STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

July 28, 2026

Addendum No. 1
RE: Contract # C205195
WBS # 50133.3.1
FEDERAL-AID NO. 0402166
Catawba County (I-5716)
INTERCHANGE AT I-40 AND SR-1007 (LENOIR RHYNE BOULEVARD)

August 18, 2026 Letting

To Whom It May Concern:

Reference is made to the plans and proposal furnished to you on this project.

The following revisions have been made to the Roadway plans.

Sheet No.	Revision
1 (Title sheet)	Deleted number in Total Sheets box in Title block Revised Letting Date
1A	Added Structure plans to Index of Sheets list
2A-1	Added R3 to Pavement Schedule for Special 5" Concrete Median Island
2A-2	Added R3 to Pavement Schedule for Special 5" Concrete Median Island
2A-3	Added R3 to Pavement Schedule for Special 5" Concrete Median Island Added Inset No. 6A for the Special 5" Concrete Median Island on the bridge along with Station range which applies. Added note to Scarify a minimum of ¼" for the concrete median island installation
2B-1	Added note for "Prop. 5" Concrete Median Island
6	Revised/added callouts for the Special 5" Concrete Median Island on the bridge Added callouts ending Keyed-In Concrete Island and beginning Concrete median island to denote where the Keyed-In concrete island and Concrete median island are to be installed.

Please void the above listed sheets in your plans and staple the revised sheets thereto.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4127
Customer Service: 1-877-368-4968

Location:
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

Website: www.ncdot.gov

The following revisions have been made to the Erosion Control plans.

Sheet No.	Revision
EC-06	Revised to reflect changes made to Roadway Sheet 6
EC-12	Revised to reflect changes made to Roadway Sheet 6

Please void the above listed sheets in your plans and staple the revised sheets thereto.

The following Structure plans have been added.

Sheet No.	Revision
Title, S-1, S-2, SN	Structure plan sheets added to show median to be constructed on existing bridge

Please add the new Structure plan sheets to your plan set

The following revisions have been made to the proposal.

Page No.	Revision
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 07-28-2026". Letting date revised
Table of Contents	UNIT PROJECT SPECIAL PROVISION entitled Structures added
G-5, G-6	The PROJECT SPECIAL PROVISION entitled **CONTRACT TIME AND LIQUIDATED DAMAGES** has been revised. The PROJECT SPECIAL PROVISION entitled **INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES** has been revised.
G-25	The PROJECT SPECIAL PROVISION entitled **SCHEDULE OF ESTIMATED COMPLETION PROGRESS** has been revised.
New Pages ST-1 thru ST-17	UNIT PROJECT SPECIAL PROVISION entitled Structures added

Please void the above listed existing pages in your proposal and staple the revised pages thereto. Staple New Pages ST-1 thru ST-17 after Page TS-63 in your proposal.

On the item sheets the following pay item revisions have been made:

Item	Description	Old Quantity	New Quantity
0066-2655000000-E852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	1,820 SY	1,760 SY
0222-1891500000-NSP	CONCRETE MEDIAN	NEW ITEM	LUMP SUM

The Contractor's bid must include these pay item revisions.

The electronic bidding form has been updated on Bid Express to reflect these revisions.

The contract will be prepared accordingly.

Sincerely,

Signed by:
Jon Weathersbee
E45DA45396074A0...

Jon Weathersbee, PE
State Contract Officer

JHW/jjr
Attachments

cc: Mr. Troy B. Brooks, PE
Mr. Mark Stafford, PE
Mr. Ken Kennedy, PE
Mr. Malcolm Bell
Mr. Forrest Dungan, PE
Ms. Jaci Kincaid
Project File (2)

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

PROPOSAL

INCLUDES ADDENDUM No.1 DATED 07-28-2026

DATE AND TIME OF BID OPENING: **Aug 18, 2026 AT 02:00 PM**

CONTRACT ID	C205195
WBS	50133.3.1

FEDERAL-AID NO.	0402166
COUNTY	CATAWBA
T.I.P NO.	I-5716
MILES	0.726
ROUTE NO.	I-40
LOCATION	INTERCHANGE AT I-40 AND SR-1007 (LENOIR RHYNE BOULEVARD).
TYPE OF WORK	GRADING, DRAINAGE, PAVING, AND SIGNALS.

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS $40,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

STANDARD SPECIAL PROVISIONS

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS SSP-1
NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY SSP-2
ERRATA.....SSP-5
PLANT AND PEST QUARANTINES SSP-8
TITLE VI AND NONDISCRIMINATION: SSP-9
MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS SSP-18
REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTR CONTRACTS SSP-21
ON-THE-JOB TRAINING.....SSP-35
MINIMUM WAGES SSP-38

UNIT PROJECT SPECIAL PROVISIONS

TRAFFIC CONTROL TC-1
LIGHTING LT-1
UTILITY BY OTHERS.....UBO-1
EROSION CONTROL EC-1
TRAFFIC SIGNALS TS-1
STRUCTURES.....ST-1

PERMITS P-1

PROPOSAL ITEM SHEET

ITEM SHEET(S)

Materials that are not permanently incorporated into the completed project are not subject to domestic content requirements. Materials are not permanently incorporated when they are used solely to facilitate construction activities and do not perform an ongoing structural, operational, or functional role after construction is complete. Determinations regarding whether a material is permanently incorporated will be made by the Engineer.

(D) Classification and Clarification of Materials

All items subject to domestic content requirements shall be classified as either an iron or steel product, construction material, manufactured product, or a material not subject to domestic content requirements based on their final form as delivered to the project site. Each item may be classified into only one category and shall not be reclassified to avoid more stringent requirements. Classification of a manufactured product does not relieve the Contractor of compliance with iron and steel domestic manufacturing requirements applicable to embedded iron or steel components when required by Federal law or regulation. When an item's classification is uncertain or does not clearly fall within the listed categories, the Contractor shall submit the item for review by the Engineer. Approval must be obtained prior to procurement or incorporation into the project.

CONTRACT TIME AND LIQUIDATED DAMAGES:
(8-15-00) (Rev. 5-16-23) 108 SP1 G08 A

The date of availability for this contract is **September 28, 2026** except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **February 28, 2029**.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Two Hundred Dollars ($ 200.00)** per calendar day. These liquidated damages will not be cumulative with any liquidated damages which may become chargeable under Intermediate Contract Time Number 1.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:
(7-1-95) (Rev. 2-21-12) 108 SP1 G13 A

Except for that work required under the Project Special Provisions entitled *Planting, Reforestation* and/or *Permanent Vegetation Establishment*, included elsewhere in this proposal, the Contractor will be required to complete all work included in this contract and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is **September 28, 2026**.

The completion date for this intermediate contract time is **September 1, 2028**.

The liquidated damages for this intermediate contract time are **Two Thousand Four Hundred Dollars ($ 2,400.00)** per calendar day.

Upon apparent completion of all the work required to be completed by this intermediate date, a final inspection will be held in accordance with Article 105-17 and upon acceptance, the Department will assume responsibility for the maintenance of all work except *Planting, Reforestation* and/or *Permanent Vegetation Establishment*. The Contractor will be responsible for and shall make corrections of all damages to the completed roadway caused by his planting operations, whether occurring prior to or after placing traffic through the project.

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:
(2-20-07) 108 SP1 G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **I-40** during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday through Sunday, 6:00 A.M. to 9:00 P.M.

In addition, the Contractor shall not close or narrow a lane of traffic on **I-40**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.

2. For **New Year's Day**, between the hours of **6:00 A.M.** December 31st and **9:00 P.M.** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **9:00 P.M.** the following Tuesday.

3. For **Easter**, between the hours of **6:00 A.M.** Thursday and **9:00 P.M.** Monday.

4. For **Memorial Day**, between the hours of **6:00 A.M.** Friday and **9:00 P.M.** Tuesday.

5. For **Independence Day**, between the hours of **6:00 A.M.** the day before Independence Day and **9:00 P.M.** the day after Independence Day.

   If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **6:00 A.M.** the Thursday before Independence Day and **9:00 P.M.** the Tuesday after Independence Day.

6. For **Labor Day**, between the hours of **6:00 A.M.** Friday and **9:00 P.M.** Tuesday.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08)(Rev. 6-16-26) 108-2 SP1 G58

The Contractor's attention is directed to the Standard Special Provision entitled *Availability of Funds Termination of Contracts* included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

Fiscal Year	Progress (% of Dollar Value)
2027 (7/01/26 - 6/30/27)	**57**% of Total Amount Bid
2028 (7/01/27 - 6/30/28)	**40**% of Total Amount Bid
2029 (7/01/28 - 6/30/29)	**3**% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the *Standard Specifications*. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE:

(10-16-07)(Rev. 10-21-25) 102-15(J) SP1 G61

Description

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with Federal funds. This provision is guided by 49 CFR Part 26.

Definitions

Additional DBE Subcontractors - Any DBE submitted at the time of bid that will not be used to meet the DBE goal. No submittal of a Letter of Intent is required.

Committed DBE Subcontractor - Any DBE submitted at the time of bid that is being used to meet the DBE goal by submission of a Letter of Intent. Or any DBE used as a replacement for a previously committed DBE firm.

Contract Goal Requirement - The approved DBE participation at time of award, but not greater than the advertised contract goal.

DBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed DBE subcontractor(s).

Disadvantaged Business Enterprise (DBE) - A firm certified as a Disadvantaged Business Enterprise through the North Carolina Unified Certification Program.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

Project Special Provisions
Structures

Falsework and Formwork (11-30-23) …… ST-2
Submittal of Working Drawings (1-31-25) …… ST-7
Crane Safety (12-05-25) …… ST-13
Grout for Structures (12-1-17) …… ST-14
Concrete Median (SPECIAL) …… ST-15
Surface Preparation (SPECIAL) …… ST-15

7/20/2026

PROJECT SPECIAL PROVISIONS – STRUCTURES

FALSEWORK AND FORMWORK (11-30-23)

GENERAL

Use this Special Provision as a guide to develop temporary works submittals required by the *Standard Specifications* or other provisions; no additional submittals are required herein. Such temporary works include, but are not limited to, falsework and formwork.

Falsework is any temporary construction used to support the permanent structure until it becomes self-supporting. Formwork is the temporary structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Access scaffolding is a temporary structure that functions as a work platform that supports construction personnel, materials, and tools, but is not intended to support the structure. Scaffolding systems that are used to temporarily support permanent structures (as opposed to functioning as work platforms) are considered to be falsework under the definitions given. Shoring is a component of falsework such as horizontal, vertical, or inclined support members. Where the term "temporary works" is used, it includes all of the temporary facilities used in bridge construction that do not become part of the permanent structure.

Design and construct safe and adequate temporary works that will support all loads imposed and provide the necessary rigidity to achieve the lines and grades shown on the plans in the final structure.

MATERIALS

Select materials suitable for temporary works; however, select materials that also ensure the safety and quality required by the design assumptions. The Engineer has authority to reject material on the basis of its condition, inappropriate use, safety, or nonconformance with the plans. Clearly identify allowable loads or stresses for all materials or manufactured devices on the plans. Revise the plan and notify the Engineer if any change to materials or material strengths is required.

DESIGN REQUIREMENTS

(A) Working Drawings

Provide working drawings for items as specified in the contract, or as required by the Engineer, with design calculations and supporting data in sufficient detail to permit a structural and safety review of the proposed design of the temporary work.

On the drawings, show all information necessary to allow the design of any component to be checked independently as determined by the Engineer.

When concrete placement is involved, include data such as the drawings of proposed sequence, rate of placement, direction of placement, and location of all construction joints.

When required, have the drawings and calculations prepared under the guidance of, and sealed by, a North Carolina Registered Professional Engineer who is knowledgeable in temporary works design.

If requested by the Engineer, submit with the working drawings manufacturer's catalog data listing the weight of all construction equipment that will be supported on the temporary work. Show anticipated total settlements and/or deflections of falsework and forms on the working drawings. Include falsework footing settlements, joint take-up, and deflection of beams or girders.

As an option for the Contractor, overhang falsework hangers may be uniformly spaced, at a maximum of 36 inches, provided the following conditions are met:

Member Type (PCG)	Member Depth, (inches)	Max. Overhang Width, (inches)	Max. Slab Edge Thickness, (inches)	Max. Screed Wheel Weight, (lbs.)	Bracket Min. Vertical Leg Extension, (inches)
II	36	39	14	2000	26
III	45	42	14	2000	35
IV	54	45	14	2000	44
MBT	63	51	12	2000	50
MBT	72	55	12	1700	48

Overhang width is measured from the centerline of the girder to the edge of the deck slab. For Type II, III & IV prestressed concrete girders (PCG), 45-degree cast-in-place half hangers and rods must have a minimum safe working load of 6,000 lbs.

For MBT prestressed concrete girders, 45-degree angle holes for falsework hanger rods shall be cast through the girder top flange and located, measuring along the top of the member, 1'-2 ½" from the edge of the top flange. Hanger hardware and rods must have a minimum safe working load of 6,000 lbs.

For link slabs, the top of girders directly beneath the link slab shall be free of overhang falsework attachments or other hardware. Submit calculations and working drawings for overhang falsework in the link slab region.

The overhang bracket provided for the diagonal leg shall have a minimum safe working load of 3,750 lbs. The vertical leg of the bracket shall extend to the point that the heel bears on the girder bottom flange, no closer than 4 inches from the bottom of the member. However, for 72-inch members, the heel of the bracket shall bear on the web, near the bottom flange transition.

Provide adequate overhang falsework and determine the appropriate adjustments for deck geometry, equipment, casting procedures and casting conditions.

If the optional overhang falsework spacing is used, indicate this on the falsework submittal and advise the girder producer of the proposed details. Failure to notify the Engineer of hanger type and hanger spacing on prestressed concrete girder casting drawings may delay the approval of those drawings.

Falsework hangers that support concentrated loads and are installed at the edge of thin top flange concrete girders (such as bulb tee girders) shall be spaced so as not to exceed 75% of the manufacturer's stated safe working load. Use of dual leg hangers (such as Meadow Burke HF-42 and HF-43) are not allowed on concrete girders with thin top flanges. Design the

falsework and forms supporting deck slabs and overhangs on girder bridges so that there will be no differential settlement between the girders and the deck forms during placement of deck concrete.

When staged construction of the bridge deck is required, detail falsework and forms for screed and fluid concrete loads to be independent of any previous deck pour components when the mid-span girder deflection due to deck weight is greater than ¾".

Note on the working drawings any anchorages, connectors, inserts, steel sleeves or other such devices used as part of the falsework or formwork that remains in the permanent structure. If the plan notes indicate that the structure contains the necessary corrosion protection required for a Corrosive Site, epoxy coat, galvanize or metalize these devices. Electroplating will not be allowed. Any coating required by the Engineer will be considered incidental to the various pay items requiring temporary works.

Design falsework and formwork requiring submittals in accordance with the current edition of AASHTO *Guide Design Specifications for Bridge Temporary Works* except as noted herein.

(1) Wind Loads

Table 2.2 of Article 2.2.5.1 is modified to include wind velocities up to 110 mph. In addition, Table 2.2A is included to provide the maximum wind speeds by county in North Carolina.

Table 2.2 - Wind Pressure Values

Height Zone feet above ground	Pressure, lb/ft^2 for Indicated Wind Velocity, mph				
	70	80	90	100	110
0 to 30	15	20	25	30	35
30 to 50	20	25	30	35	40
50 to 100	25	30	35	40	45
over 100	30	35	40	45	50

(2) Time of Removal

The following requirements replace those of Article 3.4.8.2.

Do not remove forms until the concrete has attained strengths required in Article 420-16 of the *Standard Specifications* and these Special Provisions.

Do not remove forms until the concrete has sufficient strength to prevent surface damage.

Table 2.2A - Steady State Maximum Wind Speeds by Counties in North Carolina

COUNTY	25 YR (mph)	COUNTY	25 YR (mph)	COUNTY	25 YR (mph)
Alamance	70	Franklin	70	Pamlico	100
Alexander	70	Gaston	70	Pasquotank	100
Alleghany	70	Gates	90	Pender	100
Anson	70	Graham	80	Perquimans	100
Ashe	70	Granville	70	Person	70
Avery	70	Greene	80	Pitt	90
Beaufort	100	Guilford	70	Polk	80
Bertie	90	Halifax	80	Randolph	70
Bladen	90	Harnett	70	Richmond	70
Brunswick	100	Haywood	80	Robeson	80
Buncombe	80	Henderson	80	Rockingham	70
Burke	70	Hertford	90	Rowan	70
Cabarrus	70	Hoke	70	Rutherford	70
Caldwell	70	Hyde	110	Sampson	90
Camden	100	Iredell	70	Scotland	70
Carteret	110	Jackson	80	Stanley	70
Caswell	70	Johnston	80	Stokes	70
Catawba	70	Jones	100	Surry	70
Cherokee	80	Lee	70	Swain	80
Chatham	70	Lenoir	90	Transylvania	80
Chowan	90	Lincoln	70	Tyrell	100
Clay	80	Macon	80	Union	70
Cleveland	70	Madison	80	Vance	70
Columbus	90	Martin	90	Wake	70
Craven	100	McDowell	70	Warren	70
Cumberland	80	Mecklenburg	70	Washington	100
Currituck	100	Mitchell	70	Watauga	70
Dare	110	Montgomery	70	Wayne	80
Davidson	70	Moore	70	Wilkes	70
Davie	70	Nash	80	Wilson	80
Duplin	90	New Hanover	100	Yadkin	70
Durham	70	Northampton	80	Yancey	70
Edgecombe	80	Onslow	100		
Forsyth	70	Orange	70		

(B) Review and Approval

The Engineer is responsible for the review and approval of temporary works' drawings.

Submit the working drawings sufficiently in advance of proposed use to allow for their review, revision (if needed), and approval without delay to the work.

The time period for review of the working drawings does not begin until complete drawings and design calculations, when required, are received by the Engineer.

Do not start construction of any temporary work for which working drawings are required until the drawings have been approved. Such approval does not relieve the Contractor of the responsibility for the accuracy and adequacy of the working drawings.

CONSTRUCTION REQUIREMENTS

All requirements of Section 420 of the *Standard Specifications* apply.

Construct temporary works in conformance with the approved working drawings. Ensure that the quality of materials and workmanship employed is consistent with that assumed in the design of the temporary works. Do not weld falsework members to any portion of the permanent structure unless approved. Show any welding to the permanent structure on the approved construction drawings.

