STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

June 4, 2026

ADDENDUM # 1

Contract Number:	DN01118
TIP Number:	N/A
Federal Aid Number:	Helene
WBS Number:	DF18314.2045332
County:	Henderson
Description:	Grading, Drainage, Paving, And Structure At Bridge 440055 Over Hungry River On SR 1802 (Big Hungry Road) in Henderson County

Letting Date: June 9, 2026

Plan Holders

Content Summary: Provision Changes, Pay Item Changes, Quantity Changes, Plans Changes

The above contract has experienced the following revisions:

1. Replace SP1 G28 MAJOR CONTRACT ITEMS on page G-3, with the attached provision.

2. Addition of Standard Shoring Geotechnical Provision

3. Replace the following sheets from **DN01118 STANDARD PLANS SHEETS – ROADWAY** (see attached)
    a. Sheet 1A
    b. Sheet 2G-3
    c. Sheet TMP-1
    d. Sheet TMP-1A
    e. Sheet TMP-2
    f. Sheet TMP-2A
    g. Sheet TMP-2B
    h. Sheet TMP-3
    i. Sheet TMP-4
    j. Sheet TMP-5
    k. Sheet TMP-6

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 14
253 WEBSTER ROAD
SYLVA, NC 28779

Telephone: (828) 331-5200
Fax: (828) 331-5201
Customer Service: 1-877-368-4968

Location:
253 WEBSTER ROAD
SYLVA, NC 28779

Website: www.ncdot.gov

4. Replace **Sheet S-4** of the **DN01118 STANDARD PLANS SHEETS – STRUCTURES** (see attached)

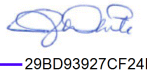
5. Pay Item Changes
    a. 0199000000-E SP **Temporary Shoring** has been added, **176** SF
    b. The quantity for line item 0048: 3380000000-E TEMPORARY STEEL BEAM GUARDRAIL has decreased from 450 to **325** LF
    c. The quantity for line item 0049: 3389150000-N TEMPORARY GUARDRAIL END UNITS, TYPE ***** CAT-1 has decreased from 6 to **4** EA
    d. The quantity for line item 0063: 4507000000-E WATER FILLED BARRIER has decreased from 496 to **472** LF
    e. The quantity for line item 0096: 8111000000-E PERMANENT STEEL CASING FOR **'-**" DIA DRILLED PIER 2'-6" has increased from 28 to **54** LF
    f. The quantity for line item 0097: 8111400000-E PERMANENT STEEL CASING FOR 3'-6"DIA DRILLED PIER has decreased from 54 to **28** LF

Please access ebsx addenda files, DN01118.001x. on Bid Express®.

Thank you for your attention to this matter.

If you have any questions, please contact the Division Proposal Engineer at (828) 331-5200.

Sincerely,

Signed by:

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Jeanette L. White, P.E.
Highway Division 14, Project Development-Team Lead

PERMANENT VEGETATION ESTABLISHMENT:

(2-16-12)(Rev. 1-16-24) 104 SP1 G16

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish permanent vegetation on all erodible areas within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the *Standard Specifications*. All work required for initial vegetation planting shall be performed as a part of the work necessary for the completion and acceptance of the Intermediate Contract Time (ICT). Between the time of ICT and Final Project acceptance, or otherwise referred to as the vegetation establishment period, the Department will be responsible for preparing the required National Pollutant Discharge Elimination System (NPDES) inspection records.

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

Payment for *Response for Erosion Control*, *Seeding and Mulching, Repair Seeding*, *Supplemental Seeding, Mowing, Fertilizer Topdressing, Silt Excavation,* and *Stone for Erosion Control* will be made at contract unit prices for the affected items. Work required that is not represented by contract line items will be paid in accordance with Articles 104-7 or 104-3 of the *Standard Specifications*. No additional compensation will be made for maintenance and removal of temporary erosion control items.

CONSTRUCTION MORATORIUM:

(7-15-14) SP1 G18A

No in-water work or land disturbance within the 25 foot wide buffer zone will be allowed from **JANUARY 1** through **APRIL 15** of any year.

MAJOR CONTRACT ITEMS:

(2-19-02)(Rev. 1-16-24) 104 SP1 G28

The following listed items are the major contract items for this contract (see Article 104-5 of the *Standard Specifications*):

Line #	**Description**
0100	CLASS A CONCRETE (BRIDGE)
0111	3'-0" X 1'-9" PRESTRESSED CONC CORED SLABS

STANDARD SHORING: **(1-16-24)**

Description

Standard shoring includes standard temporary shoring and standard temporary mechanically stabilized earth (MSE) walls. At the Contractor's option, use standard shoring as noted in the plans or as directed. When using standard shoring, a temporary shoring design submittal is not required. Construct standard shoring based on actual elevations and shoring dimensions in accordance with the contract and Geotechnical Standard Detail No. 1801.01 or 1801.02.

Define "standard temporary shoring" as cantilever shoring that meets the standard temporary shoring detail (Geotechnical Standard Detail No. 1801.01). Define "standard temporary wall" as a temporary MSE wall with geotextile or geogrid reinforcement that meets the standard temporary wall detail (Geotechnical Standard Detail No. 1801.02). Define "standard temporary geotextile wall" as a standard temporary wall with geotextile reinforcement and "standard temporary geogrid wall" as a standard temporary wall with geogrid reinforcement.

Provide positive protection for standard shoring at locations shown in the plans and as directed. See *Temporary Shoring* provision for positive protection types and definitions.

Materials

Refer to the *Standard Specifications*.

Item	Section
Concrete Barrier Materials	1170-2
Flowable Fill, Excavatable	1000-7
Geosynthetics	1056
Grout, Type 1	1003
Portland Cement Concrete, Class A	1000
Select Materials	1016
Steel Beam Guardrail Materials	862-2
Steel Sheet Piles and H-Piles	1084
Untreated Timber	1082-2
Welded Wire Reinforcement	1070-3

Provide Type 6 material certifications for shoring materials. Use Class IV select material for temporary guardrail. Use Class A concrete that meets Article 450-2 of the *Standard Specifications* or Type 1 grout for drilled-in piles.

Based on actual shoring height, positive protection, groundwater elevation, slope or surcharge case and traffic impact at each standard temporary shoring location, use sheet piles with the minimum required section modulus or H-piles with the sizes shown in Geotechnical Standard Detail No. 1801.01. Use untreated timber with a thickness of at least 3" and a bending stress of at least 1,000 psi for timber lagging.

(A) Shoring Backfill

Use Class II, Type 1, Class III, Class V or Class VI select material or material that meets AASHTO M 145 for soil classification A-2-4 with a maximum PI of 6 for shoring backfill except do not use the following:

(1) A-2-4 soil for backfill around culverts,

(2) A-2-4 soil in the reinforced zone of standard temporary walls with a back slope and

(3) Class VI select material in the reinforced zone of standard temporary geotextile walls.

(B) Standard Temporary Walls

Use welded wire reinforcement for welded wire facing, struts and wires with the dimensions and minimum wire sizes shown in Geotechnical Standard Detail No. 1801.02. Provide Type 2 geotextile for separation and retention geotextiles. Do not use more than 4 different reinforcement strengths for each standard temporary wall.

(1) Geotextile Reinforcement

Provide Type 4a geotextile for geotextile reinforcement except for the ultimate tensile strength. Based on actual wall height, groundwater elevation, slope or surcharge case and shoring backfill to be used in the reinforced zone at each standard temporary geotextile wall location, provide geotextiles with ultimate tensile strengths as shown in Geotechnical Standard Detail No. 1801.02.

(2) Geogrid Reinforcement

Use geogrids for geogrid reinforcement with a roll width of at least 4 ft and an "approved" status code in accordance with the NCDOT Geosynthetic Reinforcement Evaluation Program. The list of approved geogrids is available from:
connect.ncdot.gov/resources/Geological/Pages/Products.aspx

Based on actual wall height, groundwater or flood elevation, slope or surcharge case and shoring backfill to be used in the reinforced zone at each standard temporary geogrid wall location, provide geogrids for geogrid reinforcement with short-term design strengths as shown in Geotechnical Standard Detail No. 1801.02. Geogrids are approved for short-term design strengths (3-year design life) in the machine direction (MD) and cross-machine direction (CD) based on material type. Define material type from the website above for shoring backfill as follows:

Material Type	Shoring Backfill
Borrow	A-2-4 Soil
Fine Aggregate	Class II, Type 1 or Class III Select Material
Coarse Aggregate	Class V or VI Select Material

Preconstruction Requirements

(A) Concrete Barrier

Define "clear distance" behind concrete barrier as the horizontal distance between the barrier and edge of pavement. The minimum required clear distance for concrete barrier is shown in the plans. At the Contractor's option or if the minimum required clear distance is not available, set concrete barrier next to and up against traffic side of standard shoring except for barrier above standard temporary walls. Concrete barrier with the minimum required clear distance is required above standard temporary walls.

