

**APPENDIX F:
ALTERNATIVE 2A MODEL RESULTS**

County of Simcoe - Web Map



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0 0.03 0.06 0.12 km
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March 10, 2017

**BARRIE CITYWIDE MINOR AND MAJOR STORMWATER MODEL DEVELOPMENT
SOPHIA CREEK WATERSHED
SWM POND SP03**

Wet Pond Characteristics:

Side Slope: 5 :1
 Top Elevation: 275.00 m
 Bottom Elev: 272.00 m
 Permanent Pool: m
 Stage 0.1 m

SWMF SP03 - STAGE/VOLUME TABLE							
Pond Geometry				Pond Volume (m ³)			
Elevation (m)	Depth (m)	Area (m ²)	Avg. Area (m)	Dead	Accum. Dead	Live	Accum. Live
252.32	0	0	0			0	0
252.60	0.28	3675	1837.50			514.50	515
252.70	0.38	4988	4331.25			433.12	948
252.80	0.48	6300	5643.75			564.37	1512
252.90	0.58	6473	6386.25			638.63	2151
253.00	0.68	6645	6558.76			655.88	2807
253.10	0.78	6818	6731.27			673.13	3480
253.20	0.88	6990	6903.78			690.38	4170
253.30	0.98	7163	7076.29			707.63	4878
253.40	1.08	7335	7248.80			724.88	5603
253.50	1.18	7508	7421.31			742.13	6345
253.60	1.28	7680	7593.82			759.38	7104
253.70	1.38	7853	7766.33			776.63	7881
253.80	1.48	8025	7938.84			793.88	8675
253.90	1.58	8198	8111.35			811.14	9486
254.00	1.68	8370	8283.86			828.39	10314
254.10	1.78	8543	8456.37			845.64	11160
254.20	1.88	8715	8628.88			862.89	12023
254.30	1.98	8888	8801.39			880.14	12903
254.40	2.08	9060	8973.90			897.39	13800
254.50	2.18	9233	9146.41			914.64	14715
254.60	2.28	9405	9318.92			931.89	15647
254.70	2.38	9578	9491.43			949.14	16596
254.80	2.48	9750	9663.94			966.39	17562
254.90	2.58	9923	9836.45			983.65	18546
255.00	2.68	10095	10008.96			1000.90	19547
255.10	2.78	10268	10181.47			1018.15	20565
255.20	2.88	10440	10353.98			1035.40	21600
255.30	2.98	10613	10526.49			1052.65	22653
255.35	3.03	10699	10655.87			532.79	23186

BARRIE CITYWIDE MINOR AND MAJOR STORMWATER MODEL DEVELOPMENT
SOPHIA CREEK WATERSHED
SWM POND SP03

Orifice #1:		Overflow Weir:	Weir 1	Weir 2	
Diameter:	825	Length of Weir	1	8	m
Area:	0.5346	Weir Sill Elevation	253.90	254.35	m
C:	0.63	Weir constant K	1.6	1.6	
Invert:	252.32	Side Slope (H:V)	0	6	:1

Elevation (m)	Orifice #1		Weir #1		Weir #1		Total Discharge (m ³ /s)	Live Volume (ha.m)
	Head (m)	Discharge (m ³ /s)	Head (m)	Discharge (m ³ /s)	Head (m)	Discharge (m ³ /s)		
252.32	0.000	0.000	0	0.000	0	0.000	0.000	0.000
252.60	0.000	0.000	0	0.000	0	0.000	0.000	0.051
252.70	0.000	0.000	0	0.000	0	0.000	0.000	0.095
252.80	0.067	0.388	0	0.000	0	0.000	0.388	0.151
252.90	0.167	0.611	0	0.000	0	0.000	0.611	0.215
253.00	0.267	0.772	0	0.000	0	0.000	0.772	0.281
253.10	0.367	0.904	0	0.000	0	0.000	0.904	0.348
253.20	0.467	1.020	0	0.000	0	0.000	1.020	0.417
253.30	0.567	1.124	0	0.000	0	0.000	1.124	0.488
253.40	0.667	1.219	0	0.000	0	0.000	1.219	0.560
253.50	0.767	1.307	0	0.000	0	0.000	1.307	0.634
253.60	0.867	1.389	0	0.000	0	0.000	1.389	0.710
253.70	0.967	1.467	0	0.000	0	0.000	1.467	0.788
253.80	1.067	1.541	0	0.000	0	0.000	1.541	0.867
253.90	1.167	1.612	0	0.000	0	0.000	1.612	0.949
254.00	1.267	1.679	0.1	0.051	0	0.000	1.730	1.031
254.10	1.367	1.744	0.2	0.143	0	0.000	1.888	1.116
254.20	1.467	1.807	0.3	0.263	0	0.000	2.070	1.202
254.30	1.567	1.868	0.4	0.405	0	0.000	2.272	1.290
254.40	1.667	1.926	0.5	0.566	0.05	0.148	2.640	1.380
254.50	1.767	1.983	0.6	0.744	0.15	0.827	3.554	1.471
254.60	1.867	2.039	0.7	0.937	0.25	1.900	4.876	1.565
254.70	1.967	2.092	0.8	1.145	0.35	3.346	6.583	1.660
254.80	2.067	2.145	0.9	1.366	0.45	5.168	8.679	1.756
254.90	2.167	2.196	1	1.600	0.55	7.375	11.171	1.855
255.00	2.267	2.246	1.1	1.846	0.65	9.978	14.070	1.955
255.10	2.367	2.295	1.2	2.103	0.75	12.990	17.389	2.056
255.20	2.467	2.343	1.3	2.372	0.85	16.426	21.140	2.160
255.30	2.567	2.390	1.4	2.650	0.95	20.297	25.337	2.265
255.35	2.618	2.413	1.45	2.794	1	22.400	27.607	2.319

Daniel Twigger - Re: 115172 - SP03 Information

From: David Marshall
To: Twigger, Daniel
Date: 3/6/2017 2:43 PM
Subject: Re: 115172 - SP03 Information
Attachments: 115172 - Proposed SSD Sophia Creek SP03.xls; SP03 and SP01.pdf

Updated as per additional modelling from November 2016 - Alternative 2 with expanded SP03 (Retrofit SP03)

See Previous Email for original SSD and Concept Drawing from Skelton Brumwell

>>> David Marshall 3/6/2017 12:32 PM >>>
Requested information for SP03:

SSD Table Attached (source: CCTA Design)

Concept Plan Attached (source: CCTA Design).

Water Levels:

2-year (SCS 24 hr): **253.720**

5-year (SCS 24 hr): **254.352**

10-year (SCS 24 hr): **254.574**

25-year (SCS 24 hr): **254.779**

50-year (SCS 24 hr): **254.904**

100-year (SCS 6 hr): **255.015**

Regional (Hazel): **254.907**

****Range of water levels from SSD are from 252.32 to 255.35. All water levels are within this range and are interpolated.

SP03
Sophia Creek Watershed
(Ottawa Avenue)

Permitted Total Flow	718 m ³ /s
Burns Spillway Elev. Between Gates	718 m

Orifice 1 Data (Rectangular)		Orifice 2 Data	
Chamber	0.630	C _d	0.620
Discharge	186 m ³ /s	Discharge	186 m ³ /s
Area	2,252 m ²	Head	0.00 m
Invert Elev.	262.320 m	Invert Elev.	0.00 m

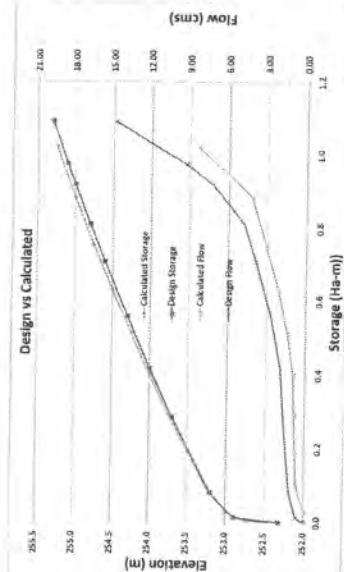
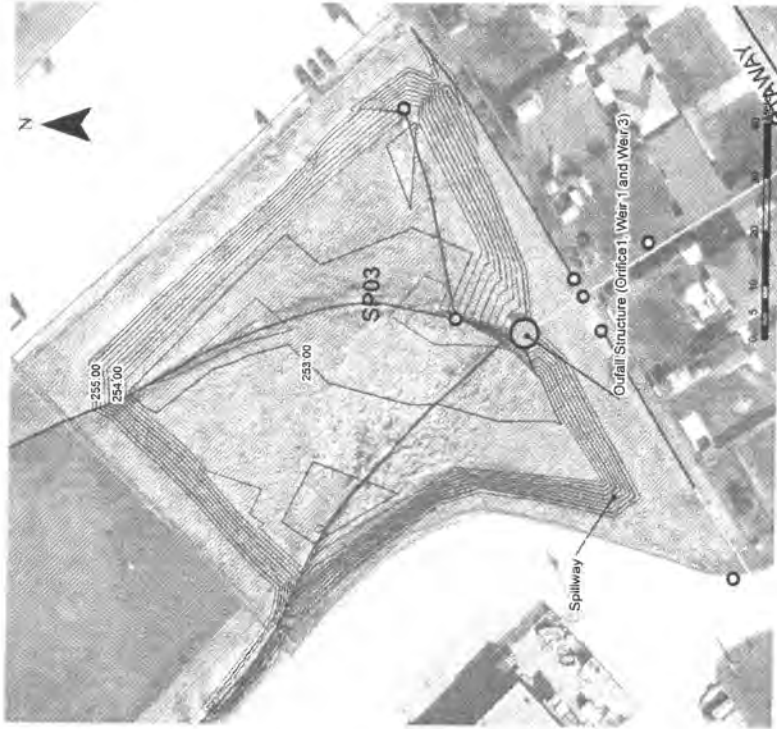
Spillway/Wear 1 Data		Spillway/Wear 2 Data	
Shape (See Note)	Rect	Shape (See Note)	Rect
Spillway/Wear 1 Data	1.700	Spillway/Wear 2 Data	1.700
Spillway/Wear 1 Data	1.700	Spillway/Wear 2 Data	1.700
Spillway/Wear 1 Data	1.700	Spillway/Wear 2 Data	1.700
Spillway/Wear 1 Data	1.700	Spillway/Wear 2 Data	1.700

Elevation	Orifice 1		Orifice 2		Spillway/Wear 1		Spillway/Wear 2		Emergency Spillway/Wear 2		Boundary	
	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Total Flow (m ³ /s)	Total Storage (m ³)
252.75	0.71	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
253.00	0.80	1.96	0.80	1.96	0.00	0.00	0.00	0.00	0.00	0.00	3.92	0.00
253.25	1.14	5.14	1.14	5.14	0.00	0.00	0.00	0.00	0.00	0.00	10.28	0.00
253.50	1.51	9.17	1.51	9.17	0.00	0.00	0.00	0.00	0.00	0.00	18.44	0.00
253.75	1.91	13.74	1.91	13.74	0.00	0.00	0.00	0.00	0.00	0.00	27.18	0.00
254.00	2.34	18.86	2.34	18.86	0.00	0.00	0.00	0.00	0.00	0.00	36.50	0.00
254.25	2.80	24.56	2.80	24.56	0.00	0.00	0.00	0.00	0.00	0.00	46.40	0.00
254.50	3.29	30.86	3.29	30.86	0.00	0.00	0.00	0.00	0.00	0.00	56.80	0.00
254.75	3.81	37.68	3.81	37.68	0.00	0.00	0.00	0.00	0.00	0.00	67.80	0.00
255.00	4.36	45.04	4.36	45.04	0.00	0.00	0.00	0.00	0.00	0.00	79.40	0.00
255.25	4.94	52.86	4.94	52.86	0.00	0.00	0.00	0.00	0.00	0.00	91.60	0.00
255.50	5.55	61.16	5.55	61.16	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00

Elevation	Orifice 1		Orifice 2		Spillway/Wear 1		Spillway/Wear 2		Emergency Spillway/Wear 2		Boundary	
	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Area (m ²)	Flow (m ³ /s)	Total Flow (m ³ /s)	Total Storage (m ³)
252.75	0.71	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
253.00	0.80	1.96	0.80	1.96	0.00	0.00	0.00	0.00	0.00	0.00	3.92	0.00
253.25	1.14	5.14	1.14	5.14	0.00	0.00	0.00	0.00	0.00	0.00	10.28	0.00
253.50	1.51	9.17	1.51	9.17	0.00	0.00	0.00	0.00	0.00	0.00	18.44	0.00
253.75	1.91	13.74	1.91	13.74	0.00	0.00	0.00	0.00	0.00	0.00	27.18	0.00
254.00	2.34	18.86	2.34	18.86	0.00	0.00	0.00	0.00	0.00	0.00	36.50	0.00
254.25	2.80	24.56	2.80	24.56	0.00	0.00	0.00	0.00	0.00	0.00	46.40	0.00
254.50	3.29	30.86	3.29	30.86	0.00	0.00	0.00	0.00	0.00	0.00	56.80	0.00
254.75	3.81	37.68	3.81	37.68	0.00	0.00	0.00	0.00	0.00	0.00	67.80	0.00
255.00	4.36	45.04	4.36	45.04	0.00	0.00	0.00	0.00	0.00	0.00	79.40	0.00
255.25	4.94	52.86	4.94	52.86	0.00	0.00	0.00	0.00	0.00	0.00	91.60	0.00
255.50	5.55	61.16	5.55	61.16	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00

Note: Red text indicates a value that has been calculated in this spreadsheet.

Formula	Value
(1) Orifice Area	0.71
(2) Orifice Slope	0.00
(3) Orifice Length	1.700
(4) Orifice Head	0.00
(5) Spillway/Wear Head	0.00
(6) Spillway/Wear Flow	0.00
(7) Total Storage	0.00
(8) Orifice Flow	0.00
(9) Spillway/Wear Flow	0.00
(10) Total Storage	0.00
(11) Total Storage	0.00



This table shows the total area approximated to the boundary of the spillway. The number of cells used is 1.

BARRIE CITYWIDE MINOR AND MAJOR STORMWATER MODEL DEVELOPMENT
SOPHIA CREEK WATERSHED
SWM POND SP01 RETROFIT

Wet Pond Characteristics:

Side Slope: 4 :1
 Top Elevation: 250.80 m
 Bottom Elev: 248.50 m
 Permanent Pool: - m
 Stage 0.05 m

Stormwater Management Pond								
Pond Geometry				Pond Volume (m ³)				Total Discharge (m ³ /s)
Elevation (m)	Depth (m)	Area (m ²)	Avg. Area (m)	Dead	Accum. Dead	Live	Accum. Live	
248.50	0	0	0			0	0	0
248.70	0.20	3,974	3,477			173.86	397	3
248.95	0.45	8,942	8,445			422.24	2012	6
249.15	0.65	12,916	12,419			620.94	4198	9
249.30	0.80	14,290	14,195			709.73	6278	12
249.45	0.95	14,861	14,766			738.28	8464	15
249.60	1.10	15,432	15,337			766.83	10736	18
249.70	1.20	15,812	15,717			785.86	12299	21
249.80	1.30	16,193	16,098			804.90	13899	24
249.90	1.40	16,574	16,479			823.93	15537	27
250.00	1.50	16,955	16,859			842.97	17214	30
250.45	1.95	18,668	18,572			928.62	25229	33
250.50	2.00	18,858	18,763			938.14	26167	36
250.60	2.10	19,239	19,143			957.17	28071	39
250.80	2.30	20,000	19,905			995.24	31995	43.5

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 1

E.G. US. (m)	248.73	Element	Inside BR US	Inside BR DS
W.S. US. (m)	248.70	E.G. Elev (m)	248.72	248.68
Q Total (m3/s)	3.00	W.S. Elev (m)	248.68	248.65
Q Bridge (m3/s)	3.00	Crit W.S. (m)	248.42	248.30
Q Weir (m3/s)		Max Chl Dpth (m)	0.68	0.77
Weir Sta Lft (m)		Vel Total (m/s)	0.85	0.72
Weir Sta Rgt (m)		Flow Area (m2)	3.55	4.16
Weir Submerg		Froude # Chl	0.38	0.30
Weir Max Depth (m)		Specif Force (m3)	1.26	1.55
Min El Weir Flow (m)	250.86	Hydr Depth (m)	0.51	0.58
Min El Prs (m)	250.20	W.P. Total (m)	7.23	7.52
Delta EG (m)	0.07	Conv. Total (m3/s)	55.2	70.0
Delta WS (m)	0.06	Top Width (m)	6.96	7.20
BR Open Area (m2)	16.26	Frctn Loss (m)	0.04	0.01
BR Open Vel (m/s)	0.85	C & E Loss (m)	0.00	0.00
Coef of Q		Shear Total (N/m2)	14.23	9.95
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 2

E.G. US. (m)	249.02	Element	Inside BR US	Inside BR DS
W.S. US. (m)	248.96	E.G. Elev (m)	249.01	248.95
Q Total (m3/s)	6.00	W.S. Elev (m)	248.94	248.90
Q Bridge (m3/s)	6.00	Crit W.S. (m)	248.59	248.47
Q Weir (m3/s)		Max Chl Dpth (m)	0.94	1.02
Weir Sta Lft (m)		Vel Total (m/s)	1.10	0.99
Weir Sta Rgt (m)		Flow Area (m2)	5.44	6.05
Weir Submerg		Froude # Chl	0.42	0.36
Weir Max Depth (m)		Specif Force (m3)	2.84	3.22
Min El Weir Flow (m)	250.86	Hydr Depth (m)	0.71	0.77
Min El Prs (m)	250.20	W.P. Total (m)	8.09	8.36
Delta EG (m)	0.08	Conv. Total (m3/s)	104.5	122.1
Delta WS (m)	0.07	Top Width (m)	7.64	7.86
BR Open Area (m2)	16.26	Frctn Loss (m)	0.05	0.01
BR Open Vel (m/s)	1.10	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	21.76	17.16
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 3

E.G. US. (m)	249.23	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.15	E.G. Elev (m)	249.22	249.16
Q Total (m3/s)	9.00	W.S. Elev (m)	249.13	249.08
Q Bridge (m3/s)	9.00	Crit W.S. (m)	248.73	248.61
Q Weir (m3/s)		Max Chl Dpth (m)	1.13	1.20
Weir Sta Lft (m)		Vel Total (m/s)	1.30	1.20
Weir Sta Rgt (m)		Flow Area (m2)	6.92	7.51
Weir Submerg		Froude # Chl	0.45	0.35
Weir Max Depth (m)		Specif Force (m3)	4.51	4.93
Min El Weir Flow (m)	250.86	Hydr Depth (m)	0.85	0.90
Min El Prs (m)	250.20	W.P. Total (m)	8.71	8.95
Delta EG (m)	0.09	Conv. Total (m3/s)	148.3	166.9
Delta WS (m)	0.09	Top Width (m)	8.14	8.31
BR Open Area (m2)	16.26	Frctn Loss (m)	0.05	0.02
BR Open Vel (m/s)	1.30	C & E Loss (m)	0.01	0.00

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 3 (Continued)

Coef of Q		Shear Total (N/m2)	28.68	23.91
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 4

E.G. US. (m)	249.41	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.31	E.G. Elev (m)	249.40	249.33
Q Total (m3/s)	12.00	W.S. Elev (m)	249.29	249.23
Q Bridge (m3/s)	12.00	Crit W.S. (m)	248.86	248.73
Q Weir (m3/s)		Max Chl Dpth (m)	1.29	1.35
Weir Sta Lft (m)		Vel Total (m/s)	1.46	1.36
Weir Sta Rgt (m)		Flow Area (m2)	8.23	8.79
Weir Submerg		Froude # Chl	0.41	0.37
Weir Max Depth (m)		Specif Force (m3)	6.29	6.74
Min El Weir Flow (m)	250.86	Hydr Depth (m)	0.97	1.03
Min El Prs (m)	250.20	W.P. Total (m)	9.19	9.39
Delta EG (m)	0.10	Conv. Total (m3/s)	191.0	210.4
Delta WS (m)	0.10	Top Width (m)	8.45	8.56
BR Open Area (m2)	16.26	Frctn Loss (m)	0.06	0.02
BR Open Vel (m/s)	1.46	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	34.65	29.88
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 5

E.G. US. (m)	249.57	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.44	E.G. Elev (m)	249.55	249.48
Q Total (m3/s)	15.00	W.S. Elev (m)	249.42	249.36
Q Bridge (m3/s)	15.00	Crit W.S. (m)	248.96	248.84
Q Weir (m3/s)		Max Chl Dpth (m)	1.42	1.48
Weir Sta Lft (m)		Vel Total (m/s)	1.60	1.51
Weir Sta Rgt (m)		Flow Area (m2)	9.37	9.90
Weir Submerg		Froude # Chl	0.43	0.40
Weir Max Depth (m)		Specif Force (m3)	8.13	8.59
Min El Weir Flow (m)	250.86	Hydr Depth (m)	1.08	1.12
Min El Prs (m)	250.20	W.P. Total (m)	9.59	9.81
Delta EG (m)	0.11	Conv. Total (m3/s)	230.7	249.3
Delta WS (m)	0.11	Top Width (m)	8.67	8.81
BR Open Area (m2)	16.26	Frctn Loss (m)	0.07	0.02
BR Open Vel (m/s)	1.60	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	40.52	35.87
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 6

E.G. US. (m)	249.72	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.58	E.G. Elev (m)	249.70	249.63
Q Total (m3/s)	18.00	W.S. Elev (m)	249.55	249.49
Q Bridge (m3/s)	18.00	Crit W.S. (m)	249.07	248.95
Q Weir (m3/s)		Max Chl Dpth (m)	1.55	1.61
Weir Sta Lft (m)		Vel Total (m/s)	1.71	1.63
Weir Sta Rgt (m)		Flow Area (m2)	10.55	11.07
Weir Submerg		Froude # Chl	0.44	0.41
Weir Max Depth (m)		Specif Force (m3)	10.14	10.62
Min El Weir Flow (m)	250.86	Hydr Depth (m)	1.17	1.21
Min El Prs (m)	250.20	W.P. Total (m)	10.10	10.31

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 6 (Continued)

Delta EG (m)	0.11	Conv. Total (m3/s)	271.5	290.5
Delta WS (m)	0.11	Top Width (m)	9.02	9.14
BR Open Area (m2)	16.26	Frctn Loss (m)	0.07	0.02
BR Open Vel (m/s)	1.71	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	45.03	40.47
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 7