Provide tell-tales attached to the forms and extending to the ground, or other means, for accurate measurement of falsework settlement. Make sure that the anticipated compressive settlement and/or deflection of falsework does not exceed 1 inch. For cast-in-place concrete structures, make sure that the calculated deflection of falsework flexural members does not exceed 1/240 of their span regardless of whether or not the deflection is compensated by camber strips.

(A) Maintenance and Inspection

Inspect and maintain the temporary work in an acceptable condition throughout the period of its use. Certify that the manufactured devices have been maintained in a condition to allow them to safely carry their rated loads. Clearly mark each piece so that its capacity can be readily determined at the job site.

Perform an in-depth inspection of an applicable portion(s) of the temporary works, in the presence of the Engineer, not more than 24 hours prior to the beginning of each concrete placement. Inspect other temporary works at least once a month to ensure that they are functioning properly. Have a North Carolina Registered Professional Engineer inspect the cofferdams, shoring, sheathing, support of excavation structures, and support systems for load tests prior to loading.

(B) Foundations

Determine the safe bearing capacity of the foundation material on which the supports for temporary works rest. If required by the Engineer, conduct load tests to verify proposed bearing capacity values that are marginal or in other high-risk situations.

The use of the foundation support values shown on the contract plans of the permanent structure is permitted if the foundations are on the same level and on the same soil as those of the permanent structure.

Allow for adequate site drainage or soil protection to prevent soil saturation and washout of the soil supporting the temporary works supports.

If piles are used, the estimation of capacities and later confirmation during construction using standard procedures based on the driving characteristics of the pile is permitted. If preferred, use load tests to confirm the estimated capacities; or, if required by the Engineer conduct load tests to verify bearing capacity values that are marginal or in other high risk situations.

The Engineer reviews and approves the proposed pile and soil bearing capacities.

REMOVAL

Unless otherwise permitted, remove and keep all temporary works upon completion of the work. Do not disturb or otherwise damage the finished work.

Remove temporary works in conformance with the contract documents. Remove them in such a manner as to permit the structure to uniformly and gradually take the stresses due to its own weight.

MEASUREMENT AND PAYMENT

Unless otherwise specified, *Falsework and Formwork* will not be directly measured.

Payment at the contract unit prices for the various pay items requiring temporary works will be full compensation for the above falsework and formwork.

SUBMITTAL OF WORKING DRAWINGS (1-31-25)

GENERAL

Submit working drawings in accordance with Article 105-2 of the *Standard Specifications* and this Special Provision. For this Special Provision, "submittals" refers to only those listed in this Special Provision. The list of submittals contained herein does not represent a list of required submittals for the project. Submittals are only necessary for those items as required by the contract. Make submittals that are not specifically noted in this provision directly to the Engineer. Either the Structures Management Unit or the Geotechnical Engineering Unit or both units will jointly review submittals.

If a submittal contains variations from plan details or specifications or significantly affects project cost, field construction or operations, discuss the submittal with and submit all copies to the Engineer. State the reason for the proposed variation in the submittal. To minimize review time, make sure all submittals are complete when initially submitted. Provide a contact name and information with each submittal. Direct any questions regarding submittal requirements to the Engineer, Structures Management Unit contacts or the Geotechnical Engineering Unit contacts noted below.

To facilitate in-plant inspection by NCDOT and approval of working drawings, provide the name, address and telephone number of the facility where fabrication will actually be done if different than shown on the title block of the submitted working drawings. This includes, but is not limited to, precast concrete items, prestressed concrete items and fabricated steel or aluminum items.

ADDRESSES AND CONTACTS

For submittals to the Structures Management Unit, use the following addresses:

Via Email: SMU-wdr@ncdot.gov (do not cc SMU Working Drawings staff)

Via US mail:

Mr. D. N. Snoke, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1581 Mail Service Center
Raleigh, NC 27699-1581

Attention: Mr. J. L. Bolden, P. E.

Via other delivery service:

Mr. D. N. Snoke, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1000 Birch Ridge Drive
Raleigh, NC 27610

Attention: Mr. J. L. Bolden, P. E.

For submittals to the Geotechnical Engineering Unit, use the following addresses:

For projects in Divisions 1-7 (Eastern Regional Office):

Via Email: EastGeotechnicalSubmittal@ncdot.gov

Via US mail:

Mr. Thomas Santee, P. E.
Assistant State Geotechnical
Engineer – Eastern Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Eastern Regional Office
1570 Mail Service Center
Raleigh, NC 27699-1570

Via other delivery service:

Mr. Thomas Santee, P. E.
Assistant State Geotechnical
Engineer – Eastern Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Eastern Regional Office
3301 Jones Sausage Road, Suite 100
Garner, NC 27529

For projects in Divisions 8-14 (Western Regional Office):

Via Email: WestGeotechnicalSubmittal@ncdot.gov

Via US mail or other delivery service:

Mr. Eric Williams, P. E.
Assistant State Geotechnical
Engineer – Western Region
North Carolina Department
of Transportation
Geotechnical Engineering Unit
Western Regional Office
5253 Z Max Boulevard
Harrisburg, NC 28075

The status of the review of structure-related submittals sent to the Structures Management Unit can be viewed from the Unit's website, via the "Drawing Submittal Status" link.

The status of the review of geotechnical-related submittals sent to the Geotechnical Engineering Unit can be viewed from the Unit's website, via the "Geotechnical Construction Submittals" link.

Direct any questions concerning submittal review status, review comments or drawing markups to the following contacts:

Primary Structures Contact:	James Bolden (919) 707 – 6408 jlbolden@ncdot.gov
Secondary Structures Contacts:	Madonna Rorie (919) 707 – 6508 mlrorie@ncdot.gov
Eastern Regional Geotechnical Contact (Divisions 1-7):	Thomas Santee (984) 920-8901 EastGeotechnicalSubmittal@ncdot.gov
Western Regional Geotechnical Contact (Divisions 8-14):	Eric Williams (980)258-6400 WestGeotechnicalSubmittal@ncdot.gov

SUBMITTAL COPIES

Furnish one complete copy of each submittal, including all attachments, to the Engineer. At the same time, submit a copy of the same complete submittal directly to the Structures Management Unit and/or the Geotechnical Engineering Unit as specified in the tables below.

The first table below covers "Structure Submittals." The Engineer will receive review comments and drawing markups for these submittals from the Structures Management Unit. The second table in this section covers "Geotechnical Submittals." The Engineer will receive review comments and drawing markups for these submittals from the Geotechnical Engineering Unit.

Unless otherwise required, submit one set of supporting calculations to either the Structures Management Unit or the Geotechnical Engineering Unit unless both units require submittal copies in which case submit a set of supporting calculations to each unit. Provide additional copies of any submittal as directed.

STRUCTURE SUBMITTALS

Submittal	Submittal Required by Structures Management Unit?	Submittal Required by Geotechnical Engineering Unit?	Contract Reference Requiring Submittal [1]
Arch Culvert Falsework	Y	N	Plan Note, SN Sheet & "Falsework and Formwork"
Box Culvert Falsework [7]	Y	N	Plan Note, SN Sheet & "Falsework and Formwork"
Cofferdams	Y	Y	Article 410-4
Foam Joint Seals [6]	Y	N	"Foam Joint Seals"
Expansion Joint Seals (hold down plate type with base angle)	Y	N	"Expansion Joint Seals"
Expansion Joint Seals (modular)	Y	N	"Modular Expansion Joint Seals"
Expansion Joint Seals (strip seals)	Y	N	"Strip Seal Expansion Joints"
Falsework & Forms [2] (substructure)	Y	N	Article 420-3 & "Falsework and Formwork"
Falsework & Forms (superstructure)	Y	N	Article 420-3 & "Falsework and Formwork"
Girder Erection over Railroad	Y	N	Railroad Provisions
Maintenance and Protection of Traffic Beneath Proposed Structure	Y	N	"Maintenance and Protection of Traffic Beneath Proposed Structure at Station ___"
Metal Bridge Railing	Y	N	Plan Note
Metal Stay-in-Place Forms	Y	N	Article 420-3
Metalwork for Elastomeric Bearings [4,5]	Y	N	Article 1072-8
Miscellaneous Metalwork [4,5]	Y	N	Article 1072-8
Disc Bearings [4]	Y	N	"Disc Bearings"
Overhead and Digital Message Signs (DMS) (metalwork and foundations)	Y	N	Applicable Provisions

Placement of Equipment on Structures (cranes, etc.)	Y	N	Article 420-20
Prestressed Concrete Box Beam (detensioning sequences) [3]	Y	N	Article 1078-11
Precast Concrete Box Culverts	Y	N	"Optional Precast Reinforced Concrete Box Culvert at Station ___"
Prestressed Concrete Cored Slab (detensioning sequences) [3]	Y	N	Article 1078-11
Prestressed Concrete Deck Panels	Y	N	Article 420-3
Prestressed Concrete Girder (strand elongation and detensioning sequences)	Y	N	Articles 1078-8 and 1078-11
Removal of Existing Structure over Railroad	Y	N	Railroad Provisions
Revised Bridge Deck Plans (adaptation to prestressed deck panels)	Y	N	Article 420-3
Revised Bridge Deck Plans (adaptation to modular expansion joint seals)	Y	N	"Modular Expansion Joint Seals"
Sound Barrier Wall (precast items)	Y	N	Article 1077-2 & "Sound Barrier Wall"
Sound Barrier Wall Steel Fabrication Plans [5]	Y	N	Article 1072-8 & "Sound Barrier Wall"
Structural Steel [4]	Y	N	Article 1072-8
Temporary Detour Structures	Y	Y	Article 400-3 & "Construction, Maintenance and Removal of Temporary Structure at Station ____"
TFE Expansion Bearings [4]	Y	N	Article 1072-8

FOOTNOTES

1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Articles refer to the *Standard Specifications*.

2. Submittals for these items are necessary only when required by a note on plans.
3. Submittals for these items may not be required. A list of pre-approved sequences is available from the producer or the Materials & Tests Unit.
4. The fabricator may submit these items directly to the Structures Management Unit.
5. The two sets of preliminary submittals required by Article 1072-8 of the *Standard Specifications* are not required for these items.
6. Submittals for Fabrication Drawings are not required. Submittals for Catalogue Cuts of Proposed Material are required. See Section 5.A of the referenced provision.
7. Submittals are necessary only when the top slab thickness is 18" or greater.

GEOTECHNICAL SUBMITTALS

Submittal	Submittals Required by Geotechnical Engineering Unit	Submittals Required by Structures Management Unit	Contract Reference Requiring Submittal [1]
Drilled Pier Construction Plans [2]	Y	N	Subarticle 411-3(A)
Crosshole Sonic Logging (CSL) Reports [2]	Y	N	Subarticle 411-5(A)(2)
Pile Driving Equipment Data Forms [2,3]	Y	N	Subarticle 450-3(D)(2)
Pile Driving Analyzer (PDA) Reports [2]	Y	N	Subarticle 450-3(F)(3)
Retaining Walls [4]	Y; drawings and calculations	Y; drawings	Applicable Provisions
Temporary Shoring [4]	Y; drawings and calculations	Y; drawings	"Temporary Shoring" & "Temporary Soil Nail Walls"

FOOTNOTES

1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Subarticles refer to the *Standard Specifications*.

2. Submit one hard copy of submittal to the Engineer. Submit a second copy of submittal electronically (PDF via email), US mail or other delivery service to the appropriate Geotechnical Engineering Unit regional office. Electronic submission is preferred.

3. The Pile Driving Equipment Data Form is available from:
   https://connect.ncdot.gov/projects/construction/ConstManRefDocs/PILE%20DRIVING%20EQUIPMENT%20DATA%20FORM.pdf
   See second page of form for submittal instructions.

4. Electronic copy of submittal is required. See referenced provision.

CRANE SAFETY (12-5-25)

GENERAL

Comply with the manufacturer specifications and limitations applicable to the operation of any and all cranes and derricks. Prime contractors, sub-contractors, and fully operated rental companies shall comply with the current Occupational Safety and Health Administration (OSHA) regulations.

Submit all items listed below to the Engineer prior to beginning crane operations. Changes in personnel or equipment must be reported to the Engineer and all applicable items listed below must be updated and submitted prior to continuing with crane operations.

CRANE SAFETY SUBMITTAL LIST

Competent Person: Provide the name and qualifications of the "Competent Person" responsible for crane safety and lifting operations. The named competent person will have the responsibility and authority to stop any work activity due to safety concerns.

Riggers: Provide the qualifications and experience of the persons responsible for rigging operations. Qualifications and experience should include, but not be limited to, weight calculations, center of gravity determinations, selection and inspection of sling and rigging equipment, and safe rigging practices.

Crane Inspections: Inspection records for all cranes shall be current and readily accessible for review upon request.

Certifications: Crane operators shall be certified by the National Commission for the Certification of Crane Operators (NCCCO) or the National Center for Construction Education and Research (NCCER). Other approved nationally accredited programs will be considered upon request. In addition, crane operators shall have a current CDL medical card. Submit a list of crane operator(s) and include current certification for each type of crane operated (small

hydraulic, large hydraulic, small lattice, large lattice) and medical evaluations for each operator.

MEASUREMENT AND PAYMENT

No direct payment will be made for providing information, certifications and documentation required for *Crane Safety*.

GROUT FOR STRUCTURES (12-1-17)

GENERAL

This Special Provision addresses grout for use in pile blockouts, grout pockets, shear keys, dowel holes and recesses for structures. This Special Provision does not apply to grout placed in post-tensioning ducts for bridge beams, girders, decks, end bent caps, or bent caps. Mix and place grout in accordance with the manufacturer's recommendations, the applicable sections of the *Standard Specifications* and this Special Provision.

MATERIAL REQUIREMENT

Unless otherwise noted on the plans, use a Type 3 Grout in accordance with Section 1003 of the *Standard Specifications*.

Initial setting time shall not be less than 10 minutes when tested in accordance with ASTM C266.

Construction loading and traffic loading shall not be allowed until the 3-day compressive strength is achieved.

SAMPLING AND PLACEMENT

Place and maintain components in final position until grout placement is complete and accepted. Concrete surfaces to receive grout shall be free of defective concrete, laitance, oil, grease, and other foreign matter. Saturate concrete surfaces with clean water and remove excess water prior to placing grout.

MEASUREMENT AND PAYMENT

No separate payment will be made for *Grout for Structures*. The cost of the material, equipment, labor, placement, and any incidentals necessary to complete the work shall be considered incidental to the structure item requiring grout.

CONCRETE MEDIAN (SPECIAL)

DESCRIPTION

Construct the proposed concrete median in accordance with the details shown on the plans, applicable sections of the Standard Specifications and this special provision.

MATERIALS

Use Class AA concrete in accordance with Section 1000 of the Standard Specifications. Provide reinforcing steel as shown in the plans and in accordance with Section 1070 of the Standard Specifications.

MEASUREMENT AND PAYMENT

The lump sum price bid for Concrete Median will be full compensation for all labor, tools, equipment, materials and any incidentals necessary to construct the concrete median as detailed on the plans.

Payment will be made under:

Pay Item	Pay Unit
Concrete Median	Lump Sum

SURFACE PREPARATION (SPECIAL)

GENERAL

This Special Provision addresses the surface preparation activities required prior to the placement of the concrete median as detailed on the plans or as directed by the Engineer. Unless specifically mentioned below, all requirements specified for the bridge deck are also required for the approach slabs.

DEFINITIONS

Scarification shall consist of the removal of any asphalt wearing surface and concrete to the limits shown on the plans.

EQUIPMENT

Use the following surface preparation equipment:

(A) Scarifying equipment that is a power-operated, mechanical grinder capable of removing a minimum depth of ¼" for each pass.

(B) Equipment capable of sawing concrete to the specified plan depth.

(C) Power driven hand tools for removal of concrete are required that meet the following requirements:

(1) Pneumatic hammers weighing a nominal 35 lbs. or less.
(2) Pneumatic hammer chisel-type bits that do not exceed the diameter of the shaft in width.

(D) Hand tools such as hammers and chisels for removal of final particles of concrete.

(E) Self-propelled vacuum capable of picking up dust and other loose material from prepared deck surface.

The equipment must operate at a noise level less than 90 decibels at a distance of 50 feet.

MANAGEMENT AND DISPOSAL OF CONCRETE GRINDING RESIDUALS

The contractor must collect and properly dispose of all solids from bridge deck preparation, otherwise referred to as Concrete Grinding Residuals (CGR). Prior to beginning work, submit for approval by the Engineer a Management Plan. Prepare the plan in accordance with the NCDOT Guidelines on the Management and Disposal of CGR available at:

https://connect.ncdot.gov/resources/Environmental/Environmental Permits and Guidelines/Forms/AllItems.aspx

Prior to final payment, the contractor must submit a paper copy of all completed records pertaining to disposal of CGR. All costs associated with Management and Disposal of CGR shall be included in the payment of other items.

OSP PLAN SUBMITTAL

Prior to beginning surface preparation activities, the Contractor shall submit for review and approval the Surface Preparation (SP) Plan. The SP Plan shall detail the type of equipment that is intended to be used and the means by which the Contractor will achieve the following requirements:

(A) Scarification of deck to required depth.
(B) Field verification that required scarification depth was achieved within limits.

SURFACE PREPARATION

Remove any existing asphalt overlay and bridge deck concrete to the limits shown on the plans or as directed by the Engineer to allow placement of the proposed concrete median.

Remove and dispose of all concrete and asphalt, and thoroughly clean the scarified surface.

Pneumatic hammers and hand tools may be substituted for the mechanical grinder unit in inaccessible or inconvenient areas.

The Engineer will re-inspect after each removal and require additional removals until compliance with plans and specifications are met.

Regardless of the method of removal, the removal operation shall be stopped if it is determined that sound concrete is being removed to a depth greater than required by the plans.

Removal of concrete debris shall be accomplished either by hand or mechanical means. All concrete debris shall become the property of the Contractor and shall be legally disposed of at the contractor's expense. The contractor shall be responsible for disposing of all debris generated by the scarification operations.

Any areas of the prepared surface contaminated by oil or other materials detrimental to good bond as a result of the contractor's operations shall be cleaned at the contractor's expense.

MEASUREMENT AND PAYMENT

No separate payment will be made for *Surface Preparation.* The contract price bid for *Concrete Median* will be full compensation for the scarification of the concrete deck and approach slab and the cleaning and disposal of the concrete debris.

