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

FINAL REQUEST FOR PROPOSALS

DESIGN-BUILD PROJECT

Hurricane Helene Emergency
Express Design-Build
Division 13 Group 6
Bridge Replacements

January 13, 2025

VOID FOR BIDDING

DATE AND TIME OF PRICE PROPOSAL OPENING: **January 21, 2025 AT 2:00 PM**

CONTRACT ID: **C205023**

WBS ELEMENT NO.: DF18313.2100057.PR, DF18313.2100307.PR and DF18313.2100064.PR

COUNTY: Yancey

ROUTE NO. SR 1152 and SR 1153

MILES: N/A

LOCATION: Replacement of Bridges in Yancey County

TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK CONTAINED IN THE REQUEST FOR PROPOSALS

NOTICE:

ALL PROPOSERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE PROPOSER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS $30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. PROPOSERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING, THE PROPOSER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

_____

5% BID BOND OR BID DEPOSIT REQUIRED

_____

PROPOSAL FORM FOR THE CONSTRUCTION OF CONTRACT NO. C205023

IN YANCEY COUNTY
NORTH CAROLINA

Date_____ 20_____

DEPARTMENT OF TRANSPORTATION,

RALEIGH, NORTH CAROLINA

The Design-Build Team herein acknowledges that it has carefully examined the location of the proposed work to be known as Contract No. C205023, has carefully examined the Final Request for Proposals (RFP) and all addendums thereto, specifications, special provisions, the form of contract, and the forms of contract payment bond and contract performance bonds, which are acknowledged to be part of the Contract; and thoroughly understands the stipulations, requirements and provisions. The undersigned Design-Build Team agrees to be bound upon their execution of the Contract and including any subsequent award to them by the Secretary of Transportation in accordance with this Contract to provide the necessary contract payment bond and contract performance bond within fourteen calendar days after the written notice of award is received by them.

The undersigned Design-Build Team further agrees to provide all necessary materials, machinery, implements, appliances, tools, labor, and other means of construction, except as otherwise noted, to perform all the work and required labor to design, construct and complete all the work necessary for State Highway Contract No. C205023 in Yancey County by no later than the date(s) specified in the Final RFP, and any addenda thereto, and in accordance with the requirements of the Engineer, the Final RFP and Addenda thereto, the January 2024 NCDOT *Standard Specifications for Roads and Structures*, and specifications prepared by NCDOT, herein after referred to as the Department, at the price(s) bid by the Design-Build Team in their Price Proposal.

The Design-Build Team shall provide signed and sealed documents prepared by the Design-Build Team, which specifications and plans show the details covering this project and adhere to the items noted above.

The Design-Build Team acknowledges that project documents furnished by the Department are preliminary and provided solely to assist the Design-Build Team in the development of the project design. Unless otherwise noted herein, the Department does not warrant or guarantee the sufficiency or accuracy of any information furnished by the Department.

The Department does not warrant or guarantee the sufficiency or accuracy of any investigations made, nor the interpretations made or opinions of the Department as to the type of materials and conditions to be encountered at the project site. The Design-Build Team is advised to make such independent investigations, as they deem necessary to satisfy their self as to conditions to be encountered on this project. The Design-Build Team shall have no claim for additional compensation or for an extension of contract time for any reason resulting from the actual conditions encountered at the site differing from those indicated in any of the information or documents furnished by the Department except as may be allowed under the provisions of the Standard Specifications.

The Design-Build Team shall assume full responsibility, including liability, for the project design, including the use of portions of the Department design, modification of such design, or other designs as may be submitted by the Design-Build Team.

The Design-Build Team shall be fully and totally responsible for the accuracy and completeness of all work performed under this contract, and shall indemnify and hold the Department harmless for any additional costs and all claims against the Department or the State which may arise due to errors or omissions of the Department in furnishing the preliminary project designs and information, and of the Design-Build Team in performing the work.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures*, *January 2024,* as well as, all design manuals, policy and procedures manuals, and AASHTO publications and guidelines referenced in the Request For Proposals, with all amendments and supplements thereto, are by reference, incorporated and made part of this contract; that, except as herein modified, all the designs, construction and, as applicable, construction engineering and inspection included in this contract is to be done in accordance with the documents noted above and under the direction of the Engineer.

The contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except by written approval as allowed by the Request for Proposals.

Accompanying the Design-Build Proposal shall be a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Design-Build Team shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by them, as provided in the Standard Specifications; otherwise said deposit will be returned to the Design-Build Team.

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STANDARD SPECIAL PROVISION

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*** PROJECT SPECIAL PROVISIONS ***

BUILD AMERICA, BUY AMERICA (BABA)

(11-15-22)(Rev. 7-16-24) 106 DB1 G05

Revise the *Standard Specifications* as follows:

Page 1-48, Article 106-1 GENERAL REQUIREMENTS, add the following after line 49:

(C) Build America, Buy America (BABA)

All manufactured products and construction materials permanently incorporated into any project shall meet requirements of the Build America, Buy America (BABA) Act of the Infrastructure Investment and Jobs Act (IIJA). Before any material or product shown on the Department's Build America, Buy America (BABA) List is included for payment on a monthly estimate, the Design-Build Team shall furnish the Engineer with a notarized certification certifying that the items conform to the BABA Act. The Department's Build America Buy America (BABA) List can be found on the Department's website below:

https://connect.ncdot.gov/letting/LetCentral/NCDOT%20BABA%20Materials%20List.pdf

Each purchase order issued by the Design-Build Team or a subcontractor for items on the BABA List to be permanently incorporated into any project shall contain in bold print a statement advising the supplier that the manufactured products and construction materials shall be produced in the United States of America. The Design-Build Team and all affected subcontractors shall maintain a separate file for BABA List items so that verification of the Design-Build Team's efforts to purchase items produced in the United States can readily be verified by an authorized representative of the Department or the Federal Highway Administration (FHWA).

CONTRACT TIME AND LIQUIDATED DAMAGES

(4-17-12)(Rev. 1-16-24)

The date of availability for this contract is March 3, 2025, except that the Design-Build Team shall only begin ground disturbing activities as allowed by this Request for Proposals (RFP).

The Final Completion Date shall not be later than October 1, 2026.

When observation periods are required by the special provisions, they are not a part of the work to be completed by the completion date and / or intermediate contract times. Should an observation period extend beyond the Final Completion Date, acceptable completion of the observation period shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are One Thousand One Hundred **Dollars ($ 1,100.00)** per calendar day.

INTERMEDIATE CONTRACT TIME NUMBERS 1, 2 & 3 AND LIQUIDATED DAMAGES

(2-20-07) (Rev. 12-10-24) AD G14

Intermediate Contract Times #1, #2 and #3 are for the completion of work at each bridge site including but not limited to the construction of the proposed bridge, roadway and approach slab components, demolition and removal of any remaining existing bridge components, and salvage of the existing temporary bridge if required, without the need for subsequent lane closures. Liquidated Damages for Intermediate Contract Times #1, #2 & #3 are per calendar day as listed in the Table below:

ICT Number	County	Structure #	Route	Intermediate Contract Time (Calendar Days)	Liquidated Damages
1	Yancey	990097	SR 1152	195	$1,100
2	Yancey	990062	SR 1153	195	$600
3	Yancey	990100	SR 1153	150	$600

Removal of the temporary bridge, and regrading / removal of embankments for the temporary bridge are not included in Intermediate Contract Time #3, and not subject to associated Liquidated Damages.

The date of availability for Intermediate Contract Times #1, #2 & #3 shall be defined in writing by the Design-Build Team to the Engineer a minimum of thirty (30) calendar days prior to beginning construction at any bridge site.

ALTERNATE BIDS

(12-17-24) 103 DB1 G15

Revise the *Standard Specifications* as follows:

Page 1-23, Subarticle 103-2(B)(5) Electronic Bids, lines 7-9, replace the last sentence of this subarticle with the following:

Where the bidder submits a unit price other than zero for more than one item of an authorized alternate, the Department will determine the lowest total price based on the alternate bid and if there are multiple alternates at the lowest total price the alternate will be determined by the Department.

MEASUREMENT AND PAYMENT

This "Measurement and Payment" Project Special Provision does not apply to bridges for which the Design-Build Team has elected to forego the unit price bid approach and instead has elected to submit an alternate lump sum bid for the design and construction of a bridge.

Reference is made to the following pay items listed on the Itemized Proposal Sheet:

Bridge Length (LF): *Bridge Length* will be measured from fill face to fill face and paid in units of linear feet as measured along the centerline of the bridge of actual bridge length constructed. Work will include all materials, labor, and equipment to construct the superstructure portion of the bridge as taken from the bottom of the superstructure to the top of the bridge rail, excluding asphalt wearing surface. This work does not include bearing devices, anchors bolts or other such connection.

Payment will be made under:

Pay Item	Pay Unit
Bridge Length Structure No. 990062	Linear Feet
Bridge Length Structure No. 990097	Linear Feet
Bridge Length Structure No. 990100	Linear Feet

Foundation Length (LF): *Foundation Length* will be measured from the elevation at the top of the piles or columns atop drilled piers to the pile tip or drilled pier tip elevation actually installed at a given end bent or interior bent and will be paid for in units of linear feet. The final foundation pay length per bent or end bent will be determined by adding the drilled pier lengths measured as defined above for the total number of piles or drilled piers per bent or end bent. Work will include all materials, labor, and equipment to install and construct the foundations, including pile auguring as necessary, regardless of the number of piles or columns/drilled piers per bent, including that portion of the piles or columns/drilled piers that extend into the end bent or interior bent cap. In the event that additional interior bents are required beyond that specified in the Structures Scope of Work, the unit price bid for linear feet of Foundation Length for the closest interior bent will be used to compensate for the additional length of piles or columns/drilled piers.

Payment will be made under:

Pay Item	Pay Unit
Foundation Length at End Bent #1 Structure No. 990062	Linear Feet
Foundation Length at End Bent #2 Structure No. 990062	Linear Feet
Foundation Length at End Bent #1 Structure No. 990097	Linear Feet
Foundation Length at Interior Bent # Structure No. 990097	Linear Feet
Foundation Length at End Bent #2 Structure No. 990097	Linear Feet
Foundation Length at End Bent #1 Structure No. 990100	Linear Feet
Foundation Length at End Bent #1 Structure No. 990100	Linear Feet

Interior Bent Caps (Each): *Interior Bent Caps* will be measured and paid for by each. Work will include all material, labor, and equipment to construct each interior bent cap, including the necessary bearing devices, anchors bolts or other such connection.

Payment will be made under:

Pay Item	Pay Unit

Interior Bent Caps Structure No. 990097 Each

End Bents (Each): *End Bents* will be measured and paid for by each. Work will include all material, labor, and equipment to construct each end bent, including the necessary bearing devices, anchors bolts or other such connection, and wing walls.

Payment will be made under:

Pay Item	**Pay Unit**
End Bents Structure No. 990062	Each
End Bents Structure No. 990097	Each
End Bents Structure No. 990100	Each

Design and Construction of Bridges (LS): *Design and Construction of Bridges* will be paid for as lump sum. No measurement will be made. Work will include all material, labor and equipment to complete all of the work required by the contract at all sites specified as bridges in this RFP, excluding those specific contract unit price items listed above. Work will include all preconstruction activities including, but not limited to, design, permitting, asbestos assessment of existing bridge, utility coordination services and other preconstruction services, regardless of the final design, bridge length, foundation length, or number of interior bents. Work will also include all other construction required by the contract including, but not limited to, erosion and sediment control, earthwork, drainage, pavement, signing, bridge approach fills, approach slabs, removal of all existing structure components, temporary shoring, guardrail and debris removal. Temporary shoring required solely to accommodate conflicting slopes from the temporary bridges will be paid for as Extra Work in accordance with Article 104-8(a) of the Standard Specifications. Work will also include all surveying and geotechnical investigative work as may be required by the contract. Work will also include undercut of unsuitable subgrade soils to a limit of 250 CY. Undercut beyond this limit will be paid for as Extra Work in accordance with Article 104-8(a) of the Standard Specifications.

Streambank re-establishment/realignment will be required beneath the proposed bridge and to extend to the proposed up and downstream Right of Way limits or 30 feet each side of the centerline of the proposed bridge, whichever is greater. This work shall include channel re-establishment, reshaping banks to a 1.5:1 or flatter slope, and armoring with appropriately sized stone as determined by the Design-Build Team and shall be included in the lump sum price for Design and Construction of Bridges. Work associated with re-establishing or stabilizing the stream channel outside of these limits may be included in the contract; however, such work will be paid for as Extra Work in accordance with Article 104-8(a) of the Standard Specifications.

Work will also include debris removal and disposal from the stream and streambanks within the stream re-establishment limits above as well as any other locations as required by the Design-Build Team's operations. Storm debris may be disposed at a DEQ Active TDSR Site.

https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=ff89064fe9514d759da54b868d93afc5

Work will also include any additional materials and labor needed to provide up to a 1'-6" increase in the existing roadway grade to satisfy all contract requirements, including FEMA compliance, as applicable.

Periodic inspections of existing temporary bridges will be performed by the Department. If maintenance activities are required on the temporary bridges, the Department may require the Design-Build Team to perform those activities; however, this work would be paid for as Extra Work in accordance with Article 104-8(a) of the Standard Specifications.

Payment will be made under:

Pay Item	**Pay Unit**
Design and Construction of Bridge No. 990062	Lump Sum
Design and Construction of Bridge No. 990097	Lump Sum
Design and Construction of Bridge No. 990100	Lump Sum

Right of Way Acquisition (EA): *Right of Way Acquisition* services will be paid for per each parcel from which a utility easement and/or right of way is required. Work will include all labor and services necessary to acquire the easements/right of way as required by the Right of Way Scope of Work.

Payment will be made under:

Pay Item	**Pay Unit**
Right of Way Acquisition at Bridge No. 990062	Each
Right of Way Acquisition at Bridge No. 990097	Each
Right of Way Acquisition at Bridge No. 990100	Each

Adjustments to Quantities and Payment

The Itemized Proposal Sheet provides the quantity of linear feet of *Bridge Length, Foundation Length* and the quantity of *Interior Bent Caps* to be bid for the bridge site. By submitting this Price Proposal, the Design-Build Team acknowledges that these quantities are intended for bidding purposes and may or may not be the final design quantities. Unless otherwise noted in the Structures Scope of Work, in the event that the final design quantities for *Bridge Length Foundation Length* and *Interior Bent Caps* differ from those presented in the Itemized Proposal Sheet, adjustment will be made to the partial payments made to Design-Build Team per the applicable contract unit prices.

The Itemized Proposal Sheet provides the quantity of parcels from which utility easement or right of way will be required across this bridge site. By submitting this Price Proposal, the Design-Build Team acknowledges that this quantity is intended for bidding purposes and may or may not be the final quantity. In the event that the final quantity of impacted parcels differs from that shown in the Itemized Proposal Sheet, adjustment will be made to the partial payments made to the Design-Build Team per the unit price bid per Each for *Right of Way Acquisition.*

All contract pay items for this contract are considered minor contract items.

No adjustments to the pay quantities will be made until such time that all pertinent design submittals are approved and all permits for the site have been obtained.

In the event of any increase in any of the above quantities, the Design-Build Team will be required to demonstrate through the pertinent design submittals the need for the additional quantities.

In the event of any decrease in any of the above quantities, the Design-Build Team will be eligible for an incentive for such reduction (reference the Project Special Provision entitled "Value Analysis"). This incentive and special provision do not apply to the line item for *Right of Way Acquisition.*

If during the course of the design phase, the Design-Build Team proposes a span arrangement that eliminates the contract line item for *Interior Bent Caps* at this bridge site, then the provisions of Article 104-12 of the Standard Specifications will apply.

Any bridge length specified in the Structure Scope of Work of 75 feet or less shall be cored slab unless otherwise specified therein. If during the course of the design, the Design-Build Team demonstrates to the Department's satisfaction that a bridge that is specified in the Structure Scope of Work as 75 feet or less must be revised to a length in excess of 75 feet such that a cored slab design will not suffice, then adjustment will be made to the partial payments made to Design-Build Team per the unit price bid for linear feet of *Bridge Length*. In addition, the provisions of Article 104-7 of the Standard Specifications will apply as to the change from a cored slab superstructure to the final design superstructure type.

The Structure Scope of Work does not specify a size of superstructure (e.g. 21" deep cored slab) or foundation pile size (e.g. 12 x 53); instead the determination of these sizes is the responsibility of the Design-Build Team. No additional compensation will be provided for any increase in specific size of superstructure or foundation type. However, if during the course of the design or permitting phase, the Design-Build Team demonstrates to the Department's satisfaction that the foundation type (e.g. steel piles or drilled piers) or superstructure type (e.g. cored slab), as specified in the Structures Scope of Work will not be adequate, then the provisions of Article 104-7 of the Standard Specifications will apply. For bridges that are proposed as multiple span bridges in the Structure Scope of Work, cored slabs and box beams are considered to be the same superstructure type for this purpose.

If during the course of the design or permitting phase, the Design-Build Team proposes a more economical foundation type or superstructure type from those specified in the Structures Scope of Work, then the provisions of Article 104-12 of the Standard Specifications will apply.

In the event, that the width of superstructure specified in the Structures Scope of Work is inadequate, as demonstrated through the pertinent approved design submittals, then provisions of Article 104-7 of the Standard Specifications will apply. In such case, the unit contract price bid per Each for *Interior Bent* and *End Bents* will be prorated based on the difference in length of cap needed for the bridge width stated herein and the final design bridge width. If the Design-Build Team demonstrates to the Department's satisfaction that the extra bridge width requires an

additional pile, then the payment quantity for Foundation Length will be prorated based on the number of piles needed for the bridge width stated herein and that for final design bridge width. The payment quantity for Linear Feet of *Bridge Length* will be prorated by multiplying the payment quantity provided in the Itemized Proposal Sheet by the ratio of the final design bridge length divided by the bridge length specified herein. No additional compensation for the lump sum item *Design and Construction of Bridges* will be provided for additional bridge width.

If during the course of the design, the Design-Build Team determines that the existing roadway grade must be raised by more than 1'-6" to accommodate other contract requirements, then the provisions of Article 104-7 of the Standard Specifications will apply to the work items covered by *the Design and Construction of Bridges* line item to the extent needed beyond the 1'-6" grade change already accommodated in the lump sum price bid for *Design and Construction of Bridges*.

DESIGN AND CONSTRUCTION ITEMIZATION

(3-21-15) EDB

Reference is made to the Measurement and Payment Project Special Provision and the pay item for *Design and Construction of Bridges* contained therein. Within 30 days after award of the contract, the Design-Build Team shall submit to the Engineer, an itemization of the anticipated costs associated with the work items contained in the amount bid for *Design and Construction of Bridge*. The itemization shall, at a minimum, break out the costs for design, other preconstruction services, the summation of all typical roadway pay items and a breakdown of all typical bridge pay items.

ALTERNATE LUMP SUM BID

The Design-Build Team may provide an alternate lump sum bid for Bridge No. 990097.

If the Design-Build Team elects to submit an alternate lump sum bid for the bridge, the Design-Build Team shall be solely responsible for all costs, including but not limited to, overruns, additional design, and any additional right-of-way, additional utility relocation, or additional mitigation costs that would not otherwise have been attributable to the bridge description specified in the Structures Scope of Work. The Design-Build Team also must forego any additional compensation that would have otherwise been afforded under the “Value Analysis” and “Measurement and Payment” Project Special Provisions. In addition, providing an alternate lump sum bid does not relieve the Design-Build Team of any contract requirements including permitting agency requirements, hydraulic design requirements, and FEMA compliance requirements. The bridge design shall not rely upon any design exceptions except to the extent that may be specifically permitted in the Roadway Scope of Work.

With the exception of *Right-of-Way Acquisition* services, which will still be paid on a unit basis, the lump sum bid entered on the Itemized Proposal Sheet will be full compensation for all work necessary at the applicable bridge site, including all pay items outlined in the Measurement and Payment” Project Special Provision. In the event that the design, upon which the alternate lump sum bid, is not ultimately accepted by the Department, the Design-Build Team will be required to design and construct a bridge that does satisfy the Department that all contract and permit conditions (including FEMA) can and will be met, which may include the design and

construction of the bridge specified in the Structures Scope of Work for that site. Culverts will not be acceptable in lieu of bridges.

The Design-Build Team is cautioned that the bridge description specified in the Structures Scope of Work was determined jointly by the Department and the regulatory and permitting agencies and variation therefrom will likely require subsequent concurrence from these agencies. The Design-Build Team is fully responsible for engaging the Department to understand the rationale for the bridge descriptions outlined in the Structures Scope of Work prior to exercising the lump sum bid alternate afforded by this provision.

To elect this option, the Design-Build Team shall enter a lump sum amount for all work required by the contract for the bridge site on the Itemized Proposal Sheet. The unit cost and amount for all other line items specific to that bridge shall be left blank on the Itemized Proposal Sheet.

To forego this option, the Design-Build Team shall enter a unit cost and amount for each of the specific unit price and lump sum items for the bridge site and the amount for the Alternate Lump Sum Bid for Bridge #990097 shall be left blank.

Payment will be made under:

Pay Item	**Pay Unit**
Alternate Lump Sum Bid for Bridge #990097	Lump Sum

MOBILIZATION

(1-16-24) DB1 G15B

Revise the *Standard Specifications* as follows:

Page 8-1, Subarticle 800-2, MEASUREMENT AND PAYMENT

Delete this subarticle in its entirety and replace with the following:

800-2 MEASUREMENT AND PAYMENT

Ten percent of the "Total Amount of Bid for Entire Project" shall be considered the lump sum amount for Mobilization. Partial payments for Mobilization will be made beginning with the first partial pay estimate paid on the contract in the amount of 40% of the mobilization. The additional 60% of the mobilization will be paid for in equal amounts over the next two partial payments.

SUBMITTAL OF QUANTITIES, FUEL BASE INDEX PRICE AND OPT-OUT OPTION

(1-23-14)(Rev 1-21-25) EDB1 G43

(A) Submittal of Quantities

Submit quantities on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet, which is found at the following link:

https://connect.ncdot.gov/letting/Design%20Build%20Resources/Express%20Design%20Build%20-%20Fuel%20Usage%20Factor%20Chart%20and%20Estimate%20of%20Quantites.pdf

The Design-Build Team shall prepare an Estimate of Quantities that they anticipate incorporating into the completed project and upon which the Price Proposal was based. The quantity breakdown shall include all items of work that appear in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet. Only those items of work which are specifically noted in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet will be subject to fuel price adjustments.

Submittal - The submittal shall be delivered at the same time and location as the Price Proposal. The *Fuel Usage Factor Chart and Estimate of Quantities* sheet shall be attached to the electronic bid file.

Trade Secret - Information submitted on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet will be considered "Trade Secret" in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

(B) **Base Index Price**

The Design-Build Team's Estimate of Quantities will be used on the various partial payment estimates to determine fuel price adjustments. The Design-Build Team shall submit a payment request for quantities of work completed based on the work completed for that estimate period. The quantities requested for partial payment shall be reflective of the work actually accomplished for the specified period. The Design-Build Team shall certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is **$ 2.3148** per gallon.

(C) **Opt Out of Fuel Price Adjustment**

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments, a quantity of zero shall be entered for all quantities in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet and the declination box shall be checked. Failure to complete and submit the *Fuel Usage Factor Chart and Estimate of Quantities* form will mean that the Design-Build Team is declining the Fuel Price Adjustments for this project.

(D) **Fuel Usage Factor for Asphalt Line Items**

If the Design-Build Team elects to pursue reimbursement for Fuel Price Adjustments, the Design-Build Team shall select either the 0.90 **or** 2.90 Fuel Usage Factor for each individual asphalt line item by marking the appropriate Factor on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet. If the Design-Build Team does not mark either Fuel Usage Factor or marks both Fuel Usage Factors for an asphalt line item, the 2.90 Fuel Usage Factor shall be used for that asphalt line item.

(E) **Change Option**

The proposer will not be permitted to change the option after the Price Proposal and the *Fuel Usage Factor Chart and Estimate of Quantities* sheet is submitted.

(F) **Failure to Submit**

Failure to submit the completed *Fuel Usage Factor Chart and Estimate of Quantities* sheet will result in the Price Proposal being considered irregular by the Department and the Price Proposal may be rejected.

(G) **Total Construction Cost Amount**

Submit the total construction cost amount on all *Fuel Usage Factor Chart and Estimate of Quantities* sheet submittals regardless of opting to pursue or not pursue reimbursement for Fuel Price Adjustments on this project. This value will be used to calculate compliance with the DBE or MBE/WBE project goals.

INDIVIDUAL MEETINGS WITH PROPOSERS

(9-1-11) DB1 G048

The Department will provide one Question and Answer Session, which includes Hydraulic, Environmental & Geotechnical questions, to meet with each proposer individually to specifically address questions regarding the draft Requests for Proposals.

CONFIDENTIAL QUESTIONS

(1-5-07) DB1 G56B

The Design-Build Team will be permitted to ask confidential questions of the Department, which neither the question nor answer will be shared with other proposing teams. For the purpose of this provision, "confidential question" is defined as a private inquiry containing information whose disclosure could alert others to certain details of doing business in a particular manner. The Department will determine if the question is considered a confidential question.

I. Confidential questions arising prior to issuance of the Final Request for Proposals will be allowed at the External RFP review with the individual teams.

   The Department will answer the confidential question verbally at the meeting if possible. If not answered verbally during the meeting, the Department will answer the confidential question by subtle changes in the Final Request for Proposals, which will clarify the scope by either allowing or disallowing the request. The revision will be made in such a manner as to not disclose the confidential question.

II. After the issuance of the Final Request for Proposals, confidential questions may be asked by requesting a meeting with the Contract Officer. The request shall be in writing and provide sufficient detail to evaluate the magnitude of the request. Questions shall be of such magnitude as to warrant a special meeting. Minor questions will not be acknowledged or answered.

After evaluation, the Contract Officer will respond to the question in writing to the Design-Build Team only. Other teams will not be notified of the question or answer.

VALUE ANALYSIS

(9-1-11) EDB1 G57

Value Engineering Proposals, as specified in Article 104-12 of the 2024 *Standard Specifications for Roads and Structures*, and as modified in the Standard Special Provision entitled "Value Engineering Proposals" will be accepted. Only proposals, which alter the requirements of the RFP issued by the Department, will be considered as Value Engineering Proposals.

To minimize re-design efforts and costs, the Design-Build Team is encouraged to submit Preliminary Value Engineering Proposals that provide an estimate of cost or time savings, span layout, span lengths, foundation types, or other such general information and how they differ from that specified in this RFP. Therefore, full design packages for the proposed structure and that for the structure specified in this RFP are not required, but enough detail should be provided to clearly show the cost of both options (excluding design cost).

The $10,000 threshold for consideration of a Value Engineering Proposal, as specified in Article 104-12 applies.

Value Engineering Proposals will not be required or allowed for the sole purposes of reducing the depth of foundations or to shorten the bridge length unless a change to the foundation type (drilled piers versus piles) or a change to the superstructure type is proposed and accepted. Instead, such reduction in foundation depth or bridge length will result in an adjustment in partial payments to the Design-Build Team in accordance with the Project Special Provision entitled "Measurement and Payment." However, as an incentive to the Design-Build Team to provide an economical structural design, the Design-Build Team will be paid a lump sum of 15% of the total partial payment adjustment attributable to the reduced pay item quantities for Foundation Depth and/or Bridge Length, as applicable. Said lump sum payment will be made upon approval of all design submittals, and receipt of all permits and FEMA compliance for a given bridge site. The 15% incentive will not apply to a bridge if the total partial payment adjustments noted above for that bridge are less than $5,000.00.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS

(7-15-08) (Rev. 7-16-24) 108-2 DB1 G58

The Design-Build Team's attention is directed to the *Availability of Funds - Termination of Contracts* Standard Special Provision found elsewhere in this RFP. The Department of Transportation's schedule of estimated completion progress for this project, as required by that Standard Special Provision, shall be as follows:

Fiscal Year	Progress (% of Dollar Value)
2025 (07/01/24 - 06/30/25)	11% of Total Amount Bid
2026 (07/01/25 - 06/30/26)	82% of Total Amount Bid
2027 (07/01/26 - 06/30/27)	7% of Total Amount Bid

In accordance with Article 108-2 of the *Standard Specifications,* the Design-Build Team shall also furnish its own progress schedule. Any acceleration of the progress as shown by the Design-Build Team's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE

(10-16-07) (Rev. 1-16-24) 102-15(J) SP1 G61 DB1 G061

Description

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

Definitions

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

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

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

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

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

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

Manufacturer - A firm that owns (or leases) and operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Design-Build Team. A firm that makes minor modifications to the materials, supplies, articles, or equipment is not a manufacturer.

Regular Dealer -A firm that owns (or leases) and operates a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in sufficient quantities, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, concrete or concrete products, gravel, stone, asphalt, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Any

supplement of regular dealers' own distribution equipment shall be by a long-term operating lease and not on an ad hoc or contract-by-contract basis.

Distributor – A firm that engages in the regular sale or lease of the items specified by the contract. A distributor assumes responsibility for the items it purchases once they leave the point of origin (e.g., a manufacturer's facility), making it liable for any loss or damage not covered by the carrier's insurance.
Replacement / Substitution - A full or partial reduction in the amount of work subcontracted to a committed (or an approved substitute) DBE firm.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

Forms and Websites Referenced in this Provision

DBE Payment Tracking System - On-line system in which the Design-Build Team enters the payments made to DBE subcontractors who have performed work on the project.

https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS *Subcontractor Payment Information* - Form for reporting the payments made to all DBE firms working on the project. This form is for paper bid projects only.

https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf

RF-1 *DBE Replacement Request Form* - Form for replacing a committed DBE.

https://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Form%20and%20Instructions.pdf

SAF *Subcontract Approval Form* - Form required for approval to sublet the contract.

https://connect.ncdot.gov/projects/construction/Construction%20Forms/SAF%20Form%20-%20Subcontract%20Approval%20Form%20Revised%2004-19.xlsm

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%

20Notification%20Form.pdf

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the estimated amount (based on quantities and unit prices) listed at the time the Price Proposal is submitted.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/08%20DBE%20Subcontractors%20(Federal).docx

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where DBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls

DBE Regular Dealer/Distributor Affirmation Form – Form is used to make a preliminary counting determination for each DBE listed as a regular dealer or distributor to assess its eligibility for 60 or 40 percent credit, respectively of the cost of materials or supplies based on its demonstrated capacity and intent to perform as a regular dealer or distributor, as defined in section 49 CFR 26.55 under the contract at issue. A Contractor will submit the completed form with the Letter of Intent.

https://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20Regular%20Dealer-Distributor%20Affirmation%20Form%20-%20USDOT%202024.pdf

DBE Goal

The following DBE goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises **4.0**%

(A) *If the DBE goal is more than zero*, the Design-Build Team shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.

(B) *If the DBE goal is zero*, the Design-Build Team shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to the Department.

This goal is to be met through utilization of highway construction contractors and / or right of way acquisition firms. Utilization of DBE firms performing design, other preconstruction services, or Construction Engineering and Inspection are not included in this goal.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as DBE certified shall be used to meet the DBE goal. The Directory can be found at the following link.

https://www.ebs.nc.gov/VendorDirectory/default.html

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of DBE Subcontractors

At the time the Price Proposal is submitted, Proposers shall submit all DBE participation that they anticipate to use during the life of the contract. Only those identified to meet the DBE goal will be considered committed, even though the listing shall include both committed DBE subcontractors and additional DBE subcontractors. Additional DBE subcontractor participation submitted at the time the Price Proposal is submitted will be used toward the Department's overall race-neutral goal. Only those firms with current DBE certification at the time of Price Proposal opening will be acceptable for listing in the Proposer's submittal of DBE participation. The Design-Build Team shall indicate the following required information:

(A) Electronic Bids

Bidders shall submit a listing of DBE participation in the appropriate section of the electronic submittal file.

(1) Submit the names and addresses of DBE firms identified to participate in the contract. If the bidder uses the updated listing of DBE firms shown in the electronic submittal file, the bidder may use the dropdown menu to access the name and address of the DBE firm.

(2) Submit the contract line numbers of work to be performed by each DBE firm. When no figures or firms are entered, the bidder will be considered to have no DBE participation.

(3) The bidder shall be responsible for ensuring that the DBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that DBE's participation will not count towards achieving the DBE goal.

(1) *If the DBE goal is zero*, entries on the *Listing of DBE Subcontractors* are not required for the zero goal, however any DBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in this special provision.

DBE Prime Contractor

When a certified DBE firm proposes on a contract that contains a DBE goal, the DBE firm is responsible for meeting the goal or making good faith efforts to meet the goal, just like any other proposer. In most cases, a DBE proposer on a contract will meet the DBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the DBE proposer and any other DBE subcontractors will count toward the DBE goal. The DBE proposer shall list itself along with any DBE subcontractors, if any, in order to receive credit toward the DBE goal.

For example, if the DBE goal is 45.0% and the DBE proposer will only perform 40.0% of the contract work, the prime will list itself at 40.0%, and the additional 5.0% shall be obtained through additional DBE participation with DBE subcontractors or documented through a good faith effort.

DBE Prime Contractors shall also follow Sections A and B listed under *Listing of DBE Subcontractor* just as a non-DBE proposer would.

Written Documentation - Letter of Intent

The Proposer shall submit written documentation for each DBE that will be used to meet the DBE goal of the contract, indicating the Proposer's commitment to use the DBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 10:00 a.m. on the sixth calendar day following opening of Price Proposals, unless the sixth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 10:00 a.m. on the next official state business day.

If the Proposer fails to submit the Letter of Intent from each committed DBE to be used toward the DBE goal, or if the form is incomplete (e.g., both signatures are not present), the DBE participation will not count toward meeting the DBE goal. If the lack of this participation drops the commitment below the DBE goal, the Design-Build Team shall submit evidence of good faith efforts, completed in its entirety, to the State Contractor Utilization Engineer or DBE@ncdot.gov no later than 10:00 a.m. on the eighth calendar day following opening of the Price Proposals, unless the eighth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 10:00 a.m. on the next official state business day.

Submission of Good Faith Effort

If the Proposer fails to meet or exceed the DBE goal the apparent lowest responsive Proposer shall submit to the Department documentation of adequate good faith efforts made to reach the DBE goal.