E.G. US. (m)	249.85	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.69	E.G. Elev (m)	249.83	249.75
Q Total (m3/s)	21.00	W.S. Elev (m)	249.66	249.59
Q Bridge (m3/s)	21.00	Crit W.S. (m)	249.16	249.04
Q Weir (m3/s)		Max Chl Dpth (m)	1.66	1.71
Weir Sta Lft (m)		Vel Total (m/s)	1.83	1.75
Weir Sta Rgt (m)		Flow Area (m2)	11.50	11.98
Weir Submerg		Froude # Chl	0.45	0.43
Weir Max Depth (m)		Specif Force (m3)	12.07	12.53
Min EI Weir Flow (m)	250.86	Hydr Depth (m)	1.26	1.31
Min EI Prs (m)	250.20	W.P. Total (m)	10.40	10.51
Delta EG (m)	0.12	Conv. Total (m3/s)	307.4	327.0
Delta WS (m)	0.12	Top Width (m)	9.14	9.14
BR Open Area (m2)	16.26	Frctn Loss (m)	0.07	0.02
BR Open Vel (m/s)	1.83	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	50.61	46.12
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 8

E.G. US. (m)	249.97	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.79	E.G. Elev (m)	249.95	249.86
Q Total (m3/s)	24.00	W.S. Elev (m)	249.76	249.69
Q Bridge (m3/s)	24.00	Crit W.S. (m)	249.25	249.13
Q Weir (m3/s)		Max Chl Dpth (m)	1.76	1.81
Weir Sta Lft (m)		Vel Total (m/s)	1.94	1.87
Weir Sta Rgt (m)		Flow Area (m2)	12.40	12.85
Weir Submerg		Froude # Chl	0.47	0.44
Weir Max Depth (m)		Specif Force (m3)	14.07	14.52
Min EI Weir Flow (m)	250.86	Hydr Depth (m)	1.36	1.41
Min EI Prs (m)	250.20	W.P. Total (m)	10.60	10.69
Delta EG (m)	0.13	Conv. Total (m3/s)	344.2	362.9
Delta WS (m)	0.13	Top Width (m)	9.14	9.14
BR Open Area (m2)	16.26	Frctn Loss (m)	0.08	0.03
BR Open Vel (m/s)	1.94	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	55.80	51.52
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 9

E.G. US. (m)	250.09	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.90	E.G. Elev (m)	250.06	249.97
Q Total (m3/s)	27.00	W.S. Elev (m)	249.85	249.77
Q Bridge (m3/s)	27.00	Crit W.S. (m)	249.33	249.21
Q Weir (m3/s)		Max Chl Dpth (m)	1.85	1.89
Weir Sta Lft (m)		Vel Total (m/s)	2.04	1.98
Weir Sta Rgt (m)		Flow Area (m2)	13.24	13.66

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 9 (Continued)

Weir Submerg		Froude # Chl	0.48	0.46
Weir Max Depth (m)		Specif Force (m3)	16.14	16.57
Min El Weir Flow (m)	250.86	Hydr Depth (m)	1.47	1.50
Min El Prs (m)	250.20	W.P. Total (m)	10.85	10.88
Delta EG (m)	0.14	Conv. Total (m3/s)	378.0	397.4
Delta WS (m)	0.15	Top Width (m)	8.98	9.13
BR Open Area (m2)	16.26	Frctn Loss (m)	0.08	0.03
BR Open Vel (m/s)	2.04	C & E Loss (m)	0.01	0.00
Coef of Q		Shear Total (N/m2)	61.06	56.85
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 10

E.G. US. (m)	250.19	Element	Inside BR US	Inside BR DS
W.S. US. (m)	249.98	E.G. Elev (m)	250.16	250.07
Q Total (m3/s)	30.00	W.S. Elev (m)	249.92	249.84
Q Bridge (m3/s)	30.00	Crit W.S. (m)	249.41	249.29
Q Weir (m3/s)		Max Chl Dpth (m)	1.92	1.96
Weir Sta Lft (m)		Vel Total (m/s)	2.16	2.10
Weir Sta Rgt (m)		Flow Area (m2)	13.90	14.26
Weir Submerg		Froude # Chl	0.50	0.48
Weir Max Depth (m)		Specif Force (m3)	18.13	18.49
Min El Weir Flow (m)	250.86	Hydr Depth (m)	1.57	1.59
Min El Prs (m)	250.20	W.P. Total (m)	11.06	11.06
Delta EG (m)	0.16	Conv. Total (m3/s)	404.7	422.2
Delta WS (m)	0.16	Top Width (m)	8.83	9.00
BR Open Area (m2)	16.26	Frctn Loss (m)	0.09	0.03
BR Open Vel (m/s)	2.16	C & E Loss (m)	0.01	0.01
Coef of Q		Shear Total (N/m2)	67.72	63.80
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 11

E.G. US. (m)	250.59	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.44	E.G. Elev (m)	250.59	250.13
Q Total (m3/s)	33.00	W.S. Elev (m)	250.20	249.90
Q Bridge (m3/s)	33.00	Crit W.S. (m)	249.49	249.37
Q Weir (m3/s)		Max Chl Dpth (m)	2.20	2.02
Weir Sta Lft (m)		Vel Total (m/s)	2.03	2.23
Weir Sta Rgt (m)		Flow Area (m2)	16.26	14.77
Weir Submerg		Froude # Chl	0.44	0.50
Weir Max Depth (m)		Specif Force (m3)	22.52	20.39
Min El Weir Flow (m)	250.86	Hydr Depth (m)	13241.84	1.66
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.22
Delta EG (m)	0.46	Conv. Total (m3/s)	352.7	443.2
Delta WS (m)	0.54	Top Width (m)		8.88
BR Open Area (m2)	16.26	Frctn Loss (m)		
BR Open Vel (m/s)	2.03	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)	69.39	71.52
Br Sel Method	Press Only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 12

E.G. US. (m)	250.67	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.50	E.G. Elev (m)	250.67	250.21
Q Total (m3/s)	36.00	W.S. Elev (m)	250.20	249.96
Q Bridge (m3/s)	36.00	Crit W.S. (m)	249.56	249.44
Q Weir (m3/s)		Max Chl Dpth (m)	2.20	2.08
Weir Sta Lft (m)		Vel Total (m/s)	2.21	2.35
Weir Sta Rgt (m)		Flow Area (m2)	16.26	15.34
Weir Submerg		Froude # Chl	0.48	0.52
Weir Max Depth (m)		Specif Force (m3)	23.81	22.46
Min El Weir Flow (m)	250.86	Hydr Depth (m)	13241.84	1.75
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.41
Delta EG (m)	0.45	Conv. Total (m3/s)	352.7	467.0
Delta WS (m)	0.54	Top Width (m)		8.75
BR Open Area (m2)	16.26	Frctn Loss (m)		
BR Open Vel (m/s)	2.21	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)	82.58	78.34
Br Sel Method	Press Only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 13

E.G. US. (m)	250.76	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.58	E.G. Elev (m)	250.76	250.29
Q Total (m3/s)	39.00	W.S. Elev (m)	250.20	250.02
Q Bridge (m3/s)	39.00	Crit W.S. (m)	249.63	249.51
Q Weir (m3/s)		Max Chl Dpth (m)	2.20	2.14
Weir Sta Lft (m)		Vel Total (m/s)	2.40	2.47
Weir Sta Rgt (m)		Flow Area (m2)	16.26	15.80
Weir Submerg		Froude # Chl	0.52	0.54
Weir Max Depth (m)		Specif Force (m3)	25.22	24.49
Min El Weir Flow (m)	250.86	Hydr Depth (m)	13241.84	1.83
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.56
Delta EG (m)	0.47	Conv. Total (m3/s)	352.7	486.6
Delta WS (m)	0.57	Top Width (m)		8.65
BR Open Area (m2)	16.26	Frctn Loss (m)		
BR Open Vel (m/s)	2.40	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)	96.92	86.13
Br Sel Method	Press Only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 14

E.G. US. (m)	250.63	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.37	E.G. Elev (m)	250.58	250.42
Q Total (m3/s)	42.00	W.S. Elev (m)	250.24	250.08
Q Bridge (m3/s)	42.00	Crit W.S. (m)	249.70	249.57
Q Weir (m3/s)		Max Chl Dpth (m)	2.24	2.20
Weir Sta Lft (m)		Vel Total (m/s)	2.58	2.57
Weir Sta Rgt (m)		Flow Area (m2)	16.26	16.35
Weir Submerg		Froude # Chl	0.55	0.55
Weir Max Depth (m)		Specif Force (m3)	27.37	26.71
Min El Weir Flow (m)	250.86	Hydr Depth (m)		1.92
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.74
Delta EG (m)	0.27	Conv. Total (m3/s)	352.7	509.9
Delta WS (m)	0.31	Top Width (m)		8.52
BR Open Area (m2)	16.26	Frctn Loss (m)	0.16	0.03
BR Open Vel (m/s)	2.58	C & E Loss (m)	0.00	0.02

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 14 (Continued)

Coef of Q		Shear Total (N/m2)	112.40	92.66
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 15

E.G. US. (m)	250.75	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.48	E.G. Elev (m)	250.68	250.49
Q Total (m3/s)	45.00	W.S. Elev (m)	250.29	250.13
Q Bridge (m3/s)	45.00	Crit W.S. (m)	249.75	249.63
Q Weir (m3/s)		Max Chl Dpth (m)	2.29	2.25
Weir Sta Lft (m)		Vel Total (m/s)	2.77	2.69
Weir Sta Rgt (m)		Flow Area (m2)	16.26	16.74
Weir Submerg		Froude # Chl	0.58	0.57
Weir Max Depth (m)		Specif Force (m3)	29.87	28.80
Min El Weir Flow (m)	250.86	Hydr Depth (m)		1.99
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.87
Delta EG (m)	0.31	Conv. Total (m3/s)	352.7	526.2
Delta WS (m)	0.37	Top Width (m)		8.43
BR Open Area (m2)	16.26	Frctn Loss (m)	0.18	0.04
BR Open Vel (m/s)	2.77	C & E Loss (m)	0.01	0.02
Coef of Q		Shear Total (N/m2)	129.03	101.13
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 16

E.G. US. (m)	250.87	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.60	E.G. Elev (m)	250.78	250.57
Q Total (m3/s)	48.00	W.S. Elev (m)	250.34	250.17
Q Bridge (m3/s)	48.00	Crit W.S. (m)	249.81	249.69
Q Weir (m3/s)		Max Chl Dpth (m)	2.34	2.29
Weir Sta Lft (m)		Vel Total (m/s)	2.95	2.81
Weir Sta Rgt (m)		Flow Area (m2)	16.26	17.09
Weir Submerg		Froude # Chl	0.62	0.59
Weir Max Depth (m)		Specif Force (m3)	32.42	30.91
Min El Weir Flow (m)	250.86	Hydr Depth (m)		2.05
Min El Prs (m)	250.20	W.P. Total (m)	20.12	11.99
Delta EG (m)	0.36	Conv. Total (m3/s)	352.7	541.1
Delta WS (m)	0.44	Top Width (m)		8.34
BR Open Area (m2)	16.26	Frctn Loss (m)	0.19	0.04
BR Open Vel (m/s)	2.95	C & E Loss (m)	0.02	0.03
Coef of Q		Shear Total (N/m2)	146.81	110.00
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 17

E.G. US. (m)	251.15	Element	Inside BR US	Inside BR DS
W.S. US. (m)	251.11	E.G. Elev (m)	251.01	250.66
Q Total (m3/s)	51.00	W.S. Elev (m)	250.51	250.22
Q Bridge (m3/s)	51.00	Crit W.S. (m)	249.86	249.75
Q Weir (m3/s)		Max Chl Dpth (m)	2.51	2.34
Weir Sta Lft (m)		Vel Total (m/s)	3.14	2.94
Weir Sta Rgt (m)		Flow Area (m2)	16.26	17.36
Weir Submerg		Froude # Chl	0.63	0.61
Weir Max Depth (m)		Specif Force (m3)	36.99	33.37
Min El Weir Flow (m)	250.86	Hydr Depth (m)		
Min El Prs (m)	250.20	W.P. Total (m)	20.12	20.36

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 17 (Continued)

Delta EG (m)	0.58	Conv. Total (m3/s)	352.7	390.1
Delta WS (m)	0.90	Top Width (m)		
BR Open Area (m2)	16.26	Frctn Loss (m)	0.32	0.05
BR Open Vel (m/s)	3.14	C & E Loss (m)	0.03	0.04
Coef of Q		Shear Total (N/m2)	165.74	142.87
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 18

E.G. US. (m)	251.30	Element	Inside BR US	Inside BR DS
W.S. US. (m)	251.27	E.G. Elev (m)	251.14	250.75
Q Total (m3/s)	54.00	W.S. Elev (m)	250.58	250.25
Q Bridge (m3/s)	54.00	Crit W.S. (m)	249.91	249.80
Q Weir (m3/s)		Max Chl Dpth (m)	2.58	2.37
Weir Sta Lft (m)		Vel Total (m/s)	3.32	3.11
Weir Sta Rgt (m)		Flow Area (m2)	16.26	17.36
Weir Submerg		Froude # Chl	0.66	0.64
Weir Max Depth (m)		Specif Force (m3)	40.08	35.80
Min EI Weir Flow (m)	250.86	Hydr Depth (m)		
Min EI Prs (m)	250.20	W.P. Total (m)	20.12	20.36
Delta EG (m)	0.66	Conv. Total (m3/s)	352.7	390.1
Delta WS (m)	1.02	Top Width (m)		
BR Open Area (m2)	16.26	Frctn Loss (m)	0.36	0.06
BR Open Vel (m/s)	3.32	C & E Loss (m)	0.03	0.05
Coef of Q		Shear Total (N/m2)	185.81	160.18
Br Sel Method	Energy only	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 19

E.G. US. (m)	250.86	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.41	E.G. Elev (m)	250.86	250.86
Q Total (m3/s)	57.00	W.S. Elev (m)	250.41	250.41
Q Bridge (m3/s)	43.54	Crit W.S. (m)	249.97	249.85
Q Weir (m3/s)	13.46	Max Chl Dpth (m)	2.41	2.53
Weir Sta Lft (m)	1.61	Vel Total (m/s)	0.00	0.00
Weir Sta Rgt (m)	59.00	Flow Area (m2)		
Weir Submerg	0.00	Froude # Chl	0.72	0.66
Weir Max Depth (m)	0.21	Specif Force (m3)	39.39	40.37
Min EI Weir Flow (m)	250.86	Hydr Depth (m)		
Min EI Prs (m)	250.20	W.P. Total (m)	20.12	20.36
Delta EG (m)	0.16	Conv. Total (m3/s)		
Delta WS (m)	0.11	Top Width (m)		
BR Open Area (m2)	16.26	Frctn Loss (m)		
BR Open Vel (m/s)	2.68	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)		
Br Sel Method	Press/Weir	Power Total (N/m s)	0.00	-1516.29

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 20

E.G. US. (m)	250.89	Element	Inside BR US	Inside BR DS
W.S. US. (m)	250.36	E.G. Elev (m)	250.89	250.89
Q Total (m3/s)	60.00	W.S. Elev (m)	250.36	250.36
Q Bridge (m3/s)	43.22	Crit W.S. (m)	250.01	249.91
Q Weir (m3/s)	16.78	Max Chl Dpth (m)	2.36	2.48
Weir Sta Lft (m)	1.36	Vel Total (m/s)	0.00	0.00
Weir Sta Rgt (m)	59.61	Flow Area (m2)		

Plan: SWMF Sophia 1 RS: 1584 Profile: PF 20 (Continued)

Weir Submerg	0.00	Froude # Chl	0.77	0.70
Weir Max Depth (m)	0.24	Specif Force (m3)	40.91	41.70
Min El Weir Flow (m)	250.86	Hydr Depth (m)		
Min El Prs (m)	250.20	W.P. Total (m)	20.12	20.36
Delta EG (m)	0.12	Conv. Total (m3/s)		
Delta WS (m)	0.03	Top Width (m)		
BR Open Area (m2)	16.26	Frctn Loss (m)		
BR Open Vel (m/s)	2.66	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)		
Br Sel Method	Press/Weir	Power Total (N/m s)	0.00	-1516.29



Flow Reduction Hydrologic Model Results Summary

Point of Interest / Culvert Crossing	Peak Flow (m ³ /s) – SCS 6 Hour Design Storms				
	1:5 Year	1:10 Year	1:25 Year	1:50 Year	1:100 Year
Howard Crescent	3.7	5.0	6.8	8.3	9.8
Grove Street (A)	5.7	7.6	10.4	12.8	15.0
St. Vincent Street	6.9	9.3	12.5	15.4	18.0
Ottaway Avenue/Rose Street	2.6 (4.7)	4.5 (7.7)	8.1 (11.3)	11.2 (14.1)	14.5 (17.0)
Laurie Crescent	3.1 (5.4)	5.3 (8.5)	9.0 (12.4)	12.0 (15.4)	15.4 (18.7)
Bothwell Crescent	11.8 (15.0)	15.3 (21.2)	21.9 (30.4)	27.3 (37.3)	29.4 (44.4)
Grove Street (C)	12.9 (16.3)	16.6 (22.7)	23.4 (32.5)	29.1 (39.9)	31.3 (47.4)
Parkdale Street	12.9 (16.2)	16.7 (22.6)	23.5 (32.3)	29.2 (39.8)	31.6 (47.3)
Davidson Street/Gunn Street	13.5 (16.9)	17.5 (23.5)	24.3 (33.6)	30.2 (41.3)	33.0 (49.1)
Wellington Street/Berczy Street	14.8 (18.3)	19.1 (25.2)	26.1 (36.0)	32.3 (44.3)	36.1 (52.4)
Peel Street (Trunk Storm Sewer)	15.7 (19.2)	20.3 (26.4)	24.5 (37.5)	33.8 (46.3)	38.5 (54.9)

Point of Interest / Culvert Crossing	Peak Flow (m ³ /s) – Chicago 4 Hour Design Storms				
	1:5 Year	1:10 Year	1:25 Year	1:50 Year	1:100 Year
Howard Crescent	2.8	3.6	4.8	5.7	6.9
Grove Street (A)	4.2	5.5	7.4	8.8	10.7
St. Vincent Street	5.1	6.7	8.9	10.7	12.8
Ottaway Avenue/Rose Street	1.8 (3.2)	2.5 (4.6)	4.4 (7.3)	6.1 (9.2)	8.1 (11.2)
Laurie Crescent	2.3 (3.7)	3.0 (5.3)	5.1 (8.2)	7.0 (10.2)	9.1 (12.5)
Bothwell Crescent	9.0 (10.8)	11.5 (14.5)	14.9 (20.5)	17.9 (25.2)	22.0 (30.2)
Grove Street (C)	9.9 (11.8)	12.6 (15.7)	16.2 (22.0)	19.3 (27.0)	23.6 (32.4)
Parkdale Street	9.9 (11.8)	12.7 (15.7)	16.4 (22.0)	19.5 (26.9)	23.8 (32.4)
Davidson Street/Gunn Street	10.4 (12.3)	13.3 (16.4)	17.1 (22.8)	20.4 (28.0)	24.7 (33.6)
Wellington Street/Berczy Street	11.3 (13.4)	14.6 (17.9)	18.7 (24.6)	22.2 (30.1)	26.7 (36.2)
Peel Street (Trunk Storm Sewer)	12.0 (14.1)	15.5 (18.8)	19.9 (25.7)	23.6 (31.5)	28.2 (37.8)

Note: (3.2) – Flows in brackets correspond to existing peak flows (uncontrolled)

```

=====
V V I SSSSS U U A L
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSSS UUUU A A LLLLL

000 TTTTT TTTTT H H Y Y M M 000 TM
0 0 T T H H Y Y M M 0 0
0 0 T T H H Y Y M M 0 0
000 T T H H Y Y M M 000

```

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***** SUMMARY OUTPUT *****

Input filename: C:\Program Files (x86)\VH Suite 3.0\VO2\vo1n.dat
 Output filename: C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\Scenario.out
 Summary filename: C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\Scenario.sum

DATE: 09/29/2016 TIME: 10:14:17
 USER:

Improvement Alternative 2A - Hydrologic Model Results

COMMENTS:

 ** SIMULATION NUMBER: 1 ** **1:2 Year Chicago Design Storm**

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R. V. mm	R. C.	Qbase cms
START @ 0.00 hrs								

READ STORM								
[Ptot= 36.95 mm]								
fname : C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\dc48ef45-2ee5-4cc7-9c0								
remark: * City of Barrie - 2 yr Chicago (4hr) + 15%								
** CALIB STANDHYD [I%=28.2; S%= 2.00]	0100	1 2.0	31.13	1.26	1.47	14.45	0.39	0.000
CHANNEL[2 : 0100]	0302	1 2.0	31.13	1.25	1.50	14.45	n/a	0.000
** CALIB STANDHYD [I%=24.8; S%= 2.00]	0105	1 2.0	9.01	0.50	1.33	16.59	0.45	0.000
** CALIB STANDHYD [I%=25.4; S%= 2.00]	0110	1 2.0	12.37	0.53	1.40	14.76	0.40	0.000
CHANNEL[2 : 0110]	0303	1 2.0	12.37	0.51	1.43	14.76	n/a	0.000
ADD [0105 + 0302]	0802	3 2.0	40.14	1.58	1.50	14.93	n/a	0.000
ADD [0802 + 0303]	0802	1 2.0	52.51	2.08	1.47	14.89	n/a	0.000
PIPE [2 : 0802]	0400	1 2.0	52.51	2.08	1.47	14.89	n/a	0.000
** CALIB STANDHYD [I%=39.4; S%= 2.00]	0113	1 2.0	9.41	0.70	1.37	18.88	0.51	0.000
CHANNEL[2 : 0113]	0301	1 2.0	9.41	0.60	1.40	18.88	n/a	0.000
** CALIB STANDHYD [I%=27.5; S%= 2.00]	0118	1 2.0	4.11	0.22	1.37	14.32	0.39	0.000
RESRVR [2 : 0118] {ST= 0.00 ha.m }	0600	1 2.0	4.11	0.19	1.43	14.36	n/a	0.000
CHANNEL[2 : 0600]	0300	1 2.0	4.11	0.15	1.53	14.35	n/a	0.000
** CALIB STANDHYD [I%=22.9; S%= 2.00]	0101	1 2.0	8.68	0.39	1.37	12.11	0.33	0.000
ADD [0101 + 0300]	0801	3 2.0	12.79	0.50	1.37	12.83	n/a	0.000

