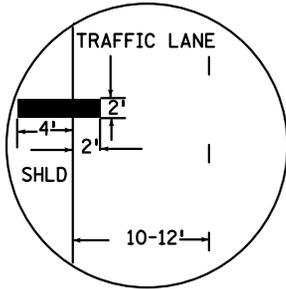


AIRPLANE PAVEMENT MARKINGS



DESIGNER'S NOTE:

PAY FOR AIRPLANE MARKER AS 24' SOLID LINE.

1/4 MILE SURVEYED LENGTH

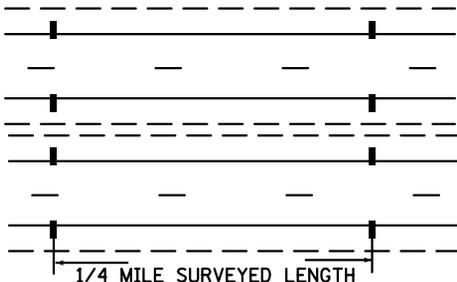
1/4 MILE SURVEYED LENGTH

1/4 MILE SURVEYED LENGTH

1/4 MILE SURVEYED LENGTH

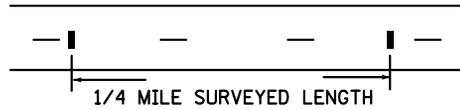
4 OR MORE LANE ROADWAY (DIVIDED)

PAVED SHOULDERS



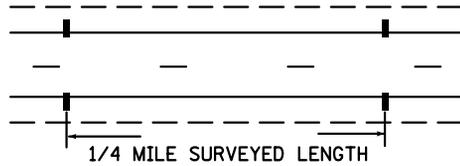
2 LANE ROADWAY

GRAVEL SHOULDERS



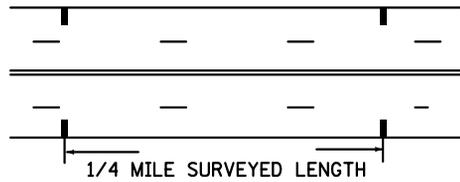
2 LANE ROADWAY

PAVED SHOULDERS



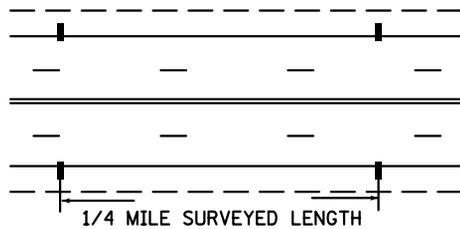
4 LANE ROADWAY (UNDIVIDED)

GRAVEL SHOULDERS



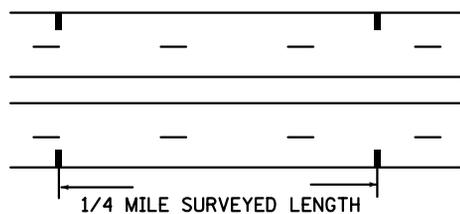
4 LANE ROADWAY (UNDIVIDED)

PAVED SHOULDERS



4 OR MORE LANE ROADWAY (DIVIDED)

GRAVEL SHOULDERS



Pavement Marking Character Areas

Areas are in square feet.

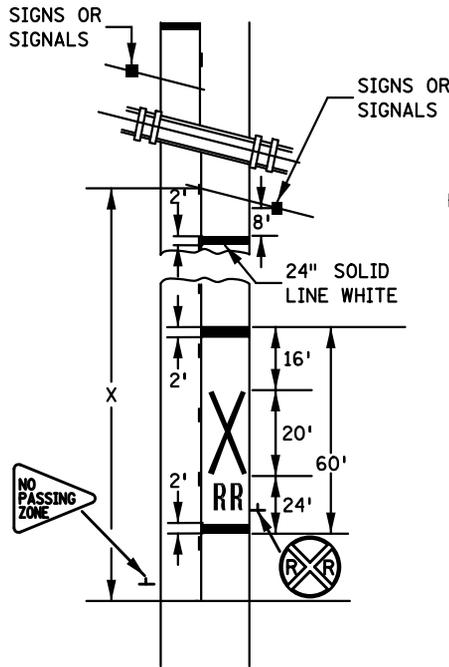
Pavement letters are 96" tall.

