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MEMO

DATE	March 23, 2022	**PROJECT NO.**	1046-4031
RE	Stormwater Management Update Memorandum Craigleith Ridge Residential Development		

TO	Deanna Vickery, P.Eng., Development Engineering Reviewer
FROM	Jessie Elder, P.Eng.
CC	Brian Worsley, P.Eng., Manager, Development Engineering

This memorandum has been prepared to summarize the changes to the Stormwater Management Facilities and the proposed Watercourse 9 Road Cross Culverts within the Craigleith Development that have been completed to address the 3rd submission engineering review comments. This memo should be reviewed in conjunction with and read as an update to the Servicing & Stormwater Management Implementation Report by Crozier dated May 2021 (referred to herein as the S&SWMI Report).

The sections below describe the updated modelling results for the ponds and culverts. Appendix and table numbers have been maintained from the S&SWMI Report for ease of reference.

Stormwater Management

Following the 3rd submission, the Town requested that the proposed Wetland (Upper Pond / SWM Facility #1) and Wet Pond (Lower Pond / SWM Facility #2) become public infrastructure, and therefore required adjustments to be brought to public design standards. The main change involved with this adjustment was the addition of a maintenance access road from the ring road surrounding the pond down into the forebay. This change resulted in new pond volumes and areas, and we have therefore updated the stormwater hydrologic modelling (using SWMHYMO) to provide updated modelling results for the ponds.

Stage Storage Discharge Calculations for each pond have been updated and are included in **Appendix D**. Water quality, extended detention and forebay design calculations have also been included in **Appendix D**, however they remain consistent with the calculations included in the S&SWMI Report (Crozier 2021).

We have updated the modelling for the 2 through 100-year storm events using the 6-Hour Keifer Chu storm distribution, for which the tables in this memo reflect the results, the 4-Hour Chicago storm, and the 12-Hour and 24-Hour SCS storm distributions. The Regional Storm (Timmins Storm event) modelling was also updated and is included in this memo. SWMHYMO modelling input and output files can be found in **Appendix C** and the summary of the flows for all distributions can be found in **Appendix D**.

The material in this memo reflects best judgment in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. C.F. Crozier & Associates Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Table 4 below shows the peak flows in an out of each pond under post-development conditions during each storm event, as well as the storage volume used during each storm event.

Table 1: Summary of Peak Flows in and out of the SWM Facilities (6-Hour Keifer Chu)

Pond ID	Parameter	Return Period						
		2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	Regional
SWMF #1 (upper)	Peak Flow In (m^3/s)	0.21	0.37	0.56	0.73	0.82	1.02	1.05
	Peak Flow Out (m^3/s)	0.02	0.03	0.03	0.05	0.07	0.11	0.62
	% Difference	-90.8%	-92.5%	-94.1%	-93.3%	-91.8%	-88.9%	-40.6%
	Storage Used (m^3)	962	1821	2759	3648	4026	4720	7803
SWMF #2 (lower)	Peak Flow In (m^3/s)	0.22	0.35	0.49	0.62	0.69	0.83	0.72
	Peak Flow Out (m^3/s)	0.02	0.03	0.04	0.07	0.09	0.13	0.42
	% Difference	-90.8%	-92.9%	-92.1%	-89.3%	-87.6%	-84.2%	-41.6%
	Storage Used (m^3)	865	1430	1967	2354	2541	2936	4186

A summary and comparison of pre- and post-development peak flows of Watercourse 9 at Lakeshore Road is provided in **Table 2**.

Table 2: Summary of Peak Flows for Pre and Post-Development Conditions (6-Hour Keifer Chu)

Location	Return Period	Peak Flow (m^3/s)		% Difference
		Pre-Development	Post-Development	
Lakeshore Road (Watercourse 9)	2-Year	1.36	1.33	-2.6%
	5-Year	2.60	2.49	-4.2%
	10-Year	3.98	3.77	-5.2%
	25-Year	5.22	4.94	-5.3%
	50-Year	5.87	5.56	-5.4%
	100-Year	7.26	6.88	-5.2%
	Regional	9.01	8.90	-1.1%

As shown in **Table 5,** post-development peak flows at the Watercourse 9 crossing at Lakeshore Road (and downstream) will be reduced from pre-development levels in all storm events, thereby improving the existing flood conditions downstream of the subject site between Lakeshore Road and Georgian Bay. Refer to **Appendix C** for flow hydrographs comparing pre- and post-development flows of Watercourse 9 at Lakeshore Road.

SWM Facility #1 has been designed as a wetland, with a main cell permanent pool depth of 0.30 m. SWM Facility #2 has been designed as a wet pond with a main cell permanent pool depth of 0.80 m. A summary of the operating characteristics of the proposed SWM Facilities are provided in **Table 3**.

Table 3: SWM Facility Operating Characteristics

Operating Level	SWMF #1 Upper – Wetland 13.1 ha		SWMF #2 Lower – Wet Pond 9.6 ha	
	Elevation (m)	**Volume (m^3)**	**Elevation (m)**	**Volume (m^3)**
Bottom of Forebay	188.40	0	180.20	0
Bottom of Main Cell	189.10	0	180.20	0
Permanent Pool[1,2]	189.40	1135 (525)	181.00	1021 (979)
Extended Detention[2]	189.70	835 (540)	181.40	798 (618)
2-Year WSE	189.74	962	181.43	865
5-Year WSE	190.00	1821	181.66	1430
10-Year WSE	190.25	2759	181.85	1967
25-Year WSE	190.46	3648	181.99	2354
50-Year WSE	190.55	4026	182.05	2541
100-Year WSE	190.70	4720	182.17	2936
Regional WSE	191.15	7803	182.54	4186
Top of Berm	191.40	9757	182.80	5114

1 Permanent Pool represents dead storage; all other volumes represent active storage.
2 Required Permanent Pool and Extended Detention volumes have been shown in brackets.