(B) Temporary Guardrail

Define "clear distance" behind temporary guardrail as the horizontal distance between guardrail posts and standard shoring. At the Contractor's option or if clear distance for standard temporary shoring is less than 4 ft, attach guardrail to traffic side of shoring as shown in the plans. Place ABC in clear distance and around guardrail posts instead of pavement. Do not use temporary guardrail above standard temporary walls.

(C) Standard Shoring Selection Forms

Before beginning standard shoring construction, survey existing ground elevations in the vicinity of standard shoring locations to determine actual shoring or wall heights (H). Submit a standard shoring selection form for each location at least 7 days before starting standard shoring construction. Standard shoring selection forms are available from: connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx

Construction Methods

Construct standard shoring in accordance with the *Temporary Shoring* provision.

(A) Standard Temporary Shoring Installation

Based on actual shoring height, positive protection, groundwater elevation, slope or surcharge case and traffic impact at each standard temporary shoring location, install piles with the minimum required embedment and extension for each shoring section in accordance with Geotechnical Standard Detail No. 1801.01. For concrete barrier above and next to standard temporary shoring and temporary guardrail above and attached to standard temporary shoring, use "surcharge case with traffic impact" in accordance with Geotechnical Standard Detail No. 1801.01. Otherwise, use "slope or surcharge case with no traffic impact" in accordance with Geotechnical Standard Detail No. 1801.01. If refusal is reached before driven piles attain the minimum required embedment, use drilled-in H-piles with timber lagging for standard temporary shoring.

(B) Standard Temporary Walls Installation

Based on actual wall height, groundwater elevation, slope or surcharge case, geotextile or geogrid reinforcement and shoring backfill in the reinforced zone at each standard temporary wall location, construct walls with the minimum required reinforcement length and number of reinforcement layers for each wall section in accordance with Geotechnical Standard Detail No. 1801.02. For standard temporary walls with pile foundations in the reinforced zone, drive piles through reinforcement after constructing temporary walls.

For standard temporary walls with interior angles less than 90°, wrap geosynthetics at acute corners as directed by the Engineer. Place geosynthetics as shown in Geotechnical Standard Detail No. 1801.02. Place separation geotextiles between shoring backfill and backfill, natural ground or culverts along the sides of the reinforced zone perpendicular to the wall face. For Class V or VI select material in the reinforced zone, place separation geotextiles between shoring backfill and backfill or natural ground on top of and at the back of the reinforced zone.

Measurement and Payment

Standard shoring will be measured and paid in accordance with the *Temporary Shoring* provision.

DocuSigned by:
Shane C. Clark
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06/04/2026

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045332	1A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 029336 DAVID B. TAYLOR

Signed by: David B. Taylor
DE31C6B10686437...
6/4/2026

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CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

INDEX OF SHEETS

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 II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 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

SUBSURFACE DRAINS:

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

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.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

RIGHT-OF-WAY MARKERS:

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

STANDARD DRAWINGS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation (Use Details in Lieu of Standards for Sheets 1 and 2 of 2)
310.02	Parallel Pipe End Section - Precast Concrete Section for 15" to 24" Pipe
310.10	Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES	
423.01	Bridge Approach Fills - Type 1 Approach Fill for Bridge Abutment
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
840.17	Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.22	Frames and Wide Slot Sag Grates
840.26	Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.29	Frames and Narrow Slot Flat Grates
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.66	Drainage Structure Steps
840.71	Concrete and Brick Pipe Plug
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
854.07	Single Slope Concrete Barrier
862.01	Guardrail Placement (Use Details in Lieu of Standards for Sheets 4, 6, and 11)
862.02	Guardrail Installation
862.03	Structure Anchor Units (Use Detail in Lieu of Standard for Sheet 1 of 1)
876.02	Guide for Rip Rap at Pipe Outlets

5/26/20

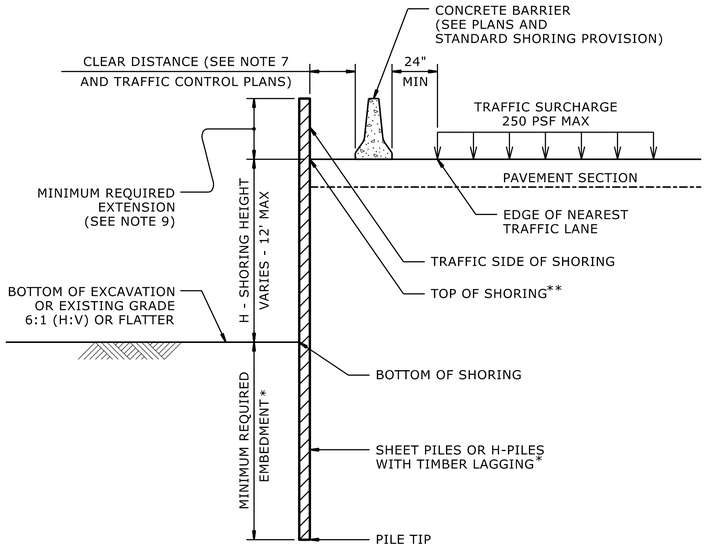
GROUNDWATER CONDITION (SEE NOTE 6)	H SHORING HEIGHT (FT)	SLOPE OR SURCHARGE CASE WITH NO TRAFFIC IMPACT					SURCHARGE CASE WITH TRAFFIC IMPACT				
		SHEET PILES		H-PILES WITH TIMBER LAGGING			SHEET PILES		H-PILES WITH TIMBER LAGGING		
		MINIMUM REQUIRED EMBEDMENT (FT)	MINIMUM REQUIRED SECTION MODULUS (IN^3/FT)	MINIMUM REQUIRED EMBEDMENT* (FT) (SEE NOTE 10)			MINIMUM REQUIRED EMBEDMENT (FT)	MINIMUM REQUIRED SECTION MODULUS (IN^3/FT)	MINIMUM REQUIRED EMBEDMENT* (FT) (SEE NOTE 10)		
				HP 10x42	HP 12x53	HP 14x73			HP 10x42	HP 12x53	HP 14x73
GROUNDWATER ELEVATION BEWTEEN BOTTOM OF SHORING AND PILE TIP	< 6	11.5	4.5	11.5	11.5	11.5	16.0	12.0	13.0	13.0	13.0
	7	13.0	7.0	13.0	13.0	13.0	17.0	14.5	14.5	14.5	14.5
	8	15.0	10.0	--	15.0	15.0	18.0	17.0	--	15.5	15.5
	9	17.0	14.0	--	17.0	17.0	19.0	20.0	--	17.0	17.0
	10	18.5	19.5	--	--	18.5	20.0	23.5	--	--	18.5
	11	20.5	26.0	--	--	--	21.0	28.0	--	--	20.0
	12	22.5	33.0	--	--	--	22.0	33.0	--	--	21.5
GROUNDWATER ELEVATION BELOW PILE TIP	< 6	7.5	3.0	8.0	8.0	8.0	11.0	10.0	9.5	9.5	9.5
	7	8.5	4.5	9.5	9.5	9.5	12.0	12.0	10.5	10.5	10.5
	8	10.0	6.5	10.5	10.5	10.5	12.5	14.0	11.5	11.5	11.5
	9	11.0	9.5	--	12.0	12.0	13.5	16.5	--	12.5	12.5
	10	12.5	13.0	--	--	13.5	14.0	19.5	--	13.5	13.5
	11	13.5	17.0	--	--	14.5	15.0	22.5	--	--	14.5
	12	15.0	21.5	--	--	16.0	16.0	25.5	--	--	15.5

MINIMUM REQUIRED EMBEDMENT AND SECTION MODULUS

*DO NOT USE H-PILES WITH TIMBER LAGGING FOR GROUNDWATER CONDITION, SHORING HEIGHT AND H-PILE SIZE SHOWN IF MINIMUM REQUIRED EMBEDMENT IS "--".