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0022000000-E	225	UNCLASSIFIED EXCAVATION	47,200 CY		
0004	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR		
0005	0057000000-E	226	UNDERCUT EXCAVATION	550 CY		
0006	0063000000-N	SP	GRADING	Lump Sum	L.S.	
0007	0134000000-E	240	DRAINAGE DITCH EXCAVATION	700 CY		
0008	0141000000-E	240	BERM DITCH CONSTRUCTION	220 LF		
0009	0192000000-N	260	PROOF ROLLING	10 HR		
0010	0194000000-E	265	SELECT GRANULAR MATERIAL, CLASS III	400 CY		
0011	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	100 SY		
0012	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	460 TON		
0013	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	1,450 SY		
0014	0343000000-E	310	15" SIDE DRAIN PIPE	448 LF		
0015	0345000000-E	310	24" SIDE DRAIN PIPE	68 LF		
0016	0348000000-E	310	**" SIDE DRAIN PIPE ELBOWS (15")	8 EA		
0017	0348000000-E	310	**" SIDE DRAIN PIPE ELBOWS (24")	4 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	1,080 LF		
0019	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	96 LF		
0020	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	340 LF		
0021	0384000000-E	310	30" RC PIPE CULVERTS, CLASS III	84 LF		
0022	0448000000-E	310	****" RC PIPE CULVERTS, CLASS IV (48")	120 LF		
0023	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	552 LF		
0024	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	556 LF		
0025	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	824 LF		
0026	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	64 LF		
0027	0576000000-E	310	**" CS PIPE CULVERTS, *****" THICK (54", 0.079")	24 LF		
0028	0995000000-E	340	PIPE REMOVAL	1,089 LF		
0029	1099500000-E	505	SHALLOW UNDERCUT	100 CY		
0030	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	1,200 TON		
0031	1110000000-E	510	STABILIZER AGGREGATE	250 TON		
0032	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	2,800 SY		
0033	1121000000-E	520	AGGREGATE BASE COURSE	1,901 TON		
0034	1220000000-E	545	INCIDENTAL STONE BASE	100 TON		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (1-1/2")	9,110 SY		
0036	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***" DEPTH (3")	15,060 SY		
0037	1330000000-E	607	INCIDENTAL MILLING	250 SY		
0038	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	7,340 TON		
0039	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	6,130 TON		
0040	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	8,800 TON		
0041	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	1,145 TON		
0042	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	25 TON		
0043	1841000000-E	665	GENERIC PAVING ITEM MILLED RUMPLE STRIPS (ASPHALT CONCRETE), (16")	2,930 LF		
0044	2022000000-E	815	SUBDRAIN EXCAVATION	336 CY		
0045	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	1,000 SY		
0046	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	168 CY		
0047	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	1,000 LF		
0048	2070000000-N	815	SUBDRAIN PIPE OUTLET	2 EA		
0049	2077000000-E	815	6" OUTLET PIPE	12 LF		
0050	2209000000-E	838	ENDWALLS	6 CY		
0051	2220000000-E	838	REINFORCED ENDWALLS	5.1 CY		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	46 EA		
0053	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	4.866 CY		
0054	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	58.3 LF		
0055	2364000000-N	840	FRAME WITH TWO GRATES, STD 840.16	7 EA		
0056	2365000000-N	840	FRAME WITH TWO GRATES, STD 840.22	15 EA		
0057	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	2 EA		
0058	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	10 EA		
0059	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	11 EA		
0060	2396000000-N	840	FRAME WITH COVER, STD 840.54	4 EA		
0061	2451000000-N	852	CONCRETE TRANSITIONAL SECTION FOR DROP INLET	6 EA		
0062	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	3,470 LF		
0063	2591000000-E	848	4" CONCRETE SIDEWALK	900 SY		
0064	2605000000-N	848	CONCRETE CURB RAMPS	20 EA		
0065	2619000000-E	850	4" CONCRETE PAVED DITCH	42 SY		
0066	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	1,760 SY		
0067	2724000000-E	857	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	110 LF		
0068	2800000000-N	858	ADJUSTMENT OF CATCH BASINS	1 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0069	2905000000-N	859	CONVERT EXISTING DROP INLET TO JUNCTION BOX	2 EA		
0070	3030000000-E	862	STEEL BEAM GUARDRAIL	2,375 LF		
0071	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	10 EA		
0072	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	3 EA		
0073	3287000000-N	862	GUARDRAIL END UNITS, TYPE TL-3	4 EA		
0074	3317000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE B-77	3 EA		
0075	3360000000-E	863	REMOVE EXISTING GUARDRAIL	980 LF		
0076	3536000000-E	866	CHAIN LINK FENCE, 48" FABRIC	1,118 LF		
0077	3542000000-E	866	METAL LINE POSTS FOR 48" CHAIN LINK FENCE	106 EA		
0078	3548000000-E	866	METAL TERMINAL POSTS FOR 48" CHAIN LINK FENCE	5 EA		
0079	3628000000-E	876	RIP RAP, CLASS I	422 TON		
0080	3635000000-E	876	RIP RAP, CLASS II	446 TON		
0081	3649000000-E	876	RIP RAP, CLASS B	187 TON		
0082	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	3,005 SY		
0083	4060000000-E	903	SUPPORTS, BREAKAWAY STEEL BEAM	1,054 LB		
0084	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	800 LF		
0085	4096000000-N	904	SIGN ERECTION, TYPE D	9 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0086	4102000000-N	904	SIGN ERECTION, TYPE E	27 EA		
0087	4108000000-N	904	SIGN ERECTION, TYPE F	3 EA		
0088	4114000000-N	904	SIGN ERECTION, MILEMARKERS	1 EA		
0089	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (A)	4 EA		
0090	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (B)	2 EA		
0091	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (D)	1 EA		
0092	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (E)	1 EA		
0093	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	20 EA		
0094	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	312 SF		
0095	4402000000-E	SP	HIGH VISIBILITY STATIONARY SIGNS	2,564 SF		
0096	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	160 SF		
0097	4407000000-E	SP	HIGH VISIBILITY PORTABLE SIGNS	109 SF		
0098	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	88 SF		
0099	4415000000-N	1115	FLASHING ARROW BOARD	2 EA		
0100	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	4 EA		
0101	4424000000-N	SP	WORK ZONE PRESENCE LIGHTING	14 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0102	4430000000-N	1130	DRUMS	104 EA		
0103	4432000000-N	SP	HIGH VISIBILITY DRUMS	29 EA		
0104	4434000000-N	1140	SEQUENTIAL FLASHING WARNING LIGHTS	20 EA		
0105	4445000000-E	1145	BARRICADES (TYPE III)	72 LF		
0106	4447000000-E	SP	PEDESTRIAN CHANNELIZING DEVICES	24 LF		
0107	4455000000-N	1150	FLAGGER	14 DAY		
0108	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	8 EA		
0109	4485000000-E	1170	PORTABLE CONCRETE BARRIER	4,825 LF		
0110	4490000000-E	1170	PORTABLE CONCRETE BARRIER (ANCHORED)	3,125 LF		
0111	4510000000-N	1190	LAW ENFORCEMENT	10,000 HR		
0112	4516000000-N	1180	SKINNY DRUM	6 EA		
0113	4520000000-N	1266	TUBULAR MARKERS (FIXED)	411 EA		
0114	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM PEDESTRIAN TRANSPORT SERVICE	470 EA		
0115	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	425 EA		
0116	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	5,746 LF		
0117	4688000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)	16,465 LF		
0118	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	72 LF		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0119	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	964 LF		
0120	4709000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	890 LF		
0121	4720000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS)	3 EA		
0122	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	42 EA		
0123	4815000000-E	1205	PAINT PAVEMENT MARKING LINES (6")	11,104 LF		
0124	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	555 LF		
0125	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	144 LF		
0126	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	21 EA		
0127	4847500000-E	SP	WORK ZONE PERFORMANCE PAVEMENT MARKING LINES, 6"	43,199 LF		
0128	4847600000-E	SP	WORK ZONE PERFORMANCE PAVEMENT MARKING LINES, 12"	637 LF		
0129	4855000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (6")	15,959 LF		
0130	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	24 LF		
0131	4895000000-N	SP	GENERIC PAVEMENT MARKING ITEM POLYCARBONATE H-SHAPED MARKERS	274 EA		
0132	5015000000-E	1401	120' HIGH MOUNT STANDARD	1 EA		
0133	5020000000-N	1401	PORTABLE DRIVE UNIT	1 EA		
0134	5025000000-E	SP	HIGH MOUNT FOUNDATIONS	9 CY		
0135	5030000000-N	SP	HIGH MOUNT LUMINAIRES ******** (560W LED)	8 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0136	5150000000-E	1409	ELECTRICAL DUCT, TYPE **, SIZE ***** (TL, 3")	100 LF		
0137	5155000000-E	1409	ELECTRICAL DUCT, TYPE BD, SIZE ***** (1.5")	50 LF		
0138	5155000000-E	1409	ELECTRICAL DUCT, TYPE BD, SIZE ***** (3")	30 LF		
0139	5220000000-E	1410	** #2 W/G FEEDER CIRCUIT IN *****" CONDUIT (2, 1.5")	1,050 LF		
0140	5240000000-N	1411	ELECTRICAL JUNCTION BOXES ********** (HM18)	1 EA		
0141	5240000000-N	1411	ELECTRICAL JUNCTION BOXES ********** (IG18)	3 EA		
0142	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.	
0143	5260000000-N	SP	GENERIC LIGHTING ITEM SMART NODE STORAGE	Lump Sum	L.S.	
0144	5270000000-N	SP	GENERIC LIGHTING ITEM REMOVE HIGH MOUNT FOUNDATION	1 EA		
0145	5270000000-N	SP	GENERIC LIGHTING ITEM REMOVE HIGH MOUNT STANDARD	1 EA		
0146	6000000000-E	1605	TEMPORARY SILT FENCE	9,115 LF		
0147	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	675 TON		
0148	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	1,940 TON		
0149	6012000000-E	1610	SEDIMENT CONTROL STONE	1,210 TON		
0150	6015000000-E	1615	TEMPORARY MULCHING	30 ACR		
0151	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	1,800 LB		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0152	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	9.5 TON		
0153	6024000000-E	1622	TEMPORARY SLOPE DRAINS	1,170 LF		
0154	6029000000-E	SP	SAFETY FENCE	380 LF		
0155	6030000000-E	1630	SILT EXCAVATION	4,650 CY		
0156	6036000000-E	1631	MATTING FOR EROSION CONTROL	35,000 SY		
0157	6037000000-E	1629	COIR FIBER MAT	100 SY		
0158	6042000000-E	1632	1/4" HARDWARE CLOTH	2,075 LF		
0159	6043000000-E	1644	LOW PERMEABILITY GEOTEXTILE	100 SY		
0160	6070000000-N	1639	SPECIAL STILLING BASINS	2 EA		
0161	6071002000-E	1642	FLOCCULANT	570 LB		
0162	6071012000-E	1642	COIR FIBER WATTLE	620 LF		
0163	6071014000-E	1642	COIR FIBER WATTLE BARRIER	3,230 LF		
0164	6071030000-E	1640	COIR FIBER BAFFLE	580 LF		
0165	6071050000-E	1644	**" SKIMMER (1-1/2")	3 EA		
0166	6084000000-E	1660	SEEDING & MULCHING	30 ACR		
0167	6087000000-E	1660	MOWING	15 ACR		
0168	6090000000-E	1661	SEED FOR REPAIR SEEDING	300 LB		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0169	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.75 TON		
0170	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	625 LB		
0171	6108000000-E	1665	FERTILIZER TOPDRESSING	18.5 TON		
0172	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0173	6114800000-N	SP	MANUAL LITTER REMOVAL	10 MHR		
0174	6114900000-E	SP	LITTER DISPOSAL	1 TON		
0175	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	25 EA		
0176	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	3 EA		
0177	6123000000-E	1670	REFORESTATION	0.25 ACR		
0178	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION CLEANOUT	90 EA		
0179	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION, TYPE 1	30 EA		
0180	6132000000-N	SP	GENERIC EROSION CONTROL ITEM PREFABRICATED CONCRETE WASHOUT	15 EA		
0181	7048500000-E	1705	PEDESTRIAN SIGNAL HEAD (16", 1 SECTION W/COUNTDOWN)	18 EA		
0182	7060000000-E	1705	SIGNAL CABLE	6,750 LF		
0183	7120000000-E	1705	VEHICLE SIGNAL HEAD (12", 3 SECTION)	42 EA		
0184	7132000000-E	1705	VEHICLE SIGNAL HEAD (12", 4 SECTION)	5 EA		
0185	7180000000-N	1706	BACKPLATE	47 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0186	7264000000-E	1710	MESSENGER CABLE (3/8")	5,050 LF		
0187	7279000000-E	1715	TRACER WIRE	550 LF		
0188	7300000000-E	1715	UNPAVED TRENCHING (**********) (1, 2")	50 LF		
0189	7300000000-E	1715	UNPAVED TRENCHING (**********) (2, 2")	400 LF		
0190	7301000000-E	1715	DIRECTIONAL DRILL (**********) (2, 2")	750 LF		
0191	7312000000-N	1716	JUNCTION BOX (**********) (SPECIAL OVERSIZED, HEAVY DUTY)	3 EA		
0192	7348000000-N	1716	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	6 EA		
0193	7360000000-N	1720	WOOD POLE	5 EA		
0194	7372000000-N	1721	GUY ASSEMBLY	17 EA		
0195	7408000000-E	1722	1" RISER WITH WEATHERHEAD	1 EA		
0196	7420000000-E	1722	2" RISER WITH WEATHERHEAD	5 EA		
0197	7430000000-N	1722	HEAT SHRINK TUBING RETROFIT KIT	1 EA		
0198	7432000000-E	1722	2" RISER WITH HEAT SHRINK TUBING	5 EA		
0199	7456100000-E	1726	LEAD-IN CABLE (14-2)	3,000 LF		
0200	7516000000-E	1730	COMMUNICATIONS CABLE (** FIBER) (24)	2,800 LF		
0201	7540000000-N	1731	SPLICE ENCLOSURE	5 EA		
0202	7541000000-N	1731	MODIFY SPLICE ENCLOSURE	2 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0203	7552000000-N	1731	INTERCONNECT CENTER	3 EA		
0204	7566000000-N	1733	DELINEATOR MARKER	9 EA		
0205	7575160000-E	1734	REMOVE EXISTING COMMUNICATIONS CABLE	2,000 LF		
0206	7575180000-N	1735	CABLE TRANSFER	5 EA		
0207	7576000000-N	SP	METAL STRAIN SIGNAL POLE	10 EA		
0208	7613000000-N	SP	SOIL TEST	10 EA		
0209	7614100000-E	SP	DRILLED PIER FOUNDATION	70 CY		
0210	7636000000-N	1745	SIGN FOR SIGNALS	18 EA		
0211	7642100000-N	1743	TYPE I POST WITH FOUNDATION	2 EA		
0212	7642200000-N	1743	TYPE II PEDESTAL WITH FOUNDATION	16 EA		
0213	7684000000-N	1750	SIGNAL CABINET FOUNDATION	3 EA		
0214	7696000000-N	1751	CONTROLLERS WITH CABINET (**********) (2070LX, BASE MOUNTED)	3 EA		
0215	7901000000-N	1753	CABINET BASE EXTENDER	3 EA		
0216	7980000000-N	SP	GENERIC SIGNAL ITEM DIGITAL CCTV CAMERA ASSEMBLY	1 EA		
0217	7980000000-N	SP	GENERIC SIGNAL ITEM MICROWAVE VEHICLE DETECTOR - MULTIPLE ZONES	13 EA		
0218	7980000000-N	SP	GENERIC SIGNAL ITEM NON-INTRUSIVE DETECTION SYSTEM PROCESSOR	3 EA		
0219	7980000000-N	SP	GENERIC SIGNAL ITEM SITE SURVEY	3 EA		

County: CATAWBA

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0220	7985000000-N	SP	GENERIC SIGNAL ITEM TRAINING FOR NON-INTRUSIVE DETECTION	Lump Sum	L.S.	
0221	7990000000-E	SP	GENERIC SIGNAL ITEM MMFO COMMUNICATIONS CABLE (12-FIBER)	2,250 LF		
0222	1891500000-N	SP	GENERIC PAVING ITEM CONCRETE MEDIAN	Lump Sum	L.S.	

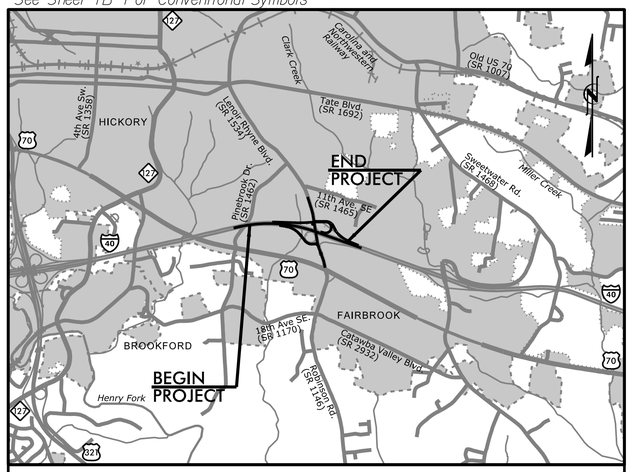
1333/Jul27/Q341687.266/D949758248000/E222 **Total Amount Of Bid For Entire Project :**

09/08/99

TIP PROJECT: I-5716

CONTRACT: C205195

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



VICINITY MAP (NTS)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

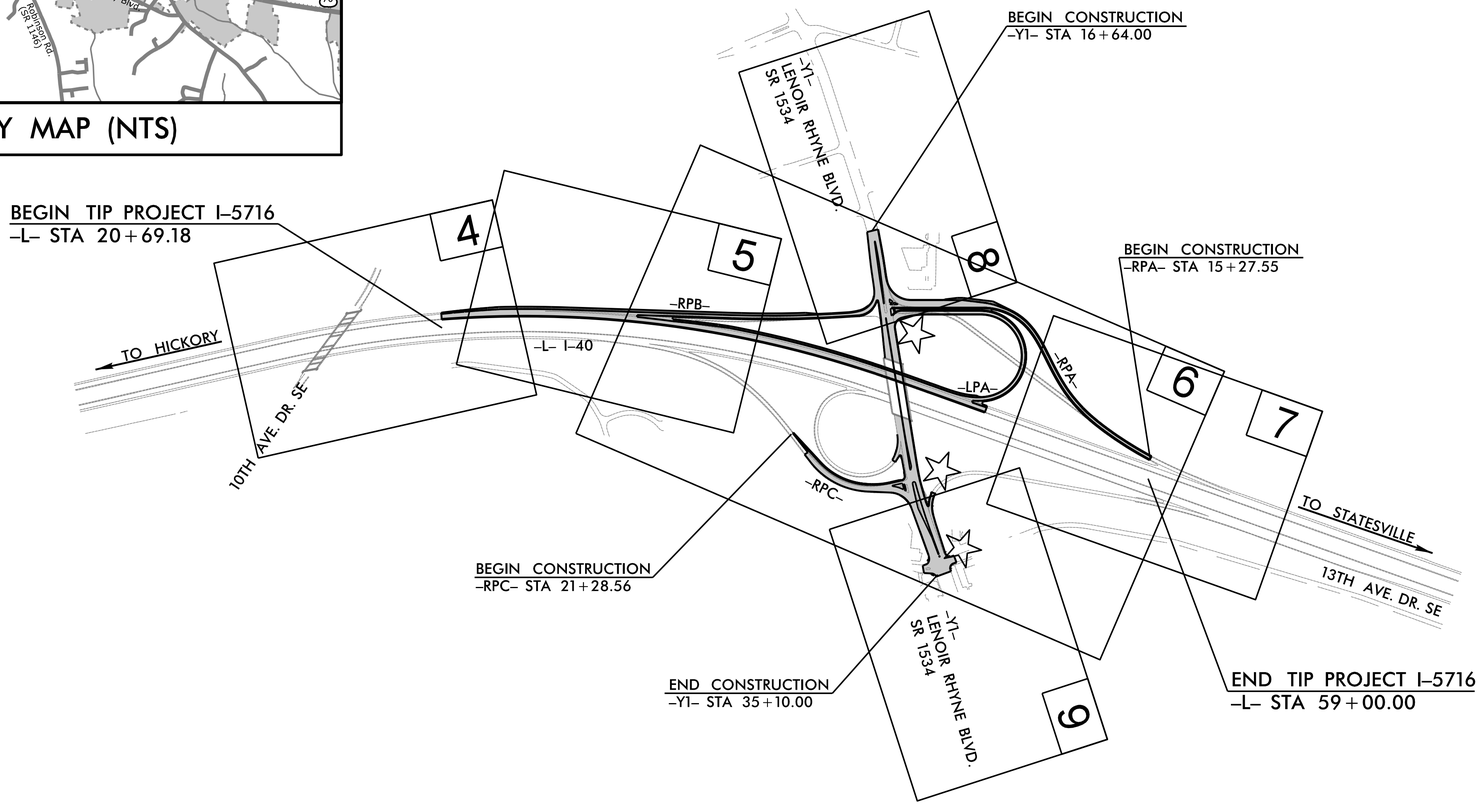
CATAWBA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5716	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50133.1.FS1	NHPP-0402(166)	PE
50133.2.1	NHPP-0402(166)	R/W
50133.2.2		Util.
50133.3.1	0402166	Const.

