

100 YR. STORM INLET AND STREET FLOW CALCULATIONS

STREET STA	INLET NO.	CONTRIBUTING DRAINAGE AREA	DESIGN STORM FREQUENCY (yr)	TIME OF CONC (min)	RAINFALL INTENSITY (in/hr)	DRAINAGE AREA (Ac)	C FACTOR	CxA	CA INTERCEPTED	Q FROM DA (cfs)	UPSTREAM CARRY-OVER (cfs)	GUTTER FLOW (cfs)	GUTTER SLOPE (%)	STREET SECTION	CROWN	DEPTH OF FLOW AT INLET (ft)	WIDTH OF FLOW IN STREET @ GUTTER (ft)	INLET LENGTH (ft)	INLET CAPACITY (cfs)	FLOW COLLECTED (cfs)	FLOW BYPASSED (cfs)	REMARKS
17+07.40 DISCOVERY	A1	A1	100	10	9.80	0.28	0.90	0.25	0.25	2.5	0.0	2.5	1.42	TRIANGULAR	0.5	0.18	8.8	5	2.4	2.4	0.1	EXISTING INLET BYPASS TO A3
16+91.39 DISCOVERY	A2	A2	100	10	9.80	0.31	0.90	0.28	0.26	2.7	0.0	2.7	1.42	TRIANGULAR	0.5	0.18	9.1	5	2.5	2.5	0.2	ON GRADE INLET / PH IV BYPASS TO A4
13+99.75 DISCOVERY	A3	A3	100	10	9.80	0.45	0.90	0.41	0.30	4.0	0.1	4.0	1.8	TRIANGULAR	0.5	0.20	10.1	5	2.9	2.9	1.1	EXISTING INLET BYPASS TO A5
13+90.02 DISCOVERY	A4	A4	100	10	9.80	0.49	0.90	0.44	0.31	4.3	0.2	4.6	1.7	TRIANGULAR	0.5	0.21	10.7	5	3.0	3.0	1.6	ON GRADE INLET / PH IV BYPASS TO A6
11+01.17 DISCOVERY	A5	A5	100	10	9.80	0.46	0.90	0.41	0.53	4.1	1.1	5.2	0.78	TRIANGULAR	0.5	0.26	13	10	5.5	5.2	0.0	EXISTING INLET
10+91.17 DISCOVERY	A6	A6	100	10	9.80	0.47	0.90	0.42	0.58	4.2	1.6	5.7	0.78	TRIANGULAR	0.5	0.27	13.5	10	5.7	5.7	0.0	EXISTING INLET
8+49.97 DISCOVERY	A7	A7	100	10	9.80	0.63	0.90	0.57	0.57	5.6	0.0	5.6	-	TRIANGULAR	0.5	0.27	-	15	-	5.6	0.0	EXISTING SUMP INLET
8+41.98 DISCOVERY	A8	A8	100	10	9.80	0.67	0.90	0.60	0.60	5.9	0.0	5.9	-	TRIANGULAR	0.5	0.28	-	15	-	5.9	0.0	EXISTING SUMP INLET
3+85.00 DISCOVERY	A9	A9	100	10	9.80	0.46	0.90	0.41	0.31	4.1	0.0	4.1	1.09	TRIANGULAR	0.5	0.22	11.1	5	3.0	3.0	1.1	EXISTING INLET BYPASS TO A12
3+75.00 DISCOVERY	A10	A10	100	10	9.80	0.42	0.90	0.38	0.30	3.7	0.0	3.7	1.09	TRIANGULAR	0.5	0.21	10.7	5	2.9	2.9	0.8	EXISTING INLET BYPASS TO A11
2+26.92 DISCOVERY	A11	A11	100	10	9.80	0.52	0.90	0.47	0.55	4.6	0.8	5.4	-	TRIANGULAR	0.5	0.27	-	20	-	5.4	0.0	EXISTING SUMP INLET
2+18.92 DISCOVERY	A12	A12	100	10	9.80	0.50	0.90	0.45	0.56	4.4	1.1	5.5	-	TRIANGULAR	0.5	0.27	-	20	-	5.5	0.0	EXISTING SUMP INLET
