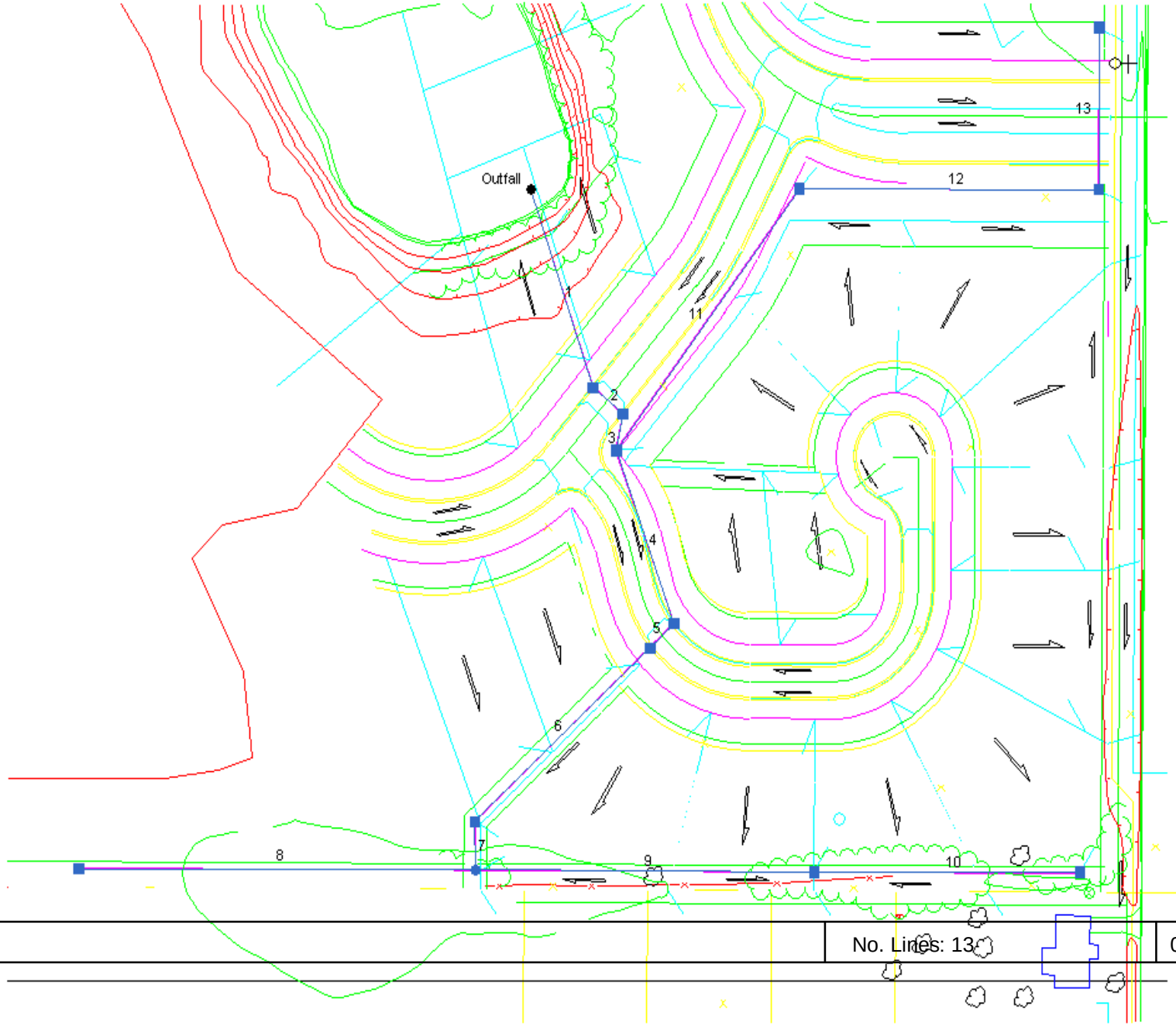
Hydraflow Plan View



sws2_RW	No. Lines: 13	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		26.10	36 c	164.6	1250.00	1250.49	0.300	1251.88	1252.37	n/a	1252.71 i	End
2		23.85	36 c	33.1	1250.49	1250.59	0.299	1252.71	1252.75	0.40	1253.15	1
3		21.60	36 c	29.4	1250.59	1250.68	0.300	1253.27	1253.29	0.26	1253.55	2
4		14.70	24 c	144.3	1251.68	1252.11	0.300	1253.68*	1254.29*	0.48	1254.77	3
5		12.25	24 c	27.9	1252.11	1252.20	0.301	1254.88*	1254.96*	0.12	1255.08	4
6		9.80	24 c	203.6	1252.20	1252.81	0.300	1255.16*	1255.54*	0.18	1255.72	5
7		6.50	18 c	37.7	1253.31	1253.42	0.302	1255.72*	1255.87*	0.21	1256.08	6
8		3.40	15 c	342.9	1253.67	1254.79	0.325	1256.17*	1257.12*	0.12	1257.24	7
9		3.10	15 c	292.9	1253.67	1254.62	0.325	1256.19*	1256.86*	0.05	1256.91	7
10		2.00	15 c	229.6	1254.62	1255.37	0.325	1256.97*	1257.19*	0.04	1257.23	9
11		5.50	18 c	259.1	1252.18	1252.96	0.300	1253.57	1254.19	0.24	1254.43	3
12		4.60	15 c	258.4	1253.21	1254.05	0.325	1254.46*	1255.77*	0.33	1256.10	11
13		2.90	15 c	127.0	1254.05	1254.46	0.324	1256.23*	1256.49*	0.09	1256.57	12

sws2_RW | Number of lines: 13 | Run Date: 04-23-2007

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		2.25*	0.00	2.25	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.27	5.71	0.34	5.71	2.00	Off
2		2.25*	0.00	2.25	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.27	5.71	0.34	5.71	2.00	Off
3		1.40*	0.00	1.40	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.11	9.64	0.11	9.64	0.00	Off
4		2.45*	0.00	2.45	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.28	6.05	0.35	6.05	2.00	Off
5		2.45*	0.00	2.45	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.28	6.05	0.35	6.05	2.00	Off
6		3.30*	0.00	3.30	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.20	15.54	0.20	15.54	0.00	Off
7		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
8		3.40*	0.00	3.40	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.21	15.82	0.21	15.82	0.00	Off
9		1.10*	0.00	1.10	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.10	8.51	0.10	8.51	0.00	Off
10		2.00*	0.00	2.00	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.15	11.70	0.15	11.70	0.00	Off