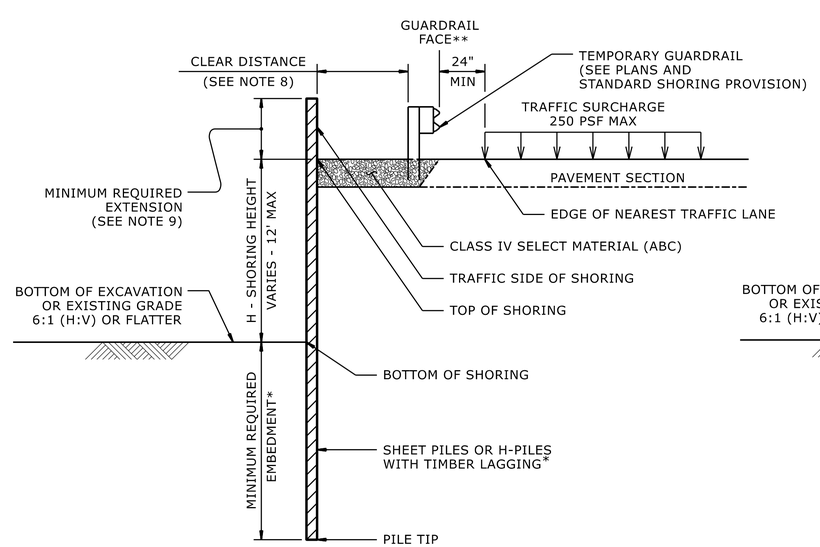
NOTES:

1. AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING AS NOTED IN THE PLANS.
2. FOR STANDARD TEMPORARY SHORING, SEE STANDARD SHORING PROVISION.
3. STANDARD TEMPORARY SHORING IS BASED ON THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:
   UNIT WEIGHT, γ = 120 PCF
   FRICTION ANGLE, φ = 30 DEGREES
   COHESION, c = 0 PSF
4. DO NOT USE STANDARD TEMPORARY SHORING IF ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE.
5. DO NOT USE STANDARD TEMPORARY SHORING WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS WITHIN THE EMBEDMENT DEPTH.
6. USE GROUNDWATER ELEVATION NOTED IN THE PLANS. IF NO GROUNDWATER ELEVATION IS SHOWN IN THE PLANS, USE "GROUNDWATER ELEVATION BETWEEN BOTTOM OF SHORING AND PILE TIP" FOR GROUNDWATER CONDITION. DO NOT USE STANDARD TEMPORARY SHORING IF GROUNDWATER IS ABOVE BOTTOM OF SHORING.
7. AT THE CONTRACTOR'S OPTION OR IF AVAILABLE CLEAR DISTANCE IS LESS THAN THE MINIMUM REQUIRED FOR CONCRETE BARRIER, SET BARRIER NEXT TO AND UP AGAINST TRAFFIC SIDE OF PILES AND USE "SURCHARGE CASE WITH TRAFFIC IMPACT".
8. AT THE CONTRACTOR'S OPTION OR IF AVAILABLE CLEAR DISTANCE IS LESS THAN 4' FOR TEMPORARY GUARDRAIL, ATTACH GUARDRAIL TO TRAFFIC SIDE OF PILES AS SHOWN IN THE PLANS AND USE "SURCHARGE CASE WITH TRAFFIC IMPACT".
9. MINIMUM REQUIRED EXTENSION IS 6" FOR "SLOPE OR SURCHARGE CASE WITH NO TRAFFIC IMPACT" AND 32" FOR "SURCHARGE CASE WITH TRAFFIC IMPACT".
10. MINIMUM REQUIRED EMBEDMENT FOR H-PILES WITH TIMBER LAGGING IS BASED ON DRIVEN H-PILES AT MAXIMUM 6' SPACING. AT THE CONTRACTOR'S OPTION, EMBEDMENT DEPTHS MAY BE REDUCED BY 25% FOR DRILLED-IN H-PILES.
11. SUBMIT A "STANDARD TEMPORARY SHORING SELECTION FORM" AT LEAST 7 DAYS BEFORE STARTING TEMPORARY SHORING CONSTRUCTION. UP TO 3 SHORING LOCATIONS MAY BE INCLUDED ON EACH FORM. STANDARD SHORING SELECTION FORMS ARE AVAILABLE FROM: connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx
12. CONTACT THE ENGINEER IF PILES DO NOT ATTAIN THE MINIMUM REQUIRED EMBEDMENT.



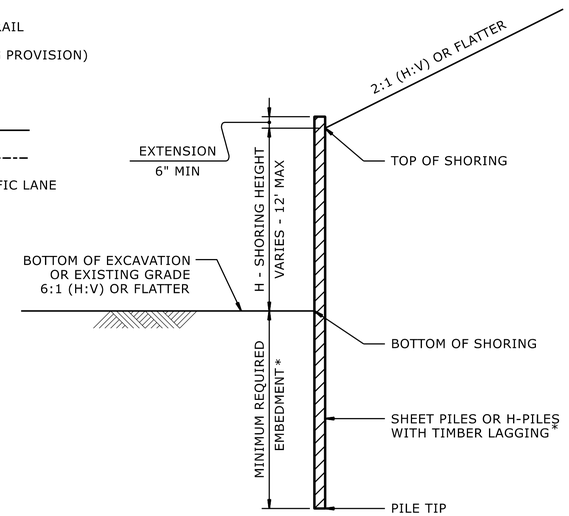
CONCRETE BARRIER

**TOP OF SHORING = EDGE OF PAVEMENT



TEMPORARY GUARDRAIL

**GUARDRAIL FACE = EDGE OF PAVEMENT



STANDARD TEMPORARY SHORING

(SLOPE CASE)
*SEE TABLE ABOVE.

STANDARD TEMPORARY SHORING

(SURCHARGE CASE)
*SEE TABLE ABOVE.

DF 18314.2045332

2G-3 | -

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL ENGINEERING UNIT

GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 29869 ENGINEER SHANE C CLARK

DocuSigned by: Shane Clark 1F4E87E2D6AD4...

6/4/2026

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STANDARD DETAIL NO. 1801.01

GEOTECHNICAL STANDARD DETAIL FOR TEMPORARY SHORING

DATE: 02-18-2025

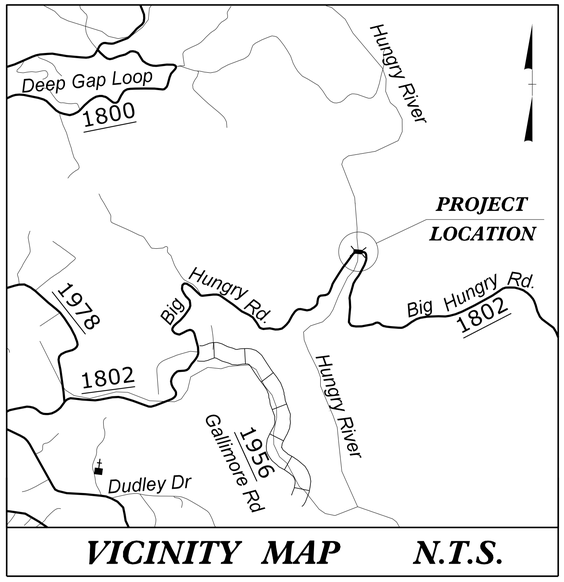
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HENDERSON COUNTY

LOCATION: BRIDGE 440055 OVER HUNGRY RIVER ON SR 1802 (BIG HUNGRY ROAD)

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



VICINITY MAP N.T.S.

INDEX OF SHEETS

SHEET NO.
TMP-1

PROJECT REFERENCE NO.: DF18314.2045332

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLANS PREPARED BY:

SEAN KORTOVICH, PE
PROJECT ENGINEER

REBECCA WRIGHT, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:

ZACHARY SHULER, PE
NCDOT PROJECT CONTACT

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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RS&H
NC FIRM LICENSE No: F-0493
1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203

APPROVED: Signed by: Rebecca E. Wright 2952C99F98584F8...

DATE: 6/4/2026

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 057350 ENGINEER REBECCA E. WRIGHT

6/4/2026
R:\Traffic\TrafficControl\440055_tmp_tsh.dgn
User:mclaughr

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-1A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - 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
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1180.01	SKINNY - DRUMS
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- TEMPORARY GRAVEL

SIGNALS

EXISTING | PROPOSED | TEMPORARY | PORTABLE

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM | SKINNY DRUM | TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

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APPROVED:

DATE: 6/4/2026

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 057350 REBECCA E. WRIGHT

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-2

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

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

TIME RESTRICTIONS

A) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
-L- BIG HUNGRY RD	MONDAY THRU SUNDAY 6:00 A.M. - 8:00 P.M.

B) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 10 FT OF AN OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS CONTINUED

I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

L) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE.

M) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

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GENERAL NOTES AND MANAGEMENT STRATEGIES

6/4/2026
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PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-2A

GENERAL NOTES

TRAFFIC BARRIER

P) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

Q) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

R) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

S) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

T) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

U) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

V) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

W) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

X) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 200 FT AND 400 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:
- FULL ROADWAY CLOSURES
- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- ONE-LANE, TWO WAY OPERATION (SIGNALIZED)

WORK ZONE SAFETY & MOBILITY STRATEGIES:
- AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)

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NORTH CAROLINA PROFESSIONAL SEAL 057350 ENGINEER REBECCA E. WRIGHT

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GENERAL NOTES AND MANAGEMENT STRATEGIES

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-2B

SHORING NOTES

SHORING LOCATION NO. 1 AND NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING LOCATION RANGES:

LOCATION NO. 1: -L- 12+91±, 0.01' LT TO -L- 13+03±, 2.22' RT

LOCATION NO. 2: -L- 14+37±, 2.25' RT TO -L- 14+50±, 2.60' LT

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING LOCATION NOS. 1 AND 2, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT = 120 PCF
FRICTION ANGLE = 30 DEGREES
COHESION = 0 PSF
GROUNDWATER ELEVATION = 1723 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING LOCATION NOS. 1 AND 2. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY WILL NOT PENETRATE BELOW ELEVATION 1723 FT (LOCATION 1) AND 1743 FT (LOCATION 2) FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DUE TO LIMITED SPACE, THE SHORING AT BOTH LOCATIONS WILL BE USED IN ALL PHASES, SERVING AS CUT SHORING IN PHASES 1 AND 2 AND FILL SHORING IN PHASES 3 AND 4. ADDITIONAL BLOCKING OR LAGGING INSTALLATION WILL BE REQUIRED WHEN THE SYSTEM IS INSTALLED TO ADDRESS THE CHANGE OF LOADING DIRECTION DURING PHASE CHANGES. SUBMIT SHORING PLAN AND DETAILS TO THE RESIDENT ENGINEER AND GEOTECHNICAL OPERATIONS ENGINEER 30 DAYS BEFORE INSTALLATION BEGINS.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING LOCATION NOS. 1 AND 2. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

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SHORING NOTES

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-3

PHASING NOTES

NOTES:

RSD REFERS TO ROADWAY STANDARD DRAWINGS.

ALL PROPOSED ASPHALT ROADWAY CONSTRUCTION IS UP TO, BUT NOT INCLUDING, THE FINAL LAYER OR SURFACE COURSE UNTIL OTHERWISE NOTED.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MATTER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

PORTABLE SIGNAL LOCATIONS MAY BE SHIFTED DURING PHASING BASED ON LENGTH OF WATER FILLED BARRIER NEEDED.

REFER TO STANDARD DRAWINGS 1801.01 AND 1801.02 FOR TEMPORARY SHORING DETAILS.

PHASE I STEP 1

USING RSD 1101.01 (SHEET 3 OF 3) PLACE ALL ADVANCE WARNING SIGNS ALONG -L- (BIG HUNGRY RD).

PHASE I STEP 2

USING RSD 1101.02 (SHEET 1 OF 19) AND A LANE CLOSURE ALONG -L- (BIG HUNGRY RD), CONSTRUCT TEMPORARY GRAVEL AND INSTALL TEMPORARY GUARDRAIL AND WATER FILLED BARRIER (SEE SHEET TMP-4).

-L- STA. 11+89± (LT) TO STA. 13+03± (LT) (TEMPORARY GRAVEL)

INSTALL PORTABLE SIGNAL AND SHIFT TRAFFIC INTO A ONE LANE, TWO WAY PATTERN ALONG -L- (LT) (BIG HUNGRY RD). INSTALL WATER FILLED BARRIER, AND USE RSD 1101.02 (SHEETS 1 AND 17 OF 19) AND STANDARD DRAWINGS 1801.01 AND 1801.02 TO INSTALL TEMPORARY SHORING AND TEMPORARY GUARDRAIL. THEN, BEGIN PARTIAL REMOVAL OF THE TEMPORARY STRUCTURE (SEE SHEET TMP-4).

-L- STA. 13+03± (RT) TO STA. 14+39± (RT) (EXISTING STRUCTURE REMOVAL)

PHASE II

WITH TRAFFIC IN A ONE LANE, TWO WAY PATTERN ALONG -L- (LT) (BIG HUNGRY RD), USE RSD 1101.02 (SHEETS 1 AND 17 OF 19), WEDGING, AND RESETTING AND PLACING WATER FILLED BARRIER , CONSTRUCT THE RIGHT SIDE OF THE PROPOSED STRUCTURE, ROADWAY, DRAINAGE, GUARDRAIL, AND WIRE MESH SLOPE PROTECTION (SEE ROADWAY SHEETS 2G-1 AND 2G-2) (SEE SHEET TMP-5).

-L- STA. 11+60± (RT) TO STA. 17+00± (RT)

PHASE III

SHIFT TRAFFIC INTO A ONE LANE, TWO WAY PATTERN ALONG -L- (RT) (BIG HUNGRY RD). RESET WATER FILLED BARRIER AND USE RSD 1101.02 (SHEETS 1 AND 17 OF 19) AND STANDARD DRAWINGS 1801.01 AND 1801.02 TO INSTALL TEMPORARY GUARDRAIL. THEN, REMOVE THE REMAINDER OF THE EXISTING STRUCTURE. REMOVE TEMPORARY GRAVEL (SEE TMP-6).

-L- STA. 11+89± (LT) TO STA. 13+03± (LT) (TEMPORARY GRAVEL REMOVAL)
-L- STA. 13+03± (LT) TO STA. 14+39± (LT) (EXISTING STRUCTURE REMOVAL)

PHASE IV

WITH TRAFFIC IN A ONE LANE, TWO WAY PATTERN ALONG -L- (RT) (BIG HUNGRY RD), USE RSD 1101.02 (SHEETS 1 AND 17 OF 19), WEDGING, AND RESET WATER FILLED BARRIER TO CONSTRUCT THE LEFT SIDE OF THE PROPOSED STRUCTURE, ROADWAY, DRAINAGE, AND GUARDRAIL (SEE TMP-7).

-L- STA. 11+60± (LT) TO STA. 15+50± (LT)

PHASE V

REMOVE PORTABLE SIGNAL SYSTEM. THEN, USING RSD 1101.02 (SHEET 1 OF 19), PLACE FINAL PAVEMENT MARKINGS AND FINAL SURFACE COURSE. REMOVAL ALL TRAFFIC CONTROL DEVICES AND OPEN TRAFFIC TO FINAL PATTERN.

