

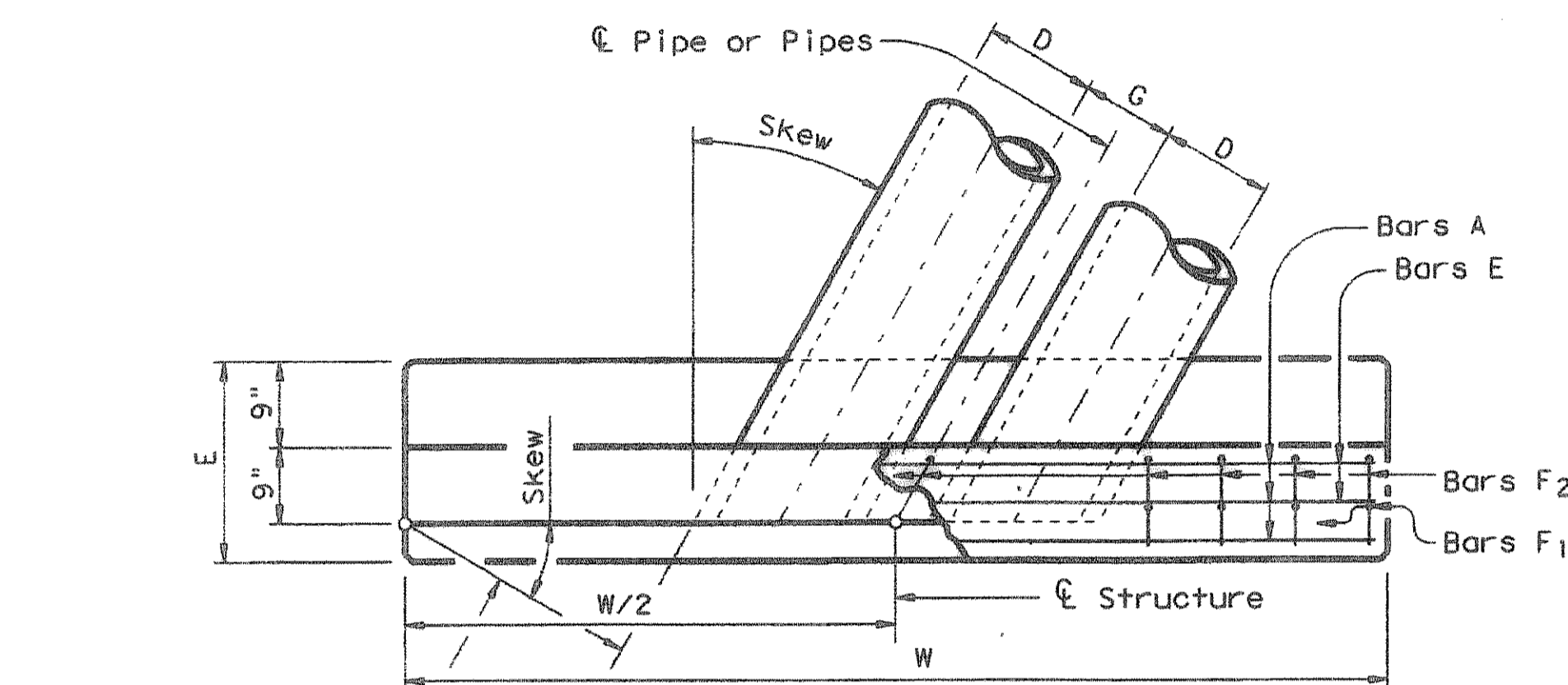
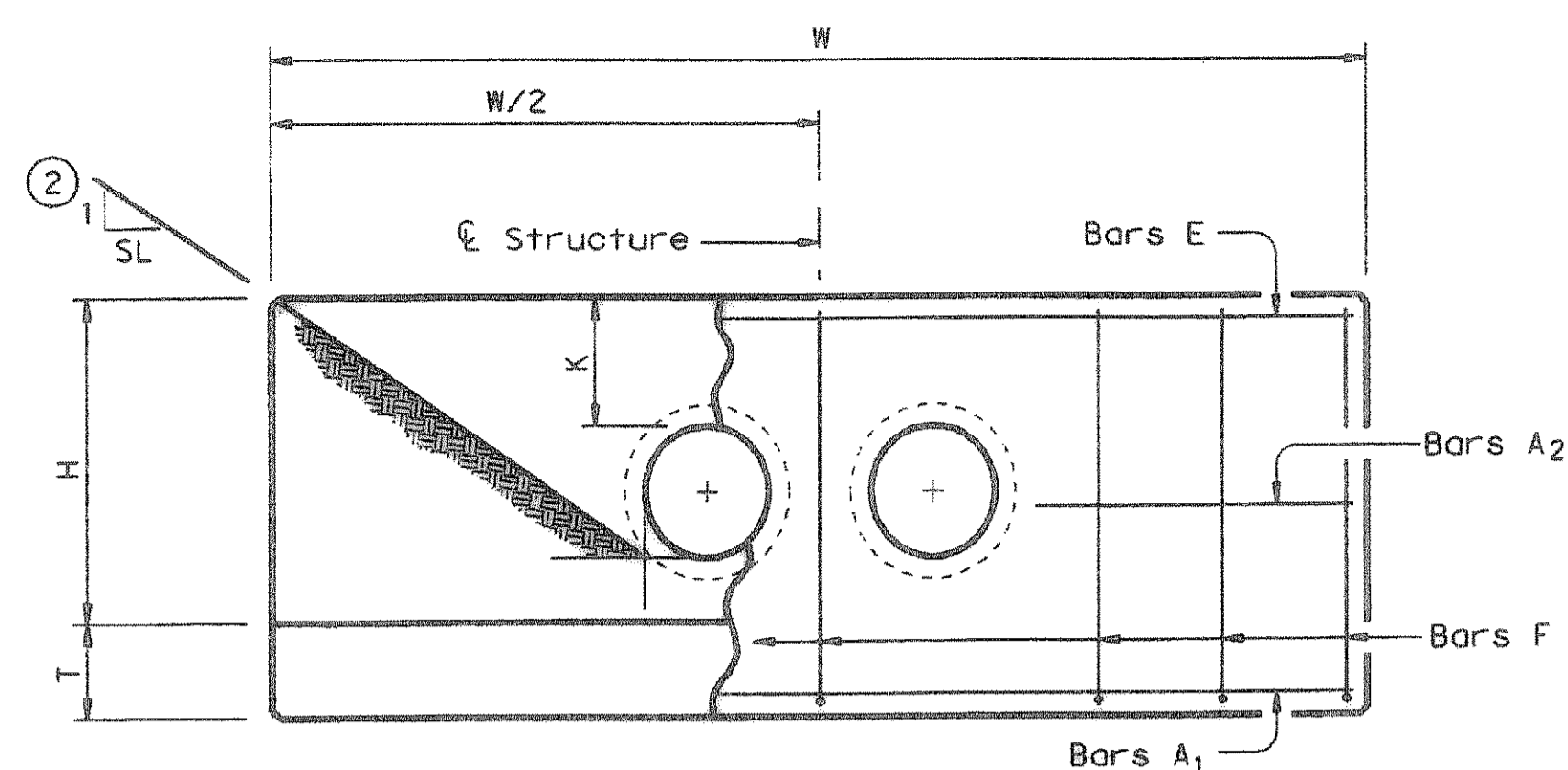
TABLE OF VARIABLE DIMENSIONS AND QUANTITIES FOR ONE HEADWALL (4)

SLOPE DIA OF PIPE, D	15 Degrees						30 Degrees						45 Degrees						
	Values for one Pipe			Values to be added for each add'l Pipe			Values for one Pipe			Values to be added for each add'l Pipe			Values for one Pipe			Values to be added for each add'l Pipe			
	W	Reinf (Lbs)	Conc (CY)	W	Reinf (Lbs)	Conc (CY)	W	Reinf (Lbs)	Conc (CY)	W	Reinf (Lbs)	Conc (CY)	W	Reinf (Lbs)	Conc (CY)	W	Reinf (Lbs)	Conc (CY)	
2:1	12"	9'-4"	124	1.1	1'-9 3/4"	15	0.2	10'-5"	130	1.2	2'-0"	16	0.2	12'-9"	159	1.5	2'-5 3/4"	17	0.3
	15"	10'-7"	136	1.3	2'-3"	17	0.2	11'-10"	159	1.5	2'-6"	18	0.2	14'-6"	191	1.8	3'-0 3/4"	20	0.3
	18"	11'-11"	165	1.5	2'-9"	19	0.3	13'-3"	174	1.7	3'-1"	29	0.3	16'-3"	207	2.1	3'-9 1/4"	33	0.4
	21"	13'-2"	203	1.9	3'-2 1/4"	31	0.4	14'-9"	233	2.1	3'-6 3/4"	33	0.4	18'-0"	276	2.6	4'-4 1/4"	36	0.5
	24"	14'-6"	240	2.1	3'-8 1/4"	34	0.4	16'-11"	251	2.4	4'-1 3/4"	36	0.5	19'-10"	318	2.9	5'-0 3/4"	39	0.6
	27"	15'-9"	258	2.5	4'-0 3/4"	38	0.5	17'-7"	292	2.8	4'-6 1/4"	39	0.6	21'-7"	342	3.4	5'-6 1/4"	44	0.7
	30"	17'-1"	297	2.8	4'-5 3/4"	40	0.6	19'-1"	311	3.1	5'-0"	42	0.6	23'-4"	388	3.8	6'-1 3/4"	47	0.8
	33"	18'-5"	320	3.3	4'-9 3/4"	43	0.6	20'-6"	358	3.6	5'-4 3/4"	46	0.7	25'-1"	439	4.4	6'-7 1/4"	51	0.9
