الباب الخامس

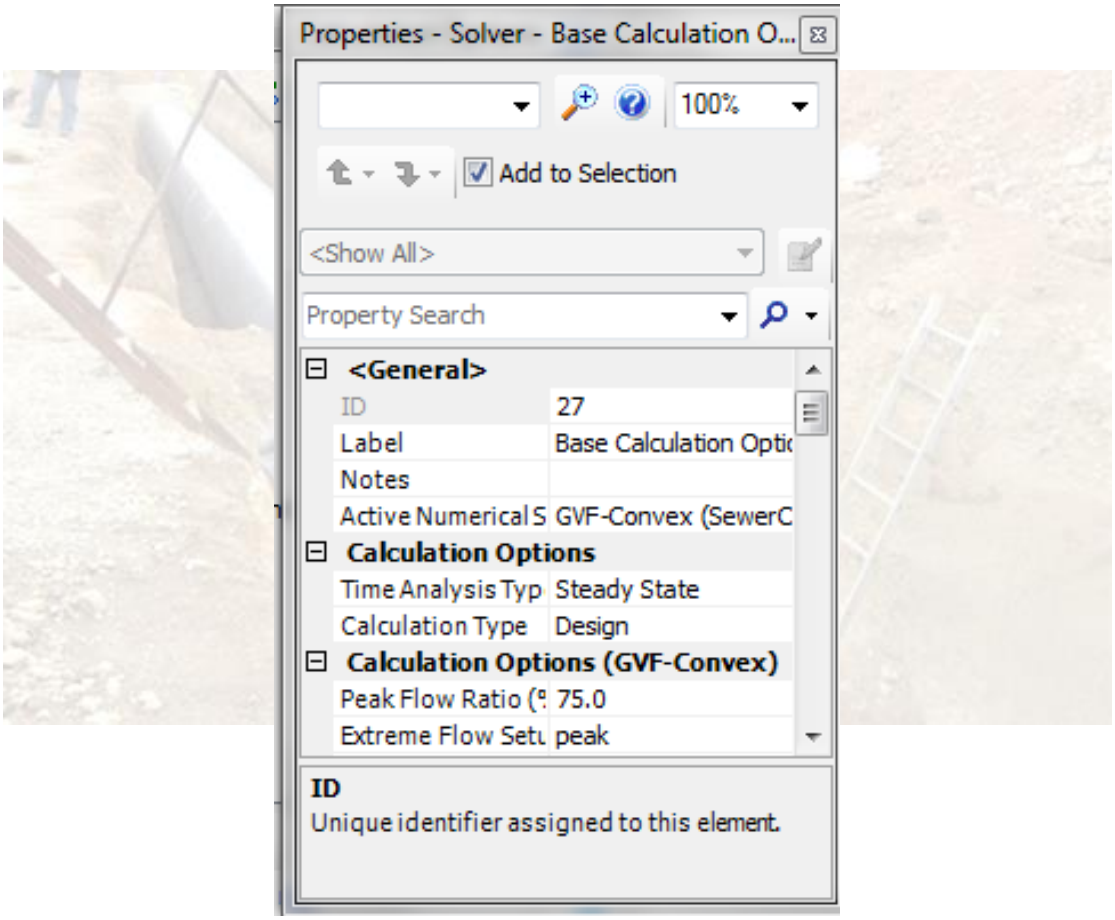
مشروع مياه الصرف الصحي لبعض احياء مدينة العاشر من رمضان

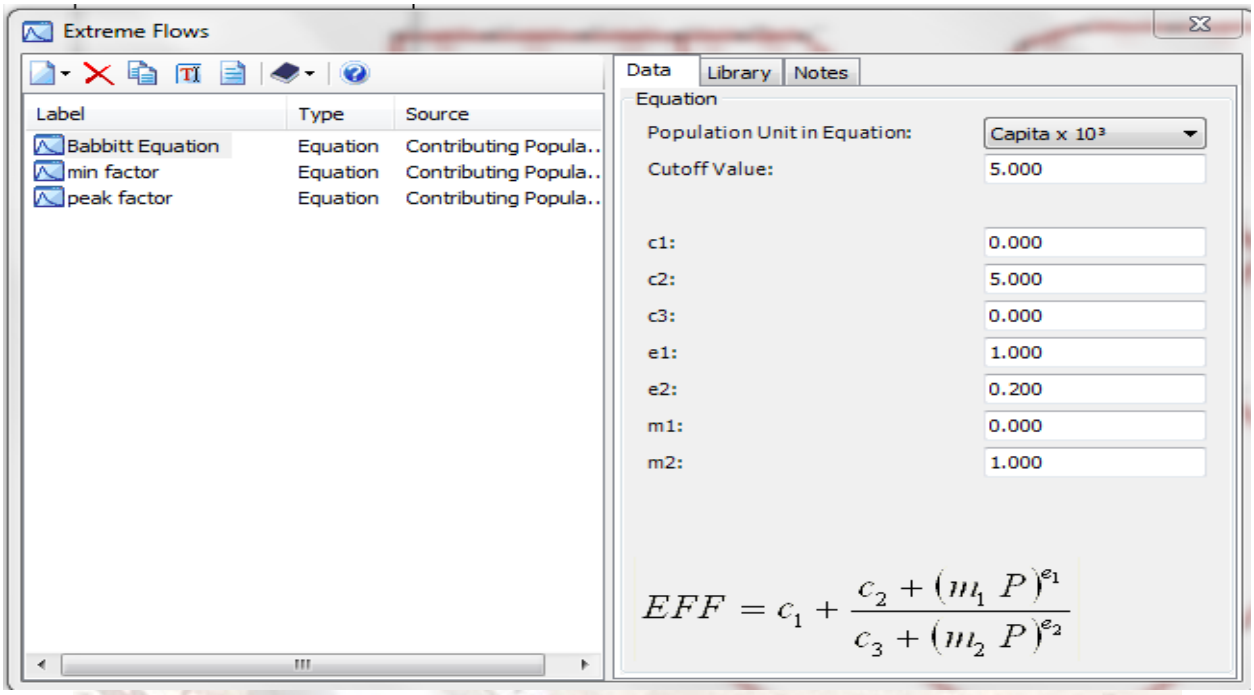
مشروع مياه الصرف الصحي لبعض احياء مدينة العاشر من رمضان

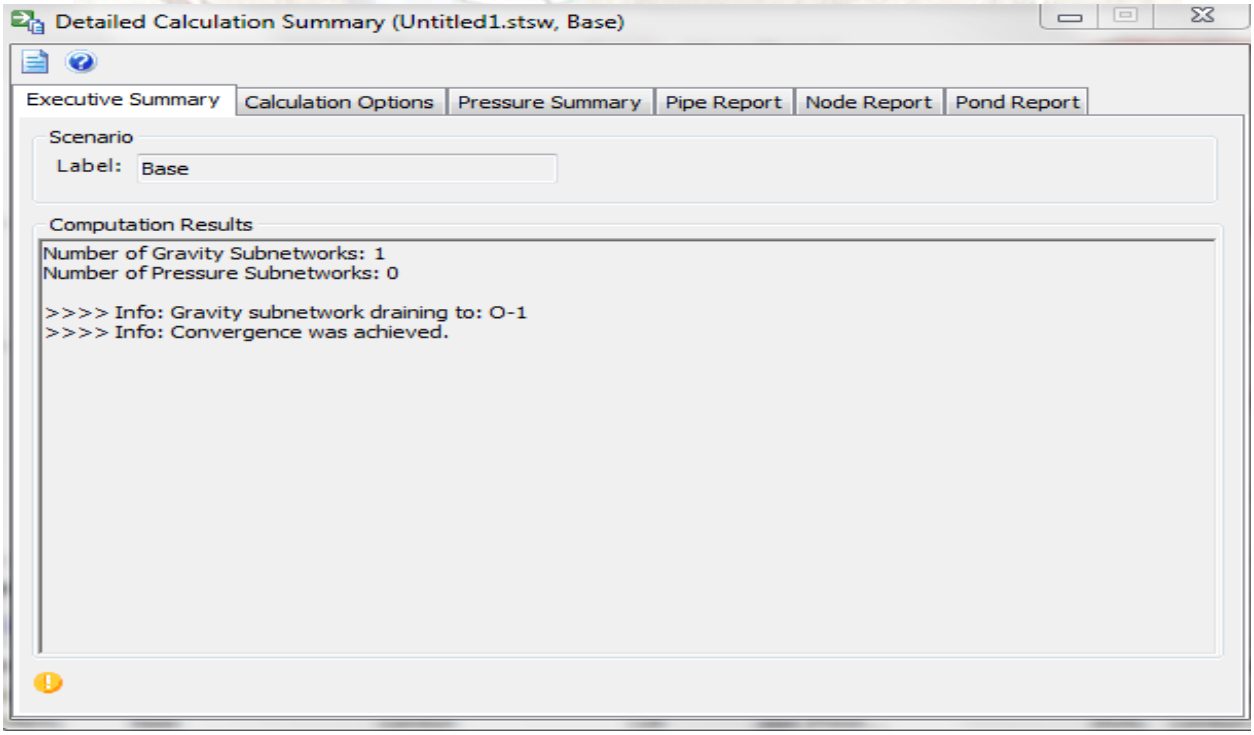
- سوف نستعرض هنا المشروع الفردي لكل طالب علي حي من الاحياء للتدريب علي العمل بواسطة البرنامج وتنمية المهارات لكل طالب.

الوحدة رقم ٣

اعداد الطالبة / سارة جمال محمد محمد




Extreme Flows
Label
Type
Source
Babbitt Equation
Equation
Contributing Popula..
min factor
Equation
Contributing Popula..
peak factor
Equation
Contributing Popula..
Data
Library
Notes
Equation
Population Unit in Equation:
Capita x 10³
Cutoff Value:
5.000
c1:
0.000
c2:
5.000
c3:
0.000
e1:
1.000
e2:
0.200
m1:
0.000
m2:
1.000
$EFF = c_1 + \frac{c_2 + (m_1 P)^{e_1}}{c_3 + (m_2 P)^{e_2}}$


Detailed Calculation Summary (Untitled1.stsw, Base)
Executive Summary
Calculation Options
Pressure Summary
Pipe Report
Node Report
Pond Report
Scenario
Label:
Base
Computation Results
Number of Gravity Subnetworks: 1
Number of Pressure Subnetworks: 0
>>>> Info: Gravity subnetwork draining to: O-1
>>>> Info: Convergence was achieved.

FlexTable: Conduit Table

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
171	pipe (Polyline)-30622	MH-83	False	80.80	MH-13
133	pipe (Polyline)-30549	MH-63	False	80.70	MH-45
46	pipe (Polyline)-30623	MH-13	False	80.66	MH-14
159	pipe (Polyline)-30628	MH-77	False	80.63	MH-78
191	pipe (Polyline)-30548	MH-90	False	80.60	MH-63
107	pipe (Polyline)-30624	MH-14	False	80.59	MH-25
136	pipe (Polyline)-30587	MH-64	False	80.56	MH-65
187	pipe (Polyline)-30627	MH-33	False	80.54	MH-77
65	pipe (Polyline)-30625	MH-25	False	80.53	MH-26
245	CO-4	MH-26	False	80.48	MH-51
78	pipe (Polyline)-30626	MH-12	False	80.47	MH-33
213	pipe (Polyline)-30586	MH-96	False	80.44	MH-64
43	pipe (Polyline)-30573	MH-11	False	80.41	MH-12
183	pipe (Polyline)-30572	MH-47	False	80.35	MH-11
209	pipe (Polyline)-30585	MH-10	False	80.34	MH-96
105	pipe (Polyline)-30571	MH-8	False	80.32	MH-47
37	pipe (Polyline)-30570	MH-7	False	80.29	MH-8
40	pipe (Polyline)-30584	MH-9	False	80.29	MH-10
61	pipe (Polyline)-30569	MH-23	False	80.26	MH-7
80	pipe (Polyline)-30568	MH-34	False	80.24	MH-23
95	pipe (Polyline)-30583	MH-27	False	80.23	MH-9
185	pipe (Polyline)-30567	MH-89	False	80.20	MH-34

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
68	pipe (Polyline)-30582	MH-22	False	80.16	MH-27
194	pipe (Polyline)-30566	MH-22	False	80.16	MH-89
58	pipe (Polyline)-30565	MH-21	False	80.14	MH-22
128	pipe (Polyline)-30564	MH-60	False	80.12	MH-21
208	pipe (Polyline)-30563	MH-94	False	80.09	MH-60
203	pipe (Polyline)-30562	MH-91	False	80.06	MH-94
195	pipe (Polyline)-30561	MH-4	False	80.03	MH-91
31	pipe (Polyline)-30560	MH-3	False	80.01	MH-4
91	pipe (Polyline)-30559	MH-40	False	79.99	MH-3
135	pipe (Polyline)-30558	MH-20	False	79.97	MH-40
55	pipe (Polyline)-30557	MH-19	False	79.95	MH-20
87	pipe (Polyline)-30556	MH-18	False	79.93	MH-19
52	pipe (Polyline)-30555	MH-17	False	79.91	MH-18
108	pipe (Polyline)-30554	MH-2	False	79.89	MH-17
28	pipe (Polyline)-30553	MH-1	False	79.88	MH-2
93	pipe (Polyline)-30552	MH-41	False	79.86	MH-1
197	pipe (Polyline)-30551	MH-46	False	79.84	MH-41
215	pipe (Polyline)-30588	MH-46	False	79.84	MH-67
141	pipe (Polyline)-30589	MH-67	False	79.81	MH-68
165	pipe (Polyline)-30590	MH-68	False	79.79	MH-74
153	pipe (Polyline)-30591	MH-74	False	79.77	MH-75
177	pipe (Polyline)-30592	MH-75	False	79.75	MH-86
198	pipe (Polyline)-30593	MH-86	False	79.73	MH-50

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
112	pipe (Polyline)-30594	MH-50	False	79.71	MH-51
207	pipe (Polyline)-30595	MH-51	False	79.69	MH-93
201	pipe (Polyline)-30596	MH-93	False	79.67	MH-85
214	pipe (Polyline)-30547	MH-36	False	78.80	MH-90
96	pipe (Polyline)-30614	MH-29	False	78.69	MH-42
85	pipe (Polyline)-30620	MH-16	False	78.68	MH-37
162	pipe (Polyline)-30581	MH-6	False	78.66	MH-79
82	pipe (Polyline)-30546	MH-35	False	78.64	MH-36
49	pipe (Polyline)-30619	MH-15	False	78.62	MH-16
70	pipe (Polyline)-30613	MH-28	False	78.60	MH-29
139	pipe (Polyline)-30545	MH-66	False	78.60	MH-35
34	pipe (Polyline)-30580	MH-5	False	78.60	MH-6
211	pipe (Polyline)-30544	MH-97	False	78.56	MH-66
76	pipe (Polyline)-30612	MH-32	False	78.55	MH-28
181	pipe (Polyline)-30618	MH-88	False	78.53	MH-15
63	pipe (Polyline)-30579	MH-24	False	78.53	MH-5
216	pipe (Polyline)-30543	MH-69	False	78.52	MH-97
144	pipe (Polyline)-30542	MH-49	False	78.49	MH-69
243	CO-2	MH-49	False	78.49	MH-102
244	CO-3	MH-102	False	78.46	MH-58
190	pipe (Polyline)-30617	MH-81	False	78.45	MH-88
188	pipe (Polyline)-30578	MH-53	False	78.45	MH-24
152	pipe (Polyline)-30539	MH-73	False	78.41	MH-58

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
115	pipe (Polyline)-30577	MH-52	False	78.39	MH-53
166	pipe (Polyline)-30616	MH-80	False	78.38	MH-81
184	pipe (Polyline)-30576	MH-87	False	78.32	MH-52
175	pipe (Polyline)-30615	MH-85	False	78.32	MH-80
193	pipe (Polyline)-30597	MH-85	False	78.32	MH-61
130	pipe (Polyline)-30598	MH-61	False	78.30	MH-62
179	pipe (Polyline)-30575	MH-82	False	78.26	MH-87
149	pipe (Polyline)-30538	MH-72	False	78.22	MH-73
169	pipe (Polyline)-30574	MH-72	False	78.22	MH-82
220	pipe (Polyline)-30601	MH-62	False	78.20	MH-95
199	pipe (Polyline)-30537	MH-92	False	78.19	MH-72
221	pipe (Polyline)-30536	MH-98	False	78.16	MH-92
218	pipe (Polyline)-30535	MH-71	False	78.13	MH-98
146	pipe (Polyline)-30534	MH-70	False	78.11	MH-71
222	pipe (Polyline)-30602	MH-95	False	78.10	MH-99
226	pipe (Polyline)-30603	MH-99	False	78.08	MH-43
229	pipe (Polyline)-30533	MH-101	False	78.08	MH-70
98	pipe (Polyline)-30604	MH-43	False	78.07	MH-44
101	pipe (Polyline)-30605	MH-44	False	78.06	MH-38
88	pipe (Polyline)-30606	MH-38	False	78.05	MH-39
227	pipe (Polyline)-30532	MH-100	False	78.05	MH-101
124	pipe (Polyline)-30607	MH-39	False	78.04	MH-32
224	pipe (Polyline)-30531	MH-57	False	78.02	MH-100

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
121	pipe (Polyline)-30530	MH-56	False	78.01	MH-57
230	pipe (Polyline)-30608	MH-32	False	78.00	MH-76
156	pipe (Polyline)-30609	MH-76	False	77.99	MH-30
73	pipe (Polyline)-30610	MH-30	False	77.98	MH-31
158	pipe (Polyline)-30611	MH-31	False	77.97	MH-55
164	pipe (Polyline)-30529	MH-55	False	77.90	MH-56
118	pipe (Polyline)-30528	MH-54	False	77.89	MH-55
173	pipe (Polyline)-30527	O-1	False	77.88	MH-54

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	80.66	False	30.0	4.818
False	80.80	False	20.0	4.939
False	80.59	False	20.0	3.250
False	80.80	False	30.0	5.562
False	80.70	False	30.0	3.250
False	80.53	False	20.0	2.800
False	80.80	False	20.0	11.757
False	80.63	False	30.0	3.250
False	80.48	False	20.0	2.800
False	80.44	False	12.0	2.800
False	80.54	False	20.0	3.250
False	80.56	False	30.0	4.173
False	80.47	False	20.0	2.800
False	80.41	False	30.0	2.200
False	80.44	False	30.0	3.250
False	80.35	False	20.0	1.400

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	80.32	False	20.0	1.400
False	80.34	False	20.0	2.800
False	80.29	False	20.0	1.400
False	80.26	False	20.0	1.400
False	80.29	False	20.0	2.800
False	80.24	False	30.0	1.200
False	80.23	False	20.0	3.277
False	80.20	False	30.0	1.200
False	80.16	False	20.0	1.200
False	80.14	False	19.7	1.000
False	80.12	False	30.3	1.000
False	80.09	False	30.0	1.000
False	80.06	False	30.0	1.000
False	80.03	False	20.0	1.000
False	80.01	False	20.0	1.000
False	79.99	False	19.6	1.000
False	79.97	False	20.0	1.000
False	79.95	False	20.0	1.000
False	79.93	False	20.0	1.000
False	79.91	False	20.0	1.000
False	79.89	False	20.0	0.800
False	79.88	False	20.0	0.800
False	79.86	False	30.0	0.800
False	79.81	False	30.5	0.800
False	79.79	False	20.0	0.800
False	79.77	False	30.0	0.800
False	79.75	False	20.0	0.800
False	79.73	False	30.0	0.800
False	79.71	False	30.0	0.800
False	79.69	False	20.0	0.800

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	79.67	False	30.0	0.800
False	79.64	False	30.0	0.800
False	79.16	False	30.0	12.000
False	78.75	False	20.0	2.800
False	78.80	False	20.0	5.877
False	78.80	False	30.3	4.586
False	78.70	False	20.0	2.800
False	78.68	False	20.0	3.250
False	78.69	False	20.0	4.700
False	78.64	False	20.0	2.200
False	78.66	False	20.0	3.250
False	78.60	False	30.0	1.400
False	78.60	False	20.4	2.456
False	78.62	False	30.0	2.800
False	78.60	False	20.0	3.250
False	78.56	False	30.0	1.400
False	78.52	False	20.0	1.400
False	78.46	False	21.2	1.400
False	78.43	False	18.7	1.400
False	78.53	False	30.4	2.800
False	78.53	False	30.2	2.800
False	78.43	False	20.0	1.200
False	78.45	False	20.0	2.800
False	78.45	False	30.0	2.200
False	78.39	False	30.0	2.200
False	78.38	False	30.0	2.200
False	78.30	False	30.0	0.600
False	78.20	False	20.0	4.914
False	78.32	False	30.0	2.200
False	78.41	False	20.0	9.577

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	78.26	False	30.0	1.400
False	78.10	False	30.0	3.333
False	78.22	False	30.6	1.000
False	78.19	False	30.0	1.000
False	78.16	False	30.0	1.000
False	78.13	False	20.0	1.000
False	78.08	False	30.0	0.600
False	78.07	False	30.2	0.500
False	78.11	False	30.0	1.000
False	78.06	False	20.0	0.500
False	78.05	False	20.0	0.500
False	78.04	False	20.0	0.500
False	78.08	False	30.0	1.000
False	78.00	False	20.6	1.788
False	78.05	False	29.8	0.800
False	78.02	False	20.0	0.800
False	77.99	False	29.6	0.500
False	77.98	False	19.5	0.500
False	77.97	False	20.0	0.500
False	77.90	False	23.6	2.778
False	78.01	False	30.0	3.537
False	77.90	False	20.0	0.500
False	77.89	False	30.0	0.500

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	200.0	0.013	482.45	0.60	0.09
Circle	200.0	0.013	468.94	0.60	0.09
Circle	200.0	0.013	979.59	0.62	0.13
Circle	200.0	0.013	404.55	0.60	0.11
Circle	200.0	0.013	963.80	0.62	0.10
Circle	250.0	0.013	1,564.63	0.66	0.15
Circle	200.0	0.013	162.71	0.60	0.09
Circle	200.0	0.013	962.79	0.62	0.18
Circle	250.0	0.013	1,967.56	0.70	0.15
Circle	250.0	0.010	2,138.24	0.87	0.13
Circle	200.0	0.013	1,384.07	0.51	0.20
Circle	200.0	0.013	583.49	0.60	0.17
Circle	250.0	0.013	2,376.88	0.56	0.25
Circle	300.0	0.013	3,037.84	0.71	0.28
Circle	200.0	0.013	1,101.07	0.41	0.20
Circle	400.0	0.013	3,614.11	0.63	0.31
Circle	400.0	0.013	4,417.04	0.66	0.33
Circle	250.0	0.013	1,547.81	0.36	0.25
Circle	400.0	0.013	5,487.95	0.69	0.34
Circle	400.0	0.013	6,006.54	0.70	0.35
Circle	250.0	0.013	1,980.78	0.47	0.25
Circle	500.0	0.013	6,636.34	0.69	0.36
Circle	250.0	0.013	2,230.05	0.53	0.25
Circle	500.0	0.013	7,393.35	0.71	0.38
Circle	500.0	0.013	10,279.64	0.75	0.40
Circle	600.0	0.013	10,734.11	0.73	0.40
Circle	600.0	0.013	11,186.89	0.74	0.41
Circle	600.0	0.013	11,860.35	0.74	0.42
Circle	600.0	0.013	12,483.58	0.75	0.43
Circle	600.0	0.013	12,988.07	0.76	0.44

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	600.0	0.013	13,558.99	0.76	0.44
Circle	600.0	0.013	13,913.20	0.77	0.45
Circle	600.0	0.013	14,342.43	0.77	0.45
Circle	600.0	0.013	14,943.43	0.78	0.45
Circle	700.0	0.013	15,367.44	0.80	0.46
Circle	700.0	0.013	15,865.39	0.80	0.46
Circle	700.0	0.013	16,239.63	0.74	0.47
Circle	700.0	0.013	16,449.48	0.74	0.47
Circle	700.0	0.013	16,847.65	0.75	0.48
Circle	700.0	0.013	17,344.61	0.75	0.48
Circle	700.0	0.013	17,740.10	0.75	0.48
Circle	700.0	0.013	18,106.92	0.76	0.49
Circle	700.0	0.013	18,607.64	0.76	0.49
Circle	700.0	0.013	19,540.37	0.77	0.49
Circle	700.0	0.013	20,349.61	0.77	0.48
Circle	700.0	0.013	20,938.70	0.77	0.47
Circle	700.0	0.013	23,497.79	0.77	0.46
Circle	700.0	0.013	24,110.68	0.77	0.39
Circle	200.0	0.013	1,819.27	1.19	0.12
Circle	250.0	0.013	2,437.77	0.73	0.17
Circle	200.0	0.013	374.63	0.60	0.19
Circle	200.0	0.013	518.84	0.60	0.15
Circle	300.0	0.013	2,492.46	0.75	0.20
Circle	200.0	0.013	1,033.29	0.38	0.20
Circle	300.0	0.013	3,191.95	0.96	0.17
Circle	300.0	0.013	3,088.83	0.71	0.22
Circle	200.0	0.013	948.02	0.35	0.20
Circle	400.0	0.013	3,703.30	0.63	0.23
Circle	400.0	0.013	3,781.14	0.79	0.16
Circle	250.0	0.013	1,575.43	0.37	0.25
Circle	200.0	0.013	1,284.22	0.47	0.20

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	400.0	0.013	4,404.86	0.66	0.24
Circle	400.0	0.013	4,864.26	0.68	0.24
Circle	400.0	0.010	5,228.54	0.84	0.24
Circle	400.0	0.010	5,650.83	0.86	0.24
Circle	250.0	0.013	2,289.28	0.54	0.25
Circle	250.0	0.013	1,763.60	0.42	0.25
Circle	500.0	0.013	6,155.81	0.68	0.24
Circle	250.0	0.013	2,464.13	0.58	0.25
Circle	300.0	0.013	2,890.29	0.47	0.30
Circle	300.0	0.013	2,935.87	0.48	0.30
Circle	300.0	0.013	3,378.84	0.55	0.30
Circle	800.0	0.013	28,049.98	0.73	0.44
Circle	800.0	0.013	28,745.57	1.69	0.46
Circle	300.0	0.013	3,470.05	0.57	0.30
Circle	500.0	0.013	6,489.49	1.48	0.33
Circle	400.0	0.013	3,951.48	0.36	0.40
Circle	800.0	0.013	29,671.43	1.48	0.56
Circle	600.0	0.013	10,833.60	0.73	0.44
Circle	600.0	0.013	11,339.45	0.74	0.45
Circle	600.0	0.013	11,811.76	0.74	0.47
Circle	600.0	0.013	13,166.55	0.76	0.48
Circle	900.0	0.013	30,543.41	0.77	0.60
Circle	900.0	0.013	31,519.92	0.72	0.60
Circle	600.0	0.013	14,190.39	0.77	0.49
Circle	900.0	0.013	32,429.50	0.72	0.59
Circle	900.0	0.013	33,153.63	0.72	0.58
Circle	900.0	0.013	33,451.17	0.72	0.58
Circle	700.0	0.013	15,439.63	0.80	0.50
Circle	900.0	0.013	34,220.70	1.21	0.58
Circle	700.0	0.013	16,723.10	0.74	0.51
Circle	700.0	0.013	17,580.78	0.75	0.52

