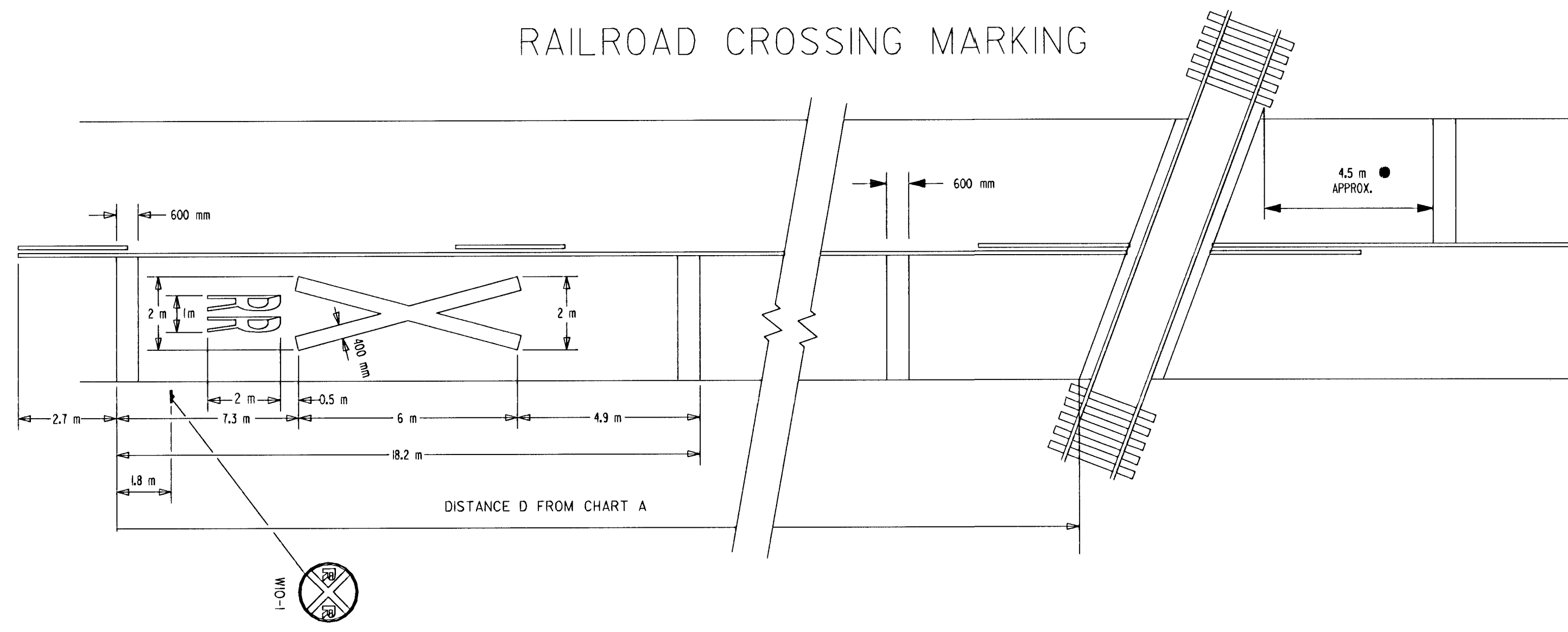


### RAILROAD CROSSING MARKING



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.

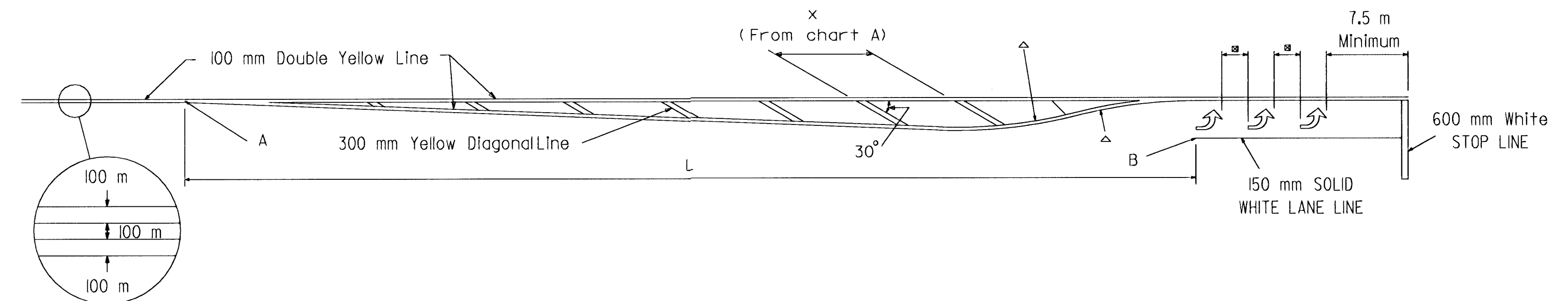
Refer to Standard Alphabet for Highway Signs and Markings for R X R symbols details.