Watercourse 9 Culverts

The length of the three proposed road cross culverts within Watercourse 9 were updated to accommodate requested design changes including a wider road width for the addition of a trail / enlarged walkway, and 1:1 excavation slopes for services at the culverts. Culvert capacity calculations were updated in CulvertMaster. The design parameters and CulvertMaster results are summarized in **Table 12**.

Table 4: Culvert Details

Culvert ID	Span (m)	Rise (m)	Proposed Slope (%)	Design Discharge Flow Rate[1] (m^3/s)	Full Flow Capacity[2] (m^3/s)	Inlet Control Headwater Elevation Elev. (masl)
Culvert #1 (Downstream end of Catchment 9A)	3.05	1.22	8.70	7.94	13.01	212.09
Culvert #2 (Downstream end of Catchment 9B)	3.05	1.22	2.57	8.01	12.39	193.77
Culvert #3 (Downstream end of Catchment 9C)	3.05	1.22	2.44	8.90	11.78	187.09

[1] Regional flow per SWMHYMO Model (greater than 100-year flow).
[2] Full flow capacity from CulvertMaster (refer to output in **Appendix E**).

CulvertMaster was used to design the three (3) culverts at the proposed Watercourse 9 crossings. The results are available in **Appendix E**. As shown in **Table 12**, the full flow capacity of the Watercourse 9 cross culverts is sufficient to pass all storm events including the 100-year and Regional events. In the event that the culverts are blocked, flows from Watercourse 9 will spill onto the roadway and will be directed back to Watercourse 9 via an overland flow route.

Conclusion

The updated modelling for the Stormwater Management Facilities demonstrates that the quantity and quality objectives for the site are met. The ponds have adequately sized permanent pools and extended detention volumes and flows on site have been reduced at Lakeshore Road in post-development conditions. The Watercourse 9 road cross culverts have sufficient capacity to convey flows up to and including the Regional Storm event.

The conclusions previously summarized in the S&SWMI Report (Crozier 2021) remain valid.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.

Jessie Elder, P.Eng.
Project Engineer
/ac

Appendix C Hydrologic & Hydraulic Modelling
- SWMHYMO Input & Output Files
- Flow Hydrographs

Appendix D SWM Facility Design
- Summary of Hydrologic Modelling Output
- Pond Design Calculations

Appendix E Stormwater Design Calculations
- CulvertMaster – Watercourse 9 Culverts

J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Acq\Memos\2022.03.16 4th Sub SWM Memo\2022.03.16 4th Sub SWM Memo.docx

