

**Maintenance and Removal**

Maintain the concrete washout structure(s) to provide adequate holding capacity plus a minimum freeboard of 12 inches. Remove and dispose of hardened concrete and return the structure to a functional condition after reaching 75% capacity.

Inspect concrete washout structures for damage and maintain for effectiveness.

Remove the concrete washout structures and sign upon project completion. Grade the earth material to match the existing contours and permanently seed and mulch area.

**Measurement and Payment**

*Concrete Washout Structure* will be paid for per each enclosure installed in accordance with the details. If alternate details or commercially available devices are approved, then those devices will also be paid for per each approved and installed device.

*Temporary Silt Fence* will be measured and paid for in accordance with Article 1605-5 of the *Standard Specifications*.

*Safety Fence* shall be measured and paid for as provided elsewhere in this contract.

No measurement will be made for other items or for over excavation or stockpiling.

Payment will be made under:

**Pay Item**

Concrete Washout Structure

**Pay Unit**

Each

**LITTER REMOVAL (MOWING AREAS ONLY):**

(07-19-22)

**Description**

This work consists of the pickup, removal, and disposal of litter from roadsides within the construction project prior to mowing operations.

**Construction Methods**

Provide labor, equipment and materials necessary for the pickup and removal of litter from non-construction sources and the disposal of same into state approved landfills. The Contractor shall abide by all ordinances, laws and regulations regarding disposal of litter and recycling of eligible materials. Wastes generated from construction activities shall be managed as provided elsewhere in the contract. Litter items may consist of any item not considered normal to the right-of-way, including but not limited to, varied sizes of bottles, cans, paper, tires, tire pieces, lumber, vehicle parts, building supplies, metals, household furnishings, cardboard, plastics, ladders, brush and other items not considered normal to the right of way. Litter removal shall be performed in designated areas within five days prior to any mowing operations and as directed by the Engineer. Designated areas shall

include vegetated medians and shoulders within the project limits including all interchange ramps and other areas to be mown. Designated areas may be omitted for litter removal by the Engineer due to safety concerns.

The Contractor shall provide adequate personnel and materials to collect and remove litter. The Contractor shall be responsible for locating and utilizing approved local landfills and recycling facilities. Refer to Section 105-27 of the *Standard Specifications* for potential hazardous materials. All collected litter shall be containerized immediately and kept off the traveled portions of the roadway, shoulders, and rights-of-way (including paved shoulders). All collected litter that is small enough to be placed in a bag shall be bagged immediately. All collected litter that is too large for a bag shall be placed into a vehicle. Extended storage or stockpiling of collected litter and recyclables will not be permitted.

The Contractor's personnel shall dispose of any litter in a landfill approved by North Carolina Division of Waste Management. The Contractor will not be allowed to use NCDOT accounts at the landfills/recycling centers nor be allowed to dispose of the litter in NCDOT trash containers on any NCDOT property.

The Contractor shall report online the number of bags of litter and any recycling on the NCDOT Litter Management Website on the date of the pickup at the following website:

<https://apps.ncdot.gov/LM>

An access code ('Pickup Key') for the online reporting portal may be obtained via emailing the Roadside Environmental Unit Litter Management Section at [ncdot.clr@ncdot.gov](mailto:ncdot.clr@ncdot.gov). The Contractor shall request access to the litter removal reporting website prior to starting initial litter collection operations.

### **Measurement and Payment**

The quantity of litter removal to be performed will be affected by the actual conditions that occur during construction of the project. The quantity of litter removal may be increased, decreased, or eliminated entirely as directed by the Engineer. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

*Manual Litter Removal* will be measured and paid as the actual number of man hours each worker spends picking up litter. Such price and payment will be full compensation for all litter removal work covered by *Litter Removal*, including, but not limited to, furnishing all materials, labor, equipment, transport, reporting, and incidentals necessary to accomplish the work.

*Litter Disposal* will be measured and paid for by the actual number of tons of litter collected and properly disposed of at a state approved landfill. Such price and payment will be full compensation for all fees, labor, transport, and incidentals necessary to dispose of collected litter associated with *Litter Removal*.

All traffic control necessary to provide a safe work area for *Litter Removal* shall be paid for as specified elsewhere in the contract.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Manual Litter Removal	MHR
Litter Disposal	TON

### **PUMP AROUND OPERATION:**

#### **Description**

The work covered by this section consists of furnishing, installing, maintaining and removing any and all pump around systems used on this project. The Contractor shall install a pump around system in locations as shown in the plans and in other locations approved by the Engineer. The pump around system shall provide a passageway for the stream flow around the work site.

The quantity of pump around systems may be increased, decreased, or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work. See NCDOT *Best Management Practices for Construction and Maintenance Activities* manual for example pump around operation.

#### **Materials**

<b>Item</b>	<b>Section</b>
Special Stilling Basin	1639

*Impervious Dike* shall meet the specifications as provided elsewhere in this contract.

Pumps shall be of sufficient size to divert the stream flow around the work area, as approved by the Engineer.

#### **Construction Methods**

Install *impervious dike(s)* as shown on the plans or as directed. Pump water around the work site. If the water is turbid or exposed to bare soil, pump through a *special stilling basin*. Once the work is complete in an area remove the *impervious dike(s)* and pump system, and stabilize the area.

#### **Measurement and Payment**

*Impervious Dike* will be measured and paid for as provided elsewhere in this contract.

*Special Stilling Basin* will be measured and paid for in accordance with Article 1639-4 of the *Standard Specifications*.

Payment for pumping operations shall be considered incidental to the work of installing pipes and culverts. The pumping operations shall include but not be limited to, diverting the stream flow around the work area and pumping runoff from the work area into a stilling basin, special stilling basin or other sediment control device. No additional payment will be made for furnishing

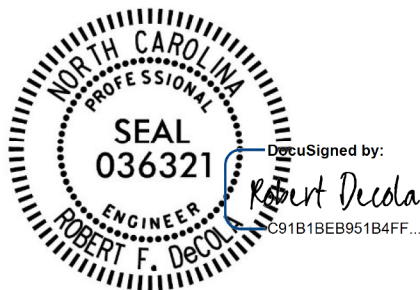
materials or maintenance of the pumping operations for the installation of pipes and culverts.

The above prices and payments will be full compensation for all work covered by this section including, but not limited to furnishing all of the necessary materials, construction, maintenance and removal of the impervious dike and pump around system.

**Project Special Provisions**  
**Structure**

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10/3/2024

Company License No. C-0764

**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 1/2" 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  $\frac{3}{4}$ ".

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 <sup>2</sup> 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****(11-30-23)****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](mailto:SMU-wdr@ncdot.gov) (do not cc SMU Working Drawings staff)

**Via US mail:**

Mr. B. C. Hanks, 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. B. C. Hanks, 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, use the following Eastern Regional Office addresses:

Via Email: [EastGeotechnicalSubmittal@ncdot.gov](mailto: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, use the following Western Regional Office addresses:

Via Email: [WestGeotechnicalSubmittal@ncdot.gov](mailto: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](mailto:jlbolden@ncdot.gov)

Secondary Structures Contacts:

Emmanuel Omile (919) 707 – 6451  
[eomile@ncdot.gov](mailto:eomile@ncdot.gov)

Madonna Rorie (919) 707 – 6508  
[mrorie@ncdot.gov](mailto:mrorie@ncdot.gov)

Eastern Regional Geotechnical Contact (Divisions 1-7):

Thomas Santee (919) 920-8901  
[tgsantee@ncdot.gov](mailto:tgsantee@ncdot.gov)

Western Regional Geotechnical Contact (Divisions 8-14):

Eric Williams (704) 455 – 8902  
[ewilliams3@ncdot.gov](mailto:ewilliams3@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**

<b>Submittal</b>	<b>Submittal Required by Structures Management Unit?</b>	<b>Submittal Required by Geotechnical Engineering Unit?</b>	<b>Contract Reference Requiring Submittal <sup>1</sup></b>
Arch Culvert Falsework	Y	N	Plan Note, SN Sheet & “Falsework and Formwork”
Box Culvert Falsework <sup>7</sup>	Y	N	Plan Note, SN Sheet & “Falsework and Formwork”
Cofferdams	Y	Y	Article 410-4
Foam Joint Seals <sup>6</sup>	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 <sup>2</sup> (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 <sup>4,5</sup>	Y	N	Article 1072-8
Miscellaneous Metalwork <sup>4,5</sup>	Y	N	Article 1072-8
Disc Bearings <sup>4</sup>	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) <sup>3</sup>	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) <sup>3</sup>	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 <sup>5</sup>	Y	N	Article 1072-8 & “Sound Barrier Wall”
Structural Steel <sup>4</sup>	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 <sup>4</sup>	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**

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

**FOOTNOTES**

- 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*.
- 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.
- 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.
- Electronic copy of submittal is required. See referenced provision.

**CRANE SAFETY****(6-20-19)**

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**

- A. **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.
- B. **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.
- C. **Crane Inspections:** Inspection records for all cranes shall be current and readily accessible for review upon request.
- D. **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.

**GROUT FOR STRUCTURES****(12-1-17)****1.0 DESCRIPTION**

This special provision addresses grout for use in pile blockouts, grout pockets, shear keys, dowel holes and recesses for structures. This 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 provision.

**2.0 MATERIAL REQUIREMENTS**

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.

**3.0 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.

**4.0 BASIS OF 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.

**PROJECT SPECIAL PROVISION**

(10-18-95) (Rev. 10-15-24)

Z-1

**PERMITS**

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Water Resources, DEQ State of North Carolina
Buffer Certification	Division of Water Resources, DEQ State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.**

U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

Action Id. **SAW-2021-00295**

County: **Wake County** U.S.G.S. Quad: **Angier**

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: **Chris Murray**  
**NC Department of Transportation, Division 5**  
Address: **2612 N. Duke Street**  
**Durham NC, 27704**  
Telephone Number: **(919) 220-4618**

Size (acres) **3.2** Nearest Town **Fuquay-Varina**  
Nearest Waterway **Little Creek** River Basin **Neuse**  
USGS HUC **03020201** Coordinates Latitude: **35.59008**; Longitude: **-78.63408**  
Location description: **The site is located along NC 42 over Lick Creek at the NC 42, Sauls Road intersection, in Wake County, North Carolina. NCDOT has identified the project as W-5601EY.**

Description of projects area and activity: **TIP No. W-5601EY; This authorization is for temporary and permanent impacts to tributary streams and wetlands associated with the construction of an eastbound turn lane at an existing NCDOT roadway intersection, NC 42 at SR 2727 (Sauls Road) as follows: Site 1 (Station 11+79 to 13+65-L-LT) Wetland B 0.02 acre of wetland fill for roadway development and 0.06 acre of mechanized land clearing. Site 2 ( 11+88 to 13+66-L-RT) Wetland C 0.03 acre of wetland fill for roadway development and 0.03 acre of mechanized land clearing. Site 3 (13+87 to 14+38-L-LT) Little Creek (Stream 1) Culvert extension (inlet) 16 linear feet, bank stabilization (inlet) 42 linear feet and temporary dewatering (inlet) 13 linear feet. Culvert extension (outlet) 14 linear feet, bank stabilization (outlet) 18 linear feet and temporary dewatering (outlet) 10 linear feet. Site 4 (14+43 to 15+86-L-LT) Wetland A 0.03 acre of wetland fill for roadway development and 0.04 acre of mechanized land clearing. Site 5 Unnamed tributary to Little Creek (Stream 2) (Station 17+75 to 19+36-L) Culvert extension (inlet) 20 linear feet, (Station 19+05 to 19+26-L-LT ) bank stabilization (inlet) 35 linear feet and temporary dewatering (inlet) 12 linear feet. (Station 18+04 to 18+38-L-RT) Culvert extension (outlet) 47 linear feet, (Station 17+87 to 18+04-L-RT) bank stabilization and at grade rip rap dissipation pad (outlet) 20 linear feet and temporary dewatering (outlet) 15 linear feet. NOTE: This verification replaces the previous 8/27/2021 NWP 14 verification for this project, including the special conditions, which are revised below. The required compensatory mitigation requirement has not changed.**

Applicable Law: ☒ Section 404 (Clean Water Act, 33 USC 1344);  
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number: **RGP 50 - NCDOT - Bridge, Road Widening and Interchanges**

***SEE ATTACHED RGP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS***

**SAW-2021-00295**

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated July 28, 2021, and November 1 and 15, 2022. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

**SPECIAL CONDITIONS**

1. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Eric Alsmeyer at (919) 817-1570 or Eric.C.Alsmeier@usace.army.mil.**

Corps Regulatory Official: Monte Matthews Date: 2022.11.16 07:08:21 -05'00' Date: **November 15, 2022**  
Expiration Date of Verification: **May 25, 2025**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at <https://regulatory.ops.usace.army.mil/customer-service-survey/>

**Action ID Number:** SAW-2021-00295

**County:** Wake County

**Permittee:** Chris Murray  
NC Department of Transportation, Division 5

**Project Name:** NCDOT/W-5601EY/NC 42/Division 5/Wake County (Reverification)

**Date Verification Issued:** November 15, 2022

**Project Manager:** Eric Alsmeyer

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

**US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
Attn: Eric Alsmeyer  
Raleigh Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587  
919.554.4884, Ext. 23**

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
**Signature of Permittee**

\_\_\_\_\_  
**Date**

DEPARTMENT OF THE ARMY  
Wilmington District, Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403-1343

Regional General Permit No. SAW-2019-02350 (RGP 50)  
Name of Permittee: North Carolina Department of Transportation  
Effective Date: May 26, 2020  
Expiration Date: May 25, 2025

**DEPARTMENT OF THE ARMY  
REGIONAL GENERAL PERMIT**

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby issued by authority of the Secretary of the Army by the

District Commander  
U.S. Army Engineer District, Wilmington  
Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403-1343

**TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES (U.S.), INCLUDING WETLANDS, ASSOCIATED WITH MAINTENANCE, REPAIR, AND CONSTRUCTION PROJECTS CONDUCTED BY THE VARIOUS DIVISIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT), INCLUDING THE NCDOT DIVISION OF HIGHWAYS, RAIL, BICYCLE/PEDESTRIAN, ETC.**

Activities authorized by this RGP:

- a. (1) Road widening, and/or (2) construction, maintenance, and/or repair of bridges. For bridge projects, work can include the approaches.
- b. (1) Improvement of interchanges or intersections, or (2) construction of interchanges or intersections over, or on, existing roads.

**Full descriptions/terms of “a” and “b”:**

**a. (1) Road widening, and/or (2) construction, maintenance, and/or repair of bridges. For bridge projects, work can include the approaches.**

Permanent impacts that result in a loss of waters of the U.S., excluding stream relocation(s), must be less than or equal to 500 linear feet (lf) of stream and/or one (1) acre of wetland/open water for each single and complete linear project.

Single and complete linear project. As noted in 33 CFR 330.2(i), for linear projects, the “single and complete project” (i.e., single and complete crossing) will apply to each crossing of a separate water of the U.S. (i.e., single waterbody) at that location; except that for linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossing of such features cannot be considered separately.

Also authorized under “a”: (1) stream relocation(s) and (2) temporary impacts, such as those from temporary structures, fills, dewatering, and other work necessary to conduct the activities listed under “a”. Stream relocation(s) and temporary impacts will be evaluated independently and are not limited to the permanent loss limits of 500 lf of stream and/or 1 acre of wetland/open water (i.e., stream relocations and/or temporary impacts do not factor into these limits) for each single and complete linear project; however, if the Corps determines that the proposed stream relocation(s) and/or temporary impacts are of such magnitude that they cannot be authorized under this section (“a”) of RGP 50, even if the permanent losses from road widening, and/or construction, maintenance, and repair of bridges do not exceed the impact limits for this section (“a”) of RGP 50, an Individual Permit will be required.

If the Corps determines, on a case-by-case basis, that the concerns for the aquatic environment so indicate, he/she may exercise discretionary authority to override this RGP and require an Individual Permit.

**b. (1) Improvement of interchanges or intersections, or (2) construction of interchanges or intersections, over or, on existing roads.**

For activities authorized under “b”, the limits for permanent impacts that result in a loss of waters of the U.S. depend on the location of the impacts, as described below:

- In the coastal plain of North Carolina (both inner coastal plain and outer coastal plain) - permanent impacts that result in a loss of waters of the U.S., excluding stream relocation(s), must be less than or equal to 1,000 lf of stream and/or 3 acres of wetland/open water for the entire interchange or intersection project.

