**TEMPORARY TRAFFIC CONTROL**

(9/1/2021) (10/13/2023) (Rev. 12/17/2024)

**Delete this guidance prior to sealing:**

**This provision may be used for projects that do not require long term temporary traffic patterns, temporary positive protection (portable concrete barrier, temporary crash cushions, waterfilled barrier), work zone speed limit reductions, and/or temporary shoring for the maintenance of traffic. Generally, this provision is intended for small, Division managed and let projects.**

**Some editing may be required if it is determined by the Project Manager that Law Enforcement and/or temporary markings are not required.**

**There are two options for Measurement and Payment – Lump Sum or Individual Items. Be sure to delete the section which does not apply to your project.**

**Contact the WZTC Regional Engineer if you have questions regarding the usage of this provision.**

**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 feet 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 feet of an open travel lane, close the nearest open shoulder using Standard Drawing No. 1101.04 of the *NCDOT Roadway Standard Drawings* unless the work area is protected by barrier or guardrail or a lane closure is installed.

When personnel and/or equipment are working within 5 feet of an open travel lane of an undivided facility, close the nearest open travel lane using 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 10 feet of an open travel lane of a divided facility, close the nearest open travel lane using 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 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 feet 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.

At the discretion of the Contractor, automated flagging assistance devices (AFAD) or portable traffic signals (PTS) may be used to assist, supplement, or replace human flaggers in accordance with the *Flaggers* provision found elsewhere in this contract.

**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 feet on-center in radii, and 3 feet 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 feet 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 Standard Drawing 1101.11, or as directed by the Engineer.

**Delete this guidance prior to sealing:**

**Delete the section below (Law Enforcement) if Law Enforcement will not be used in this project. Law Enforcement is required for flagging through signalized intersections and may be used to supplement traffic control on a multi-lane facility.**

**Law Enforcement**

Use uniformed Law Enforcement officers to control traffic at signalized intersections when the temporary traffic pattern cannot be controlled by the signal’s normal operation.

**Pavement Edge Drop Off Requirements**

Backfill at a 6:1 slope up to the edge and elevation of existing pavement in areas adjacent to an opened travel lane that has an edge of pavement drop-off as follows:

* Backfill drop-offs that exceed 2 inches on roadways with posted speed limits of 45 mph or greater.
* Backfill drop-offs that exceed 3 inches on roadways with posted speed limits less than 45 mph.
* Backfill with suitable compacted material, as approved by the Engineer, at no expense to the department.

Do not exceed a difference of 2 inches in elevation between open lanes of traffic for nominal lifts of 1.5 inches. Install advance warning “Uneven Lanes" signs (W8-11) 500 feet in advance and a minimum of every half mile throughout the uneven area.

The following options are available during milling operations on two-way, two-lane facilities when the entire roadway or entire lane is to be milled:

* Mill a single lane and pave back by the end of each work day.
* Mill the entire width of roadway and pave back within 72 hours.

The following options are available during milling operations on multi-lane facilities when all lanes or a single lane in one direction are to be milled:

* Mill a single lane and pave back by the end of each work day.
* Mill the entire width of pavement for all lanes to be milled in any direction daily and pave back within 72 hours.

If milled areas are not paved back within the same work period the Contractor is to furnish and install portable “Grooved Pavement” (W8-15) w/ Motorcycle Plaque mounted below signs. These are to be dual indicated where lateral clearance can be obtained within the median areas. Install the “Grooved Pavement” (W8-15) w/ Motorcycle Plaque 1500’ in advance of the milled area. Once mitigated, all portable signs are to be removed.

**Delete this guidance prior to sealing:**

**Delete the section below (Pavement Markings) if temporary pavement markings will not be used in this project.**

**Pavement Markings**

Install temporary pavement markings and temporary pavement markers for the sole purpose of maintaining traffic as follows:

Surface Type Marking Marker

 Asphalt Paint Temporary Raised

 Concrete Cold Applied Plastic Type IV Temporary Raised

Place one application of paint for lines initially. Place a second application of paint 6 months after the initial application and every 6 months as directed by the Engineer.

