STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

April 9, 2026

ADDENDUM # 2

Contract No.	DN01127
TIP No.:	BL-0008
Federal Aid No.:	STBGDA-1413019
WBS Element:	49463.3.1
County:	Henderson
Description:	Grading, Paving, Structures, And Drainage on Clear Creek Greenway From Oklawaha Greenway At SR-1508 (Balfour Rd) To SR-1518 (Lakewood Rd) In Henderson County

Letting Date: April 14, 2026

Plan Holders

Content Summary: Questions/Concerns & Department Responses, Provision Changes, Pay Item Quantity Changes

The above contract has experienced the following revisions:

1. Page ST-19 of the structure provisions have been revised as follows (**see attached revised structures provisions**):

    a. Under 1.4 SUBMITTALS, B., the last paragraph should read: **"The Contractor shall submit shop drawings for the prefabricated steel Pratt truss bridge, to the Engineer. The shop drawings will be reviewed by the Engineer."**

    b. Page ST-19, 1.4 SUBMITTALS, C., the first paragraph, third sentence should read: **"Complete structural calculations shall be submitted to the Engineer for their review."**

2. The following pay items have quantity changes (**see attached revised bid items sheets**):

    a. The quantity for line item 0027, 3578000000-N, GENERIC FENCING ITEM BOLLARDS has been revised to now be **27 EA**.

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

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

Location:
253 WEBSTER ROAD
SYLVA, NC 28779

Website: www.ncdot.gov

b. The quantity for line item 0042, 4725000000-E, THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) has been revised to now be **21 EA** for the 12" YIELD LINE requirements in the pavement marking plans.

3. Bidder Questions/Concerns and **Department Responses**:

Bidder Concern 1: Section 2.2 of the structure provisions, page ST-22, "Prefabricated Steel Pratt Truss Bridge," lists Contech Engineer Solutions and Excel Bridge Company as manufacturers in Section 2.2.A."

Department Response 1: Both companies have been removed from section 2.2 (2) because neither of them is on the Approved Products List as approved; they only appear as Approved for Provisional Use. (See attached revised structure provisions).

Bidder Concern 2: "Will manufacturers currently listed on the NCDOT Approved Products List under Structures / Pedestrian Bridges be considered acceptable (preapproved) for this project?"

Department Response 2: Yes. All manufacturers on the Approved Products List at this time have the status of "Approved for Provisional Use." Contact Structures Management Unit prior to use on project and notify the Materials & Tests Unit for prefabrication inspection.

Bidder Concern 3: Is Section 2.2.B intended to allow manufacturers not currently appearing on the NCDOT Approved Products List, including Excel Bridge Company, to be accepted through the review process described there?

Department Response 3: The manufacturer can be approved through the submittal process for this project only; the vendor can request to be added to the Approved Products List through the Materials &Tests Unit.

Bidder Concern 4: If so, does that project-specific review process differ from NCDOT's usual approved-products requirements for pedestrian bridges?"

Department Response 4: The project specific review would determine if the manufacturer was acceptable to produce the specific bridge used for this project only. A blanket approval of all products produced by the manufacturer would be a different process.

Bidder Concern 5: Please clarify whether manufacturer acceptability for this project is governed by the NCDOT Approved Products List or by the manufacturer and substitution language in Sheet BL-0008, Section 2.2.

Department Response 5: Both methods can result in a manufacturer being able to produce the bridges used for this project.

Please access ebsx addenda files, DN01127.002x. on Bid Express®.

Thank you for your attention to this matter.

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

Sincerely,

DocuSigned by:

02EE828795674A5...

Wes Jamison, P.E.
Division 14 Project Development Engineer

Project Special Provisions

Structures

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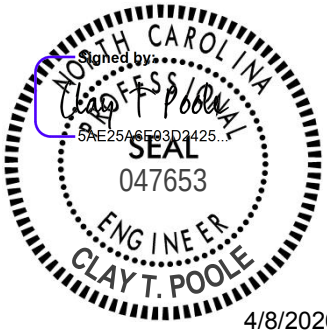

FALSEWORK AND FORMWORK (11-30-23)

GENERAL

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

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

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

MATERIALS

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

DESIGN REQUIREMENTS

(A) Working Drawings

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

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

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

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

If requested by the Engineer, submit with the working drawings manufacturer's catalog data listing the weight of all construction equipment that will be supported on the temporary work.