11		0.90*	0.00	0.90	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.09	7.69	0.09	7.69	0.00	Off
12		1.70*	0.00	1.70	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.13	10.70	0.13	10.70	0.00	Off
13		2.90*	0.00	2.90	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.030	0.030	0.000	0.19	14.42	0.19	14.42	0.00	Off

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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	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	36	26.10	1250.00	1251.88	1.88	4.66	5.60	0.49	1252.37	n/a	165	1250.49	1252.37	1.87	4.64	5.63	0.49	1252.86i	n/a	n/a	-0.001	0.89	n/a
2	36	23.85	1250.49	1252.71	2.22	5.60	4.26	0.28	1252.99	0.159	33.1	1250.59	1252.75	2.16	5.44	4.39	0.30	1253.05	0.170	0.165	0.055	1.35	0.40
3	36	21.60	1250.59	1253.27	2.68	6.66	3.24	0.16	1253.43	0.093	29.4	1250.68	1253.29	2.61	6.53	3.31	0.17	1253.46	0.096	0.094	0.028	1.50	0.26
4	24	14.70	1251.68	1253.68	2.00*	3.14	4.68	0.34	1254.02	0.423	144	1252.11	1254.29	2.00	3.14	4.68	0.34	1254.63	0.422	0.423	0.610	1.41	0.48
5	24	12.25	1252.11	1254.88	2.00	3.14	3.90	0.24	1255.11	0.293	27.9	1252.20	1254.96	2.00	3.14	3.90	0.24	1255.19	0.293	0.293	0.082	0.50	0.12
6	24	9.80	1252.20	1255.16	2.00	3.14	3.12	0.15	1255.31	0.188	204	1252.81	1255.54	2.00	3.14	3.12	0.15	1255.69	0.188	0.188	0.382	1.19	0.18
7	18	6.50	1253.31	1255.72	1.50	1.77	3.68	0.21	1255.93	0.383	37.7	1253.42	1255.87	1.50	1.77	3.68	0.21	1256.08	0.383	0.383	0.145	1.00	0.21
8	15	3.40	1253.67	1256.17	1.25	1.23	2.77	0.12	1256.29	0.277	343	1254.79	1257.12	1.25	1.23	2.77	0.12	1257.24	0.277	0.277	0.951	1.00	0.12
9	15	3.10	1253.67	1256.19	1.25	1.23	2.53	0.10	1256.29	0.231	293	1254.62	1256.86	1.25	1.23	2.53	0.10	1256.96	0.230	0.231	0.675	0.50	0.05
10	15	2.00	1254.62	1256.97	1.25	1.23	1.63	0.04	1257.01	0.096	230	1255.37	1257.19	1.25	1.23	1.63	0.04	1257.23	0.096	0.096	0.220	1.00	0.04
11	18	5.50	1252.18	1253.57	1.38	1.70	3.23	0.16	1253.73	0.238	259	1252.96	1254.19	1.24	1.56	3.53	0.19	1254.39	0.272	0.255	0.660	1.24	0.24
12	15	4.60	1253.21	1254.46	1.25*	1.23	3.75	0.22	1254.68	0.508	258	1254.05	1255.77	1.25	1.23	3.75	0.22	1255.99	0.507	0.508	1.312	1.50	0.33
13	15	2.90	1254.05	1256.23	1.25	1.23	2.36	0.09	1256.32	0.202	127	1254.46	1256.49	1.25	1.23	2.36	0.09	1256.57	0.202	0.202	0.256	1.00	0.09

