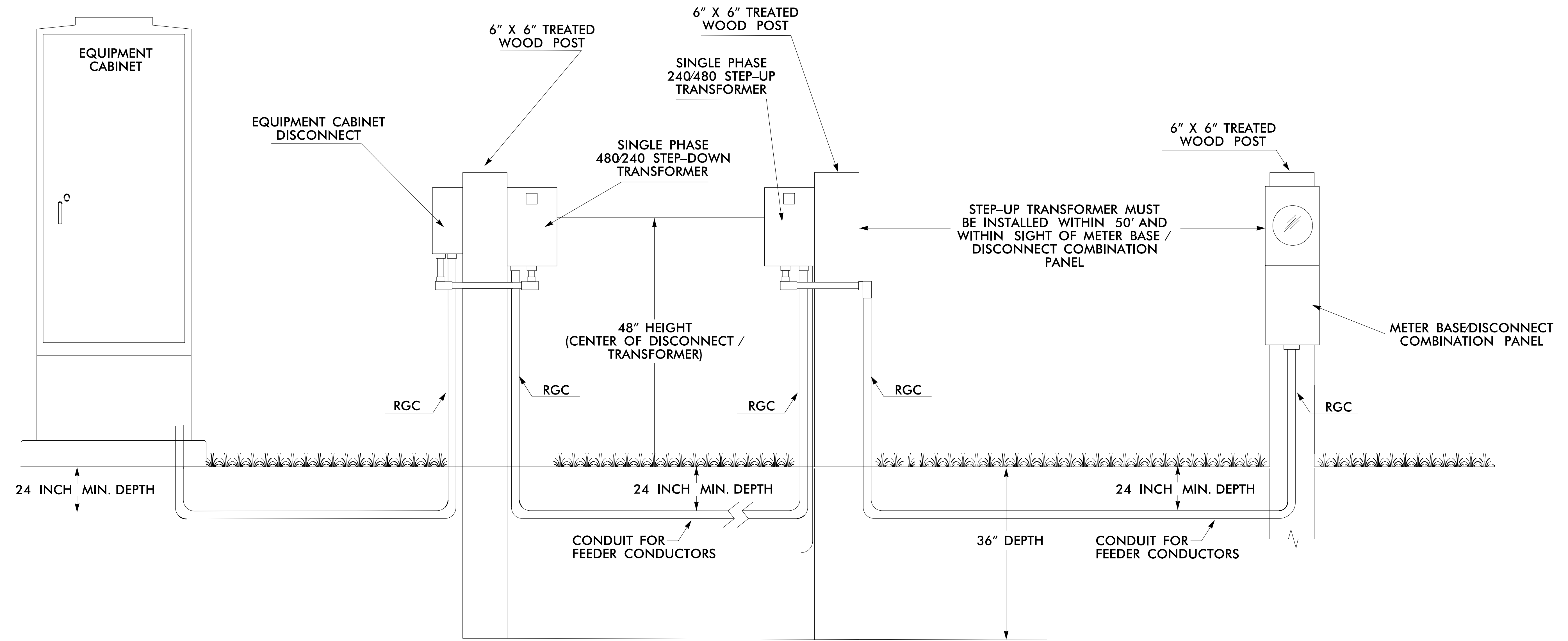
CONFIRMATION OF
SORT DECISION
PROVIDED TO
WEIGH STATION
OPERATORS

LOGGING RECORDED
DATABASE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) |  Prepared For: 750 N. Greenfield Place, Garner, NC 27529 | Halifax County NB / SB Weigh Station System Support Decision Data Flow |  |
| | | Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker PREPARED BY: J. Smith REVIEWED BY: E. Sirgany | |
| SCALE N/A | | REVISIONS _____ _____ _____ | INIT. DATE _____ _____ _____ |

DocuSigned by:
James D. Smith
4/23/2024
DATE



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.

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 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:

 250 N. Greenfield Place, Garner, NC 27529

Halifax County
 NB / SB Weigh Station
 Step-Up / Step-Down
 Transformer Details
 Division 4 Halifax County Whitakers
 PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
 PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

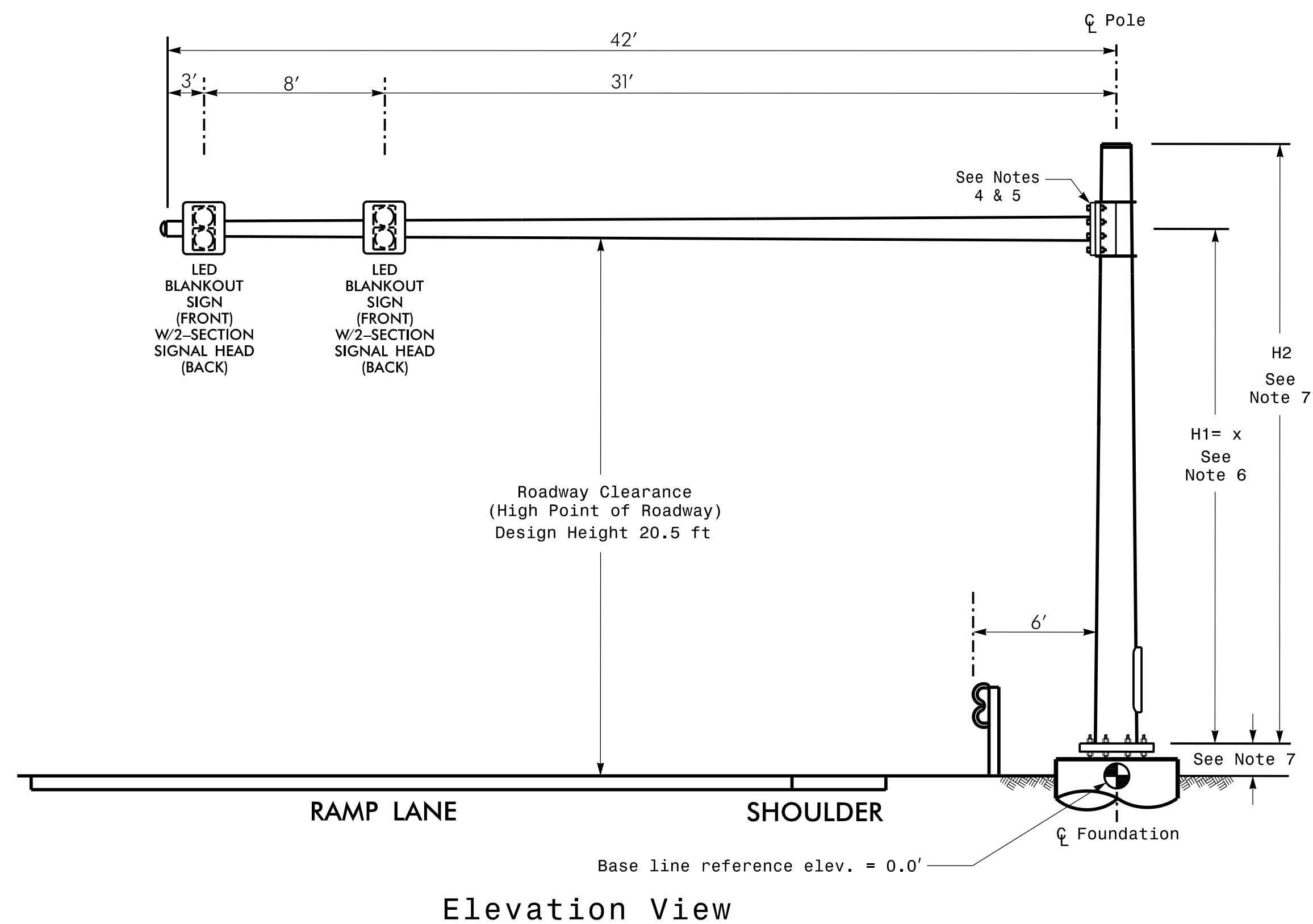
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SEAL
 NORTH CAROLINA
 PROFESSIONAL ENGINEER
 SEAL 053312
 JAMES D. SMITH

DocuSigned by:

 4/23/2024

Design Loading for Mast Arm Pole #1 with Folding Mast Arm



Elevation View

Mast Arm No. 1

PROJECT REFERENCE NO. 33879.2.107 / 33879.2.108 SHEET NO. ITS-22

SPECIAL NOTES

- The contractor is responsible for determining the mast arm attachment height (H1). Ensure that the mast arm attachment height will provide the "Design Height" clearance from the roadway before submitting final shop drawings for approval.
- ALPRs and Infrared Illuminators are shown on top of the mast arm for illustration purposes. If the contractor elects to install these devices under the mast arm then, the 20.5 Ft. roadway clearance applies to the lowest device.

MAST ARM LOADING SCHEDULE

| LOADING SYMBOL | DESCRIPTION | SIZE | WEIGHT |
|----------------|--------------------------------------------------------------------|----------------------------|---------|
| LED | L.E.D. BLANKOUT SIGN RIGID MOUNTED | 24.0" W x 36.0" L (5.0 SF) | 110 LBS |
| ⊗ | POLYCARBONATE RIGID MOUNTED SIGNAL HEAD 12"-2 SECTION-NO BACKPLATE | 14.0" W x 30.0" L (2.8 SF) | 38 LBS |

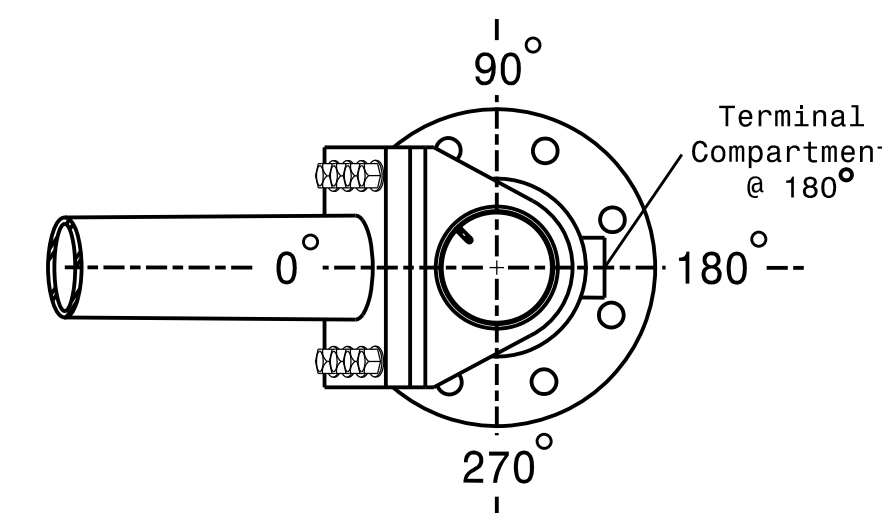
NOTES

Design Reference Material

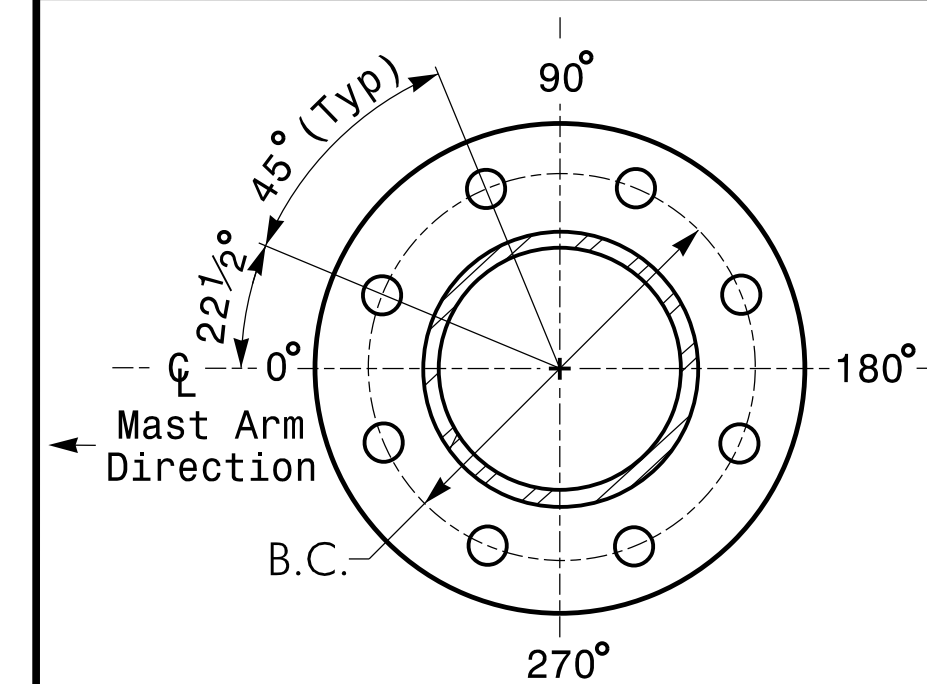
- Design the metal pole structure and foundation in accordance with:
 - AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals 1st Edition, 2015, including the latest interim revisions.
 - The 2024 NCDOT "Standard Specifications for Roads and Structures". The latest addenda to these specifications can be found in the ITS and Signals project special provisions.
 - The 2024 NCDOT Roadway Standard Drawings.
 - The project plans and special provisions.
 - The NCDOT "Metal Pole Standards" located at the following NCDOT website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>

Design Requirements

- Design the metal pole structure using the loading conditions shown in the elevation views. These are anticipated worst case design loads and may not reflect the actual position of the cameras and signs at the time of their installation.
- Design all metal pole supports using stress ratios that do not exceed 0.9.
- The camber design for mast arm deflection should provide an appearance of a low pitched arch where the tip or the free end of the mast arm does not deflect below horizontal when fully loaded or any other load condition.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (H1) shown is based on the following design assumptions:
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Attachments to the mast arm are rigid mounted and vertically centered on the arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is .75 feet above the ground elevation.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of the following:
 - Mast arm attachment height (H1) plus 2 feet, or
 - H1 plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- Design each folding mast arm pole so that the arm swings away from oncoming traffic when folding.
- If pole location adjustments are required, the contractor must gain approval from the engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the ITS & Signals Structural Engineer for assistance at (919) 814-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the attached equipment over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.
- Ensure that the pole, arm, and foundation identification tags include the appropriate inventory number as shown below:
 - Metal Pole #1 - ITS-0139

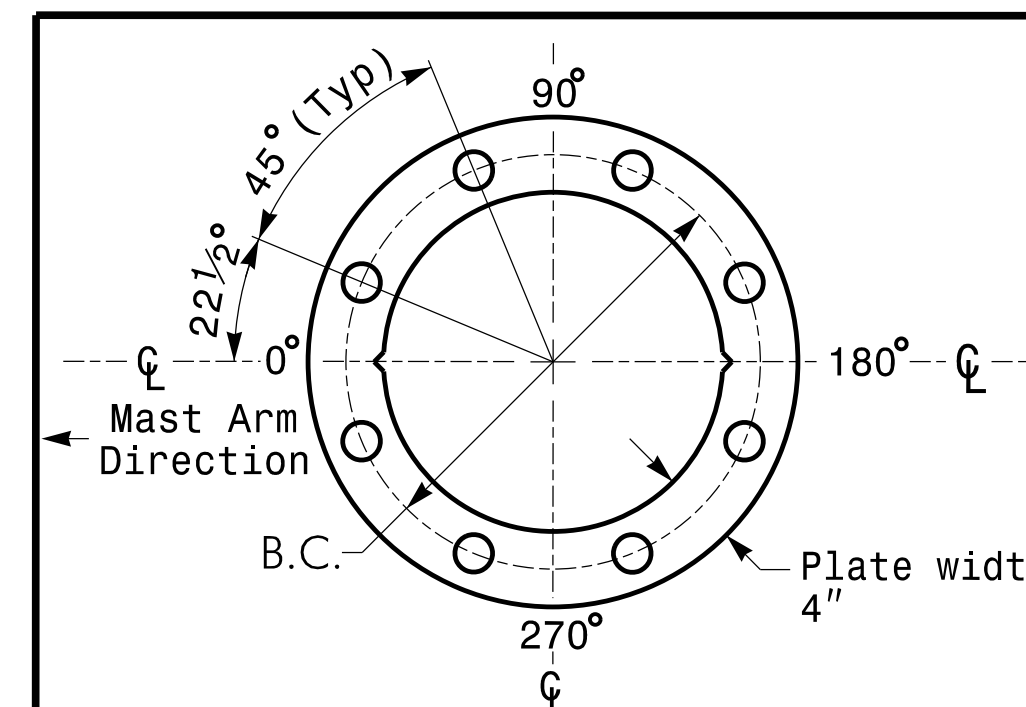


POLE RADIAL ORIENTATION



8 BOLT BASE PLATE DETAIL

See Note 6



BASE PLATE TEMPLATE & ANCHOR BOLT LOCK PLATE DETAIL For 8 Bolt Base Plate



NC FIRM LICENSE No: P-0339
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Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NCDOT Wind Zone 4 (120 mph)

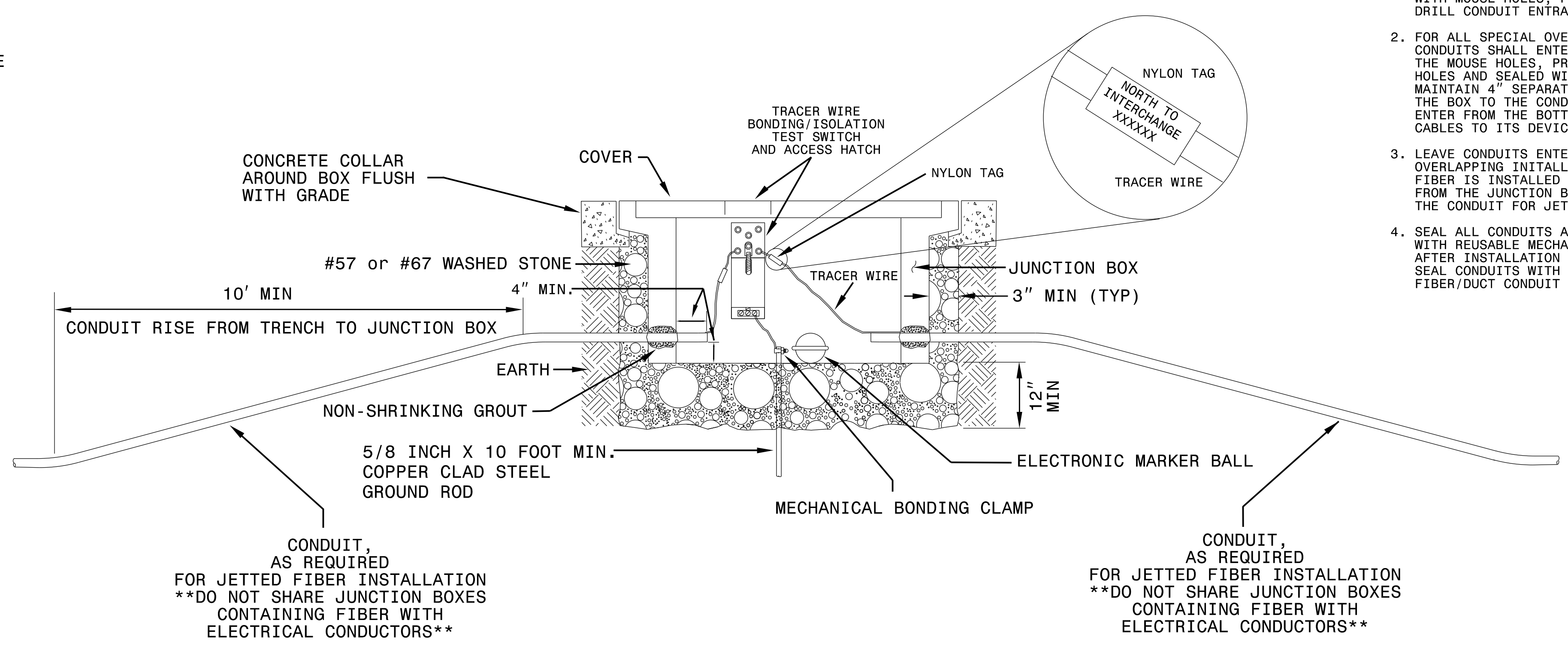
| | | | |
|--------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------|------|
| | Prepared For: Halifax County NB / SB Weigh Station Mast Arm Pole Details | | |
| | Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker | PREPARED BY: J. Smith REVIEWED BY: E. Sirgany | |
| SCALE N/A | REVISIONS | INIT. DATE | DATE |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

- FURNISH "TIER 22" RATED JUNCTION BOXES AND COVERS
- SECURE COVER WITH HEX BOLTS.
- BOX OUTSIDE DIMENSIONS:
48" (l) x 30" (w) x 36" (d)
- COIL FIVE FEET OF SPARE TRACER WIRE AND GROUND ROD BONDING JUMPER IN EACH JUNCTION BOX.

