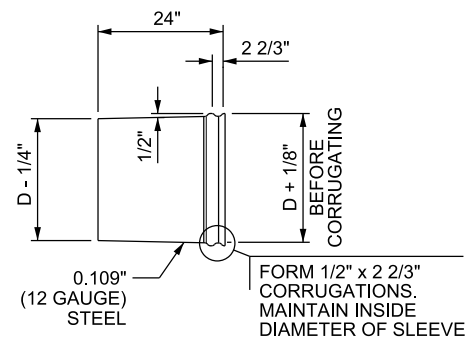
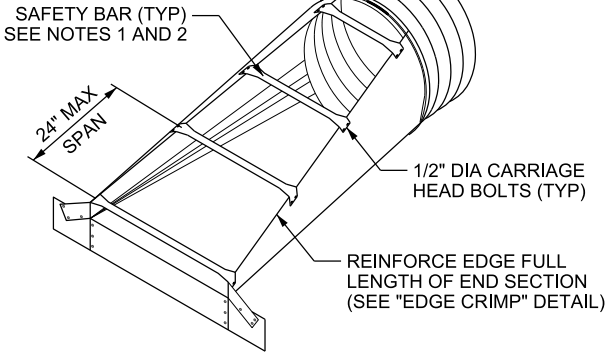


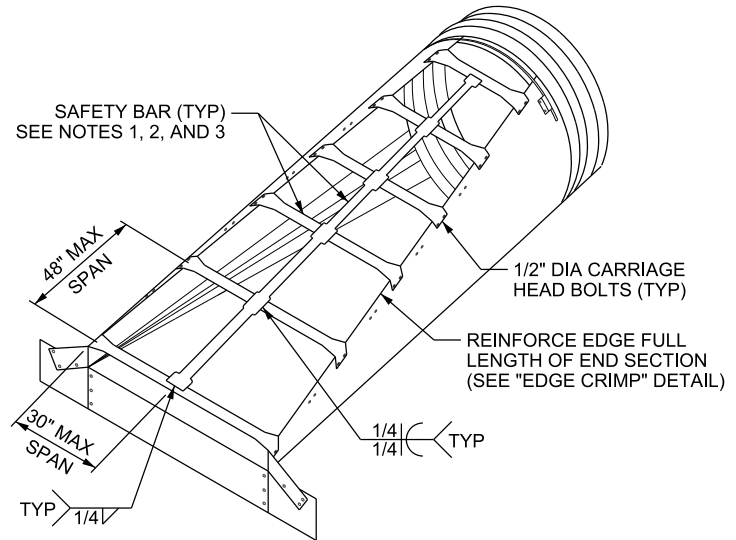
**THERMOPLASTIC OR CONCRETE PIPE CONNECTION**



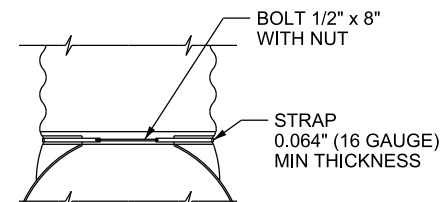
**SMOOTH TAPERED SLEEVE**



**SAFETY END SECTION - PARALLEL**

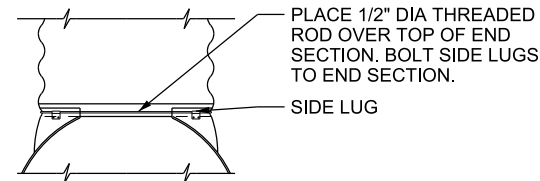


**SAFETY END SECTION - CROSSING**



**TYPE #1 CONNECTOR**

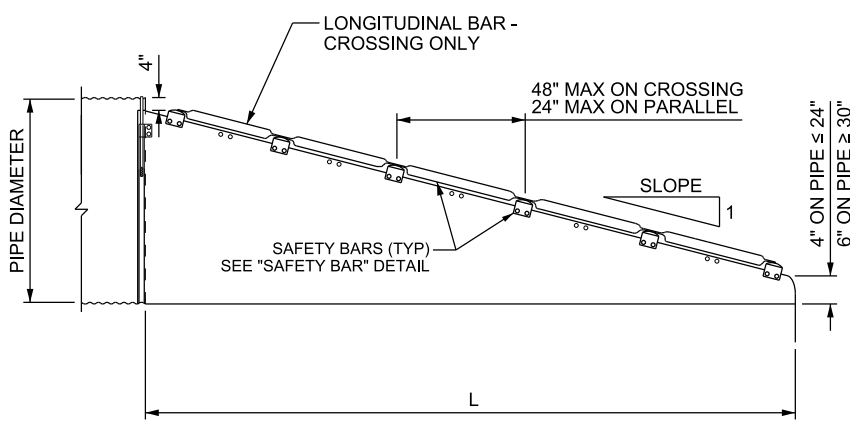
FOR USE ON CORRUGATED METAL PIPE ≤ 24" DIA



