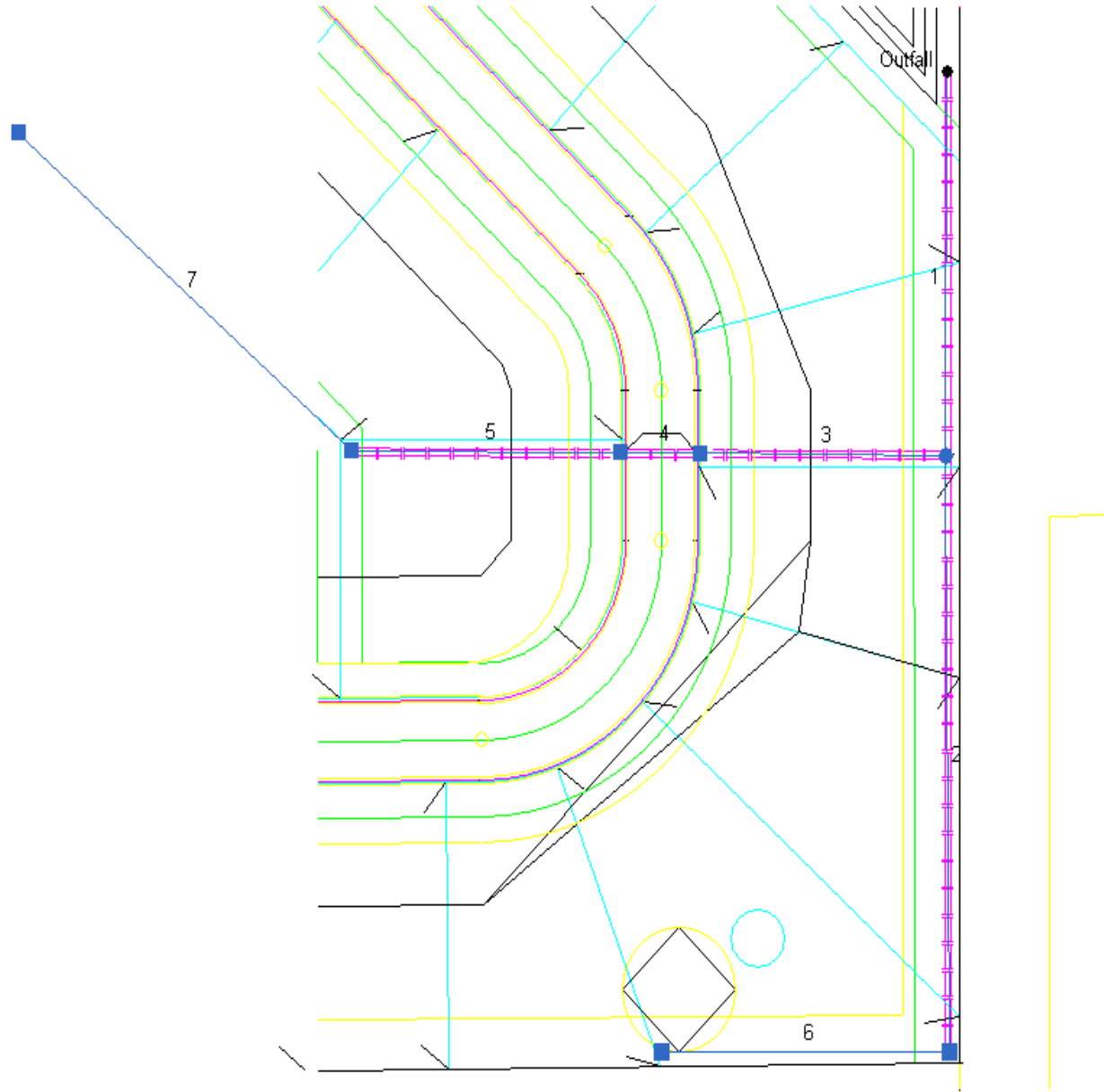


# Hydraflow Plan View



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 EI Dn (ft)	Line slope (%)	Invert EI Up (ft)	Line size (in)	Line type	N value (n)	J-loss coeff (K)	
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		10.51	24 c	154.0	1343.00	1343.50	0.325	1344.59	1344.93	n/a	1344.99 i	End
2		2.16	18 c	239.2	1344.00	1345.13	0.472	1344.99	1345.69	n/a	1345.93 i	1
3		8.35	24 c	108.7	1343.50	1344.00	0.460	1344.99	1345.12	n/a	1345.42 i	1
4		8.35	18 c	35.1	1344.00	1344.10	0.285	1345.50*	1345.72*	n/a	1345.75 i	3
5		4.31	18 c	119.1	1344.60	1344.96	0.302	1345.75	1345.98	0.18	1346.17	4
6		0.81	15 c	127.4	1345.38	1345.87	0.385	1345.93	1346.23	n/a	1346.35 i	2
7		2.69	15 c	195.0	1345.21	1345.89	0.349	1346.27	1346.68	n/a	1346.73 i	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 = 2 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		1.35	0.00	1.35	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.11	6.47	0.11	6.47	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		4.04	0.00	4.04	0.00	Curb	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.080	0.050	0.013	0.38	6.41	0.49	6.41	2.00	3
5		1.62	0.00	1.62	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.13	7.05	0.13	7.05	0.00	4
6		0.81	0.00	0.81	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.08	5.18	0.08	5.18	0.00	2
7		2.69	0.00	2.69	0.00	DrGrt	6.0	6.00	2.50	4.00	2.00	Sag	2.00	0.050	0.050	0.013	0.18	9.10	0.18	9.10	0.00	5

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

NOTES: Inlet N-Values = 0.016 ; Intensity = 76.31 / (Inlet time + 14.30) ^ 0.88; Return period = 2 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	10.51	1343.00	1344.59	1.59	2.68	3.92	0.24	1344.83	n/a	154	1343.50	1344.93	1.43	2.41	4.36	0.30	1345.23i	n/a	n/a	0.104	1.00	n/a
2	18	2.16	1344.00	1344.99	0.99	1.23	1.75	0.05	1345.03	n/a	239	1345.13	1345.69	0.56**	0.60	3.58	0.20	1345.89i	n/a	n/a	n/a	1.50	n/a
3	24	8.35	1343.50	1344.99	1.49	2.50	3.34	0.17	1345.16	n/a	109	1344.00	1345.12	1.12	1.82	4.60	0.33	1345.45i	n/a	n/a	-0.036	0.50	n/a
4	18	8.35	1344.00	1345.50	1.50*	1.77	4.73	0.35	1345.85	n/a	35.1	1344.10	1345.72	1.50	1.77	4.73	0.35	1346.07i	n/a	n/a	-0.125	0.50	n/a
5	18	4.31	1344.60	1345.75	1.15	1.46	2.96	0.14	1345.89	0.192	119	1344.96	1345.98	1.02	1.28	3.36	0.18	1346.16	0.258	0.225	0.268	1.05	0.18
6	15	0.81	1345.38	1345.93	0.55	0.52	1.56	0.04	1345.97	n/a	127	1345.87	1346.23	0.36**	0.30	2.73	0.12	1346.35i	n/a	n/a	0.266	1.00	n/a
7	15	2.69	1345.21	1346.27	1.06	1.11	2.43	0.09	1346.36	n/a	195	1345.89	1346.68	0.79	0.81	3.31	0.17	1346.85i	n/a	n/a	0.317	1.00	n/a

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Number of lines: 7

Run Date: 07-02-2007

Notes: \* Normal depth assumed.; \*\* Critical depth.