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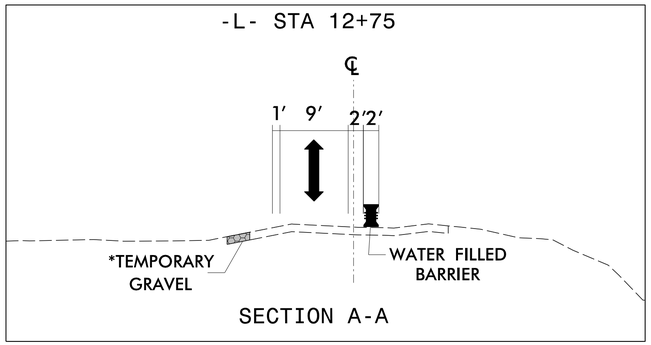
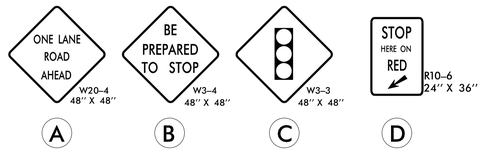
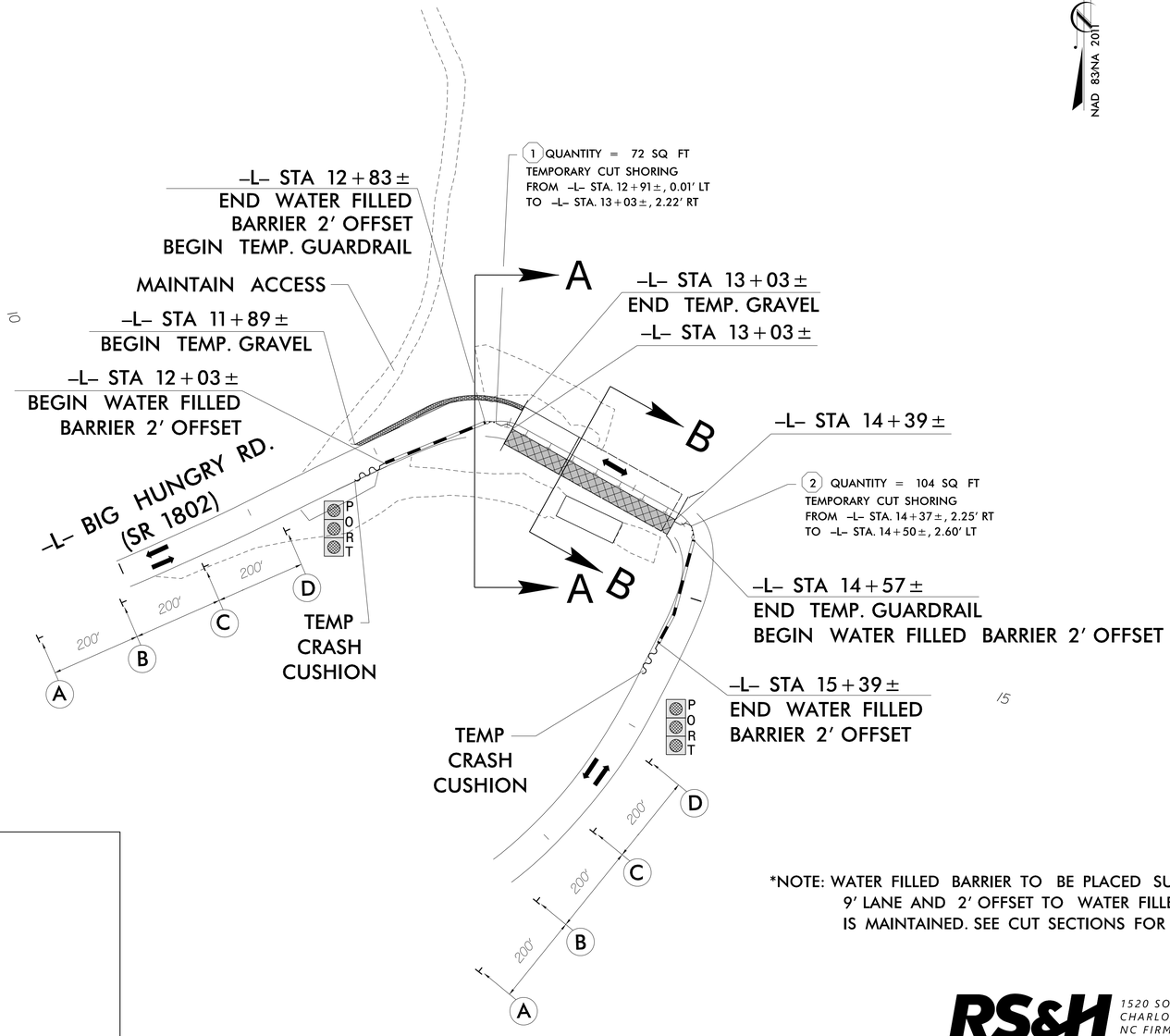
PHASING NOTES

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-4

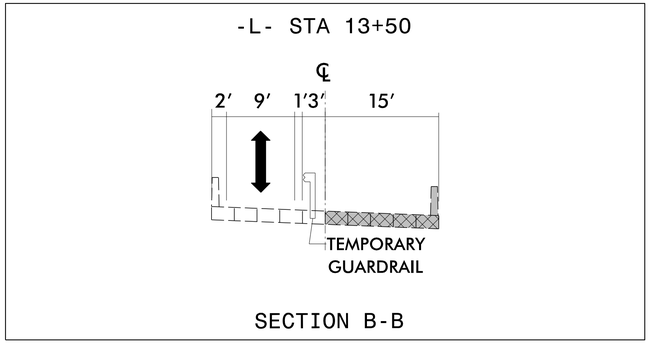


*NOTE: DEPTH AND WIDTH OF TEMPORARY GRAVEL TO BE FIELD VERIFIED.





*NOTE: WATER FILLED BARRIER TO BE PLACED SUCH THAT A 9′ LANE AND 2′ OFFSET TO WATER FILLED BARRIER IS MAINTAINED. SEE CUT SECTIONS FOR GUIDANCE.



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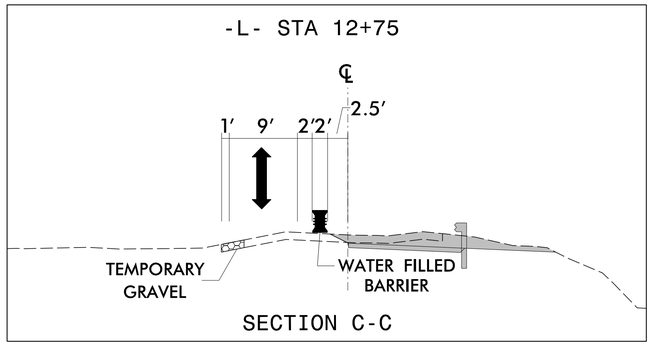
PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-5



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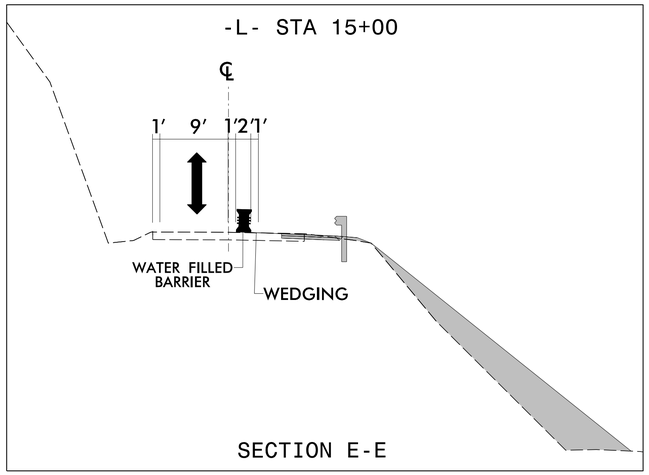

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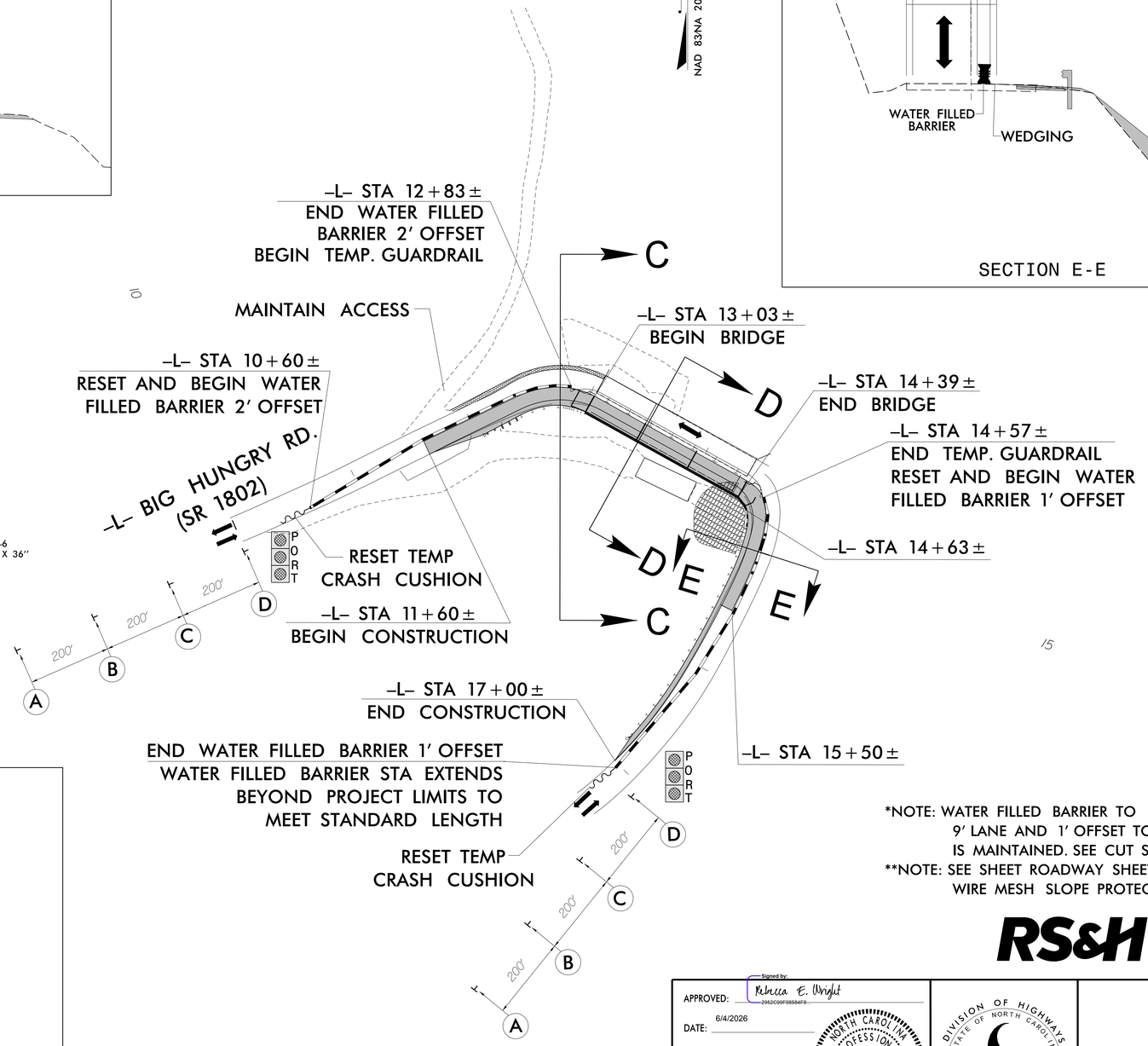

