

DRAINAGE AREA CALCULATIONS

Drainage Area	Area (acres)	Tc (min)	Residential C = 0.5	Commer. C = 0.8	5-Year Storm Event			25-Year Storm Event			50-Year Storm Event			100-Year Storm Event			Remarks
					I (in/hr)	Q (cfs)	Accum. Q (cfs)	I (in/hr)	Q (cfs)	Accum. Q (cfs)	I (in/hr)	Q (cfs)	Accum. Q (cfs)	I (in/hr)	Q (cfs)	Accum. Q (cfs)	
A-1	31.6	10		31.60	6.2	156.7	156.7	6.3	209.8	209.8	9.1	230.0	230.0	9.8	247.7	247.7	TO PONDS A1 AND A2
A-2	1.4	15		1.35	5.5	5.9	162.7	7.4	8.0	217.8	8.2	8.9	235.9	9.1	9.6	257.6	TO A 48" RCP
A-3	1.2	10		1.20	6.2	6.0	6.0	6.3	6.0	6.0	9.1	6.7	6.7	9.8	9.4	9.4	TO A 21" RCP
A-4	1.0	10		1.04	6.2	5.2	5.2	6.3	6.9	6.9	9.1	7.6	7.6	9.8	8.2	8.2	
B-1	33.6	10		33.60	6.2	166.7	166.7	6.3	223.1	223.1	9.1	244.6	244.6	9.8	263.4	263.4	TO POND B
E-1	14.6	10		14.60	6.2	72.4	72.4	6.3	96.9	96.9	9.1	106.3	106.3	9.8	114.5	114.5	TO POND E
E-2	3.6	10		3.60	6.2	17.9	90.3	6.3	23.9	120.8	9.1	26.2	132.5	9.8	28.2	142.7	TO POND E
D-1	2.7	10		2.70	6.2	13.4	103.7	6.3	17.9	136.8	9.1	19.7	152.2	9.8	21.2	163.9	TO POND D
D-2	2.6	10		2.60	6.2	12.9	116.6	6.3	17.3	156.0	9.1	18.9	171.1	9.8	20.4	184.2	TO POND D
C-1	45.3	10		45.30	6.2	224.7	341.2	6.3	300.8	456.8	9.1	329.8	500.9	9.8	355.2	539.4	TO POND C
C-2	12.3	10		12.30	6.2	61.0	402.3	6.3	81.7	538.5	9.1	89.5	590.4	9.8	96.4	635.8	TO POND C
C-3	6.0	10		6.00	6.2	29.8	432.0	6.3	39.8	578.3	9.1	43.7	634.1	9.8	47.0	682.9	TO POND C
C-4	9.2	10		9.20	6.2	45.6	477.6	6.3	61.1	639.4	9.1	67.0	701.1	9.8	72.1	755.0	TO POND C
C-5	24.9	10		24.90	6.2	123.5	601.2	6.3	165.3	804.8	9.1	181.3	882.3	9.8	195.2	950.2	TO POND C
F-1	2.0	10		2.03	6.2	10.1	10.1	6.3	13.5	13.5	9.1	14.8	14.8	9.8	15.9	15.9	UNDETAINED
F-2	3.1	10		3.11	6.2	15.4	25.5	6.3	20.7	34.1	9.1	22.6	37.4	9.8	24.4	40.3	UNDETAINED
F-3	1.4	10		1.41	6.2	7.0	32.5	6.3	9.4	43.5	9.1	10.3	47.7	9.8	11.1	51.4	UNDETAINED
F-4	1.6	15		1.64	5.5	7.2	39.7	7.4	9.7	53.2	8.2	10.8	58.4	9.1	11.9	63.3	UNDETAINED
F-5	0.8	10		0.80	6.2	4.0	43.7	6.3	5.3	58.5	9.1	5.8	64.3	9.8	6.3	69.6	UNDETAINED
F-6	1.8	15		1.78	5.5	7.8	51.5	7.4	10.5	69.1	8.2	11.7	75.9	9.1	13.0	82.5	UNDETAINED
F-7	1.9	15		1.90	5.5	8.4	59.9	7.4	11.2	80.3	8.2	12.5	88.4	9.1	13.8	96.4	UNDETAINED
F-8	1.4	10		1.40	6.2	6.9	66.8	6.3	9.3	89.6	9.1	10.2	98.6	9.8	11.0	107.3	UNDETAINED
F-9	41.7	20		41.70	5.0	166.8	233.6	6.8	226.8	316.4	8.2	273.6	372.2	8.4	280.2	387.6	UNDETAINED
G-1	6.5	10	6.50		6.2	20.2	20.2	6.3	27.0	27.0	9.1	29.6	29.6	9.8	31.9	31.9	TO PROPOSED CHANNEL
G-2	0.9	10	0.90		6.2	2.8	22.9	6.3	3.7	30.7	9.1	4.1	33.7	9.8	4.4	36.3	TO PROPOSED CHANNEL
H-1	15.6	10	15.56		6.2	48.2	71.2	6.3	64.6	95.3	9.1	70.8	100.4	9.8	76.2	112.5	TO PROPOSED CHANNEL
H-2	7.8	10	7.81		6.2	24.2	95.4	6.3	32.4	127.7	9.1	35.5	89.2	9.8	38.3	150.8	TO PROPOSED CHANNEL
H-3	5.2	10	5.19		6.2	16.1	111.5	6.3	21.5	149.2	9.1	23.6	124.0	9.8	25.4	176.2	TO TUBBS ROAD
H-4	0.2	10	0.22		6.2	0.7	112.2	6.3	0.9	150.1	9.1	1.0	70.2	9.8	1.1	177.3	TO TUBBS ROAD
J-1	11.7	10	11.70		6.2	36.3	107.4	6.3	48.6	143.8	9.1	53.2	153.6	9.8	57.3	169.8	TO PROPOSED CHANNEL

