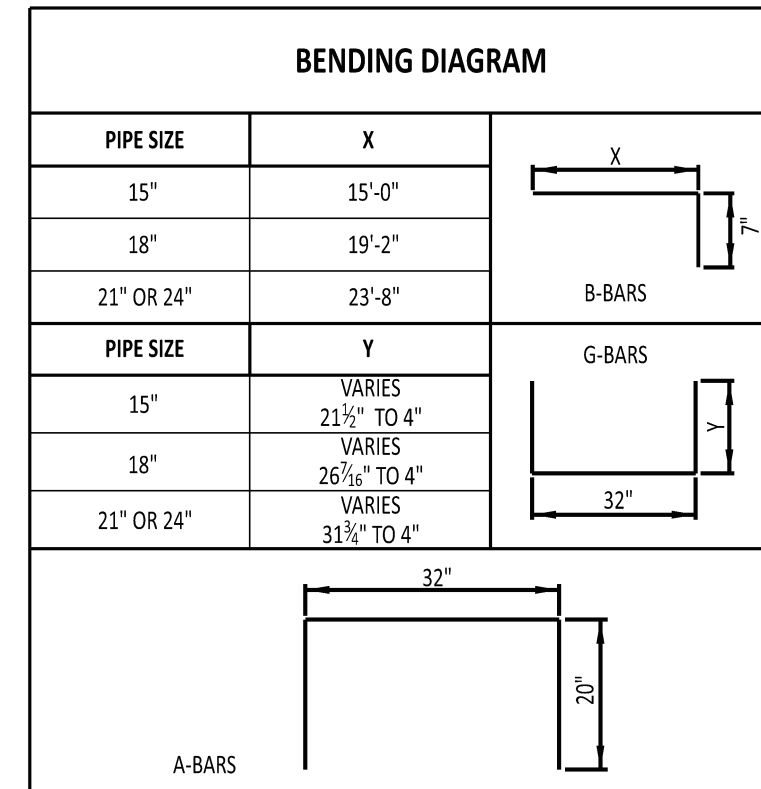


DIMENSIONS			
PIPE SIZE	A	B	C
15"	15'-4"	2'-4 ³ / ₈ "	14'-7"
18"	19'-6"	2'-9 ³ / ₈ "	18'-9"
21" OR 24"	24'-0"	3'-2 ¹³ / ₁₆ "	22'-11"

APPROXIMATE QUANTITIES							
PIPE SIZE	CONCRETE FT ³		REINF. STEEL LBS.	NO. OF GRATES	LENGTH TO BE CUT FROM 1 GRATE	WEIGHT OF FULL SIZE GRATE LBS.	WEIGHT OF CUT GRATE LBS.
	CONC. PIPE	C.M. PIPE					
15"	41.35	41.78	175.0	4	2'-1"	270.92	135.47
18"	50.11	50.68	227.0	5	2'-1"	270.92	135.47
21" OR 24"	69.43	70.31	310.4	6	2'-1"	270.92	135.47



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"	#4	2	8"	72"	#4	5	8"	15'-7"	#4	2	-	15'-1 ¹ / ₁₆ "	#4	4	8"	VARIES 72 ¹³ / ₁₆ " TO 145 ⁵ / ₈ "	#4	24	8"	VARIES 40" TO 75 ¹¹ / ₁₆ "
18"	#4	2	8"	72"	#4	5	8"	19'-9"	#4	2	-	19'-3 ³ / ₈ "	#4	4	8"	VARIES 89 ⁵ / ₈ " TO 179 ³ / ₁₆ "	#4	30	8"	VARIES 40" TO 85 ³ / ₄ "
21" OR 24"	#4	2	8"	72"	#4	5	8"	24'-3"	#4	2	-	23'-9 ⁵ / ₈ "	#4	6	8"	VARIES 80 ³ / ₄ " TO 242 ¹ / ₈ "	#4	37	8"	VARIES 40" TO 96 ⁹ / ₁₆ "



DELAWARE
DEPARTMENT OF TRANSPORTATION

10:1 CONCRETE SAFETY END STRUCTURE

STANDARD NO. D-2 (2018) SHT. 2 OF 2

APPROVED

RECOMMENDED

SIGNATURE ON FILE
CHIEF ENGINEER 1/04/2019
DATE

SIGNATURE ON FILE
DESIGN ENGINEER 12/20/2018
DATE