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	1,000.0	0.013	38,265.59	0.76	0.59
Circle	1,000.0	0.013	38,711.32	0.76	0.58
Circle	1,000.0	0.013	39,340.42	0.77	0.57
Circle	1,000.0	0.013	39,637.68	1.48	0.59
Circle	700.0	0.013	18,049.00	1.33	0.57
Circle	1,100.0	0.013	57,986.43	0.83	0.61
Circle	1,100.0	0.013	60,001.27	0.83	0.53

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)	Notes	Material	Size
1,967.01	26.9	45.8		PVC	200
1,991.62	25.8	44.3		PVC	200
1,615.51	66.5	63.8		PVC	200
2,113.47	21.0	57.0		PVC	200
1,615.51	65.4	50.2		PVC	200
2,718.77	63.1	59.0		PVC	250
3,072.62	5.8	43.1		PVC	200
1,615.51	65.4	92.1		PVC	200
2,718.77	79.4	59.2		PVC	250
3,534.40	66.3	53.4		PVC	250
1,615.51	94.0	100.0		PVC	200
1,830.59	35.0	84.2		PVC	200
2,718.77	95.9	100.0		PVC	250
3,918.82	85.0	93.6		PVC	300
1,615.51	74.7	100.0		PVC	200
6,732.52	58.9	76.8		PVC	400
6,732.52	71.9	81.3		PVC	400
2,718.77	62.4	100.0		PVC	250
6,732.52	89.4	84.8		PVC	400
6,732.52	97.8	87.3		PVC	400

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)	Notes	Material	Size
2,718.77	79.9	100.0		PVC	250
11,301.37	64.4	72.8		PVC	500
2,941.18	83.1	100.0		PVC	250
11,301.37	71.7	77.0		PVC	500
11,301.37	99.7	79.3		PVC	500
16,776.08	70.2	67.0		PVC	600
16,776.08	73.1	68.6		PVC	600
16,776.08	77.5	70.3		PVC	600
16,776.08	81.6	71.9		PVC	600
16,776.08	84.9	73.1		PVC	600
16,776.08	88.6	73.8		PVC	600
16,776.08	90.9	74.5		PVC	600
16,776.08	93.8	75.0		PVC	600
16,776.08	97.7	75.3		PVC	600
25,305.51	57.0	65.3		PVC	700
25,305.51	58.8	66.4		PVC	700
22,633.94	67.3	67.2		PVC	700
22,633.94	68.2	67.7		PVC	700
22,633.94	69.8	68.2		PVC	700
22,633.94	71.9	68.7		PVC	700
22,633.94	73.5	69.1		PVC	700
22,633.94	75.1	69.3		PVC	700
22,633.94	77.1	69.5		PVC	700
22,633.94	81.0	69.3		PVC	700
22,633.94	84.4	68.7		PVC	700
22,633.94	86.8	67.8		PVC	700
22,633.94	97.4	65.3		PVC	700
22,633.94	99.9	55.1		PVC	700
3,104.26	64.3	58.7		PVC	200
2,718.77	98.3	67.9		PVC	250

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)	Notes	Material	Size
2,172.38	18.9	97.4		PVC	200
1,918.97	29.7	76.5		PVC	200
4,421.02	61.8	66.1		PVC	300
1,615.51	70.1	100.0		PVC	200
5,727.86	61.1	56.7		PVC	300
3,918.82	86.4	73.3		PVC	300
1,615.51	64.4	100.0		PVC	200
6,732.52	60.3	58.0		PVC	400
8,917.45	46.5	41.0		PVC	400
2,718.77	63.5	100.0		PVC	250
1,615.51	87.2	100.0		PVC	200
6,732.52	71.7	59.9		PVC	400
6,732.52	79.2	59.2		PVC	400
8,752.28	65.5	59.1		PVC	400
8,752.28	70.8	60.5		PVC	400
2,718.77	92.3	100.0		PVC	250
2,718.77	71.1	100.0		PVC	250
11,301.37	59.7	47.2		PVC	500
2,718.77	99.4	100.0		PVC	250
3,918.82	80.9	100.0		PVC	300
3,918.82	82.2	100.0		PVC	300
3,918.82	94.6	100.0		PVC	300
27,985.69	94.0	55.3		PVC	800
80,093.33	33.7	58.1		PVC	800
3,918.82	97.1	100.0		PVC	300
31,926.61	22.3	66.0		PVC	500
6,732.52	64.4	100.0		PVC	400
65,962.90	42.2	69.6		PVC	800
16,776.08	70.8	73.3		PVC	600
16,776.08	74.1	75.8		PVC	600

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)	Notes	Material	Size
16,776.08	77.2	78.3		PVC	600
16,776.08	86.1	80.2		PVC	600
38,312.70	74.8	66.5		PVC	900
34,974.55	84.6	66.1		PVC	900
16,776.08	92.8	81.6		PVC	600
34,974.55	87.0	65.5		PVC	900
34,974.55	88.9	64.8		PVC	900
34,974.55	89.7	63.9		PVC	900
25,305.51	57.2	71.8		PVC	700
66,138.38	48.5	64.8		PVC	900
22,633.94	69.3	73.5		PVC	700
22,633.94	72.9	74.4		PVC	700
46,320.37	77.5	58.9		PVC	1000
46,320.37	78.4	58.0		PVC	1000
46,320.37	79.7	57.0		PVC	1000
109,173.53	34.1	59.2		PVC	1000
47,589.49	35.6	81.6		PVC	700
59,724.51	91.1	55.2		PVC	1100
59,724.51	94.3	47.9		PVC	1100

Conduit Type	Catalog Class
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1

Conduit Type	Catalog Class
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1

Conduit Type	Catalog Class
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1

Conduit Type	Catalog Class
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1

Conduit Type	Catalog Class
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1
Catalog Conduit	Conduit Catalog - 1

FlexTable: Manhole Table

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
29	MH-1	82.00	True	82.00	False
30	MH-2	82.00	True	82.00	False
32	MH-3	82.00	True	82.00	False
33	MH-4	82.00	True	82.00	False
38	MH-7	82.00	True	82.00	False
39	MH-8	82.00	True	82.00	False
41	MH-9	82.00	True	82.00	False
42	MH-10	82.00	True	82.00	False
44	MH-11	82.00	True	82.00	False
45	MH-12	82.00	True	82.00	False
47	MH-13	82.00	True	82.00	False
48	MH-14	82.00	True	82.00	False
53	MH-17	82.00	True	82.00	False
54	MH-18	82.00	True	82.00	False
56	MH-19	82.00	True	82.00	False
57	MH-20	82.00	True	82.00	False
59	MH-21	82.00	True	82.00	False
60	MH-22	82.00	True	82.00	False
62	MH-23	82.00	True	82.00	False
66	MH-25	82.00	True	82.00	False
67	MH-26	82.00	True	82.00	False
69	MH-27	82.00	True	82.00	False
79	MH-33	82.00	True	82.00	False
81	MH-34	82.00	True	82.00	False
92	MH-40	82.00	True	82.00	False
94	MH-41	82.00	True	82.00	False
103	MH-45	82.00	True	82.00	False
104	MH-46	82.00	True	82.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
106	MH-47	82.00	True	82.00	False
113	MH-50	82.00	True	82.00	False
114	MH-51	82.00	True	82.00	False
129	MH-60	82.00	True	82.00	False
131	MH-61	82.00	True	82.00	False
134	MH-63	82.00	True	82.00	False
137	MH-64	82.00	True	82.00	False
138	MH-65	82.00	True	82.00	False
142	MH-67	82.00	True	82.00	False
143	MH-68	82.00	True	82.00	False
154	MH-74	82.00	True	82.00	False
155	MH-75	82.00	True	82.00	False
160	MH-77	82.00	True	82.00	False
161	MH-78	82.00	True	82.00	False
167	MH-80	82.00	True	82.00	False
172	MH-83	82.00	True	82.00	False
176	MH-85	82.00	True	82.00	False
178	MH-86	82.00	True	82.00	False
186	MH-89	82.00	True	82.00	False
192	MH-90	82.00	True	82.00	False
196	MH-91	82.00	True	82.00	False
202	MH-93	82.00	True	82.00	False
204	MH-94	82.00	True	82.00	False
210	MH-96	82.00	True	82.00	False
242	MH-102	80.00	True	80.00	False
35	MH-5	80.00	True	80.00	False
36	MH-6	80.00	True	80.00	False
50	MH-15	80.00	True	80.00	False
51	MH-16	80.00	True	80.00	False
64	MH-24	80.00	True	80.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
71	MH-28	80.00	True	80.00	False
72	MH-29	80.00	True	80.00	False
74	MH-30	80.00	True	80.00	False
75	MH-31	80.00	True	80.00	False
77	MH-32	80.00	True	80.00	False
83	MH-35	80.00	True	80.00	False
84	MH-36	80.00	True	80.00	False
86	MH-37	80.00	True	80.00	False
89	MH-38	80.00	True	80.00	False
90	MH-39	80.00	True	80.00	False
97	MH-42	80.00	True	80.00	False
99	MH-43	80.00	True	80.00	False
100	MH-44	80.00	True	80.00	False
111	MH-49	80.00	True	80.00	False
116	MH-52	80.00	True	80.00	False
117	MH-53	80.00	True	80.00	False
119	MH-54	80.00	True	80.00	False
120	MH-55	80.00	True	80.00	False
122	MH-56	80.00	True	80.00	False
123	MH-57	80.00	True	80.00	False
126	MH-58	80.00	True	80.00	False
132	MH-62	80.00	True	80.00	False
140	MH-66	80.00	True	80.00	False
145	MH-69	80.00	True	80.00	False
147	MH-70	80.00	True	80.00	False
148	MH-71	80.00	True	80.00	False
150	MH-72	80.00	True	80.00	False
151	MH-73	80.00	True	80.00	False
157	MH-76	80.00	True	80.00	False
163	MH-79	80.00	True	80.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
168	MH-81	80.00	True	80.00	False
170	MH-82	80.00	True	80.00	False
180	MH-87	80.00	True	80.00	False
182	MH-88	80.00	True	80.00	False
200	MH-92	80.00	True	80.00	False
206	MH-95	80.00	True	80.00	False
212	MH-97	80.00	True	80.00	False
219	MH-98	80.00	True	80.00	False
223	MH-99	80.00	True	80.00	False
225	MH-100	80.00	True	80.00	False
228	MH-101	80.00	True	80.00	False

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m^3/day)	Flow (Total Out) (m^3/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
79.88	<Collection: 0 items>	16,239.63	16,449.48	0.47	80.35
79.89	<Collection: 0 items>	15,865.39	16,239.63	0.47	80.36
80.01	<Collection: 0 items>	12,988.07	13,558.99	0.44	80.45
80.03	<Collection: 0 items>	12,483.58	12,988.07	0.44	80.47
80.29	<Collection: 0 items>	4,417.04	5,487.95	0.33	80.63
80.32	<Collection: 0 items>	3,614.11	4,417.04	0.32	80.64
80.29	<Collection: 0 items>	1,547.81	1,980.78	0.34	80.63
80.34	<Collection: 0 items>	1,101.07	1,547.81	0.30	80.65
80.41	<Collection: 0 items>	2,376.88	3,037.84	0.26	80.68
80.47	<Collection: 0 items>	1,384.07	2,376.88	0.25	80.72
80.66	<Collection: 0 items>	482.45	979.59	0.12	80.77

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
80.59	<Collection: 0 items>	979.59	1,564.63	0.14	80.73
79.91	<Collection: 0 items>	15,367.44	15,865.39	0.46	80.37
79.93	<Collection: 0 items>	14,943.43	15,367.44	0.45	80.38
79.95	<Collection: 0 items>	14,342.43	14,943.43	0.45	80.40
79.97	<Collection: 0 items>	13,913.20	14,342.43	0.45	80.42
80.14	<Collection: 0 items>	10,279.64	10,734.11	0.40	80.54
80.16	<Collection: 0 items>	9,623.40	10,279.64	0.39	80.56
80.26	<Collection: 0 items>	5,487.95	6,006.54	0.35	80.61
80.53	<Collection: 0 items>	1,564.63	1,967.56	0.16	80.69
80.48	<Collection: 0 items>	1,967.56	2,138.24	0.14	80.62
80.23	<Collection: 0 items>	1,980.78	2,230.05	0.37	80.60
80.54	<Collection: 0 items>	962.79	1,384.07	0.23	80.77
80.24	<Collection: 0 items>	6,006.54	6,636.34	0.35	80.59
79.99	<Collection: 0 items>	13,558.99	13,913.20	0.45	80.44
79.86	<Collection: 0 items>	16,449.48	16,847.65	0.48	80.33
80.80	<Collection: 0 items>	0.00	468.94	0.07	80.87
79.84	<Collection: 0 items>	16,847.65	17,344.61	0.48	80.31
80.35	<Collection: 0 items>	3,037.84	3,614.11	0.30	80.65
79.71	<Collection: 0 items>	20,349.61	20,938.70	0.48	80.18
79.69	<Collection: 0 items>	23,076.95	23,497.79	0.47	80.16
80.12	<Collection: 0 items>	10,734.11	11,186.89	0.41	80.53
78.30	<Collection: 0 items>	28,049.98	28,745.57	0.41	78.71
80.70	<Collection: 0 items>	468.94	963.80	0.11	80.81

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
80.56	<Collection: 0 items>	162.71	583.49	0.14	80.70
80.80	<Collection: 0 items>	0.00	162.71	0.04	80.84
79.81	<Collection: 0 items>	17,344.61	17,740.10	0.48	80.29
79.79	<Collection: 0 items>	17,740.10	18,106.92	0.48	80.28
79.77	<Collection: 0 items>	18,106.92	18,607.64	0.49	80.26
79.75	<Collection: 0 items>	18,607.64	19,540.37	0.49	80.24
80.63	<Collection: 0 items>	404.55	962.79	0.17	80.80
80.80	<Collection: 0 items>	0.00	404.55	0.06	80.86
78.38	<Collection: 0 items>	2,890.29	3,378.84	0.45	78.84
80.80	<Collection: 0 items>	0.00	482.45	0.07	80.87
78.32	<Collection: 0 items>	27,489.52	28,049.98	0.47	78.79
79.73	<Collection: 0 items>	19,540.37	20,349.61	0.48	80.21
80.20	<Collection: 0 items>	6,636.34	7,393.35	0.37	80.58
79.16	<Collection: 0 items>	963.80	1,819.27	0.12	79.28
80.06	<Collection: 0 items>	11,860.35	12,483.58	0.43	80.49
79.67	<Collection: 0 items>	23,497.79	24,110.68	0.44	80.11
80.09	<Collection: 0 items>	11,186.89	11,860.35	0.42	80.51
80.44	<Collection: 0 items>	583.49	1,101.07	0.25	80.69
78.46	<Collection: 0 items>	5,228.54	5,650.83	0.24	78.70
78.60	<Collection: 0 items>	948.02	1,284.22	0.28	78.87
78.66	<Collection: 0 items>	518.84	948.02	0.24	78.90
78.62	<Collection: 0 items>	1,033.29	1,575.43	0.34	78.96
78.68	<Collection: 0 items>	374.63	1,033.29	0.30	78.99

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
78.53	<Collection: 0 items>	1,284.22	1,763.60	0.30	78.83
78.60	<Collection: 0 items>	3,191.95	3,781.14	0.18	78.78
78.69	<Collection: 0 items>	2,437.77	3,191.95	0.16	78.85
77.98	<Collection: 0 items>	38,711.32	39,340.42	0.58	78.55
77.97	<Collection: 0 items>	39,340.42	39,637.68	0.56	78.53
78.00	<Collection: 0 items>	38,001.84	38,265.59	0.59	78.59
78.64	<Collection: 0 items>	2,492.46	3,088.83	0.21	78.86
78.70	<Collection: 0 items>	1,819.27	2,492.46	0.18	78.88
78.80	<Collection: 0 items>	0.00	374.63	0.19	78.99
78.05	<Collection: 0 items>	33,153.63	33,451.17	0.58	78.63
78.04	<Collection: 0 items>	33,451.17	34,220.70	0.57	78.61
78.75	<Collection: 0 items>	0.00	2,437.77	0.18	78.93
78.07	<Collection: 0 items>	31,519.92	32,429.50	0.59	78.66
78.06	<Collection: 0 items>	32,429.50	33,153.63	0.59	78.64
78.49	<Collection: 0 items>	4,864.26	5,228.54	0.23	78.72
78.39	<Collection: 0 items>	2,464.13	2,935.87	0.36	78.75
78.45	<Collection: 0 items>	1,763.60	2,464.13	0.35	78.80
77.89	<Collection: 0 items>	57,986.43	60,001.27	0.59	78.48
77.90	<Collection: 0 items>	57,686.68	57,986.43	0.62	78.52
78.01	<Collection: 0 items>	17,580.78	18,049.00	0.52	78.53
78.02	<Collection: 0 items>	16,723.10	17,580.78	0.52	78.54
78.43	<Collection: 0 items>	5,650.83	6,155.81	0.24	78.68
78.20	<Collection: 0 items>	28,745.57	29,671.43	0.51	78.71

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
78.60	<Collection: 0 items>	3,088.83	3,703.30	0.23	78.83
78.52	<Collection: 0 items>	4,404.86	4,864.26	0.24	78.76
78.11	<Collection: 0 items>	13,166.55	14,190.39	0.48	78.59
78.13	<Collection: 0 items>	11,811.76	13,166.55	0.48	78.60
78.22	<Collection: 0 items>	10,440.97	10,833.60	0.43	78.65
78.41	<Collection: 0 items>	6,155.81	6,489.49	0.23	78.64
77.99	<Collection: 0 items>	38,265.59	38,711.32	0.58	78.57
78.80	<Collection: 0 items>	0.00	518.84	0.11	78.91
78.45	<Collection: 0 items>	2,289.28	2,890.29	0.42	78.87
78.26	<Collection: 0 items>	3,470.05	3,951.48	0.40	78.66
78.32	<Collection: 0 items>	2,935.87	3,470.05	0.39	78.71
78.53	<Collection: 0 items>	1,575.43	2,289.28	0.40	78.93
78.19	<Collection: 0 items>	10,833.60	11,339.45	0.45	78.63
78.10	<Collection: 0 items>	29,671.43	30,543.41	0.60	78.70
78.56	<Collection: 0 items>	3,703.30	4,404.86	0.24	78.80
78.16	<Collection: 0 items>	11,339.45	11,811.76	0.46	78.62
78.08	<Collection: 0 items>	30,543.41	31,519.92	0.60	78.68
78.05	<Collection: 0 items>	15,439.63	16,723.10	0.51	78.56
78.08	<Collection: 0 items>	14,190.39	15,439.63	0.49	78.57

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.35	False	False	<Collection: 1 items>
Absolute	80.36	False	False	<Collection: 1 items>
Absolute	80.45	False	False	<Collection: 1 items>
Absolute	80.47	False	False	<Collection: 1 items>
Absolute	80.63	False	False	<Collection: 1 items>
Absolute	80.64	False	False	<Collection: 1 items>
Absolute	80.63	False	False	<Collection: 1 items>
Absolute	80.65	False	False	<Collection: 1 items>
Absolute	80.68	False	False	<Collection: 1 items>
Absolute	80.72	False	False	<Collection: 1 items>
Absolute	80.77	False	False	<Collection: 1 items>
Absolute	80.73	False	False	<Collection: 1 items>
Absolute	80.37	False	False	<Collection: 1 items>
Absolute	80.38	False	False	<Collection: 1 items>
Absolute	80.40	False	False	<Collection: 1 items>
Absolute	80.42	False	False	<Collection: 1 items>
Absolute	80.54	False	False	<Collection: 1 items>
Absolute	80.56	False	False	<Collection: 1 items>
Absolute	80.61	False	False	<Collection: 1 items>
Absolute	80.69	False	False	<Collection: 1 items>
Absolute	80.62	False	False	<Collection: 1 items>
Absolute	80.60	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.77	False	False	<Collection: 1 items>
Absolute	80.59	False	False	<Collection: 1 items>
Absolute	80.44	False	False	<Collection: 1 items>
Absolute	80.33	False	False	<Collection: 1 items>
Absolute	80.87	False	False	<Collection: 1 items>
Absolute	80.31	False	False	<Collection: 1 items>
Absolute	80.65	False	False	<Collection: 1 items>
Absolute	80.18	False	False	<Collection: 1 items>
Absolute	80.16	False	False	<Collection: 1 items>
Absolute	80.53	False	False	<Collection: 1 items>
Absolute	78.71	False	False	<Collection: 1 items>
Absolute	80.81	False	False	<Collection: 1 items>
Absolute	80.70	False	False	<Collection: 1 items>
Absolute	80.84	False	False	<Collection: 1 items>
Absolute	80.29	False	False	<Collection: 1 items>
Absolute	80.28	False	False	<Collection: 1 items>
Absolute	80.26	False	False	<Collection: 1 items>
Absolute	80.24	False	False	<Collection: 1 items>
Absolute	80.80	False	False	<Collection: 1 items>
Absolute	80.86	False	False	<Collection: 1 items>
Absolute	78.84	False	False	<Collection: 1 items>
Absolute	80.87	False	False	<Collection: 1 items>
Absolute	78.79	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.21	False	False	<Collection: 1 items>
Absolute	80.58	False	False	<Collection: 1 items>
Absolute	79.28	False	False	<Collection: 1 items>
Absolute	80.49	False	False	<Collection: 1 items>
Absolute	80.11	False	False	<Collection: 1 items>
Absolute	80.51	False	False	<Collection: 1 items>
Absolute	80.69	False	False	<Collection: 1 items>
Absolute	78.70	False	False	<Collection: 1 items>
Absolute	78.87	False	False	<Collection: 1 items>
Absolute	78.90	False	False	<Collection: 1 items>
Absolute	78.96	False	False	<Collection: 1 items>
Absolute	78.99	False	False	<Collection: 1 items>
Absolute	78.83	False	False	<Collection: 1 items>
Absolute	78.78	False	False	<Collection: 1 items>
Absolute	78.85	False	False	<Collection: 1 items>
Absolute	78.55	False	False	<Collection: 1 items>
Absolute	78.53	False	False	<Collection: 1 items>
Absolute	78.59	False	False	<Collection: 1 items>
Absolute	78.86	False	False	<Collection: 1 items>
Absolute	78.88	False	False	<Collection: 1 items>
Absolute	78.99	False	False	<Collection: 1 items>
Absolute	78.63	False	False	<Collection: 1 items>
Absolute	78.61	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	78.93	False	False	<Collection: 1 items>
Absolute	78.66	False	False	<Collection: 1 items>
Absolute	78.64	False	False	<Collection: 1 items>
Absolute	78.72	False	False	<Collection: 1 items>
Absolute	78.75	False	False	<Collection: 1 items>
Absolute	78.80	False	False	<Collection: 1 items>
Absolute	78.48	False	False	<Collection: 1 items>
Absolute	78.52	False	False	<Collection: 1 items>
Absolute	78.53	False	False	<Collection: 1 items>
Absolute	78.54	False	False	<Collection: 1 items>
Absolute	78.68	False	False	<Collection: 1 items>
Absolute	78.71	False	False	<Collection: 1 items>
Absolute	78.83	False	False	<Collection: 1 items>
Absolute	78.76	False	False	<Collection: 1 items>
Absolute	78.59	False	False	<Collection: 1 items>
Absolute	78.60	False	False	<Collection: 1 items>
Absolute	78.65	False	False	<Collection: 1 items>
Absolute	78.64	False	False	<Collection: 1 items>
Absolute	78.57	False	False	<Collection: 1 items>
Absolute	78.91	False	False	<Collection: 1 items>
Absolute	78.87	False	False	<Collection: 1 items>
Absolute	78.66	False	False	<Collection: 1 items>
Absolute	78.71	False	False	<Collection: 1 items>

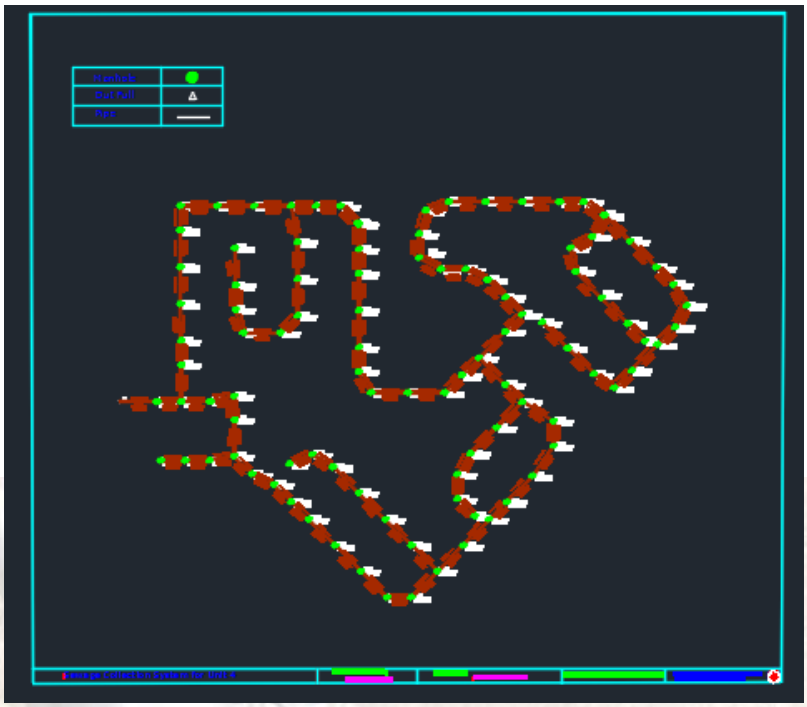
Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	78.93	False	False	<Collection: 1 items>
Absolute	78.63	False	False	<Collection: 1 items>
Absolute	78.70	False	False	<Collection: 1 items>
Absolute	78.80	False	False	<Collection: 1 items>
Absolute	78.62	False	False	<Collection: 1 items>
Absolute	78.68	False	False	<Collection: 1 items>
Absolute	78.56	False	False	<Collection: 1 items>
Absolute	78.57	False	False	<Collection: 1 items>