LOCATION: I-40 AT SR 1007 (LENOIR RHYNE BOULEVARD) CONSTRUCT INTERCHANGE IMPROVEMENTS

TYPE OF WORK: DRAINAGE, SIGNALS, GRADING, & PAVING

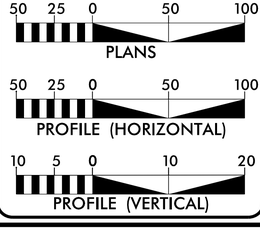


SIGNAL UPGRADE

NOTES:
1. THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.
2. THIS PROJECT IS LOCATED WITHIN THE MUNICIPAL BOUNDARY OF THE TOWN OF HICKORY.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2026 = 71494
ADT 2040 = 75476
K = 9 %
D = 55 %
T = 10 % *
V = 70 MPH
* TTST = 7% DUAL = 3%
TIER = STATEWIDE
FUNC CLASS = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5716 = 0.726 MI.
LENGTH STRUCTURE TIP PROJECT I-5716 = 0.000 MI.
TOTAL LENGTH TIP PROJECT I-5716 = 0.726 MI.

AMT
NCBELS LICENSE # F-1049

Prepared for the North Carolina Department of Transportation in the Office of:

A. MORTON THOMAS AND ASSOCIATES, INC.
CONSULTING ENGINEERS
900 RIDGEFIELD DRIVE SUITE 125, RALEIGH, NC 27609
(919) 833-9909 FAX (919) 855-5687
EMAIL: AMT@AMTENGINEERING.COM

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JULY 19, 2019

LETTING DATE:
AUGUST 18, 2026

JASON T. GADDY, PE
PROJECT ENGINEER

AUSTIN B. CARPENTER, PE
PROJECT DESIGN ENGINEER

NATHAN ADIMA, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

Signed by: Josh Dalton
1089AD8C14084C3...
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON
7/22/2026
P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

DocuSigned by: Jason T. Gaddy
BAE5D64400E5486...
NORTH CAROLINA PROFESSIONAL SEAL 045246 ENGINEER JASON T. GADDY
7/22/2026
P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

7/22/2026
X:\Raleigh\I4-568 - NCDOT- I-5716 I-40 Lenoir-Rhyne Interchange\05-CAD\I5716\Roadway\Proj\I5716_Rdy_tsh.dgn
aarpenter

12/2/2016

PROJECT REFERENCE NO.	SHEET NO.
I-5716	1A

INDEX OF SHEETS & LIST OF STANDARD DRAWINGS

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARDS
1B	CONVENTIONAL SYMBOLS
2A-1 THRU 2A-3	PAVEMENT SCHEDULE, TYPICAL SECTIONS AND WEDGING DETAILS
2B-1 THRU 2B-2	ROADWAY INTERSECTION DETAILS
2B-3	SHEAR POINT LAYOUT DIAGRAM
2C-1 THRU 2C-8	DETAILS USED IN LIEU OF STANDARDS
3B-1	ROADWAY SUMMARIES (CHAIN LINK FENCE, GUARDRAIL, CURB & GUTTER AND SIDEWALK)
3B-2	ROADWAY SUMMARY (EARTHWORK)
3D-1 THRU 3D-4	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 9	PLAN SHEETS
10 THRU 16	PROFILE SHEETS
RW01 THRU RW07	SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENT,AND PROPERTY TIES
TMP-1 THRU TMP-37	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-7	PAVEMENT MARKING PLANS
E-1	ELECTRICAL PLANS
EC-1 THRU EC-15	EROSION CONTROL SHEETS
RF-1	REFORESTATION DETAIL
SIGN-1 THRU SIGN-5	SIGNING PLANS
SD-1 THRU SD-3	SIGN DESIGN SHEETS
SIG-1 THRU SIG-12.3	SIGNAL PLAN SHEETS
SCP-1 THRU SCP-19	SYSTEM COMMUNICATION PLANS
UO-1 THRU UO-3	UTILITY BY OTHERS SHEETS
X-1	CROSS SECTION INDEX
X-1A	CROSS SECTION SUMMARY SHEET
X-2 THRU X-41	CROSS-SECTIONS
S-1 THRU S-2	STRUCTURE PLANS

LIST OF STANDARD DRAWINGS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - 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
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Method III
225.01	Guide for Grading Subgrade - Interstate and Freeway
225.03	Deceleration and Acceleration Lanes
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.05	Method of Obtaining Superelevation - Divided Highways
225.06	Method of Grading Sight Distances at Intersections
225.09	Guide for Shoulder and Ditch Transition at Grade Separations
240.01	Guide for Berm Ditch Construction
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve Method I
560.02	Method of Shoulder Construction - High Side of Superelevated Curve Method II
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
610.01	Guide for Paving Shoulders Under Bridges - Method I
654.01	Pavement Repairs
665.01	Asphalt Shoulders - Milled Rumble Strips
665.02	Limits for Asphalt Shoulders - Milled Rumble Strips
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
838.01	Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90° Skew
838.11	Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90° Skew
838.21	Reinforced Concrete Endwalls - for Single 54" Pipe 90° Skew
838.45	Notes for Reinforced Concrete Endwall - Std. Dwg's 838.21 thru 838.40
838.51	Reinforced Brick Endwall - for Single 54" Pipe 90°Skew
838.75	Notes for Reinforced Brick Endwall - Std. Dwg's 838.51 thru 838.70
838.80	Precast Concrete Endwall
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.17	Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.22	Frames and Wide Slot Sag Grates
840.25	Anchorage for Frames - Brick, Concrete, or Precast
840.26	Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.28	Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.35	Traffic Bearing Grated Drop Inlet - for Double Frame and Grates
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.06	Curb Ramp
850.10	Guide for Berm Ditch Outlet - 15" and 18" Pipe
850.11	Guide for Berm Ditch Outlet - 24" and 30" Pipe
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands
857.01	Precast Reinforced Concrete Barrier - 41" Single Faced
862.01	Guardrail Placement
862.02	Guardrail Installation
866.01	Chain Link Fence - 4', 5', and 6' High Fence
876.01	Rip Rap in Channels and Ditches
876.02	Guide to Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

GENERAL NOTES

GENERAL NOTES: 2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 AND 225.05 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS.SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01 & 560.02

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

BERM DITCHES:

BERM DITCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 240.01 AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

UTILITIES:

UTILITIES PRESENT ON THIS PROJECT ARE:
DUKE ENERGY, PIEDMONT NATURAL GAS, BRIGHTSPEED, METRONET, CHARTER, AND CITY OF HICKORY WATER, NCDOT IT FIBER CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES WITHIN WORK AREAS BEFORE STARTING WORK.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

CURB RAMPS:

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.06.

ROCK:

ROCK IS ANTICIPATED BETWEEN RPA STA. 15+50 TO 24+50 AND LPA STA. 14+75 TO 16+25.

PROJECT REFERENCE NO.	SHEET NO.
I-5716	2A-1

ROADWAY DESIGN ENGINEER — SEAL 045246, JASON T. GADDY, 7/21/2026

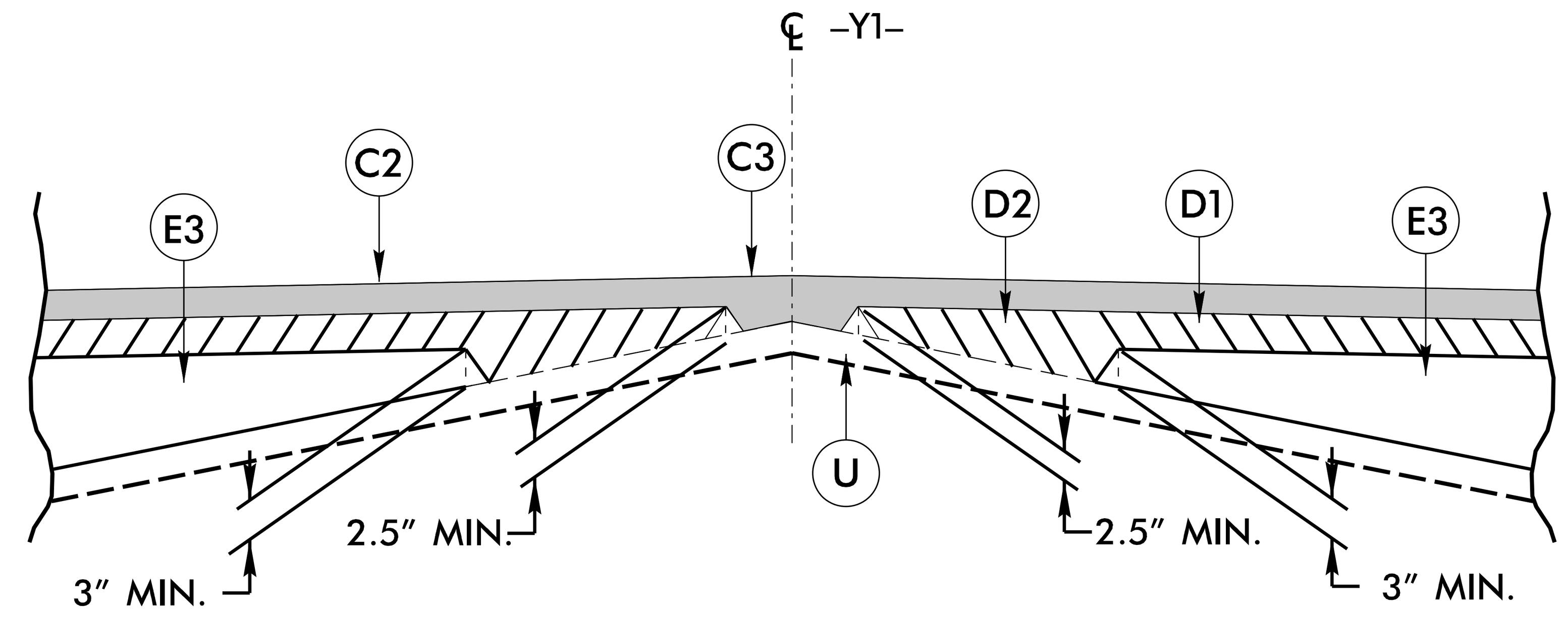
PAVEMENT DESIGN ENGINEER — SEAL 024964, JOSEPH T. HOLLAND, 7/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

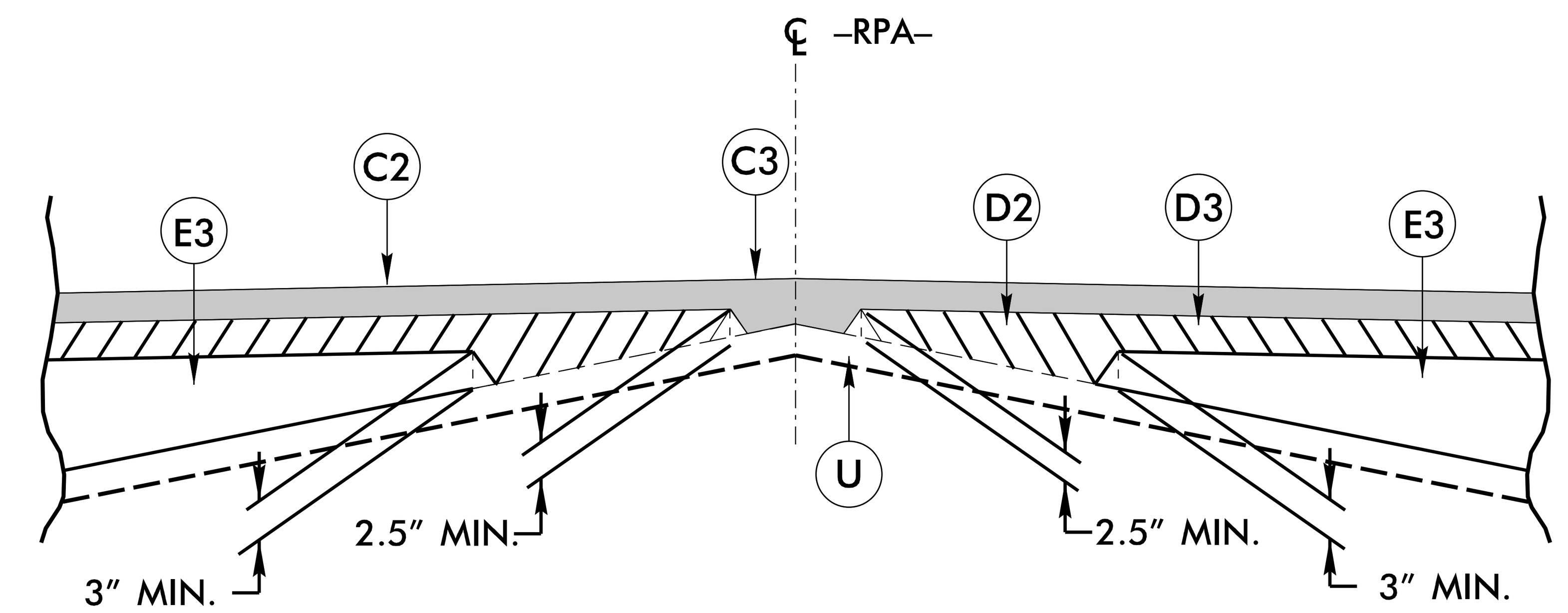
AMT
A. Morton Thomas and Associates, Inc.
CONSULTING ENGINEERS
900 RIDGEFIELD DRIVE SUITE 125, RALEIGH, NC 27609
EMAIL: AMT1@AMTENGINEERING.COM
NCBELS LICENSE # F-1049

FINAL PAVEMENT SCHEDULE

C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	R1	2'-6" CONCRETE CURB AND GUTTER
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2.0" IN DEPTH.	R2	5" MONOLITHIC CONCRETE ISLAND (KEYED IN, HIGH EARLY STRENGTH CONCRETE)
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	R3	5" CONCRETE MEDIAN ISLAND (HIGH EARLY STRENGTH CONCRETE, SEE STRUCTURES PLANS)
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.	S	4" CONCRETE SIDEWALK
E1	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL
E2	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	U	EXISTING PAVEMENT
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT GREATER THAN 5.5" OR LESS THAN 3" IN DEPTH	V1	1.5" MILLING
J1	PROP. 6" AGGREGATE BASE COURSE	V2	3" MILLING
K	PROP 8" CLASS IV SUBGRADE STABILIZATION	V3	INCIDENTAL MILLING
N	GEOTEXTILE FOR SUBGRADE STABILIZATION	W	WEDGING
NOTES: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.		Y	MILLED RUMBLE STRIPS

