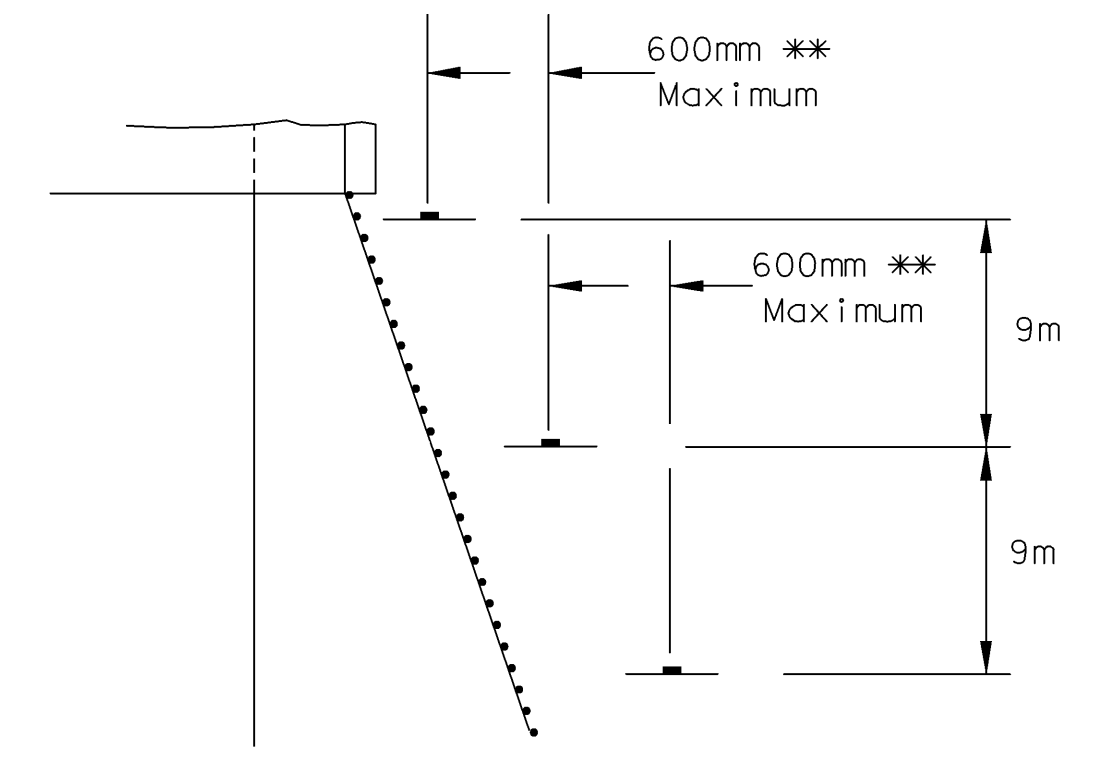
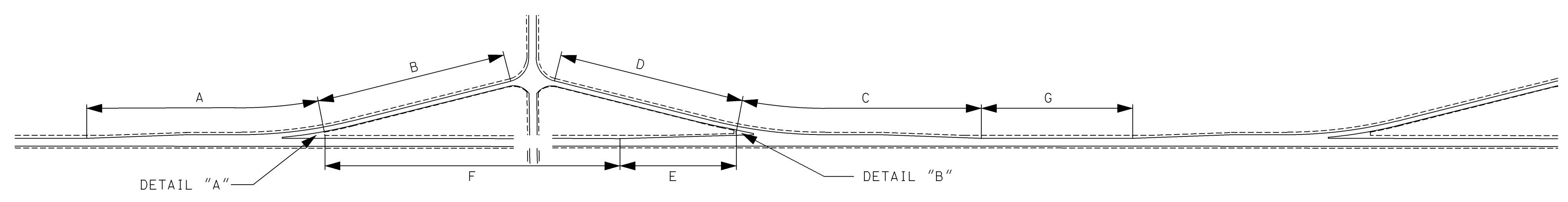




CURB SECTION
SHOULDER SECTION
GUARD FENCE SECTION
TYPICAL DELINEATOR LOCATION FOR ROADSIDE MOUNTING

TYPE 2 OBJECT MARKERS
SHOULDER WIDTH 1.8m or GREATER
TYPE 3 OBJECT MARKERS
SHOULDER WIDTH LESS THAN 1.8m
TYPICAL OBJECT MARKER LOCATION FOR BRIDGE AND CULVERT STRUCTURES