Show anticipated total settlements and/or deflections of falsework and forms on the working drawings. Include falsework footing settlements, joint take-up, and deflection of beams or girders.

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Wind Loads

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

Table 2.2 - Wind Pressure Values

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

(2) Time of Removal

The following requirements replace those of Article 3.4.8.2.

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

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

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

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

(B) Review and Approval

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

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

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

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

CONSTRUCTION REQUIREMENTS

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

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

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

(A) Maintenance and Inspection

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

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

(B) Foundations

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

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

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

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

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

REMOVAL

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

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

MEASUREMENT AND PAYMENT

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

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

SUBMITTAL OF WORKING DRAWINGS (11-30-23)

GENERAL

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

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

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

ADDRESSES AND CONTACTS

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

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

Via US mail:

Mr. B. C. Hanks, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1581 Mail Service Center
Raleigh, NC 27699-1581

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

Via other delivery service:

Mr. B. C. Hanks, P. E.
State Structures Engineer
North Carolina Department
of Transportation
Structures Management Unit
1000 Birch Ridge Drive
Raleigh, NC 27610

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

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

For projects in Divisions 1-7, use the following Eastern Regional Office addresses:

Via Email: EastGeotechnicalSubmittal@ncdot.gov

Via US mail:

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

Via other delivery service:

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

For projects in Divisions 8-14, use the following Western Regional Office addresses:

Via Email: WestGeotechnicalSubmittal@ncdot.gov

Via US mail or other delivery service:

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

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

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

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

Primary Structures Contact: James Bolden (919) 707 – 6408
jlbolden@ncdot.gov

Secondary Structures Contacts: Emmanuel Omile (919) 707 – 6451
eomile@ncdot.gov

Madonna Rorie (919) 707 – 6508
mrorie@ncdot.gov

Eastern Regional Geotechnical Contact (Divisions 1-7):

Thomas Santee (919) 920-8901
tgsantee@ncdot.gov

Western Regional Geotechnical Contact (Divisions 8-14):
Eric Williams (704) 455 – 8902
ewilliams3@ncdot.gov

SUBMITTAL COPIES

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

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

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

STRUCTURE SUBMITTALS

Submittal	Submittal Required by Structures Management Unit?	Submittal Required by Geotechnical Engineering Unit?	Contract Reference Requiring Submittal [1]
Arch Culvert Falsework	Y	N	Plan Note, SN Sheet & "Falsework and Formwork"
Box Culvert Falsework [7]	Y	N	Plan Note, SN Sheet & "Falsework and Formwork"
Cofferdams	Y	Y	Article 410-4
Foam Joint Seals [6]	Y	N	"Foam Joint Seals"
Expansion Joint Seals (hold down plate type with base angle)	Y	N	"Expansion Joint Seals"
Expansion Joint Seals (modular)	Y	N	"Modular Expansion Joint Seals"

Expansion Joint Seals (strip seals)	Y	N	"Strip Seal Expansion Joints"
Falsework & Forms [2] (substructure)	Y	N	Article 420-3 & "Falsework and Formwork"
Falsework & Forms (superstructure)	Y	N	Article 420-3 & "Falsework and Formwork"
Girder Erection over Railroad	Y	N	Railroad Provisions
Maintenance and Protection of Traffic Beneath Proposed Structure	Y	N	"Maintenance and Protection of Traffic Beneath Proposed Structure at Station ___"
Metal Bridge Railing	Y	N	Plan Note
Metal Stay-in-Place Forms	Y	N	Article 420-3
Metalwork for Elastomeric Bearings [4,5]	Y	N	Article 1072-8
Miscellaneous Metalwork [4,5]	Y	N	Article 1072-8
Disc Bearings [4]	Y	N	"Disc Bearings"
Overhead and Digital Message Signs (DMS) (metalwork and foundations)	Y	N	Applicable Provisions
Placement of Equipment on Structures (cranes, etc.)	Y	N	Article 420-20
Prestressed Concrete Box Beam (detensioning sequences) [3]	Y	N	Article 1078-11
Precast Concrete Box Culverts	Y	N	"Optional Precast Reinforced Concrete Box Culvert at Station ___"
Prestressed Concrete Cored Slab (detensioning sequences) [3]	Y	N	Article 1078-11
Prestressed Concrete Deck Panels	Y	N	Article 420-3
Prestressed Concrete Girder (strand elongation and detensioning sequences)	Y	N	Articles 1078-8 and 1078-11
Removal of Existing Structure over Railroad	Y	N	Railroad Provisions

