

**Design Bureau** 

9C-2

## **Design Manual** Chapter 9 **Traffic Control**

Originally Issued: 09-01-95

Revised: 06-25-19

Work Located Off the **Traveled Way** 

Work located off the traveled way does not usually interfere with traffic directly. However, work activity within 15 feet (4.5 meters) of the traffic lanes may limit the area available for emergency use. Standard Road Plans TC-202 and TC-402 show traffic control methods for work adjacent to 2-lane and 4-lane roadways respectively.

## **Pavement Drop-Offs**

When construction involves a pavement drop-off adjacent to the traveled way, motorists should be provided with proper warning. In addition to Table 1, the following are guidelines for the treatment of pavement drop-offs and for warning motorists of their presence.

### **Two-Lane Roadways**

The depth of a drop-off should be limited to a nominal 10 inches (250 millimeters) during nonworking hours. The contractor should not be allowed to remove so much material that the drop-off cannot be reduced to 10 inches (250 millimeters) before work is suspended for the day. The edge of the drop-off should be delineated by a white edge line and channeling devices. Refer to Standard Road Plan TC-<u>202</u>.

#### Multilane Roadways

The traffic lane adjacent to the drop-off should remain closed to traffic. Refer to Standard Road Plans TC-418 and TC-419.

### **Excavations**

Excavations necessary to construct culvert extensions and bridge pier footings may warrant additional traffic control measures, especially when an excavation is within the shoulder line. Although these excavations are only 30 to 50 feet (10 to 15 meters) long, they are usually much deeper than a normal pavement drop-off. It would be impractical to fill them during non-working hours. Consequently, temporary concrete barriers may be warranted. Refer to Section 9B-9 for more information.

DEPTH OF DROP-OFF, d	OFFSET FROM TRAVELED WAY, x	TREATMENT	COMMENTS
2" < d ≤ 6"	x ≤ 6'	SHOULDER DROP OFF signs Fillet** or Safety Edge Shoulder Closure (TC-202 or 402)	No fillet or safety edge required for drop-off length of 1000' or less. Device spacing 40' c/c.
		Lane closure, TC-418 or 419	
	6' < x ≤ 15'	SHOULDER DROP OFF signs Partial shoulder closure (TC-202 or 402)	No signs or treatment necessary for drop-off beyond existing shoulder.
6" < d ≤ 10"	x ≤ 6'	SHOULDER DROP OFF signs Fillet** or Safety Edge Shoulder Closure (TC-202 or 402)	No fillet or safety edge required for drop-off length of 1000' or less. Device spacing 40' c/c.
		Lane closure, TC-418, 419	
		TBR	
	6' < x ≤ 15'	SHOULDER DROP OFF signs Partial shoulder closure (TC-202 or 402)	No signs or treatment necessary for drop-off beyond existing shoulder.
10" < d ≤ 24"	x ≤ 6'	Lane closure*, TC-418, 419	
		TBR	
	6' < x ≤ 15'	Shoulder closure* TC-202, 402	
		Lane closure* TC-418, 419	
		TBR	
d > 24"	x ≤ 6'	Lane closure* TC-418, 419	
		TBR	
	6' < x ≤ 15'	Lane closure* TC-418, 419	
		TBR	
	x > 15'	Decision based on engineering judgment.	

**Table 1** – Treatments for given Drop-off Depths and Offsets.

Dashed lines indicate optional treatments.

<sup>\*</sup>This option allowed when lane closure or shoulder closure provides an offset, x, that is greater than or equal to the TTC clear zone distance. Refer to Chapter <u>8A-2</u> of the Design Manual.

<sup>\*\*</sup>Fillet must meet the requirements of Articles 1107.09, A, 2, d.

# **Chronology of Changes to Design Manual Section:**

# 009C-002 Work Located Off the Traveled Way

6/25/2019 Revised

Updated hyperlinks.

Updated header logo and text.

6/12/2018 Revised

Corrected header and fixed broken hyperlinks.

3/23/2011 Revised

Added Table 1 and updated references and general formatting.

2/4/2011 Revised

Added Appendix A and updated references and general formatting.