	36"	19'-8"	401	4.0	5'-3"	47	0.9	21'-11"	422	4.5	5'-10 3/4"	50	0.9	26'-10"	517	5.5	7'-2 1/4"	55	1.2
	42"	22'-3"	476	5.0	6'-0 3/4"	53	1.1	24'-10"	528	5.6	6'-8 3/4"	56	1.2	30'-5"	634	6.9	8'-3"	76	1.4
	48"	25'-11"	577	6.6	6'-9 3/4"	60	1.3	28'-10"	637	7.3	7'-7 1/4"	79	1.5	35'-4"	791	9.0	9'-3 3/4"	88	1.8
	54"	28'-6"	711	7.8	7'-9"	83	1.6	31'-9"	781	8.7	8'-8"	87	1.8	38'-11"	958	10.7	10'-7 1/4"	97	2.2
	60"	31'-1"	805	9.2	8'-6 1/4"	91	1.9	34'-8"	881	10.2	9'-6 1/4"	97	2.1	42'-5"	1113	12.5	11'-8"	124	2.6
	66"	33'-8"	907	10.6	9'-0 3/4"	98	2.1	37'-6"	1028	11.8	10'-1 1/4"	102	2.4	46'-0"	1235	14.5	12'-4 1/4"	132	2.9
	72"	36'-3"	1071	12.1	9'-8"	105	2.4	40'-5"	1207	13.5	10'-9 1/4"	110	2.6	49'-6"	1446	16.6	13'-2 1/4"	141	3.2
3:1	12"	13'-6"	178	1.6	1'-9 3/4"	15	0.2	15'-0"	189	1.8	2'-0"	15	0.2	18'-5"	237	2.2	2'-5 3/4"	17	0.2
	15"	15'-3"	212	1.9	2'-3"	17	0.2	17'-0"	223	2.1	2'-0"	17	0.3	20'-10"	276	2.6	3'-0 3/4"	20	0.3
	18"	17'-1"	231	2.3	2'-9"	19	0.3	19'-1"	259	2.5	3'-1"	29	0.3	23'-4"	318	3.1	3'-9 1/4"	32	0.4
	21"	18'-11"	306	2.7	3'-2 1/4"	31	0.4	21'-1"	339	3.0	3'-6 3/4"	33	0.4	25'-10"	413	3.7	4'-4 1/4"	36	0.5
	24"	20'-8"	345	3.1	3'-8 3/4"	35	0.4	23'-1"	384	3.5	4'-1 3/4"	36	0.5	28'-3"	462	4.2	5'-0 3/4"	40	0.6
	27"	22'-6"	376	3.7	4'-0 3/4"	38	0.5	25'-1"	438	4.1	4'-6 1/4"	39	0.6	30'-9"	522	5.0	5'-6 1/4"	44	0.7
	30"	24'-4"	422	4.1	4'-5 3/4"	40	0.6	27'-2"	466	4.6	5'-0"	42	0.6	33'-3"	578	5.6	6'-1 3/4"	47	0.8
