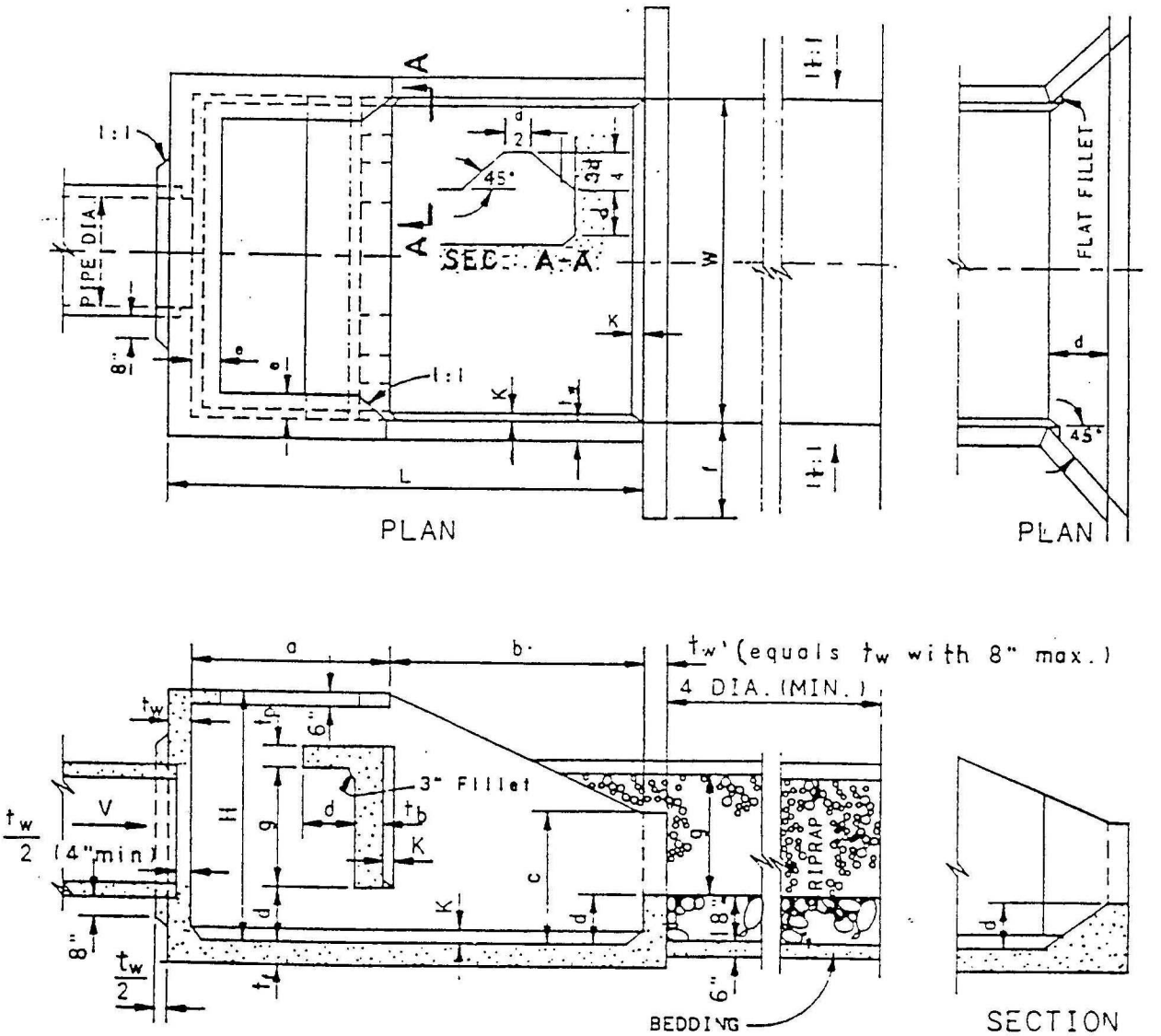
EXHIBIT NO. 31

Energy Dissipator - Stilling Basin Type



`Stilling Basin Type

Suggested pipe size		Max. discharge Q	Feet and Inches										Inches					
Dia. in.	Area sq. ft.		W	H	L	a	b	c	d	e	f	g	t_w	t_f	t_b	t_p	K	Suggested riprap size
18	1.77	21	5-6	4-3	7-4	3-3	4-1	2-4	0-11	0-6	1-6	2-1	6	6¼	6	6	3	See EXHIBIT 30
24	3.14	38	6-9	5-3	9-0	3-11	5-1	2-10	1-2	0-6	2-0	2-6	6	6¼	6	6	3	
30	4.91	59	8-0	6-3	10-8	4-7	6-1	3-4	1-4	0-8	2-6	3-0	6	6¼	7	7	3	
36	7.07	85	9-3	7-3	12-4	5-3	7-1	3-10	1-7	0-8	3-0	3-6	7	7¼	8	8	3	See EXHIBIT 30
42	9.62	115	10-6	8-0	14-0	6-0	8-0	4-6	1-9	0-10	3-0	3-11	8	8¼	9	8	4	
48	12.57	151	11-9	9-0	15-8	6-9	8-11	4-11	2-0	0-10	3-0	4-5	9	9¼	10	8	4	
54	15.90	191	13-0	9-9	17-4	7-4	10-0	5-5	2-2	1-0	3-0	4-11	10	10¼	10	8	4	
60	19.63	236	14-3	10-9	19-0	8-0	11-0	5-11	2-5	1-0	3-0	5-4	11	11¼	11	8	6	
72	28.27	339	16-6	12-3	22-0	9-3	12-9	6-11	2-9	1-3	3-0	6-2	12	12¼	12	8	6	