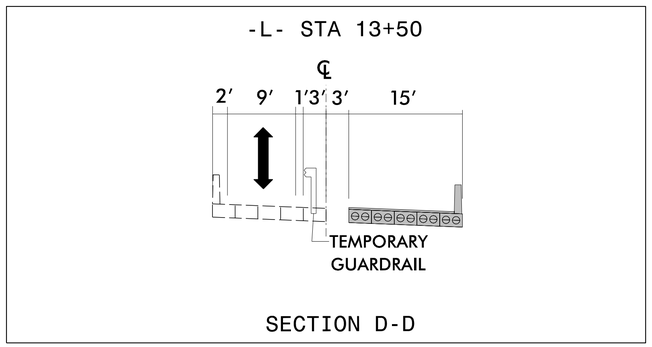

SECTION D-D

*NOTE: WATER FILLED BARRIER TO BE PLACED SUCH THAT A 9′ LANE AND 1′ OFFSET TO WATER FILLED BARRIER IS MAINTAINED. SEE CUT SECTIONS FOR GUIDANCE.
**NOTE: SEE SHEET ROADWAY SHEET 2G–1 AND 2G–2 FOR WIRE MESH SLOPE PROTECTION DETAILS.

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PHASE II DETAIL

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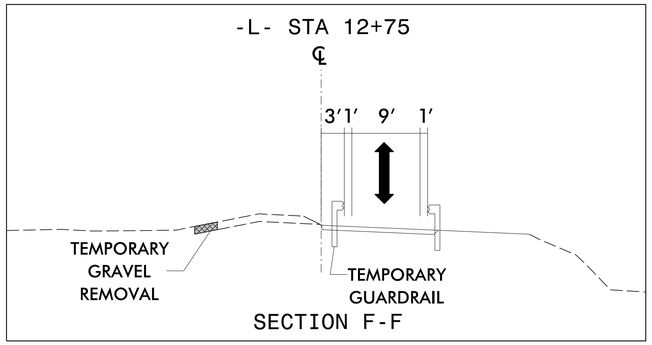
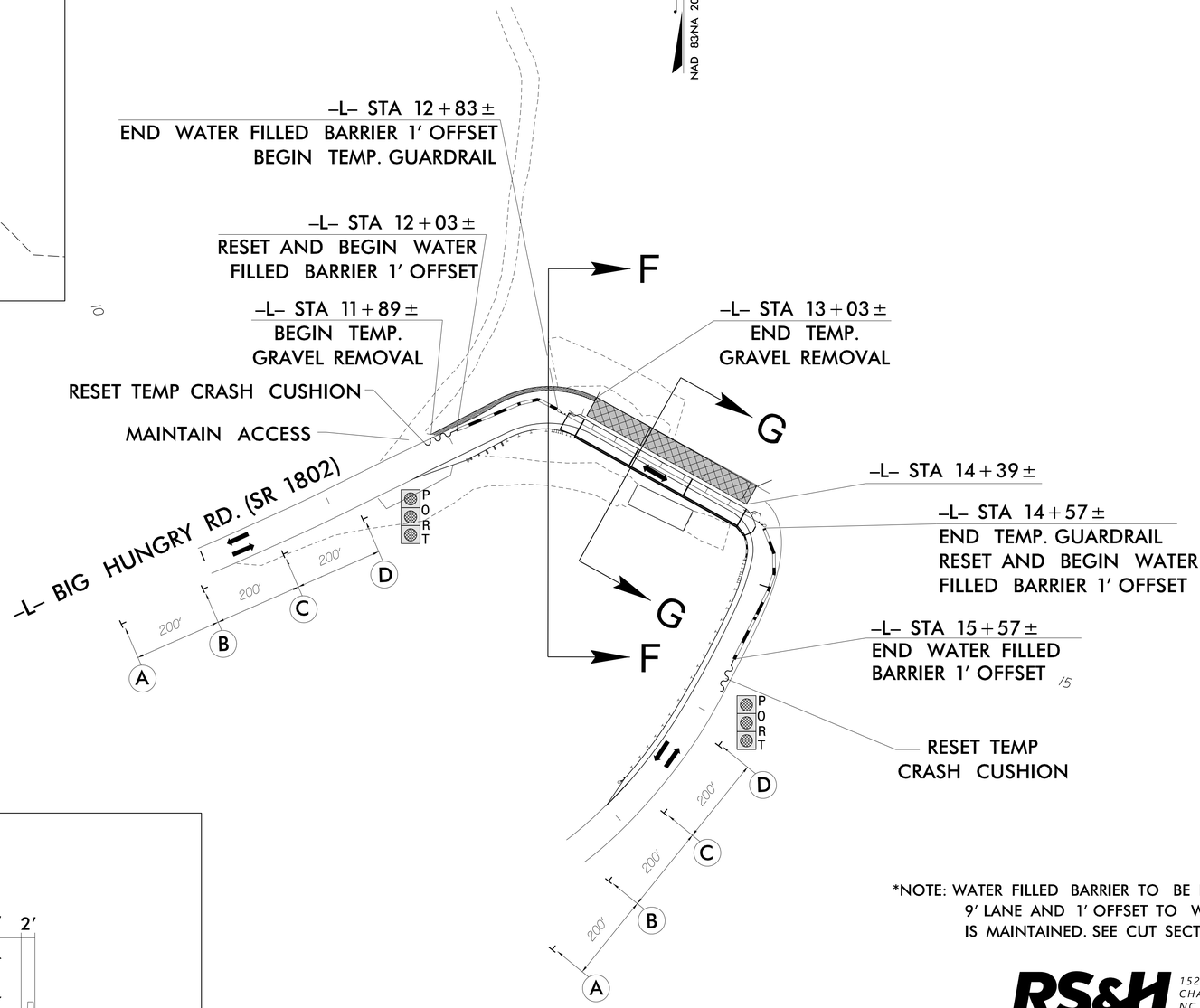
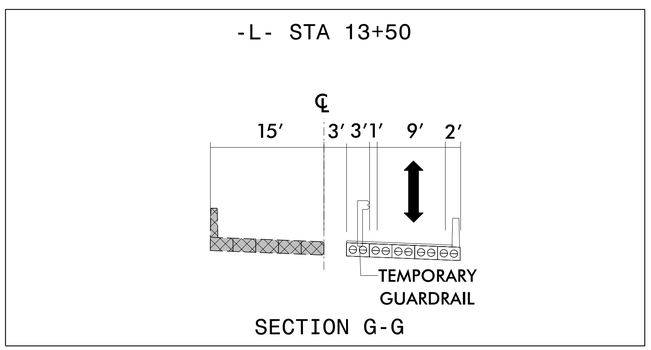
PROJ. REFERENCE NO.	SHEET NO.
DF18314.2045332	TMP-6







*NOTE: WATER FILLED BARRIER TO BE PLACED SUCH THAT A 9′ LANE AND 1′ OFFSET TO WATER FILLED BARRIER IS MAINTAINED. SEE CUT SECTIONS FOR GUIDANCE.