APPENDIX C

Hydrologic & Hydraulic Modelling

6-Hour Keifer Chu Modelling
4-Hour Chicago Modelling
24-Hour SCS Modelling
12-Hour SCS Modelling
Flow Hydrographs

```
00001> 2     Metric units
00002> *#*************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2018-09-19
00005> *#  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#*************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1]
00010> *%                    ["2yr.stm"] <--storm filename, one per line for NSTORM time
00011> *#*************************************************************************
00012> *%-----------------|-------------------------------------------------------|
00013> READ STORM         STORM_FILENAME=["STORM.001"]
00014> *%-----------------|-------------------------------------------------------|
00015> *%-----------------|-------------------------------------------------------|
00016> *#-----------------|-------------------------------------------------------|
00017> *#-----------------|-PRE-DEVELOPMENT---------------------------------------|
00018> *#-----------------|-------------------------------------------------------|
00019> *#-----------------|-------------------------------------------------------|
00020> *#-----------------|-Subwatershed 9 External Drainage Area-----------------|
00021> *#-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00022> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00023> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00024> *#-----------------|-------------------------------------------------------|
00025> *%-----------------|-------------------------------------------------------|
00026> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00027>                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00028>                    N=[3], TP=[1.00]hrs,
00029>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00030> *%-----------------|-------------------------------------------------------|
00031> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00032>                    RDT=[1](min),
00033>                    CHLGTH=[550](m),  CHSLOPE=[2](%),
00034>                                       FPSLOPE=[2](%),
00035>                    SECNUM=[1],       NSEG=[3]
00036>                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00037>                    ( DISTANCE (m), ELEVATION (m))= [0,102]
00038>                                                    [8,100]
00039>                                                    [12,100]
00040>                                                    [20,102]
00041> *%-----------------|-------------------------------------------------------|
00042> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00043>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00044>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00045>                            DCAY=[2](/hr), F=[0](mm),
00046>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00047>                                  LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00048>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00049>                                  LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00050>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00051> *%-----------------|-------------------------------------------------------|
00052> ROUTE RESERVOIR    IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00053>                    RDT=[1](min),
00054>                         TABLE of ( OUTFLOW-STORAGE ) values
00055>                                    (cms) - (ha-m)
00056>                                  [   0.0 ,  0.0 ]
00057>                                  [   0.0100 ,  0.0610 ]
00058>                                  [   0.0400 ,  0.1310 ]
00059>                                  [   0.0700 ,  0.2110 ]
00060>                                  [   0.2600 ,  0.3000 ]
00061>                                  [   0.6000 ,  0.3940 ]
00062>                                  [   1.0200 ,  0.4950 ]
00063>                                  [   1.5200 ,  0.6020 ]
00064>                                  [   2.0800 ,  0.7160 ]
00065>                                  [   2.6900 ,  0.8370 ]
00066>                                  [   -1  ,  -1  ]  (max twenty pts)
00067>                         IDovf=[   ], NHYDovf=[   ]
00068> *%-----------------|-------------------------------------------------------|
00069> *#-----------------|-------------------------------------------------------|
00070> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00071> *#-----------------|-------------------------------------------------------|
00072> *%-----------------|-------------------------------------------------------|
00073> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00074> *%-----------------|-------------------------------------------------------|
00075> *#-----------------|-------------------------------------------------------|
00076> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00077> *#-----------------|-------------------------------------------------------|
00078> *%-----------------|-------------------------------------------------------|
00079> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00080>                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00081>                    N=[3], TP=[0.37]hrs,
00082>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00083> *%-----------------|-------------------------------------------------------|
00084> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00085>                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00086>                    N=[3], TP=[1.09]hrs,
00087>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00088> *%-----------------|-------------------------------------------------------|
00089> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00090> *%-----------------|-------------------------------------------------------|
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00092>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00093>                    N=[3], TP=[0.14]hrs,
00094>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00095> *%-----------------|-------------------------------------------------------|
00096> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00097>                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00098>                    N=[3], TP=[0.15]hrs,
00099>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00100> *%-----------------|-------------------------------------------------------|
00101> *#-----------------|-------------------------------------------------------|
00102> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00103> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00104> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00105> *#-----------------|-------------------------------------------------------|
00106> *%-----------------|-------------------------------------------------------|
00107> ROUTE RESERVOIR    IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00108>                    RDT=[1](min),
00109>                         TABLE of ( OUTFLOW-STORAGE ) values
00110>                                    (cms) - (ha-m)
00111>                                  [   0.0 ,  0.0 ]
00112>                                  [   0.00 ,  0.479 ]
00113>                                  [   0.00 ,  1.249 ]
00114>                                  [   -1  ,  -1  ]  (max twenty pts)
00115>                         IDovf=[   ], NHYDovf=[   ]
00116> *%-----------------|-------------------------------------------------------|
00117> ADD HYD            IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00118> *%-----------------|-------------------------------------------------------|
00119> *#-----------------|-------------------------------------------------------|
00120> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
00121> *#-----------------|-------------------------------------------------------|
00122> *%-----------------|-------------------------------------------------------|
00123> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00124>                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00125>                    N=[3], TP=[0.48]hrs,
00126>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00127> *%-----------------|-------------------------------------------------------|
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00129>                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00130>                    N=[3], TP=[0.71]hrs,
00131>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00132> *%-----------------|-------------------------------------------------------|