A hard copy and an electronic copy of this information shall be received in the office of the State Contractor Utilization Engineer or at DBE@ncdot.gov no later than 10:00 a.m. on the sixth calendar day following opening of the Price Proposals unless the sixth day falls on an official state holiday. In that situation, it is due in the office of the State Contractor Utilization Engineer no later than 10:00 a.m. on the next official state business day. If the Design-Build Team cannot send the information electronically, then one complete set and five copies of this information shall be received under the same time constraints above.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with DBE Goals More Than Zero

Adequate good faith efforts mean that the Proposer took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient DBE participation. Adequate good faith efforts also mean that the Proposer actively and aggressively sought DBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a Proposer has made. Listed below are examples of the types of actions a proposer will take in making a good faith effort to meet the goal and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

(A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified DBEs who have the capability to perform the work of the contract. The Proposer must solicit this interest within at least ten days prior to the opening of the Price Proposals to allow the DBEs to respond to the solicitation. Solicitation shall provide the opportunity to DBEs within the Division and surrounding Divisions where the project is located. The Proposer must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

(B) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.

(1) Where appropriate, break out contract work items into economically feasible units to facilitate DBE participation, even when the Prime Contractor might otherwise prefer to perform these work items with its own forces.

(2) Negotiate with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be sublet includes potential for DBE participation (2^{nd} and 3^{rd} tier subcontractors).

(C) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(D) (1) Negotiating in good faith with interested DBEs. It is the Proposer's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A proposer using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a proposer's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a Prime Contractor to perform the work of a contract with its own organization does not relieve the Proposer of the responsibility to make good faith efforts. Proposing Design-Build Teams are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

(E) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Proposer's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Proposer's efforts to meet the project goal.

(F) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or proposer.

(G) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

(H) Effectively using the services of available minority / women community organizations; minority / women contractors' groups; Federal, State, and local minority / women

business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs. Contact within seven days from the Price Proposals opening the Business Opportunity and Work Force Development Unit at BOWD@ncdot.gov to give notification of the Proposer's inability to get DBE quotes.

(I) Any other evidence that the Proposer submits which shows that the Proposer has made reasonable good faith efforts to meet the DBE goal.

In addition, the Department may take into account the following:

(1) Whether the Proposer's documentation reflects a clear and realistic plan for achieving the DBE goal.

(2) The Proposer's past performance in meeting the DBE goals.

(3) The performance of other proposers in meeting the DBE goal. For example, when the apparent lowest responsive Proposer fails to meet the DBE goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent lowest responsive Proposer could have met the goal. If the apparent lowest responsive Proposer fails to meet the DBE goal, but meets or exceeds the average DBE participation obtained by other proposers, the Department may view this, in conjunction with other factors, as evidence of the apparent lowest responsive Proposer having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive Proposer, the Department reserves the right to award the contract to the Proposer with the next lowest responsive Proposer that can satisfy the Department that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

If the Department does not award the contract to the Proposer with the apparent adjusted low price, the Department reserves the right to award the contract to the Proposer with the next apparent adjusted low price that can satisfy the Department that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

Non-Good Faith Appeal

The State Prequalification Engineer will notify the Design-Build Team verbally and in writing of non-good faith. A Design-Build Team may appeal a determination of non-good faith made by the Goal Compliance Committee. If a Design-Build Team wishes to appeal the determination made by the Committee, they shall provide written notification to the State Prequalification Engineer. The appeal shall be made within two business days of notification of the determination of non-good faith.

Counting DBE Participation Toward Meeting DBE Goal

(A) Participation

The total dollar value of the participation by a committed DBE will be counted toward the contract goal requirement. The total dollar value of participation by a committed DBE will be based upon the value of work performed by the DBE and the actual payments to DBE firms by the Design-Build Team.

(B) Joint Checks

Prior notification of joint check use shall be required when counting DBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 *(Joint Check Notification Form)* and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract goal requirement. Work that a DBE subcontracts to a non-DBE firm does not count toward the contract goal requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the DBE is not performing a commercially useful function. The DBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.

(D) Joint Venture

When a DBE performs as a participant in a joint venture, the Design-Build Team may count toward its contract goal requirement a portion of the total value of participation with the DBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the DBE performs with its forces.

(E) Manufacturer, Regular Dealer, Distributor

A Design-Build Team may count toward its DBE requirement 40 percent of its expenditures for materials or supplies (including transportation costs) from a DBE distributor, 60 percent of its expenditures for materials or supplies (including transportation costs) from a DBE regular dealer and 100 percent of such expenditures obtained from a DBE manufacturer.

A Design-Build Team may count toward its DBE requirement the following expenditures to DBE firms that are not manufacturers, regular dealers or distributors:

(1) The fees or commissions charged by a DBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.

(2) With respect to materials or supplies purchased from a DBE, which is neither a manufacturer, regular dealer, nor a distributor count the entire amount of fees or commissions charged that the Department deems to be reasonable, including transportation charges for the delivery of materials or supplies. Do not count any portion of the cost of the materials and supplies themselves.

A Design-Build Team will submit a completed *DBE Regular Dealer/Distributor Affirmation Form* with the Letter of Intent to the State Contractor Utilization Engineer or DBE@ncdot.gov. The State Contractor Utilization Engineer will make a preliminary assessment as to whether a DBE supplier has the demonstrated capacity to perform a commercially useful function (CUF) on a contract-by-contract basis *prior* to its participation.

Commercially Useful Function

(A) DBE Utilization

The Design-Build Team may count toward its contract goal requirement only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is performing and the DBE credit claimed for its performance of the work, and any other relevant factors.

(B) DBE Utilization in Trucking

The following factors will be used to determine if a DBE trucking firm is performing a commercially useful function:

(1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.

(2) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

(3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

(4) The DBE may subcontract the work to another DBE firm, including an owner-operator who is certified as a DBE. The DBE who subcontracts work to another DBE receives credit for the total value of the transportation services the subcontracted DBE provides on the contract.

(5) The DBE may also subcontract the work to a non-DBE firm, including from an owner-operator. The DBE who subcontracts the work to a non-DBE is entitled to credit for the total value of transportation services provided by the non-DBE subcontractor not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the DBE and the Design-Build Team will not count towards the DBE contract requirement.

(6) A DBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. This type of lease may count toward the DBE's credit as long as the driver is under the DBE's payroll.

(7) Subcontracted / leased trucks shall clearly display on the dashboard the name of the DBE that they are subcontracted / leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

DBE Replacement

When a Design-Build Team has relied on a commitment to a DBE subcontractor (or an approved substitute DBE subcontractor) to meet all or part of a contract goal requirement, the Design-Build Team shall not terminate the DBE subcontractor or any portion of its work for convenience. This includes, but is not limited to, instances in which the Design-Build Team seeks to perform the work of the terminated subcontractor with another DBE subcontractor, a non-DBE subcontractor, or with the Contractor's own forces or those of an affiliate.

The Design-Build Team must give notice in writing both by certified mail and e-mail to the DBE subcontractor, with a copy to the Engineer of its intent to request to terminate a DBE subcontractor or a portion of its work, and the reason for the request. The Design-Build Team must give the DBE subcontractor five (5) business days to respond to the Design-Build Team's notice of intent to request termination and / or substitution. If the DBE subcontractor objects to the intended termination / substitution, the DBE, within five (5) business days, must advise the Design-Build Team and the Department of the reasons why the action should not be approved. The five-day notice period shall begin on the next business day after written notice is provided to the DBE subcontractor.

A committed DBE subcontractor may only be terminated or any portion of its work after receiving the Department's written approval based upon a finding of good cause for the proposed termination and/or substitution. Good cause does not exist if the Contractor seeks to terminate a DBE or any portion of its work that it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE was engaged, or so that the Contractor can substitute another DBE or non-DBE contractor after contract award. For purposes of this section, good cause shall include the following circumstances:

(a) The listed DBE subcontractor fails or refuses to execute a written contract.

(b) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Prime Contractor.

(c) The listed DBE subcontractor fails or refuses to meet the Prime Contractor's reasonable, nondiscriminatory bond requirements.

(d) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.

(e) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1,200 or applicable state law.

(f) The listed DBE subcontractor is not a responsible contractor.

(g) The listed DBE voluntarily withdraws from the project and provides written notice of withdrawal.

(h) The listed DBE is ineligible to receive DBE credit for the type of work required.

(i) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

(j) Other documented good cause that compels the termination of the DBE subcontractor.

The Design-Build Team shall comply with the following for replacement of a committed DBE:

(A) Performance Related Replacement

When a committed DBE is terminated for good cause as stated above, an additional DBE that was submitted at the time the Price Proposal was submitted may be used to fulfill the DBE commitment. A good faith effort will only be required for removing a committed DBE if there were no additional DBEs submitted at the time the Price Proposal was submitted to cover the same amount of work as the DBE that was terminated.

If a replacement DBE is not found that can perform at least the same amount of work as the terminated DBE, the Design-Build Team shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

(1) Copies of written notification to DBEs that their interest is solicited in contracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.

(2) Efforts to negotiate with DBEs for specific subbids including, at a minimum:

(a) The names, addresses, and telephone numbers of DBEs who were contacted.
(b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.

(3) A list of reasons why DBE quotes were not accepted.

(4) Efforts made to assist the DBEs contacted, if needed, in obtaining bonding or insurance required by the Design-Build Team.

(B) Decertification Replacement

(1) When a committed DBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Design-Build Team to solicit replacement DBE participation equal to the remaining work to be performed by the decertified

firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement but not the overall goal.

(i) If the DBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract. The Department may continue to count participation equal to the remaining work performed by the decertified firm which will count toward the contract goal requirement and overall goal.

(ii) If the DBE's ineligibility is caused solely by its acquisition by or merger with a non-DBE during the performance of the contract. The Department may not continue to count the portion of the decertified firm's performance on the contract remaining toward either the contract goal or the overall goal, even if the Contractor has executed a subcontract with the firm or the Department has executed a prime contract with the DBE that was later decertified.

(2) When a committed DBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named DBE firm, the Design-Build Team shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the DBE goal requirement. If a DBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (See A herein for required documentation).

All requests for replacement of a committed DBE firm shall be submitted to the Engineer for approval on Form RF-1 (DBE Replacement Request). If the Prime Contractor or any affiliated companies within the Design-Build Team fails to follow this procedure they may be disqualified from further bidding for a period of up to six months.

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed DBE, the Design-Build Team will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a DBE based upon the Design-Build Team's commitment, the DBE shall participate in additional work to the same extent as the DBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Design-Build Team shall seek additional participation by DBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed DBE, the Design-Build Team shall seek participation by DBEs unless otherwise approved by the Engineer.

When the Design-Build Team requests changes in the work that result in the reduction or elimination of work that the Design-Build Team committed to be performed by a DBE, the Design-Build Team shall seek additional participation by DBEs equal to the reduced DBE participation caused by the changes.

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a DBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving DBE subcontractors.

When using transportation services to meet the contract commitment, the Design-Build Team shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a DBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Design-Build Team shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60.0% or 100.0%) of expenditures claimed for DBE credit.

Reporting Disadvantaged Business Enterprise Participation

The Design-Build Team shall provide the Engineer with an accounting of payments made to all DBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

(A) Withholding of money due in the next partial pay estimate; or

(B) Removal of an approved Prime Contractor or other affiliated companies within the Design-Build Team from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to DBEs, it shall be the Prime Contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Design-Build Team to submit the required information in the time frame specified may result in the disqualification of that Prime Contractor and any affiliate companies within the Design-Build Team from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that Prime Contractor or any affiliate companies

within the Design-Build Team from being approved for work on future NCDOT projects until the required information is submitted.

Design-Build Teams reporting transportation services provided by non-DBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

The Design-Build Team shall report the accounting of payments through the Department's DBE Payment Tracking System.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *Standard Specifications* may be cause to disqualify the Prime Contractor or any affiliated companies within the Design-Build Team from further bidding for a specified length of time.

CERTIFICATION FOR FEDERAL-AID CONTRACTS

(3-21-90) DB1 G85

The Proposer certifies, by signing and submitting a Design-Build Proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by *Section 1352, Title 31, U.S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Proposer also agrees by submitting a Design-Build Proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such sub-recipients shall certify and disclose accordingly.

U.S. DEPARTMENT OF TRANSPORTATION HOTLINE

(8-18-22) 108-5 DB1 G100

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free hotline Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the hotline to report such activities.

The hotline is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse, and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected..

USE OF UNMANNED AIRCRAFT SYSTEM (UAS)

(1-16-24) DB1 G092

The Design-Build Team shall adhere to all Federal, State and Local regulations and guidelines for the use of Unmanned Aircraft Systems (UAS). This includes, but is not limited to,
US 14 CFR Part 107 *Small UAS Rule*, NC GS 15A-300.2 *Regulation of launch and recovery sites,* NC GS 63-95 *Training required for the operation of unmanned aircraft systems*,
NC GS 63-96 *Permit required for commercial operation of unmanned aircraft system,* and NCDOT UAS Policy. The required operator certifications include possessing a current Federal Aviation Administration (FAA) Remote Pilot Certificate, a NC UAS Operator Permit, as well as operating a UAS registered with the FAA.

Prior to beginning operations, the Design-Build Team shall complete the NCDOT UAS - Flight Operation Approval Form and submit it to the Engineer for approval. All UAS operations shall be approved by the Engineer, in writing, prior to beginning the operations.

All Design-Build team members operating UAS shall have UAS specific general liability insurance to cover all operations under this contract.

The use of UAS shall be at the Design-Build Team’s discretion. Except as allowed otherwise below, no measurement or payment will be made for the use of UAS. In the event that the Department directs the Design-Build Team to utilize UAS, all costs associated with using UAS will be paid for as extra work, in accordance with Subarticle 104-8(A) of the *Standard Specifications*.

SUBMISSION OF RECORDS - FEDERAL-AID PROJECTS

(7-17-07) (Rev. 10-17-23) DB1 G103

The Design-Build Team's attention is directed to the Standard Special Provision entitled *Required Contract Provisions-Federal-Aid Construction Contracts* contained elsewhere in this RFP.

This project is located on a roadway classified as a local road or rural minor collector, and the funding source does not require it to be treated as a project on a Federal-aid highway; therefore the requirements of Paragraph IV - Davis Bacon and Related Act Provisions are exempt from this contract.

CARGO PREFERENCE ACT

(2-16-16)

Privately owned United States-flag commercial vessels transporting cargoes are subject to the Cargo Preference Act (CPA) of 1954 requirements and regulations found in 46 CFR 381.7. Contractors are directed to clause (b) of 46 CFR 381.7 as follows:

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees-

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

RESOURCE CONSERVATION AND ENVIRONMENTALLY SUSTAINABLE PRACTICES

(3/27/13) (Rev. 4-16-15) 104-13 DB1 G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to

recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

http://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx.

Submit the Project Construction Reuse and Recycling Reporting Form by August 1st annually to valuemanagementunit@ncdot.gov. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

SUBSURFACE INFORMATION

(10-2-20) DB1 G112C

Any available subsurface information gained through ongoing geotechnical investigations will be provided to the Design-Build teams as it is received. The Design-Build Team shall be responsible for additional investigations and for verifying the accuracy of the subsurface information supplied by the Department.

COOPERATION BETWEEN CONTRACTORS

(7-1-95) (Rev. 1-16-24) DB1 G133

The Design-Build Team's attention is directed to Article 105-7 of the 2*Standard Specifications*.

The Design-Build Team on this project shall cooperate with the Contractor or Design-Build Team working within or adjacent to the limits of this project, to the extent that the work can be carried out to the best advantage of all concerned.

BID DOCUMENTATION

(7-31-12) (Rev. 8-20-24) DB1 G142

General

The successful Design-Build Team shall submit the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation used to prepare the Price Proposal for this contract to the Department within ten days after receipt of notice of award of contract. Such documentation shall be placed in escrow with a banking institution or other bonded document storage facility selected by the Department.

The Department will not execute the contract until the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation has been received by the Department.

Terms

Bid Documentation - Bid Documentation shall mean all written information, working papers, computer printouts, electronic media, charts, and all other data compilations which contain or reflect information, data, and calculations used by the Proposer in the preparation of the Price Proposal. The term *bid documentation* includes, but is not limited to, Design-Build Team equipment rates, Design-Build Team overhead rates, labor rates, efficiency or productivity factors, arithmetical calculations, and quotations from subcontractors and material suppliers to the extent that such rates and quotations were used by the Proposer in formulating and determining the Price Proposal. The term *bid documentation* also includes any manuals, which are standard to the industry used by the Proposer in determining the Price Proposal. Such manuals may be included in the bid documentation by reference. Such reference shall include the name and date of the publication and the publisher. *Bid Documentation* does not include bid documents provided by the Department for use by the Proposer in bidding on this project. The Bid Documentation can be in the form of electronic submittal (i.e. thumb drive) or paper. If the Bidder elects to submit the Bid Documentation in electronic format, the Department requires a backup submittal (i.e. a second thumb drive) in case one is corrupted.

Design-Build Team's Representative - Officer of the Prime Contractor's company; if not an officer, the Contractor shall supply a letter signed and notarized by an officer of the Prime Contractor's company, granting permission for the representative to sign the escrow agreement on behalf of the Prime Contractor.

Escrow Agent - Officer of the select banking institution or other bonded document storage facility authorized to receive and release bid documentation.

Escrow Agreement Information

A draft copy of the Escrow Agreement will be mailed to the Proposer after the notice of award for informational purposes. The Proposer and Department will sign the actual Escrow Agreement at the time the bid documentation is delivered to the Escrow Agent.

Failure to Provide Bid Documentation

The Proposer's failure to provide the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation within 14 days after the notice of award is received by him may be just cause for rescinding the award of the contract and may result in the removal of the Proposer from the Department's list of qualified bidders for a period of up to 180 days. Award may then be made to the Proposer with the next lowest adjusted price or the work may be readvertised and constructed under the contract or otherwise, as the Department may decide.

Submittal of Bid Documentation

(A) Appointment - Email **specs@ncdot.gov** or call 919.707.6900 to schedule an appointment.

(B) Delivery - A representative of the Bidder shall deliver the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation to the Department, in a container suitable for sealing, within ten days after the notice of award is received.

(C) Packaging - The container shall be no larger than 15.5 inches in length by 12 inches wide by 11 inches high and shall be water resistant. The container shall be clearly marked on the face and the back of the container with the following information: Bid Documentation, Bidder's Name, Bidder's Address, Date of Escrow Submittal, Contract Number, TIP Number if applicable, and County.

Affidavit

Bid documentation will be considered a certified copy if the proposer includes an affidavit stating that the enclosed documentation is an EXACT copy of the original documentation used by the Proposer to determine the bid for this project. The affidavit shall also list each bid document with sufficient specificity so a comparison may be made between the list and the bid documentation to ensure that all of the bid documentation listed in the affidavit has been enclosed for escrow. The affidavit shall attest that the affiant has personally examined the bid documentation, that the affidavit lists all of the documents used by the proposer to determine the bid for this project, and that all bid documentation has been included. The affidavit shall be signed by a chief officer of the company, have the person's name and title typed below the signature, and the signature shall be notarized at the bottom of the affidavit.

Verification

Upon delivery of the bid documentation, the State Contract Officer acting directly or through a duly authorized representative and the Design-Build Team's representative will verify the accuracy and completeness of the bid documentation compared to the affidavit. Should a discrepancy exist, the Design-Build Team's representative shall immediately

furnish the State Contract Officer acting directly or through a duly authorized representative with any other needed bid documentation. The State Contract Officer acting directly or through a duly authorized representative upon determining that the bid documentation is complete will, in the presence of the Design-Build Team's representative, immediately place the complete bid documentation and affidavit in the container and seal it. Both parties will deliver the sealed container to the Escrow Agent for placement in a safety deposit box, vault, or other secure accommodation.

Confidentiality of Bid Documentation

The bid documentation and affidavit in escrow are, and will remain, the property of the Proposer. The Department has no interest in, or right to, the bid documentation and affidavit other than to verify the contents and legibility of the bid documentation unless the Design-Build Team gives written notice of intent to file a claim, files a written claim, files a written and verified claim, or initiates litigation against the Department. In the event of such written notice of intent to file a claim, filing of a written claim, filing a written and verified claim, or initiation of litigation against the Department, or receipt of a letter from the Design-Build Team authorizing release, the bid documentation and affidavit may become the property of the Department for use in considering any claim or in litigation as the Department may deem appropriate.

Any portion or portions of the bid documentation designated by the Proposer as a *trade secret* at the time the bid documentation is delivered to the State Contract Officer acting directly or through a duly authorized representative shall be protected from disclosure as provided by *G.S. 132-1.2*.

Duration and Use

The bid documentation and affidavit shall remain in escrow until 60 calendar days from the time the Prime Contractor receives the final estimate; or until such time as the Design-Build Team:

(A) Gives written notice of intent to file a claim,
(B) Files a written claim,
(C) Files a written and verified claim,
(D) Initiates litigation against the Department related to the contract; or
(E) Authorizes in writing its release.

Upon the giving of written notice of intent to file a claim, filing a written claim, filing a written and verified claim, or the initiation of litigation by the Design-Build Team against the Department, or receipt of a letter from the Design-Build Team authorizing release, the Department may obtain the release and custody of the bid documentation.

The Proposer certifies and agrees that the sealed container placed in escrow contains all of the bid documentation used to determine the Price Proposal and that no other bid documentation shall be relevant or material in litigation over claims brought by the Design-Build Team arising out of this contract.

Release of Bid Documentation to the Contractor

If the bid documentation remains in escrow 60 calendar days after the time the Design-Build Team receives the final estimate and the Design-Build Team has not filed a written claim, filed a written and verified claim, or has not initiated litigation against the Department related to the contract, the Department will instruct the Escrow Agent to release the sealed container to the Prime Contractor.

The Prime Contractor will be notified by certified letter from the Escrow Agent that the bid documentation will be released to the Prime Contractor. The Prime Contractor or his representative shall retrieve the bid documentation from the Escrow Agent within 30 days of the receipt of the certified letter. If the Prime Contractor does not receive the documents within 30 days of the receipt of the certified letter, the Department will contact the Prime Contractor to determine final dispersion of the bid documentation.

Payment

The cost of the escrow will be borne by the Department. There will be no separate payment for all costs of compilation of the data, container, or verification of the bid documentation. Payment at the various contract unit or lump sum prices in the contract will be full compensation for all such costs.

TWELVE MONTH GUARANTEE

(7-15-03) DB1 G145

(A) The Design-Build Team shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work at each bridge site for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Design-Build Team will not be responsible for damage due to normal wear and tear, for negligence on the part of the Department, and / or for use in excess of the design.

(B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Design-Build Team shall be responsible for invoking the warranted repair work with the manufacturer. The Design-Build Team's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Design-Build Team would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Design-Build Team to return to the project to make repairs or perform additional work that the Department would normally compensate the Design-

Build Team for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and / or performance bonds shall cover this guarantee for the project. In addition, failure on the part of the responsible entity(ies) of the Design-Build Team to perform guarantee work within the terms of this provision shall be just cause to remove the responsible entity(ies) from the Department's corresponding prequalified list. The Design-Build Team will be removed for a minimum of 6 months and will be reinstated only after all work has been corrected and the Design-Build Team requests reinstatement in writing.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

PERMANENT VEGETATION ESTABLISHMENT

(6-11-15) (Rev. 1-16-24) 104 DB01 G160

Establish permanent vegetation stands of the Long Term Stabilization mixtures identified in the Erosion and Sedimentation Control Scope of Work found elsewhere in this RFP. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish 80% coverage of permanent vegetation within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the Erosion and Sedimentation Control Scope of Work found elsewhere in this RFP and the applicable sections of the *Standard Specifications*.

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

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION

(1-16-07) (Rev 07-10-23) 105-16, 225-2, 16 DB1 G180

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control/Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

(A) *Certified Supervisor* - Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Design-Build Team and subcontractor operations, ensure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.

(B) *Certified Foreman* - Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.

(C) *Certified Installer* - Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.

(D) *Certified Designer* - Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

Roles and Responsibilities

(A) *Certified Erosion and Sediment Control/Stormwater Supervisor* - The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:

(1) Manage Operations - Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.

(a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
(b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
(c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
(d) Implement the erosion and sediment control/stormwater site plans requested.
(e) Provide any needed erosion and sediment control/stormwater practices for the Design-Build Team's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
(f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Design-Build Team in jurisdictional areas.

(g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.

(h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.

(i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Design-Build Team's operations.

(j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.

(k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.

(2) Requirements set forth under the NPDES Permit - The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000, General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:

(a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.

(b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event equal to or greater than 1.0 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.

(c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.

(d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.

(e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.

(f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.

(g) Provide secondary containment for bulk storage of liquid materials.
(h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
(i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.

(3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:

(a) Follow permit requirements related to the Design-Build Team and subcontractors' construction activities.
(b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
(c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
(d) Conduct the inspections required by the NPDES permit.
(e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
(f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
(g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
(h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
(i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
(j) The Design-Build Team's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.

(B) *Certified Foreman* - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:

(1) Foreman in charge of grading activities
(2) Foreman in charge of bridge or culvert construction over jurisdictional areas
(3) Foreman in charge of utility activities

The Design-Build Team may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as

described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Design-Build Team may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

(C) *Certified Installers* - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:

(1) Seeding and Mulching
(2) Temporary Seeding
(3) Temporary Mulching
(4) Sodding
(5) Silt fence or other perimeter erosion/sediment control device installations
(6) Erosion control blanket installation
(7) Hydraulic tackifier installation
(8) Turbidity curtain installation
(9) Rock ditch check/sediment dam installation
(10) Ditch liner/matting installation
(11) Inlet protection
(12) Riprap placement
(13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
(14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Design-Build Team may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

(D) *Certified Designer* - Include the certification number of the Level III Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III Certified Designer on the design of the project erosion and sediment control/stormwater plan.

Preconstruction Meeting

Furnish the names of the *Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers* and *Certified Designer* and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of an *Immediate Corrective Action (ICA), Notice of Violation (NOV),* or C*ease and Desist Order* for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

(A) Failure to adequately perform the duties as defined within this certification provision.
(B) Issuance of an ICA, NOV, or Cease and Desist Order.
(C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.
(D) Demonstration of erroneous documentation or reporting techniques.
(E) Cheating or copying another candidate's work on an examination.
(F) Intentional falsification of records.
(G) Directing a subordinate under direct or indirect supervision to perform any of the above actions.
(H) Dismissal from a company for any of the above reasons.
(I) Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer
1536 Mail Service Center
Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and *Certified Designer* will be incidental to the project for which no direct compensation will be made.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE

(1-22-13) (Rev. 1-16-24) DB1 G181

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

If during any operating day, the downstream water quality exceeds the standard, the Design-Build Team shall do all of the following:

(A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or

(B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.

(C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.

(D) Notify DWR within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the *Standard Specifications*, the Design-Build Team shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity will be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the

functioning of a wetland. Visible sedimentation shall be considered an indication of possible adverse impacts on wetland use.

The Engineer will perform independent turbidity tests on a random basis. These results will be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Design-Build Team's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Design-Build Team.

To plan, design, construct, and maintain BMPs to address water quality standards, the Design-Build Team shall use the NCDOT *Turbidity Reduction Options for Borrow Pits Matrix,* available at the website noted below:

https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/TurbidityReductionOptionSheet.pdf

Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWR's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Design-Build Team exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Design-Build Team may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the Price Proposal for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

CLEARING AND GRUBBING

(9-1-11) (Rev. 8-18-15) DB2 R01

With the exception of areas with Permanent Utility Easements, the Design-Build Team shall perform clearing on this project to the limits established by Method "II" as shown on Standard No. 200.02 of the *Roadway Standard Drawings*; however, clearing limits shall extend five feet beyond the toe of slope with no grubbing. In areas with Permanent Utility Easements, clearing shall extend to the proposed right of way limits.

DRAINAGE PIPE

(1-16-24) DB3 R36

Description

Where shown in the plans developed by the Design-Build Team, the Design-Build Team shall use Reinforced Concrete Pipe, Corrugated Aluminum Alloy Pipe, Aluminized Corrugated Steel Pipe, Polypropylene Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe) in accordance with the following requirements:

- The appropriate Reinforced Concrete Pipe class and the appropriate gage thickness for Corrugated Aluminum Alloy Pipe Aluminized Corrugated Steel pipe shall be selected based on fill height. All pipe types shall be subject to the maximum and minimum fill height requirements as found on-line at the below:

https://connect.ncdot.gov/resources/hydro/Pages/
NCDOT-Pipe-Material-Selection-Guide.aspx

- Site specific conditions may limit a particular material beyond what is identified in this Project Special Provision. These conditions include, but are not limited to, abrasion, environmental, soil resistivity and pH, high ground water and special loading conditions. The Design-Build Team shall determine if additional restrictions are necessary.

- Slope drains shall be Corrugated Aluminum Alloy Pipe, Aluminized Corrugated Steel Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe).

- Transverse median drains, storm drainage system pipes, and open-ended cross drains shall be Reinforced Concrete Pipe unless 1 the pipe slope is greater than 10%, in which case the pipe shall be either Corrugated Aluminum Alloy Pipe or Aluminized Corrugated Steel Pipe.

PRICE ADJUSTMENTS FOR ASPHALT BINDER

(9-1-11) (Rev. 1-16-24) DB6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the *Standard Specifications.*

The base price index for asphalt binder for plant mix is $ **558.75** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on January 1, 2025.

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

(9-1-11) (Rev. 1-16-24) DB6 R26

Revise the *Standard Specifications* as follows:

Page 6-15, Article 609-11 and Page 6-30, Article 610-14

Add the following paragraph before the first paragraph:

The "Asphalt Price" used to calculate any price adjustments set forth in this section shall be $40.00 per theoretical ton. This price shall apply for all mix types.

FLAGGERS

(12-17-24) 1150 DB11 R50

Revise Section 1150 of the *Standard Specification* as follows:

Page 11-13, Article 1150-1, DESCRIPTION, add the following after line 31:

Alternatively, at the discretion of the Design-Build Team, the Design-Build Team may furnish, install, place in operation, repair, maintain, relocate, and remove remotely controlled Automated Flagging Assistance Devices (AFAD) or Temporary Portable Traffic Signal units (PTS units) to assist, supplement, or replace human flaggers for one-lane, two-way traffic maintenance during construction in accordance with this provision and the *Standard Specifications*.

For the purpose of this provision, an "approach" refers to a single lane of traffic moving in one direction toward a point of control or work zone. Flaggers, AFAD and PTS units are only used to control one lane of approaching traffic in a specific direction.

Page 11-13, Article 1150-2, MATERIALS, add the following after line 34:

Provide documentation to the Engineer that the AFAD or PTS units meets or exceeds the requirements of this special provision and is on the NCDOT APL or ITS and Signals QPL.

(A) Automated Flagging Assistance Devices (AFAD)

(1) AFAD General

Cover the automated gate arm with Department approved Type VII, VIII or IX retroreflective sheeting of vertical alternating red and white stripes at 16 inch intervals measured horizontally. When the gate arm is in the down position the minimum vertical aspect of the arm and sheeting shall be four inches. The retroreflectorized sheeting shall be on both sides of the gate arm. With the AFAD parked or positioned two feet outside or in a location deemed acceptable for the lane being controlled, the gate arm shall reach at least to the center of the lane but shall not exceed the width of the lane being controlled.

Design the system to be fail-safe. Provide a conflict monitor, malfunction monitoring unit, or similar device that monitors for malfunctions and prevents the display of conflicting indications. This system shall be electronic and operated by remote control.

(2) AFAD Type I System: RED / YELLOW

Provide a Red/Yellow AFAD with at least one set of CIRCULAR RED and CIRCULAR YELLOW lenses in a vertical configuration that are 12 inches in diameter. The bottom of the housing (including brackets) shall be at least seven feet (2.1 meters) above the pavement.

This system is required to have yellow 12-inch aluminum or polycarbonate vehicle signal heads with ten inch tunnel visors, backplates, and Light Emitting Diode (LED) modules. Provide signal heads, backplates, and LED modules listed on the ITS and Signals QPL available on the Department's website.

Provide an automated gate arm on the AFAD that descends to a down position across the approaching lane of traffic when the steady CIRCULAR RED lens is illuminated and then ascends to an upright position when the flashing CIRCULAR YELLOW lens is illuminated. The automated gate arm is to be designed such that if a motorist pulls underneath the gate arm while lowering, no damage to the vehicle occurs.

A STOP HERE ON RED (R10-6 or R10-6a) sign shall be installed on the right-hand side of the approach at the point at which drivers are expected to stop when the steady CIRCULAR RED lens is illuminated.

To stop traffic, the AFAD shall transition from the flashing CIRCULAR YELLOW lens by initiating a minimum 5 second steadily illuminated CIRCULAR YELLOW lens followed by the CIRCULAR RED lens.

Once the CIRCULAR RED lens is displayed, the system is to have a minimum 2 second delay between the time the steady CIRCULAR RED is displayed and the time the gate arm begins to lower. The maximum delay between CIRCULAR RED and the time the gate arm lowers is 4 seconds. To permit stopped road users to proceed, the AFAD shall display the flashing CIRCULAR YELLOW lens and the gate arm shall be placed in the upright position.

Ensure the system monitors for a lack of yellow or red signal voltage, total loss of indication in any direction, presence of multiple indications on any approach and low power conditions.

Additional sets of CIRCULAR RED and CIRCULAR YELLOW lenses located over the roadway or on the left side of the approach and operated in unison with the primary set, may be used to improve visibility of the AFAD. If the set of lenses is located over any portion of the roadway that can be used by motor vehicles, the bottom of the housing (including brackets) shall be at least 15 feet (4.6 meters) above the pavement.

(3) AFAD Type II System: STOP/SLOW

Provide STOP / SLOW signs that are octagonal in shape, made of rigid material, and at least 36 inch x 36 inch in size. Letters shall be a minimum of eight inches high. The STOP face shall have a red background with white letters and border.

The SLOW face shall be diamond shaped, orange, or yellow background with black letters and border. Cover both faces in a Department approved Type VII, VIII or IX retroreflective sheeting. The minimum mounting height for the sign faces shall be seven feet above the pavement to the bottom of the sign.

The AFAD's STOP / SLOW signs shall be supplemented with active conspicuity devices by incorporating a stop beacon (red lens) and a warning beacon (yellow lens). The stop beacon shall be no more than 24 inches above the STOP face. Mount the warning beacon no more than 24 inches above or beside of the SLOW face. Except for the mounting locations, the beacons shall conform to the provisions of Chapter 4L of the *Manual on Uniform Traffic Control Devices* (MUTCD) and have 12-inch signal lenses.

Strobe / flashing lights are an acceptable alternative to flashing beacons. If utilized, they shall be either white or red flashing lights located within the STOP face and white or yellow flashing lights within the SLOW face and conform to the provisions of Chapter 6D of the MUTCD. If used, the lens diameter shall be a minimum of 5 inches with a minimum height of 6 inches. Equip strobes / flashing lights for both dual and quad flash patterns.