21+70.90 DISCOVERY	B1	B1	100	10	9.80	0.44	0.90	0.40	0.31	3.9	0.0	3.9	1.33	TRIANGULAR	0.5	0.23	11.7	5	3.0	3.0	0.9	ON GRADE INLET / PH IV BYPASS TO B3
21+70.90 DISCOVERY	B2	B2	100	10	9.80	0.44	0.90	0.40	0.31	3.9	0.0	3.9	1.33	TRIANGULAR	0.5	0.23	11.7	5	3.0	3.0	0.9	EXISTING INLET BYPASS TO B4
24+52.90 DISCOVERY	B3	B3	100	10	9.80	0.44	0.90	0.40	0.49	3.9	0.9	4.8	1.33	TRIANGULAR	0.5	0.25	12.7	10	5.4	4.8	0.0	ON GRADE INLET / PH IV
24+52.90 DISCOVERY	B4	B4	100	10	9.80	0.44	0.90	0.40	0.49	3.9	0.9	4.8	1.33	TRIANGULAR	0.5	0.25	12.7	10	5.4	4.8	0.0	EXISTING INLET
27+29.60 DISCOVERY	B5	B5	100	10	9.80	0.44	0.90	0.40	0.40	3.9	0.0	3.9	1.33	TRIANGULAR	0.5	0.23	11.7	10	5.2	3.9	0.0	ON GRADE INLET / PH IV
27+34.89 DISCOVERY	B6	B6	100	10	9.80	0.44	0.90	0.40	0.40	3.9	0.0	3.9	1.33	TRIANGULAR	0.5	0.23	11.7	10	5.2	3.9	0.0	EXISTING INLET
13+88.34 SPRINGER	C1	C1	100	10	9.80	0.29	0.90	0.26	0.26	2.6	0.0	2.6	0.6	TRIANGULAR	0.5	0.22	11.1	5	2.6	2.6	0.0	ON GRADE INLET / PH IV
14+23.86 SPRINGER	C2	C2	100	10	9.80	0.57	0.90	0.51	0.36	5.0	0.0	5.0	0.6	TRIANGULAR	0.5	0.28	14.2	5	3.5	3.5	1.5	EXISTING INLET BYPASS TO C4
11+59.11 SPRINGER	C3.1	C3.1	100	10	9.80	3.34	0.90	3.01	3.01	-	-	-	-	-	-	0.84	4'x4'	50.2	29.5	0.0	0.0	OFFSITE TYPE IL-HL DROP INLET
10+84.30 SPRINGER	C3.2	C3.2	100	10	9.80	0.27	0.90	0.24	0.24	2.4	0.0	2.4	0.7	TRIANGULAR	0.5	0.21	10.4	5	2.6	2.4	0.0	ON GRADE INLET / PH IV
10+73.86 SPRINGER	C4	C4	100	10	9.80	0.72	0.90	0.65	0.71	6.4	1.5	7.9	0.7	TRIANGULAR	0.5	0.33	16.3	10	7.0	7.0	0.9	EXISTING INLET BYPASS TO C6
7+34.14 SPRINGER	C5	C5	100	10	9.80	0.24	0.90	0.22	0.22	2.1	0.0	2.1	0.7	TRIANGULAR	0.5	0.20	9.9	5	2.5	2.1	0.0	ON GRADE INLET / PH IV
7+23.86 SPRINGER	C6	C6	100	10	9.80	0.73	0.90	0.66	0.68	6.4	0.9	7.3	0.7	TRIANGULAR	0.5	0.32	15.9	10	6.7	6.7	0.6	EXISTING INLET BYPASS TO C8
4+23.48 SPRINGER	C8	C8	100	10	9.80	0.62	0.90	0.56	0.61	5.5	0.6	6.1	0.7	TRIANGULAR	0.5	0.30	14.9	10	6.0	6.0	0.1	EXISTING INLET BYPASS TO C10
4+23.48 SPRINGER	C10	C10	100	10	9.80	0.51	0.90	0.46	0.47	4.5	0.1	4.6	-	TRIANGULAR	1.5	0.27	-	10	-	4.6	0.0	EXISTING SAG INLET
6+77.83 SPRINGER	C16.1	C16.1	100	10	9.80	6.11	0.90	5.50	5.50	-	-	-	-	-	-	1.50	-	70.6	53.9	0.0	0.0	OFFSITE TYPE IL-HL DROP INLET