00133> *#-----------------|-------------------------------------------------------|
00134> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00135> *#-----------------|-------------------------------------------------------|
00136> *%-----------------|-------------------------------------------------------|
00137> ADD HYD            IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00138> *%-----------------|-------------------------------------------------------|
00139> SAVE HYD           ID=[1],   # OF PCYCLES=[10],  ICASESh=[1]
00140>                    HYD_COMMENT=["PRE Lakeshore Road Hydrograph"]
00141> *%-----------------|-------------------------------------------------------|
00142> *%-----------------|-------------------------------------------------------|
00143> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[2]
00144> *                  ["5yr.stm"] <--storm filename, one per line for NSTORM time
00145> *%-----------------|-------------------------------------------------------|
00146> *%-----------------|-------------------------------------------------------|
00147> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[3]
00148> *                  ["10yr.stm"] <--storm filename, one per line for NSTORM time
00149> *%-----------------|-------------------------------------------------------|
00150> *%-----------------|-------------------------------------------------------|
00151> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[4]
00152> *                  ["25yr.stm"] <--storm filename, one per line for NSTORM time
00153> *%-----------------|-------------------------------------------------------|
00154> *%-----------------|-------------------------------------------------------|
00155> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[5]
00156> *                  ["50yr.stm"] <--storm filename, one per line for NSTORM time
00157> *%-----------------|-------------------------------------------------------|
00158> *%-----------------|-------------------------------------------------------|
00159> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[6]
00160> *                  ["100yr.stm"] <--storm filename, one per line for NSTORM tim
00161> *%-----------------|-------------------------------------------------------|
00162> *%-----------------|-------------------------------------------------------|
00163> START              TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[7]
00164> *                  ["tim.stm"] <--storm filename, one per line for NSTORM time
00165> *%-----------------|-------------------------------------------------------|
00166> FINISH
00167>
00168>
00169>
00170>
00171>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM   O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M   O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO         2       0   0   11
00008>                                                               2       0   0   11
00009>         StormWater Management HYdrologic Model                222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ******************  A single event and continuous hydrologic simulation model
00014>  ******************     based on the principles of HYMO and its successors
00015>  ******************                OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  ****************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ******************                 Ottawa,  Ontario: (613) 836-3884
00019>  ******************                 Gatineau, Quebec: (819) 243-6858
00020>  ******************                 E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ******************           Maximum value for ID numbers  :     11
00031>  ******************           Max. number of rainfall points: 105408
00032>  ******************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ******************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2020-06-10     TIME: 14:02:16     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00041>  *               HYMO\KCpond\PRE_KCHU.dat
00042>  * Output  file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00043>  *               HYMO\KCpond\PRE_KCHU.out
00044>  * Summary file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00045>  *               HYMO\KCpond\PRE_KCHU.sum
00046>  * User comments:
00047>  * 1: _____________________________________________________________________________
00048>  * 2: _____________________________________________________________________________
00049>  * 3: _____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2018-09-19
00056> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001------------------------------------------------------------------
00062>      START
00063>       [TZERO =    .00 hrs on        0]
00064>       [METOUT=   2    (1=imperial, 2=metric output)]
00065>       [NSTORM=   1 ]
00066>       [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> R0001:C00002------------------------------------------------------------------
00069>      READ STORM
00070>       Filename = STORM.001
00071>       Comment  = 2-Year 6 hr Kefer Chu Chicago Storm Event
00072>       [SDT=60.00:SDUR=   6.00:PTOT=  37.90]
00073> #-----------------|-------------------------------------------------------|
00074> #-----------------|-PRE-DEVELOPMENT---------------------------------------|
00075> #-----------------|-------------------------------------------------------|
00076> #-----------------|-------------------------------------------------------|
00077> #-----------------|-Subwatershed 9 External Drainage Area-----------------|
00078> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00079> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00080> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00081> #-----------------|-------------------------------------------------------|
00082> R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00083>     CALIB NASHYD          1.0 01:EXT-9A       101.80    1.200 No_date    3:51
00084>       [CN= 80.0: N= 3.00: Tp= 1.00]
00085> R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00086>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    1.200 No_date    3:51
00087>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    1.195 No_date    3:54
00088>       [L/S/n=  550./2.000/.035]
00089>       {Vmax= 1.224:Dmax=  .193}
00090> R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00091>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .439 No_date    3:01
00092>       [XIMP=.35:TIMP=.35]
00093>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00094>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00095>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00096> R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00097>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .439 No_date    3:01
00098>                  out <=   1.0 04:Orchards      14.80     .059 No_date    4:13
00099>      {MxStoUsed=.1807E+00  m3}
00100> #-----------------|-------------------------------------------------------|
00101> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
00102> #-----------------|-------------------------------------------------------|
00103> R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00104>     ADD HYD               1.0 02:Channel     101.80    1.195 No_date    3:54
00105>                     +     1.0 04:Orchards     14.80     .059 No_date    4:13
00106>                   SUM=    1.0 05:RD19        116.60    1.253 No_date    3:54
00107> #-----------------|-------------------------------------------------------|
00108> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00109> #-----------------|-------------------------------------------------------|
00110> R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00111>     CALIB NASHYD          1.0 01:9A            2.57     .015 No_date    3:12
00112>       [CN= 48.4: N= 3.00: Tp=  .37]
00113> R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00114>     CALIB NASHYD          1.0 02:9B           11.63     .068 No_date    4:04
00115>       [CN= 68.5: N= 3.00: Tp= 1.09]
00116> R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00117>     ADD HYD               1.0 01:9A            2.57     .015 No_date    3:12
00118>                     +     1.0 02:9B           11.63     .068 No_date    4:04
00119>                   SUM=    1.0 10:9A9B         14.20     .073 No_date    3:59
00120> R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00121>     CALIB NASHYD          1.0 01:9C            1.19     .005 No_date    3:02
00122>       [CN= 33.2: N= 3.00: Tp=  .14]
00123> R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00124>     CALIB NASHYD          1.0 02:9D            2.02     .013 No_date    3:02