	33"	26'-2"	476	4.8	4'-10"	43	0.6	29'-2"	522	5.3	5'-4 3/4"	46	0.7	35'-9"	644	6.5	6'-7 1/4"	51	0.9
	36"	27'-11"	590	5.9	5'-3 1/4"	47	0.8	31'-2"	645	6.6	5'-10 3/4"	50	0.9	38'-2"	787	8.0	7'-2 1/4"	56	1.2
	42"	31'-7"	684	7.3	6'-0 1/4"	53	1.1	35'-3"	776	8.2	6'-8 3/4"	56	1.2	43'-2"	933	10.0	8'-3"	79	1.4
	48"	36'-9"	880	9.6	6'-9 3/4"	61	1.3	41'-0"	953	10.7	7'-7 1/4"	81	1.5	50'-2"	1166	13.1	9'-3 3/4"	88	1.8
	54"	40'-5"	1065	11.4	7'-9"	85	1.6	45'-0"	1185	12.7	8'-8"	89	1.8	55'-2"	1435	15.5	10'-7 1/4"	97	2.2
	60"	44'-0"	1224	13.3	8'-6 1/4"	93	1.9	49'-1"	1356	14.8	9'-6 1/4"	96	2.1	60'-1"	1627	18.2	11'-8"	124	2.6
	66"	47'-7"	1357	15.4	9'-1"	98	2.1	53'-1"	1497	17.2	10'-1 1/4"	103	2.3	65'-1"	1834	21.1	12'-4 1/4"	130	2.9
	72"	51'-3"	1624	17.7	9'-8"	105	2.3	57'-2"	1787	19.7	10'-9 1/4"	109	2.6	70'-0"	2210	24.1	13'-2 1/4"	139	3.2
4:1	12"	17'-7"	232	2.1	1'-9 3/4"	15	0.2	19'-8"	259	2.4	2'-0"	16	0.2	24'-0"	314	2.9	2'-5 3/4"	18	0.2
	15"	19'-11"	272	2.5	2'-3"	17	0.2	22'-3"	301	2.8	2'-6"	18	0.3	27'-3"	361	3.5	3'-0 3/4"	21	0.3
	18"	22'-3"	313	3.0	2'-9"	19	0.3	24'-10"	344	3.3	3'-1"	29	0.3	30'-5"	427	4.0	3'-9 1/4"	32	0.4
	21"	24'-7"	407	3.6	3'-2 1/4"	31	0.4	27'-5"	446	4.0	3'-6 3/4"	33	0.4	33'-7"	549	4.9	4'-4 1/4"	36	0.5
	24"	26'-11"	455	4.1	3'-8 3/4"	35	0.4	30'-0"	499	4.5	4'-1 3/4"	36	0.5	36'-9"	609	5.6	5'-0 3/4"	40	0.6
