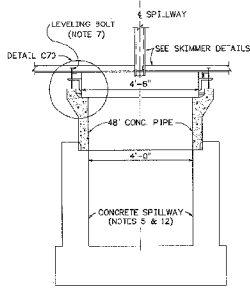
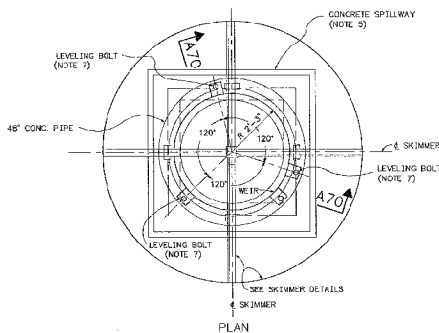


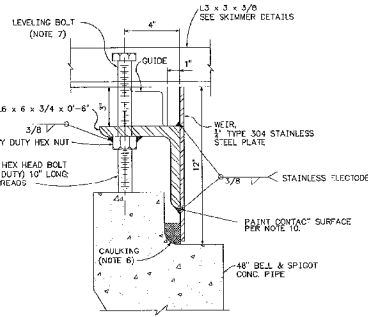
A



SECTION A70



DETAIL B70
WEIR DETAILS



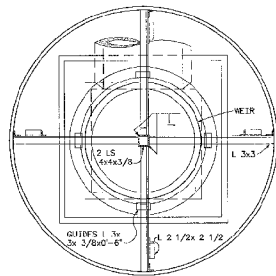
DETAIL C70
3 REQUIRED
5\"/>

WEIR DISCHARGE * IN CUBIC FEET PER SECOND										
HEAD IN FEET	D.0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0	.04	.11	.21	.35	.52	.72	.95	1.20	1.34
0.1	1.54	1.75	1.97	2.20	2.44	2.70	2.96	3.24	3.52	3.81
0.2	4.11	4.41	4.72	5.04	5.36	5.69	6.04	6.38	6.73	7.10
0.3	7.47	7.85	8.23	8.62	9.00	9.41	9.82	10.20	10.60	11.10
0.4	11.50	11.90	12.40	12.80	13.30	13.70	14.20	14.70	15.10	15.60
0.5	16.10	16.60	17.10	17.60	18.10	18.60	19.10	19.60	20.10	20.70
0.6	21.20	21.70	22.30	22.80	23.40	23.90	24.50	25.00	25.60	26.20
0.7	26.70	27.30	27.90	28.50	29.10	29.70	30.30	30.90	31.50	32.10
0.8	32.70	33.40	34.00	34.60	35.20	35.80	36.50	37.20	37.80	38.50
0.9	39.10	39.80	40.40	41.10	41.80	42.50	43.10	43.80	44.50	45.20
1.0	45.90									

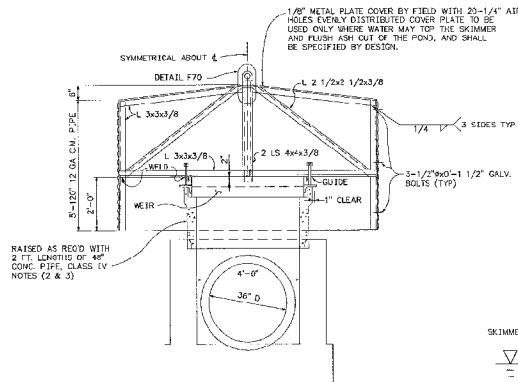
* 4' 6" DIAMETER

BILL OF MATERIAL				
ITEM	DESCRIPTION	NO. SPLWS	PER SPLW	TOTAL REQS.
ANGLE BOLT	5 x 6 x 3/4 x 0'-0"		3	3
CAULKING	1/2" x 1/2" HEAVY DUTY (FULL THREADS) WITH NUT		1	1
SKIMMER	120" DIA CORRUGATED METAL PIPE (NOTE 4)		5 FT.	12
SKIMMER	1/2" x 1/2" GALVANIZED		1	1
ANGLE	1/8" METAL COVER (BY FIELD SEE DETAILS)		23 FT.	1
ANGLE	2 1/2 x 2 1/2 x 3/8		84 FT.	8
ANGLE	3 x 3 x 3/8		8 FT.	8
ANGLE	4 x 4 x 3/8			

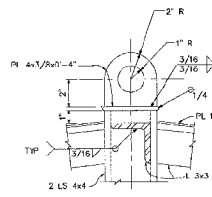
C



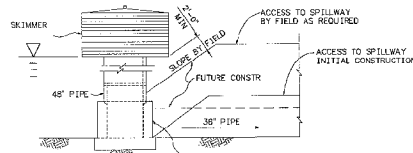
SECTIONAL PLAN



SECTIONAL ELEVATION
DETAIL D70
SKIMMER DETAILS



DETAIL F70
3\"/>



DETAIL E70
TYPICAL SECTION FOR
ACCESS TO SPILLWAY
3/16\"/>

BENT BAR LIST					
BAR MARK	NO	REQD	BENDING DIMENSIONS		
			a	b	c
4L6-3	10	4+4	EX		
4T20-6	1	5-0	5-0		
4U14-9	1	5-0	5-0	EX	
4L2-6	4	1-3	EX		