Type B warning lights shall not be used in lieu of the beacons or the strobe lights.

The faces of the AFADs STOP / SLOW sign may include louvers. If louvers are used, design the louvers such that the aspect of the sign face to approaching traffic is a full sign face at a distance of 50 feet or greater.

A WAIT ON STOP (R1-7) sign and a GO ON SLOW (R1-8) sign shall be displayed to traffic approaching the AFAD. Position signs on the same support structure as the AFAD. Both signs shall have black legends and borders on white Type III sheeting backgrounds. Each of these signs shall be rectangular in shape and be at least 24 inch x 30 inch size with letters at least six inches high.

Provide an automated gate arm on the AFAD that descends to a down position across the approaching lane of traffic when the STOP face is displayed and then ascends to an upright position when the SLOW face is displayed.

The automated gate arm is to be designed such that if a motorist pulls underneath the gate arm while lowering, no damage to the vehicle occurs.

A STOP HERE ON RED (R10-6 or R10-6a) sign shall be installed on the right-hand side of the approach at the point at which drivers are expected to stop when the STOP face is displayed.

When approaching motorists are to proceed, display the SLOW face and the warning beacon or strobes are to flash on the AFAD. When approaching motorists are will be stopped, display the STOP face and the stop beacon or strobes are to flash on the AFAD.

To stop traffic, the AFAD will transition from the SLOW face to the STOP face by initiating a minimum 5 second change cycle. First, the warning beacon is to be steadily illuminated for the change cycle. If strobes are used in lieu of a warning beacon, they are to be placed in the quad flash pattern. At the end of the change cycle, the STOP face is to be displayed with the stop beacon flashing and the warning beacon or strobes are to stop flashing. Once the STOP face is displayed, the system is to have a minimum 2 second delay between the time the STOP face is displayed and the time the gate arm begins to lower. The maximum delay between the time the STOP face is displayed and the time the gate arm lowers is 4 seconds.

To permit stopped road users to proceed, the gate arm shall be placed in the upright position and the AFAD shall display the SLOW face and the warning beacon or strobes are to flash in the dual flash pattern.

Do not flash the stop beacon when the SLOW face is displayed, and do not flash the warning beacon when the STOP face is displayed.

(B) Portable Traffic Signals (PTS) Units

Provide PTS units with at least one set of CIRCULAR RED, CIRCULAR YELLOW, and CIRCULAR GREEN lenses in a vertical configuration that are 12-inch diameter aluminum or polycarbonate vehicle signal heads with ten-inch tunnel visors, backplates, and Light Emitting Diode (LED) modules. All signal heads, tunnel visors, and backplates shall be yellow in color.

The bottom of the housing (including brackets) shall be at least seven feet above the pavement for single set units. Additional signal heads on units with more than one signal head shall be capable of extending over the travel lane.

Communication Requirements

All PTS units within the signal set up systems shall maintain communication at all times by either hardwire cable or wireless radio link communication. If the hardwire cable communication is utilized the communication cable shall be deployed in a manner that will not intrude in the direct work area of the project or obstruct vehicular and pedestrian traffic. Utilize radio communication with 900MHz frequency band and frequency hopping capability. The radio link communication system shall have a minimum range of one mile.

Fault Mode Requirements

Revert PTS units to a flashing red mode upon system default unless otherwise specified by the Engineer. Equip the PTS units with a remote monitoring system. Where cell communication availability exists, the remote monitoring system shall adhere to the remote monitoring system section of this provision.

Remote Monitoring System

The remote monitoring system (RMS) shall be capable of reporting signal location, battery voltage / battery history and system default. Provide a password protected website viewable from any computer with internet capability for the RMS. In the event of a system default, the RMS shall provide specific information concerning the cause of the system default (i.e. red lamp on signal number 1). Equip the RMS with a mechanism capable of immediately contacting a minimum of three previously designated individuals via text messaging and / or email upon a default.

The running program operating the PTS units shall be always available and viewable through the RMS website. Maintain a history of the RMS operating system in each signal including operating hours and events and the location of the PTS units.

Trailer / Cart

The AFAD and PTS units may be mounted on either a trailer or a moveable cart system.

Finish all exterior metal surfaces with Federal orange enamel per AMS-STD-595, color chip ID# 13538 or 12473 respectively with a minimum paint thickness of 2.5 mils (64 microns).

Design and test the AFAD or PTS units trailer / cart to withstand an 80 MPH wind load while in the operational position. Provide independent certification that the assembly meets the design wind load.

Equip the AFAD or PTS units with leveling jacks capable of stabilizing the unit in a horizontal position when located on slopes 6:1 or flatter.

Equip trailers in compliance with North Carolina Law governing motor vehicles and include a 12-volt trailer lighting system complying *with Federal Motor Carrier Safety Regulations 393*, safety chains and a minimum two-inch ball hitch.

Provide a minimum four-inch-wide strip of fluorescent conspicuity sheeting retroreflective sheeting to the frame of the trailer. Apply the sheeting to all sides of the trailer. The sheeting shall meet the ASTM requirements of Type VII, VIII or IX.

Power System

Design the systems to operate both with and without an external power source. Furnish transmitters, generators, batteries, controls and all other components necessary to operate the device.

Provide equipment that is solar powered and supplemented with a battery backup system that includes a minimum 110/120 VAC powered on-board charging system capable of powering the unit for seven continuous days with no solar power. Each unit shall also be capable of being powered by standard 110/120 VAC power sources, if applicable.

Locate batteries and electronic controls in a locked, weather and vandal resistant housings.

Page 11-14, Article 1150-3, CONSTRUCTION METHODS, add the following after line 11:

Flaggers shall have a path to escape an errant approaching vehicle at all times, unimpeded by barrier, guardrail, guiderail, parked vehicles, construction materials, slopes steeper than 2:1, or any other obstruction at all times. If an unimpeded path cannot be maintained, the Contractor shall use AFAD or PTS units in lieu of a flagger.

Provide documentation to the Engineer prior to deploying the device that the AFAD or PTS units operator(s) are qualified flagger(s) that have been properly trained through an NCDOT approved training agency or other NCDOT approved training provider and that the qualified flagger(s) have received manufacturer training to operate that specific device. This training shall include proper installation, remote control operation, central control systems and maintenance of the AFAD or PTS units. The training shall take place off the project site where training conditions are removed from live traffic. The documentation shall include the names of the authorized trainer, the trainees, the device on which they have been trained and the date of the training. Provide updated documentation to the Engineer prior to deploying any additional operators.

Install advance warning signs and operate AFADs in accordance with the attached detail drawings in this provision.

Install advance warning signs and operate PTS units in accordance with *NCDOT Roadway Standard Drawings* No. 1101.02, Sheet 17.

AFAD and PTS units shall only be used in situations where there is only one lane of approaching traffic in the direction to be controlled. **At no time shall an AFAD unit controlling traffic through the work area be placed in an autonomous mode and / or left unattended.**

Signal timing and operation of PTS units shall be field verified and accepted by the Engineer before use.

Use AFAD or PTS units in locations where queueing from the AFAD or PTS units will extend to within 150 feet of a signalized intersection or railroad crossing. Do not be use AFAD and PTS units as a substitute for or a replacement for a continuously operating temporary traffic control signal as described in Section 6F.84 of the MUTCD.

If used at night, illuminate each AFAD or PTS units as described in Section 6D of the MUTCD.

Provide a complete AFAD or PTS units that is capable of being relocated as traffic conditions demand.

If AFADs or PTS units become inoperative, be prepared at all times to replace the unit with the same type and model of AFAD or PTS units, revert to human flagging operations or terminate all construction activities requiring the use of the AFAD or PTS units until the AFAD or PTS units become operative or qualified human flaggers are available.

When the work requiring the AFAD or PTS units is not pursued for 30 minutes or longer, power off each AFAD or PTS units. Removed the AFAD or PTS units from the travel lane and relocated to a minimum of five feet from the edge line. AFAD gate arms shall be in the upright position. Remove all traffic control devices from the road, place two cones by each AFAD or PTS units and all signs associated with the lane closure operation shall be removed or laid down. At the end of each workday, remove all AFADs or PTS units from the roadway and shoulder areas.

Ensure the system's wireless communication links continuously monitor and verify proper transmission and reception of data used to monitor and control each AFAD or PTS units. Ensure ambient mobile or other radio transmissions or adverse weather conditions do not affect the system.

In the event of a loss of communications, immediately display the flashing RED or STOP indication on all AFAD or PTS units.

AFAD Specific Construction Methods

The flagger/operator controlling the AFAD units shall be on the project site at all times. If multiple AFAD units are used, one AFAD unit shall be the Main AFAD unit and all other units shall be remote AFAD units. Ensure that each device meets the physical display and operational characteristics as specified in the MUTCD.

Multiple AFAD units may be controlled with **one** flagger / operator when the AFAD units meet each of the following requirements:

(1) AFAD units are spaced no greater than the manufacturer's recommendations.

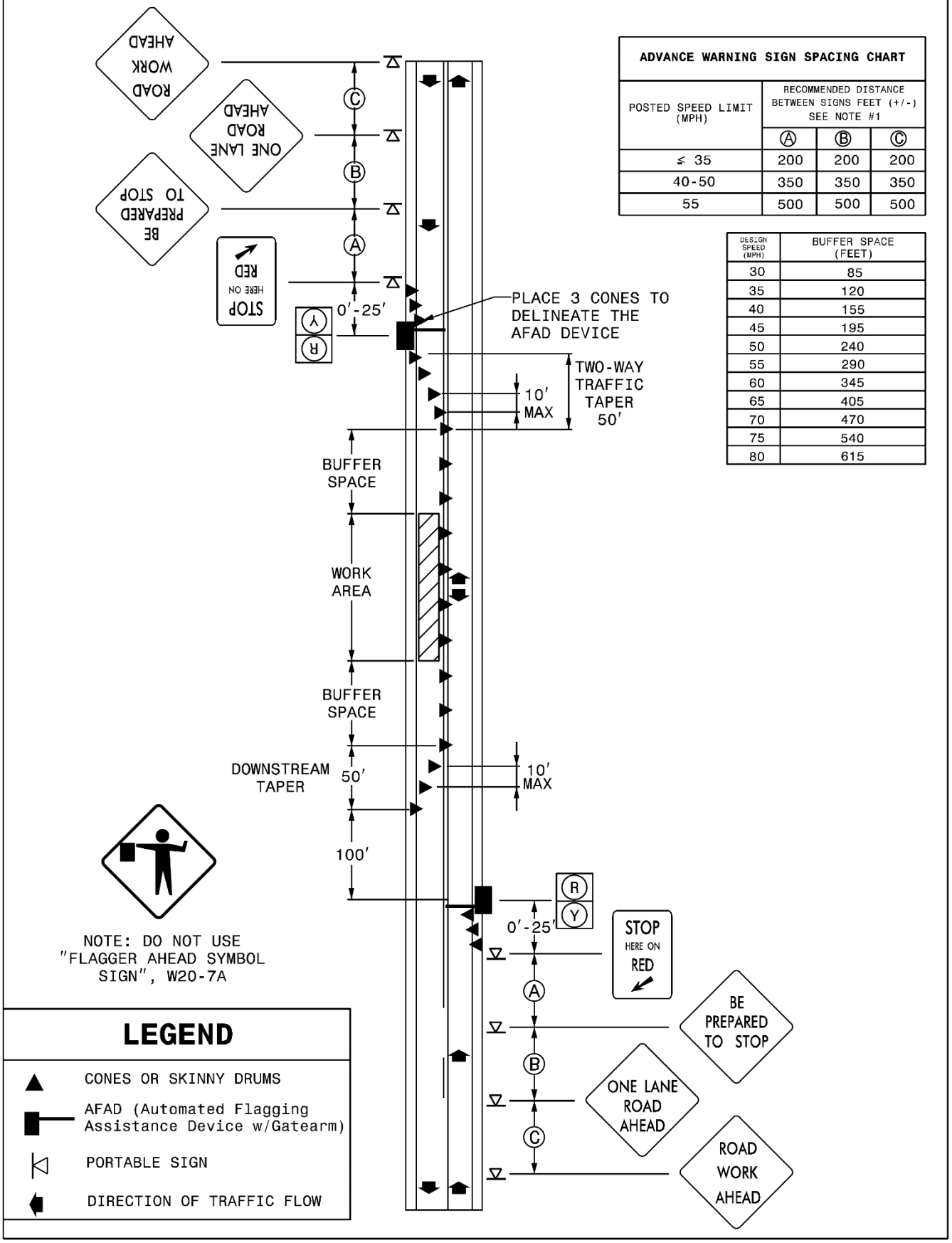
(2) Both AFAD units can be seen at the same time from the flagger / operator's position, or the AFAD is operating on its own secure network with malfunction detection and notification to the flagger/operator.

(3) The flagger / operator has an unobstructed view of approaching traffic in both directions from the flagger / operator position or the AFAD is operating on its own secure network, with cameras that provide the flagger / operator an unobstructed view of approaching traffic from both directions. The flagger / operator may control the AFAD units from a pilot vehicle.

If any of the above requirements are not met, flagger / operator control each AFAD unit.

AFAD operators may either control traffic at side streets or driveways between the AFAD units or operate the pilot car while operating the AFAD system if approved by the Engineer. AFAD units must continue to be within clear sight of the operator during these work activities.

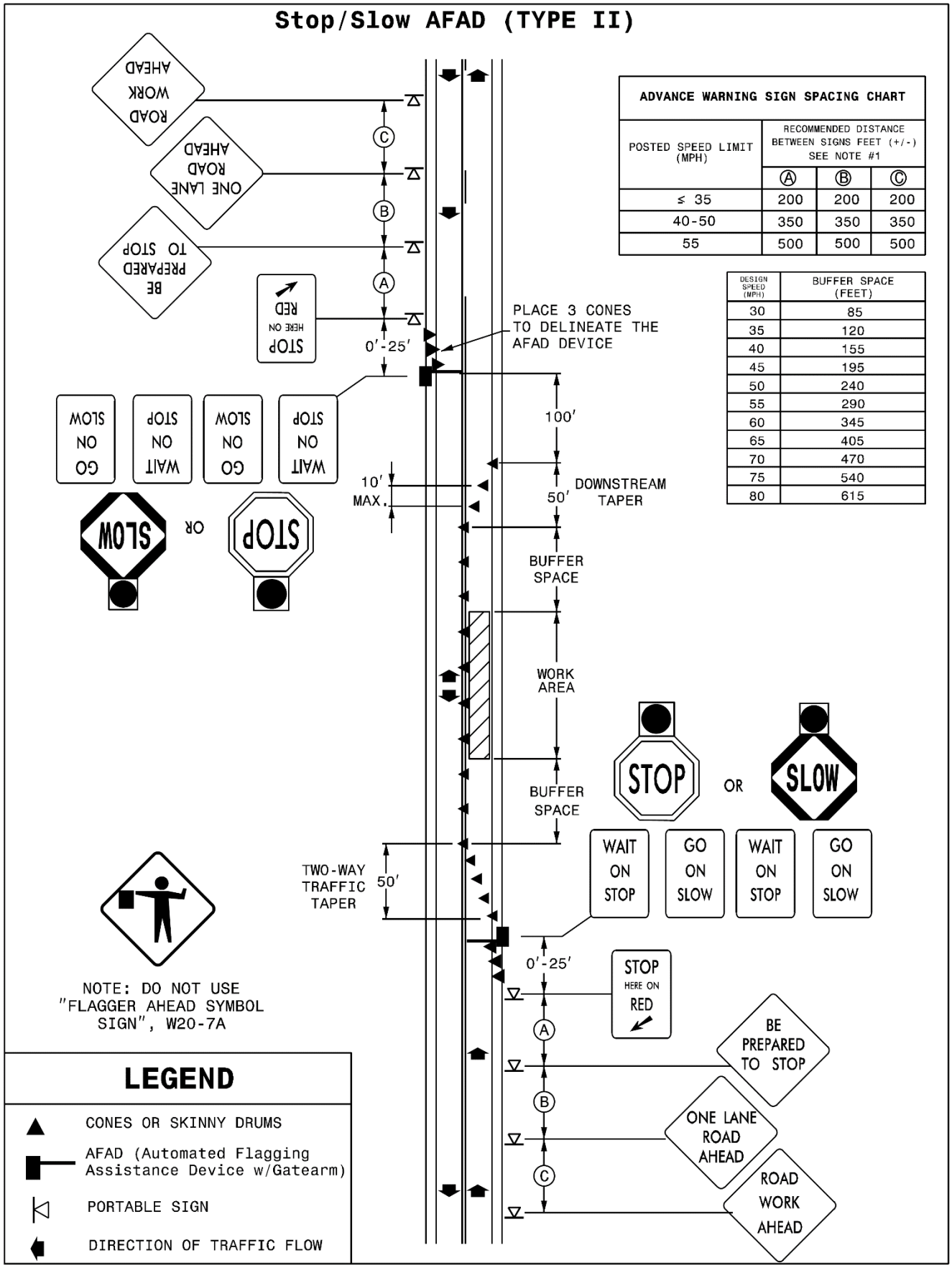
Red/Yellow Lens AFAD (TYPE I)



ADVANCE WARNING SIGN SPACING CHART			
POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS FEET (+/-) SEE NOTE #1		
	Ⓐ	Ⓑ	Ⓒ
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500

DESIGN SPEED (MPH)	BUFFER SPACE (FEET)
30	85
35	120
40	155
45	195
50	240
55	290
60	345
65	405
70	470
75	540
80	615

Stop/Slow AFAD (TYPE II)



ADVANCE WARNING SIGN SPACING CHART

POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS FEET (+/-) SEE NOTE #1		
	Ⓐ	Ⓑ	Ⓒ
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500

DESIGN SPEED (MPH)	BUFFER SPACE (FEET)
30	85
35	120
40	155
45	195
50	240
55	290
60	345
65	405
70	470
75	540
80	615

TEMPORARY PORTABLE TRAFFIC SIGNAL SYSTEM

Furnish, install, place in operation, repair, maintain, relocate, and remove temporary portable traffic signal system. Comply with the provisions of Section 1700 of the *Standard Specifications.*

Materials

Provide a complete portable traffic signal system that is totally mobile and capable of being relocated as traffic conditions demand. Design the system for operation with or without an external power source. Provide a pop-up trailer system or a pedestal mounted system at the discretion of the Department.

Pop-Up Trailer System: Provide a signal control trailer for each signalized approach with two vehicle signal heads per trailer. This system should be designed with at least one vehicle signal head over the travel lane. Design the portable traffic signal system to perform without interruption. This system should be designed to operate for a minimum of 21 days without sunlight on battery power alone. Provide one operator unit for each portable traffic signal system. Furnish transmitters, solar assemblies, batteries, controls, backup systems and all other components necessary to operate the system.

Pedestal Mounted System: Provide a system that includes two signal control trailers for each signalized approach with one pedestal mounted vehicle signal head per trailer. Pedestal mounted signals should be dual indicated for each signalized approach. Design the portable traffic signal system to perform without interruption. This system should be designed to operate for a minimum of 72 hours without sunlight on battery power alone. Provide one operator unit for each portable traffic signal system. Furnish transmitters, solar assemblies, batteries, controls, backup systems and all other components necessary to operate the system.

Ensure each system meets the physical display and operational requirements of conventional traffic signals as specified in PART IV of the *Manual on Uniform Traffic Control Devices (MUTCD)* and the *North Carolina Supplement to the MUTCD* in effect on the date of advertisement.

Used equipment will be acceptable if the equipment is in good working condition. Design-Build Team retains ownership of the portable traffic signal systems.

Provide yellow 12-inch aluminum or polycarbonate vehicle signal heads with 10-inch tunnel visors, backplates and Light Emitting Diode (LED) modules. Provide aluminum signal heads and backplates listed on the Department's Qualified Products List (QPL) for traffic signal equipment. Provide polycarbonate signal heads and visors that comply with the provisions pertaining to Signal Heads within these *Project Special Provisions* with the following exceptions:

Fabricate signal head housings, end caps, and visors from virgin polycarbonate material. Provide U.V. stabilized polycarbonate plastic with a minimum thickness of 0.1 ± 0.01 inches that is highway yellow (Federal Standard 959A, Color Chip 13538). Ensure the color is incorporated into the plastic material before molding the signal head housings and end caps. Ensure the plastic formulation provides the following physical properties in the assembly (tests may be performed on separately molded specimens):

Test	Required	Method
Specific Gravity	1.17 minimum	ASTM D 792
Vicat Softening Temperature, °F	305-325	ASTM D 1525
Brittleness Temperature, °F	Below –200	ASTM D 746
Flammability	Self-extinguishing	ASTM D 635
Tensile Strength, yield, PSI	8500 minimum	ASTM D 638
Elongation at yield, %	5.5-8.5	ASTM D 638
Shear, strength, yield, PSI	5500 minimum	ASTM D 732
Izod impact strength, ft-lb/in [notched, 1/8"]	15 minimum	ASTM D 256
Fatigue strength, PSI at 2.5 mm cycles	950 minimum	ASTM D 671

To minimize signal head movement due to wind, mount top and bottom of signal heads to the signal head supports.

Provide 120V AC powered LED modules listed on the QPL or provide 12V DC powered LED modules that meet the *ITE VTCSH Part 2: Light Emitting Diode (LED) Vehicle Signal Modules (Interim Purchase Specification)* with the exception of paragraphs 5.2, 5.3, 5.7, and testing associated with 120V AC. Ensure DC powered LED modules operate with input power between 9V DC and 15V DC.

Provide trailers that have durable paint in highway orange, Federal Standard 595a Color Chip ID # 12473 with a minimum paint thickness of 2.5 mils.

Provide trailers with a 12-volt trailer lighting system complying with *Federal Motor Carrier Safety Regulations 393*, safety chains, and a 2-inch ball hitch. When provided, locate generators, fuel tanks, batteries and electronic controls in protective housings that are provided with locks to restrict access.

Design the trailer assembly and signal supports to withstand an 80 MPH wind load with the signal supports raised in the operating position. Provide independent certification from a registered Professional Engineer that the assembly meets this 80 MPH wind load requirement. Provide a reliable hydraulic, electric or manual means for raising and lowering the signal support members. Provide screw-type stabilizing and leveling devices with a self-leveling foot to support the unit in the operating position on slopes 1V:3H or flatter when detached from the transporting vehicle.

During manual operation, ensure the system provides a means of informing the operator of signal indications, such as a light on the back of each signal head that illuminates when the signal displays a red indication.

Design the temporary portable traffic signal system to perform without interruption during the time it is in operation.

Where a traffic actuated system is required, provide a system control unit that is capable of pre-timed operation, traffic actuated operation, a variable green time interval dependent upon vehicle actuations, and programmable yellow clearance and red clearance intervals. Furnish all sensors to monitor vehicle demands for vehicle actuation per the Project Special Provisions and Section 1098 of the *Standard Specifications*.

Design the systems to be fail-safe. Ensure the system monitors the following conditions: lack of green, yellow, and red signal indication voltage, total loss of indication on any approach, presence of multiple signal indications on any approach, conflicting green/yellow signal indications, and low power condition. In the event any of these conditions are detected, immediately begin flashing operation of red indications in all directions.

Provide either hard-wired, microwave, or radio controlled type communications for pre-timed and traffic actuated temporary portable traffic signal systems. In the event a loss of communication is detected, immediately begin flashing operation of red indications in all directions.

Ensure systems that use wireless communication links continuously monitor and verify proper transmission and reception of data used to monitor and control each signal head. Ensure ambient mobile or other radio transmissions or adverse weather conditions do not affect the system. Encode signal transmissions digitally to protect radio transmissions from interference. Do not violate FCC regulations and ensure radio frequencies are appropriate for portable signal equipment applications.

Upon detecting a malfunction, ensure all signals go to a flashing red condition and the operator is notified by a reliable means approved by the Engineer. Provide a battery back-up system for generator and direct current powered signal systems to power the warning means and "flashing red" condition. Provide a back-up system with a 72-hour minimum reserve.

Ensure the system meets the Environmental Standards for traffic signals in accordance with NEMA TS-1, Section 2.

Construction Methods

Do not use portable traffic signal systems in a work area with intersecting streets or driveways, unless directed by the Engineer.

Do not install portable traffic signal within 300 feet of at-grade railroad crossing.

During automatic operation, ensure the motorist has an unobstructed view of opposing traffic.

Install stop bars and warning signs and operate portable traffic signals in accordance with the Traffic Control Plan.

If modification to the distance between signal units is required after the units are positioned, relocate the signals or the system and make the necessary timing revisions only as directed by the Engineer.

Submit a traffic signal timing plan to the Engineer for approval a minimum of two weeks prior to installation. Include the following items in the plan: distance between stop bars, speed limit to be posted during operation, each approach grade, recommended yellow change interval, recommended red clearance interval, recommended minimum and maximum green intervals. Make timing changes to approved signal timing plan only as authorized by the Engineer. Keep a written record of all timing changes.

Allow only trained operators to set up and operate the system. Provide an experienced operator at all times for each temporary portable traffic signal system during periods of manual operation. Do not violate yellow change and red clearance intervals during periods of manual operation.

Perform all maintenance operations required by the system manufacturer including periodic cleaning of the systems. Ensure properly skilled and trained maintenance personnel are available to maintain the system in good working order and to perform all emergency and preventive maintenance as recommended by the system manufacturer.

Furnish the Engineer with the name, office telephone number, cellular (mobile) telephone number, and pager number of the supervisory employee who will be responsible for maintenance and repair of equipment during all hours.

For all failures, malfunctions, or damage to this equipment, begin necessary repairs within four hours of notification. Complete repairs within eight hours of notification. Comply with Section 150 for maintenance of traffic flow. The inability to contact the supervisory employee or prearranged alternate will not extend repair time requirements.

In the event that the system becomes inoperative, be prepared at all times to revert to flagging operations or suspend all construction activities requiring the use of the temporary portable traffic signal system until the system is restored to proper operation. Implement flagging operations as shown on Roadway Standard Drawing No. 1101.02 Sheet 1 (Closure of one lane of a Two-lane, Two-way Highway).

When not in operation, remove signal heads from the view of traffic or cover signal heads with burlap bags or bags made of non-ripping material specifically designed for covering signal heads. Do not use trash bags of any type. Remove, cover, fold, or turn all inappropriate signs so that they are not readable by oncoming traffic.

ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES

04/07/16 BI 40

Inspection for Asbestos Containing Material

Prior to conducting bridge demolition or renovation activities, the Design-Build Team shall thoroughly inspect the bridge or remaining portions of the bridge for the presence of asbestos containing material (ACM) using a firm prequalified by NCDOT to perform asbestos surveys. The inspection must be performed by a N.C. accredited asbestos inspector with experience inspecting bridges or other industrial structures. The N.C. accredited asbestos inspector must conduct a thorough inspection, identifying all asbestos-containing material as required by the Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants

(NESHAP) Code of Federal Regulations (CFR) 40 CFR, Part 61, Subpart M.

The Design-Build Team shall submit an inspection report to the Engineer, which at a minimum must include information required in 40 CFR 763.85 (a)(4) vi)(A)-(E), as well as a project location map, photos of existing structure, the date of inspection and the name, N.C. accreditation number, and signature of the N.C. accredited asbestos inspector who performed the inspection and completed the report. The cover sheet of the report shall include project identification information. Place the following notes on the cover sheet of the report and check the appropriate box:

_____ ACM was found
_____ ACM was not found

Removal and Disposal of Asbestos Containing Material

If ACM is found, notify the Engineer. Compensation for removal and disposal of ACM is considered extra work in accordance with Article 104-7 of the2024 Standard Specifications.

An Asbestos Removal Permit must be obtained from the Health Hazards Control Unit (HHCU) of the N.C. Department of Health & Human Services, Division of Public Health, if more than 35 cubic feet, 160 square feet, or 260 linear feet of regulated ACM (RACM) is to be removed from a structure and this work must be completed by a Design-Build Team prequalified by NCDOT to perform asbestos abatement. RACM is defined in 40 CFR, Part 61, Subpart M. Note: 40 CFR 763.85 (a)(4) vi)(D) defines ACM as surfacing, TSI and Miscellaneous which does not meet the NESHAP RACM.

Demolition Notification

Even if no ACM is found (or if quantities are less than those required for a permit), a Demolition Notification (DHHS-3768) must be submitted to the HHCU. Notifications and Asbestos Permit applications require an original signature and must be submitted to the HHCU 10 working days prior to beginning demolition activities. The 10 working day period starts based on the post-marked date or date of hand delivery. Demolition that does not begin as originally notified requires submission of a separate revision form HHCU 3768-R to HHCU. Reference the North Carolina Administrative Code, Chapter 10A, Subchapter 41C, Article .0605 for directives on revision submissions.

Contact Information
Health Hazards Control Unit (HHCU)
N.C. Department of Health and Human Services 1912 Mail Service Center
Raleigh, NC 27699-1912
Telephone: (919) 707-5950
Fax: (919) 870-4808

Special Considerations

Buncombe, Forsyth, and Mecklenburg counties also have asbestos permitting and NESHAP requirements must be followed. For projects involving permitted RACM removals, both the

applicable county and the state (HHCU) must be notified.

For demolitions with no RACM, only the local environmental agencies must be notified. Contact information is as follows:

Buncombe County
WNC Regional Air Pollution Control
Agency 49 Mt. Carmel Road
Asheville, NC 28806
(828) 250-6777

Forsyth County
Environmental Affairs Department
537 N. Spruce Street
Winston-Salem, NC 27101
(336) 703-2440

Mecklenburg County
Land Use and Environmental Services
Agency Mecklenburg Air Quality
700 N. Tryon Street
Charlotte, NC 28202
(704) 336-5430

Additional Information

Additional information may be found on N.C. asbestos rules, regulations, procedures and N.C. accredited inspectors, as well as associated forms for demolition notifications and asbestos permit applications at the N.C. Asbestos Hazard Management Program website:

https://epi.publichealth.nc.gov/asbestos/rules.html

GENERAL

The State will not be bound by oral explanations or instructions given at any time during the bidding process or after award. Only information that is received in response to this RFP will be evaluated; reference to information previously submitted will not suffice as a response to this solicitation.

NO CONTACT CLAUSE

To ensure that information is distributed equitably to all short-listed Design-Build Teams, all questions and requests for information shall be directed to the State Contract Officer through the Design-Build e-mail address. This precludes any Design-Build Team Member, or representative, from contacting representatives of the Department, other State Agencies or Federal Agencies either by phone, e-mail or in person concerning the Design-Build Project.

USE OF TERMS

Throughout this RFP and all manuals, documents and standards referred to in the RFP, the terms Contractor, Bidder, Design-Builder, Design-Build Team, Team, Firm, Company, and Proposer are synonymous.

Throughout this RFP and all manuals, documents and standards referred to in the RFP, the terms NCDOT, Department, Engineer, and State are synonymous.

DESIGN REFERENCES

Design references developed and published by NCDOT and those developed and published by other agencies and adopted for use by NCDOT which are to be used in the design of this project may be obtained by contacting Contract Standards and Development within the Technical Services Division. Standard prices for materials, which the Department normally sells for a fee, will be in effect. The Design-Build Team shall be responsible for designing in accordance with the applicable documents and current revisions and supplements thereto.

REVIEW OF SUBMITTALS

Submittals will be reviewed within 10 working days (15 days for temporary structures, FEMA compliance documents, and temporary shoring) from the date of receipt by NCDOT unless otherwise stipulated in the scope of work. All submittals shall be prepared and submitted in accordance with the *"Express Design-Build Bridge Replacement Submittal Guidelines - Year 5 March 24, 2016"* which by reference are incorporated and made a part of this contract. The Design-Build Team may, however, propose an alternate scheme for submittals that include a combination of submittals, a different order of submittals, or other submittal scheme. This alternate approach to submittals must be submitted to the Alternative Delivery Unit after award of the contract and approved by the Department. If an approved alternate approach to submittals is approved, the Design-Build Team may use the alternate approach but shall assume all risk associated with any necessary re-work or re-design. Moreover, the alternate approach must include, at a minimum, final plans and RFC plans for each of the design disciplines.

The Department reserves the right to use portions or all of the approved alternate approach on any concurrent or future Design-Build projects.

All submittals shall be made simultaneously to the Alternative Delivery Unit and the Resident Engineer. The Department will not accept subsequent submittals until prior submittal reviews have been completed for that item. The Design-Build Team shall inform the Alternative Delivery Unit in writing of any proposed changes to the previously reviewed submittals and obtain approval prior to incorporation. The Design-Build Team shall prioritize submittals in the event that multiple submittals are made based on the current schedule. All submittals shall include pertinent Special Provisions. No work shall be performed prior to Department review and approval of the applicable design submittals.

GENERAL SCOPE

The scope of work for this project includes design, construction and management of the replacement of two bridges with bridges. Construction shall include, but not be limited to, all necessary clearing, grading, roadway, drainage, structures, utility coordination and relocation, and erosion and sediment control work items for the bridge replacement. Construction shall comply with *Standard Specifications* and any special provisions.

Project services include, but are not limited to:

- **Design Services** – completion of construction plans
- **Construction Services** – necessary to build and ensure workmanship of the designed facility
- **Permits –** development of all documents for permits, as necessary
- **Right of Way or Easement Acquisition Services –** as may be necessary
- **Utility Coordination** – minor utility relocation efforts, as needed
- **As-Built Drawings**

Construction Engineering Inspection shall be provided by NCDOT Division personnel or will be performed under a separate contract.

The Department will be responsible for the environmental document for each bridge site. The Design-Build Team shall be responsible for preparing drawings and communicating the design assumptions / limitations necessary for the Department to complete a NEPA Consultation and obtain all required environmental permits for construction of each bridge.

The Department will provide survey files using ORD software. The Design-Build Team have the option of using either Microstation format using Geopak (current version used by the Department) or ORD software.

DESIGN AND CONSTRUCTION PERFORMED BY DESIGN-BUILD TEAM

The Design-Build Team shall acknowledge that project documents furnished by the Department are preliminary and provided solely to assist the Design-Build Team in the development of the project design. The Design-Build Team shall be fully and totally responsible for the accuracy and completeness of all work performed under this contract and shall save the State harmless and

shall be fully liable for any additional costs and all claims against the State which may arise due to errors, omissions and negligence of the Design-Build Team in performing the work required by this contract.

There shall be no assignment, subletting or transfer of the interest of the Design-Build Team in any of the work covered by the Contract without the written consent of the State, except that the Design-Build Team may, with prior written notification of such action to the State, sublet property searches and related services without further approval of the State.