- All other areas of North Carolina - permanent impacts that result in a loss of waters of the U.S., excluding stream relocation(s), must be less than or equal to 1,000 lf of stream and/or 2 acres of wetland/open water for the entire interchange or intersection project.

Coastal plain – See [http://saw-reg.usace.army.mil/JD/LRRs\\_PandT.pdf](http://saw-reg.usace.army.mil/JD/LRRs_PandT.pdf) for Land Resource Areas LRRP (inner coastal plain) and LRRT (outer coastal plain).

When proposed impacts to waters of the U.S. are located both inside AND outside of the coastal plain, the Corps will determine, based on the location(s) of proposed impacts to waters of the U.S., if a project is a “coastal plain project”.

Single and complete project. For permitting purposes, each interchange or intersection is considered to be one single and complete project. For example, an interchange project cannot result in a permanent loss (excluding stream relocation), of (1) greater than 1,000 lf of stream and/or 3 acres of wetland/open water in the coastal plain OR (2) greater than 1,000 lf of stream and/or 2 acres of wetland/open water in all other areas of North Carolina.

Approach fills may be considered to be part of an interchange or intersection project if the Corps determines that inclusion of these areas meet the terms of this section (“b”) of RGP 50. Early coordination with the Corps is encouraged.

Intersections, regardless of the mode of transportation (e.g., railroad, other roadways, etc.), may be at grade or grade separated if the Corps determines that the project would meet the terms of this section (“b”) of RGP 50. Early coordination with the Corps is encouraged.

Also authorized under “b”: (1) stream relocation(s) and (2) temporary impacts, such as those from temporary structures, fills, dewatering, and other work necessary to conduct the activities listed under “b”. Stream relocation(s) and temporary impacts will be evaluated independently and are not limited to the permanent loss limits of (1) 1,000 lf of stream and/or 3 acres of wetland/open water in the coastal plain OR (2) 1,000 lf of stream and/or 2 acres of wetland/open water in all other areas of North Carolina (i.e., stream relocations and/or temporary impacts do not factor into these limits) for each interchange or intersection project; however, if the Corps determines that the proposed stream relocation(s) and/or temporary impacts are of such magnitude that they cannot be authorized under this section (“b”) of RGP 50, even if the permanent losses from improvement of interchanges or intersections, or construction of interchanges or intersections over, or on, existing roads do not exceed the impact limits for this section (“b”) of RGP 50, an Individual Permit will be required.

If the Corps determines, on a case-by-case basis, that the concerns for the aquatic environment so indicate, he/she may exercise discretionary authority to override this RGP and require an Individual Permit.

1. Special Conditions.

a. The prospective permittee must submit a pre-construction notification (PCN) and applicable supporting information to the District Engineer and receive written verification from the Corps that the proposed work complies with this RGP prior to commencing any activity authorized by this RGP.

b. If the project will not impact a designated “Area of Environmental Concern” (AEC) in the twenty\* (20) counties of North Carolina covered by the North Carolina Coastal Area Management Act (CAMA) (“CAMA counties”), a consistency submission is not required. If the project will impact a designated AEC and meets the definition of “development”, the prospective permittee must obtain the required CAMA permit. Development activities shall not commence until a copy of the approved CAMA permit is furnished to the appropriate Corps Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889).

**\*The 20 CAMA counties in North Carolina include Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, and Washington.**

c. No work shall be authorized by this RGP within the 20\* CAMA counties without prior consultation with the National Oceanic and Atmospheric Administration’s (NOAA) Habitat Conservation Division. For each activity reviewed by the Corps where it is determined that the activity may affect Essential Fish Habitat (EFH) for federally managed species, an EFH Assessment shall be prepared by the prospective permittee and forwarded to the Corps and NOAA Fisheries for review and comment prior to authorization of work.

d. Culverts and pipes. The following conditions [(1)-(8)] apply to the construction of culverts/pipes, and work on existing culverts/pipes.

Additionally, if the proposed work would affect an existing culvert/pipe (e.g., culvert/pipe extensions), the prospective permittee must include actions (in the PCN) to correct any existing deficiencies that are located:

- At the inlet and/or outlet of the existing culvert/pipe, IF these deficiencies are/were caused by the existing culvert/pipe, or
- Near the inlet or outlet of the existing culvert/pipe, IF these deficiencies are/were caused by the existing culvert/pipe.

These deficiencies may include, but are not limited to, stream over-widening, bank erosion, streambed scour, perched culvert/pipes, and inadequate water depth in culvert(s). Also note if the proposed work would address the existing deficiency or eliminate it – e.g., bank erosion on left bank, but the culvert extension will be placed in this eroded area. If the prospective permittee is unable to correct the deficiencies caused by the existing culvert/pipe, they must document the reasons in the PCN for Corps consideration.

(1) No activity may result in substantial, permanent disruption of the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. Measures will be included that will promote the safe passage of fish and other aquatic organisms.

(2) The dimension, pattern, and profile of the stream above and below a culvert/pipe shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. It is acceptable to use rock vanes at culvert/pipe outlets to ensure, enhance, or maintain aquatic passage. Pre-formed scour holes are acceptable when designed for velocity reduction. The width, height, and gradient of a proposed opening shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow will be determined from gauge data, if available. In the absence of such data, bankfull flow will be used as a comparable level.

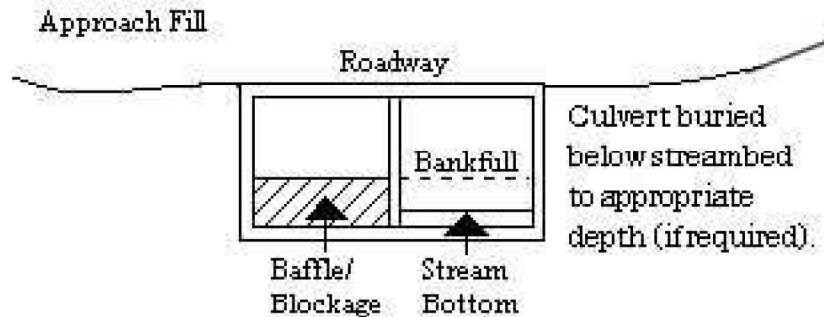
(3) Burial/depth specifications: If the project is located within any of the 20\* CAMA counties, culvert/pipe inverts will be buried at least one foot below normal bed elevation when they are placed within the Public Trust AEC and/or the Estuarine Waters AEC as designated by CAMA. If the project is located outside of the 20\* CAMA counties, culvert/pipe inverts will be buried at least one foot below the bed of the stream for culverts/pipes that are greater than 48 inches in diameter. Culverts/pipes that are 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, to include passage during drought or low flow conditions. Every effort shall be made to maintain the existing channel slope. A waiver from the burial/depth specifications in this condition may be requested in writing. The prospective permittee is encouraged to request agency input about waiver requests as early as possible, and prior to submitting the PCN for a specific project; this will allow the agencies time to conduct a site visit, if necessary, and will prevent time delays and potential project revisions for the prospective permittee. The waiver will only be issued by the Corps if it can be demonstrated that the impacts of complying with burial requirements would result in more adverse impacts to the aquatic environment.

(4) Appropriate actions to prevent destabilization of the channel and head cutting upstream shall be incorporated in the design and placement of culverts/pipes.

(5) Culverts/pipes placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the U.S. Culverts/pipes placed across wetland fills purely for the purposes of equalizing surface

water do not have to be buried, but must be of adequate size and/or number to ensure unrestricted transmission of water.

(6) Bankfull flows (or less) shall be accommodated through maintenance of the existing bankfull channel cross sectional area in no more than one culvert/pipe or culvert/pipe barrel. Additional culverts/pipes or barrels at such crossings shall be allowed only to receive flows exceeding the bankfull flow. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable to comply with this condition.



(7) Where adjacent floodplain is available, flows exceeding bankfull will be accommodated by installing culverts/pipes at the floodplain elevation. When multiple culverts/pipes are used, baseflow must be maintained at the appropriate width and depth by the construction of floodplain benches, sills, and/or construction methods to ensure that the overflow culvert(s)/pipe(s) is elevated above the baseflow culvert(s)/pipe(s).

(8) The width of the baseflow culvert/pipe shall be comparable to the width of the bankfull width of the stream channel. If the width of the baseflow culvert/pipe is wider than the stream channel, the culvert/pipe shall include baffles, benches and/or sills to maintain the width of the stream channel. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills.

See the remaining special conditions for additional information about culverts/pipes in specific areas.

e. Discharges into waters of the U.S. designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are prohibited during the period between February 15th and June 30th, without prior written approval from the Corps and the appropriate wildlife agencies (NCDMF, NCWRC, and/or the National Marine Fisheries Service (NMFS)). Discharges into waters of the U.S. designated by NCWRC as primary nursery areas in inland waters are prohibited during the period between February 15th and September 30th, without prior written approval from the Corps and the appropriate wildlife agencies. Discharges into waters of the U.S. designated by NCDMF as primary nursery areas shall be coordinated with NCDMF prior to being authorized by

this RGP. Coordination with NCDMF may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The prospective permittee should contact:

**NC Division of Marine Fisheries**  
**3441 Arendell Street**  
**Morehead City, NC 28557**  
**Telephone 252-726-7021**  
**or 800-682-2632**

**North Carolina Wildlife Resources Commission**  
**Habitat Conservation Division**  
**1721 Mail Service Center**  
**Raleigh, NC 27699-1721**  
**Telephone (919) 707-0220**

f. This permit does not authorize the use of culverts in areas designated as anadromous fish spawning areas by the NCDMF or the NCWRC.

g. No in-water work shall be conducted in Waters of the U.S. designated as Atlantic sturgeon critical habitat during the periods between February 1st and June 30th. No in-water work shall be conducted in Waters of the U.S. in the Roanoke River designated as Atlantic sturgeon critical habitat during the periods between February 1st and June 30th, and between August 1st to October 31st, without prior written approval from NMFS.

h. Before discharging dredged or fill material into waters of the U.S. in designated trout watersheds in North Carolina, the PCN will be sent to the NCWRC and the Corps concurrently. See <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx> for the designated trout watersheds. The PCN shall summarize alternatives to conducting work in waters of the U.S. in trout watersheds that were considered during the planning process and detail why alternatives were or were not selected. For proposals where (1) a bridge in a trout stream will be replaced with a culvert, or (2) a culvert will be placed in a trout stream, the PCN must also include a compensatory mitigation plan for all loss of stream bed, and details of any on-site evaluations that were conducted to determine that installation of a culvert will not adversely affect passage of fish or other aquatic biota at the project site. The evaluation information must include factors such as the proposed slope of the culvert and determinations of how the slope will be expected to allow or impede passage, the necessity of baffles and/or sills to ensure passage, design considerations to ensure that expected baseflow will be maintained for passage and that post-construction velocities will not prevent passage, site conditions that will or will not allow proper burial of the culvert, existing structures (e.g., perched culverts, waterfalls, etc.) and/or stream patterns up and downstream of the culvert site that could affect passage and bank stability, and any other considerations regarding passage. The level of detail for this information shall be based on site conditions (i.e., culverts on a slope over 3% will most likely require more information than culverts on a slope that is less than 1%, etc.). Also, in order to evaluate potential impacts, the prospective permittee will describe bedforms that will be impacted by the proposed culvert – e.g., pools, glides, riffles, etc. The NCWRC will respond to both the prospective permittee and the Corps.

i. For all activities authorized by this RGP that involve the use of riprap material for bank stabilization, the following measures shall be applied:

(1) Where bank stabilization is conducted as part of an activity, natural design, bioengineering, and/or geoengineering methods that incorporate natural durable materials, native seed mixes, and native plants and shrubs are to be utilized, as appropriate to site conditions, to the maximum extent practicable.

(2) Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters; however, the prospective permittee may request a waiver from this requirement. The waiver request must be in writing. The Corps will only issue a waiver if the prospective permittee demonstrates that the impacts of complying with this requirement would result in greater adverse impacts to the aquatic environment. Note that filter fabric is not required if the riprap will be pushed or “keyed” into the bank of the waterbody.

(3) The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

(4) Riprap shall not be placed in a manner that prevents or impedes fish passage.

(5) Riprap shall be clean and free from loose dirt or any pollutant except in trace quantities that will not have an adverse environmental effect.

(6) Riprap shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

(7) Riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

j. Discharges of dredged or fill material into waters of the U.S., including wetlands, must be minimized or avoided to the maximum extent practicable.

k. Generally, off-site detours are preferred to avoid and minimize impacts to the human and natural environment; however, if an off-site detour is considered impracticable, then an on-site detour may be considered as a necessary component of the actions authorized by this RGP. Impacts from the detour may be considered temporary and may not require compensatory mitigation if the impacted area is restored to pre-construction elevations and contours after construction is complete. The permittee shall also restore natural hydrology and stream corridors (if applicable), and reestablish native vegetation/riparian corridors. If the construction of a detour (on-site or off-site) includes standard undercutting methods, removal of all material and backfilling with suitable material is required. See special condition “s” for additional information.

l. All activities authorized by this RGP shall, to the maximum extent practicable, be

conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from sediment, concrete, and other pollutants. Where concrete is utilized, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the U.S. until the concrete has set and cured. All water in the work area that has been in contact with concrete shall only be returned to waters of the U.S. when it no longer poses a threat to aquatic organisms (concrete is set and cured).

m. In cases where new alignment approaches are to be constructed and the existing approach fill in waters of the U.S. is to be abandoned and no longer maintained as a roadway, the abandoned fill shall be removed and the area will be restored to pre-construction elevations and contours. The permittee shall also restore natural hydrology and stream corridors (if applicable), and reestablish native vegetation/riparian corridors, to the extent practicable. This activity may qualify as compensatory mitigation credit for the project and will be assessed on a case-by-case basis in accordance with Special Conditions "q" and "r" in this document. Any proposed on-site wetland restoration area must be void of utility conflicts and/or utility maintenance areas. A restoration plan detailing this activity will be required with the submittal of the PCN.

n. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

o. The project must be implemented and/or conducted so that all reasonable and practicable measures to ensure that equipment, structures, fill pads, and work associated with the project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, scour, flooding, and/or shoreline/streambank erosion. During construction, the permittee shall routinely monitor for these effects, cease all work if/when detected, take initial corrective measures to correct actively eroding areas, and notify the Corps immediately. Permanent corrective measures may require additional authorization from the Corps.

p. All PCNs will describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. To the maximum extent practicable, structures and measures will be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams. In addition, appropriate soil and erosion control measures must be established and maintained during construction. All fills, temporary and permanent, must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.

q. Compensatory mitigation will be required for permanent impacts resulting in a loss of waters of the U.S. due to culvert/pipe installation and other similar activities. Mitigation may be required for stream relocation projects (see Special Condition “r” below). When compensatory mitigation is required, the prospective permittee will attach a proposed mitigation plan to the PCN. Compensatory mitigation proposals will be written in accordance with currently approved Wilmington District guidance and Corps mitigation regulations, unless the purchase of mitigation credits from an approved mitigation bank or the North Carolina Division of Mitigation Services (NCDMS) is proposed to address all compensatory mitigation requirements. The Corps Project Manager will make the final determination concerning the appropriate amount and type of mitigation.

r. Stream Relocations (non-tidal only) - for the purposes of permitting, stream relocations are considered a loss of waters of the U.S. Depending on the condition and location of (1) the existing stream, and (2) the relocated channel, stream relocation(s) may provide a functional uplift. The Corps will determine if an uplift is possible based on the information submitted with the PCN. If the anticipated uplift(s) occurs, it may offset, either partially or fully, the loss associated with a stream relocation(s) - (i.e., due to the uplift, either no compensatory mitigation would be required for the stream relocation itself, or compensatory mitigation would be required at a reduced ratio).

Because the amount of potential uplift is dependent upon the condition (or quality) of the channel to be relocated, there is no pre-determined amount of uplift needed to satisfy the requirements for a successful relocation project. After performing the evaluation(s) noted in this document, the prospective permittee will propose a certain amount of uplift potential and the Corps project manager will make the final determination. Baseline conditions and subsequent monitoring must show that the relocated channel is providing/will provide aquatic function at, or above, the level provided by the baseline (pre-project) condition. If the required uplift is not achieved, the work will not be in compliance with this special condition of RGP 50 and remediation will be required through repair (and continued monitoring), or by the permittee providing compensatory mitigation (e.g., mitigation credit through an approved bank, mitigation credit through NCDMS, etc.).

Compensatory mitigation, in addition to the stream relocation activity, may be required if the Corps determines that (a) no uplift in stream function is achievable, (b) the proposed uplift in stream function is not sufficient, by itself, (c) the risks associated with achieving potential uplifts in stream function are excessive, and/or (d) the time period for achieving the potential uplifts/functional success is too great.