TYPE A SPILLWAYS

BENT BAR LIST					
BAR MARK	NO	REQD	BENDING DIMENSIONS		
			a	b	c
4L6-3	16	4-4	EX		
4T20-6	1	5-0	5-0		
4U14-9	3	5-0	5-0	EX	

TYPE B SPILLWAYS

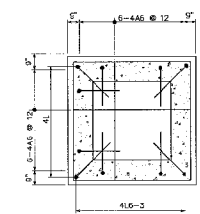
NOTES:

- A SECTION OF 120" DIA. CORRUGATED METAL PIPE, FULLY COATED, SHALL BE USED FOR THE SKIMMER DEVICE. FABRICATION OF THE PIPE SHALL BE COMPLETE PRIOR TO COATING.
- ONE SECTION OF 48" PIPE SHALL BE INSTALLED DURING INITIAL CONSTRUCTION.
- AS ADDITIONAL SECTIONS OF 48" PIPE ARE ADDED, GROUT THE JOINT TO FORM A STABLE AND WATER TIGHT CONNECTION.
- ALL CONNECTIONS TO BE WELDED.
- FOR SPILLWAY DETAILS SEE STD. DWG. SD-C11.1.
- CAULKING SHALL EXTEND COMPLETELY AROUND THE WEIR AND FORM A WATER TIGHT SEAL.
- WHEN THE WEIR IS INSTALLED THE TOP SHALL BE LEVELED WITH THE USE OF LEVELING BOLTS.
- ALL WELDS BY TVA FIELD SHALL BE MADE AND INSPECTED IN ACCORDANCE WITH TVA CONSTRUCTION SPECIFICATION C20C.
- ALL WELDS BY TVA TO HAVE VISUAL INSPECTION.
- ALL SURFACES OF FABRICATED STEEL ITEMS SHALL BE PAINTED IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION C14, PART XIX.
- DEWATER AREA WHERE WEIRS ARE TO BE INSTALLED BY CONSTRUCTING ASH DIKES OR INSTALLING SHEET PILE, AND REMOVING WATER FROM THE INSTALLATION AREA DESIGN OF ASH DIKES AND/OR SHEET PILE BY TVA FES.
- PROVIDE ADEQUATE FIRM BASE FOR INSTALLATION OF CONCRETE SPILLWAY BY INSTALLING ROCK BASE OR TENSAR GEOGRID. SELECTION OF TENSAR GEOGRID BY TVA FES.

NOTES:

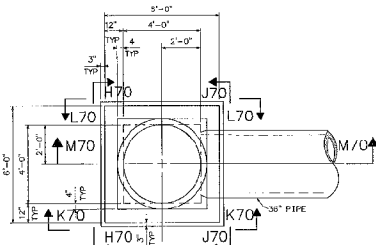
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE T-1 SPECIFICATIONS, UNLESS OTHERWISE NOTED.
- ALL CONCRETE SHALL BE CLASS "X" IN ACCORDANCE WITH SECTION 400.
- ALL REINFORCEMENT SHALL CONFORM TO ASTM SPECIFICATION A615 GRADE 60, DEFORMED.
- DIMENSIONS SHOWN ARE TO THE CENTERLINE OF REINFORCING BARS, UNLESS OTHERWISE NOTED.
- CONCRETE CLEAR COVER DIMENSIONS ARE AS FOLLOWS:
3 INCHES FOR FACES CAST AGAINST EARTH OR ROCK;
2 INCHES FOR ALL OTHER FACES.

G

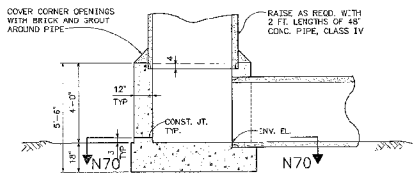


SECTION N70
(TYPE A & B)

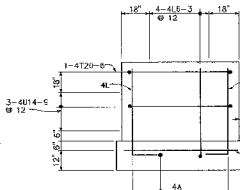
NOTE:
PIPES NOT SHOWN



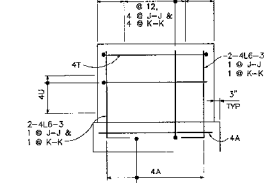
DETAIL G70
PLAN-SPILLWAY TYPE B



SECTION M70



SECTION H70
SECTION J70
(OPPOSITE HAND)



SECTION K70
SECTION L70
(OPPOSITE HAND)

REV	DATE	BY	CHKD	APP'D	DESC	SCALE	NOTES
1	08/11/2010	W.D.	W.D.	W.D.	ISSUE FOR CONSTRUCTION	NONE	EXCEPT AS NOTED

SCALE: NONE

YARD

ASH DISPOSAL AREA
LATERAL EXPANSION
WEIR & SKIMMER DETAILS

DESIGNED BY: W.D. WOODSON
CHECKED BY: R.E. BUNNEY
APPROVED BY: J.A. PATTERSON
DATE: 08/11/2010

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14 DATE 36 c 10W425-70 R D

H

TASK COMPLETED BY: REV NO.

PLOT FACTOR: 1
R-TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY