TOEWALL FOR REINFORCED CONCRETE PIPE

PROJECT NO.	SHEET

				90° CROSSING							75° CROSSING							60° CROSSING							45° CROSSING						
Diameter D	Shell Thick. T*	H	No. Of Pipes	S	L	M	Concrete (Cu.Yds.)	Steel (lbs.)	Flexible △ Revetment (Sq.Yds.)	Sack ∅ Toewall (Sq.Yds.)	S	L	M	Concrete (Cu.Yds.)	Steel (lbs.)	Flexible △ Revetment (Sq.Yds.)	Sack ∅ Toewall (Sq.Yds.)	S	L	M	Concrete (Cu.Yds.)	Steel (lbs.)	Flexible △ Revetment (Sq.Yds.)	Sack ∅ Toewall (Sq.Yds.)	S	L	M	Concrete (Cu.Yds.)	Steel (lbs.)	Flexible △ Revetment (Sq.Yds.)	Sack ∅ Toewall (Sq.Yds.)
54"	5 1/2"	2'-3"	1	–	4'-6"	14'-5"	1.04	58	14	6		4'-8"	14'-11"	1.08	60	15	6	2'-0"		16'-7"	1.20	64	17	7	2'-6"		20'-4"	1.47	79	20	9
			2	1'-9"	4'-6"	21'-7"	1.46	76	22	9	1'-10"	4'-8"	22'-5"	1.51	78	22	9		5'-2"	24'-10"	1.67	84	25	10		6'-4"	30'-6"	2.06	103	31	12
			3	1'-9"	4'-6"	28'-9"	1.87	94	29	11	1'-10"	4'-8"	29'-10"	1.94	97	30	12		5'-2"	33'-1"	2.15	104	33	13		6'-4"	40'-8"	2.64	126	41	16
			4	1'-9"	4'-6"	35'-11"	2.28	112	36	14	1'-10"	4'-8"	37'-3"	2.36	115	37	14		5'-2"	41'-4"	2.62	123	41	16		6'-4"	50'-10"	3.23	150	51	19
			5	1'-9"	4'-6"	43'-1"	2.69	130	43	16	1'-10"	4'-8"	44'-8"	2.79	133	45	17		5'-2"	49'-7"	3.09	143	50	19		6'-4"	61'-0"	3.81	173	61	23
60"	6"	2'-6"	1	–	5'-0"	16'-0"	1.22	64	18	7		5'-2"	16'-7"	1.26	65	18	8	2'-3"		18'-5"	1.40	76	20	8	2'-9"		22'-8"	1.73	87	25	10
			2	1'-11"	5'-0"	23'-11"	1.69	84	27	10	2'-0"	5'-2"	24'-9"	1.75	86	28	10		5'-9"	27'-7"	1.95	98	31	12		7'-1"	33'-11"	2.40	116	38	14
			3	1'-11"	5'-0"	31'-10"	2.16	103	35	13	2'-0"	5'-2"	33'-0"	2.24	106	37	13		5'-9"	36'-9"	2.50	120	41	15		7'-1"	45'-1"	3.06	145	50	18
			4	1'-11"	5'-0"	39'-8"	2.63	123	44	16	2'-0"	5'-2"	41'-2"	2.73	126	46	16		5'-9"	46'-0"	3.05	142	51	18		7'-1"	56'-4"	3.74	174	63	22
			5	1'-11"	5'-0"	47'-8"	3.11	143	53	19	2'-0"	5'-2"	49'-5"	3.22	146	55	19		5'-9"	55'-2"	3.60	164	61	22		7'-1"	67'-7"	4.41	203	75	26
72"	7"	3'-0"	1		6'-0"	19'-2"	1.61	82	26	10		6'-3"	19'-11"	1.67	84	27	10	2'-4"		22'-1"	1.85	90	29	11	2'-10"		27'-2"	2.28	110	36	14
			2	2'-0"	6'-0"	28'-4"	2.18	105	36	13	2'-1"	6'-3"	29'-5"	2.27	107	39	14		6'-11"	32'-9"	2.52	115	44	15		8'-6"	40'-1"	3.09	142	53	19
			3	2'-0"	6'-0"	37'-6"	2.76	127	50	17	2'-1"	6'-3"	38'-11"	2.86	130	52	17		6'-11"	43'-4"	3.19	140	58	19		8'-6"	53'-1"	3.90	175	71	23
			4	2'-0"	6'-0"	46'-8"	3.33	149	62	20	2'-1"	6'-3"	48'-5"	3.46	153	65	21		6'-11"	53'-11"	3.85	164	72	23		8'-6"	66'-1"	4.72	208	88	28
			5	2'-0"	6'-0"	55'-10"	3.91	171	74	23	2'-1"	6'-3"	57'-11"	4.06	176	77	24		6'-11"	64'-7"	4.52	189	86	27		8'-6"	79'-0"	5.53	240	105	33
84"	8"	3'-6"	1		7'-0"	22'-4"	2.05	103	35	12		7'-3"	23'-2"	2.12	113	36	13	3'-6"		25'-9"	2.36	121	40	14	4'-3"		31'-7"	2.89	147	49	17
			2	3'-0"	7'-0"	33'-8"	2.84	137	52	17	3'-1"	7'-3"	34'-10"	2.93	148	54	18		8'-1"	38'-11"	3.28	159	61	20		9'-11"	47'-8"	4.02	194	74	24
			3	3'-0"	7'-0"	45'-0"	3.62	170	70	22	3'-1"	7'-3"	46'-7"	3.75	182	72	23		8'-1"	52'-0"	4.19	196	81	25		9'-11"	63'-8"	5.13	241	99	31
			4	3'-0"	7'-0"	56'-4"	4.41	204	88	26	3'-1"	7'-3"	58'-3"	4.56	216	91	27		8'-1"	65'-2"	5.11	233	101	31		9'-11"	79'-9"	6.25	288	124	38
			5	3'-0"	7'-0"	67'-8"	5.20	237	105	31	3'-1"	7'-3"	70'-0"	5.36	250	109	32		8'-1"	78'-3"	6.02	270	122	36		9'-11"	95'-9"	7.37	335	149	44
96"	9"	4'-0"	1		8'-0"	25'-6"	2.53	125	45	15		8'-3"	26'-4"	2.61	128	47	16	3'-6"		29'-6"	2.93	146	52	18	4'-3"		36'-1"	3.58	174	64	21
			2	3'-0"	8'-0"	38'-0"	3.44	161	68	21	3'-1"	8'-3"	39'-3"	3.55	165	70	21		9'-3"	43'-11"	3.97	186	78	24		11'-4"	53'-9"	4.86	225	96	29
			3	3'-0"	8'-0"	50'-6"	4.34	198	90	26	3'-1"	8'-3"	52'-2"	4.48	202	93	27		9'-3"	58'-5"	5.03	226	104	30		11'-4"	71'-6"	6.15	276	127	37
			4	3'-0"	8'-0"	63'-0"	5.25	234	112	32	3'-1"	8'-3"	65'-1"	5.42	239	116	33		9'-3"	72'-11"	6.08	266	130	37		11'-4"	89'-2"	7.43	327	159	45
			5	3'-0"	8'-0"	75'-6"	6.16	270	134	37	3'-1"	8'-3"	78'-0"	6.35	276	139	38		9'-3"	87'-4"	7.13	307	155	43		11'-4"	106'-10"	8.72	377	190	52
108"	10"	4'-6"	1		9'-0"	28'-8"	3.07	149	57	18		9'-4"	29'-9"	3.18	152	60	19	3'-6"		33'-2"	3.55	172	66	21	4'-3"		40'-7"	4.34	203	81	26
			2	3'-0"	9'-0"	42'-4"	4.09	188	85	25	3'-1"	9'-4"	43'-10"	4.24	192	88	25		10'-5"	49'-6"	4.74	215	98	28		12'-9"	59'-11"	5.80	258	120	35
			3	3'-0"	9'-0"	56'-0"	5.12	227	112	31	3'-1"	9'-4"	58'-0"	5.31	232	116	32		10'-5"	64'-9"	5.93	258	130	36		12'-9"	79'-3"	7.25	313	159	44
			4	3'-0"	9'-0"	69'-8"	6.15	266	139	37	3'-1"	9'-4"	72'-1"	6.36	271	144	38		10'-5"	80'-7"	7.12	301	161	43		12'-9"	98'-7"	8.71	367	197	52
			5	3'-0"	9'-0"	83'-4"	7.18	305	167	43	3'-1"	9'-4"	86'-3"	7.43	311	173	45		10'-5"	96'-5"	8.32	344	193	50		12'-9"	117'-11"	10.17	422	236	61
120"	11"	5'-0"	1		10'-0"	31'-10"	3.65	176	71	22		10'-4"	32'-11"	3.77	190	73	23	3'-6"		36'-10"	4.22	204	82	25	4'-3"		45'-1"	5.17	252	100	31
			2	3'-0"	10'-0"	46'-8"	4.81	220	104	29	3'-1"	10'-4"	48'-3"	4.97	235	107	30		11'-7"	54'-0"	5.57	252	120	33		14'-2"	66'-1"	6.81	313	147	41
			3	3'-0"	10'-0"	61'-6"	5.96	263	137	36	3'-1"	10'-4"	63'-7"	6.16	279	141	37		11'-7"	71'-2"	6.91	300	158	41		14'-2"	87'-0"	8.44	374	193	51
			4	3'-0"	10'-0"	76'-4"	7.12	307	170	43	3'-1"	10'-4"	78'-11"	7.35	323	175	44		11'-7"	88'-4"	8.25	348	196	49		14'-2"	108'-0"	10.08	435	240	60
			5	3'-0"	10'-0"	91'-2"	8.28	350	203	50	3'-1"	10'-4"	94'-3"	8.55	368	209	51		11'-7"	105'-6"	9.59	397	234	58		14'-2"	129'-0"	11.71	496	287	70