The Design-Build Team shall certify all plans, specifications, estimates and engineering data furnished by the Team. All work by the Design-Build Team shall be performed in a manner satisfactory to the State and in accordance with the established customs, practices, and procedures of the North Carolina Department of Transportation, and in conformity with the standards adopted by the American Association of State Highway Transportation Officials, and approved by the U.S. Secretary of Transportation as provided in Title 23, U.S. Code, Section 109 (b). The decision of the Engineer/State/Department shall control in all questions regarding location, type of design, dimension of design, and similar questions.

Alternate designs, details, or construction practices (such as those employed by other states, but not standard practice in NC) are subject to Department review and acceptance and will be evaluated on a case by case basis.

The Design-Build Team shall not change team members, subconsultants or subcontractors identified in the Statement of Qualifications (SOQ) without written consent of the Engineer or the State Contract Officer. In addition, subconsultants and subcontractors not identified in the SOQ shall not perform any work without written consent by the Engineer. Individual offices of the Design-Build Team not identified in the Statement of Qualifications submitted shall not perform any work without written consent by the Engineer. Failure to comply with this requirement may be justification for removing the Team from further consideration for this project and disqualification from submitting on future Design-Build Projects.

All firms shall be prequalified by the Department for the work they are to perform. Joint Ventures, LLCs or any legal structure that are different than the existing prequalification status must be prequalified prior to the Price Proposal submittal deadline. Subcontractors need only be prequalified prior to performing the work. Design firms shall be prequalified prior to the Price Proposal submittal deadline. If the work is to be performed by an office other than the one that is prequalified, that office shall be prequalified prior to any design submittals.

ACCESS TO SUBMITTAL SITE

To reduce the submittal review time and increase the efficiency of the review process, the Design-Build Team will need access to the project's submittal site. The site will include a library that will be used for the Design-Build Team to submit documents to NCDOT to review and another for NCDOT to provide response back to the Design-Build Team. The Design-Build Team's Project Manager shall provide a list of team members that will require access to this portal. This list shall include the name, e-mail address and North Carolina Identity Management

(NCID) for each individual team member. Once the list is complete, it shall be submitted to the Design-Build e-mail address (altdelivery@ncdot.gov).

To create an NCID account, each individual shall go to NCDOT's Connect website (https://connect.ncdot.gov) and click on the "How to get an Account" link and then, "Create NCID".

The Department will obtain access rights for these individuals and notify the Technical Services Project Manager accordingly. Individuals may then re-enter the "Connect" site and login with their NCID account. Once logged in, the TeamSite's "DF18313.2100057.PR Yancey 097 Helene", "DF18313.2100307.PR Yancey 062 Helene" and "DF18313.2100064.PR 100 Helene" Project Sites link will be apparent on the left side of the webpage.

Please note that all submittals for this project will be electronic and will be submitted to the Teamsite, in accordance with the "*Express Design-Build Bridge Replacement Submittal Guidelines – Year 5, March 24, 2016".* NCDOT reserves the right to request a hard copy of any submittal or supporting electronic files or calculation needed to complete the review.

ELECTRONIC PLAN SUBMITTALS AND E-SIGNATURES

The Design-Build Team shall submit all Release for Construction Plans in accordance with the NCDOT e-Signature requirements, including but not limited to providing signed and sealed searchable .pdf files. Reference the website noted below for additional information:

https://connect.ncdot.gov/projects/roadway/pages/private-engineering-firm-resources.aspx

ETHICS POLICY

Employees employed by the Design-Build Team or employees employed by any subconsultant for the Design-Build Team to provide services for this project shall comply with the Department's ethics policy. Failure to comply with the ethics policy will result in the employee's removal from the project and may result in removal of the Company from the Department's appropriate prequalified list.

APPROVAL OF PERSONNEL

The Department will have the right to approve or reject any personnel, assigned to a project by the Design-Build Team.

In the event of engagement of a former employee of the Department, the Design-Build Team or their subcontractors shall restrict such person or persons from working on any of the Design-Build Team's contracted projects in which the person or persons were "formerly involved" while employed by the State. The restriction period shall be for the duration of the contracted project with which the person was involved. *Former Involvement* shall be defined as active participation in any of the following activities:

Drafting the contract
Defining the contract scope of the contract

Design-Build Team selection
Negotiation of the contract cost (including calculating manhours or fees); and
Contract administration

An exception to these terms may be granted when recommended by the Secretary and approved by the Board of Transportation.

Failure to comply with the terms stated above in this section shall be grounds for termination of this contract and / or not being considered for selection of work on future contracts for a period of one year.

SUBMITTAL OF PRICE PROPOSALS

Price Proposals shall be submitted electronically in accordance with Articles 102-8(B) in the Standard Specifications for Roads and Structures. **No Price Proposals will be received after 2:00 p.m. Local Time on January 21, 2025.**

A Bid Bond or Bid Deposit in the amount of 5% of the Total Amount Bid will be required. The Bidder shall submit an electronic Bid Bond with each electronic bid submittal unless he elects to furnish a Bid Deposit to the address shown below:

Mr. Ronald E. Davenport, Jr., PE
Contract Standards and Development
1020 Birch Ridge Drive
Century Center Complex- Building B
Raleigh, NC 27610

Opening of Price Proposals

At the time and date specified, the State Contract Officer will open and read the Price Proposals and calculate the percentage difference between the Price Proposals submitted and the Engineer's Estimate.

Best and Final Offer

In the event initial Price Proposals exceed an acceptable range of the Engineer's Estimate or if the Department feels it is necessary for any reason the Department may choose to make amendments to the details of the RFP and request a Best and Final Offer from all of the previously short-listed teams. Alternately, the Department may choose to redistribute to the short-listed Design-Build Teams another RFP for the project with no amendments to the RFP.

The Design-Build Teams shall submit a revised Price Proposal at the time and date specified in the Best and Final RFP. This will constitute the Design-Build Team's Best and Final Offer. Award of the project may then be made to the Design-Build Team with the lowest apparent Price Proposal in response to the Best and Final RFP.

Stipend No stipend will be provided for this project

ROADWAY SCOPE OF WORK

Project Details

- The Design-Build Project consists of replacing a total of three (3) bridges located in Yancey County. Bridge Nos. 990062 and 990097 shall be replaced utilizing stage construction to maintain traffic on-site. Bridge No. 990100 shall be constructed in place with an on-site detour.

- The Design-Build Team shall be responsible for designing and constructing the bridge approaches to tie the new structure into the existing pavement in accordance with the NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects*, which are included in the 2024 NCDOT Roadway Design Manual, current NCDOT design standards and NCDOT policies. The Design-Build Team shall make every effort to stay within the existing right of way to reduce or eliminate the need for additional right of way or easements.

- All bridges are considered subregional tier.

- The Design-Build Team shall use the Travel Lane Width, and the Paved Shoulder Width as shown in the table below (unless otherwise noted herein) for the full length of the construction limits. The Design Build Team shall use the Out-to-Out Bridge Width as specified in the *Structures Scope of Work*. The lanes shall be striped to match existing travel lane widths.

County	Bridge No.	Route	ADT	Travel Lane Width (ft)	Paved Shoulder (ft)
Yancey	990062	SR 1153	1000	10	1
Yancey	990097	SR 1152	520	12	1
Yancey	990100	SR 1153	1000	10	1

- The Design-Build Team shall design the facility to meet or exceed the existing design speed. Reductions in design speeds in order to retain existing horizontal and vertical alignments will be allowed per the NCDOT *Sub Regional Tier*, located in the 2024 NCDOT Roadway Design Manual; any further reductions will require a design exception. Other design exceptions will only be considered if the proposed criteria meet or exceed existing conditions

- At a minimum, the Design-Build Team shall construct full depth pavement in all areas of missing pavement, pavement removal, widening or re-alignment. In no case shall the existing pavement width be narrowed.

- At all bridge sites, the extent of pavement milling, resurfacing and / or overlay as necessary shall extend a minimum of (1) 50 feet from the end of the bridge; (2) to the end of the guardrail; or (3) 50 feet beyond the limits of missing pavement up to a maximum distance of 100 feet from the end of the bridge. Additional roadway embankment work and paving

beyond 100 feet will be paid for as Extra Work in accordance with Article 104-8(a) of the the *Standard Specifications*.

- The Design-Build Team shall pave to the face of guardrail for its full length and taper at an 8:1 ratio to the proposed edge of pavement.

- Paved shoulders shall be extended to the end of construction limits and blunt ended unless otherwise directed by the Engineer.

- Outside the guardrail limits on the subregional tier, for all approaches with paved shoulders, the Design-Build Team shall provide a minimum of 2'-0" of graded shoulder from the edge of the pavement to the shoulder point.

- The grade may be adjusted as needed by the Design-Build Team to assist in the attainment of FEMA compliance or to assist in minimizing hydraulic spread. (Reference the Hydraulic Scope of Work).

- Unless noted otherwise elsewhere in the RFP, all guardrail should be designed and placed in accordance with the January 2024 NCDOT *Standard Drawings* and/or approved details in lieu of standards. Unless noted otherwise elsewhere in the RFP, for subregional bridges, the length of guardrail installed shall be based on the length provided in the NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* located in the 2024 NCDOT Roadway Design Manual.

- A crest vertical curve high point is permitted on a bridge or approach slab provided the Design-Build Team can demonstrate that (1) the design directs water off the travel lanes in an effective manner and (2) providing a tangent grade on the structure would create significant additional roadway approach work. In no case shall a sag vertical curve low point be located on any bridge or approach slab.

- Prior to recording the Right of Way Plans, the Design-Build Team shall locate and install iron pins and caps with fiberglass right of way markers that delineate the proposed right of way for all parcels within the project limits.

- For all parcels, the Design-Build Team shall locate and install metal caps with fiberglass markers that delineate all proposed permanent easements within the project limits.

- The Design-Build Team shall replace all existing right of way and permanent easement markers / monuments damaged and / or relocated during construction.

- In accordance with NCDOT Policy, the Department will furnish the metal caps with fiberglass markers.

- The Design-Build Team shall maintain existing driveway access at all times during the construction and/or relocate if necessary to accommodate construction.

- Bridge approach slabs are required at all bridge ends. The minimum bridge approach slab length shall be 12 feet for the subregional tier sites.

General

- Unless otherwise noted herein, the design shall be in accordance with the NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* located in the 2024 NCDOT Roadway Design Manual, the 2018 AASHTO *A Policy on Geometric Design of Highways and Streets, Roadway Design Policy and Procedure Manual, Roadway Design Guidelines for Design-Build Projects,* January 2024 NCDOT *Standard Specifications for Roads and Structures, the* 2011 AASHTO *Roadside Design Guide*, 4th Edition and 2019 Errata, and the 2006 *Chapter 6 Update* and January 2024 NCDOT *Roadway Standard Drawings.*

- Once all changes have been incorporated into the "Released for Construction" roadway plan set for each site, the Design-Build Team shall provide electronically sealed and signed PDFs of the plans in the proper format which conform to the NCDOT eSignature Policy to the Alternative Delivery Unit.

NCDOT Information Supplied

- NCDOT *SubRegional Tier Design Guidelines for Bridge Projects* are available in Section 5.2 of the 2024 NCDOT Roadway Design Manual at:

https://connect.ncdot.gov/projects/Roadway/Pages/RDM.aspx

- The NCDOT will provide electronic surveys to the Design-Build Team for each bridge site. Any additional supplemental surveys, including but not limited to additional topography, existing and proposed roadway, structure sites, underground and overhead utilities, existing and proposed drainage, and wetland delineation shall be the responsibility of the Design-Build Team to acquire and process.

- Design-Build Team shall be responsible for confirming the location of the utilities and the type/size of facilities. All SUE work shall be the responsibility of the Design-Build Team.

- The NCDOT will provide final pavement designs for each bridge site.

STRUCTURES SCOPE OF WORK (1-10-25)

Project Details:

The Design-Build Team will be responsible for all structures necessary to complete the project in accordance with the table provided herein. Reference the *Project Special Provision* entitled "*Measurement and Payment*" for a description of pay items and resolution of differences between the quantities and data provided herein and the final design prepared by the Design-Build Team and approved by the Department.

All bridge lengths stated herein are based on an assumed end bent cap depth of 4'-0". All bridges shall be cored slab or box beam designs. The type of overlay shall be based on the bridge location and traffic conditions. Reference Figure 6-61 of the NCDOT Structures Management Unit Manual and / or the *Pavement Management Scope of Work* for further information.

Low water bridges shall be defined as cored slab bridges where the design high water elevation, based on the Roadway Classification (reference Chapter 7, Table 1 of the Hydraulics Guidelines), is above the low chord elevation of any span. For all low water bridges, detail 7/8" (22.23 mm)φ hold-down anchor bolts in the exterior cored slab units of all spans at a minimum. Evaluate stream forces based on the design to the high water elevation to determine if the interior cored slab units require hold-down anchor bolts. The length of anchor bolt projecting above the end bent and bent caps shall be equivalent to the cored slab unit depth. The anchor bolt embedment length into end bent and bent caps shall be 1'-6" (450 mm).

The Design-Build Team shall provide a standard 42-inch Vertical Concrete Barrier Rail unless an appropriate flow-thru rail is needed to mitigate proposed water surface elevation increases. Precast Barriers will not be allowed.

Note that the bridge length in the table below is from fill face to fill face and therefore may require adjustment to the length on any box beam / cored slab standard that the Design-Build Team may wish to use. In lieu of adjusting these beam / slab lengths, and at no additional cost to the Department, the Design-Build Team may elect to use the box beam / cored slab 5-foot increment standards and lengthen the fill face to fill face dimension as needed. Regardless of the method chosen, the Design-Build Team shall ensure that the model used for FEMA compliance includes the correct span lengths and end points (end of beam).

At Bridge No. 990062, the Design-Build Team may construct 1) a sloping spill thru abutment on the left side and a vertical face on the right side with a 20-foot offset or 2) vertical face abutments at both end bents. Vertical face abutments shall be either (1) a cast-in-place abutment: (2) a deep end bent cap supported on piles; or (3) a standard end bent cap supported on piles with sheet piles in front of the end bent. These three options are collectively referred to as "Vertical Face" in the table contained herein. The vertical wall or sheeting shall be of sufficient depth to accommodate abutment scour.

At Bridge No. 990097, the Design-Build Team shall construct vertical face abutments at both end bents; (1) a cast-in-place abutment: (2) a deep end bent cap supported on piles; or (3) a standard end bent cap supported on piles with sheet piles in front of the end bent. These three options are collectively referred to as "Vertical Face" in the table contained herein. The vertical wall or sheeting shall be of sufficient depth to accommodate abutment scour.

At Bridge No. 990100, the Design-Build Team may construct a sloping spill thru abutment on the left side and a vertical face on the right side; (1) a cast-in-place abutment: (2) a deep end bent cap supported on piles; or (3) a standard end bent cap supported on piles with sheet piles in front of the end bent. These three options are collectively referred to as "Vertical Face" in the table contained herein. The vertical wall or sheeting shall be of sufficient depth to accommodate abutment scour.

Structure Number	Site Description	Out-Out Width (ft)	Fill Face to Fill Face Length (ft)	Bent Placement Limitations	# of Spans	End Bent #1 Foundation Length (& est tip elev)	End Bent #2 Foundation Length (& est tip elev)	Interior Bent Foundation Length (& est tip elev)	Foundation Type
990062	SR 1153 over Ayles Creek	27	50	Not Applicable	1	18(79)	10(86) LT 24(72) (RT)	Not Applicable	Steel Piles @ EB 1 and EB2
990097	SR 1152 over South Toe River	36	170	None	2 or 3*	18(2560)	30 (2558)	B1-B3 44 (2538)	Vertical Abutment @ EB 1 and EB 2 Drilled Shafts @ Int. Bents
990100	SR 1153 over Ayles Creek	27	65	Not Applicable	1	8 (2675)	32 (2656)	Not Applicable	Steel Piles @ End Bents

NOTES:

*Cored Slab and Box Beam Options

Assumed Foundation Type at End Bent is Drilled-in or Driven Steel Piles with factored resistance per NCDOT Standard Bridge Loads and NCDOT LRFD Driven Pile Policy.

The estimated tip elevations are based on an examination of the borings and taking into account roughly 10 feet of scour depth and are shown for informational purposes. The estimated tip elevations are not necessarily true elevations but may instead relate to an assumed benchmark noted on the boring logs; benchmarks were not always accessible at the time of borings. Foundation length was determined by comparing the existing grade and bridge seat elevations with the estimated pile tip elevations, taking into account any adjustment needed to the assumed benchmark, as appropriate.

990062 – Elevations are based on a Temporary Bench Mark. Foundation Lengths are measured from the existing grade and will need to be reduced to account for end bent cap depth used

990097 - Vertical Abutment Foundation Length is measured from the existing ground surface and is intended to identify the approximate bearing elevation. The height and embedment of the actual abutment will be dependent on the hydraulic analysis. Bents 1-2(3) foundation lengths have been estimated from the approximate original Bottom of Cap (BOC) to the approximate rockline plus 10 ft for drilled pier embedment.

990100 - Foundation Lengths are measured from the existing grade and will need to be reduced to account for end bent cap depth used

Bridge 990062 skew is 120 degrees Bridge 990097 skew is 75 degrees Bridge 990100 skew is 120 degrees

Bridge Removal:

The Design-Build team is responsible for the removal and disposal of all existing bridges, piles, abutments, and previous bridge substructure remnants per NCDOT's *Best Management Practices of Maintenance and Construction Activities* and the Standard Specifications, except as otherwise noted herein.

For existing bridges that have paint systems containing red lead paint, the Design-Build Team is responsible for handling, removing, shipping, and disposing of these materials in accordance with the January 2024 *NCDOT Standard Specifications for Roads and Structures*. The existing bridges shall be removed in accordance with Subarticle 402-2(A) and (B) of the 2024 *Standard Specifications for Roads and Structures*. Red lead paint, if present on the stockpiled items, need not be removed by the Design-Build Team.

The Design-Build Team shall notify the Resident Engineer regarding the salvage operations one week prior to availability of the materials. The Design Build Team shall salvage materials, as listed below and shall deliver to the NCDOT facility, Mitchell / Yancey County Bridge Maintenance Yard, located at 902 Greenwood Road, Spruce Pine, NC, 28777, where NCDOT will offload the salvaged materials.

- At Bridge No. 990062 Temporary Bridge Structure
- At Bridge No. 990097 Temporary Bridge Structure
- At Bridge No. 990100 Temporary Bridge Structure
- All other salvageable materials (ex. guardrail and guardrail posts, steel I-Beams, etc.) that may remain at each bridge location.

Every precaution should be taken to avoid any damage during demolition. Carefully dismantle and remove existing guardrail and all components, concrete anchors included, at locations indicated in the plans developed by the Design-Build Team with the small parts stored in sturdy containers, for delivery to the NCDOT facilities named above. Dispose of the concrete anchors.

General:

All bridges shall meet approved roadway typical sections and grades. Bridge geometry (width, length, skew, span arrangement, etc.) shall be in accordance with the approved Preliminary Roadway Plans and approved Hydraulic Bridge Survey Reports prepared by the Design-Build Team.

Design shall be in accordance with the latest edition of AASHTO *LRFD Bridge Design Specifications* (with exceptions noted in the NCDOT *Structures Management Unit Manual)*, NCDOT *LRFD Driven Pile Foundation Design Policy*, NCDOT *Structures Management Unit Manual* (including policy memos), NCDOT *Bridge Policy Manual* and NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* (located in the 2024 Roadway Design Manual) except as noted otherwise elsewhere in this RFP.

If the NCDOT's Standard Bridge Plans are used, then the Design-Build Team shall analyze and seal the plans.

A live load rating chart for proposed girders shall be included with the bridge plans and shall state design assumptions and methodology used in the load rating calculations. The load rating shall be in accordance with the NCDOT *Structures Management Unit Manual* (including policy memos) and *AASHTO's Manual for Bridge Evaluation*. If Standard Bridge Plans and the corresponding rating sheets are not used, the Design-Build Team shall submit an initial live load rating chart concurrently with the Preliminary Bridge Survey Report submittal.

Construction and Materials shall be in accordance with 2024 NCDOT *Standard Specifications for Roads and Structures*, NCDOT Structures Management Unit *Project Special Provisions*, and NCDOT Structures Management Unit Standard Drawings.

Alternate designs, details, or construction practices (such as those employed by other states, but not standard practice in NC) are subject to Department review and will be evaluated on a case-by-case basis.

Once all changes have been incorporated into the "Released for Construction" structure plans for each site, the Design-Build Team shall provide a PDF of the sealed plans to the Department.

NCDOT Information Supplied

The NCDOT Standard Bridge Design Plans are available at:

https://connect.ncdot.gov/resources/Structures/Pages/Standard-Design-Plans.aspx

HYDRAULICS DESIGN SCOPE OF WORK

The Design-Build Team shall be required to do the following:

- Employ a prequalified private engineering firm to perform hydraulic design for all work required under this contract.
- Attend a Hydraulic pre-design meeting prior to the first hydraulic submittal.
- Design the storm drainage using Geopak Drainage or ORD Drainage and Utilities..
- Provide a *Stormwater Management Plan* using the most current NCDOT Best Management Practices where applicable.
- Provide Bridge Survey Reports as required by NCDOT Hydraulic Guidelines stated below.
- End Bent fill slopes shall be armored with Class II rip rap. Flood plain benches are not required.
- Bridge design should maintain or increase the pre-storm event open area.
- Design the structure at this location to meet the requirements of the Memorandum of Agreement (MOA) between NCDOT and NC Floodplain Mapping Program (NCFMP) approved December 14, 2020, and the Coordination and Compliance Plan for Department of Transportation and Emergency Management (CCP), for the Department's submittal to FEMA. The CCP details the requirements to achieve State Floodplain Compliance (SFC). In the event an SFC type A or B cannot be achieved, the Design-Build Team shall be responsible for preparing a CLOMR package; however, the Department will be responsible for all FEMA submittal fees associated with the submittal of a CLOMR, and subsequently LOMR, packages. In the event that the Design-Build Team revises their design after initial submittal of the SFC or CLOMR package and a second FEMA submittal for that bridge is required, then the Design- Build Team will be responsible for all FEMA submittal fees associated with there-submittal.
- The Department will not allow direct contact between the Design-Build Team and the representatives of NCFMP and their contractors either by phone, e-mail, or in person without the State Hydraulics Engineer or his designee(s) present. The Department will review with NCFMP the eligibility for the SFC at their monthly meeting. The SFC (or CLOMR) Package with the accepted Bridge Survey Report for each site shall be submitted for review one month prior to the meeting. A member of the Design-Build Team may attend this meeting. The Design-Build Team shall recognize that the SFC allows for as much as one hundred fifty (150) days for approval once an accepted SFC Package has been submitted by the Department to the NCFMP. The Design- Build Team shall recognize that the CLOMR allows for as much as three hundred sixty-five (365) days for approval once an accepted CLOMR package has been submitted by the Department to the NCFMP.

- The Design-Build Team shall obtain NCFMP approval in coordination with NCDOT Hydraulics Unit prior to performing any construction activity in a FEMA regulated floodplain.

- The Department will be responsible for all fees associated with the submittal of SFC (or CLOMR) Packages.

- Construct structures in FEMA regulated floodplains to ensure adherence to the approved FEMA submittal. The Design-Build Team shall ensure that construction of all structures in FEMA regulated floodplains adhere to the approved CLOMR(s) and/or SFC(s). Within three months of completion of a structure in a FEMA regulated floodplain, the Design-Build Team shall provide a sealed As-Built survey for the structure and certify that the constructed structure adheres to the approved CLOMR or SFC. Guidance for plan certification for FEMA-Regulated Stream Crossings may be found on the Hydraulics Unit website at the following address:

  https://connect.ncdot.gov/resources/hydro/Pages/FEMA-Interagency-Design.aspx

- The Design-Build Team shall prepare a new FEMA model and/or package and be responsible for all associated costs resulting from any construction variation from the approved CLOMR(s) and/or SFC(s).

- The Design-Build Team shall prepare a Letter of Map Revision(s) (LOMR(s)) for the submittal to the NCFMP. The LOMR(s) must be submitted within six months of completion of work in the floodplain.

- The Department will not provide FEMA models that are available on the North Carolina Flood Risk System (FRIS) website. The Department will provide FEMA models, if available, to the Shortlisted Design Build Teams that are not available on the FRIS website. The Department in no way warrants or implies that these models are complete, accurate, or sufficient. No additional compensation will be provided for additional modeling necessary to correct, re-create, or adjust the models provided.

- Prepare the associated Permit Drawings as described in the Environmental Permits Scope of Work. All work resulting from the hydraulics and Permit Drawing reviews shall be the responsibility of the Design-Build Team.

- Design all stormwater controls based upon the most current NCDOT *Stormwater Best Management Practices Toolbox*.

- Design hydraulic spread cannot intrude into the travel lane width.

- Use grated drop inlets with pipes in shoulder berm gutter. Concrete flumes shall be used only if there is inadequate depth for a drop inlet.

- The Design-Build Team shall provide bank stabilization where the bank is disturbed for bent removal.

- No deck drains are allowed to be installed over water.

General

- Design in accordance with criteria provided in the North Carolina Division of Highways *Sub Regional Tier Guidelines for Bridge Projects* located in the 2024 NCDOT Roadway Design Manual, *Guidelines for Drainage Studies and Hydraulics Design-August 8, 2022* and the addendum Handbook *of Design for Highway Drainage Studies-1973,* North Carolina Department of Transportation *Stormwater Best Management Practices Toolbox-2014* and the North Carolina Division of Highways Hydraulics Unit website:

https://connect.ncdot.gov/resources/hydro/pages/default.aspx

Information Supplied

- Memorandum of Agreement (MOA) between NCDOT and NC Floodplain Mapping Program approved December 14, 2020, and associated materials are located at:

https://connect.ncdot.gov/resources/hydro/Pages/FEMA-Interagency-Design.aspx

- FEMA model is available on the North Carolina Flood Risk System (FRIS) website. NCDOT will provide the FEMA model not available on FRIS website The FRIS website is located at:

http://fris.ncem.org/fris

- Pre-design Hydraulic Report for bridge.

Coordination and Compliance Plan for Department of Transportation and Emergency Management provides guidance for the interagency coordination and technical NFIP compliance aspects for actions related to the December 14, 2020 Memorandum of Agreement (MOA) between the Department of Transportation, an agency of the State of North Carolina, and North Carolina Emergency Management, an office within the Department of Public Safety of the State of North Carolina.

https://connect.ncdot.gov/resources/hydro/DrainageStudiesGuidelines/MOACCP.pdf

ENVIRONMENTAL PERMITS SCOPE OF WORK

General

It is anticipated the majority of these projects will be constructed under the emergency provisions established by the US Army Corps of Engineers, using a non-reporting Nationwide Permit 3.

Efforts should be made to minimize impacts to Waters of the US to the fullest extent practicable to ensure the project qualifies for the emergency procedures.

The Design-Build Team shall be responsible for preparing drawings necessary for the Department to obtain all required environmental permits for construction of the bridge. The Design-Build Team is encouraged to gain the Department's concurrence on the permits needed prior to beginning permit application work for the bridge site.

The Department will allow no direct contact between the Design-Build Team and representatives of the environmental agencies. No contact between the Design-Build Team and the environmental agencies shall be allowed either by phone, e-mail or in person, without representatives of the Division's Environmental Officer present. A representative from the Alternative Delivery Unit shall be included on all correspondence.

Once the Department has obtained the applicable permits based upon the approved Design-Build Team's proposed design and / or construction methods, the Design-Build Team will be responsible for any change in the proposed design and/or construction methods that nullifies any permit. The Department shall not allow any contract time extensions associated with this additional coordination.

The Design-Build Team shall meet all permit conditions. The Design-Build Team shall be required to staff any personnel necessary to provide permit compliance.

Permit Process

The Department will provide the environment document for the bridge site. Once preliminary drawings are established, The Design-Build Team shall provide the preliminary design and construction details to NCDOT Environmental Staff for consultation and permitting determination with the regulatory agencies. If a permit is required, NCDOT will acquire the environmental permit concurrently with design, and in some cases, concurrently with construction.

All fill material shall be immediately stabilized and maintained to prevent sediment from entering adjacent waters or wetlands. The Design-Build Team shall be responsible for ensuring that the design and construction of the project will not impair the movement of aquatic life.

Requests made for modifications to the permits obtained by NCDOT Environmental Staff shall only be allowed if the Engineer determines it to be in the best interest of the Department and will be strongly discouraged. The Design-Build Team shall not take an iterative approach to hydraulic design issues. The design shall be complete prior to permit modification application.

Commitments

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize impacts to wetlands, streams, open water, and regulated riparian buffers. Additionally, the NCDOT will provide full compensatory mitigation of all stream, wetland, and riparian buffer impacts as required by the regulatory agencies.

All work by the Design-Build Team must be accomplished in strict compliance with the plans submitted and approved for the permit drawings and in compliance with all conditions of the permits received and certifications issued by the agencies. The Design-Build Team shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of the permits.

The Design-Build Team shall strictly adhere to these commitments, as well as others, including but not limited to requirements for permitting.

If the Design-Build Team discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he shall immediately notify NCDOT Staff Archaeologist and / or Division Environmental Officer, as listed below, who will initiate the required State / Federal coordination. All questions regarding these sites should be addressed to Mr. Matthew Wilkerson, NCDOT Archaeology (919) 707-6089, or the Division Environmental Officer.

EROSION AND SEDIMENTATION CONTROL SCOPE OF WORK

The NCDOT Roadside Environmental Unit (REU) shall review and accept all Erosion and Sedimentation Control Plans. Erosion Control (EC) Plans shall be designed for the grading phase of the construction. Release for Construction (RFC) Erosion Control Plans shall be submitted to all NCDOT Personnel listed in the "*Express Design-Build Bridge Replacement Submittal Guidelines – Year 5, March 24, 2016*", before **any** land disturbing activities, including clearing and grubbing can commence. No land disturbing activities, including clearing and grubbing, shall occur in any location that does not have accepted RFC Erosion Control Plans. Refer to the most recent versions of the NCDOT *Erosion and Sediment Control Design and Construction Manual* and the *NCDENR - Erosion and Sediment Control Planning and Design Manual* for erosion control design guidelines not addressed in this Scope of Work.

The Design-Build Team shall be responsible for determining the Bridge Projects located in Environmentally Sensitive Areas and use the higher Peak Inflow Rate and Peak Rainfall Data (25 year).

For other erosion control requirements, see Project Special Provisions for "Special Requirements for Work in National Forest".

Erosion and Sedimentation Control Plans shall at a minimum address the following:

I. Complete Set of Plans:

A. RFC Plans

1. The EC plans shall contain a Clearing & Grubbing and Final Grade phase of erosion control design as directed.
2. Use correct NCDOT symbology.
3. Protect existing and proposed drainage structure inlets with Rock Inlet Sediment Trap Type 'A' (RIST-A), Rock Inlet Sediment Trap Type 'C' (RIST-C), Rock Pipe Inlet Sediment Trap Type 'A' (PIST-A), etc.
4. Utilize adequate perimeter controls (temporary silt ditch (TSD), temporary silt fence (TSF), etc.)
5. Utilize infiltration basins, skimmer basins and rock measures with sediment control stone (Temporary Rock Sediment Dam Type 'B' (TRSD-B), Temporary Rock Silt Check Type 'A' (TRSC-A), etc.) at all drainage outlets with a spillway with an adequately designed base length to distribute outflow.
6. Take into account existing topography and show contour lines.
7. Utilize Temporary Rock Silt Checks Type 'B' (TRSC-B) and wattles to reduce velocity in existing and proposed ditches with spacing of 250 feet divided by percentage of ditch grade. Also utilize TRSC-B's in proposed TSD's and temporary diversions (TD).
8. Protect existing streams; do not place erosion control devices in jurisdictional streams.
9. Sediment basins shall be sized to provide adequate silt storage of 3600 cubic feet per disturbed acre with surface area equal to 435 square feet per cubic foot per second (cfs) of the peak inflow rate, Q10 or Q25, using 10-year or 25-year peak rainfall data (*NCDENR - Erosion and Sediment Control Planning and Design Manual* or NOAA's National

Weather Service web site **http://hdsc.nws.noaa.gov/hdsc/pfds/orb/nc_pfds.html** for partial duration (ARI) time series type). A Sediment Basin Designer Spreadsheet will be provided by the NCDOT REU upon request.

10. Infiltration Basins shall provide adequate silt storage for 1800 cubic feet per disturbed acre with surface area equal to 325 square feet per cubic foot per second (cfs) of the peak inflow rate, Q10 or Q25, using the 10-year or 25-year peak rainfall data (*NCDENR - Erosion and Sediment Control Planning and Design Manual* or NOAA's National Weather Service web site **http://hdsc.nws.noaa.gov/hdsc/pfds/orb/nc_pfds.html** for partial duration (ARI) time series type). Infiltration Basin shall be designed to dewater in 3 days or less. An Infiltration Basin Designer Spreadsheet will be provided by the NCDOT REU upon request.
11. Skimmer Basins shall provide adequate silt storage for 1800 cubic feet per disturbed acre with surface area equal to 325 square feet per cubic foot per second (cfs) of the peak inflow rate, Q10 or Q25, using the 10-year or 25-year peak rainfall data (*NCDENR - Erosion and Sediment Control Planning and Design Manual* or NOAA's National Weather Service web site **http://hdsc.nws.noaa.gov/hdsc/pfds/orb/nc_pfds.html** for partial duration (ARI) time series type). A Skimmer Basin Designer Spreadsheet will be provided by the NCDOT REU upon request.
12. The minimum and maximum length to width ratio of all Sediment Basins shall be 2:1 (L:W) and 6:1 (L:W), respectively.
13. Coir Fiber Baffles shall be installed in all silt basins and sediment dams at drainage outlets. For silt basins with a 20-foot or longer length, three Coir Fiber Baffles shall be installed with a spacing of 1/4 the basin length. For silt basins with a length less than 20 feet, a minimum of two Coir Fiber Baffles shall be installed, with a spacing of 1/3 the basin length. The Design-Build Team will not be required to show the individual baffles on the EC Plans.
14. Include any culvert and/or pipe construction sequence plan sheets in the Clearing & Grubbing Erosion Control Plans; all pipes 48 inch or larger, or any combination of pipes that total 48 inch or more conveying jurisdictional stream flow require a construction sequence. Prior to installation of pipes smaller than 48 inches in jurisdictional areas, the Design Build Team shall submit a phasing plan for managing the watercourse to the Resident Engineer for review and acceptance. The phasing plan shall be in accordance with the Best Management Practices for Construction and Maintenance Activities.
15. In accordance with the NCDOT Erosion and Sediment Control Design and Construction Manual, utilize Excelsior / Coir Fiber Wattles with Flocculant and / or TRSC-As with Matting and Flocculant in temporary and permanent, existing and proposed ditches in areas where sediment basins are not feasible at drainage outlets, and in areas where sediment basins at drainage outlets with sediment traps (e.g. PIST A, RIST-A, etc.) cannot be properly sized to surface area and/or sediment storage requirements due to safety concerns, ROW limitations, utility conflicts, or other construction limitations approved by the NCDOT.
16. Utilize temporary slope drains and earth berms at top of fill slopes 8 feet (5 feet in Divisions 1, 2, 3, and 6) or higher and steeper than 4:1 (H:V), or where there are superelevation rates above 4% and fills are greater than 5 feet (3 feet in Divisions 1, 2, 3, and 6). Maximum slope drain spacing shall be 200 feet.
17. Utilize rock energy dissipater and/or silt basin at outlet of slope drain.