	27"	29'-3"	514	4.8	4'-0 3/4"	38	0.5	32'-7"	562	5.4	4'-6 1/4"	40	0.6	39'-11"	703	6.6	5'-6 1/4"	43	0.7
	30"	31'-7"	568	5.4	4'-5 3/4"	40	0.6	35'-3"	620	6.0	5'-0"	42	0.6	43'-2"	768	7.4	6'-1 3/4"	49	0.8
	33"	33'-11"	634	6.2	4'-10"	43	0.7	37'-10"	710	7.0	5'-4 3/4"	46	0.7	46'-4"	848	8.5	6'-7 1/4"	52	0.9
	36"	36'-3"	776	7.7	5'-3"	48	0.9	40'-5"	868	8.6	5'-10 3/4"	49	0.9	49'-6"	1058	10.6	7'-2 1/4"	56	1.1
	42"	40'-11"	921	9.6	6'-0 1/4"	53	1.0	45'-7"	1022	10.7	6'-8 3/4"	57	1.2	55'-10"	1262	13.1	8'-3"	78	1.4
	48"	47'-7"	1152	12.6	6'-10"	61	1.3	53'-1"	1268	14.0	7'-7 1/4"	80	1.5	65'-1"	1579	17.2	9'-3 3/4"	86	1.8
	54"	52'-3"	1416	14.9	7'-9 1/4"	86	1.6	58'-4"	1589	16.6	8'-8"	89	1.8	71'-5"	1916	20.4	10'-7 1/4"	95	2.2
	60"	56'-11"	1606	17.5	8'-6 3/4"	92	1.9	63'-6"	1798	19.5	9'-6 1/4"	95	2.1	77'-9"	2184	23.9	11'-8"	122	2.6
	66"	61'-7"	1811	20.2	9'-0 3/4"	97	2.1	68'-8"	2011	22.5	10'-1 1/4"	101	2.4	84'-2"	2464	27.6	12'-4 1/4"	131	2.9
	72"	66'-3"	2142	23.2	9'-8"	104	2.4	73'-11"	2371	25.9	10'-9 1/4"	108	2.6	90'-6"	2929	31.7	13'-2 1/4"	138	3.2
6:1	12"	25'-11"	342	3.1	1'-9 3/4"	15	0.2	28'-10"	374	3.5	2'-0"	16	0.2	35'-4"	456	4.3	2'-5 3/4"	17	0.2
	15"	29'-3"	390	3.7	2'-3"	17	0.2	32'-7"	442	4.2	2'-6"	18	0.2	39'-11"	549	5.1	3'-0 3/4"	20	0.3
	18"	32'-7"	459	4.4	2'-9"	20	0.3	36'-4"	515	4.9	3'-1"	29	0.3	44'-7"	629	6.0	3'-9 1/4"	33	0.4
