

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

August 9, 2024

#### **ADDENDUM #1**

Contract No. DN12138220 TIP No.: To Be Determined

Federal Aid No.: State Funded WBS Element: 21S.044

County: Henderson, Polk, Transylvania

Description: ID-IQ On-Call Tree Services - District 1 at Various Locations

Throughout Henderson, Polk, and Transylvania Counties

Letting Date: August 13, 2024

Content Summary: Pre-Bid Meeting Minutes, Pre-Bid Attendance Roster, Proposal Cover Correction to TIP Info, Pay Item Quantity Changes, Pay Item Unit of Measure Changes, Provision Revisions

Plan Holders,

As a result of the pre-bid meeting, the above contract has experienced the following revisions:

- The pre-bid meeting, for the above noted contract, was held yesterday. Attached are the associated meeting minutes and attendance roster. This was a mandatory meeting, so only those bidders in attendance will be allowed to submit bids.
- 2. The proposal cover page has been revised to change the "TIP No." from "N/A" to "To Be Determined."
- 3. The following pay item quantities have been revised (See attached pay items sheets):
  - a. The quantity for line **0015**, **6021000000-E**, **FERTILIZER FOR TEMPORARY SEEDING**, has been changed to **1 TON**.

- b. The quantity for line **0016**, **6029000000-E**, **SAFETY FENCE**, has been changed to **500 LF**.
- c. The quantity for line **0018**, **6036000000-E**, **MATTING FOR EROSION CONTROL**, has been changed to **50 SY**.
- d. The quantity for line **0019**, **6084000000-E**, **SEED AND MULCH**, has been changed to **2 ACR**.
- e. The quantity for line **0020**, **6087000000-E**, **MOWING**, has been changed to **1 ACR**.
- f. The quantity for line **0024**, **6093000000-E**, **FERTILIZER FOR REPAIR SEEDING**, has been changed to **1 TON**.
- g. The quantity for line **0026**, **6108000000-E**, **FERTILIZER TOPDRESSING**, has been changed to **1 TON**.
- h. The quantity for line **0027**, **6132000000-N**, **STUMP REMOVAL**, has been changed to **15 EA**.
- i. The quantity for line **0036**, **6138000000-E**, **BRUSH DEBRIS GRINDING AND REMOVAL**, has been changed to **15,000 CY**.
- 4. The following pay items have been revised to reflect new pay item numbers, new units of measure, and new quantities (See attached pay items sheets):
  - a. Line **0038** has been revised to read as follows: **460900000-N**, **TWO** LANE WORK ZONE TRAFFIC CONTROL, **45** DAY.
  - b. Line **0039** has been revised to read as follows: **460900000-N**, **MULTI-LANE WORK ZONE TRAFFIC CONTROL**, **15 DAY**.
  - Line 0040 has been revised to read as follows: 460900000-N,
     SHOULDER CLOSURE WORK ZONE TRAFFIC CONTROL, 50 DAY.
- 5. The Traffic Control provisions have been revised to reflect the unit of measure change from "per each" to "per day." (See attached provision)

Please insert this addendum letter and any attachments into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.

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

Sincerely,

Jeanette L. White, P.E.

29BD93927CF24F6

Division 14 Project Team Lead



## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J.R. "JOEY" HOPKINS
SECRETARY

### Minutes of Mandatory Pre-Bid Meeting for DN12134289, DN12138220, DN12138278, DN12138280, DN12138282, and DN12138287:

- 1. Introductions were made by attendees. Only three bidders were in attendance. All attendees are listed on the roster, including Department staff who attended, virtually.
- 2. The Division Proposal Engineer (DPE) explained the following:
  - a. This pre-bid meeting addresses all six proposals that are advertised for the ID-IQ On-Call Tree Services.
  - b. These proposals/contracts require a Small Business Enterprise (SBE) certification. Bidders will have to possess that certification at the time of bid opening.
  - c. SBE proposals/contracts are capped at \$1M annually, so if a Bidder's bid comes at or above \$1M, they need not submit their bid.
  - d. Once the contract is executed, payment for the work performed cannot reach or exceed \$1M.
  - e. These proposals/contracts are multi-award, which means that the Department may opt to award more than one bidder. Each contract that is awarded and executed will have a \$1M.
  - f. ID/IQ was explained: ID = Indefinite Delivery; IQ = Indefinite Quantity. This method of contracting is for on-call services, when the Department does not know the exact quantities needed or exactly when those on-call services will be needed. All quantities are token values that will allow the Department to compare bids. Work orders will be issued by the Department to the Contractor, once scope and times are established by the Department.
  - g. For multi-award ID/IQ, the unit, administering contract for the Department, will start with lowest bidder and give them first right of refusal for a work order assignment. Should that Contractor not be able to provide services for a given work order, then the Department will move to the Contractor with next lower bid; not every bidder will get a turn in this process.

