

## THESE NOTES MUST APPEAR ON ANY TRAFFIC CONTROL PLAN

A. Street space is at a minimum so no more space should be used for construction or maintenance work than is absolutely necessary. Through barricading and channelization, the remaining street space is to be used to carry the traffic around the work area in the best way possible under prevailing conditions.

B. Traffic control devices shall be set up prior to the start of construction or maintenance operations, and shall be removed or relocated as the work is finished or work conditions change. The agency doing the work shall patrol the work site as required to ensure that all traffic control devices are in place and operating at all times.

C. All traffic control signs for the work area shall be reflectorized. The reflective materials used shall be equal to or better than the Type 1, Level A reflective sheeting requirements in Section 633 of the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-74).

D. At night, adequate barricades with reflectorized material and lights are required to call attention to and to indicate the actual location of obstructions and hazards.

E. When not in use during work hours or construction inactivity, equipment shall be parked a minimum of 10' away from the travel lane in such a manner as to not create a sight distance problem for motorists.

F. The minimum width for temporary travel lanes is 10'; however, a 12' lane is advisable and should be provided whenever possible.

G. Whenever traffic must be routed across the centerline the two directions of traffic must be physically separated. Traffic cones can be effectively used for this purpose during daylight hours; reflectorized drums must be used at night.

H. Traffic shall not be routed across centerline with cones or drums during non-working hours. Contractor must be on site or change pavement marking appropriately.

I. Generally, the peak flow of traffic occurs in Charlotte between the hours of 7-9 a.m. and 4:30-6:30 p.m., (4-6 p.m. in the CBD) Monday through Friday. During these hours construction activity that involves a lane closure will not be allowed on thoroughfare streets except in emergency situations or with approval from the Charlotte Department of Transportation.

J. The agency doing the work shall provide flaggers and/or Police control when required. Contractor may also be required to provide a uniformed officer to control traffic when working in and around a signalized intersection.

K. Every attempt shall be made to schedule and expedite the work to cause the least inconvenience to the traveling public.

L. In situations not covered in this design, the protection of the traveling public and the protection of the workers on site will dictate the measures to be taken consistent with the City of Charlotte Work Area Traffic Control Handbook (WATCH).

M. The contractor, utility company, or governmental agency involved in the work shall notify the Charlotte Department of Transportation (Jimmy Rhyne at 704-336-3905) of the construction start date and any major work where the number of travel lanes are reduced [Continued next column]

from normal conditions or the street is required to be closed. Except in emergencies, the following notification is required:

- \*Construction start date - 5 working days in advance
- \*Closing 1 or more travel lanes during Peak Travel Times - 5 working days prior to the scheduled work
- \*Closing a street - 10 working days prior to the scheduled work.

This lead-time is necessary for planning and notifying the public of expected changes in the normal traffic conditions.

N. Where complete street closure is necessary, the Department of Transportation will coordinate closure of the street and, if necessary, fully sign a detour route.

O. The City Engineer or Director of the Department of Transportation or their representatives are authorized to stop any construction or maintenance activity which is not properly signed and barricaded as required by this standard, the WATCH, and/or the MUTCD until such requirements are met.

P. This design standard cannot be used for all roadway construction situations. It is intended only to be used as a guideline. Specific situations may require engineering judgment in the placement of traffic control devices because of limited vertical and/or horizontal sight distance.

Q. When personnel and/or equipment are within 2' of the edge of an open travel lane, the contractor shall refer to the WATCH for proper lane closure.

R. Operational signs are generally mounted on portable supports. These are usually used for short-term operations to warn and guide traffic. Advanced warning signs (Construction Ahead) shall be mounted on stationary supports seven days prior to the beginning of construction of the roadway.

S. All drums shall be ballasted in such a manner that they will be stable under wind and vehicle action. Ballasting shall be done with sandbags or other yielding material situated in the base of the drums.

T. Construction work shall not be allowed on both sides of the road simultaneously within the same area, unless the roadway is median divided.

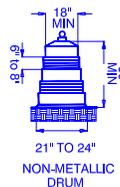
U. At the end of each work day the contractor shall backfill up to the edge and elevation of the existing pavement areas within 2 feet of an open travel lane that include a drop off of more than 3 inches in accordance with the WATCH (see Detail)

V. Pavement markings are to be installed by the contractor. Pre-lines must be approved by CDOT prior to placement of the pavement markings. The contractor shall notify Jimmy Rhyne (704-336-3905) of CDOT 5 working days in advance of placing the pre-lines.

W. Traffic Signal work is to be performed by CDOT. The contractor shall notify Jimmy Rhyne (704-336-3905) of CDOT at least 60 days in advance of needed signal work. If a traffic signal uses steel poles and/or mast arms, at least 90 days' advance notice is required.

| BARRICADE WARNING LIGHTS       |                         |                          |                       |
|--------------------------------|-------------------------|--------------------------|-----------------------|
|                                | Low Intensity<br>Type A | High Intensity<br>Type B | Steady Burn<br>Type C |
| Hours of Operation             | Dusk to Dawn            | 24 Hrs/Day               | Dusk to Dawn          |
| Minimum Beam Candle Power **   | -                       | -                        | 2 Candles             |
| Minimum Effective Intensity ** | 4.0 Candelas            | 35 Candelas              | -                     |
| Flash Duration                 | 10%                     | 8%                       | Constant              |
| Flash Rate/Minute ***          | 55 to 75                | 55 to 75                 | Constant              |
| Lens Directional Faces         | 1 or 2                  | 1                        | 1 or 2                |

TYPE C STEADY BURN WARNING LIGHTS are most commonly mounted on separate portable supports or on Type I or Type II barricades and are intended to continually warn the driver that he is approaching or adjacent to a hazardous area. Barricade warning lights are portable, lens directed, enclosed lights. The color of the light emitted shall be yellow.



Barricade warning lights shall be in accordance with the requirements of the Institute of Transportation Engineers' (ITE) Standard for Flashing and Steady Burn Barricade Warning Lights (1971).

\*\* These values must be maintained within a full 9 degrees on each side of the vertical axis, and 5 degrees above and 5 degrees below the horizontal axis.

\*\*\* Length of time that instantaneous intensity is equal to or greater than effective intensity.



Charlotte  
Department of  
Transportation

## WORK ZONE TRAFFIC CONTROL NOTES

| DATE     | REVISION                                |
|----------|---|
| 7/29/04  | INITIAL VERSION                         |
| 11/15/04 | CHANGED NOTE "M", ADDED NOTES "V" & "W" |
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|          |   |