*	CHANNEL[2 : 0801]	0304	1 2.0	12.79	0.42	1.43	12.82	n/a	0.000
**	CALIB STANDHYD [I%=27.1; S%= 2.00]	0123	1 2.0	22.81	0.91	1.47	15.50	0.42	0.000
*	ADD [0123 + 0301]	0800	3 2.0	32.22	1.49	1.43	16.48	n/a	0.000
*	ADD [0800 + 0304]	0800	1 2.0	45.01	1.91	1.43	15.44	n/a	0.000
*	ADD [0800 + 0400]	0800	3 2.0	97.52	3.97	1.47	15.15	n/a	0.000
*	RESRVR [2 : 0800] {ST= 0.62 ha.m }	0601	1 2.0	97.52	1.28	2.23	15.15	n/a	0.000
*	PIPE [2 : 0601]	0403	1 2.0	97.52	1.28	2.27	15.15	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1 2.0	97.52	1.27	2.40	15.14	n/a	0.000
**	CALIB STANDHYD [I%=22.0; S%= 2.00]	0102	1 2.0	19.41	0.79	1.40	16.20	0.44	0.000
*	ADD [0102 + 0317]	0803	3 2.0	116.93	1.60	1.93	15.32	n/a	0.000
**	CALIB STANDHYD [I%=37.1; S%= 2.00]	0103	1 2.0	35.79	2.34	1.43	20.81	0.56	0.000
**	CALIB STANDHYD [I%=20.7; S%= 2.00]	0104	1 2.0	5.22	0.25	1.37	17.54	0.47	0.000
**	CALIB STANDHYD [I%=21.1; S%= 2.00]	0106	1 2.0	13.71	0.54	1.40	15.16	0.41	0.000
*	CALIB STANDHYD [I%=18.1; S%= 2.00]	0107	1 5.0	8.53	0.38	1.33	16.69	0.45	0.000
*	CALIB STANDHYD [I%=24.4; S%= 2.00]	0108	1 2.0	58.75	1.82	1.53	13.74	0.37	0.000
*	CHANNEL[2 : 0108]	0307	1 2.0	58.75	1.76	1.60	13.74	n/a	0.000
*	CALIB STANDHYD [I%= 3.0; S%= 2.00]	0109	1 2.0	13.70	0.50	1.57	13.94	0.38	0.000
*	ADD [0109 + 0307]	0806	3 2.0	72.45	2.25	1.60	13.78	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1 2.0	72.45	2.24	1.60	13.78	n/a	0.000
*	ADD [0107 + 0308]	0807	3 2.0	80.98	2.54	1.60	14.09	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1 2.0	80.98	2.52	1.63	14.09	n/a	0.000
*	ADD [0106 + 0306]	0804	3 2.0	94.69	2.95	1.63	14.24	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1 2.0	94.69	2.84	1.67	14.24	n/a	0.000
*	ADD [0104 + 0305]	0093	3 2.0	99.91	3.03	1.67	14.42	n/a	0.000
*	ADD [0103 + 0093]	0805	3 2.0	135.70	4.83	1.60	16.10	n/a	0.000
*	ADD [0803 + 0805]	0096	3 2.0	252.63	6.25	1.60	15.74	n/a	0.000
*	RESRVR [2 : 0096] {ST= 0.19 ha.m }	0700	1 2.0	252.63	5.79	1.77	15.74	n/a	0.000
*	CALIB STANDHYD [I%=22.2; S%= 2.00]	0111	1 2.0	3.57	0.16	1.37	16.46	0.45	0.000
*	ADD [0111 + 0700]	0808	3 2.0	256.20	5.88	1.77	15.75	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1 2.0	256.20	5.88	1.77	15.75	n/a	0.000
*	CALIB STANDHYD [I%=23.9; S%= 2.00]	0112	1 2.0	16.90	0.76	1.43	17.76	0.48	0.000
*	ADD [0112 + 0310]	0809	3 2.0	273.10	6.41	1.77	15.88	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1 2.0	273.10	6.30	1.83	15.87	n/a	0.000
*	CALIB STANDHYD [I%=17.3; S%= 2.00]	0114	1 2.0	4.95	0.21	1.40	16.40	0.44	0.000
*	ADD [0114 + 0311]	0810	3 2.0	278.05	6.43	1.83	15.88	n/a	0.000

```

* CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 6.43 1.83 15.88 n/a 0.000
* * CALI B STANDHYD 0115 1 2.0 12.66 0.59 1.43 15.75 0.43 0.000
* [I%=28.8; S%= 2.00]
*
* ADD [0115 + 0313] 0811 3 2.0 290.71 6.73 1.80 15.88 n/a 0.000
*
* CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 6.73 1.83 15.88 n/a 0.000
*
* * CALI B STANDHYD 0116 1 2.0 26.63 1.24 1.40 15.42 0.42 0.000
* [I%=25.5; S%= 2.00]
*
* ADD [0116 + 0314] 0812 3 2.0 317.34 7.32 1.80 15.84 n/a 0.000
*
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 7.33 1.80 15.84 n/a 0.000
*
* * CALI B STANDHYD 0117 1 2.0 27.32 1.10 1.40 12.10 0.33 0.000
* [I%=25.1; S%= 2.00]
*
* ADD [0117 + 0401] 0813 3 2.0 344.66 7.77 1.77 15.54 n/a 0.000
*
* CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 7.76 1.80 15.54 n/a 0.000
*
* * CALI B STANDHYD 0119 1 2.0 16.91 0.69 1.43 13.30 0.36 0.000
* [I%=26.9; S%= 2.00]
*
* ADD [0119 + 0315] 0814 3 2.0 361.57 8.09 1.80 15.44 n/a 0.000
*
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 8.09 1.80 15.44 n/a 0.000
*
* * CALI B STANDHYD 0120 1 2.0 17.04 0.60 1.40 10.98 0.30 0.000
* [I%=20.9; S%= 2.00]
*
* CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 0.58 1.43 10.98 n/a 0.000
*
* * CALI B STANDHYD 0121 1 2.0 1.39 0.05 1.33 7.97 0.22 0.000
* [I%=14.6; S%= 2.00]
*
* * CALI B STANDHYD 0122 1 2.0 3.13 0.18 1.33 12.36 0.33 0.000
* [I%=26.5; S%= 2.00]
*
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.23 1.33 11.00 n/a 0.000
*
* ADD [0815 + 0316] 0815 1 2.0 21.56 0.71 1.37 10.99 n/a 0.000
*
* ADD [0815 + 0402] 0815 3 2.0 383.13 8.42 1.80 15.19 n/a 0.000
*
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 8.42 1.80 15.19 n/a 0.000
*
* * CALI B STANDHYD 0124 1 2.0 21.61 1.30 1.37 14.88 0.40 0.000
* [I%=33.4; S%= 2.00]
*
* ADD [0124 + 0404] 0816 3 2.0 404.74 8.80 1.77 15.17 n/a 0.000
*
* DUHYD 0500 1 2.0 404.74 8.80 1.77 15.17 n/a 0.000
* MAJOR SYSTEM: 0500 2 2.0 299.55 7.94 1.77 15.17 n/a 0.000
* MINOR SYSTEM: 0500 3 2.0 105.19 0.87 1.13 15.17 n/a 0.000
*
* PIPE [ 2 : 0500] 0405 1 2.0 299.55 7.93 1.80 15.17 n/a 0.000
*
* ** CALI B STANDHYD 0125 1 2.0 18.74 1.28 1.43 18.67 0.51 0.000
* [I%=44.1; S%= 2.00]
*
* ADD [0125 + 0405] 0817 3 2.0 318.29 8.59 1.57 15.38 n/a 0.000
*
* PIPE [ 2 : 0500] 0408 1 2.0 105.19 0.87 1.23 15.17 n/a 0.000
*
* ** CALI B STANDHYD 0126 1 2.0 22.26 1.35 1.37 13.99 0.38 0.000
* [I%=32.1; S%= 2.00]
*
* ADD [0126 + 0408] 0820 3 2.0 127.45 2.22 1.37 14.96 n/a 0.000
*
* PIPE [ 2 : 0820] 0406 1 2.0 127.45 2.22 1.37 14.96 n/a 0.000
*
* ** CALI B STANDHYD 0127 1 2.0 9.98 0.49 1.37 12.24 0.33 0.000
* [I%=27.4; S%= 2.00]
*
* ADD [0127 + 0406] 0818 3 2.0 137.43 2.70 1.37 14.77 n/a 0.000
*
* PIPE [ 2 : 0818] 0407 1 2.0 137.43 2.65 1.40 14.77 n/a 0.000
*
* ** CALI B STANDHYD 0128 1 2.0 14.87 1.30 1.37 19.55 0.53 0.000
* [I%=45.4; S%= 2.00]
*

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```

* ADD [0128 + 0407] 0819 3 2.0 152.30 3.89 1.37 15.23 n/a 0.000
*
* *****
* ** SIMULATION NUMBER: 2 ** 1:5 Year Chicago Design Storm
* *****
*
* W/E COMMAND HYD ID DT AREA : Qpeak Tpeak R. V. R. C. Qbase
* mi n ha : cms hrs mm cms
*
* START @ 0.00 hrs
* -----
* READ STORM 10.0
* [ Ptot= 50.52 mm ]
* fname : C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\780b9b3-7787-4bbe-812
* remark: * City of Barrie - 5 yr Chicago (4hr) + 15%
*
* ** CALI B STANDHYD 0100 1 2.0 31.13 1.90 1.43 22.20 0.44 0.000
* [I%=28.2; S%= 2.00]
*
* CHANNEL[ 2 : 0100] 0302 1 2.0 31.13 1.88 1.47 22.20 n/a 0.000
*
* ** CALI B STANDHYD 0105 1 2.0 9.01 0.76 1.33 26.06 0.52 0.000
* [I%=24.8; S%= 2.00]
*
* ** CALI B STANDHYD 0110 1 2.0 12.37 0.80 1.40 23.03 0.46 0.000
* [I%=25.4; S%= 2.00]
*
* CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 0.77 1.43 23.03 n/a 0.000
*
* ADD [0105 + 0302] 0802 3 2.0 40.14 2.48 1.47 23.07 n/a 0.000
*
* ADD [0802 + 0303] 0802 1 2.0 52.51 3.25 1.47 23.06 n/a 0.000
*
* PIPE [ 2 : 0802] 0400 1 2.0 52.51 3.25 1.47 23.06 n/a 0.000
*
* ** CALI B STANDHYD 0113 1 2.0 9.41 1.04 1.37 28.32 0.56 0.000
* [I%=39.4; S%= 2.00]
*
* CHANNEL[ 2 : 0113] 0301 1 2.0 9.41 0.92 1.43 28.31 n/a 0.000
*
* ** CALI B STANDHYD 0118 1 2.0 4.11 0.32 1.33 22.10 0.44 0.000
* [I%=27.5; S%= 2.00]
*
* RESRVR [ 2 : 0118] 0600 1 2.0 4.11 0.21 1.47 22.12 n/a 0.000
* {ST= 0.01 ha.m }
*
* CHANNEL[ 2 : 0600] 0300 1 2.0 4.11 0.20 1.67 22.09 n/a 0.000
*
* ** CALI B STANDHYD 0101 1 2.0 8.68 0.57 1.33 18.90 0.37 0.000
* [I%=22.9; S%= 2.00]
*
* ADD [0101 + 0300] 0801 3 2.0 12.79 0.69 1.33 19.93 n/a 0.000
*
* CHANNEL[ 2 : 0801] 0304 1 2.0 12.79 0.59 1.40 19.92 n/a 0.000
*
* ** CALI B STANDHYD 0123 1 2.0 22.81 1.42 1.43 24.22 0.48 0.000
* [I%=27.1; S%= 2.00]
*
* ADD [0123 + 0301] 0800 3 2.0 32.22 2.34 1.43 25.41 n/a 0.000
*
* ADD [0800 + 0304] 0800 1 2.0 45.01 2.91 1.43 23.85 n/a 0.000
*
* ADD [0800 + 0400] 0800 3 2.0 97.52 6.15 1.43 23.43 n/a 0.000
*
* RESRVR [ 2 : 0800] 0601 1 2.0 97.52 1.76 2.30 23.43 n/a 0.000
* {ST= 1.04 ha.m }
*
* PIPE [ 2 : 0601] 0403 1 2.0 97.52 1.76 2.33 23.43 n/a 0.000
*
* CHANNEL[ 2 : 0403] 0317 1 2.0 97.52 1.75 2.40 23.42 n/a 0.000
*
* ** CALI B STANDHYD 0102 1 2.0 19.41 1.30 1.43 25.79 0.51 0.000
* [I%=22.0; S%= 2.00]
*
* ADD [0102 + 0317] 0803 3 2.0 116.93 2.29 1.73 23.82 n/a 0.000
*
* ** CALI B STANDHYD 0103 1 2.0 35.79 3.52 1.43 31.47 0.62 0.000
* [I%=37.1; S%= 2.00]
*
* ** CALI B STANDHYD 0104 1 2.0 5.22 0.42 1.37 27.72 0.55 0.000
* [I%=20.7; S%= 2.00]
*
* ** CALI B STANDHYD 0106 1 2.0 13.71 0.87 1.43 24.05 0.48 0.000
* [I%=21.1; S%= 2.00]

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```

* * CALI B STANDHYD 0107 1 5.0 8.53 0.63 1.33 26.62 0.53 0.000
  [I%=18.1: S%= 2.00]
* * CALI B STANDHYD 0108 1 2.0 58.75 2.87 1.53 21.43 0.42 0.000
  [I%=24.4: S%= 2.00]
* * CHANNEL[ 2 : 0108] 0307 1 2.0 58.75 2.80 1.57 21.43 n/a 0.000
* * CALI B STANDHYD 0109 1 2.0 13.70 0.95 1.50 23.38 0.46 0.000
  [I%= 3.0: S%= 2.00]
* * ADD [0109 + 0307] 0806 3 2.0 72.45 3.70 1.53 21.80 n/a 0.000
* * CHANNEL[ 2 : 0806] 0308 1 2.0 72.45 3.69 1.57 21.80 n/a 0.000
* * ADD [0107 + 0308] 0807 3 2.0 80.98 4.23 1.57 22.31 n/a 0.000
* * CHANNEL[ 2 : 0807] 0306 1 2.0 80.98 4.20 1.60 22.31 n/a 0.000
* * ADD [0106 + 0306] 0804 3 2.0 94.69 4.99 1.57 22.56 n/a 0.000
* * CHANNEL[ 2 : 0804] 0305 1 2.0 94.69 4.79 1.63 22.56 n/a 0.000
* * ADD [0104 + 0305] 0093 3 2.0 99.91 5.10 1.63 22.83 n/a 0.000
* * ADD [0103 + 0093] 0805 3 2.0 135.70 7.90 1.57 25.11 n/a 0.000
* * ADD [0803 + 0805] 0096 3 2.0 252.63 10.14 1.57 24.51 n/a 0.000
* * RESRVR [ 2 : 0096] 0700 1 2.0 252.63 8.86 1.77 24.51 n/a 0.000
  {ST= 0.41 ha.m }
* * CALI B STANDHYD 0111 1 2.0 3.57 0.26 1.40 26.03 0.52 0.000
  [I%=22.2: S%= 2.00]
* * ADD [0111 + 0700] 0808 3 2.0 256.20 9.02 1.77 24.53 n/a 0.000
* * CHANNEL[ 2 : 0808] 0310 1 2.0 256.20 9.01 1.77 24.53 n/a 0.000
* * CALI B STANDHYD 0112 1 2.0 16.90 1.25 1.43 27.86 0.55 0.000
  [I%=23.9: S%= 2.00]
* * ADD [0112 + 0310] 0809 3 2.0 273.10 9.86 1.73 24.74 n/a 0.000
* * CHANNEL[ 2 : 0809] 0311 1 2.0 273.10 9.71 1.83 24.74 n/a 0.000
* * CALI B STANDHYD 0114 1 2.0 4.95 0.35 1.50 26.26 0.52 0.000
  [I%=17.3: S%= 2.00]
* * ADD [0114 + 0311] 0810 3 2.0 278.05 9.92 1.80 24.76 n/a 0.000
* * CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 9.92 1.80 24.76 n/a 0.000
* * CALI B STANDHYD 0115 1 2.0 12.66 0.88 1.40 24.25 0.48 0.000
  [I%=28.8: S%= 2.00]
* * ADD [0115 + 0313] 0811 3 2.0 290.71 10.39 1.80 24.74 n/a 0.000
* * CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 10.38 1.80 24.74 n/a 0.000
* * CALI B STANDHYD 0116 1 2.0 26.63 1.87 1.37 24.10 0.48 0.000
  [I%=25.5: S%= 2.00]
* * ADD [0116 + 0314] 0812 3 2.0 317.34 11.35 1.77 24.69 n/a 0.000
* * PIPE [ 2 : 0812] 0401 1 2.0 317.34 11.35 1.77 24.69 n/a 0.000
* * CALI B STANDHYD 0117 1 2.0 27.32 1.57 1.40 18.49 0.37 0.000
  [I%=25.1: S%= 2.00]
* * ADD [0117 + 0401] 0813 3 2.0 344.66 12.10 1.77 24.20 n/a 0.000
* * CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 11.99 1.83 24.20 n/a 0.000
* * CALI B STANDHYD 0119 1 2.0 16.91 1.01 1.40 20.44 0.40 0.000
  [I%=26.9: S%= 2.00]
* * ADD [0119 + 0315] 0814 3 2.0 361.57 12.47 1.83 24.02 n/a 0.000
* * PIPE [ 2 : 0814] 0402 1 2.0 361.57 12.45 1.83 24.02 n/a 0.000
* * CALI B STANDHYD 0120 1 2.0 17.04 0.88 1.37 17.09 0.34 0.000
  [I%=20.9: S%= 2.00]

```

```

* * CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 0.85 1.40 17.09 n/a 0.000
* * CALI B STANDHYD 0121 1 2.0 1.39 0.06 1.33 12.68 0.25 0.000
  [I%=14.6: S%= 2.00]
* * CALI B STANDHYD 0122 1 2.0 3.13 0.25 1.33 18.74 0.37 0.000
  [I%=26.5: S%= 2.00]
* * ADD [0121 + 0122] 0815 3 2.0 4.52 0.31 1.33 16.88 n/a 0.000
* * ADD [0815 + 0316] 0815 1 2.0 21.56 1.09 1.37 17.05 n/a 0.000
* * ADD [0815 + 0402] 0815 3 2.0 383.13 12.95 1.83 23.63 n/a 0.000
* * PIPE [ 2 : 0815] 0404 1 2.0 383.13 12.92 1.87 23.63 n/a 0.000
* * CALI B STANDHYD 0124 1 2.0 21.61 1.91 1.37 22.21 0.44 0.000
  [I%=33.4: S%= 2.00]
* * ADD [0124 + 0404] 0816 3 2.0 404.74 13.56 1.67 23.55 n/a 0.000
* * DUHYD 0500 1 2.0 404.74 13.56 1.67 23.55 n/a 0.000
  MAJOR SYSTEM: 0500 2 2.0 325.92 12.69 1.67 23.55 n/a 0.000
  MINOR SYSTEM: 0500 3 2.0 78.82 0.87 1.00 23.55 n/a 0.000
* * PIPE [ 2 : 0500] 0405 1 2.0 325.92 12.70 1.67 23.55 n/a 0.000
* * CALI B STANDHYD 0125 1 2.0 18.74 1.85 1.40 27.38 0.54 0.000
  [I%=44.1: S%= 2.00]
* * ADD [0125 + 0405] 0817 3 2.0 344.66 13.73 1.63 23.76 n/a 0.000
* * PIPE [ 2 : 0500] 0408 1 2.0 78.82 0.87 1.10 23.55 n/a 0.000
* * CALI B STANDHYD 0126 1 2.0 22.26 1.93 1.33 20.87 0.41 0.000
  [I%=32.1: S%= 2.00]
* * ADD [0126 + 0408] 0820 3 2.0 101.08 2.80 1.33 22.96 n/a 0.000
* * PIPE [ 2 : 0820] 0406 1 2.0 101.08 2.75 1.37 22.96 n/a 0.000
* * CALI B STANDHYD 0127 1 2.0 9.98 0.68 1.37 18.45 0.37 0.000
  [I%=27.4: S%= 2.00]
* * ADD [0127 + 0406] 0818 3 2.0 111.06 3.43 1.37 22.55 n/a 0.000
* * PIPE [ 2 : 0818] 0407 1 2.0 111.06 3.37 1.37 22.55 n/a 0.000
* * CALI B STANDHYD 0128 1 2.0 14.87 1.84 1.37 28.69 0.57 0.000
  [I%=45.4: S%= 2.00]
* * ADD [0128 + 0407] 0819 3 2.0 125.93 5.21 1.37 23.28 n/a 0.000
* * *****
* * SIMULATION NUMBER: 3 ** I:10 Year Chicago Design Storm
* * *****
W/E COMMAND HYD ID DT AREA Opeak Tpeak R.V. R.C. Qbase
mi n ha cms hrs mm
START @ 0.00 hrs
-----
READ STORM 10.0
[ Ptot= 59.69 mm ]
fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\def0ee31-d85f-455f-975
remark: * City of Barrie - 10 yr Chicago (4hr) + 15%
* * CALI B STANDHYD 0100 1 2.0 31.13 2.40 1.40 27.92 0.47 0.000
  [I%=28.2: S%= 2.00]
* * CHANNEL[ 2 : 0100] 0302 1 2.0 31.13 2.39 1.43 27.91 n/a 0.000
* * CALI B STANDHYD 0105 1 2.0 9.01 0.94 1.33 32.98 0.55 0.000
  [I%=24.8: S%= 2.00]
* * CALI B STANDHYD 0110 1 2.0 12.37 1.02 1.40 29.15 0.49 0.000
  [I%=25.4: S%= 2.00]
* * CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 0.99 1.43 29.15 n/a 0.000
* * ADD [0105 + 0302] 0802 3 2.0 40.14 3.18 1.43 29.05 n/a 0.000
* * ADD [0802 + 0303] 0802 1 2.0 52.51 4.17 1.43 29.07 n/a 0.000