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CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

APPROVED: Signed by: Rebecca E. Wright 2952C99F985B4F8...
DATE: 6/4/2026
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 057350 ENGINEER REBECCA E. WRIGHT

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PHASE III DETAIL

6/4/2026
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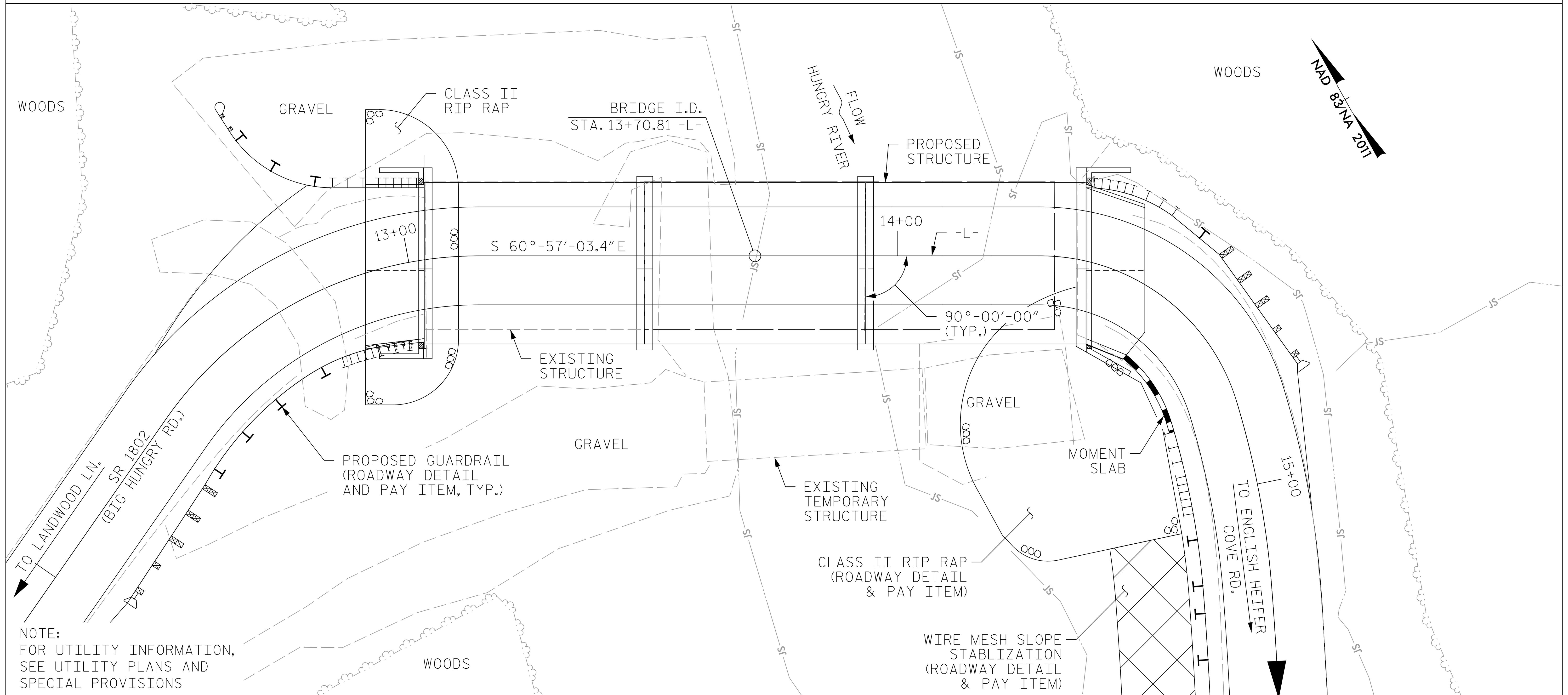
User:mclaughr

BENCHMARK #1: R.R SPIKE SET IN 22" POPLAR, STA. 11+54.27 -L-, 70.18' RT., EL 1747.27. (N 580375, E 1000297)



LOCATION SKETCH

NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARDS REMOVE TEMPORARY GUARDRAILS FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. FOR CONSTRUCTION, AND MAINTENANCE, SEE SPECIAL PROVISIONS.

THE EXISTING STRUCTURE CONSISTING OF (1) 45'-0" SPAN WITH A CLEAR ROADWAY OF APPROXIMATELY 30 FEET AND SUPPORTED BY REINFORCED CONCRETE ABUTMENTS AND AN INTERIOR PILE BENT WITH H-PILES AND A CONCRETE CAP AND FOOTING SHALL BE REMOVED. SEE SPECIAL PROVISIONS.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

ALL MATERIALS REMOVED FROM THE BRIDGE SHALL BE RETAINED AND DELIVERED TO THE NCDOT MAINTENANCE YARD AS DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET 1 OF 4 SHALL BE EXCAVATED FOR A DISTANCE FROM THE CENTERLINE OF ROADWAY 30'± LEFT AND 30'± (RIGHT) AT END BENT 1. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

THE NUMBER AND LINEAR FEET OF PP 24 x 0.5 GALVANIZED STEEL PILES IS FOR NEWLY INSTALLED PILES ONLY. NO ADDITIONAL PAYMENT WILL BE MADE FOR PIPE PILES TO BE RETAINED FROM THE TEMPORARY CONSTRUCTION. FOR ADDITIONAL INFORMATION FOR PIPE PILES TO BE REUSED, SEE SPECIAL PROVISION "REMOVAL, STAGING, DEMOLITION AND CONSTRUCTION OF BRIDGE AT STA. 13+70.81 -L-".

THE LINEAR FEET OF 3'-0" x 1'-9" PRESTRESSED CONCRETE CORED SLAB UNITS IS FOR NEWLY FABRICATED CORED SLAB UNITS ONLY. NO ADDITIONAL PAYMENT WILL BE MADE FOR CORED SLABS TO BE REUSED FROM THE TEMPORARY CONSTRUCTION. FOR ADDITIONAL INFORMATION FOR CORED SLABS TO BE REUSED, SEE SPECIAL PROVISION "REMOVAL, STAGING, DEMOLITION AND CONSTRUCTION OF BRIDGE AT STA. 13+70.81 -L-".

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 - EVALUATING SCOUR AT BRIDGES".

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

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 ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.

FOR REMOVAL, STAGING, DEMOLITION AND CONSTRUCTION OF BRIDGE AT STA. 13+70.81 -L-, SEE SPECIAL PROVISIONS.

FOR TEMPORARY TIMBER MATS, SEE SPECIAL PROVISIONS.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE "STANDARD NOTES" SHEET.

FOR INTERIOR BENT 1, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE INTERIOR BENT SHEET(S) FOR REQUIRED GALVANIZED LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

SHEET PILING FOR TEMPORARY SHORING SHALL BE HOT ROLLED.

FOR MOMENT SLAB LAYOUT AND DETAILS, SEE ROADWAY PLANS.

TOTAL BILL OF MATERIAL

	REMOVAL, STAGING, DEMOLITION AND CONSTRUCTION OF STRUCTURE AT STA. 13+70.81 -L-	ASBESTOS ASSESSMENT	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	2'-6"Ø DRILLED PIERS	PERMANENT STEEL CASING FOR 2'-6"Ø DRILLED PIER	PERMANENT STEEL CASING FOR 3'-6"Ø DRILLED-IN PILE	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION @ STA. 13+70.81 -L-	CLASS A CONCRETE	BRIDGE APPROACH SLABS
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	LUMP SUM	CU. YDS.	LUMP SUM
SUPERSTRUCTURE											
END BENT 1										21.5	
BENT 1			40	127			28.0	1		21.0	
BENT 2										21.0	
END BENT 2					168.0	54.0				41.9	
TOTAL	LUMP SUM	LUMP SUM	40	127	168.0	54.0	28.0	1	LUMP SUM	105.4	LUMP SUM

	REINFORCING STEEL	SPIRAL REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP12x53 STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR PP 24x0.50 GALVANIZED STEEL PILES	HP 12x53 STEEL PILES		PP 24x0.50 GALVANIZED STEEL PILES		CONCRETE BARRIER RAIL WITH MOMENT SLAB	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS	
	LBS.	LBS.	EACH	EACH	NO.	LIN. FT.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.
SUPERSTRUCTURE									18.11	278.92				19	855
END BENT 1	2,659		7		7	140					101	112			
BENT 1	3,708			4			4	195							
BENT 2	3,708														
END BENT 2	16,125	2,902													
TOTAL	26,200	2,902	7	4	7	140	4	195	18.11	278.92	101	112	LUMP SUM	19	855

HYDRAULIC DATA

DESIGN DISCHARGE: 2,900 CFS
FREQUENCY OF DESIGN FLOOD: 25 YRS.
DESIGN HIGH WATER ELEVATION: 1,730.1
DRAINAGE AREA: 19.4 SQ. MI.
BASE DISCHARGE (Q100): 4,200 CFS
BASE HIGH WATER ELEVATION: 1,731.9

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE: 17,950 CFS
FREQUENCY OF OVERTOPPING FLOOD: 1000+ YRS.
* OVERTOPPING FLOOD ELEVATION: 1,746.8

* SAG AT -L- STA. 12+92.70

PROJECT NO. DF18314.2045332
HENDERSON COUNTY
STATION: 13+70.81 -L-

SHEET 4 OF 4

SEAL 052472 — NORTH CAROLINA PROFESSIONAL ENGINEER — MATTHEW R. ACOSTA
6/4/2026

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON BIG HUNGRY RD. (SR 1802) OVER HUNGRY RIVER BETWEEN LANDWOOD LN. AND ENGLISH HEIFER COVE RD.