18. In accordance with the requirements below, install erosion control in all ditch lines, including but not limited to temporary ditch lines (TDs) utilized to divert offsite runoff around construction areas:
    - Install straw matting in all ditch lines where the velocity is greater than 2.0 feet / sec, and the shear stress is 1.25 psf or less.
    - Install excelsior matting in all ditch lines with a shear stress above 1.25 psf, but not greater than 2.55 psf.
    - Excluding locations where rip rap is not allowed (e.g. clear recovery zone, etc.), install Permanent Soil Reinforcement Mat or rip rap in all ditch lines with a sheer stress greater than 2.55 psf.
    - At locations where rip rap is not allowed, install Permanent Soil Reinforcement Mat in all ditch lines with a sheer stress greater than 2.55 psf.
19. Provide matting for erosion control on all disturbed slopes adjacent to jurisdictional areas regardless of height and slope. Rolled erosion control products used within wetlands or riparian areas shall be non-poly mesh nettings.
20. For bridge projects with Design Standards in Sensitive Watersheds (15A NCAC 04B .0124) commitment, all streams and unnamed tributaries shall have a 50-foot Environmentally Sensitive Area (ESA) on Clearing & Grubbing EC Plans only, and utilize 25-year peak rainfall data for surface area requirement for all sediment basins.
21. To contain concrete waste water and associated concrete mix from washing out ready-mix trucks, drum, pumps, or other equipment, provide Concrete Washout Structures at egress points. Concrete Washout Structures must collect and retain all concrete waste water and solids so that this material does not migrate to surface waters or into the ground water. The Concrete Washout Structures are not intended for concrete waste water not associated with washout operations. The Concrete Washout Structures may include devices above or below ground and/or commercially available devices designed specifically to capture concrete waste water. Concrete Washout Structure options may be found in the special provisions, available at the website noted in Section IV. For construction details of an above grade and below grade Concrete Washout Structure, reference the following link:

    https://connect.ncdot.gov/resources/roadside/SoilWaterDocuments2024/Concrete%20Washout%20Structure%20Detail.pdf

B. Intermediate Phase

Intermediate Erosion Control Plans shall only be required if design modifications and/or site conditions require additional erosion control design or design revisions to the RFC Erosion Control Plans. Intermediate Plans shall be submitted for review and shall be accepted prior to construction of any aspect impacted by the revised erosion control design. For any intermediate phase, comply with Section A, "RFC Plans" above.

C. The following documents shall accompany the Erosion Control Plans and be completed and submitted to NCDOT REU for initial submittal:
    1. High Quality Water Worksheet from Soil and Water Engineering web page

2. Low Impact Bridge Project Checklist from Soil and Water Engineering web page
3. Matting Determination Spreadsheet from Soil and Water Engineering web page
4. Erosion Control Quantities Spreadsheet from Soil and Water Engineering web page
5. Basin or Checkdam Design Spreadsheet from Soil and Water Engineering web page
6. Preliminary Permit Drawings showing all jurisdictional stream and wetland impacts (half-size)
7. General Structure Drawing with locations of piles, drilled shafts, etc. (half-size)
8. Erosion Control Plans shall be submitted according to the "*Express Design-Build Bridge Replacement Submittal Guidelines – Year 5, March 24, 2016*".
9. Microstation files may be requested by NCDOT REU staff if needed

The documents located on the Soil and Water Engineering web page can be found at:

https://connect.ncdot.gov/resources/roadside/SoilWaterDocuments/Forms/AllItems.aspx

All documents from the Soil and Water Engineering web page can be submitted electronically or hard copy.

II. Detail Sheets and Notes:

A. Provide project specific special notes and details.
B. Provide matting summary sheet(s): matting for erosion control and permanent soil reinforcement mat.
C. Provide reforestation sheet(s): regular, wetland, streambank and/or buffer showing appropriate species.

III. Title Sheet:

A. Show correct notes: NCG-01, HQW, ESA, clearing and grubbing, etc.
B. Show correct standards for project.
C. Show list of standard NCDOT symbology
D. Show name and certification number of Level III certified individual responsible for designing and/or reviewing Erosion and Sedimentation Control Plans.

IV. Special Provisions:

A. Erosion Control Special Provisions are available at the following website:

https://connect.ncdot.gov/resources/roadside/Pages/Soil-Water.aspx

B. References in Erosion Control Special Provisions from the aforementioned website to Method of Measurement, Basis of Payment, or any other statement regarding direct payment for Erosion & Sediment Control measures shall be disregarded.
C. Erosion Control / Stormwater Certification found elsewhere in this RFP.

V. Miscellaneous:

A. Plan submittals shall include all pertinent design information required for review, such as design calculations, drainage areas, etc.
B. The NCDOT REU will provide a sample set of Erosion and Sedimentation Control Plans (including any special details or special provisions used by the NCDOT REU) and

MicroStation Erosion Control Workspace to the Design-Build Team for reference upon request.

C. Plans shall address any environmental issues raised during the permitting process.
D. Sufficient time shall be allowed for the Design-Build Team to make any changes to the Erosion and Sedimentation Control Plans deemed necessary by the NCDOT REU.
E. Temporary access and haul roads, other than public roads, constructed or used in connection with the project shall be considered a part of the project and addressed in the Erosion and Sedimentation Control Plans.
F. Borrow or waste areas that are part of the project shall require a separate Reclamation Plan, unless the borrow or waste activity is regulated under the Mining Act of 1971, or is a landfill regulated by the Division of Waste Management (DWM). The Design-Build Team shall submit the permit number for waste / borrow sites covered by the Mining Act or regulated by DWM (NCDEQ) concurrently to the Alternative Delivery Unit and the Resident Engineer. For Reclamation Procedures, see:

https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/Contract%20Reclamation%20Procedures.pdf

G. Whenever the Engineer determines that significant erosion and sedimentation continues despite the installation of approved protective practices, the Design-Build Team shall be required to and shall take additional protective action.
H. An accepted Erosion and Sedimentation Control Plan does not exempt the Design-Build Team from making every effort to contain sediment onsite.
I. Any Erosion Control Design revisions made during the construction of the project shall be submitted to NCDOT REU via the Alternative Delivery Unit. At any time requested by the Engineer or the NCDOT-REU, the Design-Build Team shall provide an updated version of the Erosion and Sedimentation Control Plans for distribution to all parties involved in the construction process.
J. The Design-Build Team shall comply with the *North Carolina Administrative Code Title 15A Department of Environment and Natural Resources Chapter 4, Sediment Control* and the current version of the NCG-010000 General Construction Permit, issued by the North Carolina Department of Environmental Quality.
K. A pre-design meeting shall take place between the NCDOT REU Soil & Water Engineering Section, the Design Build Team, and any other pertinent NCDOT personnel before any Erosion and Sedimentation Control Designs are submitted to NCDOT REU. Erosion and Sedimentation Control Plan submittals shall only be reviewed and accepted by NCDOT REU after the Erosion Control Pre-Design Meeting. The Design Build Team shall be required to submit a tentative Erosion and Sedimentation Control Plan submittal schedule at the pre-design meeting.
L. At minimum, the Design Build Team shall bring one erosion control plan sheet with a Clearing & Grubbing erosion control design to the Erosion and Sedimentation Control Plan pre-design meeting.
M. All RFC Erosion and Sedimentation Control Plans, including any red line revisions, shall be kept on site at all times throughout the duration of the project.
N. Erosion Control / Stormwater Certification shall be required according to the Project Special Provision found elsewhere in this RFP.

O. Prior to installation of any erosion control devices, the Design-Build Team shall verify boundaries of jurisdictional areas in the field and delineated with Safety Fence or flagging. For guidance on Safety Fence and flagging in jurisdictional areas, see:

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fconnect.ncdot.gov%2Fresources%2Froadside%2FSoilWaterDocuments%2FSafety%2520Fence.docx

P. Various projects that impact more than 100 linear feet of stream buffer with a Division of Water Resources (DWR) Classification of Trout (Tr) may require a Trout Buffer Variance from the Regional Land Quality Section office Additional coordination and document preparation with NCDOT REU and Land Quality may be required to obtain this variance approval. These projects will be identified at the erosion control pre-design meeting. Information on the requirements for the variance package may be found in the *NCDOT Erosion and Sediment Control Design and Construction Manual*.

Q. Sediment basins that drain directly into jurisdictional streams or wetlands or have a total drainage area of one acre or more, regardless of outfall location, shall be designed and constructed with outlet structures that only withdraw water from the surface. For sediment basins that do not drain directly into jurisdictional water or have less than one acre of total drainage area, surface dewatering outlets or stone outlets may be utilized.

R. Ground cover stabilization shall comply with the timeframe guidelines specified by the North Carolina Department of Environmental Quality NCG-010000 General Construction Permit Excluding the slopes noted below, temporary and permanent ground cover stabilization shall be provided within seven calendar days from the last land-disturbing activity. The Design-Build Team shall label all slopes subject to the seven-day ground cover stabilization requirements on all Erosion and Sedimentation Control Plans submitted to the Department for review and acceptance.

For the slopes noted below, temporary and permanent ground cover stabilization shall be provided within 14 calendar days from the last land-disturbing activity:

Slopes between 2:1 (H:V) and 3:1 (H:V), with a slope length of ten feet or less
Slopes 3:1 (H:V) or flatter, with a slope length of 50 feet or less
Slopes 4:1 (H:V)or flatter

Temporary and permanent ground cover stabilization shall be provided in accordance with the provisions in this contract and as directed.

EROSION CONTROL DAMAGES:

The Design-Build Team shall observe and comply with Federal and State Laws, Local Laws, Ordinances, and Regulations; as well as Orders and Decrees of Bodies having any jurisdiction or authority in accordance with Section 107 of the 2024 NCDOT *Standard Specifications for Roads and Structures (Standard Specifications)*.

The Design-Build Team shall take all reasonable precautions to comply with all regulations of all authorities having jurisdiction over public and private land governing the protection of erosion and sedimentation. Any fines, remediation required or charges levied against the Department for failing to comply with all rules and regulations concerning erosion and sediment control, due to the Design-Build Team's negligence, carelessness, or failure to implement the Erosion and Sedimentation Control Plans and Specifications; or failure to maintain an approved Storm Water Pollution Prevention Plan (SWPPP), regardless of absence of neglect, shall be deducted from monies due the Design-Build Team. In addition to said fines, remediation required, or charges levied, any associated engineering costs or actions taken by the Department in order for the Department to comply with rules and regulations, as a result of the Design-Build Team's negligence, carelessness, or failure to implement the Erosion and Sedimentation Control Plans and Specifications; and/or the SWPPP, regardless of absence of neglect, shall be deducted from the monies due to the Design-Build Team.

GEOTECHNICAL ENGINEERING SCOPE OF WORK

I. GENERAL:

Obtain the services of a firm prequalified for geotechnical work by the NCDOT Geotechnical Engineering Unit at:

https://www.ebs.nc.gov/VendorDirectory/search.html?s=pc&a=new

The prequalified geotechnical firm shall prepare foundation design recommendation reports for use in designing structure foundations and roadway foundations, retaining walls, and temporary structures if necessary.

If the NCDOT's standard bridge plans are used, then the Design-Build Team shall design the foundations and seal the plans.

The Engineer of Record who prepares the foundation design recommendation reports shall be a Professional Engineer registered in the State of North Carolina who has completed a minimum of three geotechnical design projects of scope and complexity similar to that anticipated for this project using the load and resistance factor design (LRFD) method and in accordance with the latest edition of the AASHTO *LRFD Bridge Design Specification*.

The prequalified geotechnical firm shall determine if additional subsurface information, other than that provided, is required. If a determination is made that additional subsurface information is required, the Design-Build Team shall use a prequalified geotechnical firm to perform all additional subsurface investigation and laboratory testing in general accordance with the current NCDOT Geotechnical Engineering Unit *Geotechnical Investigation and Recommendations Manual*. Submit additional information collected by the Design-Build Team to the NCDOT Geotechnical Engineering Unit for review and acceptance in the following format:

- 8 ½ x 11-inch Paper Format
- "Structure Subsurface Investigation Title Sheet." Includes Caution Notice and an area to list Contents.
- NC Division of Highways Geotechnical Engineering Unit Soil and Rock Classification Legend and Abbreviations
- Plan View of boring locations and any other significant geologic or topographic features
- gINT boring logs
- gINT core logs (if applicable)
- Core photographs (if applicable)
- AASHTO soil test results for both disturbed and undisturbed samples
- Rock test results summary chart

The Design-Build Team shall provide the final Subsurface Investigation Report in electronic format to the NCDOT for its records.

A minimum of two standard penetration test (SPT) / rock core borings shall be required per bent for all bridges. All borings must be located within 25 feet of the center of each bent to satisfy this requirement. No boring may be used for the foundation design of more than one bent. Extend all borings to a depth below the foundation element to show a complete subsurface profile. The Design-Build Team shall be responsible for obtaining the borings noted above for all bents. Any deviations to the requirements noted above shall require acceptance from the NCDOT Geotechnical Engineering Unit prior to construction.

The maximum spacing between borings for retaining walls shall be 100 feet, with a minimum of two borings: one at each end of the wall. Drill borings for retaining walls a minimum depth below the bottom of the wall equal to twice the maximum height of the wall.

Due to this contract being used for emergency response, the above investigation requirements may not be practical in all cases. Any deviations necessary to the requirements noted above shall be discussed with and require acceptance from the NCDOT Geotechnical Engineering Unit.

The Design-Build Team is permitted to design bridges on this project using software that accounts for the structural effects of soil / pier interaction.

II. DESCRIPTION OF WORK:

The Design-Build Team shall design foundations, embankments, slopes, and retaining walls in accordance with:

- the current edition of the AASHTO *LRFD Bridge Design Specifications*, NCDOT *LRFD Driven Pile Foundation Design Policy*
- NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* located in the 2024 Roadway Design Manual
- Section 5.2.4 of the 2024 NCDOT Roadway Design Manual, (if applicable)
- all applicable NCDOT Geotechnical Engineering Unit Standard Provisions
- NCDOT *Structures Management Manual*
- NCDOT *Roadway Design Manual*
- NCDOT *LRFD Driven Pile Foundation Design Policy* is located on the NCDOT Geotechnical Engineering Unit's website at:

https://connect.ncdot.gov/resources/Geological/Pages/default.aspx

For *Geotechnical Guidelines for Design-Build Projects*, the Design-Build Team shall adhere to the guidelines located at the following website:

https://connect.ncdot.gov/letting/Pages/Design-Build-Resources.aspx

A. Structure Foundations

Permanent steel casings shall be required for drilled piers that are constructed in six inches or more of water. Permanent steel casings shall be required for drilled piers constructed on sloped stream banks subject to degradation from flooding.

When the weathered rock or rock elevation is below the 100-year hydraulic scour elevation, the 100-year and 500-year design scour elevations are equal to the 100-year and 500-year hydraulic scour elevations from the structure survey report accepted by the NCDOT Hydraulics Unit. When the weathered rock or rock elevation is above the 100-year hydraulic scour elevation, the 100-year design scour elevation may be considered equal to the top of the weathered rock or rock elevation, whichever is higher, and the 500-year design scour elevation may be set two feet below the 100-year design scour elevation.

End bent slopes shall be 1.5:1 (H:V) or flatter with rip rap slope protection. Place end bent slope protection from the toe of slope to berm to protect the approach embankment from scour.

Analyze drilled pier and pile bent foundations using either LPile or FB-Pier. Design drilled piers and vertical piles with a sufficient embedment in soil and / or rock to achieve "fixity".

Add steel pile points to all driven piles with an estimated embedded length of 20 feet or less.

B. Roadway Foundation

All proposed unreinforced fill and cut slopes shall be 2:1 (H:V) or flatter except bridge end bent slopes (see Section A – Structure Foundations). In areas where a sliver fill is required to tie the proposed grade into the existing ground, fill slopes may be steeper than 2:1 (H:V) provided the existing slopes are stable and erosion control measures are utilized on the sliver fill slopes. However, in no case shall a slope be steeper than 1.5:1. The Design- Build Team shall submit slope stability analysis verifying stability of any modified slopes, including details to control erosion of the slope. For all other proposed slopes steeper than 2:1 (H:V), the slopes shall be reinforced and detailed design calculations shall be submitted to the NCDOT Geotechnical Engineering Unit, via the Alternative Delivery Unit, for review and acceptance, prior to construction.

Bridge approach fills shall be required for end bents on all bridges in accordance with NCDOT 2024 Standard Drawings 423 and NCDOT design criteria.

III. CONSTRUCTION REQUIREMENTS:

All construction and materials shall be in accordance with the NCDOT 2024 *Standard Specifications for Roads and Structures* and current NCDOT *Project Special Provisions* unless noted otherwise elsewhere in this RFP. The Design-Build Team shall be responsible for investigating, proposing and incorporating remedial measures for any construction problems related to foundations, retaining walls, subgrades, settlement, slopes, and construction vibrations. Submit the proposed remedial measures to the Geotechnical Engineering Unit for review and acceptance prior to incorporation.

The Design-Build Team shall be responsible for any damage or claim caused by construction, including damage caused by vibration (see 2024 *Standard Specifications for Roads and Structures* Article 107-14). The Design-Build Team shall be responsible for deciding what additional, if any, pre and post-construction monitoring and inventories need to be conducted

to satisfy their liability concerns. Any monitoring and inventory work shall be performed by a qualified private engineering firm experienced in the effects of construction on existing structures.

The prequalified geotechnical firm that prepared the original foundation designs shall perform any changes to the foundation designs. All changes shall be based upon additional information, subsurface investigation and / or testing. Send copies of revised designs, including additional subsurface information, calculations and any other supporting documentation sealed by a professional engineer registered in the State of North Carolina, to the NCDOT for review and acceptance.

The prequalified geotechnical firm that prepared the foundation designs shall review and approve all pile driving hammers and drilled pier construction sequences. After the geotechnical firm has approved these submittals, the Design-Build Team shall submit to the NCDOT for review prior to beginning construction.

Perform hammer approvals with GRLWEAP Version 2010 or later and in accordance with the NCDOT LRFD Driven Pile Foundation Design Policy. Provide pile driving inspection charts or tables for all approved pile hammers.

Limit driving stresses in accordance with the AASHTO LRFD *Bridge Design Specifications*. If a tip elevation is noted on the plans, drive piles to the minimum required driving resistance and tip elevation.

Drive piles to the minimum required driving resistance and a penetration into natural ground or below design scour of at least 10 ft. If a pile is socketed into rock (as defined in Section 411-1 of the 2024 *Standard Specifications for Roads and Structures*) at least 5 feet and all other design requirements are met then the total penetration amount may be relaxed at the discretion of the Geotechnical Engineering Unit. Unless otherwise approved, stop driving piles when refusal is reached. Refusal is defined as 240 blows per foot or any equivalent set. The foundation design firm or the PDA consultant shall develop pile driving inspection charts or tables for acceptance by the NCDOT prior to pile installation.

Install Crosshole Sonic Logging (CSL) tubes in all drilled piers. CSL test a minimum of 25% of drilled piers at each bridge or one per bent, whichever is greater. If a CSL test identifies any defect in the drilled pier, the Department has the right to request additional CSL testing and / or tomography as needed. The Department will determine which piers will be CSL tested. Submit CSL and tomography test information and results to the Geotechnical Engineering Unit, via the Alternative Delivery Unit, for review and acceptance.

Send copies of any inspection forms related to foundations, embankment, and subgrade to the NCDOT for review.

PAVEMENT MANAGEMENT SCOPE OF WORK

The pavement design for the mainline and mainline shoulders is as follows:

Road Name	Bridge Number	Surface	Base
SR 1153 Hickory Springs Road	990062	3.0" S9.5B	4.0" B25.0C
SR 2802 Blue Rock Road	990097	3.0" S9.5B	4.0" B25.0C
SR 1153 Hickory Springs Road	990100	3.0" S9.5B	4.0" B25.0C

The minimum depth for overlaying the existing pavement shall be equal to the full thickness of surface course as provided in the table above.

If wedging is equal to or greater than the full thickness of the surface course as provided in the table above plus 3.0", then wedging shall consist of the full thickness of surface course as provided in the table above, and the remainder shall be B25.0C.

The Design-Build Team shall be responsible for the design of all temporary pavements and for the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary. In the event that the existing shoulders and roadways are found to be inadequate for the proposed temporary traffic volumes and duration, the Design-Build Team shall be responsible for upgrading the pavement to an acceptable level. Temporary pavements shall be designed in accordance with the most recent version of the NCDOT Pavement Design Procedure. Temporary pavement designs shall be submitted for review and comments using the contract submittal process. The expected duration for traffic on temporary pavement must be included as part of the submittal.

The Design-Build Team shall provide incidental milling where tying to the existing pavement to provide a smooth transition to the proposed pavement. Driveways impacted by the Design-Build Team's construction shall be repaired to the pre-construction condition.

RIGHT OF WAY SCOPE OF WORK (12-12-24)

**** NOTE ** Prior to beginning the right of way acquisition process, the Design-Build Team shall meet with the appropriate NCDOT Location and Surveys, Right of Way and Alternative Delivery Unit personnel.**

It is expected that the Design-Build Team, to the greatest extent practicable, perform construction activities within existing DOT right of way or maintenance limits as applicable. If additional right of way or easements are required, the Design-Build Team shall follow the procedures contained in this scope of work. The Design-Build Team shall be responsible for all right of way staking.

No additional contract time will be allowed for project designs that require the acquisition of additional ROW or easements.

Excluding acquisition services required outside of the project construction limits due solely to a rise in the floodplain water elevation on insurable structures, the Design-Build Team shall employ qualified, competent personnel who are currently **approved by the NCDOT Right of Way Branch,** herein after referred to as the Department, to provide all services necessary to perform all appraisal (except appraisal review and updated appraisals required solely for condemned parcels), negotiation and relocation services required for all right of way and easements, including but not limited to permanent utility easements, necessary for completion of the project in accordance with Session Law 2017-137 and G.S. 136-28.1 of the General Statutes of North Carolina, as amended, and in accordance with the requirements set forth in the *Uniform Appraisal Standards and General Legal Principles for Highway Right of Way*, the *North Carolina Department of Transportation's Right of Way Manual*, the *North Carolina Department of Transportation's Rules and Regulations for the Use of Right of Way Consultants*, the *Code of Federal Regulations*, and *Chapter 133 of the General Statutes of North Carolina from Section 133-5 through 133-18*, hereby incorporated by reference, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. For a list of firms currently approved, the Design-Build Team should contact Mr. Bradley Bass, in the NCDOT Right of Way Branch, at 919-707-4361. The Design-Build Team shall perform the services as set forth herein and furnish and deliver to the Department reports accompanied by all documents necessary for the settlement of claims and the recordation of deeds, or necessary for condemnation proceedings covering said properties. The Design-Build Team, acting as an agent on behalf of the State of North Carolina, shall provide right of way acquisition services for all bridge replacement sites.

Acquisition services required outside of the project construction limits due solely to a rise in the floodplain water elevation on insurable structures will be considered extra work and paid for in accordance with Article 104-7 of the January 2024 NCDOT *Standard Specifications for Roads and Structures*.

The Design-Build Team shall carry out the responsibilities as follows:

- With respect to the payments, costs and fees associated with the acquisition of right of way in this contract, the Department will be responsible for only direct payments to property owners for negotiated settlements, recording fees, any relocation benefits, and deposits and fees involved in the filing of condemnation of any claims. The Department will assume responsibility for all costs associated with the litigation of condemned claims, including testimony by the appraiser(s). The Design-Build Team shall be responsible for all other acquisition related payments, costs and fees, including but not limited to attorney fees required for all non-condemnation acquisitions.

- A Department representative will be available to provide technical guidance on right of way acquisition procedures and to make timely decisions on approving relocation benefits and approving administrative adjustment settlements on behalf of the Department over and above the authority granted to the Department Right of Way Consultant Project Managers.

- The Design-Build Team shall submit a right of way project tracking report and right of way quality control plan to the Department. The Department standard forms and documents shall be used to the extent possible.

- The Design-Build Team shall provide a current title certificate for each parcel as of the date of closing or the date of filing of condemnation, unless required otherwise in the June 10, 2024 NCDOT Right of Way Manual.

- The Design-Build Team shall prepare all Final Condemnation Reports. The Department will prepare all Condemnation Maps. For all plan revisions on condemned parcels that modify the area acquired, modify the Control of Access and/or impact the appraised value, the Design-Build Team shall be responsible for the following:

    - The Design-Build Team shall notify the Division Right of Way Agent, the Area Negotiator, Area Appraiser and the Attorney General, in writing, that revisions have been made that impact a condemned parcel and provide updated plan sheets and revised area takes.

    - The Design-Build Team shall consult with the Attorney General and the Area Appraiser to determine the status of the negotiations and appraisal(s).

    - If the Attorney General and/or Area Appraiser recommend an updated appraisal, the Design-Build Team shall provide an updated Summary Sheet to the Area Appraiser for the Department's use in obtaining an updated appraisal(s).

    - Upon receipt of the approved updated appraisal(s), the Design-Build Team shall develop a revised written offer. If settlement is not reached, the Design-Build Team shall submit an updated Final Condemnation Report. If settlement is reached, the Design-Build Team

shall notify the Attorney General and Area Appraiser in writing and submit an updated Final Condemnation Report with all necessary documentation.

- The Department will be responsible for payment for the additional deposit to the Attorney General's Office and the Attorney General will prepare and file an Amendment to the Declaration of Taking.

- The following shall be required:

  - Unless otherwise approved by the NCDOT Assistant State Negotiator, in writing, the Design-Build Team shall provide right of way and easement descriptions in metes and bounds format (bearings and distances). The Design-Build Team shall provide exhibits, diagrams and/or other information required to verify the aforementioned descriptions.

  - In accordance with the NCDOT June 10, 2024, Right of Way Manual, the Design-Build Team may prepare red-line adjustments for parcels that are not condemned. The Department must approve a red-line adjustment in writing prior to the Design-Build Team making an offer based on the red-line adjustment.

  - The Design-Build Team shall prepare, execute and record documents conveying title to acquired properties to the Department with the Register of Deeds.

  - The Design-Build Team shall deliver all executed and recorded deeds and easements to the Department.

  - For all property purchased in conjunction with the project, title shall be acquired in fee simple or easement and shall be conveyed to "The North Carolina Department of Transportation", free and clear of all liens and encumbrances except permitted encumbrances.

- The Design-Build Team shall develop the following right of way items:

  - Right of Way series of plan sheets ("R/W" series of plan sheets) that delineate the existing property information, property ties, proposed centerline data, existing and proposed right of way, existing and proposed easements, and existing and proposed control of access. The "RW" series plan sheets shall be signed and sealed by a Professional Land Surveyor registered in the State of North Carolina. The Professional Land Surveyor's signature and seal shall attest that the right of way monuments were placed under their responsible charge.

  - A table of control points for the proposed centerline alignments ("D series of plan sheets).

- A table of proposed right of way and permanent easement control points ("E" series of plan sheets) that shall be signed and sealed by a Professional Land Surveyor registered in the State of North Carolina.

- It is understood and agreed by and between the parties hereto that all reports, surveys, studies, specifications, memoranda, estimates, etc., secured by and for the Design-Build Team shall become and remain the sole property of the Department upon termination or completion of the work, and the Department shall have the right to use same for any public purpose without compensation to the Design-Build Team.

- The Design-Build Team shall prepare appraisals in accordance with the Department's *Uniform Appraisal Standards and General Legal Principles for Highway Right of Way Acquisitions*. The Design-Build Team's appraiser shall be on the Department's approved state certified appraiser list. The Design-Build Team may request its state certified appraiser be added to the approved state certified appraiser list, subject to approval by the Department's State Appraiser.

- The Design-Build Team shall provide two appraisals for all appraisals over $1,000,000.00.

- The NCDOT, or its agent, will provide appraisal reviews complying with The Department's *Uniform Appraisal Standards and General Legal Principles for Highway Right of Way Acquisitions*. The reviewer will ensure that the appraisal meets the Department's guidelines and requirements, conforms to acceptable appraisal standards and techniques, does not include any non-compensable items or exclude any compensable items and that the value conclusions are reasonable and based on facts presented in the appraisal. The reviewer has the authority to approve, adjust, request additional data or corrections, or not to recommend and request another appraisal. Within 10 business days from the date of receipt, all appraisals will be reviewed by NCDOT Review Appraisers or Review Appraisers under contract to the corresponding NCDOT Area Appraisal Office. The NCDOT will sign as approving any and all appraisals to be used in acquisition.

- The NCDOT will provide relocation reviews and approvals for ALL Replacement Housing Payment calculations and ALL Rent Supplement Payment calculations PRIOR TO these offers being made to the displacees. Within five (5) business days of the receipt of the Replacement Housing Payment or Rent Supplement payment calculation documentation, which shall include all documentation required for an Evaluation package, the Department will approve the calculation, and the signed Frm15-D will be returned to the Design-Build Team, or a request for an updated calculation or documentation will be presented to the Design-Build Team for further handling. At this time, the Relocation Coordinator in the NCDOT Right of Way Unit is the approving authority for the aforementioned calculations.

- ALL Claims for Payment involving relocation benefits must be submitted to the NCDOT Relocation Coordinator in the Right of Way Unit for approval and processing.

- The Design-Build Team shall provide a right of way certification prior to entering the property.

- The Design-Build Team shall prepare Right of Way Transmittal Summary and/or Narrative Appraisals for all right of way and easement acquisitions.

- In accordance with Chapter 133 of the *General Statutes of North Carolina,* Section 133-40, the Council of State must approve acquisition of property with contaminated soil. Thus, prior to acquiring right of way, control of access and/or easement from any parcel with contaminated soil, the Design-Build Team shall provide a written priority list of all properties with contaminated soil that require right of way, control of access and/or easement acquisition to the Division Right of Way Agent, the Area Negotiator, the Area Appraiser, and the State Property Agent. At a minimum the aforementioned priority list shall contain the following information:

    - Project Contract Number, description and county
    - Parcel number(s) requiring acquisition of contaminated soil
    - Acquisition Appraisal(s)
    - GeoEnvironmental Impact Evaluation and Hazardous Materials Report provided by the Department
    - Description, with metes and bounds, of the area(s) to be acquired

The Department will require 90 days from receipt of the information noted above to coordinate with the Council of State and obtain their approval for the acquisition of contaminated property.

Claims Less Than $35,000

For claims with compensation estimated to be less than $35,000 with no damages, the Design-Build Negotiating Team's Project Manager may prepare Right of Way Claim Reports. The reports must be approved by the Division Right of Way Agent prior to any offer (written or oral) and must be accompanied by documentation showing the source of the estimates.

TRAFFIC ENGINEERING SCOPE OF WORK

I. TRAFFIC MANAGEMENT PLANS

A. DESIGN PARAMETERS

1. The Design-Build Project consists of replacing a total of three (3) bridges located in Yancey County. Bridge Nos. 990062 and 990097 shall be replaced utilizing stage construction to maintain traffic on-site. For Bridge No. 990100, the existing temporary bridge and approach roadway shall be shifted to the extent necessary to place the structure on the pre-storm alignment. Local access to all residences and businesses will be maintained between the closure points at all times during construction.

2. Improvements to the above stated detour routes will not be required. In the event the Design-Build Team proposes any deviations/improvements to the above stated detour routes, it shall be the sole responsibility of the Design-Build Team to obtain approval from the NCDOT Division Engineer and perform all required environmental studies and obtain environmental permits for any proposed changes.

3. Design and prepare the Temporary Traffic Control Plan for each bridge site location project. Development of the Traffic Control Plan should proceed as follows:

    a) Submit a Traffic Control Plan to the Resident Engineer and the Alternative Delivery Unit for review and acceptance. Construction may begin once the Traffic Control Plan has been sealed by the Design-Build Team and accepted by the Department.

    b) The Traffic Control Plan shall include a detour detail, which includes detour signing (detour advance warning & trailblazing with road names), sign designs, and locations of traffic control devices; construction phasing/sequence, and project notes. Street names are required on detour signing. *Roadway Standard Drawings* Section 1100 is for traffic control and will need to be incorporated into the plans for most work activities. The detour detail will incorporate *Roadway Standard Drawing* 1101.03. Ensure the development of the Traffic Control Plan is in compliance with the North Carolina Department of Transportation Roadway Standard Drawings, the latest edition of the *Manual on Uniform Traffic Control Devices (M.U.T.C.D.) and the Standard Specifications.*

    c) Use traffic control devices that conform to all NCDOT requirements and are listed on the Department's Approved Products List as shown on NCDOT's Traffic Control Website.

    d) The NCDOT's Traffic Control Website should be utilized when developing the Traffic Control Plan. The Traffic Control Website is updated and provides

key information necessary in preparing the Traffic Control Plan. The Traffic Control Website Address:

https://connect.ncdot.gov/projects/WZTC/Pages/default.aspx

B. PROJECT REQUIREMENTS FOR ALL BRIDGE SITES

1. The Design-Build Team shall select a Private Engineering Firm (PEF) that has experience designing and sealing Traffic Management Plans for the North Carolina Department of Transportation (NCDOT) on comparable projects.

2. The Traffic Management Plans shall adhere to the *"Express Design-Build Bridge Replacement Submittal Guidelines–Year 5, March 24, 2016",* and the *"Guidelines for Preparation of Traffic Control and Pavement Marking Plans for Design-Build Projects", Roadway Standard Drawings*, *Standard Specifications*, and the "*Manual for Uniform Traffic Control Devices".*

3. Adapt the traffic control plans, when directed by the engineer, to meet field conditions to provide safe and efficient traffic movement. Changes may be required when physical dimensions in the detail drawings, standard details and roadway details are not attainable or result in duplicate or undesired overlapping of devices. Modification may include: moving, supplementing, covering or removal of devices.