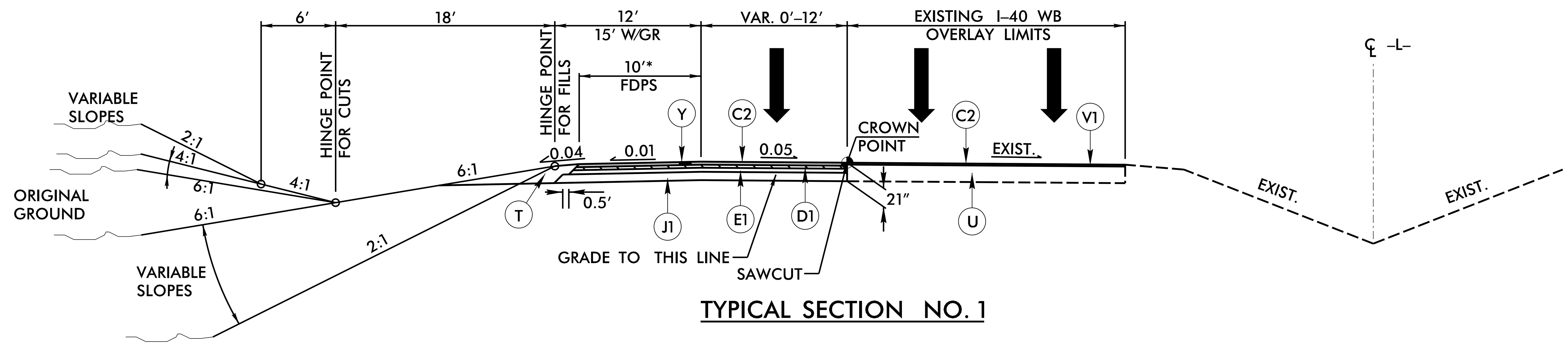


STANDARD WEDGING DETAIL



TEMPORARY WEDGING DETAIL – RAMP A

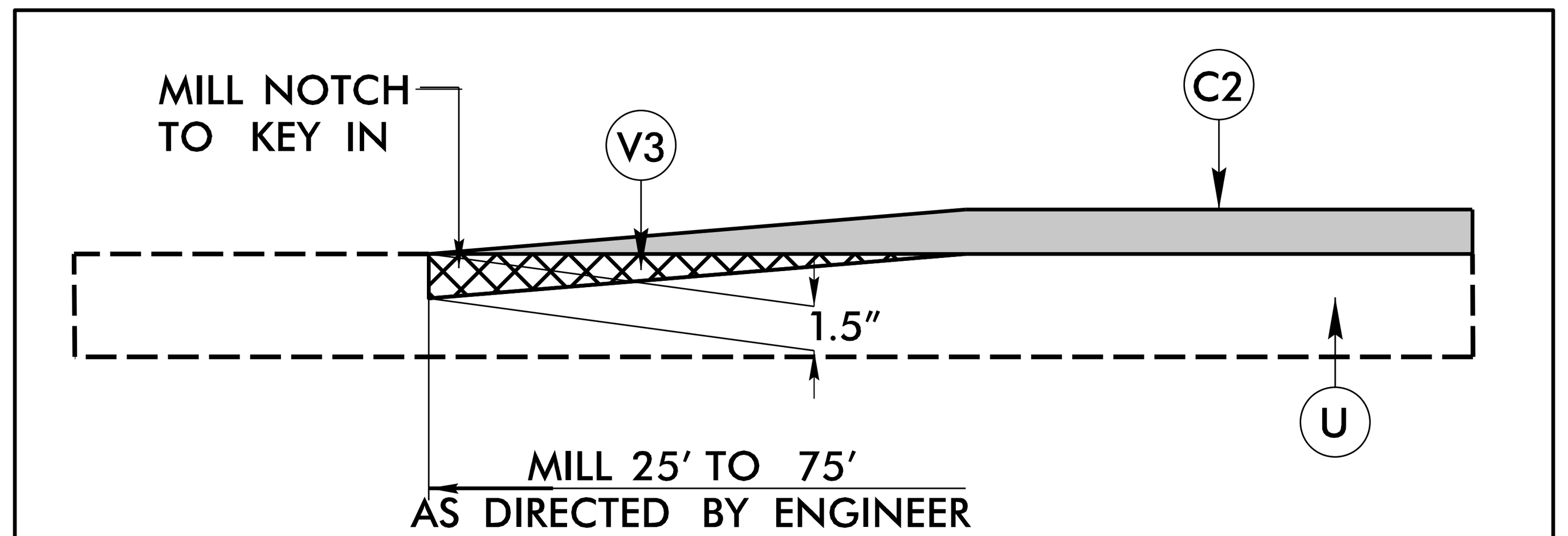
SEE TMP PLANS FOR LOCATIONS



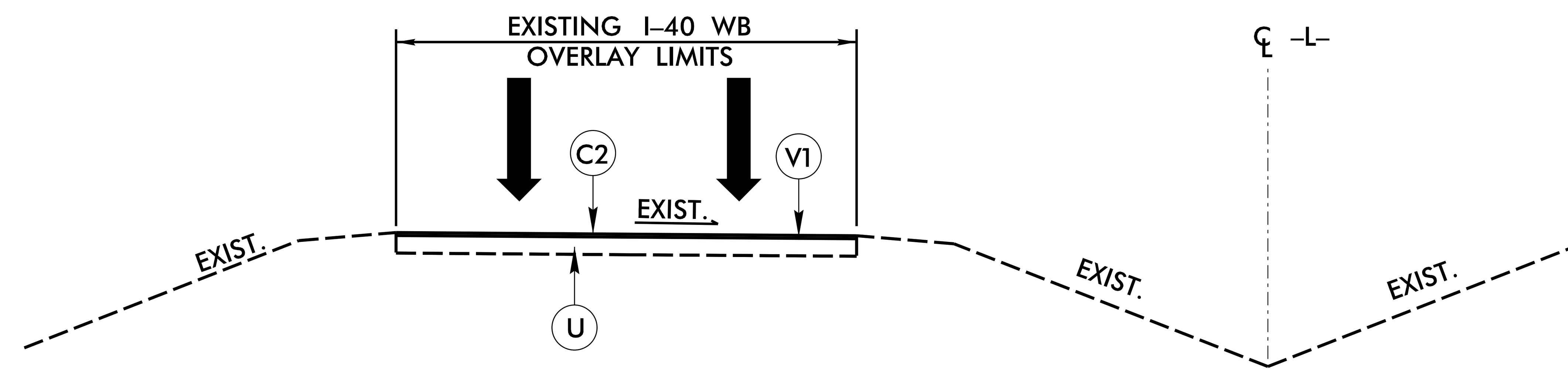
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
–L– STA. 20+69.18 TO STA. 47+05.43

* PAVE TO FACE OF GUARDRAIL



KEY–IN DETAIL



TYPICAL SECTION NO. 1A

USE TYPICAL SECTION NO. 1A
–L– STA. 47+05.43 TO STA. 49+75.00

6/2/99

PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
C2	3" S9.5C
C3	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	8" B25.0C
E2	4" B25.0C
E3	VAR. B25.0C
J1	4" ABC
K	8" CLASS IV
N	GEOTEXTILE
R1	2'-6" C & G
R2	5" MONO. ISLAND (KEYED IN)
R3	5" CONCRETE MEDIAN ISLAND
S	4" CONC. SW
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3" MILLING
V3	INCID. MILLING
W	WEDGING
Y	RUMBLE STRIPS

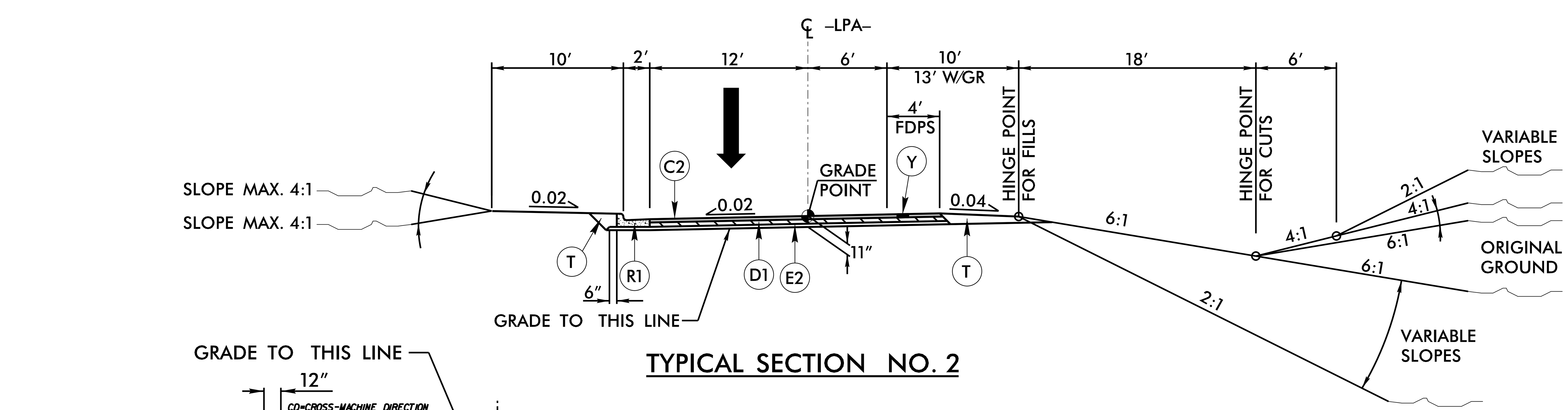
PROJECT REFERENCE NO.	SHEET NO.
I-5716	2A-2

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045246 JASON T. GADDY — 7/21/2026

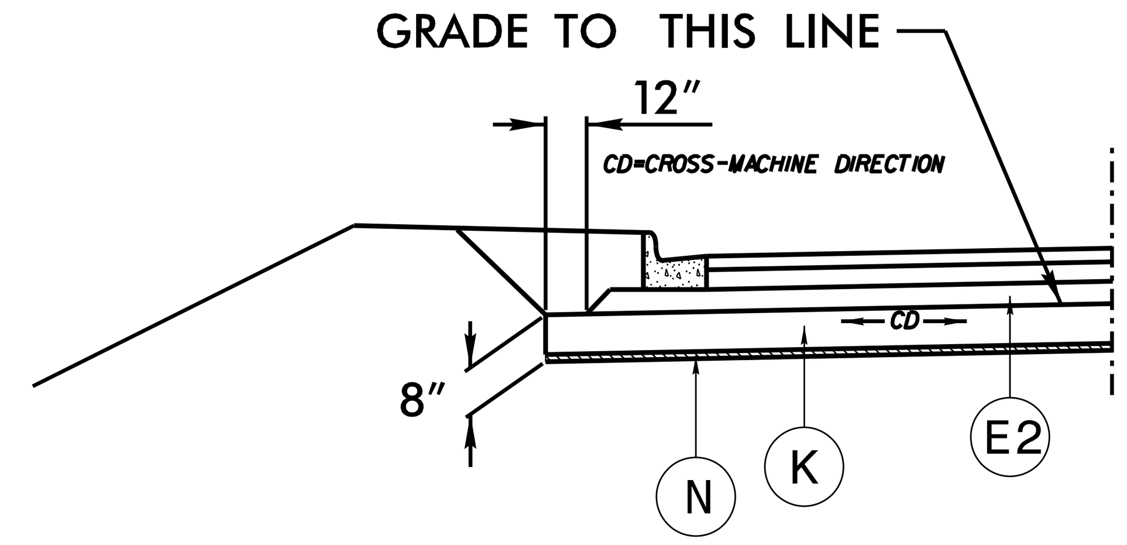
PAVEMENT DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 024964 JOSEPH T. HOLLAND — 7/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

AMT — A. Morton Thomas and Associates, Inc. Consulting Engineers, 900 Ridgefield Drive Suite 325, Raleigh, NC 27609
NCBELS LICENSE # F-1049

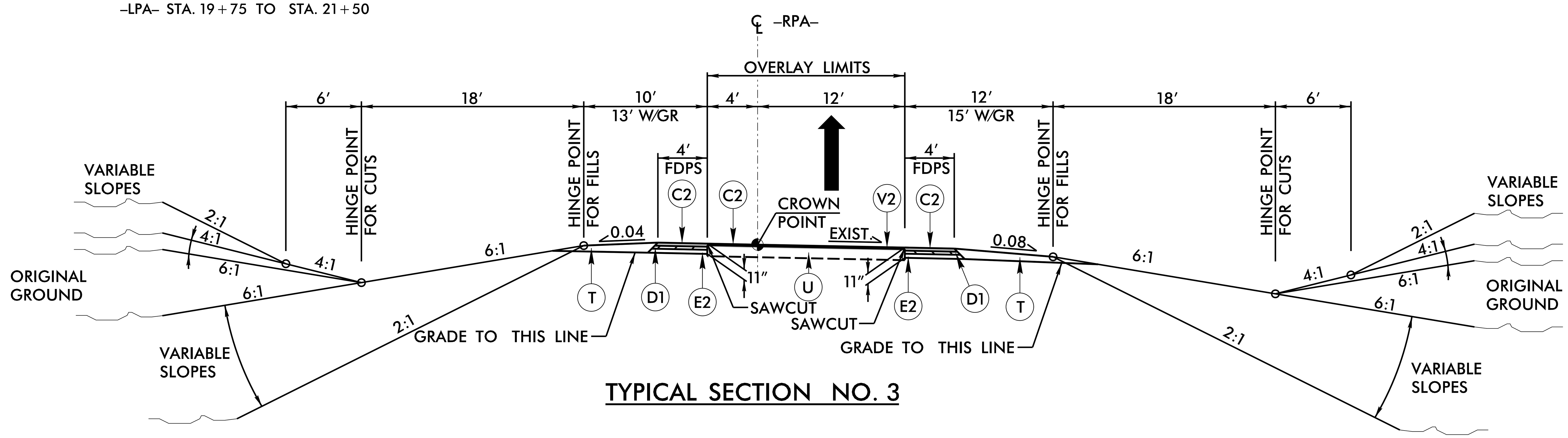


TYPICAL SECTION NO. 2



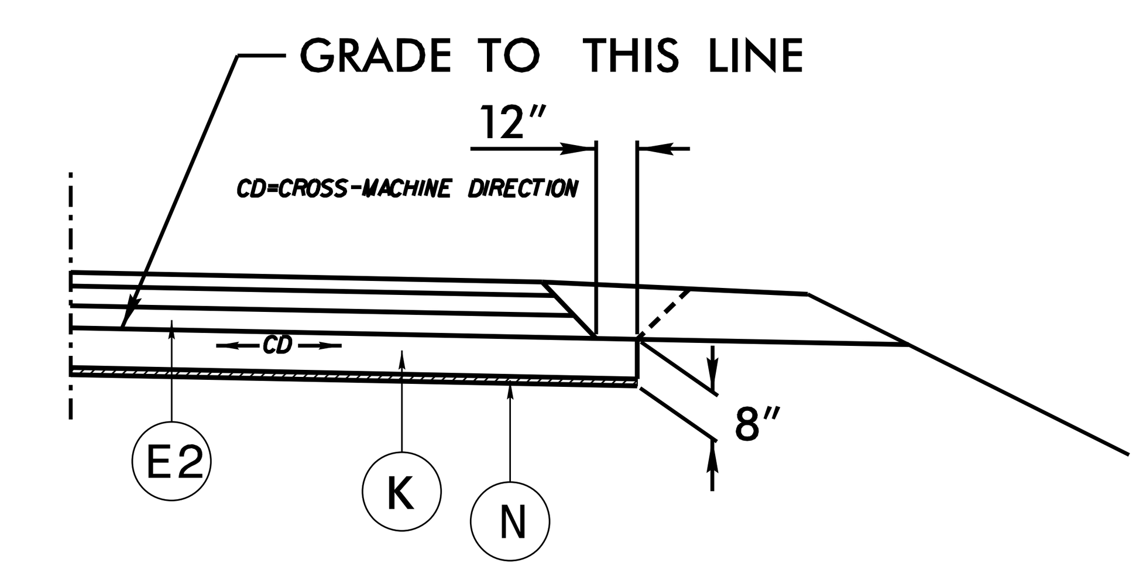
AGGREGATE SUBGRADE FOR CG WITH ASPHALT BASE
-LPA- STA. 19+75 TO STA. 21+50

USE TYPICAL SECTION NO. 2
-LPA- STA. 10+00.00 TO STA. 24+15.31

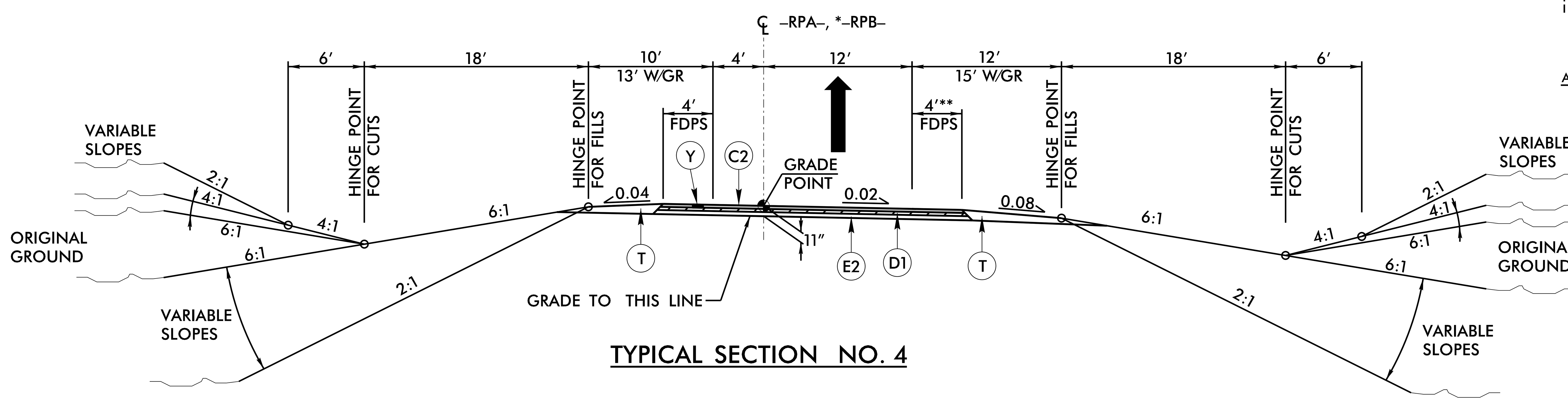


TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3
-RPA- STA. 15+27.55 TO 17+75.78



AGGREGATE SUBGRADE FOR SHOULDER WITH ASPHALT BASE
-RPA- STA. 27+75 TO STA. 30+25



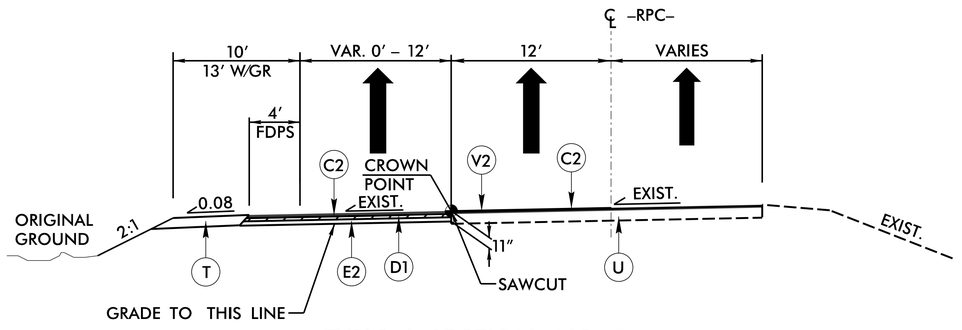
TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4
-RPA- STA. 17+75.78 TO 32+42.06
-RPB- STA. 10+00.00 TO 27+63.51