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			32

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : J. SCACCA DATE : 01/2025
CHECKED BY : M. ACOSTA DATE : 01/2025
DESIGN ENGINEER OF RECORD: M. ACOSTA DATE : 03/2026

County: HENDERSON

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	0008000000-E	200	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR		
0004	0036000000-E	225	UNDERCUT EXCAVATION	450 CY		
0005	0063000000-N	SP	GRADING	Lump Sum	L.S.	
0006	0195000000-E	265	SELECT GRANULAR MATERIAL	400 CY		
0007	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	400 SY		
0008	0248000000-N	SP	GENERIC GRADING ITEM TYPE 1 BRIDGE APPROACH FILL, STATION 13+70.81 -L-	Lump Sum	L.S.	
0009	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	20 TON		
0010	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	60 SY		
0011	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	40 LF		
0012	0449000000-E	310	**" RC PIPE CULVERTS, CLASS V 15"	68 LF		
0013	0453000000-E	310	**" PIPE END SECTION 24"	1 EA		
0014	0582000000-E	310	15" CS PIPE CULVERTS, 0.064" THICK	28 LF		
0015	0594000000-E	310	24" CS PIPE CULVERTS, 0.064" THICK	44 LF		
0016	0636000000-E	310	**" CS PIPE ELBOWS, *****" THICK 15", 0.064"	2 EA		
0017	1099500000-E	505	SHALLOW UNDERCUT	100 CY		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	200 TON		
0019	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	300 SY		
0020	1121000000-E	520	AGGREGATE BASE COURSE	11 TON		
0021	1220000000-E	545	INCIDENTAL STONE BASE	50 TON		
0022	1308000000-E	607	MILLING ASPHALT PAVEMENT, ***" TO ******" 0" TO 3"	120 SY		
0023	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	130 TON		
0024	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	240 TON		
0025	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	25 TON		
0026	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	15 TON		
0027	2022000000-E	815	SUBDRAIN EXCAVATION	44.8 CY		
0028	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	200 SY		
0029	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	33.6 CY		
0030	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	200 LF		
0031	2070000000-N	815	SUBDRAIN PIPE OUTLET	1 EA		
0032	2077000000-E	815	6" OUTLET PIPE	6 LF		
0033	2264000000-E	840	PIPE PLUGS	0.13 CY		
0034	2275000000-E	SP	FLOWABLE FILL	1.96 CY		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	2 EA		
0036	2365000000-N	840	FRAME WITH TWO GRATES, STD 840.22	1 EA		
0037	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	1 EA		
0038	2556000000-E	846	SHOULDER BERM GUTTER	30 LF		
0039	3030000000-E	862	STEEL BEAM GUARDRAIL	187.5 LF		
0040	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	62.5 LF		
0041	3145000000-E	862	EXTRA LENGTH GUARDRAIL POST (**' STEEL) 8'	4 EA		
0042	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	5 EA		
0043	3180000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE ****** TYPE III SHOP CURVED	2 EA		
0044	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	1 EA		
0045	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	1 EA		
0046	3215000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE III	2 EA		
0047	3288000000-N	862	GUARDRAIL END UNITS, TYPE TL-2	2 EA		
0048	3380000000-E	862	TEMPORARY STEEL BEAM GUARDRAIL	325 LF		
0049	3389150000-N	862	TEMPORARY GUARDRAIL END UNITS, TYPE ***** CAT-1	4 EA		
0050	3635000000-E	876	RIP RAP, CLASS II	600 TON		
0051	3649000000-E	876	RIP RAP, CLASS B	1 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	495 SY		
0053	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	20 LF		
0054	4102000000-N	904	SIGN ERECTION, TYPE E	4 EA		
0055	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	156 SF		
0056	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	96 SF		
0057	4424500000-N	SP	TEMPORARY PORTABLE TRAFFIC SIGNAL SYSTEM	1 EA		
0058	4430000000-N	1130	DRUMS	20 EA		
0059	4435000000-N	1135	CONES	30 EA		
0060	4455000000-N	1150	FLAGGER	24 DAY		
0061	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	2 EA		
0062	4470000000-N	1160	REMOVE & RESET TEMPORARY CRASH CUSHION	6 EA		
0063	4507000000-E	1170	WATER FILLED BARRIER	472 LF		
0064	4508000000-E	1170	REMOVE AND RESET WATER FILLED BARRIER	800 LF		
0065	4516000000-N	1180	SKINNY DRUM	20 EA		
0066	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	2,010 LF		
0067	4895000000-N	SP	GENERIC PAVEMENT MARKING ITEM POLYCARBONATE H-SHAPED MARKERS	16 EA		
0068	6000000000-E	1605	TEMPORARY SILT FENCE	1,000 LF		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0069	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	100 TON		
0070	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	30 TON		
0071	6012000000-E	1610	SEDIMENT CONTROL STONE	65 TON		
0072	6015000000-E	1615	TEMPORARY MULCHING	0.5 ACR		
0073	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	100 LB		
0074	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	0.5 TON		
0075	6024000000-E	1622	TEMPORARY SLOPE DRAINS	200 LF		
0076	6029000000-E	SP	SAFETY FENCE	320 LF		
0077	6030000000-E	1630	SILT EXCAVATION	60 CY		
0078	6036000000-E	1631	MATTING FOR EROSION CONTROL	5,000 SY		
0079	6037000000-E	1629	COIR FIBER MAT	100 SY		
0080	6042000000-E	1632	1/4" HARDWARE CLOTH	240 LF		
0081	6071012000-E	1642	COIR FIBER WATTLE	30 LF		
0082	6084000000-E	1660	SEEDING & MULCHING	0.5 ACR		
0083	6087000000-E	1660	MOWING	0.5 ACR		
0084	6090000000-E	1661	SEED FOR REPAIR SEEDING	50 LB		
0085	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.25 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0086	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB		
0087	6108000000-E	1665	FERTILIZER TOPDRESSING	0.25 TON		
0088	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0089	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	13 EA		
0090	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	2 EA		
0091	6123000000-E	1670	REFORESTATION	0.1 ACR		
0116	0199000000-E	SP	TEMPORARY SHORING	176 SF		
			STRUCTURE ITEMS			
0092	8065000000-N	SP	ASBESTOS ASSESSMENT	Lump Sum	L.S.	
0093	8096000000-E	450	PILE EXCAVATION IN SOIL	40 LF		
0094	8097000000-E	450	PILE EXCAVATION NOT IN SOIL	127 LF		
0095	8105500000-E	411	**'-**" DIA DRILLED PIERS IN SOIL 2'-6"	168 LF		
0096	8111000000-E	411	PERMANENT STEEL CASING FOR **'-**" DIA DRILLED PIER 2'-6"	54 LF		
0097	8111400000-E	411	PERMANENT STEEL CASING FOR 3'-6" DIA DRILLED PIER	28 LF		
0098	8115000000-N	411	CSL TESTING	1 EA		
0099	8121000000-N	412	UNCLASSIFIED STRUCTURE EXCAVATION AT STATION ******** 13+70.81 -L-	Lump Sum	L.S.	
0100	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	105.4 CY		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0101	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ********** 12+92.88 -L-, 14+48.87 -L-	Lump Sum	L.S.	
0102	8217000000-E	425	REINFORCING STEEL (BRIDGE)	26,200 LB		
0103	8238000000-E	425	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)	2,902 LB		
0104	8328200000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** STEEL PILES 12X53	7 EA		
0105	8328400000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** GALVANIZED STEEL PILES 24X0.50	4 EA		
0106	8355000000-E	450	HP *** X *** STEEL PILES 12X53	140 LF		
0107	8385200000-E	450	PP ** X **** GALVANIZED STEEL PILES 24X0.50	195 LF		
0108	8504000000-E	460	CONCRETE BARRIER RAIL WITH MOMENT SLAB	20 LF		
0109	8505000000-E	460	VERTICAL CONCRETE BARRIER RAIL	278.92 LF		
0110	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	
0111	8762000000-E	430	3'-0" X 1'-9" PRESTRESSED CONC CORED SLABS	855 LF		
0112	8834000000-N	SP	GENERIC RETAINING WALL ITEM SLOPE NAIL PROOF TESTS	3 EA		
0113	8834000000-N	SP	GENERIC RETAINING WALL ITEM SUPPLEMENTAL SLOPE NAILS	5 EA		
0114	8848000000-E	SP	GENERIC RETAINING WALL ITEM WIRE MESH SLOPE PROTECTION	240 SY		
0115	8860000000-N	SP	GENERIC STRUCTURE ITEM REMOVAL, STAGING, DEMOLITION, AND CONSTRUCTION OF STRUCTURE AT STA. 13+70.81 -L-	Lump Sum	L.S.	