Mailing Address: NC DEPARTMENT OF TRANSPORTATION HIGHWAY 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

- h. If a Contractor feels that site conditions require equipment that exceed the requirements of the contract, the Contractor may negotiate with the Department during the work order assignment process. For example, during this meeting, one of the Bidders felt that a 30-HP excavator would not possess adequate power to remove certain size stumps. For such a scenario, the Bidder can negotiate pricing for a more powerful machine to match the need, but the Bidder should bid for a 30-HP excavator.
- i. Explained difference between this ID/IQ On Call Contract and the contract(s) currently being administered by the Roadside Environmental Unit. Roadside's contract(s) is/are for day-to-day maintenance efforts of removing fallen trees, bows, etc... from the roadway. This contract will be primarily for advanced tree clearing of utility corridors. This work will be for TIP and similar type projects (ahead of the moratoria). Those trees that fall within utility corridor will be dropped and removed from the site. Any branches overhanging that corridor will also be cut down and removed from the site. The Department is not looking for outright clearing & grubbing, but instead opting for select stump removal or grinding.
- j. The work orders will be put together by the Project Development unit but will be administered by the Resident Construction Engineer for each District. Plans or flagging, or a combination of both, will delineate the tree clearing limits. Work forecast the Project Development team is a designing a multitude of upcoming road/bridge projects for which there is a need for tree removal due to utility relocations; the Department expects to have work order assignments ready for tree removal operations at the contract availability date and through those dates outside of the moratoria restrictions.
- k. It was explained that there are a total of six proposals, 3 federally funded proposals and 3 state funded proposals. The federally funded proposals will require certified payrolls. It is imperative that the Contractor be very clear on which contract he is working state vs. federal.
- 3. Division Proposal Engineer discussed some of the more critical aspects of the proposal:
  - a. Contract times on page G-3. Assistant Division Construction Engineer explained that there was an advantage to multi-award, that being more people to cover the anticipated amount of work to be done.
  - b. Bonding requirements: explained the work order dollar amount will drive the bonding payment and performance requirements. If a work order is valued at or over \$450,000, then payment and performance bonds will be required.
  - c. Liquidated Damages associated with Mobilization were explained.

- d. Renewal of Contract was explained. 60 days from the end of the contract period, the Department will reach out to the Contractor to see if he wants to renew. 30 days from that notice, the Contractor will make his decision on renewal. If both parties agree, then a new purchase order is assigned, and the contract continues for another year. If either opts not to renew, then the current contract ends and a new contract will be advertised.
- e. The Department will write the work orders and negotiate a dollar amount based on the bidder's prices and any unique conditions requiring a supplement agreement. The Contractor will let the department know when they can start and how long it will take them to complete the job. Anything past the timeframe decided upon by the Contractor and Department will result in Liquidated Damages. It was also noted that mobilization will be paid per work order rather than a lump sum item.
- f. Discussed ICT 1 and the need to avoid closing lanes around rush hour. This will be dependent on the work order location. While possible on rare occasions, night work is not expected. The Assistant Division Construction Engineer stated that an inspector would be with the Contractor during operations.
- g. Discussed the 2024 Standard Specifications and the 2024 Roadway Drawings regarding Traffic Control. The Department will check that the Contractor has the correct buffer length and traffic control in place. A Bidder requested to revise the traffic control pay item to be "Per Day" instead of "Per Each." The Department has agreed to this change; the details of which are found elsewhere in the addendum.
- h. Discussed moratoria and specialty items, and work in forest service and the need to be aware of those provisions in the proposal.
- i. Discussed Div 14 debris site locations: If the site, where trees are being removed, does not afford sufficient room to grind and mulch the brush debris, Division 14 has sites that may be utilized for this purpose, but this must be negotiated with the Department before the start of work order operations. No debris is to remain at the initial site or at the Department site once the debris has been processed; the materials shall be removed. If the Contractor opts for a municipal waste facility, there is a tipping fee pay item in the proposal for such cases. The Contractor must use disposal sites approved by the Department.
- j. Discussed the use of the Addendum and Award Limits pages.
- k. Discussed the non-collusion forms, emphasized filling out the correct form. If the Contractor is a corporation, be sure to put the Contractor's company seal; this can be hand-drawn.
- 1. Discussed the Bid Item sheets and reiterated that the SBE cap is \$1M.