On-site compensatory mitigation is not the same as stream relocation. While stream relocation simply moves a stream to a nearby, geographically similar area, it does not generate mitigation credits. If NCDOT proposes to generate compensatory mitigation on a project site, NCDOT must submit a mitigation plan that complies with 33 CFR 332.4.

**The prospective permittee is required to submit the following information for any proposed project that involves stream relocation, regardless of the size/length of the stream relocation** (note that 1-5 below only apply to stream relocations and not to compensatory mitigation):

- (1) A statement detailing why relocating the stream is unavoidable. In order to ensure that this action is separate from a compensatory mitigation project, the need for the fill must be related to road/interchange/intersection construction or improvement, and the project must meet the requirements set forth in the full descriptions/terms of “a” and “b” on pages 2 and 3 of this permit.
- (2) An evaluation of effects on the relocated stream and buffer from utilities, or potential for impact from utility placement in the future.
- (3) An evaluation of the baseline condition of the stream to be relocated. In order to demonstrate a potential uplift, the prospective permittee must provide the baseline (pre-impact) condition of the stream that is proposed for relocation. The prospective permittee will document the baseline condition of the stream by using the Corps’ (Wilmington District’s) current functional assessment method - e.g., the North Carolina Stream Assessment Method (NCSAM). The functional assessment must be used to identify specific areas where an uplift would reasonably be expected to occur, and also show important baseline functions that will remain after the relocation.
- (4) An evaluation of the potential uplifts to stream function for the relocated channel. The amount of detail required in the plan will be commensurate with the functional capacity of the original stream and proposed uplift(s). Low functional capacity will warrant less monitoring and less detail in the plan in order to ensure that the relocated channel provides the same, or better/increased, suite of aquatic functions as the existing channel.
- (5) A proposed monitoring plan for the relocated channel (and buffer, if applicable), will be prepared in accordance with current District guidance. The level of detail needed in the plan will be directly related to the quality of baseline functions and the anticipated uplift, therefore it is recommended that a pre-application discussion occur with the Corps Project Manager as early as possible. For example, if the risk for achieving the anticipated functional uplift is moderate or low, or if there is a low amount of proposed uplift, less information and monitoring will be required in the proposed relocation plan; similar to the requirements found in the "2003 Stream Mitigation Guidelines". If the risk for uplift is higher, or if there is a high amount of proposed uplift, additional monitoring and information will be required, trending toward the prescriptions found in the most recent Wilmington District Compensatory Mitigation Guidance – e.g., the 2016 Wilmington District Stream and Wetland Compensatory Mitigation Update. All monitoring will be for at least 5 years unless the Corps project manager determines that (a) a specific project requires less than 5 years due to site conditions or limited risk/uplift potential, and/or complexity (or simplicity) of the existing channel and/or the

relocation work, or (b) the Corps project manager determines (during the monitoring period) that the 5 years of monitoring may be reduced (or that no further monitoring is required) based on monitoring information received once the stream relocation has been completed.

s. Upon completion of any work authorized by this RGP, all temporary fills (to include culverts, pipes, causeways, etc.) will be completely removed from waters of the U.S. and the areas will be restored to pre-construction elevations and contours. The permittee shall also restore natural hydrology and stream corridors (if applicable), and reestablish native vegetation/riparian corridors. This work will be completed within 60 days of completion of project construction. If this timeframe occurs while a required moratorium of this permit is in effect, the temporary fill shall be removed in its entirety within 60 days of the moratorium end date. If vegetation cannot be planted due to the time of the year, all disturbed areas will be seeded with a native mix appropriate for the impacted area, and vegetation will be planted during the next appropriate time frame. A native seed mix may contain non-invasive small grain annuals (e.g. millet and rye grain) to ensure adequate cover while native vegetation becomes established. The PCN must include a restoration plan showing how all temporary fills and structures will be removed and how the area will be restored to pre-project elevations and contours.

t. Once the authorized work in waters of the U.S. is complete, the permittee shall sign and return the compliance certificate that is attached to the RGP verification letter.

u. The District Engineer will consider any comments from Federal and/or State agencies concerning the proposed activity's compliance with the terms and conditions of this RGP.

v. The Corps may place additional special conditions, limitations, or restrictions on any verification of the use of RGP 50 on a project-by-project basis.

## **2. General Conditions.**

a. Except as authorized by this RGP or any Corps approved modification to this RGP, no excavation, fill or mechanized land-clearing activities shall take place within waters or wetlands, at any time during construction or maintenance of the project. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with the project.

b. Authorization under this RGP does not obviate the need to obtain other federal, state, or local authorizations.

c. All work authorized by this RGP must comply with the terms and conditions of the applicable CWA Section 401 Water Quality Certification for this RGP issued by the North Carolina Division of Water Resources (NCDWR).

d. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside of the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

e. The activities authorized by this RGP must not interfere with the public's right to free navigation on all navigable waters of the U.S. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at, or adjacent to, the authorized work for a reason other than safety.

f. The permittee understands and agrees that if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

g. The permittee, upon receipt of a notice of revocation of this RGP for the verified individual activity, may apply for an individual permit, or will, without expense to the U.S. and in such time and manner as the Secretary of the Army or his/her authorized representative may direct, restore the affected water of the U.S. to its former conditions.

h. This RGP does not authorize any activity that would conflict with a federal project's congressionally authorized purposes, established limitations or restrictions, or limit an agency's ability to conduct necessary operation and maintenance functions. Per Section 14 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. 408), no project that has the potential to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, or obstruct a federally constructed work or project, including, but not limited to, levees, dams, jetties, navigation channels, borrow areas, dredged material disposal sites, flood control projects, etc., shall be permitted unless the project has been reviewed and approved by the appropriate Corps approval authority. Permittees shall not begin the activity authorized by this RGP until notified by the Corps that the activity may proceed.

i. The permittee shall obtain a Consent to Cross Government Easement from the appropriate Corps District's Land Use Coordinator prior to any crossing of a Corps easement and/or prior to commencing construction of any structures, authorized dredging, or other work within the right-of-way of, or in proximity to, a federally designated disposal area.

j. The permittee will allow the Wilmington District Engineer or his/her representative to inspect the authorized activity at any time deemed necessary to ensure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.

k. This RGP does not grant any property rights or exclusive privileges.

l. This RGP does not authorize any injury to the property or rights of others.

m. This RGP does not authorize the interference with any existing or proposed federal project.

n. In issuing this permit, the Federal Government does not assume any liability for the following:

(1) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

(2) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest.

(3) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

(4) Design or construction deficiencies associated with the permitted work.

(5) Damage claims associated with any future modification, suspension, or revocation of this permit.

o. Authorization provided by this RGP may be modified, suspended or revoked in whole, or in part, if the Wilmington District Engineer, acting for the Secretary of the Army, determines that such action would be in the best public interest. The term of this RGP shall be five (5) years unless subject to modification, suspension, or revocation. Any modification, suspension, or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.

p. No activity may occur in a component of the National Wild and Scenic Rivers System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or “study river” (e.g., National Park Service, U.S. Forest Service, etc.).

q. Endangered Species.

(1) No activity is authorized under this RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RGP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(2) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal prospective permittees (and when FHWA is the lead federal agency) must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the RGP activity, or whether additional ESA consultation is necessary.

(3) Non-federal prospective permittees - for activities that might affect federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The District Engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat. In cases where the non-federal prospective permittee has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the prospective permittee shall not begin work until the Corps has provided notification that the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed.

(4) As a result of formal or informal consultation with the U.S. Fish and Wildlife Service (USFWS) or NMFS, the District Engineer may add species-specific endangered species conditions to the RGP verification letter for a project.

(5) Authorization of an activity by a RGP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the USFWS or the NMFS, the ESA prohibits any person subject to the jurisdiction of the U.S. to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(6) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS in North Carolina at the addresses provided below, or from the USFWS and NMFS via their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

USFWS offices in North Carolina:

The Asheville USFWS Office covers all NC counties west of, and including, Anson, Stanly, Davidson, Forsyth and Stokes Counties.

US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

The Raleigh USFWS Office covers all NC counties east of, and including, Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

r. The Wilmington District, USFWS, NCDOT, and the FHWA have conducted programmatic Section 7(a)(2) consultation for a number of federally listed species and habitat, and programmatic consultation concerning other federally listed species and/or habitat may occur in the future. The result of completed programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS. These PBOs contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” of whichever species or critical habitat is covered by a specific PBO. Authorization under RGP 50 is conditional upon the permittee’s compliance with all the mandatory terms and conditions associated with incidental take of the applicable PBO (or PBOs), which are incorporated by reference in RGP 50. Failure to comply with the terms and conditions associated with incidental take of an applicable PBO, where a take of the federally listed species occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee non-compliance with the authorization under RGP 50. If the terms and conditions of a specific PBO (or PBOs) apply to a project, the Corps will include this/these requirements in any RGP 50 verification that may be issued for a project. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.

s. Northern long-eared bat (NLEB) (*Myotis septentrionalis*). Standard Local Operating Procedures for Endangered Species (SLOPES) for the NLEB have been approved by the Corps and the U.S. Fish and Wildlife Service. See <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>. This SLOPES details how the Corps will make determinations of effect to the NLEB when the Corps is the lead federal agency for an NCDOT project that is located in the western 41 counties of North Carolina. This SLOPES does not address NCDOT projects (either federal or state funded) in the eastern 59 counties in North Carolina. Note that if another federal agency is the lead federal agency for a project in the western 41 counties, procedures for satisfying the requirements of Section 7(a)(2) of the ESA will be dictated by that agency and will not be applicable for consideration under the SLOPES; however, information that demonstrates the lead federal agency's (if other than the Corps) compliance with Section 7(a)(2) / 4(d) Rule for the NLEB, will be required in the PCN. Note that at the time of issuance of RGP 50, the federal listing status of the NLEB as "Threatened" is being litigated at the National level. If, as a result of litigation, the NLEB is federally listed as "Endangered", this general condition ("s") will no longer be applicable because the 4(d) Rule, and this NLEB SLOPES, will no longer apply/be valid.

t. For proposed activities the sixteen (16) counties listed below, prospective permittees must provide a copy of the PCN to the USFWS, 160 Zillico Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the USFWS and the Corps Project Manager for that specific county.

The 16 counties with tributaries that drain to designated critical habitat that require notification to the Asheville USFWS are: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

u. If the permittee discovers or observes any live, damaged, injured or dead individual of an endangered or threatened species during construction, the permittee shall immediately notify the Wilmington District Engineer so that required coordination can be initiated with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

v. Historic Properties.

(1) In cases where the District Engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(2) Federal prospective permittees (or when FHWA is the lead federal agency) should follow their own procedures for complying with the requirements of Section 106 of the NHPA. Federal prospective permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements; this includes copies of correspondence sent to all interested, federally recognized tribes and a summary statement about

tribal consultation efforts or, if the Corps enters into a Programmatic Agreement (PA) with the FHWA/NCDOT, documentation that the FHWA/NCDOT has complied with PA requirements. The District Engineer will review the documentation and determine whether it is sufficient to address Section 106 compliance for this RGP activity, or whether additional Section 106 consultation is necessary.

(3) Non-federal prospective permittees - the PCN must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), as appropriate, and the NRHP (see 33 CFR 330.4(g)). When reviewing PCNs, the District Engineer will comply with the current procedures for addressing the requirements of Section 106 of the NHPA. The District Engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the District Engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties.

(4) Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)).

(5) Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to a prospective permittee who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit will relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the prospective permittee. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the prospective permittee, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

w. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this general permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

x. Permittees are advised that development activities in or near a floodway may be subject to the National Flood Insurance Program that prohibits any development, including fill, within a floodway that results in any increase in base flood elevations. This general permit does not authorize any activity prohibited by the National Flood Insurance Program.

y. The permittee must install and maintain, at his/her expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. For further information, the permittee should contact Coast Guard Sector North Carolina at (910) 772-2191 or email Coast Guard Fifth District at [cgd5waterways@uscg.mil](mailto:cgd5waterways@uscg.mil).

z. The permittee must maintain any structure or work authorized by this general permit in good condition and in conformance with the terms and conditions of this general permit. The permittee is not relieved of this requirement if the permittee abandons the structure or work. Transfer in fee simple of the work authorized by this general permit will automatically transfer this general permit to the property's new owner, with all of the rights and responsibilities enumerated herein. The permittee must inform any subsequent owner of all activities undertaken under the authority of this general permit and provide the subsequent owner with a copy of the terms and conditions of this general permit.

aa. At his or her sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this general permit will not be applicable to a specific proposal. In such case, the procedures for processing an individual permit in accordance with 33 CFR 325 will be available.

bb. Except as authorized by this general permit or any Corps approved modification to this general permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

cc. Except as authorized by this general permit or any Corps approved modification to this general permit, all excavated material will be disposed of in approved upland disposal areas.

dd. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon this general permit will remain authorized provided the activity is completed within twelve months of the date of the general permit's expiration, modification, or revocation. Activities completed under the authorization of this general permit that were in effect at the time the activity was completed continue to be authorized by the general permit.

ee. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

ff. The activity must comply with applicable FEMA approved state or local floodplain management requirements.

gg. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.

hh. Unless authorization to fill those specific wetlands or mudflats has been issued by the Corps, heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

ii. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines that the proposed activity will significantly affect the quality of the human environment and determines that an EIS must be prepared.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

**CLARK.ROBERT.J**  
**AMES.10189013**  
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Robert J. Clark  
Colonel, U. S. Army  
District Commander

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

RICHARD E. ROGERS, JR.  
Director



December 2, 2022  
DWR # 20210986 ver.2  
Wake County

Mr. Brandon H. Jones, PE, Division Engineer  
NCDOT, Division 5  
2612 North Duke Street  
Durham, NC 27704

**Subject: APPROVAL OF 401 WATER QUALITY CERTIFICATION WITH ADDITIONAL CONDITIONS  
NCDOT TIP #W-5601EY: NC Hwy 42 at SR 2727, Wake County.**

Dear Mr. Jones:

You have our approval for the impacts listed below for the purpose described in your application received by the Division of Water Resources (Division) on November 1, 2022. These impacts are covered by the attached Water Quality General Certification Number 4135 and the conditions listed below. This certification is associated with the use of General Permit 50 once it is issued to you by the U.S. Army Corps of Engineers. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations. **This approval replaces the one issued on August 3, 2021.**

The Division has determined that the proposed project will comply with water quality requirements provided that you adhere to the conditions listed in the general certification and to the additional conditions itemized below.

The following proposed impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

#### Stream Impacts in the Neuse River Basin

Site	Permanent Fill in Perennial Stream (linear ft)	Riprap Stabilization in Perennial Stream (linear ft)	Temporary Dewatering to Perennial Stream (linear ft)	Total Stream Impact (linear ft)
3	30	60	23	113
5	67	55	27	149
<b>Total</b>	<b>97</b>	<b>115</b>	<b>50</b>	<b>262</b>

**Total Stream Impact for Project: 262 linear feet.**

#### Wetland Impacts in the Neuse River Basin

Site	Permanent Fill (ac)	Mechanized Clearing (ac)	Total Wetland Impact (ac)
<b>Total</b>	<b>0.07</b>	<b>0.12</b>	<b>0.19</b>

**Total Wetland Impact for Project: 0.19 acres.**

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)].



North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1611 Mail Service Center | Raleigh, North Carolina 27699-1611  
919.707.9000

If you are unable to comply with any of the conditions of the attached Water Quality General Certification or with the additional conditions itemized below, you must notify the DWR Transportation Permitting Branch within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to DWR any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

**Additional Conditions:**

1. Compensatory mitigation for impacts to 0.19 acres of wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. DMS has indicated in a letter dated July 23, 2021 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010.
2. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
3. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
4. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species. [15A NCAC 02H.0506(b)(2)]
5. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
6. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
7. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
8. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
9. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
10. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
11. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
12. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
13. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
14. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]



15. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]

16. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]

17. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H.0507(c) and 15A NCAC 02H.0506 (b)(2) and (c)(2)]

18. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]

19. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.

20. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]

21. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]

22. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]

23. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]

24. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

25. Sediment and erosion control measures shall not be placed in wetlands or surface waters, or within 5 feet of the top of bank, without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

26. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H.0506(b)(3) and (c)(3) and 15A NCAC 02B.0200]



North Carolina Department of Environmental Quality | Division of Water Resources  
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 919.707.9000

27. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NC DOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

If the project occurs in waters or watersheds that contain federally-protected aquatic species, the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B.0124 (b-e), *Design Standards in Sensitive Watershed*.