```

*	PIPE [2 : 0802]	0400	1	2.0	52.51	4.17	1.43	29.07	n/a	0.000
**	CALIB STANDHYD [I%=39.4; S%= 2.00]	0113	1	2.0	9.41	1.30	1.37	35.12	0.59	0.000
*	CHANNEL[2 : 0113]	0301	1	2.0	9.41	1.16	1.43	35.11	n/a	0.000
**	CALIB STANDHYD [I%=27.5; S%= 2.00]	0118	1	2.0	4.11	0.40	1.33	27.85	0.47	0.000
*	RESRVR [2 : 0118] {ST= 0.01 ha.m }	0600	1	2.0	4.11	0.24	1.57	27.91	n/a	0.000
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.23	1.70	27.88	n/a	0.000
**	CALIB STANDHYD [I%=22.9; S%= 2.00]	0101	1	2.0	8.68	0.69	1.33	23.99	0.40	0.000
*	ADD [0101 + 0300]	0801	3	2.0	12.79	0.83	1.33	25.24	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	0.72	1.40	25.23	n/a	0.000
**	CALIB STANDHYD [I%=27.1; S%= 2.00]	0123	1	2.0	22.81	1.80	1.43	30.64	0.51	0.000
*	ADD [0123 + 0301]	0800	3	2.0	32.22	2.96	1.43	31.95	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	3.66	1.43	30.04	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	7.83	1.43	29.52	n/a	0.000
*	RESRVR [2 : 0800] {ST= 1.32 ha.m }	0601	1	2.0	97.52	2.51	2.20	29.52	n/a	0.000
*	PIPE [2 : 0601]	0403	1	2.0	97.52	2.51	2.20	29.52	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	2.46	2.27	29.52	n/a	0.000
**	CALIB STANDHYD [I%=22.0; S%= 2.00]	0102	1	2.0	19.41	1.69	1.40	32.80	0.55	0.000
*	ADD [0102 + 0317]	0803	3	2.0	116.93	2.98	2.20	30.06	n/a	0.000
**	CALIB STANDHYD [I%=37.1; S%= 2.00]	0103	1	2.0	35.79	4.36	1.43	39.08	0.65	0.000
**	CALIB STANDHYD [I%=20.7; S%= 2.00]	0104	1	2.0	5.22	0.53	1.37	35.10	0.59	0.000
**	CALIB STANDHYD [I%=21.1; S%= 2.00]	0106	1	2.0	13.71	1.12	1.40	30.61	0.51	0.000
*	CALIB STANDHYD [I%=18.1; S%= 2.00]	0107	1	5.0	8.53	0.81	1.50	33.85	0.57	0.000
*	CALIB STANDHYD [I%=24.4; S%= 2.00]	0108	1	2.0	58.75	3.69	1.50	27.14	0.45	0.000
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	3.59	1.57	27.14	n/a	0.000
**	CALIB STANDHYD [I%= 3.0; S%= 2.00]	0109	1	2.0	13.70	1.32	1.50	30.36	0.51	0.000
*	ADD [0109 + 0307]	0806	3	2.0	72.45	4.84	1.53	27.75	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	4.83	1.53	27.75	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	5.58	1.53	28.39	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	5.53	1.57	28.39	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	6.59	1.53	28.71	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	6.28	1.60	28.71	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	6.70	1.60	29.05	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	10.33	1.53	31.69	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	13.13	1.57	30.94	n/a	0.000
*	RESRVR [2 : 0096] {ST= 0.58 ha.m }	0700	1	2.0	252.63	11.29	1.77	30.94	n/a	0.000

*	CALIB STANDHYD [I%=22.2; S%= 2.00]	0111	1	2.0	3.57	0.35	1.40	33.03	0.55	0.000
*	ADD [0111 + 0700]	0808	3	2.0	256.20	11.49	1.73	30.97	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	11.49	1.77	30.97	n/a	0.000
**	CALIB STANDHYD [I%=23.9; S%= 2.00]	0112	1	2.0	16.90	1.68	1.43	35.18	0.59	0.000
*	ADD [0112 + 0310]	0809	3	2.0	273.10	12.60	1.73	31.23	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	12.39	1.80	31.23	n/a	0.000
**	CALIB STANDHYD [I%=17.3; S%= 2.00]	0114	1	2.0	4.95	0.47	1.50	33.45	0.56	0.000
*	ADD [0114 + 0311]	0810	3	2.0	278.05	12.65	1.80	31.27	n/a	0.000
*	CHANNEL[2 : 0810]	0313	1	2.0	278.05	12.66	1.80	31.27	n/a	0.000
**	CALIB STANDHYD [I%=28.8; S%= 2.00]	0115	1	2.0	12.66	1.11	1.40	30.48	0.51	0.000
*	ADD [0115 + 0313]	0811	3	2.0	290.71	13.28	1.77	31.23	n/a	0.000
*	CHANNEL[2 : 0811]	0314	1	2.0	290.71	13.27	1.80	31.23	n/a	0.000
**	CALIB STANDHYD [I%=25.5; S%= 2.00]	0116	1	2.0	26.63	2.38	1.40	30.49	0.51	0.000
*	ADD [0116 + 0314]	0812	3	2.0	317.34	14.55	1.77	31.17	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	14.56	1.77	31.17	n/a	0.000
**	CALIB STANDHYD [I%=25.1; S%= 2.00]	0117	1	2.0	27.32	1.92	1.40	23.23	0.39	0.000
*	ADD [0117 + 0401]	0813	3	2.0	344.66	15.56	1.73	30.54	n/a	0.000
*	CHANNEL[2 : 0813]	0315	1	2.0	344.66	15.45	1.80	30.54	n/a	0.000
**	CALIB STANDHYD [I%=26.9; S%= 2.00]	0119	1	2.0	16.91	1.26	1.40	25.72	0.43	0.000
*	ADD [0119 + 0315]	0814	3	2.0	361.57	16.14	1.77	30.32	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	16.13	1.77	30.32	n/a	0.000
**	CALIB STANDHYD [I%=20.9; S%= 2.00]	0120	1	2.0	17.04	1.09	1.37	21.69	0.36	0.000
*	CHANNEL[2 : 0120]	0316	1	2.0	17.04	1.07	1.40	21.69	n/a	0.000
**	CALIB STANDHYD [I%=14.6; S%= 2.00]	0121	1	2.0	1.39	0.08	1.33	16.30	0.27	0.000
**	CALIB STANDHYD [I%=26.5; S%= 2.00]	0122	1	2.0	3.13	0.30	1.33	23.46	0.39	0.000
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.38	1.33	21.26	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	1.36	1.37	21.60	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	16.84	1.77	29.83	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	16.82	1.77	29.82	n/a	0.000
**	CALIB STANDHYD [I%=33.4; S%= 2.00]	0124	1	2.0	21.61	2.30	1.37	27.55	0.46	0.000
*	ADD [0124 + 0404]	0816	3	2.0	404.74	17.60	1.73	29.70	n/a	0.000
*	DUHYD MAJOR SYSTEM:	0500	1	2.0	404.74	17.60	1.73	29.70	n/a	0.000
*	MINOR SYSTEM:	0500	2	2.0	337.69	16.73	1.73	29.70	n/a	0.000
*		0500	3	2.0	67.05	0.87	0.90	29.70	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	337.69	16.73	1.77	29.70	n/a	0.000
**	CALIB STANDHYD [I%=44.1; S%= 2.00]	0125	1	2.0	18.74	2.29	1.40	33.61	0.56	0.000
*	ADD [0125 + 0405]	0817	3	2.0	356.43	17.71	1.73	29.91	n/a	0.000

*	ADD [0116 + 0314]	0812	3	2.0	317.34	18.71	1.77	39.77	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	18.72	1.77	39.77	n/a	0.000
**	CALI B STANDHYD [I%=25.1: S%= 2.00]	0117	1	2.0	27.32	2.46	1.37	29.62	0.42	0.000
*	ADD [0117 + 0401]	0813	3	2.0	344.66	19.99	1.73	38.96	n/a	0.000
*	CHANNEL [2 : 0813]	0315	1	2.0	344.66	19.90	1.77	38.96	n/a	0.000
**	CALI B STANDHYD [I%=26.9: S%= 2.00]	0119	1	2.0	16.91	1.60	1.40	32.82	0.46	0.000
*	ADD [0119 + 0315]	0814	3	2.0	361.57	20.79	1.77	38.67	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	20.80	1.77	38.67	n/a	0.000
**	CALI B STANDHYD [I%=20.9: S%= 2.00]	0120	1	2.0	17.04	1.37	1.37	27.91	0.39	0.000
*	CHANNEL [2 : 0120]	0316	1	2.0	17.04	1.37	1.40	27.91	n/a	0.000
**	CALI B STANDHYD [I%=14.6: S%= 2.00]	0121	1	2.0	1.39	0.09	1.33	21.28	0.30	0.000
**	CALI B STANDHYD [I%=26.5: S%= 2.00]	0122	1	2.0	3.13	0.38	1.33	29.81	0.42	0.000
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.48	1.33	27.18	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	1.77	1.37	27.76	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	21.75	1.73	38.06	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	21.74	1.77	38.06	n/a	0.000
**	CALI B STANDHYD [I%=33.4: S%= 2.00]	0124	1	2.0	21.61	2.82	1.37	34.65	0.49	0.000
*	ADD [0124 + 0404]	0816	3	2.0	404.74	22.79	1.73	37.88	n/a	0.000
*	DUHYD MAJOR SYSTEM: 0500	1	2.0	404.74	22.79	1.73	37.88	n/a	0.000	
*	MINOR SYSTEM: 0500	2	2.0	349.74	21.92	1.73	37.88	n/a	0.000	
*		0500	3	2.0	54.99	0.87	0.83	37.88	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	349.74	21.91	1.73	37.88	n/a	0.000
**	CALI B STANDHYD [I%=44.1: S%= 2.00]	0125	1	2.0	18.74	2.81	1.40	41.78	0.59	0.000
*	ADD [0125 + 0405]	0817	3	2.0	368.48	23.20	1.70	38.08	n/a	0.000
*	PIPE [2 : 0500]	0408	1	2.0	54.99	0.87	0.90	37.88	n/a	0.000
**	CALI B STANDHYD [I%=32.1: S%= 2.00]	0126	1	2.0	22.26	2.96	1.33	32.57	0.46	0.000
*	ADD [0126 + 0408]	0820	3	2.0	77.25	3.82	1.33	36.35	n/a	0.000
*	PIPE [2 : 0820]	0406	1	2.0	77.25	3.79	1.37	36.35	n/a	0.000
**	CALI B STANDHYD [I%=27.4: S%= 2.00]	0127	1	2.0	9.98	1.01	1.37	29.15	0.41	0.000
*	ADD [0127 + 0406]	0818	3	2.0	87.23	4.80	1.37	35.52	n/a	0.000
*	PIPE [2 : 0818]	0407	1	2.0	87.23	4.69	1.37	35.52	n/a	0.000
**	CALI B STANDHYD [I%=45.4: S%= 2.00]	0128	1	2.0	14.87	2.79	1.33	43.76	0.61	0.000
*	ADD [0128 + 0407]	0819	3	2.0	102.10	7.43	1.37	36.72	n/a	0.000

1:50 Year Chicago Design Storm

 ** SIMULATION NUMBER: 5 **

W/E COMMAND	HYD ID	DT min	AREA ha	Opeak cms	Tpeak hrs	R. V. mm	R. C.	Qbase cms
START @ 0.00 hrs								

READ STORM		10.0						

[Ptot= 79.45 mm]
fname : C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\751284ce-ac28-47ed-abd
remark: * City of Barrie - 50 yr Chicago (4hr) + 15%
** CALI B STANDHYD [I%=28.2: S%= 2.00]
0100 1 2.0 31.13 3.73 1.43 41.25 0.52 0.000
* CHANNEL [2 : 0100]
0302 1 2.0 31.13 3.70 1.43 41.25 n/a 0.000
** CALI B STANDHYD [I%=24.8: S%= 2.00]
0105 1 2.0 9.01 1.48 1.37 48.87 0.62 0.000
** CALI B STANDHYD [I%=25.4: S%= 2.00]
0110 1 2.0 12.37 1.52 1.40 43.38 0.55 0.000
* CHANNEL [2 : 0110]
0303 1 2.0 12.37 1.49 1.43 43.38 n/a 0.000
* ADD [0105 + 0302]
0802 3 2.0 40.14 5.01 1.43 42.96 n/a 0.000
* ADD [0802 + 0303]
0802 1 2.0 52.51 6.49 1.43 43.06 n/a 0.000
* PIPE [2 : 0802]
0400 1 2.0 52.51 6.49 1.43 43.06 n/a 0.000
** CALI B STANDHYD [I%=39.4: S%= 2.00]
0113 1 2.0 9.41 1.81 1.33 50.63 0.64 0.000
* CHANNEL [2 : 0113]
0301 1 2.0 9.41 1.64 1.40 50.62 n/a 0.000
** CALI B STANDHYD [I%=27.5: S%= 2.00]
0118 1 2.0 4.11 0.59 1.33 41.27 0.52 0.000
* RESRVR [2 : 0118]
{ST= 0.03 ha.m }
* CHANNEL [2 : 0600]
0300 1 2.0 4.11 0.32 1.73 41.29 n/a 0.000
** CALI B STANDHYD [I%=22.9: S%= 2.00]
0101 1 2.0 8.68 1.01 1.33 36.03 0.45 0.000
* ADD [0101 + 0300]
0801 3 2.0 12.79 1.18 1.37 37.72 n/a 0.000
* CHANNEL [2 : 0801]
0304 1 2.0 12.79 1.05 1.40 37.72 n/a 0.000
** CALI B STANDHYD [I%=27.1: S%= 2.00]
0123 1 2.0 22.81 2.76 1.43 45.53 0.57 0.000
* ADD [0123 + 0301]
0800 3 2.0 32.22 4.35 1.40 47.02 n/a 0.000
* ADD [0800 + 0304]
0800 1 2.0 45.01 5.40 1.40 44.37 n/a 0.000
* ADD [0800 + 0400]
0800 3 2.0 97.52 11.86 1.43 43.67 n/a 0.000
* RESRVR [2 : 0800]
{ST= 1.63 ha.m }
* PIPE [2 : 0601]
0403 1 2.0 97.52 6.12 1.87 43.67 n/a 0.000
* CHANNEL [2 : 0403]
0317 1 2.0 97.52 5.85 1.97 43.67 n/a 0.000
** CALI B STANDHYD [I%=22.0: S%= 2.00]
0102 1 2.0 19.41 2.75 1.40 48.90 0.62 0.000
* ADD [0102 + 0317]
0803 3 2.0 116.93 7.00 1.93 44.53 n/a 0.000
** CALI B STANDHYD [I%=37.1: S%= 2.00]
0103 1 2.0 35.79 6.58 1.43 56.20 0.71 0.000
** CALI B STANDHYD [I%=20.7: S%= 2.00]
0104 1 2.0 5.22 0.87 1.37 51.88 0.65 0.000
** CALI B STANDHYD [I%=21.1: S%= 2.00]
0106 1 2.0 13.71 1.80 1.40 45.79 0.58 0.000
* CALI B STANDHYD [I%=18.1: S%= 2.00]
0107 1 5.0 8.53 1.28 1.50 50.37 0.63 0.000
** CALI B STANDHYD [I%=24.4: S%= 2.00]
0108 1 2.0 58.75 5.73 1.47 40.53 0.51 0.000
* CHANNEL [2 : 0108]
0307 1 2.0 58.75 5.67 1.57 40.53 n/a 0.000
* CALI B STANDHYD [I%= 3.0: S%= 2.00]
0109 1 2.0 13.70 2.23 1.43 46.46 0.58 0.000

```

* ADD [0109 + 0307] 0806 3 2.0 72.45 7.65 1.50 41.65 n/a 0.000
* CHANNEL [ 2 : 0806] 0308 1 2.0 72.45 7.63 1.50 41.65 n/a 0.000
* ADD [0107 + 0308] 0807 3 2.0 80.98 8.91 1.50 42.57 n/a 0.000
* CHANNEL [ 2 : 0807] 0306 1 2.0 80.98 8.84 1.53 42.57 n/a 0.000
* ADD [0106 + 0306] 0804 3 2.0 94.69 10.54 1.53 43.03 n/a 0.000
* CHANNEL [ 2 : 0804] 0305 1 2.0 94.69 10.02 1.57 43.03 n/a 0.000
* ADD [0104 + 0305] 0093 3 2.0 99.91 10.70 1.57 43.50 n/a 0.000
* ADD [0103 + 0093] 0805 3 2.0 135.70 16.28 1.53 46.85 n/a 0.000
* ADD [0803 + 0805] 0096 3 2.0 252.63 20.43 1.53 45.78 n/a 0.000
* RESRVR [ 2 : 0096] 0700 1 2.0 252.63 17.70 1.83 45.78 n/a 0.000
  {ST= 1.05 ha.m }
* CALI B STANDHYD 0111 1 2.0 3.57 0.55 1.37 49.08 0.62 0.000
  [I%=22.2: S%= 2.00]
* ADD [0111 + 0700] 0808 3 2.0 256.20 17.95 1.80 45.82 n/a 0.000
* CHANNEL [ 2 : 0808] 0310 1 2.0 256.20 17.94 1.83 45.82 n/a 0.000
* CALI B STANDHYD 0112 1 2.0 16.90 2.59 1.40 51.84 0.65 0.000
  [I%=23.9: S%= 2.00]
* ADD [0112 + 0310] 0809 3 2.0 273.10 19.34 1.77 46.20 n/a 0.000
* CHANNEL [ 2 : 0809] 0311 1 2.0 273.10 19.18 1.83 46.20 n/a 0.000
* CALI B STANDHYD 0114 1 2.0 4.95 0.76 1.43 49.90 0.63 0.000
  [I%=17.3: S%= 2.00]
* ADD [0114 + 0311] 0810 3 2.0 278.05 19.53 1.83 46.26 n/a 0.000
* CHANNEL [ 2 : 0810] 0313 1 2.0 278.05 19.53 1.83 46.26 n/a 0.000
* CALI B STANDHYD 0115 1 2.0 12.66 1.70 1.43 44.93 0.57 0.000
  [I%=28.8: S%= 2.00]
* ADD [0115 + 0313] 0811 3 2.0 290.71 20.37 1.80 46.20 n/a 0.000
* CHANNEL [ 2 : 0811] 0314 1 2.0 290.71 20.36 1.80 46.20 n/a 0.000
* CALI B STANDHYD 0116 1 2.0 26.63 3.70 1.40 45.31 0.57 0.000
  [I%=25.5: S%= 2.00]
* ADD [0116 + 0314] 0812 3 2.0 317.34 22.19 1.77 46.13 n/a 0.000
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 22.20 1.77 46.13 n/a 0.000
* CALI B STANDHYD 0117 1 2.0 27.32 2.82 1.37 34.42 0.43 0.000
  [I%=25.1: S%= 2.00]
* ADD [0117 + 0401] 0813 3 2.0 344.66 23.68 1.73 45.20 n/a 0.000
* CHANNEL [ 2 : 0813] 0315 1 2.0 344.66 23.59 1.77 45.20 n/a 0.000
* CALI B STANDHYD 0119 1 2.0 16.91 1.92 1.40 38.14 0.48 0.000
  [I%=26.9: S%= 2.00]
* ADD [0119 + 0315] 0814 3 2.0 361.57 24.63 1.73 44.87 n/a 0.000
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 24.63 1.77 44.87 n/a 0.000
* CALI B STANDHYD 0120 1 2.0 17.04 1.62 1.37 32.62 0.41 0.000
  [I%=20.9: S%= 2.00]
* CHANNEL [ 2 : 0120] 0316 1 2.0 17.04 1.60 1.40 32.62 n/a 0.000
* CALI B STANDHYD 0121 1 2.0 1.39 0.11 1.33 25.10 0.32 0.000
  [I%=14.6: S%= 2.00]
* CALI B STANDHYD 0122 1 2.0 3.13 0.44 1.33 34.57 0.44 0.000
  [I%=26.5: S%= 2.00]
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.55 1.33 31.65 n/a 0.000
* ADD [0815 + 0316] 0815 1 2.0 21.56 2.06 1.37 32.42 n/a 0.000

```

```

* ADD [0815 + 0402] 0815 3 2.0 383.13 25.76 1.73 44.17 n/a 0.000
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 25.73 1.73 44.17 n/a 0.000
* CALI B STANDHYD 0124 1 2.0 21.61 3.29 1.33 39.93 0.50 0.000
  [I%=33.4: S%= 2.00]
* ADD [0124 + 0404] 0816 3 2.0 404.74 26.90 1.73 43.94 n/a 0.000
* DUHYD 0500 1 2.0 404.74 26.90 1.73 43.94 n/a 0.000
  MAJOR SYSTEM: 0500 2 2.0 356.02 26.03 1.73 43.94 n/a 0.000
  MINOR SYSTEM: 0500 3 2.0 48.72 0.87 0.77 43.94 n/a 0.000
* PIPE [ 2 : 0500] 0405 1 2.0 356.02 26.04 1.73 43.94 n/a 0.000
* CALI B STANDHYD 0125 1 2.0 18.74 3.21 1.40 47.80 0.60 0.000
  [I%=44.1: S%= 2.00]
* ADD [0125 + 0405] 0817 3 2.0 374.76 27.51 1.70 44.14 n/a 0.000
* PIPE [ 2 : 0500] 0408 1 2.0 48.72 0.87 1.20 43.94 n/a 0.000
* CALI B STANDHYD 0126 1 2.0 22.26 3.36 1.33 37.56 0.47 0.000
  [I%=32.1: S%= 2.00]
* ADD [0126 + 0408] 0820 3 2.0 70.98 4.23 1.33 41.94 n/a 0.000
* PIPE [ 2 : 0820] 0406 1 2.0 70.98 4.18 1.37 41.94 n/a 0.000
* CALI B STANDHYD 0127 1 2.0 9.98 1.17 1.33 33.74 0.42 0.000
  [I%=27.4: S%= 2.00]
* ADD [0127 + 0406] 0818 3 2.0 80.96 5.32 1.37 40.93 n/a 0.000
* PIPE [ 2 : 0818] 0407 1 2.0 80.96 5.25 1.37 40.93 n/a 0.000
* CALI B STANDHYD 0128 1 2.0 14.87 3.18 1.33 50.03 0.63 0.000
  [I%=45.4: S%= 2.00]
* ADD [0128 + 0407] 0819 3 2.0 95.83 8.36 1.37 42.34 n/a 0.000

```

** SIMULATION NUMBER: 6 ** **1:100 Year Chicago Design Storm**

W/E COMMAND	HYD ID	DT mi n	AREA ha	Qpeak cms	Tpeak hrs	R. V. mm	R. C.	Qbase cms
START @ 0.00 hrs								

READ STORM		10.0						
[Ptot= 87.58 mm]								
fname : C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\61f17da7-3bc2-4428-98b								
remark: * City of Barrile - 100 yr Chicago (4hr) + 15%								
** CALI B STANDHYD	0100	1 2.0	31.13	4.28	1.43	47.08	0.54	0.000
[I%=28.2: S%= 2.00]								
CHANNEL [2 : 0100]	0302	1 2.0	31.13	4.25	1.43	47.08	n/a	0.000
** CALI B STANDHYD	0105	1 2.0	9.01	1.70	1.37	55.70	0.64	0.000
[I%=24.8: S%= 2.00]								
** CALI B STANDHYD	0110	1 2.0	12.37	1.84	1.40	49.58	0.57	0.000
[I%=25.4: S%= 2.00]								
CHANNEL [2 : 0110]	0303	1 2.0	12.37	1.79	1.43	49.58	n/a	0.000
ADD [0105 + 0302]	0802	3 2.0	40.14	5.77	1.43	49.01	n/a	0.000
ADD [0802 + 0303]	0802	1 2.0	52.51	7.56	1.43	49.15	n/a	0.000
PIPE [2 : 0802]	0400	1 2.0	52.51	7.55	1.43	49.15	n/a	0.000
** CALI B STANDHYD	0113	1 2.0	9.41	2.04	1.33	57.28	0.65	0.000
[I%=39.4: S%= 2.00]								
CHANNEL [2 : 0113]	0301	1 2.0	9.41	1.87	1.40	57.27	n/a	0.000
** CALI B STANDHYD	0118	1 2.0	4.11	0.67	1.37	47.13	0.54	0.000
[I%=27.5: S%= 2.00]								
RESRVR [2 : 0118]	0600	1 2.0	4.11	0.37	1.63	47.18	n/a	0.000

