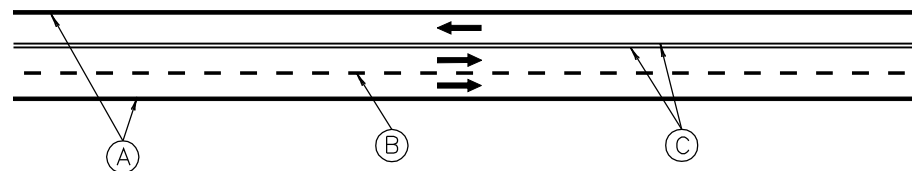


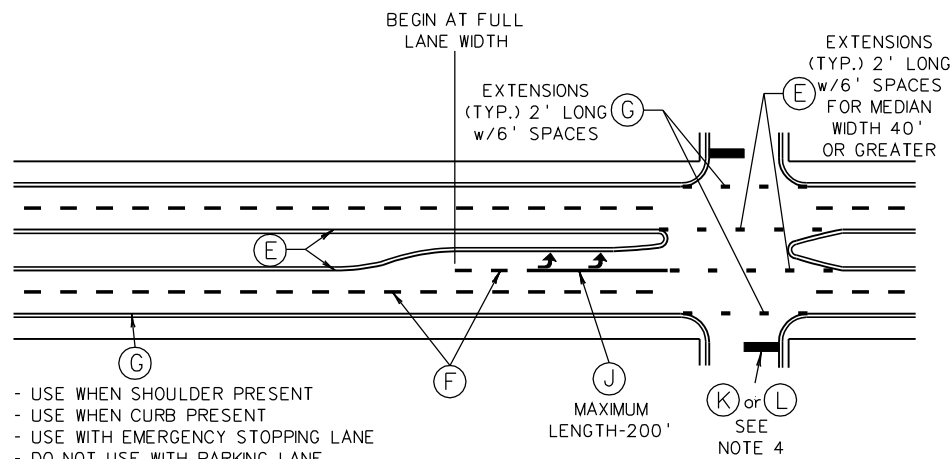
PUBLIC ROADS DIV.	STATE DIST. NO.	STATE PROJECT NO.	FEDERAL PROJECT NO.	FISCAL YEAR	COUNTY	SHEET NO.	TOTAL SHEETS
WV							

GENERAL NOTES

- BROKEN LINES SHALL BE 10 FEET IN LENGTH WITH 30' SPACINGS, UNLESS OTHERWISE SPECIFIED. THE RATIO OF PAINTED LINE LENGTH TO SKIP LENGTH SHALL BE 1 TO 3.
- THE DISTANCE FROM THE RAILROAD CROSSING MARKING TO THE NEAREST TRACK WILL VARY ACCORDING TO THE APPROACH SPEED AND THE SIGHT DISTANCE OF THE VEHICULAR TRAFFIC APPROACHING, BUT SHOULD NOT BE LESS THAN 50 FEET. ALSO SEE TABLE.
- ALL RAILROAD MARKINGS AND STOP LINES SHALL BE WHITE. ON MULTI-LANE ROADS THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL RAILROAD SYMBOLS SHALL BE USED IN EACH APPROACH LANE.
- STOP LINES SHALL BE 12 INCHES IF SPEED LIMIT IS LESS THAN 45 MPH AND 24 INCHES IF SPEED LIMIT IS 45 MPH OR GREATER. ALL INTERCHANGE RAMP STOP LINES SHALL BE 24 INCHES. STOP LINES SHOULD BE PLACED 4 FEET IN ADVANCE OF AND PARALLEL TO THE NEAREST CROSSWALK LINE. THE STOP LINE SHOULD BE PLACED AT THE DESIRED STOPPING POINT, BUT IN NO CASE MORE THAN 30 FEET OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING TRAVEL WAY.