Character	Installed Area	Removal Area	Message	Installed Area	Removal Area
A	= 5.27	10.67	ONLY	= 20.76	47.00
B	= 7.19	10.67	PED	= 17.45	37.00
C	= 4.79	10.67	SCHOOL	= 31.86	74.00
D	= 6.26	10.67	SIGNAL	= 29.84	67.20
E	= 5.84	10.67	STOP	= 20.44	50.00
F	= 4.61	10.67	XING	= 20.18	42.00
G	= 5.89	10.67	YIELD	= 22.31	54.27
H	= 5.94	10.67		= 15.00	48.00
I	= 2.56	2.67		= 12.01	35.00
J	= 3.76	10.67		= 26.16	95.00
K	= 5.71	10.67		= 25.87	88.00
L	= 3.79	10.67		= 37.04	70.00
M	= 8.13	10.67		= 42.55	44.00
N	= 7.07	10.67		= 18.87	67.20
O	= 6.04	10.67		= 25.10	93.39
P	= 5.35	10.67		= 9.75	30.00
Q	= 6.30	10.67		= 0.75	1.50
R	= 6.33	10.67		= 3.00	6.00
S	= 5.89	10.67		= 5.79	8.00
T	= 3.79	10.67		= 8.69	18.00
U	= 5.75	10.67		= 11.58	32.00
V	= 4.70	10.67		= 7.63	32.07
W	= 6.18	10.67		= 3.53	14.12
X	= 4.66	10.67		= 61.72	204.00
Y	= 3.86	10.67			
Z	= 5.00	10.67			
1	= 2.56	10.67			
2	= 5.68	10.67			
3	= 5.59	10.67			
4	= 5.13	10.67			
5	= 6.18	10.67			
6	= 6.35	10.67			
7	= 3.80	10.67			
8	= 6.76	10.67			
9	= 6.35	10.67			
0	= 6.04	10.67			
Message	Installed Area	Removal Area			
AHEAD	= 28.58	64.99			
BIKE	= 21.30	42.00			
LANE	= 21.97	42.00			

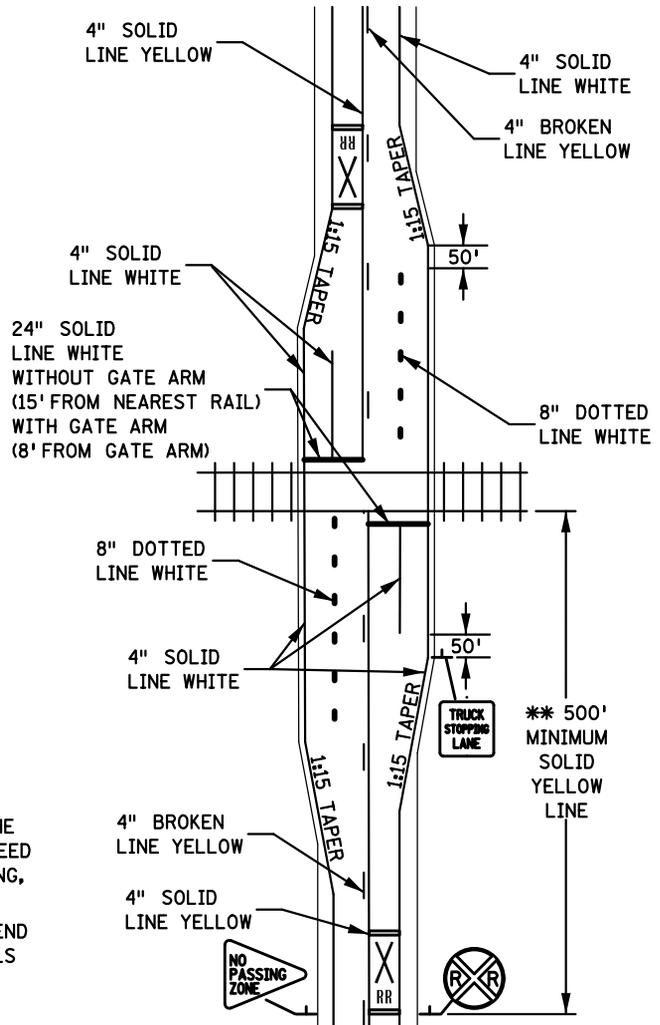
NOTE:
ALL REMOVAL AREAS
ARE COMPUTED AS
RECTANGLES AS
REQUIRED BY SPEC. 2102

BARS FOR RAILROAD
CROSSING PAVEMENT
MESSAGE PAID FOR AS
24" SOLID LINE WHITE.