00125>       [CN= 41.9: N= 3.00: Tp=  .15]
00126> #-----------------|-------------------------------------------------------|
00127> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00128> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00129> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00130> #-----------------|-------------------------------------------------------|
00131> R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00132>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .013 No_date    3:02
00133>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00134>      {MxStoUsed=.4693E-02  m3}
00135> R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00136>     ADD HYD               1.0 01:9C            1.19     .005 No_date    3:02
00137>                     +     1.0 04:ExPond        2.02     .000 No_date    0:00
00138>                   SUM=    1.0 09:9C9D          3.21     .005 No_date    3:02
00139> #-----------------|-------------------------------------------------------|
00140> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
00141> #-----------------|-------------------------------------------------------|
00142> R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00143>     CALIB NASHYD          1.0 07:9E            7.60     .035 No_date    3:18
00144>       [CN= 47.1: N= 3.00: Tp=  .48]
00145> R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00146>     CALIB NASHYD          1.0 08:9F            3.35     .013 No_date    3:34
00147>       [CN= 50.4: N= 3.00: Tp=  .71]
00148> #-----------------|-------------------------------------------------------|
00149> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD--------|
00150> #-----------------|-------------------------------------------------------|
00151> R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>     ADD HYD               1.0 05:RD19        116.60    1.253 No_date    3:54
00153>                     +     1.0 10:9A9B         14.20     .073 No_date    3:59
00154>                     +     1.0 09:9C9D          3.21     .005 No_date    3:02
00155>                     +     1.0 07:9E            7.60     .035 No_date    3:18
00156>                     +     1.0 08:9F            3.35     .013 No_date    3:34
00157>                   SUM=    1.0 01:WC9LS       144.96    1.361 No_date    3:53
00158> R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00159>     SAVE HYD              1.0 01:WC9LS       144.96    1.361 No_date    3:53
00160>       fname :WC9LS.0001
00161>       remark:PRE Lakeshore Road Hydrograph
00162>   ** END OF RUN :    1
00163>
00164> ********************************************************************************
00165>
00166>
00167>
00168>
00169>
00170>  RUN#:COMMAND#
00171> R0002:C00001------------------------------------------------------------------
00172>      START
00173>       [TZERO =    .00 hrs on        0]
00174>       [METOUT=   2    (1=imperial, 2=metric output)]
00175>       [NSTORM=   1 ]
00176>       [NRUN  = 0002 ]
00177> #*******************************************************************************
00178> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00179> #  Date        : 2018-09-19
00180> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00181> #  Company     : C.F. Crozier & Associates Inc.
00182> #  License #   : 3737016
00183> #*******************************************************************************
00184> #*******************************************************************************
00185> R0002:C00002------------------------------------------------------------------
00186>      READ STORM
00187>       Filename = STORM.001
00188>       Comment  = 5-Year 6 hr Kifer Chu Chicago Storm Event
00189>       [SDT=60.00:SDUR=   6.00:PTOT=  52.70]
00190> #-----------------|-------------------------------------------------------|
00191> #-----------------|-PRE-DEVELOPMENT---------------------------------------|
00192> #-----------------|-------------------------------------------------------|
00193> #-----------------|-------------------------------------------------------|
00194> #-----------------|-Subwatershed 9 External Drainage Area-----------------|
00195> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00196> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00197> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00198> #-----------------|-------------------------------------------------------|
00199> R0002:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00200>     CALIB NASHYD          1.0 01:EXT-9A       101.80    2.169 No_date    3:49
00201>       [CN= 80.0: N= 3.00: Tp= 1.00]
00202> R0002:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00203>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.169 No_date    3:49
00204>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.160 No_date    3:53
00205>       [L/S/n=  550./2.000/.035]
00206>       {Vmax= 1.515:Dmax=  .268}
00207> R0002:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00208>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .867 No_date    3:01
00209>       [XIMP=.35:TIMP=.35]
00210>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00211>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00212>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00213> R0002:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00214>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .867 No_date    3:01
00215>                  out <=   1.0 04:Orchards      14.80     .226 No_date    3:36
00216>      {MxStoUsed=.2842E+00  m3}
00217> #-----------------|-------------------------------------------------------|
00218> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
00219> #-----------------|-------------------------------------------------------|
00220> R0002:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00221>     ADD HYD               1.0 02:Channel     101.80    2.160 No_date    3:53
00222>                     +     1.0 04:Orchards     14.80     .226 No_date    3:36
00223>                   SUM=    1.0 05:RD19        116.60    2.377 No_date    3:51
00224> #-----------------|-------------------------------------------------------|
00225> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00226> #-----------------|-------------------------------------------------------|
00227> R0002:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00228>     CALIB NASHYD          1.0 01:9A            2.57     .031 No_date    3:11
00229>       [CN= 48.4: N= 3.00: Tp=  .37]
00230> R0002:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00231>     CALIB NASHYD          1.0 02:9B           11.63     .137 No_date    4:01
00232>       [CN= 68.5: N= 3.00: Tp= 1.09]
00233> R0002:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00234>     ADD HYD               1.0 01:9A            2.57     .031 No_date    3:11
00235>                     +     1.0 02:9B           11.63     .137 No_date    4:01
00236>                   SUM=    1.0 10:9A9B         14.20     .149 No_date    3:54
00237> R0002:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00238>     CALIB NASHYD          1.0 01:9C            1.19     .011 No_date    3:02
00239>       [CN= 33.2: N= 3.00: Tp=  .14]
00240> R0002:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00241>     CALIB NASHYD          1.0 02:9D            2.02     .027 No_date    3:02
00242>       [CN= 41.9: N= 3.00: Tp=  .15]
00243> #-----------------|-------------------------------------------------------|
00244> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00245> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00246> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00247> #-----------------|-------------------------------------------------------|
00248> R0002:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00249>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .027 No_date    3:02
00250>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00251>      {MxStoUsed=.1012E-01  m3}
00252> R0002:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00253>     ADD HYD               1.0 01:9C            1.19     .011 No_date    3:02
00254>                     +     1.0 04:ExPond        2.02     .000 No_date    0:00
00255>                   SUM=    1.0 09:9C9D          3.21     .011 No_date    3:02
00256> #-----------------|-------------------------------------------------------|
00257> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
00258> #-----------------|-------------------------------------------------------|
00259> R0002:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00260>     CALIB NASHYD          1.0 07:9E            7.60     .074 No_date    3:17
00261>       [CN= 47.1: N= 3.00: Tp=  .48]