[15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]

28. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]

This approval and its conditions are final and binding unless contested. [G.S. 143-215.5] Please be aware that by having impacted waters without first applying for and securing the issuance of a 401 Water Quality Certification, you have violated Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

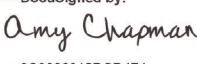
This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

William F. Lane, General Counsel  
Department of Environmental Quality  
1601 Mail Service Center  
Raleigh, NC 27699-1601

This letter completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Rob Ridings at [rob.ridings@ncdenr.gov](mailto:rob.ridings@ncdenr.gov) if you have any questions or concerns.

Sincerely,

DocuSigned by:  
  
9C9886312DCD474...  
Richard E. Rogers, Director  
Division of Water Resources

cc:

Eric Alsmeyer, USACE Raleigh Regulatory Field Office  
Chris Murray, Project Engineer, Division 5 Planning & Environmental  
Heather Montague, Division 5 Environmental Officer  
Beth Harmon, Division of Mitigation Services  
File Copy



North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1611 Mail Service Center | Raleigh, North Carolina 27699-1611  
919.707.9000

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

RICHARD E. ROGERS, JR.  
Director



December 2, 2022

DWR # 20210986  
Wake County

Mr. Brandon H. Jones, PE, Division Engineer  
NCDOT Division 5  
2612 North Duke Street  
Durham, NC 27704

**Subject: APPROVAL OF NEUSE RIPARIAN BUFFER AUTHORIZATION WITH ADDITIONAL CONDITIONS**  
**NCDOT TIP #W-5601EY: NC Hwy 42 at SR 2727, Wake County.**

Dear Mr. Jones:

You have our approval for the impacts listed below for the purpose described in your application received by the Division of Water Resources (Division) on November 1, 2022. These impacts are covered by the Neuse Buffer Rules and the conditions listed below. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

**This approval replaces the one issued on August 2, 2021.**

The following impacts are hereby approved, provided that all of the Conditions listed below and all of the conditions of the Neuse Buffer Rules are met. No other impacts are approved, including incidental impacts. [15A NCAC 02B.0611(b)(2)]

#### Neuse Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
3	6489	N/A	3685	N/A
5	8818	N/A	4830	N/A
<b>Totals</b>	<b>15307</b>	<b>0</b>	<b>8515</b>	<b>0</b>

\* n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required

**Total Buffer Impact for Project: 23822 square feet.**

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Authorization Certificate. If you change your project, you must notify the Division and you may be required to submit a new application package. If the property is sold, the new owner must be given a copy of this Authorization Certificate and is responsible for complying with all conditions. [15A NCAC 02B.0611(b)(2)]

If you are unable to comply with any of the conditions below, you must notify the DWR Transportation Permitting Branch within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to DWR any noncompliance with the conditions of this Authorization Certificate and/or any violation of state regulated riparian buffer rules [15A NCAC 02B.0714]. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the applicant became aware of the circumstances.



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**Additional Conditions:**

1. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 02B.0714].
2. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 02B.0714].
3. Pursuant to 15A NCAC 02B.0714, sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

This approval and its conditions are final and binding unless contested. [G.S. 143-215.5]

This Authorization Certificate can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:  
William F. Lane, General Counsel  
Department of Environmental Quality  
1601 Mail Service Center  
Raleigh, NC 27699-1601

This Authorization shall expire five (5) years from the date of this letter.

This letter completes the review of the Division under the Neuse Riparian Buffer Rules as described in 15A NCAC 02B.0714. Please contact Rob Ridings at [rob.ridings@ncdenr.gov](mailto:rob.ridings@ncdenr.gov) if you have any questions or concerns.

Sincerely,

DocuSigned by:  
*Amy Chapman*  
9C9886312DCD474...

Richard E. Rogers, Director  
Division of Water Resources

cc: Eric Alsmeyer, USCOE Raleigh Field Office  
Chris Murray, Project Engineer, Division 5 Planning & Environmental  
Heather Montague, Division 5 Environmental Officer  
File Copy



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919.707.9000

**FINAL Construct Eastbound Left Turn Lane on NC 42 at the SR 2727 (Sauls Road) Intersection**

**Environmental Commitments**

The following "Design Standards in Sensitive Watersheds" [15A NCAC 04B.0124 (b) – (e)] are incorporated into NCDOT projects that occur within or upstream of water bodies that contain federally protected aquatic species. Within the Environmentally Sensitive Areas, the following shall apply:

-The contractor may perform clearing operations but not grubbing operations until immediately prior to beginning grading operations.

-Once grading operations begin in the Environmental Sensitive Areas, work shall progress in a continuous manner until complete.

-Erosion control devices shall be installed immediately following the clearing operation.

-Seeding and mulching shall be performed on the areas disturbed by construction immediately following final grade establishment.

-Seeding and mulching shall be done in stages on cut and fill slopes that are greater than 20 feet in height measure along the slope or greater than two acres in area, whichever is less.

**The following are additional measures intended to further reduce deleterious construction related effects to the waterway:**

Off-site detours will be utilized to the maximum extent possible.

No heavy equipment will be placed in the stream outside of the impervious dikes installed at the Little Creek and Unnamed Tributary to Little Creek.

The following documents will be used during design and construction: 1) NCDOT Erosion and Sediment Control Design and Construction Manual; 2) NCDOT Best Management Practices for Construction and Maintenance Activities and 3) NCDOT Stormwater Best Management Practices Toolbox.

Culvert construction activities will have containment measures in place to prevent components of the structure from dropping into the stream outside of the impervious dike. The method of containment will be proposed by the contractor and approved by the engineer as necessary.

Special sediment control fence NCDOT Standard No. 1606.01 or a combination of special sediment control fence and standard silt fence will be installed between the top of the stream bank and adjacent grading activities. Once the disturbed areas of the project draining to these areas have been stabilized, the special sediment control fence and/or standard silt fence and all built up sediment adjacent to these devices will be removed to natural ground and stabilized

with a native grass mix.

All sedimentation and erosion control measures, throughout the project limits, will be maintained to ensure proper function of the measures following NCDOT protocols.

Embankment construction and grading shall be managed in such a manner as to prevent surface runoff/drainage from discharging untreated into the riparian buffer. All interim surfaces will be graded to drain to temporary erosion control devices. Temporary berms, ditches, etc. will be incorporated, as necessary, to treat temporary runoff before discharging into the riparian buffer (as specified in the NCDOT BMP Manual).

All sedimentation and erosion control measures will be appropriately maintained following NCDOT standards to ensure proper function of the measures. This project must adhere to conditions of General Permit NCG01000 to Discharge Stormwater under the National Pollutant Discharge Elimination System for Construction Activities. The project design and construction activities are required to “select, install, implement and maintain best management practices (BMPs) and control measures that minimize pollutants in the discharge to meet the requirements of the permit.” Among these conditions, the permit requires: 1) all erosion and sedimentation control measures must be inspected at least once every seven calendar days and 2) within 24 hours after any storm event of greater than 1.0 inch of rain per 24 hour period. It is understood that these requirements and implementation of other appropriate BMPs are monitored through multiple layers of oversight. At a minimum, the following personnel monitor erosion control measures:

- Contactor project manager
- NCDOT Division Environmental Officer and Environmental Specialists
- NCDOT Roadside Environmental Field Operations Staff

NCDOT will require utility relocations to utilize directional (horizontal) boring under Little Creek at the culvert crossing. Open cut (trenching) of the Unnamed Tributary to Little Creek at the existing 48 inch pipe structure has been determined to be allowable based on coordination with the USFWS dated July 6, 2021.

In the event that visible sediment loss from the project is observed at the bridge site, a review of turbidity levels will be made upstream and downstream 400 meters (0.25 mile) to determine if sedimentation effects are occurring beyond the Action Area as defined in the Biological Opinion. If visual observation of turbidity levels downstream appear to be elevated beyond upstream observations, the project inspector will contact the Division Environmental Officer. If determined that project-related sediment is occurring beyond 400 meters, the USFWS must be contacted immediately to discuss potential remediation.

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER RESOURCES

**WATER QUALITY GENERAL CERTIFICATION NO. 4135**

**GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS**

- **NATIONWIDE PERMIT NUMBER 14 (LINEAR TRANSPORTATION PROJECTS), AND**
- **REGIONAL GENERAL PERMIT 198200031 (NCDOT BRIDGES, WIDENING PROJECTS, INTERCHANGE IMPROVEMENTS)**

Water Quality Certification Number 4135 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (14) of the US Army Corps of Engineers regulations and Regional General Permit 198200031.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: December 1, 2017

Signed this day: December 1, 2017

By

A handwritten signature in black ink, appearing to read 'Linda Culpepper', is written over a horizontal line.

for Linda Culpepper  
Interim Director

**Activities meeting any one (1) of the following thresholds or circumstances require written approval for a 401 Water Quality Certification from the Division of Water Resources (DWR):**

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Any temporary or permanent impacts to wetlands, open waters and/or streams, except for construction of a driveway to a single family residential lot that is determined to not be part of a larger common plan of development, as long as the driveway involves a travel lane of less than 25 feet and total stream impacts of less than 60 feet, including any topographic/slope stabilization or in-stream stabilization needed for the crossing; or
- c) Any stream relocation or stream restoration; or
- d) Any high-density project, as defined in 15A NCAC 02H .1003(2)(a) and by the density thresholds specified in 15A NCAC 02H .1017, which:
  - i. Disturbs one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); and
  - ii. Has permanent wetland, stream or open water impacts; and
  - iii. Is proposing new built-upon area; and
  - iv. Does not have a stormwater management plan reviewed and approved under a state stormwater program<sup>1</sup> or a state-approved local government stormwater program<sup>2</sup>.

Projects that have vested rights, exemptions, or grandfathering from state or locally-implemented stormwater programs and projects that satisfy state or locally-implemented stormwater programs through use of community in-lieu programs **require written approval**; or

- e) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-1, WS-11, or North Carolina or National Wild and Scenic River.
- f) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as Trout except for driveway projects that are below threshold (b) above provided that:
  - i. The impacts are not adjacent to any existing structures
  - ii. All conditions of this General Certification can be met, including adherence to any moratoriums as stated in Condition #10; and
  - iii. A *Notification of Work in Trout Watersheds Form* is submitted to the Division at least 60 days prior to commencement of work; or
- g) Any permanent impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL); or
- h) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or

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<sup>1</sup> e.g. Coastal Counties, HQW, ORW, or state-implemented Phase II NPDES

<sup>2</sup> e.g. Delegated Phase II NPDES, Water Supply Watershed, Nutrient-Sensitive Waters, or Universal Stormwater Management Program

- i) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
  - i. The activities are listed as "EXEMPT" from these rules; or
  - ii. A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
  - iii. A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23

**Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.**

**I. ACTIVITY SPECIFIC CONDITIONS:**

1. If this Water Quality Certification is used to access residential, commercial or industrial building sites, then all parcels owned by the applicant that are part of the single and complete project authorized by this Certification must be buildable without additional impacts to streams or wetlands. If required in writing by DWR, the applicant shall provide evidence that the parcels are buildable without requiring additional impacts to wetlands, waters, or state regulated riparian buffers. [15A NCAC 02H .0506(b)(4) and (c)(4)]
2. For road and driveway construction purposes, this Certification shall only be utilized from natural high ground to natural high ground. [15A NCAC 02H .0506(b)(2) and (c)(2)]
3. Deed notifications or similar mechanisms shall be placed on all lots with retained jurisdictional wetlands, waters, and state regulated riparian buffers within the project boundaries in order to assure compliance with NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules {15A NCAC 02H .1300), and/or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200). These mechanisms shall be put in place at the time of recording of the property or individual parcels, whichever is appropriate. [15A NCAC 02H .0506(b)(4) and (c)(4)]
4. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. All other high-density projects that trigger threshold item (d) above shall comply with one of the following requirements: [15A NCAC 02H .0506(b)(5) and (c)(5)]

**GC4135**

- a. Provide a completed Stormwater Management Plan (SMP) for review and approval, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high-density development requirements of 15A NCAC 02H .1003. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
- b. Provide documentation (including calculations, photos, etc.) that the project will not cause degradation of downstream surface waters. Documentation shall include a detailed analysis of the hydrological impacts from stormwater runoff when considering the volume and velocity of stormwater runoff from the project built upon area and the size and existing condition of the receiving stream(s).

Exceptions to this condition require application to and written approval from DWR.

**II. GENERAL CONDITIONS:**

1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 028 .0200]

3. In accordance with 15A NCAC 02H .0506(h) and Session Law 2017-10, compensatory mitigation may be required for losses of greater than 300 linear feet of perennial streams and/or greater than one (1) acre of wetlands. Impacts associated with the removal of a dam shall not require mitigation when the removal complies with the requirements of Part 3 of Article 21 in Chapter 143 of the North Carolina General Statutes. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 300 linear feet per perennial stream.

GC4135

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-1, WS-11, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]

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8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]
10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

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Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as, a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [ISA NCAC 02H .0506(b)(S)]

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13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross-sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]
17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H.1405.

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20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 {12}]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107(a)]
24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law. If DWR determines that such standards or laws are not being met, including failure to sustain a designated or achieved use, or that State or Federal law is being violated, or that further conditions are necessary to assure compliance, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
26. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this Certification. A copy of this Certification, including all conditions shall be available at the project site during the construction and maintenance of this project. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

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27. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
28. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
29. If the property or project is sold or transferred, the new permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

**111. GENERAL CERTIFICATION ADMINISTRATION:**

1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).
2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.

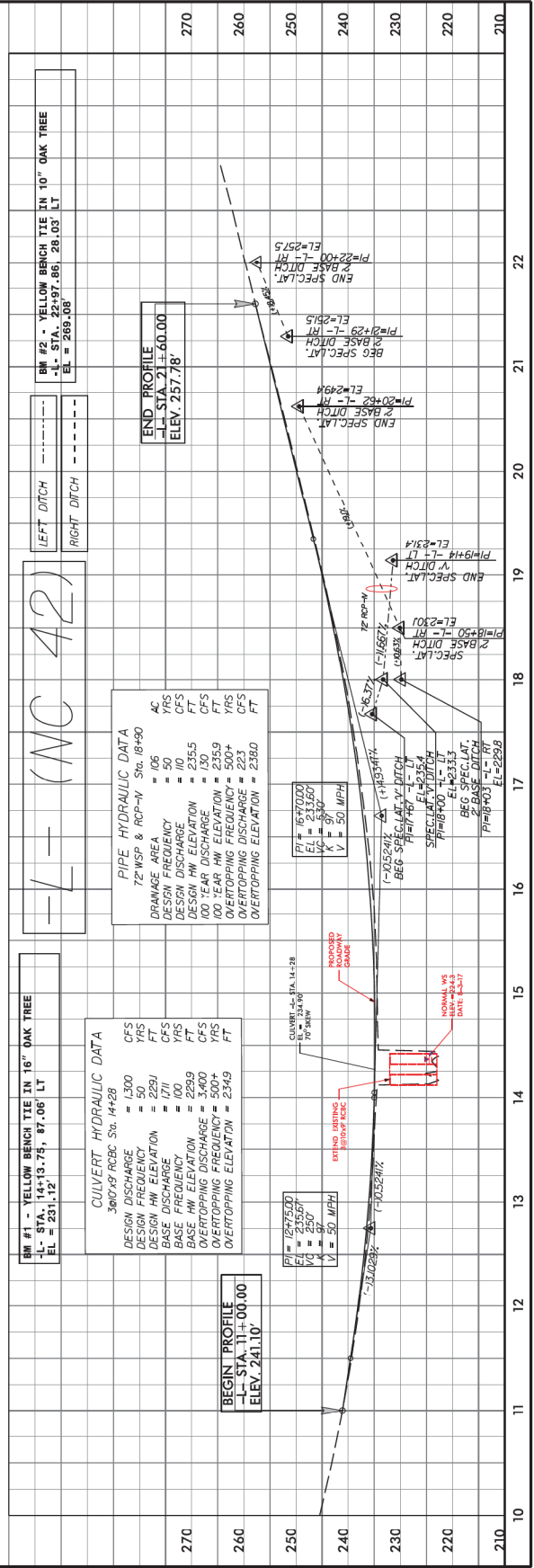
**GC4135**

5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is deemed in the public's best interest or determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.