RAILROAD CROSSING WITH TRUCK STOPPING LANE



FROM MnMUTCD SECTION 2C-D TABLE II-1



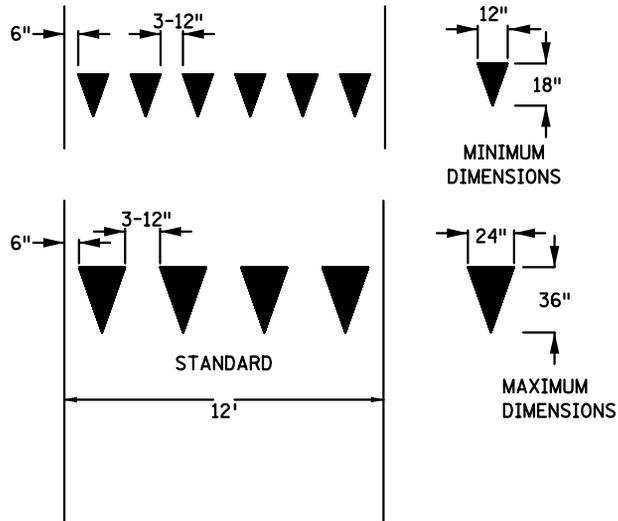
DESIGNER'S NOTES:

1. THE DISTANCE FROM THE RAILROAD CROSSING MARKING TO THE NEAREST TRACK WILL VARY ACCORDING TO THE APPROACH SPEED AND SIGHT DISTANCE OF THE VEHICULAR TRAFFIC APPROACHING, BUT SHOULD NOT BE LESS THAN 50 FEET.
2. 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.
3. USE THE SAME SIGNING AND PAVEMENT MARKINGS FOR THE OPPOSITE DIRECTION.

** IF THE DISTANCE BETWEEN THE BEGINNING OF THE SOLID LINE YELLOW IS LESS THAN THE DISTANCES IN TABLE 7.5 IN THE (TEM) FROM THE END OF A PRECEDING SOLID LINE YELLOW IN THE SAME LANE, THE SOLID LINE SHALL BE EXTENDED BETWEEN THEM.

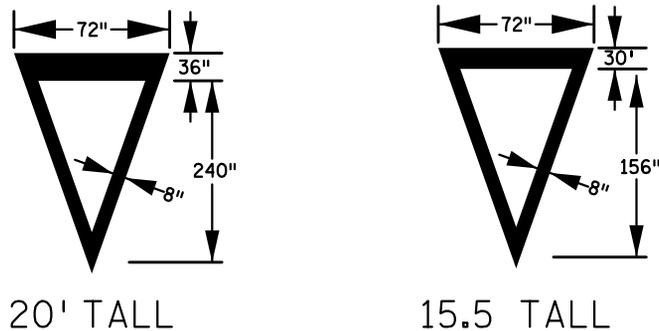
NOTE:
SIGN LOCATION FOR REFERENCE ONLY.

RECOMMENDED YIELD LINE LAYOUT



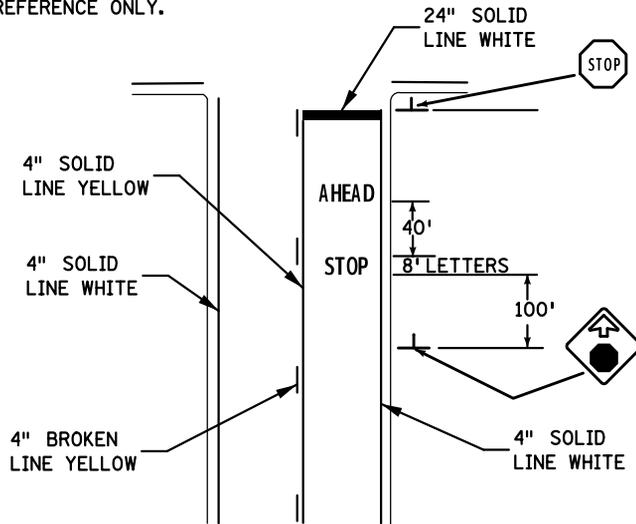
DESIGNER'S NOTES:
 TRIANGLE HEIGHT IS EQUAL TO
 1.5 TIMES THE BASE DIMENSION
 12" X 18" YIELD LINES MAY BE PLACED
 ON NARROWER OR SLOW-SPEED FACILITIES
 SUCH AS SHARED-USE PATHS

YIELD AHEAD PAVEMENT MARKING



STOP LINE AND "STOP AHEAD"

