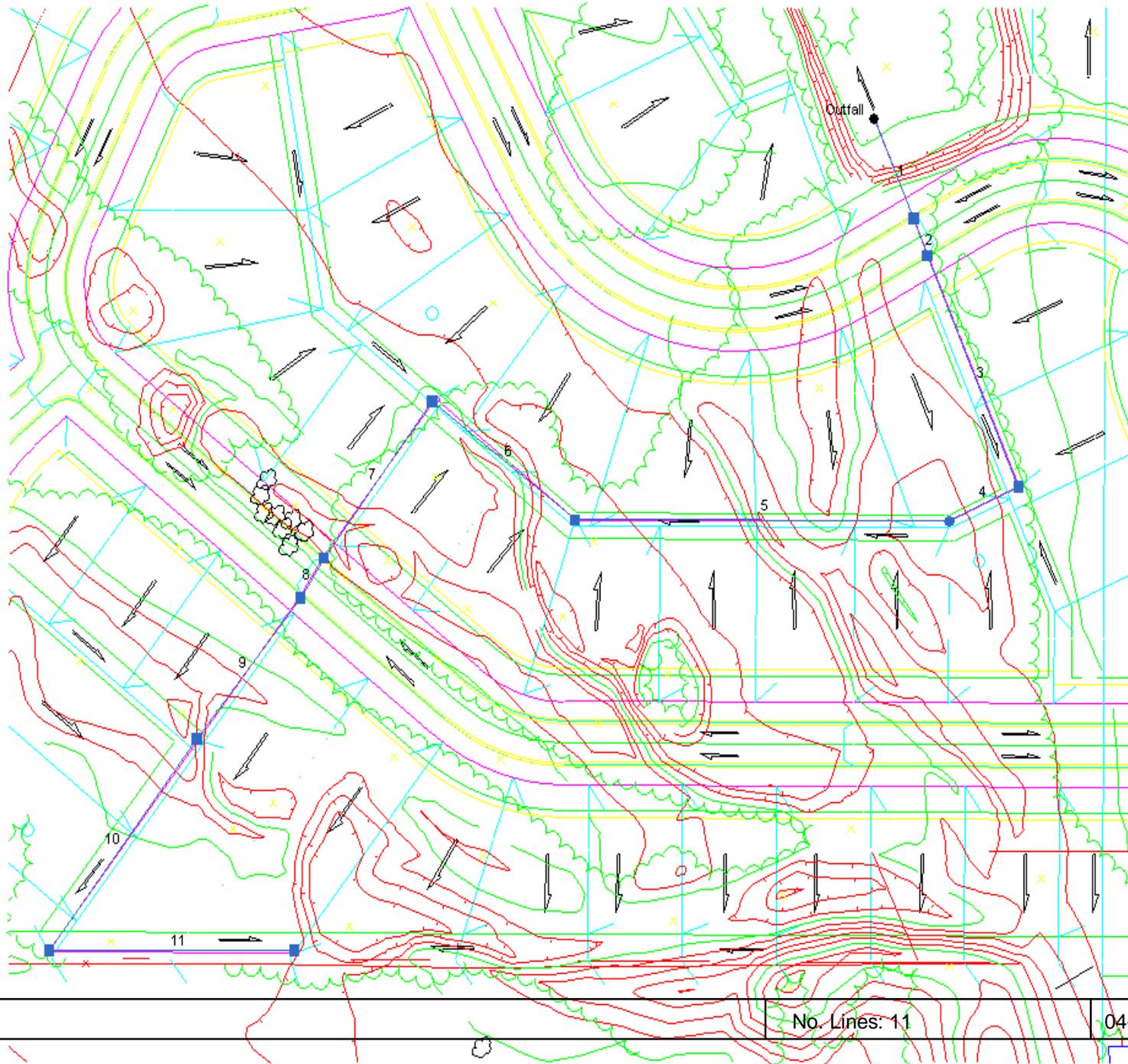


# Hydraflow Plan View



sws5\_RW

No. Lines: 11

04-23-2007

# 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		40.90	48 c	83.5	1249.00	1249.07	0.084	1252.22	1252.29	0.11	1252.40	End
2		38.05	48 c	30.5	1249.07	1249.09	0.066	1252.49	1252.51	0.09	1252.59	1
3		35.20	48 c	194.2	1249.09	1249.25	0.082	1252.61	1252.71	0.22	1252.93	2
4		33.10	42 c	64.2	1249.75	1249.83	0.125	1252.93	1252.99	0.10	1253.08	3
5		33.10	42 c	318.0	1249.83	1250.21	0.120	1253.08	1253.38	0.20	1253.57	4
6		29.50	42 c	151.8	1250.21	1250.39	0.119	1253.61	1253.72	0.23	1253.95	5
7		25.60	36 c	151.6	1250.89	1251.07	0.119	1253.95*	1254.17*	0.10	1254.27	6
8		17.05	36 c	36.3	1251.07	1251.14	0.193	1254.39*	1254.41*	0.05	1254.46	7
9		8.50	24 c	140.0	1252.14	1252.56	0.300	1254.46*	1254.65*	0.06	1254.71	8
10		6.00	18 c	205.2	1253.06	1253.84	0.380	1254.71	1255.33	0.27	1255.60	9
11		3.20	15 c	208.2	1254.09	1254.88	0.380	1255.67	1256.12	0.11	1256.23	10

