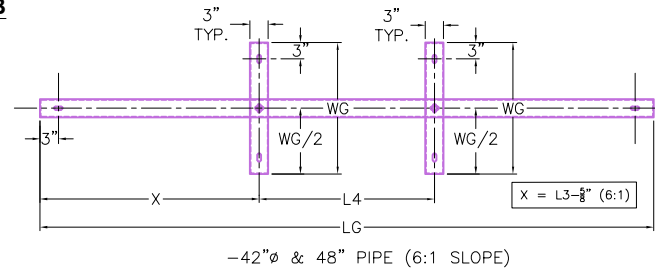
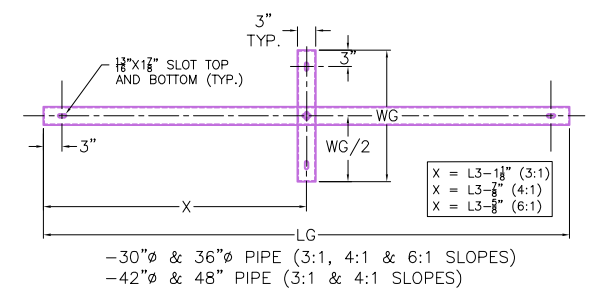


GENERAL NOTES

- DRAWING TO BE USED FOR ALL 12" THROUGH 48" SIDE DRAIN CONCRETE ENDWALLS. MANUFACTURING, FOR CROSS DRAINS ONLY.
- CONCRETE: $F_c' = 4,500$ PSI @ 28 DAYS.
- REINFORCING STEEL: ASTM A615, $F_y = 60,000$ PSI. SEE STD. DWGS. D-PE-15A, D-PE-18, D-PE-24A, D-PE-30A, D-PE-36A, D-PE-42A & D-PE-48A FOR BILL OF STEEL.
- SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.
- APPROPRIATE SIZING AND LOCATIONS OF THE LIFTING INSERTS WILL BE THE RESPONSIBILITY OF INFRASTRUCTURE PRECAST, INC.
- LIFTING INSERT POCKETS SHALL BE GROUTED ON SITE BY THE CONTRACTOR AFTER THE ENDWALL IS SET AS PER TDOT REQUIREMENTS.
- DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.
- PIPE OPENINGS FOR HEADWALLS ARE BASED ON REINFORCED CONCRETE PIPE WITH TYPE "B" WALL AS PER AMERICAN CONCRETE PIPE ASSOCIATION (ACPA). OUTSIDE DIAMETER + 3"-4".
- TOE WALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15'.



STEEL PIPE GRATE PLAN VIEWS

(SEE D-PE-99 FOR MOUNTING STEEL GRATES)

DIMENSIONS & QUANTITIES FOR ONE ENDWALL 3:1										
PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS		STRUCT. STEEL	WEIGHT	LBS.	LBS.
	H	W	L1	L2	L3	L4				
15"	2'-11"	2'-8"	6'-0"	6'-3 $\frac{3}{8}"$	N/A	N/A	N/A	2,819		
18"	3'-2"	2'-11"	6'-8"	7'-0 $\frac{3}{8}"$	N/A	N/A	N/A	3,406		
24"	3'-9"	3'-6"	8'-5"	8'-10 $\frac{1}{2}"$	N/A	N/A	N/A	5,011		
30"	4'-5"	4'-1"	10'-5"	10'-11 $\frac{1}{4}"$	5'-2"	N/A	114	7,204		
36"	5'-0"	4'-8"	12'-2"	12'-9 $\frac{3}{8}"$	6'-4 $\frac{1}{2}"$	N/A	132	9,513		
42"	5'-6"	5'-3"	13'-8"	14'-4 $\frac{1}{2}"$	7'-4 $\frac{1}{2}"$	N/A	148	11,862		
48"	6'-1"	5'-10"	15'-5"	16'-3"	7'-4 $\frac{1}{8}"$	N/A	167	14,838		

DIMENSIONS & QUANTITIES FOR ONE ENDWALL 4:1										
PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS		STRUCT. STEEL	WEIGHT	LBS.	LBS.
	H	W	L1	L2	L3	L4				
15"	2'-11"	2'-8"	8'-0"	8'-3"	N/A	N/A	N/A	3,484		
18"	3'-2"	2'-11"	8'-8"	8'-11 $\frac{1}{4}"$	N/A	N/A	N/A	4,228		
24"	3'-9"	3'-6"	11'-0"	11'-4"	N/A	N/A	N/A	6,303		
30"	4'-5"	4'-1"	13'-8"	14'-1"	6'-1"	N/A	137	9,083		
36"	5'-0"	4'-8"	16'-0"	16'-5 $\frac{3}{8}"$	8'-2 $\frac{1}{2}"$	N/A	160	12,058		
42"	5'-6"	5'-3"	18'-0"	18'-6 $\frac{3}{8}"$	9'-2 $\frac{1}{2}"$	N/A	180	15,073		
48"	6'-1"	5'-10"	20'-4"	20'-11 $\frac{1}{2}"$	10'-3 $\frac{1}{4}"$	N/A	203	18,910		

DIMENSIONS & QUANTITIES FOR ONE ENDWALL 6:1										
PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS		STRUCT. STEEL	WEIGHT	LBS.	LBS.
	H	W	L1	L2	L3	L4				
15"	2'-11"	2'-8"	11'-2"	11'-3 $\frac{7}{8}"$	N/A	N/A	N/A	4,737		
18"	3'-2"	2'-11"	12'-8"	12'-10 $\frac{3}{8}"$	N/A	N/A	N/A	5,833		
24"	3'-9"	3'-6"	16'-2"	16'-4 $\frac{3}{8}"$	N/A	N/A	N/A	8,848		
30"	4'-5"	4'-1"	20'-2"	20'-5 $\frac{3}{8}"$	10'-1"	N/A	186	12,880		
36"	5'-0"	4'-8"	23'-8"	23'-11 $\frac{1}{8}"$	12'-0 $\frac{1}{2}"$	N/A	217	17,186		
42"	5'-6"	5'-3"	26'-8"	27'-0 $\frac{3}{8}"$	9'-1"	9'-1"	284	21,532		
48"	6'-1"	5'-10"	30'-2"	30'-7"	10'-0 $\frac{3}{8}"$	10'-0 $\frac{3}{8}"$	320	27,092		

STEEL PIPE GRATE DIMENSIONS				
PIPE DIA.	ALL SLOPES			
	WG	LG	LG	LG
30"	4'-1"	10'-10 $\frac{3}{8}"$	14'-0 $\frac{3}{8}"$	20'-4 $\frac{3}{8}"$
36"	4'-8"	12'-8 $\frac{3}{8}"$	16'-5"	23'-11 $\frac{3}{8}"$
42"	5'-3"	14'-3 $\frac{3}{8}"$	18'-5 $\frac{3}{8}"$	26'-11 $\frac{3}{8}"$
48"	5'-10"	16'-1 $\frac{3}{8}"$	20'-10 $\frac{3}{8}"$	30'-6 $\frac{3}{8}"$

INFRASTRUCTURE PRECAST, INC.
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TDOT TYPE "U" CROSS DRAIN ENDWALL WITH STEEL PIPE GRATE FOR 15" THROUGH 48" PIPES

DRAWING NO.: ET-TDOT-202	DATE: 03-12-26
REVIEWED BY: J.H. ROSS, PE	DRAWN BY: N. RICHARDS
WEB: WWW.ICASTINC.COM	SCALE: NTS