*REVERSE TYPICAL FOR -RPB-
**PAVE TO FACE OF GUARDRAIL

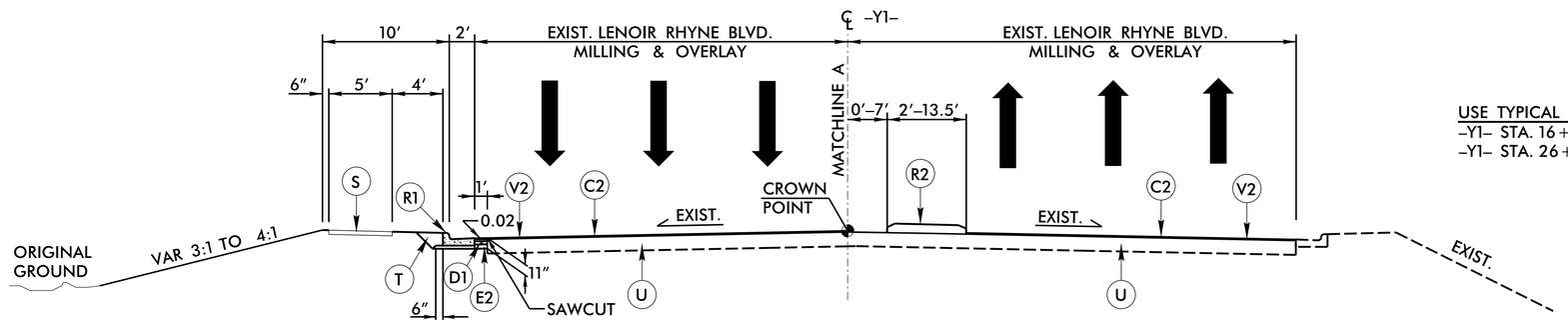
7/20/2026
X:\Raleigh\114-568 - NCDOT- I-5716 I-40 Lenoir-Rhyne Interchange\05-CAD\I5716\Roadway\Proj\I5716_rdy_typ.dgn

PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
C2	3″ S9.5C
C3	VAR. S9.5C
D1	4″ I19.0C
D2	VAR. I19.0C
E1	8″ B25.0C
E2	4″ B25.0C
E3	VAR. B25.0C
J1	4″ ABC
K	8″ CLASS IV
N	GEOTEXTILE
R1	2′-6″ C & G
R2	5″ MONO. ISLAND (KEYED IN)
R3	5″ CONCRETE MEDIAN ISLAND
S	4″ CONC. SW
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5″ MILLING
V2	3″ MILLING
V3	INCID. MILLING
W	WEDGING
Y	RUMBLE STRIPS



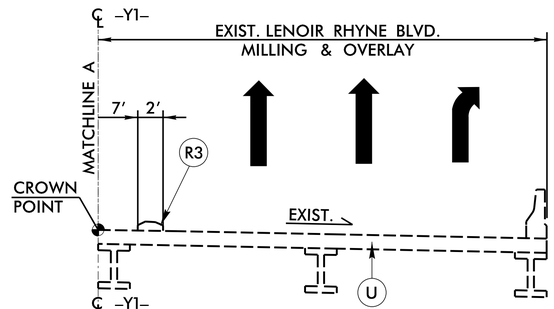
TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5
–RPC– STA. 21+28.56 TO 28+56.21



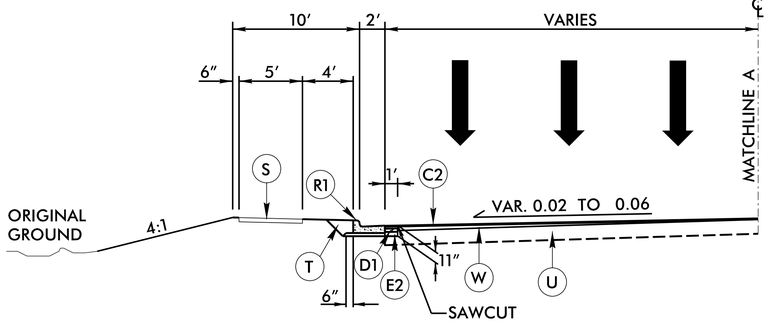
TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6
–Y1– STA. 16+64.00 TO STA. 23+57.72 (BEGIN EXIST. APPROACH SLAB)
–Y1– STA. 26+55.27 (END EXIST. APPROACH SLAB) TO STA. 35+10.00



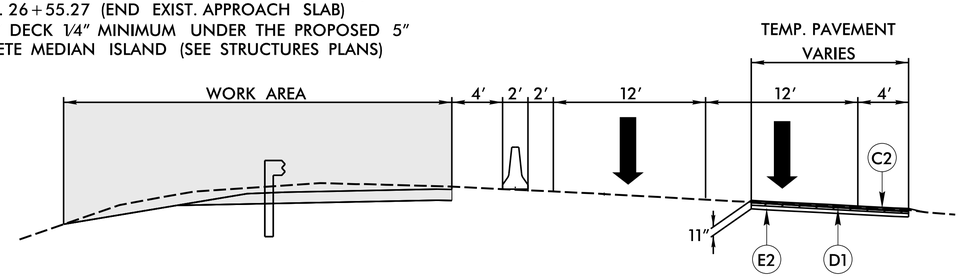
INSET NO. 6A

–Y1– STA. 23+57.72 (BEGIN EXIST. APPROACH SLAB)
TO STA. 26+55.27 (END EXIST. APPROACH SLAB)
SCARIFY DECK 1/4″ MINIMUM UNDER THE PROPOSED 5″
CONCRETE MEDIAN ISLAND (SEE STRUCTURES PLANS)



INSET NO. 6B

–Y1– STA. 27+50.00 TO STA. 31+43.00



–L– TEMPORARY PAVEMENT

SEE TMP PLANS FOR LOCATIONS

PROJECT REFERENCE NO.	SHEET NO.
I-5716	2A-3

ROADWAY DESIGN ENGINEER
DocuSigned by: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045246 JASON T. GADDY
BAE8D64009B448F...
7/21/2026

PAVEMENT DESIGN ENGINEER
Signature: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 024964 JOSEPH T. HOLLAND
719B3B1B6E0446...
7/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

A. MORTON THOMAS AND ASSOCIATES, INC.
CONSULTING ENGINEERS
900 RIDGEFIELD DRIVE SUITE 325, RALEIGH, NC 27609
(919) 855-9989 FAX (919) 855-9667
EMAIL: AMT@AMTENGINEERING.COM
NCBELS LICENSE # F-1049

6/2/99
7/20/2026
X:\Projects\114-568 - NCDOT I-5716 I-40 Lenoir-Rhyne Interchange\05-CAD\I5716\Roadway\Proj\I5716_rdy_typ.dgn
Default

8/17/99

INTERSECTION DETAIL -RPA-, -LPA- & -RPB- AT -Y1-

PROJECT REFERENCE NO.	SHEET NO.
I-5716	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DocuSigned by: BAE5DC5400BA486... NORTH CAROLINA PROFESSIONAL 045246 ENGINEER JASON T. GADDY 7/21/2026	Signed by: 1589A1CBA4994C3... NORTH CAROLINA PROFESSIONAL 26971 ENGINEER JOSHUA G. DALTON 7/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

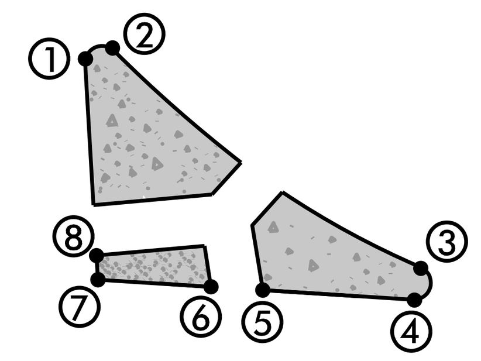
AMT
A. Morton Thomas and Associates, Inc.
CONSULTING ENGINEERS
900 RIDGEFIELD DRIVE SUITE 325, RALEIGH, NC 27609
(919) 855-9989 FAX (919) 855-3687
EMAIL: AMT@AMTENGINEERING.COM
NCBELS LICENSE # F-1049

SIGNAL UPGRADE

REMOVE EXIST. PAVEMENT

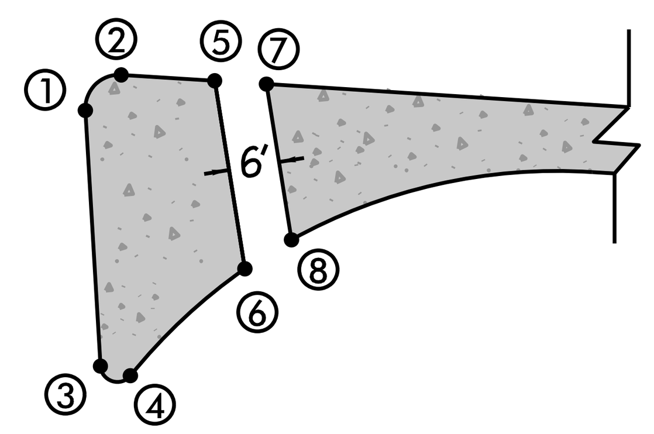
50 25 0 50 100
PLANS

INSET A

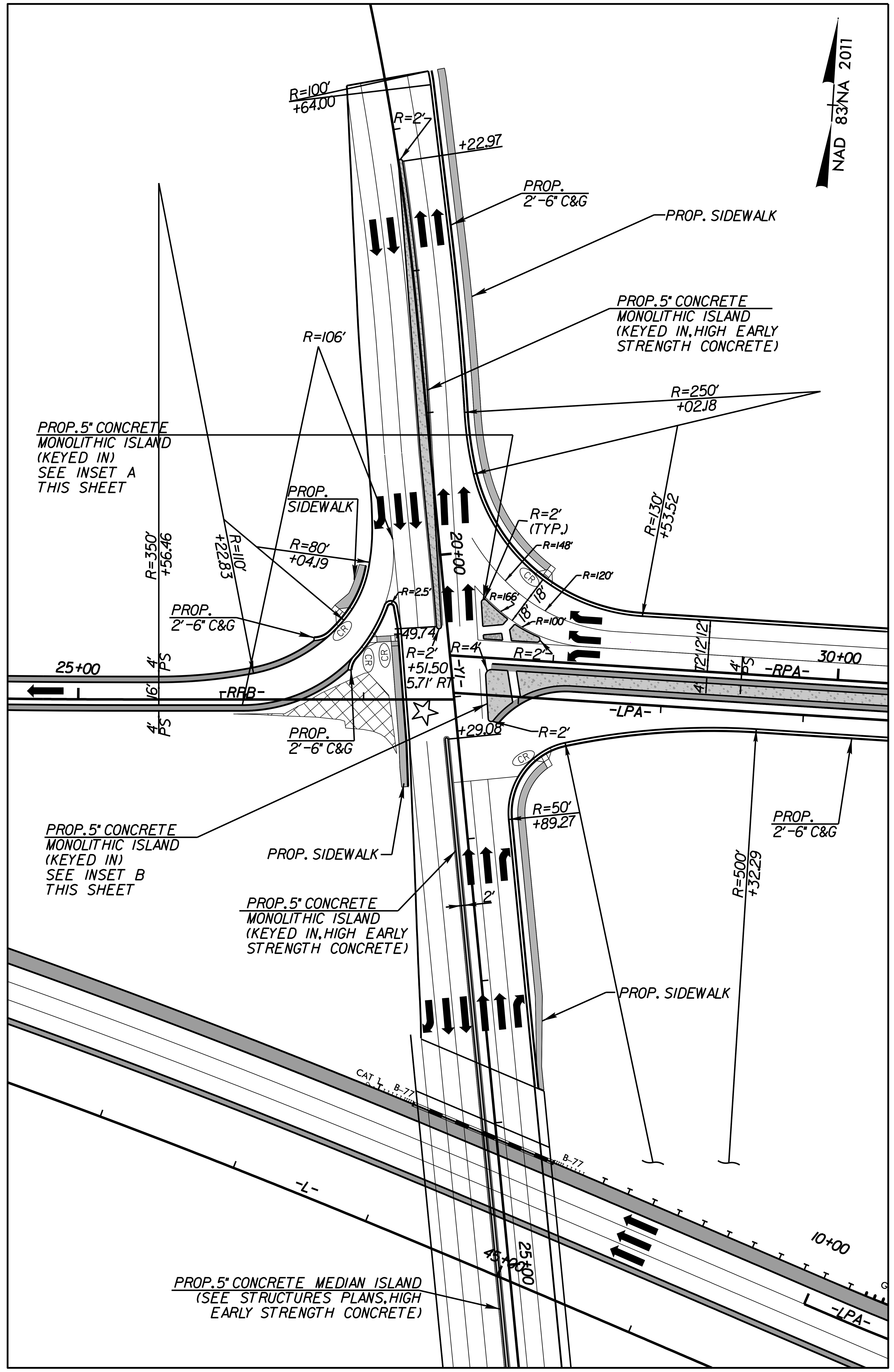


LINE	STATION	OFFSET
① -RPA-	32+52.78	38.48' RT
② -RPA-	32+49.48	40.23' RT
③ -RPA-	32+11.53	16.88' RT
④ -RPA-	32+12.20	13.00' RT
⑤ -RPA-	32+30.06	13.00' RT
⑥ -RPA-	32+36.21	13.00' RT
⑦ -RPA-	32+49.66	13.00' RT
⑧ -RPA-	32+50.01	15.84' RT

INSET B



LINE	STATION	OFFSET
① -Y1-	20+87.27	23.60' LT
② -Y1-	20+83.47	28.23' LT
③ -Y1-	21+17.66	22.45' LT
④ -Y1-	21+19.13	25.88' LT
⑤ -Y1-	20+85.24	39.20' LT
⑥ -Y1-	21+07.81	40.64' LT
⑦ -Y1-	20+86.22	45.28' LT
⑧ -Y1-	21+04.91	46.47' LT



7/20/2026
X:\Raleigh\114-568 - NCDOT- I-5716 I-40 Lenoir-Rhyne Interchange\05-CAD\I5716\Roadway\Proj\I5716_Rdy_psh028_1.dgn
acarpenter

Docusign Envelope ID: E7F89136-11FD-8472-8031-FB0533322E55

PROJECT REFERENCE NO.	SHEET NO.
I-5716	6
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — DocuSigned by: BAE5D64400BA486... — NORTH CAROLINA PROFESSIONAL SEAL 045246 ENGINEER JASON T. GADDY — 7/21/2026

HYDRAULICS ENGINEER — Signed by: 1089AD8C14994C3... — NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON — 7/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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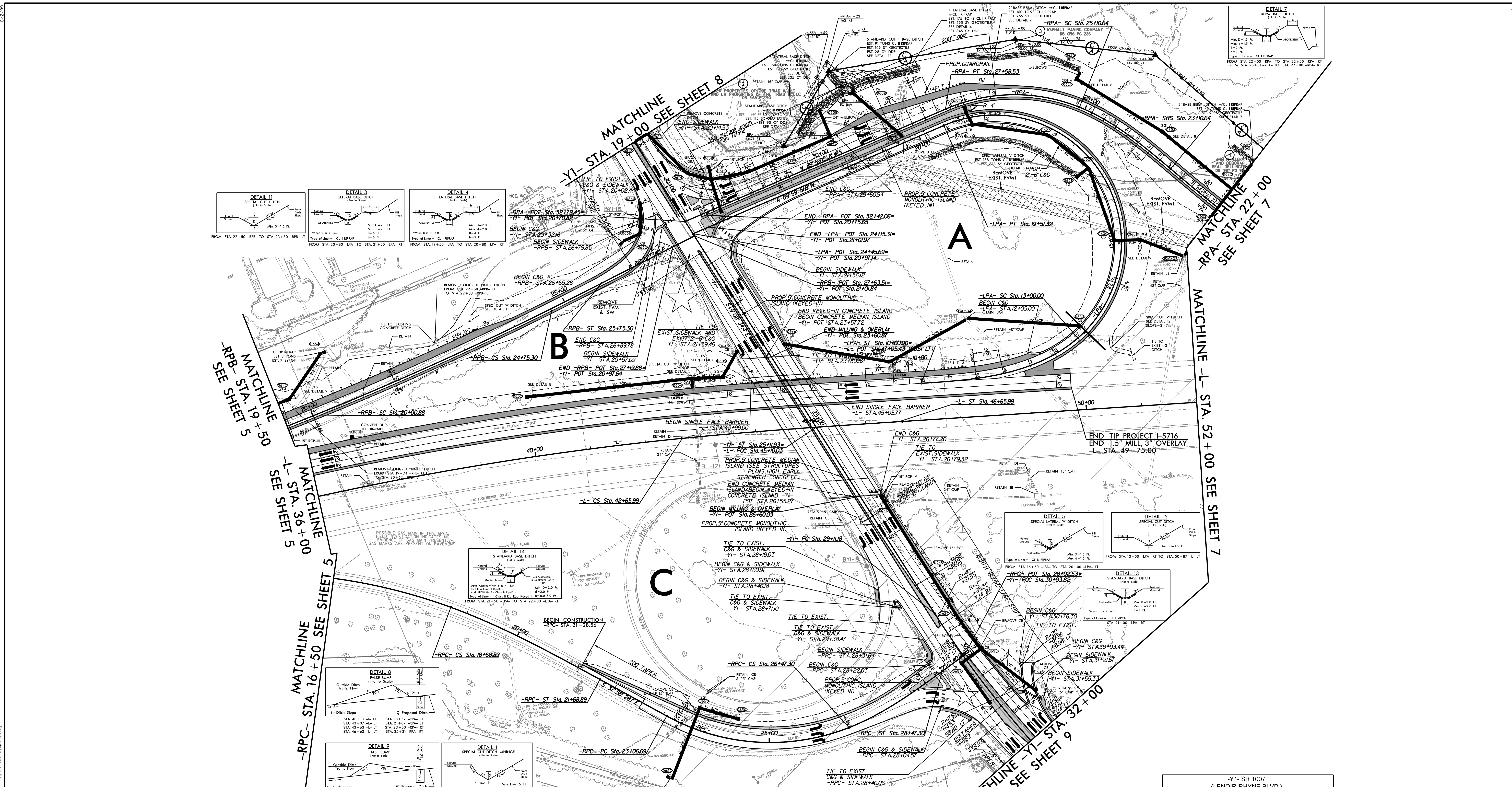
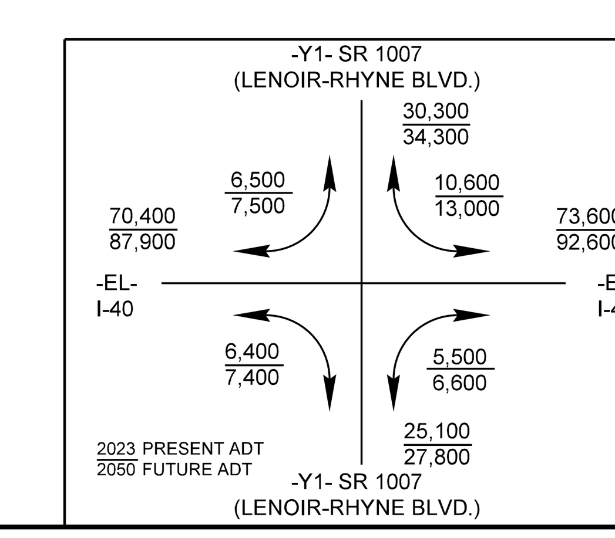
(919) 855-9989 FAX:(919) 855-5687
EMAIL: AMT1@AMTENGINEERING.COM
NCBELS LICENSE # F-1049