4+33.76 SPRINGER	C16.7	C16.7	100	10	9.80	0.48	0.90	0.43	0.43	4.2	0.0	4.2	0.7	TRIANGULAR	0.5	0.26	12.9	10	5.5	4.2	0.0	ON GRADE INLET / PH IV
1+83.25 SPRINGER	C16.9	C16.9	100	10	9.80	0.61	0.90	0.55	0.55	5.4	0.0	5.4	-	TRIANGULAR	1.5	0.28	-	10	-	5.4	0.0	SAG INLET / PH IV
20+37.61 SPRINGER	D1	D1	100	10	9.80	0.66	0.90	0.59	0.59	5.8	0.0	5.8	0.84	TRIANGULAR	0.5	0.30	15	10	5.9	5.8	0.0	EXISTING INLET
20+37.61 SPRINGER	D2	D2	100	10	9.80	0.21	0.90	0.19	0.19	1.9	0.0	1.9	0.84	TRIANGULAR	0.5	0.20	9.8	10	5.0	1.9	0.0	ON GRADE INLET / PH IV
22+87.61 SPRINGER	D3	D3	100	10	9.80	0.53	0.90	0.48	0.48	4.7	0.0	4.7	0.7	TRIANGULAR	0.5	0.29	14.3	10	5.8	4.7	0.0	EXISTING INLET
22+87.61 SPRINGER	D4	D4	100	10	9.80	0.18	0.90	0.16	0.16	1.6	0.0	1.6	0.7	TRIANGULAR	0.5	0.19	9.6	10	4.9	1.6	0.0	ON GRADE INLET / PH IV
4+50.62 DATA	E1	E1	100	10	9.80	0.44	0.90	0.40	0.40	3.9	0.0	3.9	-	TRIANGULAR	0.5	0.27	-	10	-	3.9	0.0	SAG INLET / PH IV
4+50.62 DATA	E2	E2	100	10	9.80	1.05	0.90	0.94	0.94	9.3	0.0	9.3	-	TRIANGULAR	0.5	0.37	-	10	-	9.3	0.0	EXISTING SAG INLET
25+10.31 SPRINGER	I1	I1	100	10	9.80	0.28	0.90	0.25	0.25	2.5	0.0	2.5	-	TRIANGULAR	0.5	0.22	-	10	-	2.5	0.0	SAG INLET / PH IV
25+08.01 SPRINGER	I2	I2	100	10	9.80	0.74	0.90	0.67	0.67	6.5	0.0	6.5	-	TRIANGULAR	0.5	0.32	-	10	-	6.5	0.0	EXISTING SAG INLET
9+92.15 DATA	P1	P1	100	10	9.80	0.38	0.90	0.34	0.34	3.3	0.0	3.3	-	TRIANGULAR	0.5	0.25	-	10	-	3.3	0.0	SAG INLET / PH IV
9+92.15 DATA	P2	P2	100	10	9.80	1.02	0.90	0.92	0.92	9.0	0.0	9.0	-	TRIANGULAR	0.5	0.36	-	10	-	9.0	0.0	EXISTING SAG INLET
17+30.00 DATA	M1	M1	100	10	9.80	0.40	0.90	0.36	0.36	3.5	0.0	3.5	0.73	TRIANGULAR	0.5	0.24	11.7	10	5.3	3.5	0.0	ON GRADE INLET / PH IV
17+30.00 DATA	M2	M2	100	10	9.80	0.30	0.90	0.27	0.27	2.6	0.0	2.6	0.73	TRIANGULAR	0.5	0.22	10.4	10	5.1	2.6	0.0	ON GRADE INLET / PH IV
20+27.38 DATA	M3	M3	100	10	9.80	0.76	0.90	0.68	0.68	6.7	0.0	6.7	-	TRIANGULAR	0.5	0.33	-	10	-	6.7	0.0	SAG INLET / PH IV
20+27.38 DATA	M4	M4	100	10	9.80	0.76	0.90	0.68	0.68	6.7	0.0	6.7	-	TRIANGULAR	0.5	0.33	-	10	-	6.7	0.0	SAG INLET / PH IV