- 4. It was noted that the Department is anticipating plenty of work for both state and federal but that there will likely be more federally funded work. Assistant Division Construction Engineer reiterated that federally funded contract requires certified payrolls and that the Contractor must pay employees per the minimum listed in that provision. If the Contractor needs assistance with the payrolls or an, ask the District or Resident engineers for help.
- 5. It was noted that federally funded means any contract with even as little as \$1 of federal funds then it is considered a federally funded project.
- 6. When invoicing please be very clear which contract, state or federal funded, that you, as the Contractor, are working on. The Contract ID will help with this process.
- 7. The Contractor will be required to have Work Zone Certified Flaggers/Installers. If the Contractor has crews that are not certified, there are online courses that are offered.
- 8. When working on the Erosion Control items, the Contractor is required to provide Erosion Control person and this work will be inspected by Department personnel from the Erosion Control Unit.
- 9. Be aware: during the trout moratorium period the Contractor cannot be in the stream or within the 25-foot buffer limit, which is measured from the top of the bank this includes tree clearing operations. Moratoria restrictions will be noted on the work orders.

Questions from bidders and Department answers/responses:

Q1: Will it be up to the Contractor to decide what type of closure we need?

A1: Yes, once the Contractor receives the work order you can decide what Traffic Control you will need. The Contractor should consult Division 11 of the NCDOT Standard Drawings for the appropriate Work Zone Traffic Control closure requirements.

Q2: How is Traffic Control paid out?

A2: Explained Measurement and Payment for Traffic Control is per each. It will also be negotiated per work order.

Q3: A Bidder then presented a better unit of measure option, "Per Day," and asked the Department to revise this.

A3: The Department has agreed to this change; the details of which are found elsewhere in the addendum.

Q4: Due to the unknowns of the length of each project will the department change the Traffic Control to per day rather than per each?

A4: See A3 above.

Q5: The Contractor who currently has the stump grinding contract for Division 14 asked: "Due to expense of machine and grinding clean stumps (no fence posts, etc.) can we keep our grinder separate from those coming in on this project?"

A5: The Department will negotiate that with the work order.

Q6: In the proposal, the minimum horsepower for excavator is 30 hp, what if the Contractor needs something stronger?

A6: At the time the work order is being issued, the Contractor may negotiate for a supplemental agreement to address the site needs beyond that which contract provides.

Q7: Tub grinder pay item/provision – what is the min horsepower on the grinder.

A7: Since the Brush Debris Grinding and Removal pay item has a unit of measure of cubic yards, it is up to the Bidder/Contractor to determine HP rating necessary to complete the work based on site conditions.

Q8: Once the trees are ground do I have to provide a machine to load and remove the mulch?

A8: Yes; this is covered in the provisions, Grapple Truck. Once the debris is ground, the mulch must leave the site. The Contractor may grind it on the project site, take it to one of the Department debris sites for grinding, or directly to a Department-approved landfill. However, if the Contractor wants to go somewhere else, a reclamation plan will need to be done. No supplemental agreements will be made for a reclamation plan.

Q9: Regarding the stump removal pay item showing per each, a different price would be required based on the number of stumps.

A: The Department does not see that as an issue, we need trees cleared vertically; the Contractor can cut down the trees and leave the stumps. The only situation where a stump would need to be removed is if a proposed pole or a proposed guywire is going to be installed exactly where the stump is located. Stump removal by excavator should be minimal. If the Department has a particularly difficult area to clear, the Contractor may negotiate those difficulties as part of the work order negotiations at any time.

Q: Night work: cutting trees at night is not the safest thing. When would this have to be done?