Revised Bridge Deck Plans (adaptation to prestressed deck panels)	Y	N	Article 420-3
Revised Bridge Deck Plans (adaptation to modular expansion joint seals)	Y	N	"Modular Expansion Joint Seals"
Sound Barrier Wall (precast items)	Y	N	Article 1077-2 & "Sound Barrier Wall"
Sound Barrier Wall Steel Fabrication Plans [5]	Y	N	Article 1072-8 & "Sound Barrier Wall"
Structural Steel [4]	Y	N	Article 1072-8
Temporary Detour Structures	Y	Y	Article 400-3 & "Construction, Maintenance and Removal of Temporary Structure at Station ____"
TFE Expansion Bearings [4]	Y	N	Article 1072-8

FOOTNOTES

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

GEOTECHNICAL SUBMITTALS

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

FOOTNOTES

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

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

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

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

CRANE SAFETY (6-20-19)

GENERAL

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

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

CRANE SAFETY SUBMITTAL LIST

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

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

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

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

MEASUREMENT AND PAYMENT

No direct payment will be made for *Crane Safety*. All costs shall be considered incidental to items for which direct payment is made.

GROUT FOR STRUCTURES (12-1-17)

GENERAL

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

MATERIAL REQUIREMENT

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

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

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

SAMPLING AND PLACEMENT

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

MEASUREMENT AND PAYMENT

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

PREFABRICATED PEDESTRIAN BRIDGE (SPECIAL)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes prefabricated steel Pratt truss bridge superstructure and substructure.

B. All materials, construction, and fabrication shall meet the requirements of the current edition of the North Carolina Department of Transportation Standard Specifications for Roads and Structures.

1.3 PERFORMANCE REQUIREMENTS

A. Structural Performance: The prefabricated steel Pratt truss bridge, anchor bolts and bearing pads shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to current edition of the AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges, North Carolina Department of Transportation Bicycle Facilities Planning and Design Guidelines, North Carolina Department of Transportation Structure Design Manual, North Carolina Department of Transportation Standard Specifications for Roads and Structures, AASHTO LRFD Bridge Design Specifications, at a minimum:

1. Dead Loads: Self-weight of superstructure.
2. Live Loads: Pedestrian load shall not be considered to act concurrently with vehicular load. The dynamic load allowance need not be considered for vehicular load.

    a. Pedestrian Live Load = 90 psf
    b. Vehicular Live Load = AASHTO H-5

3. Railing Loads: Per AASHTO.
4. Wind Loads: Per AASHTO.
5. Water Loads: Per AASHTO.

    a. Stream Velocities:

        1) Structure #1: 1.4 feet/sec

        2) Structure #2: 7.0 feet/sec

6. Temperature: Per AASHTO/NCDOT.
7. Seismic: Per AASHTO.
8. Load Combinations: Per AASHTO.
9. Deflection Limits: Design framing system to withstand service loads without deflections greater than the following:

    a. Main Truss:

        1) Vehicular and/or pedestrian loads = Span/1000.

b. Floor system members (floor beams and stringers):

1) Vehicular and/or pedestrian loads = Span/360.
2) Vehicular and/or pedestrian loads on cantilever arms = Span/375.