TYPICAL PLACEMENT OF TYPE 3 OBJECT MARKERS

** - No guard fence or barrier

DELINEATION SPACING TABLE					
	BEGINNING POINT	ENDING POINT	TYPICAL SPACINGS(1)	DELINEATOR TYPE AND COLOR	
				RIGHT EDGE	LEFT EDGE
A	End of Acceleration Lane Taper	Perpendicular to Entrance Ramp Gore	30m	"B" WHITE	"B" YELLOW
B	Perpendicular to Entrance Ramp Gore	Ramp Terminal Radius	30m	"A" WHITE	"A" YELLOW
C	End of Deceleration Lane Taper	Perpendicular to Exit Ramp Gore Sign	30m	"B" WHITE	"B" YELLOW
D	Perpendicular to Exit Ramp Gore Sign	Ramp Terminal Radius	30m	"A" WHITE	"A" YELLOW
E	Perpendicular to Exit Ramp Gore Sign	End of Exit Gore Taper	23m-30m	"A" WHITE	"A" YELLOW
F	End of Exit Gore Taper	Entrance Ramp Gore	120m-160m	"A" WHITE	"A" YELLOW
G	End of Acceleration or Deceleration Lane Taper	End of Acceleration or Deceleration Lane Taper	160m	"A" WHITE	"A" YELLOW
	Beginning of curve for Direction of Travel	End of curve for Direction of Travel	6m-90m (2)	"A" WHITE	"A" YELLOW

- (1) Spacings shall be continuous and uniform.
 (2) Spacing is rounded to nearest meter using the formula:
 $Spacing = 1.7 \times \sqrt{Radius - 15}$

NOTE:
 See 'Delineation Spacing' and 'Pattern of Delineation' tables and/or plan sheet for type, color, and spacing of delineation. The color of delineation shall match the color of the pavement marking edgeline.

Delineation shall be located on the outside edge of mainline, acceleration lanes, deceleration lanes, ramps, and curves. Delineation shall not be used on curves or loops when chevrons (W1-8 signs) are used, except at the entrance and exit gore areas. When changing from delineating one edge of the roadway to the other edge, the delineation on both edges shall overlap the typical spacing shown in the Delineation Spacing Table.

When delineating a curve, the first delineator should be located at the beginning of the curve. The spacing on the curve shall not exceed the typical spacing for the road type.

All delineation used within 30m in advance of the nose of guard fence and throughout the area with guard fence shall be flexible post mounted.

