

WinTR-20 Printed Page File Beginning of Input Data List
 W:\DC\Maret\NORTH FOND.inp
 WinTR-20: version 3.30 0 0 .01 0
 MARET SCHOOL
 SUB-AREA: Field POND .00533 98. .0833
 STREAM REACH: POND OUTLET Field Unde
 STORM ANALYSIS: 25 year 5.9 NOAA_C 2
 STRUCTURE RATING: Field Unde 308.5
 308.5 0 .3737 0
 311. .5285 .05624
 313.50 .7285 1.22437
 318. .8844 3.05223

RAINFALL DISTRIBUTION: NOAA_C

0.0	0.1	0.00128	0.00231	0.00335	0.00441
0.00547	0.00654	0.00763	0.00872	0.00982	0.01093
0.01199	0.01206	0.01319	0.01433	0.01548	0.01665
0.01782	0.01900	0.02019	0.02140	0.02261	0.02383
0.02506	0.02631	0.02756	0.02882	0.03009	0.03137
0.03267	0.03397	0.03528	0.03660	0.03793	0.03927
0.04062	0.04199	0.04336	0.04474	0.04613	0.04753
0.04894	0.05036	0.05179	0.05324	0.05469	0.05615
0.05762	0.05910	0.06059	0.06209	0.06360	0.06512
0.06665	0.06819	0.06974	0.07130	0.07287	0.07445
0.07604	0.07764	0.07925	0.08090	0.08259	0.08432
0.08609	0.08790	0.08975	0.09164	0.09356	0.09553
0.09754	0.09959	0.10168	0.10380	0.10597	0.10818
0.11042	0.11271	0.11503	0.11740	0.11981	0.12225
0.12474	0.12726	0.12982	0.13243	0.13507	0.13776
0.14048	0.14324	0.14605	0.14890	0.15210	0.15536
0.15876	0.16231	0.16602	0.16987	0.17387	0.17803
0.18233	0.18678	0.19139	0.19614	0.20104	0.20613
0.21173	0.21793	0.22471	0.23206	0.23999	0.24899
0.25907	0.26824	0.27755	0.28709	0.29688	0.30693
0.31710	0.32751	0.33812	0.34893	0.35995	0.37118
0.38250	0.39400	0.40569	0.41758	0.42976	0.44213
0.45480	0.46755	0.48057	0.49386	0.50736	0.52107
0.53500	0.54882	0.56285	0.57709	0.59154	0.60620
0.62100	0.63587	0.65095	0.66624	0.68174	0.69745
0.71336	0.72929	0.74543	0.76178	0.77834	0.79511
0.81210	0.82909	0.84629	0.86369	0.88130	0.89911
0.91700	0.93511	0.95343	0.97196	0.99070	1.00965
1.02880	1.04895	1.06936	1.08993	1.11066	1.13155
1.15260	1.17465	1.19696	1.21953	1.24236	1.26545
1.28880	1.31215	1.33576	1.35963	1.38376	1.40815
1.43280	1.45755	1.48256	1.50783	1.53336	1.55915
1.58520	1.61125	1.63756	1.66413	1.69096	1.71805
1.74540	1.77275	1.80036	1.82823	1.85636	1.88465
1.91310	1.94155	1.97026	1.99923	2.02846	2.05795
2.08770	2.11745	2.14746	2.17773	2.20826	2.23905
2.26910	2.29915	2.32946	2.35993	2.39056	2.42135
2.45230	2.48325	2.51446	2.54583	2.57736	2.60905
2.64090	2.67275	2.70486	2.73713	2.76956	2.80215
2.83490	2.86755	2.89946	2.93163	2.96396	2.99645
3.02910	3.06155	3.09426	3.12713	3.16016	3.19335
3.22670	3.25995	3.29336	3.32693	3.36066	3.39455
3.42810	3.46225	3.49656	3.53103	3.56566	3.60045
3.64650	3.68155	3.71676	3.75213	3.78766	3.82335
3.86910	3.90495	3.94096	3.97713	4.01346	4.04995
4.08650	4.12315	4.15996	4.19693	4.23406	4.27135
4.30810	4.34555	4.38316	4.42093	4.45886	4.49695