**INSTALLATION CROSS-SECTION
SPECIAL OVERSIZED JUNCTION BOX (AT GRADE)**

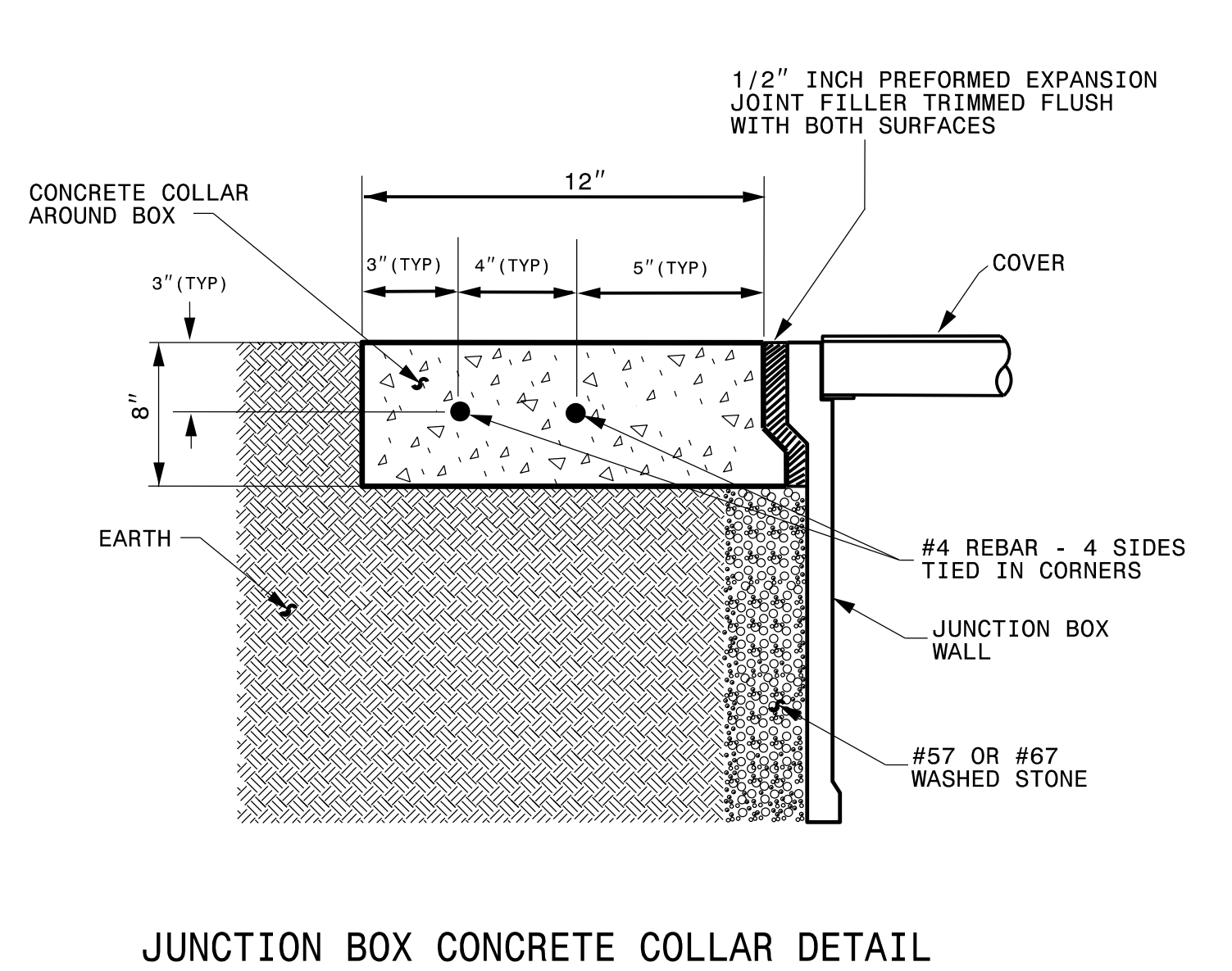
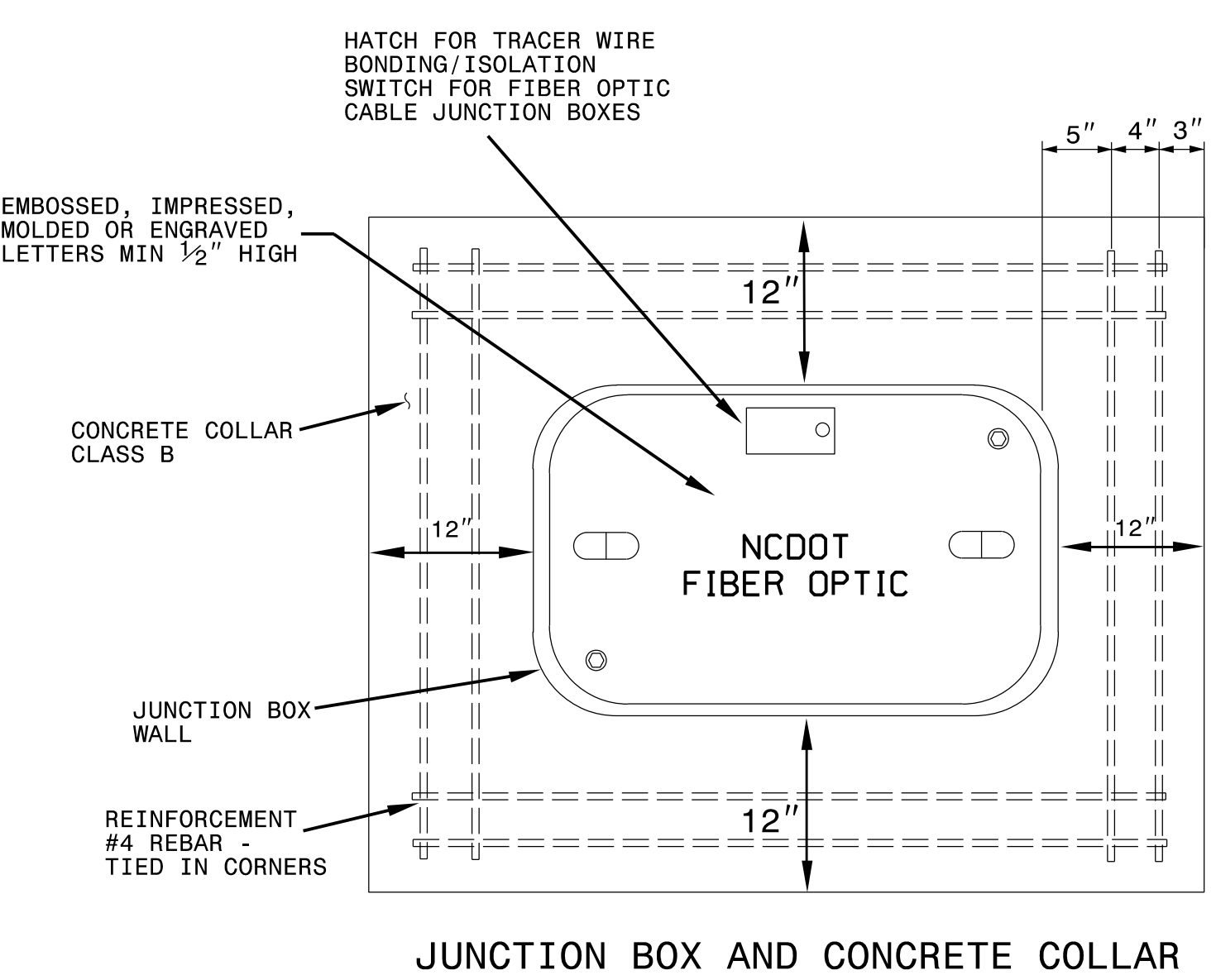
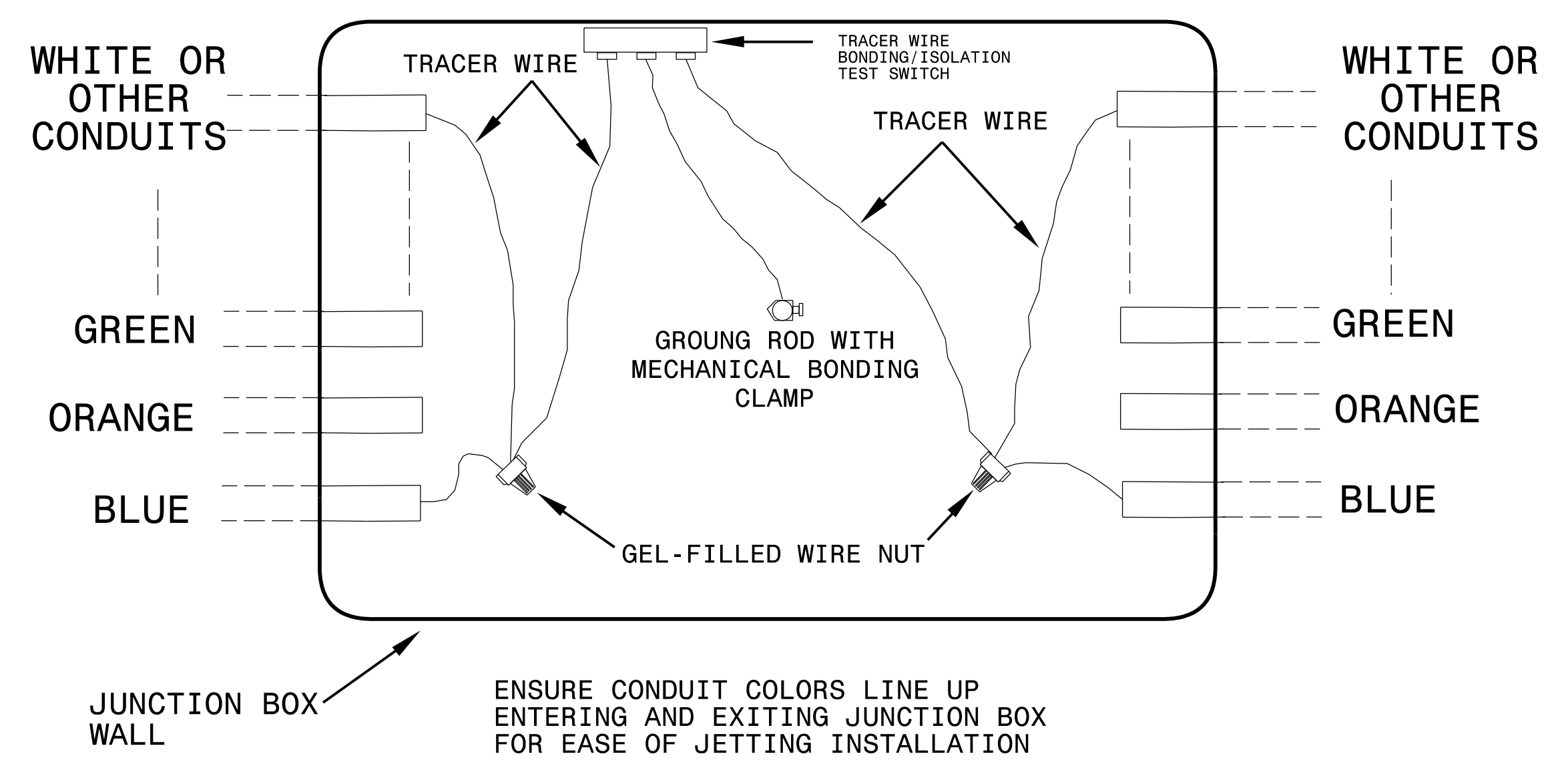


**CONDUIT ENTERING JUNCTION BOX
(JETTED FIBER INSTALLATION)**

- PROVIDE SPECIAL OVERSIZED JUNCTION BOXES WITH MOUSE HOLES, PRECAST KNOCKOUTS OR FIELD DRILL CONDUIT ENTRANCE HOLES.
- FOR ALL SPECIAL OVERSIZED JUNCTION BOXES, ALL CONDUITS SHALL ENTER THROUGH THE SIDEWALL THROUGH THE MOUSE HOLES, PRECAST KNOCKOUTS OR FIELD DRILLED HOLES AND SEALED WITH NON-SHRINKING GROUT. MAINTAIN 4" SEPARATION FROM THE BOTTOM OF THE BOX TO THE CONDUITS. NO CONDUIT SHALL ENTER FROM THE BOTTOM EXCEPT FOR DROP CABLES TO ITS DEVICES.
- LEAVE CONDUITS ENTERING SIDES OF JUNCTION BOX OVERLAPPING INITIALLY FOR JETTING PURPOSES. AFTER FIBER IS INSTALLED CUT CONDUIT BACK TO FOUR INCHES FROM THE JUNCTION BOX SIDEWALL IN ACCORDANCE WITH THE CONDUIT FOR JETTING PROJECT SPECIAL PROVISIONS.
- SEAL ALL CONDUITS AFTER INSTALLATION WITH REUSABLE MECHANICAL DUCT PLUGS. AFTER INSTALLATION OF FIBER CABLE, SEAL CONDUITS WITH A MECHANICAL FIBER/DUCT CONDUIT PLUGS.

ELECTRONIC MARKER BALL
ORANGE BALL - 101.4 kHz - FIBER

TOP VIEW



SUMMIT
DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For:
Halifax County
250 N. Greenfield Place, Garner, NC 27529

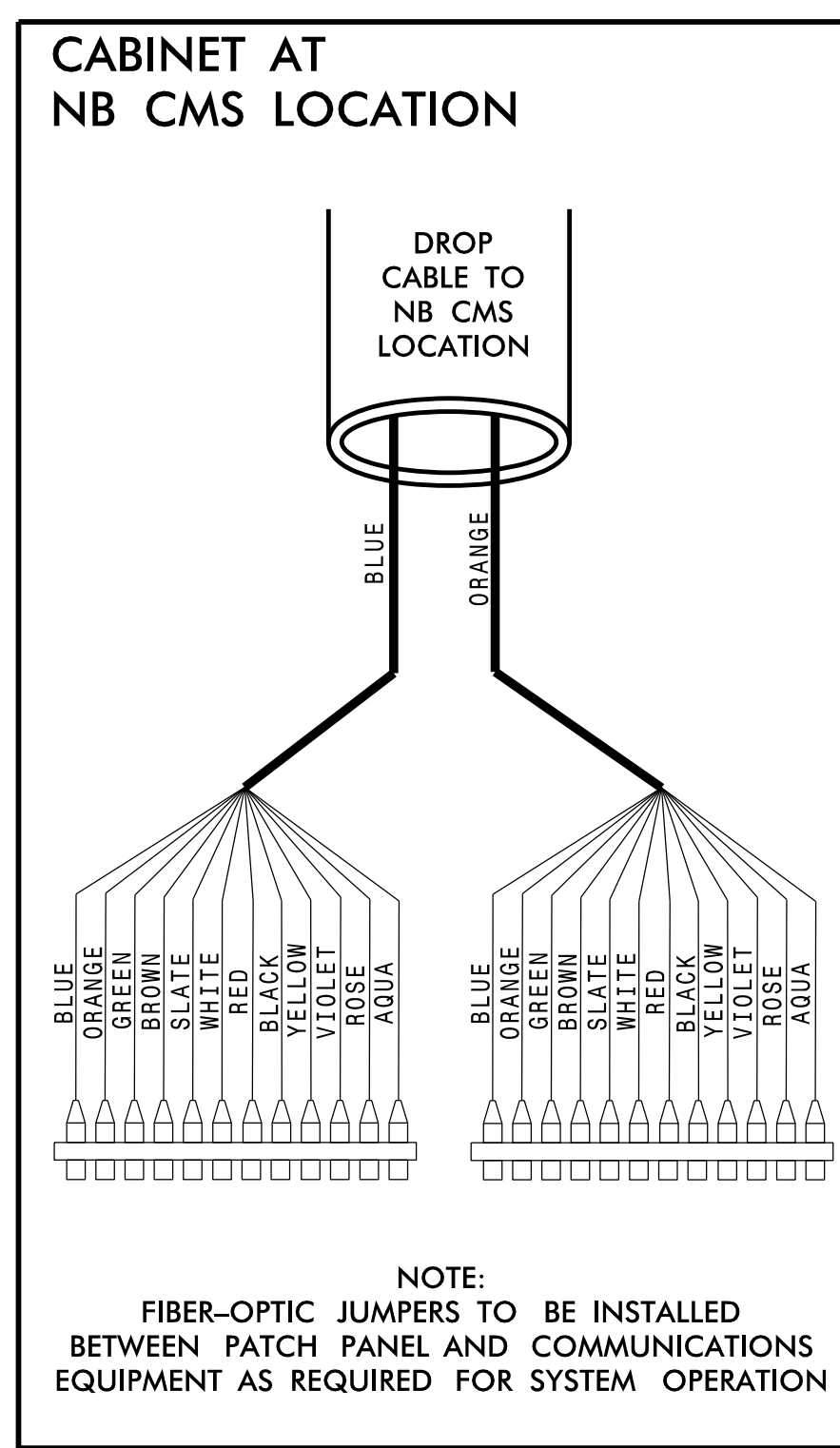
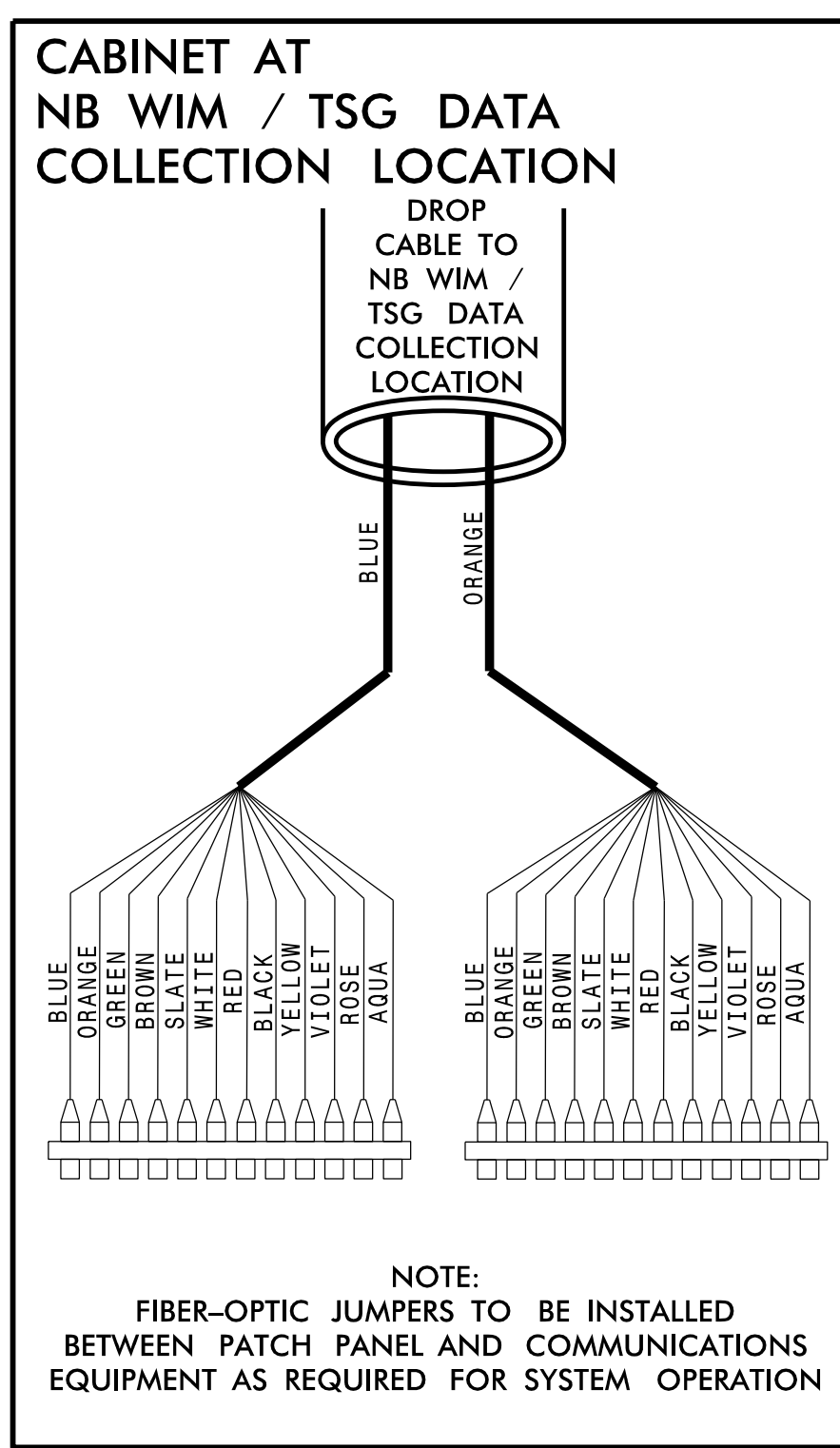
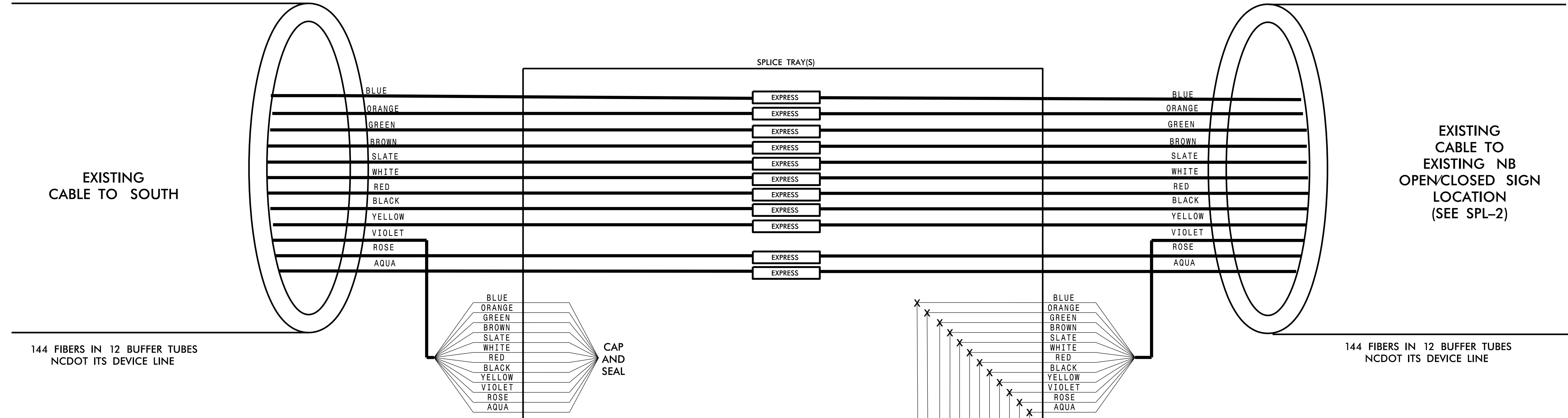
Halifax County
NB / SB Weigh Station
Broadband Special Over-Sized
Junction Box Details
Division 4 Halifax County Whitakers
PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL 053312
JAMES D. SMITH
DATE 4/23/2024

**SPLICE ENCLOSURE SE-1
NB WIM / TSG DATA COLLECTION
LOCATION AND NB CMS
(SEE ITS-7 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

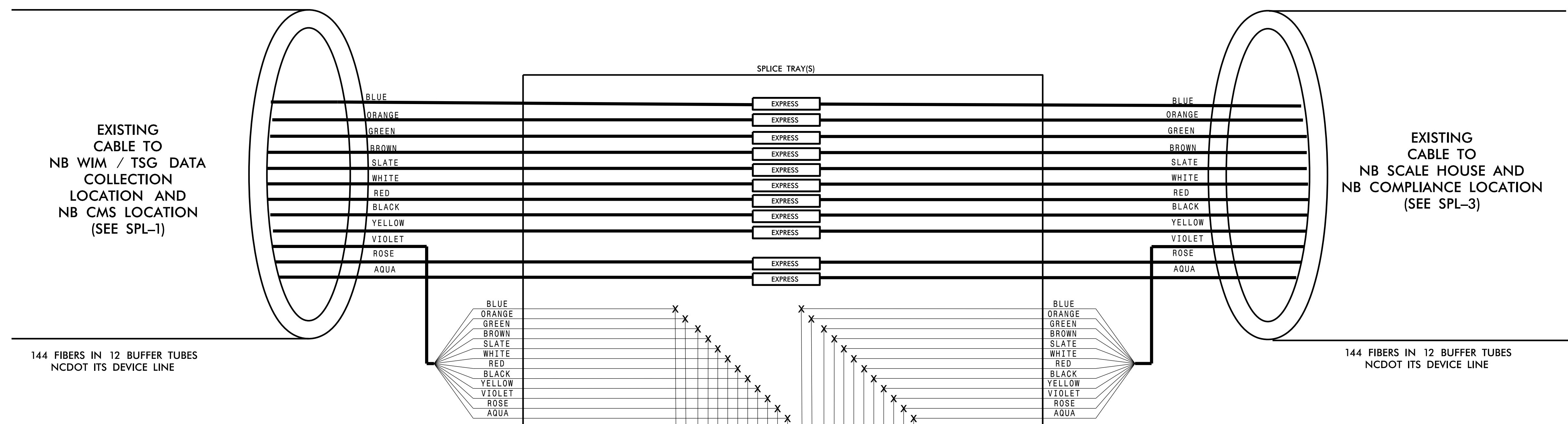
X - FUSION SPLICE INDIVIDUAL FIBER
O - EXISTING SPLICE

EXPRESS - EXPRESS ENTIRE BUFFER TUBE
SPLICE - SPLICE ENTIRE BUFFER TUBE

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.

| | | |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For: Halifax County NB / SB Weigh Station Splice Detail SE-1 Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker PREPARED BY: J. Smith REVIEWED BY: E. Sirgany | DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL 053312 JAMES D. SMITH ENGINEER |
| | | |