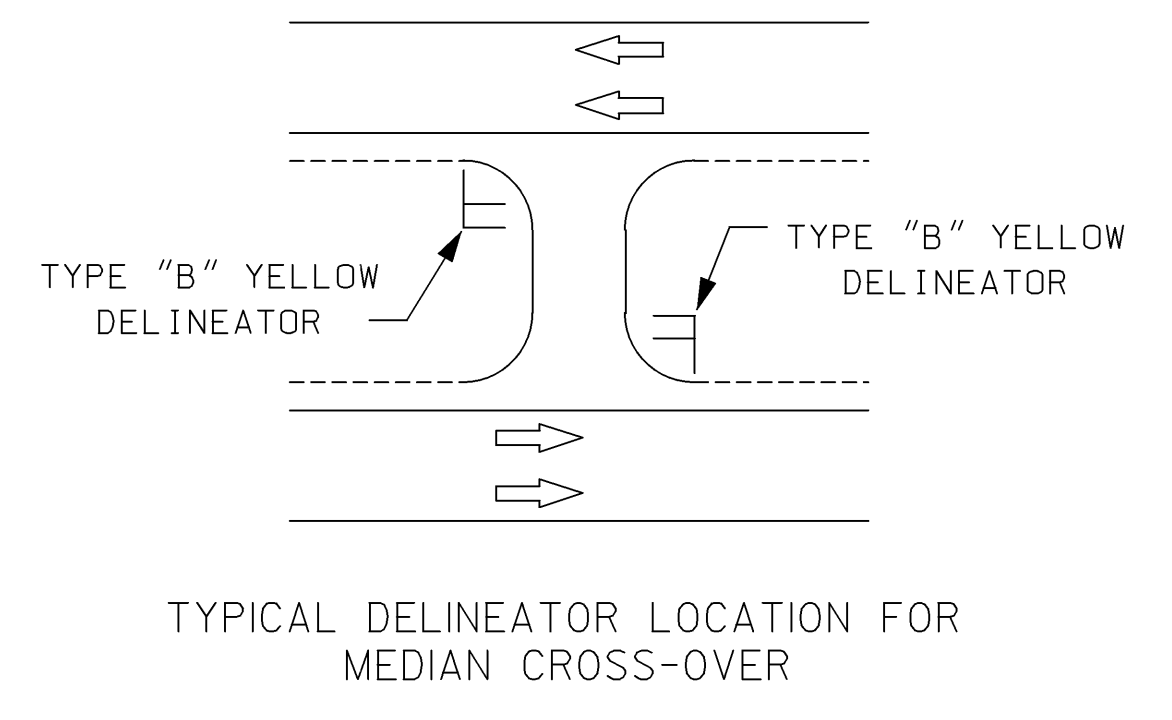
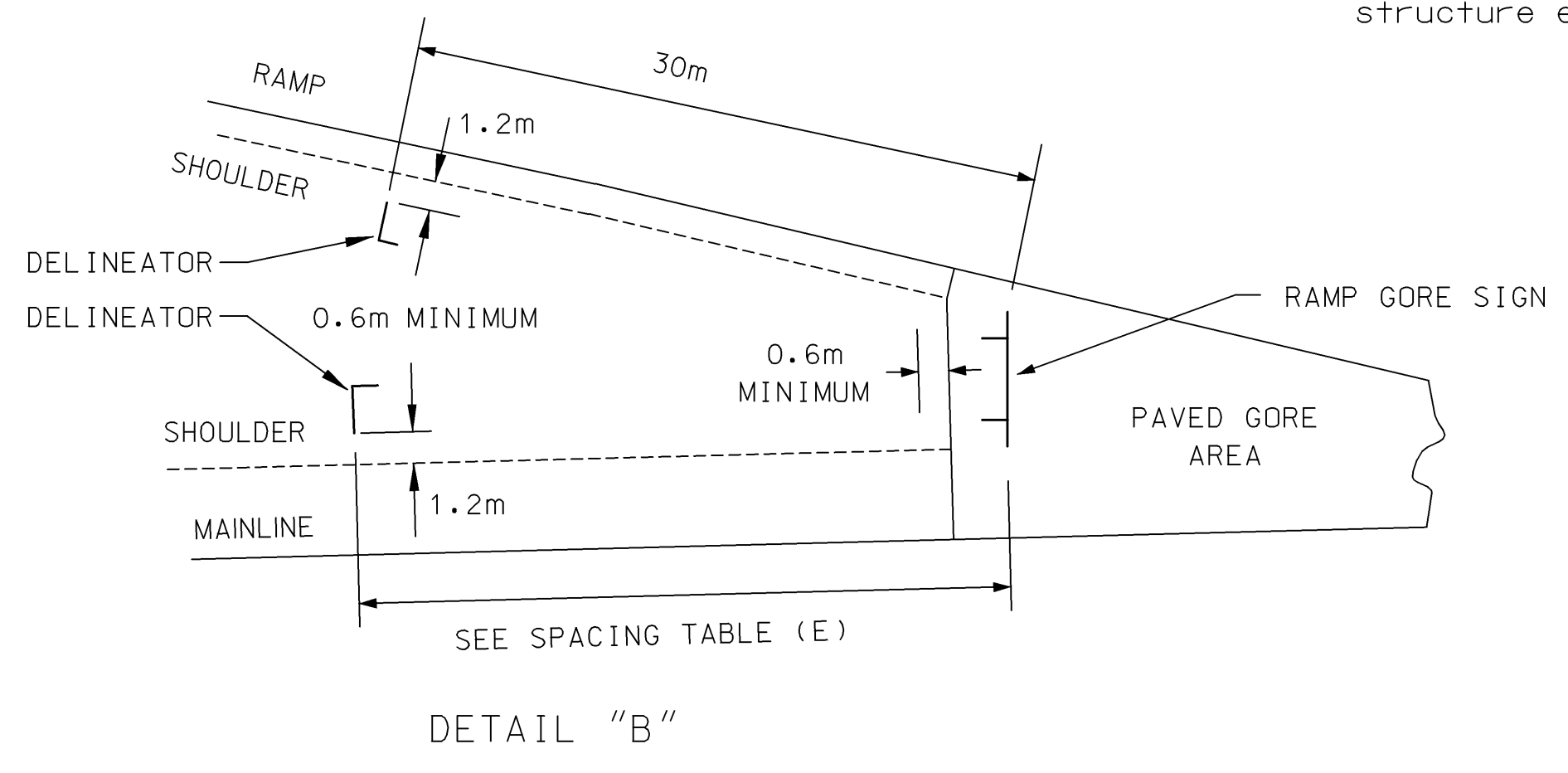
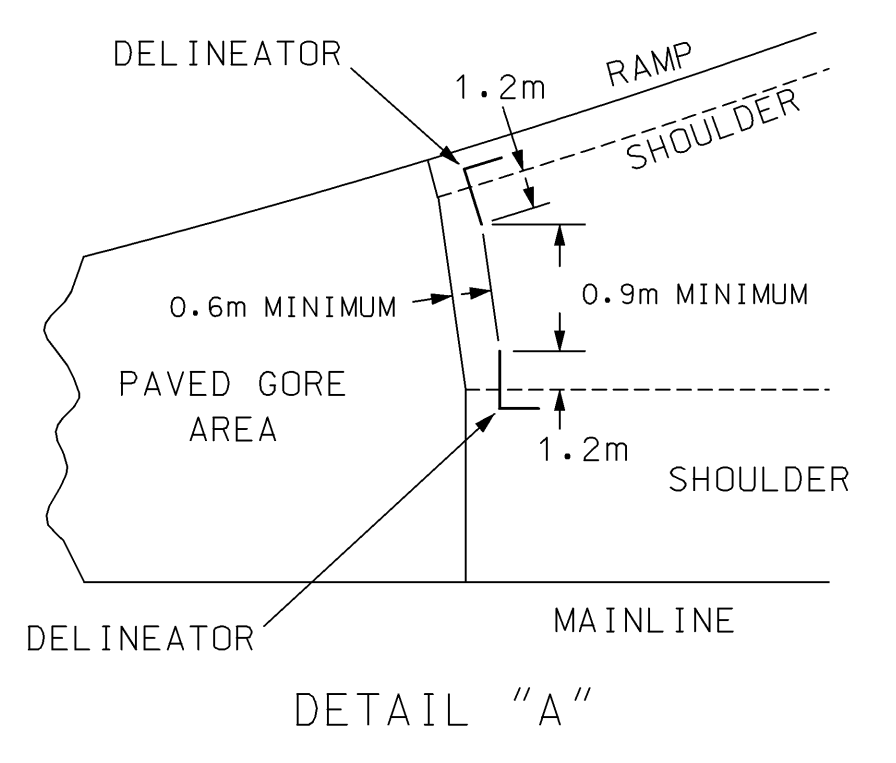
Delineation located on a median between the entrance and exit ramps should be installed according to median width:

Median width less than 1.8m: delineation installed back-to-back on a single post along the median centerline.

Median width greater than or equal to 1.8m: delineation installed as shown for the typical delineator locations.

The spacing shall be as shown in the Delineation Spacing Table.

The longitudinal location of the Object Markers from the structure end shall be a maximum spacing of 1.05m.



TYPE 3 OBJECT MARKERS USAGE		
TWO-WAY ROADWAY (TWO LANES)		
Width of Structure	Left	Right
Less than 6.1m	3 (1)	3 (1)
6.1m to less than 7.4m	1	3 (1)
7.4m to less than 8.6m	1	3 (1)
8.6m to less than 9.8m	1	3 (1)
9.8m to less than 11.0m	1 (2)	1
ONE-WAY ROADWAY (ONE LANE)		
Width of Structure	Left	Right
Less than 7.4m	3 (1)	3 (1)
ONE-WAY ROADWAY (TWO LANES)		
Width of Structure	Left	Right
Less than 6.1m	-	-
6.1m to less than 7.4m	3 (1)	3 (1)
7.4m to less than 8.6m	3 (1)	3 (1)
8.6m to less than 9.8m	3 (1)	3 (1)
9.8m to less than 11.0m	1 (2)	1

- NOTES:
 The Type 3 Object Markers Usage table is based on both shoulders being equal width. If one shoulder width is greater than or equal to 1.8m, then install a Type 2 Object Marker on that side and install a Type 3 Object Marker on the other side.
 (1) - The first two Type 3 Object Markers not required if the guard fence has delineation.
 (2) - The left Type 3 Object Marker not required if structure less than 3m long.

3					
2					
1					
NO.	DATE	REVISIONS	BY	APP'D	

KANSAS DEPARTMENT OF TRANSPORTATION
 DESIGN DETAILS FOR
 POSITIONING OF DELINEATORS &
 OBJECT MARKERS (TYPES 2 & 3)
 TE409si 07-01-03

FHWA APPROVAL	07-22-2003	APP'D	Steven A. Buckley
DESIGNED	DDG	DETAILED	WSB
DESIGN CK.	SAB	DETAIL CK.	DDG
		QUANTITIES	QUAN. CK.
		TRACED	TRACE CK.

Plotted By : @USER@NAME@
 Plot File : @@SYTIME@
 Plot Date : @@SYTIME@