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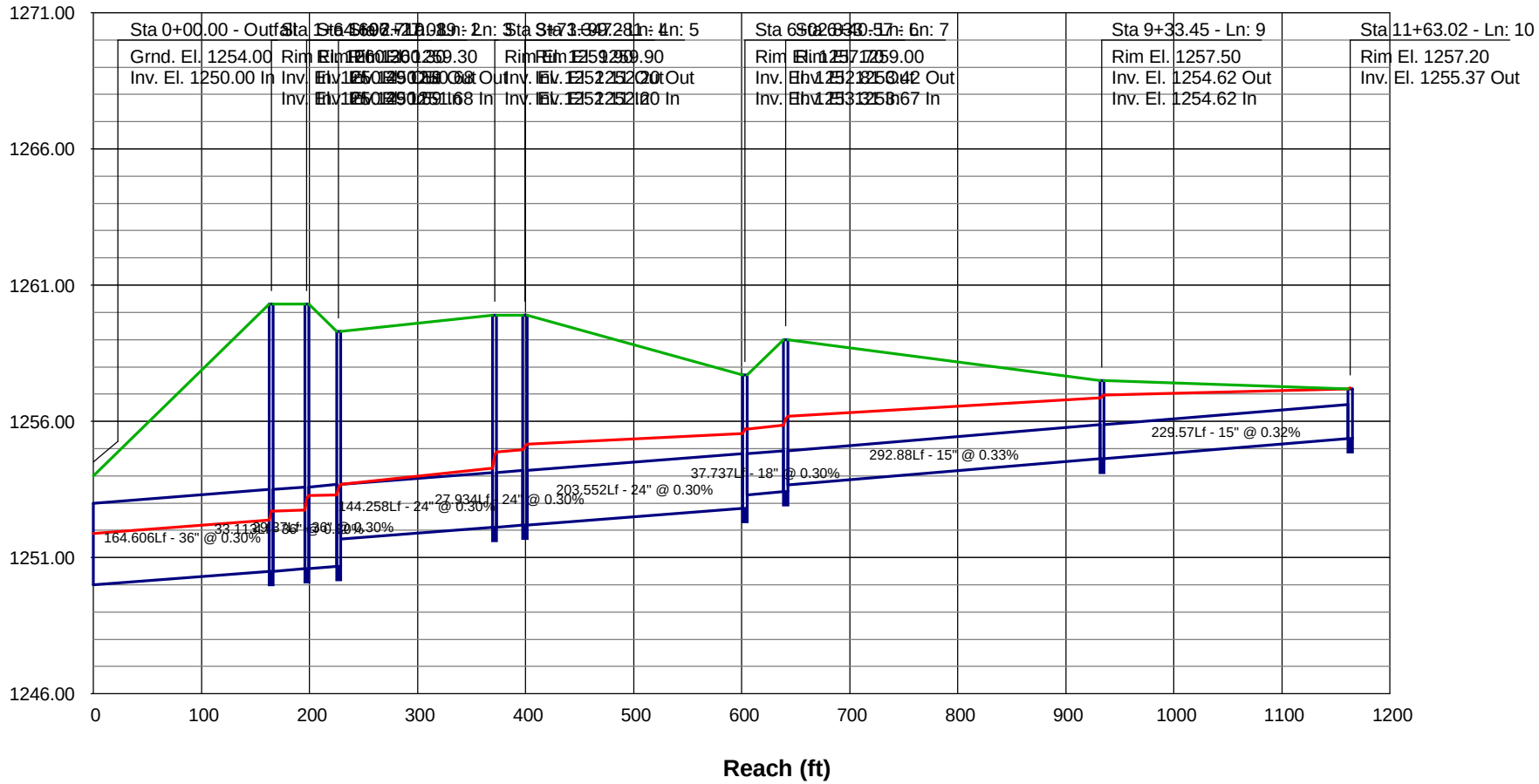
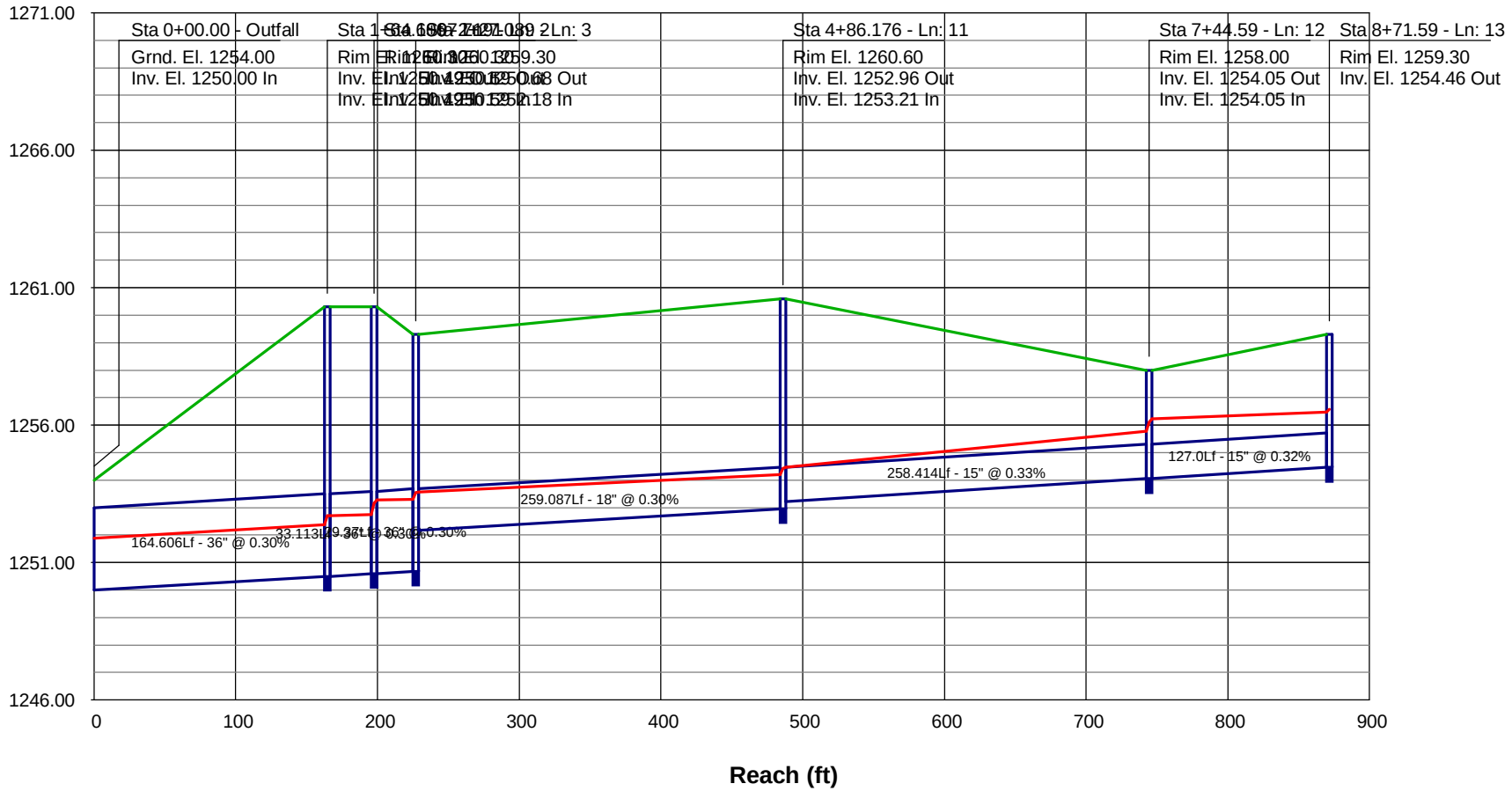
Notes: * Normal depth assumed.

Storm Sewer Profile

Proj. file: sws2_10.stm



Storm Sewer Profile

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