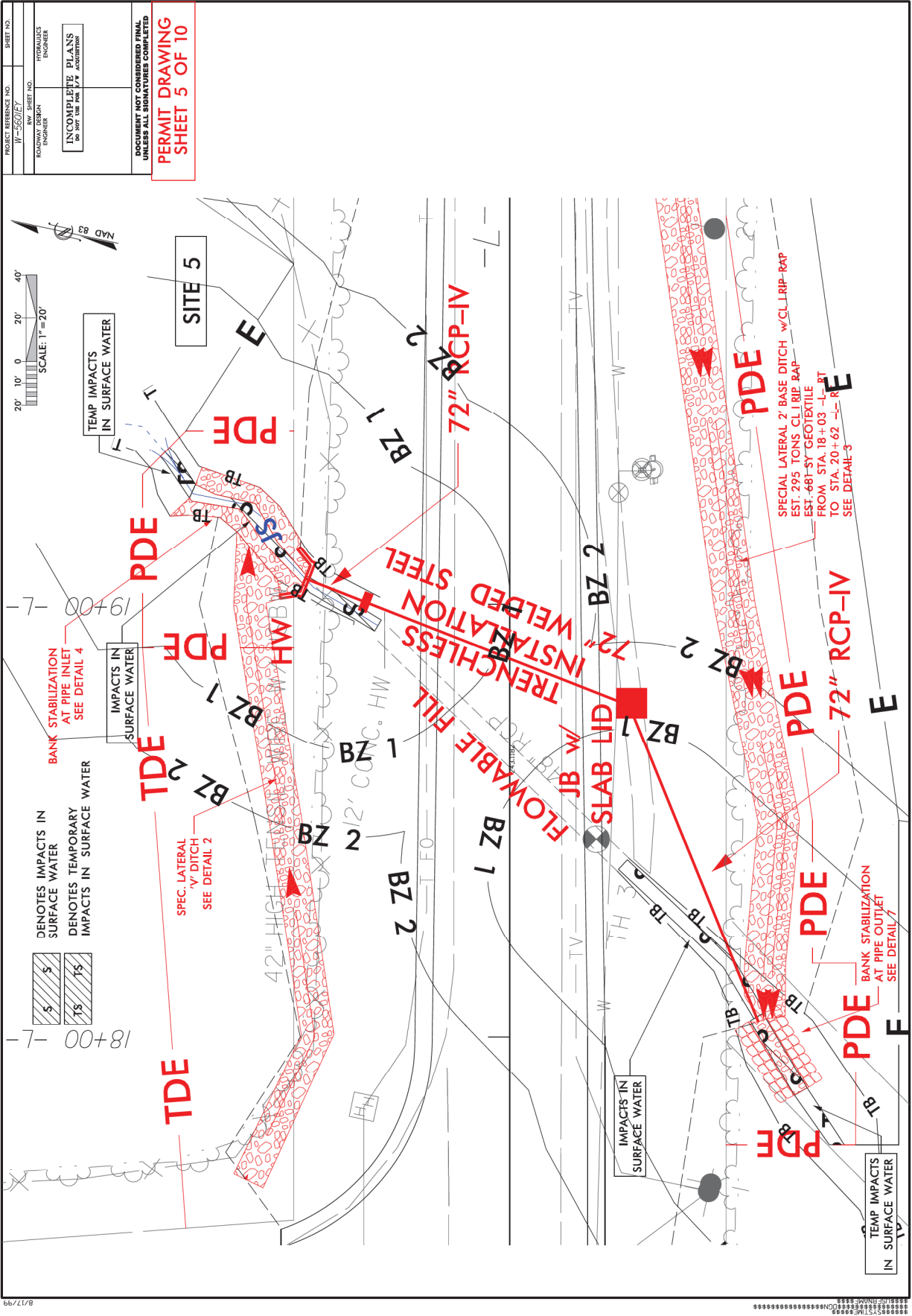
*History Note: Water Quality Certification (WQC) Number 4135 issued December 1, 2017 replaces WQC Number 4088 issued March 3, 2017; WQC 3886 issued March 12, 2012; WQC Number 3820 issued April 6, 2010; WQC Number 3627 issued March 2007; WQC Number 3404 issued March 2003; WQC Number 3375 issued March 18, 2002; WQC Number 3289 issued June 1, 2000; WQC Number 3103 issued February 11, 1997; WQC Number 2732 issued May 1, 1992; WQC Number 2666 issued January 21, 1992; WQC Number 2177 issued November 5, 1987.*





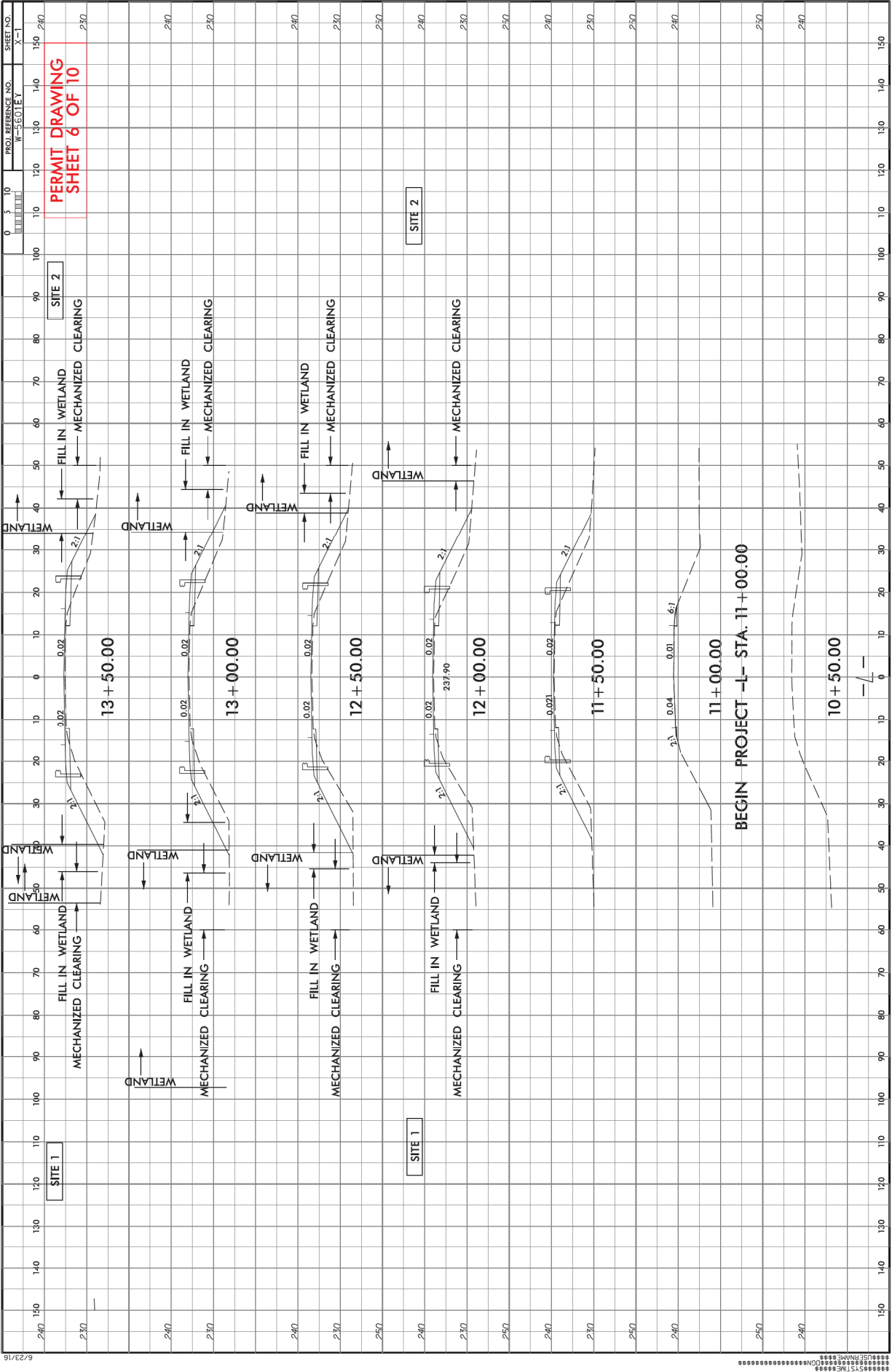






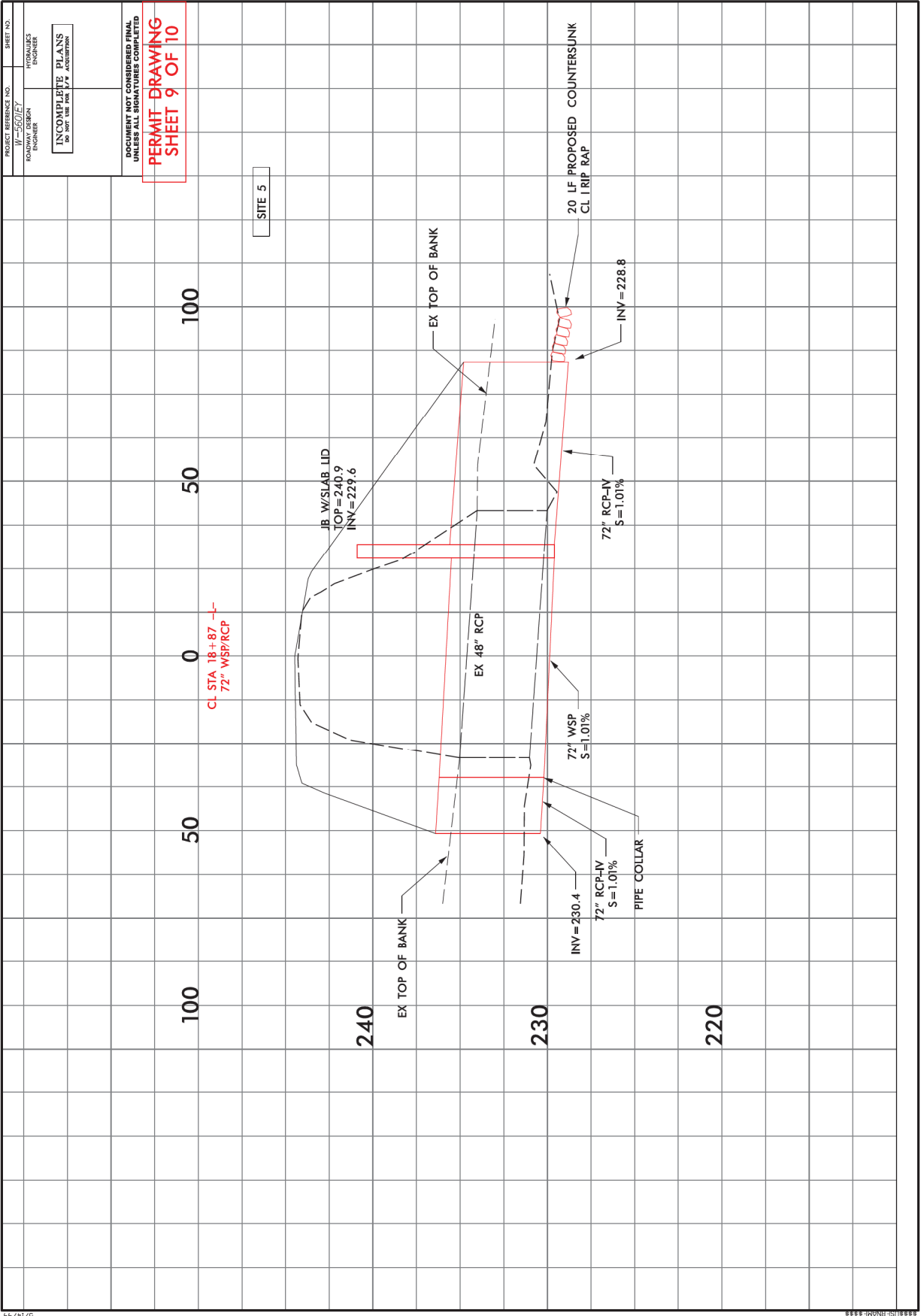
PERMIT DRAWING  
SHEET 5 OF 10

PROJECT REFERENCE NO.	10-25017
DATE	10/25/17
BY	HYDRAULICS ENGINEER
CHECKED BY	HYDRAULICS ENGINEER
INCOMPLETE PLANS	DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL	UNLESS ALL SIGNATURES COMPLETED









5/17/29

\*\*\*\*\*SYTIME\*\*\*\*\*  
\*\*\*\*\*DATE\*\*\*\*\*  
\*\*\*\*\*DRAWN\*\*\*\*\*

WETLAND AND SURFACE WATER IMPACTS SUMMARY														
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS							
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)		
1	11+79 to 13+65-L-LT	ROADWAY FILL	0.02			0.06								
2	11+88 to 13+66-L-RT	ROADWAY FILL	0.03			0.03								
3	13+87 to 14+38-L-LT	CULVERT EXTENSION INLET								< 0.01		16		
		INLET CHANNEL											13	
		INLET BANK STABILIZATION										42		
		CULVERT EXTENSION OUTLET								< 0.01		14		
		OUTLET CHANNEL								0.01			10	
		OUTLET BANK STABILIZATION										18		
4	14+43 to 15+86-L-LT	ROADWAY FILL	0.03			0.04								
5	17+75 to 19+36-L-18+94 to 19+36-L-LT	72" PIPE at INLET INLET CHANNEL								< 0.01		20		
	19+05 to 19+26-L-LT	INLET BANK STABILIZATION									< 0.01		12	
	18+04 to 18+38-L-RT	72" PIPE at OUTLET										47		
	17+75 to 17+87-L-RT	OUTLET CHANNEL								< 0.01	< 0.01		15	
	17+87 to 18+04-L-RT	OUTLET CHANNEL COUNTERSUNK RIP RAP AND BANK STABILIZATION								< 0.01	< 0.01	20		
TOTALS*:			0.07			0.12				0.02	0.02	212	50	0

\*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

7-20-2021

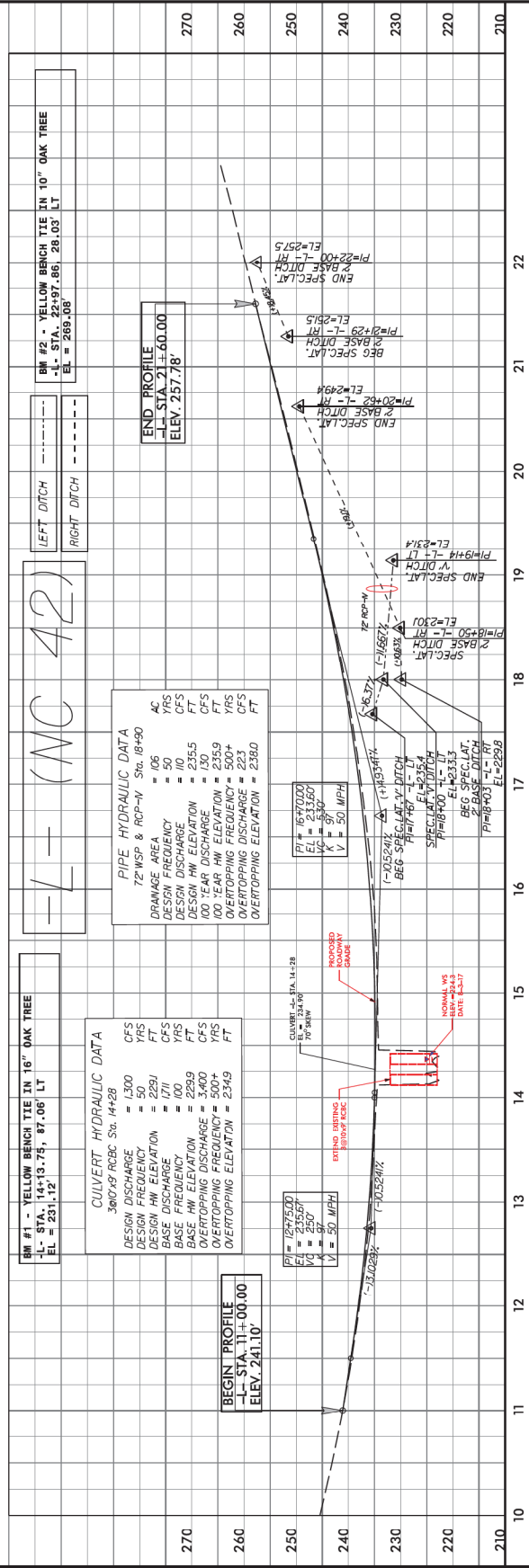
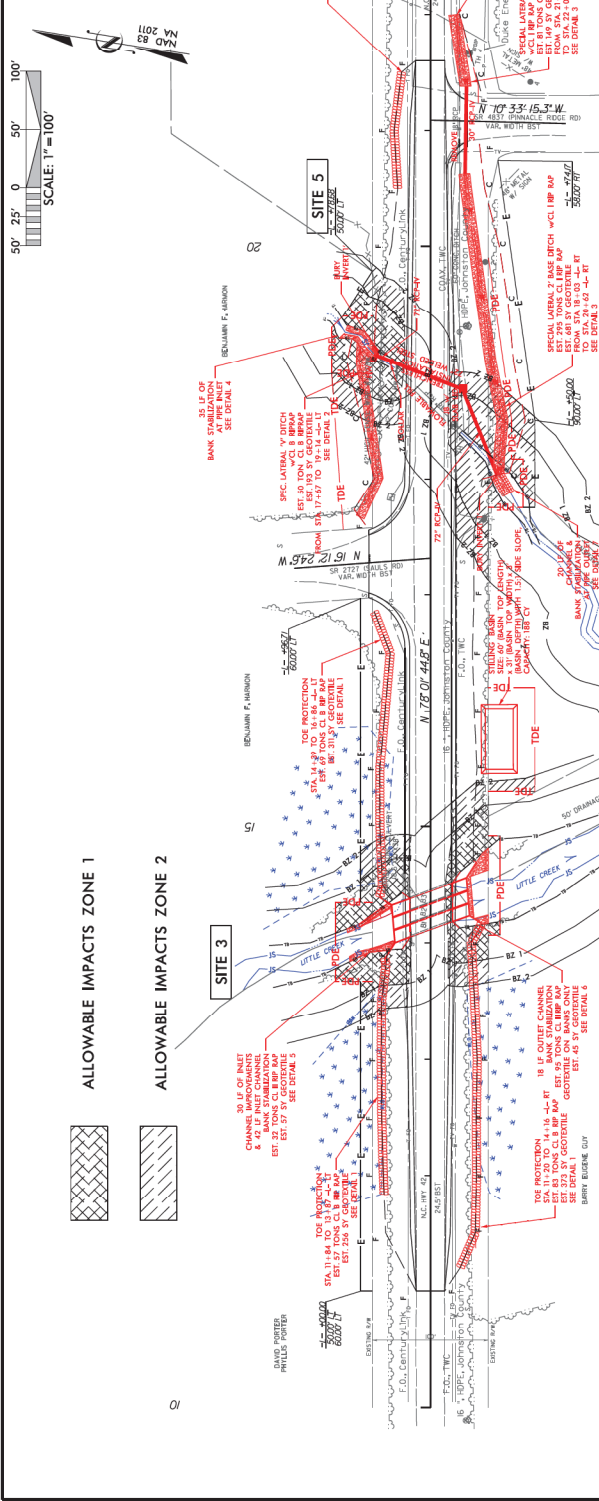
WAKE COUNTY