**SPLICE ENCLOSURE SE-2
EXISTING NB OPEN/CLOSED SIGN LOCATION
(SEE ITS-8 FOR LOCATION)**



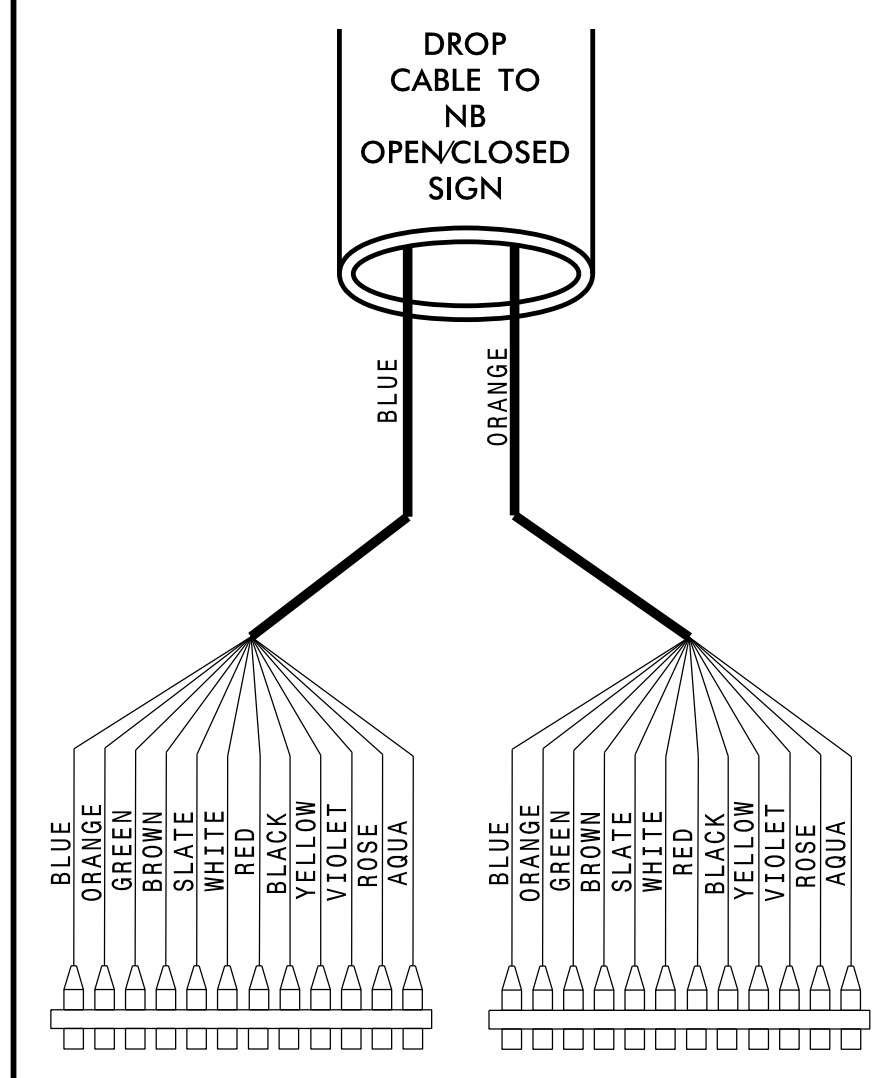
EXISTING CABLE TO NB WIM / TSG DATA COLLECTION LOCATION AND NB CMS LOCATION (SEE SPL-1)

EXISTING CABLE TO NB SCALE HOUSE AND NB COMPLIANCE LOCATION (SEE SPL-3)

144 FIBERS IN 12 BUFFER TUBES NCDOT ITS DEVICE LINE

144 FIBERS IN 12 BUFFER TUBES NCDOT ITS DEVICE LINE

CABINET AT NB OPEN/CLOSED SIGN

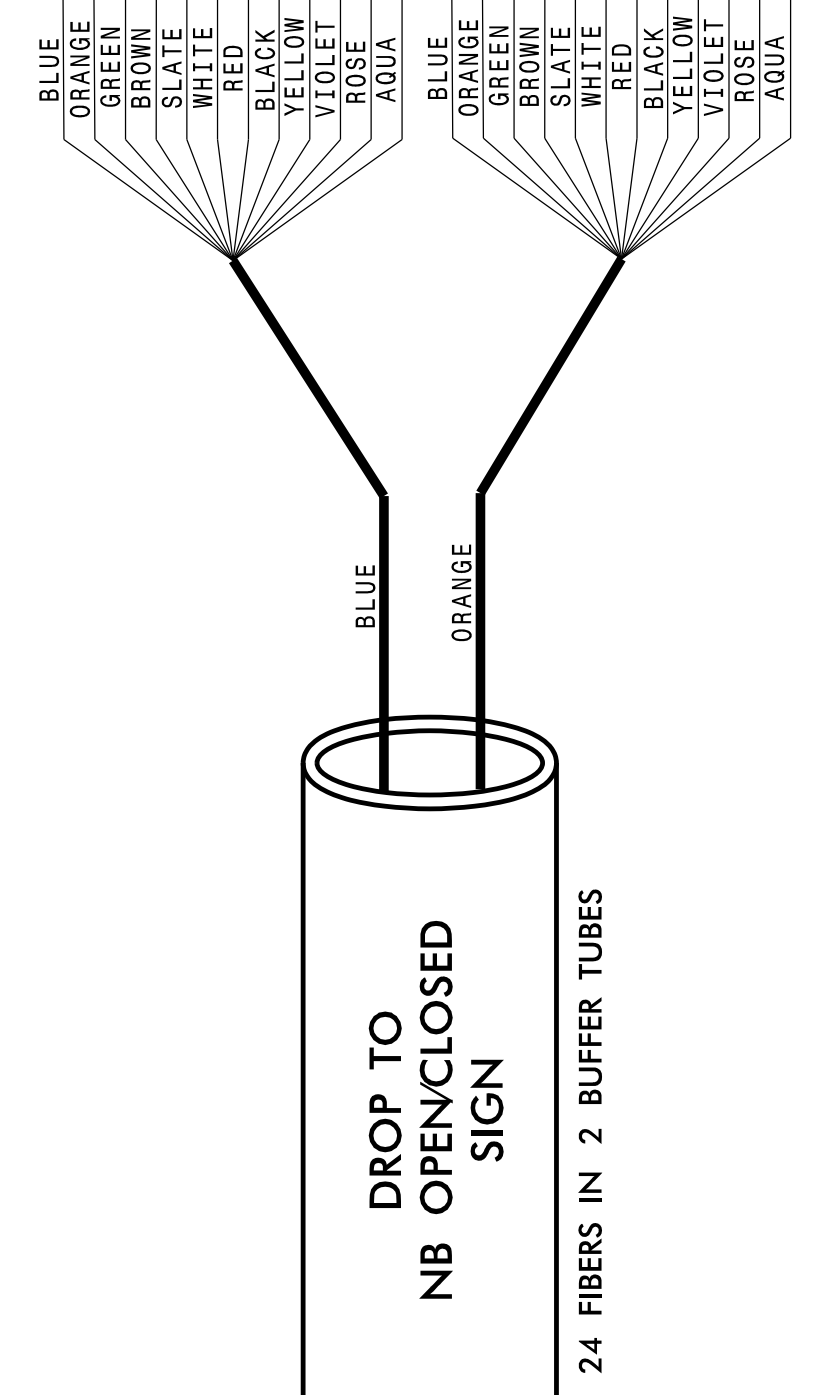


NOTE:
FIBER-OPTIC JUMPERS TO BE INSTALLED BETWEEN PATCH PANEL AND COMMUNICATIONS EQUIPMENT AS REQUIRED FOR SYSTEM OPERATION

| | | | |
|------------------------------------|-------------|------------------------------------|--|
| 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 | | |
| (4) BROWN | (10) VIOLET | | |
| (5) SLATE | (11) ROSE | | |
| (6) WHITE | (12) AQUA | | |

| | |
|----------------|----------------------------|
| EXPRESS | EXPRESS ENTIRE BUFFER TUBE |
| SPLICE | SPLICE ENTIRE BUFFER TUBE |

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.
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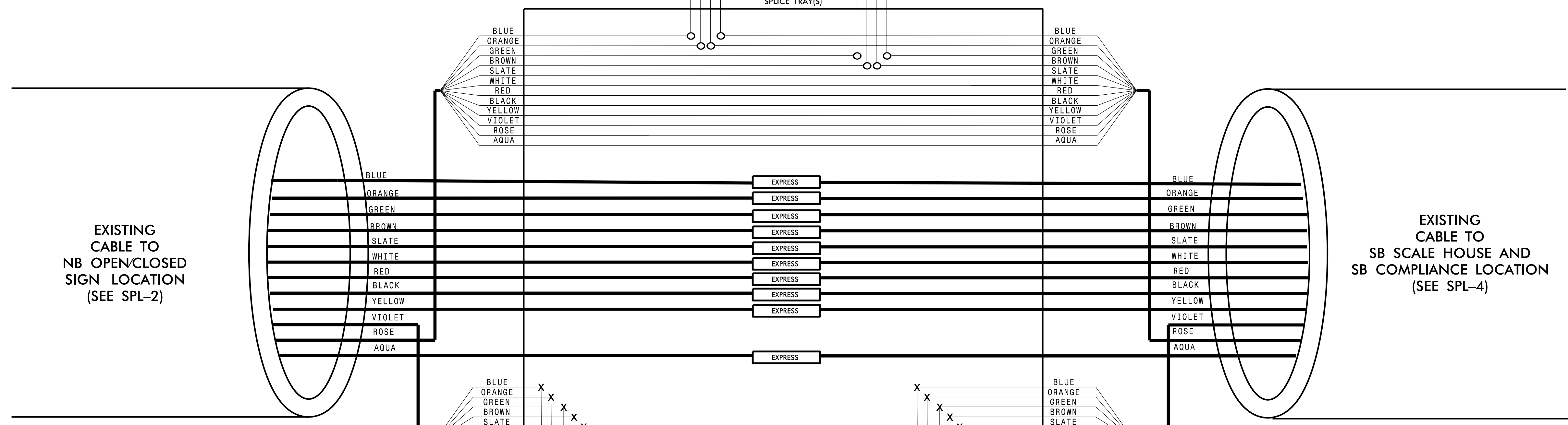
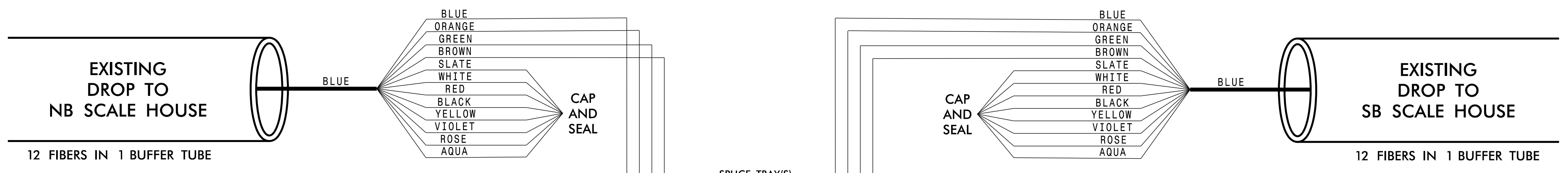


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| | | | | |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------|
| NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For: 250 N. Greenfield Place, Garner, NC 27529 | Halifax County NB / SB Weigh Station Splice Detail SE-2 | | SEAL 053312 JAMES D. SMITH ENGINEER |
| | | Division 4 PLAN DATE: February 2024 PREPARED BY: J. Smith | Halifax County Whitakers REVIEWED BY: S. Yow/T. Parker E. Sirgany | |

7/3/2024
DATE

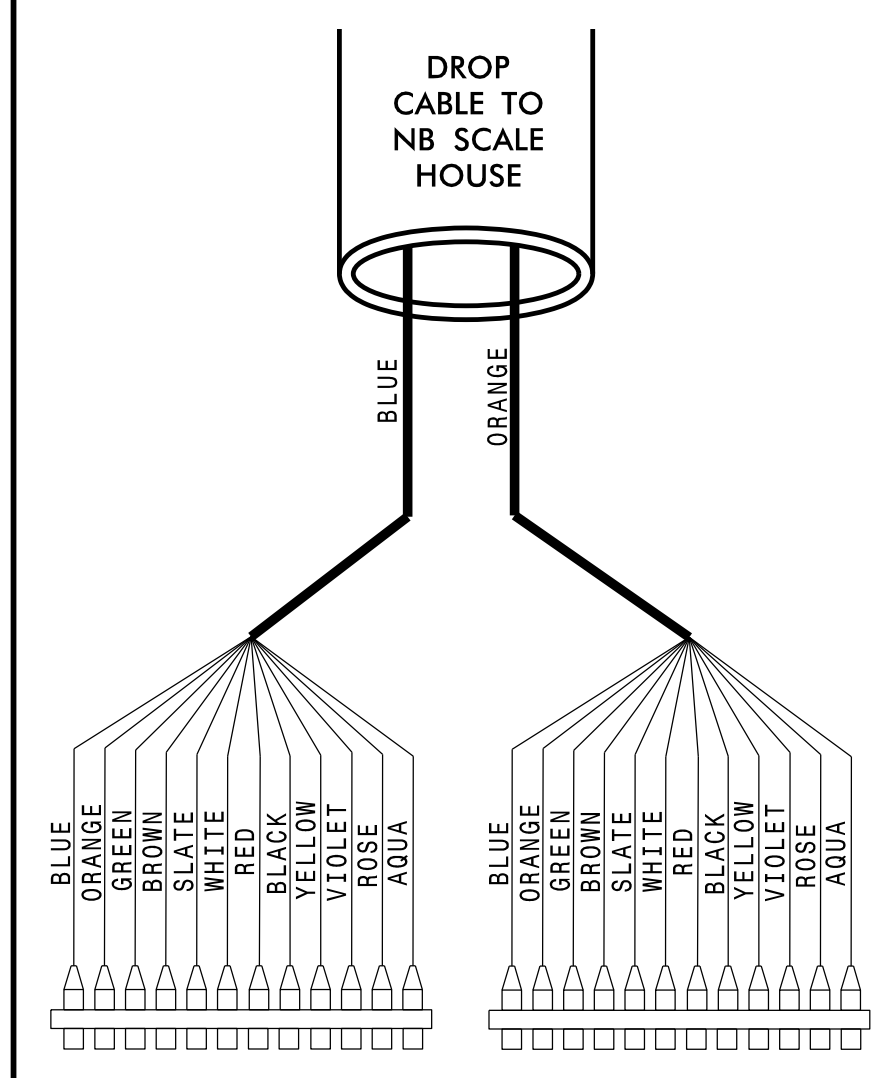
**SPLICE ENCLOSURE SE-3
NB SCALE HOUSE AND
NB COMPLIANCE LOCATION
(SEE ITS-10 FOR LOCATION)**



144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE

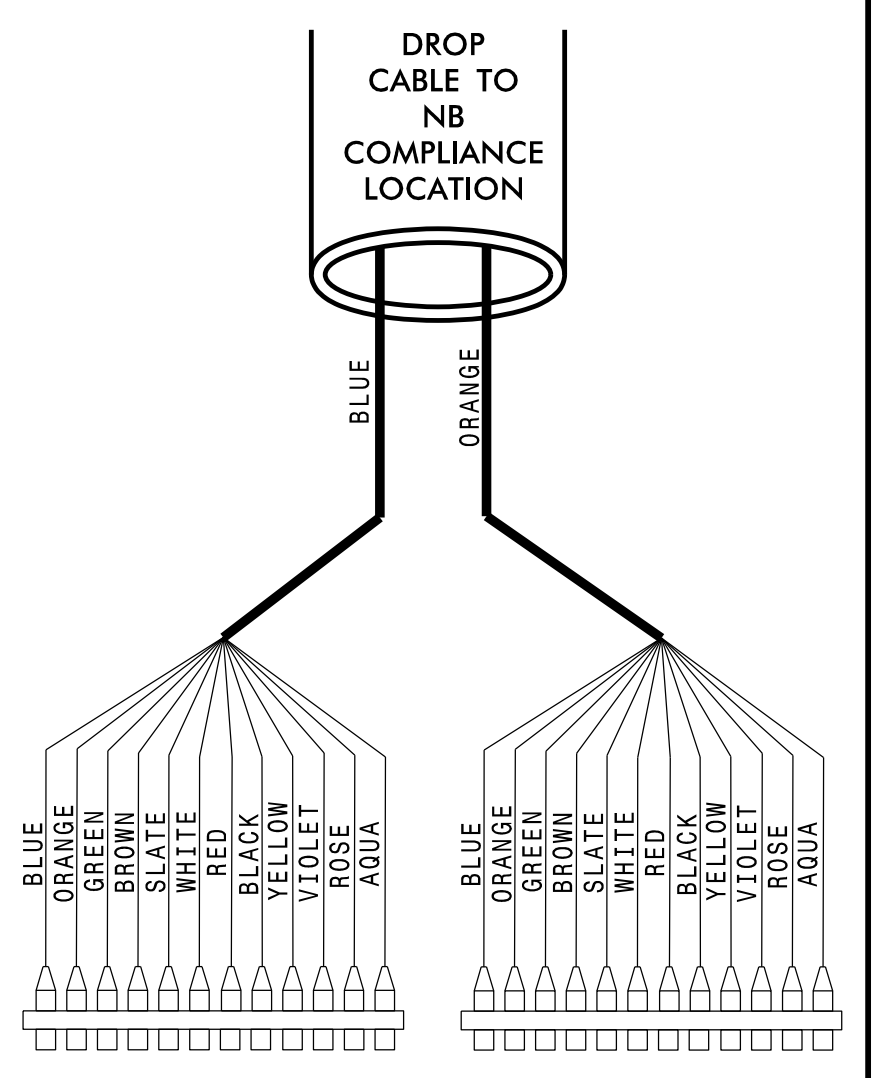
144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE

**EQUIPMENT RACK AT
NB SCALE HOUSE**

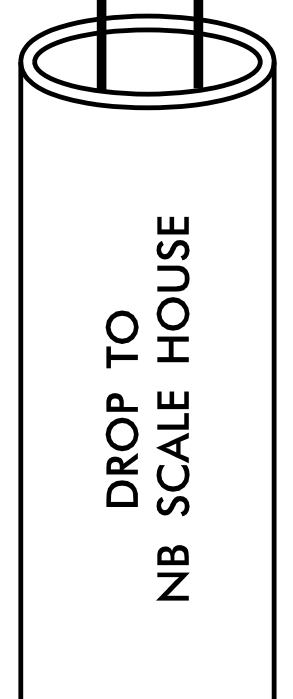


NOTE:
FIBER-OPTIC JUMPERS TO BE INSTALLED
BETWEEN PATCH PANEL AND COMMUNICATIONS
EQUIPMENT AS REQUIRED FOR SYSTEM OPERATION

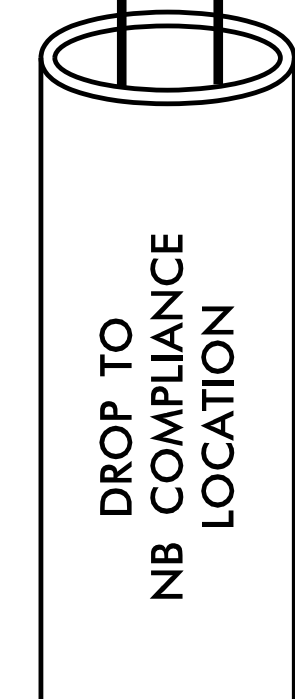
**CABINET AT
NB COMPLIANCE LOCATION**



NOTE:
FIBER-OPTIC JUMPERS TO BE INSTALLED
BETWEEN PATCH PANEL AND COMMUNICATIONS
EQUIPMENT AS REQUIRED FOR SYSTEM OPERATION



24 FIBERS IN 2 BUFFER TUBES



24 FIBERS IN 2 BUFFER TUBES

| | | | |
|------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 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 - EXPRESS ENTIRE BUFFER TUBE |
| (4) BROWN | (10) VIOLET | | SPICE - SPLICE ENTIRE BUFFER TUBE |
| (5) SLATE | (11) ROSE | NOTES: | |
| (6) WHITE | (12) AQUA | 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. | |

SUMMIT
DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For:
Halifax County
250 N. Greenfield Pkwy., Garner, NC 27529
SCALE: N/A

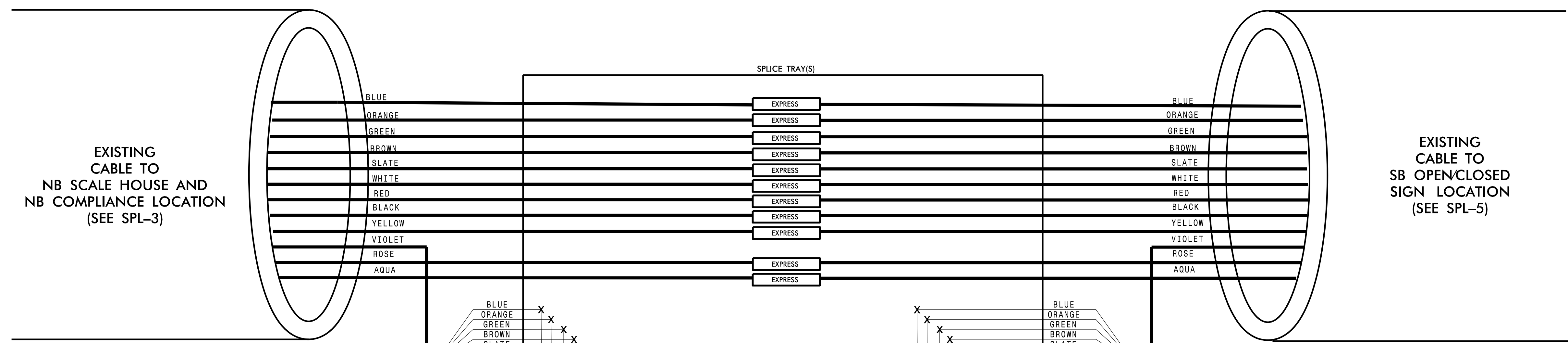
Halifax County
NB / SB Weigh Station
Splice Detail SE-3
Division 4 Halifax County Whitakers
PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker
PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