(A) TWO WAY MARKING, TRUCK CLIMBING LANE



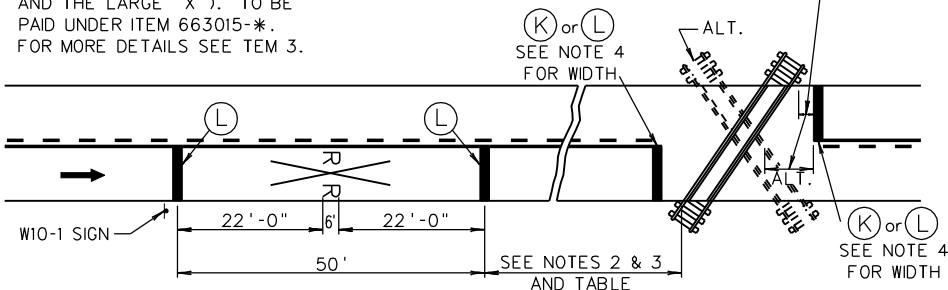
(C) DIVIDED HIGHWAY WITH MEDIAN

- USE WHEN SHOULDER PRESENT
- USE WHEN CURB PRESENT
- USE WITH EMERGENCY STOPPING LANE
- DO NOT USE WITH PARKING LANE

NOTE:

ENTIRE RAILROAD MARKING, (INCLUDES THE TWO "R"'S AND THE LARGE "X"). TO BE PAID UNDER ITEM 663015-*. FOR MORE DETAILS SEE TEM 3.

STOP LINES ARE LOCATED PERPENDICULAR TO ROADWAY AT APPROX. 15' (OR 8' FROM AND PARALLEL TO GATE IF PRESENT)



(E) TWO WAY MARKING, RAILROAD-HIGHWAY GRADE CROSSINGS

RAILROAD CROSSING MARKING DISTANCE TABLE

POSTED OR 85TH PERCENTILE TRAFFIC SPEED	DISTANCE FROM NEAR RAIL TO MARKING	
20	100	**
25	100	**
30	100	
35	100	
40	125	
45	175	
50	250	
55	325	
60	400	

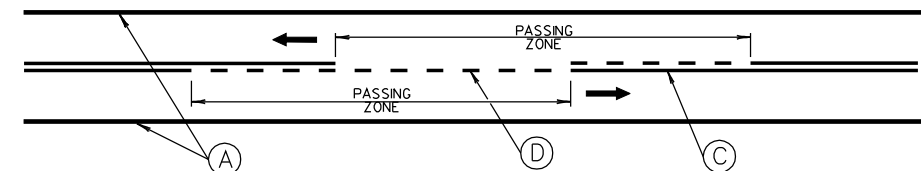
NOTE:
VALUES SHOWN ARE FOR GUIDANCE. ENGINEERING JUDGEMENT IS TO BE USED IN DETERMINING THE MARKING PLACEMENT TO ASSURE EFFECTIVENESS.

** - THIS DISTANCE MAY BE REDUCED TO A MINIMUM OF 50' DEPENDING UPON LOCAL CONDITIONS. A MINIMUM OF 100' IS GENERALLY NECESSARY FOR THE EFFECTIVE DISPLAY OF PAVEMENT MARKINGS. IF THE 100' MINIMUM CANNOT BE OBTAINED, MARKINGS MAY BE OMITTED.

85TH-PERCENTILE SPEED OR THE POSTED OR STATUTORY SPEED LIMIT (MPH)	MINIMUM PASSING SIGHT DISTANCE (FT)
25	450
30	500
35	550
40	600
45	700
50	800
55	900