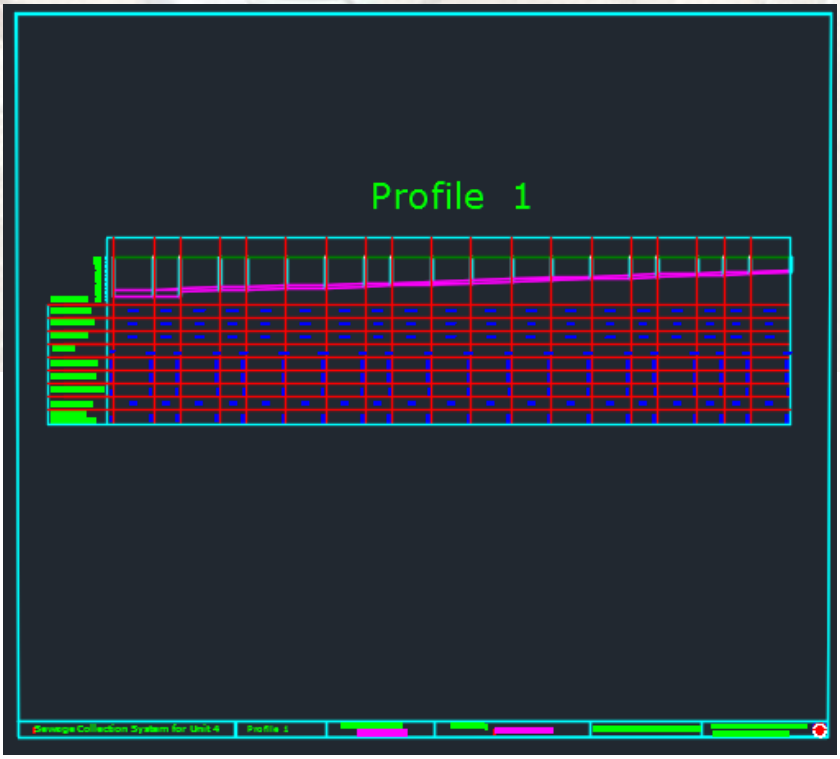
Diameter (mm)	Volume (L)	Velocity (In) (m/s)	Velocity (Out) (m/s)	Depth (Structure) (m)
1,200.0	135.6	0.69	0.69	2.12
1,200.0	134.7	0.69	0.69	2.11
1,200.0	126.7	0.70	0.70	1.99
1,200.0	125.2	0.68	0.68	1.97
1,200.0	95.9	0.57	0.57	1.71
1,200.0	91.0	0.48	0.48	1.68
1,200.0	97.9	0.47	0.47	1.71
1,200.0	87.0	0.36	0.36	1.66
1,200.0	76.0	0.53	0.53	1.59
1,200.0	72.2	0.56	0.56	1.53
1,200.0	33.2	0.60	0.60	1.34
1,200.0	40.1	0.64	0.64	1.41
1,200.0	132.4	0.68	0.68	2.09
1,200.0	130.1	0.68	0.68	2.07
1,200.0	129.7	0.76	0.76	2.05
1,200.0	128.9	0.73	0.73	2.03

Diameter (mm)	Volume (L)	Velocity (In) (m/s)	Velocity (Out) (m/s)	Depth (Structure) (m)
1,200.0	114.4	0.62	0.62	1.86
1,200.0	113.5	0.72	0.72	1.84
1,200.0	99.1	0.60	0.60	1.74
1,200.0	44.7	0.71	0.71	1.47
1,200.0	40.3	0.87	0.87	1.52
1,200.0	105.4	0.53	0.53	1.77
1,200.0	67.3	0.51	0.51	1.46
1,200.0	101.5	0.52	0.52	1.76
1,200.0	127.9	0.72	0.72	2.01
1,200.0	136.5	0.70	0.70	2.14
1,200.0	19.0	0.60	0.60	1.20
1,200.0	137.7	0.71	0.71	2.16
1,200.0	85.4	0.42	0.42	1.65
1,200.0	137.3	0.87	0.87	2.29
1,200.0	135.5	0.99	0.99	2.31
1,200.0	116.6	0.64	0.64	1.88
1,200.0	119.2	1.26	1.26	3.70
1,200.0	32.0	0.62	0.62	1.30
1,200.0	39.3	0.30	0.30	1.44
1,200.0	10.3	0.49	0.49	1.20
1,200.0	138.7	0.73	0.73	2.19
1,200.0	139.2	0.74	0.74	2.21
1,200.0	139.7	0.75	0.75	2.23
1,200.0	139.8	0.79	0.79	2.25
1,200.0	48.4	0.39	0.39	1.37
1,200.0	17.0	0.60	0.60	1.20
1,200.0	130.1	0.55	0.55	3.62
1,200.0	19.4	0.60	0.60	1.20
1,200.0	135.0	1.06	1.06	3.68
1,200.0	139.0	0.83	0.83	2.27
1,200.0	107.7	0.54	0.54	1.80

Diameter (mm)	Volume (L)	Velocity (In) (m/s)	Velocity (Out) (m/s)	Depth (Structure) (m)
1,200.0	35.9	1.02	1.02	2.84
1,200.0	122.6	0.67	0.67	1.94
1,200.0	127.3	1.09	1.09	2.33
1,200.0	119.8	0.65	0.65	1.91
1,200.0	72.0	0.41	0.41	1.56
914.4	52.5	0.83	0.83	1.54
1,200.0	80.0	0.47	0.47	1.40
1,200.0	67.7	0.35	0.35	1.34
1,200.0	98.3	0.37	0.37	1.38
1,200.0	87.3	0.38	0.38	1.32
1,200.0	86.8	0.42	0.42	1.47
1,200.0	51.7	0.80	0.80	1.40
1,200.0	46.0	0.96	0.96	1.31
1,200.0	165.2	0.97	0.97	2.02
1,200.0	162.0	1.01	1.01	2.03
1,200.0	170.8	0.91	0.91	2.00
1,200.0	61.5	0.66	0.66	1.36
1,200.0	52.4	0.64	0.64	1.30
1,200.0	54.5	0.14	0.14	1.20
1,200.0	166.5	0.89	0.89	1.95
1,200.0	164.1	0.93	0.93	1.96
1,200.0	51.5	0.75	0.75	1.25
1,200.0	170.0	0.85	0.85	1.93
1,200.0	168.5	0.87	0.87	1.94
1,200.0	66.8	0.80	0.80	1.51
1,200.0	103.7	0.48	0.48	1.61
1,200.0	100.9	0.58	0.58	1.55
1,200.0	170.7	1.33	1.33	2.11
1,200.0	178.0	1.22	1.22	2.10
1,200.0	150.3	0.68	0.68	1.99
1,200.0	149.0	0.67	0.67	1.98

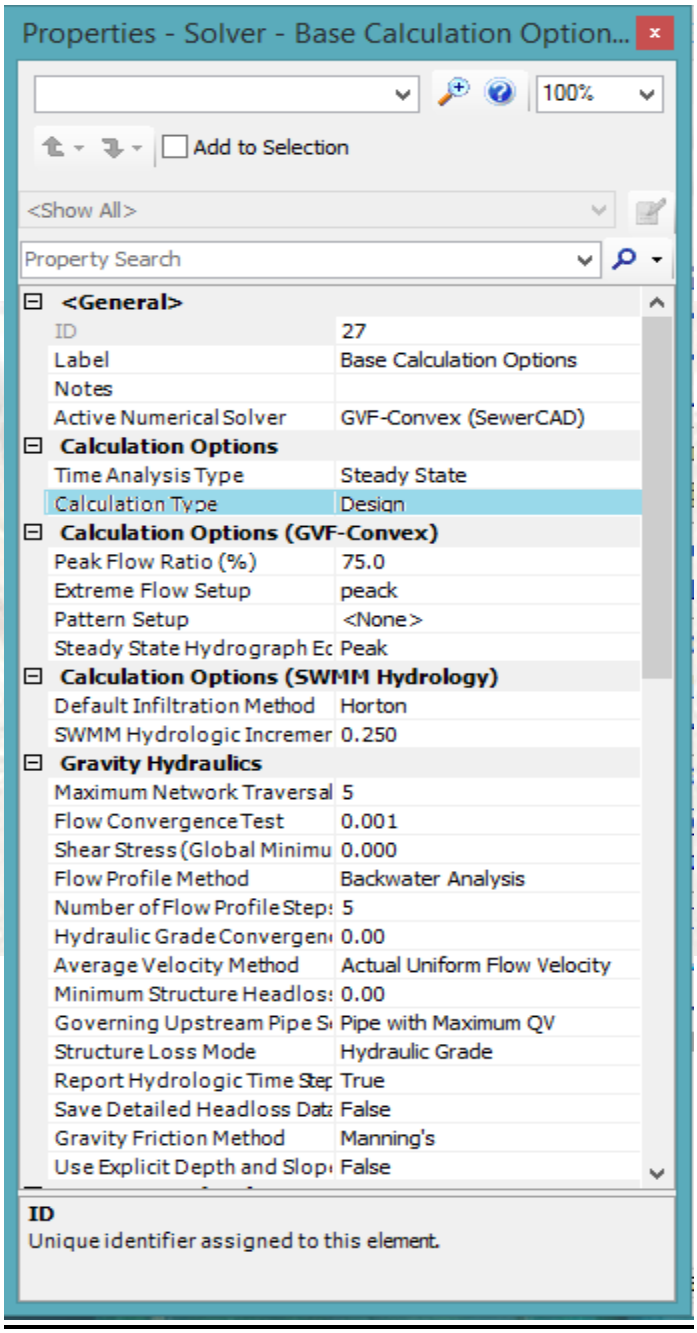
Diameter (mm)	Volume (L)	Velocity (In) (m/s)	Velocity (Out) (m/s)	Depth (Structure) (m)
1,200.0	70.1	0.75	0.75	1.57
1,200.0	147.7	1.01	1.01	1.80
1,200.0	64.8	0.59	0.59	1.40
1,200.0	69.1	0.71	0.71	1.48
1,200.0	139.3	0.67	0.67	1.89
1,200.0	137.1	0.63	0.63	1.87
1,200.0	124.1	0.58	0.58	1.78
1,200.0	65.6	0.86	0.86	1.59
1,200.0	167.7	0.94	0.94	2.01
1,200.0	30.4	0.36	0.36	1.20
1,200.0	121.5	0.47	0.47	1.55
1,200.0	116.2	0.36	0.36	1.74
1,200.0	112.1	0.57	0.57	1.68
1,200.0	114.4	0.54	0.54	1.47
1,200.0	128.5	0.58	0.58	1.81
1,200.0	172.1	0.79	0.79	1.90
1,200.0	68.4	0.65	0.65	1.44
1,200.0	132.8	0.58	0.58	1.84
1,200.0	171.8	0.81	0.81	1.92
1,200.0	146.6	0.64	0.64	1.95
1,200.0	141.9	0.62	0.62	1.92

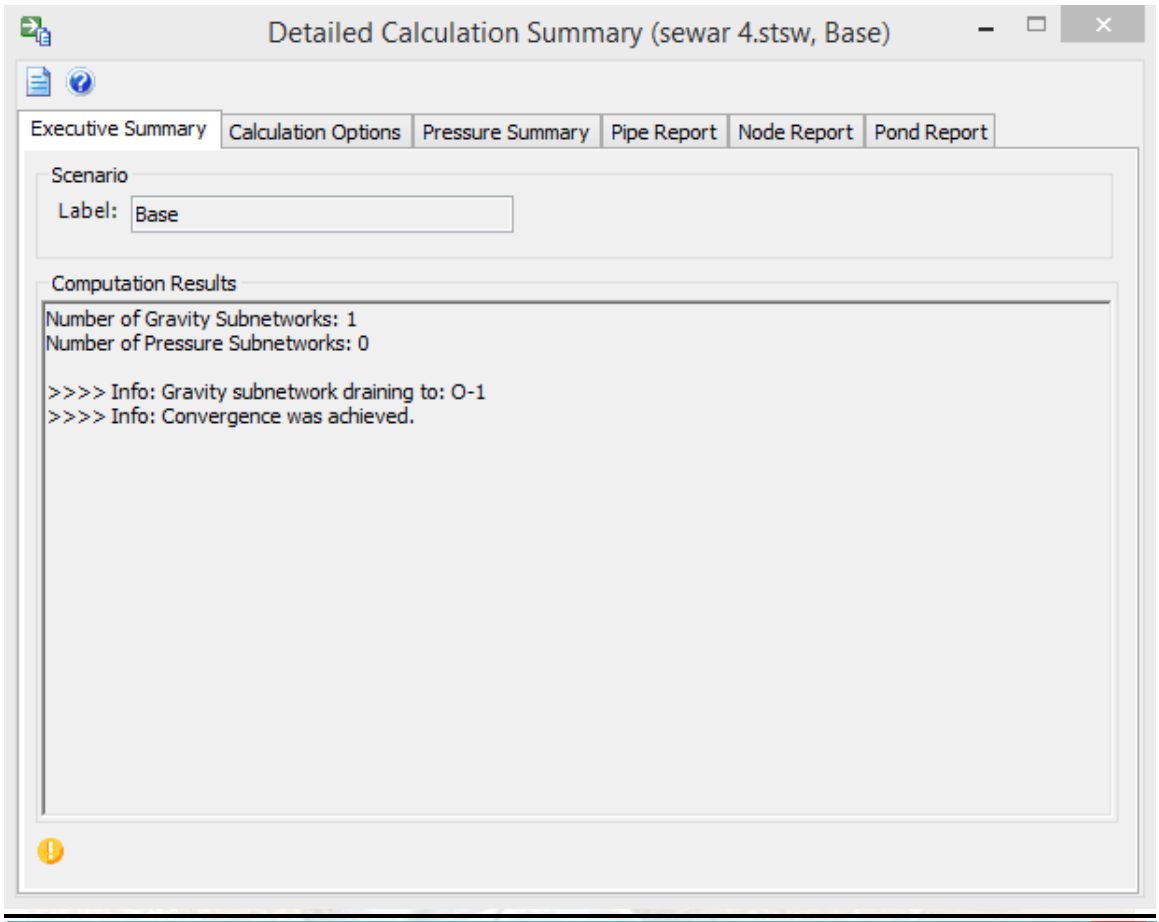


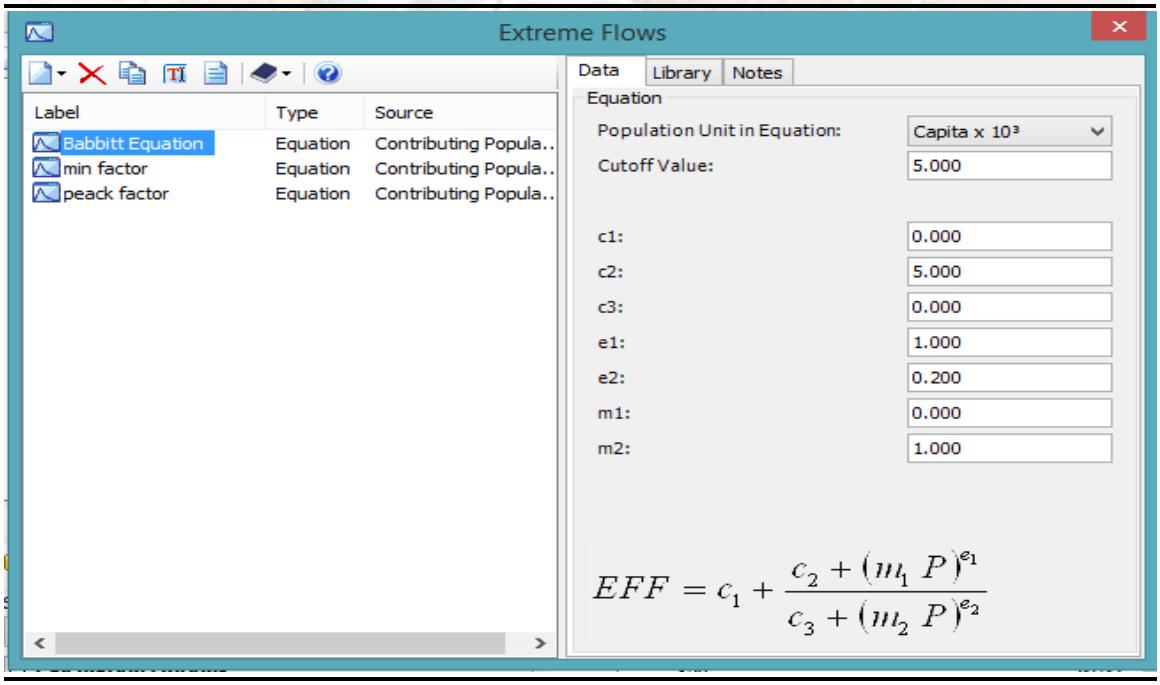

Profile 1

الوحده رقم ٤

اعداد الطالبه / شروق فتحي محمد




Detailed Calculation Summary (sewar 4.stsw, Base)
Executive Summary
Calculation Options
Pressure Summary
Pipe Report
Node Report
Pond Report
Scenario
Label: Base
Computation Results
Number of Gravity Subnetworks: 1
Number of Pressure Subnetworks: 0
>>>> Info: Gravity subnetwork draining to: O-1
>>>> Info: Convergence was achieved.


Extreme Flows
Label
Type
Source
Babbitt Equation
Equation
Contributing Popula..
min factor
Equation
Contributing Popula..
peack factor
Equation
Contributing Popula..
Data
Library
Notes
Equation
Population Unit in Equation:
Capita x 10³
Cutoff Value:
5.000
c1:
0.000
c2:
5.000
c3:
0.000
e1:
1.000
e2:
0.200
m1:
0.000
m2:
1.000
$EFF = c_1 + \frac{c_2 + (m_1 P)^{e_1}}{c_3 + (m_2 P)^{e_2}}$

Flex Table: Conduit Table

ID	Label	Diameter (mm)	Length (Scaled) (m)	Material	Design Percent Full (%)	Slope (Calculated) (m/km)	Manning's n	Velocity (m/s)
40	Pipe.B.10	700.0	15.0	Vitrified Clay	100.0	0.800	0.013	0.77
43	Pipe.A.10.5	200.0	15.0	Vitrified Clay	100.0	3.250	0.013	0.57
46	Pipe.B.22	500.0	15.0	Vitrified Clay	100.0	1.200	0.013	0.74
49	Pipe.B.29	500.0	20.0	Vitrified Clay	100.0	1.200	0.013	0.69
52	Pipe.B.33	400.0	20.0	Vitrified Clay	100.0	1.400	0.013	0.68
55	Pipe.B.19.2	200.0	20.0	Vitrified Clay	100.0	3.250	0.013	0.57
58	Pipe.A.12	400.0	20.0	Vitrified Clay	100.0	1.400	0.013	0.69
61	Pipe.A.1	600.0	20.0	Vitrified Clay	100.0	1.000	0.013	0.75
64	Pipe.B.37	300.0	20.0	Vitrified Clay	100.0	2.200	0.013	0.70
67	Pipe.B.4	700.0	20.0	Vitrified Clay	100.0	0.800	0.013	0.78
70	Pipe.B.12	700.0	20.0	Vitrified Clay	100.0	0.800	0.013	0.75
73	Pipe.A.4.4	200.0	20.0	Vitrified Clay	100.0	3.250	0.013	0.57
76	Pipe.B.6	700.0	20.0	Vitrified Clay	100.0	0.800	0.013	0.77
79	Pipe.B.20	600.0	20.0	Vitrified Clay	100.0	1.000	0.013	0.75
82	Pipe.B.14	600.0	20.0	Vitrified Clay	100.0	1.000	0.013	0.78
84	Pipe.B.39	200.0	20.0	Vitrified Clay	100.0	3.250	0.013	0.67
87	Pipe.B.21.2	400.0	20.0	Vitrified Clay	100.0	1.400	0.013	0.65
90	Pipe.A.13.3	200.0	20.0	Vitrified Clay	100.0	3.250	0.013	0.57
93	Pipe.A.4	500.0	20.0	Vitrified Clay	75.0	5.250	0.013	1.37
96	pipe-1	900.0	20.0	Vitrified Clay	100.0	0.600	0.013	0.78
98	Pipe.B.1	700.0	19.9	Vitrified Clay	100.0	0.800	0.013	0.78
99	Pipe.B.21	600.0	25.0	Vitrified Clay	100.0	1.000	0.013	0.75
100	Pipe.B.35	400.0	25.0	Vitrified Clay	100.0	1.400	0.013	0.66
103	Pipe.A.3	600.0	25.0	Vitrified Clay	100.0	1.000	0.013	0.74
105	Pipe.B.16	600.0	25.0	Vitrified Clay	100.0	1.000	0.013	0.77
108	Pipe.B.9	700.0	25.0	Vitrified Clay	100.0	0.800	0.013	0.77
109	Pipe.A.10	500.0	25.0	Vitrified Clay	100.0	1.200	0.013	0.72
112	Pipe.B.21.2.4	200.0	25.0	Vitrified Clay	100.0	3.250	0.013	0.57
115	Pipe.B.40	200.0	25.0	Vitrified Clay	100.0	3.250	0.013	0.57
117	Pipe.B.19.1	200.0	25.0	Vitrified Clay	100.0	3.250	0.013	0.67
118	Pipe.B.3	700.0	25.0	Vitrified Clay	100.0	0.800	0.013	0.78
120	Pipe.B.23	500.0	25.0	Vitrified Clay	100.0	1.200	0.013	0.73
122	Pipe.B.10.6	250.0	25.0	Vitrified Clay	100.0	2.800	0.013	0.72
125	Pipe.B.10.4	200.0	25.0	Vitrified Clay	100.0	3.250	0.013	0.57
128	Pipe.B.15	600.0	27.7	Vitrified Clay	100.0	1.000	0.013	0.77
129	Pipe.B.12.3	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.57

ID	Label	Diameter (mm)	Length (Scaled) (m)	Material	Design Percent Full (%)	Slope (Calculated) (m/km)	Manning's n	Velocity (m/s)
132	Pipe.A.9	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.73
134	pipe-81	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
137	Pipe.B.12.1	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
139	Pipe.B.26	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.72
142	Pipe.A.10.3	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
144	Pipe.A.19	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.57
147	Pipe.A.13.1	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
150	Pipe.A.16	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.72
153	Pipe.A.17	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
155	Pipe.B.18	600.0	30.0	Vitrified Clay	100.0	1.000	0.013	0.77
158	Pipe.B.34	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.67
159	Pipe.B.38	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.72
160	Pipe.B.21.1	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.66
161	Pipe.B.2	700.0	29.9	Vitrified Clay	100.0	0.800	0.013	0.78
162	Pipe.B.21.3	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
164	Pipe.B.7	700.0	30.0	Vitrified Clay	100.0	0.800	0.013	0.77
166	Pipe.B.21.2.2	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
169	Pipe.B.21.2.3	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
170	Pipe.B.10.1	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
172	Pipe.A.4.1	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.72
174	Pipe.B.27	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.71
176	Pipe.A.5	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.75
178	Pipe.A.13	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.68
179	Pipe.B.8	700.0	30.0	Vitrified Clay	100.0	0.800	0.013	0.77
180	Pipe.A.18	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
181	Pipe.B.10.3	300.0	30.0	Vitrified Clay	100.0	2.200	0.013	0.72
183	Pipe.A.6	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.74
185	Pipe.B.21.5	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.57
188	Pipe.B.14.3	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.57
191	Pipe.B.30	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.68
193	Pipe.B.21.2.1	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.72
194	Pipe.B.13	700.0	30.0	Vitrified Clay	100.0	0.800	0.013	0.74
195	Pipe.B.32	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.69
197	Pipe.A.10.4	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
198	Pipe.A.14	300.0	30.0	Vitrified Clay	100.0	2.200	0.013	0.72
200	Pipe.A.11	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.69
201	Pipe.B.24	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.73
203	Pipe.B.11	700.0	30.0	Vitrified Clay	100.0	0.800	0.013	0.75
204	Pipe.A.8	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.73
206	Pipe.B.12.2	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67

ID	Label	Diameter (mm)	Length (Scaled) (m)	Material	Design Percent Full (%)	Slope (Calculated) (m/km)	Manning's n	Velocity (m/s)
207	Pipe.B.10.7	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.57
209	Pipe.B.36	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.64
210	Pipe.A.10.2	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.72
212	Pipe.A.15	300.0	30.0	Vitrified Clay	100.0	2.200	0.013	0.70
213	Pipe.B.14.1	250.0	30.2	Vitrified Clay	100.0	2.800	0.013	0.69
215	Pipe.A.13.2	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
216	Pipe.B.5	700.0	30.0	Vitrified Clay	100.0	0.800	0.013	0.77
217	Pipe.B.36.1	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.60
219	Pipe.B.19	600.0	30.0	Vitrified Clay	100.0	1.000	0.013	0.76
220	Pipe.B.21.4	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
221	Pipe.B.25	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.72
222	Pipe.A.10.1	300.0	30.0	Vitrified Clay	100.0	2.200	0.013	0.70
223	Pipe.A.7	500.0	30.0	Vitrified Clay	100.0	1.200	0.013	0.74
224	Pipe.B.31	400.0	30.0	Vitrified Clay	100.0	1.400	0.013	0.70
225	pipe-80	250.0	30.0	Vitrified Clay	100.0	2.800	0.013	0.69
226	Pipe.B.10.2	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
227	Pipe.A.2	600.0	30.0	Vitrified Clay	100.0	1.000	0.013	0.74
228	Pipe.B.14.2	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
229	Pipe.A.4.3	200.0	30.0	Vitrified Clay	100.0	3.250	0.013	0.67
231	Pipe.B.10.5	300.0	30.0	Vitrified Clay	100.0	2.200	0.013	0.70
232	Pipe.A.4.2	250.0	35.0	Vitrified Clay	100.0	2.800	0.013	0.69
233	Pipe.B.28	500.0	35.0	Vitrified Clay	100.0	1.200	0.013	0.70
234	Pipe.B.17	600.0	35.0	Vitrified Clay	100.0	1.000	0.013	0.77
235	Pipe.B.38.1	200.0	35.0	Vitrified Clay	100.0	3.250	0.013	0.57

Flow (L/day)	Depth (Normal) / Rise (%)	Depth (Normal) (m)
19,569,256.02	71.8	0.50
696,000.00	45.9	0.09
9,004,614.88	67.5	0.34
6,548,728.58	54.6	0.27
5,036,127.10	64.5	0.26
696,000.00	45.9	0.09
5,284,912.50	66.7	0.27
12,106,343.90	62.9	0.38
2,812,545.96	62.7	0.19
22,029,632.63	79.7	0.56
17,314,986.99	65.5	0.46
696,000.00	45.9	0.09

Flow (L/day)	Depth (Normal) / Rise (%)	Depth (Normal) (m)
20,671,833.80	75.1	0.53
12,556,969.98	64.5	0.39
15,868,101.70	77.5	0.46
1,351,287.06	70.0	0.14
4,096,336.58	56.3	0.23
696,000.00	45.9	0.09
11,159,636.79	48.3	0.24
31,036,722.50	68.3	0.61
22,834,230.49	82.8	0.58
12,245,543.60	63.4	0.38
4,235,536.58	57.5	0.23
11,477,360.57	60.7	0.36
14,387,089.32	71.3	0.43
19,846,337.15	72.6	0.51
7,836,851.73	61.3	0.31
696,000.00	45.9	0.09
696,000.00	45.9	0.09
1,351,287.06	70.0	0.14
22,298,640.77	80.7	0.56
8,665,245.09	65.6	0.33
2,352,727.51	71.8	0.18
696,000.00	45.9	0.09
14,686,262.71	72.5	0.43
696,000.00	45.9	0.09
8,183,263.23	63.1	0.32
1,351,287.06	70.0	0.14
1,869,048.81	60.9	0.15
7,625,767.93	60.2	0.30
1,869,048.81	60.9	0.15
696,000.00	45.9	0.09
1,869,048.81	60.9	0.15
2,352,727.51	71.8	0.18
1,869,048.81	60.9	0.15
13,783,952.42	69.0	0.41
4,640,289.49	61.0	0.24
2,352,727.51	71.8	0.18
4,501,089.49	59.8	0.24
22,566,834.61	81.7	0.57

Flow (L/day)	Depth (Normal) / Rise (%)	Depth (Normal) (m)
1,869,048.81	60.9	0.15
20,397,606.21	74.3	0.52
1,869,048.81	60.9	0.15
1,351,287.06	70.0	0.14
1,869,048.81	60.9	0.15
2,352,727.51	71.8	0.18
7,271,335.92	58.4	0.29
9,534,675.41	70.4	0.35
4,896,927.40	63.2	0.25
20,122,445.33	73.4	0.51
1,351,287.06	70.0	0.14
3,254,203.09	69.6	0.21
9,201,566.85	68.5	0.34
696,000.00	45.9	0.09
696,000.00	45.9	0.09
6,179,775.68	52.7	0.26
2,352,727.51	71.8	0.18
16,160,058.38	62.5	0.44
5,424,112.21	68.0	0.27
1,351,287.06	70.0	0.14
3,254,203.09	69.6	0.21
5,665,896.73	70.3	0.28
8,322,463.52	63.8	0.32
17,600,657.93	66.3	0.46
8,526,045.38	64.9	0.32
1,351,287.06	70.0	0.14
696,000.00	45.9	0.09
3,820,507.23	53.9	0.22
2,352,727.51	71.8	0.18
2,812,545.96	62.7	0.19
1,869,048.81	60.9	0.15
1,351,287.06	70.0	0.14
20,945,149.10	76.0	0.53
835,200.00	51.0	0.10
13,479,883.91	67.9	0.41
1,351,287.06	70.0	0.14
7,976,052.02	62.0	0.31
2,812,545.96	62.7	0.19

Flow (L/day)	Depth (Normal) / Rise (%)	Depth (Normal) (m)
8,865,415.18	66.7	0.33
5,805,096.44	71.6	0.29
1,869,048.81	60.9	0.15
1,351,287.06	70.0	0.14
11,792,900.44	61.8	0.37
1,351,287.06	70.0	0.14
1,351,287.06	70.0	0.14
2,812,545.96	62.7	0.19
1,869,048.81	60.9	0.15
6,912,442.78	56.5	0.28
14,086,335.17	70.2	0.42
696,000.00	45.9	0.09

sewar 4.stsw 6/30/18	Bentley Systems, Inc. Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666	Bentley SewerCAD V8i (SELECTseries 4) [08.11.04.54] Page 1 of 1

Flex Table: Manhole Table

ID	Label	Diameter (mm)	Depth (Structure) (m)	Elevation (Ground) (m)	Elevation (Invert) (m)	Flow (Total In) (L/day)	Flow (Total Out) (L/day)
29	MH.B.8	1,200.0	1.86	28.00	26.14	19,777,908.00	20,122,445.33
32	MH.B.1	1,200.0	2.02	28.00	25.98	22,500,479.71	22,834,230.49
35	MH.B.14	1,200.0	3.59	30.00	26.41	15,502,313.25	15,868,101.70
38	MH.A.10.3	1,200.0	1.40	29.00	27.60	1,246,032.59	1,869,048.81
41	MH.B.9	1,200.0	1.84	28.00	26.16	19,500,597.04	19,846,337.15
42	MH.B.10	1,200.0	1.83	28.00	26.17	19,222,290.95	19,569,256.02
44	MH.A.10.4	1,200.0	1.25	29.00	27.75	675,643.53	1,351,287.06
45	MH.A.10.5	1,200.0	1.20	29.00	27.80	0.00	696,000.00
47	MH.B.22	1,200.0	3.28	30.00	26.72	8,582,452.53	9,004,614.88
48	MH.B.21	1,200.0	3.40	30.00	26.60	11,855,015.85	12,245,543.60
50	MH.B.29	1,200.0	3.04	30.00	26.96	6,090,905.04	6,548,728.58
51	MH.B.28	1,200.0	3.07	30.00	26.93	6,460,893.32	6,912,442.78
53	MH.B.33	1,200.0	2.79	30.00	27.21	4,546,434.48	5,036,127.10
54	MH.B.32	1,200.0	2.82	30.00	27.18	4,943,665.62	5,424,112.21
56	MH.B.19.1	1,200.0	1.27	30.00	28.74	675,643.53	1,351,287.06
57	MH.B.19.2	1,200.0	1.20	30.00	28.80	0.00	696,000.00
59	MH.A.11	1,200.0	1.97	29.00	27.04	5,193,738.38	5,665,896.73
60	MH.A.12	1,200.0	1.94	29.00	27.06	4,804,465.91	5,284,912.50
62	MH	1,200.0	2.42	28.00	25.58	30,727,746.02	31,036,722.50
63	MH.A.1	1,200.0	2.10	28.00	25.90	11,715,816.15	12,106,343.90
65	MH.B.37	1,200.0	1.53	29.00	27.47	2,250,036.83	2,812,545.96
66	MH.B.36	1,200.0	2.67	30.00	27.33	3,294,606.28	3,820,507.23
68	MH.B.3	1,200.0	1.98	28.00	26.02	21,962,890.41	22,298,640.77
69	MH.B.4	1,200.0	1.96	28.00	26.04	21,692,855.65	22,029,632.63
71	MH.B.11	1,200.0	3.75	30.00	26.25	17,244,301.60	17,600,657.93
72	MH.B.12	1,200.0	3.74	30.00	26.26	16,957,157.21	17,314,986.99
74	MH.A.4.3	1,200.0	1.27	28.00	26.74	675,643.53	1,351,287.06
75	MH.A.4.4	1,200.0	1.20	28.00	26.80	0.00	696,000.00
77	MH.B.5	1,200.0	1.93	28.00	26.07	20,604,067.29	20,945,149.10
78	MH.B.6	1,200.0	1.91	28.00	26.09	20,329,622.71	20,671,833.80
80	MH.B.20	1,200.0	3.42	30.00	26.58	12,168,915.46	12,556,969.98
81	MH.B.19	1,200.0	3.44	30.00	26.56	13,098,720.60	13,479,883.91
83	MH.B.13	1,200.0	3.71	30.00	26.29	15,795,947.53	16,160,058.38
85	MH.B.39	1,200.0	1.28	29.00	27.72	675,643.53	1,351,287.06
86	MH.B.38	1,200.0	1.40	29.00	27.60	1,764,545.64	2,352,727.51
88	MH.B.21.1	1,200.0	1.77	30.00	28.23	4,000,968.47	4,501,089.49
89	MH.B.21.2	1,200.0	1.75	30.00	28.25	3,584,294.48	4,096,336.58

ID	Label	Diameter (mm)	Depth (Structure) (m)	Elevation (Ground) (m)	Elevation (Invert) (m)	Flow (Total In) (L/day)	Flow (Total Out) (L/day)
91	MH.A.13.2	1,200.0	1.27	29.00	27.74	675,643.53	1,351,287.06
92	MH.A.13.3	1,200.0	1.20	29.00	27.80	0.00	696,000.00
94	MH.A.3	1,200.0	2.05	28.00	25.95	11,081,590.04	11,477,360.57
95	MH.A.4	1,200.0	1.84	28.00	26.16	10,761,078.04	11,159,636.79
101	MH.B.35	1,200.0	2.72	30.00	27.28	3,723,494.47	4,235,536.58
102	MH.B.34	1,200.0	2.75	30.00	27.25	4,140,168.47	4,640,289.49
104	MH.A.2	1,200.0	2.07	28.00	25.93	11,399,803.80	11,792,900.44
106	MH.B.16	1,200.0	3.54	30.00	26.46	14,012,144.09	14,387,089.32
107	MH.B.15	1,200.0	3.56	30.00	26.44	14,313,261.06	14,686,262.71
110	MH.A.9	1,200.0	2.14	29.00	26.86	7,752,565.32	8,183,263.23
111	MH.A.10	1,200.0	2.11	29.00	26.89	7,401,471.59	7,836,851.73
113	MH.B.21.2.3	1,200.0	1.28	30.00	28.72	675,643.53	1,351,287.06
114	MH.B.21.2.4	1,200.0	1.20	30.00	28.80	0.00	696,000.00
116	MH.B.40	1,200.0	1.20	29.00	27.80	0.00	696,000.00
119	MH.B.2	1,200.0	2.00	28.00	26.00	22,232,094.54	22,566,834.61
121	MH.B.23	1,200.0	3.25	30.00	26.75	8,238,942.99	8,665,245.09
123	MH.B.10.2	1,200.0	1.30	28.00	26.70	2,250,036.83	2,812,545.96
124	MH.B.10.3	1,200.0	2.18	29.00	26.82	1,764,545.64	2,352,727.51
126	MH.B.4.2	1,200.0	1.28	28.00	26.72	675,643.53	1,351,287.06
127	MH.B.4.3	1,200.0	1.20	28.00	26.80	0.00	696,000.00
130	MH.B.12.2	1,200.0	1.30	30.00	28.70	675,643.53	1,351,287.06
131	MH.B.12.3	1,200.0	1.20	30.00	28.80	0.00	696,000.00
133	MH.A.8	1,200.0	2.17	29.00	26.83	8,099,743.29	8,526,045.38
135	MH.B.10.4	1,200.0	1.45	29.00	27.56	1,246,032.59	1,869,048.81
136	MH.B.10.5	1,200.0	1.30	29.00	27.70	675,643.53	1,351,287.06
138	MH.B.12.1	1,200.0	1.45	30.00	28.56	1,246,032.59	1,869,048.81
140	MH.B.26	1,200.0	3.14	30.00	26.86	7,185,381.83	7,625,767.93
141	MH.B.25	1,200.0	3.18	30.00	26.82	7,540,671.30	7,976,052.02
143	MH.A.10.2	1,200.0	1.48	29.00	27.52	1,764,545.64	2,352,727.51
145	MH.A.18	1,200.0	1.30	29.00	27.70	675,643.53	1,351,287.06
146	MH.A.19	1,200.0	1.20	29.00	27.80	0.00	696,000.00
148	MH.A.13	1,200.0	1.90	29.00	27.11	4,407,234.48	4,896,927.40
149	MH.A.13.1	1,200.0	1.41	29.00	27.59	1,246,032.59	1,869,048.81
151	MH.A.15	1,200.0	1.66	29.00	27.34	2,250,036.83	2,812,545.96
152	MH.A.16	1,200.0	1.53	29.00	27.47	1,764,545.64	2,352,727.51
154	MH.A.17	1,200.0	1.45	29.00	27.56	1,246,032.59	1,869,048.81
156	MH.B.18	1,200.0	3.47	30.00	26.53	13,404,931.03	13,783,952.42
157	MH.B.17	1,200.0	3.50	30.00	26.50	13,709,385.69	14,086,335.17
163	MH.B.21.3	1,200.0	1.45	30.00	28.56	1,246,032.59	1,869,048.81
165	MH.B.7	1,200.0	1.89	28.00	26.11	20,054,242.50	20,397,606.21
167	MH.B.21.2.1	1,200.0	1.51	30.00	28.49	1,764,545.64	2,352,727.51

ID	Label	Diameter (mm)	Depth (Structure) (m)	Elevation (Ground) (m)	Elevation (Invert) (m)	Flow (Total In) (L/day)	Flow (Total Out) (L/day)
168	MH.B.21.2.2	1,200.0	1.43	30.00	28.57	1,246,032.59	1,869,048.81
171	MH.B.4.1	1,200.0	1.43	28.00	26.57	1,246,032.59	1,869,048.81
173	MH.A.4.1	1,200.0	1.51	28.00	26.49	1,764,545.64	2,352,727.51
175	MH.B.27	1,200.0	3.11	30.00	26.89	6,825,577.56	7,271,335.92
177	MH.A.5	1,200.0	1.54	28.00	26.46	9,120,124.08	9,534,675.41
182	MH.B.10.1	1,200.0	1.37	28.00	26.63	2,711,835.90	3,254,203.09
184	MH.A.6	1,200.0	1.50	28.00	26.50	8,783,313.84	9,201,566.85
186	MH.B.21.4	1,200.0	1.30	30.00	28.70	675,643.53	1,351,287.06
187	MH.B.21.5	1,200.0	1.20	30.00	28.80	0.00	696,000.00
189	MH.B.14.2	1,200.0	1.30	30.00	28.70	675,643.53	1,351,287.06
190	MH.B.14.3	1,200.0	1.20	30.00	28.80	0.00	696,000.00
192	MH.B.30	1,200.0	3.01	30.00	26.99	5,715,115.77	6,179,775.68
196	MH.B.31	1,200.0	2.86	30.00	27.14	5,332,938.67	5,805,096.44
199	MH.A.14	1,200.0	1.73	29.00	27.27	2,711,835.90	3,254,203.09
202	MH.B.24	1,200.0	3.22	30.00	26.78	7,891,765.02	8,322,463.52
205	MH.A.7	1,200.0	2.46	29.00	26.54	8,443,252.24	8,865,415.18
208	MH.B.10.6	1,200.0	1.20	29.00	27.80	0.00	696,000.00
211	MH.A.10.1	1,200.0	1.61	29.00	27.39	2,250,036.83	2,812,545.96
214	MH.B.14.1	1,200.0	1.45	30.00	28.56	1,246,032.59	1,869,048.81
218	MH.B.36.1	1,200.0	1.20	30.00	28.80	0.00	835,200.00
230	MH.A.4.2	1,200.0	1.41	28.00	26.59	1,246,032.59	1,869,048.81
236	MH.B.38.1	1,200.0	1.20	29.00	27.80	0.00	696,000.00

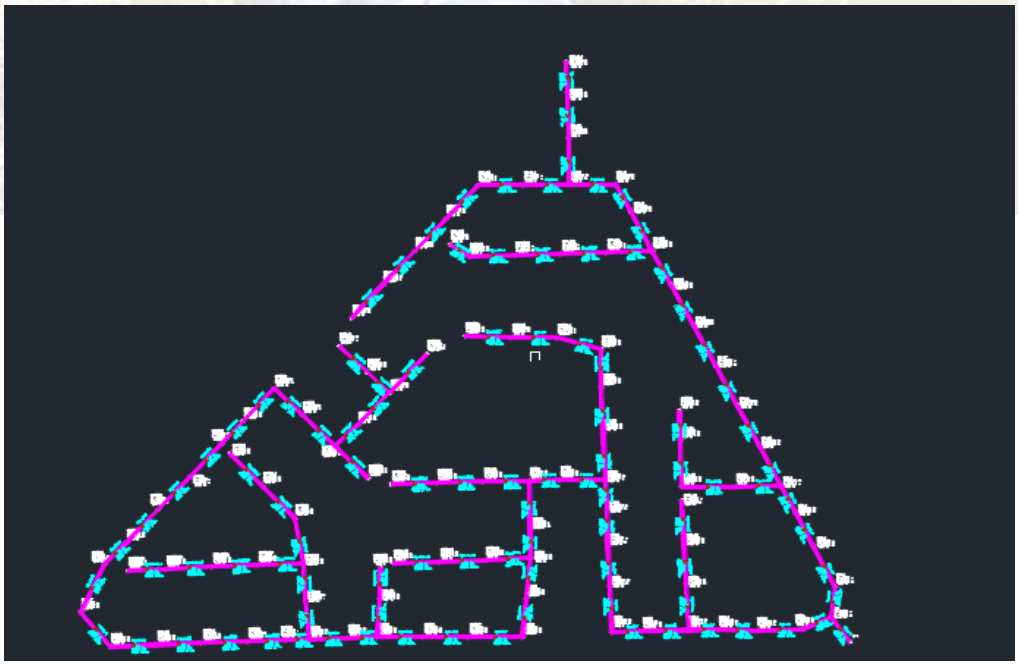
Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
0.49	26.63
0.41	26.39
0.37	26.78
0.16	27.76
0.49	26.65
0.49	26.66
0.14	27.89
0.11	27.91
0.31	27.03
0.40	27.00
0.29	27.25
0.30	27.23
0.26	27.47
0.26	27.44

Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
0.14	28.87
0.10	28.90
0.25	27.29
0.26	27.32
0.44	26.02
0.31	26.21
0.18	27.65
0.23	27.56
0.47	26.49
0.48	26.51
0.44	26.69
0.44	26.71
0.14	26.87
0.10	26.90
0.48	26.55
0.48	26.57
0.40	26.98
0.41	26.96
0.44	26.73
0.14	27.86
0.18	27.78
0.22	28.45
0.22	28.48
0.14	27.87
0.10	27.90
0.34	26.29
0.24	26.40
0.25	27.53
0.25	27.50
0.34	26.26
0.40	26.86
0.39	26.83
0.30	27.16
0.30	27.19
0.14	28.86
0.09	28.89

Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
0.09	27.89
0.45	26.45
0.31	27.06
0.19	26.89
0.18	27.00
0.14	26.86
0.09	26.89
0.14	28.84
0.09	28.89
0.29	27.11
0.15	27.71
0.14	27.84
0.15	28.71
0.31	27.17
0.31	27.13
0.18	27.70
0.14	27.84
0.09	27.89
0.26	27.36
0.15	27.74
0.19	27.53
0.18	27.65
0.16	27.71
0.41	26.93
0.40	26.90
0.15	28.71
0.49	26.60
0.18	28.66
0.16	28.73
0.15	26.72
0.18	26.67
0.30	27.20
0.31	26.77
0.20	26.84
0.32	26.82
0.14	28.84

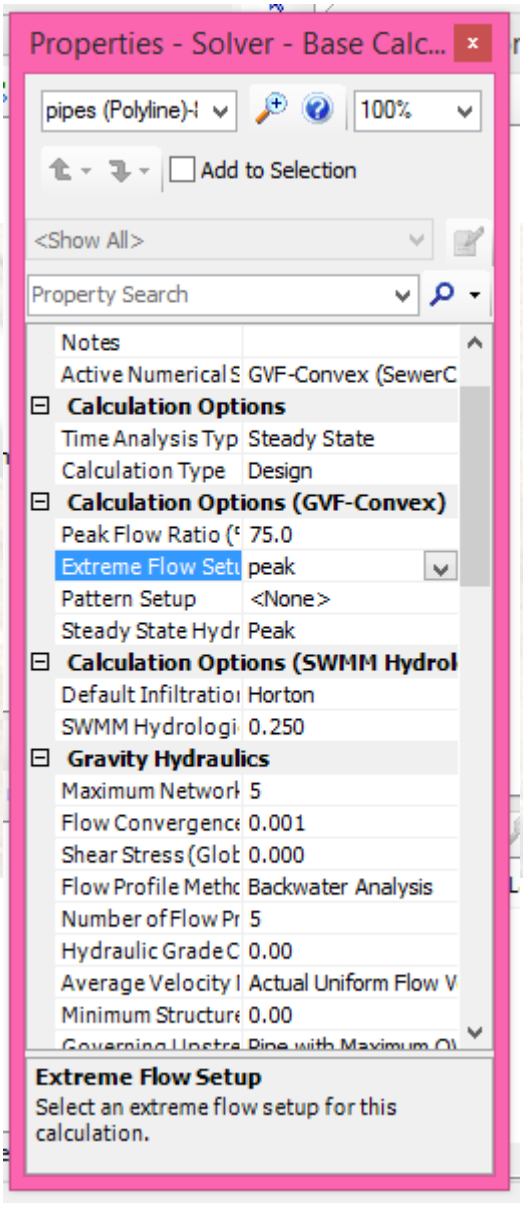
Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
0.09	28.89
0.14	28.84
0.09	28.89
0.28	27.27
0.26	27.39
0.20	27.47
0.32	27.10
0.32	26.86
0.09	27.89
0.18	27.57
0.15	28.71
0.10	28.90
0.15	26.74
0.09	27.89

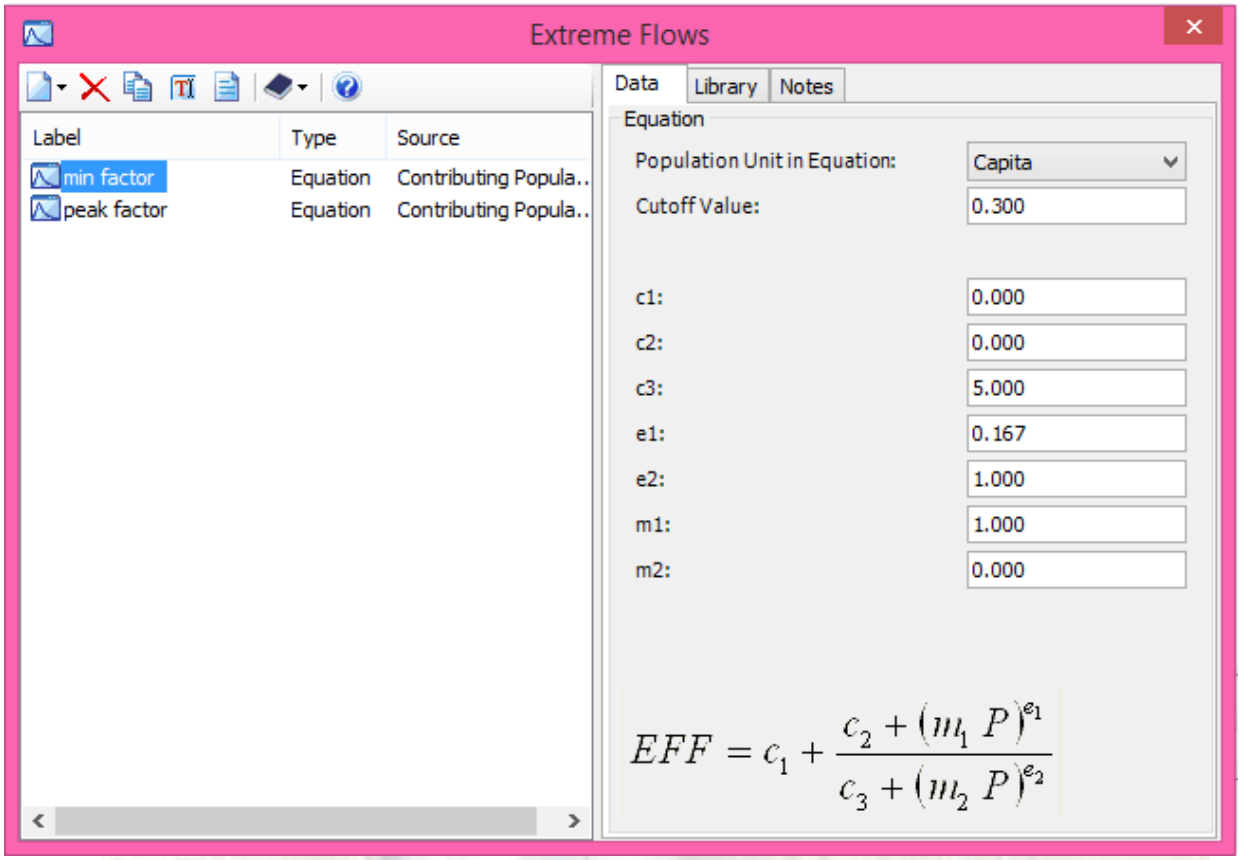
sewar 4.stsw 6/30/18	Bentley Systems, Inc. Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666	Bentley SewerCAD V8i (SELECTseries 4) [08.11.04.54] Page 1 of 1

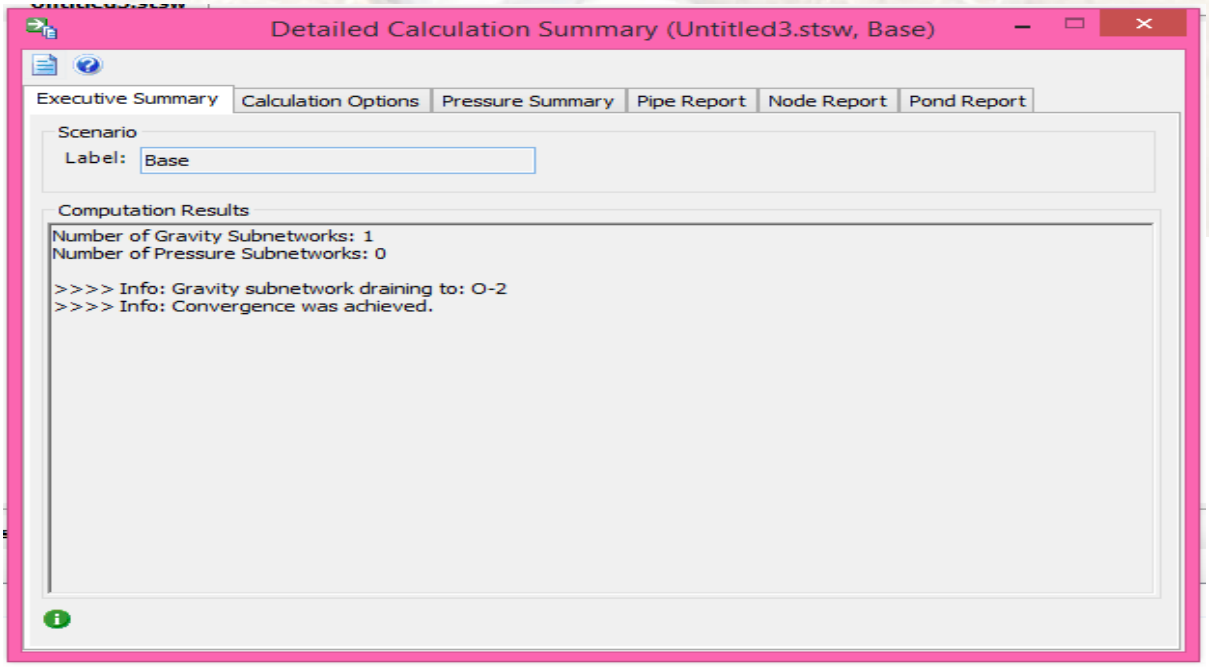


الوحدة رقم ٣٠١

اعداد الطالبه / الشيماء يونس مصطفي السلمي




Extreme Flows
Label
Type
Source
min factor
Equation
Contributing Popula..
peak factor
Equation
Contributing Popula..
Data
Library
Notes
Equation
Population Unit in Equation:
Capita
Cutoff Value:
0.300
c1:
0.000
c2:
0.000
c3:
5.000
e1:
0.167
e2:
1.000
m1:
1.000
m2:
0.000
$EFF = c_1 + \frac{c_2 + (m_1 P)^{e_1}}{c_3 + (m_2 P)^{e_2}}$