00262> R0002:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00263>     CALIB NASHYD          1.0 08:9F            3.35     .028 No_date    3:32
00264>       [CN= 50.4: N= 3.00: Tp=  .71]
00265> #-----------------|-------------------------------------------------------|
00266> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD--------|
00267> #-----------------|-------------------------------------------------------|
00268> R0002:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00269>     ADD HYD               1.0 05:RD19        116.60    2.377 No_date    3:51
00270>                     +     1.0 10:9A9B         14.20     .149 No_date    3:54
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00271>                    +     1.0 09:9C9D          3.21     .011 No_date    3:02
00272>                    +     1.0 07:9E            7.60     .074 No_date    3:17
00273>                    +     1.0 08:9F            3.35     .028 No_date    3:32
00274>                  SUM=    1.0 01:WC9LS       144.96    2.601 No_date    3:50
00275> R0002:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00276>     SAVE HYD             1.0 01:WC9LS       144.96    2.601 No_date    3:50
00277>       fname :WC9LS.0002
00278>       remark:PRE Lakeshore Road Hydrograph
00279>   ** END OF RUN :    2
00280>
00281> ********************************************************************************
00282>
00283>
00284>
00285>
00286>
00287>  RUN#:COMMAND#
00288> R0003:C00001-----------------------------------------------------------------------
00289>      START
00290>       [TZERO =    .00 hrs on        0]
00291>       [METOUT=   2    (1=imperial, 2=metric output)]
00292>       [NSTORM=   1 ]
00293>       [NRUN  = 0003 ]
00294> #*******************************************************************************
00295> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00296> #  Date        : 2018-09-19
00297> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00298> #  Company     : C.F. Crozier & Associates Inc.
00299> #  License #   : 3737016
00300> #*******************************************************************************
00301> #*******************************************************************************
00302> R0003:C00002-----------------------------------------------------------------------
00303>      READ STORM
00304>       Filename = STORM.001
00305>       Comment  = 10yr 6 hr Kifer Chu Chicago Storm Event
00306>       [SDT=60.00:SDUR=   6.00:PTOT=  66.00]
00307> #-----------------|-------------------------------------------------------------|
00308> #-----------------|-PRE-DEVELOPMENT-----------------------------------------------|
00309> #-----------------|-------------------------------------------------------------|
00310> #-----------------|-------------------------------------------------------------|
00311> #-----------------|-Subwatershed 9 External Drainage Area-------------------------|
00312> #-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
00313> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------------|
00314> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00315> #-----------------|-------------------------------------------------------------|
00316> R0003:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00317>     CALIB NASHYD         1.0 01:EXT-9A       101.80    3.210 No_date    3:47
00318>       [CN= 80.0: N= 3.00: Tp= 1.00]
00319> R0003:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00320>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    3.210 No_date    3:47
00321>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.198 No_date    3:51
00322>       [L/S/n=  550./2.000/.035]
00323>       {Vmax= 1.754:Dmax=  .336}
00324> R0003:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00325>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    1.268 No_date    3:01
00326>       [XIMP=.35:TIMP=.35]
00327>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00328>       [Pervious    area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00329>       [Impervious  area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00330> R0003:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00331>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.268 No_date    3:01
00332>                  out <=   1.0 04:Orchards      14.80     .515 No_date    3:22
00333>      {MxStoUsed=.3704E+00  m3}
00334> #-----------------|-------------------------------------------------------------|
00335> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00336> #-----------------|-------------------------------------------------------------|
00337> R0003:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00338>     ADD HYD              1.0 02:Channel      101.80    3.198 No_date    3:51
00339>                    +     1.0 04:Orchards      14.80     .515 No_date    3:22
00340>                  SUM=    1.0 05:RD19         116.60    3.614 No_date    3:46
00341> #-----------------|-------------------------------------------------------------|
00342> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00343> #-----------------|-------------------------------------------------------------|
00344> R0003:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00345>     CALIB NASHYD         1.0 01:9A            2.57     .050 No_date    3:10
00346>       [CN= 48.4: N= 3.00: Tp=  .37]
00347> R0003:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00348>     CALIB NASHYD         1.0 02:9B           11.63     .217 No_date    3:58
00349>       [CN= 68.5: N= 3.00: Tp= 1.09]
00350> R0003:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00351>     ADD HYD              1.0 01:9A            2.57     .050 No_date    3:10
00352>                    +     1.0 02:9B           11.63     .217 No_date    3:58
00353>                  SUM=    1.0 10:9A9B         14.20     .236 No_date    3:50
00354> R0003:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00355>     CALIB NASHYD         1.0 01:9C            1.19     .018 No_date    3:02
00356>       [CN= 33.2: N= 3.00: Tp=  .14]
00357> R0003:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00358>     CALIB NASHYD         1.0 02:9D            2.02     .043 No_date    3:02
00359>       [CN= 41.9: N= 3.00: Tp=  .15]
00360> #-----------------|-------------------------------------------------------------|
00361> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00362> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00363> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00364> #-----------------|-------------------------------------------------------------|
00365> R0003:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00366>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .043 No_date    3:02
00367>  *                out <=   1.0 04:ExPond        2.02     .000 No_date    0:00
00368>      {MxStoUsed=.1651E-01  m3}
00369> R0003:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00370>     ADD HYD              1.0 01:9C            1.19     .018 No_date    3:02
00371>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00372>                  SUM=    1.0 09:9C9D          3.21     .018 No_date    3:02
00373> #-----------------|-------------------------------------------------------------|
00374> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00375> #-----------------|-------------------------------------------------------------|
00376> R0003:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00377>     CALIB NASHYD         1.0 07:9E            7.60     .122 No_date    3:16
00378>       [CN= 47.1: N= 3.00: Tp=  .48]
00379> R0003:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00380>     CALIB NASHYD         1.0 08:9F            3.35     .047 No_date    3:31
00381>       [CN= 50.4: N= 3.00: Tp=  .71]
00382> #-----------------|-------------------------------------------------------------|
00383> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00384> #-----------------|-------------------------------------------------------------|
00385> R0003:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00386>     ADD HYD              1.0 05:RD19         116.60    3.614 No_date    3:46
00387>                    +     1.0 10:9A9B          14.20     .236 No_date    3:50
00388>                    +     1.0 09:9C9D           3.21     .018 No_date    3:02
00389>                    +     1.0 07:9E             7.60     .122 No_date    3:16
00390>                    +     1.0 08:9F             3.35     .047 No_date    3:31
00391>                  SUM=    1.0 01:WC9LS        144.96    3.981 No_date    3:45
00392> R0003:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00393>     SAVE HYD             1.0 01:WC9LS        144.96    3.981 No_date    3:45
00394>       fname :WC9LS.0003
00395>       remark:PRE Lakeshore Road Hydrograph