W-5601EY

50138.3.156

SHEET 10 OF 10





RIPARIAN BUFFER IMPACTS SUMMARY													
Site No.	Station (From/To)	Structure Size / Type	IMPACTS					MITIGABLE			BUFFER REPLACEMENT		
			TYPE		ALLOWABLE		TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	TOTAL (ft <sup>2</sup> )	ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )	
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft <sup>2</sup> )							ZONE 2 (ft <sup>2</sup> )
3	13+18 to 15+39-L-	CULVERT EXTENSION	X			6489	3685	10174					
5	17+48 to 19+77-L-	ROADWAY FILL	X			8818	4830	13648					

WETLANDS IN BUFFER IMPACTS SUMMARY					
SITE NO.	STATION (FROM/TO)	WETLANDS IN BUFFERS			
		ZONE 1 (ft <sup>2</sup> )	ZONE 2 (ft <sup>2</sup> )		
3	13+18 to 15+39-L-	278	917		
<b>TOTAL:</b>		<b>278</b>	<b>917</b>		

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
7-21-2021  
WAKE COUNTY  
W-5601EY  
50138.3.156

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Revised 2018 Feb

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
7-21-2021  
WAKE COUNTY  
W-5601EY  
50138.3.156  
SHEET 4 OF 4

County: WAKE

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	0043000000-N	226	GRADING	Lump Sum	L.S.	
0004	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR		
0005	0134000000-E	240	DRAINAGE DITCH EXCAVATION	240 CY		
0006	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	200 SY		
0007	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	153 TON		
0008	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	673 SY		
0009	0335300000-E	305	18" DRAINAGE PIPE	28 LF		
0010	0335400000-E	305	24" DRAINAGE PIPE	108 LF		
0011	0448000000-E	310	***** RC PIPE CULVERTS, CLASS IV (72")	80 LF		
0012	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	72 LF		
0013	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	160 LF		
0014	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	160 LF		
0015	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (30", 0.500")	44 LF		
0016	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (36", 0.500")	64 LF		
0017	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (72", 1.000")	40 LF		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (30", 0.500")	44 LF		
0019	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (36", 0.500")	64 LF		
0020	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (72", 1.000")	40 LF		
0021	0995000000-E	340	PIPE REMOVAL	206 LF		
0022	1099500000-E	505	SHALLOW UNDERCUT	150 CY		
0023	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	300 TON		
0024	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	200 SY		
0025	1220000000-E	545	INCIDENTAL STONE BASE	100 TON		
0026	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***** DEPTH (1-1/2")	910 SY		
0027	1330000000-E	607	INCIDENTAL MILLING	280 SY		
0028	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	2,020 TON		
0029	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	1,340 TON		
0030	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	1,810 TON		
0031	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	270 TON		
0032	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	30 TON		
0033	1880000000-E	SP	GENERIC PAVING ITEM ABC(M) SHOULDER CONSTRUCTION	48 TON		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0034	2209000000-E	838	ENDWALLS	3.4 CY		
0035	2220000000-E	838	REINFORCED ENDWALLS	7.5 CY		
0036	2253000000-E	840	PIPE COLLARS	0.447 CY		
0037	2275000000-E	SP	FLOWABLE FILL	70 CY		
0038	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	7.5 CY		
0039	2612000000-E	848	6" CONCRETE DRIVEWAY	60 SY		
0040	3030000000-E	862	STEEL BEAM GUARDRAIL	887.5 LF		
0041	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	50 LF		
0042	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	5 EA		
0043	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	1 EA		
0044	3287000000-N	862	GUARDRAIL END UNITS, TYPE TL-3	3 EA		
0045	3628000000-E	876	RIP RAP, CLASS I	410 TON		
0046	3635000000-E	876	RIP RAP, CLASS II	187 TON		
0047	3649000000-E	876	RIP RAP, CLASS B	703 TON		
0048	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	4,615 SY		
0049	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	296 SF		
0050	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	464 SF		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0051	4430000000-N	1130	DRUMS	213 EA		
0052	4455000000-N	1150	FLAGGER	330 DAY		
0053	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	2 EA		
0054	4485000000-E	1170	PORTABLE CONCRETE BARRIER	110 LF		
0055	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	11 EA		
0056	4688000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)	15,115 LF		
0057	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	475 LF		
0058	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	11 EA		
0059	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	1,600 LF		
0060	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	118 EA		
0061	5325600000-E	1510	6" WATER LINE	27 LF		
0062	5326600000-E	1510	16" WATER LINE	1,238 LF		
0063	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	5,760 LB		
0064	5558600000-E	1515	16" VALVE	2 EA		
0065	5571600000-E	1515	6" TAPPING SLEEVE & VALVE	1 EA		
0066	5648000000-N	1515	RELOCATE WATER METER	2 EA		
0067	5672000000-N	1515	RELOCATE FIRE HYDRANT	3 EA		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0068	5673000000-E	1515	FIRE HYDRANT LEG	51 LF		
0069	5679200000-E	1515	16" LINE STOP	2 EA		
0070	5686500000-E	1515	WATER SERVICE LINE	21 LF		
0071	5800000000-E	1530	ABANDON 6" UTILITY PIPE	43 LF		
0072	5810000000-E	1530	ABANDON 16" UTILITY PIPE	1,226 LF		
0073	5872600000-E	1550	DIRECTIONAL DRILLING OF *** (16")	491 LF		
0074	6000000000-E	1605	TEMPORARY SILT FENCE	4,805 LF		
0075	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	180 TON		
0076	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	1,190 TON		
0077	6012000000-E	1610	SEDIMENT CONTROL STONE	350 TON		
0078	6015000000-E	1615	TEMPORARY MULCHING	9 ACR		
0079	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	700 LB		
0080	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	3.5 TON		
0081	6024000000-E	1622	TEMPORARY SLOPE DRAINS	400 LF		
0082	6029000000-E	SP	SAFETY FENCE	1,240 LF		
0083	6030000000-E	1630	SILT EXCAVATION	1,620 CY		
0084	6036000000-E	1631	MATTING FOR EROSION CONTROL	9,000 SY		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0085	6037000000-E	1629	COIR FIBER MAT	100 SY		
0086	6042000000-E	1632	1/4" HARDWARE CLOTH	315 LF		
0087	6069000000-E	1638	STILLING BASINS	188 CY		
0088	6071002000-E	1642	FLOCCULANT	340 LB		
0089	6071010000-E	1642	WATTLE	270 LF		
0090	6071030000-E	1640	COIR FIBER BAFFLE	135 LF		
0091	6084000000-E	1660	SEEDING & MULCHING	9 ACR		
0092	6087000000-E	1660	MOWING	9 ACR		
0093	6090000000-E	1661	SEED FOR REPAIR SEEDING	150 LB		
0094	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.5 TON		
0095	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	200 LB		
0096	6108000000-E	1665	FERTILIZER TOPDRESSING	5.75 TON		
0097	6111000000-E	SP	IMPERVIOUS DIKE	330 LF		
0098	6114500000-N	1667	SPECIALIZED HAND MOWING	20 MHR		
0099	6114800000-N	SP	MANUAL LITTER REMOVAL	6 MHR		
0100	6114900000-E	SP	LITTER DISPOSAL	2 TON		
0101	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	50 EA		

County: WAKE

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0102	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	4 EA		
0103	6120000000-E	SP	CULVERT DIVERSION CHANNEL	57 CY		
0104	6123000000-E	1670	REFORESTATION	0.1 ACR		
CULVERT ITEMS						
0105	8130000000-N	414	BOX CULVERT EXCAVATION, STA ***** (14+28.00 -L-)	Lump Sum	L.S.	
0106	8133000000-E	414	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT	252 TON		
0107	8196000000-E	420	CLASS A CONCRETE (CULVERT)	161.5 CY		
0108	8245000000-E	425	REINFORCING STEEL (CULVERT)	21,045 LB		

0829/Oct14/Q87608.697/D420146242000/E108

Total Amount Of Bid For Entire Project :

Vendor 1 of 6: CARDINAL CIVIL CONTRACTING LLC (19491)  
Call Order 007 (Proposal: C204987)

Bid Information

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**Proposal County:** WAKE

**Vendor Address:** 4441 SIX FORKS RD STE 106 261  
RALEIGH , NC , 27609

**Signature Check:** Jeremy Simmons Spivey

**Time Bid Received:** November 19, 2024 11:51 AM

**Amendment Count:** 0

**Bid Checksum:** 1156FD80CF

**Bid Total:** \$4,522,370.00

**Items Total:** \$4,522,370.00

**Time Total:** \$0.00

**Bidding Errors:**

None.

DBE GOAL SET: 6%  
DBE GOAL OBT: 7.16%

Vendor 1 of 6: CARDINAL CIVIL CONTRACTING LLC (19491)  
Call Order 007 (Proposal: C204987)

Bid Bond Information

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<b>Projects:</b>	<b>Bond Maximum:</b>
<b>Counties:</b>	<b>State of Incorporation:</b>
<b>Bond ID:</b> SNC1029129080	<b>Agency Execution Date:</b> 10/29/2024 12:48:01 PM
<b>Paid by Check:</b> No	<b>Surety Name:</b> Surety2000
<b>Bond Percent:</b> 5%	<b>Bond Agency Name:</b> West Bend Insurance Company

Letting: L241119  
11/19/2024 02:00:00 PM

North Carolina Department of Transportation  
19491 - Cardinal Civil Contracting, LLC

Contract ID: C204987  
Call: 007

## DBE Load Information

Letting ID: L241119  
Letting Date: 11/19/2024  
Call Order: 007  
Contract ID: C204987

DBE GOAL SET: 6%  
DBE GOAL OBT: 7.16%

Project: HSIP-0042(066)HSIP-0042(066)HSIP-0042(066)HSIP-0042(066)  
Bid Total: \$4,522,370.00  
DBE Goal: 6.00% (\$271,342.20)

Vendor ID: 19491  
Vendor Name: Cardinal Civil Contracting, LLC  
DBE Entered: 7.16% (\$323,593.40)

Vendor ID	DBE Name	Is Supplier?	City/State	Goods/Service	Amount
16877	ROADWORKS CONSTRUCTION COMPANY LLC	False	2400 RELIANCE AVENUE, SUITE B APEX, NC 27539	SubContractor  Committed	323,593.40

Letting: L241119

North Carolina Department of Transportation

Contract ID: C204987

11/19/2024 02:00:00 PM

19491 - Cardinal Civil Contracting, LLC

Call: 007

BondID: SNC1029129080

Surety Registry Agency: Surety2000

Verified?: 1

Surety Agency: West Bend Insurance Company

Bond Execution Date: 10/29/2024 12:48:01 PM

Line Number	Item Number	Quantity	Unit	Unit Price	Extension Price
Section 0001					
ROADWAY ITEMS					
0001	0000100000-N MOBILIZATION	1.000	LS	\$210,000.0000	\$210,000.00
0002	0000400000-N CONSTRUCTION SURVEYING	1.000	LS	\$47,000.0000	\$47,000.00
0003	0043000000-N GRADING	1.000	LS	\$656,000.0000	\$656,000.00
0004	0050000000-E SUPPLEMENTARY CLEARING & GRUBBING	1.000	ACR	\$12,000.0000	\$12,000.00
0005	0134000000-E DRAINAGE DITCH EXCAVATION	240.000	CY	\$47.5000	\$11,400.00
0006	0196000000-E GEOTEXTILE FOR SOIL STABILIZATION	200.000	SY	\$3.0000	\$600.00
0007	0318000000-E FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	153.000	TON	\$45.0000	\$6,885.00
0008	0321000000-E FOUNDATION CONDITIONING GEOTEXTILE	673.000	SY	\$4.0000	\$2,692.00
0009	0335300000-E 18" DRAINAGE PIPE	28.000	LF	\$156.0000	\$4,368.00
0010	0335400000-E 24" DRAINAGE PIPE	108.000	LF	\$141.0000	\$15,228.00
0011	0448000000-E ***** RC PIPE CULVERTS, CLASS IV (72")	80.000	LF	\$846.0000	\$67,680.00
0012	0448300000-E 18" RC PIPE CULVERTS, CLASS IV	72.000	LF	\$161.0000	\$11,592.00
0013	0448400000-E 24" RC PIPE CULVERTS, CLASS IV	160.000	LF	\$211.0000	\$33,760.00
0014	0448500000-E 30" RC PIPE CULVERTS, CLASS IV	160.000	LF	\$245.0000	\$39,200.00
0015	0973100000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (30", 0.500")	44.000	LF	\$830.0000	\$36,520.00
0016	0973100000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (36", 0.500")	64.000	LF	\$980.0000	\$62,720.00
0017	0973100000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (72", 1.000")	40.000	LF	\$3,875.0000	\$155,000.00
0018	0973300000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (30", 0.500")	44.000	LF	\$2,075.0000	\$91,300.00
0019	0973300000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (36", 0.500")	64.000	LF	\$2,225.0000	\$142,400.00
0020	0973300000-E **" WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (72", 1.000")	40.000	LF	\$5,950.0000	\$238,000.00
0021	0995000000-E PIPE REMOVAL	206.000	LF	\$34.5000	\$7,107.00
0022	1099500000-E SHALLOW UNDERCUT	150.000	CY	\$54.4600	\$8,169.00
0023	1099700000-E CLASS IV SUBGRADE STABILIZATION	300.000	TON	\$41.5000	\$12,450.00