- 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  $\leq$  60 km/h  $L = (S^2W)/157$   
 Speeds  $\geq$  70 km/h  $L = (SW)/1.6$

- 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

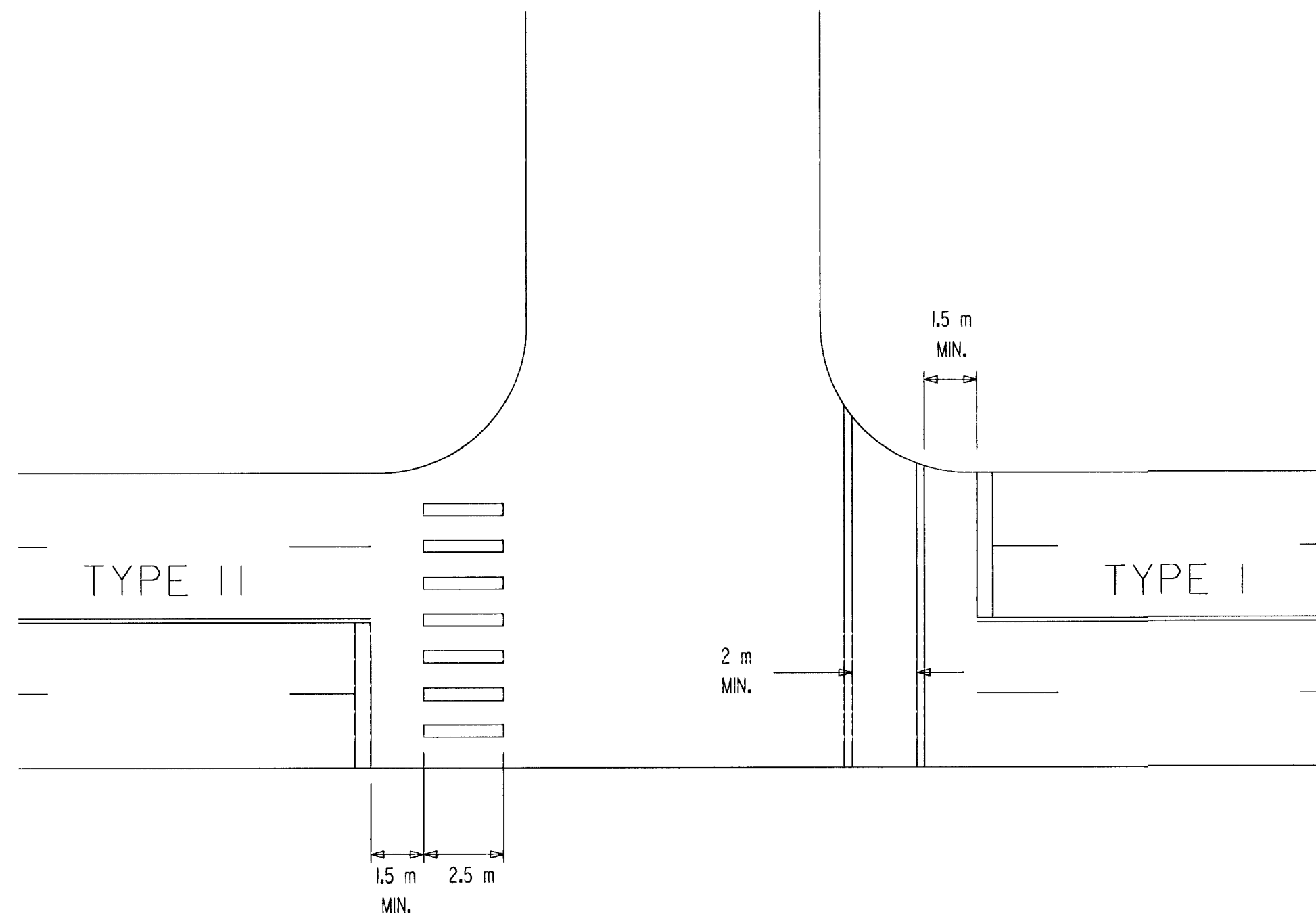
Approach Speed	X
30 km/h	6 m
40 km/h	8 m
50 km/h	10 m
60 km/h	12 m
70 km/h	14 m
80 km/h	16 m
90 km/h	18 m
100 km/h	20 m
110 km/h	22 m

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

### 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 wheelpath 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.



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

Plotted By : J. Olson  
 Plot File : 1827JE309SI  
 Plot Date : 7-12-99

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

**KANSAS DEPARTMENT OF TRANSPORTATION**  
 TYPICAL  
 MISCELLANEOUS  
 PAVEMENT MARKING  
 DETAIL SHEET 05/12/94

FHWA APPROVAL	09/10/96	APP'D	JAMES E. TOBACEN
DESIGNED	JFF	DETAILED	GSB
DESIGN CK.	JET	DETAIL CK.	JFF