4. The Design-Build Team will be allowed five additional days of lane closure per bridge site to complete punch list items identified by the Engineer. The Design-Build Team shall notify the Engineer 15 days prior to installation of a lane closure and submit details for approval by the Engineer.

5. As approved by the Engineer, lane closures will be allowed for geotechnical borings and the relocation of utilities prior to the road closure at each bridge site.

C. LANE AND SHOULDER CLOSURE REQUIREMENTS

On all roads under staged construction, the Design-Build Team shall not install more than one lane closure in any one direction.

The Design-Build Team shall remove lane closure devices from the lane when work is not being performed behind the lane closure or when a lane closure is no longer needed.

When personnel and/or equipment are working within 15-feet of an open travel lane, the Design-Build Team shall close the nearest open shoulder using *Roadway Standard Drawing* No. 1101.04, unless the work area is protected by an approved temporary traffic barrier or guardrail.

When personnel and/or equipment are working within 5 ft of an open travel lane on an undivided facility, close the nearest open travel lane using Roadway Standard Drawing No. 1101.02 unless the work area is protected by barrier or guardrail.

When personnel and/or equipment are working on the shoulder adjacent to a divided facility and within 10-feet of an open travel lane, the Design-Build Team shall close the nearest open travel lane using *Roadway Standard Drawing* No. 1101.02, unless the work area is protected by an approved temporary traffic barrier or guardrail.

When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, the Design-Build Team shall close the lane using the appropriate roadway standard drawing from the *Roadway Standard Drawings.* The Design-Build Team shall conduct the work so that all personnel and / or equipment remain within the closed travel lane.

The Design-Build Team shall not perform work involving heavy equipment within 15-feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way.

D. DETOUR SIGNING

The Design-Build Team shall be responsible for the installation and maintenance of all supplemental detour signing within and off the project limits.

Cover or remove all detour signs within and off the project limits when a detour is not in operation.

Ensure all necessary signing is in place prior to altering any traffic pattern.

E. TRAFFIC BARRIER

The Department will not provide any type of barrier for this project. The Design-Build Team shall use only an NCDOT approved temporary traffic barrier system and adhere to the following requirements.

Install temporary traffic barrier system a maximum of two (2) weeks prior to beginning work in any location. Once the temporary traffic barrier system is installed at any location, proceed in a continuous manner to complete the proposed work in that location.

Once the temporary traffic barrier system is installed and no work has been or will be performed behind the temporary traffic barrier system for a period longer than two (2) months, remove/reset the temporary traffic barrier system unless the barrier is protecting a hazard.

Protect the approach end of temporary traffic barrier system at all times during the installation and removal of the barrier by either a truck mounted impact attenuator (maximum 72 hours) or a temporary crash cushion.

Protect the approach end of temporary traffic barrier system from oncoming traffic at all times by a temporary crash cushion unless the approach end of temporary traffic barrier system is offset from oncoming traffic as follows:

Posted speed limit (MPH)	Minimum offset (feet)
40 or less	15
45 – 50	20
55	25
60 mph or higher	30

Install temporary traffic barrier system with the traffic flow, beginning with the upstream side of traffic. Remove the temporary traffic barrier system against the traffic flow, beginning with the downstream side of traffic.

Install drums to close or keep closed tangent sections of the roadway until the temporary traffic barrier system can be placed or after the temporary barrier system has been removed. The distance, in feet, between drums shall be no greater than twice the posted speed limit (MPH).

The Design-Build Team shall be responsible for providing proper connection between the existing bridge rail and the temporary barrier system and include this information in the appropriate plans.

F. TRAFFIC CONTROL DEVICES

The Design-Build Team shall use traffic control devices that conform to all NCDOT requirements and are listed on the Approved Products List. The Approved Products List is shown on NCDOT's Work Zone Traffic Control website at:

https://apps.ncdot.gov/vendor/approvedproducts/

The use of any devices that are not shown on the Approved Product List shall require written approval from the Alternative Delivery Unit.

II. PERMANENT SIGNING

The Design-Build Team will replace any existing signs damaged by construction operations. The signs shall be furnished and installed by the Design-Build Team according to NCDOT's specifications.

III. FINAL PAVEMENT MARKING PLANS

General

Prepare Final Pavement Marking Plans in accordance with the latest *Manual on Uniform Traffic Control Devices (MUTCD)* and the *Roadway Standard Drawings*.

Final Pavement Marking Plan Requirements

Develop Pavement Marking Plans that maintain all types of traffic (motorists, bicyclists, and pedestrians within the highway, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) as defined by the *Manual for Uniform Traffic Control Devices (MUTCD).*

Roadway Standard Drawings – Section 1200 pertain to pavement markings and markers and shall be utilized.

Use pavement marking and pavement marker products that conform to all NCDOT's requirements and specifications and are listed on the Department's Approved Products List. The use of any devices that are not shown on the Approved Product List shall require written approval from the Signing and Delineation Unit.

Install pavement markings in accordance with the *Standard Specifications,* and in accordance with the manufacturer's procedures and specifications.

Install pavement markings and pavement markers on the final surface as follows:

Bridge #	**Marking**	**Marker**
Bridge No. 990062	Paint	None
Bridge No. 990097	Paint	None
Bridge No. 990100	Paint	None

Passing zone(s) will be determined in the field and must be approved by the engineer.

The Design-Build Team shall install temporary pavement markings and temporary pavement markers on the interim surface or temporary pattern as follows:

Road	**Marking**	**Marker**
All Roads and Temporary Structures	Minimum of Paint	None

Place at least two applications of paint for temporary traffic patterns that will remain in place over three (3) months. Place additional applications of paint upon sufficient drying time, as determined by the Engineer.

Tie proposed pavement marking lines to existing pavement marking lines.

Replace any pavement markings that have been damaged by the end of each day's operation.

Remove any conflicting markings or markers before shifting traffic to a new pattern.

Removal of the temporary pavement markings shall be accomplished by using water blasting, sand blasting, shot blasting systems or other approved systems to minimize damage to the road surface. All systems shall be required to remove 100% of the pavement marking without removing more than 1/32 inch of the pavement surface.

UTILITIES COORDINATION SCOPE OF WORK

The Design-Build Team shall obtain the services of a Professional Services Firm (PSF) knowledgeable in the NCDOT Utility Coordination Process involved with utility relocation / installation and highway construction. During procurement phase and the life of the project, the Design-Build Team will only be allowed direct contact with the utility owners when the aforementioned PSF is present. The PSF shall be responsible for coordinating all utility relocations, removals, and/or adjustments where the Design-Build Team and Utility Company, with concurrence from the Department, determine that such work is essential for highway safety and performance of the required highway construction. Coordination shall be for all utilities whether or not they are specifically identified in this scope of work and shall include any necessary utility agreements when applicable. NCDOT will be the approving authority for all utility agreements and approval of plans.

The Design-Build Team shall be responsible for verifying the utility locations, type of facilities, and identifying the utility owners in order to coordinate the relocation of any utilities, known and unknown, in conflict with the project.

After all utility conflicts have been identified by the Design-Build Team at a bridge site, if requested by the Design-Build Team, the Department will write a letter to the affected utility owners introducing the project to the owners and requesting their cooperation with the Design-Build Team to adjust utilities in a timely manner.

Cost Responsibility:

The Design-Build Team shall be responsible for relocating water and sewer facilities that have prior rights or other compensable interest; however the cost of relocating these facilities, as well as any necessary design and permitting for these utilities, will be paid for as Extra Work in accordance with Article 104-8(A) of the January 2024 NCDOT *Standard Specifications for Roads and Structures*. The NCDOT will be responsible for all other non-betterment utility relocation costs when the utility owner has prior rights of way / compensable interest. The utility owner shall be responsible for the relocation costs if they cannot furnish evidence of prior rights of way or a compensable interest in their facilities. The Design-Build Team shall be responsible for determining the cost responsibility for the utility relocations. The Design-Build Team shall be responsible for all costs associated with utility relocations due to haul roads and/or any other temporary conditions resulting from the Design-Build Team's methods of operation or sequence of work.

Water and Sewer:

If the Design-Build Team's design and/or construction require the relocation and / or protection of existing water or sewer facilities, designs shall be coordinated with the NCDOT Utilities Unit. The Design-Build Team shall submit Utility Construction Requests with justification, with the Utility Owner's requirements and the Utility Owner's commitment to cooperate with the Utility Unit, via the Alternative Delivery Unit. The Utility Owner's requirements and commitments shall be on the respective Utility Owner's letter head or email address. The Design-Build Team shall develop designs; prepare all plans for needed agreements and permits; submit permits directly to the agencies and obtain approval from the agencies. This design cost shall be reviewed by the NCDOT Utilities Unit to be approved for Extra Work.

Designs shall be coordinated with the NCDOT Utilities Unit. The Design-Build Team shall be responsible for submitting electronically the set (half size and full size plans in pdf format) of utility construction drawings to the State Utilities Manager, via the Alternative Delivery Unit, for further handling. Each set shall include a title sheet, plan sheets, profiles and special provisions if required. Once approved by the State Utilities Manager, the Design Build Team will submit the plans to the agencies to obtain approval.

The relocation and / or protection of all water and sewer facilities shall be done in accordance with the NCDOT policies and the latest water and sewer design requirements / specifications of the appropriate Utility Owner. In the event of conflicting design parameters in the requirements noted above, the proposed design shall adhere to the most conservative values. The Design-Build Team may obtain the design requirements / specifications from the respective utility. The materials and appurtenances proposed by the Design-Build Team shall require approval by both NCDOT Utilities Unit and the aforementioned appropriate utility owner prior to installation. This construction cost shall be reviewed by the NCDOT Utilities Unit to be approved for Extra Work.

Upon completion of the water and sewer relocations and protective measures, the Design-Build Team shall concurrently provide 1) lump sum construction costs for the relocations and protective measures that are separated by individual utility owner to the Department; and 2) electronic As-Built Plans to the Department and the utility owner. At a minimum, the As-Built Plans shall include all revisions that occurred during construction, as well as all field adjustments. The As-Built Plans shall be in accordance with NCDOT requirements or the utility owner's requirements, whichever is more conservative. The As-Built Plans shall be provided in .pdf format and MicroStation format to the Department and in the CADD format required by the utility owner.

Utility Relocation Plans:

Excluding water and sewer conflicts, if the Design-Build Team's design and / or construction creates a utility conflict, the Design-Build Team shall request that the utility owner submit relocation plans (Highway Construction Plans to be provided by the Design-Build Team to utility owners) that show existing utilities and proposed utility relocations for approval by the NCDOT. If Permanent Utility Easement (PUE) is required to relocate a utility, the PUE acquired will be the minimum area necessary to safely relocate the utility. Wetlands, Historical Areas and areas that can be shared with a Drainage/Utility Easement (DUE) or Aerial Utility Easement (AUE) shall be taken into account. If during the Departments review, the PUE is determined to be excessive the Department will request the PUE be reduced as necessary.

In .pdf format, the Design-Build Team shall electronically submit one half-size set and one full size set of Utility Relocation Plans to the NCDOT State Utilities Manager, via the Alternative Delivery Unit, for review and approval. The Department shall approve the Utility Relocation Plans prior to any utility relocation work beginning. The Design-Build Team shall also be responsible for submitting the appropriate agreements to be used with the Utility Relocation Plans (See Agreements Section found elsewhere in this Scope of Work). After the review process is complete, the NCDOT Utilities Unit will submit an electronic copy of the authorization letter to the Design-Build Team. The NCDOT Utilities Unit will also submit an electronic copy of the approved Utility Relocation Plans, estimate and agreement to the Department's Resident Engineer. If the Utility Relocation Plans

are approved subject to changes, it shall be the Design-Build Team's responsibly to coordinate these changes with the appropriate utility owner.

Compensable Interest:

The NCDOT will be responsible for all other non-betterment utility relocation cost when the utility owner has prior rights of way / compensable interest. The utility owner shall be responsible for the relocation costs if they cannot furnish evidence of prior rights of way or a compensable interest in their facilities.

The Design-Build Team shall be responsible for verifying / determining the cost responsibility (prior rights and compensable interest) for the utility relocations. Typically, affidavits, recorded easements or NCDOT agreements can serve as evidence of prior rights. A compensable interest is identified as follows:

(A) Existing or prior easement rights within the limits of the project, either by recorded right of way or adverse possession (Utility occupying the same location for twenty (20) plus years outside the existing highway rights of way).

(B) Entities covered under *General Statute 136-27.1* and *136-27.2.* Statute requires the NCDOT to pay the non-betterment cost for certain water, sewer and gas relocations.

(C) Utilities that have a joint-use agreement that constitutes a compensable interest with entities that have existing or prior easements rights within the project limits.

The Design-Build Team shall be responsible for all costs associated with utility relocations due to haul roads and / or any other temporary conditions resulting from the Design-Build Team's methods of operation or sequence of work.

Work Performed by Design-Build Team for Utility Owners:

If the Design-Build Team elects to make arrangements with a utility owner for proposed utility construction not required herein, in which the Utility Owner shall be responsible for the costs of work to be performed by the Design-Build Team, the Design-Build Team shall be responsible for negotiating all costs associated with the proposed construction. Once the Design-Build Team and the Utility Owner agree on a plan and a lump sum estimated cost for the utility construction, the Design-Build Team shall be responsible for submitting electronically a set (half size and full size plans in pdf format) of utility construction drawings to the State Utilities Manager, via the Alternative Delivery Unit, for further handling. Each set shall include a title sheet, plan sheets, profiles and special provisions if required. Also, a letter from the Utility Owner agreeing to the plans and lump sum cost must accompany this package. The NCDOT will reimburse the Design-Build Team the estimated lump sum cost under a Supplemental Agreement if the cost responsibility is NCDOT. The necessary Utility Agreement to the Utility Owner for reimbursement shall be a two party agreement between the NCDOT and the Utility Owner; and will be developed and executed by the Department.

If the Design-Build Team is requested, in writing, by a utility owner to relocate facilities not impacted by the project's construction, and/or betterment or incorporate new facilities as part of the highway construction, designs shall be coordinated with the Utility Owner and NCDOT Utilities Unit. The associated design and construction costs shall be negotiated and agreed upon between the Design-

Build Team and the utility company. The Design-Build Team shall develop designs; prepare all plans for needed agreements and permits; submit permits directly to the agencies and obtain approval from the agencies. The Design-Build Team shall be responsible for all permit fees.

Cable TV (CATV):

The cost in relocating CATV due to the highway construction shall be the responsibility of the CATV Company; however, 1) if the CATV Company can validate a recorded easement for facilities outside the maintained NCDOT right of way, the Department will bear the relocation expense; and 2) if the adjustment is needed on existing utility poles to accommodate a proposed NCDOT Traffic Management System Fiber Optic Communication Cable Project, the Design-Build Team shall be responsible for the relocation costs.

The NCDOT will not permit CATV to place poles within the highway rights of way but will allow down guys for their facilities within the highway rights of way. Under most circumstances, the CATV Company will continue a joint-use attachment with the local Power and Telephone Company. If the CATV proposed relocation places buried facilities within the highway rights of way then plans and encroachment agreements shall be required by the NCDOT.

Bridge Attachments:

No attachment of utilities to bridges will be allowed.

General:

The Design-Build Team shall not commence work at points where the highway construction operations are adjacent to utility facilities, until making arrangements with the utility company to protect against damage that might result in expense, loss, disruption of service or other undue inconvenience to the public or utility owner. The Design-Build Team shall be responsible for damage to the existing or relocated utilities resulting from the Team's operations. In the event of interruption of any utilities by the project construction, the Design-Build Team shall promptly notify the proper authority (Utility Owner) and cooperate with the owner in the prompt restoration of service.

If total property acquisition is unavoidable due to encroachment into wells and/or septic systems, then the Design-Build Team shall investigate and determine if extending water and/or sewer lines to the affected property is cost effective. If the Department concurs with the determination that a utility extension is cost effective, the costs associated with the utility construction shall be addressed in accordance with Article 104-7 of the January 2024 NCDOT *Standard Specifications for Roads and Structures*.

The Design-Build Team shall accommodate utility adjustments, reconstruction, new installation and routine maintenance work that may be underway or take place during the progress of the contract.

The Design-Build Team shall make arrangements to relocate water, sewer or gas facilities in which the entities are covered under General Statute 136-27.1 or 136-27.2 and/or occupy a compensable interest. If relocation of these facilities is required, a Use and Occupancy Agreement shall be executed through the Utilities Coordination Agent.

The Design-Build Team shall be required to use the guidelines as set forth in the following:

(A) NCDOT *Utilities Accommodation Manual*. Reference the website noted below for the current version of the NCDOT utility manuals, and additional information on the transition to the new utility manuals that shall be adhered to:

https://connect.ncdot.gov/municipalities/Utilities/Pages/default.aspx

(B) *Federal Aid Policy Guide* - Subchapter G, Part 645, Subparts A & B

(C) *Federal Highway Administration's Program Guide, Utility Adjustments & Accommodations on Federal Aid Highway Projects*

(D) *NCDOT Construction Manual* Section 105-8

(E) *NCDOT Right of Way Manual* - Chapter 16 Utility Relocations

(F) *NCDEQ Public Water Supply* - Rules governing public water supply

(G) *NCDEQ Division of Water Resources* - Title 15A - Environment and Natural Resources

Agreements:

If a utility company can provide evidence of prior rights of way or a compensable interest in their facilities, the Design-Build Team shall coordinate the non-betterment utility relocation cost with the utility company and develop the Utility Relocation Agreement (URA's).

The State Utilities Manager must execute approved agreements on Design-Build highway projects. The URA's and Encroachment Agreements are available from the NCDOT Utilities Unit. Reference Pages 59 and 60 of the *NCDOT Utility Manual on Policies & Procedures for Accommodating Utilities on Highway Rights of Way* for the different types of encroachment agreements available for use.

The Design-Build Utility Coordinator shall perform a preliminary analysis of the highway project, identify potential utility conflicts and determine preliminary alignments and schedules for relocations for each utility company. The Design-Build Utility Coordinator shall provide the Utilities Analysis and Routing Report (UARR) (preliminary) depicting this information to NCDOT Utilities Unit via the Alternative Delivery Unit, prior to Right-of-Way Plan submittal.

The Design-Build Team shall submit all agreements, and all supporting documents to the NCDOT State Utilities Manager, via the Alternative Delivery Unit, in electronic format. Prior to submittal, all agreements shall be signed electronically by an authorized representative of the utility owner. These electronic agreement packets will be reviewed, approved and signed electronically by the NCDOT Utilities Manager, or designated representative, before being distributed to the field. The Design-Build Team shall utilize the NCDOT Standard Utility Encroachment Agreements, as necessary, in relocating utilities. The Utility Encroachment Agreements shall be used under the following conditions:

(A) If a utility company is not occupying a valid right of way / compensable interest and the proposed relocation will place the relocated utilities within the existing or proposed highway rights of way.

(B) For **all** new utility installations not covered under a Utility Agreement and within the existing or proposed highway rights of way. This includes all water, sewer and gas lines owned by entities covered under *General Statute 136-27.1* and *136-27.2.*

***** STANDARD SPECIAL PROVISIONS *****

AWARD OF CONTRACT

(1-16-18)(Rev. 4-10-24) 103 DB1 G01

Revise the 2024 *Standard Specifications for Roads and Structures* as follows:

Page 1-24, Subarticle 103-4(A) General, first paragraph, replace the 3rd and 4th sentences with the following:

Where award is to be made, the notice of award will be issued within 60 days after the opening of bids or upon issuance of any necessary debt instrument, whichever is later, but not to exceed 120 days; except with the consent of the successful proposer the decision to award the contract to such proposer may be delayed for as long a time as may be agreed upon by the Department and such proposer. In the absence of such agreement, the successful proposer may withdraw his bid at the expiration of 120 days without penalty if no notice of award has been issued.

HAUL ROADS

(7-16-24) 105 DB1 G04

Revise the *Standard Specifications* as follows:

Page 1-45, Article 105-15 RESTRICTION OF LOAD LIMITS, line 31, add the following after second sentence of the second paragraph:

At least 30 days prior to use, the Design-Build Team shall notify the Engineer of any public road proposed for use as a haul road for the project.

EQUIPMENT IDLING GUIDELINES

(1-19-21) 107 SP1 G096

Exercise reduced fuel consumption and reduced equipment emissions during the construction of all work associated with this contract. Employees engaged in the construction of this project should turn off vehicles

when stopped for more than thirty (30) minutes and off-highway equipment should idle no longer than fifteen (15) consecutive minutes.

These guidelines for turning off vehicles and equipment when idling do not apply to:

1. Idling when queuing.
2. Idling to verify the vehicle is in safe operating condition.
3. Idling for testing, servicing, repairing or diagnostic purposes.
4. Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane, mixing concrete, etc.).
5. Idling required to bring the machine system to operating temperature.

6. Emergency vehicles, utility company, construction, and maintenance vehicles where the engines must run to perform needed work.
7. Idling to ensure safe operation of the vehicle.
8. Idling when the propulsion engine is providing auxiliary power for other than heating or air conditioning. (such as hydraulic systems for pavers)
9. When specific traffic, safety, or emergency situations arise.
10. If the ambient temperature is less than 32 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants (e.g. to run the heater).
11. If the ambient temperature is greater than 90 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants of off-highway equipment (e.g. to run the air conditioning) no more than 30 minutes.
12. Diesel powered vehicles may idle for up to 30 minutes to minimize restart problems.

Any vehicle, truck, or equipment in which the primary source of fuel is natural gas or electricity is exempt from the idling limitations set forth in this special provision.

VALUE ENGINEERING PROPOSALS

(11-4-24) 104 DB01 G116

Value Engineering Proposals (VEP), as specified in Article 104-12 of the *Standard Specifications* will be accepted. Only proposals, which alter the requirements of the RFP issued by the Department, will be considered as Value Engineering Proposals.

Revise the *Standard Specifications* as follows:

Page 1-36, Subarticle 104-12(D), Preliminary Review, lines 32-35, replace the first sentence of the first paragraph with the following:

Should the Design-Build Team desire a preliminary review of a possible VEP, prior to expending considerable time and expense in full development, a copy of the Preliminary VEP shall be concurrently submitted to the State Value Management Engineer at **ValueManagementUnit@ncdot.gov**, the Resident Engineer and the Alternative Delivery Unit.

Page 1-37, Subarticle 104-12(E), Final Proposal, lines 1-4, replace the first sentence of the first paragraph with the following:

The Design-Build Team shall concurrently submit a copy of the Final VEP to the State Value Management Engineer at **ValueManagementUnit@ncdot.gov,** the Resident Engineer and the Alternative Delivery Unit.

Page 1-38, Subarticle 104-12(F), Modifications, lines 43-48, replace the eighth paragraph with the following:

Unless and until a supplemental agreement is executed and issued by the Department; and final plans (hard copy and electronic) sealed by an engineer licensed in the State of North Carolina incorporating an approved VEP have been concurrently provided to the State Value Management

Engineer, the Resident Engineer and the Alternative Delivery Unit, the Design-Build Team shall remain obligated to perform the work in accordance with the terms of the existing contract with no additional contract time or compensation.

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, Emerald Ash Borer, Guava Root Knot Nematode and Other Noxious Weeds)

(8-31-13)(Rev. 4-1-19) DB1 G130

Within Quarantined Area

This project may be within a county regulated for plant and / or pests. If the project or any part of the Design-Build Team's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal / state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a Quarantined County

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture / United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture / United States Department of Agriculture at 1-800-206-9333, 919-707-3730, or **https://www.ncagr.gov/plantindustry/Plant/quaran/table2.htm** to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut / waste, ditch pulling, and shoulder cutting.
2. Plants with roots including grass sod
3. Plant crowns and roots
4. Bulbs, corms, rhizomes, and tubers of ornamental plants
5. Hay, straw, fodder, and plant litter of any kind
6. Clearing and grubbing debris
7. Used agricultural cultivating and harvesting equipment
8. Used earth-moving equipment
9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed, emerald ash borer, guava root knot nematode or other noxious weeds.

BRIDGE APPROACH FILLS

(1-16-18) (Rev. 1-16-24) 423 DB4 R02

Description

Bridge approach fills consist of backfilling behind bridge end bents with select material or aggregate to support all or part of bridge approach slabs. Install outlets and grade bridge approach fills to drain water through and away from approach fills. Install geotextiles to allow for possible future slab jacking and separate approach fills from embankment fills, natural ground and pavement sections as required. For bridge approach fills behind end bents with mechanically stabilized earth (MSE) abutment walls, reinforce bridge approach fills with MSE wall reinforcement connected to end bent caps as required. Construct bridge approach fills in accordance with the contract, accepted submittals and bridge approach fill *Roadway Standard Drawings*.

Define bridge approach fill types as follows:

Type 1 Approach Fill – Approach fill for bridge abutment in accordance with *Roadway Standard Drawing* No. 423.01;

Type 1A Approach Fill – Alternate approach fill for integral bridge abutment in accordance with *Roadway Standard Drawing* No. 423.02;

Type 2 Approach Fill – Approach fill for bridge abutment with MSE wall in accordance with *Roadway Standard Drawing* No. 423.03 and

Type 2A Approach Fill – Alternate approach fill for integral bridge abutment with MSE wall in accordance with *Roadway Standard Drawing* No. 423.04.

At the Design-Build Team's option, use Type 1A or 2A approach fills instead of Type 1 or 2 approach fills, respectively, for integral bridge abutments. Type 1A and 2A approach fills consists of constructing an approach fill with a temporary geotextile wall before placing all or a portion of the concrete for the backwall and wing walls of the integral end bent cap. The temporary geotextile wall is designed for a construction surcharge, remains in place and is aligned so the wall face functions as a form for the integral end bent cap backwall and wing walls.

Materials

Refer to Division 10 of the *Standard Specifications*.

Item	Section
Geotextiles	1056
Portland Cement Concrete	1000
Select Materials	1016
Subsurface Drainage Materials	1044
Welded Wire Reinforcement	1070-3

Provide Type 1 geotextile for separation geotextiles, Type 4a geotextile for under bridge approach slabs and Class B concrete for outlet pads. Use Class V or Class VI select material for Type 1 and 1A approach fills and the same aggregate type approved for the reinforced zone in the accepted MSE wall submittal for Type 2 and 2A approach fills. For MSE wall aggregate, reinforcement and connector materials, see the *Mechanically Stabilized Earth Retaining Walls* provision. Provide outlet pipes and fittings for subsurface drainage materials. Provide 1/4" hardware cloth with 1/4 inch openings constructed from 24 gauge wire.

For temporary geotextile walls, use welded wire reinforcement for welded wire facing and Type 5a geotextile for reinforcement geotextiles. Use Type 5a geotextile with lengths as shown in *Roadway Standard Drawing* No. 423.02 or 423.04.

Construction Methods

Excavate as necessary for approach fills and, if applicable, temporary geotextile walls in accordance with the contract. Ensure limits of approach fills are graded to drain as shown in the bridge approach fill *Roadway Standard Drawings*. For Type 1 and 1A approach fills in embankment fills, place and compact a temporary 1.5:1 (H:V) fill slope in accordance with *Roadway Standard Drawing* No. 423.01 or 423.02 and in accordance with Subarticle 235-3(B) and 235-3(C) of the *Standard Specifications*. Density testing is required within the temporary fill slope and additional more frequent density testing is also required for bridge approach embankments. Wait three days before cutting the slope back to complete the approach fill excavation. Use excavated material elsewhere on the project to form embankments, subgrades, or shoulders. If a slope for an approach fill is excavated to flatter than what is required for access or any other reason, that same slope is required for the entire approach fill excavation. Do not backfill overexcavations that extend outside the approach fill limits shown on the *Roadway Standard Drawings* with embankment soils. Instead, expand approach fill limits to include overexcavations.

Notify the Engineer when embankment fill placement and approach fill excavation is complete. Do not place separation geotextiles or aggregate until approach fill dimensions and embankment materials below and outside approach fills are approved.

For Type 2 approach fills, cast MSE wall reinforcement or connectors into end bent cap backwalls within three inches of locations shown in the accepted MSE wall submittals. Install MSE wall reinforcement with the orientation, dimensions and number of layers shown in the accepted MSE wall submittals. If a Type 2 approach fill is designed with geogrid reinforcement embedded in an end bent cap, cut geogrids to the required lengths and after securing ends of geogrids in place, reroll and rewrap portions of geogrids not embedded in the cap to protect geogrids from damage. Before placing aggregate over any MSE wall geosynthetic reinforcement, pull reinforcement taut so that it is in tension and free of kinks, folds, wrinkles or creases.

For Type 1 and 1A approach fills, place pipe sleeves in wing walls so water drains towards outlets. Use sleeves that can withstand wing wall loads. Insert outlet pipes into pipe sleeves to direct water towards outlets. Attach hardware cloth in front of the outlet pipe at the wing. Connect outlet pipes and fittings with solvent cement in accordance with Article 815-3 of the *Standard Specifications* and place outlet pads in accordance with Roadway Standard Drawing No. 815.03.

Attach separation geotextiles to end bent cap backwalls and wing walls with adhesives, tapes or other approved methods. Overlap adjacent geotextiles of the same type at least 18 inches. Cover select material or aggregate with Type 4a geotextile at an elevation six inches below the bridge approach slab. Hold geotextiles in place with wire staples or anchor pins as needed. Contact the Engineer when existing or future obstructions such as foundations, pavements, pipes, inlets or utilities will interfere with geotextiles or MSE wall reinforcement.

For Type 1A and 2A approach fills, install temporary geotextile walls as shown in *Roadway Standard Drawing* No. 423.02 or 423.04. At the Contractor's option, construct the bottom portion of integral end bents before temporary geotextile walls as shown in the plans developed by the Design-Build Team. Erect and set welded wire facing for temporary geotextile walls so facing functions as a form for the integral end bent cap backwall. Place welded wire facing adjacent to each other in the horizontal and vertical directions to completely cover the temporary geotextile wall face. Stagger welded wire facing to create a running bond by centering facing over joints in the row below. Wrap reinforcement geotextiles at the wall face in accordance with *Roadway Standard Drawing* No. 423.02 or 423.04 and cover geotextiles with at least three inches of select material or aggregate. Place layers of reinforcement geotextiles within three inches of locations shown in *Roadway Standard Drawing* No. 423.02 or 423.04. Install reinforcement geotextiles with the direction shown in *Roadway Standard Drawing* No. 423.02 or 423.04. Orient overlapping seams in reinforcement geotextiles perpendicular to the integral end bent cap backwall. Do not overlap reinforcement geotextiles so seams are parallel to the wall face. Before placing select material or aggregate over reinforcement geotextiles, pull geotextiles taut so they are in tension and free of kinks, folds, wrinkles or creases. Temporary geotextile walls are designed for a surcharge pressure in accordance with *Roadway Standard Drawing* No. 423.02 or 423.04. If loads from construction equipment will be more than what the wall is designed for, contact the Engineer before positioning equipment on top of temporary geotextile walls.

Place select material or aggregate in six inch to eight inch thick lifts. Compact fine aggregate for Type 2 and 2A approach fills in accordance with Subarticle 235-3(C) of the *Standard Specifications* except compact fine aggregate to a density of at least 98%. Compact select material for Type 1 and 1A approach fills and coarse aggregate for Type 2 and 2A approach fills with at least 4 passes of a trench roller in a direction parallel to the end bent cap backwall. Do not displace or damage geosynthetics or MSE wall reinforcement when placing and compacting select material or aggregate. End dumping directly on geosynthetics is not permitted. Do not operate heavy equipment on geosynthetics until they are covered with at least eight inches of select material or aggregate. Replace any damaged geosynthetics to the satisfaction of the Engineer. When approach fills extend beyond bridge approach slabs, wrap Type 4a geotextiles over select material or aggregate and back under approach slabs as shown in *Roadway Standard Drawing* No. 423.03 or 423.04.

SUBSURFACE DRAINAGE

(9-1-11) (Rev. 9-14-17) DB8 R05

Revise the 2024 *Standard Specifications for Roads and Structures* as follows:

Page 8-11, Article 815-1, delete the first sentence and replace with the following:

The Design-Build Team shall construct subsurface drains, underdrains, blind drains and other types of drains where groundwater is within six feet of subgrade.

IMPACT ATTENUATOR UNITS, TYPE TL-___

(4-20-04)(Rev. 8-20-24) DB8 R75

Description

The Design-Build Team shall furnish and install impact attenuator units and any components necessary to connect the impact attenuator units in accordance with the manufacturer's requirement, the details in the plans developed by the Design-Build Team and at locations shown in the plans developed by the Design-Build Team.

Materials

The Design-Build Team shall furnish attenuator units listed on the NCDOT APL. Units shall not be modified by the manufacturer and installer once approved and on the NCDOT APL.

Prior to installation the Design-Build Team shall submit to the Engineer certified working drawings and assembling instructions from the manufacturer for each impact attenuator unit in accordance with Article 105-2 of the *Standard Specifications*.

No modifications shall be made to the impact attenuator unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans developed by the Design-Build Team and details and assembling instructions furnished by the manufacturer.

Construction Methods

Perform installation in accordance with the plans and details and assembling instructions furnished by the manufacturer.

TEMPORARY SHORING

(2-20-07) (Rev. 1-16-24) DB11 R02

Description

Temporary shoring includes cantilever, braced and anchored shoring and temporary mechanically stabilized earth (MSE) walls. Temporary shoring does not include trench boxes. At the Design-Build Team's option, use any type of temporary shoring, unless noted otherwise in the plans developed by the Design-Build Team or as directed.

Design and construct temporary shoring based on actual elevations and shoring dimensions in accordance with the contract, the plans developed by the Design-Build Team and accepted submittals. Construct temporary shoring at locations shown in the plans developed by the Design-Build Team and as directed. Temporary shoring shall be required to maintain traffic when a 2:1 (H:V) slope from the top of an embankment or bottom of an excavation will intersect the existing ground line less than

five feet from the edge of pavement of an open travelway. This Standard Special Provision does not apply to pipe, inlet or utility installations unless noted otherwise in the plans developed by the Design-Build Team.

Positive protection includes concrete barrier and temporary guardrail. Provide positive protection for temporary shoring at locations shown in the plans developed by the Design-Build Team and as directed. Positive protection shall be required if temporary shoring is located in the clear zone in accordance with the AASHTO *Roadside Design Guide.*

(A) Cantilever and Braced Shoring

Cantilever shoring consists of steel sheet piles or H-piles with timber lagging. Braced shoring consists of sheet piles or H-piles with timber lagging and bracing such as beams, plates, walers, struts, rakers, etc. Define "piles" as sheet piles or H-piles.