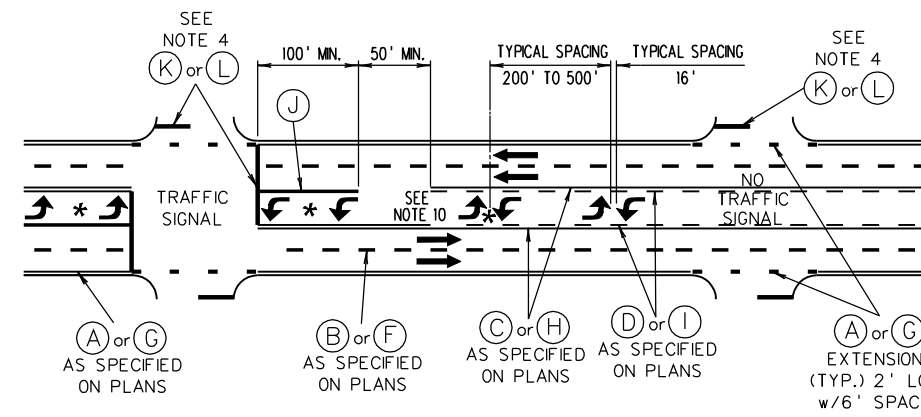
NO-PASSING ZONES SHALL BE MARKED BE EITHER ONE DIRECTION NO-PASSING ZONE PAVEMENT MARKINGS OR TWO-DIRECTION NO-PASSING ZONE PAVEMENT MARKINGS. NO-PASSING ZONE MARKINGS SHALL BE USED ON TWO-WAY ROADWAYS AT LANE-REDUCTION TRANSITIONS AND ON APPROACHES TO OBSTRUCTIONS THAT MUST BE PASSED ON THE RIGHT. WHERE THE DISTANCE BETWEEN SUCCESSIVE NO-PASSING ZONES IS LESS THAN 400 FEET, NO-PASSING MARKINGS SHALL CONNECT THE ZONES. NO-PASSING ZONE MARKINGS SHALL BE USED ON APPROACHES TO GRADE CROSSING AS SHOWN ON DETAIL E. SEE THE MUTCD FOR FURTHER GUIDANCE RELATED TO ESTABLISHING NO-PASSING ZONE MARKINGS.

- THE SPACING BETWEEN ADJACENT YELLOW CENTERLINE MARKINGS SHALL BE EQUAL TO THE LINE WIDTHS (4" OR 6").
- ALL LONGITUDINAL MARKINGS SHALL BE OFFSET FROM THE PAVEMENT JOINTS AS SPECIFIED IN THE STANDARD SPECIFICATIONS.
- NORMALLY, THE MAXIMUM LANE WIDTH SHALL BE 12'. SINGLE-LANE RAMP WIDTHS SHALL BE 16'.
- LEFT TURN MOVEMENTS MAY BE GUIDED BY DASHED YELLOW LINES 2' LONG WITH 6' SPACES WHERE ENGINEERING JUDGEMENT DETERMINES THAT SUCH ADDITIONAL MARKINGS ARE NEEDED. THE WIDTH OF THE DASHES SHALL BE EQUAL TO THE WIDTH OF THE LINE THAT THE DASHES ORIGINATE FROM.
- A TWO-WAY LEFT-TURN LANE-USE ARROW PAVEMENT MARKING, WITH OPPOSING ARROWS SPACED AS SHOWN, SHALL BE PLACED AT OR JUST DOWNSTREAM FROM THE BEGINNING OF THE TWO-WAY LEFT-TURN LANE ON EACH END. ADDITIONAL TWO-WAY LEFT-TURN LANE-USE ARROW MARKINGS MAY BE USED AT OTHER LOCATIONS ALONG A TWO-WAY LEFT-TURN LANE WHERE ENGINEERING JUDGEMENT DETERMINES THAT SUCH ADDITIONAL MARKINGS ARE NEEDED TO EMPHASIZE THE PROPER USE OF THE LANE.



(B) TWO WAY MARKING FOR PASSING ZONE

(SEE NOTE 5)



(D) MULTI-LANE HIGHWAY WITH TWO-WAY LEFT TURN CHANNELIZATION

NOTE:
THIS ARROW ONLY INDICATES DIRECTION OF TRAVEL.

NOTE:
* REQUIRED LANE-USE MARKINGS. ALL OTHER LANE USE ARROWS SHOWN ON THIS SHEET ARE OPTIONAL AS CALLED FOR ON PLANS.

LEGEND

- (A) - ITEM 663001-*, EDGE LINE (4" WHITE)
- (B) - ITEM 663002-*, LANE LINE (4")
- (C) - ITEM 663002-*, CENTERLINE (4")
- (D) - ITEM 663002-*, CENTERLINE (4")
- (E) - ITEM 663001-*, EDGE LINE (6" YELLOW)
- (F) - ITEM 663002-*, LANE LINE (6" WHITE)
- (G) - ITEM 663001-*, EDGE LINE (6" WHITE)
- (H) - ITEM 663002-*, CENTERLINE (6")
- (I) - ITEM 663002-*, CENTERLINE (6")
- (J) - ITEM 663004-*, CHANNELIZING LINE (8")
- (K) - ITEM 663005-*, STOP LINE (12")
- (L) - ITEM 663005-*, STOP LINE (24")
- (M) - ITEM 663002-*, LANE LINE (8" DASHED)

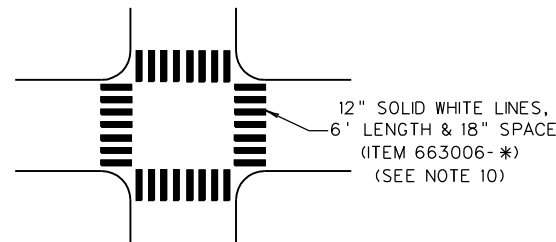
WEST VIRGINIA DIVISION OF HIGHWAYS
**REVISED STANDARD DETAIL
 TYPICAL PAVEMENT
 MARKINGS**
 (SHEET 1 of 2)
STANDARD SHEET TEM-2

PREPARED: 7/00/71

REVISIONS
05-00-72
05-00-73
08-28-75
11-23-77
01-15-85
02-03-93
09-12-01
01-29-10

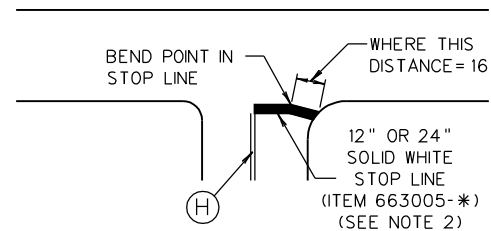
- EDGE LINES
- MODIFIED SPACING & NOTES 1, 2, 7 & 11
- WHOLE SHEET
- ADDED R.R. DISTANCE TABLE AND EDGE LINE EXTENSION NOTE TO DETAIL C
- REVISED DETAIL C, ADDED DETAIL J
- ENTIRE SHEET

PUBLIC ROADS DIV.	STATE DIST. NO.	STATE PROJECT NO.	FEDERAL PROJECT NO.	FISCAL YEAR	COUNTY	SHEET NO.	TOTAL SHEETS
WV							



(F) TYPE V PARALLEL CROSSWALK LINE DETAILS

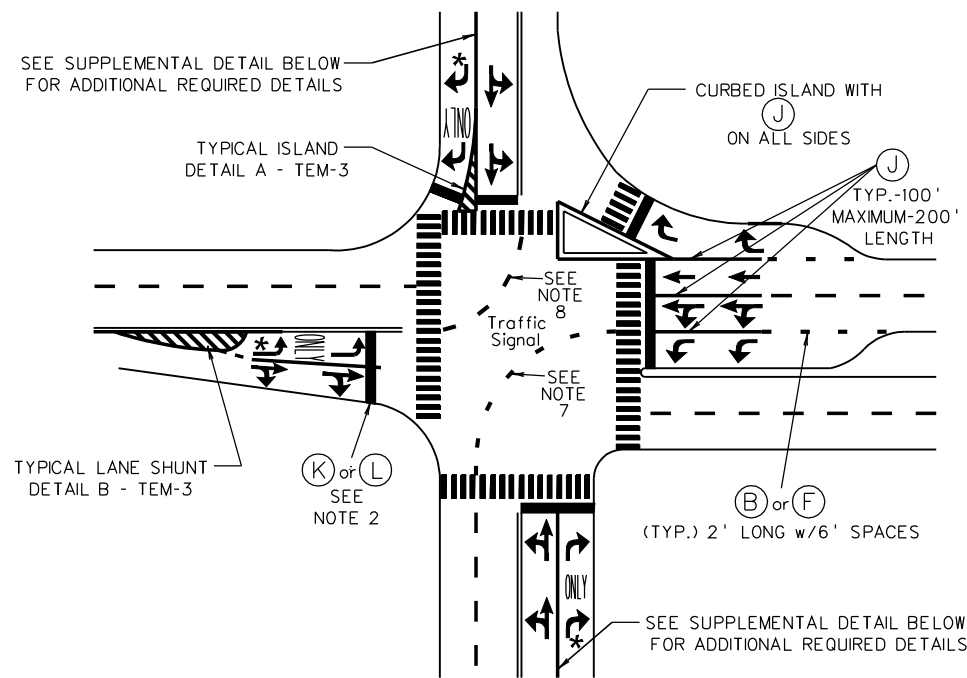
(OFFSET MARKINGS AS REQUIRED IN ORDER TO AVOID WHEEL TRACKING AREAS)



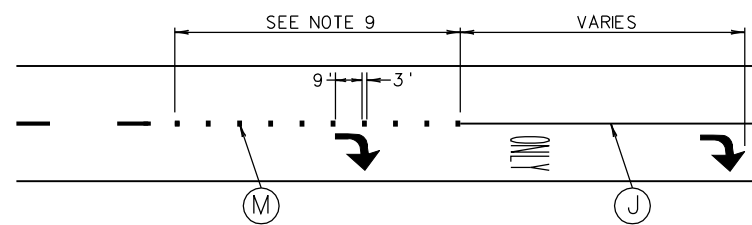
(G) METHODOLOGY FOR INSTALLING (BENDING) STOP LINES AT WIDE THROATED INTERSECTIONS

GENERAL NOTES

- BROKEN LINES SHALL BE 10' IN LENGTH WITH 30' SPACINGS, UNLESS OTHERWISE SPECIFIED. THE RATIO OF PAINTED LINE LENGTH TO SKIP LENGTH SHALL BE 1 TO 3.
- STOP LINES SHALL BE 12 INCHES IF SPEED LIMIT IS LESS THAN 45 MPH AND 24 INCHES IF SPEED LIMIT IS 45 MPH OR GREATER. ALL INTERCHANGE RAMP STOP LINES SHALL BE 24". STOP LINES SHOULD BE PLACED 4 FEET IN ADVANCE OF AND PARALLEL TO THE NEAREST CROSSWALK LINE. THE STOP LINE SHOULD BE PLACED AT THE DESIRED STOPPING POINT, BUT IN NO CASE MORE THAN 30 FEET OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING TRAVEL WAY.
- SUPPLEMENTAL PAVEMENT WORD AND/OR SYMBOL MARKINGS SHOULD BE LIMITED TO NOT MORE THAN A TOTAL OF THREE LINES OF INFORMATION (WORDS AND/OR SYMBOLS). THEY SHALL BE WHITE IN COLOR. LETTERS, SYMBOLS AND NUMERALS SHALL BE A MINIMUM OF 8" IN HEIGHT. THE WORD MARKING "ONLY" AND THE ARROW SHALL BE USED WHERE A MOVEMENT THAT WOULD OTHERWISE BE LEGAL IS TO BE PROHIBITED. THE SPACE BETWEEN LINES SHOULD BE AT LEAST FOUR TIMES THE HEIGHT OF THE CHARACTERS FOR LOW SPEEDS BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTERS UNDER ANY CONDITIONS. LOCATION OF SUPPLEMENTAL PAVEMENT MARKINGS SHALL BE AS SHOWN OR AS DIMENSIONED ON THE PLANS.
- THE SPACING BETWEEN ADJACENT YELLOW CENTERLINE MARKINGS SHALL BE EQUAL TO THE LINE WIDTHS (4" OR 6").
- ALL LONGITUDINAL MARKINGS SHALL BE OFFSET FROM THE PAVEMENT JOINTS AS SPECIFIED IN THE STANDARD SPECIFICATIONS.
- NORMALLY, THE MAXIMUM LANE WIDTH SHALL BE 12'. SINGLE-LANE RAMP WIDTHS SHALL BE 16'.
- DUAL LEFT TURN LANES SHALL BE SEPERATED BY DASHED WHITE LINES 2' LONG WITH 6' SPACES. THE WIDTH OF THE DASHES SHALL BE EQUAL TO THE WIDTH OF THE LINE THAT THE DASHES ORIGINATE FROM.
- LEFT TURN MOVEMENTS MAY BE GUIDED BY DASHED YELLOW LINES 2' LONG WITH 6' SPACES WHERE ENGINEERING JUDGEMENT DETERMINES THAT SUCH ADDITIONAL MARKINGS ARE NEEDED. THE WIDTH OF THE DASHES SHALL BE EQUAL TO THE WIDTH OF THE LINE THAT THE DASHES ORIGINATE FROM.
- IF THE DISTANCE BETWEEN THE PRECEDING INTERSECTION AND THE APPROACH INTERSECTION IS 1 MILE OR LESS, THE DASHED LANE LINE SHALL BE EXTENDED BACK TO THE PRECEDING INTERSECTION. OTHERWISE, THE DASHED LANE LINE SHOULD BEGIN A DISTANCE IN ADVANCE OF THE INTERSECTION AS DETERMINED BY ENGINEERING JUDGEMENT AS BEING SUITABLE TO ENABLE DRIVERS WHO DO NOT DESIRE TO MAKE THE MANDATORY TURN TO MOVE OUT OF THE LANE BEING DROPPED PRIOR TO REACHING THE QUEUE OF VEHICLES THAT ARE WAITING TO MAKE THE TURN. THE DASHED LANE LINE SHOULD BEGIN NO CLOSER TO THE INTERSECTION THAN THE MOST UPSTREAM REGULATORY OR WARNING SIGN ASSOCIATED WITH THE LANE DROP.
- THE TYPE V MATERIAL USED FOR CROSSWALK MARKINGS SHALL BE ENHANCED SKID RESISTANT MATERIAL, AS CATEGORIZED ON THE DIVISION'S APL FOR TYPE V MATERIALS. ENHANCED SKID RESISTANT MATERIAL SHALL ALSO BE USED FOR OTHER TYPE V MARKINGS WHEN INDICATED IN THE PROJECT PLANS.