	21"	36'-0"	608	5.3	3'-2 1/4"	31	0.4	40'-2"	660	5.9	3'-6 3/4"	33	0.4	49'-2"	823	7.2	4'-4 1/4"	38	0.5
	24"	39'-4"	672	6.0	3'-8 3/4"	35	0.4	43'-11"	748	6.7	4'-1 3/4"	36	0.5	53'-9"	920	8.2	5'-0 3/4"	42	0.6
	27"	42'-8"	770	7.1	4'-0 3/4"	38	0.5	47'-8"	852	8.0	4'-6 1/4"	41	0.5	58'-4"	1039	9.7	5'-6 1/4"	45	0.7
	30"	46'-1"	839	8.0	4'-5 3/4"	40	0.6	51'-5"	949	8.9	5'-0"	44	0.6	62'-11"	1154	10.9	6'-1 3/4"	48	0.8
	33"	49'-5"	947	9.2	4'-10"	45	0.7	55'-2"	1040	10.3	5'-4 3/4"	48	0.7	67'-6"	1284	12.6	6'-7 1/4"	50	0.9
	36"	52'-10"	1151	11.4	5'-3"	49	0.8	58'-11"	1287	12.7	5'-10 3/4"	51	1.0	72'-1"	1575	15.6	7'-2 1/4"	55	1.1
	42"	59'-6"	1365	14.2	6'-0 1/4"	55	1.0	66'-5"	1522	15.8	6'-8 3/4"	57	1.2	81'-4"	1867	19.4	8'-3"	76	1.4
	48"	69'-4"	1729	18.5	6'-10"	59	1.3	77'-4"	1934	20.7	7'-7 1/4"	79	1.5	94'-9"	2360	25.3	9'-3 3/4"	86	1.8
	54"	76'-1"	2130	22.0	7'-9 1/4"	83	1.6	84'-10"	2370	24.6	8'-8"	87	1.8	103'-11"	2904	30.1	10'-7 1/4"	95	2.2
	60"	82'-10"	2414	25.8	8'-6 3/4"	90	1.9	92'-5"	2673	28.8	9'-6 1/4"	94	2.1	113'-2"	3286	35.3	11'-8"	122	2.6
	66"	89'-7"	2712	29.9	9'-0 3/4"	96	2.1	99'-11"	3030	33.3	10'-1 1/4"	101	2.4	122'-4"	3689	40.8	12'-4 1/4"	130	2.9
	72"	96'-3"	3210	34.2	9'-8"	102	2.4	107'-5"	3572	38.2	10'-9 1/4"	108	2.6	131'-6"	4364	46.8	13'-2 1/4"	139	3.2

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LEVELS DISPLAYED

RECORD DRAWING
01/16/09



Lengths of wings based on SL:1 Slope along this line.