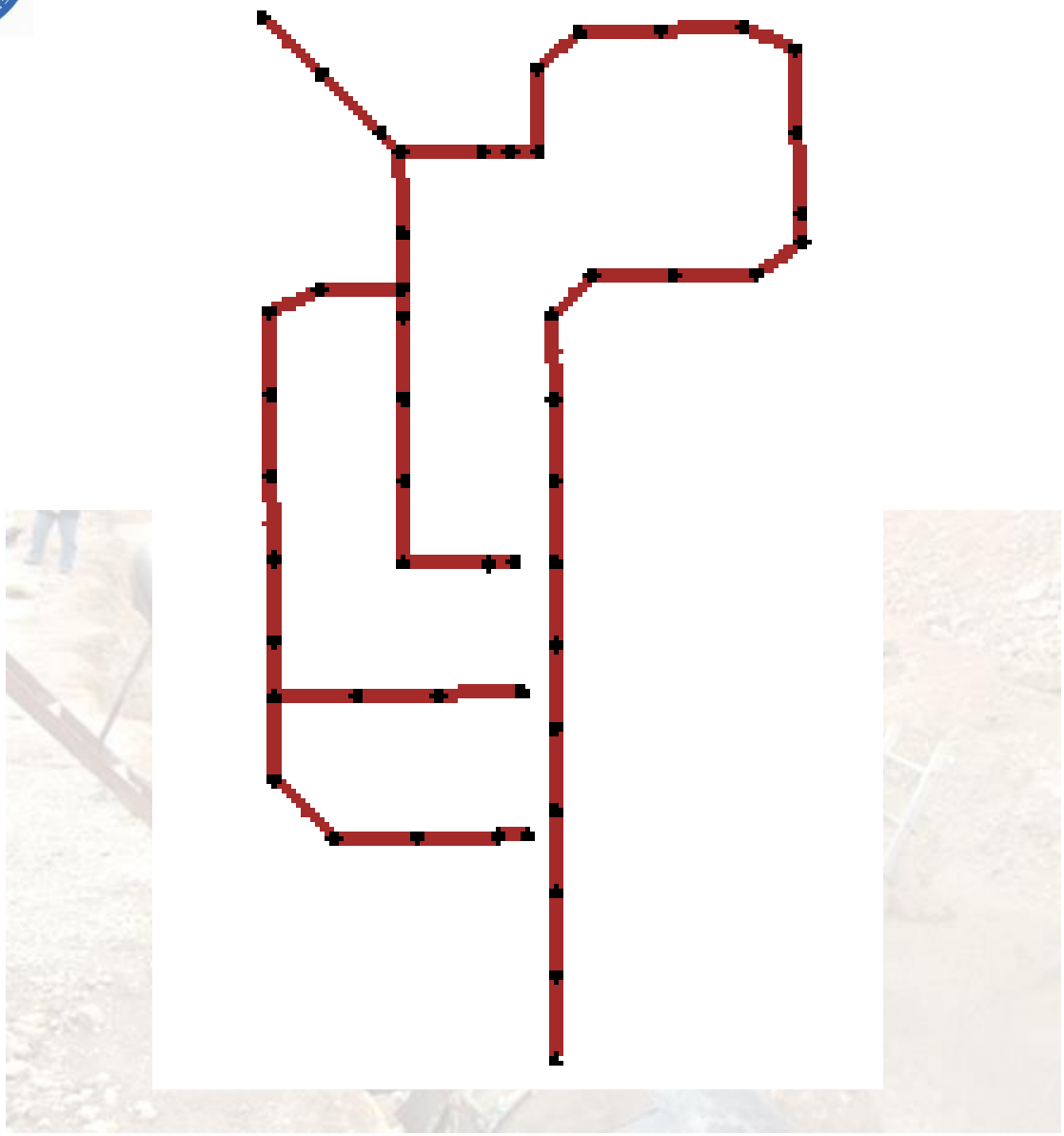

Detailed Calculation Summary (Untitled3.stsw, Base)
Executive Summary
Calculation Options
Pressure Summary
Pipe Report
Node Report
Pond Report
Scenario
Label:
Base
Computation Results
Number of Gravity Subnetworks: 1
Number of Pressure Subnetworks: 0
>>>> Info: Gravity subnetwork draining to: O-2
>>>> Info: Convergence was achieved.

FlexTable: Conduit Table (Current Time: 0.000 hours) (Untitled3.stsw)

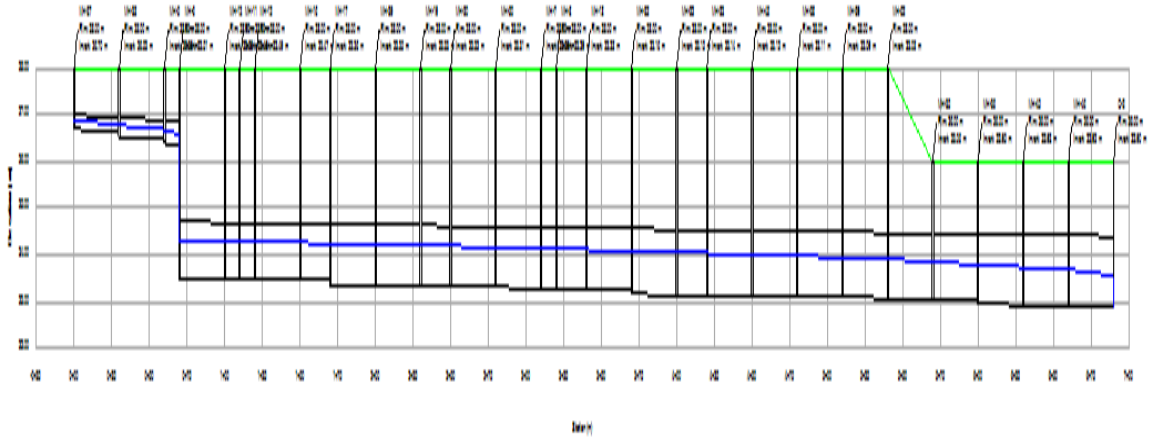
	ID	Size	Velocity (m/s)	Conduit Type	Material	Catalog Class	Length (Scaled) (m)	Cover (Maximum) (m)	Diameter (mm)	Cover (Minimum) (m)	Velocity (Maximum) (m/s)
82: pipes (Po...	82	400	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		400.0		
109: pipes (P...	109	400	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		400.0		
120: pipes (P...	120	400	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		400.0		
123: pipes (P...	123	400	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		400.0		
40: pipes (Po...	40	300	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		300.0		
48: pipes (Po...	48	300	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		300.0		
88: pipes (Po...	88	300	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		300.0		
93: pipes (Po...	93	300	0.68	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		300.0		
34: pipes (Po...	34	500	0.71	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		500.0		
96: pipes (Po...	96	500	0.71	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		500.0		
108: pipes (P...	108	500	0.71	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		500.0		
125: pipes (P...	125	500	0.71	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		500.0		
118: pipes (P...	118	900	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		900.0		
67: pipes (Po...	67	800	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		800.0		
73: pipes (Po...	73	600	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		600.0		
126: pipes (P...	126	600	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		600.0		
99: pipes (Po...	99	900	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		900.0		
64: pipes (Po...	64	900	0.72	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		900.0		
75: pipes (Po...	75	800	0.73	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		800.0		
79: pipes (Po...	79	800	0.73	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		800.0		
84: pipes (Po...	84	600	0.75	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		600.0		
115: pipes (P...	115	600	0.75	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		600.0		
81: pipes (Po...	81	1000	0.76	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,000.0		
31: pipes (Po...	31	600	0.78	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		600.0		
59: pipes (Po...	59	1100	0.83	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		1,100.0		
129: pipes (P...	129	1100	0.83	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,100.0		
113: pipes (P...	113	1200	0.87	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,200.0		
51: pipes (Po...	51	1200	0.87	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		1,200.0		
46: pipes (Po...	46	1200	0.88	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		1,200.0		
119: pipes (P...	119	1200	0.88	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,200.0		
43: pipes (Po...	43	1200	0.88	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		1,200.0		
91: pipes (Po...	91	1300	0.92	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,300.0		
117: pipes (P...	117	1300	0.92	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,300.0		
114: pipes (P...	114	1300	0.92	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,300.0		
56: pipes (Po...	56	1300	0.92	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		1,300.0		
54: pipes (Po...	54	1300	0.92	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		1,300.0		
121: pipes (P...	121	1300	0.93	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,300.0		
111: pipes (P...	111	1300	0.93	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,300.0		
37: pipes (Po...	37	1300	0.93	Catalog Con...	Vitrified Clay	Conduit Cata...	10.0		1,300.0		
77: pipes (Po...	77	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
85: pipes (Po...	85	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
61: pipes (Po...	61	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	20.0		1,400.0		
106: pipes (P...	106	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
127: pipes (P...	127	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
124: pipes (P...	124	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
70: pipes (Po...	70	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
130: pipes (P...	130	1400	0.97	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,400.0		
122: pipes (P...	122	1500	1.01	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,500.0		
101: pipes (P...	101	1500	1.01	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,500.0		
104: pipes (P...	104	1500	1.02	Catalog Con...	Vitrified Clay	Conduit Cata...	30.0		1,500.0		

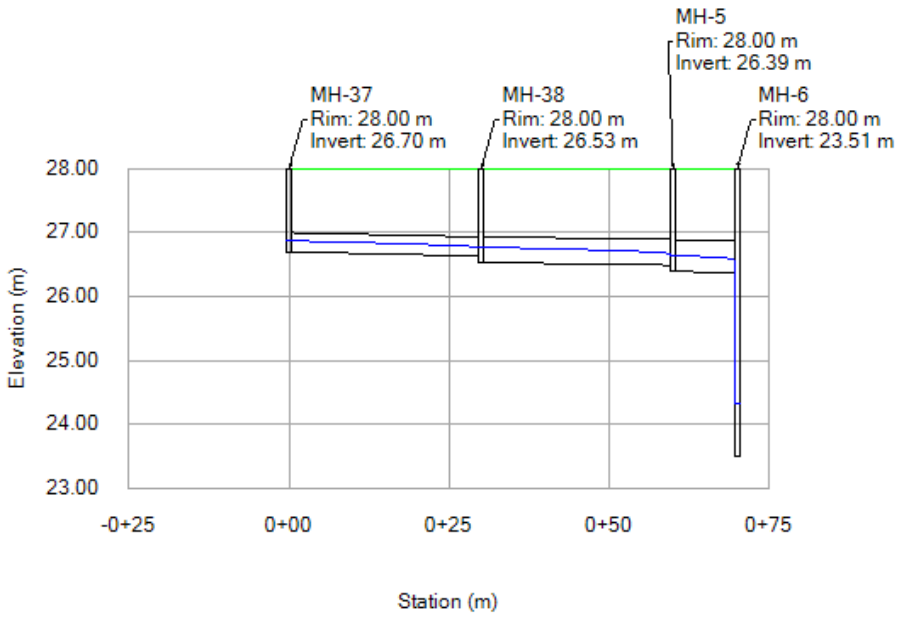
FlexTable: Manhole Table (Current Time: 0.000 hours) (Untitled3.stsw)

	ID	Elevation (Ground) (m)	Diameter (mm)	Elevation (Invert) (m)	Velocity (In) (m/s)	Velocity (Out) (m/s)
29: MH-1	29	26.00	914.4	24.27	0.87	0.87
32: MH-3	32	28.00	914.4	23.64	0.96	0.96
33: MH-4	33	28.00	914.4	26.24	1.09	1.09
35: MH-5	35	28.00	914.4	26.39	0.90	0.90
36: MH-6	36	28.00	914.4	23.51	0.97	0.97
38: MH-7	38	28.00	914.4	23.29	1.18	1.18
39: MH-8	39	28.00	914.4	23.29	1.22	1.22
41: MH-9	41	28.00	914.4	26.58	0.75	0.75
42: MH-10	42	28.00	914.4	26.70	0.74	0.74
44: MH-11	44	28.00	914.4	23.49	1.05	1.05
45: MH-12	45	28.00	914.4	23.49	1.09	1.09
47: MH-13	47	28.00	914.4	23.50	1.01	1.01
49: MH-14	49	26.00	914.4	24.58	0.75	0.75
50: MH-15	50	26.00	914.4	24.70	0.74	0.74
52: MH-16	52	28.00	914.4	23.47	1.15	1.15
53: MH-17	53	28.00	914.4	23.36	0.98	0.98
55: MH-18	55	28.00	914.4	23.28	1.27	1.27
57: MH-19	57	28.00	914.4	23.33	1.05	1.05
58: MH-20	58	28.00	914.4	23.32	1.09	1.09
60: MH-21	60	28.00	914.4	23.63	1.01	1.01
62: MH-22	62	28.00	914.4	23.15	1.14	1.14
63: MH-23	63	28.00	914.4	23.14	1.18	1.18
65: MH-24	65	28.00	914.4	23.75	0.83	0.83
66: MH-25	66	28.00	914.4	23.86	1.00	1.00
68: MH-26	68	28.00	914.4	24.03	0.86	0.86
69: MH-27	69	26.00	914.4	24.04	0.77	0.77
71: MH-28	71	28.00	914.4	23.11	1.27	1.27
72: MH-29	72	28.00	914.4	23.09	1.34	1.34
74: MH-30	74	26.00	914.4	24.30	0.70	0.70
76: MH-31	76	28.00	914.4	24.01	0.97	0.97
78: MH-32	78	28.00	914.4	23.16	1.10	1.10
80: MH-33	80	28.00	914.4	23.89	0.82	0.82
83: MH-34	83	26.00	914.4	24.44	0.80	0.80
86: MH-35	86	26.00	914.4	23.06	1.52	1.52
87: MH-36	87	26.00	914.4	22.95	1.38	1.38
87: MH-36	87	26.00	914.4	22.95	1.38	1.38
89: MH-37	89	28.00	914.4	26.70	0.69	0.69
90: MH-38	90	28.00	914.4	26.53	0.75	0.75
92: MH-39	92	28.00	914.4	23.35	1.01	1.01
94: MH-40	94	26.00	914.4	24.53	0.75	0.75
95: MH-41	95	26.00	914.4	24.70	0.69	0.69
97: MH-42	97	28.00	914.4	26.30	0.69	0.69
98: MH-43	98	28.00	914.4	26.44	0.79	0.79
100: MH-44	100	28.00	914.4	23.88	0.90	0.90
102: MH-45	102	26.00	914.4	22.93	1.47	1.47
103: MH-46	103	26.00	914.4	22.92	1.61	1.61
107: MH-48	107	28.00	914.4	23.12	1.22	1.22
110: MH-49	110	26.00	914.4	24.39	0.81	0.81
112: MH-50	112	28.00	914.4	23.31	1.13	1.13
116: MH-51	116	28.00	914.4	26.27	0.85	0.85
128: MH-52	128	28.00	914.4	23.08	1.41	1.41



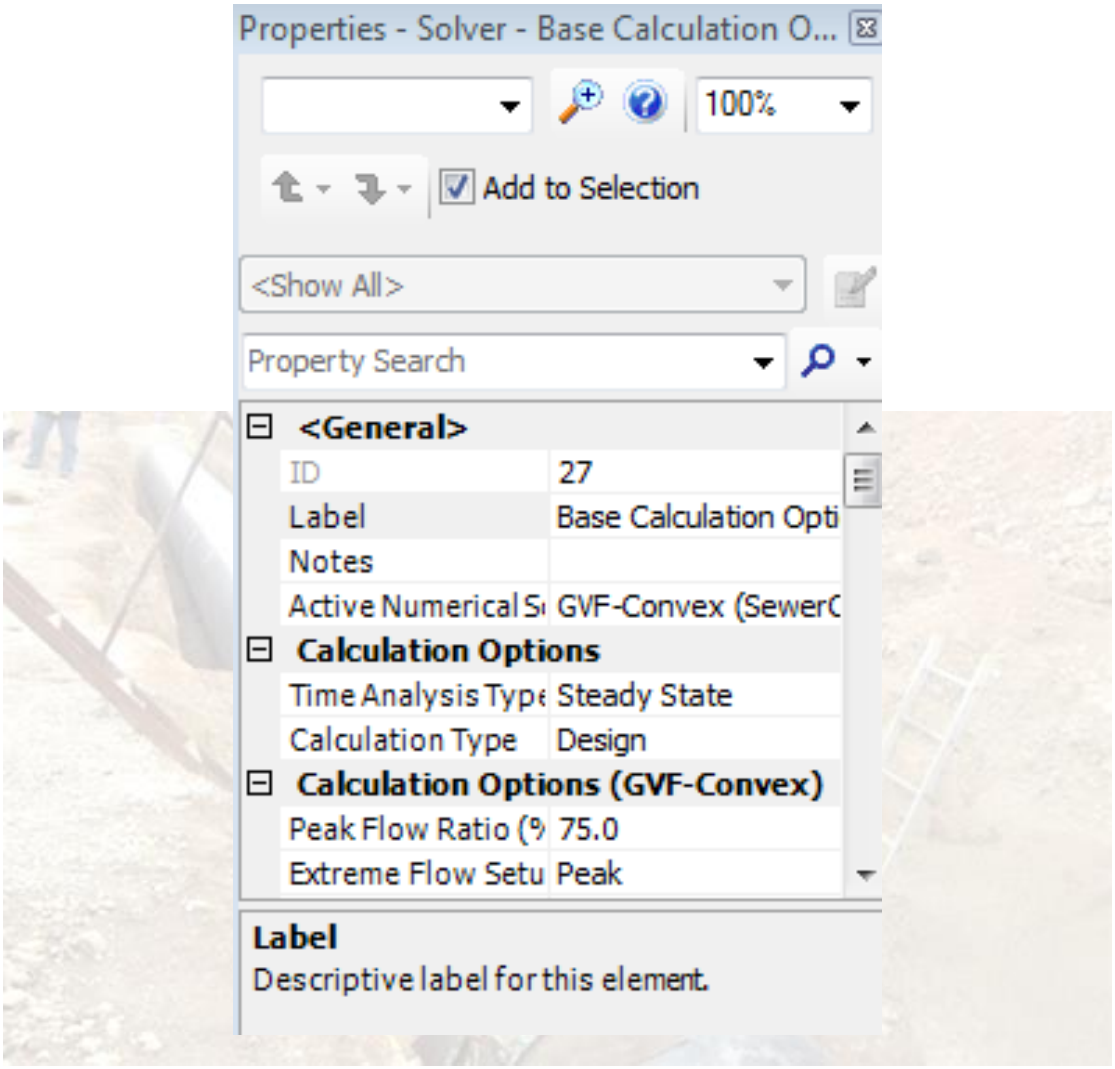
تخطيط شبكة تجميع مياه الصرف الصحي للوحدة٣٠١

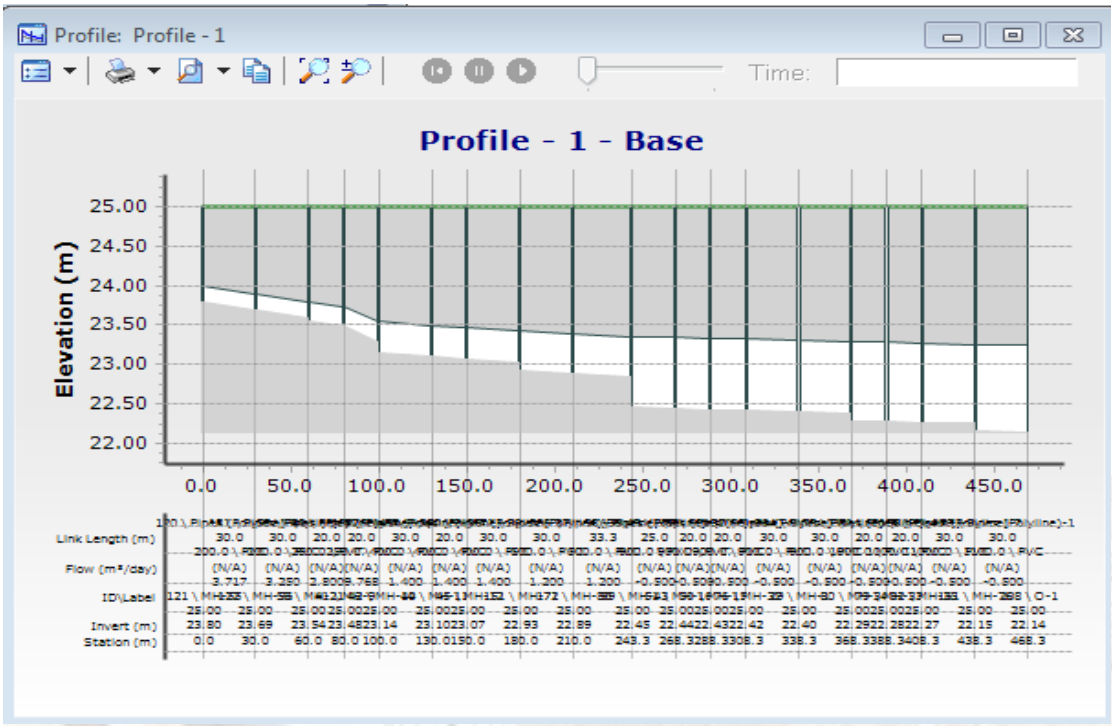


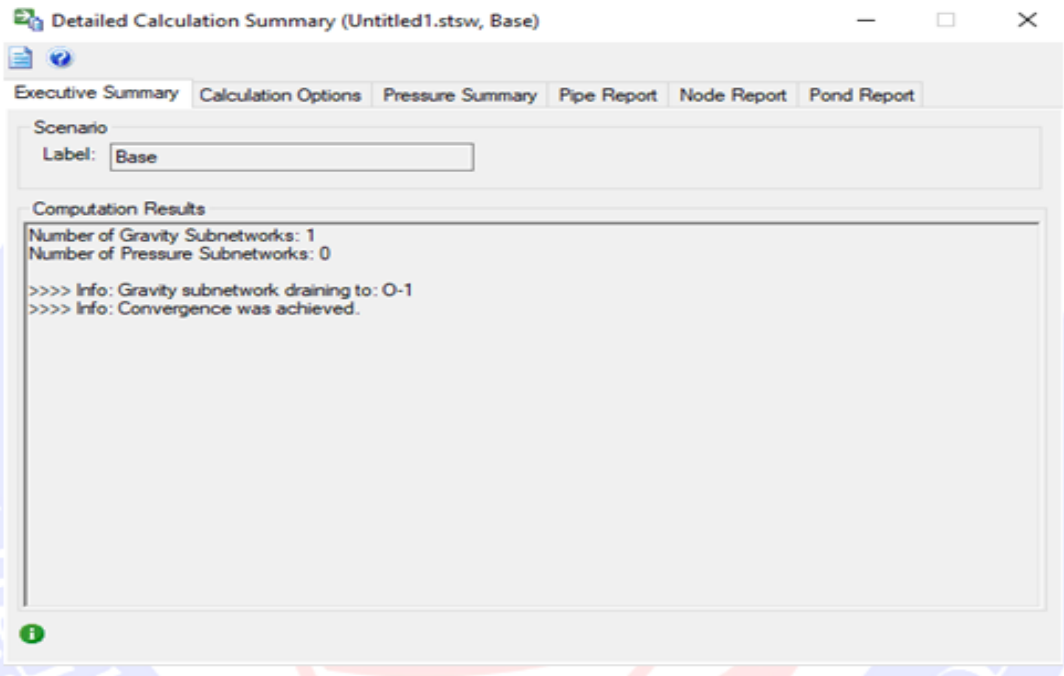

MH-5
Rim: 28.00 m
Invert: 26.39 m
MH-37
Rim: 28.00 m
Invert: 26.70 m
MH-38
Rim: 28.00 m
Invert: 26.53 m
MH-6
Rim: 28.00 m
Invert: 23.51 m
28.00
27.00
26.00
25.00
24.00
23.00
Elevation (m)
-0+25
0+00
0+25
0+50
0+75
Station (m)

الوحدة رقم ٦٥١

اعداد الطالبه / مرنا نظمى


Properties - Solver - Base Calculation O...
100%
Add to Selection
<Show All>
Property Search
<General>
ID
27
Label
Base Calculation Opti
Notes
Active Numerical S
GVF-Convex (SewerC
Calculation Options
Time Analysis Type
Steady State
Calculation Type
Design
Calculation Options (GVF-Convex)
Peak Flow Ratio (%
75.0
Extreme Flow Setu
Peak
Label
Descriptive label for this element.


Profile: Profile - 1
Time:
Profile - 1 - Base
Elevation (m)
25.00
24.50
24.00
23.50
23.00
22.50
22.00
0.0
50.0
100.0
150.0
200.0
250.0
300.0
350.0
400.0
450.0
Link Length (m)
Flow (m³/day)
ID\Label
Invert (m)
Station (m)


Detailed Calculation Summary (Untitled1.stsw, Base)
Executive Summary
Calculation Options
Pressure Summary
Pipe Report
Node Report
Pond Report
Scenario
Label:
Base
Computation Results
Number of Gravity Subnetworks: 1
Number of Pressure Subnetworks: 0
>>>> Info: Gravity subnetwork draining to: O-1
>>>> Info: Convergence was achieved.

Flex Table: Conduit Table

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
40	Pipes (Polyline)-34	MH-9	False	23.48	MH-10
43	Pipes (Polyline)-36	MH-11	False	23.10	MH-12
46	Pipes (Polyline)-12	MH-13	False	23.51	MH-14
49	Pipes (Polyline)-9	MH-15	False	22.43	MH-16
52	Pipes (Polyline)-54	MH-17	False	23.43	MH-18
55	Pipes (Polyline)-22	MH-19	False	24.03	MH-20
58	Pipes (Polyline)-33	MH-21	False	23.54	MH-9
60	Pipes (Polyline)-42	MH-22	False	23.59	MH-23
63	Pipes (Polyline)-17	MH-24	False	23.81	MH-25
66	Pipes (Polyline)-83	MH-26	False	24.53	MH-27
69	Pipes (Polyline)-66	MH-28	False	24.00	MH-29
72	Pipes (Polyline)-44	MH-30	False	23.42	MH-31
75	Pipes (Polyline)-8	MH-32	False	22.42	MH-15
77	Pipes (Polyline)-18	MH-25	False	23.93	MH-5
78	Pipes (Polyline)-4	MH-33	False	22.28	MH-34
81	Pipes (Polyline)-3	MH-35	False	22.27	MH-33
83	Pipes (Polyline)-43	MH-23	False	23.47	MH-30
84	Pipes (Polyline)-28	MH-36	False	23.07	MH-37
87	Pipes (Polyline)-65	MH-38	False	24.03	MH-28
89	Pipes (Polyline)-84	MH-27	False	24.51	MH-20
90	Pipes (Polyline)-89	MH-39	False	24.36	MH-20

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
92	Pipes (Polyline)-69	MH-40	False	23.81	MH-14
94	Pipes (Polyline)-30	MH-41	False	22.91	MH-35
96	Pipes (Polyline)-81	MH-42	False	23.46	MH-34
98	Pipes (Polyline)-10	MH-16	False	22.44	MH-43
100	Pipes (Polyline)-76	MH-44	False	24.62	MH-45
103	Pipes (Polyline)-60	MH-46	False	24.31	MH-47
106	Pipes (Polyline)-45	MH-31	False	23.36	MH-10
107	Pipes (Polyline)-55	MH-18	False	23.37	MH-37
108	Pipes (Polyline)-50	MH-48	False	23.37	MH-49
111	Pipes (Polyline)-25	MH-7	False	24.55	MH-50
113	Pipes (Polyline)-63	MH-51	False	24.10	MH-52
116	Pipes (Polyline)-41	MH-53	False	23.68	MH-22
118	Pipes (Polyline)-59	MH-54	False	24.35	MH-46
120	Pipes (Polyline)-31	MH-55	False	23.80	MH-56
123	Pipes (Polyline)-51	MH-57	False	23.80	MH-58
126	Pipes (Polyline)-80	MH-59	False	23.50	MH-42
128	Pipes (Polyline)-57	MH-60	False	24.65	MH-61
131	Pipes (Polyline)-13	MH-14	False	23.72	MH-3
132	Pipes (Polyline)-7	MH-1	False	22.40	MH-32
133	Pipes (Polyline)-71	MH-62	False	24.66	MH-63
136	Pipes (Polyline)-49	MH-64	False	23.45	MH-48
138	Pipes (Polyline)-48	MH-65	False	23.53	MH-64
140	Pipes (Polyline)-61	MH-47	False	24.28	MH-66
142	Pipes (Polyline)-77	MH-45	False	24.46	MH-67

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
144	Pipes (Polyline)-21	MH-68	False	23.99	MH-19
146	Pipes (Polyline)-52	MH-58	False	23.68	MH-69
148	Pipes (Polyline)-15	MH-3	False	23.75	MH-70
150	Pipes (Polyline)-37	MH-12	False	23.07	MH-71
152	Pipes (Polyline)-40	MH-72	False	23.80	MH-53
154	Pipes (Polyline)-16	MH-70	False	23.78	MH-24
155	Pipes (Polyline)-20	MH-5	False	23.96	MH-68
156	Pipes (Polyline)-85	MH-73	False	24.80	MH-74
159	Pipes (Polyline)-1	O-1	False	22.14	MH-76
162	Pipes (Polyline)-72	MH-63	False	24.57	MH-77
164	Pipes (Polyline)-5	MH-34	False	22.39	MH-1
165	Pipes (Polyline)-47	MH-78	False	23.68	MH-65
167	Pipes (Polyline)-46	MH-79	False	23.80	MH-78
169	Pipes (Polyline)-53	MH-69	False	23.58	MH-17
170	Pipes (Polyline)-62	MH-66	False	24.13	MH-51
171	Pipes (Polyline)-38	MH-71	False	22.93	MH-80
173	Pipes (Polyline)-58	MH-61	False	24.52	MH-54
174	Pipes (Polyline)-86	MH-74	False	24.69	MH-81
176	Pipes (Polyline)-73	MH-77	False	24.42	MH-82
178	Pipes (Polyline)-29	MH-37	False	22.95	MH-41
179	Pipes (Polyline)-11	MH-43	False	23.20	MH-13
180	Pipes (Polyline)-64	MH-52	False	24.06	MH-38
181	Pipes (Polyline)-32	MH-56	False	23.69	MH-21
182	Pipes (Polyline)-35	MH-10	False	23.14	MH-11

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
183	Pipes (Polyline)-78	MH-67	False	24.42	MH-83
185	Pipes (Polyline)-26	MH-50	False	24.67	MH-84
187	Pipes (Polyline)-70	MH-85	False	24.80	MH-62
189	Pipes (Polyline)-23	MH-20	False	24.25	MH-7
190	Pipes (Polyline)-27	MH-49	False	23.24	MH-36
191	Pipes (Polyline)-87	MH-81	False	24.59	MH-86
193	Pipes (Polyline)-2	MH-76	False	22.25	MH-35
194	Pipes (Polyline)-56	MH-87	False	24.80	MH-60
196	Pipes (Polyline)-68	MH-88	False	23.84	MH-40
198	Pipes (Polyline)-88	MH-86	False	24.44	MH-39
199	Pipes (Polyline)-82	MH-89	False	24.70	MH-26
201	Pipes (Polyline)-79	MH-83	False	23.96	MH-59
202	Pipes (Polyline)-75	MH-90	False	24.75	MH-44
204	Pipes (Polyline)-67	MH-29	False	23.98	MH-88
205	Pipes (Polyline)-74	MH-82	False	24.33	MH-88
206	Pipes (Polyline)-39	MH-80	False	22.89	MH-43

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	23.29	False	20.0	9.768
False	23.07	False	20.0	1.400
False	23.52	False	20.0	0.600
False	22.44	False	20.0	0.500
False	23.37	False	20.0	2.800
False	24.05	False	20.0	1.200

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	23.48	False	20.0	2.800
False	23.52	False	20.0	3.250
False	23.83	False	20.0	1.000
False	24.51	False	20.0	1.400
False	23.98	False	20.0	1.200
False	23.36	False	20.0	2.800
False	22.43	False	20.0	0.500
False	23.96	False	20.0	1.200
False	22.29	False	20.0	0.500
False	22.28	False	20.0	0.500
False	23.42	False	20.0	2.800
False	23.05	False	20.0	1.400
False	24.00	False	20.0	1.200
False	24.48	False	20.3	1.400
False	24.30	False	20.3	2.800
False	23.72	False	20.6	4.349
False	22.77	False	21.0	6.699
False	23.43	False	24.4	1.200
False	22.45	False	25.0	0.500
False	24.56	False	25.0	2.200
False	24.28	False	25.0	1.400
False	23.29	False	25.2	2.800
False	23.20	False	26.1	6.837
False	23.29	False	27.2	2.800
False	24.62	False	30.0	2.200
False	24.06	False	30.0	1.200
False	23.59	False	30.0	3.250
False	24.31	False	30.0	1.400
False	23.69	False	30.0	3.717
False	23.68	False	30.0	4.157

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	23.46	False	30.0	1.200
False	24.57	False	30.0	2.800
False	23.75	False	30.0	1.000
False	22.42	False	30.0	0.500
False	24.57	False	30.0	3.250
False	23.37	False	30.0	2.800
False	23.45	False	30.0	2.800
False	24.23	False	30.0	1.400
False	24.42	False	30.0	1.400
False	24.03	False	30.0	1.200
False	23.58	False	30.0	3.250
False	23.78	False	30.0	1.000
False	23.03	False	30.0	1.400
False	23.68	False	30.0	3.840
False	23.81	False	30.0	1.000
False	23.99	False	30.0	1.200
False	24.69	False	30.0	3.738
False	22.15	False	30.0	0.500
False	24.47	False	30.0	3.250
False	22.40	False	30.0	0.500
False	23.58	False	30.0	3.250
False	23.68	False	30.0	3.950
False	23.48	False	30.0	3.250
False	24.10	False	30.0	1.200
False	22.89	False	30.0	1.200
False	24.45	False	30.0	2.200
False	24.59	False	30.0	3.250
False	24.33	False	30.0	2.800
False	22.91	False	30.0	1.200
False	23.51	False	30.0	10.331

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	24.03	False	30.0	1.200
False	23.59	False	30.0	3.250
False	23.10	False	30.0	1.400
False	24.38	False	30.0	1.400
False	24.75	False	30.0	2.800
False	24.66	False	30.0	4.571
False	24.55	False	30.0	9.935
False	23.17	False	30.0	2.200
False	24.49	False	30.0	3.250
False	22.27	False	30.0	0.500
False	24.70	False	30.0	3.250
False	23.81	False	30.0	1.000
False	24.36	False	30.0	2.800
False	24.63	False	30.0	2.200
False	23.60	False	30.0	12.000
False	24.67	False	30.0	2.800
False	23.94	False	30.0	1.200
False	24.19	False	30.8	4.617
False	22.85	False	33.3	1.200

Section Type	Diameter (mm)	Manning's n	Flow (m^3/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	250.0	0.013	1,854.98	1.10	0.11
Circle	400.0	0.013	5,057.86	0.68	0.26
Circle	800.0	0.013	24,872.55	0.73	0.37
Circle	900.0	0.013	32,538.23	0.72	0.56
Circle	250.0	0.013	1,690.84	0.68	0.13
Circle	500.0	0.013	9,074.21	0.74	0.33
Circle	250.0	0.013	1,529.50	0.66	0.13
Circle	200.0	0.013	1,412.82	0.67	0.13

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	600.0	0.013	10,531.78	0.73	0.34
Circle	400.0	0.013	3,582.63	0.63	0.20
Circle	500.0	0.013	9,782.68	0.75	0.32
Circle	250.0	0.013	2,058.00	0.70	0.17
Circle	900.0	0.013	32,873.60	0.72	0.54
Circle	500.0	0.013	10,254.24	0.75	0.27
Circle	1,000.0	0.013	41,058.66	0.77	0.58
Circle	1,000.0	0.013	41,268.29	0.77	0.56
Circle	250.0	0.013	1,695.08	0.68	0.16
Circle	400.0	0.013	3,889.80	0.64	0.18
Circle	500.0	0.013	9,079.28	0.74	0.33
Circle	400.0	0.013	3,810.33	0.64	0.17
Circle	250.0	0.013	2,131.57	0.71	0.15
Circle	600.0	0.013	12,761.10	1.32	0.25
Circle	500.0	0.013	6,561.35	1.30	0.18
Circle	500.0	0.013	7,156.30	0.70	0.23
Circle	900.0	0.013	32,220.62	0.72	0.56
Circle	300.0	0.013	2,898.55	0.70	0.16
Circle	400.0	0.013	5,075.90	0.68	0.26
Circle	250.0	0.013	2,287.93	0.72	0.15
Circle	250.0	0.013	1,952.76	0.98	0.12
Circle	250.0	0.013	2,326.40	0.72	0.16
Circle	300.0	0.013	2,609.35	0.69	0.16
Circle	500.0	0.013	7,598.14	0.71	0.32
Circle	200.0	0.013	1,075.02	0.64	0.13
Circle	400.0	0.013	4,187.12	0.65	0.25
Circle	200.0	0.013	684.66	0.60	0.11
Circle	200.0	0.013	586.42	0.60	0.10
Circle	500.0	0.013	6,802.18	0.70	0.26
Circle	250.0	0.013	2,162.25	0.71	0.16
Circle	600.0	0.013	11,800.21	0.74	0.28

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	900.0	0.013	33,233.58	0.72	0.53
Circle	200.0	0.013	913.51	0.61	0.12
Circle	250.0	0.013	1,939.33	0.70	0.17
Circle	250.0	0.013	1,509.36	0.66	0.15
Circle	400.0	0.013	5,916.51	0.70	0.23
Circle	400.0	0.013	4,011.52	0.65	0.23
Circle	500.0	0.013	9,319.92	0.74	0.33
Circle	200.0	0.013	974.44	0.62	0.13
Circle	600.0	0.013	11,343.44	0.74	0.33
Circle	400.0	0.013	5,758.38	0.70	0.22
Circle	200.0	0.013	653.52	0.60	0.10
Circle	600.0	0.013	10,893.16	0.73	0.34
Circle	500.0	0.013	9,875.63	0.75	0.32
Circle	200.0	0.013	679.46	0.60	0.10
Circle	1,100.0	0.013	50,001.53	0.81	0.48
Circle	200.0	0.013	1,304.37	0.66	0.12
Circle	900.0	0.013	33,661.68	0.72	0.50
Circle	200.0	0.013	1,072.00	0.64	0.11
Circle	200.0	0.013	629.10	0.60	0.10
Circle	200.0	0.013	1,365.07	0.67	0.12
Circle	500.0	0.013	6,780.47	0.70	0.31
Circle	500.0	0.013	6,147.01	0.68	0.26
Circle	300.0	0.013	3,199.70	0.72	0.17
Circle	200.0	0.013	1,078.43	0.64	0.13
Circle	250.0	0.013	1,693.05	0.68	0.14
Circle	500.0	0.013	6,287.17	0.68	0.21
Circle	800.0	0.013	25,264.79	2.14	0.29
Circle	500.0	0.013	8,372.53	0.73	0.33
Circle	200.0	0.013	1,127.09	0.64	0.11
Circle	400.0	0.013	4,519.79	0.66	0.25
Circle	400.0	0.013	5,082.21	0.68	0.21

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	250.0	0.013	2,103.18	0.71	0.15
Circle	200.0	0.013	521.03	0.60	0.09
Circle	300.0	0.013	2,991.74	1.25	0.13
Circle	300.0	0.013	3,296.92	0.72	0.18
Circle	200.0	0.013	1,439.12	0.67	0.13
Circle	1,000.0	0.013	48,164.45	0.78	0.50
Circle	200.0	0.013	1,082.02	0.64	0.12
Circle	600.0	0.013	12,504.90	0.75	0.29
Circle	250.0	0.013	1,879.32	0.69	0.16
Circle	300.0	0.013	3,051.32	0.71	0.17
Circle	400.0	0.013	6,055.75	1.60	0.17
Circle	250.0	0.013	1,886.34	0.69	0.14
Circle	500.0	0.013	10,133.58	0.75	0.27
Circle	250.0	0.013	2,053.98	0.86	0.13
Circle	500.0	0.013	6,553.40	0.69	0.22

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
5,078.06	40.1	44.4
6,732.52	82.4	64.1
27,985.69	83.4	46.0
34,974.55	87.3	61.7
2,718.77	68.2	52.5
11,301.37	88.1	66.9
2,718.77	61.7	50.2
1,615.51	95.9	63.1
16,776.08	68.8	56.8
6,732.52	58.4	50.2
11,301.37	94.9	64.5
2,718.77	83.0	67.6
34,974.55	88.2	60.5

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
11,301.37	99.5	54.8
46,320.37	83.2	57.5
46,320.37	83.6	56.1
2,718.77	68.4	62.7
6,732.52	63.4	43.8
11,301.37	88.1	65.8
6,732.52	62.1	43.4
2,718.77	86.0	58.0
34,985.05	40.0	41.4
26,702.47	26.9	35.3
11,301.37	69.4	45.1
34,974.55	86.4	62.7
3,918.82	81.1	54.5
6,732.52	82.7	65.1
2,718.77	92.3	60.8
4,248.39	50.4	48.0
2,718.77	93.8	65.8
3,918.82	73.0	53.2
11,301.37	73.7	64.6
1,615.51	73.0	65.7
6,732.52	68.2	63.4
1,727.64	43.5	52.6
1,827.00	35.2	47.5
11,301.37	66.0	52.7
2,718.77	87.2	63.4
16,776.08	77.1	46.4
34,974.55	89.2	58.7
1,615.51	62.0	61.0
2,718.77	78.2	66.8
2,718.77	60.9	58.7
6,732.52	96.4	58.4

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
6,732.52	65.3	58.7
11,301.37	90.4	66.2
1,615.51	66.1	63.3
16,776.08	74.2	54.6
6,732.52	93.8	55.0
1,756.14	40.8	51.0
16,776.08	71.2	56.3
11,301.37	95.8	63.5
1,732.50	43.0	51.8
59,724.51	78.6	43.7
1,615.51	88.5	60.3
34,974.55	90.3	55.5
1,615.51	72.8	53.4
1,780.90	38.7	50.3
1,615.51	92.7	62.1
11,301.37	65.8	62.6
11,301.37	59.6	51.0
3,918.82	89.5	58.0
1,615.51	73.2	66.8
2,718.77	68.3	56.1
11,301.37	61.0	42.9
116,128.59	20.4	36.0
11,301.37	81.2	65.8
1,615.51	76.5	55.0
6,732.52	73.6	63.3
6,732.52	82.8	51.4
2,718.77	84.8	58.1
1,915.89	29.8	44.7
8,327.88	39.4	44.5
3,918.82	92.3	59.0
1,615.51	97.7	64.4

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
46,320.37	97.6	49.8
1,615.51	73.4	59.2
16,776.08	81.7	48.4
2,718.77	75.8	63.5
3,918.82	85.4	56.4
19,710.80	33.7	42.7
2,718.77	76.1	57.8
11,301.37	98.3	54.8
3,491.38	64.5	52.4
11,301.37	63.6	43.7

sewer. stsw	Bentley Systems, Inc. Haestad Methods Solution Center	Bentley SewerCAD V8i (SELECTseries 4) [08.11.04.54]
26/06/2018	27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666	Page 1 of 1

Flex Table: Manhole Table

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
29	MH-1	25.00	True	25.00	False
32	MH-3	26.00	True	26.00	False
35	MH-5	26.00	True	26.00	False
38	MH-7	26.00	True	26.00	False
41	MH-9	25.00	True	25.00	False
42	MH-10	25.00	True	25.00	False
44	MH-11	25.00	True	25.00	False
45	MH-12	25.00	True	25.00	False
47	MH-13	26.00	True	26.00	False
48	MH-14	26.00	True	26.00	False
50	MH-15	25.00	True	25.00	False
51	MH-16	25.00	True	25.00	False
53	MH-17	25.00	True	25.00	False
54	MH-18	25.00	True	25.00	False
56	MH-19	26.00	True	26.00	False
57	MH-20	26.00	True	26.00	False
59	MH-21	25.00	True	25.00	False
61	MH-22	25.00	True	25.00	False
62	MH-23	25.00	True	25.00	False
64	MH-24	26.00	True	26.00	False
65	MH-25	26.00	True	26.00	False
67	MH-26	26.00	True	26.00	False
68	MH-27	26.00	True	26.00	False
70	MH-28	26.00	True	26.00	False
71	MH-29	26.00	True	26.00	False
73	MH-30	25.00	True	25.00	False
74	MH-31	25.00	True	25.00	False
76	MH-32	25.00	True	25.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
79	MH-33	25.00	True	25.00	False
80	MH-34	25.00	True	25.00	False
82	MH-35	25.00	True	25.00	False
85	MH-36	25.00	True	25.00	False
86	MH-37	25.00	True	25.00	False
88	MH-38	26.00	True	26.00	False
91	MH-39	26.00	True	26.00	False
93	MH-40	26.00	True	26.00	False
95	MH-41	25.00	True	25.00	False
97	MH-42	25.00	True	25.00	False
99	MH-43	25.00	True	25.00	False
101	MH-44	26.00	True	26.00	False
102	MH-45	26.00	True	26.00	False
104	MH-46	26.00	True	26.00	False
105	MH-47	26.00	True	26.00	False
109	MH-48	25.00	True	25.00	False
110	MH-49	25.00	True	25.00	False
112	MH-50	26.00	True	26.00	False
114	MH-51	26.00	True	26.00	False
115	MH-52	26.00	True	26.00	False
117	MH-53	25.00	True	25.00	False
119	MH-54	26.00	True	26.00	False
121	MH-55	25.00	True	25.00	False
122	MH-56	25.00	True	25.00	False
124	MH-57	25.00	True	25.00	False
125	MH-58	25.00	True	25.00	False
127	MH-59	25.00	True	25.00	False
129	MH-60	26.00	True	26.00	False
130	MH-61	26.00	True	26.00	False
134	MH-62	26.00	True	26.00	False
135	MH-63	26.00	True	26.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
137	MH-64	25.00	True	25.00	False
139	MH-65	25.00	True	25.00	False
141	MH-66	26.00	True	26.00	False
143	MH-67	26.00	True	26.00	False
145	MH-68	26.00	True	26.00	False
147	MH-69	25.00	True	25.00	False
149	MH-70	26.00	True	26.00	False
151	MH-71	25.00	True	25.00	False
153	MH-72	25.00	True	25.00	False
157	MH-73	26.00	True	26.00	False
158	MH-74	26.00	True	26.00	False
161	MH-76	25.00	True	25.00	False
163	MH-77	26.00	True	26.00	False
166	MH-78	25.00	True	25.00	False
168	MH-79	25.00	True	25.00	False
172	MH-80	25.00	True	25.00	False
175	MH-81	26.00	True	26.00	False
177	MH-82	26.00	True	26.00	False
184	MH-83	26.00	True	26.00	False
186	MH-84	26.00	True	26.00	False
188	MH-85	26.00	True	26.00	False
192	MH-86	26.00	True	26.00	False
195	MH-87	26.00	True	26.00	False
197	MH-88	26.00	True	26.00	False
200	MH-89	26.00	True	26.00	False
203	MH-90	26.00	True	26.00	False

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
22.40	<Collection: 0 items>	33,233.58	33,661.68	0.52	22.92
23.75	<Collection: 0 items>	11,343.44	11,800.21	0.32	24.07
23.96	<Collection: 0 items>	9,875.63	10,254.24	0.31	24.26
24.55	<Collection: 0 items>	2,609.35	2,991.74	0.14	24.69
23.48	<Collection: 0 items>	1,529.50	1,854.98	0.12	23.60
23.14	<Collection: 0 items>	4,142.91	4,519.79	0.25	23.39
23.10	<Collection: 0 items>	4,519.79	5,057.86	0.26	23.35
23.07	<Collection: 0 items>	5,057.86	5,758.38	0.26	23.33
23.51	<Collection: 0 items>	24,872.55	25,264.79	0.32	23.83
23.52	<Collection: 0 items>	24,561.30	24,872.55	0.41	23.94
22.43	<Collection: 0 items>	32,538.23	32,873.60	0.55	22.98
22.44	<Collection: 0 items>	32,220.62	32,538.23	0.56	23.00
23.43	<Collection: 0 items>	1,365.07	1,690.84	0.14	23.57
23.37	<Collection: 0 items>	1,690.84	1,952.76	0.12	23.50
24.03	<Collection: 0 items>	9,074.21	9,319.92	0.33	24.36
24.05	<Collection: 0 items>	8,933.65	9,074.21	0.34	24.39
23.54	<Collection: 0 items>	1,127.09	1,529.50	0.13	23.67
23.59	<Collection: 0 items>	1,075.02	1,412.82	0.14	23.73
23.47	<Collection: 0 items>	1,412.82	1,695.08	0.15	23.62
23.81	<Collection: 0 items>	10,531.78	10,893.16	0.34	24.15
23.83	<Collection: 0 items>	10,254.24	10,531.78	0.34	24.17
24.53	<Collection: 0 items>	3,051.32	3,582.63	0.20	24.74

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
24.51	<Collection: 0 items>	3,582.63	3,810.33	0.20	24.70
24.00	<Collection: 0 items>	9,079.28	9,782.68	0.33	24.33
23.98	<Collection: 0 items>	9,782.68	10,133.58	0.32	24.29
23.42	<Collection: 0 items>	1,695.08	2,058.00	0.17	23.58
23.36	<Collection: 0 items>	2,058.00	2,287.93	0.17	23.53
22.42	<Collection: 0 items>	32,873.60	33,233.58	0.54	22.96
22.28	<Collection: 0 items>	41,058.66	41,268.29	0.57	22.85
22.29	<Collection: 0 items>	40,817.97	41,058.66	0.58	22.87
22.27	<Collection: 0 items>	47,829.64	48,164.45	0.55	22.82
23.07	<Collection: 0 items>	3,296.92	3,889.80	0.20	23.27
22.95	<Collection: 0 items>	5,842.56	6,287.17	0.25	23.19
24.03	<Collection: 0 items>	8,372.53	9,079.28	0.33	24.36
24.36	<Collection: 0 items>	1,879.32	2,131.57	0.16	24.52
23.81	<Collection: 0 items>	12,504.90	12,761.10	0.25	24.06
22.91	<Collection: 0 items>	6,287.17	6,561.35	0.18	23.09
23.46	<Collection: 0 items>	6,802.18	7,156.30	0.26	23.72
22.45	<Collection: 0 items>	31,818.20	32,220.62	0.57	23.02
24.62	<Collection: 0 items>	1,886.34	2,898.55	0.19	24.80
24.46	<Collection: 0 items>	2,898.55	4,011.52	0.23	24.69
24.31	<Collection: 0 items>	4,187.12	5,075.90	0.26	24.57
24.28	<Collection: 0 items>	5,075.90	5,916.51	0.26	24.54
23.37	<Collection: 0 items>	1,939.33	2,326.40	0.18	23.54

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
23.24	<Collection: 0 items>	2,326.40	3,296.92	0.20	23.44
24.62	<Collection: 0 items>	2,103.18	2,609.35	0.18	24.79
24.10	<Collection: 0 items>	6,780.47	7,598.14	0.32	24.42
24.06	<Collection: 0 items>	7,598.14	8,372.53	0.33	24.39
23.68	<Collection: 0 items>	653.52	1,075.02	0.12	23.80
24.35	<Collection: 0 items>	3,199.70	4,187.12	0.25	24.60
23.80	<Collection: 0 items>	0.00	684.66	0.09	23.89
23.69	<Collection: 0 items>	684.66	1,127.09	0.12	23.81
23.80	<Collection: 0 items>	0.00	586.42	0.08	23.88
23.68	<Collection: 0 items>	586.42	974.44	0.11	23.79
23.50	<Collection: 0 items>	6,055.75	6,802.18	0.27	23.77
24.65	<Collection: 0 items>	1,082.02	2,162.25	0.17	24.82
24.52	<Collection: 0 items>	2,162.25	3,199.70	0.20	24.72
24.66	<Collection: 0 items>	521.03	913.51	0.11	24.77
24.57	<Collection: 0 items>	913.51	1,304.37	0.14	24.70
23.45	<Collection: 0 items>	1,509.36	1,939.33	0.16	23.61
23.53	<Collection: 0 items>	1,072.00	1,509.36	0.13	23.67
24.13	<Collection: 0 items>	5,916.51	6,780.47	0.31	24.44
24.42	<Collection: 0 items>	4,011.52	5,082.21	0.24	24.66
23.99	<Collection: 0 items>	9,319.92	9,875.63	0.33	24.32
23.58	<Collection: 0 items>	974.44	1,365.07	0.14	23.72
23.78	<Collection: 0 items>	10,893.16	11,343.44	0.33	24.12

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
22.93	<Collection: 0 items>	5,758.38	6,147.01	0.26	23.19
23.80	<Collection: 0 items>	0.00	653.52	0.08	23.88
24.80	<Collection: 0 items>	0.00	679.46	0.09	24.89
24.69	<Collection: 0 items>	679.46	1,078.43	0.12	24.81
22.15	<Collection: 0 items>	48,164.45	50,001.53	0.54	22.70
24.42	<Collection: 0 items>	1,304.37	1,693.05	0.14	24.56
23.68	<Collection: 0 items>	629.10	1,072.00	0.12	23.80
23.80	<Collection: 0 items>	0.00	629.10	0.08	23.88
22.89	<Collection: 0 items>	6,147.01	6,553.40	0.25	23.14
24.59	<Collection: 0 items>	1,078.43	1,439.12	0.15	24.74
24.33	<Collection: 0 items>	1,693.05	2,053.98	0.14	24.47
23.96	<Collection: 0 items>	5,082.21	6,055.75	0.19	24.15
24.75	<Collection: 0 items>	0.00	2,103.18	0.16	24.91
24.80	<Collection: 0 items>	0.00	521.03	0.07	24.87
24.44	<Collection: 0 items>	1,439.12	1,879.32	0.15	24.60
24.80	<Collection: 0 items>	0.00	1,082.02	0.12	24.92
23.84	<Collection: 0 items>	12,187.56	12,504.90	0.33	24.17
24.70	<Collection: 0 items>	0.00	3,051.32	0.19	24.89
24.75	<Collection: 0 items>	0.00	1,886.34	0.15	24.90

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	22.92	False	False	<Collection: 1 items>
Absolute	24.07	False	False	<Collection: 1 items>
Absolute	24.26	False	False	<Collection: 1 items>
Absolute	24.69	False	False	<Collection: 1 items>
Absolute	23.60	False	False	<Collection: 1 items>
Absolute	23.39	False	False	<Collection: 1 items>
Absolute	23.35	False	False	<Collection: 1 items>
Absolute	23.33	False	False	<Collection: 1 items>
Absolute	23.83	False	False	<Collection: 1 items>
Absolute	23.94	False	False	<Collection: 1 items>
Absolute	22.98	False	False	<Collection: 1 items>
Absolute	23.00	False	False	<Collection: 1 items>
Absolute	23.57	False	False	<Collection: 1 items>
Absolute	23.50	False	False	<Collection: 1 items>
Absolute	24.36	False	False	<Collection: 1 items>
Absolute	24.39	False	False	<Collection: 1 items>
Absolute	23.67	False	False	<Collection: 1 items>
Absolute	23.73	False	False	<Collection: 1 items>
Absolute	23.62	False	False	<Collection: 1 items>
Absolute	24.15	False	False	<Collection: 1 items>
Absolute	24.17	False	False	<Collection: 1 items>
Absolute	24.74	False	False	<Collection: 1 items>

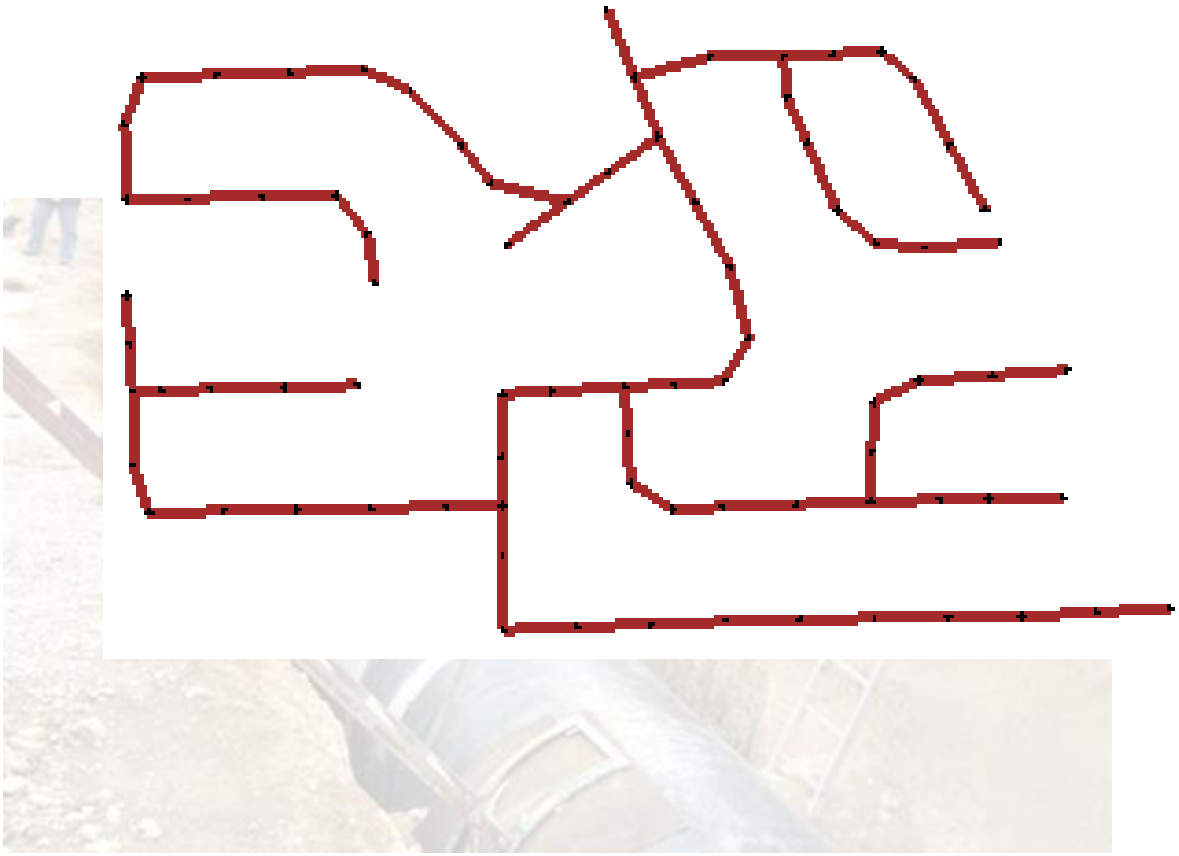
Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	24.70	False	False	<Collection: 1 items>
Absolute	24.33	False	False	<Collection: 1 items>
Absolute	24.29	False	False	<Collection: 1 items>
Absolute	23.58	False	False	<Collection: 1 items>
Absolute	23.53	False	False	<Collection: 1 items>
Absolute	22.96	False	False	<Collection: 1 items>
Absolute	22.85	False	False	<Collection: 1 items>
Absolute	22.87	False	False	<Collection: 1 items>
Absolute	22.82	False	False	<Collection: 1 items>
Absolute	23.27	False	False	<Collection: 1 items>
Absolute	23.19	False	False	<Collection: 1 items>
Absolute	24.36	False	False	<Collection: 1 items>
Absolute	24.52	False	False	<Collection: 1 items>
Absolute	24.06	False	False	<Collection: 1 items>
Absolute	23.09	False	False	<Collection: 1 items>
Absolute	23.72	False	False	<Collection: 1 items>
Absolute	23.02	False	False	<Collection: 1 items>
Absolute	24.80	False	False	<Collection: 1 items>
Absolute	24.69	False	False	<Collection: 1 items>
Absolute	24.57	False	False	<Collection: 1 items>
Absolute	24.54	False	False	<Collection: 1 items>
Absolute	23.54	False	False	<Collection: 1 items>
Absolute	23.44	False	False	<Collection: 1 items>

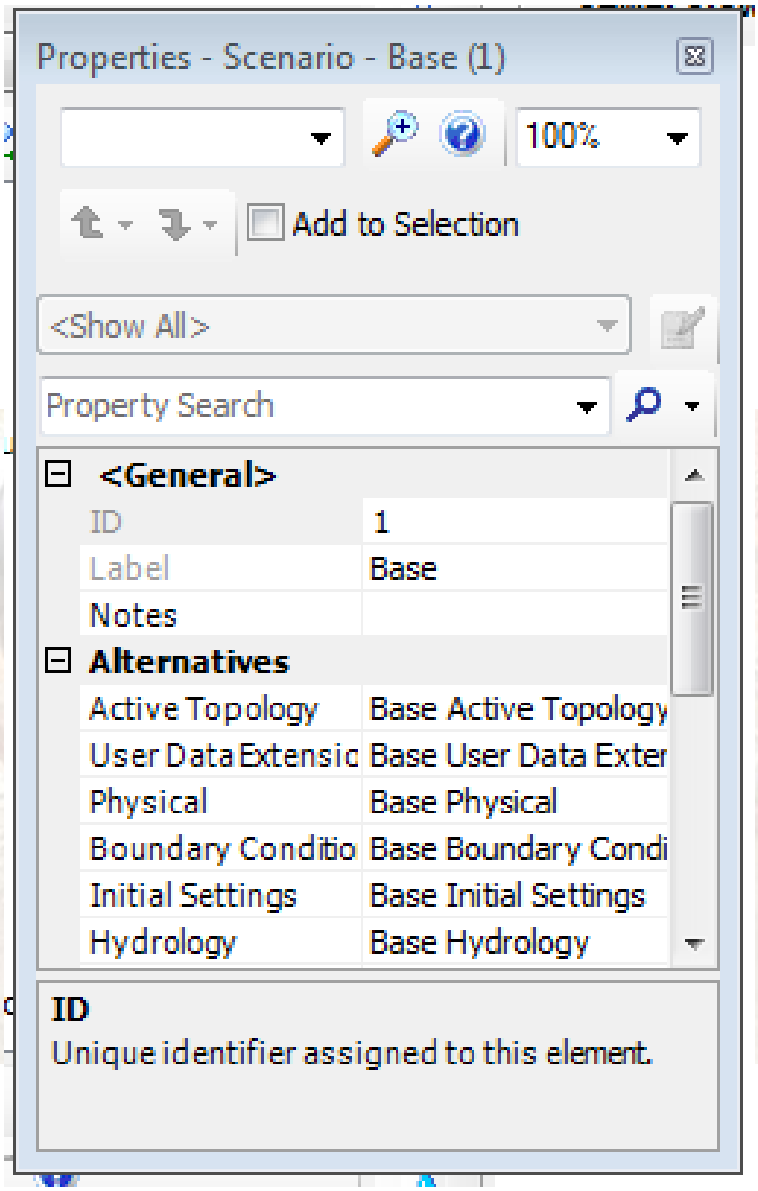
Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	24.79	False	False	<Collection: 1 items>
Absolute	24.42	False	False	<Collection: 1 items>
Absolute	24.39	False	False	<Collection: 1 items>
Absolute	23.80	False	False	<Collection: 1 items>
Absolute	24.60	False	False	<Collection: 1 items>
Absolute	23.89	False	False	<Collection: 1 items>
Absolute	23.81	False	False	<Collection: 1 items>
Absolute	23.88	False	False	<Collection: 1 items>
Absolute	23.79	False	False	<Collection: 1 items>
Absolute	23.77	False	False	<Collection: 1 items>
Absolute	24.82	False	False	<Collection: 1 items>
Absolute	24.72	False	False	<Collection: 1 items>
Absolute	24.77	False	False	<Collection: 1 items>
Absolute	24.70	False	False	<Collection: 1 items>
Absolute	23.61	False	False	<Collection: 1 items>
Absolute	23.67	False	False	<Collection: 1 items>
Absolute	24.44	False	False	<Collection: 1 items>
Absolute	24.66	False	False	<Collection: 1 items>
Absolute	24.32	False	False	<Collection: 1 items>
Absolute	23.72	False	False	<Collection: 1 items>
Absolute	24.12	False	False	<Collection: 1 items>
Absolute	23.19	False	False	<Collection: 1 items>
Absolute	23.88	False	False	<Collection: 1 items>

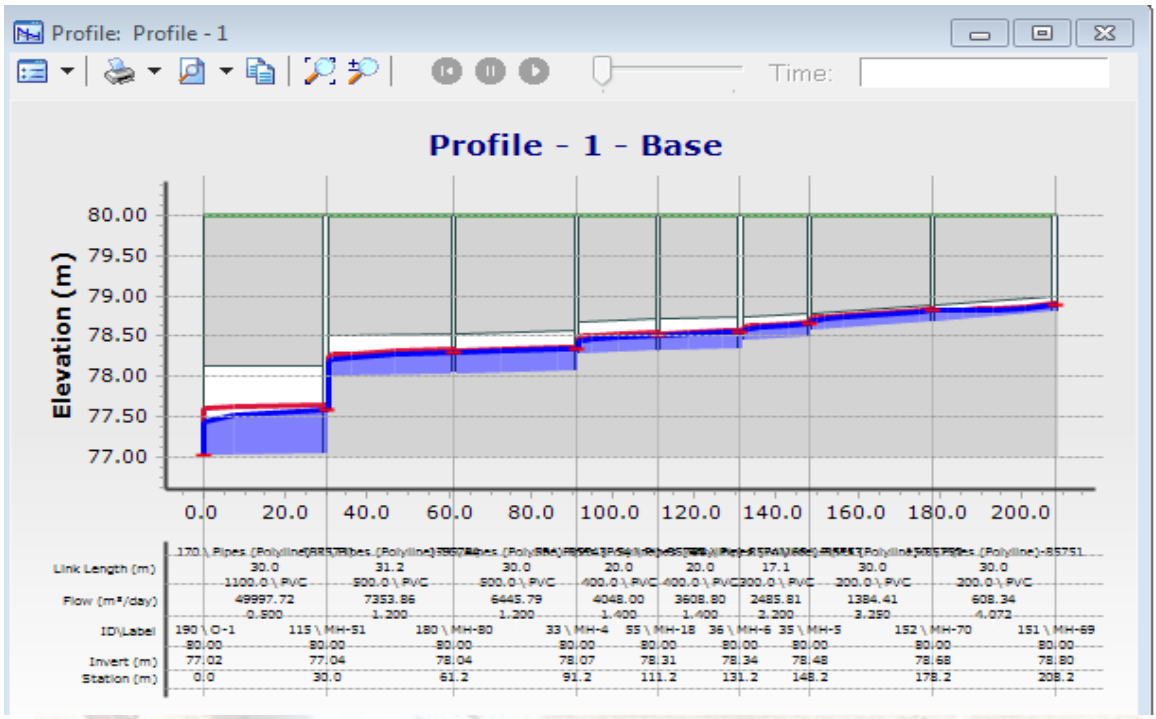
Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	24.89	False	False	<Collection: 1 items>
Absolute	24.81	False	False	<Collection: 1 items>
Absolute	22.70	False	False	<Collection: 1 items>
Absolute	24.56	False	False	<Collection: 1 items>
Absolute	23.80	False	False	<Collection: 1 items>
Absolute	23.88	False	False	<Collection: 1 items>
Absolute	23.14	False	False	<Collection: 1 items>
Absolute	24.74	False	False	<Collection: 1 items>
Absolute	24.47	False	False	<Collection: 1 items>
Absolute	24.15	False	False	<Collection: 1 items>
Absolute	24.91	False	False	<Collection: 1 items>
Absolute	24.87	False	False	<Collection: 1 items>
Absolute	24.60	False	False	<Collection: 1 items>
Absolute	24.92	False	False	<Collection: 1 items>
Absolute	24.17	False	False	<Collection: 1 items>
Absolute	24.89	False	False	<Collection: 1 items>
Absolute	24.90	False	False	<Collection: 1 items>

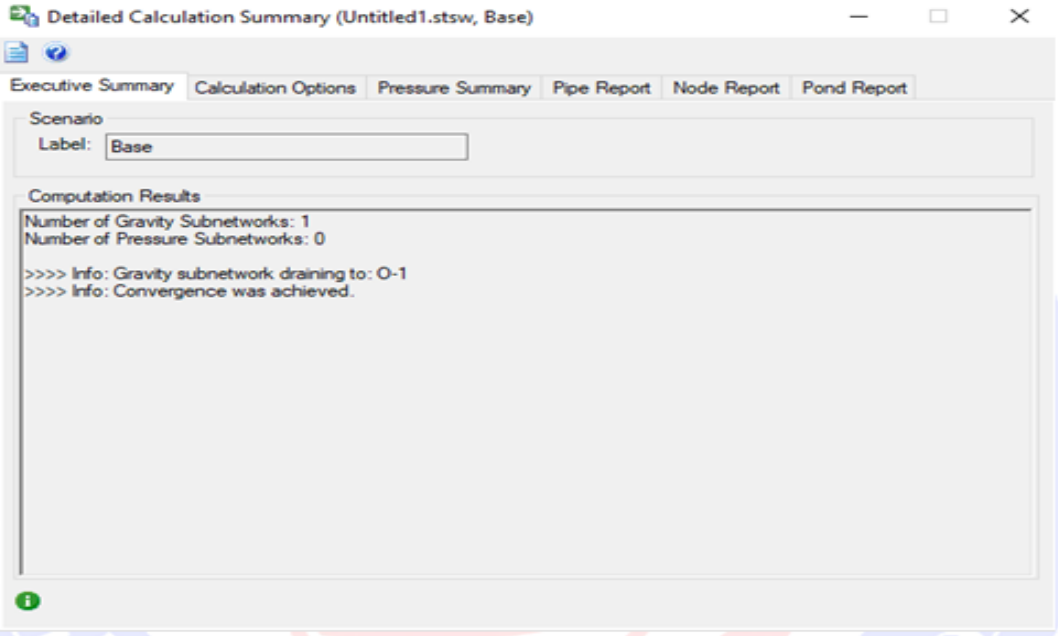
sewer.stsw	Bentley Systems, Inc. Haestad Methods Solution Center	Bentley SewerCAD V8i (SELECTseries 4) [08.11.04.54]
26/06/2018	27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666	Page 1 of 1

اعداد الطالب / محمود إبراهيم محمود محمد سالم




Properties - Scenario - Base (1)
100%
Add to Selection
<Show All>
Property Search
<General>
ID
1
Label
Base
Notes
Alternatives
Active Topology
Base Active Topology
User Data Extensic
Base User Data Exter
Physical
Base Physical
Boundary Conditio
Base Boundary Condi
Initial Settings
Base Initial Settings
Hydrology
Base Hydrology
ID
Unique identifier assigned to this element.


Profile: Profile - 1
Time:
Profile - 1 - Base
Elevation (m)
80.00
79.50
79.00
78.50
78.00
77.50
77.00
0.0
20.0
40.0
60.0
80.0
100.0
120.0
140.0
160.0
180.0
200.0
Link Length (m)
Flow (m³/day)
ID\Label
Invert (m)
Station (m)
190 \ O-1
115 \ MH-51
180 \ MH-80
33 \ MH-4
55 \ MH-18
36 \ MH-6
35 \ MH-5
152 \ MH-70
151 \ MH-69


Detailed Calculation Summary (Untitled1.stsw, Base)
Executive Summary
Calculation Options
Pressure Summary
Pipe Report
Node Report
Pond Report
Scenario
Label:
Base
Computation Results
Number of Gravity Subnetworks: 1
Number of Pressure Subnetworks: 0
>>>> Info: Gravity subnetwork draining to: O-1
>>>> Info: Convergence was achieved.

Flex Table: Conduit Table

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
28	Pipes (Polyline)-85794	MH-1	False	80.46	MH-2
31	Pipes (Polyline)-85750	MH-3	False	78.37	MH-4
34	Pipes (Polyline)-85753	MH-5	False	78.48	MH-6
37	Pipes (Polyline)-85796	MH-7	False	80.73	MH-2
39	Pipes (Polyline)-85764	MH-8	False	80.11	MH-9
42	Pipes (Polyline)-85740	MH-10	False	79.54	MH-11
45	Pipes (Polyline)-85766	MH-12	False	80.68	MH-13
48	Pipes (Polyline)-85797	MH-14	False	78.80	MH-15
51	Pipes (Polyline)-85785	MH-16	False	80.18	MH-17
54	Pipes (Polyline)-85741	MH-6	False	78.34	MH-18
56	Pipes (Polyline)-85747	MH-19	False	78.63	MH-20
59	Pipes (Polyline)-85742	MH-18	False	78.31	MH-4
60	Pipes (Polyline)-85793	MH-21	False	80.52	MH-1
62	Pipes (Polyline)-85761	MH-22	False	80.19	MH-23
65	Pipes (Polyline)-85757	MH-24	False	80.53	MH-25
68	Pipes (Polyline)-85749	MH-26	False	78.43	MH-3
70	Pipes (Polyline)-85736	MH-27	False	78.10	MH-28
73	Pipes (Polyline)-85737	MH-28	False	79.50	MH-29
75	Pipes (Polyline)-85762	MH-23	False	80.16	MH-30
77	Pipes (Polyline)-85809	MH-31	False	77.77	MH-32
80	Pipes (Polyline)-85763	MH-30	False	80.14	MH-8
81	Pipes (Polyline)-85779	MH-33	False	79.58	MH-34

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
84	Pipes (Polyline)-85778	MH-35	False	80.03	MH-33
86	Pipes (Polyline)-85807	MH-36	False	77.83	MH-37
89	Pipes (Polyline)-85746	MH-38	False	78.69	MH-19
91	Pipes (Polyline)-85795	MH-39	False	80.80	MH-7
93	Pipes (Polyline)-85798	MH-15	False	78.69	MH-40
95	Pipes (Polyline)-85782	MH-41	False	77.71	MH-42
98	Pipes (Polyline)-85803	MH-43	False	78.07	MH-44
101	Pipes (Polyline)-85756	MH-45	False	80.58	MH-24
103	Pipes (Polyline)-85758	MH-25	False	80.42	MH-46
105	Pipes (Polyline)-85738	MH-29	False	79.51	MH-9
106	Pipes (Polyline)-85790	MH-47	False	79.91	MH-33
108	Pipes (Polyline)-85801	MH-48	False	78.36	MH-49
111	Pipes (Polyline)-85780	MH-34	False	79.57	MH-11
112	Pipes (Polyline)-85783	MH-42	False	77.68	MH-50
114	Pipes (Polyline)-85732	MH-51	False	77.14	MH-50
116	Pipes (Polyline)-85767	MH-13	False	80.61	MH-46
117	Pipes (Polyline)-85734	MH-52	False	78.07	MH-53
120	Pipes (Polyline)-85777	MH-54	False	80.06	MH-35
122	Pipes (Polyline)-85739	MH-9	False	79.52	MH-10
123	Pipes (Polyline)-85772	MH-55	False	80.34	MH-56
126	Pipes (Polyline)-85771	MH-57	False	80.37	MH-55
128	Pipes (Polyline)-85805	MH-58	False	77.90	MH-59
131	Pipes (Polyline)-85786	MH-17	False	80.05	MH-60
133	Pipes (Polyline)-85755	MH-61	False	80.67	MH-45

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
135	Pipes (Polyline)-85799	MH-40	False	78.60	MH-62
137	Pipes (Polyline)-85733	MH-50	False	78.06	MH-52
138	Pipes (Polyline)-85745	MH-63	False	78.80	MH-38
140	Pipes (Polyline)-85768	MH-64	False	80.60	MH-65
143	Pipes (Polyline)-85769	MH-65	False	80.56	MH-66
145	Pipes (Polyline)-85792	MH-67	False	80.63	MH-21
147	Pipes (Polyline)-85804	MH-44	False	78.04	MH-58
148	Pipes (Polyline)-85791	MH-68	False	80.80	MH-67
150	Pipes (Polyline)-85751	MH-69	False	78.80	MH-70
153	Pipes (Polyline)-85806	MH-59	False	77.86	MH-36
154	Pipes (Polyline)-85789	MH-71	False	79.94	MH-47
156	Pipes (Polyline)-85788	MH-72	False	79.98	MH-71
158	Pipes (Polyline)-85787	MH-60	False	80.02	MH-72
159	Pipes (Polyline)-85775	MH-73	False	80.23	MH-74
162	Pipes (Polyline)-85759	MH-46	False	80.28	MH-75
164	Pipes (Polyline)-85800	MH-62	False	78.50	MH-48
165	Pipes (Polyline)-85776	MH-74	False	80.09	MH-54
166	Pipes (Polyline)-85781	MH-76	False	78.80	MH-41
168	Pipes (Polyline)-85752	MH-70	False	78.68	MH-5
169	Pipes (Polyline)-85808	MH-37	False	77.80	MH-31
170	Pipes (Polyline)-85731	O-1	False	77.02	MH-51
172	Pipes (Polyline)-85765	MH-78	False	80.80	MH-12
174	Pipes (Polyline)-85770	MH-66	False	80.52	MH-57
175	Pipes (Polyline)-85784	MH-2	False	80.22	MH-16

ID	Label	Start Node	Set Invert to Start?	Invert (Start) (m)	Stop Node
176	Pipes (Polyline)-85754	MH-79	False	80.75	MH-61
178	Pipes (Polyline)-85760	MH-75	False	80.23	MH-22
179	Pipes (Polyline)-85743	MH-4	False	78.07	MH-80
181	Pipes (Polyline)-85773	MH-56	False	80.30	MH-81
183	Pipes (Polyline)-85748	MH-20	False	78.51	MH-26
184	Pipes (Polyline)-85735	MH-53	False	78.08	MH-27
185	Pipes (Polyline)-85802	MH-49	False	78.24	MH-43
186	Pipes (Polyline)-85774	MH-81	False	80.27	MH-73
187	Pipes (Polyline)-85744	MH-80	False	78.04	MH-51
188	Pipes (Polyline)-85810	MH-32	False	77.74	MH-41