{ST= 0.03 ha.m }										
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.35	1.77	47.15	n/a	0.000
**	CALI B STANDHYD [I%=22.9; S%= 2.00]	0101	1	2.0	8.68	1.15	1.33	41.35	0.47	0.000
*	ADD [0101 + 0300]	0801	3	2.0	12.79	1.34	1.37	43.22	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	1.20	1.40	43.21	n/a	0.000
**	CALI B STANDHYD [I%=27.1; S%= 2.00]	0123	1	2.0	22.81	3.33	1.43	51.98	0.59	0.000
*	ADD [0123 + 0301]	0800	3	2.0	32.22	5.11	1.43	53.52	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	6.30	1.43	50.59	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	13.85	1.43	49.81	n/a	0.000
*	RESRVR [2 : 0800] {ST= 1.73 ha.m }	0601	1	2.0	97.52	8.06	1.77	49.81	n/a	0.000
*	PIPE [2 : 0601]	0403	1	2.0	97.52	8.05	1.80	49.81	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	7.61	1.90	49.81	n/a	0.000
**	CALI B STANDHYD [I%=22.0; S%= 2.00]	0102	1	2.0	19.41	3.20	1.40	55.81	0.64	0.000
*	ADD [0102 + 0317]	0803	3	2.0	116.93	9.11	1.87	50.81	n/a	0.000
**	CALI B STANDHYD [I%=37.1; S%= 2.00]	0103	1	2.0	35.79	7.38	1.40	63.46	0.72	0.000
**	CALI B STANDHYD [I%=20.7; S%= 2.00]	0104	1	2.0	5.22	1.09	1.37	59.04	0.67	0.000
**	CALI B STANDHYD [I%=21.1; S%= 2.00]	0106	1	2.0	13.71	2.10	1.40	52.36	0.60	0.000
*	CALI B STANDHYD [I%=18.1; S%= 2.00]	0107	1	5.0	8.53	1.50	1.50	57.44	0.66	0.000
*	CALI B STANDHYD [I%=24.4; S%= 2.00]	0108	1	2.0	58.75	7.01	1.47	46.39	0.53	0.000
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	6.91	1.53	46.39	n/a	0.000
*	CALI B STANDHYD [I%= 3.0; S%= 2.00]	0109	1	2.0	13.70	2.64	1.43	53.39	0.61	0.000
*	ADD [0109 + 0307]	0806	3	2.0	72.45	9.26	1.50	47.71	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	9.24	1.50	47.71	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	10.75	1.50	48.74	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	10.65	1.53	48.74	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	12.67	1.50	49.26	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	12.03	1.57	49.26	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	12.80	1.57	49.77	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	19.02	1.53	53.38	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	24.00	1.57	52.19	n/a	0.000
*	RESRVR [2 : 0096] {ST= 1.29 ha.m }	0700	1	2.0	252.63	21.73	1.83	52.19	n/a	0.000
*	CALI B STANDHYD [I%=22.2; S%= 2.00]	0111	1	2.0	3.57	0.63	1.37	55.97	0.64	0.000
*	ADD [0111 + 0700]	0808	3	2.0	256.20	22.01	1.80	52.24	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	21.99	1.83	52.24	n/a	0.000
*	CALI B STANDHYD [I%=23.9; S%= 2.00]	0112	1	2.0	16.90	3.00	1.40	58.95	0.67	0.000
*	ADD [0112 + 0310]	0809	3	2.0	273.10	23.57	1.77	52.66	n/a	0.000

*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	23.37	1.83	52.66	n/a	0.000
*	CALI B STANDHYD [I%=17.3; S%= 2.00]	0114	1	2.0	4.95	0.90	1.43	56.95	0.65	0.000
*	ADD [0114 + 0311]	0810	3	2.0	278.05	23.77	1.83	52.73	n/a	0.000
*	CHANNEL[2 : 0810]	0313	1	2.0	278.05	23.77	1.83	52.73	n/a	0.000
*	CALI B STANDHYD [I%=28.8; S%= 2.00]	0115	1	2.0	12.66	1.99	1.40	51.20	0.58	0.000
*	ADD [0115 + 0313]	0811	3	2.0	290.71	24.67	1.83	52.67	n/a	0.000
*	CHANNEL[2 : 0811]	0314	1	2.0	290.71	24.68	1.83	52.67	n/a	0.000
*	CALI B STANDHYD [I%=25.5; S%= 2.00]	0116	1	2.0	26.63	4.22	1.40	51.73	0.59	0.000
*	ADD [0116 + 0314]	0812	3	2.0	317.34	26.69	1.80	52.59	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	26.69	1.80	52.59	n/a	0.000
*	CALI B STANDHYD [I%=25.1; S%= 2.00]	0117	1	2.0	27.32	3.30	1.37	39.36	0.45	0.000
*	ADD [0117 + 0401]	0813	3	2.0	344.66	28.27	1.77	51.54	n/a	0.000
*	CHANNEL[2 : 0813]	0315	1	2.0	344.66	28.18	1.80	51.54	n/a	0.000
*	CALI B STANDHYD [I%=26.9; S%= 2.00]	0119	1	2.0	16.91	2.17	1.40	43.60	0.50	0.000
*	ADD [0119 + 0315]	0814	3	2.0	361.57	29.26	1.80	51.17	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	29.27	1.80	51.17	n/a	0.000
*	CALI B STANDHYD [I%=20.9; S%= 2.00]	0120	1	2.0	17.04	1.85	1.37	37.48	0.43	0.000
*	CHANNEL[2 : 0120]	0316	1	2.0	17.04	1.82	1.40	37.48	n/a	0.000
*	CALI B STANDHYD [I%=14.6; S%= 2.00]	0121	1	2.0	1.39	0.13	1.33	29.08	0.33	0.000
*	CALI B STANDHYD [I%=26.5; S%= 2.00]	0122	1	2.0	3.13	0.51	1.33	39.46	0.45	0.000
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.63	1.33	36.26	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	2.35	1.37	37.23	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	30.50	1.77	50.38	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	30.47	1.80	50.38	n/a	0.000
*	CALI B STANDHYD [I%=33.4; S%= 2.00]	0124	1	2.0	21.61	3.71	1.33	45.32	0.52	0.000
*	ADD [0124 + 0404]	0816	3	2.0	404.74	31.70	1.77	50.11	n/a	0.000
*	DUHYD	0500	1	2.0	404.74	31.70	1.77	50.11	n/a	0.000
*	MAJOR SYSTEM:	0500	2	2.0	361.27	30.84	1.77	50.11	n/a	0.000
*	MINOR SYSTEM:	0500	3	2.0	43.46	0.87	0.73	50.11	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	361.27	30.82	1.77	50.11	n/a	0.000
**	CALI B STANDHYD [I%=44.1; S%= 2.00]	0125	1	2.0	18.74	3.72	1.37	53.89	0.62	0.000
*	ADD [0125 + 0405]	0817	3	2.0	380.01	32.24	1.73	50.30	n/a	0.000
*	PIPE [2 : 0500]	0408	1	2.0	43.46	0.87	0.80	50.11	n/a	0.000
**	CALI B STANDHYD [I%=32.1; S%= 2.00]	0126	1	2.0	22.26	3.77	1.33	42.66	0.49	0.000
*	ADD [0126 + 0408]	0820	3	2.0	65.72	4.64	1.33	47.59	n/a	0.000
*	PIPE [2 : 0820]	0406	1	2.0	65.72	4.60	1.37	47.59	n/a	0.000
**	CALI B STANDHYD [I%=27.4; S%= 2.00]	0127	1	2.0	9.98	1.37	1.33	38.47	0.44	0.000

```

*
* ADD [0127 + 0406] 0818 3 2.0 75.70 5.94 1.37 46.39 n/a 0.000
*
* PIPE [ 2 : 0818] 0407 1 2.0 75.70 5.85 1.37 46.39 n/a 0.000
*
** CALI B STANDHYD 0128 1 2.0 14.87 3.58 1.33 56.38 0.64 0.000
[1%=45.4; S%= 2.00]
*
* ADD [0128 + 0407] 0819 3 2.0 90.57 9.36 1.37 48.03 n/a 0.000
*
*****
** SIMULATION NUMBER: 7 ** 1:2 Year 6 Hour SCS Design Storm
*****

```

```

W/E COMMAND          HYD ID  DT      AREA  *  Qpeak  Tpeak  R. V.  R. C.  Qbase
                    mi n    ha    '  cms   hrs   mm

```

```
START @ 0.00 hrs
```

```

-----
READ STORM              15.0
[ Ptot= 42.30 mm ]
fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\04526ce1-0e32-4491-a97
remark: 2yr/6hr Barrie Wpcc +15% SCS

```

```

*
** CALI B STANDHYD 0100 1 2.0 31.13 1.38 3.33 17.40 0.41 0.000
[1%=28.2; S%= 2.00]
*
* CHANNEL[ 2 : 0100] 0302 1 2.0 31.13 1.38 3.37 17.40 n/a 0.000
*
** CALI B STANDHYD 0105 1 2.0 9.01 0.54 3.27 20.20 0.48 0.000
[1%=24.8; S%= 2.00]
*
** CALI B STANDHYD 0110 1 2.0 12.37 0.59 3.33 17.90 0.42 0.000
[1%=25.4; S%= 2.00]
*
* CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 0.58 3.37 17.90 n/a 0.000
*
* ADD [0105 + 0302] 0802 3 2.0 40.14 1.80 3.30 18.03 n/a 0.000
*
* ADD [0802 + 0303] 0802 1 2.0 52.51 2.37 3.33 18.00 n/a 0.000
*
* PIPE [ 2 : 0802] 0400 1 2.0 52.51 2.37 3.33 18.00 n/a 0.000
*
** CALI B STANDHYD 0113 1 2.0 9.41 0.70 3.27 22.50 0.53 0.000
[1%=39.4; S%= 2.00]
*
* CHANNEL[ 2 : 0113] 0301 1 2.0 9.41 0.64 3.30 22.50 n/a 0.000
*
** CALI B STANDHYD 0118 1 2.0 4.11 0.22 3.27 17.28 0.41 0.000
[1%=27.5; S%= 2.00]
*
* RESRVR [ 2 : 0118] 0600 1 2.0 4.11 0.19 3.33 17.28 n/a 0.000
{ST= 0.00 ha.m }
*
* CHANNEL[ 2 : 0600] 0300 1 2.0 4.11 0.17 3.43 17.27 n/a 0.000
*
** CALI B STANDHYD 0101 1 2.0 8.68 0.39 3.27 14.67 0.35 0.000
[1%=22.9; S%= 2.00]
*
* ADD [0101 + 0300] 0801 3 2.0 12.79 0.53 3.27 15.51 n/a 0.000
*
* CHANNEL[ 2 : 0801] 0304 1 2.0 12.79 0.48 3.33 15.50 n/a 0.000
*
** CALI B STANDHYD 0123 1 2.0 22.81 1.04 3.37 18.81 0.44 0.000
[1%=27.1; S%= 2.00]
*
* ADD [0123 + 0301] 0800 3 2.0 32.22 1.67 3.33 19.89 n/a 0.000
*
* ADD [0800 + 0304] 0800 1 2.0 45.01 2.15 3.33 18.64 n/a 0.000
*
* ADD [0800 + 0400] 0800 3 2.0 97.52 4.52 3.33 18.29 n/a 0.000
*
* RESRVR [ 2 : 0800] 0601 1 2.0 97.52 1.46 4.03 18.29 n/a 0.000
{ST= 0.78 ha.m }
*
* PIPE [ 2 : 0601] 0403 1 2.0 97.52 1.46 4.03 18.29 n/a 0.000
*
* CHANNEL[ 2 : 0403] 0317 1 2.0 97.52 1.45 4.17 18.29 n/a 0.000
*
** CALI B STANDHYD 0102 1 2.0 19.41 1.00 3.33 19.85 0.47 0.000
[1%=22.0; S%= 2.00]
*
* ADD [0102 + 0317] 0803 3 2.0 116.93 1.88 3.53 18.55 n/a 0.000
*

```

```

** CALI B STANDHYD 0103 1 2.0 35.79 2.51 3.33 24.92 0.59 0.000
[1%=37.1; S%= 2.00]
*
** CALI B STANDHYD 0104 1 2.0 5.22 0.33 3.30 21.43 0.51 0.000
[1%=20.7; S%= 2.00]
*
** CALI B STANDHYD 0106 1 2.0 13.71 0.64 3.30 18.54 0.44 0.000
[1%=21.1; S%= 2.00]
*
* CALI B STANDHYD 0107 1 5.0 8.53 0.47 3.25 20.47 0.48 0.000
[1%=18.1; S%= 2.00]
*
* CALI B STANDHYD 0108 1 2.0 58.75 2.13 3.43 16.66 0.39 0.000
[1%=24.4; S%= 2.00]
*
* CHANNEL[ 2 : 0108] 0307 1 2.0 58.75 2.09 3.47 16.66 n/a 0.000
*
** CALI B STANDHYD 0109 1 2.0 13.70 0.71 3.40 17.52 0.41 0.000
[1%= 3.0; S%= 2.00]
*
* ADD [0109 + 0307] 0806 3 2.0 72.45 2.77 3.43 16.82 n/a 0.000
*
* CHANNEL[ 2 : 0806] 0308 1 2.0 72.45 2.76 3.47 16.82 n/a 0.000
*
* ADD [0107 + 0308] 0807 3 2.0 80.98 3.14 3.47 17.20 n/a 0.000
*
* CHANNEL[ 2 : 0807] 0306 1 2.0 80.98 3.12 3.47 17.20 n/a 0.000
*
* ADD [0106 + 0306] 0804 3 2.0 94.69 3.66 3.47 17.40 n/a 0.000
*
* CHANNEL[ 2 : 0804] 0305 1 2.0 94.69 3.55 3.53 17.40 n/a 0.000
*
* ADD [0104 + 0305] 0093 3 2.0 99.91 3.77 3.50 17.61 n/a 0.000
*
* ADD [0103 + 0093] 0805 3 2.0 135.70 5.82 3.40 19.53 n/a 0.000
*
* ADD [0803 + 0805] 0096 3 2.0 252.63 7.63 3.43 19.08 n/a 0.000
*
* RESRVR [ 2 : 0096] 0700 1 2.0 252.63 6.89 3.60 19.08 n/a 0.000
{ST= 0.27 ha.m }
*
* CALI B STANDHYD 0111 1 2.0 3.57 0.20 3.30 20.11 0.48 0.000
[1%=22.2; S%= 2.00]
*
* ADD [0111 + 0700] 0808 3 2.0 256.20 7.01 3.60 19.09 n/a 0.000
*
* CHANNEL[ 2 : 0808] 0310 1 2.0 256.20 7.00 3.60 19.09 n/a 0.000
*
* CALI B STANDHYD 0112 1 2.0 16.90 0.97 3.33 21.62 0.51 0.000
[1%=23.9; S%= 2.00]
*
* ADD [0112 + 0310] 0809 3 2.0 273.10 7.66 3.57 19.25 n/a 0.000
*
* CHANNEL[ 2 : 0809] 0311 1 2.0 273.10 7.53 3.67 19.25 n/a 0.000
*
* CALI B STANDHYD 0114 1 2.0 4.95 0.27 3.30 20.16 0.48 0.000
[1%=17.3; S%= 2.00]
*
* ADD [0114 + 0311] 0810 3 2.0 278.05 7.69 3.63 19.27 n/a 0.000
*
* CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 7.69 3.63 19.27 n/a 0.000
*
* CALI B STANDHYD 0115 1 2.0 12.66 0.64 3.33 18.98 0.45 0.000
[1%=28.8; S%= 2.00]
*
* ADD [0115 + 0313] 0811 3 2.0 290.71 8.06 3.63 19.25 n/a 0.000
*
* CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 8.06 3.63 19.25 n/a 0.000
*
* CALI B STANDHYD 0116 1 2.0 26.63 1.36 3.30 18.72 0.44 0.000
[1%=25.5; S%= 2.00]
*
* ADD [0116 + 0314] 0812 3 2.0 317.34 8.82 3.60 19.21 n/a 0.000
*
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 8.82 3.60 19.21 n/a 0.000
*
* CALI B STANDHYD 0117 1 2.0 27.32 1.10 3.30 14.52 0.34 0.000
[1%=25.1; S%= 2.00]
*
* ADD [0117 + 0401] 0813 3 2.0 344.66 9.39 3.60 18.84 n/a 0.000
*
* CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 9.37 3.60 18.84 n/a 0.000
*
* CALI B STANDHYD 0119 1 2.0 16.91 0.73 3.30 16.01 0.38 0.000

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* [I%=26.9; S%= 2.00]
* ADD [0119 + 0315] 0814 3 2.0 361.57 9.79 3.60 18.70 n/a 0.000
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 9.79 3.60 18.70 n/a 0.000
* ** CALI B STANDHYD 0120 1 2.0 17.04 0.62 3.30 13.29 0.31 0.000
* [I%=20.9; S%= 2.00]
* CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 0.60 3.33 13.29 n/a 0.000
* ** CALI B STANDHYD 0121 1 2.0 1.39 0.04 3.23 9.73 0.23 0.000
* [I%=14.6; S%= 2.00]
* ** CALI B STANDHYD 0122 1 2.0 3.13 0.16 3.23 14.79 0.35 0.000
* [I%=26.5; S%= 2.00]
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.20 3.23 13.23 n/a 0.000
* ADD [0815 + 0316] 0815 1 2.0 21.56 0.77 3.27 13.28 n/a 0.000
* ADD [0815 + 0402] 0815 3 2.0 383.13 10.20 3.60 18.40 n/a 0.000
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 10.20 3.60 18.40 n/a 0.000
* ** CALI B STANDHYD 0124 1 2.0 21.61 1.24 3.27 17.68 0.42 0.000
* [I%=33.4; S%= 2.00]
* ADD [0124 + 0404] 0816 3 2.0 404.74 10.68 3.57 18.36 n/a 0.000
* DUHYD 0500 1 2.0 404.74 10.68 3.57 18.36 n/a 0.000
* MAJOR SYSTEM: 0500 2 2.0 298.55 9.82 3.57 18.36 n/a 0.000
* MINOR SYSTEM: 0500 3 2.0 106.18 0.87 2.47 18.36 n/a 0.000
* PIPE [ 2 : 0500] 0405 1 2.0 298.55 9.81 3.60 18.36 n/a 0.000
* ** CALI B STANDHYD 0125 1 2.0 18.74 1.31 3.30 22.03 0.52 0.000
* [I%=44.1; S%= 2.00]
* ADD [0125 + 0405] 0817 3 2.0 317.29 10.60 3.43 18.58 n/a 0.000
* PIPE [ 2 : 0500] 0408 1 2.0 106.18 0.87 2.60 18.36 n/a 0.000
* ** CALI B STANDHYD 0126 1 2.0 22.26 1.26 3.27 16.62 0.39 0.000
* [I%=32.1; S%= 2.00]
* ADD [0126 + 0408] 0820 3 2.0 128.44 2.13 3.27 18.06 n/a 0.000
* PIPE [ 2 : 0820] 0406 1 2.0 128.44 2.13 3.27 18.06 n/a 0.000
* ** CALI B STANDHYD 0127 1 2.0 9.98 0.46 3.27 14.61 0.35 0.000
* [I%=27.4; S%= 2.00]
* ADD [0127 + 0406] 0818 3 2.0 138.42 2.59 3.27 17.81 n/a 0.000
* PIPE [ 2 : 0818] 0407 1 2.0 138.42 2.56 3.30 17.81 n/a 0.000
* ** CALI B STANDHYD 0128 1 2.0 14.87 1.27 3.27 23.08 0.55 0.000
* [I%=45.4; S%= 2.00]
* ADD [0128 + 0407] 0819 3 2.0 153.29 3.81 3.27 18.32 n/a 0.000

```

** SIMULATION NUMBER: 10 ** **1:5 Year 6 Hour SCS Design Storm**

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R. V. mm	R. C.	Qbase cms
START @ 0.00 hrs								
----- READ STORM [Ptot= 59.50 mm]		15.0						
fname : C:\Users\dtwigger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\fe28f0f5-464a-4b49-8d6								
remark: 5yr/6hr Barrie Wpcc +15% SCS								
** CALI B STANDHYD [I%=28.2; S%= 2.00]	0100	1 2.0	31.13	2.32	3.33	27.79	0.47	0.000
CHANNEL[2 : 0100]	0302	1 2.0	31.13	2.30	3.33	27.79	n/a	0.000
** CALI B STANDHYD [I%=24.8; S%= 2.00]	0105	1 2.0	9.01	0.98	3.27	32.83	0.55	0.000

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** CALI B STANDHYD 0110 1 2.0 12.37 1.03 3.30 29.01 0.49 0.000
* [I%=25.4; S%= 2.00]
* CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 1.01 3.33 29.01 n/a 0.000
* ADD [0105 + 0302] 0802 3 2.0 40.14 3.14 3.30 28.92 n/a 0.000
* ADD [0802 + 0303] 0802 1 2.0 52.51 4.13 3.33 28.94 n/a 0.000
* PIPE [ 2 : 0802] 0400 1 2.0 52.51 4.13 3.33 28.94 n/a 0.000
* ** CALI B STANDHYD 0113 1 2.0 9.41 1.16 3.27 34.97 0.59 0.000
* [I%=39.4; S%= 2.00]
* CHANNEL[ 2 : 0113] 0301 1 2.0 9.41 1.09 3.30 34.97 n/a 0.000
* ** CALI B STANDHYD 0118 1 2.0 4.11 0.37 3.27 27.72 0.47 0.000
* [I%=27.5; S%= 2.00]
* RESRVR [ 2 : 0118] 0600 1 2.0 4.11 0.24 3.40 27.73 n/a 0.000
* {ST= 0.01 ha.m }
* CHANNEL[ 2 : 0600] 0300 1 2.0 4.11 0.23 3.53 27.70 n/a 0.000
* ** CALI B STANDHYD 0101 1 2.0 8.68 0.63 3.27 23.88 0.40 0.000
* [I%=22.9; S%= 2.00]
* ADD [0101 + 0300] 0801 3 2.0 12.79 0.81 3.27 25.10 n/a 0.000
* CHANNEL[ 2 : 0801] 0304 1 2.0 12.79 0.74 3.30 25.10 n/a 0.000
* ** CALI B STANDHYD 0123 1 2.0 22.81 1.87 3.33 30.50 0.51 0.000
* [I%=27.1; S%= 2.00]
* ADD [0123 + 0301] 0800 3 2.0 32.22 2.93 3.33 31.81 n/a 0.000
* ADD [0800 + 0304] 0800 1 2.0 45.01 3.67 3.33 29.90 n/a 0.000
* ADD [0800 + 0400] 0800 3 2.0 97.52 7.80 3.33 29.39 n/a 0.000
* RESRVR [ 2 : 0800] 0601 1 2.0 97.52 2.60 3.93 29.38 n/a 0.000
* {ST= 1.33 ha.m }
* PIPE [ 2 : 0601] 0403 1 2.0 97.52 2.60 3.97 29.38 n/a 0.000
* CHANNEL[ 2 : 0403] 0317 1 2.0 97.52 2.53 4.03 29.38 n/a 0.000
* ** CALI B STANDHYD 0102 1 2.0 19.41 1.80 3.33 32.65 0.55 0.000
* [I%=22.0; S%= 2.00]
* ADD [0102 + 0317] 0803 3 2.0 116.93 3.06 3.93 29.93 n/a 0.000
* ** CALI B STANDHYD 0103 1 2.0 35.79 4.18 3.33 38.92 0.65 0.000
* [I%=37.1; S%= 2.00]
* ** CALI B STANDHYD 0104 1 2.0 5.22 0.59 3.27 34.94 0.59 0.000
* [I%=20.7; S%= 2.00]
* ** CALI B STANDHYD 0106 1 2.0 13.71 1.18 3.33 30.47 0.51 0.000
* [I%=21.1; S%= 2.00]
* ** CALI B STANDHYD 0107 1 5.0 8.53 0.93 3.25 33.70 0.57 0.000
* [I%=18.1; S%= 2.00]
* ** CALI B STANDHYD 0108 1 2.0 58.75 3.78 3.37 27.02 0.45 0.000
* [I%=24.4; S%= 2.00]
* CHANNEL[ 2 : 0108] 0307 1 2.0 58.75 3.70 3.43 27.02 n/a 0.000
* ** CALI B STANDHYD 0109 1 2.0 13.70 1.41 3.33 30.21 0.51 0.000
* [I%= 3.0; S%= 2.00]
* ADD [0109 + 0307] 0806 3 2.0 72.45 5.01 3.40 27.62 n/a 0.000
* CHANNEL[ 2 : 0806] 0308 1 2.0 72.45 5.00 3.40 27.62 n/a 0.000
* ADD [0107 + 0308] 0807 3 2.0 80.98 5.74 3.40 28.26 n/a 0.000
* CHANNEL[ 2 : 0807] 0306 1 2.0 80.98 5.70 3.40 28.26 n/a 0.000
* ADD [0106 + 0306] 0804 3 2.0 94.69 6.78 3.40 28.58 n/a 0.000
* CHANNEL[ 2 : 0804] 0305 1 2.0 94.69 6.50 3.47 28.58 n/a 0.000