4.53410	4.57225	4.61056	4.64903	4.68766	4.72645
4.76540	4.80435	4.84246	4.88073	4.91916	4.95775
4.99650	5.03535	5.07436	5.11353	5.15286	5.19235
5.23200	5.27165	5.31146	5.35143	5.39156	5.43185
5.47210	5.51245	5.55296	5.59363	5.63446	5.67545
5.71540	5.75695	5.80366	5.85053	5.89756	5.94475
6.00000	6.04735	6.09486	6.14253	6.19036	6.23835
6.28810	6.33625	6.38456	6.43303	6.48166	6.53045
6.57910	6.62795	6.67996	6.73213	6.78446	6.83695
6.83000	6.88335	6.93686	6.99053	7.04436	7.09835
7.15210	7.20625	7.26056	7.31503	7.36966	7.42445
7.48910	7.54405	7.59916	7.65443	7.70986	7.76585
7.82210	7.87835	7.93476	7.99133	8.04806	8.10495
8.16210	8.21915	8.27636	8.33373	8.39126	8.44895
8.50000	8.55785	8.61586	8.67403	8.73236	8.79085
8.84810	8.90675	8.96556	9.02453	9.08366	9.14295
9.20210	9.26155	9.32116	9.38093	9.44086	9.50095
9.56110	9.62125	9.68156	9.74203	9.80266	9.86345
9.92410	9.98495	10.04596	10.10713	10.16846	10.22995
10.39610	10.45765	10.51936	10.58123	10.64326	10.70545
10.76810	10.83035	10.89276	10.95533	11.01806	11.08055
11.14310	11.20575	11.26856	11.33153	11.39466	11.45795
11.52010	11.58355	11.64716	11.71093	11.77486	11.83895
11.90410	11.96825	12.03256	12.09703	12.16166	12.22645
12.25000	12.31495	12.37996	12.44513	12.51046	12.57595
12.64110	12.70675	12.77256	12.83853	12.90466	12.97095
13.04810	13.11455	13.18116	13.24793	13.31486	13.38195
13.45910	13.52625	13.59256	13.65903	13.72566	13.79245
13.86010	13.92715	13.98886	14.05073	14.11286	14.17515
14.27810	14.34035	14.40276	14.46533	14.52806	14.59095
14.69410	14.75675	14.81956	14.88253	14.94566	15.00895
15.12010	15.18355	15.24716	15.31093	15.37486	15.43895
15.56010	15.62425	15.68856	15.75303	15.81766	15.88245
16.00000	16.06495	16.12996	16.19513	16.26046	16.32595
16.44010	16.50575	16.57156	16.63753	16.70366	16.76995
16.88010	16.94625	17.00716	17.06823	17.12946	17.19085
17.32010	17.38155	17.44316	17.50493	17.56686	17.62895
17.66010	17.72225	17.78416	17.84623	17.90846	17.97085
18.00000	18.06495	18.12716	18.18953	18.25206	18.31465
18.44010	18.50275	18.56556	18.62853	18.69166	18.75495
18.88010	18.94325	19.00656	19.06993	19.13346	19.19705
19.32010	19.38355	19.44716	19.51093	19.57486	19.63895
19.66010	19.72425	19.78856	19.85253	19.91666	19.98095
20.00000	20.06495	20.12996	20.19513	20.26046	20.32595
20.44010	20.50575	20.57156	20.63753	20.70366	20.76995
20.88010	20.94625	21.01216	21.07823	21.14446	21.21085
21.32010	21.38155	21.44316	21.50493	21.56686	21.62895
21.66010	21.72225	21.78416	21.84623	21.90846	21.97085
22.00000	22.06495	22.12996	22.19513	22.26046	22.32595
22.44010	22.50575	22.57156	22.63753	22.70366	22.76995
23.00000	23.06495	23.12996	23.19513	23.26046	23.32595

