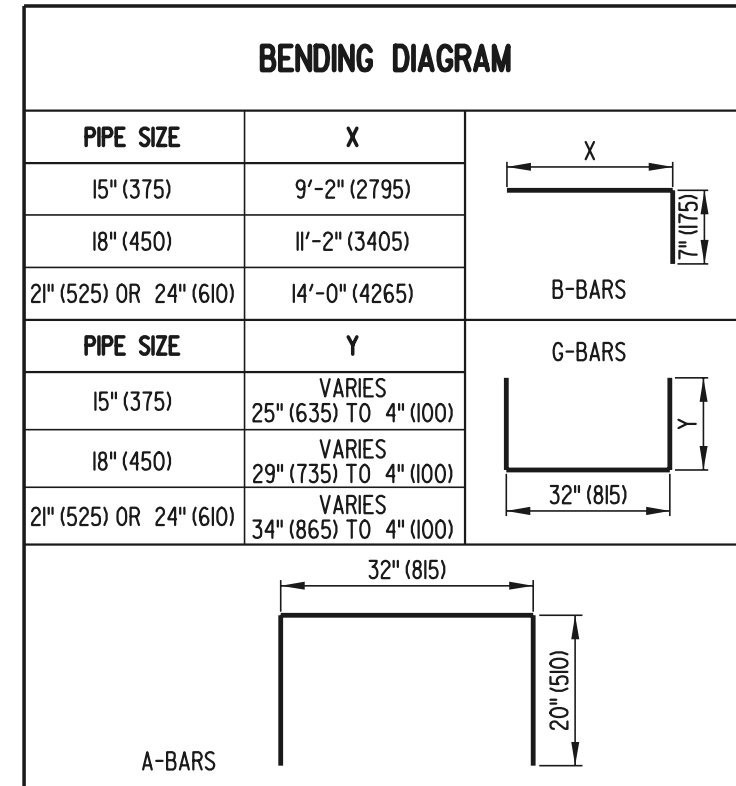


DIMENSIONS			
PIPE SIZE	A	B	C
15" (375)	9'-6" (2895)	2'-5" (735)	8'-4" (2540)
18" (450)	11'-6" (3505)	2'-9" (840)	10'-5" (3175)
21" (525) OR 24" (600)	14'-4" (4370)	3'-2 ⁵ / ₈ " (980)	12'-6" (3810)



APPROXIMATE QUANTITIES							
PIPE SIZE	CONCRETE FT ³ (m ³)		REINF. STEEL LBS. (kg)	NO. OF GRATES	LENGTH TO BE CUT FROM 1 GRATE	WEIGHT OF FULL SIZE GRATE LBS. (kg)	WEIGHT OF CUT GRATE LBS. (kg)
	CONC. PIPE	C.M. PIPE					
15" (375)	25 (0.708)	25.43 (0.720)	121.12 (54.94)	2	--	270.92 (122.89)	--
18" (450)	31.5 (0.892)	32.07 (0.908)	156.7 (71.08)	3	2'-1" (635)	270.92 (122.89)	135.47 (61.45)
21" (525) OR 24" (600)	40.75 (1.154)	39.87 (1.129)	194.0 (88.00)	3	--	270.92 (122.89)	--

SCHEDULE OF REINFORCING STEEL																				
PIPE SIZE	A-BARS				B-BARS				C-BARS				D-BARS				G-BARS			
	SIZE	NO.	SPA.	LENGTH	SIZE	NO.	SPA.	LENGTH	SIZE	NO.	SPA.	LENGTH	SIZE	NO.	SPA.	LENGTH	SIZE	NO.	SPA.	LENGTH
15" (375)	*4 (#13)	2	8" (200)	72" (1830)	*4 (#13)	5	8" (200)	9'-9" (2970)	*4 (#13)	2	-	9'-3" (2820)	*4 (#13)	4	8" (200)	VARIES 50" (1270) TO 100" (2540)	*4 (#13)	15	8" (200)	VARIES 40" (1015) TO 82" (2085)
18" (450)	*4 (#13)	2	8" (200)	72" (1830)	*4 (#13)	5	8" (200)	11'-9" (3580)	*4 (#13)	2	-	11'-5" (3480)	*4 (#13)	6	8" (200)	43 ¹ / ₂ " (1105) TO 130 ¹ / ₂ " (3315)	*4 (#13)	18	8" (200)	VARIES 40" (1015) TO 90" (2285)
21" (525) OR 24" (600)	*4 (#13)	2	8" (200)	72" (1830)	*4 (#13)	5	8" (200)	14'-7" (4445)	*4 (#13)	2	-	14'-3" (4345)	*4 (#13)	6	8" (200)	VARIES 51" (1295) TO 153" (3885)	*4 (#13)	22	8" (200)	VARIES 40" (1015) TO 100" (2540)



DELAWARE
DEPARTMENT OF TRANSPORTATION

6:1 SAFETY END STRUCTURE

STANDARD NO. D-1 (2001)

SHT. 2 OF 2

APPROVED *Ryan M. Hershman* 6/18/01
CHIEF ENGINEER DATE
 RECOMMENDED *Mehal Rajda* 6/18/01
DESIGN ENGINEER DATE