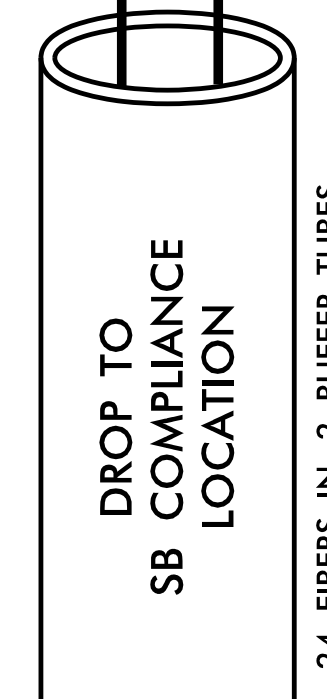
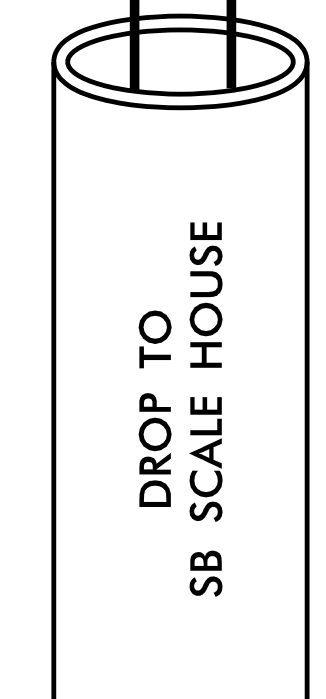
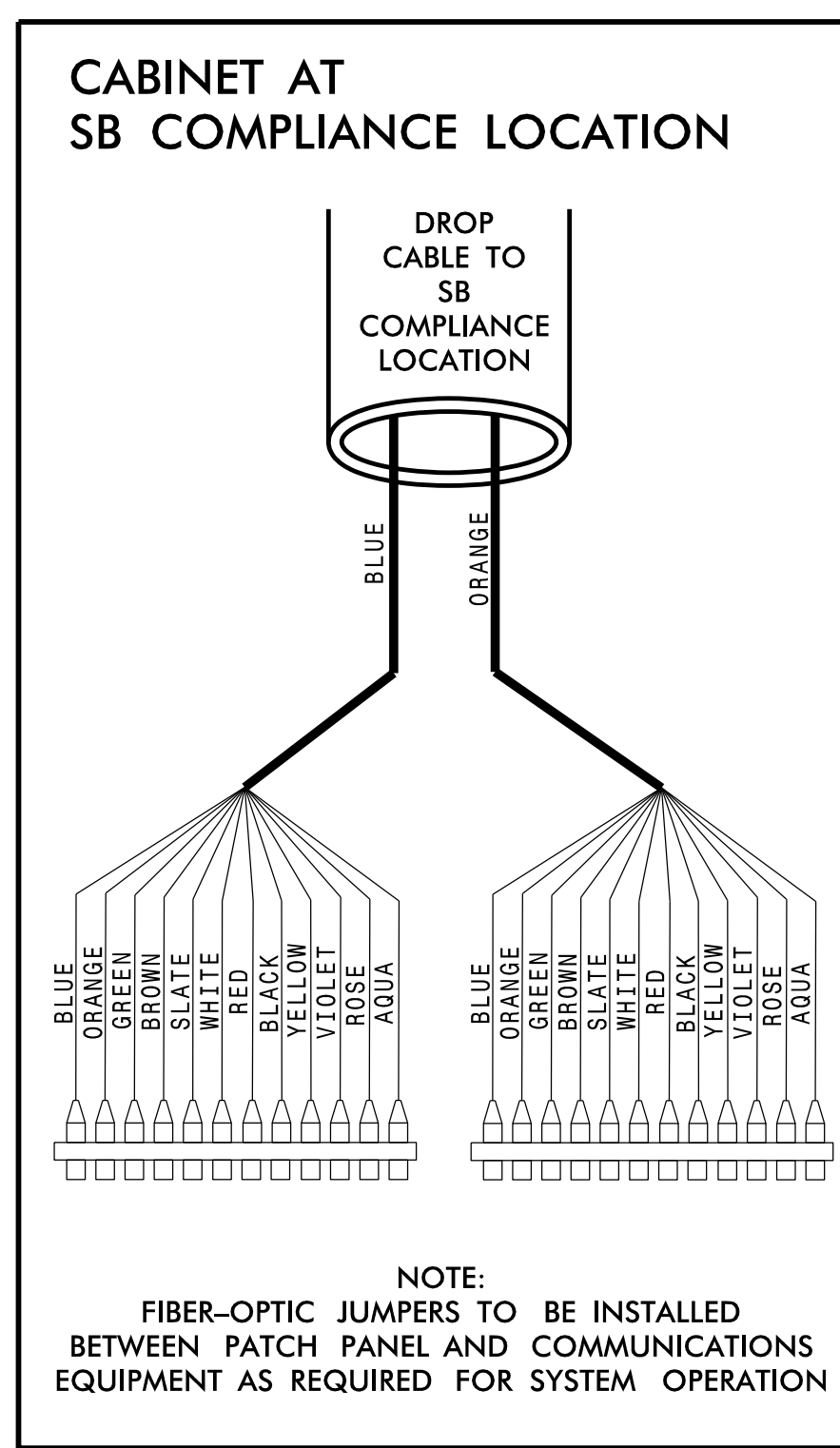
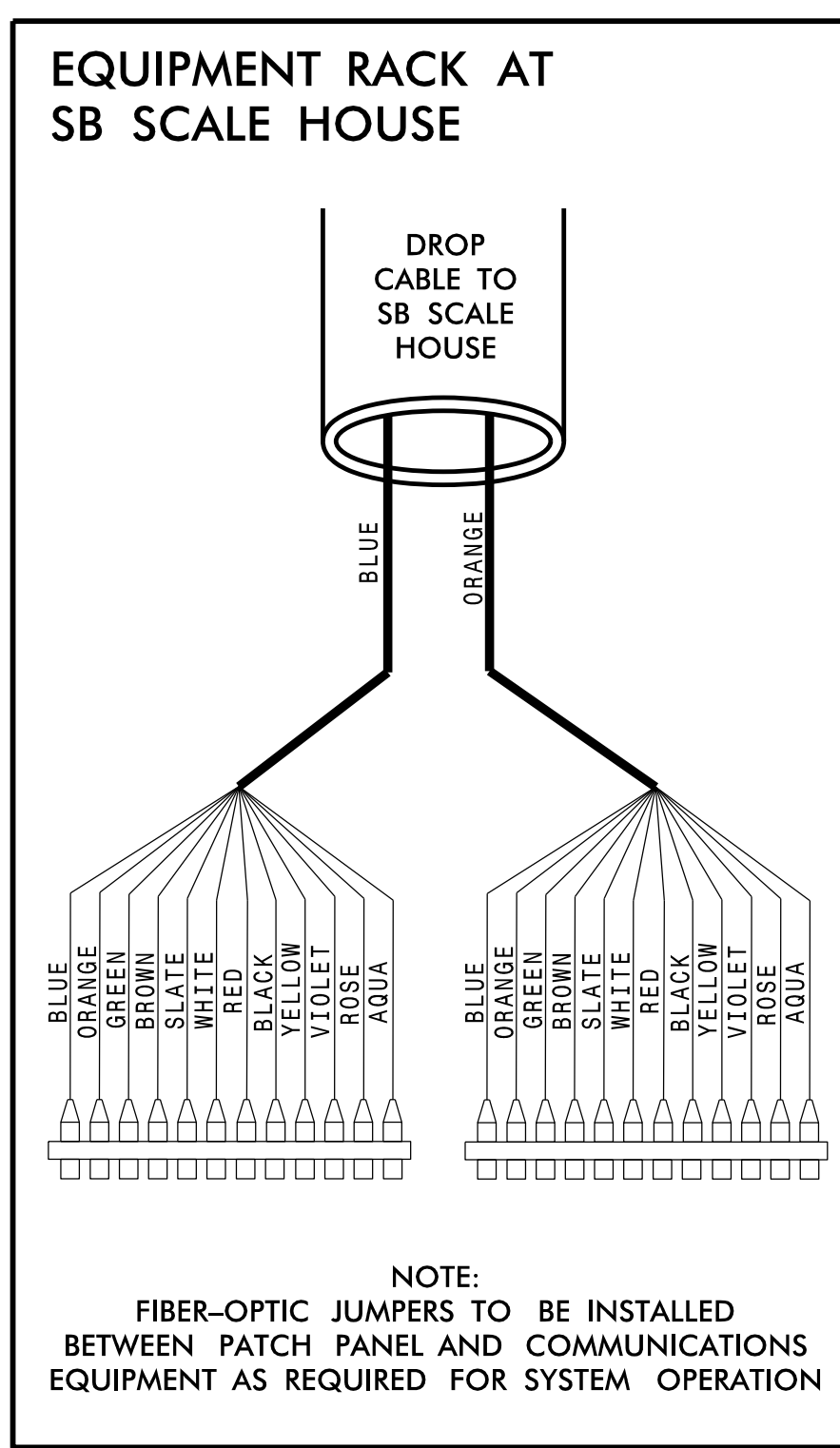
SEAL
JAMES D. SMITH
ENGINEER
SEAL 053312
DATE: 4/23/2024

**SPLICE ENCLOSURE SE-4
SB SCALE HOUSE AND
SB COMPLIANCE LOCATION
(SEE ITS-10 FOR LOCATION)**



144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE

144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE



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

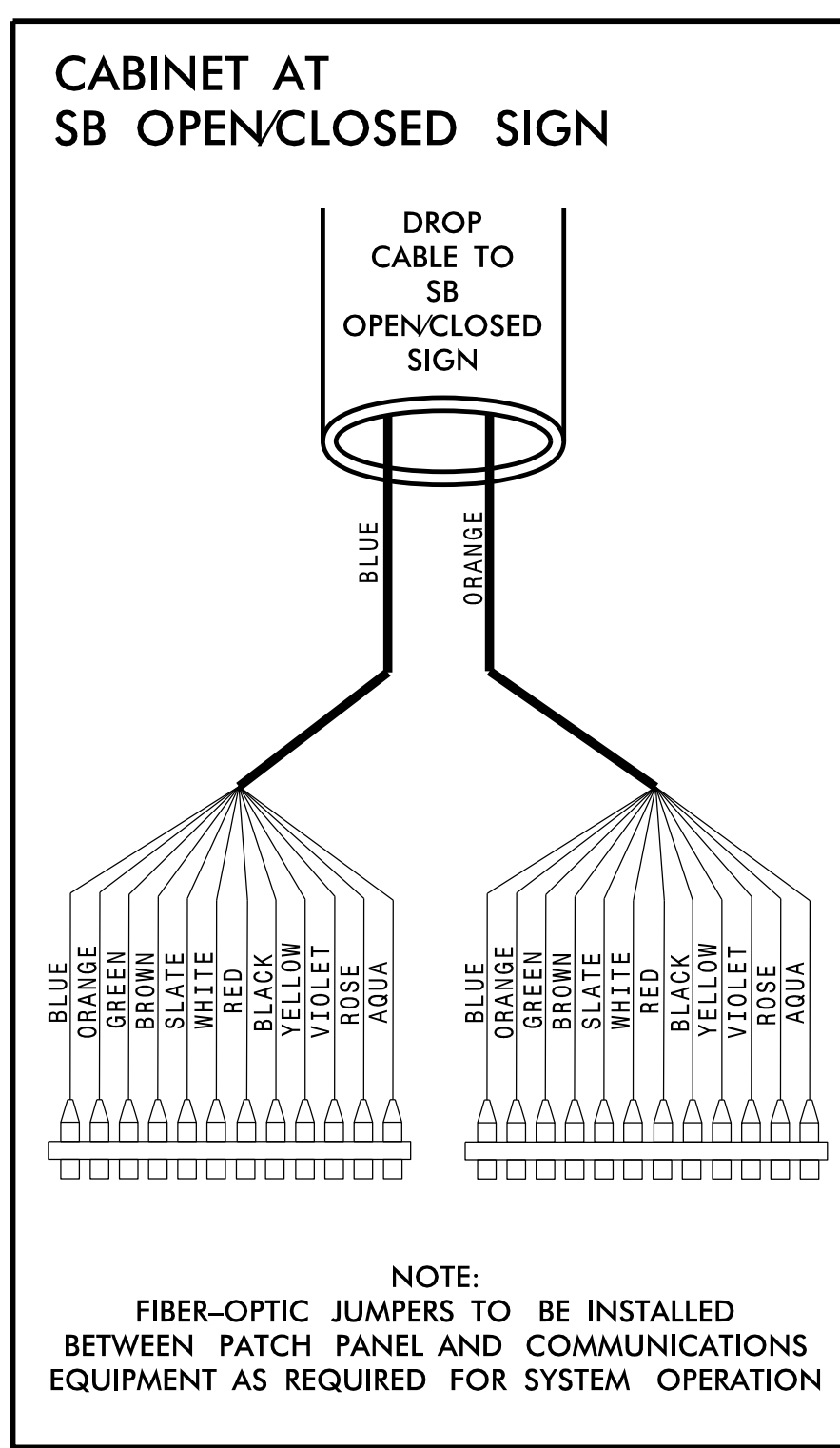
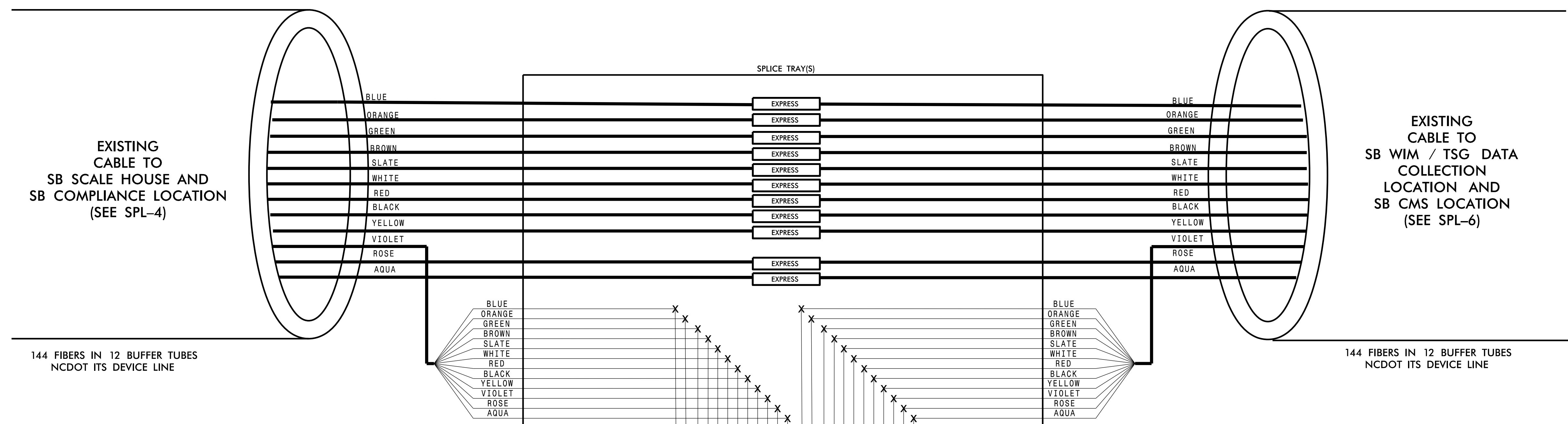
EXPRESS - EXPRESS ENTIRE BUFFER TUBE
SPLICE - SPLICE ENTIRE BUFFER TUBE

NOTES:

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| | | |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For: Halifax County NB / SB Weigh Station Splice Detail SE-4 Division 4 Halifax County Whitakers PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker PREPARED BY: J. Smith REVIEWED BY: E. Sirgany | DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL 053312 JAMES D. SMITH ENGINEER |
| | | |

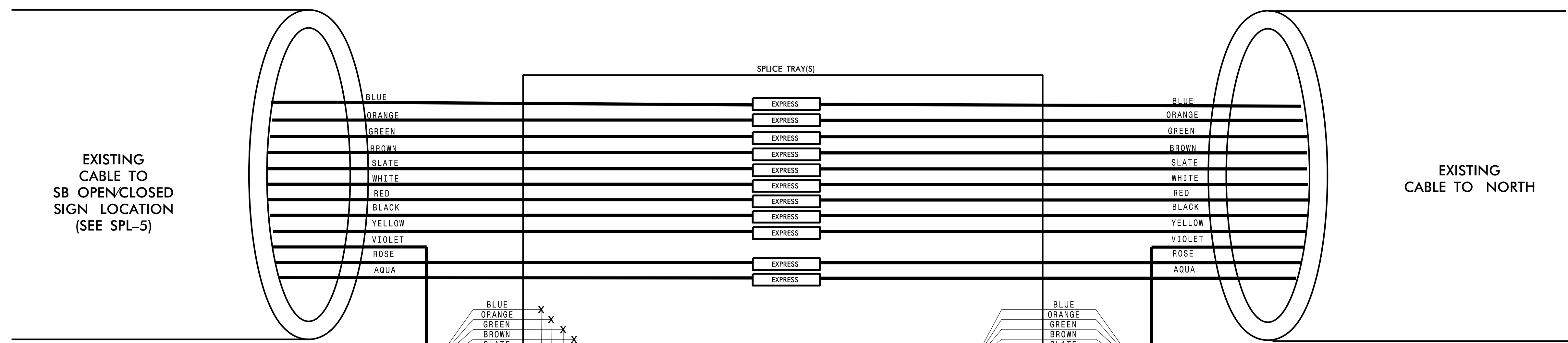
**SPLICE ENCLOSURE SE-5
EXISTING SB OPEN/CLOSED SIGN LOCATION
(SEE ITS-11 FOR LOCATION)**



| | | | |
|------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 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 - EXPRESS ENTIRE BUFFER TUBE |
| (4) BROWN | (10) VIOLET | | SPLICE - SPLICE ENTIRE BUFFER TUBE |
| (5) SLATE | (11) ROSE | NOTES: | |
| (6) WHITE | (12) AQUA | 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. | |

| | | | | |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | Prepared For: 250 N. Greenfield Place, Garner, NC 27529 SCALE: N/A | Halifax County NB / SB Weigh Station Splice Detail SE-5 | | DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL JAMES D. SMITH ENGINEER |
| | | Division 4 PLAN DATE: February 2024 PREPARED BY: J. Smith | Halifax County Whitakers REVIEWED BY: S. Yow/T. Parker REVIEWED BY: E. Sirgany | |

**SPLICE ENCLOSURE SE-6
SB WIM / TSG DATA COLLECTION
LOCATION AND SB CMS
(SEE ITS-15 FOR LOCATION)**

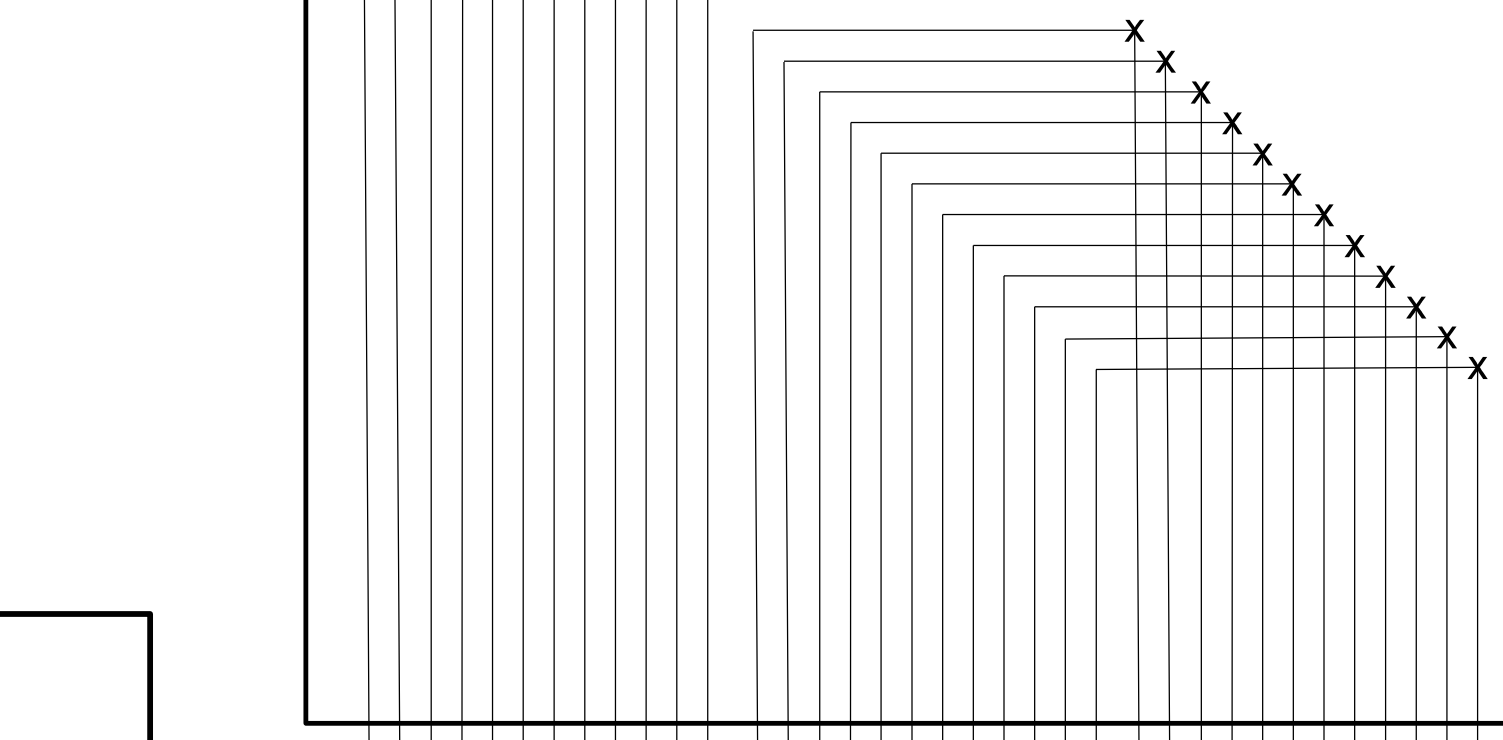
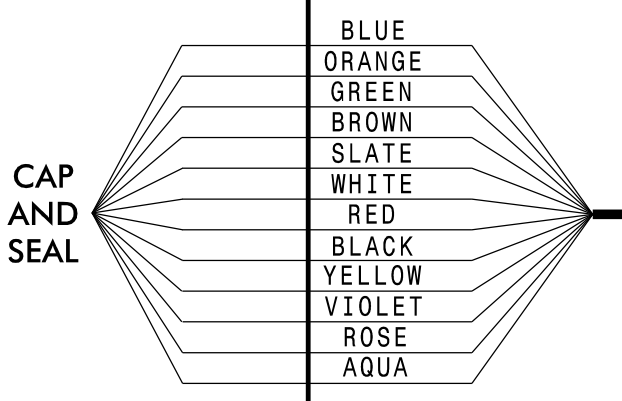
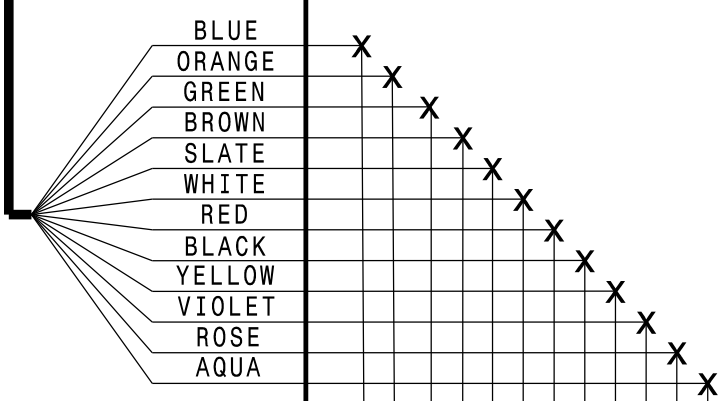


EXISTING CABLE TO SB OPENCLOSED SIGN LOCATION (SEE SPL-5)

