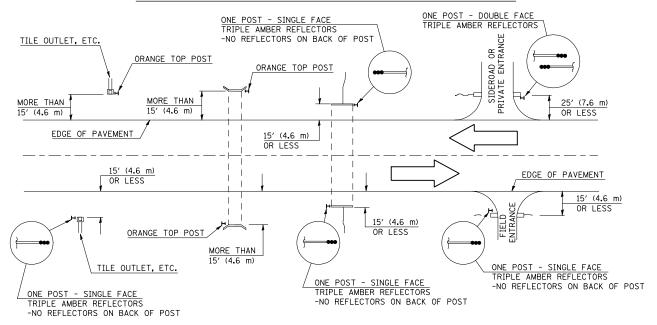
TOTAL SHEET NO. 251 214 COUNTY SECTION PIATT

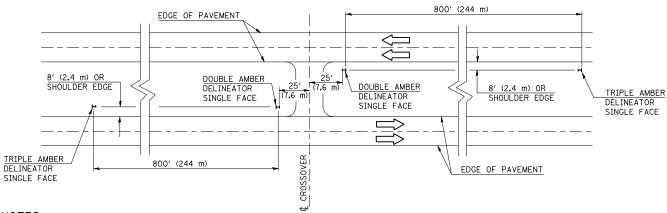
* (58,74-66)&(74-67&68)RS-1

DELINEATORS APPLICATIONS

IDENTIFICATION OF ROADSIDE HAZARDS FOR TWO-LANE ROADWAYS



MEDIAN DELINEATORS AT CROSSOVER (FOR INTERSTATES, EXPRESSWAYS, DUAL HIGHWAYS)



NOTES

NAME DATE

F-5.13

12/99

D.L.P.

DESIGNED

CHECKED

CADD NO.

DELINEATORS FOR ROADSIDE HAZARDS SHALL ONLY BE PLACED AT LOCATIONS WHERE THERE IS NO GUARDRAIL, OR OTHER PERMANENT BARRIER, ON THE SAME SIDE OF ROAD AS THE HAZARD.

DELINEATORS FOR ROADSIDE HAZARDS SHALL ONLY BE PLACED AT LOCATIONS WHERE DELINEATORS ARE NOT IN PLACE ALONG THE EDGE OF SHOULDER.

EACH POST SHALL BE CONSIDERED AS ONE DELINEATOR FOR PAYMENT, REGARDLESS OF THE NUMBER OF DELINEATORS

POSTS INDICATED AS "ORANGE TOP" SHALL HAVE NO REFLECTORS. THEY SHALL HAVE THE TOP 12" (300 mm) (MINIMUM) OF THE POST PAINTED A BRIGHT ORANGE COLOR SIMILAR TO CONSTRUCTION SIGNS, AND SHALL MEET THE APPROVAL OF THE ENGINEER, FLUORESCENT PAINT OR OTHER SPECIAL RETROREFLECTIVE COATINGS WILL NOT BE REQUIRED.

FOR ONE-WAY ROADWAYS THE APPLICATION SHALL BE SIMILAR WITH DELINEATORS PLACED ON THE TRAFFIC APPROACH SIDE OF HAZARDS AND OBJECTS, ONLY SINGLE FACE DELINEATORS WILL BE REQUIRED ON ONE-WAY ROADWAYS.

ALL DIMENSIONS ARE IN

INCHES (MILLIMETERS)

UNLESS OTHERWISE SHOWN.

FOR OTHER DELINEATOR APPLICATIONS, REFER TO STANDARD 635001.

REVISIONS

NAME

K.A.G.

DATE

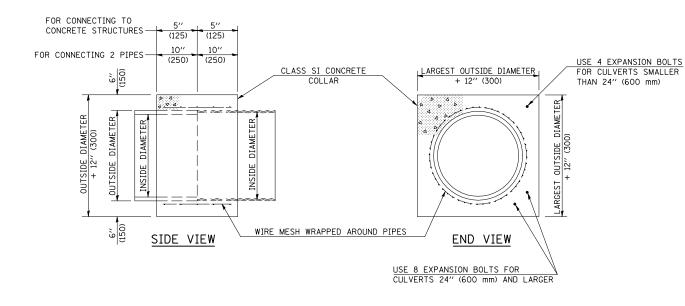
08/03

BILL OF MATERIALS

DELINEATOR TYPE	SINGLE FACE	DOUBLE FACE	NO REFLECTOR	TOTAL DELINEATORS
	FACE	FACE	REFLECTOR	DELINEATORS
SINGLE CRYSTAL		N/A	N/A	
DOUBLE CRYSTAL			N/A	
SINGLE AMBER			N/A	
DOUBLE AMBER		N/A	N/A	
TRIPLE AMBER			N/A	
ORANGE TOP	N/A	N/A		
			TOTAL	

DELINEATOR TYPE	SINGLE	DOORLE	l NO	TOTAL
	FACE	FACE	REFLECTOR	DELINEATOR
SINGLE CRYSTAL		N/A	N/A	
DOUBLE CRYSTAL			N/A	
SINGLE AMBER			N/A	
DOUBLE AMBER		N/A	N/A	
TRIPLE AMBER			N/A	
ORANGE TOP	N/A	N/A		
			TOTAL	

DETAIL OF CONCRETE COLLARS



QUANTITIES FOR	CONCRETE PIPES
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE
	REQUIRED 20" (500 mm) WIDTH
INCH (mm)	CU. YD. (m3)
4" (100)	0.14 (0.11)
6" (150)	0.16 (0.12)
8" (200)	0.19 (0.14)
10" (250)	0.22 (0.17)
12" (300)	0.25 (0.19)
15" (375)	0.30 (0.23)
18" (450)	0.35 (0.27)
24" (600)	0.45 (0.35)
30" (750)	0.57 (0.43)
36" (900)	0.69 (0.53)
42" (1050)	0.83 (0.63)
48" (1200)	0.97 (0.74)
54" (1350)	1.12 (0.86)
60" (1500)	1.28 (0.98)

QUANTITIES FOR METAL PIPES				
INSIDE DIAMETER	ESTIMATED			
OF PIPE	CLASS SI CONCRETE			
	REQUIRED			
	20" (500 mm) WIDTH			
INCH (mm)	CU. YD. (m3)			
4" (100)	0.12 (0.09)			
6" (150)	0.14 (0.11)			
8" (200)	0.16 (0.12)			
10" (250)	0.19 (0.14)			
12" (300)	0.21 (0.16)			
15" (375)	0.25 (0.19)			
18" (450)	0.29 (0.22)			
24" (600)	0.38 (0.29)			
30" (750)	0.47 (0.36)			
36" (900)	0.59 (0.45)			
42" (1050)	0.69 (0.53)			
48" (1200)	0.81 (0.62)			
54" (1350)	0.93 (0.71)			
60" (1500)	1.05 (0.81)			

GENERAL NOTES

- 1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
- 2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
- 3. THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT. (2.63 kg/m²).
- 4. WHEN CONCRETE COLLARS ARE CONSTRUCTED ADJACENT TO AN EXISTING CONCRETE STRUCTURE (HEADWALLS, ETC.) EXPANSION BOLTS, SHALL BE USED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR EXPANSION BOLTS OF THE SIZE SPECIFIED IN THE PLANS.
- 5. CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER CUBIC YARD (CUBIC METER), FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.

	REVISIONS		DATE	NAME	
	DATE	NAME	4-80	J.M.H.	DESIGNED
	08/00	D.L.P.	4-80	P.E.K.	CHECKED
37 └	09/03	K.A.G.	.45	J-5	CADD NO.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.