FOR -L- PROFILE SEE SHTS. 10-11
FOR -LPA- PROFILE SEE SHT. 12
FOR -RPA- PROFILE SEE SHT. 13
FOR -RPB- PROFILE SEE SHT. 14
FOR INTERSECTION DETAILS SEE SHTS. 2B-2 & 2B-3



-L-		-RPA-		
PI Sta 28+75.16	PIs Sta 43+99.34	PIs Sta 21+77.42	PIs Sta 24+44.69	PI Sta 26+41.45
Δ = 28° 24' 48.6" (RT)	θs = 2° 00' 00.0"	θs = 7° 33' 31.7"	θs = 18° 14' 49.4"	Δ = 45° 13' 53.6" (LT)
D = 1° 00' 00.0"	Ls = 400.00'	Ls = 200.00'	Ls = 200.00'	D = 18° 14' 49.4"
L = 2,841.35'	LT = 266.68'	LT = 133.46'	LT = 134.05'	L = 247.88'
T = 1,450.52'	ST = 133.35'	ST = 66.78'	ST = 67.32'	T = 130.81'
R = 5,729.58'				R = 314.00'
				DS = 30 MPH
				Runoff = 192'
				e = 0.08

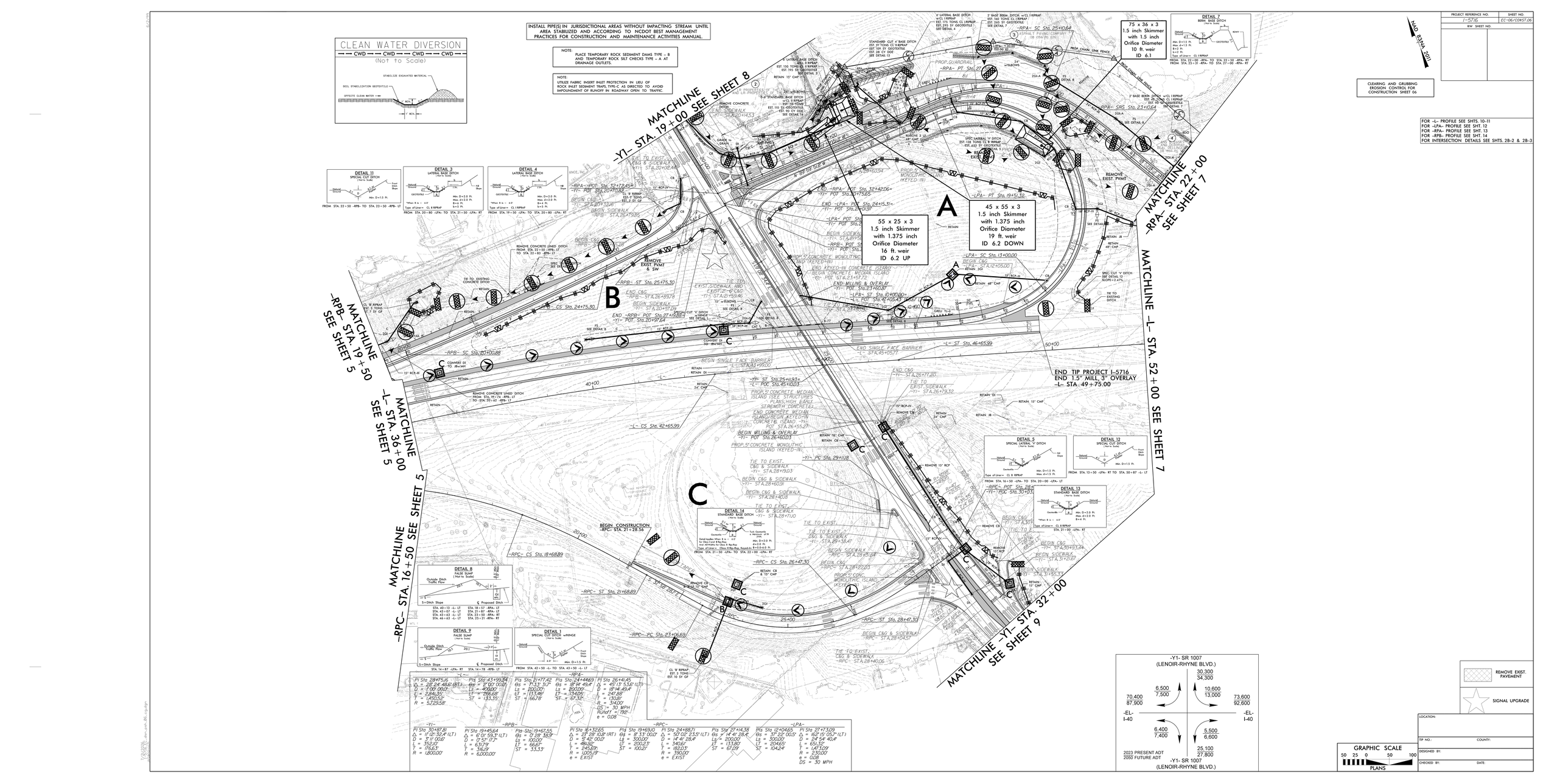
-Y1-	-RPB-		-RPC-				-LPA-	
PI Sta 30+87.81	PI Sta 19+45.64	PIs Sta 19+67.55	PI Sta 16+32.65	PIs Sta 19+69.10	PI Sta 24+88.71	PIs Sta 27+14.38	PIs Sta 12+04.65	PI Sta 27+73.09
Δ = 11° 12' 32.4" (LT)	Δ = 6° 01' 59.3" (LT)	θs = 0° 28' 38.9"	Δ = 27° 28' 10.8" (RT)	θs = 8° 33' 00.0"	Δ = 50° 02' 23.5" (LT)	θs = 14° 41' 28.4"	θs = 37° 22' 00.5"	Δ = 162° 15' 05.7" (LT)
D = 3° 11' 00.6"	D = 0° 57' 17.7"	Ls = 100.00'	D = 5° 42' 00.0"	Ls = 300.00'	D = 14° 41' 28.4"	Ls = 200.00'	Ls = 300.00'	D = 24° 54' 40.4"
L = 352.10'	L = 631.79'	LT = 66.67'	L = 481.92'	LT = 200.23'	L = 340.61'	LT = 133.80'	LT = 204.65'	L = 651.32'
T = 176.63'	T = 316.19'	ST = 33.33'	T = 245.69'	ST = 100.21'	T = 182.03'	ST = 67.09'	ST = 104.24'	T = 1,473.09'
R = 1,800.00'	R = 6,000.00'		R = 1,005.19'		R = 390.00'			R = 230.00'
			e = EXIST		e = EXIST			e = 0.08
								DS = 30 MPH

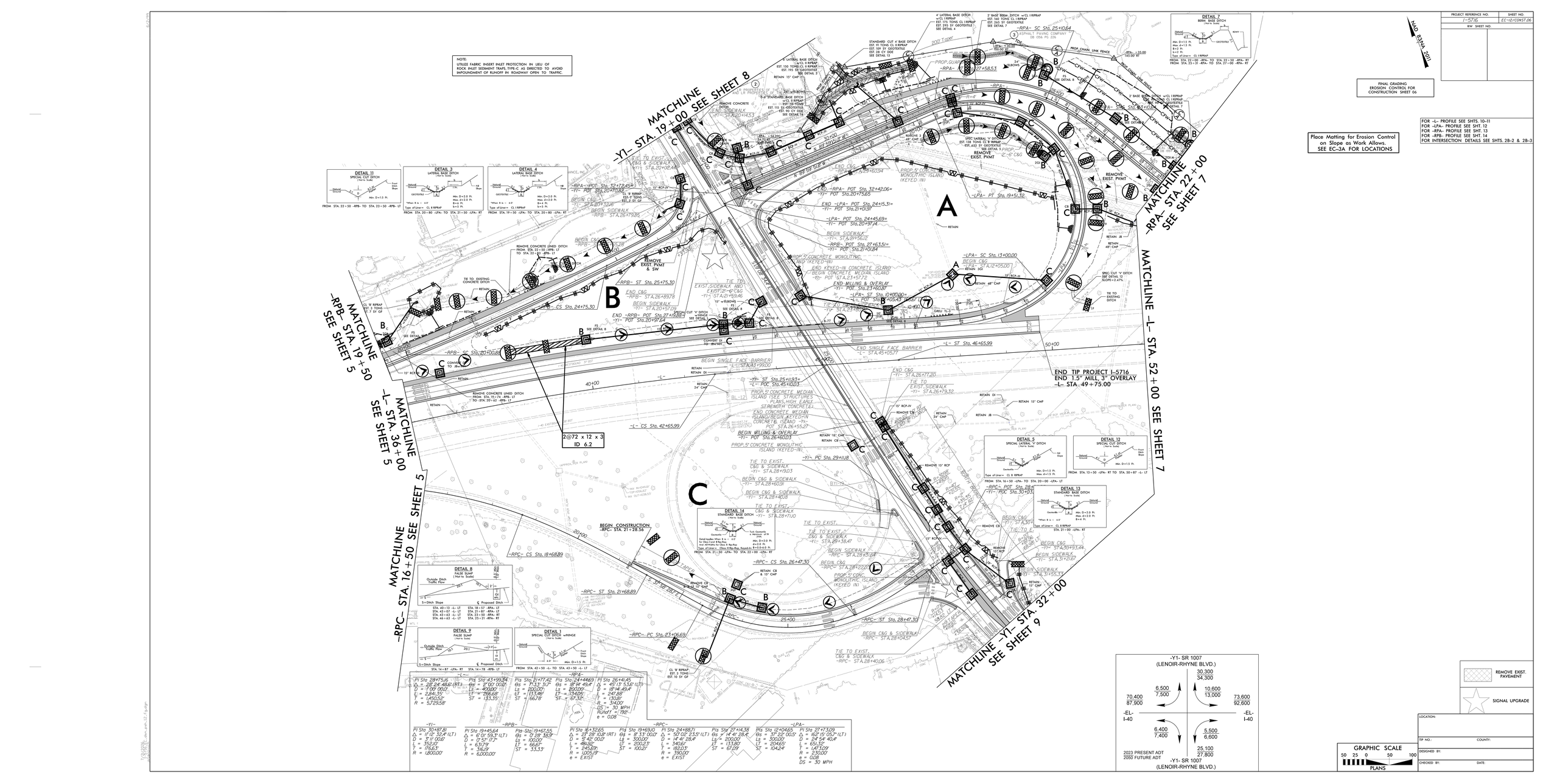


GRAPHIC SCALE
50 25 0 50 100
PLANS

REMOVE EXIST. PAVEMENT
SIGNAL UPGRADE

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY:
CHECKED BY: DATE:


CLEAN WATER DIVERSION
CWD CWD CWD CWD CWD
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.
NAD 83/NSRA 2011
PROJECT REFERENCE NO. I-5715
SHEET NO. EC-06/CONST.06
R/W SHEET NO.
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 06
FOR -L- PROFILE SEE SHTS. 10-11
FOR -LPA- PROFILE SEE SHT. 12
FOR -RPA- PROFILE SEE SHT. 13
FOR -RPB- PROFILE SEE SHT. 14
FOR INTERSECTION DETAILS SEE SHTS. 2B-2 & 2B-3
MATCHLINE -Y1- STA. 19+00 SEE SHEET 8
MATCHLINE -RPA- STA. 22+00 SEE SHEET 7
MATCHLINE -L- STA. 52+00 SEE SHEET 7
MATCHLINE -RPB- STA. 19+50 SEE SHEET 5
MATCHLINE -L- STA. 36+00 SEE SHEET 5
MATCHLINE -RPC- STA. 16+50 SEE SHEET 5
MATCHLINE -Y1- STA. 32+00 SEE SHEET 9
END TIP PROJECT I-5716
END 1.5" MILL, 3" OVERLAY
-L- STA. 49+75.00
75 x 36 x 3 1.5 inch Skimmer with 1.5 inch Orifice Diameter 10 ft. weir ID 6.1
45 x 55 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 19 ft. weir ID 6.2 DOWN
55 x 25 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 16 ft. weir ID 6.2 UP
A
B
C
DETAIL 11 SPECIAL CUT DITCH
DETAIL 3 LATERAL BASE DITCH
DETAIL 4 LATERAL BASE DITCH
DETAIL 7 BERM BASE DITCH
DETAIL 5 SPECIAL LATERAL 'V' DITCH
DETAIL 12 SPECIAL CUT DITCH
DETAIL 13 STANDARD BASE DITCH
DETAIL 14 STANDARD BASE DITCH
DETAIL 8 FALSE SUMP
DETAIL 9 FALSE SUMP
DETAIL 1 SPECIAL CUT DITCH w/HINGE
-Y1- PI Sta 28+75.15 Δ = 28° 24' 48.6" (RT) D = 1° 00' 00.0" L = 2,841.35' T = 1,450.52' R = 5,729.58'
-Y1- Pis Sta 43+99.34 Θs = 2° 00' 00.0" Ls = 400.00' LT = 266.68' ST = 133.35'
-RPA- Pis Sta 21+77.42 Θs = 1° 33' 31.7" Ls = 200.00' LT = 133.46' ST = 66.78'
-RPA- Pis Sta 22+44.69 Θs = 18° 14' 49.4" Ls = 800.00' LT = 734.05' ST = 67.32'
-RPA- PI Sta 26+41.45 Δ = 45° 13' 53.5" (LT) D = 18° 14' 49.4" L = 247.88' T = 130.92' R = 314.00' DS = 30 MPH Runoff = 1.96" e = 0.08
-Y1- PI Sta 30+87.81 Δ = 11° 12' 32.4" (LT) D = 3° 11' 00.0" L = 352.01' T = 176.51' R = 1,800.00'
-RPB- PI Sta 19+45.64 Δ = 6° 01' 59.3" (LT) D = 0° 57' 17.7" L = 631.79' T = 316.19' R = 6,000.00'
-RPB- Pis Sta 19+67.55 Θs = 0° 28' 38.9" Ls = 100.00' LT = 66.67' ST = 33.33'
-RPC- PI Sta 16+32.55 Δ = 21° 28' 10.8" (RT) D = 5° 42' 00.0" L = 489.92' T = 247.89' R = 1,005.19' e = EXIST
-RPC- Pis Sta 19+69.10 Θs = 8° 33' 00.0" Ls = 300.00' LT = 200.23' ST = 100.21'
-RPC- PI Sta 24+88.71 Δ = 50° 02' 23.5" (LT) D = 14° 41' 28.4" L = 340.61' T = 182.03' R = 390.00' e = EXIST
-LPA- PI Sta 27+14.38 Δ = 14° 41' 28.4" Lg = 200.00' LT = 133.80' ST = 67.09'
-LPA- Pis Sta 12+04.25 Θs = 37° 22' 00.5" Ls = 300.00' LT = 204.65' ST = 104.24'
-LPA- PI Sta 27+73.09 Δ = 162° 15' 05.7" (LT) D = 24° 54' 40.4" L = 651.32' T = 1,417.09' R = 230.00' e = 0.08' DS = 30 MPH
2023 PRESENT ADT
2050 FUTURE ADT
-Y1- SR 1007 (LENOIR-RHYNE BLVD.)
70,400 87,900
6,500 7,500
10,600 13,000
73,600 92,600
-EL- I-40
6,400 7,400
5,500 6,600
25,100 27,800
REMOVE EXIST. PAVEMENT
SIGNAL UPGRADE
GRAPHIC SCALE 50 25 0 50 100 PLANS
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:


NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.
MATCHLINE -Y1- STA. 19+00 SEE SHEET 8
MATCHLINE -RPA- STA. 22+00 SEE SHEET 7
MATCHLINE -RPB- STA. 19+50 SEE SHEET 5
MATCHLINE -L- STA. 36+00 SEE SHEET 5
MATCHLINE -RPC- STA. 16+50 SEE SHEET 5
MATCHLINE -L- STA. 52+00 SEE SHEET 7
MATCHLINE -Y1- STA. 32+00 SEE SHEET 9
END TIP PROJECT I-5716
END 1.5" MILL, 3" OVERLAY
-L- STA. 49+75.00
BEGIN CONSTRUCTION -RPC- STA. 21+28.56
2@72 x 12 x 3 ID 6.2
A
B
C
DETAIL 11 SPECIAL CUT DITCH
DETAIL 3 LATERAL BASE DITCH
DETAIL 4 LATERAL BASE DITCH
DETAIL 7 BERM BASE DITCH
DETAIL 5 SPECIAL LATERAL 'V' DITCH
DETAIL 12 SPECIAL CUT DITCH
DETAIL 13 STANDARD BASE DITCH
DETAIL 14 STANDARD BASE DITCH
DETAIL 8 FALSE SUMP
DETAIL 9 FALSE SUMP
DETAIL 1 SPECIAL CUT DITCH w/HINGE
FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 06
Place Matting for Erosion Control on Slope as Work Allows. SEE EC-3A FOR LOCATIONS
FOR -L- PROFILE SEE SHTS. 10-11
FOR -LPA- PROFILE SEE SHT. 12
FOR -RPA- PROFILE SEE SHT. 13
FOR -RPB- PROFILE SEE SHT. 14
FOR INTERSECTION DETAILS SEE SHTS. 2B-2 & 2B-3
PROJECT REFERENCE NO. I-5715
SHEET NO. EC-12/CONST.06
R/W SHEET NO.
NAD 83/NSRA 2011
-Y1- SR 1007 (LENOIR-RHYNE BLVD.)
70,400 87,900
6,500 7,500
30,300 34,300
10,600 13,000
73,600 92,600
-EL- I-40
6,400 7,400
5,500 6,600
25,100 27,800
2023 PRESENT ADT
2050 FUTURE ADT
REMOVE EXIST. PAVEMENT
SIGNAL UPGRADE
GRAPHIC SCALE
50 25 0 50 100
PLANS
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

09/08/09

TIP PROJECT: I-5716

CONTRACT: C205195

STRUCTURE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

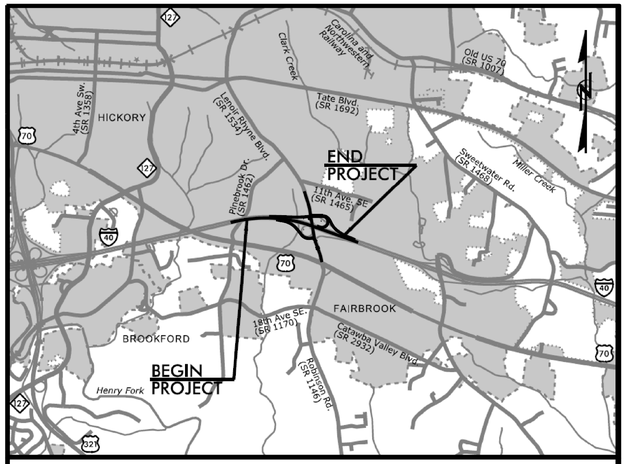
CATAWBA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5716		

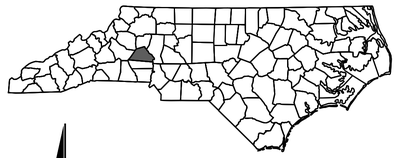
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50133.1.FS1	NHPP-0402(166)	PE
50133.2.1	NHPP-0402(166)	R/W
50133.2.2		Util.
50133.3.1	0402166	Const.

