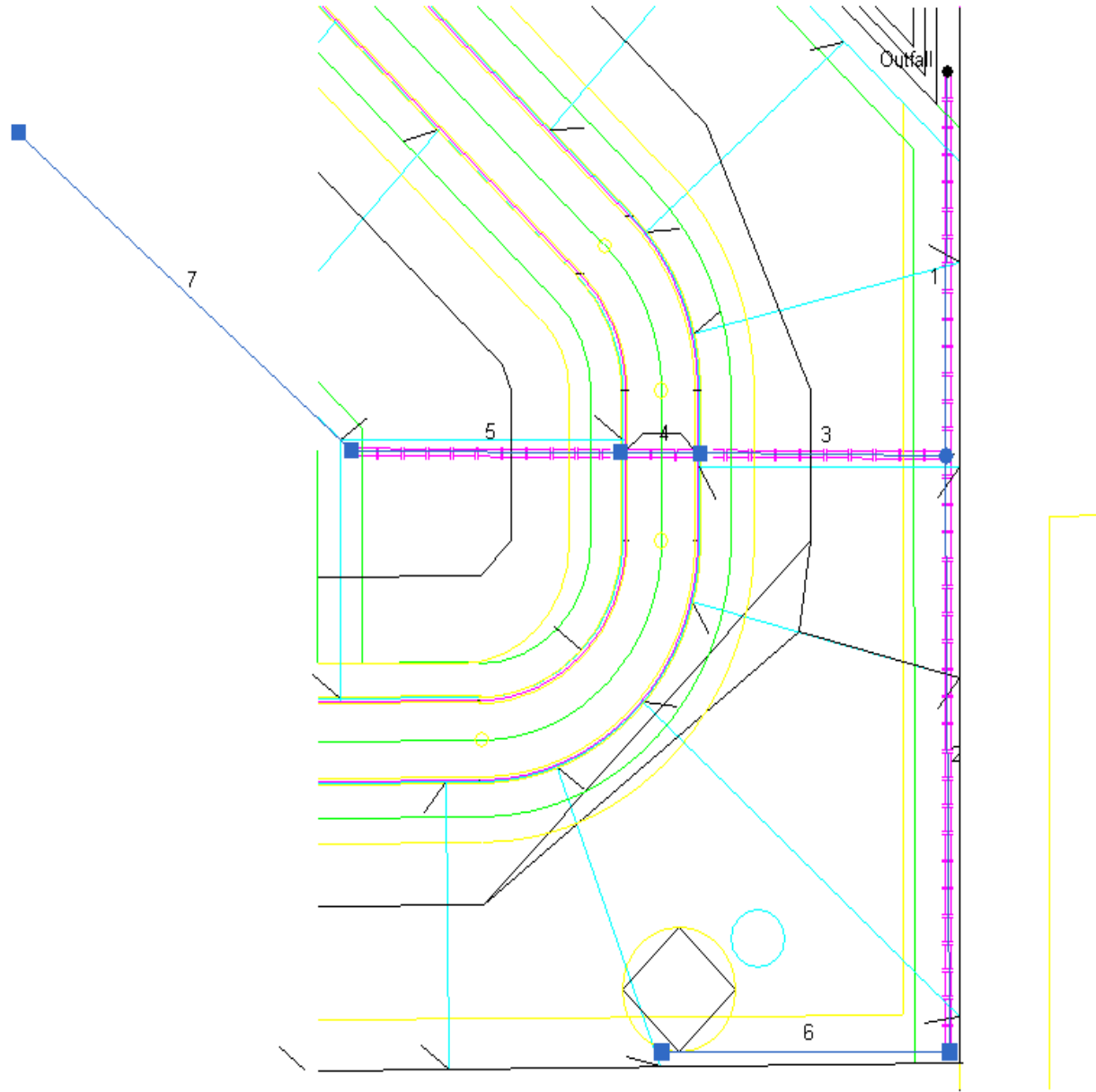


# Hydraflow Plan View



Project File: SWS2.stm

No. Lines: 7

07-02-2007

# Storm Sewer Inventory Report

Line No.	Alignment				Flow Data				Physical Data								Line ID
	Dnstr line No.	Line length (ft)	Defl angle (deg)	Junc type	Known Q (cfs)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Invert El Dn (ft)	Line slope (%)	Invert El Up (ft)	Line size (in)	Line type	N value (n)	J-loss coeff (K)	Inlet/ Rim El (ft)	
1	End	154.0	90.2	MH	0.00	0.00	0.00	0.0	1343.00	0.32	1343.50	24	Cir	0.013	1.00	1348.00	
2	1	239.2	-0.6	DrGrt	0.00	0.50	0.70	15.0	1344.00	0.47	1345.13	18	Cir	0.013	1.50	1348.80	
3	1	108.7	90.4	Curb	0.00	0.00	0.00	0.0	1343.50	0.46	1344.00	24	Cir	0.013	0.50	1347.00	
4	3	35.1	0.3	Curb	0.00	1.50	0.70	15.0	1344.00	0.28	1344.10	18	Cir	0.013	0.50	1347.00	
5	4	119.1	-0.6	DrGrt	0.00	0.60	0.70	15.0	1344.60	0.30	1344.96	18	Cir	0.013	1.05	1347.00	
6	2	127.4	90.4	DrGrt	0.00	0.30	0.70	15.0	1345.38	0.38	1345.87	15	Cir	0.013	1.00	1347.50	
7	5	195.0	40.6	DrGrt	0.00	1.00	0.70	15.0	1345.21	0.35	1345.89	15	Cir	0.013	1.00	1348.00	
Project File: SWS2.stm												Number of lines: 7				Date: 07-02-2007	

# Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.
1		14.25	24 c	154.0	1343.00	1343.50	0.325	1344.59	1345.26	n/a	1345.34 i	End
2		2.92	18 c	239.2	1344.00	1345.13	0.472	1345.34	1345.80	n/a	1346.06 i	1
3		11.33	24 c	108.7	1343.50	1344.00	0.460	1345.34	1345.53	n/a	1345.54 i	1
4		11.33	18 c	35.1	1344.00	1344.10	0.285	1345.54*	1345.95*	n/a	1346.51 i	3
5		5.85	18 c	119.1	1344.60	1344.96	0.302	1346.51*	1346.88*	0.18	1347.06	4
6		1.10	15 c	127.4	1345.38	1345.87	0.385	1346.06	1346.30	n/a	1346.43 i	2
7		3.65	15 c	195.0	1345.21	1345.89	0.349	1347.09*	1347.72*	0.14	1347.86	5

Project File: SWS2.stm	Number of lines: 7	Run Date: 07-02-2007
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NOTES: c = cir; e = ellip; b = box; Return period = 10 Yrs. ; \*Surcharged (HGL above crown). ; i - Inlet control.

# Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q byp (cfs)	Junc type	Curb Inlet		Grate Inlet			Gutter						Inlet			Byp line No	
							Ht (in)	L (ft)	area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)		Depr (in)
1		0.00	0.00	0.00	0.00	MH	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.080	0.050	0.013	0.00	0.00	0.00	0.00	0.00	Off
2		1.83	0.00	1.83	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.14	7.48	0.14	7.48	0.00	1
3		0.00	0.00	0.00	0.00	Curb	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.080	0.050	0.013	0.06	0.75	0.17	1.25	2.00	1
4		5.48	0.00	5.48	0.00	Curb	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.080	0.050	0.013	0.45	7.86	0.56	7.86	2.00	3
5		2.19	0.00	2.19	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.15	8.19	0.15	8.19	0.00	4
6		1.10	0.00	1.10	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.10	5.90	0.10	5.90	0.00	2
7		3.65	0.00	3.65	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.22	10.70	0.22	10.70	0.00	5

Project File: SWS2.stm Number of lines: 7 Run Date: 07-02-2007

NOTES: Inlet N-Values = 0.016 ; Intensity = 55.18 / (Inlet time + 11.10) ^ 0.72; Return period = 10 Yrs. ; \* Indicates Known Q added

# Hydraulic Grade Line Computations

Line	Size (in)	Q (cfs)	Downstream								Len (ft)	Upstream								Check		JL coeff (K)	Minor loss (ft)
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)		
1	24	14.25	1343.00	1344.59	1.59	2.68	5.32	0.44	1345.03	n/a	154	1343.50	1345.26	1.76	2.93	4.87	0.37	1345.63i	n/a	n/a	0.230	1.00	n/a
2	18	2.92	1344.00	1345.34	1.34	1.66	1.76	0.05	1345.39	n/a	239	1345.13	1345.80	0.67	0.76	3.85	0.23	1346.03i	n/a	n/a	0.411	1.50	n/a
3	24	11.33	1343.50	1345.34	1.84	3.02	3.75	0.22	1345.56	n/a	109	1344.00	1345.53	1.53	2.59	4.38	0.30	1345.83i	n/a	n/a	-0.023	0.50	n/a
4	18	11.33	1344.00	1345.54	1.50	1.77	6.41	0.64	1346.18	n/a	35.1	1344.10	1345.95	1.50	1.77	6.41	0.64	1346.59i	n/a	n/a	-0.230	0.50	n/a
5	18	5.85	1344.60	1346.51	1.50	1.77	3.31	0.17	1346.68	0.310	119	1344.96	1346.88	1.50	1.77	3.31	0.17	1347.05	0.310	0.310	0.369	1.05	0.18
6	15	1.10	1345.38	1346.06	0.68	0.68	1.60	0.04	1346.10	n/a	127	1345.87	1346.30	0.43	0.38	2.90	0.13	1346.43i	n/a	n/a	0.202	1.00	n/a
7	15	3.65	1345.21	1347.09	1.25	1.23	2.98	0.14	1347.23	0.320	195	1345.89	1347.72	1.25	1.23	2.98	0.14	1347.86	0.320	0.320	0.625	1.00	0.14

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Number of lines: 7

Run Date: 07-02-2007