(B) Anchored Shoring

Anchored shoring consists of sheet piles with walers or H-piles with timber lagging anchored with ground or helical anchors. Driven anchors may be accepted at the discretion of the Engineer. A ground anchor consists of a grouted steel bar or multi-strand tendon with an anchorage. A helical anchor consists of a lead section with a central steel shaft and at least one helix steel plate followed by extensions with only central shafts (no helixes) and an anchorage. Anchorages consist of steel bearing plates with washers and hex nuts for bars or steel wedge plates and wedges for strands. Use a prequalified Anchored Wall contractor to install ground anchors. Define "anchors" as ground, helical or driven anchors.

(C) Temporary MSE Walls

Temporary MSE walls include temporary geosynthetic and wire walls. Define "temporary wall" as a temporary MSE wall and "Temporary Wall Vendor" as the vendor supplying the temporary MSE wall. Define "reinforcement" as geotextile, geogrid, geostrip, welded wire grid or metallic strip reinforcement.

Temporary geosynthetic walls consist of geotextiles or geogrids wrapped behind welded wire facing or geostrips connected to welded wire facing. Define "temporary geotextile wall" as a temporary geosynthetic wall with geotextile reinforcement, "temporary geogrid wall" as a temporary geosynthetic wall with geogrid reinforcement and "temporary geostrip wall" as a temporary geosynthetic wall with geostrip reinforcement.

Temporary wire walls consist of welded wire grid or metallic strip reinforcement connected to welded wire facing. Define "Wire Wall Vendor" as the vendor supplying the temporary wire wall.

(D) Embedment

Define "embedment" for cantilever, braced and anchored shoring as the pile depth below the grade in front of shoring. Define "embedment" for temporary walls as the wall embedment below the grade at the wall face.

(E) Positive Protection

Define "unanchored or anchored portable concrete barrier" as portable concrete barrier (PCB) that meets *Roadway Standard Drawing* No. 1170.01. Define "concrete barrier" as unanchored or anchored PCB or an approved equal. Define "temporary guardrail" as temporary steel beam guardrail that meets *Roadway Standard Drawing* No. 862.02.

Materials

Refer to the *Standard Specifications*.

Item	Section
Concrete Barrier Materials	1170-2
Flowable Fill, Excavatable	1000-7
Geosynthetics	1056
Grout, Type 1	1003
Portland Cement	1024-1
Portland Cement Concrete	1000
Select Materials	1016
Steel Beam Guardrail Materials	862-2
Steel Plates	1072-2
Steel Sheet Piles and H-Piles	1084
Untreated Timber	1082-2
Water	1024-4
Welded Wire Reinforcement	1070-3

Provide Type 6 material certifications for shoring materials in accordance with Article 106-3 of the *Standard Specifications*. Use Class IV select material for temporary guardrail. Use Class A concrete that meets Article 450-2 of the *Standard Specifications* or Type 1 grout for drilled-in piles. Provide untreated timber with a thickness of at least three inches and a bending stress of at least 1,000 pounds per square inch for timber lagging. Provide steel bracing that meets ASTM A36.

(A) Shoring Backfill

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

(B) Anchors

Store anchor materials on blocking a minimum of 12 inches above the ground and protect it at all times from damage; and when placing in the work make sure it is free from dirt, dust, loose mill scale, loose rust, paint, oil or other foreign materials. Load, transport, unload and store anchor materials so materials are kept clean and free of damage. Bent, damaged or defective materials shall be rejected.

(1) Ground Anchors

Use high-strength deformed steel bars that meet AASHTO M 275 or seven-wire strands that meet ASTM A886 or Article 1070-5 of the *Standard Specifications*. Splice bars in accordance with Article 1070-9 of the *Standard Specifications*. Do not splice strands. Use bondbreakers, spacers and centralizers that meet Article 6.3.5 of the AASHTO *LRFD Bridge Construction Specifications*.

Use neat cement grout that only contains cement and water with a water cement ratio of 0.4 to 0.5 which is approximately 5.5 gallons of water per 94 pounds of Portland cement. Provide grout with a compressive strength at three and 28 days of at least 1,500 and 4,000 psi, respectively.

(2) Helical Anchors

Use helical anchors with an ICC Evaluation Service, Inc. (ICC-ES) report. Provide couplers, thread bar adapters and bolts recommended by the Anchor Manufacturer to connect helical anchors together and to piles.

(3) Anchorages

Provide steel plates for bearing plates and steel washers, hex nuts, wedge plates and wedges recommended by the Anchor Manufacturer.

(C) Temporary Walls

(1) Welded Wire Facing

Use welded wire reinforcement for welded wire facing, struts and wires. For temporary wire walls, provide welded wire facing supplied by the Wire Wall Vendor or a manufacturer approved or licensed by the vendor. For temporary wire walls with separate reinforcement and facing components, provide connectors (e.g., bars, clamps, plates, etc.) and fasteners (e.g., bolts, nuts, washers, etc.) required by the Wire Wall Vendor.

(2) Geotextiles

Provide Type 2 geotextile for separation and retention geotextiles. Provide Type 5 geotextile for geotextile reinforcement with ultimate tensile strengths in accordance with the accepted submittals.

(3) Geogrid and Geostrip Reinforcement

Use geogrids with a roll width of at least four feet. Use geogrids for geogrid reinforcement and geostrips for geostrip reinforcement with an "approved" status code in accordance with the NCDOT Geosynthetic Reinforcement Evaluation Program. The list of approved geogrids and geostrips is available from:

connect.ncdot.gov/resources/Geological/Pages/Products.aspx

Provide geogrids and geostrips with design strengths in accordance with the accepted submittals. Geogrids and geostrips are approved for short-term design strengths (three-year design life) in the machine direction (MD) and cross-machine direction (CD) based on material type. Define material type from the website above for shoring backfill as follows:

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

(4) Welded Wire Grid and Metallic Strip Reinforcement

Provide welded wire grid and metallic strip reinforcement supplied by the Wire Wall Vendor or a manufacturer approved or licensed by the vendor. Use welded wire grid reinforcement ("mesh", "mats" and "ladders") that meet Article 1070-3 of the *Standard Specifications* and metallic strip reinforcement ("straps") that meet ASTM A572 or A1011.

Preconstruction Requirements

(A) Concrete Barrier

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

(B) Temporary Guardrail

Define "clear distance" behind temporary guardrail as the horizontal distance between guardrail posts and temporary shoring. At the Design-Build Team's option or if clear distance for cantilever, braced and anchored shoring is less than four feet, attach guardrail to traffic side of shoring as shown in the plans developed by the Design-Build Team. Place ABC in clear distance and around guardrail posts instead of pavement. Do not use temporary guardrail above temporary walls.

(C) Temporary Shoring Designs

Before beginning temporary shoring design, survey existing ground elevations in the vicinity of shoring locations to determine actual design heights (H). Submit .pdf files of working drawings and design calculations for temporary shoring designs in accordance with Article 105-2 of the *Standard Specifications*. Submit working drawings showing plan views, shoring profiles, typical sections and details of temporary shoring design and construction sequence. Do not begin shoring construction until a design submittal is accepted.

Have cantilever and braced shoring designed, detailed and sealed by an engineer licensed in the state of North Carolina. Use a prequalified Anchored Wall Design Consultant to design anchored shoring. Provide anchored shoring designs sealed by a Design Engineer approved as a Geotechnical Engineer (key person) for an Anchored Wall Design Consultant. Include details in anchored shoring working drawings of anchor locations and lock-off loads, unit grout / ground bond strengths for ground anchors or minimum installation torque and torsional strength rating for helical anchors and if necessary, obstructions extending through shoring or interfering with anchors. Include details in the anchored shoring construction sequence of pile and anchor installation, excavation and anchor testing.

Provide temporary wall designs sealed by a Design Engineer licensed in the state of North Carolina and employed or contracted by the Temporary Wall Vendor. Include details in temporary wall working drawings of geotextile and reinforcement types, locations and directions and obstructions extending through walls or interfering with reinforcement.

(1) Soil Parameters

Design temporary shoring for the assumed soil parameters and groundwater or flood elevations shown in the plans developed by the Design-Build Team. Assume the following soil parameters for shoring backfill:

(a) Unit weight (γ) = 120 pcf;

(b)

Friction Angle (ϕ)	Shoring Backfill
30°	A-2-4 Soil
34°	Class II, Type 1 or Class III Select Material
38°	Class V or VI Select Material

(c) Cohesion (c) = 0 psf.

(2) Traffic Surcharge

Design temporary shoring for a traffic surcharge of 250 pounds per square foot if traffic will be above and within H of shoring. This traffic surcharge shall not apply to construction traffic. Design temporary shoring for any construction surcharge if construction traffic will be above and within H of shoring. Design temporary shoring for a traffic (live load) surcharge in accordance with Article 11.5.6 of the AASHTO *LRFD Bridge Design Specifications*.

(3) Cantilever, Braced and Anchored Shoring Designs

Use shoring backfill for fill sections and voids between cantilever, braced and anchored shoring and the critical failure surface. Use concrete or Type 1 grout for embedded portions of drilled-in H-piles. Do not use drilled-in sheet piles.

Define "top of shoring" for cantilever, braced and anchored shoring as where the grade intersects the back of sheet piles or H-piles and timber lagging. Design cantilever, braced and anchored shoring for a traffic impact load of 2,000 pounds per foot applied 18 inches above top of shoring if concrete barrier is above and next to shoring or temporary guardrail is above and attached to shoring. Extend cantilever, braced and anchored shoring at least 32 inches above top of shoring if shoring is designed for traffic impact. Otherwise, extend shoring at least six inches above top of shoring.

Design cantilever, braced and anchored shoring for a maximum deflection of three inches if the horizontal distance to the closest edge of pavement or structure is less than H. Otherwise, design shoring for a maximum deflection of six inches. Design cantilever and braced shoring in accordance with the plans developed by the Design-Build Team and AASHTO *Guide Design Specifications for Bridge Temporary Works*.

Design anchored shoring in accordance with the plans developed by the Design-Build Team and Article 11.9 of the AASHTO *LRFD Bridge Design Specifications*. Use a resistance factor of 0.80 for tensile resistance of anchors with bars, strands or shafts. Extend the unbonded length for ground anchors and the shallowest helix for helical anchors at least five feet behind the critical failure surface. Do not extend anchors beyond right of way or easement limits. If existing or future obstructions such as foundations, guardrail posts, pavements, pipes, inlets or utilities will interfere with anchors, maintain a clearance of at least six inches between obstructions and anchors.

(4) Temporary Wall Designs

Use shoring backfill in the reinforced zone of temporary walls. Separation geotextiles shall be required between shoring backfill and backfill, natural ground or culverts along the sides of the reinforced zone perpendicular to the wall face. For Class V or VI select material in the reinforced zone, separation geotextiles shall also be required between shoring backfill and backfill or natural ground on top of and at the back of the reinforced zone.

Design temporary walls in accordance with the plans developed by the Design-Build Team and Article 11.10 of the AASHTO *LRFD Bridge Design Specifications*. Embed temporary walls at least 18 inches except for walls on structures or rock as determined by the Engineer. Use a uniform reinforcement length throughout the wall height of at least 0.7H or six feet, whichever is longer. Extend the reinforced zone at least six inches beyond end of reinforcement. Do not locate the reinforced zone outside right of way or easement limits.

Use the simplified method for determining maximum reinforcement loads in accordance with the AASHTO LRFD specifications. For geotextile reinforcement, use geotextile properties approved by the Department or default values in accordance with the AASHTO LRFD specifications. For geogrid and geostrip reinforcement, use approved geosynthetic reinforcement properties available from the website shown elsewhere in this provision. Use geosynthetic properties for the direction reinforcement will be installed, a three-year design life and shoring backfill to be used in the reinforced zone.

Do not use more than four different reinforcement strengths for each temporary geosynthetic wall. Design temporary geotextile walls for a reinforcement coverage ratio (R_c) of 1.0. For temporary geogrid walls with an R_c of less than 1.0, use a maximum horizontal clearance between geogrids of three feet and stagger reinforcement so geogrids are centered over gaps in the reinforcement layer below.

For temporary geosynthetic walls, use “L” shaped welded wire facing with 18-inch to 24-inch long legs. Locate geosynthetic reinforcement so reinforcement layers are at the same level as the horizontal legs of welded wire facing. Use vertical reinforcement spacing equal to facing height. Wrap geotextile or geogrid reinforcement behind welded wire facing and extend reinforcement at least three feet back behind facing into shoring backfill. Attach geostrip reinforcement to welded wire facing with a connection approved by the Department.

For temporary wire walls with separate reinforcement and facing components, attach welded wire grid or metallic strip reinforcement to welded wire facing with a connection approved by the Department. For temporary geogrid, geostrip and wire walls, retain shoring backfill at welded wire facing with retention geotextiles and extend geotextiles at least three feet back behind facing into backfill.

(D) Preconstruction Meeting

The Engineer may require a shoring preconstruction meeting to discuss the construction, inspection and testing of the temporary shoring. If required, and if this meeting occurs before all shoring submittals have been accepted, additional preconstruction meetings may be required before beginning construction of temporary shoring without accepted submittals. The Resident, District or Bridge Maintenance Engineer, Area Construction Engineer, Geotechnical Operations Engineer, Design-Build Team and Shoring contractor Superintendent will attend preconstruction meetings.

Construction Methods

Control drainage during construction in the vicinity of shoring. Direct run off away from shoring and shoring backfill. Contain and maintain backfill and protect material from erosion.

Install positive protection in accordance with the contract and accepted submittals. Use PCB in accordance with Section 1170 of the *Standard Specifications* and *Roadway Standard Drawing* No. 1170.01. Use temporary guardrail in accordance with Section 862 of the *Standard Specifications* and *Roadway Standard Drawing* Nos. 862.01, 862.02 and 862.03.

(A) Tolerances

Construct shoring with the following tolerances:

(1) Horizontal wires of welded wire facing are level in all directions,

(2) Shoring location is within six inches of horizontal and vertical alignment shown in the accepted submittals, and

(3) Shoring plumbness (batter) is not negative and within two degrees of vertical.

(B) Cantilever, Braced and Anchored Shoring Installation

If overexcavation behind cantilever, braced or anchored shoring is shown in the accepted submittals, excavate before installing piles. Otherwise, install piles before excavating for shoring. Install cantilever, braced or anchored shoring in accordance with the construction sequence shown in the accepted submittals. Remove piles and if applicable, timber lagging when shoring is no longer needed.

(1) Pile Installation

Install piles with the minimum required embedment and extension in accordance with Subarticles 450-3(D) and 450-3(E) of the *Standard Specifications* except that a pile driving equipment data form is not required. Piles may be installed with a vibratory hammer as approved by the Engineer.

Do not splice sheet piles. Use pile excavation to install drilled-in H-piles. After filling holes with concrete or Type 1 grout to the elevations shown in the accepted submittals, remove any fluids and fill remaining portions of holes with flowable fill. Cure concrete or grout at least seven days before excavating.

Notify the Engineer if refusal is reached before pile excavation or driven piles attain the minimum required embedment. When this occurs, a revised design submittal may be required.

(2) Excavation

Excavate in front of piles from the top down in accordance with the accepted submittals. For H-piles with timber lagging and braced and anchored shoring, excavate in staged horizontal lifts with a maximum height of five feet. Remove flowable fill and material in between H-piles, as needed, to install timber lagging. Position lagging with at least three inches of contact in the horizontal direction between the lagging and pile flanges. Do not excavate the next lift until timber lagging for the current lift is installed and, if applicable, bracing and anchors for the current lift are accepted. Backfill behind cantilever, braced or anchored shoring with shoring backfill.

(3) Anchor Installation

If applicable, install foundations located behind anchored shoring before installing anchors. Fabricate and install ground anchors in accordance with the accepted submittals, Articles 6.4 and 6.5 of the AASHTO *LRFD Bridge Construction Specifications* and the following unless otherwise approved:

(a) Materials in accordance with this provision shall be required instead of materials conforming to Articles 6.4 and 6.5.3 of the AASHTO LRFD Specifications,

(b) Encapsulation-protected ground anchors in accordance with Article 6.4.1.2 of the AASHTO LRFD specifications are not required, and

(c) Corrosion protection for unbonded lengths of ground anchors and anchorage covers are not required.

(d) Mix and place neat cement grout in accordance with Subarticles 1003-5, 1003-6 and 1003-7 of the *Standard Specifications*. Measure grout temperature, density and flow during grouting with at least the same frequency grout cubes are made for compressive strength. Perform density and flow field tests in the presence of the Engineer in accordance with American National Standards Institute / American Petroleum Institute Recommended Practice 13B-1 (Section 4, Mud Balance) and ASTM C939 (Flow Cone), respectively.

Install helical anchors in accordance with the accepted submittals and Anchor Manufacturer's instructions. Measure torque during installation and do not exceed the torsional strength rating of the helical anchor. Attain the minimum required installation torque and penetration before terminating anchor installation. When replacing a helical anchor, embed last helix of the replacement anchor at least three helix plate diameters past the location of the first helix of the previous anchor.

(4) Anchor Testing

Proof test and lock-off anchors in accordance with the accepted submittals and Article 6.5.5 of the AASHTO *LRFD Bridge Construction Specifications* except for the acceptance criteria in Article 6.5.5.5. For the AASHTO LRFD specifications, "ground anchor" refers to a ground or helical anchor and "tendon" refers to a bar, strand or shaft.

(a) Anchor Acceptance

Anchor acceptance shall be based in part on the following criteria.

(i) For ground and helical anchors, total movement is less than 0.04 inches between the one and ten minute readings or less than 0.08 inches between the six and 60 minute readings.

(ii) For ground anchors, total movement at maximum test load exceeds 80% of the theoretical elastic elongation of the unbonded length.

(b) Anchor Test Results

Submit .pdf files of anchor test records including movement versus load plots for each load increment within 24 hours of completing each row of anchors. The Engineer will review the test records to determine if the anchors are acceptable.

If the Engineer determines an anchor is unacceptable, revise the anchor design or installation methods. Submit a revised anchored shoring design for acceptance and provide an acceptable anchor with the revised design or installation methods. If required, replace the anchor or provide additional anchors with the revised design or installation methods.

(C) Temporary Wall Installation

Excavate as necessary for temporary walls in accordance with the plans developed by the Design-Build Team and accepted submittals. If applicable, install foundations located in the reinforced zone before placing shoring backfill or reinforcement unless otherwise approved. Notify the Engineer when foundation excavation is complete. Do not place shoring backfill or reinforcement until excavation dimensions and foundation material are approved.

Erect welded wire facing so the wall position is as shown in the plans developed by the Design-Build Team and accepted submittals. Set welded wire facing adjacent to each other in the horizontal and vertical direction to completely cover the wall face with facing. Stagger welded wire facing to create a running bond by centering facing over joints in the row below.

Attach geostrip reinforcement to welded wire facing and wrap geotextile reinforcement and retention geotextiles behind welded wire facing as shown in the plans developed by the Design-Build Team and accepted submittals. Cover geotextiles with at least three inches of shoring backfill. Overlap adjacent geotextile reinforcement and retention and separation geotextiles at least 18 inches with seams oriented perpendicular to the wall face. Hold geotextiles in place with wire staples or anchor pins as needed.

Place reinforcement within three inches of locations shown in the plans developed by the Design-Build Team and accepted submittals. Before placing shoring backfill, pull geosynthetic reinforcement taut so it is in tension and free of kinks, folds, wrinkles and creases. Install reinforcement with the direction shown in the plans developed by the Design-Build Team and accepted submittals. For temporary wire walls with separate reinforcement and facing components, attach welded wire grid or metallic strip reinforcement to welded wire facing as shown in the accepted submittals. Do not splice or overlap reinforcement so seams are parallel to the wall face. Contact the Engineer when unanticipated existing or future obstructions such as foundations, pavements, pipes, inlets or utilities will interfere with reinforcement.

Place shoring backfill in the reinforced zone in eight-inch to ten-inch thick lifts. Compact A-2-4 soil and Class II, Type 1 and Class III select material in accordance with Subarticle 235-3(C) of the *Standard Specifications*. Use only hand operated compaction equipment to compact backfill within three feet of welded wire facing. At a distance greater than three feet, compact shoring backfill with at least four passes of an eight-ton to ten-ton vibratory roller in a direction parallel to the wall face. Smooth wheeled or rubber tired rollers are also acceptable for compacting backfill. Do not use sheepsfoot, grid rollers or other types of compaction equipment with feet. Do not displace or damage reinforcement when placing and compacting shoring backfill. End dumping directly on geosynthetic reinforcement shall not be permitted. Do not operate heavy equipment on reinforcement until it is covered with at least eight inches of shoring backfill. Replace any damaged reinforcement to the satisfaction of the Engineer.

Backfill for temporary walls outside the reinforced zone in accordance with Article 410-8 of the *Standard Specifications*. Bench temporary walls into the sides of excavations where applicable. For temporary geosynthetic walls with top of wall within five feet of finished grade, remove top facing and incorporate top reinforcement layer into fill when placing fill in front of wall. Temporary walls remain in place permanently unless otherwise required.

PORTABLE CONCRETE BARRIER

(12-17-24) 1170 SP11 R70

Revise the *Standard Specifications* as follows:

Page 11-17, Subarticle 1170-3(A)(1) Portable Concrete Barrier, after line 25, add the following:

For MASH approved F-Shape K-Wall, install anchorage transitions between unanchored portable concrete barrier and temporary crash cushions, and between unanchored portable concrete barrier and portable concrete barrier (anchored) as shown in the *Roadway Standard Drawings*, No. 1170.01.

ON-THE-JOB TRAINING

(2-24-15) (Rev. 7-20-17) Z-10

Description

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assigning Training Goals

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include

a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year.

Training Classifications

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft / operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor’s needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee / Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

STANDARD SPECIAL PROVISION

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(9-1-11) Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

"(h) Amounts Encumbered – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c).* Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications."

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(D), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated January 2024 and as amended by the Standard Special Provision, Division One found elsewhere in this RFP.

***** STANDARD SPECIAL PROVISIONS *****

NCDOT GENERAL SEED SPECIFICATIONS FOR SEED QUALITY

(5-7-11) Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious Weed	Limitations per Lb. of Seed	Restricted Noxious Weed	Limitations per Lb. of Seed
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza
Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)
Kobe Lespedeza
Korean Lespedeza
Weeping Lovegrass
Carpetgrass
Bermudagrass
Browntop Millet
German Millet - Strain R
Clover - Red/White/Crimson

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)
Kentucky Bluegrass (all approved varieties)
Hard Fescue (all approved varieties)
Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass
Crownvetch
Pensacola Bahiagrass
Creeping Red Fescue
Japanese Millet
Reed Canary Grass
Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass
Big Bluestem
Little Bluestem
Bristly Locust
Birdsfoot Trefoil
Indiangrass
Orchardgrass
Switchgrass
Yellow Blossom Sweet Clover

STANDARD SPECIAL PROVISION

ERRATA

(1-16-24) Z-4

Revise the *2024 Standard Specifications* as follows:

Division 3

Page 3-5, Article 305-2 MATERIALS, after line 16, replace " 1032-3(A)(7)" with "1032-3" and add the item "Galvanized Corrugated Steel Pipe" with Section "1032-3".

Page 3-6, Article 310-2 MATERIALS, after line 9, add the item "Galvanized Corrugated Steel Pipe" with Section "1032-3".

Division 9

Page 9-17, Article 904-4 MEASUREMENT AND PAYMENT, prior to line 1, replace " Sign Erection, Relocate Type (Ground Mounted)" with "Sign Erection, Relocate Type ___ (Ground Mounted)".

Division 10

Page 10-51, Article 1024-4 WATER, prior to line 1, delete the "unpopulated blank row" in Table 1024-2 between "Time of set, deviation from control" and "Chloride Ion Content, Max.".

Page 10-170, Subarticle 1081-1(C) Requirements, line 4, replace "maximum" with "minimum".

Division 11

Page 11-15, Article 1160-4 MEASUREMENT AND PAYMENT, line 24, replace "Where barrier units are moved more than one" with "Where barrier units are moved more than once".

Division 15

Page 15-10, Article 1515-4 MEASUREMENT AND PAYMENT, lines 11, replace " All piping" with "All labor, the manhole, other materials, excavation, backfilling, piping".

Division 16

Page 16-3, Article 1609-2 MATERIALS, after line 26, replace "Type 4" with "Type 4a".

Page 16-14, Article 1633-5 MEASUREMENT AND PAYMENT, line 20-24 and prior to line 25, delete and replace with the following " Flocculant will be measured and paid in accordance with Article 1642-5 applied to the temporary rock silt checks."

Page 16-25, Article 1644-2 MATERIALS, after line 22, replace "Type 4" with "Type 4a".

***** STANDARD SPECIAL PROVISIONS *****

TITLE VI AND NONDISCRIMINATION

(6-28-77) (Rev 1-16-24) Z-6

The North Carolina Department of Transportation is committed to carrying out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts.

The provisions of this section related to United States Department of Transportation (US DOT) Order 1050.2A, Title 49 Code of Federal Regulations (CFR) part 21, 23 United States Code (U.S.C.) 140 and 23 CFR part 200 (or 49 CFR 303, 49 U.S.C. 5332 or 49 U.S.C. 47123) are applicable to all North Carolina Department of Transportation (NCDOT) contracts and to all related subcontracts, material supply, engineering, architectural and other service contracts, regardless of dollar amount. Any Federal provision that is specifically required not specifically set forth is hereby incorporated by reference.

(1) **Title VI Assurances (USDOT Order 1050.2A, Appendix A)**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(a) Compliance with Regulations

The contractor (hereinafter includes consultants) shall comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

(b) Nondiscrimination

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

(c) Solicitations for Subcontractors, Including Procurements of Materials and Equipment

In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

(d) Information and Reports

The contractor shall provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(e) Sanctions for Noncompliance:

In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it and/or the FHWA may determine to be appropriate, including, but not limited to:

(i) Withholding payments to the contractor under the contract until the contractor complies; and/or

(ii) Cancelling, terminating, or suspending a contract, in whole or in part.

(f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs (a) through (f) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

(2) **Title VI Nondiscrimination Program (23 CFR 200.5(p))**

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion/creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

(a) During the performance of this contract or agreement, contractors (e.g., subcontractors, consultants, vendors, prime contractors) are

responsible for complying with NCDOT's Title VI Program. Contractors are not required to prepare or submit Title VI Programs. To comply with this section, the prime contractor shall:

1. Post NCDOT's Notice of Nondiscrimination and the Contractor's own Equal Employment Opportunity (EEO) Policy in conspicuous locations accessible to all employees, applicants and subcontractors on the jobsite.

2. Physically incorporate the required Title VI clauses into all subcontracts on federally-assisted and state-funded NCDOT projects, and ensure inclusion by subcontractors into all lower-tier subcontracts.

3. Required Solicitation Language. The Contractor shall include the following notification in all solicitations for bids and requests for work or material, regardless of funding source:

   "The North Carolina Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. In accordance with other related nondiscrimination authorities, bidders and contractors will also not be discriminated against on the grounds of sex, age, disability, low-income level, creed/religion, or limited English proficiency in consideration for an award."

4. Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.

5. Provide language assistance services (i.e., written translation and oral interpretation), free of charge, to LEP employees and applicants. Contact NCDOT OCR for further assistance, if needed.

6. For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.

(b) Subrecipients (e.g. cities, counties, LGAs, planning organizations) may be required to prepare and submit a Title VI Plan to NCDOT, including Title VI Assurances and/or agreements. Subrecipients must also ensure compliance by their contractors and subrecipients with Title VI. (23 CFR 200.9(b)(7))

(c) If reviewed or investigated by NCDOT, the contractor or subrecipient agrees to take affirmative action to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless additional time is granted by NCDOT. (23 CFR 200.9(b)(15))

(d) The Contractor is responsible for notifying subcontractors of NCDOT's External Discrimination Complaints Process.

1. Applicability

Title VI and related laws protect participants and beneficiaries (e.g., members of the public and contractors) from discrimination by NCDOT employees, subrecipients and contractors, regardless of funding source.

2. Eligibility

Any person—or class of persons—who believes he/she has been subjected to discrimination based on race, color, national origin, Limited English Proficiency (LEP), sex, age, or disability (and religion in the context of employment, aviation, or transit) may file a written complaint. The law also prohibits intimidation or retaliation of any sort.

3. Time Limits and Filing Options

Complaints may be filed by the affected individual(s) or a representative and must be filed no later than 180 calendar days after the following:

(i) The date of the alleged act of discrimination; or

(ii) The date when the person(s) became aware of the alleged discrimination; or

(iii) Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and related discrimination complaints may be submitted to the following entities:

- North Carolina Department of Transportation, Office of Civil Rights, Title VI Program, 1511 Mail Service Center, Raleigh, NC 27699-1511; toll free 1-800-522-0453
- Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010
- US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

4. Format for Complaints

Complaints must be in writing and signed by the complainant(s) or a representative, and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages, including Braille.

5. Discrimination Complaint Form

Contact NCDOT Civil Rights to receive a full copy of the Discrimination Complaint Form and procedures.

6. Complaint Basis

Allegations must be based on issues involving race, color, national origin (LEP), sex, age, disability, or religion (in the context of employment, aviation or transit). "Basis" refers to the complainant's membership in a protected group category.

TABLE 103-1
COMPLAINT BASIS

Protected Categories	Definition	Examples	Applicable Nondiscrimination Authorities
Race and Ethnicity	An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group	Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White	Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 23 CFR 200; 49 U.S.C. 5332(b); 49 U.S.C. 47123. *(Executive Order 13166)*
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	
National Origin *(Limited English Proficiency)*	Place of birth. Citizenship is not a factor. (*Discrimination based on language or a person's accent is also covered)*	Mexican, Cuban, Japanese, Vietnamese, Chinese	
Sex	Gender. The sex of an individual. *Note:* Sex under this program does not include sexual orientation.	Women and Men	1973 Federal-Aid Highway Act; 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Age	Persons of any age	21-year-old person	Age Discrimination Act of 1975 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Disability	Physical or mental impairment, permanent or temporary, or perceived.	Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic	Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990

Religion (in the context of employment) *(Religion/ Creed in all aspects of any aviation or transit-related construction)*	An individual belonging to a religious group; or the perception, based on distinguishable characteristics that a person is a member of a religious group. In practice, actions taken as a result of the moral and ethical beliefs as to what is right and wrong, which are sincerely held with the strength of traditional religious views. ***Note:*** Does not have to be associated with a recognized religious group or church; if an individual sincerely holds to the belief, it is a protected religious practice.	Muslim, Christian, Sikh, Hindu, etc.	Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. *(49 U.S.C. 5332(b);* *49 U.S.C. 47123)*

(3) **Pertinent Nondiscrimination Authorities**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

(a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

(b) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

(c) Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

(d) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;

(e) The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

(f) Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

(g) The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

(h) Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

(i) The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

(j) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

(k) Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

(l) Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

(m) Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq., Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin).

(4) **Additional Title VI Assurances**

***The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable*

(a) Clauses for Deeds Transferring United States Property (1050.2A, Appendix B)

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4.

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the North Carolina Department of Transportation (NCDOT) will accept title to the lands and maintain the project constructed thereon in accordance with the North Carolina General Assembly, the Regulations for the Administration of the Federal-Aid Highway Program, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NCDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the North Carolina Department of Transportation (NCDOT) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NCDOT, its successors and assigns.

The NCDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the NCDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

(b) Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program (1050.2A, Appendix C)

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(a):

1. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

(i.) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. *

3. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

(c) Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program (1050.2A, Appendix D)

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(b):

1. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non¬ discrimination covenants, the NCDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. *

3. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

***** STANDARD SPECIAL PROVISIONS *****

MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS
(12-18-07) Z-7

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (*EXECUTIVE NUMBER 11246*)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female Participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in *41 CFR Part 60-4* shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in *41 CFR 60-4.3(a)*, and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project or the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations *in 41 CFR Part 60-4*. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

EMPLOYMENT GOALS FOR MINORITY AND FEMALE PARTICIPATION

Economic Areas

Area 023 29.7%
Bertie County
Camden County
Chowan County
Gates County
Hertford County
Pasquotank County
Perquimans County

Area 024 31.7%
Beaufort County
Carteret County
Craven County
Dare County
Edgecombe County
Green County
Halifax County
Hyde County
Jones County
Lenoir County
Martin County
Nash County
Northampton County
Pamlico County
Pitt County
Tyrrell County
Washington County
Wayne County
Wilson County

Area 025 23.5%
Columbus County
Duplin County
Onslow County
Pender County

Area 026 33.5%
Bladen County
Hoke County
Richmond County
Robeson County
Sampson County
Scotland County

Area 027 24.7%
Chatham County
Franklin County
Granville County
Harnett County
Johnston County
Lee County
Person County
Vance County
Warren County

Area 028 15.5%
Alleghany County
Ashe County
Caswell County
Davie County
Montgomery County
Moore County
Rockingham County
Surry County
Watauga County
Wilkes County

Area 029 15.7%
Alexander County
Anson County
Burke County
Cabarrus County
Caldwell County
Catawba County
Cleveland County
Iredell County
Lincoln County
Polk County
Rowan County
Rutherford County
Stanly County

Area 0480 8.5%
Buncombe County
Madison County

Area 030 6.3%
Avery County
Cherokee County
Clay County
Graham County
Haywood County
Henderson County
Jackson County
McDowell County
Macon County
Mitchell County
Swain County
Transylvania County
Yancey County

SMSA Areas

Area 5720 26.6%
Currituck County

Area 9200 20.7%
Brunswick County
New Hanover County

Area 2560 24.2%
Cumberland County

Area 6640 22.8%
Durham County
Orange County
Wake County

Area 1300 16.2%
Alamance County

Area 3120 16.4%
Davidson County
Forsyth County
Guilford County
Randolph County
Stokes County
Yadkin County

Area 1520 18.3%
Gaston County
Mecklenburg County
Union County

Goals for Female

Participation in Each Trade

(Statewide) 6.9%

MINIMUM WAGES

(07-21-09) Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer must pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS ($7.25) per hour.

STATE: The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS ($7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS ($7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS ($7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS ($7.25) per hour.

The determination of the intent of the application of these Acts to the project's contract shall be the Design-Build Team's responsibility.

The Design-Build Team shall have no claim against the Department of Transportation for any changes in the minimum wage laws, State or Federal. It shall be the responsibility of the Design-Build Team to be fully informed of all Federal and State Laws affecting the project's contract.