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* ADD [0104 + 0305] 0093 3 2.0 99.91 6.92 3.43 28.91 n/a 0.000
* ADD [0103 + 0093] 0805 3 2.0 135.70 10.63 3.40 31.55 n/a 0.000
* ADD [0803 + 0805] 0096 3 2.0 252.63 13.60 3.40 30.80 n/a 0.000
* RESRVR [ 2 : 0096] 0700 1 2.0 252.63 11.57 3.57 30.80 n/a 0.000
  {ST= 0.60 ha.m }
* CALI B STANDHYD 0111 1 2.0 3.57 0.36 3.30 32.88 0.55 0.000
  [I%=22.2; S%= 2.00]
* ADD [0111 + 0700] 0808 3 2.0 256.20 11.77 3.57 30.83 n/a 0.000
* CHANNEL[ 2 : 0808] 0310 1 2.0 256.20 11.75 3.57 30.83 n/a 0.000
* CALI B STANDHYD 0112 1 2.0 16.90 1.70 3.33 35.02 0.59 0.000
  [I%=23.9; S%= 2.00]
* ADD [0112 + 0310] 0809 3 2.0 273.10 12.87 3.53 31.09 n/a 0.000
* CHANNEL[ 2 : 0809] 0311 1 2.0 273.10 12.63 3.60 31.09 n/a 0.000
* CALI B STANDHYD 0114 1 2.0 4.95 0.53 3.30 33.30 0.56 0.000
  [I%=17.3; S%= 2.00]
* ADD [0114 + 0311] 0810 3 2.0 278.05 12.89 3.60 31.12 n/a 0.000
* CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 12.89 3.60 31.12 n/a 0.000
* CALI B STANDHYD 0115 1 2.0 12.66 1.08 3.30 30.35 0.51 0.000
  [I%=28.8; S%= 2.00]
* ADD [0115 + 0313] 0811 3 2.0 290.71 13.51 3.60 31.09 n/a 0.000
* CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 13.50 3.60 31.09 n/a 0.000
* CALI B STANDHYD 0116 1 2.0 26.63 2.35 3.30 30.35 0.51 0.000
  [I%=25.5; S%= 2.00]
* ADD [0116 + 0314] 0812 3 2.0 317.34 14.77 3.57 31.03 n/a 0.000
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 14.77 3.57 31.03 n/a 0.000
* CALI B STANDHYD 0117 1 2.0 27.32 1.80 3.30 23.13 0.39 0.000
  [I%=25.1; S%= 2.00]
* ADD [0117 + 0401] 0813 3 2.0 344.66 15.77 3.57 30.40 n/a 0.000
* CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 15.66 3.60 30.40 n/a 0.000
* CALI B STANDHYD 0119 1 2.0 16.91 1.19 3.33 25.61 0.43 0.000
  [I%=26.9; S%= 2.00]
* ADD [0119 + 0315] 0814 3 2.0 361.57 16.35 3.60 30.18 n/a 0.000
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 16.35 3.60 30.18 n/a 0.000
* CALI B STANDHYD 0120 1 2.0 17.04 1.04 3.30 21.59 0.36 0.000
  [I%=20.9; S%= 2.00]
* CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 1.03 3.33 21.59 n/a 0.000
* CALI B STANDHYD 0121 1 2.0 1.39 0.07 3.23 16.22 0.27 0.000
  [I%=14.6; S%= 2.00]
* CALI B STANDHYD 0122 1 2.0 3.13 0.26 3.23 23.36 0.39 0.000
  [I%=26.5; S%= 2.00]
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.32 3.23 21.16 n/a 0.000
* ADD [0815 + 0316] 0815 1 2.0 21.56 1.29 3.27 21.50 n/a 0.000
* ADD [0815 + 0402] 0815 3 2.0 383.13 17.07 3.57 29.69 n/a 0.000
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 17.07 3.60 29.69 n/a 0.000
* CALI B STANDHYD 0124 1 2.0 21.61 1.97 3.27 27.43 0.46 0.000
  [I%=33.4; S%= 2.00]
* ADD [0124 + 0404] 0816 3 2.0 404.74 17.79 3.57 29.57 n/a 0.000
* DUHYD 0500 1 2.0 404.74 17.79 3.57 29.57 n/a 0.000
  MAJOR SYSTEM: 0500 2 2.0 327.92 16.93 3.57 29.57 n/a 0.000

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* MI NOR SYSTEM: 0500 3 2.0 76.81 0.87 2.00 29.57 n/a 0.000
* PIPE [ 2 : 0500] 0405 1 2.0 327.92 16.92 3.60 29.57 n/a 0.000
** CALI B STANDHYD 0125 1 2.0 18.74 2.04 3.30 33.48 0.56 0.000
  [I%=44.1; S%= 2.00]
* ADD [0125 + 0405] 0817 3 2.0 346.66 17.86 3.57 29.78 n/a 0.000
* PIPE [ 2 : 0500] 0408 1 2.0 76.81 0.87 2.47 29.57 n/a 0.000
** CALI B STANDHYD 0126 1 2.0 22.26 1.97 3.27 25.78 0.43 0.000
  [I%=32.1; S%= 2.00]
* ADD [0126 + 0408] 0820 3 2.0 99.07 2.83 3.27 28.72 n/a 0.000
* PIPE [ 2 : 0820] 0406 1 2.0 99.07 2.83 3.27 28.72 n/a 0.000
** CALI B STANDHYD 0127 1 2.0 9.98 0.73 3.27 22.92 0.39 0.000
  [I%=27.4; S%= 2.00]
* ADD [0127 + 0406] 0818 3 2.0 109.05 3.56 3.27 28.19 n/a 0.000
* PIPE [ 2 : 0818] 0407 1 2.0 109.05 3.51 3.30 28.19 n/a 0.000
** CALI B STANDHYD 0128 1 2.0 14.87 1.96 3.27 35.07 0.59 0.000
  [I%=45.4; S%= 2.00]
* ADD [0128 + 0407] 0819 3 2.0 123.92 5.45 3.27 29.01 n/a 0.000
*
*****
** SIMULATION NUMBER: 13 ** 1:10 Year 6 Hour SCS Design Storm
*****
W/E COMMAND HYD ID DT AREA Opeak Tpeak R. V. R. C. Qbase
mi n ha cms hrs mm
START @ 0.00 hrs
-----
READ STORM 15.0
[ Ptot= 70.80 mm ]
fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\18481e3d-6d75-48f9-814
remark : 10yr/6hr Barrie Wpcc +15% SCS
** CALI B STANDHYD 0100 1 2.0 31.13 3.06 3.33 35.26 0.50 0.000
  [I%=28.2; S%= 2.00]
* CHANNEL[ 2 : 0100] 0302 1 2.0 31.13 3.03 3.37 35.26 n/a 0.000
** CALI B STANDHYD 0105 1 2.0 9.01 1.33 3.27 41.77 0.59 0.000
  [I%=24.8; S%= 2.00]
** CALI B STANDHYD 0110 1 2.0 12.37 1.39 3.30 36.99 0.52 0.000
  [I%=25.4; S%= 2.00]
* CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 1.37 3.33 36.99 n/a 0.000
* ADD [0105 + 0302] 0802 3 2.0 40.14 4.17 3.30 36.72 n/a 0.000
* ADD [0802 + 0303] 0802 1 2.0 52.51 5.50 3.33 36.78 n/a 0.000
* PIPE [ 2 : 0802] 0400 1 2.0 52.51 5.50 3.33 36.78 n/a 0.000
** CALI B STANDHYD 0113 1 2.0 9.41 1.46 3.27 43.71 0.62 0.000
  [I%=39.4; S%= 2.00]
* CHANNEL[ 2 : 0113] 0301 1 2.0 9.41 1.38 3.30 43.71 n/a 0.000
** CALI B STANDHYD 0118 1 2.0 4.11 0.49 3.27 35.23 0.50 0.000
  [I%=27.5; S%= 2.00]
* RESRVR [ 2 : 0118] 0600 1 2.0 4.11 0.29 3.43 35.27 n/a 0.000
  {ST= 0.02 ha.m }
* CHANNEL[ 2 : 0600] 0300 1 2.0 4.11 0.28 3.57 35.24 n/a 0.000
** CALI B STANDHYD 0101 1 2.0 8.68 0.84 3.27 30.59 0.43 0.000
  [I%=22.9; S%= 2.00]
* ADD [0101 + 0300] 0801 3 2.0 12.79 1.05 3.27 32.09 n/a 0.000
* CHANNEL[ 2 : 0801] 0304 1 2.0 12.79 0.97 3.30 32.08 n/a 0.000
** CALI B STANDHYD 0123 1 2.0 22.81 2.51 3.33 38.86 0.55 0.000

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[I%=27.1; S%= 2.00]										
*	ADD [0123 + 0301]	0800	3	2.0	32.22	3.86	3.33	40.27	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	4.81	3.33	37.95	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	10.31	3.33	37.32	n/a	0.000
*	RESRVR [2 : 0800] {ST= 1.53 ha.m }	0601	1	2.0	97.52	4.54	3.77	37.32	n/a	0.000
*	PIPE [2 : 0601]	0403	1	2.0	97.52	4.54	3.77	37.32	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	4.44	3.83	37.32	n/a	0.000
**	CALI B STANDHYD [I%=22.0; S%= 2.00]	0102	1	2.0	19.41	2.47	3.33	41.71	0.59	0.000
*	ADD [0102 + 0317]	0803	3	2.0	116.93	5.33	3.80	38.05	n/a	0.000
**	CALI B STANDHYD [I%=37.1; S%= 2.00]	0103	1	2.0	35.79	5.44	3.30	48.60	0.69	0.000
**	CALI B STANDHYD [I%=20.7; S%= 2.00]	0104	1	2.0	5.22	0.80	3.27	44.41	0.63	0.000
**	CALI B STANDHYD [I%=21.1; S%= 2.00]	0106	1	2.0	13.71	1.61	3.33	38.99	0.55	0.000
*	CALI B STANDHYD [I%=18.1; S%= 2.00]	0107	1	5.0	8.53	1.22	3.25	43.01	0.61	0.000
*	CALI B STANDHYD [I%=24.4; S%= 2.00]	0108	1	2.0	58.75	5.07	3.37	34.50	0.49	0.000
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	4.97	3.40	34.50	n/a	0.000
*	CALI B STANDHYD [I%= 3.0; S%= 2.00]	0109	1	2.0	13.70	1.90	3.33	39.26	0.55	0.000
*	ADD [0109 + 0307]	0806	3	2.0	72.45	6.72	3.40	35.40	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	6.71	3.40	35.40	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	7.69	3.40	36.20	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	7.65	3.40	36.20	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	9.11	3.40	36.60	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	8.71	3.43	36.60	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	9.26	3.43	37.01	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	13.88	3.37	40.07	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	17.71	3.37	39.13	n/a	0.000
*	RESRVR [2 : 0096] {ST= 0.85 ha.m }	0700	1	2.0	252.63	15.11	3.60	39.13	n/a	0.000
*	CALI B STANDHYD [I%=22.2; S%= 2.00]	0111	1	2.0	3.57	0.49	3.30	41.91	0.59	0.000
*	ADD [0111 + 0700]	0808	3	2.0	256.20	15.34	3.60	39.17	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	15.32	3.60	39.17	n/a	0.000
*	CALI B STANDHYD [I%=23.9; S%= 2.00]	0112	1	2.0	16.90	2.29	3.33	44.42	0.63	0.000
*	ADD [0112 + 0310]	0809	3	2.0	273.10	16.63	3.57	39.50	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	16.43	3.63	39.50	n/a	0.000
*	CALI B STANDHYD [I%=17.3; S%= 2.00]	0114	1	2.0	4.95	0.68	3.27	42.57	0.60	0.000
*	ADD [0114 + 0311]	0810	3	2.0	278.05	16.73	3.63	39.55	n/a	0.000
*	CHANNEL[2 : 0810]	0313	1	2.0	278.05	16.73	3.63	39.55	n/a	0.000
*	CALI B STANDHYD [I%=28.8; S%= 2.00]	0115	1	2.0	12.66	1.43	3.30	38.45	0.54	0.000

*	ADD [0115 + 0313]	0811	3	2.0	290.71	17.48	3.60	39.50	n/a	0.000
*	CHANNEL[2 : 0811]	0314	1	2.0	290.71	17.47	3.60	39.50	n/a	0.000
*	CALI B STANDHYD [I%=25.5; S%= 2.00]	0116	1	2.0	26.63	3.17	3.30	38.67	0.55	0.000
*	ADD [0116 + 0314]	0812	3	2.0	317.34	19.08	3.57	39.43	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	19.08	3.57	39.43	n/a	0.000
*	CALI B STANDHYD [I%=25.1; S%= 2.00]	0117	1	2.0	27.32	2.33	3.30	29.37	0.41	0.000
*	ADD [0117 + 0401]	0813	3	2.0	344.66	20.44	3.53	38.64	n/a	0.000
*	CHANNEL[2 : 0813]	0315	1	2.0	344.66	20.33	3.57	38.64	n/a	0.000
*	CALI B STANDHYD [I%=26.9; S%= 2.00]	0119	1	2.0	16.91	1.56	3.30	32.55	0.46	0.000
*	ADD [0119 + 0315]	0814	3	2.0	361.57	21.26	3.57	38.35	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	21.27	3.57	38.35	n/a	0.000
*	CALI B STANDHYD [I%=20.9; S%= 2.00]	0120	1	2.0	17.04	1.37	3.27	27.67	0.39	0.000
*	CHANNEL[2 : 0120]	0316	1	2.0	17.04	1.37	3.30	27.67	n/a	0.000
*	CALI B STANDHYD [I%=14.6; S%= 2.00]	0121	1	2.0	1.39	0.09	3.23	21.08	0.30	0.000
*	CALI B STANDHYD [I%=26.5; S%= 2.00]	0122	1	2.0	3.13	0.33	3.23	29.56	0.42	0.000
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.42	3.23	26.95	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	1.75	3.27	27.52	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	22.26	3.53	37.74	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	22.25	3.57	37.74	n/a	0.000
*	CALI B STANDHYD [I%=33.4; S%= 2.00]	0124	1	2.0	21.61	2.61	3.27	34.37	0.49	0.000
*	ADD [0124 + 0404]	0816	3	2.0	404.74	23.24	3.53	37.56	n/a	0.000
*	DUHYD	0500	1	2.0	404.74	23.24	3.53	37.56	n/a	0.000
*	MAJOR SYSTEM:	0500	2	2.0	341.12	22.37	3.53	37.56	n/a	0.000
*	MINOR SYSTEM:	0500	3	2.0	63.61	0.87	1.83	37.56	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	341.12	22.35	3.57	37.56	n/a	0.000
**	CALI B STANDHYD [I%=44.1; S%= 2.00]	0125	1	2.0	18.74	2.57	3.30	41.47	0.59	0.000
*	ADD [0125 + 0405]	0817	3	2.0	359.86	23.63	3.50	37.76	n/a	0.000
*	PIPE [2 : 0500]	0408	1	2.0	63.61	0.87	2.23	37.56	n/a	0.000
**	CALI B STANDHYD [I%=32.1; S%= 2.00]	0126	1	2.0	22.26	2.49	3.23	32.31	0.46	0.000
*	ADD [0126 + 0408]	0820	3	2.0	85.87	3.35	3.23	36.20	n/a	0.000
*	PIPE [2 : 0820]	0406	1	2.0	85.87	3.35	3.27	36.20	n/a	0.000
**	CALI B STANDHYD [I%=27.4; S%= 2.00]	0127	1	2.0	9.98	0.93	3.27	28.91	0.41	0.000
*	ADD [0127 + 0406]	0818	3	2.0	95.85	4.28	3.27	35.44	n/a	0.000
*	PIPE [2 : 0818]	0407	1	2.0	95.85	4.21	3.27	35.44	n/a	0.000
**	CALI B STANDHYD [I%=45.4; S%= 2.00]	0128	1	2.0	14.87	2.45	3.27	43.43	0.61	0.000
*	ADD [0128 + 0407]	0819	3	2.0	110.72	6.66	3.27	36.51	n/a	0.000

 ** SIMULATION NUMBER: 16 ** **1:25 Year 6 Hour SCS Design Storm**

W/E COMMAND HYD ID DT AREA Qpeak Tpeak R. V. R. C. Qbase
 mi n ha cms hrs mm cms

START @ 0.00 hrs

READ STORM
[Plot= 85.20 mm]

Fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\6095f82d-cb6a-4938-a98
remark: 25yr/6hr Barri e Wpcc +15% SCS

**	CALI B STANDHYD [I%=28.2: S%= 2.00]	0100	1	2.0	31.13	4.09	3.30	45.35	0.53	0.000
*	CHANNEL[2 : 0100]	0302	1	2.0	31.13	4.08	3.33	45.35	n/a	0.000
**	CALI B STANDHYD [I%=24.8: S%= 2.00]	0105	1	2.0	9.01	1.74	3.27	53.68	0.63	0.000
*	CALI B STANDHYD [I%=25.4: S%= 2.00]	0110	1	2.0	12.37	1.81	3.30	47.75	0.56	0.000
*	CHANNEL[2 : 0110]	0303	1	2.0	12.37	1.77	3.33	47.75	n/a	0.000
*	ADD [0105 + 0302]	0802	3	2.0	40.14	5.64	3.30	47.22	n/a	0.000
*	ADD [0802 + 0303]	0802	1	2.0	52.51	7.41	3.30	47.35	n/a	0.000
*	PIPE [2 : 0802]	0400	1	2.0	52.51	7.41	3.30	47.35	n/a	0.000
**	CALI B STANDHYD [I%=39.4: S%= 2.00]	0113	1	2.0	9.41	1.92	3.27	55.32	0.65	0.000
*	CHANNEL[2 : 0113]	0301	1	2.0	9.41	1.81	3.30	55.31	n/a	0.000
**	CALI B STANDHYD [I%=27.5: S%= 2.00]	0118	1	2.0	4.11	0.63	3.27	45.39	0.53	0.000
*	RESRVR [2 : 0118] {ST= 0.03 ha.m }	0600	1	2.0	4.11	0.36	3.47	45.41	n/a	0.000
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.34	3.57	45.39	n/a	0.000
**	CALI B STANDHYD [I%=22.9: S%= 2.00]	0101	1	2.0	8.68	1.14	3.27	39.77	0.47	0.000
*	ADD [0101 + 0300]	0801	3	2.0	12.79	1.38	3.27	41.58	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	1.28	3.30	41.57	n/a	0.000
**	CALI B STANDHYD [I%=27.1: S%= 2.00]	0123	1	2.0	22.81	3.27	3.33	50.07	0.59	0.000
*	ADD [0123 + 0301]	0800	3	2.0	32.22	5.07	3.30	51.60	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	6.36	3.30	48.75	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	13.76	3.30	47.99	n/a	0.000
*	RESRVR [2 : 0800] {ST= 1.73 ha.m }	0601	1	2.0	97.52	8.08	3.57	47.99	n/a	0.000
*	PIPE [2 : 0601]	0403	1	2.0	97.52	8.07	3.57	47.99	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	7.59	3.67	47.99	n/a	0.000
**	CALI B STANDHYD [I%=22.0: S%= 2.00]	0102	1	2.0	19.41	3.37	3.30	53.77	0.63	0.000
*	ADD [0102 + 0317]	0803	3	2.0	116.93	9.00	3.67	48.95	n/a	0.000
**	CALI B STANDHYD [I%=37.1: S%= 2.00]	0103	1	2.0	35.79	7.00	3.30	61.32	0.72	0.000
*	CALI B STANDHYD [I%=20.7: S%= 2.00]	0104	1	2.0	5.22	1.06	3.27	56.93	0.67	0.000
**	CALI B STANDHYD [I%=21.1: S%= 2.00]	0106	1	2.0	13.71	2.20	3.30	50.42	0.59	0.000
*	CALI B STANDHYD [I%=18.1: S%= 2.00]	0107	1	5.0	8.53	1.62	3.25	55.36	0.65	0.000