LOCATION: I-40 AT SR 1007 (LENOIR RHYNE BOULEVARD) CONSTRUCT INTERCHANGE IMPROVEMENTS

TYPE OF WORK: DRAINAGE, SIGNALS, GRADING, PAVING, AND STRUCTURE



VICINITY MAP (NTS)



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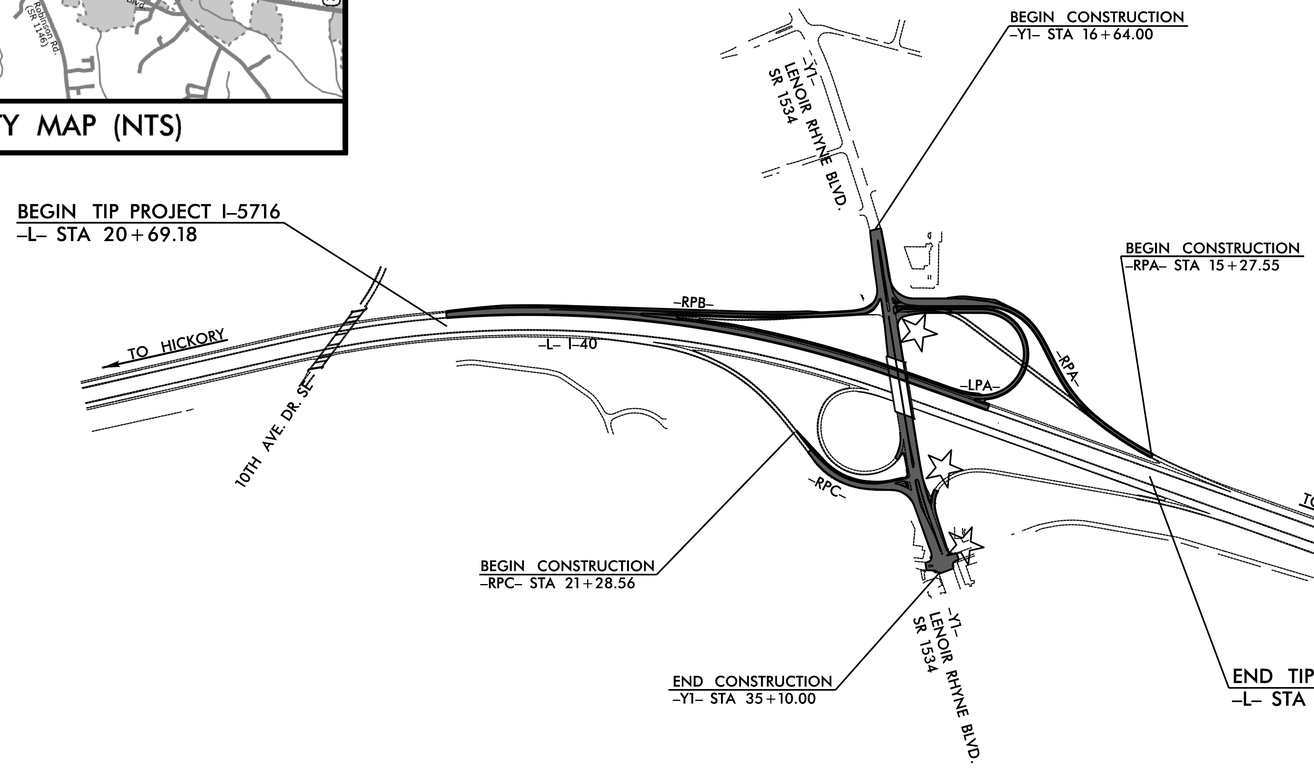


SIGNAL UPGRADE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DESIGN DATA

ADT 2026 = 71494
ADT 2040 = 75476
K = 9 %
D = 55 %
T = 10 % *
V = 70 MPH
* TTST = 7% DUAL = 3%
TIER = STATEWIDE
FUNC CLASS = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5716 = 0.726 MI.
LENGTH STRUCTURE TIP PROJECT I-5716 = 0.000 MI.
TOTAL LENGTH TIP PROJECT I-5716 = 0.726 MI.

PLANS PREPARED BY:

TGS ENGINEERS
TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603

PLANS PREPARED FOR:

NORTH CAROLINA DEPARTMENT OF TRANSPORATION
DIVISION 12
1710 E. Marion St
Shelby, NC 28150

LETTING DATE:
AUGUST 18, 2026

2024 STANDARD SPECIFICATIONS

MARC CHEEK, PE
STRUCTURES DESIGN ENGINEER

STRUCTURES DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK, JR.

Signed by: Marshall G. Cheek, Jr.
5FBCC2F3A4DC413...

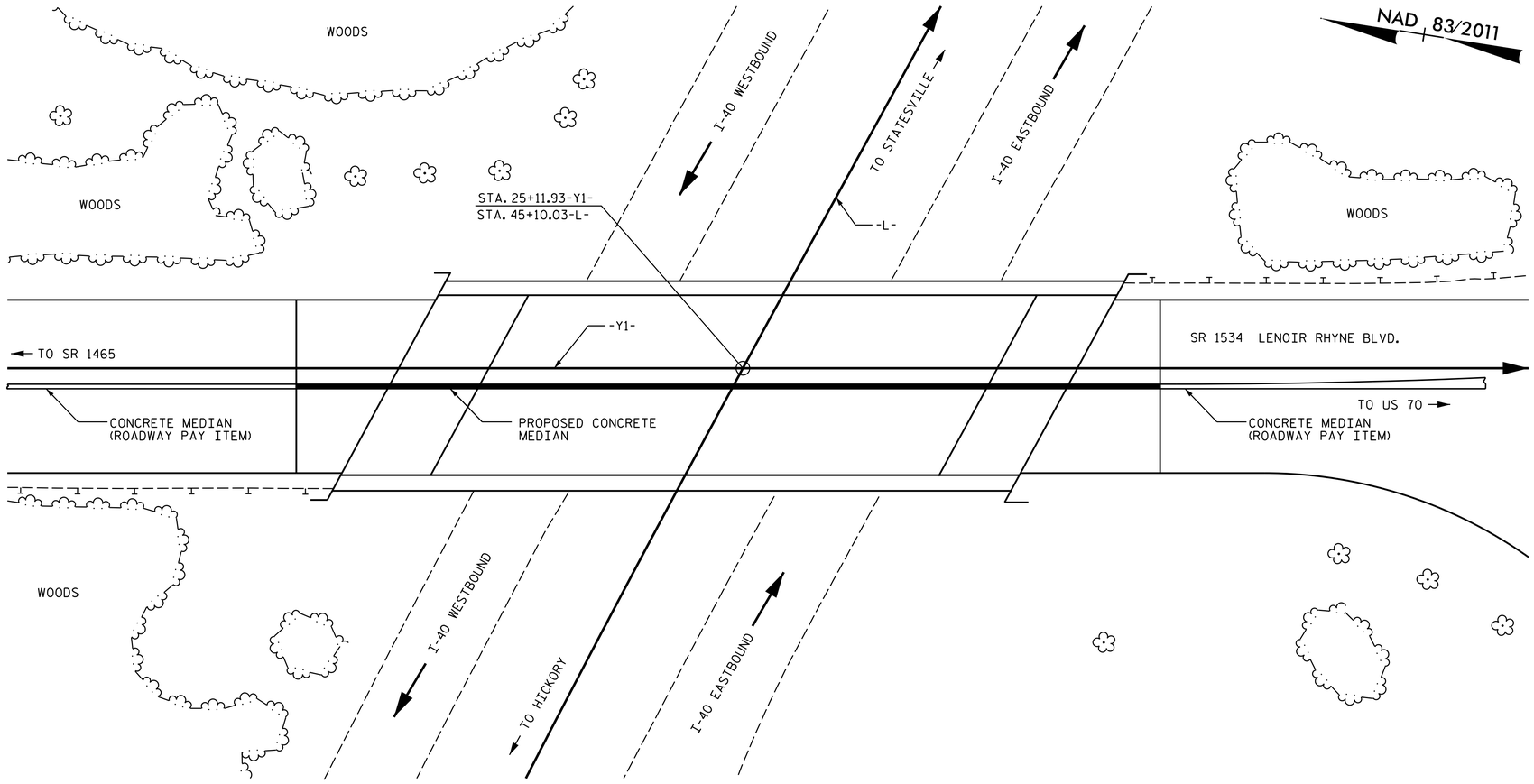
7/22/2026

P.E.

SIGNATURE:

7/14/2026
$$$$$$$$$$$$DGN$$$$$$$$$$$$
User:ZSmith

F.A. PROJECT No. : 0402166



LOCATION SKETCH

NOTES:

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR OTHER DESIGN DATA, SEE STANDARD NOTES SHEET.

FOR CONCRETE MEDIAN, SEE SPECIAL PROVISIONS.

FOR BONDING OF NEW CONCRETE TO OLD, THE OLD CONCRETE SHALL BE THOROUGHLY ROUGHENED, CLEANED OF LOOSE MATERIAL AND WETTED FOR A MINIMUM OF TWO HOURS PRIOR TO PLACING NEW CONCRETE.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE AMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

SAMPLE BAR REPLACEMENT	
SIZE	LENGTH
#3	6'-2"
#4	7'-4"
#5	8'-6"
#6	9'-8"
#7	10'-10"
#8	12'-0"
#9	13'-2"
#10	14'-6"
#11	15'-10"

NOTE:
SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30"(SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND f_s = 60ksi.

TOTAL BILL OF MATERIAL	
ITEM	CONCRETE MEDIAN
	LUMP SUM
TOTALS	LUMP SUM

PROJECT NO. I-5716

CATAWBA COUNTY

STATION: 25+11.93-Y1-

SHEET 1 OF 2 BRIDGE NO. 170161

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL C. GREEK, JR.

Marshall C. Greek, Jr.
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7/22/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

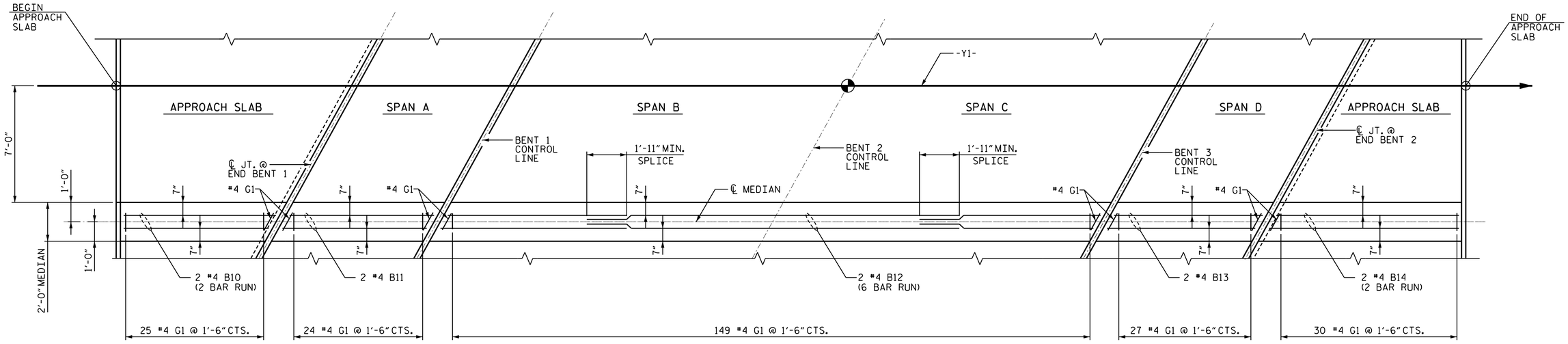
TGS ENGINEERS
201 W. MARION ST STE 200
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

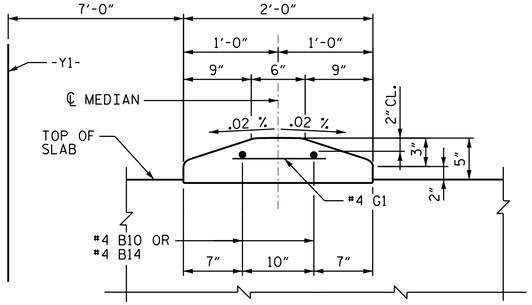
BRIDGE #170161
ON SR 1007
OVER I-40 EBL AND WBL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			2

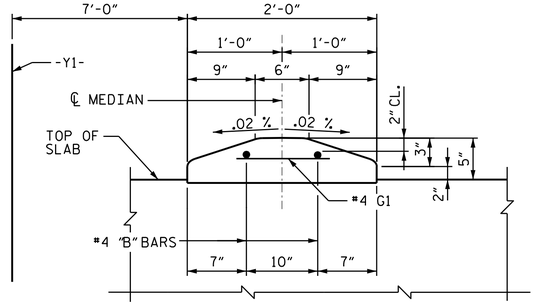
DRAWN BY :	NMW	DATE :	7/26
CHECKED BY :	MGC	DATE :	7/26



PLAN OF CONCRETE MEDIAN

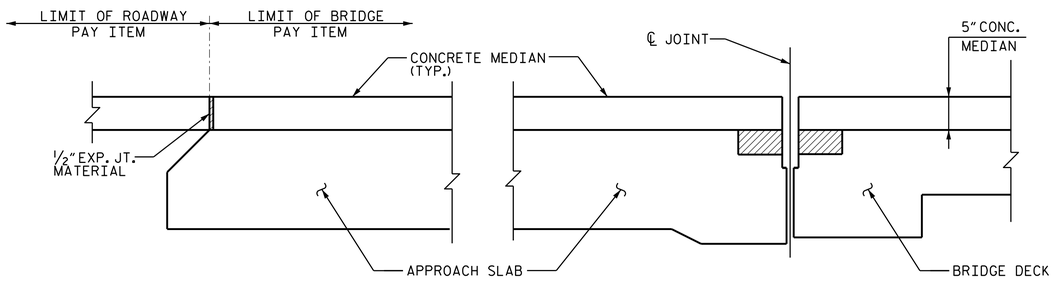


AT APPROACH SLABS

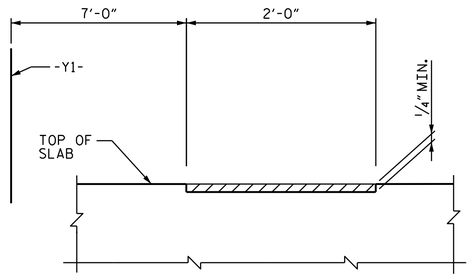


AT BRIDGE DECK

CONCRETE MEDIAN DETAIL



ELEVATION OF CONCRETE MEDIAN



DECK/APPROACH SLAB SCARIFICATION DETAIL

THE EXISTING DECK SURFACE UNDERNEATH THE PROPOSED CONCRETE MEDIAN SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 1/4". THE CONTRACTIOR SHALL SAW CUT THE AREA TO BE SCARIFIED TO A MAXIMUM OF 1/4" PRIOR TO THE REMOVAL OF THE EXISTING DECK SURFACE. SEE SURFACE PREPARATION SPECIAL PROVISION.

NOTES

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE CONCRETE MEDIAN IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINTS SHALL BE LOCATED AT A SPACING OF 8 FT. TO 10 FT. BETWEEN EXPANSION JOINTS. NO CONTRACTION JOINTS WILL BE REQUIRED FOR SEGMENTS LESS THAN 10 FEET IN LENGTH.

ALL REINFORCING STEEL IN CONCRETE MEDIAN SHALL BE EPOXY COATED.

BILL OF MATERIAL FOR CONCRETE MEDIAN

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B10	4	#4	STR	20'-5"	55
* B11	2	#4	STR	35'-0"	47
* B12	12	#4	STR	38'-9"	311
* B13	2	#4	STR	39'-0"	52
* B14	4	#4	STR	24'-0"	64
* G1	263	#4	STR	10"	146
* EPOXY COATED REINFORCING STEEL					675 LBS.
CLASS "AA" CONCRETE					
BRIDGE					7.2 C.Y.
APPROACH SLABS					2.2 C.Y.

PROJECT NO. I-5716

CATAWBA COUNTY

STATION: 25+11.93-Y1-

SHEET 2 OF 2

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK, JR.

Marshall G. Cheek, Jr.

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7/22/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
201 W. MARION ST STE 200
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONCRETE MEDIAN

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			2

DRAWN BY : NMW DATE : 7/26
CHECKED BY : MGC DATE : 7/26

STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	AASHTO (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE AASHTO
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	SEE AASHTO
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2024 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED $\frac{3}{4}$" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO $1\frac{1}{2}$" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A $\frac{1}{4}$" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A $\frac{1}{4}$" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE $\frac{7}{8}$" ∅ SHEAR STUDS FOR THE $\frac{3}{4}$" ∅ STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - $\frac{7}{8}$" ∅ STUDS FOR 4 - $\frac{3}{4}$" ∅ STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF $\frac{7}{8}$" ∅ STUDS ALONG THE BEAM AS SHOWN FOR $\frac{3}{4}$" ∅ STUDS BASED ON THE RATIO OF 3 - $\frac{7}{8}$"∅ STUDS FOR 4 - $\frac{3}{4}$" ∅ STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST $\frac{5}{16}$" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY $\frac{1}{16}$" OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.