Orifice Equation	
Input	
D = Diameter of Orifice	3 IN
Diameter of Orifice	0.2500 FT
Sv = Storage Volume	132,083.50 CF
h = Head on Centerline	13.0000 FT
Constants	
Cd = Coeff. of Orifice	0.6000
g = Gravity or 32.2 (FT/S)	32.2000 FT/S
Calculation	
A = Area of Orifice	0.0491 SF
Q = Flow from System	0.8522 CFS
Dt = Drawdown Time	154.993 s
Drawdown Time	43.1 Hours

ORIFICE EQUATION FOR JUNCTION BOX

MARET SCHOOL									
Area or Reach Identifier	Drainage Area (sq mi)	Rain Gage ID or Location	Runoff Amount (in)	Elevation (ft)	Time (hr)	Rate (cfs)	Rate (csm)	Line Start Time (hr)	Flow Values & time increment of 0.250 hr (cfs)
POND	0.005	Downstream	5.659	316.84	14.76	0.68	126.99	16.750	0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67
Line Start Time (hr) Flow Values & time increment of 0.250 hr (cfs)									
1.000	0.0	0.02	0.03	0.05	0.06	0.08	0.10	18.500	0.67 0.66 0.66 0.66 0.66 0.66 0.66 0.66 0.66 0.66
2.750	0.11	0.13	0.14	0.16	0.17	0.18	0.19	20.250	0.66 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65
4.500	0.21	0.22	0.23	0.24	0.24	0.25	0.26	22.000	0.65 0.65 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64
6.250	0.27	0.28	0.30	0.31	0.33	0.35	0.37	23.750	0.64 0.64 0.63 0.63 0.63 0.63 0.63 0.63 0.63 0.63
8.000	0.38	0.39	0.40	0.41	0.43	0.44	0.47	25.500	0.62 0.62 0.62 0.62 0.61 0.61 0.61 0.61 0.61 0.61
9.750	0.49	0.53	0.53	0.53	0.53	0.54	0.54	27.250	0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.60
11.500	0.55	0.56	0.58	0.64	0.65	0.66	0.67	29.000	0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.59
13.250	0.67	0.67	0.67	0.68	0.68	0.68	0.68	30.750	0.58 0.58 0.57 0.57 0.57 0.57 0.57 0.57 0.57 0.57
15.000	0.68	0.68	0.68	0.68	0.67	0.67	0.67	32.500	0.56 0.56 0.56 0.56 0.56 0.56 0.55 0.55 0.55 0.55
16.750	0.67	0.67	0.67	0.67	0.67	0.67	0.67	34.250	0.55 0.55 0.55 0.55 0.54 0.54 0.54 0.54 0.54 0.54
18.500	0.67	0.66	0.66	0.66	0.66	0.66	0.66	36.000	0.54 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.53
20.250	0.66	0.65	0.65	0.65	0.65	0.65	0.65	37.750	0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54
22.000	0.65	0.65	0.64	0.64	0.64	0.64	0.64	39.500	0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54
23.750	0.64	0.64	0.63	0.63	0.63	0.63	0.63	41.250	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
25.500	0.62	0.62	0.62	0.62	0.61	0.61	0.61		
27.250	0.61	0.60	0.60	0.60	0.60	0.60	0.59		
29.000	0.59	0.59	0.59	0.59	0.58	0.58	0.58		
30.750	0.58	0.58	0.57	0.57	0.57	0.57	0.57		
32.500	0.56	0.56	0.56	0.56	0.56	0.55	0.55		
34.250	0.55	0.55	0.55	0.54	0.54	0.54	0.54		
36.000	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
37.750	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
39.500	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
41.250	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
43.000	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
44.750	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
46.500	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
48.250	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
50.000	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
51.750	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
53.500	0.54	0.53	0.53	0.53	0.53	0.47	0.42		
55.250	0.54	0.53	0.53	0.53	0.53				