00396>   ** END OF RUN :    3
00397>
00398> ********************************************************************************
00399>
00400>
00401>
00402>
00403>
00404>  RUN#:COMMAND#
00405> R0004:C00001-----------------------------------------------------------------------
00406>      START
00407>       [TZERO =    .00 hrs on        0]
00408>       [METOUT=   2    (1=imperial, 2=metric output)]
00409>       [NSTORM=   1 ]
00410>       [NRUN  = 0004 ]
00411> #*******************************************************************************
00412> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00413> #  Date        : 2018-09-19
00414> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00415> #  Company     : C.F. Crozier & Associates Inc.
00416> #  License #   : 3737016
00417> #*******************************************************************************
00418> #*******************************************************************************
00419> R0004:C00002-----------------------------------------------------------------------
00420>      READ STORM
00421>       Filename = STORM.001
00422>       Comment  = 25-Year 6 hr Kifer Chu Chicago Storm Event
00423>       [SDT=60.00:SDUR=   6.00:PTOT=  77.90]
00424> #-----------------|-------------------------------------------------------------|
00425> #-----------------|-PRE-DEVELOPMENT-----------------------------------------------|
00426> #-----------------|-------------------------------------------------------------|
00427> #-----------------|-------------------------------------------------------------|
00428> #-----------------|-Subwatershed 9 External Drainage Area-------------------------|
00429> #-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
00430> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------------|
00431> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00432> #-----------------|-------------------------------------------------------------|
00433> R0004:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00434>     CALIB NASHYD         1.0 01:EXT-9A       101.80    4.139 No_date    3:46
00435>       [CN= 80.0: N= 3.00: Tp= 1.00]
00436> R0004:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00437>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    4.139 No_date    3:46
00438>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    4.128 No_date    3:50
00439>       [L/S/n=  550./2.000/.035]
00440>       {Vmax= 1.895:Dmax=  .385}
00441> R0004:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00442>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    1.607 No_date    3:00
00443>       [XIMP=.35:TIMP=.35]
00444>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00445>       [Pervious    area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00446>       [Impervious  area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00447> R0004:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00448>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.607 No_date    3:00
00449>                  out <=   1.0 04:Orchards      14.80     .796 No_date    3:17
00450>      {MxStoUsed=.4411E+00  m3}
00451> #-----------------|-------------------------------------------------------------|
00452> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00453> #-----------------|-------------------------------------------------------------|
00454> R0004:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00455>     ADD HYD              1.0 02:Channel      101.80    4.128 No_date    3:50
00456>                    +     1.0 04:Orchards      14.80     .796 No_date    3:17
00457>                  SUM=    1.0 05:RD19         116.60    4.714 No_date    3:46
00458> #-----------------|-------------------------------------------------------------|
00459> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00460> #-----------------|-------------------------------------------------------------|
00461> R0004:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00462>     CALIB NASHYD         1.0 01:9A            2.57     .069 No_date    3:10
00463>       [CN= 48.4: N= 3.00: Tp=  .37]
00464> R0004:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00465>     CALIB NASHYD         1.0 02:9B           11.63     .292 No_date    3:57
00466>       [CN= 68.5: N= 3.00: Tp= 1.09]
00467> R0004:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00468>     ADD HYD              1.0 01:9A            2.57     .069 No_date    3:10
00469>                    +     1.0 02:9B           11.63     .292 No_date    3:57
00470>                  SUM=    1.0 10:9A9B         14.20     .320 No_date    3:49
00471> R0004:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00472>     CALIB NASHYD         1.0 01:9C            1.19     .025 No_date    3:02
00473>       [CN= 33.2: N= 3.00: Tp=  .14]
00474> R0004:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00475>     CALIB NASHYD         1.0 02:9D            2.02     .059 No_date    3:02
00476>       [CN= 41.9: N= 3.00: Tp=  .15]
00477> #-----------------|-------------------------------------------------------------|
00478> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00479> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00480> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00481> #-----------------|-------------------------------------------------------------|
00482> R0004:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00483>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .059 No_date    3:02
00484>  *                out <=   1.0 04:ExPond        2.02     .000 No_date    0:00
00485>      {MxStoUsed=.2332E-01  m3}
00486> R0004:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00487>     ADD HYD              1.0 01:9C            1.19     .025 No_date    3:02
00488>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00489>                  SUM=    1.0 09:9C9D          3.21     .025 No_date    3:02
00490> #-----------------|-------------------------------------------------------------|
00491> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00492> #-----------------|-------------------------------------------------------------|
00493> R0004:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00494>     CALIB NASHYD         1.0 07:9E            7.60     .168 No_date    3:16
00495>       [CN= 47.1: N= 3.00: Tp=  .48]
00496> R0004:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00497>     CALIB NASHYD         1.0 08:9F            3.35     .064 No_date    3:30
00498>       [CN= 50.4: N= 3.00: Tp=  .71]
00499> #-----------------|-------------------------------------------------------------|
00500> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00501> #-----------------|-------------------------------------------------------------|
00502> R0004:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00503>     ADD HYD              1.0 05:RD19         116.60    4.714 No_date    3:46
00504>                    +     1.0 10:9A9B          14.20     .320 No_date    3:49
00505>                    +     1.0 09:9C9D           3.21     .025 No_date    3:02
00506>                    +     1.0 07:9E             7.60     .168 No_date    3:16
00507>                    +     1.0 08:9F             3.35     .064 No_date    3:30
00508>                  SUM=    1.0 01:WC9LS        144.96    5.220 No_date    3:42
00509> R0004:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00510>     SAVE HYD             1.0 01:WC9LS        144.96    5.220 No_date    3:42
00511>       fname :WC9LS.0004
00512>       remark:PRE Lakeshore Road Hydrograph
00513>   ** END OF RUN :    4
00514>
00515> ********************************************************************************
00516>
00517>
00518>
00519>
00520>
00521>  RUN#:COMMAND#
00522> R0005:C00001-----------------------------------------------------------------------
00523>      START
00524>       [TZERO =    .00 hrs on        0]
00525>       [METOUT=   2    (1=imperial, 2=metric output)]
00526>       [NSTORM=   1 ]
00527>       [NRUN  = 0005 ]
00528> #*******************************************************************************
00529> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00530> #  Date        : 2018-09-19
00531> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00532> #  Company     : C.F. Crozier & Associates Inc.
00533> #  License #   : 3737016
00534> #*******************************************************************************
00535> #*******************************************************************************
00536> R0005:C00002-----------------------------------------------------------------------
00537>      READ STORM
00538>       Filename = STORM.001
00539>       Comment  = 50-Year 6 hr Kifer Chu Chicago Storm Event
00540>       [SDT=60.00:SDUR=   6.00:PTOT=  83.90]
```