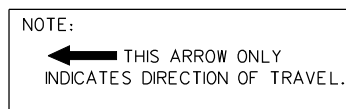


NOTE: IF A RAILROAD CROSSING IS CLOSE TO THE INTERSECTION PLACE ARROWS SO THAT DRIVERS ARE NOT DIRECTED ONTO TRACKS.

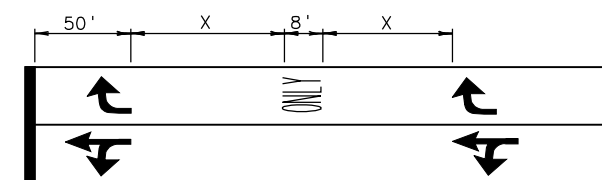


SUPPLEMENTAL DETAIL - MANDATORY TURN LANE MARKINGS

(H) TYPICAL INTERSECTIONS MARKINGS



NOTE:
* ALL LANE USE MARKINGS SHOWN IN THIS LANE ARE REQUIRED. ALL OTHER LANE USE ARROWS SHOWN ON THIS SHEET ARE OPTIONAL AS CALLED FOR ON PLANS.



X - 32' WHEN OPERATING SPEED IS 40 MPH AND BELOW
X - 80' WHEN OPERATING SPEED IS ABOVE 40 MPH

(I) TYPICAL LANE-USE MARKING SPACING

LEGEND

- | | |
|--------------------------------------------|---------------------------------------------|
| (A) - ITEM 663001-*, EDGE LINE (4" WHITE) | (H) - ITEM 663002-*, CENTERLINE (6") |
| (B) - ITEM 663002-*, LANE LINE (4") | (I) - ITEM 663002-*, CENTERLINE (6") |
| (C) - ITEM 663002-*, CENTERLINE (4") | (J) - ITEM 663004-*, CHANNELIZING LINE (8") |
| (D) - ITEM 663002-*, CENTERLINE (4") | (K) - ITEM 663005-*, STOP LINE (12") |
| (E) - ITEM 663001-*, EDGE LINE (6" YELLOW) | (L) - ITEM 663005-*, STOP LINE (24") |
| (F) - ITEM 663002-*, LANE LINE (6" WHITE) | (M) - ITEM 663002-*, LANE LINE (8" DASHED) |
| (G) - ITEM 663001-*, EDGE LINE (6" WHITE) | |

REARRANGED

WEST VIRGINIA DIVISION OF HIGHWAYS
REVISED STANDARD DETAIL
TYPICAL PAVEMENT
MARKINGS

PREPARED 7/00/71

REVISIONS
01-29-10

(SHEET 2 of 2)

STANDARD SHEET TEM-2