10. Vibration Limits: Per AASHTO.

B. Geometry and Component Requirements:

1. Span:

a. Structure 1 contains a prefabricated steel bridge span as shown in the plans. The prefabricated steel span shall be a simple-span bridge along the centerline of the proposed alignment. The Contractor is required to provide verification to the Engineer that the substructure and foundations are correctly laid out before placement of the bridge superstructure.

b. Structure 2 contains a prefabricated steel bridge span as shown in the plans. The prefabricated steel span shall be a simple-span bridge along the centerline of the proposed alignment. The Contractor is required to provide verification to the Engineer that the substructure and foundations are correctly laid out before placement of the bridge superstructure.

2. Width:
a. The bridge clear path width shall be 12’-0” and shall be measured between the inside faces of safety railing elements.

3. Depth:
a. The maximum depth of superstructure shall be measured from top of deck to bottom of bridge superstructure.

4. Bridge System Type:

a. The bridge shall be a Pratt truss bridge arched similar to Contech Capstone model as shown in the plans. Interior vertical members may be plumb or perpendicular to the chord faces. Diagonal members shall be welded to the chords and/or verticals as determined by the Bridge Manufacturer.

1) The bridge shall be designed utilizing floor beams placed between the bottom chords and verticals.
2) The Bridge Manufacturer shall determine the distance from the top of the deck to the top and bottom truss members based upon structural and/or shipping requirements.
3) For Structures 1 and 2, the deck shall be a reinforced cast-in-place concrete deck. Immediately after float finishing of concrete, slightly roughen entire surface by brooming with fiber-bristle broom perpendicular to traffic. Coordinate final finish with Engineer before application.
4) The top of the safety rail system or guardrail elements shall not be less than 54 inches above the deck (measured from the high point of the walking/riding surface). The safety system shall extend the full length of the bridge and shall be connected to the guardrail at each end of the bridge per NCDOT requirements.

5. Member Components:

a. All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing, and all their shop connections shall be fully welded. Other structural members and bracing shall be fabricated from structural steel shapes or square and/or rectangular structural steel tubing. Drain holes and weep holes shall be provided in all connections. Unless the floor fastenings are

specifically designed to provide adequate lateral support to the top flange of open shape stringers (W-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location. Weep all tubular members as required for drainage.

6. Railings:

   a. The safety railing system shall be placed on the structure to a minimum height of 54 inches above the deck surface (measured from the high point of the walking/riding surface). The bridge manufacturer shall determine the placement of the horizontal and vertical rails such that a 6-inch diameter sphere cannot pass between successive rails for the lower 27 inches of the railing system; above 27 inches, the spacing of the rails shall be such that an 8-inch diameter sphere cannot pass between successive rails. A safety toe rail or curb shall be provided. The safety rail shall be designed to accommodate the required loads per AASHTO.

   b. Metal approach railings shall be provided at each corner of the structure, as shown in the plans. Approach railings shall be 5'-0" long, skewed at 15 degrees, and be 54 inches above the trail surface (measured from the high point of the walking/riding surface).

7. Camber:

   a. The bridge shall have a vertical camber dimension at midspan equal to 100% of the full dead load deflection.

8. Substructure:

   a. Bridge end bents shall be cast-in-place reinforced concrete supported on piles as detailed in the plans.

   b. Piles shall be driven to a minimum tip elevation as indicated on the plans.

   c. Prefabricated steel pedestrian bridge end bent details shall be coordinated with the prefabricated steel pedestrian bridge plans, to be provided by the prefabricated steel pedestrian bridge manufacturer. Notify the Engineer immediately if conflicts are identified. Construction of end bents shall not begin until superstructure shop drawings are approved and all conflicts resolved.

   d. Reinforcement in cap may be shifted to clear anchor bolts.

   e. The top surface of end bent caps, except at bridge seat build-ups, shall be sloped transversely from fill face to back face at a minimum rate of 2%.

   f. End bent backwall shall be placed after bridge has been erected. Top of backwall shall follow bridge deck grade.

   g. The top surface of end bent caps shall be cured in accordance with NCDOT Standard Specifications, except that the membrane curing compound method shall not be used.

   h. Apply an epoxy protective coating to the top surface of end bents, except under bearings and boardwalk sill plates.

i. End bent backwall shall be placed prior to application of epoxy protective coating.