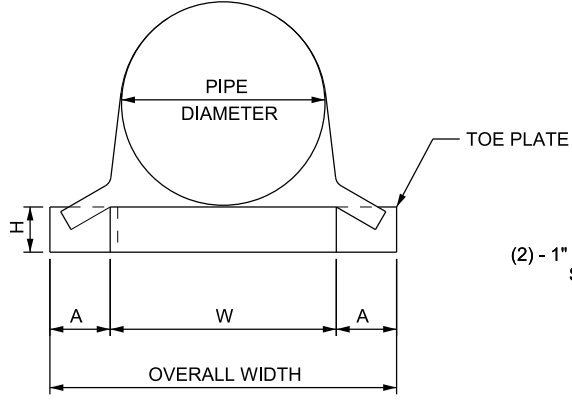
**TYPE #2 CONNECTOR**

FOR USE ON CORRUGATED METAL PIPE ≥ 30" DIA

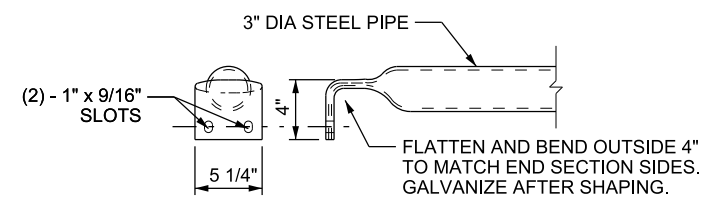
**CORRUGATED METAL PIPE CONNECTION**



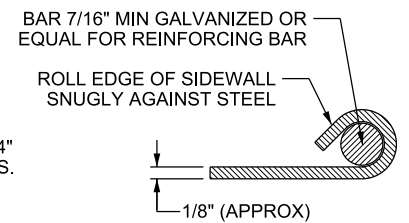
**SAFETY END SECTION - ELEVATION**



**SAFETY END SECTION FRONT VIEW**



**SAFETY BAR**



**EDGE CRIMP**

STEEL SAFETY END SECTIONS FOR ELLIPTICAL PIPE								
PIPE SIZE (INCHES)		MIN METAL THICK INCH/GAUGE	DIMENSIONS (INCHES)					
SPAN X RISE	EQUIV DIA		H	W	OVERALL WIDTH	L		
						SLOPE = 4	SLOPE = 6	
23 X 14	18	0.064/16	8	6	29	45	16	24
30 X 19	24	0.064/16	8	6	36	52	36	54
38 X 24	30	0.079/14	12	9	44	68	56	84
45 X 29	36	0.109/12	12	9	51	83	76	114
53 X 34	42	0.109/12	16	12	59	91	96	144

STEEL SAFETY END SECTIONS FOR ARCHED PIPE									
PIPE SIZE (INCHES)		MIN METAL THICK INCH/GAUGE	DIMENSIONS (INCHES)						
SPAN X RISE	EQUIV DIA		A	H	W	OVERALL WIDTH	L		
						SLOPE = 4	SLOPE = 6	SLOPE = 10*	
21 X 15	18	0.064/16	8	6	27	43	20	30	70
28 X 20	24	0.064/16	8	6	34	50	40	60	120
35 X 24	30	0.079/14	12	9	41	65	56	84	160
42 X 29	36	0.109/12	12	9	48	72	76	114	210
49 X 33	42	0.109/12	16	12	55	87	92	138	

\* MINIMUM THICKNESS OF ALL 10:1 SLOPE END SECTIONS IS 0.109" / 12 GAUGE

STEEL SAFETY END SECTIONS FOR CIRCULAR PIPE									
PIPE DIA (INCHES)		MIN METAL THICK INCH/GAUGE	DIMENSIONS (INCHES)						
			A	H	W	OVERALL WIDTH	L		
						SLOPE = 4	SLOPE = 6	SLOPE = 10*	
18	0.064/16	8	6	24	40	32	48	100	
24	0.064/16	8	6	30	46	56	84	160	
30	0.109/12	12	9	36	60	80	120	220	
36	0.109/12	12	9	42	66	104	156	280	
42	0.109/12	16	12	48	80	128	192		

\* MINIMUM THICKNESS OF ALL 10:1 SLOPE END SECTIONS IS 0.109" / 12 GAUGE

**NOTES:**

1. PROVIDE SLOTTED HOLES FOR SAFETY BAR ATTACHMENT.
2. NUMBER OF BARS REQUIRED VARIES DEPENDING ON THE LENGTH AND WIDTH OF THE END SECTION.
3. ADD LONGITUDINAL BAR WHEN WIDTH EXCEEDS 30 INCHES. WELD BARS TO CREATE ONE PIECE STRUCTURE.
4. USE GALVANIZED HARDWARE FOR CONNECTIONS.

**SUPPLEMENTAL DRAWING**

NO.	DATE	APPR.	REMARKS
1	8/30/2018	JGE	REMOVED DESIGN INFORMATION FROM THE DRAWING.

UTAH DEPARTMENT OF TRANSPORTATION  
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION  
SALT LAKE COUNTY, UTAH

RECOMMENDED FOR APPROVAL  
*Randy...*  
CHAIRMAN STANDARDS COMMITTEE APPROVED

DATE: AUG.30.2018  
DATE: AUG.30.2018

DEPUTY DIRECTOR

**STEEL SAFETY END SECTIONS**

STD. DWG. NO. DG 6

12-SEP-2018 DGN File: D:\StandardSpecSection\2017\Section\A11\_Supp\_Issues\Issue 6 08-30-2018\Drawings\DD06.dgn