34+70 DATA	FUT1	FUT1	100	10	9.80	0.42	0.90	0.38	0.38	3.7	0.0	3.7	1.06	TRIANGULAR	0.5	0.23	11.1	10	-	3.7	0.0	ON GRADE INLET / FUTURE
34+70 DATA	FUT2	FUT2	100	10	9.80	0.40	0.90	0.36	0.36	3.5	0.0	3.5	1.06	TRIANGULAR	0.5	0.23	10.9	10	-	3.5	0.0	ON GRADE INLET / FUTURE
32+32 DATA	FUT3	FUT3	100	10	9.80	0.25	0.90	0.22	0.22	2.2	0.0	2.2	1.06	TRIANGULAR	0.5	0.19	9.1	10	-	2.2	0.0	ON GRADE INLET / FUTURE
32+32 DATA	FUT4	FUT4	100	10	9.80	0.23	0.90	0.21	0.21	2.0	0.0	2.0	1.06	TRIANGULAR	0.5	0.18	8.8	10	-	2.0	0.0	ON GRADE INLET / FUTURE
27+47.08 CAPITAL	T1	T1	100	10	9.80	0.17	0.90	0.15	0.15	1.5	0.0	1.5	1.55	TRIANGULAR	0.5	0.15	7.4	5	2.3	1.5	0.0	ON GRADE INLET / PH IV
27+47.08 CAPITAL	T2	T2	100	10	9.80	0.17	0.90	0.15	0.15	1.5	0.0	1.5	1.55	TRIANGULAR	0.5	0.15	7.4	5	2.3	1.5	0.0	ON GRADE INLET / PH IV
29+00 DATA	T3	T3	100	10	9.80	0.43	0.90	0.39	0.39	3.8	0.0	3.8	1.06	TRIANGULAR	0.5	0.23	11.2	10	5.2	3.8	0.0	ON GRADE INLET / PH IV
29+00 DATA	T4	T4	100	10	9.80	0.44	0.90	0.40	0.40	3.9	0.0	3.9	1.06	TRIANGULAR	0.5	0.24	11.3	10	5.3	3.9	0.0	ON GRADE INLET / PH IV
25.73.58 DATA	T5	T5	100	10	9.80	0.79	0.90	0.71	0.71	7.0	0.0	7.0	-	TRIANGULAR	0.5	0.29	-	10	-	7.0	0.0	SAG INLET / PH IV
25.73.58 DATA	T6	T6	100	10	9.80	0.79	0.90	0.71	0.71	7.0	0.0	7.0	-	TRIANGULAR	0.5	0.29	-	10	-	7.0	0.0	SAG INLET / PH IV
1+12 CAPITAL	X1	X1	100	10	9.80	0.19	0.90	0.17	0.17	1.7	0.0	1.7	0.85	TRIANGULAR	0.5	0.18	8.6	5	2.4	1.7	0.0	ON GRADE INLET / PH IV
1+12 CAPITAL	X2	X2	100	10	9.80	0.19	0.90	0.17	0.17	1.7	0.0	1.7	0.85	TRIANGULAR	0.5	0.18	8.6	5	2.4	1.7	0.0	ON GRADE INLET / PH IV
8+50 CAPITAL	Y1	Y1	100	10	9.80	0.43	0.90	0.39	0.39	3.8	0.0	3.8	0.85	TRIANGULAR	0.5	0.24	11.7	10	5.3	3.8	0.0	ON GRADE INLET / PH IV
8+50 CAPITAL	Y2	Y2	100	10	9.80	0.39	0.90	0.35	0.35	3.4	0.0	3.4	0.85	TRIANGULAR	0.5	0.23	11.2	10	5.2	3.4	0.0	ON GRADE INLET / PH IV
5+50 CAPITAL	Y3	Y3	100	10	9.80	0.41	0.90	0.37	0.37	3.6	0.0	3.6	0.85	TRIANGULAR	0.5	0.24	11.5	10	5.3	3.6	0.0	ON GRADE INLET / PH IV
5+50 CAPITAL	Y4	Y4	100	10	9.80	0.38	0.90	0.34	0.34	3.4	0.0	3.4	0.85	TRIANGULAR	0.5	0.23	11.2	10	5.2	3.4	0.0	ON GRADE INLET / PH IV
2+62 CAPITAL	Y5	Y5	100	10	9.80	0.38	0.90	0.34	0.34	3.5	0.0											