*	CALI B STANDHYD [I%=24.4: S%= 2.00]	0108	1	2.0	58.75	6.96	3.37	44.65	0.52	0.000
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	6.84	3.40	44.65	n/a	0.000
**	CALI B STANDHYD [I%= 3.0: S%= 2.00]	0109	1	2.0	13.70	2.66	3.30	51.34	0.60	0.000
*	ADD [0109 + 0307]	0806	3	2.0	72.45	9.13	3.37	45.92	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	9.07	3.40	45.92	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	10.44	3.37	46.91	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	10.39	3.40	46.91	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	12.34	3.37	47.41	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	11.82	3.43	47.41	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	12.53	3.43	47.91	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	18.69	3.37	51.45	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	24.29	3.40	50.29	n/a	0.000
*	RESRVR [2 : 0096] {ST= 1.28 ha.m }	0700	1	2.0	252.63	21.62	3.63	50.29	n/a	0.000
*	CALI B STANDHYD [I%=22.2: S%= 2.00]	0111	1	2.0	3.57	0.64	3.30	53.93	0.63	0.000
*	ADD [0111 + 0700]	0808	3	2.0	256.20	21.89	3.63	50.34	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	21.90	3.63	50.34	n/a	0.000
*	CALI B STANDHYD [I%=23.9: S%= 2.00]	0112	1	2.0	16.90	3.14	3.30	56.86	0.67	0.000
*	ADD [0112 + 0310]	0809	3	2.0	273.10	23.36	3.60	50.75	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	23.12	3.67	50.75	n/a	0.000
*	CALI B STANDHYD [I%=17.3: S%= 2.00]	0114	1	2.0	4.95	0.95	3.27	54.87	0.64	0.000
*	ADD [0114 + 0311]	0810	3	2.0	278.05	23.45	3.63	50.82	n/a	0.000
*	CHANNEL[2 : 0810]	0313	1	2.0	278.05	23.46	3.67	50.82	n/a	0.000
*	CALI B STANDHYD [I%=28.8: S%= 2.00]	0115	1	2.0	12.66	1.92	3.30	49.34	0.58	0.000
*	ADD [0115 + 0313]	0811	3	2.0	290.71	24.34	3.63	50.76	n/a	0.000
*	CHANNEL[2 : 0811]	0314	1	2.0	290.71	24.32	3.67	50.76	n/a	0.000
*	CALI B STANDHYD [I%=25.5: S%= 2.00]	0116	1	2.0	26.63	4.34	3.30	49.83	0.58	0.000
*	ADD [0116 + 0314]	0812	3	2.0	317.34	26.10	3.60	50.68	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	26.10	3.63	50.68	n/a	0.000
*	CALI B STANDHYD [I%=25.1: S%= 2.00]	0117	1	2.0	27.32	3.19	3.27	37.90	0.44	0.000
*	ADD [0117 + 0401]	0813	3	2.0	344.66	27.54	3.60	49.67	n/a	0.000
*	CHANNEL[2 : 0813]	0315	1	2.0	344.66	27.47	3.63	49.66	n/a	0.000
*	CALI B STANDHYD [I%=26.9: S%= 2.00]	0119	1	2.0	16.91	2.10	3.30	41.98	0.49	0.000
*	ADD [0119 + 0315]	0814	3	2.0	361.57	28.54	3.60	49.31	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	28.54	3.60	49.31	n/a	0.000
*	CALI B STANDHYD [I%=20.9: S%= 2.00]	0120	1	2.0	17.04	1.86	3.27	36.04	0.42	0.000
*	CHANNEL[2 : 0120]	0316	1	2.0	17.04	1.84	3.30	36.04	n/a	0.000
*	CALI B STANDHYD	0121	1	2.0	1.39	0.12	3.27	27.89	0.33	0.000

[I%=14.6; S%= 2.00]										
* *	CALI B STANDHYD	0122	1	2.0	3.13	0.43	3.23	38.01	0.45	0.000
*	[I%=26.5; S%= 2.00]									
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.56	3.23	34.89	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	2.32	3.27	35.80	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	29.69	3.57	48.55	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	29.68	3.57	48.55	n/a	0.000
*	CALI B STANDHYD	0124	1	2.0	21.61	3.33	3.27	43.72	0.51	0.000
*	[I%=33.4; S%= 2.00]									
*	ADD [0124 + 0404]	0816	3	2.0	404.74	30.99	3.50	48.29	n/a	0.000
*	DUHYD	0500	1	2.0	404.74	30.99	3.50	48.29	n/a	0.000
*	MAJOR SYSTEM:	0500	2	2.0	352.82	30.12	3.50	48.29	n/a	0.000
*	MINOR SYSTEM:	0500	3	2.0	51.92	0.87	1.60	48.29	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	352.82	30.11	3.50	48.29	n/a	0.000
**	CALI B STANDHYD	0125	1	2.0	18.74	3.32	3.30	52.09	0.61	0.000
*	[I%=44.1; S%= 2.00]									
*	ADD [0125 + 0405]	0817	3	2.0	371.56	31.93	3.47	48.48	n/a	0.000
*	PIPE [2 : 0500]	0408	1	2.0	51.92	0.87	1.70	48.29	n/a	0.000
**	CALI B STANDHYD	0126	1	2.0	22.26	3.27	3.23	41.15	0.48	0.000
*	[I%=32.1; S%= 2.00]									
*	ADD [0126 + 0408]	0820	3	2.0	74.18	4.14	3.23	46.14	n/a	0.000
*	PIPE [2 : 0820]	0406	1	2.0	74.18	4.14	3.27	46.14	n/a	0.000
**	CALI B STANDHYD	0127	1	2.0	9.98	1.22	3.27	37.07	0.44	0.000
*	[I%=27.4; S%= 2.00]									
*	ADD [0127 + 0406]	0818	3	2.0	84.16	5.36	3.27	45.07	n/a	0.000
*	PIPE [2 : 0818]	0407	1	2.0	84.16	5.27	3.27	45.07	n/a	0.000
**	CALI B STANDHYD	0128	1	2.0	14.87	3.09	3.27	54.51	0.64	0.000
*	[I%=45.4; S%= 2.00]									
*	ADD [0128 + 0407]	0819	3	2.0	99.03	8.36	3.27	46.48	n/a	0.000

 ** SIMULATION NUMBER: 19 ** **1:50 Year 6 Hour SCS Design Storm**

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak cms	Tpeak hrs	R. V. mm	R. C.	Qbase cms		
START @ 0.00 hrs										

READ STORM										
[Ptot= 95.90 mm]										
fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\40bdcde-ee7f-4ed4-9d8										
remark: 50yr/6hr Barrie Wpcc +15% SCS										
**	CALI B STANDHYD	0100	1	2.0	31.13	4.83	3.30	53.22	0.55	0.000
*	[I%=28.2; S%= 2.00]									
*	CHANNEL[2 : 0100]	0302	1	2.0	31.13	4.81	3.33	53.22	n/a	0.000
**	CALI B STANDHYD	0105	1	2.0	9.01	2.15	3.27	62.83	0.66	0.000
*	[I%=24.8; S%= 2.00]									
**	CALI B STANDHYD	0110	1	2.0	12.37	2.24	3.30	56.09	0.58	0.000
*	[I%=25.4; S%= 2.00]									
*	CHANNEL[2 : 0110]	0303	1	2.0	12.37	2.20	3.30	56.09	n/a	0.000
*	ADD [0105 + 0302]	0802	3	2.0	40.14	6.73	3.30	55.37	n/a	0.000
*	ADD [0802 + 0303]	0802	1	2.0	52.51	8.93	3.30	55.54	n/a	0.000
*	PIPE [2 : 0802]	0400	1	2.0	52.51	8.93	3.30	55.54	n/a	0.000
**	CALI B STANDHYD	0113	1	2.0	9.41	2.22	3.27	64.22	0.67	0.000

[I%=39.4; S%= 2.00]										
*	CHANNEL[2 : 0113]	0301	1	2.0	9.41	2.09	3.30	64.21	n/a	0.000
**	CALI B STANDHYD	0118	1	2.0	4.11	0.74	3.27	53.31	0.56	0.000
*	[I%=27.5; S%= 2.00]									
*	RESRVR [2 : 0118]	0600	1	2.0	4.11	0.41	3.47	53.35	n/a	0.000
*	{ST= 0.04 ha.m }									
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.39	3.60	53.33	n/a	0.000
*	CALI B STANDHYD	0101	1	2.0	8.68	1.42	3.27	46.99	0.49	0.000
*	[I%=22.9; S%= 2.00]									
*	ADD [0101 + 0300]	0801	3	2.0	12.79	1.69	3.27	49.03	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	1.57	3.30	49.02	n/a	0.000
*	CALI B STANDHYD	0123	1	2.0	22.81	4.04	3.30	58.74	0.61	0.000
*	[I%=27.1; S%= 2.00]									
*	ADD [0123 + 0301]	0800	3	2.0	32.22	6.13	3.30	60.34	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	7.70	3.30	57.12	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	16.63	3.30	56.27	n/a	0.000
*	RESRVR [2 : 0800]	0601	1	2.0	97.52	11.21	3.50	56.27	n/a	0.000
*	{ST= 1.85 ha.m }									
*	PIPE [2 : 0601]	0403	1	2.0	97.52	11.20	3.50	56.27	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	10.08	3.63	56.27	n/a	0.000
**	CALI B STANDHYD	0102	1	2.0	19.41	4.03	3.30	63.03	0.66	0.000
*	[I%=22.0; S%= 2.00]									
*	ADD [0102 + 0317]	0803	3	2.0	116.93	11.97	3.60	57.39	n/a	0.000
**	CALI B STANDHYD	0103	1	2.0	35.79	8.46	3.30	70.99	0.74	0.000
*	[I%=37.1; S%= 2.00]									
**	CALI B STANDHYD	0104	1	2.0	5.22	1.26	3.27	66.48	0.69	0.000
*	[I%=20.7; S%= 2.00]									
**	CALI B STANDHYD	0106	1	2.0	13.71	2.64	3.30	59.25	0.62	0.000
*	[I%=21.1; S%= 2.00]									
*	CALI B STANDHYD	0107	1	5.0	8.53	1.93	3.25	64.80	0.68	0.000
*	[I%=18.1; S%= 2.00]									
*	CALI B STANDHYD	0108	1	2.0	58.75	8.49	3.37	52.56	0.55	0.000
*	[I%=24.4; S%= 2.00]									
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	8.35	3.37	52.56	n/a	0.000
*	CALI B STANDHYD	0109	1	2.0	13.70	3.20	3.30	60.63	0.63	0.000
*	[I%= 3.0; S%= 2.00]									
*	ADD [0109 + 0307]	0806	3	2.0	72.45	11.24	3.37	54.09	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	11.23	3.37	54.09	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	12.86	3.37	55.21	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	12.79	3.37	55.21	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	15.21	3.37	55.80	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	14.44	3.40	55.80	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	15.39	3.40	56.35	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	22.82	3.37	60.22	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	30.92	3.43	58.91	n/a	0.000
*	RESRVR [2 : 0096]	0700	1	2.0	252.63	27.03	3.60	58.91	n/a	0.000
*	{ST= 1.65 ha.m }									
*	CALI B STANDHYD	0111	1	2.0	3.57	0.79	3.27	63.16	0.66	0.000
*	[I%=22.2; S%= 2.00]									

```

* ADD [0111 + 0700] 0808 3 2.0 256.20 27.34 3.60 58.97 n/a 0.000
* CHANNEL[ 2 : 0808] 0310 1 2.0 256.20 27.35 3.60 58.97 n/a 0.000
* * CALI B STANDHYD 0112 1 2.0 16.90 3.69 3.30 66.35 0.69 0.000
  [I%=23.9: S%= 2.00]
* ADD [0112 + 0310] 0809 3 2.0 273.10 29.07 3.60 59.42 n/a 0.000
* CHANNEL[ 2 : 0809] 0311 1 2.0 273.10 28.75 3.63 59.42 n/a 0.000
* * CALI B STANDHYD 0114 1 2.0 4.95 1.14 3.27 64.28 0.67 0.000
  [I%=17.3: S%= 2.00]
* ADD [0114 + 0311] 0810 3 2.0 278.05 29.16 3.63 59.51 n/a 0.000
* CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 29.16 3.63 59.51 n/a 0.000
* * CALI B STANDHYD 0115 1 2.0 12.66 2.27 3.30 57.77 0.60 0.000
  [I%=28.8: S%= 2.00]
* ADD [0115 + 0313] 0811 3 2.0 290.71 30.20 3.63 59.43 n/a 0.000
* CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 30.18 3.63 59.43 n/a 0.000
* * CALI B STANDHYD 0116 1 2.0 26.63 5.17 3.30 58.47 0.61 0.000
  [I%=25.5: S%= 2.00]
* ADD [0116 + 0314] 0812 3 2.0 317.34 32.25 3.63 59.35 n/a 0.000
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 32.26 3.63 59.35 n/a 0.000
* * CALI B STANDHYD 0117 1 2.0 27.32 3.78 3.27 44.60 0.47 0.000
  [I%=25.1: S%= 2.00]
* ADD [0117 + 0401] 0813 3 2.0 344.66 33.93 3.60 58.18 n/a 0.000
* CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 33.84 3.63 58.18 n/a 0.000
* * CALI B STANDHYD 0119 1 2.0 16.91 2.58 3.30 49.36 0.51 0.000
  [I%=26.9: S%= 2.00]
* ADD [0119 + 0315] 0814 3 2.0 361.57 35.00 3.60 57.77 n/a 0.000
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 35.01 3.63 57.77 n/a 0.000
* * CALI B STANDHYD 0120 1 2.0 17.04 2.22 3.30 42.65 0.44 0.000
  [I%=20.9: S%= 2.00]
* CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 2.21 3.30 42.65 n/a 0.000
* * CALI B STANDHYD 0121 1 2.0 1.39 0.16 3.27 33.35 0.35 0.000
  [I%=14.6: S%= 2.00]
* * CALI B STANDHYD 0122 1 2.0 3.13 0.51 3.23 44.65 0.47 0.000
  [I%=26.5: S%= 2.00]
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.67 3.23 41.17 n/a 0.000
* ADD [0815 + 0316] 0815 1 2.0 21.56 2.78 3.27 42.34 n/a 0.000
* ADD [0815 + 0402] 0815 3 2.0 383.13 36.33 3.57 56.90 n/a 0.000
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 36.33 3.57 56.90 n/a 0.000
* * CALI B STANDHYD 0124 1 2.0 21.61 3.90 3.27 51.00 0.53 0.000
  [I%=33.4: S%= 2.00]
* ADD [0124 + 0404] 0816 3 2.0 404.74 37.83 3.53 56.59 n/a 0.000
* DUHYD 0500 1 2.0 404.74 37.83 3.53 56.59 n/a 0.000
  MAJOR SYSTEM: 0500 2 2.0 359.22 36.96 3.53 56.59 n/a 0.000
  MINOR SYSTEM: 0500 3 2.0 45.51 0.87 1.43 56.59 n/a 0.000
* PIPE [ 2 : 0500] 0405 1 2.0 359.22 36.97 3.53 56.59 n/a 0.000
* * * CALI B STANDHYD 0125 1 2.0 18.74 3.87 3.30 60.26 0.63 0.000
  [I%=44.1: S%= 2.00]
* ADD [0125 + 0405] 0817 3 2.0 377.96 38.83 3.50 56.77 n/a 0.000
* PIPE [ 2 : 0500] 0408 1 2.0 45.51 0.87 1.87 56.59 n/a 0.000
* * * CALI B STANDHYD 0126 1 2.0 22.26 3.91 3.23 48.04 0.50 0.000

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* [I%=32.1: S%= 2.00]
* ADD [0126 + 0408] 0820 3 2.0 67.77 4.78 3.23 53.78 n/a 0.000
* PIPE [ 2 : 0820] 0406 1 2.0 67.77 4.78 3.27 53.78 n/a 0.000
* * * CALI B STANDHYD 0127 1 2.0 9.98 1.44 3.27 43.48 0.45 0.000
  [I%=27.4: S%= 2.00]
* ADD [0127 + 0406] 0818 3 2.0 77.75 6.22 3.27 52.46 n/a 0.000
* PIPE [ 2 : 0818] 0407 1 2.0 77.75 6.11 3.27 52.46 n/a 0.000
* * * CALI B STANDHYD 0128 1 2.0 14.87 3.65 3.23 63.01 0.66 0.000
  [I%=45.4: S%= 2.00]
* ADD [0128 + 0407] 0819 3 2.0 92.62 9.73 3.27 54.15 n/a 0.000

```

** SIMULATION NUMBER: 22 **

I:100 Year 6 Hour SCS Design Storm

```

W/E COMMAND          HYD ID  DT  AREA  Opeak  Tpeak  R. V.  R. C.  Qbase
                   mi n   ha    cms   hrs   mm
-----
START @ 0.00 hrs
-----
READ STORM          15.0
[ Ptot=106.50 mm ]
fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\3d3b1b89-e8c4-4a46-b00
remark: 100yr/6hr Barrie Wpcc +15% SCS
* * * CALI B STANDHYD 0100 1 2.0 31.13 5.81 3.30 61.26 0.58 0.000
  [I%=28.2: S%= 2.00]
* CHANNEL[ 2 : 0100] 0302 1 2.0 31.13 5.78 3.33 61.26 n/a 0.000
* * * CALI B STANDHYD 0105 1 2.0 9.01 2.50 3.27 72.08 0.68 0.000
  [I%=24.8: S%= 2.00]
* * * CALI B STANDHYD 0110 1 2.0 12.37 2.62 3.30 64.60 0.61 0.000
  [I%=25.4: S%= 2.00]
* CHANNEL[ 2 : 0110] 0303 1 2.0 12.37 2.58 3.30 64.60 n/a 0.000
* ADD [0105 + 0302] 0802 3 2.0 40.14 8.03 3.30 63.69 n/a 0.000
* ADD [0802 + 0303] 0802 1 2.0 52.51 10.61 3.30 63.90 n/a 0.000
* PIPE [ 2 : 0802] 0400 1 2.0 52.51 10.61 3.30 63.90 n/a 0.000
* * * CALI B STANDHYD 0113 1 2.0 9.41 2.55 3.27 73.23 0.69 0.000
  [I%=39.4: S%= 2.00]
* CHANNEL[ 2 : 0113] 0301 1 2.0 9.41 2.41 3.27 73.22 n/a 0.000
* * * CALI B STANDHYD 0118 1 2.0 4.11 0.89 3.27 61.40 0.58 0.000
  [I%=27.5: S%= 2.00]
* RESRVR [ 2 : 0118] 0600 1 2.0 4.11 0.47 3.47 61.50 n/a 0.000
  {ST= 0.05 ha.m }
* CHANNEL[ 2 : 0600] 0300 1 2.0 4.11 0.45 3.57 61.48 n/a 0.000
* * * CALI B STANDHYD 0101 1 2.0 8.68 1.67 3.27 54.42 0.51 0.000
  [I%=22.9: S%= 2.00]
* ADD [0101 + 0300] 0801 3 2.0 12.79 1.96 3.27 56.69 n/a 0.000
* CHANNEL[ 2 : 0801] 0304 1 2.0 12.79 1.83 3.30 56.68 n/a 0.000
* * * CALI B STANDHYD 0123 1 2.0 22.81 4.73 3.30 67.55 0.63 0.000
  [I%=27.1: S%= 2.00]
* ADD [0123 + 0301] 0800 3 2.0 32.22 7.13 3.30 69.21 n/a 0.000
* ADD [0800 + 0304] 0800 1 2.0 45.01 8.96 3.30 65.65 n/a 0.000
* ADD [0800 + 0400] 0800 3 2.0 97.52 19.57 3.30 64.71 n/a 0.000
* RESRVR [ 2 : 0800] 0601 1 2.0 97.52 14.49 3.47 64.71 n/a 0.000
  {ST= 1.97 ha.m }
* PIPE [ 2 : 0601] 0403 1 2.0 97.52 14.50 3.47 64.71 n/a 0.000

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* CHANNEL[ 2 : 0403] 0317 1 2.0 97.52 12.94 3.57 64.71 n/a 0.000
** CALI B STANDHYD [I%=22.0: S%= 2.00] 0102 1 2.0 19.41 4.70 3.30 72.38 0.68 0.000
* ADD [0102 + 0317] 0803 3 2.0 116.93 15.35 3.53 65.98 n/a 0.000
** CALI B STANDHYD [I%=37.1: S%= 2.00] 0103 1 2.0 35.79 9.73 3.30 80.70 0.76 0.000
* ** CALI B STANDHYD [I%=20.7: S%= 2.00] 0104 1 2.0 5.22 1.52 3.27 76.10 0.71 0.000
* ** CALI B STANDHYD [I%=21.1: S%= 2.00] 0106 1 2.0 13.71 3.09 3.30 68.21 0.64 0.000
* ** CALI B STANDHYD [I%=18.1: S%= 2.00] 0107 1 5.0 8.53 2.53 3.25 74.33 0.70 0.000
* ** CALI B STANDHYD [I%=24.4: S%= 2.00] 0108 1 2.0 58.75 9.97 3.37 60.67 0.57 0.000
* CHANNEL[ 2 : 0108] 0307 1 2.0 58.75 9.83 3.37 60.67 n/a 0.000
* ** CALI B STANDHYD [I%= 3.0: S%= 2.00] 0109 1 2.0 13.70 3.75 3.30 70.02 0.66 0.000
* ADD [0109 + 0307] 0806 3 2.0 72.45 13.18 3.37 62.43 n/a 0.000
* CHANNEL[ 2 : 0806] 0308 1 2.0 72.45 13.17 3.37 62.43 n/a 0.000
* ADD [0107 + 0308] 0807 3 2.0 80.98 15.00 3.33 63.68 n/a 0.000
* CHANNEL[ 2 : 0807] 0306 1 2.0 80.98 14.95 3.37 63.68 n/a 0.000
* ADD [0106 + 0306] 0804 3 2.0 94.69 17.77 3.37 64.34 n/a 0.000
* CHANNEL[ 2 : 0804] 0305 1 2.0 94.69 16.93 3.40 64.34 n/a 0.000
* ADD [0104 + 0305] 0093 3 2.0 99.91 17.95 3.40 64.95 n/a 0.000
* ADD [0103 + 0093] 0805 3 2.0 135.70 26.72 3.33 69.11 n/a 0.000
* ADD [0803 + 0805] 0096 3 2.0 252.63 38.29 3.43 67.66 n/a 0.000
* RESRVR [ 2 : 0096] 0700 1 2.0 252.63 29.10 3.67 67.66 n/a 0.000
{ST= 2.26 ha.m }
* ** CALI B STANDHYD [I%=22.2: S%= 2.00] 0111 1 2.0 3.57 0.92 3.27 72.49 0.68 0.000
* ADD [0111 + 0700] 0808 3 2.0 256.20 29.40 3.67 67.73 n/a 0.000
* CHANNEL[ 2 : 0808] 0310 1 2.0 256.20 29.41 3.67 67.73 n/a 0.000
* ** CALI B STANDHYD [I%=23.9: S%= 2.00] 0112 1 2.0 16.90 4.29 3.30 75.92 0.71 0.000
* ADD [0112 + 0310] 0809 3 2.0 273.10 31.25 3.43 68.23 n/a 0.000
* CHANNEL[ 2 : 0809] 0311 1 2.0 273.10 31.14 3.63 68.23 n/a 0.000
* ** CALI B STANDHYD [I%=17.3: S%= 2.00] 0114 1 2.0 4.95 1.38 3.27 73.78 0.69 0.000
* ADD [0114 + 0311] 0810 3 2.0 278.05 31.59 3.60 68.33 n/a 0.000
* CHANNEL[ 2 : 0810] 0313 1 2.0 278.05 31.58 3.60 68.33 n/a 0.000
* ** CALI B STANDHYD [I%=28.8: S%= 2.00] 0115 1 2.0 12.66 2.60 3.30 66.35 0.62 0.000
* ADD [0115 + 0313] 0811 3 2.0 290.71 32.96 3.53 68.25 n/a 0.000
* CHANNEL[ 2 : 0811] 0314 1 2.0 290.71 32.95 3.57 68.25 n/a 0.000
* ** CALI B STANDHYD [I%=25.5: S%= 2.00] 0116 1 2.0 26.63 6.27 3.27 67.25 0.63 0.000
* ADD [0116 + 0314] 0812 3 2.0 317.34 36.06 3.50 68.16 n/a 0.000
* PIPE [ 2 : 0812] 0401 1 2.0 317.34 36.08 3.50 68.16 n/a 0.000

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* CALI B STANDHYD [I%=25.1: S%= 2.00] 0117 1 2.0 27.32 4.40 3.27 51.52 0.48 0.000
* ADD [0117 + 0401] 0813 3 2.0 344.66 38.80 3.47 66.84 n/a 0.000
* CHANNEL[ 2 : 0813] 0315 1 2.0 344.66 38.48 3.50 66.84 n/a 0.000
* ** CALI B STANDHYD [I%=26.9: S%= 2.00] 0119 1 2.0 16.91 2.98 3.30 56.94 0.53 0.000
* ADD [0119 + 0315] 0814 3 2.0 361.57 40.40 3.50 66.38 n/a 0.000
* PIPE [ 2 : 0814] 0402 1 2.0 361.57 40.40 3.50 66.38 n/a 0.000
* ** CALI B STANDHYD [I%=20.9: S%= 2.00] 0120 1 2.0 17.04 2.71 3.27 49.49 0.46 0.000
* CHANNEL[ 2 : 0120] 0316 1 2.0 17.04 2.70 3.30 49.49 n/a 0.000
* ** CALI B STANDHYD [I%=14.6: S%= 2.00] 0121 1 2.0 1.39 0.19 3.27 39.05 0.37 0.000
* ** CALI B STANDHYD [I%=26.5: S%= 2.00] 0122 1 2.0 3.13 0.59 3.23 51.49 0.48 0.000
* ADD [0121 + 0122] 0815 3 2.0 4.52 0.77 3.23 47.66 n/a 0.000
* ADD [0815 + 0316] 0815 1 2.0 21.56 3.37 3.27 49.10 n/a 0.000
* ADD [0815 + 0402] 0815 3 2.0 383.13 42.43 3.50 65.41 n/a 0.000
* PIPE [ 2 : 0815] 0404 1 2.0 383.13 42.41 3.50 65.41 n/a 0.000
* ** CALI B STANDHYD [I%=33.4: S%= 2.00] 0124 1 2.0 21.61 4.56 3.27 58.46 0.55 0.000
* ADD [0124 + 0404] 0816 3 2.0 404.74 44.25 3.50 65.04 n/a 0.000
* DUHYD MAJOR SYSTEM: 0500 1 2.0 404.74 44.25 3.50 65.04 n/a 0.000
MINOR SYSTEM: 0500 2 2.0 364.24 43.38 3.50 65.04 n/a 0.000
0500 3 2.0 40.49 0.87 1.33 65.04 n/a 0.000
* PIPE [ 2 : 0500] 0405 1 2.0 364.24 43.37 3.50 65.04 n/a 0.000
* ** CALI B STANDHYD [I%=44.1: S%= 2.00] 0125 1 2.0 18.74 4.44 3.30 68.56 0.64 0.000
* ADD [0125 + 0405] 0817 3 2.0 382.98 45.73 3.47 65.21 n/a 0.000
* PIPE [ 2 : 0500] 0408 1 2.0 40.49 0.87 1.77 65.04 n/a 0.000
* ** CALI B STANDHYD [I%=32.1: S%= 2.00] 0126 1 2.0 22.26 4.50 3.23 55.12 0.52 0.000
* ADD [0126 + 0408] 0820 3 2.0 62.75 5.36 3.23 61.52 n/a 0.000
* PIPE [ 2 : 0820] 0406 1 2.0 62.75 5.36 3.27 61.52 n/a 0.000
* ** CALI B STANDHYD [I%=27.4: S%= 2.00] 0127 1 2.0 9.98 1.69 3.27 50.09 0.47 0.000
* ADD [0127 + 0406] 0818 3 2.0 72.73 7.05 3.27 59.95 n/a 0.000
* PIPE [ 2 : 0818] 0407 1 2.0 72.73 6.95 3.27 59.95 n/a 0.000
* ** CALI B STANDHYD [I%=45.4: S%= 2.00] 0128 1 2.0 14.87 4.17 3.23 71.62 0.67 0.000
* ADD [0128 + 0407] 0819 3 2.0 87.60 11.08 3.27 61.93 n/a 0.000