<b>sws5_RW</b>	Number of lines: 11	Run Date: 04-23-2007
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NOTES: c = cir; e = ellip; b = box; Return period = 10 Yrs. ; \*Surcharged (HGL above crown).

# 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		2.85*	0.00	2.85	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.30	6.70	0.37	6.70	2.00	Off
2		2.85*	0.00	2.85	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.30	6.70	0.37	6.70	2.00	Off
3		2.10*	0.00	2.10	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.15	17.03	0.15	17.03	0.00	Off
4		0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	Off
5		3.60*	0.00	3.60	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.22	23.53	0.22	23.53	0.00	Off
6		3.90*	0.00	3.90	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.23	24.71	0.23	24.71	0.00	Off
7		8.55*	0.00	8.55	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.52	13.98	0.59	13.98	2.00	Off
8		8.55*	0.00	8.55	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.52	13.98	0.59	13.98	2.00	Off
9		2.50*	0.00	2.50	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.17	18.88	0.17	18.88	0.00	Off
10		2.80*	0.00	2.80	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.18	20.21	0.18	20.21	0.00	Off
11		3.20*	0.00	3.20	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.20	21.90	0.20	21.90	0.00	Off

sws5\_RW

Number of lines: 11

Run Date: 04-23-2007

NOTES: Inlet N-Values = 0.016 ; Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; 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	48	40.90	1249.00	1252.22	3.22	10.84	3.77	0.22	1252.44	0.084	83.5	1249.07	1252.29	3.22	10.84	3.77	0.22	1252.51	0.084	0.084	0.070	0.50	0.11
2	48	38.05	1249.07	1252.49	3.42*	11.44	3.33	0.17	1252.66	0.066	30.5	1249.09	1252.51	3.42	11.43	3.33	0.17	1252.68	0.066	0.066	0.020	0.50	0.09
3	48	35.20	1249.09	1252.61	3.52	11.71	3.01	0.14	1252.75	0.054	194	1249.25	1252.71	3.46	11.55	3.05	0.14	1252.85	0.055	0.055	0.106	1.50	0.22
4	42	33.10	1249.75	1252.93	3.18	9.17	3.61	0.20	1253.13	0.095	64.2	1249.83	1252.99	3.15	9.13	3.63	0.20	1253.19	0.095	0.095	0.061	0.47	0.10
5	42	33.10	1249.83	1253.08	3.25	9.32	3.55	0.20	1253.28	0.094	318	1250.21	1253.38	3.17	9.15	3.62	0.20	1253.58	0.095	0.094	0.300	0.97	0.20
6	42	29.50	1250.21	1253.61	3.40	9.54	3.09	0.15	1253.76	0.076	152	1250.39	1253.72	3.33	9.45	3.12	0.15	1253.87	0.075	0.075	0.114	1.50	0.23
7	36	25.60	1250.89	1253.95	3.00	7.07	3.62	0.20	1254.15	0.147	152	1251.07	1254.17	3.00	7.07	3.62	0.20	1254.37	0.147	0.147	0.223	0.50	0.10
8	36	17.05	1251.07	1254.39	3.00	7.07	2.41	0.09	1254.48	0.065	36.3	1251.14	1254.41	3.00	7.07	2.41	0.09	1254.50	0.065	0.065	0.024	0.50	0.05
9	24	8.50	1252.14	1254.46	2.00	3.14	2.71	0.11	1254.57	0.141	140	1252.56	1254.65	2.00	3.14	2.71	0.11	1254.77	0.141	0.141	0.198	0.50	0.06
10	18	6.00	1253.06	1254.71	1.50	1.77	3.40	0.18	1254.89	0.327	205	1253.84	1255.33	1.49	1.77	3.40	0.18	1255.51	0.304	0.315	0.647	1.50	0.27
11	15	3.20	1254.09	1255.67	1.25	1.23	2.61	0.11	1255.78	0.246	208	1254.88	1256.12	1.24	1.23	2.61	0.11	1256.23	0.229	0.237	0.494	1.00	0.11

sws5\_RW

Number of lines: 11

Run Date: 04-23-2007

Notes: \* Normal depth assumed.

# Storm Sewer Profile

Elev. (ft)