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	80.42	False	11.4	3.250
False	78.32	False	16.6	2.800
False	78.44	False	17.1	2.200
False	80.67	False	18.7	3.250
False	80.08	False	18.9	1.400
False	79.55	False	19.7	0.600
False	80.61	False	20.0	3.250
False	78.69	False	20.0	5.731
False	80.15	False	20.0	1.400
False	78.31	False	20.0	1.400
False	78.56	False	20.0	3.250
False	78.29	False	20.0	1.400
False	80.46	False	20.0	3.250
False	80.16	False	20.0	1.400
False	80.47	False	20.0	2.800

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	78.37	False	20.0	2.800
False	78.11	False	20.0	0.500
False	79.51	False	20.0	0.600
False	80.14	False	20.0	1.400
False	77.74	False	20.0	1.200
False	80.11	False	20.0	1.400
False	79.57	False	20.0	0.600
False	80.01	False	20.0	1.000
False	77.80	False	20.0	1.200
False	78.63	False	20.0	3.250
False	80.73	False	20.0	3.320
False	78.60	False	20.0	4.216
False	77.68	False	20.0	1.200
False	78.04	False	20.0	1.400
False	80.53	False	20.0	2.800
False	80.38	False	20.0	2.200
False	79.52	False	20.0	0.600
False	79.88	False	23.0	1.200
False	78.29	False	24.9	2.800
False	79.55	False	25.2	0.600
False	77.65	False	25.2	1.200
False	77.15	False	25.8	0.500
False	80.52	False	27.8	3.250
False	78.08	False	30.0	0.500
False	80.03	False	30.0	1.000
False	79.54	False	30.0	0.600
False	80.30	False	30.0	1.200
False	80.34	False	30.0	1.200
False	77.86	False	30.0	1.200
False	80.02	False	30.0	1.200
False	80.58	False	30.0	2.800

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	78.50	False	30.0	3.250
False	78.07	False	30.0	0.500
False	78.69	False	30.0	3.666
False	80.56	False	30.0	1.400
False	80.52	False	30.0	1.400
False	80.52	False	30.0	3.584
False	78.00	False	30.0	1.400
False	80.63	False	30.0	5.622
False	78.68	False	30.0	4.072
False	77.83	False	30.0	1.200
False	79.91	False	30.0	1.200
False	79.94	False	30.0	1.200
False	79.98	False	30.0	1.200
False	80.19	False	30.0	1.200
False	80.23	False	30.0	1.400
False	78.41	False	30.0	3.250
False	80.06	False	30.0	1.000
False	78.63	False	30.0	5.605
False	78.58	False	30.0	3.250
False	77.77	False	30.0	1.200
False	77.04	False	30.0	0.500
False	80.68	False	30.0	4.120
False	80.47	False	30.0	1.400
False	80.18	False	30.0	1.400
False	80.67	False	30.0	2.800
False	80.19	False	30.0	1.400
False	78.04	False	30.0	1.200
False	80.27	False	30.0	1.200
False	78.43	False	30.0	2.800
False	78.10	False	30.0	0.500
False	78.17	False	30.0	2.200

Set Invert to Stop?	Invert (Stop) (m)	Has User Defined Length?	Length (Scaled) (m)	Slope (Calculated) (m/km)
False	80.23	False	30.0	1.200
False	78.00	False	31.2	1.200
False	77.71	False	31.8	1.200

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	200.0	0.013	1,175.54	0.65	0.11
Circle	250.0	0.013	1,926.10	0.70	0.14
Circle	300.0	0.013	2,485.81	0.68	0.15
Circle	200.0	0.013	1,270.36	0.66	0.12
Circle	400.0	0.013	5,034.16	0.68	0.20
Circle	800.0	0.013	24,070.23	0.72	0.50
Circle	200.0	0.013	852.85	0.60	0.11
Circle	200.0	0.013	390.36	0.60	0.07
Circle	400.0	0.013	3,857.02	0.64	0.22
Circle	400.0	0.013	3,608.80	0.63	0.21
Circle	200.0	0.013	1,243.58	0.66	0.12
Circle	400.0	0.013	4,048.00	0.65	0.18
Circle	200.0	0.013	1,068.24	0.64	0.12
Circle	400.0	0.013	4,431.58	0.66	0.24
Circle	250.0	0.013	2,424.90	0.72	0.16
Circle	250.0	0.013	1,770.29	0.68	0.15
Circle	900.0	0.013	30,055.85	0.72	0.52
Circle	800.0	0.013	29,817.26	0.72	0.40
Circle	400.0	0.013	4,636.39	0.67	0.24
Circle	500.0	0.013	9,074.39	0.74	0.33
Circle	400.0	0.013	4,875.78	0.68	0.23
Circle	800.0	0.013	23,537.54	0.72	0.51
Circle	600.0	0.013	13,319.16	0.76	0.29
Circle	500.0	0.013	8,007.10	0.72	0.33
Circle	200.0	0.013	983.07	0.62	0.12

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	200.0	0.013	806.96	0.60	0.12
Circle	200.0	0.013	615.50	0.61	0.09
Circle	500.0	0.013	9,985.87	0.75	0.32
Circle	400.0	0.013	3,251.17	0.61	0.24
Circle	250.0	0.013	2,154.25	0.71	0.17
Circle	300.0	0.013	2,599.24	0.69	0.15
Circle	800.0	0.013	29,614.92	0.73	0.47
Circle	500.0	0.013	10,059.92	0.75	0.27
Circle	250.0	0.013	1,554.11	0.66	0.12
Circle	800.0	0.013	23,742.04	0.72	0.51
Circle	500.0	0.013	10,222.91	0.75	0.27
Circle	1,000.0	0.013	41,461.38	0.77	0.48
Circle	200.0	0.013	1,076.76	0.64	0.11
Circle	900.0	0.013	30,718.97	0.72	0.48
Circle	600.0	0.013	13,074.63	0.76	0.34
Circle	800.0	0.013	24,331.13	0.73	0.49
Circle	500.0	0.013	7,420.27	0.71	0.32
Circle	500.0	0.013	6,589.24	0.69	0.31
Circle	500.0	0.013	6,192.29	0.68	0.31
Circle	500.0	0.013	7,543.31	0.71	0.33
Circle	250.0	0.013	1,883.22	0.69	0.16
Circle	200.0	0.013	879.48	0.61	0.12
Circle	900.0	0.013	31,040.66	0.72	0.40
Circle	200.0	0.013	742.69	0.61	0.10
Circle	400.0	0.013	3,999.21	0.65	0.25
Circle	400.0	0.013	4,853.45	0.67	0.26
Circle	200.0	0.013	768.44	0.61	0.11
Circle	400.0	0.013	5,439.87	0.69	0.22
Circle	200.0	0.013	399.56	0.60	0.08
Circle	200.0	0.013	608.34	0.60	0.11
Circle	500.0	0.013	6,939.05	0.70	0.32

Section Type	Diameter (mm)	Manning's n	Flow (m³/day)	Velocity (m/s)	Depth (Middle) (m)
Circle	500.0	0.013	9,796.22	0.75	0.32
Circle	500.0	0.013	9,314.81	0.74	0.33
Circle	500.0	0.013	8,585.99	0.73	0.33
Circle	500.0	0.013	9,853.73	0.75	0.28
Circle	400.0	0.013	3,876.81	0.64	0.23
Circle	200.0	0.013	1,264.23	0.66	0.12
Circle	600.0	0.013	10,674.44	0.73	0.35
Circle	200.0	0.013	400.94	0.60	0.06
Circle	200.0	0.013	1,384.41	0.67	0.13
Circle	500.0	0.013	8,716.26	0.74	0.33
Circle	1,100.0	0.013	49,997.72	0.81	0.48
Circle	200.0	0.013	598.87	0.60	0.09
Circle	400.0	0.013	5,757.22	0.70	0.23
Circle	400.0	0.013	2,907.45	0.60	0.21
Circle	250.0	0.013	1,562.40	0.66	0.15
Circle	400.0	0.013	4,181.34	0.65	0.24
Circle	500.0	0.013	6,445.79	0.69	0.27
Circle	500.0	0.013	8,212.83	0.73	0.32
Circle	250.0	0.013	1,510.00	0.66	0.14
Circle	900.0	0.013	30,363.67	0.72	0.51
Circle	300.0	0.013	2,309.30	0.67	0.15
Circle	500.0	0.013	9,031.54	0.74	0.32
Circle	500.0	0.013	7,353.86	0.71	0.23
Circle	500.0	0.013	9,290.01	0.74	0.33

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
1,615.51	79.8	55.9
2,718.77	77.7	54.5
3,918.82	69.6	49.5
1,615.51	86.2	59.1

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
6,732.52	82.0	50.1
27,985.69	80.7	62.5
1,615.51	57.9	55.8
2,145.36	20.0	34.4
6,732.52	62.8	55.2
6,732.52	58.8	51.4
1,615.51	84.4	58.4
6,732.52	65.9	44.8
1,615.51	72.5	60.8
6,732.52	72.2	60.0
2,718.77	97.8	62.6
2,718.77	71.4	60.1
34,974.55	80.6	57.8
27,985.69	100.0	50.4
6,732.52	75.5	60.0
11,301.37	88.1	66.8
6,732.52	79.4	58.5
27,985.69	78.9	64.0
16,776.08	87.1	48.4
11,301.37	77.7	66.2
1,615.51	66.7	61.4
1,632.74	54.2	58.7
1,840.01	33.5	46.2
11,301.37	96.9	64.1
6,732.52	53.0	60.2
2,718.77	86.9	69.7
3,918.82	72.7	50.9
27,985.69	99.3	58.6
11,301.37	97.6	53.8
2,718.77	62.7	49.9
27,985.69	79.6	63.3

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
11,301.37	99.2	54.6
46,320.37	84.0	47.7
1,615.51	73.1	53.6
34,974.55	82.4	53.2
16,776.08	85.5	56.9
27,985.69	81.6	61.3
11,301.37	72.0	63.2
11,301.37	63.9	61.2
11,301.37	60.1	61.5
11,301.37	73.2	65.3
2,718.77	76.0	65.2
1,615.51	59.7	59.6
34,974.55	83.3	45.0
1,715.88	43.3	51.5
6,732.52	65.1	61.8
6,732.52	79.1	63.8
1,696.39	45.3	53.4
6,732.52	88.6	56.0
2,124.81	20.6	38.3
1,808.24	36.9	55.7
11,301.37	67.3	64.4
11,301.37	95.1	63.6
11,301.37	90.4	66.1
11,301.37	83.3	66.5
11,301.37	95.6	56.5
6,732.52	63.1	57.5
1,615.51	85.8	59.1
16,776.08	69.8	58.8
2,121.61	20.7	28.9
1,615.51	94.0	62.7
11,301.37	84.6	66.8

Capacity (Full Flow) (m³/day)	Flow / Capacity (Design) (%)	Depth (Average End) / Rise (%)
59,724.51	78.5	43.7
1,818.94	36.1	45.7
6,732.52	93.8	57.0
6,732.52	47.4	52.7
2,718.77	63.0	58.4
6,732.52	68.1	59.2
11,301.37	62.5	53.5
11,301.37	79.7	64.2
2,718.77	60.9	56.3
34,974.55	81.5	56.1
3,918.82	64.6	49.5
11,301.37	87.6	63.4
11,301.37	71.4	46.2
11,301.37	90.1	66.1

sewer.stsw	Bentley Systems, Inc. Haestad Methods Solution Center	Bentley SewerCAD V8i (SELECTseries 4) [08.11.04.54]
28/06/2018	27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666	Page 1 of 1

Flex Table: Manhole Table

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
29	MH-1	82.00	True	82.00	False
30	MH-2	82.00	True	82.00	False
32	MH-3	80.00	True	80.00	False
33	MH-4	80.00	True	80.00	False
35	MH-5	80.00	True	80.00	False
36	MH-6	80.00	True	80.00	False
38	MH-7	82.00	True	82.00	False
40	MH-8	82.00	True	82.00	False
41	MH-9	82.00	True	82.00	False
43	MH-10	82.00	True	82.00	False
44	MH-11	82.00	True	82.00	False
46	MH-12	82.00	True	82.00	False
47	MH-13	82.00	True	82.00	False
49	MH-14	80.00	True	80.00	False
50	MH-15	80.00	True	80.00	False
52	MH-16	82.00	True	82.00	False
53	MH-17	82.00	True	82.00	False
55	MH-18	80.00	True	80.00	False
57	MH-19	80.00	True	80.00	False
58	MH-20	80.00	True	80.00	False
61	MH-21	82.00	True	82.00	False
63	MH-22	82.00	True	82.00	False
64	MH-23	82.00	True	82.00	False
66	MH-24	82.00	True	82.00	False
67	MH-25	82.00	True	82.00	False
69	MH-26	80.00	True	80.00	False
71	MH-27	80.00	True	80.00	False
72	MH-28	82.00	True	82.00	False
74	MH-29	82.00	True	82.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
76	MH-30	82.00	True	82.00	False
78	MH-31	80.00	True	80.00	False
79	MH-32	80.00	True	80.00	False
82	MH-33	82.00	True	82.00	False
83	MH-34	82.00	True	82.00	False
85	MH-35	82.00	True	82.00	False
87	MH-36	80.00	True	80.00	False
88	MH-37	80.00	True	80.00	False
90	MH-38	80.00	True	80.00	False
92	MH-39	82.00	True	82.00	False
94	MH-40	80.00	True	80.00	False
96	MH-41	80.00	True	80.00	False
97	MH-42	80.00	True	80.00	False
99	MH-43	80.00	True	80.00	False
100	MH-44	80.00	True	80.00	False
102	MH-45	82.00	True	82.00	False
104	MH-46	82.00	True	82.00	False
107	MH-47	82.00	True	82.00	False
109	MH-48	80.00	True	80.00	False
110	MH-49	80.00	True	80.00	False
113	MH-50	80.00	True	80.00	False
115	MH-51	80.00	True	80.00	False
118	MH-52	80.00	True	80.00	False
119	MH-53	80.00	True	80.00	False
121	MH-54	82.00	True	82.00	False
124	MH-55	82.00	True	82.00	False
125	MH-56	82.00	True	82.00	False
127	MH-57	82.00	True	82.00	False
129	MH-58	80.00	True	80.00	False
130	MH-59	80.00	True	80.00	False
132	MH-60	82.00	True	82.00	False

ID	Label	Elevation (Ground) (m)	Set Rim to Ground Elevation?	Elevation (Rim) (m)	Bolted Cover?
134	MH-61	82.00	True	82.00	False
136	MH-62	80.00	True	80.00	False
139	MH-63	80.00	True	80.00	False
141	MH-64	82.00	True	82.00	False
142	MH-65	82.00	True	82.00	False
144	MH-66	82.00	True	82.00	False
146	MH-67	82.00	True	82.00	False
149	MH-68	82.00	True	82.00	False
151	MH-69	80.00	True	80.00	False
152	MH-70	80.00	True	80.00	False
155	MH-71	82.00	True	82.00	False
157	MH-72	82.00	True	82.00	False
160	MH-73	82.00	True	82.00	False
161	MH-74	82.00	True	82.00	False
163	MH-75	82.00	True	82.00	False
167	MH-76	80.00	True	80.00	False
173	MH-78	82.00	True	82.00	False
177	MH-79	82.00	True	82.00	False
180	MH-80	80.00	True	80.00	False
182	MH-81	82.00	True	82.00	False

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m^3/day)	Flow (Total Out) (m^3/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
80.46	<Collection: 0 items>	1,068.24	1,175.54	0.12	80.58
80.22	<Collection: 0 items>	2,445.91	2,907.45	0.20	80.42
78.37	<Collection: 0 items>	1,770.29	1,926.10	0.15	78.52
78.07	<Collection: 0 items>	5,974.10	6,445.79	0.27	78.34
78.48	<Collection: 0 items>	1,384.41	2,485.81	0.17	78.65

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
78.34	<Collection: 0 items>	2,485.81	3,608.80	0.21	78.55
80.73	<Collection: 0 items>	806.96	1,270.36	0.13	80.87
80.11	<Collection: 0 items>	4,875.78	5,034.16	0.23	80.34
79.52	<Collection: 0 items>	29,365.29	29,614.92	0.48	80.01
79.54	<Collection: 0 items>	24,070.23	24,331.13	0.50	80.04
79.55	<Collection: 0 items>	23,742.04	24,070.23	0.50	80.06
80.68	<Collection: 0 items>	598.87	852.85	0.10	80.78
80.61	<Collection: 0 items>	852.85	1,076.76	0.12	80.73
78.80	<Collection: 0 items>	0.00	390.36	0.06	78.86
78.69	<Collection: 0 items>	390.36	615.50	0.08	78.77
80.18	<Collection: 0 items>	2,907.45	3,857.02	0.22	80.40
80.05	<Collection: 0 items>	3,857.02	7,543.31	0.32	80.37
78.31	<Collection: 0 items>	3,608.80	4,048.00	0.20	78.52
78.63	<Collection: 0 items>	983.07	1,243.58	0.13	78.76
78.51	<Collection: 0 items>	1,243.58	1,510.00	0.13	78.64
80.52	<Collection: 0 items>	768.44	1,068.24	0.12	80.64
80.19	<Collection: 0 items>	4,181.34	4,431.58	0.24	80.43
80.16	<Collection: 0 items>	4,431.58	4,636.39	0.24	80.40
80.53	<Collection: 0 items>	2,154.25	2,424.90	0.18	80.70
80.42	<Collection: 0 items>	2,424.90	2,599.24	0.17	80.59
78.43	<Collection: 0 items>	1,510.00	1,770.29	0.15	78.57
78.10	<Collection: 0 items>	30,055.85	30,363.67	0.52	78.62
78.11	<Collection: 0 items>	29,817.26	30,055.85	0.53	78.64

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
79.51	<Collection: 0 items>	29,614.92	29,817.26	0.45	79.97
80.14	<Collection: 0 items>	4,636.39	4,875.78	0.24	80.37
77.77	<Collection: 0 items>	8,716.26	9,074.39	0.33	78.10
77.74	<Collection: 0 items>	9,074.39	9,290.01	0.33	78.08
79.58	<Collection: 0 items>	23,379.08	23,537.54	0.51	80.09
79.57	<Collection: 0 items>	23,537.54	23,742.04	0.51	80.08
80.03	<Collection: 0 items>	13,074.63	13,319.16	0.33	80.36
77.83	<Collection: 0 items>	6,939.05	8,007.10	0.33	78.16
77.80	<Collection: 0 items>	8,007.10	8,716.26	0.33	78.14
78.69	<Collection: 0 items>	742.69	983.07	0.11	78.80
80.80	<Collection: 0 items>	0.00	806.96	0.10	80.90
78.60	<Collection: 0 items>	615.50	879.48	0.11	78.71
77.71	<Collection: 0 items>	9,690.96	9,985.87	0.33	78.03
77.68	<Collection: 0 items>	9,985.87	10,222.91	0.31	78.00
78.07	<Collection: 0 items>	2,309.30	3,251.17	0.23	78.30
78.04	<Collection: 0 items>	3,251.17	5,439.87	0.25	78.29
80.58	<Collection: 0 items>	1,883.22	2,154.25	0.17	80.75
80.28	<Collection: 0 items>	3,676.00	3,876.81	0.23	80.50
79.91	<Collection: 0 items>	9,796.22	10,059.92	0.31	80.22
78.36	<Collection: 0 items>	1,264.23	1,554.11	0.14	78.49
78.24	<Collection: 0 items>	1,554.11	2,309.30	0.16	78.40
77.15	<Collection: 0 items>	41,263.56	41,461.38	0.51	77.66
77.04	<Collection: 0 items>	48,815.25	49,997.72	0.54	77.58

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
78.07	<Collection: 0 items>	30,718.97	31,040.66	0.46	78.53
78.08	<Collection: 0 items>	30,363.67	30,718.97	0.49	78.58
80.06	<Collection: 0 items>	10,674.44	13,074.63	0.35	80.42
80.34	<Collection: 0 items>	6,589.24	7,420.27	0.31	80.65
80.30	<Collection: 0 items>	7,420.27	8,212.83	0.32	80.62
80.37	<Collection: 0 items>	5,757.22	6,589.24	0.30	80.67
77.90	<Collection: 0 items>	5,439.87	6,192.29	0.30	78.20
77.86	<Collection: 0 items>	6,192.29	6,939.05	0.32	78.18
80.02	<Collection: 0 items>	7,543.31	8,585.99	0.33	80.35
80.67	<Collection: 0 items>	1,562.40	1,883.22	0.16	80.82
78.50	<Collection: 0 items>	879.48	1,264.23	0.13	78.64
78.80	<Collection: 0 items>	0.00	742.69	0.09	78.89
80.60	<Collection: 0 items>	0.00	3,999.21	0.24	80.84
80.56	<Collection: 0 items>	3,999.21	4,853.45	0.25	80.81
80.52	<Collection: 0 items>	4,853.45	5,757.22	0.26	80.77
80.63	<Collection: 0 items>	399.56	768.44	0.09	80.73
80.80	<Collection: 0 items>	0.00	399.56	0.06	80.86
78.80	<Collection: 0 items>	0.00	608.34	0.08	78.88
78.68	<Collection: 0 items>	608.34	1,384.41	0.14	78.82
79.94	<Collection: 0 items>	9,314.81	9,796.22	0.33	80.27
79.98	<Collection: 0 items>	8,585.99	9,314.81	0.33	80.31
80.23	<Collection: 0 items>	9,031.54	9,853.73	0.31	80.54
80.09	<Collection: 0 items>	9,853.73	10,674.44	0.35	80.45

Elevation (Invert) (m)	Inflow (Wet) Collection	Flow (Total In) (m³/day)	Flow (Total Out) (m³/day)	Depth (Out) (m)	Hydraulic Grade Line (Out) (m)
80.23	<Collection: 0 items>	3,876.81	4,181.34	0.23	80.47
78.80	<Collection: 0 items>	0.00	400.94	0.06	78.86
80.80	<Collection: 0 items>	0.00	598.87	0.08	80.88
80.75	<Collection: 0 items>	0.00	1,562.40	0.14	80.89
78.04	<Collection: 0 items>	6,445.79	7,353.86	0.27	78.30
80.27	<Collection: 0 items>	8,212.83	9,031.54	0.32	80.59

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.58	False	False	<Collection: 1 items>
Absolute	80.42	False	False	<Collection: 1 items>
Absolute	78.52	False	False	<Collection: 1 items>
Absolute	78.34	False	False	<Collection: 1 items>
Absolute	78.65	False	False	<Collection: 1 items>
Absolute	78.55	False	False	<Collection: 1 items>
Absolute	80.87	False	False	<Collection: 1 items>
Absolute	80.34	False	False	<Collection: 1 items>
Absolute	80.01	False	False	<Collection: 1 items>
Absolute	80.04	False	False	<Collection: 1 items>
Absolute	80.06	False	False	<Collection: 1 items>
Absolute	80.78	False	False	<Collection: 1 items>
Absolute	80.73	False	False	<Collection: 1 items>
Absolute	78.86	False	False	<Collection: 1 items>
Absolute	78.77	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.40	False	False	<Collection: 1 items>
Absolute	80.37	False	False	<Collection: 1 items>
Absolute	78.52	False	False	<Collection: 1 items>
Absolute	78.76	False	False	<Collection: 1 items>
Absolute	78.64	False	False	<Collection: 1 items>
Absolute	80.64	False	False	<Collection: 1 items>
Absolute	80.43	False	False	<Collection: 1 items>
Absolute	80.40	False	False	<Collection: 1 items>
Absolute	80.70	False	False	<Collection: 1 items>
Absolute	80.59	False	False	<Collection: 1 items>
Absolute	78.57	False	False	<Collection: 1 items>
Absolute	78.62	False	False	<Collection: 1 items>
Absolute	78.64	False	False	<Collection: 1 items>
Absolute	79.97	False	False	<Collection: 1 items>
Absolute	80.37	False	False	<Collection: 1 items>
Absolute	78.10	False	False	<Collection: 1 items>
Absolute	78.08	False	False	<Collection: 1 items>
Absolute	80.09	False	False	<Collection: 1 items>
Absolute	80.08	False	False	<Collection: 1 items>
Absolute	80.36	False	False	<Collection: 1 items>
Absolute	78.16	False	False	<Collection: 1 items>
Absolute	78.14	False	False	<Collection: 1 items>
Absolute	78.80	False	False	<Collection: 1 items>
Absolute	80.90	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	78.71	False	False	<Collection: 1 items>
Absolute	78.03	False	False	<Collection: 1 items>
Absolute	78.00	False	False	<Collection: 1 items>
Absolute	78.30	False	False	<Collection: 1 items>
Absolute	78.29	False	False	<Collection: 1 items>
Absolute	80.75	False	False	<Collection: 1 items>
Absolute	80.50	False	False	<Collection: 1 items>
Absolute	80.22	False	False	<Collection: 1 items>
Absolute	78.49	False	False	<Collection: 1 items>
Absolute	78.40	False	False	<Collection: 1 items>
Absolute	77.66	False	False	<Collection: 1 items>
Absolute	77.58	False	False	<Collection: 1 items>
Absolute	78.53	False	False	<Collection: 1 items>
Absolute	78.58	False	False	<Collection: 1 items>
Absolute	80.42	False	False	<Collection: 1 items>
Absolute	80.65	False	False	<Collection: 1 items>
Absolute	80.62	False	False	<Collection: 1 items>
Absolute	80.67	False	False	<Collection: 1 items>
Absolute	78.20	False	False	<Collection: 1 items>
Absolute	78.18	False	False	<Collection: 1 items>
Absolute	80.35	False	False	<Collection: 1 items>
Absolute	80.82	False	False	<Collection: 1 items>
Absolute	78.64	False	False	<Collection: 1 items>
Absolute	78.89	False	False	<Collection: 1 items>

Headloss Method	Hydraulic Grade Line (In) (m)	Is Overflowing?	Is Ever Overflowing?	Sanitary Loads
Absolute	80.84	False	False	<Collection: 1 items>
Absolute	80.81	False	False	<Collection: 1 items>
Absolute	80.77	False	False	<Collection: 1 items>
Absolute	80.73	False	False	<Collection: 1 items>
Absolute	80.86	False	False	<Collection: 1 items>
Absolute	78.88	False	False	<Collection: 1 items>
Absolute	78.82	False	False	<Collection: 1 items>
Absolute	80.27	False	False	<Collection: 1 items>
Absolute	80.31	False	False	<Collection: 1 items>
Absolute	80.54	False	False	<Collection: 1 items>
Absolute	80.45	False	False	<Collection: 1 items>
Absolute	80.47	False	False	<Collection: 1 items>
Absolute	78.86	False	False	<Collection: 1 items>
Absolute	80.88	False	False	<Collection: 1 items>
Absolute	80.89	False	False	<Collection: 1 items>
Absolute	78.30	False	False	<Collection: 1 items>
Absolute	80.59	False	False	<Collection: 1 items>