INLET CALCULATIONS

INLET No.	DISCHARGES TO	DESIGN STORM FREQUENCY (years)	TIME OF CONC. (min.)	RAINFALL INTENSITY (in./hr.)	DRAINAGE AREA (acres)	DRAINAGE AREA CA	FLOW FROM DRAINAGE AREA (cfs)	CARRY-OVER (cfs)	TOTAL GUTTER FLOW (cfs)	GUTTER SLOPE (X)	STREET SECTION	CROSS SLOPE (X)	DEPTH OF FLOW (ft)	PONDED WIDTH (ft)	INLET LENGTH (ft.)	FLOW COLLECTED (cfs)	CARRY-OVER (cfs)	REMARKS
A-4	LAT. A-2	100	10	9.8	1.04	0.8	8.2	0	8.2	-	TRIANGULAR	2X	0.27	-	10	8.2	0	
A-2	LAT. A-3	100	15	9.1	1.35	1.08	9.8	0	9.8	-	TRIANGULAR	2X	0.29	-	10	9.8	0	TEMP. DROP INLET, FUT. 10' REC. CI
F-1	LINE D	100	10	9.8	2.03	1.62	15.9	0	15.9	2.5	TRIANGULAR	2X	0.33	16.7	15	11.3	4.6	
F-3	LAT. D-2	100	10	9.8	1.41	1.15	11.1	4.6	15.7	1.67	TRIANGULAR	2X	0.36	18	15	11.8	3.9	
F-2	LAT. D-4	100	10	9.8	3.11	2.48	24.4	3.9	28.3	1.64	TRIANGULAR	2X	0.45	22.5	15	15.3	13	
F-4	LAT. D-3	100	15	9.1	1.64	1.31	11.9	0	11.9	1.72	TRIANGULAR	2X	0.32	16.1	15	10.4	1.5	FUTURE 15' REC. C.I.
F-8	LAT. F-2	100	10	9.8	1.40	1.12	11	13.5	24.5	-	TRIANGULAR	2X	0.53*	-	15	24.5	0	
F-7	LAT. G-3	100	15	9.1	1.90	1.52	13.8	4.5	18.3	-	TRIANGULAR	2X	0.45	-	15	18.3	0	TEMP 21' HEADWALL, FUT. 15' REC. CI
F-6	LINE G	100	15	9.1	1.78	1.42	13	0	13	-	TRIANGULAR	2X	0.42	-	10	10	3.0	
F-5	LAT. G-2	100	10	9.8	0.80	0.64	6.3	0	6.3	1.8	TRIANGULAR	2X	0.25	12.5	10	5.8	0.5	FUTURE 15' REC. CI

* LOW POINT: Q SOUTH = 17.2 CFS - 0.47'
Q NORTH = 7.3 CFS - 0.34'