0024	1112000000-E	200.000 SY	\$4.0000	\$800.00
	GEOTEXTILE FOR SUBGRADE STABILIZATION			
0025	1220000000-E	100.000 TON	\$51.0900	\$5,109.00
	INCIDENTAL STONE BASE			
0026	1297000000-E	910.000 SY	\$19.0000	\$17,290.00
	MILLING ASPHALT PAVEMENT, ****" DEPTH (1-1/2")			
0027	1330000000-E	280.000 SY	\$31.0000	\$8,680.00
	INCIDENTAL MILLING			
0028	1491000000-E	2020.000 TON	\$85.0000	\$171,700.00
	ASPHALT CONC BASE COURSE, TYPE B25.0C			
0029	1503000000-E	1340.000 TON	\$82.0000	\$109,880.00
	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C			
0030	1523000000-E	1810.000 TON	\$90.0000	\$162,900.00
	ASPHALT CONC SURFACE COURSE, TYPE S9.5C			
0031	1575000000-E	270.000 TON	\$665.0000	\$179,550.00
	ASPHALT BINDER FOR PLANT MIX			
0032	1693000000-E	30.000 TON	\$285.0000	\$8,550.00
	ASPHALT PLANT MIX, PAVEMENT REPAIR			
0033	1880000000-E	48.000 TON	\$77.0000	\$3,696.00
	GENERIC PAVING ITEM ABC(M) SHOULDER CONSTRUCTION			
0034	2209000000-E	3.400 CY	\$2,750.0000	\$9,350.00
	ENDWALLS			
0035	2220000000-E	7.500 CY	\$2,560.0000	\$19,200.00
	REINFORCED ENDWALLS			
0036	2253000000-E	0.447 CY	\$8,053.6900	\$3,600.00
	PIPE COLLARS			
0037	2275000000-E	70.000 CY	\$507.0000	\$35,490.00
	FLOWABLE FILL			
0038	2297000000-E	7.500 CY	\$3,130.0000	\$23,475.00
	MASONRY DRAINAGE STRUCTURES			
0039	2612000000-E	60.000 SY	\$210.0000	\$12,600.00
	6" CONCRETE DRIVEWAY			
0040	3030000000-E	887.500 LF	\$24.0000	\$21,300.00
	STEEL BEAM GUARDRAIL			
0041	3045000000-E	50.000 LF	\$31.5000	\$1,575.00
	STEEL BEAM GUARDRAIL, SHOP CURVED			
0042	3150000000-N	5.000 EA	\$42.0000	\$210.00
	ADDITIONAL GUARDRAIL POSTS			
0043	3195000000-N	1.000 EA	\$1,050.0000	\$1,050.00
	GUARDRAIL END UNITS, TYPE AT-1			
0044	3287000000-N	3.000 EA	\$3,675.0000	\$11,025.00
	GUARDRAIL END UNITS, TYPE TL-3			
0045	3628000000-E	410.000 TON	\$74.0000	\$30,340.00
	RIP RAP, CLASS I			
0046	3635000000-E	187.000 TON	\$90.0000	\$16,830.00
	RIP RAP, CLASS II			
0047	3649000000-E	703.000 TON	\$73.0000	\$51,319.00
	RIP RAP, CLASS B			
0048	3656000000-E	4615.000 SY	\$1.0000	\$4,615.00

GEOTEXTILE FOR DRAINAGE

0049	4400000000-E	296.000	SF	\$6.2500	\$1,850.00
	WORK ZONE SIGNS (STATIONARY)				
0050	4405000000-E	464.000	SF	\$17.5000	\$8,120.00
	WORK ZONE SIGNS (PORTABLE)				
0051	4430000000-N	213.000	EA	\$73.0000	\$15,549.00
	DRUMS				
0052	4455000000-N	330.000	DAY	\$600.0000	\$198,000.00
	FLAGGER				
0053	4465000000-N	2.000	EA	\$4,725.0000	\$9,450.00
	TEMPORARY CRASH CUSHIONS				
0054	4485000000-E	110.000	LF	\$36.5000	\$4,015.00
	PORTABLE CONCRETE BARRIER				
0055	4650000000-N	11.000	EA	\$11.0000	\$121.00
	TEMPORARY RAISED PAVEMENT MARKERS				
0056	4688000000-E	15115.000	LF	\$1.7000	\$25,695.50
	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)				
0057	4700000000-E	475.000	LF	\$4.2000	\$1,995.00
	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)				
0058	4725000000-E	11.000	EA	\$153.0000	\$1,683.00
	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)				
0059	4810000000-E	1600.000	LF	\$1.6000	\$2,560.00
	PAINT PAVEMENT MARKING LINES (4")				
0060	4900000000-N	118.000	EA	\$10.5000	\$1,239.00
	PERMANENT RAISED PAVEMENT MARKERS				
0061	5325600000-E	27.000	LF	\$342.0000	\$9,234.00
	6" WATER LINE				
0062	5326600000-E	1238.000	LF	\$201.0000	\$248,838.00
	16" WATER LINE				
0063	5329000000-E	5760.000	LB	\$14.9500	\$86,112.00
	DUCTILE IRON WATER PIPE FITTINGS				
0064	5558600000-E	2.000	EA	\$15,350.0000	\$30,700.00
	16" VALVE				
0065	5571600000-E	1.000	EA	\$4,500.0000	\$4,500.00
	6" TAPPING SLEEVE & VALVE				
0066	5648000000-N	2.000	EA	\$2,200.0000	\$4,400.00
	RELOCATE WATER METER				
0067	5672000000-N	3.000	EA	\$3,700.0000	\$11,100.00
	RELOCATE FIRE HYDRANT				
0068	5673000000-E	51.000	LF	\$125.0000	\$6,375.00
	FIRE HYDRANT LEG				
0069	5679200000-E	2.000	EA	\$26,250.0000	\$52,500.00
	16" LINE STOP				
0070	5686500000-E	21.000	LF	\$100.0000	\$2,100.00
	WATER SERVICE LINE				
0071	5800000000-E	43.000	LF	\$112.0000	\$4,816.00
	ABANDON 6" UTILITY PIPE				
0072	5810000000-E	1226.000	LF	\$35.0000	\$42,910.00
	ABANDON 16" UTILITY PIPE				

0073	5872600000-E	491.000	LF	\$650.0000	\$319,150.00
	DIRECTIONAL DRILLING OF **" (16")				
0074	6000000000-E	4805.000	LF	\$3.8000	\$18,259.00
	TEMPORARY SILT FENCE				
0075	6006000000-E	180.000	TON	\$61.0000	\$10,980.00
	STONE FOR EROSION CONTROL, CLASS A				
0076	6009000000-E	1190.000	TON	\$59.0000	\$70,210.00
	STONE FOR EROSION CONTROL, CLASS B				
0077	6012000000-E	350.000	TON	\$51.0000	\$17,850.00
	SEDIMENT CONTROL STONE				
0078	6015000000-E	9.000	ACR	\$1,785.0000	\$16,065.00
	TEMPORARY MULCHING				
0079	6018000000-E	700.000	LB	\$2.1000	\$1,470.00
	SEED FOR TEMPORARY SEEDING				
0080	6021000000-E	3.500	TON	\$1,160.0000	\$4,060.00
	FERTILIZER FOR TEMPORARY SEEDING				
0081	6024000000-E	400.000	LF	\$16.0000	\$6,400.00
	TEMPORARY SLOPE DRAINS				
0082	6029000000-E	1240.000	LF	\$3.4000	\$4,216.00
	SAFETY FENCE				
0083	6030000000-E	1620.000	CY	\$15.0000	\$24,300.00
	SILT EXCAVATION				
0084	6036000000-E	9000.000	SY	\$1.6000	\$14,400.00
	MATting FOR EROSION CONTROL				
0085	6037000000-E	100.000	SY	\$8.0000	\$800.00
	COIR FIBER MAT				
0086	6042000000-E	315.000	LF	\$7.0000	\$2,205.00
	1/4" HARDWARE CLOTH				
0087	6069000000-E	188.000	CY	\$83.0000	\$15,604.00
	STILLING BASINS				
0088	6071002000-E	340.000	LB	\$15.7500	\$5,355.00
	FLOCCULANT				
0089	6071010000-E	270.000	LF	\$10.5000	\$2,835.00
	WATTLE				
0090	6071030000-E	135.000	LF	\$12.0000	\$1,620.00
	COIR FIBER BAFFLE				
0091	6084000000-E	9.000	ACR	\$3,045.0000	\$27,405.00
	SEEDING & MULCHING				
0092	6087000000-E	9.000	ACR	\$265.0000	\$2,385.00
	MOWING				
0093	6090000000-E	150.000	LB	\$7.0000	\$1,050.00
	SEED FOR REPAIR SEEDING				
0094	6093000000-E	0.500	TON	\$1,300.0000	\$650.00
	FERTILIZER FOR REPAIR SEEDING				
0095	6096000000-E	200.000	LB	\$5.2500	\$1,050.00
	SEED FOR SUPPLEMENTAL SEEDING				
0096	6108000000-E	5.750	TON	\$1,100.0000	\$6,325.00
	FERTILIZER TOPDRESSING				
0097	6111000000-E	330.000	LF	\$222.0000	\$73,260.00

IMPERVIOUS DIKE

0098	6114500000-N	20.000	MHR	\$160.0000	\$3,200.00
SPECIALIZED HAND MOWING					
0099	6114800000-N	6.000	MHR	\$55.0000	\$330.00
MANUAL LITTER REMOVAL					
0100	6114900000-E	2.000	TON	\$300.0000	\$600.00
LITTER DISPOSAL					
0101	6117000000-N	50.000	EA	\$325.0000	\$16,250.00
RESPONSE FOR EROSION CONTROL					
0102	6117500000-N	4.000	EA	\$1,215.0000	\$4,860.00
CONCRETE WASHOUT STRUCTURE					
0103	6120000000-E	57.000	CY	\$66.0000	\$3,762.00
CULVERT DIVERSION CHANNEL					
0104	6123000000-E	0.100	ACR	\$3,500.0000	\$350.00
REFORESTATION					

Section 0001 Total \$4,233,323.50

Section 0002  
CULVERT ITEMS

0105	8130000000-N	1.000	LS	\$36,500.0000	\$36,500.00
BOX CULVERT EXCAVATION, STA ***** (14+28.00 -L-)					
0106	8133000000-E	252.000	TON	\$96.0000	\$24,192.00
FOUNDATION CONDITIONING MATERIAL, BOX CULVERT					
0107	8196000000-E	161.500	CY	\$1,010.0000	\$163,115.00
CLASS A CONCRETE (CULVERT)					
0108	8245000000-E	21045.000	LB	\$3.1000	\$65,239.50
REINFORCING STEEL (CULVERT)					

Section 0002 Total \$289,046.50

Item Total \$4,522,370.00

## **ELECTRONIC BID SUBMISSION**

By submitting this bid electronically, I hereby acknowledge that all requirements included in the hard copy proposal, addendum, amendments, plans, standard specifications, supplemental specifications and special provisions are part of the bid and contract. Further, I acknowledge that I have read, understand, accept, acknowledge and agree to comply with all statements in this electronic bid.

=====

## **NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**

The prequalified bidder declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating N.C.G.S. §133-24 within the last three years, and that the prequalified bidder intends to do the work with his own bonafide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. §133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

## **DEBARMENT CERTIFICATION OF PREQUALIFIED BIDDER**

Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
2. The terms covered transaction, debarred, suspended, ineligible, lower tier

covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.

3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.

4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal- Aid Provision titled Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.

5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.

6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

### **DEBARMENT CERTIFICATION**

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or

commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and

d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

**EXPLANATION:**

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## Award Limits on Multiple Projects

By answering YES to this statement, the bidder acknowledges that they are using the award limits on multiple projects? **Yes** ☐ **No** ☒

A bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than he is equipped to handle, may bid on any number of projects but may limit the total amount of work awarded to him on selected projects by completing the AWARD LIMITS ON MULTIPLE PROJECTS.

The Award Limits on Multiple Projects must be filled in on each project bid for which the Bidder desires protection.

It is the desire of the Bidder to be awarded contracts, the value of which will not exceed a total of    for those

projects indicated herein, for which bids will be opened on    (MM/DD/YY)

The Award Limits shall apply to the following projects:

Contract Number  
County

Contract Number  
County

Contract Number  
County

Contract Number  
County

Contract Number  
County

Contract Number  
County

It is agreed that if I am (we are) the low Bidder(s) on indicated projects, the total value of which is more than the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated

that have a total value not to exceed the award limit and will result in the lowest total bids to the Department of Transportation.

DBE List Summary

Project: HSIP-0042(066)  
Bid Total: 4,522,370.00  
  
Goal: 6.00% (271,342.20)  
Total Entered: 7.16% (323,593.40)

Bidder ID: 19491  
Business Name: Cardinal Civil Contracting, LLC

ID	Name	Supp?/Dist?	Item Count	Amount	Is Complete?
16877	ROADWORKS CONSTRUCTION COMPANY LLC	No	6	323,593.40	True

Name: ROADWORKS CONSTRUCTION COMPANY LLC ID: 16877

Address: 2400 RELIANCE AVENUE, SUITE B APEX, NC 27539

Used As: SubContractor DBE Items Total:\$323,593.40

Items for ROADWORKS CONSTRUCTION COMPANY LLC

0001 ROADWAY ITEMS				
0001	0000100000-N	1.000 LS	\$17,480.0000	\$17,480.00
	MOBILIZATION			
0097	6111000000-E	236 LF	\$115.9000	\$27,352.40
	IMPERVIOUS DIKE			
Section 0001 Total				\$44,832.40
0002 CULVERT ITEMS				
0105	8130000000-N	1.000 LS	\$35,260.0000	\$35,260.00
	BOX CULVERT EXCAVATION, STA ***** (14+28.00 -L-)			
0106	8133000000-E	252.000 TON	\$93.2000	\$23,486.40
	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT			
0107	8196000000-E	161.500 CY	\$975.3000	\$157,510.95
	CLASS A CONCRETE (CULVERT)			
0108	8245000000-E	21045.000 LB	\$2.9700	\$62,503.65
	REINFORCING STEEL (CULVERT)			
Section 0002 Total				\$278,761.00
Item Total				\$323,593.40

THIS PROPOSAL CONTAINS THE FOLLOWING ERRORS/WARNINGS (IF ANY)

This Bid contains 0 amendment files

### Electronic Bid Submission

By submitting this bid electronically, I hereby acknowledge that all requirements included in the hard copy proposal, addendum, amendments, plans, standard specifications, supplemental specifications and special provisions are part of the bid and contract. Further, I acknowledge that I have read, understand, accept, acknowledge and agree to comply with all statements in this electronic bid.

I hereby certify that I have the authority to submit this bid.

Signature \_\_\_\_\_

Agency \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Agency \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Agency \_\_\_\_\_

Date \_\_\_\_\_

## Attachments

Failure to complete and attach the Fuel Usage Factor Adjustment Form will result in using 2.90 gallons per ton as the Fuel Usage Factor for Diesel for the asphalt items included on the form. The contractor will not be permitted to change the option after the bids are submitted.