A: In general, for construction some environmental documents do not allow for it. The Department does not expect any night work for these contracts. All tree clearing needs will be completed well in advance of the new road or bridge.



DN12134289, DN12138220, DN12138278, DN12138280, DN12138282, DN12138287 Pre-Bid Meeting Attendance Roster Sylva, NC 28779 August 7, 2024

Please Print Legibly

<u>Name*</u> :	Company Name**:	Email:	828-231-5206		
Loura Greeno	EXTGIS/DOT	Email:  ext-legreone @ncdotgov  ical spaweh	586-2141		
Jeffrey Alsp	aug NEDOT	jeal spangh	828-331-5200		
Just al	, ,	The some Odan Graf @ loter			
		be Service burchfield chad @	yahoo.com (828)735-2508		
Brody Sith		bdsitton@ncdot.gov	828 -497-7373		
14 LER REGIERS	NCDOT	rtrogers 1@nedot-gov	828.891. 5367		
TROY WILSON	NCDOT	tswilson andot.gov	828-891-7911		
Elias Hord	NCDOT	echord@nedot.gov	828 - 207 - 0167		
Keviny N=cos	· NCDOT	Kanasort enedet god	828-497-7333		
Daniel Flora	NCDOT	derose I Dacdo t. gen	978-497-7333		
Colton Case	South MTW hand wor	KS Case tree of 240 /aloo.com	828-593-9941		
Nathan Tannes	NCBOT	nrtanner @ncdot. gov	828-421-6930		

<sup>\*</sup>Person representing the company listed shall be an officer of the company or authorized employee to conduct business on behalf of the company.

<sup>\*\*</sup>Company name shall reflect the full company name of the intended bidder. i.e. Division 14 dba The Department of Transportation



# DN12134289, DN12138220, DN12138278, DN12138280, DN12138282, DN12138287 Pre-Bid Meeting Attendance Roster Sylva, NC 28779 August 7, 2024

Please Print Legibly

Phone No: Email: Name\*: Company Name\*\*: 828 586 2141 JLWhitES @ NCDOT. 900 JANETTE WHITE NCDOT 828-331-5200 RHH/NCDOT Ext- Thenmost nobotion 828-331-6200 NCDOT wweddle @ nedot-gov 828-331-5200 NCDOT 828-331-5200 NEDAT Pibreedlove @ncdot.gov 828-331-5200 NCDOT Ztshuler@ncdot.gov 828-331-5200 RS+H ext-Imband @nodof.gov 828-331-5200 Khbarnett @nodot.gov

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#### STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 14

#### SMALL BUSINESS ENTERPRISE ID/IQ PROPOSAL

DATE AND TIME OF BID OPENING: AUGUST 13, 2024 AT 2:00 PM

CONTRACT ID: DN12138220

WBS ELEMENT NO.: 21S.044

FEDERAL AID NO.: STATE FUNDED

COUNTY: HENDERSON, POLK, AND TRANSYLVANIA

TIP NO.: TO BE DETERMINED

MILES: VARIES

**ROUTE NO.:** VARIES

LOCATION: AT VARIOUS LOCATIONS THROUGHOUT HENDERSON,

POLK, AND TRANSYLVANIA COUNTIES

TYPE OF WORK: ID-IQ ON-CALL TREE SERVICES - DISTRICT 1

#### **NOTICE:**

UNDER THE PROVISIONS OF THIS PROGRAM, A N.C. GENERAL CONTRACTOR'S LICENSE IS NOT REQUIRED AND CONTRACT PAYMENT AND CONTRACT PERFORMANCE BONDS ARE NOT REQUIRED. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO, THOSE 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.

THIS IS A ROADWAY PROJECT.

BID BOND IS NOT REQUIRED.