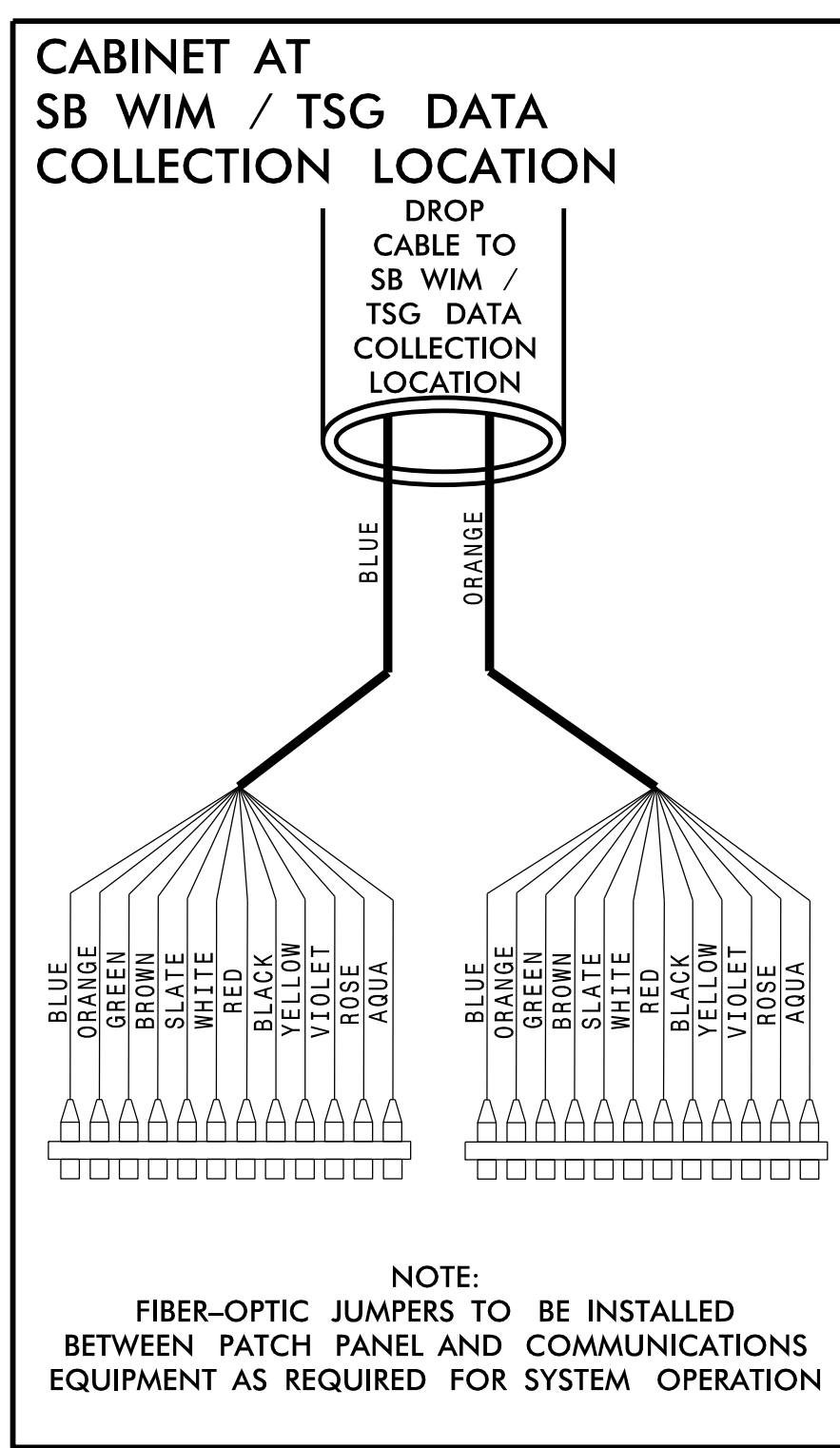
EXISTING CABLE TO NORTH

144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE

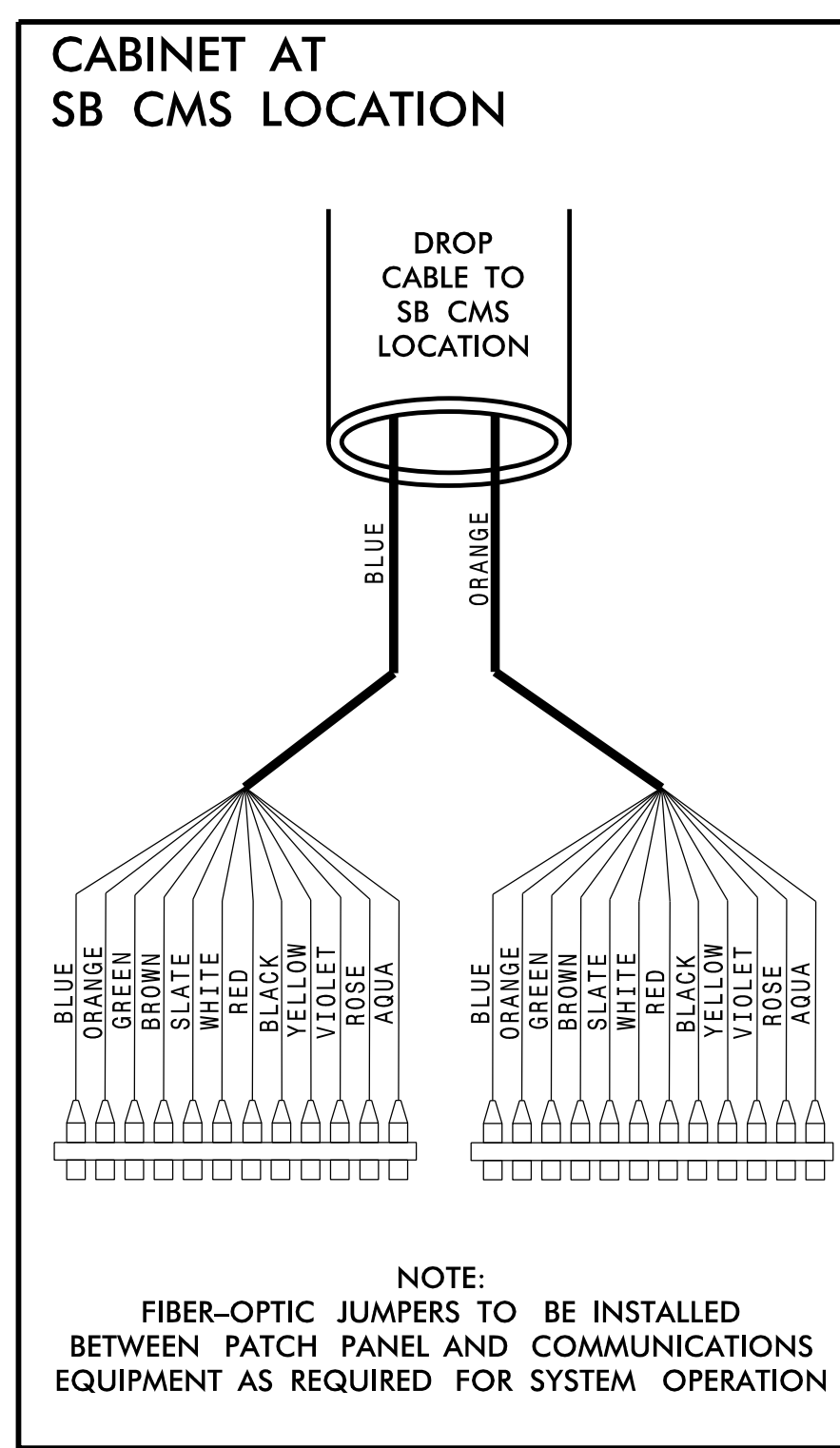
144 FIBERS IN 12 BUFFER TUBES
NCDOT ITS DEVICE LINE



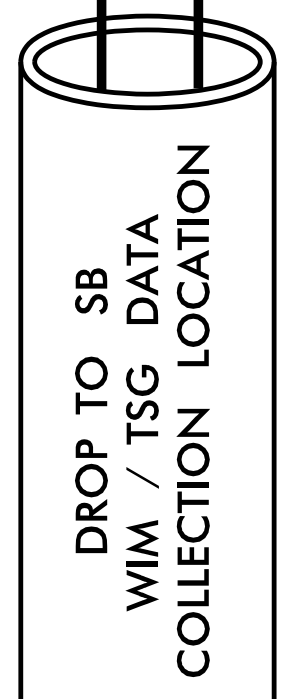
CAP AND SEAL



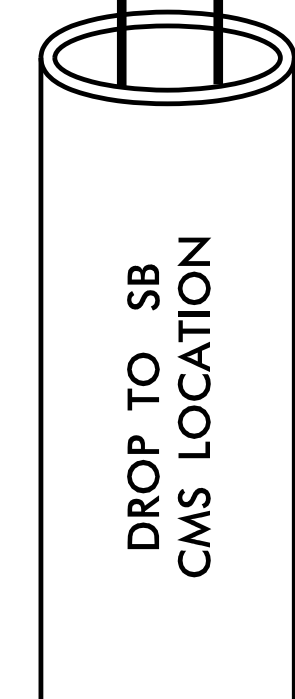
NOTE:
FIBER-OPTIC JUMPERS TO BE INSTALLED BETWEEN PATCH PANEL AND COMMUNICATIONS EQUIPMENT AS REQUIRED FOR SYSTEM OPERATION



NOTE:
FIBER-OPTIC JUMPERS TO BE INSTALLED BETWEEN PATCH PANEL AND COMMUNICATIONS EQUIPMENT AS REQUIRED FOR SYSTEM OPERATION



24 FIBERS IN 2 BUFFER TUBES



24 FIBERS IN 2 BUFFER TUBES

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 - EXPRESS ENTIRE BUFFER TUBE
SPLICE - SPLICE ENTIRE BUFFER TUBE

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.

SUMMIT
DESIGN AND ENGINEERING SERVICES

NC FIRM LICENSE No: P-0339
320 Executive Court
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For:
Halifax County
NB / SB Weigh Station
Splice Detail SE-6

Division 4 Halifax County Whitakers

PLAN DATE: February 2024 REVIEWED BY: S. Yow/T. Parker

PREPARED BY: J. Smith REVIEWED BY: E. Sirgany

SCALE: N/A

| REVISIONS | INIT. | DATE |
|-----------|-------|------|
| | | |
| | | |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
JAMES D. SMITH
ENGINEER
SEAL 053312

7/3/2024

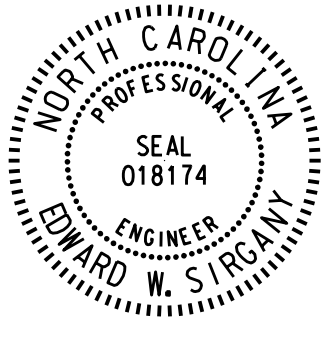

WBS: 33879.2.107/33879.2.108

2023 ITD

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HALIFAX COUNTY

LOCATION: I-95 FROM NC 33 (SWITCH CREEK SCHOOL ROAD) TO NC 481

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| WBS PROJECT NOS. 33879.2.107/33879.2.108 | SHEET NO. SIGN-1 |
| APPROVED: _____ DATE: 4/23/2024 | |
| DocuSigned by: <i>Edward W. Sirgany</i> 39DF9C8A6884E9 | |
| SEAL  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  NC FIRM LICENSE No: P-0339 320 Executive Ct. Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) | |

GENERAL NOTES

- SIGNS FURNISHED BY THE CONTRACTOR.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
- DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.
- SEE ITS PLANS FOR GUARD/GUIDE RAIL DETAILS.

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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

| STD. NO. | TITLE |
|----------|-----------------------------------------------------|
| 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 |

SUMMARY OF QUANTITIES

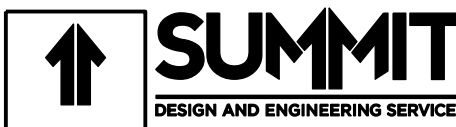
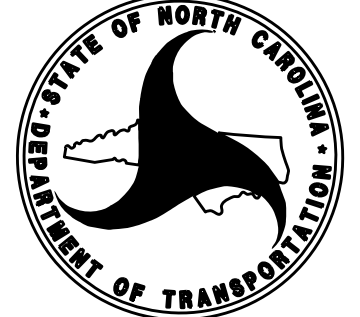
| ITEM NO. | | ITEM DESCRIPTION | QUANTITY | UNIT |
|------------|-----------|----------------------------------------|----------|------|
| DESC. NO. | SECT. NO. | | | |
| 4025000000 | 901 | CONTRACTOR FURNISHED, TYPE B SIGN | 168 | SF |
| 4054000000 | 902 | PLAIN CONCRETE SIGN FOUNDATION | 2 | CY |
| 4060000000 | 903 | SUPPORTS, BREAKAWAY STEEL BEAM | 1270 | LB |
| 4066000000 | 903 | SUPPORTS, SIMPLE STEEL BEAM | 683 | LB |
| 4110000000 | 904 | SIGN ERECTION, TYPE B (GROUND MOUNTED) | 4 | EA |
| 4155000000 | 907 | DISPOSAL OF SIGN SYSTEM, U-CHANNEL | 4 | EA |

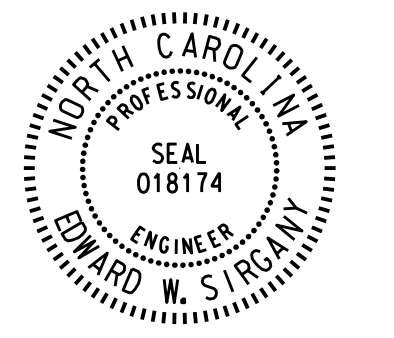

PAY ITEM NOTES

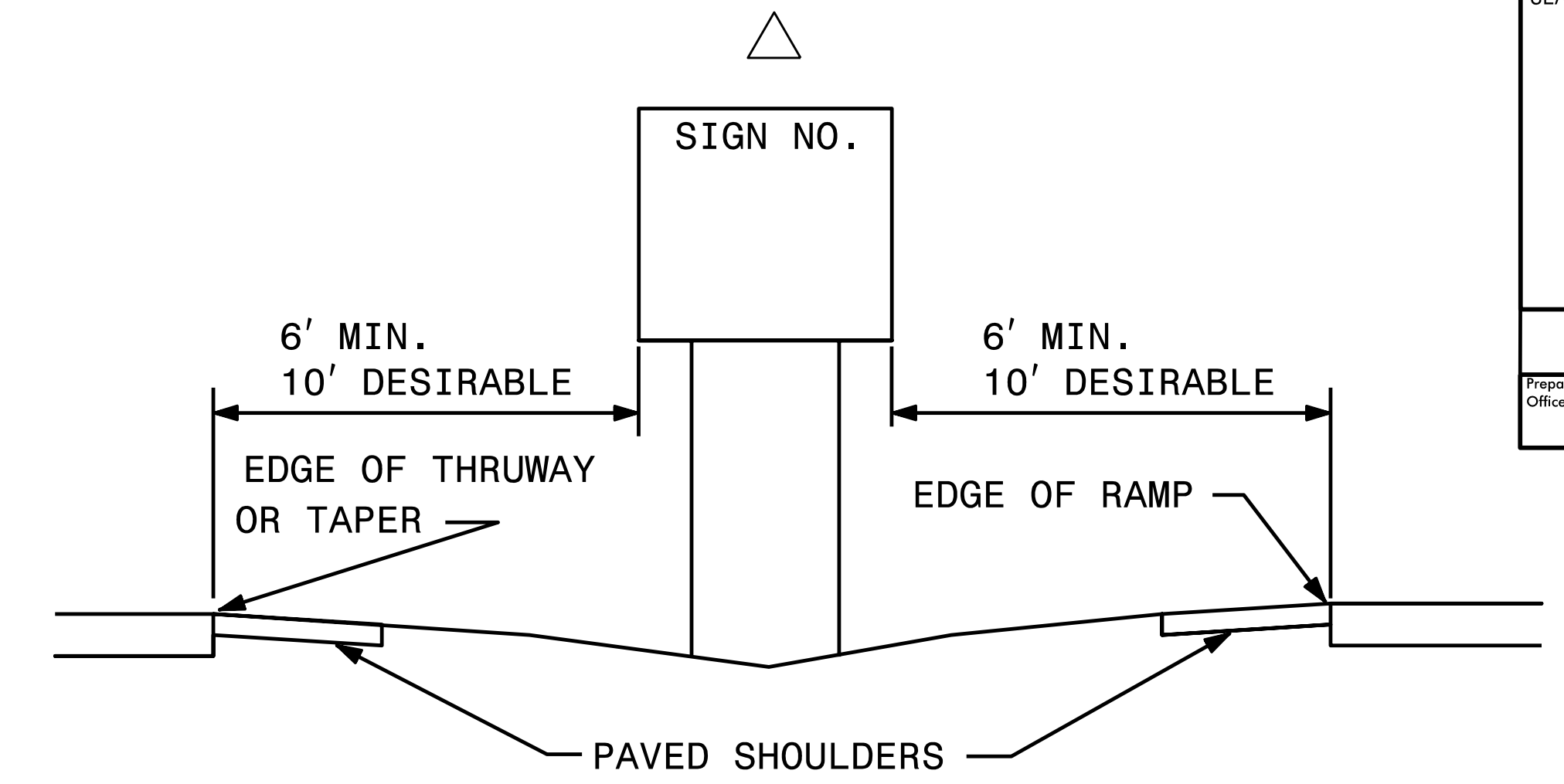
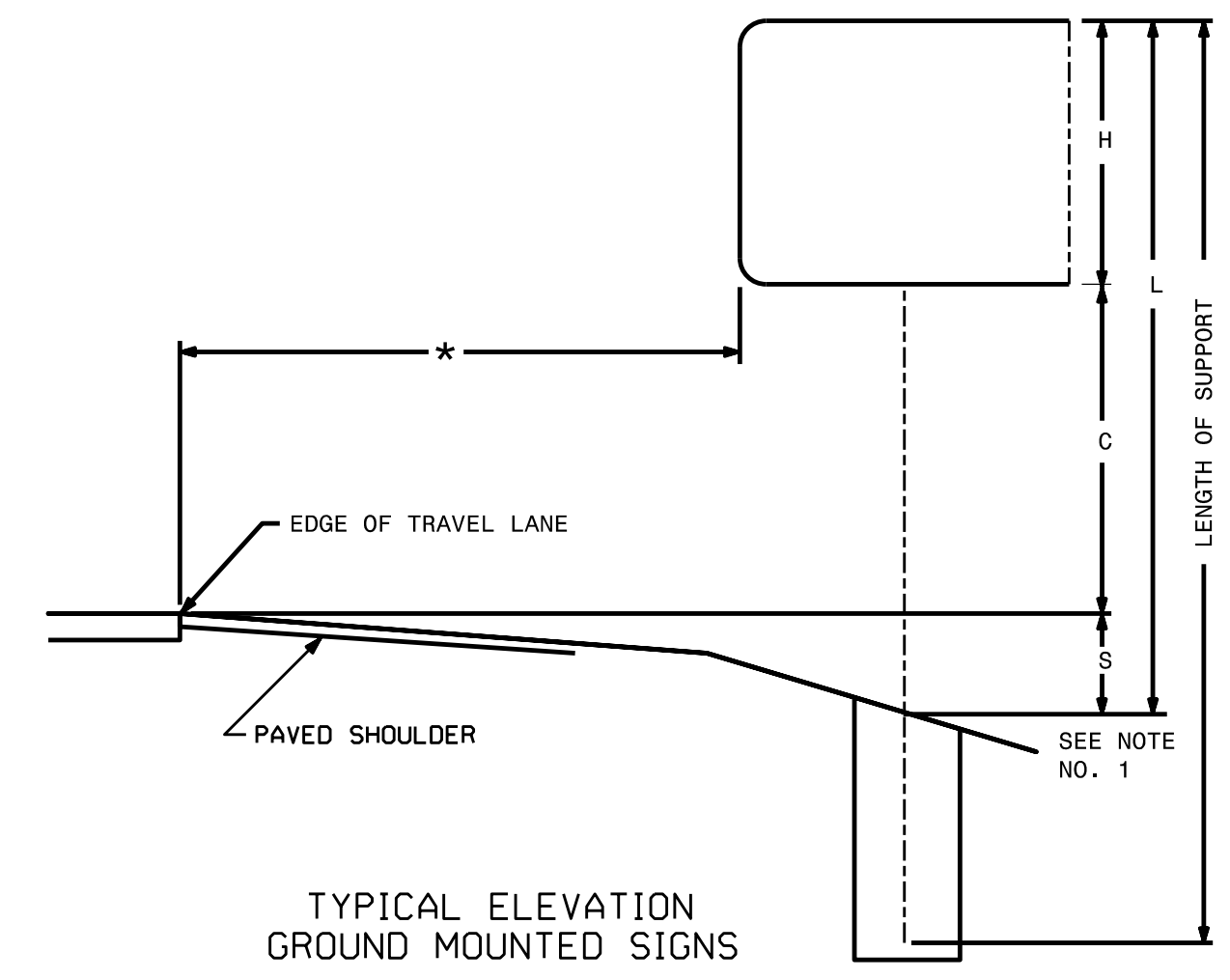
- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

INDEX

| SHEET NO. | DESCRIPTION |
|----------------|-----------------------------|
| SIGN-1 | TITLE SHEET |
| SIGN-2 | SIGN SUPPORT DETAILS |
| SIGN-3 | SPECIAL SIGN DESIGNS |
| SIGN-4 THRU 15 | EXISTING AND PROPOSED SIGNS |

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Prepared in the Office of:  EDWARD W. SIRGANY, PE PROJECT DESIGNER JAMES D. SMITH, PE PROJECT DESIGN ENGINEER | NC FIRM LICENSE No: P-0339 320 Executive Ct. Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

| | |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| WBS PROJECT NOS. 33879.2.107/33879.2.108 | SHEET NO. SIGN-2 |
| APPROVED: <i>Edward W. Sirigany</i> 39DF9C86A684E9 | |
| DATE: 4/23/2024 | |
| SEAL  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  | NC FIRM LICENSE No. P-0339 320 Executive Ct., Hillsborough, NC 27618 (919) 752-2883 (919) 752-6676 (Fax) |



