

NOTE:
A. AN ASTERIK (*) SIGNIFIES THAT THE CALCULATED LENGTH WAS ROUNDED TO A FULL PIPE LENGTH JOINT FOR MINIMUM INSTALLATION.

NO.	DESCRIPTION:
1.	SLIP JOINT PIPE.
2.	RESTRAINED JOINT.
3.	RESTRAINED JOINT PIPE.
4.	RESTRAINED JOINT BEND.

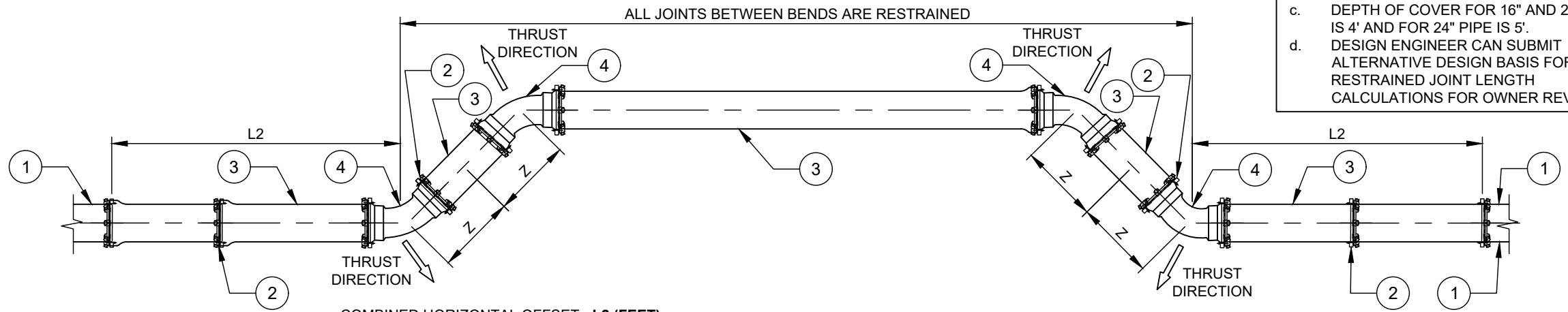
HORIZONTAL OFFSET - L2 (FEET)
L2 = L1 MINUS Z

DIP	L1 (FEET)							
	DIAMETER							
BEND ANGLE	6"	8"	10"	12"	16"	20"	24"	
45	90	116	140	163	162	195	189	
22.5	54*	56	67	78	78	94	91	
11.25	36*	36*	36*	54*	39	46	45	

POLYWRAPPED DIP/PVC	L1 (FEET)							
	DIAMETER							
BEND ANGLE	6"	8"	10"	12"	16"	20"	24"	
45	112	144	173	201	200	241	233	
22.5	54	69	83	97	96	116	112	
11.25	36*	36*	54*	54*	48	57	55	

DESIGN BASIS:
DIPRA "THRUST RESTRAINT DESIGN FOR DIP"
LAYING CONDITION: TYPE 2
SOIL DESIGNATION: SILT 1
DEPTH OF COVER: 3' MINIMUM (SEE NOTE c)
DESIGN PRESSURE: 200 PSI
SAFETY FACTOR: 2.0

NOTES:
a. 12" AND SMALLER DIP MAY BE SLIP JOINT PIPE WITH GRIP RESTRAINT GASKETS.
b. 16" AND LARGER DIP SHALL BE FACTORY RESTRAINT JOINT PIPE AND FITTINGS.
c. DEPTH OF COVER FOR 16" AND 20" PIPE IS 4' AND FOR 24" PIPE IS 5'.
d. DESIGN ENGINEER CAN SUBMIT ALTERNATIVE DESIGN BASIS FOR RESTRAINED JOINT LENGTH CALCULATIONS FOR OWNER REVIEW.



COMBINED HORIZONTAL OFFSET - L2 (FEET)
L2 = L1 MINUS Z

DIP	L1 (FEET)							
	DIAMETER							
BEND ANGLE	6"	8"	10"	12"	16"	20"	24"	
45	90	116	140	163	162	195	189	
22.5	54*	56	67	78	78	94	91	
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