RANS

NAME OF BIDDER

ADDRESS OF BIDDER

ITEMIZED PROPOSAL FOR CONTRACT NO. DN12138220							
Line #	Item Number	Sec #	Description	Qty	Units	Unit Cost	<b>Extended Amount</b>
	I		ROADWAY ITEM	S	I.		
0001	0000915000-N	SP	MOBILIZATION - STANDARD TREE CREW	25	EA	\$	<u> </u>
0002	0000915000-N	SP	MOBILIZATION - BUCKET TRUCK	10	EA	\$	\$
0002	0000915000-N	SP	MOBILIZATION - BUCKET TRUCK  MOBILIZATION - STUMP GRINDER	5	EA	\$	\$
0003	0000915000-N	SP	MOBILIZATION - STOMP GRINDER  MOBILIZATION - BRUSH CHIPPER	3	LA	\$	<u>ې</u>
0004	0000912000-1	34	WITH TRUCK	25	EA	\$	\$
0005	0000915000-N	SP	MOBILIZATION - GRAPPLE TRUCK	25	EA	\$	\$
0006	0000915000-N	SP	MOBILIZATION - MECHANICAL TREE TRIMMER	5	EA	\$	\$
0007	0000915000-N	SP	MOBILIZATION - SKID STEER			Ψ	<u> </u>
0007	0000913000 N	5	LOADER WITH GRAPPLE	20	EA	\$	\$
8000	0000915000-N	SP	MOBILIZATION - EXCAVATOR	10	EA	\$	\$
0009	0000915000-N	SP	MOBILIZATION - TREE CLIMBING	5	EA	\$	\$
0010	0000915000-N	SP	MOBILIZATION - BRUSH DEBRIS GRINDING AND REMOVAL	25	EA	\$	\$
0011	0000860000-N	SP	TIPPING FEE + 3%	1	DOL	\$1.03	\$1.03
0011	3656000000-E	1607	GEOTEXTILE FOR DRAINAGE	67	SY	\$	\$
0012	6006000000-E	1610	STONE FOR EROSION CONTROL,	07	31	Φ	, <del>,</del>
0013	000000000-L	1010	CLASS A	20	TON	\$	\$
0014	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	50	LB	\$	\$
0015	6021000000-E	1620	FERTILIZER FOR TEMPORARY	1	TON		
			SEEDING	1	TON	\$	\$
0016	6029000000-E	SP	SAFETY FENCE	500	LF	\$	\$
0017	600000000-E	1605	TEMPORARY SILT FENCE	500	LF	\$	\$
0018	6036000000-E	1631	MATTING FOR EROSION CONTROL	50	SY	\$	\$
0019	6084000000-E	1660	SEED AND MULCH	2	ACR	\$	\$
0020	6087000000-Е	1660	MOWING	1	ACR	\$	\$
0021	6071010000-E	1642	WATTLE	50	LF	\$	\$
0022	6071012000-E	1642	COIR FIBER WATTLE	50	LF	\$	\$
0023	609000000-Е	1661	SEED FOR REPAIR SEEDING	50	LB	\$	\$
0024	6093000000-Е	1661	FERTILIZER FOR REPAIR SEEDING	1	TON	\$	\$
0025	6096000000-Е	1662	SEED FOR SUPPLEMENTAL SEEDING	50	LB	\$	\$
0026	6108000000-E	1665	FERTILIZER TOPDRESSING	1	TON	\$	\$
0027	6132000000-N	SP	STUMP REMOVAL	15	EA	\$	\$
0028	6134000000-N	SP	STANDARD TREE CREW	200	HR	\$	\$
0029	6134000000-N	SP	BUCKET TRUCK	100	HR	\$	\$
0030	6134000000-N	SP	STUMP GRINDER	20	HR	\$	\$
0031	6134000000-N	SP	BRUSH CHIPPER WITH TRUCK	50	HR	\$	\$
0032	6134000000-N	SP	GRAPPLE TRUCK	400	HR	\$	\$
0033	6134000000-N	SP	MECHANICAL TREE TRIMMER	200	HR	\$	\$
0034	6134000000-N	SP	SKID STEER LOADER WITH GRAPPLE	250	HR	\$	\$
0035	6134000000-N	SP	EXCAVATOR	250	HR	\$	\$
0036	6138000000-E	SP	BRUSH DEBRIS GRINDING AND REMOVAL	15,000	CY	\$	\$
0037	6134000000-N	SP	TREE CLIMBING	75	HR	\$	\$

0038	460000000-N	SP	TWO LANE WORK ZONE TRAFFIC CONTROL	45	DAY	\$	\$
0039	460000000-N	SP	MULTI-LANE WORK ZONE TRAFFIC CONTROL	15	DAY	\$	\$
0040	460000000-N	SP	SHOULDER CLOSURE WORK ZONE TRAFFIC CONTROL	50	DAY	\$	\$
	Total Amount Of Bid For Entire Project:			\$			