```

```

*****
** SIMULATION NUMBER: 25 ** Hurricane Hazel Storm Event
*****
W/E COMMAND HYD ID DT AREA Opeak Tpeak R. V. R. C. Qbase
mi n ha cms hrs mm
START @ 0.00 hrs
-----
READ STORM 12.0
[ Ptot=212.00 mm ]
fname : C:\Users\dtwi\ggr\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\02f6c4b0-d9e8-4e4f-a94
remark: * REGIONAL DESIGN STORM - HAZEL

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**	CALI B STANDHYD	0100	1	2.0	31.13	3.55	10.07	149.95	0.71	0.000
*	[I%=28.2; S%= 2.00]									
*	CHANNEL[2 : 0100]	0302	1	2.0	31.13	3.55	10.10	149.95	n/a	0.000
**	CALI B STANDHYD	0105	1	2.0	9.01	1.20	10.00	169.83	0.80	0.000
*	[I%=24.8; S%= 2.00]									
**	CALI B STANDHYD	0110	1	2.0	12.37	1.50	10.03	157.08	0.74	0.000
*	[I%=25.4; S%= 2.00]									
*	CHANNEL[2 : 0110]	0303	1	2.0	12.37	1.50	10.07	157.08	n/a	0.000
*	ADD [0105 + 0302]	0802	3	2.0	40.14	4.73	10.03	154.41	n/a	0.000
*	ADD [0802 + 0303]	0802	1	2.0	52.51	6.23	10.03	155.04	n/a	0.000
*	PIPE [2 : 0802]	0400	1	2.0	52.51	6.23	10.03	155.04	n/a	0.000
**	CALI B STANDHYD	0113	1	2.0	9.41	1.22	10.00	168.94	0.80	0.000
*	[I%=39.4; S%= 2.00]									
*	CHANNEL[2 : 0113]	0301	1	2.0	9.41	1.21	10.03	168.93	n/a	0.000
**	CALI B STANDHYD	0118	1	2.0	4.11	0.49	10.00	150.58	0.71	0.000
*	[I%=27.5; S%= 2.00]									
*	RESRVR [2 : 0118]	0600	1	2.0	4.11	0.42	10.30	150.66	n/a	0.000
*	{ST= 0.04 ha.m }									
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.42	10.43	150.64	n/a	0.000
**	CALI B STANDHYD	0101	1	2.0	8.68	0.97	10.00	138.40	0.65	0.000
*	[I%=22.9; S%= 2.00]									
*	ADD [0101 + 0300]	0801	3	2.0	12.79	1.35	10.03	142.34	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	1.34	10.07	142.33	n/a	0.000
**	CALI B STANDHYD	0123	1	2.0	22.81	2.79	10.07	162.24	0.77	0.000
*	[I%=27.1; S%= 2.00]									
*	ADD [0123 + 0301]	0800	3	2.0	32.22	4.00	10.07	164.19	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	5.34	10.07	157.98	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	11.57	10.07	156.40	n/a	0.000
*	RESRVR [2 : 0800]	0601	1	2.0	97.52	11.42	10.13	156.40	n/a	0.000
*	{ST= 1.86 ha.m }									
*	PIPE [2 : 0601]	0403	1	2.0	97.52	11.42	10.13	156.40	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	11.32	10.23	156.40	n/a	0.000
**	CALI B STANDHYD	0102	1	2.0	19.41	2.54	10.03	170.86	0.81	0.000
*	[I%=22.0; S%= 2.00]									
*	ADD [0102 + 0317]	0803	3	2.0	116.93	13.74	10.20	158.80	n/a	0.000
**	CALI B STANDHYD	0103	1	2.0	35.79	4.79	10.03	181.25	0.85	0.000
*	[I%=37.1; S%= 2.00]									
**	CALI B STANDHYD	0104	1	2.0	5.22	0.71	10.00	176.22	0.83	0.000
*	[I%=20.7; S%= 2.00]									
**	CALI B STANDHYD	0106	1	2.0	13.71	1.74	10.03	164.05	0.77	0.000
*	[I%=21.1; S%= 2.00]									
*	CALI B STANDHYD	0107	1	5.0	8.53	1.16	10.00	173.89	0.82	0.000
*	[I%=18.1; S%= 2.00]									
**	CALI B STANDHYD	0108	1	2.0	58.75	6.54	10.13	150.03	0.71	0.000
*	[I%=24.4; S%= 2.00]									
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	6.53	10.17	150.03	n/a	0.000
*	CALI B STANDHYD	0109	1	2.0	13.70	1.85	10.00	168.87	0.80	0.000
*	[I%= 3.0; S%= 2.00]									
*	ADD [0109 + 0307]	0806	3	2.0	72.45	8.31	10.10	153.59	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	8.31	10.13	153.59	n/a	0.000

*	ADD [0107 + 0308]	0807	3	2.0	80.98	9.40	10.10	155.73	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	9.40	10.13	155.73	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	11.12	10.10	156.93	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	11.06	10.17	156.93	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	11.72	10.13	157.94	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	16.46	10.10	164.09	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	30.13	10.13	161.64	n/a	0.000
*	RESRVR [2 : 0096]	0700	1	2.0	252.63	27.94	10.43	161.64	n/a	0.000
*	{ST= 1.92 ha.m }									
**	CALI B STANDHYD	0111	1	2.0	3.57	0.47	10.00	170.75	0.81	0.000
*	[I%=22.2; S%= 2.00]									
*	ADD [0111 + 0700]	0808	3	2.0	256.20	28.33	10.43	161.77	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	28.33	10.43	161.77	n/a	0.000
**	CALI B STANDHYD	0112	1	2.0	16.90	2.24	10.03	175.69	0.83	0.000
*	[I%=23.9; S%= 2.00]									
*	ADD [0112 + 0310]	0809	3	2.0	273.10	30.26	10.33	162.63	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	30.24	10.43	162.63	n/a	0.000
**	CALI B STANDHYD	0114	1	2.0	4.95	0.67	10.00	173.20	0.82	0.000
*	[I%=17.3; S%= 2.00]									
*	ADD [0114 + 0311]	0810	3	2.0	278.05	30.79	10.37	162.82	n/a	0.000
*	CHANNEL[2 : 0810]	0313	1	2.0	278.05	30.79	10.37	162.82	n/a	0.000
**	CALI B STANDHYD	0115	1	2.0	12.66	1.54	10.03	159.21	0.75	0.000
*	[I%=28.8; S%= 2.00]									
*	ADD [0115 + 0313]	0811	3	2.0	290.71	32.18	10.30	162.66	n/a	0.000
*	CHANNEL[2 : 0811]	0314	1	2.0	290.71	32.18	10.33	162.66	n/a	0.000
**	CALI B STANDHYD	0116	1	2.0	26.63	3.35	10.03	161.71	0.76	0.000
*	[I%=25.5; S%= 2.00]									
*	ADD [0116 + 0314]	0812	3	2.0	317.34	35.20	10.23	162.58	n/a	0.000
*	PIPE [2 : 0812]	0401	1	2.0	317.34	35.19	10.23	162.58	n/a	0.000
**	CALI B STANDHYD	0117	1	2.0	27.32	2.79	10.03	130.61	0.62	0.000
*	[I%=25.1; S%= 2.00]									
*	ADD [0117 + 0401]	0813	3	2.0	344.66	37.83	10.17	160.05	n/a	0.000
*	CHANNEL[2 : 0813]	0315	1	2.0	344.66	37.80	10.23	160.05	n/a	0.000
**	CALI B STANDHYD	0119	1	2.0	16.91	1.85	10.07	141.88	0.67	0.000
*	[I%=26.9; S%= 2.00]									
*	ADD [0119 + 0315]	0814	3	2.0	361.57	39.57	10.23	159.20	n/a	0.000
*	PIPE [2 : 0814]	0402	1	2.0	361.57	39.57	10.23	159.20	n/a	0.000
**	CALI B STANDHYD	0120	1	2.0	17.04	1.74	10.03	128.29	0.61	0.000
*	[I%=20.9; S%= 2.00]									
*	CHANNEL[2 : 0120]	0316	1	2.0	17.04	1.74	10.07	128.29	n/a	0.000
**	CALI B STANDHYD	0121	1	2.0	1.39	0.13	10.00	107.80	0.51	0.000
*	[I%=14.6; S%= 2.00]									
**	CALI B STANDHYD	0122	1	2.0	3.13	0.33	10.00	129.72	0.61	0.000
*	[I%=26.5; S%= 2.00]									
*	ADD [0121 + 0122]	0815	3	2.0	4.52	0.46	10.00	122.97	n/a	0.000
*	ADD [0815 + 0316]	0815	1	2.0	21.56	2.18	10.03	127.17	n/a	0.000
*	ADD [0815 + 0402]	0815	3	2.0	383.13	41.65	10.20	157.39	n/a	0.000
*	PIPE [2 : 0815]	0404	1	2.0	383.13	41.65	10.20	157.39	n/a	0.000

* **	CALIB STANDHYD	0124	1	2.0	21.61	2.39	10.00	141.62	0.67	0.000
	[I%=33.4; S%= 2.00]									
*	ADD [0124 + 0404]	0816	3	2.0	404.74	43.83	10.20	156.55	n/a	0.000
*	DUHYD	0500	1	2.0	404.74	43.83	10.20	156.55	n/a	0.000
	MAJOR SYSTEM:	0500	2	2.0	373.79	42.96	10.20	156.55	n/a	0.000
	MINOR SYSTEM:	0500	3	2.0	30.94	0.87	1.10	156.55	n/a	0.000
*	PIPE [2 : 0500]	0405	1	2.0	373.79	42.95	10.20	156.55	n/a	0.000
**	CALIB STANDHYD	0125	1	2.0	18.74	2.22	10.03	158.29	0.75	0.000
	[I%=44.1; S%= 2.00]									
*	ADD [0125 + 0405]	0817	3	2.0	392.53	45.05	10.20	156.63	n/a	0.000
*	PIPE [2 : 0500]	0408	1	2.0	30.94	0.87	1.43	156.55	n/a	0.000
**	CALIB STANDHYD	0126	1	2.0	22.26	2.36	10.00	134.94	0.64	0.000
	[I%=32.1; S%= 2.00]									
*	ADD [0126 + 0408]	0820	3	2.0	53.20	3.23	10.00	147.51	n/a	0.000
*	PIPE [2 : 0820]	0406	1	2.0	53.20	3.23	10.03	147.51	n/a	0.000
**	CALIB STANDHYD	0127	1	2.0	9.98	0.99	10.03	125.99	0.59	0.000
	[I%=27.4; S%= 2.00]									
*	ADD [0127 + 0406]	0818	3	2.0	63.18	4.21	10.03	144.11	n/a	0.000
*	PIPE [2 : 0818]	0407	1	2.0	63.18	4.21	10.03	144.11	n/a	0.000
**	CALIB STANDHYD	0128	1	2.0	14.87	1.87	10.00	163.90	0.77	0.000
	[I%=45.4; S%= 2.00]									
*	ADD [0128 + 0407]	0819	3	2.0	78.05	6.07	10.03	147.88	n/a	0.000

***** ** SIMULATION NUMBER: 26 ** ***** Timmins Storm Event

W/E	COMMAND	HYD	ID	DT	AREA	Opeak	Tpeak	R. V.	R. C.	Qbase
				mi n	ha	cms	hrs	mm		cms
	START @ 0.00 hrs									

	READ STORM			15.0						
	[Ptot=193.00 mm]									
	fname : C:\Users\dtwi gger\AppData\Local\Temp\716a860b-28e9-4e2e-8b8a-3758315d2e95\8feb2090-af53-4f3b-970									
	remark: * Timmins Storm									
**	CALIB STANDHYD	0100	1	2.0	31.13	2.61	7.03	133.17	0.69	0.000
	[I%=28.2; S%= 2.00]									
*	CHANNEL[2 : 0100]	0302	1	2.0	31.13	2.61	7.07	133.17	n/a	0.000
**	CALIB STANDHYD	0105	1	2.0	9.01	0.92	7.00	151.76	0.79	0.000
	[I%=24.8; S%= 2.00]									
**	CALIB STANDHYD	0110	1	2.0	12.37	1.12	7.03	139.73	0.72	0.000
	[I%=25.4; S%= 2.00]									
*	CHANNEL[2 : 0110]	0303	1	2.0	12.37	1.12	7.03	139.73	n/a	0.000
*	ADD [0105 + 0302]	0802	3	2.0	40.14	3.52	7.03	137.34	n/a	0.000
*	ADD [0802 + 0303]	0802	1	2.0	52.51	4.63	7.03	137.90	n/a	0.000
*	PIPE [2 : 0802]	0400	1	2.0	52.51	4.63	7.03	137.90	n/a	0.000
**	CALIB STANDHYD	0113	1	2.0	9.41	0.93	7.00	151.17	0.78	0.000
	[I%=39.4; S%= 2.00]									
*	CHANNEL[2 : 0113]	0301	1	2.0	9.41	0.93	7.03	151.16	n/a	0.000
**	CALIB STANDHYD	0118	1	2.0	4.11	0.36	7.00	133.72	0.69	0.000
	[I%=27.5; S%= 2.00]									
*	RESRVR [2 : 0118]	0600	1	2.0	4.11	0.31	7.17	133.72	n/a	0.000
	{ST= 0.02 ha.m }									
*	CHANNEL[2 : 0600]	0300	1	2.0	4.11	0.31	7.27	133.69	n/a	0.000

**	CALIB STANDHYD	0101	1	2.0	8.68	0.70	7.00	122.31	0.63	0.000
	[I%=22.9; S%= 2.00]									
*	ADD [0101 + 0300]	0801	3	2.0	12.79	0.99	7.00	125.97	n/a	0.000
*	CHANNEL[2 : 0801]	0304	1	2.0	12.79	0.98	7.03	125.96	n/a	0.000
**	CALIB STANDHYD	0123	1	2.0	22.81	2.10	7.03	144.58	0.75	0.000
	[I%=27.1; S%= 2.00]									
*	ADD [0123 + 0301]	0800	3	2.0	32.22	3.02	7.03	146.50	n/a	0.000
*	ADD [0800 + 0304]	0800	1	2.0	45.01	4.01	7.03	140.66	n/a	0.000
*	ADD [0800 + 0400]	0800	3	2.0	97.52	8.64	7.03	139.18	n/a	0.000
*	RESRVR [2 : 0800]	0601	1	2.0	97.52	8.38	7.13	139.18	n/a	0.000
	{ST= 1.74 ha.m }									
*	PIPE [2 : 0601]	0403	1	2.0	97.52	8.38	7.13	139.18	n/a	0.000
*	CHANNEL[2 : 0403]	0317	1	2.0	97.52	8.28	7.23	139.18	n/a	0.000
**	CALIB STANDHYD	0102	1	2.0	19.41	1.94	7.03	152.68	0.79	0.000
	[I%=22.0; S%= 2.00]									
*	ADD [0102 + 0317]	0803	3	2.0	116.93	10.05	7.17	141.42	n/a	0.000
**	CALIB STANDHYD	0103	1	2.0	35.79	3.74	7.00	162.83	0.84	0.000
	[I%=37.1; S%= 2.00]									
**	CALIB STANDHYD	0104	1	2.0	5.22	0.55	7.00	157.84	0.82	0.000
	[I%=20.7; S%= 2.00]									
**	CALIB STANDHYD	0106	1	2.0	13.71	1.31	7.03	146.22	0.76	0.000
	[I%=21.1; S%= 2.00]									
*	CALIB STANDHYD	0107	1	5.0	8.53	0.89	7.00	155.58	0.81	0.000
	[I%=18.1; S%= 2.00]									
**	CALIB STANDHYD	0108	1	2.0	58.75	4.78	7.10	133.13	0.69	0.000
	[I%=24.4; S%= 2.00]									
*	CHANNEL[2 : 0108]	0307	1	2.0	58.75	4.77	7.13	133.13	n/a	0.000
*	CALIB STANDHYD	0109	1	2.0	13.70	1.42	7.00	150.63	0.78	0.000
	[I%= 3.0; S%= 2.00]									
*	ADD [0109 + 0307]	0806	3	2.0	72.45	6.15	7.07	136.44	n/a	0.000
*	CHANNEL[2 : 0806]	0308	1	2.0	72.45	6.15	7.10	136.44	n/a	0.000
*	ADD [0107 + 0308]	0807	3	2.0	80.98	6.98	7.07	138.45	n/a	0.000
*	CHANNEL[2 : 0807]	0306	1	2.0	80.98	6.97	7.07	138.45	n/a	0.000
*	ADD [0106 + 0306]	0804	3	2.0	94.69	8.28	7.07	139.58	n/a	0.000
*	CHANNEL[2 : 0804]	0305	1	2.0	94.69	8.22	7.13	139.58	n/a	0.000
*	ADD [0104 + 0305]	0093	3	2.0	99.91	8.73	7.10	140.53	n/a	0.000
*	ADD [0103 + 0093]	0805	3	2.0	135.70	12.44	7.07	146.41	n/a	0.000
*	ADD [0803 + 0805]	0096	3	2.0	252.63	22.36	7.10	144.10	n/a	0.000
*	RESRVR [2 : 0096]	0700	1	2.0	252.63	21.45	7.27	144.10	n/a	0.000
	{ST= 1.27 ha.m }									
*	CALIB STANDHYD	0111	1	2.0	3.57	0.36	7.00	152.60	0.79	0.000
	[I%=22.2; S%= 2.00]									
*	ADD [0111 + 0700]	0808	3	2.0	256.20	21.74	7.27	144.22	n/a	0.000
*	CHANNEL[2 : 0808]	0310	1	2.0	256.20	21.75	7.27	144.22	n/a	0.000
**	CALIB STANDHYD	0112	1	2.0	16.90	1.73	7.03	157.36	0.82	0.000
	[I%=23.9; S%= 2.00]									
*	ADD [0112 + 0310]	0809	3	2.0	273.10	23.25	7.23	145.03	n/a	0.000
*	CHANNEL[2 : 0809]	0311	1	2.0	273.10	23.15	7.30	145.03	n/a	0.000
*	CALIB STANDHYD	0114	1	2.0	4.95	0.52	7.00	154.90	0.80	0.000