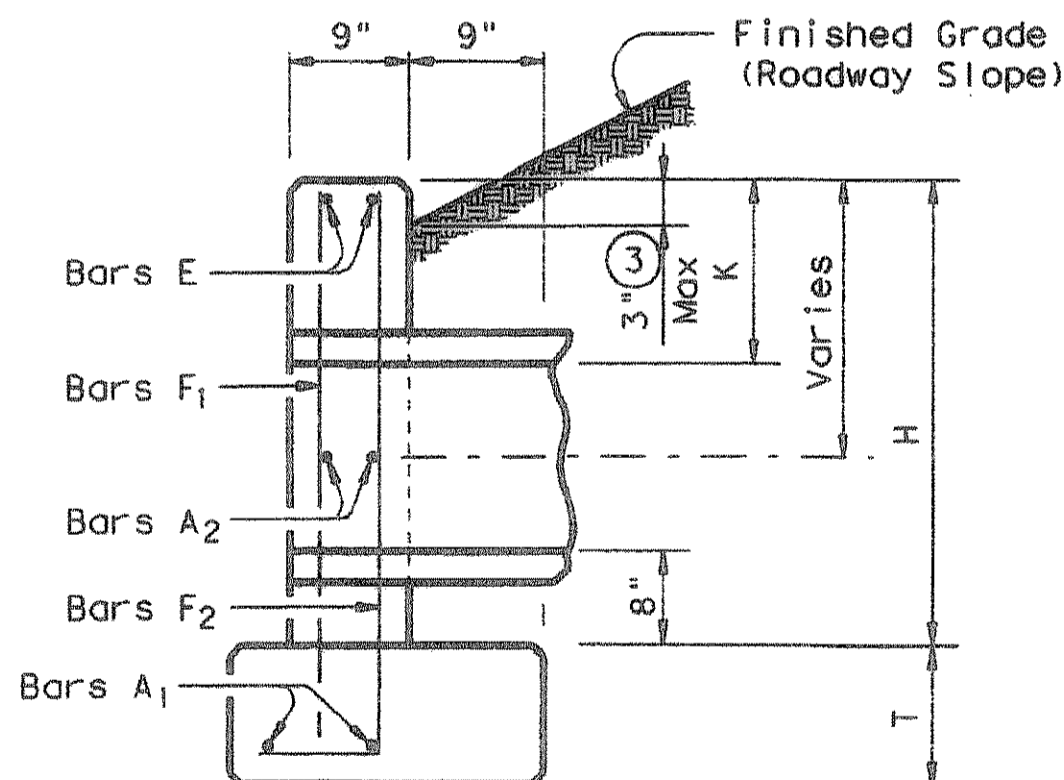


TABLE OF CONSTANT DIMENSIONS

DIA OF PIPE, D	G	K	H	T	E
12"	9"	1'-0"	2'-8"	9"	1'-9"
15"	11"	1'-0"	2'-11"	9"	1'-9"
18"	1'-2"	1'-0"	3'-2"	9"	1'-9"
21"	1'-4"	1'-0"	3'-5"	9"	2'-0"
24"	1'-7"	1'-0"	3'-8"	9"	2'-0"
27"	1'-8"	1'-0"	3'-11"	9"	2'-3"
30"	1'-10"	1'-0"	4'-2"	9"	2'-3"
33"	1'-11"	1'-0"	4'-5"	9"	2'-6"
36"	2'-1"	1'-0"	4'-8"	1'-0"	2'-6"
42"	2'-4"	1'-0"	5'-2"	1'-0"	2'-9"
48"	2'-7"	1'-3"	5'-11"	1'-0"	3'-0"
54"	3'-0"	1'-3"	6'-5"	1'-0"	3'-3"
60"	3'-3"	1'-3"	6'-11"	1'-0"	3'-6"
66"	3'-3"	1'-3"	7'-5"	1'-0"	3'-9"
72"	3'-4"	1'-3"	7'-11"	1'-0"	4'-0"

TABLE OF REINFORCING STEEL (4)

Bar	Size	Spa	No.
A1	# 5	~	2