9. Elevations:

a. The bridge end bent shall be constructed at the elevations shown on the plans and adjusted based on the prefabricated steel pedestrian bridge manufacturer. The elevations shown on the plans are grade point elevations and not top of cap elevations.

1.4 SUBMITTALS

A. Product Data: For each type of product used. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for prefabricated steel Pratt truss bridge, anchor bolts, and bearing.

B. Shop Drawings: For prefabricated steel Pratt truss bridge, include plans, elevations, sections, details, and attachments to other work specific to this project. All pertinent design information such as geometries, member sizes, bridge reactions, splice locations, details, quantities and general notes shall be clearly specified on the drawings. All drawings shall be signed and sealed by a Professional Engineer who is licensed to practice in the State of North Carolina. The bridge designer/fabricator shall be NCDOT-approved for such work.

The Contractor shall submit shop drawings for the prefabricated steel Pratt truss bridge, to the Engineer. The shop drawings will be reviewed by the Engineer.

C. Structural Calculations: For prefabricated steel Pratt truss bridge, anchor bolts and bearing pads. The calculations shall include all design information necessary to determine the structural adequacy of the bridge, anchor bolts and bearing pads, and to demonstrate conformance with the current AASHTO code. Complete structural calculations shall be submitted to the Engineer for their review. All calculations shall be signed and sealed by a Professional Engineer who is licensed to practice in the State of North Carolina, and shall include the following, at a minimum:

1. Design calculations for the individual truss members, floor beams and stringers, and decking.
2. Checks for the critical connection failure modes for each individual truss member. Special attention shall be given to all welded tube on tube connections.
3. Design calculations for all bolted splice connections.
4. Main truss deflection checks, including individual truss member deflection checks.
5. Design calculations for anchor bolts.
6. Design calculations for bearings.

D. Erection plans and sequencing signed and sealed by a Professional Engineer licensed in the State of North Carolina. The erection plans and sequencing method shall include location(s) of crane(s) required for erection, as well as procedures for mitigating the amount of fallen debris. No debris will be allowed to collect in the channel of the waterway. All equipment locations and staging shall occur within the right-of-way and easements established in the roadway plans and shall be indicated on the erection plans.

E. Qualification Data: For qualified fabricator and Professional Engineer.

F. Welding certificates.

G. Mill test reports for structural steel, including chemical and physical properties.

H. Product Test Reports: For the following:

1. Bolts, nuts and washers including mechanical properties and chemical analysis.

I. Maintenance Data: For prefabricated steel Pratt truss bridge to include in maintenance manuals.

J. Warranty: Sample of special warranty.

1.5 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code – Steel".

B. Fabricator Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Categories CBR and B-CMP, and is NCDOT approved for such work.

C. Comply with current edition of the applicable provisions of the following specifications and documents:

1. AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges.
2. North Carolina Department of Transportation Bicycle Facilities Planning and Design Guidelines.
3. North Carolina Department of Transportation Structure Design Manual.
4. North Carolina Department of Transportation Standard Specifications for Roads and Bridges, and Special Provisions.
5. AASHTO LRFD Bridge Design Specifications.
6. RCSC's "Specification for Structural Joints Using ASTM A325 or A490 Bolts."

D. Pre-installation Conference: Conduct conference at Project Site prior to commencing construction of prefabricated steel pedestrian bridge.

1.6 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair finish or replace any part of the steel Pratt truss bridge that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Ten (10) years from date of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.

1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

B. Weathering steel shall be stored under conditions that will prevent unsightly, uneven weathering and excessive corrosion. If uneven weathering occurs, the contractor shall reclean the steel to the satisfaction of the engineer. If cleaning does not produce satisfactory uniformity in appearance or if in the judgment of the engineer, excessive corrosion or chemical contamination has occurred, the contractor shall replace the material at the contractor's expense. As a minimum, the following conditions shall be avoided and the contractor shall take additional precautions as deemed necessary:

1. Storage in transit, open cars or trucks for an extended period of time.

2. Standing water on material in storage or entrapment of moisture.
3. Contact with chemically treated lumber used for blocking or other types of foreign matter.
4. Exposure to chlorides or other chemical contamination.

C. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.

1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
2. Clean and relubricate bolts and nuts that become dry and rusty before use.

1.8 COORDINATION

A. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Steel Structural Tubing: ASTM A 847, weathering steel; AASHTO M 270, Grade 50W.

B. Channels and Angles: ASTM A 588, weathering steel, AASHTO M 270, Grade 50W.

C. Steel Plates, Shapes, and Bars: ASTM A 588, weathering steel, AASHTO M 270, Grade 50W.

D. Anchor Bolts, High Strength Bolts, Nuts and Washers:

1. Anchor Bolts: ASTM A 449, Type 1 hot dip galvanized, heavy-hex steel structural bolts.
2. High-Strength Bolts: ASTM F3125 Grade A 325 (AASHTO M 164), Type 3 weathering steel, heavy-hex steel structural bolts.
3. Nuts and Washers: Hot dip galvanized at anchor bolts and weathering steel for all high strength weathering steel bolts.
4. Bolts, nuts, and washers shall also be in accordance with Section 1072 of the NCDOT Standard Specifications.

E. The minimum corrosion index of the atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

F. Concrete:

1. End Bents and Bents: Class A concrete, per NCDOT Standard Specifications.
2. Concrete Deck: Class A concrete, per NCDOT Standard Specifications
3. Reinforcing Steel: ASTM A 615 (AASHTO M 31), Grade 60.

G. Bearing Pads: Minimum 50 durometer hardness, conforming to NCDOT Standard Specifications and Special Provisions.

2.2 PREFABRICATED STEEL PRATT TRUSS BRIDGE

A. Manufacturers: Subject to compliance with the requirements, manufacturers offering products suitable for incorporation into the Work may be considered.

B. Manufacturers may be used provided the proposed supplier is evaluated and approved by the Designer or Owner through the submittal process in accordance with the General Conditions. The Contractor must provide the following documentation for any proposed supplier who is not pre-approved:

1. Product Literature
2. All documentation to ensure the proposed substitution will be in compliance with these specifications. This shall include:

    a. Representative design calculations.
    b. Representative drawings.
    c. Splicing and erection procedures.
    d. Warranty information.
    e. Inspection and maintenance procedures.
    f. AISC Shop Certification.

2.3 FABRICATION

A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC's 'Code of Standard Practice for Steel Buildings and Bridges".

1. Mark and match-mark materials for field assembly.
2. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.

B. Thermal Cutting: Perform thermal cutting by machine to the greatest extent possible.

1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.

C. Bolt Holes: Cut, drill or punch standard bolt holes perpendicular to metal surfaces.

D. Drain Holes: Weep/drain holes shall be provided in all tubular bridge members, for drainage at their lowest point, unless such members are free-draining, open-ended.

E. Cleaning: After fabrication, weathering steel shall be shop cleaned to a SSPC SP-6 finish.

2.4 SHOP CONNECTIONS

A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A325 or A490 Bolts" for type of bolt and type of joint specified.

B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

2.5 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

2.6 INSTALLATION

A. Delivery is made to a location nearest the site which is easily accessible to normal over-the-road tractor/trailer equipment. Contractor is to schedule a pre-installation meeting to discuss the method of erecting the bridge, as well as to verify the location(s) of the crane(s) required for erection. All equipment locations and staging shall occur within the right-of-way and easements established in the roadway plans. Contractor to verify prior to commencing bridge erection.

B. The Fabricator will provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of the Contractor.

C. No debris will be allowed to collect in the channel of the waterway. Contractor to provide measures to ensure debris is collected from the channel of the waterway as soon as is practical during construction.

PART 3 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT

3.1 METHOD OF MEASUREMENT

A. The quantity for Prefabricated Pedestrian Bridge to be paid for shall be measured on lump sum basis per Structure. No separate measurement will be made.

3.2 BASIS OF PAYMENT

A. The prefabricated steel Pratt truss bridge components including but not limited to attachments, inserts, compression seal expansion joints, and reinforced deck slab shall be paid for under the lump sum bid item Prefabricated Pedestrian Bridge.

B. Payment will be made under:

1. Prefabricated Pedestrian Bridge:

a. Prefabricated Pedestrian Bridge at Sta. 108+82.00 -L1- _____ Lump Sum
b. Prefabricated Pedestrian Bridge at Sta. 146+37.50 -L1- _____ Lump Sum

END OF SECTION

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM KAYAK LAUNCH	Lump Sum	L.S.	
0004	0043000000-N	226	GRADING	Lump Sum	L.S.	
0005	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	1,300 SY		
0006	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	396 LF		
0007	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	100 LF		
0008	0448000000-E	310	****" RC PIPE CULVERTS, CLASS IV (48")	28 LF		
0009	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	108 LF		
0010	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	28 LF		
0011	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	32 LF		
0012	0448600000-E	310	36" RC PIPE CULVERTS, CLASS IV	44 LF		
0013	0995000000-E	340	PIPE REMOVAL	42 LF		
0014	1099500000-E	505	SHALLOW UNDERCUT	100 CY		
0015	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	2,000 TON		
0016	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	15,390 SY		
0017	1121000000-E	520	AGGREGATE BASE COURSE	5,086 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	1220000000-E	545	INCIDENTAL STONE BASE	286 TON		
0019	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	1,520 TON		
0020	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	102 TON		
0021	2220000000-E	838	REINFORCED ENDWALLS	12 CY		
0022	2591000000-E	848	4" CONCRETE SIDEWALK	340 SY		
0023	2605000000-N	848	CONCRETE CURB RAMPS	12 EA		
0024	2830000000-N	858	ADJUSTMENT OF MANHOLES	2 EA		
0025	2847000000-N	858	RECONSTRUCT MANHOLE STRUCTURES	2 EA		
0026	3575000000-E	SP	GENERIC FENCING ITEM WILDLIFE FENCE, 108" FABRIC	1,035 LF		
0027	3578000000-N	SP	GENERIC FENCING ITEM BOLLARDS	27 EA		
0028	3578000000-N	SP	GENERIC FENCING ITEM METAL LINE POSTS FOR ___" WILDLIFE FENCE, (108")	130 EA		
0029	3578000000-N	SP	GENERIC FENCING ITEM METAL TERMINAL POSTS FOR ___" WILDLIFE FENCE, (108")	4 EA		
0030	3578000000-N	SP	GENERIC FENCING ITEM REMOVE AND REINSTALL GATE	1 EA		
0031	3628000000-E	876	RIP RAP, CLASS I	265 TON		
0032	3649000000-E	876	RIP RAP, CLASS B	70 TON		
0033	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	1,285 SY		
0034	4025000000-E	901	CONTRACTOR FURNISHED, TYPE *** SIGN (E)	160 SF		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	4078000000-E	903	SUPPORTS, 2-LB STEEL U-CHANNEL	31 EA		
0036	4102000000-N	904	SIGN ERECTION, TYPE E	31 EA		
0037	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (E)	1 EA		
0038	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	2 EA		
0039	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL	Lump Sum	L.S.	
0040	4709000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	500 LF		
0041	4720000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS)	26 EA		
0042	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	21 EA		
0043	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	400 LF		
0044	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	100 LF		
0045	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	15 LF		
0046	5672000000-N	1515	RELOCATE FIRE HYDRANT	1 EA		
0047	5689000000-E	1515	GENERIC UTILITY ITEM MANHOLE VENT PIPE	1 EA		
0048	5689000000-E	1515	GENERIC UTILITY ITEM REMOVE MANHOLE VENT PIPE	1 EA		
0049	6000000000-E	1605	TEMPORARY SILT FENCE	24,400 LF		
0050	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	465 TON		
0051	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	455 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	6012000000-E	1610	SEDIMENT CONTROL STONE	780 TON		
0053	6015000000-E	1615	TEMPORARY MULCHING	20 ACR		
0054	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	1,300 LB		
0055	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	6.5 TON		
0056	6024000000-E	1622	TEMPORARY SLOPE DRAINS	200 LF		
0057	6029000000-E	SP	SAFETY FENCE	5,700 LF		
0058	6030000000-E	1630	SILT EXCAVATION	2,100 CY		
0059	6036000000-E	1631	MATTING FOR EROSION CONTROL	50,295 SY		
0060	6037000000-E	1629	COIR FIBER MAT	100 SY		
0061	6042000000-E	1632	1/4" HARDWARE CLOTH	1,900 LF		
0062	6070000000-N	1639	SPECIAL STILLING BASINS	9 EA		
0063	6071010000-E	1642	WATTLE	930 LF		
0064	6071030000-E	1640	COIR FIBER BAFFLE	30 LF		
0065	6084000000-E	1660	SEEDING & MULCHING	18 ACR		
0066	6087000000-E	1660	MOWING	12 ACR		
0067	6090000000-E	1661	SEED FOR REPAIR SEEDING	200 LB		
0068	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.75 TON		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0069	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	600 LB		
0070	6108000000-E	1665	FERTILIZER TOPDRESSING	13.25 TON		
0071	6111000000-E	SP	IMPERVIOUS DIKE	90 LF		
0072	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0073	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	25 EA		
0074	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	15 EA		
0075	6129000000-E	1670	WETLAND REFORESTATION	0.1 ACR		
0076	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION - (TYPE 2)	3 EA		
0077	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION CLEANOUT	9 EA		
0078	6132000000-N	SP	GENERIC EROSION CONTROL ITEM PREFABRICATED CONCRETE WASHOUT	9 EA		
0079	7980000000-N	SP	GENERIC SIGNAL ITEM RELOCATE EXISTING GATE KEYPAD	1 EA		
0080	7985000000-N	SP	GENERIC SIGNAL ITEM RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM	Lump Sum	L.S.	
0097	0036000000-E	225	UNDERCUT EXCAVATION	350 CY		
0098	0195000000-E	265	SELECT GRANULAR MATERIAL	200 CY		
0099	2022000000-E	815	SUBDRAIN EXCAVATION	84 CY		
0100	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	250 SY		