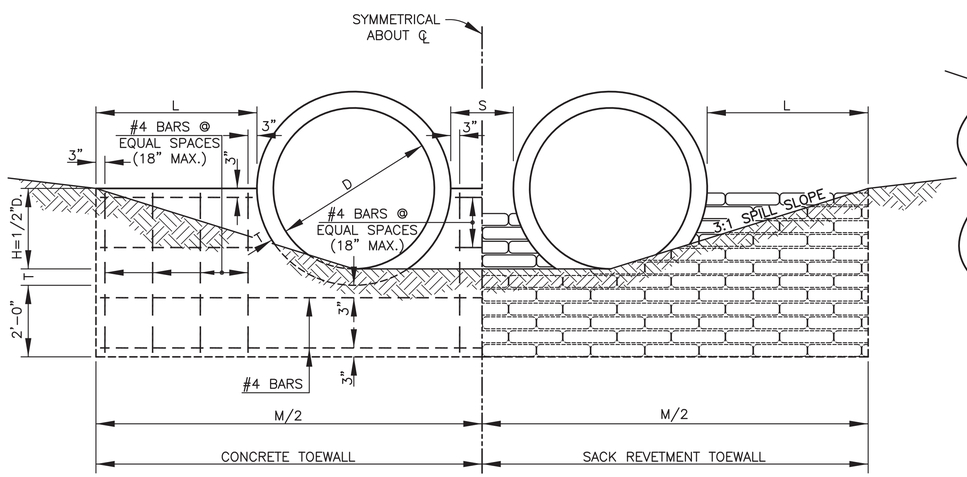
GENERAL NOTE:

1. CONSTRUCTION SPECIFICATIONS SHALL BE THE LATEST CITY PARISH SPECIFICATIONS.
2. ALL CONCRETE TO BE 4A2000.
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO BAR CENTERS.
4. REINFORCEMENT SHALL BE AS PER CITY PARISH SPECIFICATIONS.
5. QUANTITIES GIVEN ARE FOR ONE TOEWALL.
6. TOEWALL REQUIRED ON UPSTREAM AND DOWNSTREAM END OF PIPES UNLESS OTHERWISE NOTED ON PLANS.

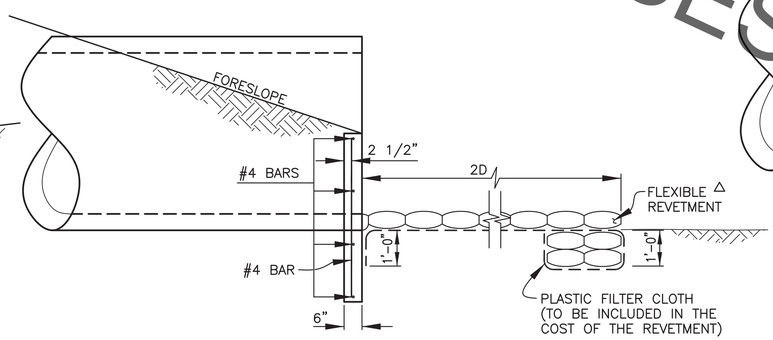
* REFERS TO CLASS III PIPE, WALL B.

△ STONE ALTERNATE TO BE 10" THICK. SEE STD. SPECIFICATIONS, SECTION 1001-11 FOR GRADATION OF STONE.

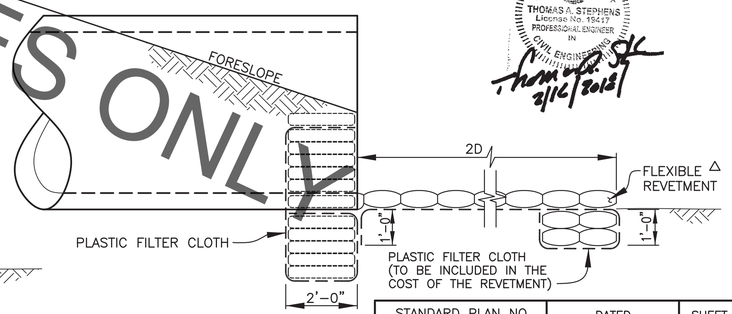
∅ QUANTITY BASED ON SURFACE AREA OF TOEWALL FACE.



ELEVATION VIEW
Scale: 1/2"=1'-0"



PROFILE VIEW
SHOWING CONCRETE TOEWALL
Scale: 1/2"=1'-0"



PROFILE VIEW
SHOWING SACK REVETMENT TOEWALL
Scale: 1/2"=1'-0"

STANDARD PLAN NO.	DATED	SHEET NO.
704-03	FEBRUARY 4, 2008	1 OF 1

STANDARD PLAN
SACKED CONCRETE TOEWALL
(CONCRETE PIPE)
TOE WALL FOR 54" THRU 120" RCP

DATE	DESCRIPTION REVISIONS	BY

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
R. ELLIS	G. VANNICE	R. ELLIS	T. STEPHENS

FOR INFORMATION PURPOSES ONLY