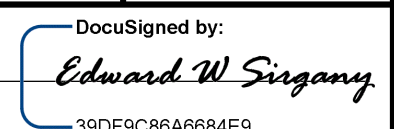
| SIGN | | | | ROADWAY STATION | NUMBER OF SUPPORTS | BEAM SECTION | SUPPORT TYPE BA or S | OMNI COUPLER | ATTACHMENT METHOD | MOUNTING METHOD | HORIZONTAL CLEARANCE (ft.) | SUPPORT SPACING | LENGTH (ft) | | | LEFT SUPPORT (ft) | | | CENTER SUPPORT (ft) | | | RIGHT SUPPORT (ft) | | | SUPPORT WEIGHTS | | FOOTINGS | | | | FIELD VERIFIED SEE NOTE 2 (mm/dd/yy) | |
|----------|------|------------|---|-----------------|--------------------|--------------|----------------------|--------------|-------------------|-----------------|----------------------------|-----------------|-------------|--------|--------------|-------------------|--------|-------|---------------------|------|-------|--------------------|------|-------|-----------------|---------------|----------------|-------------|-------------------|--------------|--------------------------------------|--------|
| NUMBER | TYPE | SIZE (in.) | | | | | | | | | | | SNS HT | MTG HT | EMBED-MENT | LEFT SUPPORT (ft) | | | CENTER SUPPORT (ft) | | | RIGHT SUPPORT (ft) | | | B/A (lbs.) | SIMPLE (lbs.) | DIAMETER (ft.) | DEPTH (ft.) | REINFORCED (c.y.) | PLAIN (c.y.) | | |
| | | w | x | | | | | | | | | | | | | h | S | L | LENGTH | S | L | LENGTH | S | L | | | | | | | | LENGTH |
| 101 | B | 126 | x | 48 | SEE PLANS | 2 | S4x7.7 | BA | N/A | N/A | N/A | 21.00 | 6.15 | 4.00 | 7.00 | 3.0 | 3.00 | 14.00 | 17.00 | 0.00 | 0.00 | 0.00 | 3.00 | 14.00 | 17.00 | 301.80 | 0 | 1.0 | 3.5 | 0.00 | 0.20 | |
| 102 | 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 | 4.00 | 15.00 | 18.00 | 0.00 | 0.00 | 0.00 | 4.00 | 15.00 | 18.00 | 317.20 | 0 | 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 | 6.00 | 17.00 | 20.00 | 324.90 | 0 | 1.0 | 3.5 | 0.00 | 0.20 | |
| 104 | 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 | 6.00 | 17.00 | 20.00 | 0.00 | 0.00 | 0.00 | 3.00 | 14.00 | 17.00 | 324.90 | 0 | 1.0 | 3.5 | 0.00 | 0.20 | |
| NB CMS 1 | B | 128 | x | 31 | SEE ITS PLANS | 2 | S3x5.7 | S | N/A | N/A | N/A | 23.00 | 6.25 | 2.58 | 7.00 | 2.5 | 3.50 | 13.08 | 15.58 | 0.00 | 0.00 | 0.00 | 3.50 | 13.08 | 15.58 | 0.00 | 177.65 | 1.0 | 3 | 0.00 | 0.17 | |
| NB CMS 2 | B | 128 | x | 31 | SEE ITS PLANS | 2 | S3x5.7 | S | N/A | N/A | N/A | 23.00 | 6.25 | 2.58 | 7.00 | 2.5 | 3.50 | 13.08 | 15.58 | 0.00 | 0.00 | 0.00 | 3.50 | 13.08 | 15.58 | 0.00 | 177.65 | 1.0 | 3 | 0.00 | 0.17 | |
| SB CMS 1 | B | 128 | x | 31 | SEE ITS PLANS | 2 | S3x5.7 | S | N/A | N/A | N/A | 18.00 | 6.25 | 2.58 | 7.00 | 2.5 | 1.50 | 11.08 | 13.58 | 0.00 | 0.00 | 0.00 | 3.00 | 12.58 | 15.08 | 0.00 | 163.4 | 1.0 | 3 | 0.00 | 0.17 | |
| SB CMS 2 | B | 128 | x | 31 | SEE ITS PLANS | 2 | S3x5.7 | S | N/A | N/A | N/A | 18.00 | 6.25 | 2.58 | 7.00 | 2.5 | 1.50 | 11.08 | 13.58 | 0.00 | 0.00 | 0.00 | 3.00 | 12.58 | 15.08 | 0.00 | 163.4 | 1.0 | 3 | 0.00 | 0.17 | |
| | | | | | | | | | | | | | | | TOTAL | | TOTAL | | TOTAL | | TOTAL | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1268.80 | | 682.10 | | 0.00 | | 1.48 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | USE: 1270.00 | | 683.00 | | 0.00 | | 2.00 | | | | | | | | | | | |

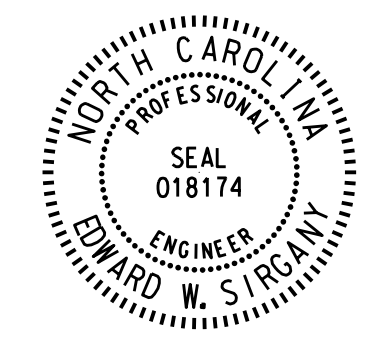
* DO NOT BEGIN FABRICATION FOR TYPES A&B SIGNS MOUNTED ON STEEL SUPPORT UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED

NOTES:

- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF TRAVEL LINE.
- 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

APPROVED:  Edward W. Sizemore
 DATE: 4/23/2024
DocuSigned by:
39DF9C86A6884E9...



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

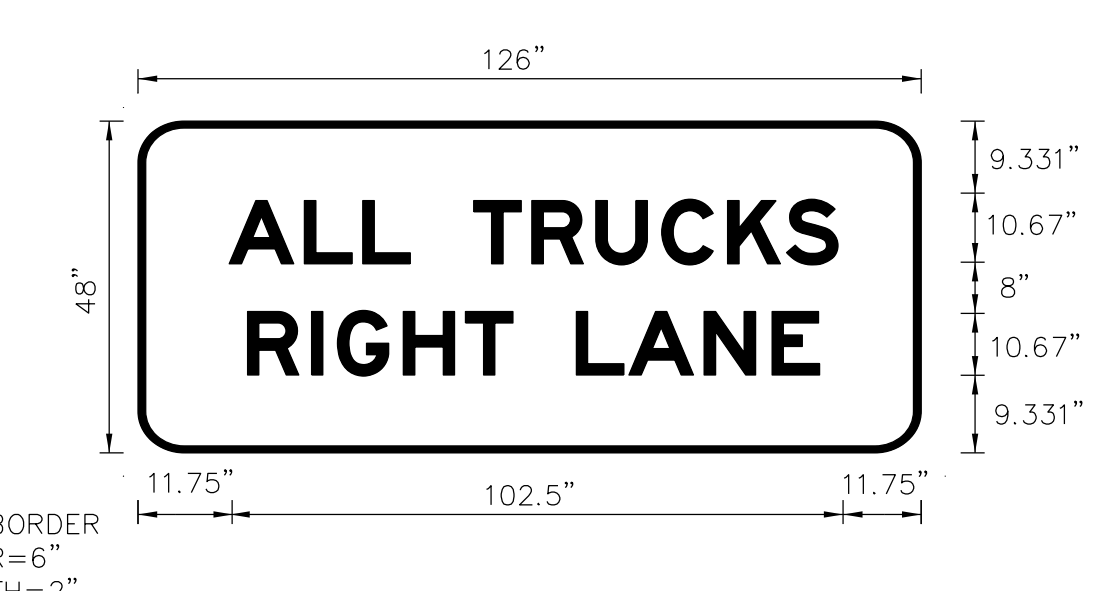


SIGN NUMBER: 101,102,103,104 BACKG COLOR: White
 TYPE: B COPY COLOR: Black DESIGN BY: JDS CHECKED BY: DATE: February 2024
 QUANTITY: 4 PROJECT ID: 33879.2.107/33879.2.108 DIV: 4

| SYMBOL | X | Y | WID | HT |
|--------|---|---|-----|----|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SIGN WIDTH: 10'-6"
 HEIGHT: 4'-0"
 TOTAL AREA: 42.0 Sq.Ft.
 BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 2"
 RADIUS: 6"
 MAT'L: 0.125" (3.2 mm) ALUMINUM
 NO. Z BARS: 2
 LENGTH: 118.0

ALL TRUCKS
RIGHT LANE



Spacing Factor is 1 unless specified otherwise

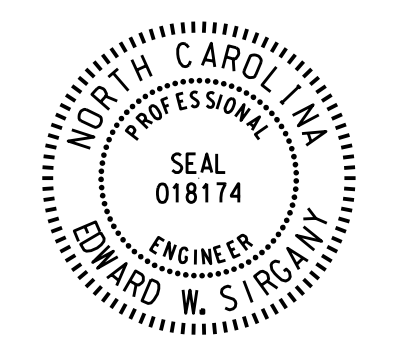

USE NOTES:
 1. Legend and border (except those that are colored black) shall be direct applied Grade C sheeting.
 2. Background shall be Grade C reflective sheeting.

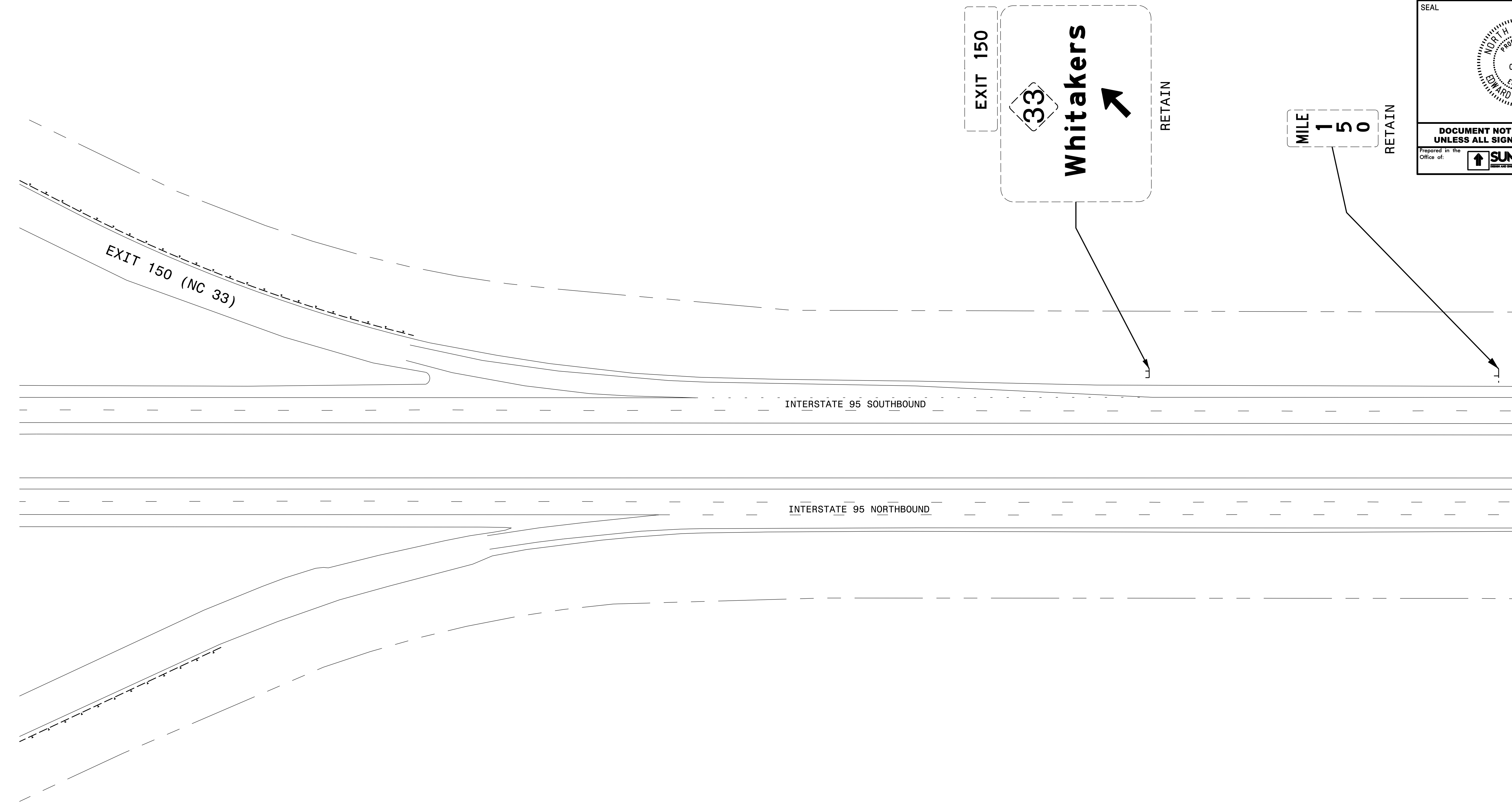
LETTER POSITIONS

| Letter spacings are to start of next letter | | | | | | | | | | | | Series/Size |
|---------------------------------------------|------|-----|------|------|-----|------|------|------|------|-----|------|-------------|
| A | L | L | T | R | U | C | K | S | | | | Text Length |
| 11.7 | 12.7 | 9.6 | 7.9 | 10.7 | 9.8 | 10.9 | 11.2 | 11 | 10.1 | 8.6 | 11.7 | E 2000 |
| | | | | | | | | | | | | 102.5 |
| 14.7 | 10.9 | 4.7 | 11.2 | 10.6 | 7.9 | 10.7 | 8.5 | 12.7 | 11.6 | 7.9 | 14.7 | E 2000 |
| | | | | | | | | | | | | 96.7 |

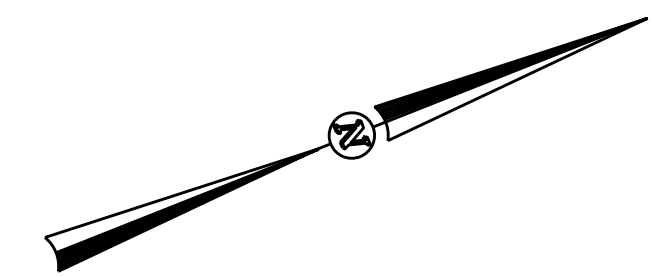
SUMMIT DESIGN & ENGINEERING SERVICES

SIGN DESIGNS

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-4 |
| APPROVED: <i>Edward W. Siganey</i> DATE: 4/23/2024 | |
| SEAL  | |
| <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p> <p>Prepared in the Office of:  NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsborough, NC 27278 919-732-3661 (919) 732-6676 (FAX)</p> | |



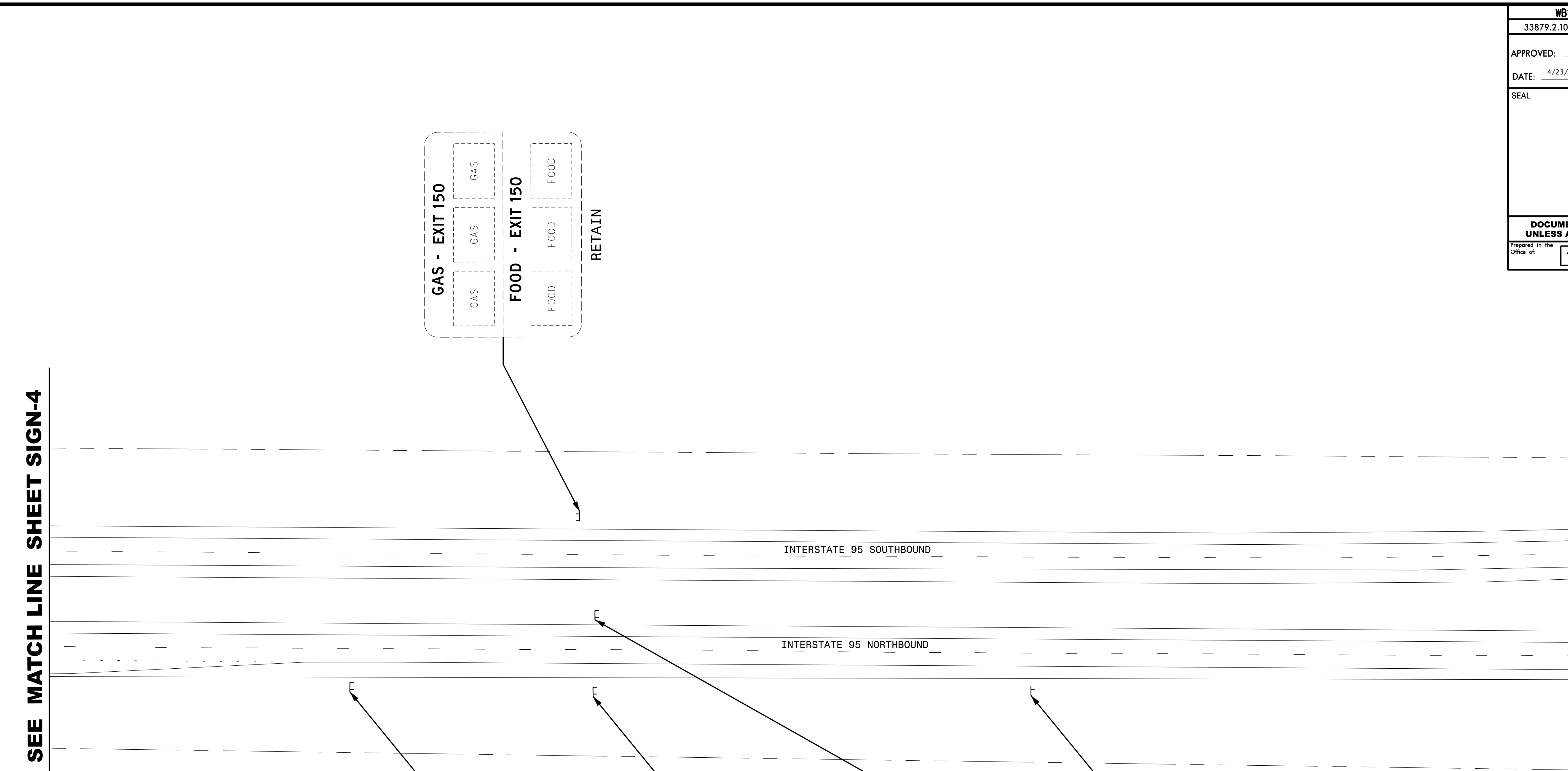
SEE MATCH LINE SHEET SIGN-5



PAY ITEM NOTES

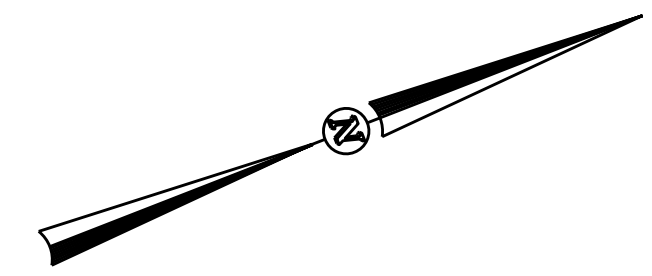
- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

EXISTING AND PROPOSED SIGNS

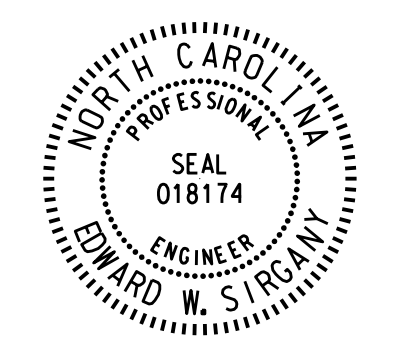



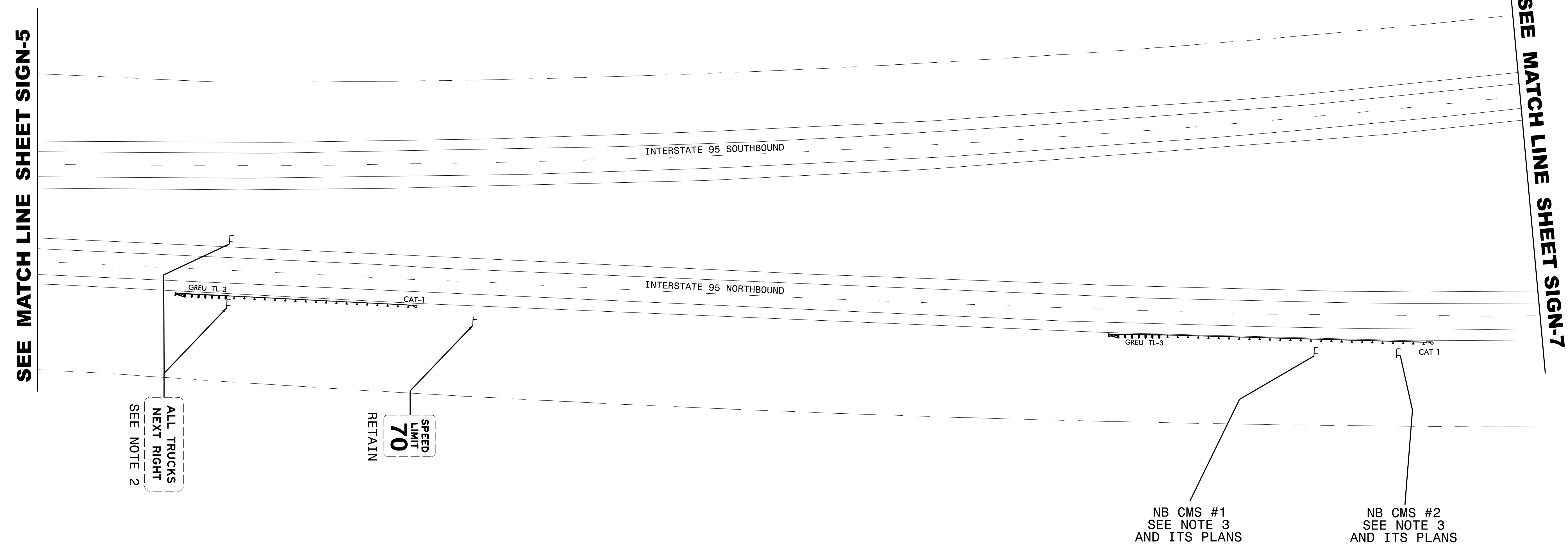
PAY ITEM NOTES

- SIGN ERECTION, TYPE B (GROUND MOUNTED)
- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)



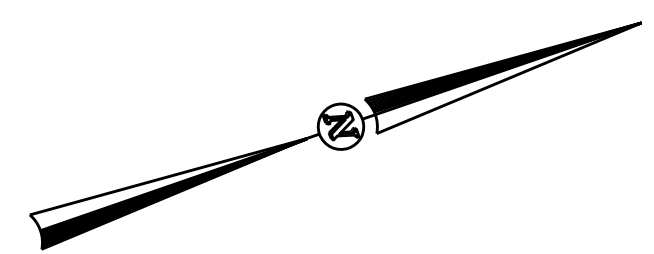
EXISTING AND PROPOSED SIGNS

| | |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-6 |
| DocuSigned by: <i>Edward W. Srigany</i> 39DF9C8A68684E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  | NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsboro, NC 27278 919-732-3661 919-732-6676 (FAX) |

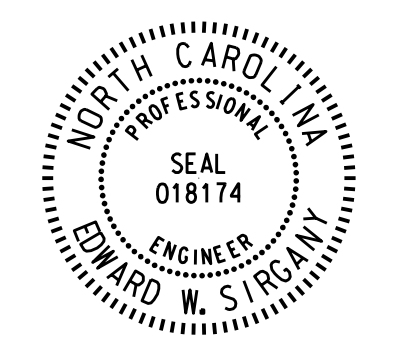



PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)



EXISTING AND PROPOSED SIGNS

| | |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-7 |
| DocuSigned by: <i>Edward W. Surrency</i> 39DFC86A6684E9 | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: |  |
| NC FIRM LICENSE No. P-0339 305 Executive Ct. Hillsborough, NC 27278 919-732-3661 919-732-6676 (FAX) | |

SEE MATCH LINE SHEET SIGN-6

SEE MATCH LINE SHEET SIGN-8

MILE
1 5 0 .5
RETAIN

Welcome To
NASH
COUNTY
RETAIN

EXIT 150

33
Whitakers
1 MILE
RETAIN

INTERSTATE 95 SOUTHBOUND

INTERSTATE 95 NORTHBOUND

MILE
1 5 0 .5
RETAIN

Fishing
Creek
PART OF THE
Tar-Pamlico
River Basin
RETAIN

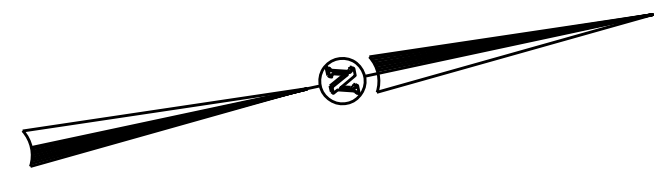
WEIGH
STATION
NEXT RIGHT
RETAIN SIGN PANEL
AND OPEN/CLOSED PANEL

WEIGH
STATION
NEXT RIGHT

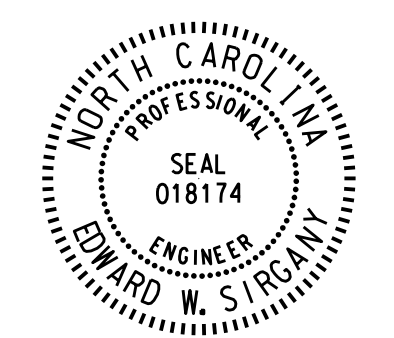

BRIDGE
ICES BEFORE
ROAD
RETAIN

PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

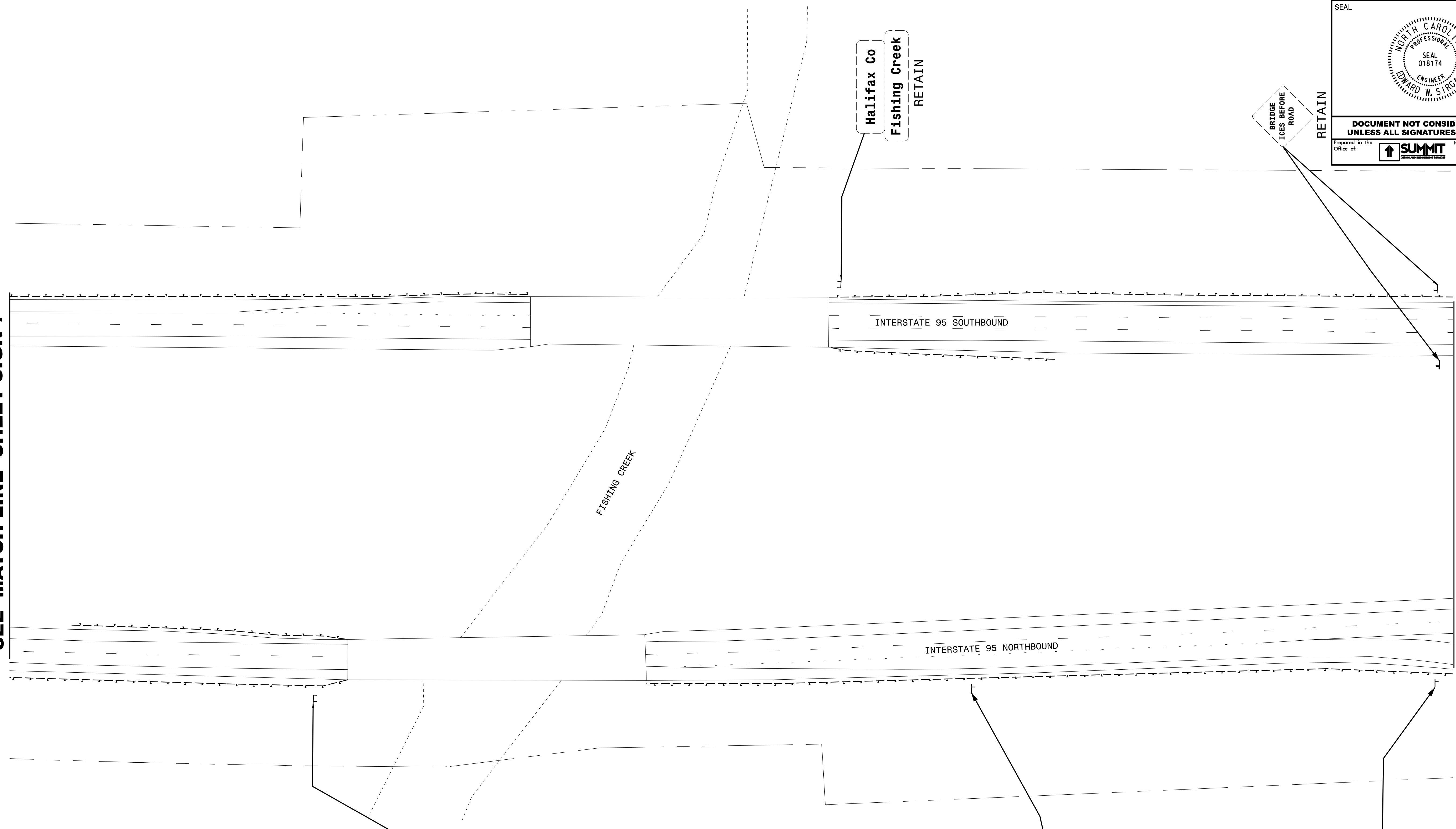


EXISTING AND PROPOSED SIGNS

| | |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-8 |
| DocuSigned by: <i>Edward W. Singany</i> 30DF9C8A6884E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  | NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsborough, NC 27278 (919) 422-3661 (919) 732-6676 (FAX) |

SEE MATCH LINE SHEET SIGN-7

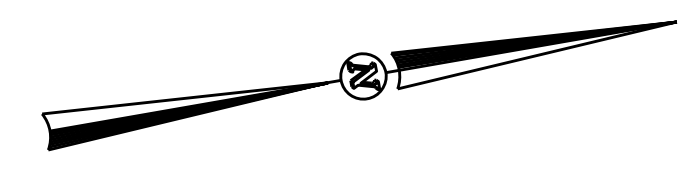
SEE MATCH LINE SHEET SIGN-9

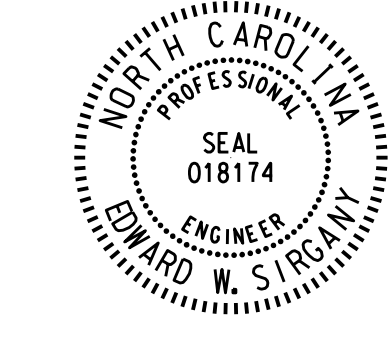



PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

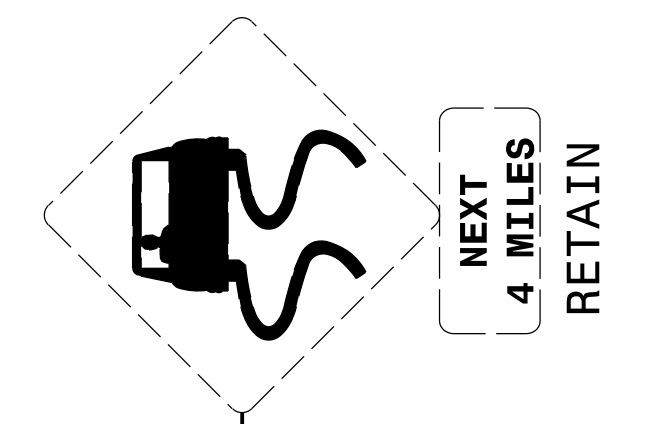
EXISTING AND PROPOSED SIGNS



| | |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-9 |
| DocuSigned by: <i>Edward W. Sugony</i> 39DF9C86A6884E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: |  |
| | <small>NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsboro, NC 27278 Tel: 732-3681 (90) 732-6676 (FAX)</small> |

WBS 33879.2.107 NORTH BOUND WEIGH STATION UPGRADE
ALL WORK SOUTH OF THE NORTH BOUND WEIGH STATION UPGRADE AND SHALL BE INVOICED SEPERATELY FROM THE SOUTH BOUND WBS

WBS 33879.2.108 SOUTH BOUND WEIGH STATION UPGRADE
ALL WORK NORTH OF THE SOUTH BOUND WEIGH STATION UPGRADE AND SHALL BE INVOICED SEPERATELY FROM THE NORTH BOUND WBS



SR
SCALE
HOUSE

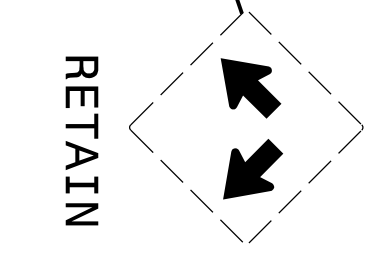
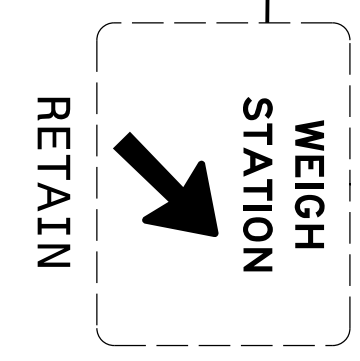
SEE MATCH LINE SHEET SIGN-8

SEE MATCH LINE SHEET SIGN-10

INTERSTATE 95 SOUTHBOUND

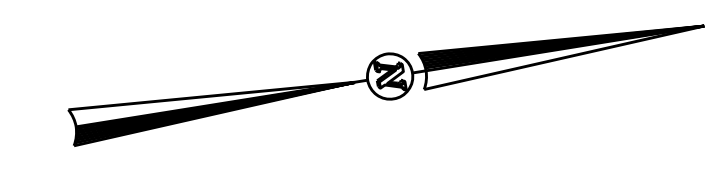
INTERSTATE 95 NORTHBOUND

NB
SCALE
HOUSE

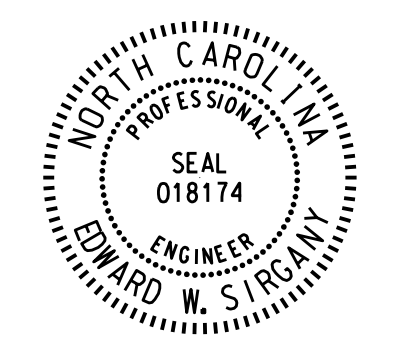



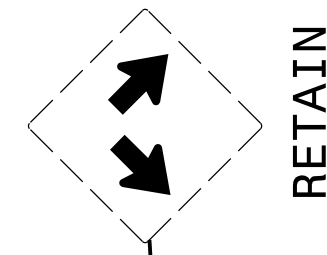
PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

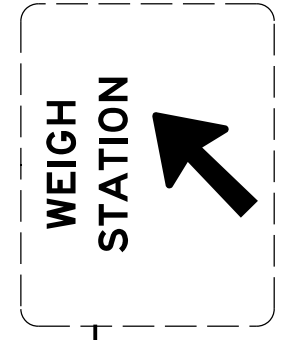


EXISTING AND PROPOSED SIGNS

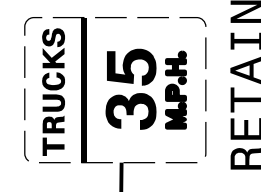
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| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-10 |
| APPROVED: <i>Edward W. Sargany</i> DocuSigned by: 39DF9C86A684E9... | |
| DATE: 4/23/2024 | |
| SEAL  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  | NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsborough, NC 27278 (919) 732-3661 (919) 732-6676 (FAX) |



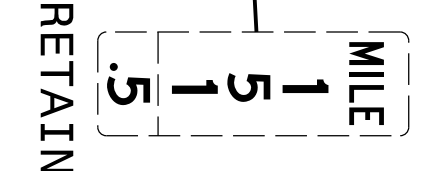
RETAIN



RETAIN



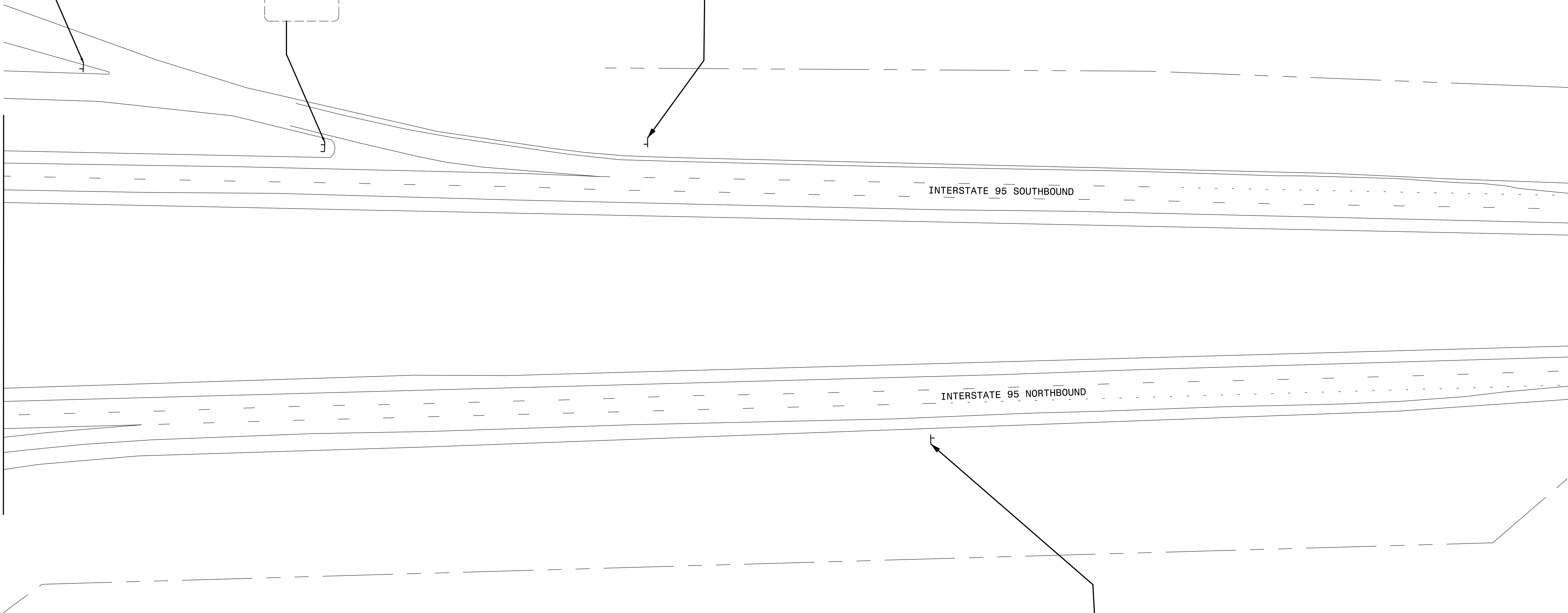
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RETAIN

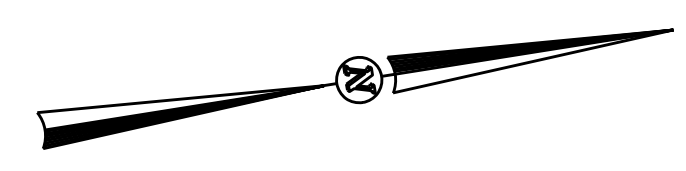
SEE MATCH LINE SHEET SIGN-9

SEE MATCH LINE SHEET SIGN-11

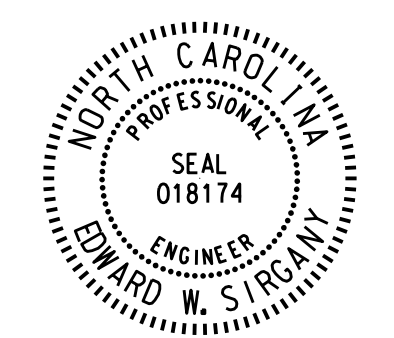



PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

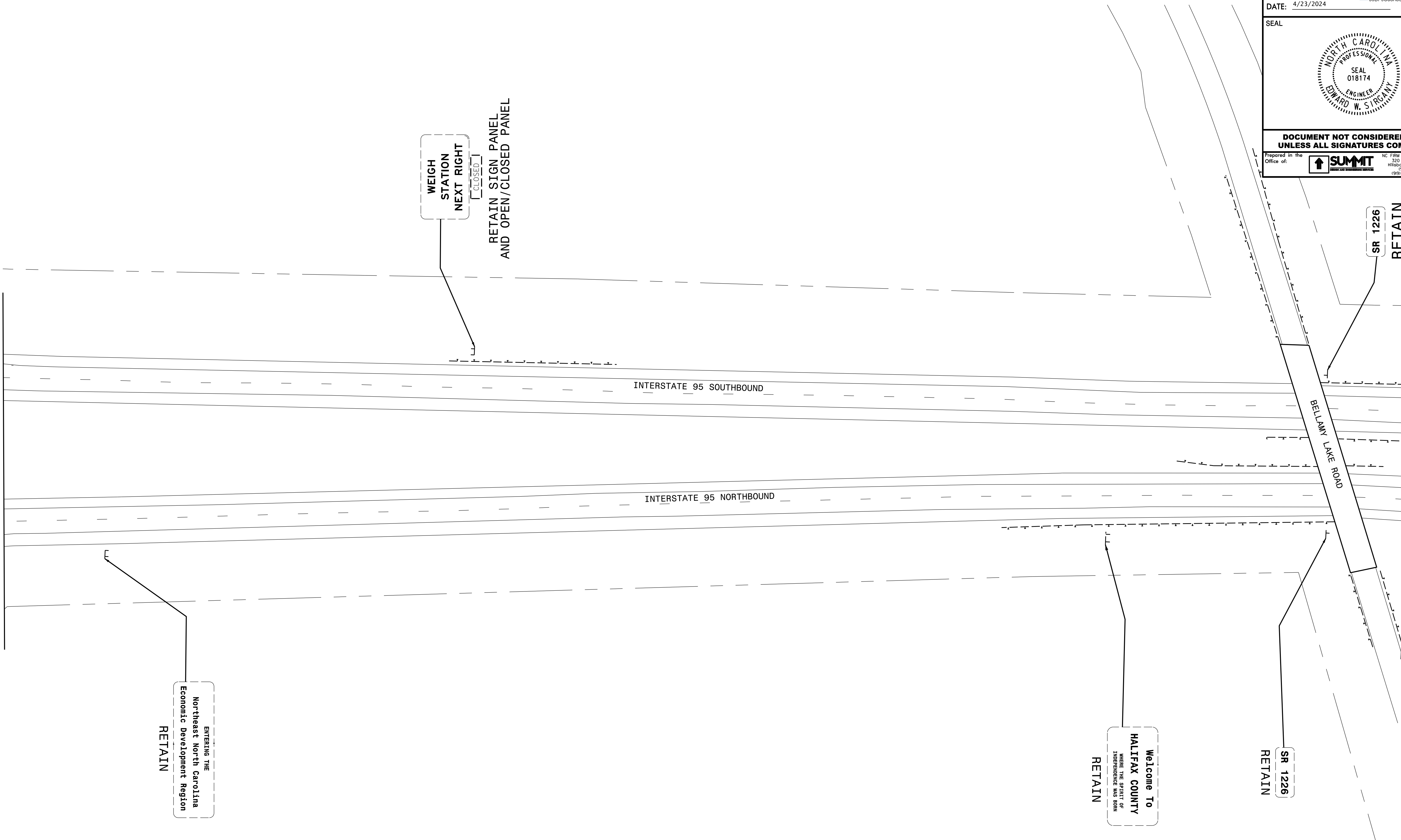


EXISTING AND PROPOSED SIGNS

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| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-11 |
| DocuSigned by: <i>Edward W. Szigany</i> 39DF9C86A6884E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
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| Prepared in the Office of: |  |
| <small>NC FIRM LICENSE No. P-0339 303 Executive Ct. Hillsborough, NC 27278 919-732-3661 919-732-6676 (FAX)</small> | |

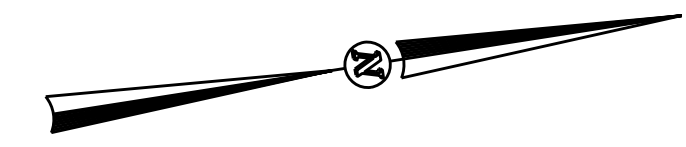
SEE MATCH LINE SHEET ITS-10

SEE MATCH LINE SHEET ITS-12

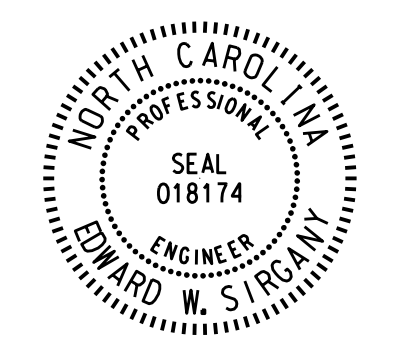



PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

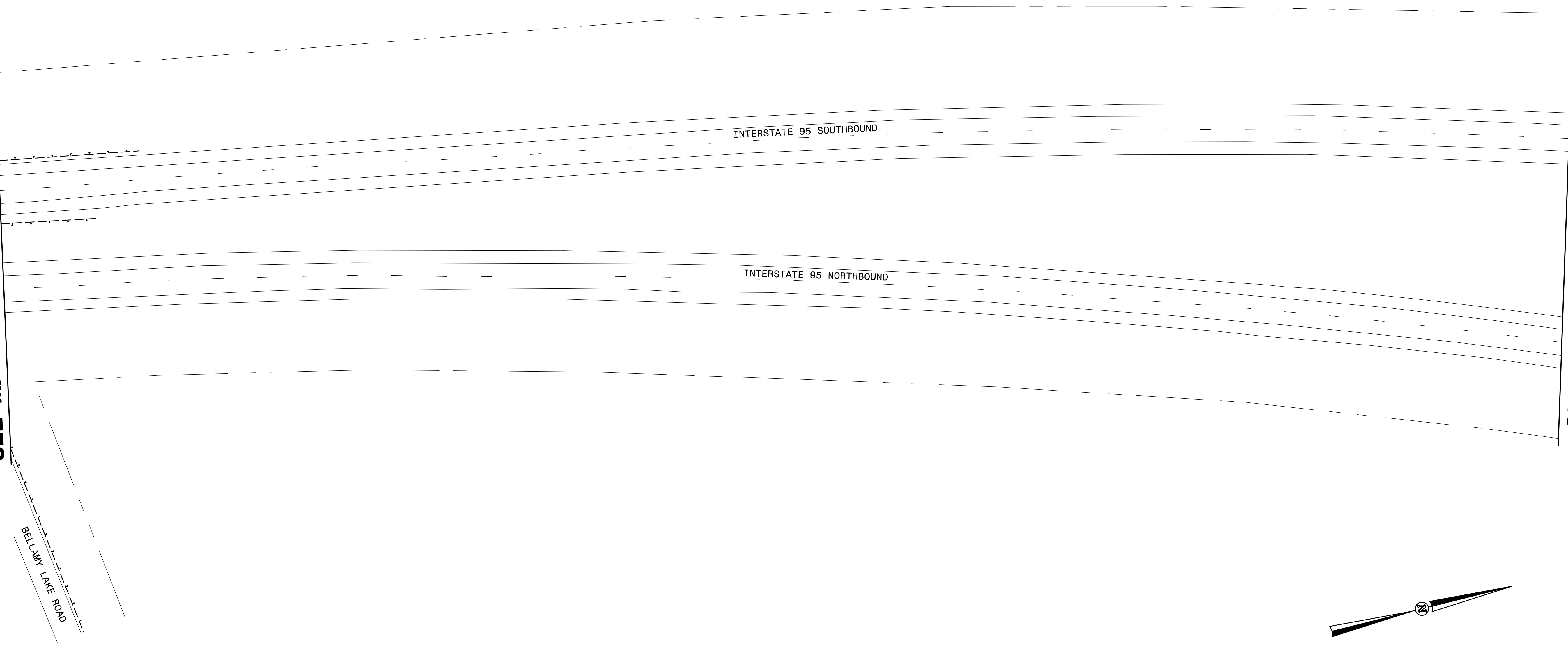


EXISTING AND PROPOSED SIGNS

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| APPROVED: <i>Edward W. Srigany</i> 38DF9C86A684E9 | |
| DATE: 4/23/2024 | |
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| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: |  |