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0101	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	42 CY		
0102	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	250 LF		
0103	2070000000-N	815	SUBDRAIN PIPE OUTLET	1 EA		
0104	2077000000-E	815	6" OUTLET PIPE	6 LF		
			STRUCTURE ITEMS			
0081	8096000000-E	450	PILE EXCAVATION IN SOIL	30 LF		
0082	8097000000-E	450	PILE EXCAVATION NOT IN SOIL	61.8 LF		
0083	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	45.8 CY		
0084	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ********** (STA 108+82.00 -L1-)	Lump Sum	L.S.	
0085	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ********** (STA 146+37.50 -L1-)	Lump Sum	L.S.	
0086	8217000000-E	425	REINFORCING STEEL (BRIDGE)	5,740 LB		
0087	8328400000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** GALVANIZED STEEL PILES (HP 12 X 53)	12 EA		
0088	8365000000-E	450	HP 12 X 53 GALVANIZED STEEL PILES	330 LF		
0089	8590000000-E	876	RIP RAP, CLASS ** (I)	220 TON		
0090	8622000000-E	876	GEOTEXTILE FOR DRAINAGE	246 SY		
0091	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	
0092	8860000000-N	SP	GENERIC STRUCTURE ITEM ANCHOR BOLTS	Lump Sum	L.S.	

County: HENDERSON

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0093	8860000000-N	SP	GENERIC STRUCTURE ITEM APPROACH RAILINGS, STA 108+82.00 -L1-	Lump Sum	L.S.	
0094	8860000000-N	SP	GENERIC STRUCTURE ITEM APPROACH RAILINGS, STA 146+37.50 -L1-	Lump Sum	L.S.	
0095	8860000000-N	SP	GENERIC STRUCTURE ITEM PREFABRICATED PEDESTRIAN BRIDGE, STA 108+82.00 -L1-	Lump Sum	L.S.	
0096	8860000000-N	SP	GENERIC STRUCTURE ITEM PREFABRICATED PEDESTRIAN BRIDGE, STA 146+37.50 -L1-	Lump Sum	L.S.	

1043/Apr09/Q128616.2/D471924640000/E104 **Total Amount Of Bid For Entire Project :**