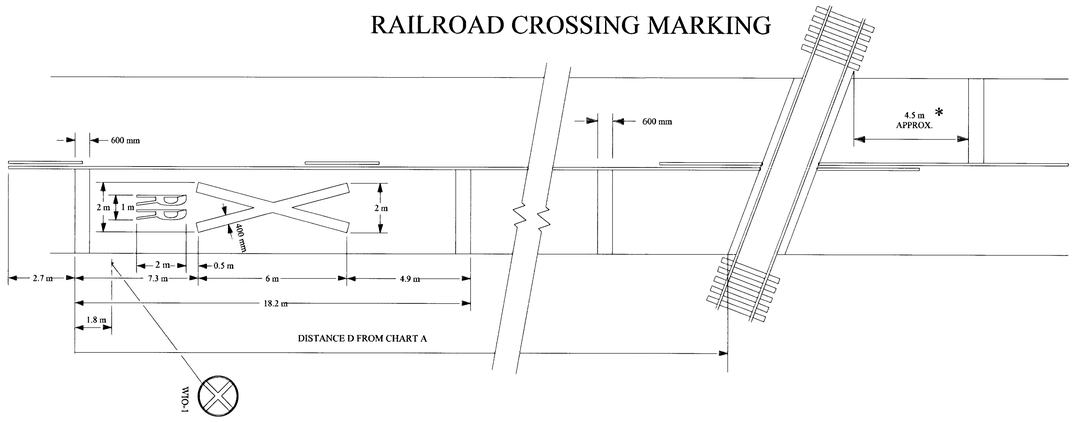
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 N-0194-01	2001	30	43

RAILROAD CROSSING MARKING



A three-lane roadway should be marked with a centerline for two-lane approach operation on the approach to a crossing.

On multi-lane roads the transverse bands should extend across all approach lanes, and individual R X R symbols should be used in each approach lane.

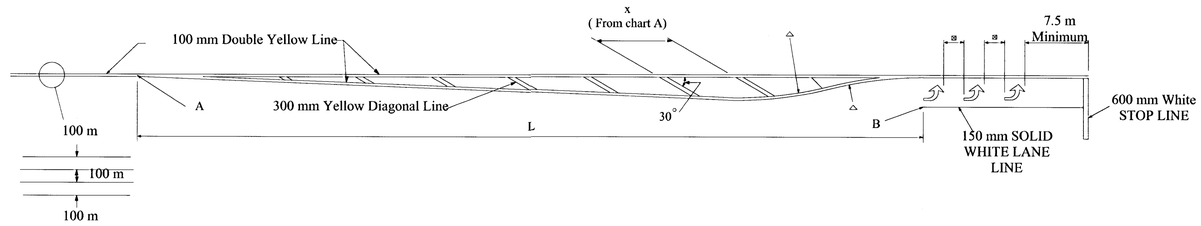
Refer to Standard Alphabet for Highway Signs and Markings for R X R symbols details.

* Stop line 2.5 m from near edge of gate or cantilever, if present.

SPEED (km/h)	DISTANCE D (METERS)
110	265
90	210
80	190
70	165
60	145
50	100
40	75
30	55

ALL DISTANCES ARE MINIMUM.

TYPICAL APPROACH TAPER DETAIL



The approach taper length from point A to point B is to be determined using CHART B. Values for L were calculated using the equations below and increased to the next higher 5 m increment.

Speeds < 60 km/h $L=(S\ W)/157$ [2]
Speeds > 70 km/h $L=(SW)/1.6$

[28] Unless otherwise specified the space between lines should be at least four times the height of the characters for low speed roads but not more than ten times the height of the characters, under any conditions.

△ For speeds less than or equal to 60 km/h, R=45 m.
For speeds greater than or equal to 70 km/h, R=90 m.

CHART A

Approach Speed	X
30 km/h	6 m
40 km/h	8 m
50 km/h	10 m
60 km/h	12 m
70 km/h	14 m
80 km/h	16 m
90 km/h	18 m
100 km/h	20 m
110 km/h	22 m

CHART B

Approach Speed	L
30 km/h	25 m
40 km/h	40 m
50 km/h	60 m
60 km/h	85 m
70 km/h	165 m
80 km/h	185 m
90 km/h	210 m
100 km/h	235 m
110 km/h	255 m

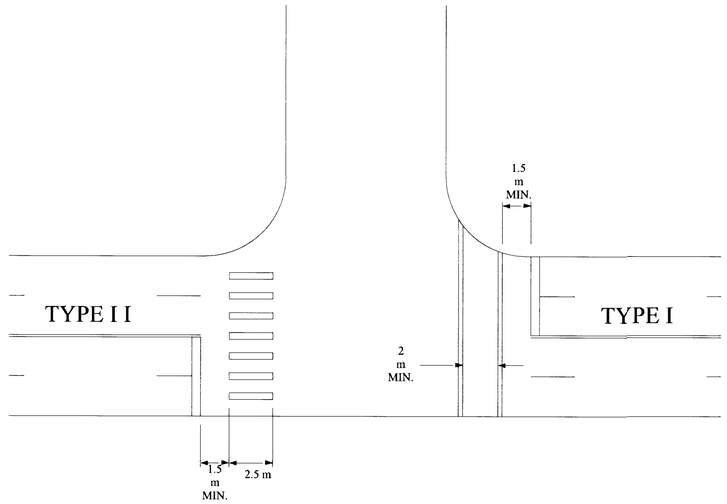
SPEED CONVERSION CHART	
MPH	km/h
20	30
25	40
30	50
35	60
40	60
45	70
50	80
55	90
60	100
65	110
70	110

TYPICAL CROSSWALKS

TYPE I: Crosswalk lines shall be 300 mm solid white lines. They shall be spaced a minimum of 2 m apart from inside edge to inside edge.

TYPE II: These lines should be solid white 600 mm wide placed parallel to the direction of traffic flow. The line placement is determined by lane line,center line, and wheel path in such a manner as to minimize traffic wear. The crosswalk width should be not less than 2.5 m. The transverse crosswalk lines may be added.

When required, Stop lines shall be installed a minimum of 1.5 m from crosswalks.



NO.	DATE	REVISION	BY	APP'D
3				
2				
1	09/04/96	ADDED STOP LINE NOTE ON RAILROAD DETAIL	GSB	

KANSAS DEPARTMENT OF TRANSPORTATION
TYPICAL MISCELLANEOUS PAVEMENT MARKING DETAIL SHEET

TE309SI 05/12/94

FHWA APPROVAL	09/10/96	APP'D	JAMES E. TOBABEN		
DESIGNED	JFF	DETAILED	GSB	QUANTITIES	TRACED
DESIGN CK.	JET	DETAIL CK.	JFF	QUAN. CK.	TRACE CK.