NOTE: The maximum upload limit is 5 MB.Fuel Usage Factor Adjustment Form - Starting Nov 2022 Lettings.pdf ☒ Verify

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
<b>ROADWAY ITEMS</b>						
0001	0000100000-N	800	MOBILIZATION	LUMP SUM	210,000.00	210,000.00
0002	0000400000-N	801	CONSTRUCTION SURVEYING	LUMP SUM	47,000.00	47,000.00
0003	0043000000-N	226	GRADING	LUMP SUM	656,000.00	656,000.00
0004	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR	12,000.00	12,000.00
0005	0134000000-E	240	DRAINAGE DITCH EXCAVATION	240 CY	47.50	11,400.00
0006	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	200 SY	3.00	600.00
0007	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	153 TON	45.00	6,885.00
0008	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	673 SY	4.00	2,692.00
0009	0335300000-E	305	18" DRAINAGE PIPE	28 LF	156.00	4,368.00
0010	0335400000-E	305	24" DRAINAGE PIPE	108 LF	141.00	15,228.00
0011	0448000000-E	310	***** RC PIPE CULVERTS, CLASS IV (72")	80 LF	846.00	67,680.00
0012	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	72 LF	161.00	11,592.00
0013	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	160 LF	211.00	33,760.00
0014	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	160 LF	245.00	39,200.00
0015	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (30", 0.500")	44 LF	830.00	36,520.00
0016	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (36", 0.500")	64 LF	980.00	62,720.00
0017	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (72", 1.000")	40 LF	3,875.00	155,000.00
0018	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (30", 0.500")	44 LF	2,075.00	91,300.00
0019	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (36", 0.500")	64 LF	2,225.00	142,400.00

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0020	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (72", 1.000")	40 LF	5,950.00	238,000.00
0021	0995000000-E	340	PIPE REMOVAL	206 LF	34.50	7,107.00
0022	1099500000-E	505	SHALLOW UNDERCUT	150 CY	54.46	8,169.00
0023	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	300 TON	41.50	12,450.00
0024	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	200 SY	4.00	800.00
0025	1220000000-E	545	INCIDENTAL STONE BASE	100 TON	51.09	5,109.00
0026	1297000000-E	607	MILLING ASPHALT PAVEMENT, ***** DEPTH (1-1/2")	910 SY	19.00	17,290.00
0027	1330000000-E	607	INCIDENTAL MILLING	280 SY	31.00	8,680.00
0028	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	2,020 TON	85.00	171,700.00
0029	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	1,340 TON	82.00	109,880.00
0030	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	1,810 TON	90.00	162,900.00
0031	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	270 TON	665.00	179,550.00
0032	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	30 TON	285.00	8,550.00
0033	1880000000-E	SP	GENERIC PAVING ITEM ABC(M) SHOULDER CONSTRUCTION	48 TON	77.00	3,696.00
0034	2209000000-E	838	ENDWALLS	3.4 CY	2,750.00	9,350.00
0035	2220000000-E	838	REINFORCED ENDWALLS	7.5 CY	2,560.00	19,200.00
0036	2253000000-E	840	PIPE COLLARS	0.45 CY	8,053.69	3,600.00
0037	2275000000-E	SP	FLOWABLE FILL	70 CY	507.00	35,490.00
0038	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	7.5 CY	3,130.00	23,475.00
0039	2612000000-E	848	6" CONCRETE DRIVEWAY	60 SY	210.00	12,600.00
0040	3030000000-E	862	STEEL BEAM GUARDRAIL	887.5 LF	24.00	21,300.00
0041	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	50 LF	31.50	1,575.00

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0042	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	5 EA	42.00	210.00
0043	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	1 EA	1,050.00	1,050.00
0044	3287000000-N	862	GUARDRAIL END UNITS, TYPE TL-3	3 EA	3,675.00	11,025.00
0045	3628000000-E	876	RIP RAP, CLASS I	410 TON	74.00	30,340.00
0046	3635000000-E	876	RIP RAP, CLASS II	187 TON	90.00	16,830.00
0047	3649000000-E	876	RIP RAP, CLASS B	703 TON	73.00	51,319.00
0048	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	4,615 SY	1.00	4,615.00
0049	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	296 SF	6.25	1,850.00
0050	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	464 SF	17.50	8,120.00
0051	4430000000-N	1130	DRUMS	213 EA	73.00	15,549.00
0052	4455000000-N	1150	FLAGGER	330 DAY	600.00	198,000.00
0053	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	2 EA	4,725.00	9,450.00
0054	4485000000-E	1170	PORTABLE CONCRETE BARRIER	110 LF	36.50	4,015.00
0055	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	11 EA	11.00	121.00
0056	4688000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS)	15,115 LF	1.70	25,695.50
0057	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	475 LF	4.20	1,995.00
0058	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	11 EA	153.00	1,683.00
0059	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	1,600 LF	1.60	2,560.00
0060	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	118 EA	10.50	1,239.00
0061	5325600000-E	1510	6" WATER LINE	27 LF	342.00	9,234.00
0062	5326600000-E	1510	16" WATER LINE	1,238 LF	201.00	248,838.00
0063	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	5,760 LB	14.95	86,112.00
0064	5558600000-E	1515	16" VALVE	2 EA	15,350.00	30,700.00

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0065	5571600000-E	1515	6" TAPPING SLEEVE & VALVE	1 EA	4,500.00	4,500.00
0066	5648000000-N	1515	RELOCATE WATER METER	2 EA	2,200.00	4,400.00
0067	5672000000-N	1515	RELOCATE FIRE HYDRANT	3 EA	3,700.00	11,100.00
0068	5673000000-E	1515	FIRE HYDRANT LEG	51 LF	125.00	6,375.00
0069	5679200000-E	1515	16" LINE STOP	2 EA	26,250.00	52,500.00
0070	5686500000-E	1515	WATER SERVICE LINE	21 LF	100.00	2,100.00
0071	5800000000-E	1530	ABANDON 6" UTILITY PIPE	43 LF	112.00	4,816.00
0072	5810000000-E	1530	ABANDON 16" UTILITY PIPE	1,226 LF	35.00	42,910.00
0073	5872600000-E	1550	DIRECTIONAL DRILLING OF *** (16")	491 LF	650.00	319,150.00
0074	6000000000-E	1605	TEMPORARY SILT FENCE	4,805 LF	3.80	18,259.00
0075	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	180 TON	61.00	10,980.00
0076	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	1,190 TON	59.00	70,210.00
0077	6012000000-E	1610	SEDIMENT CONTROL STONE	350 TON	51.00	17,850.00
0078	6015000000-E	1615	TEMPORARY MULCHING	9 ACR	1,785.00	16,065.00
0079	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	700 LB	2.10	1,470.00
0080	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	3.5 TON	1,160.00	4,060.00
0081	6024000000-E	1622	TEMPORARY SLOPE DRAINS	400 LF	16.00	6,400.00
0082	6029000000-E	SP	SAFETY FENCE	1,240 LF	3.40	4,216.00
0083	6030000000-E	1630	SILT EXCAVATION	1,620 CY	15.00	24,300.00
0084	6036000000-E	1631	MATTING FOR EROSION CONTROL	9,000 SY	1.60	14,400.00
0085	6037000000-E	1629	COIR FIBER MAT	100 SY	8.00	800.00
0086	6042000000-E	1632	1/4" HARDWARE CLOTH	315 LF	7.00	2,205.00
0087	6069000000-E	1638	STILLING BASINS	188 CY	83.00	15,604.00

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
0088	6071002000-E	1642	FLOCCULANT	340 LB	15.75	5,355.00
0089	6071010000-E	1642	WATTLE	270 LF	10.50	2,835.00
0090	6071030000-E	1640	COIR FIBER BAFFLE	135 LF	12.00	1,620.00
0091	6084000000-E	1660	SEEDING & MULCHING	9 ACR	3,045.00	27,405.00
0092	6087000000-E	1660	MOWING	9 ACR	265.00	2,385.00
0093	6090000000-E	1661	SEED FOR REPAIR SEEDING	150 LB	7.00	1,050.00
0094	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.5 TON	1,300.00	650.00
0095	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	200 LB	5.25	1,050.00
0096	6108000000-E	1665	FERTILIZER TOPDRESSING	5.75 TON	1,100.00	6,325.00
0097	6111000000-E	SP	IMPERVIOUS DIKE	330 LF	222.00	73,260.00
0098	6114500000-N	1667	SPECIALIZED HAND MOWING	20 MHR	160.00	3,200.00
0099	6114800000-N	SP	MANUAL LITTER REMOVAL	6 MHR	55.00	330.00
0100	6114900000-E	SP	LITTER DISPOSAL	2 TON	300.00	600.00
0101	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	50 EA	325.00	16,250.00
0102	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	4 EA	1,215.00	4,860.00
0103	6120000000-E	SP	CULVERT DIVERSION CHANNEL	57 CY	66.00	3,762.00
0104	6123000000-E	1670	REFORESTATION	0.1 ACR	3,500.00	350.00

## Contract Item Sheets For C204987

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
CULVERT ITEMS						
0105	8130000000-N	414	BOX CULVERT EXCAVATION, STA ***** (14+28.00 -L-)	LUMP SUM	36,500.00	36,500.00
0106	8133000000-E	414	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT	252 TON	96.00	24,192.00
0107	8196000000-E	420	CLASS A CONCRETE (CULVERT)	161.5 CY	1,010.00	163,115.00
0108	8245000000-E	425	REINFORCING STEEL (CULVERT)	21,045 LB	3.10	65,239.50
TOTAL AMOUNT OF BID FOR ENTIRE PROJECT						\$4,522,370.00

0938/Dec02/Q87608.697/D420146242000/E108

## Fuel Usage Factor Adjustment Form

Contract Number	C204987
County	Wake
Contractor Name	Cardinal Civil Contracting, LLC
HiCAMS Vendor Number	19491

Select a Fuel Usage Factor for each of the Asphalt Material Descriptions to be used on the project. Within the Selected Fuel Usage Factor column, choose either 0.90 or 2.90 Gallons per Ton for the corresponding asphalt material description.

The Selected Fuel Usage Factor chosen will be used for the entire contract duration.

Description	Unit	Selected Fuel Usage Factor	
		0.90	2.90
Asphalt Concrete Base Course, Type B25.0C	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Intermediate Course, Type I19.0C	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type SA-1	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type SA-1 (Leveling Course)	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S4.75	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S4.75 (Leveling Course)	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5B	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5B (Leveling Course)	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5C	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5C (Leveling Course)	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5D	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Asphalt Concrete Surface Course, Type S9.5D (Leveling Course)	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Open-Graded Asphalt Friction Course	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ultra-thin Bonded Wearing Course	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Permeable Asphalt Drainage Course, Type _____	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sand Asphalt Surface Course, Type _____	Gal/Ton	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If the Contractor does not mark either Fuel Usage Factor or marks both Fuel Usage Factors for an asphalt item description, the 2.90 Fuel Usage Factor shall be used for that asphalt line item.



Contract No. C204987  
County Wake

Rev. 1-16-18

**EXECUTION OF CONTRACT  
NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION  
LIMITED LIABILITY COMPANY**

The Contractor declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this Contract, that the Contractor has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Contractor intends to do the work with its own bona fide employees or subcontractors and did not bid for the benefit of another contractor.

By submitting this Execution of Contract, Non-Collusion and Debarment Certification, the Contractor is certifying his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

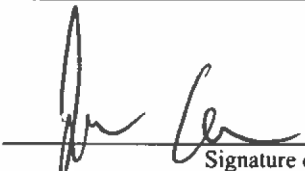
**SIGNATURE OF CONTRACTOR**

**Cardinal Civil Contracting, LLC**

Full Name of Firm

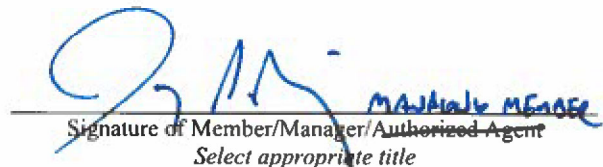
**100 E. Six Forks Rd, Suite 300, Raleigh, NC 27609**

Address as Prequalified

  
Signature of Witness

**John Egan**

Print or type Signer's name

  
Signature of Member/Manager/Authorized Agent  
Select appropriate title

**Jeremy Spivey**

Print or type Signer's Name

## DEBARMENT CERTIFICATION

### Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

### DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

☐ Check here if an explanation is attached to this certification.

Contract No. C204987

County (ies): Wake

ACCEPTED BY THE  
DEPARTMENT OF TRANSPORTATION

Signed by:

*Ronald E. Davenport, Jr.*

52C46046381F443...

Contract Officer

12/12/2024

Date

Execution of Contract and Bonds  
Approved as to Form:

DocuSigned by:

*Alan McInnes*

8BD7716388C4431...

Attorney General

12/12/2024

Date

Signature Sheet (Bid - Acceptance by Department)

Contract No.  
County

**C204987**

Page

Rev 5-17-11

**CONTRACT PAYMENT BOND** Bond #2630846

Date of Payment Bond Execution	<u>December 3, 2024</u>
Name of Principal Contractor	<u>Cardinal Civil Contracting, LLC</u>
Name of Surety:	<u>West Bend Insurance Company</u>
Name of Contracting Body:	<u>North Carolina Department of Transportation</u>
	<u>Raleigh, North Carolina</u>
Amount of Bond:	<u>\$4,522,370.00</u>
Contract ID No.:	<u>C204987</u>
County Name:	<u>Wake</u>

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Contract No.  
County

C204987

\_\_\_\_\_

Rev 5-17-11



CONTRACT PAYMENT BOND

West Bend Insurance Company

Print or type Surety Company Name

By Jessica Burgess

Print, stamp or type name of Attorney-in-Fact

*Jessica Burgess*

Signature of Attorney-in-Fact

Signer ID: SRC165YG12...

*[Signature]*

Signature of Witness

Signer ID: SRC165YG12...

Amelia Martin

Print or type Signer's name

1900 W 18th Ave., West Bend WI 53095

Address of Attorney-in-Fact

Contract No.  
County

**C204987**

Rev 5-17-11

**CONTRACT PAYMENT BOND**

**LIMITED LIABILITY COMPANY**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor


**Cardinal Civil Contracting, LLC**

Full name of Firm

**4441 Six Forks Rd., Ste. 106 261, Raleigh, NC 27609**

Address as prequalified

By:

 **MANAGING MEMBER**  
Signature of Member, Manager, ~~Authorized Agent~~  
Select appropriate title

**Jeremy S. Spivey**

Print or type Signer's name

Contract No.  
County

**C204987**

Wake

Rev 5-17-11

Bond #2630846

**CONTRACT PERFORMANCE BOND**

Date of Performance Bond Execution: **December 3, 2024**

Name of Principal Contractor: **Cardinal Civil Contracting, LLC**

Name of Surety: **West Bend Insurance Company**

Name of Contracting Body: **North Carolina Department of Transportation**

**Raleigh, North Carolina**

Amount of Bond: **\$4,522,370.00**

Contract ID No.: **C204987**

County Name: **Wake**

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Contract No.  
County

C204987

Rev 5-17-11



CONTRACT PERFORMANCE BOND

West Bend Insurance Company

Print or type Surety Company Name

By Jessica Burgess

Print, stamp or type name of Attorney-in-Fact

Jessica Burgess

Signature of Attorney-in-Fact

[Signature]

Signature of Witness

Signer ID: SRC165YG12..

Amelia Martin

Print or type Signer's name

1900 W 18th Ave., West Bend WI 53095

Address of Attorney-in-Fact

Contract No.  
County

**C204987**

Rev 5-17-11

**CONTRACT PERFORMANCE BOND**

**LIMITED LIABILITY COMPANY**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

**Cardinal Civil Contracting, LLC**

Full name of Firm

**4441 Six Forks Rd., Ste. 106 261, Raleigh, NC 27609**

Address as prequalified

By:

 **MANAGING MEMBER**  
Signature of Member, Manager, ~~Authorized Agent~~  
Select appropriate title

**JEREMY S. SPIVEY**

Print or type Signer's name



Bond No. 2630846

## POWER OF ATTORNEY

Know all men by these Presents, that West Bend Insurance Company (formerly known as West Bend Mutual Insurance Company prior to 1/1/2024), a corporation having its principal office in the City of West Bend, Wisconsin does make, constitute and appoint:

Jessica Burgess

lawful Attorney(s)-in-fact, to make, execute, seal and deliver for and on its behalf as surety and as its act and deed any and all bonds, undertakings and contracts of suretyship, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of: Thirty Million Dollars (\$30,000,000)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of West Bend Insurance Company by unanimous consent resolution effective the 1<sup>st</sup> day of January 2024.

*Appointment of Attorney-In-Fact. The president or any vice president, or any other officer of West Bend Insurance Company may appoint by written certificate Attorneys-In-Fact to act on behalf of the company in the execution of and attesting of bonds and undertakings and other written obligatory instruments of like nature. The signature of any officer authorized hereby and the corporate seal may be affixed by facsimile to any such power of attorney or to any certificate relating therefore and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the company, and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the company in the future with respect to any bond or undertaking or other writing obligatory in nature to which it is attached. Any such appointment may be revoked, for cause, or without cause, by any said officer at any time.*

Any reference to West Bend Mutual Insurance Company in any Bond and all continuations thereof shall be considered a reference to West Bend Insurance Company.

In witness whereof, West Bend Insurance Company has caused these presents to be signed by its president undersigned and its corporate seal to be hereto duly attested by its secretary this 1<sup>st</sup> day of January 2024.

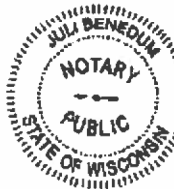
Attest Christopher C. Zwygart  
Christopher C. Zwygart  
Secretary



Robert J. Jacques  
Robert J. Jacques  
President

State of Wisconsin  
County of Washington

On the 1<sup>st</sup> day of January 2024, before me personally came Robert Jacques, to me known being by duly sworn, did depose and say that he is the President of West Bend Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation and that he signed his name thereto by like order.



Juli Benedum  
Juli Benedum  
Lead Corporate Attorney  
Notary Public, Washington Co., WI  
My Commission is Permanent

The undersigned, duly elected to the office stated below, now the incumbent in West Bend Insurance Company, a Wisconsin corporation authorized to make this certificate, Do Hereby Certify that the foregoing attached Power of Attorney remains in full force effect and has not been revoked and that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

Signed and sealed at West Bend, Wisconsin this 3rd day of December, 2024



Christopher C. Zwygart  
Christopher C. Zwygart  
Secretary