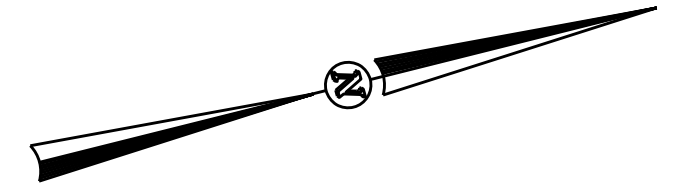
SEE MATCH LINE SHEET SIGN-11

SEE MATCH LINE SHEET SIGN-13

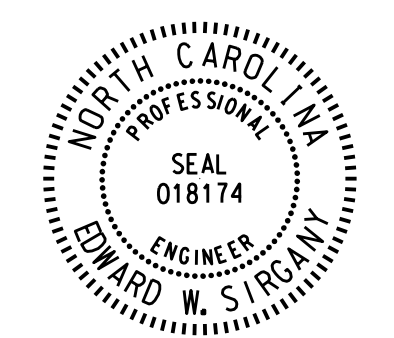



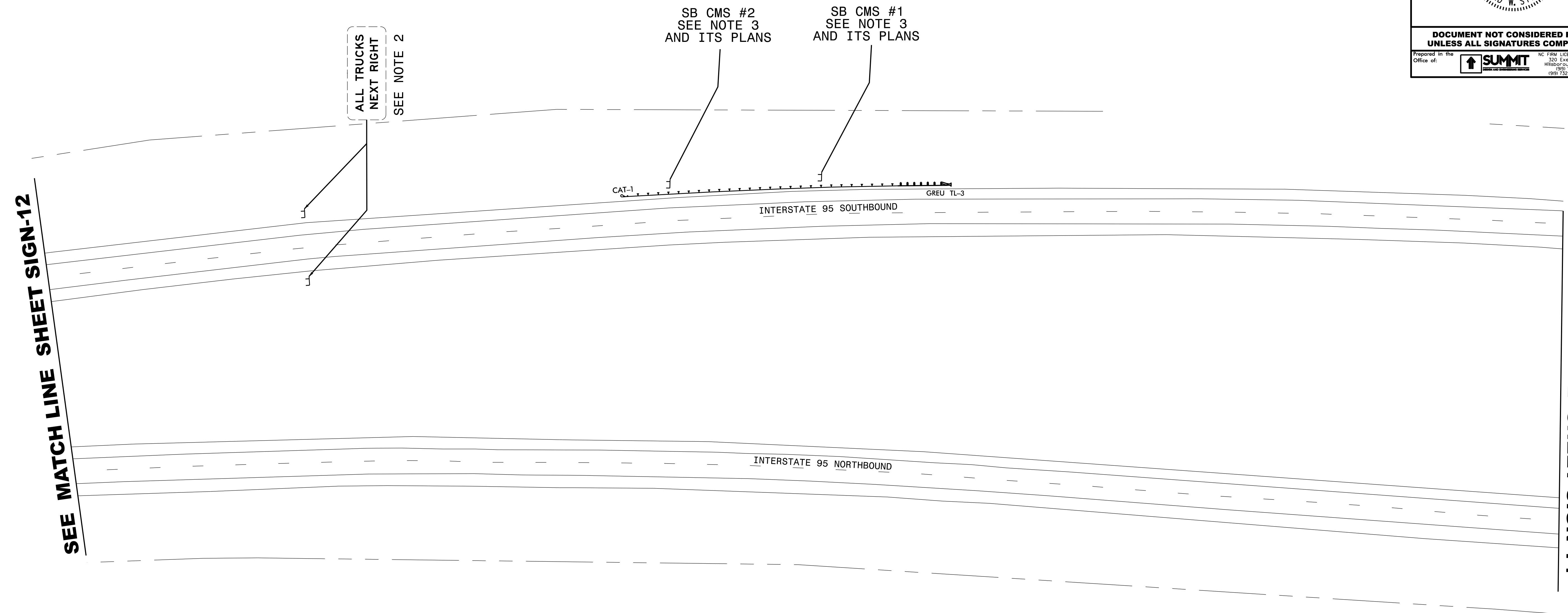
PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)



EXISTING AND PROPOSED SIGNS

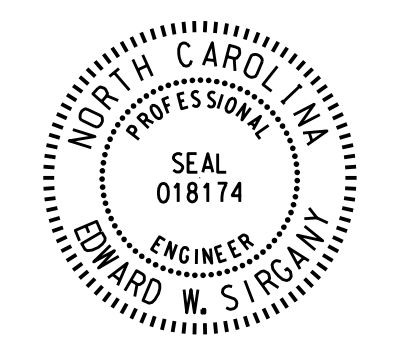

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| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-13 |
| DocuSigned by: <i>Edward W. Sigany</i> 39DF9C86A6884E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
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PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)

EXISTING AND PROPOSED SIGNS

| | |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-14 |
| APPROVED: <i>Edward W. Surrency</i> DocuSigned by: Edward W. Surrency 39DF9C86A6884E9... | |
| DATE: 4/23/2024 | |
| SEAL  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of:  | NC FIRM LICENSE No. P-0339 300 Executive Ct Hillsborough, NC 27278 919-732-3861 (919) 732-6676 (FAX) |

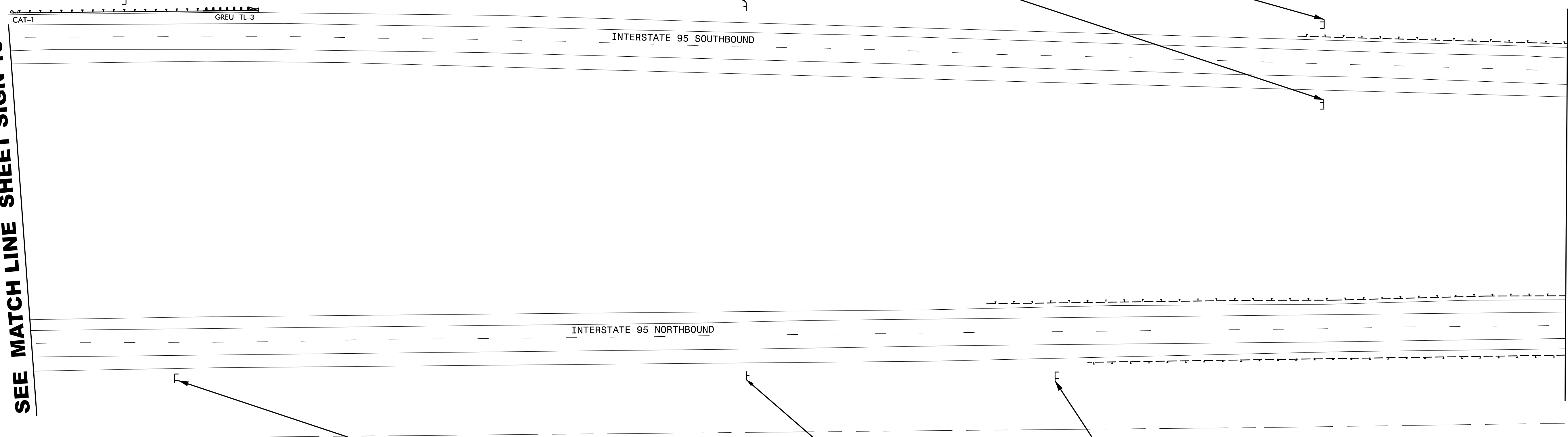
**WEIGH STATION
1 MILE**
WEIGH IN MOTION
RETAIN

MILE
1
5
2
.5
RETAIN

**ALL TRUCKS
RIGHT LANE**
126" X 48"
SEE NOTE 1
INSTALL SIGNS 1,200'
PRIOR TO SB WIM
LOCATION

**ALL TRUCKS
RIGHT LANE**
126" X 48"
SEE NOTE 1
INSTALL SIGNS 1,200'
PRIOR TO SB WIM
LOCATION

SEE MATCH LINE SHEET SIGN-13



SEE MATCH LINE SHEET SIGN-15

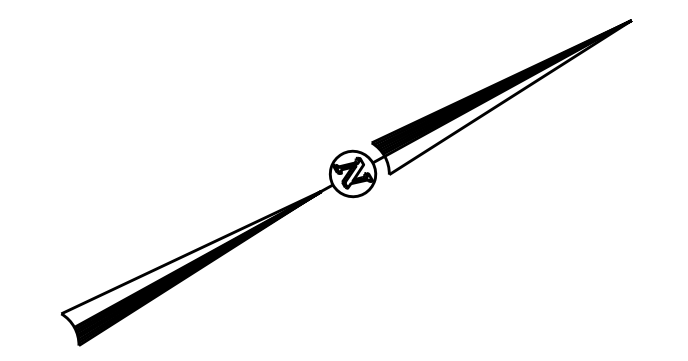
PAY ITEM NOTES

- SIGN ERECTION, TYPE B (GROUND MOUNTED)
- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- INSTALL CMS SIGN (SEE ITS PLAN/SPECIAL PROVISION)

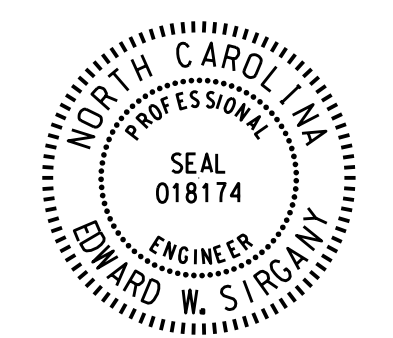

Enfield
481
1 MILE
RETAIN
EXIT 154

MILE
1
5
2
.5
RETAIN

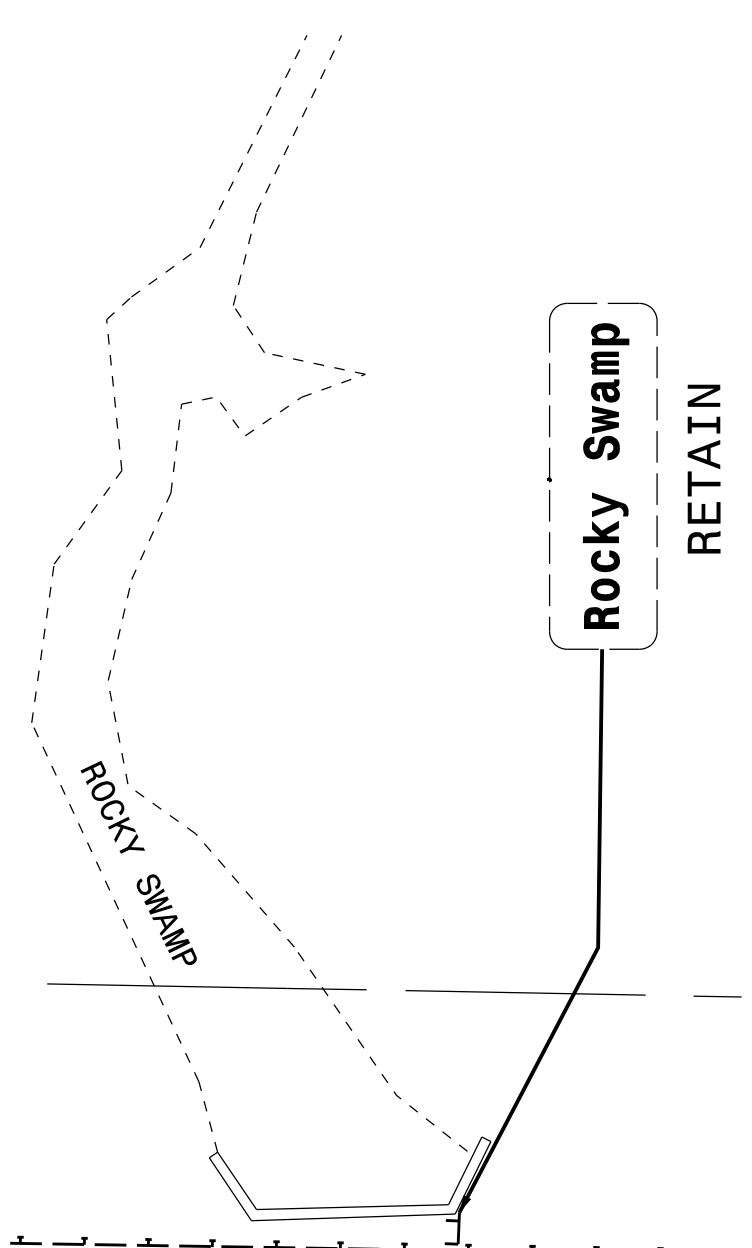
CAMPING - EXIT 154
CAMPING
CAMPING
CAMPING
RETAIN



EXISTING AND PROPOSED SIGNS

| | |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| WBS NO. 33879.2.107/33879.2.108 | SHEET NO. SIGN-15 |
| DocuSigned by: <i>Edward W. Sugony</i> 38DF9C86A6884E9... | |
| APPROVED: _____ | |
| DATE: 4/23/2024 | |
| SEAL | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: |  |
| | <small>NC FIRM LICENSE No. P-0339 308 Executive Ct. Hillsborough, NC 27278 919-732-3883 (919) 732-6676 (FAX)</small> |

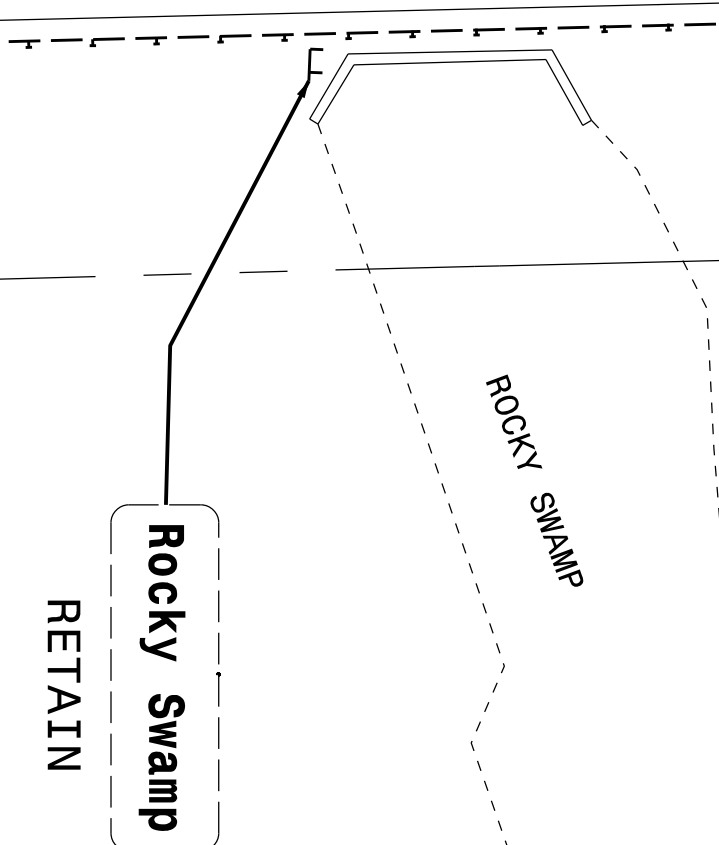
SEE MATCH LINE SHEET SIGN-14



Rocky Mount 20
Wilson 40
Fayetteville 107
RETAIN

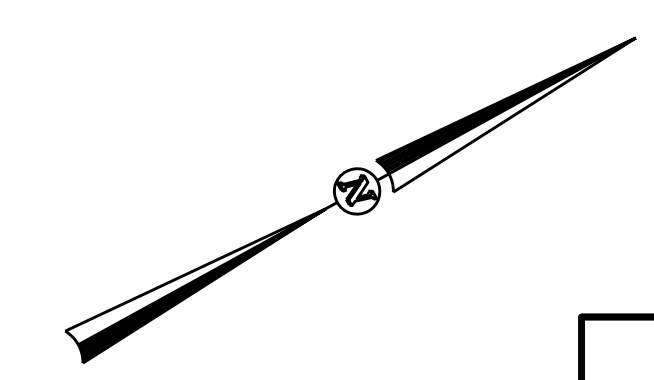
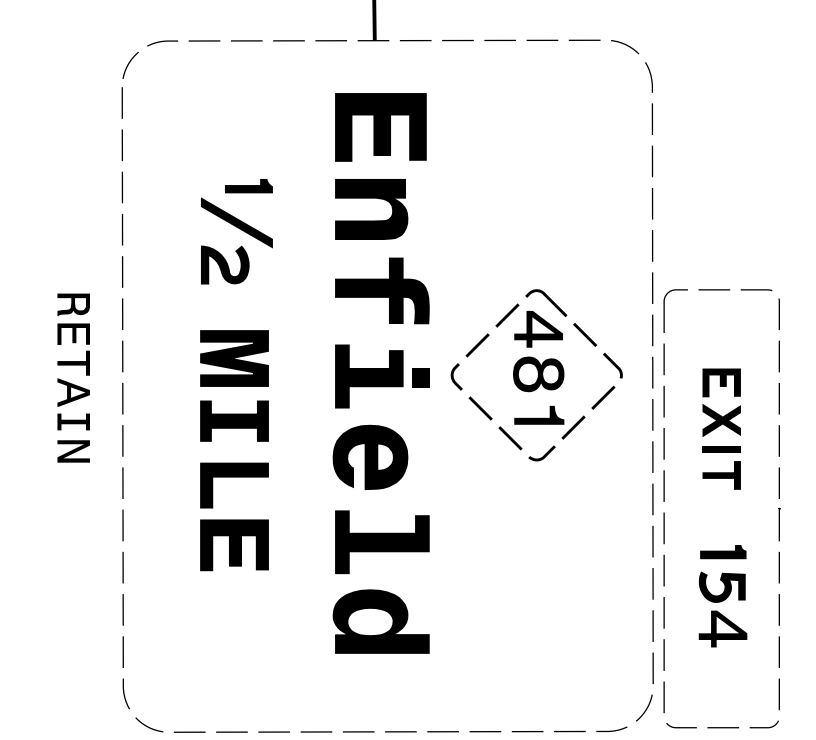
INTERSTATE 95 SOUTHBOUND

INTERSTATE 95 NORTHBOUND



PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE B (GROUND MOUNTED)
- 2 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 3 INSTALL CMS SIGN
(SEE ITS PLAN/SPECIAL PROVISION)



EXISTING AND PROPOSED SIGNS

APPROVED: Edward W. Sirgany
DocuSigned by: Edward W. Sirgany
39DF9C86A6884E9...
DATE: 4/23/2024

SEAL



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

PAVEMENT MARKING SCHEDULE

| SYMBOL | DESCRIPTION | QUANTITY |
|--------|------------------------------|----------|
| | THERMO (8") | |
| T40 | WHITE GORELINE (8", 90 MIL) | 205 LF |
| T41 | WHITE DIAGONAL (8", 90 MIL) | 65 LF |
| T42 | YELLOW DIAGONAL (8", 90 MIL) | 65 LF |
| T47 | YELLOW GORELINE (8", 90 MIL) | 205 LF |

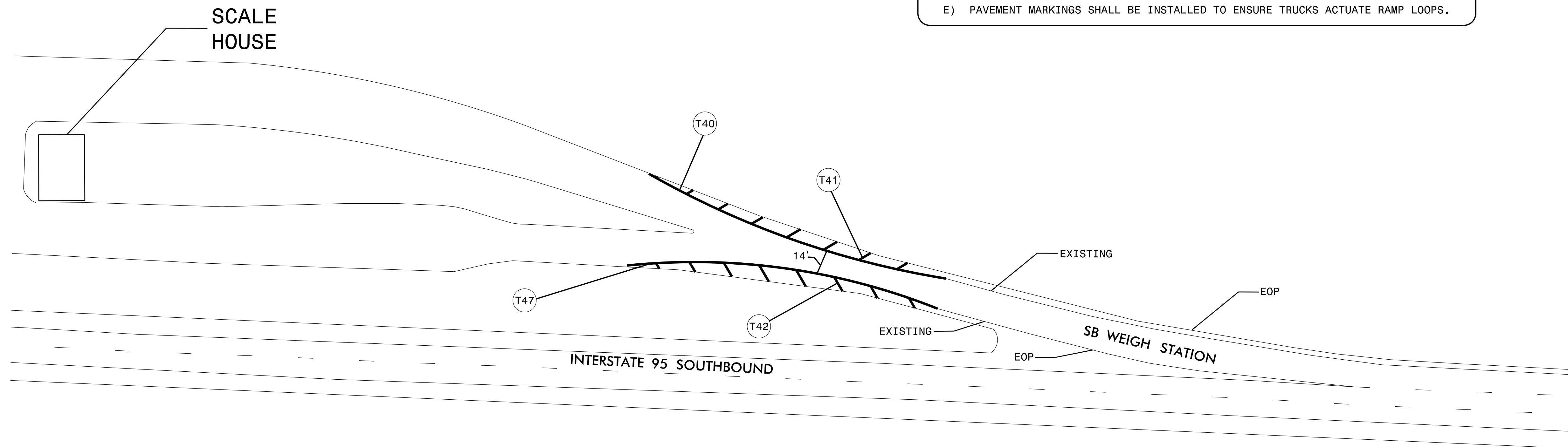
GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

| ROAD NAME | MARKING |
|--------------------------------|---------|
| INTERSTATE 95 SB WEIGH STATION | THERMO |

- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- D) MARKERS ARE TO BE PLACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS
- E) PAVEMENT MARKINGS SHALL BE INSTALLED TO ENSURE TRUCKS ACTUATE RAMP LOOPS.



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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

| STD. NO. | TITLE |
|----------|-----------------------------------------------------|
| 1205.01 | PAVEMENT MARKINGS - LINE TYPES AND OFFSETS |
| 1205.02 | PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS |
| 1250.01 | PAVEMENT MARKER SPACING |
| 1251.01 | RAISED PAVEMENT MARKERS - TEMPORARY AND PERMANENT |

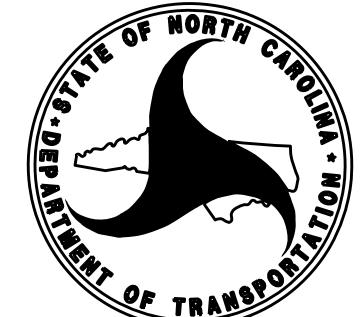


SCALE: 1" = 40'

Prepared in the Office of:



NC FIRM LICENSE No: P-0339
320 EXECUTIVE COURT
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)



EDWARD W. SIRGANY, PE PROJECT ENGINEER
JAMES D. SMITH, PE PROJECT DESIGN ENGINEER

**PAVEMENT MARKING PLANS
I-95 SOUTHBOUND
WEIGH STATION**