***** STANDARD SPECIAL PROVISIONS *****

(10-23-17) (Rev. 1-16-24)

DIVISION ONE OF STANDARD SPECIFICATIONS

Division One of the 2024 NCDOT *Standard Specifications for Roads and Structures* (*Standard Specifications*) shall apply except as follows:

Definitions: Throughout Division One of the *Standard Specifications*, the term "Contractor" is replaced with "Design-Build Team", the term "Bidder" is replaced with "Proposer," and the term "Bid" is replaced with "Price Proposal." Throughout Article 102-2, the term "State Contractual Services Engineer" is replaced with "State Prequalifications Engineer". The replacement of "Contractor" with "Design-Build Team" does not apply to Article 102-2. The replacement of the above terms also does not apply when the terms are part of a phrase (e.g. bid bond, prime contractor, total amount bid, etc.)

Deletions: Articles / Subarticles 102-3(B), 102-4, 102-8(B), 102-9(C)(2), 103-2(B), and 103-4(B) of the *Standard Specifications* are deleted from Design-Build Contracts.

Modifications: The remainder of this Standard Special Provision includes modifications to Division One of the *Standard Specifications*.

SECTION 101
DEFINITION OF TERMS

Page 1-3, Article 101-3, replace and add certain definitions as follows:

ADDITIONAL WORK

Additional work is that which results from a change or alteration to the contract and for which there are contract unit prices in the original contract or an executed supplemental agreement.

ADVERTISEMENT

The public advertisement inviting Statements of Qualifications for the design and construction of specific projects.

AWARD

The decision of the Department of Transportation to accept the Price Proposal of the selected Design-Build Team for work which is subject to the furnishing of payment and performance bonds, and such other conditions as may be otherwise provided by law, the Request for Proposals, and the *Standard Specifications*.

CONTRACT

The executed agreement between the Department and the successful Proposer, covering the performance of, and compensation for, the work. The term contract is all inclusive with reference to all written and electronic agreements affecting a contractual relationship and all documents referred to therein. The contract shall include, but not be limited to, the Request for Proposals, the Price Proposal, the printed contract form and attachments, contract bonds, plans and associated special provisions prepared by the Design-Build Team, Standard Specifications and supplemental specifications, standard special provisions and project special provisions contained in the Request for Proposals or as developed by the Design-Build Team and accepted by the Department, and all executed supplemental agreements. All references to contracts shall include electronic agreements and printed paper agreements. These may include, but not be limited to, the electronic bid bond, Non-Collusion Certification, Debarment Certification, Gift Ban Certification and award limits. The contract shall constitute one instrument.

DATE OF AVAILABILITY

That date, established as set forth in the Request for Proposals, by which it is anticipated that the Contract will be executed and sufficient design efforts or work sites within the project limits will be available for the Design-Build Team to begin the controlling operations or design.

DESIGN-BUILD

A form of contracting in which the successful Proposer undertakes responsibility for both the design and construction of a project.

DESIGN-BUILD TEAM

An individual, partnership, joint venture, corporation or other legal entity that furnishes the necessary design and construction services, whether by itself or through subcontracts.

DESIGN-BUILD PROPOSAL

A proposal to contract consisting of a electronically submitted Price Proposal submitted in response to a Request for Proposals on a Design-Build project.

PLANS

The project plans, Standard Drawings, working drawings and supplemental drawings, or reproductions thereof, accepted by the Engineer, which show the location, character, dimensions and details of the work to be performed. Unless noted otherwise within the Request for Proposals, the term “plans” refers to plans as developed by the Design-Build Team and accepted by the Department.

(A) Standard Drawings

Drawings approved for repetitive use, showing details to be used where appropriate. All Standard Drawings approved by the Department plus subsequent revisions and additions. Standard Drawings are available for purchase from:

State Contract Officer
1591 Mail Service Center
Raleigh, NC 27699-1591

(B) Preliminary Plans

Department-furnished drawings distributed in concert with a Request for Proposals, or as developed by the Design-Build Team.

(C) Project Plans

Construction drawings prepared, sealed and completed by the Design-Build Team, or as provided by the Department, that contain specific details and dimensions peculiar to the work.

(D) Working Drawings and Supplemental Drawings

Supplemental design sheets, shop drawings, or similar data which the Design-Build Team is required to submit to the Engineer.

(E) As-Built Plans

Coordinately correct plans documenting the details, dimensions and locations of the completed work.

PRICE PROPOSAL

The offer of a Proposer, submitted on the prescribed forms, to perform the work and furnish the labor and materials at the price quoted.

PROPOSER

An individual, partnership, firm, corporation, LLC, or joint venture formally submitting a Price Proposal in response to a Request for Proposals.

REQUEST FOR PROPOSALS

The document provided by the Department that the Proposer uses to develop his offer to perform the work at designated bid prices.

RIGHT OF WAY

The land area shown on the plans as right of way within which the project is to be constructed.

SCHEDULE OF VALUES

A schedule of work items necessary to complete work, along with the progress of each work item, primarily for the purpose of partial payments.

TABLE OF QUANTITIES

A listing of work items (corresponding to the items in the pay item list) that contributes to a project completion. The table shall include estimated quantities for each work item.

SECTION 102
PROPOSAL REQUIREMENTS AND CONDITIONS

Page 1-9, delete Article 102-1 and replace with the following:

102-1 INVITATION TO BID

After the advertisement has been made, an Invitation to Bid will be made available to known prequalified contractors and any other contracting firms, material suppliers and other interested parties who have requested they be placed on the Invitation to Bid mailing list, informing them that Statements of Qualifications and Design-Build Proposals will be received for the design and construction of specific projects. Such invitation will indicate the contract identification number, length, locations and descriptions; a general summary of the scope of work to be performed; and information on how to receive a Request for Qualifications.

All projects will be advertised in daily newspapers throughout the state before the Price Proposal opening.

Page 1-12, delete Article 102-3 and replace with the following:

102-3 CONTENTS OF REQUEST FOR PROPOSALS

A Request for Proposals will be furnished by the Department to the selected Proposers from among the respondents to the Request for Qualifications. Each Request for Proposals will be marked on the front cover by the Department with an identifier of the Proposer to whom it is being furnished. This Request for Proposals will state the location of the project and will show a schedule of contract items for which Price Proposal are invited. It will set forth the date and time Price Proposal are to be submitted and when the Price Proposals will be opened. The Request for Proposal will also include special provisions or requirements that vary from or are not contained in any preliminary design information or standard specifications.

The Request for Proposals will also include the printed contract forms and signature sheets for execution by both parties to the contract. In the event the Proposer is awarded the contract, execution of the Request for Proposals by the Proposer is considered the same as execution of the contract.

Standard specifications, sealed plans specifically identified as the Department's responsibility and other documents designated in the Request for Proposals shall be considered a part of the Request for Proposals whether or not they are attached thereto. All papers bound to the Request for Proposals are necessary parts thereof and shall not be detached, taken apart, or altered.

The names and identity of each prospective Proposer that receives a copy of the Request for Qualifications for the purposes of submitting a Statement of Qualifications shall be made public, except that a potential Proposer who obtains a Request for Qualifications may, at the time of ordering, request that his name remain confidential.

Page 1-14, Article 102-7, 4th paragraph, delete the first two sentences and replace with the following:

Details shown in the subsurface investigation report are preliminary only. The subsurface investigation and subsurface report, if provided, is done so for information purposes only.

Pages 1-14, delete Article 102-8 delete the first paragraph and replace and replace with the following:

The Proposer shall submit a unit or lump sum price for every item in the proposal other than items that are authorized alternates to those items for which a bid price has been submitted.

Page 1-18, Article 102-10, 3rd paragraph, delete the fifth sentence and replace with the following:

The condition of the bid bond or bid deposit is: the Principal shall not withdraw its bid within 75 days after the submittal of the same, and if the Department shall award a contract to the Principal, the Principal shall, within 14 calendar days after the written notice of award is received by him, give payment and performance bonds with good and sufficient surety as required for the faithful performance of the contract and for the protection of all persons supplying labor and materials in the prosecution of the work.

Page 1-18, Article 102-10, delete the end of the Article beginning with, and inclusive of, the 6th paragraph.

Pages 1-19, delete Article 102-12 and replace with the following:

102-12 WITHDRAWAL OR REVISION OF BIDS

A Design-Build Team will not be permitted to withdraw its Price Proposal after they have been submitted to the Department, unless allowed under Article 103-3 or unless otherwise approved by the Chief Engineer.

Page 1-19, delete Article 102-13 and replace with the following:

102-13 RECEIPT AND OPENING OF BIDS

Price Proposals from short-listed Proposers will be opened and read publicly on the date and time indicated in the Request for Proposals.

Page 1-19, Article 102-14, replace the 1st paragraph with the following:

102-14 REJECTION OF BIDS

Any Price Proposal submitted which fails to comply with any of the requirements of Articles 102-8, 102-9 or 102-10, or with the requirements of the project scope and specifications shall be considered irregular and may be rejected. A Price Proposal that does not contain costs for all items in the Request for Proposals shall be considered irregular and may be rejected.

SECTION 103
AWARD AND EXECUTION OF CONTRACT

Page 1-21, Subarticle 103-2(A), add items (8) and (9) as follows:

(8) Discrepancy in the "Total Amount Bid" and the addition of the "Amount Bid" for each line Item

In the case of the Total Amount Bid does not equal the summation of each Amount Bid for the line items, the summation of each Amount Bid for the line items shall be deemed to be the correct Total Amount Bid for the entire project.

(9) Omitted Total Amount Bid –Amount Bid Completed

If the Total Amount Bid is not completed and the Amount Bid for all line items is completed the Total Amount Bid shall be the summation of the Amount Bid for all the line items.

Page 1-24, Subarticle 103-4(A), first paragraph, replace the 3rd and 4th sentences with the following:

Where award is to be made, the notice of award will be issued within 75 days after the submittal of Price Proposals, except with the consent of the responsible Proposer with the lowest price the decision to award the contract to such bidder may be delayed for as long a time as may be agreed upon by the Department and such Proposer. In the absence of such agreement, the Proposer may withdraw his Price Proposal at the expiration of the 75 days without penalty if no notice of award has been issued.

Page 1-24, Subarticle 103-4(B), first paragraph, replace the first sentence with the following:

A Proposer who desires to submit a Price Proposal on more than one project on which Price Proposals are to be opened in the same letting and who desires to avoid receiving an award of more projects than he is equipped to handle, may submit a Price Proposal on any number of projects but may limit the total amount of work awarded to him on selected projects by completing the form Award Limits on Multiple Projects for each project subject to the award limit.

Page 1-25, Article 103-6, delete the 1st and 2nd paragraphs and replace with the following:

Checks that have been furnished as a bid deposit will be retained until after the contract bonds have been furnished by the successful Proposer, at which time the checks that were furnished as a bid deposit will be returned.

SECTION 104
SCOPE OF WORK

Page 1-26, delete Article 104-1 and replace with the following:

104-1 INTENT OF CONTRACT

The intent of the contract is to prescribe the work or improvements that the Design-Build Team undertakes to perform, in full compliance with the contract documents. In case the method of construction or character of any part of the work is not covered by the contract, this section shall apply. The Design-Build Team shall perform all work in accordance with the contract or as may be modified by written orders, and shall do such additional, extra, and incidental work as may be considered necessary to complete the work to the full intent of the contract. Unless otherwise provided elsewhere in the contract, the Design-Build Team shall furnish all implements, machinery, equipment, tools, materials, supplies, transportation, and labor necessary for the design, prosecution and completion of the work.

Page 1-26, Article 104-3, replace "plans or details of construction" with "contract" in all instances within this Article.

Page 1-35, delete Article 104-10 and replace with the following:

104-10 MAINTENANCE OF THE PROJECT

The Design-Build Team shall maintain the project from the date of beginning construction on the project until the project is finally accepted. For sections of facilities impacted by utility construction / relocation performed by the Design-Build Team prior to beginning construction on the roadway project, maintenance of the impacted sections of facilities shall be performed by the Design-Build Team beginning concurrently with the impact. This maintenance shall be continuous and effective and shall be prosecuted with adequate equipment and forces to the end that all work covered by the contract is kept in satisfactory and acceptable conditions at all times.

All existing and constructed guardrail / guiderail within the project limits shall be included in this maintenance. The Design-Build Team shall perform weekly inspections of all guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this Article, such repair or replacement shall be performed within seven consecutive calendar days of such inspection report.

The Design-Build Team shall maintain all existing drainage facilities, except where the work consists of resurfacing only, such that they are in the same condition upon acceptance of the project as they were when the project was made available to the Design-Build Team. In the event that the Design-Build Team's work is suspended for any reason, the Design-Build Team shall maintain the work covered by the contract, as provided herein. When a portion of the project is accepted as provided in Article 105-17, immediately after such acceptance, the Design-Build Team will not be required to maintain the accepted portion. Should latent defects be discovered or become evident in an accepted portion of the project, the Design-Build Team shall repair or replace the defective work at no cost to the Department.

Where an observation period(s) is required that extends beyond the final acceptance date, the Design-Build Team shall perform any work required by the observation period until satisfactory completion of the observation period.

With the exception of the maintenance of existing and constructed guardrail / guiderail, the Design-Build Team will not be directly compensated for any maintenance operations. The Design-Build Team will not be compensated for the performance of weekly inspections of guardrail / guiderail, and the damage reports required as described above. Authorized maintenance activities for existing and constructed guardrail / guiderail within the project limits will be paid for as extra work in accordance with Articles 104-7 and 104-8 of the *Standard Specifications.*

SECTION 105
CONTROL OF WORK

Pages 1-40, delete Article 105-2 and replace with the following:

105-2 PLANS AND WORKING DRAWINGS

All plans shall be supplemented by such approved working drawings as are necessary to adequately control the work. Working drawings furnished by the Design-Build Team and approved by the Engineer shall consist of such detailed drawings as may be required to adequately control the work. They may include stress sheets, shop drawings, erection drawings, falsework drawings, cofferdam drawings, bending diagrams for reinforcing steel, catalog cuts, or any other supplementary drawings or similar data required of the Design-Build Team. When working drawings are approved by the Engineer, such approval shall not operate to relieve the Design-Build Team of any of his responsibility under the contract for the successful completion of the work.

Changes on shop drawings after approval and / or distribution shall be subject to the approval of the Engineer and he shall be furnished a record of such changes.

Page 1-41, Article 105-3, add the following after the 3rd paragraph:

The Design-Build Team shall bear all the costs of providing the burden of proof that the nonconforming work is reasonable and adequately addresses the design purpose. The Design-Build Team shall bear all risk for continuing with nonconforming work in question until it is accepted.

The Engineer may impose conditions for acceptance of the nonconforming work. The Design-Build Team shall bear all costs for fulfilling the conditions.

The decisions whether the product satisfies the design purpose, whether the nonconforming work is reasonably acceptable and the conditions for acceptance are at the sole discretion of the Engineer.

Pages 1-41, delete Article 105-4 and replace with the following:

105-4 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS

The Request for Proposals, all construction Plans, the Standard Specifications, Supplemental Specifications and Special Provisions and all supplementary documents are essential parts of the contract and a requirement occurring in one is as binding as though occurring in all. They are complementary and describe and provide the complete contract.

In case of discrepancy or conflict, the order in which they govern shall be as follows:

(A) Request for Proposals, in which Project Special Provisions govern Standard Special Provisions

(B) Price Proposal from the Design-Build Team

(C) Accepted Plans and Details from the Design-Build Team, or sealed plans provided by the Department, as applicable

(D) Standard Drawings

(E) Standard Specifications

Where dimensions on the plans are given or can be computed from other given dimensions they shall govern over scaled dimensions.

The Design-Build Team shall take no advantage of any error or omission in the plans, estimated quantities, or specifications. In the event the Design-Build Team discovers an error or omission, he shall immediately notify the Engineer.

Page 1-43, delete Article 105-9 and replace with the following:

105-9 CONTRUCTION STAKES, LINES, AND GRADES

The Design-Build Team shall be responsible for all surveying, construction staking and layout required in the performance of the work. The Design-Build Team shall be responsible for the accuracy of lines, slopes, grades and other engineering work which the Design-Build Team provides under this contract.

SECTION 106
CONTROL OF MATERIAL

Page 1-49, Article 106-2, add the following after the second paragraph:

Prior to beginning construction, the Design-Build Team shall provide a Table of Quantities as described in Article 101-3 of these specifications.

The Table of Quantities Work Items shall correspond to Pay Items as defined in the Standard Specifications. These Work Items have associated Materials and Conversion Factors. For non-standard Work Items, a Generic Work Item with the correct Unit of Measure and in an appropriate category will be used. For example, “GENERIC TRAFFIC CONTROL ITEM - EA” or “GENERIC RETAINING WALL ITEM - LF”. For these Generic Work Items, Materials must be defined and appropriate conversion factors submitted.

An initial Table of Quantities shall be submitted no later than 30 calendar days after the date of award. The Table of Quantities shall be updated and resubmitted within 14 days of when a set of Plans is sealed as Release for Construction (RFC) Plans, and whenever there are substantial changes to the Quantities on previously incorporated RFC Plans.

A Certified Table of Quantities shall be submitted with each pay request. All Certified Tables of Quantities shall indicate that the information accurately represents the materials used for the work performed for which payment is requested, and be notarized by a Design-Build Team representative.

Page 1-50, Article 106-6, add the following after the last paragraph:

For items normally pretested by the Department, the Design-Build Team shall provide a minimum of 30 days notice prior to the beginning of production of the items for this project along with final approved shop drawings.

SECTION 107
LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107-18 FURNISHING RIGHT OF WAY

The responsibility for coordinating the securing of all necessary rights of way is as outlined in the Request for Proposals.

SECTION 108
PROSECUTION AND PROGRESS

Page 1-63, Article 108-2, replace the 2nd paragraph with the following:

The Design-Build Team shall submit a Progress Schedule for review within thirty (30) calendar days of receiving Notice of Award. The Department will review the Progress Schedule within twenty-one (21) calendar days of receipt. The Design-Build Team shall make any necessary corrections and adjustments to the Progress Schedule as necessitated by the Department's review within seven (7) calendar days. The Department will review the revised Progress Schedule within seven (7) calendar days of receipt.

Page 1-63, Subarticle 108-2(A)(1), add the following:

(k) Utility relocation and construction

Page 1-64, Subarticle 108-2(A)(2), add the following:

(h) Critical design submittal dates

(i) Critical permitting dates

(j) Completion of right of way acquisition

(k) Completion of utility relocation and construction

Page 1-64, Article 108-2, add the following:

(D) The Design-Build Team shall provide a written narrative each month detailing the work and percentage of work completed, anticipated sequence of upcoming work (two-month forecast), controlling operation(s), intermediate completion dates, and milestones. If any milestones are exceeded or will not be achieved, the Design-Build Team shall provide in the written narrative details of the delay; controlling operation affected, impacts to other operations, revisions to future intermediate completion dates and milestones, and remedial action necessary to get the project back to the original completion date.

Page 1-64, delete Article 108-3 and replace with the following:

108-3 PRECONSTRUCTION AND PRE-DESIGN CONFERENCES

The selected Design-Build Team shall meet with the Engineer for a pre-design conference concerning the design phase of the work. This conference shall be held prior to the commencement of work, as it is determined according to Article 108-1, and will be scheduled by the Engineer. At the predesign conference, the Design-Build Team shall furnish authorized signature forms and a list of all proposed subcontractors associated with the project design.

A preconstruction conference shall be held at least ten working days before construction activity begins. This second conference, concerning the construction phase, shall also be scheduled by the Engineer. The Design-Build Team shall give the Engineer a minimum of 45 days written notice before the Design-Build Team plans to begin construction activities. This will allow the Engineer time for any environmental agency representatives involved in the permitting process, as well as any other pertinent entities, to be scheduled to attend the preconstruction conference. If the Design-Build Team is responsible for utilities in accordance with Article 105-8 and the Request for Proposals, the Design-Build Team shall be responsible for coordinating with the Engineer in scheduling the utility owners attendance and for notifying the utility owners. The Design-Build Team shall also be responsible for coordinating with the Engineer in scheduling the attendance of subcontractors and others deemed appropriate, and for notifying them.

At the preconstruction conference, a list of any proposed subcontractors and major material suppliers associated with the construction of the project will be submitted.

If the contract has a DBE or WBE / MBE requirement, the Design-Build Team shall submit a Monitoring Spreadsheet for the DBE Open-Ended Performance Plan (OEPP) within thirty (30) days of construction.

In accordance with Article 1101-1 and the Request for Proposals, the Design-Build Team shall submit Transportation Management Plans, including but not limited to Temporary Traffic Control Plans. The Design-Build Team shall designate an employee who is competent and experienced in transportation management to implement and monitor the Transportation Management Plans. The qualifications of the designated employee must be satisfactory to the Engineer.

The Design-Build Team shall submit a Safety Plan and designate an employee as the Safety Supervisor.

Both plans shall be submitted at the preconstruction conference and must be satisfactory to the Engineer. Should the design plan include activities that would place personnel on the work site, Temporary Traffic Control Plans and a Safety Plan for those activities shall be submitted at the predesign conference.

During the preconstruction conference, the Engineer will designate a Department employee or employees who will be responsible to see that the Transportation Management Plans, including but not limited to the Temporary Traffic Control Plans, and any alterations thereto are implemented and monitored to the end that traffic is carried through the work in an effective manner. If approved by the Engineer, the Design-Build Team may designate one employee to be responsible for both the Temporary Traffic Control Plans and the Safety Plan. The Design-Build Team shall not designate its superintendent as the responsible person for either the Temporary Traffic Control Plans or the Safety Plan, unless approved by the Engineer.

If the project requires the Design-Build Team or State personnel work from falsework, within shoring, or in any other hazardous area, the Design-Build Team shall submit, as part of the Design-Build Team's Safety Plan, specific measures that will be used to ensure worker safety.

The Design-Build Team shall also submit a program for erosion control and pollution prevention on all projects involving clearing and grubbing, earthwork, structural work, or other construction, when such work is likely to create erosion or pollution problems.

If the Design-Build Team fails to provide the required submissions, the Engineer may order the preconstruction conference suspended until such time as they are furnished. Work shall not begin until the preconstruction conference has been concluded and the Safety Plan has been approved, unless authorized by the Engineer. The Design-Build Team shall not be entitled to additional compensation or an extension of contract time resulting from any delays due to such a suspension.

The Design-Build Team shall designate a qualified employee as Quality Control Manager. The Quality Control Manager shall be responsible for implementing and monitoring the quality control requirements of the project.

Page 1-64, Article 108-4, add the following sentence to the end of this article:

The Design-Build Team shall record the proceedings of these conferences and distribute the final minutes of the conferences to all attendees.

Page 1-65, Article 108-6, replace "40%" with "30%" in the 1st paragraph.

Page 1-66, Article 108-6, replace "35%" with "25%" in the 2nd paragraph.

Pages 1-67, delete Article 108-8 and replace with the following:

108-8 FAILURE TO MAINTAIN SATISFACTORY PROGRESS

The Engineer will check the Design-Build Team's progress at the time each partial pay request is received. The Design-Build Team's progress may be considered as unsatisfactory if, according to the Progress Schedule, the projected finish date for all work exceeds the scheduled finish date by more than 10%.

When the Design-Build Team's progress is found to be unsatisfactory as described above, the Engineer may make written demand of the Design-Build Team to state in writing the reason for the unsatisfactory progress and produce such supporting data as the Engineer may require or the Design-Build Team may desire to submit. The Engineer will consider the justifications submitted by the Design-Build Team and extensions of the completion date that have or may be allowed in accordance with Subarticle 108-10(B) and as modified herein.

When the Design-Build Team cannot satisfactorily justify the unsatisfactory progress the Engineer may invoke one or more of the following sanctions:

1. Withhold anticipated liquidated damages from amounts currently due or which become due.

2. Remove the Design-Build Team and individual managing firms of the Design-Build Team and / or prequalified design firms from the Department's Prequalified Bidders List.

When any of the above sanctions have been invoked, they shall remain in effect until rescinded by the Engineer.

Page 1-70, Subarticle 108-10(B), add the following as the first paragraph:

Only delays to activities which affect the completion date or intermediate contract date will be considered for an extension of contract time. No extensions will be granted until a delay occurs which impacts the project's critical path and extends the work beyond the contract completion date or intermediate completion date. Any extension to the completion date or intermediate contract date will be based on the number of calendar days the completion date or intermediate completion date is impacted as determined by the Engineer's analysis.

Pages 1-70, delete Subarticle 108-10(B)(1) in its entirety.

Page 1-74, delete Subarticle 108-13(D)(2) in its entirety.

SECTION 109
MEASUREMENT AND PAYMENT

Page 1-75, Article 109-2, delete the last sentence of the 1st paragraph and replace with the following:

Payment to the Design-Build Team will be made only for the work completed, certified and accepted in accordance with the terms of the contract.

Pages 1-80, delete Subarticle 109-4(A) and replace with the following:

109-4 PARTIAL PAYMENTS

(A) General

Partial payments will be based upon progress estimates prepared by the Engineer at least once each month on the date established by the Engineer. Partial payments may be made twice each month if in the judgment of the Engineer the amount of work performed is sufficient to warrant such payment. No partial payment will be made when the total value of work performed since the last partial payment amounts to less than $10,000.00. Partial payments will be approximate only and will be subject to correction in the final estimate and payment.

When the contract includes one lump sum price for the entire work required by the contract, partial payments for the lump sum Design-Build price shall be based on a certified Schedule of Values submitted by the successful Design-Build Team and approved by the Engineer. The certification shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represents the work performed for which payment is requested. The certified Schedule of Values shall be submitted no later than 30 calendar days after the date of award. Each item on the certified Schedule of Values shall be assigned a cost and quantity and shall be identified as an activity on the Progress Schedule. A revised certified Schedule of Values shall be submitted with each update of the Progress Schedule as described in Article 108-2, and as modified herein, or when requested by the Engineer. A certified copy of the Table of Quantities shall also be submitted with each payment request. The certification of the Table of Quantities shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represents the materials for the work performed for which payment is requested.

When the contract includes lump sum items for portions of the work required by the contract, and the applicable section of the Specifications or Request for Proposals specify the means by which the total amount bid be included in the partial pay estimates, the Engineer will determine amounts due on the partial pay estimate in accordance with the applicable portion of the Specifications or Request for Proposals.

The Engineer will withhold an amount sufficient to cover anticipated liquidated damages as determined by the Engineer.

Page 1-81, Subarticle 109-5(D), delete the 4th and 5th paragraphs and replace with the following:

Partial payments will not be made on seed or any living or perishable plant materials.

Partial payment requests shall not be submitted by the Design-Build Team until those items requested have corresponding signed and sealed RFC Plans accepted by the Department.

Pages 1-83, Article 109-10, add the following as bullets (E), (F) and (G) under the 1st paragraph.

(E) As-Built Plans

(F) All documents required elsewhere in this RFP

(G) Documents or guarantees to support any warranty provided by the Design Build Team

County: YANCEY

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			CONTRACT ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN & CONSTRUCTION OF BRIDGE #990062	Lump Sum	L.S.	
0003	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN & CONSTRUCTION OF BRIDGE #990100	Lump Sum	L.S.	
0004	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM END BENTS STRUCTURE #990062	2 EA		
0005	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM END BENTS STRUCTURE #990100	2 EA		
0006	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM RIGHT OF WAY AQUISITION STRUCTURE #990062	4 EA		
0007	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM RIGHT OF WAY AQUISITION STRUCTURE #990097	3 EA		
0008	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM RIGHT OF WAY AQUISITION STRUCTURE #990100	4 EA		
0009	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM BRIDGE LENGTH STRUCTURE #990062	50 LF		
0010	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM BRIDGE LENGTH STRUCTURE #990100	65 LF		
0011	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #1 STRUCTURE #990062	18 LF		
0012	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #1 STRUCTURE #990100	8 LF		
0013	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #2 STRUCTURE #990062	10 LF		
0014	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #2 STRUCTURE #990100	32 LF		

County: YANCEY

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			******* BEGIN SCHEDULE AA ****** ******* (3 ALTERNATES) *******			
0015 AA1	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN & CONSTRUCTION OF BRIDGE #990097	Lump Sum	L.S.	
0016 AA1	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM END BENTS STRUCTURE #990097	2 EA		
0017 AA1	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM INTERIOR BENT CAP STRUCTURE #990097	2 EA		
0018 AA1	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM BRIDGE LENGTH STRUCTURE #990097	170 LF		
0019 AA1	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #1 STRUCTURE #990097	18 LF		
0020 AA1	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #2 STRUCTURE #990097	30 LF		
0021 AA1	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT INTERIOR BENT STRUCTURE #990097	44 LF		
			*** OR ***			
0022 AA2	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN & CONSTRUCTION OF BRIDGE #990097	Lump Sum	L.S.	
0023 AA2	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM END BENTS STRUCTURE #990097	2 EA		
0024 AA2	0000915000-N	SP	GENERIC MISCELLANEOUS ITEM INTERIOR BENT CAP STRUCTURE #990097	1 EA		
0025 AA2	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM BRIDGE LENGTH STRUCTURE #990097	170 LF		
0026 AA2	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #1 STRUCTURE #990097	18 LF		
0027 AA2	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT END BENT #2 STRUCTURE #990097	30 LF		
0028 AA2	0000930000-E	SP	GENERIC MISCELLANEOUS ITEM FOUNDATION LENGTH AT INTERIOR BENT STRUCTURE #990097	22 LF		
			*** OR ***			

County: YANCEY

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0029 AA3	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM ALTERNATE LUMP SUM BID FOR BRIDGE #990097	Lump Sum	L.S.	

***** END SCHEDULE AA *****

1152/Jan13/Q713/D25855000/E29

Total Amount Of Bid For Entire Project :

CONTRACT NUMBER **CONTRACTOR NAME** **HiCAMS VENDOR NUMBER** **COUNTY**

FUEL USAGE FACTOR CHART AND ESTIMATE OF QUANTITIES

Description of Work	Units	Fuel Usage Factor Diesel #2	Estimate of Quantities
Unclassified Excavation	Gal / CY	0.29	_____ CY
Borrow Excavation	Gal / CY	0.29	_____ CY
Class IV Subgrade Stabilization Aggregate Base Course Sub-Ballast Aggregate for Cement Treated Base Course	Gal / Ton	0.55	_____ Tons
Portland Cement for Cement Treated Base Course	Gal / Ton	0.55	_____ Tons
* Asphalt Concrete Base Course	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
* Asphalt Concrete Intermediate Course	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
* Asphalt Concrete Surface Course	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
* Open-Graded Asphalt Friction Course	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
* Permeable Asphalt Drainage Course	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
* Sand Asphalt Surface Course, Type SA-1	Gal / Ton	☐ 0.90 ☐ 2.90	_____ Tons
Portland Cement Concrete Pavement			
Through Lanes and Shoulders (> 11")	Gal / SY	0.327	_____ SY
Through Lanes and Shoulders (9" to 11")		0.272	_____ SY
Through Lanes and Shoulders (< 9")		0.245	_____ SY
** Structural Concrete (Cast-in-Place Only)	Gal / CY	0.98	_____ CY

* Select 0.90 **OR** 2.90

** Structural Concrete shall be defined as cast-in-place Class A or Class AA concrete used in the construction of major structures for various work items identified in Division 4 of the *Standard Specifications*.

☐ The above quantities represent a reasonable estimate of the total quantities anticipated, for each item, as pertaining to fuel price adjustments, and is representative of the design proposed.

Or

☐ The Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments on this project.

Enter the Total Construction Cost Amount: **$**_____

LISTING OF DBE SUBCONTRACTORS			Sheet _____ of _____	
Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

This form must be completed in order for the Bid to be considered responsive and be publicly read.

Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

LISTING OF DBE SUBCONTRACTORS

Sheet _____ of _____

Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

This form must be completed in order for the Bid to be considered responsive and be publicly read.
Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

LISTING OF DBE SUBCONTRACTORS

Sheet _____ of _____

Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				
Name Address				

This form must be completed in order for the Bid to be considered responsive and be publicly read.
Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

LISTING OF DBE SUBCONTRACTORS

Sheet _____ of _____

Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name Address				
Name Address				
Name Address				
Name Address				

COST OF CONSTRUCTION WORK ONLY $ _____

*The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.

** Dollar Volume of DBE Subcontractor $ _____

Percentage of Total Construction Cost _____ %

(Including Right of Way Acquisition Services)

** - Must have entry even if figure to be entered is zero.

** - *If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.*
If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

This form must be completed in order for the Bid to be considered responsive and be publicly read.
Bidders with no DBE participation must so indicate this on the form by entering the word or number *zero*.

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

CORPORATION

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 bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

_____
Full name of Corporation

_____
Address as Prequalified

Attest _____ By _____

Secretary/Assistant Secretary
(Select appropriate title)

President/Vice President/Assistant Vice President
(Select appropriate title)

_____
Print or Type Signer's name

_____
Print or Type Signer's name

CORPORATE SEAL

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

PARTNERSHIP

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 its own bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

_____

Full Name of
Partnership

_____

Address as Prequalified

_____ _____

Signature of Witness | Signature of Partner

_____ _____

Print or Type Signer's Name | Print or Type Signer's Name

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

LIMITED LIABILITY COMPANY

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 its own bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

_____
Full Name of Firm

_____
Address as Prequalified

_____	_____
Signature of Witness	Signature of Member/Manager/Authorized Agent *(Select appropriate Title)*
_____	_____
Print or Type Signer's Name	Print or Type Signer's Name

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

JOINT VENTURE (2) or (3)

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 its own bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

_____
Address as Prequalified

BY

_____ _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or Type Signer's Name — Print or Type Signer's Name

If Corporation, affix Corporate Seal

AND

(3) _____
Name of Contractor

_____
Address as Prequalified

BY

_____ _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or Type Signer's Name — Print or Type Signer's Name

If Corporation, affix Corporate Seal

AND

(4) _____
Name of Contractor

_____
Address as Prequalified

BY

_____ _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or Type Signer's Name — Print or Type Signer's Name

If Corporation, affix Corporate Seal

CORPORATE SEAL(S)

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

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 its own bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder _____

Individual Name

Trading and Doing Business As _____

Full name of Firm

_____

Address as Prequalified

_____ _____

Signature of Witness | Signature of Prequalified Bidder, Individual

_____ _____

Print or Type Signer's Name | Print or Type Signer's Name

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

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 its own bona fide 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.

SIGNATURE OF PREQUALIFIED BIDDER

Name of Prequalified Bidder _____

Print or Type Name

_____

Address as Prequalified

_____

Signature of Prequalified Bidder, Individually

_____

Print or Type Signer's Name

_____

Signature of Witness

_____

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.: **C205023**

County: **Yancey County**

ACCEPTED BY THE
DEPARTMENT OF TRANSPORTATION

_____
Contract Officer

_____
Date

Execution of Contract and Bonds
Approved as to Form:

_____
Attorney General

Signature Sheet (Bid - Acceptance by Department)