PARABOLIC DIVERSION DESIGN, WITHOUT FREEBOARD

RETARDANCE - D
GRADE, % - 0.25 to 2.0

Velocity, Depth and Top Width Based on Retardance "D"

	Grade 0.25%			Grade 0.50%			Grade 0.75%			Grade 1.0%			Grade 1.25%			Grade 1.50%			Grade 2.0%		
V	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0	1.0	1.5	2.0
D	1.2	1.7	2.1	0.9	1.1	1.4	0.7	0.9	1.1	0.7	0.8	0.9	0.6	0.7	0.8	0.5	0.7	0.8	0.5	0.6	0.7
Q										Top Widths											
5				8			10	5		11	6		13	7		14	7	5	15	9	5
10	11			17	9		20	10	7	23	12	8	25	14	8	27	15	10	31	17	11
15	18	9		25	13	8	30	16	10	34	19	12	38	21	13	41	23	15	46	26	16
20	24	12		34	18	10	40	22	14	46	25	16	50	28	18	54	30	20	61	34	22
25	30	15		42	23	13	50	27	17	57	31	20	63	35	22	68	38	24		43	27
30	36	18	10	51	27	16	60	33	20	69	37	24		42	27		45	29		52	33
35	43	21	12	59	32	18	71	38	24		44	28		49	31		53	34		60	38
40	49	24	14	68	36	21	81	44	27		50	32		56	35		61	39		69	44
45	55	27	15	76	41	24	91	49	31		56	36		63	40		68	44			49
50	61	30	17	85	45	26	101	54	34		62	40		70	44			49			55
55	67	33	19	93	50	29	111	60	37		68	43			49			54			60
60	73	36	20	101	54	32		65	41		75	47			53			59			66
65	79	39	22	110	59	34		71	44			51			58			64			71
70	85	42	24		63	37		76	48			55			62			68			
75	91	45	26		68	39		82	51			59			67			73			
80	97	48	27		72	42		87	54			63			71						
90		55	31		81	47		98	61			71									
100		61	34		90	53		109	68												
110		67	38		99	58			75												
120		73	41		108	63			82												
130		79	44			68			89												
140		85	48			74			95												
150		91	51			79															
160		97	55			84															
170			58			89															
180			62			95															
190			65																		
200			68																		

Top widths (T) and depths (D) shown are for the hydraulic section. Freeboard and allowance for settlement are to be added as necessary.

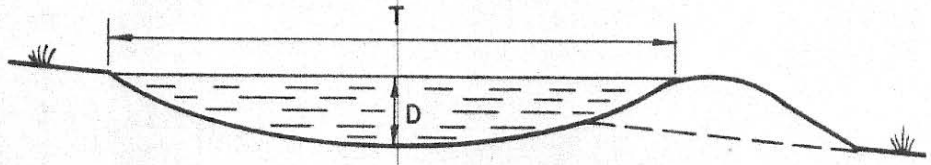

Exhibit 9-0

REFERENCE
SCS - TP - 61

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ENGINEERING & WATERSHED PLANNING UNIT
UPPER DARBY, PENNSYLVANIA

RTSC - NE - ENG.
905
SHEET 1 OF 1