Trace the existing and/or proposed monolithic island with the proper color pavement marking prior to removal and/or installation. Place drums, cones, or tubular markers to delineate any existing and/or proposed monolithic islands after removal and/or before installation.

Tie proposed pavement marking lines to existing pavement marking lines.

Remove/Replace any conflicting/damaged pavement markings and markers by the end of each day’s operation.

Install pavement markings and pavement markers on the final surface as shown in the Final Pavement Marking Plan.

# Project Requirements

Failure to comply with the following requirements will result in a suspension of all other operations:

1. Prior to beginning work, the Contractor shall submit a written construction sequence for traffic control and construction lighting to the Engineer at the first pre-construction meeting and the sequence must be approved before closing a lane of traffic.
2. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures. The maximum length of any one lane closure is 1 mile unless otherwise directed by the Engineer.
3. If Lane Closure Restrictions apply, see Special Provision, “Intermediate Contract Times and Liquidated Damages”.
4. Contractor shall conduct operations in an order such that water does not accumulate.
5. The Contractor on this and any adjacent projects, or subcontractors working within this

project shall coordinate lane closure location, type, and direction with the Engineer to best

maintain lane continuity through the limits of this and adjacent projects.

1. Operate paving equipment and conduct paving operations in the same direction as the flow of traffic unless the operation is protected by barrier or guardrail or as directed by the Engineer. Maintain vehicular access in accordance with Section 1101-05 of the *NCDOT Standard Specifications.*
2. Provide appropriate construction lighting in accordance with Section 1413 of the *NCDOT Standard Specifications*.

**Measurement and Payment**

**Delete this guidance prior to sealing:**

**Delete the section below if temporary pavement markings will not be used in this project.**

*Paint Pavement Marking Lines, Paint Pavement Marking Symbols, Paint Pavement Marking Characters, Cold Applied Plastic Pavement Marking Lines, Cold Applied Pavement Marking Symbols, Cold Applied Pavement Marking Characters,* and *Temporary Raised Pavement Markers* that are required for the maintenance of traffic will be measured and paid in accordance with Section 1205-10.

**Delete this guidance prior to sealing:**

**Delete the section below if Law Enforcement will not be used in this project.**

*Law Enforcement* will be measured and paid in accordance with Section 1190-3.

**Delete this guidance prior to sealing:**

**Choose Either this Lump Sum section (yellow) or the Individual Item description below (green) – Delete the section that does not apply to your project. Remove the highlight before sealing.**

*Temporary Traffic Control (Lump Sum)* shall include but not be limited to providing Signs (portable, stationary, and/or barricade mounted), including detour signing, Barricades, Truck Mounted Attenuators (TMA), Portable Changeable Message Signs (PCMS), Flashing Arrow Boards (FAB), Pilot Vehicle, Flaggers (including AFAD or PTS units), 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 remove traffic control devices when no longer required.

*Temporary Traffic Control (Lump Sum)* does not 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 for *Temporary Traffic Control (Lump Sum)* will be made on the following schedule:

1. 70% of the unit bid price upon starting the project
2. 20% of the unit bid price when the project is 50% complete
3. 10% of the unit bid price when the project is 100% complete and all traffic control devices have been removed from the project.

Payment will be made under:

**Pay Item Pay Unit**

Temporary Traffic Control Lump Sum

**Delete this guidance prior to sealing:**

**Choose Either this Individual Item description (green) or the Lump Sum section above (yellow) – Delete the section that does not apply to your project. Remove the highlight before sealing.**

**Include a line item and estimated quantity for each item in the project estimate.**

*Signs (portable, stationary,* and/or *barricade mounted), Barricades, Truck Mounted Attenuators (TMA), Portable Changeable Message Signs (PCMS), Flashing Arrow Boards (FAB), Pilot Vehicle, Flaggers (including AFAD and PTS units), Cones, Skinny Drums* and *Drums* will be measured and paid in accordance with the item’s specific Section in the NCDOT Standard Specifications, Section 1105 of the NCDOT Standard Specifications, or the item’s Special Provision, as determined by the Engineer.