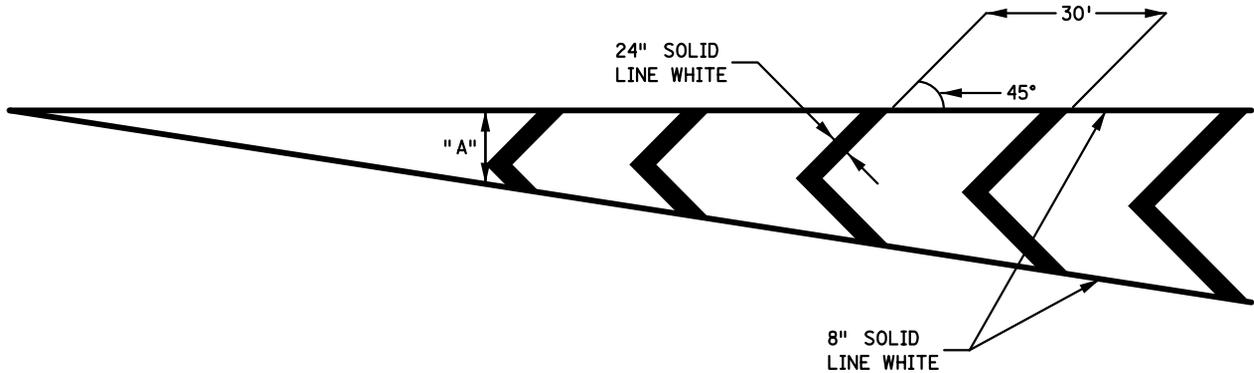
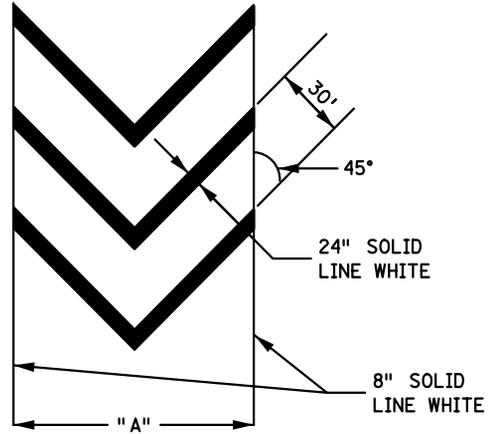
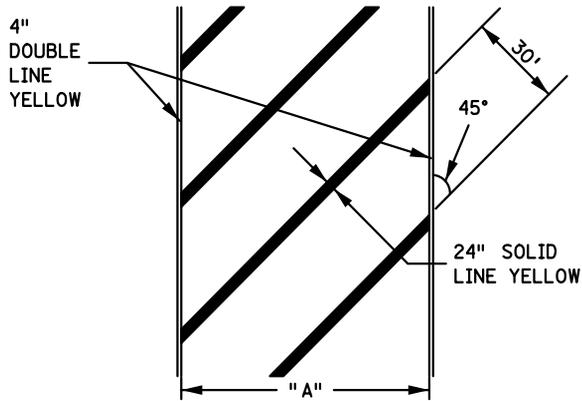
NOTE:
SIGN LOCATION FOR REFERENCE ONLY.



NOTES:

1. DO NOT PLACE A STOP AHEAD PAVEMENT MESSAGE IF THE INTERSECTION HAS ADEQUATE LIGHTING.
2. PLACE ONLY ONE SET OF STOP AHEAD PAVEMENT MESSAGES. IF A STOP AHEAD SIGN NEEDS TO BE PLACED MORE THAN 1000 FT FROM THE STOP SIGN, CONTACT THE DISTRICT TRAFFIC ENGINEER TO DETERMINE IF, WHERE, A SECOND SET OF "STOP AHEAD" PAVEMENT MESSAGES SHOULD BE PLACED.
3. THE STOP LINE SHOULD ORDINARILY BE PLACED 4 FT IN ADVANCE OF AND PERPENDICULAR TO THE NEAREST CROSSWALK LINE. IN THE ABSENCE OF A MARKED CROSSWALK, THE STOP LINE SHOULD BE PLACED AT THE DESIRED STOPPING POINT, AND IN NO CASE NO MORE THAN 30 FT OR LESS THEN 4 FT FROM THE NEAREST EDGE OF THE INTERSECTING CURB LINE OR THE NEAR EDGE OF THE THRU LANE.
4. IF A STOP LINE IS USED IN CONJUNCTION WITH A STOP SIGN, IT SHOULD ORDINARILY BE PLACED IN LINE WITH THE STOP SIGN. HOWEVER, IF THE SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP LINE SHOULD BE PLACED AT THE STOPPING POINT.
5. USE TABLE 7.4 IN THE (TEM) TO DETERMINE THE MINIMUM LENGTH OF A NO PASSING ZONE IN ADVANCE OF A STOP CONDITION.
6. PAY FOR STOP LINE AS 24' SOLID.

CROSSHATCHING



DESIGNER'S NOTES:

IF "A" IS LESS THAN 4' NO CROSSHATCHING REQUIRED.

AT SPEEDS LESS THAN 45 MPH THE WIDTH OF THE CROSSHATCH LINE MAY BE REDUCED TO 12" AND SPACING MAY BE REDUCED TO 20'.