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## Inter-Departmental Memorandum

**Date:** January 12, 1998  
**To:** Assistant Chief Engineer - PreConstruction  
**From:** Assistant Roadway Design Division Engineer  
John B. Pickering *J.B.P.*  
**Subject:** Difference in Elevation for Travel Lanes and Pavement Edge Drop-Off

Due to the new superpave specifications within the MDOT, new guidelines have been developed for traffic that is expected to cross a temporary longitudinal construction joint. The traffic control sheet regarding pavement edge drop-off has also been updated.

The guidelines are attached and titled, "*Proposed Policy for Difference in Elevation for Travel Lanes and Pavement Edge Drop-Off.*" Plans and specifications are expected to follow the attached guidelines.

If there are any questions, please advise.

### Attachment

pc: Section Engineers  
Squad Leaders  
Assistant Chief Engineer - Operations  
District Construction Engineers  
Construction Division  
Traffic Engineering Division  
Federal Highway Administration  
Active Consultants  
Design Memo File

APPROVED *1/29/98*  
*James H. Key*  
Chief Engineer



## **PROPOSED POLICY FOR DIFFERENCE IN ELEVATION FOR TRAVEL LANES AND PAVEMENT EDGE DROP-OFF**

### **DIFFERENCE IN ELEVATION FOR TRAVEL LANES --**

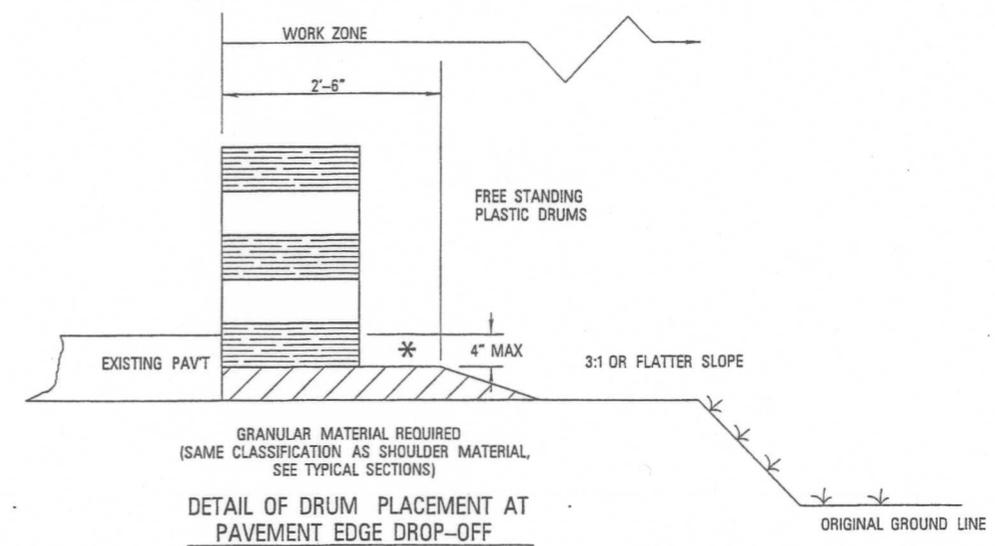
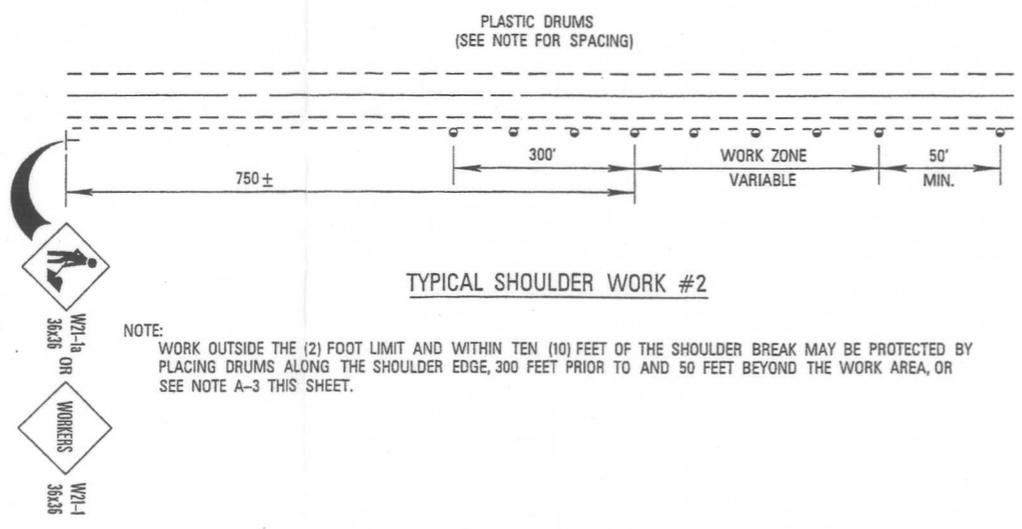
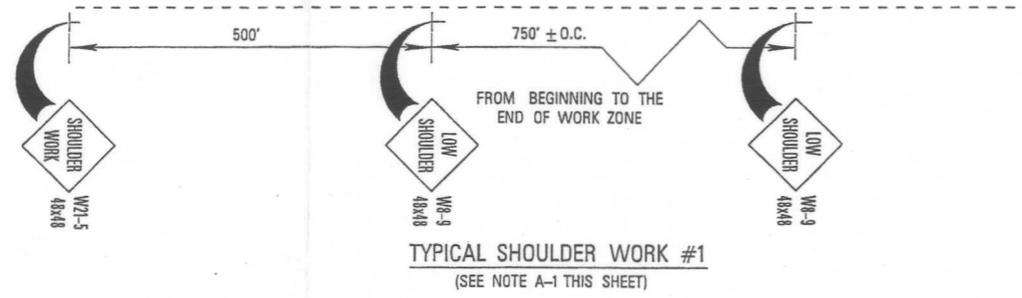
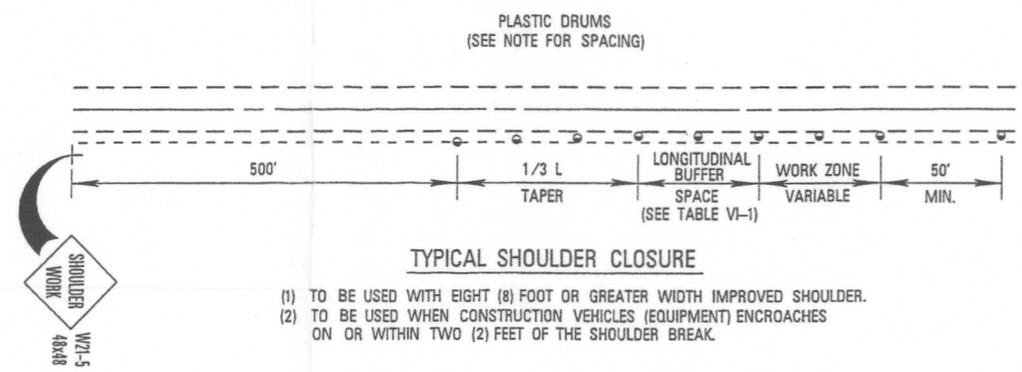
The MDOT specifications will be revised to reflect the following:

- The maximum difference in elevation for travel lanes can not exceed 2.25 inches or 55 millimeters where traffic is expected to cross a temporary longitudinal construction joint.
- Current specifications say, "*Single lane placement of leveling, binder and surface courses shall be limited to the distance covered in one and one-half days in advance of that placed in the adjacent lane.*" This will remain in the specifications; however, add to the specifications requiring adjacent lanes to be matched within 48 hours unless an emergency arises.
- Uneven lane signs will be required on all projects when there is any difference in elevation for travel lanes where traffic is expected to cross a temporary longitudinal construction joint. The uneven lane signs will be spaced at 1/4 mile (400 meters) intervals. Additional information regarding these signs will be provided by Roadway Design Division and Traffic Engineering Division for insertion in the specifications.

### **PAVEMENT EDGE DROP-OFFS --**

The attached drawing titled, "*Traffic Control Details - Drum placement and Shoulder Closure,*" ( Working Number TCP-6) is applicable to all projects with pavement edge drop-offs.

END ~~



**NOTES**

- \* A. PAVEMENT EDGE DROP-OFF
- IF LESS THAN TWO (2) INCHES—NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750' ± 0.C.).
  - TWO TO FOUR INCHES—PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE M.U.T.C.D. (1/3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
  - GREATER THAN FOUR (4) INCHES—POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.
  - FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR (4) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
  - LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.
- B. DRUM SPACING
- TANGENTS = 2 X S
  - TAPERS = L / 3
- WHERE L = S X W  
L = TAPER LENGTH IN FEET  
S = SPEED IN MPH (POSTED OR 85 PERCENTILE)  
W = WIDTH OF OFFSET IN FEET
- C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE VI-1. GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE

SPEED* (MPH)	LENGTH (FEET)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

\* POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL DETAILS  
DRUM PLACEMENT  
AND  
SHOULDER CLOSURE**

PROJECT NO.:  
COUNTY:

DATE: FILENAME: specpro1/plas-drum.dgn  
DESIGN TEAM: BOB WARDELL CHECKED: P. HUNT DATE: 8-19-97

WORKING NUMBER  
TCP-6  
SHEET NUMBER