## WORK ZONE TRAFFIC CONTROL Project Special Provisions Table of Contents

Special Provision Page

Temporary Traffic Control TC-2



#### **TEMPORARY TRAFFIC CONTROL**

(9/1/2021) (Rev. 05/28/24)

#### **General Requirements**

Maintain traffic on all roads in accordance with Divisions 10, 11 and 12 of the *NCDOT Standard Specifications* and the following provisions:

Install Work Zone Advance Warning Signs when work is within 40 ft. from the edge of the travel lane in accordance with Standard Drawing No. 1101.01 of the *NCDOT Roadway Standard Drawings* prior to beginning any other work. If signs are installed more than 3 calendar days prior to the beginning of work, cover the signs until the work begins. Install each work zone advance warning sign separately and not on the same post or stand with any other sign.

When personnel and/or equipment are working within 15 ft. of an open travel lane, close the nearest open shoulder using Roadway Standard Drawing No. 1101.04 unless the work area is protected by barrier or guardrail or a lane closure is installed.

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

When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane using Roadway Standard Drawing No. 1101.02 of the *NCDOT Roadway Standard Drawings* or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

Do not work simultaneously within 15 ft. on both sides of an open travel way, ramp, or loop within the same location, unless protected with guardrail or barrier.

Remove lane closure devices from the lane when work is not being performed behind the lane closure or when a lane closure is no longer needed or as directed by the Engineer.

#### **Temporary Traffic Control (TTC)**

Refer to Standard Drawing No. 1101.02, 1101.03, 1101.04, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, and 1180.01 of the *NCDOT Roadway Standard Drawings* when closing a lane of travel or shoulder in the work zone.

Notify the Engineer (30) calendar days prior to any traffic pattern alteration.

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

When lane closures are not in effect, space channelizing devices in work areas no greater in feet than twice the posted speed limit (MPH), except 10 ft. on-center in radii, and 3 ft. off the edge of an open travelway. Refer to *NCDOT Standard Specifications* Sections 1130 (Drums), 1135 (Cones), and 1180 (Skinny Drums) for additional requirements.

Place additional sets of three channelizing devices (Drums, Cones, or Skinny Drums) perpendicular to the edge of travelway on 100 to 500 ft. centers, as directed by the Engineer, when unopened lanes are closed to traffic.

Place Type III Barricades with "ROAD CLOSED" sign R11-2 attached, of sufficient length to close the entire roadway.

Install black on orange "DIP" (W8-2) and/or "BUMP" (W8-1) signs in advance of the uneven area in accordance with Roadway Standard Drawing 1101.11, or as directed by the Engineer.

#### **Measurement and Payment**

Two Lane Work Zone Traffic Control will be paid for as per each day in which traffic control operations for Two Lane Work Zone Traffic Control are conducted as required by the work order.

Multi-lane Work Zone Traffic Control will be paid for as per each day in which traffic control operations for Multi-lane Work Zone Traffic Control are conducted as required by the work order.

Shoulder Closure Work Zone Traffic Control will be paid for as per each day in which traffic control operations for Shoulder Closure Work Zone Traffic Control are conducted as required by the work order.

Price and payment for each of the Work Zone Traffic Control scenario may include but not be limited to providing Signs (portable, stationary, and/or barricade mounted), including detour signing, Truck Mounted Attenuators (TMA), Portable Changeable Message Signs (PCMS), Flashing Arrow Boards (FAB), Pilot Vehicle, Flaggers, Cones, Skinny Drums and Drums as shown in the applicable Roadway Standard Drawings and all labor, tools, equipment and incidentals

necessary to furnish, install, maintain and to remove traffic control devices when no longer required.

None of the Work Zone Traffic Control scenarios include Portable Concrete Barrier, Waterfilled Barrier, Temporary Crash Cushions, Digital Speed Limit Signs, Sequential Flashing Lights, or Presence Lights as these devices are beyond the scope of this provision.

Payment will be made under:

Pay Item	Pay Unit
Two Lane Work Zone Traffic Control	Day
Multi-Lane Work Zone Traffic Control	Day
Shoulder Closure Work Zone Traffic Control	Day