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00541> #-----------------|-------------------------------------------------------|
00542> #-----------------|-PRE-DEVELOPMENT---------------------------------------|
00543> #-----------------|-------------------------------------------------------|
00544> #-----------------|-------------------------------------------------------|
00545> #-----------------|-Subwatershed 9 External Drainage Area-----------------|
00546> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00547> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00548> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00549> #-----------------|-------------------------------------------------------|
00550> R0005:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00551>     CALIB NASHYD           1.0 01:EXT-9A       101.80    4.631 No_date    3:46
00552>       [CN= 80.0: N= 3.00: Tp= 1.00]
00553> R0005:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00554>     ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    4.631 No_date    3:46
00555>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    4.621 No_date    3:49
00556>        [L/S/n=  550./2.000/.035]
00557>        {Vmax= 1.979:Dmax=  .411}
00558> R0005:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00559>     CALIB STANDHYD         1.0 03:EXT-9B        14.80    1.769 No_date    3:00
00560>       [XIMP=.35:TIMP=.35]
00561>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00562>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00563>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00564> R0005:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00565>     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    1.769 No_date    3:00
00566>                  out <=    1.0 04:Orchards      14.80     .927 No_date    3:16
00567>      {MxStoUsed=.4726E+00  m3}
00568> #-----------------|-------------------------------------------------------|
00569> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
00570> #-----------------|-------------------------------------------------------|
00571> R0005:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00572>     ADD HYD                1.0 02:Channel      101.80    4.621 No_date    3:49
00573>                      +     1.0 04:Orchards      14.80     .927 No_date    3:16
00574>                    SUM=    1.0 05:RD19         116.60    5.289 No_date    3:41
00575> #-----------------|-------------------------------------------------------|
00576> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00577> #-----------------|-------------------------------------------------------|
00578> R0005:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00579>     CALIB NASHYD           1.0 01:9A            2.57     .079 No_date    3:10
00580>       [CN= 48.4: N= 3.00: Tp=  .37]
00581> R0005:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00582>     CALIB NASHYD           1.0 02:9B           11.63     .333 No_date    3:57
00583>       [CN= 68.5: N= 3.00: Tp= 1.09]
00584> R0005:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00585>     ADD HYD                1.0 01:9A            2.57     .079 No_date    3:10
00586>                      +     1.0 02:9B           11.63     .333 No_date    3:57
00587>                    SUM=    1.0 10:9A9B         14.20     .365 No_date    3:48
00588> R0005:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00589>     CALIB NASHYD           1.0 01:9C            1.19     .029 No_date    3:01
00590>       [CN= 33.2: N= 3.00: Tp=  .14]
00591> R0005:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00592>     CALIB NASHYD           1.0 02:9D            2.02     .068 No_date    3:02
00593>       [CN= 41.9: N= 3.00: Tp=  .15]
00594> #-----------------|-------------------------------------------------------|
00595> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00596> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00597> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00598> #-----------------|-------------------------------------------------------|
00599> R0005:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00600>     ROUTE RESERVOIR ->     1.0 02:9D            2.02     .068 No_date    3:02
00601>  *                  out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00602>      {MxStoUsed=.2711E-01  m3}
00603> R0005:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00604>     ADD HYD                1.0 01:9C            1.19     .029 No_date    3:01
00605>                      +     1.0 04:ExPond        2.02     .000 No_date    0:00
00606>                    SUM=    1.0 09:9C9D          3.21     .029 No_date    3:01
00607> #-----------------|-------------------------------------------------------|
00608> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
00609> #-----------------|-------------------------------------------------------|
00610> R0005:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00611>     CALIB NASHYD           1.0 07:9E            7.60     .194 No_date    3:16
00612>       [CN= 47.1: N= 3.00: Tp=  .48]
00613> R0005:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00614>     CALIB NASHYD           1.0 08:9F            3.35     .074 No_date    3:30
00615>       [CN= 50.4: N= 3.00: Tp=  .71]
00616> #-----------------|-------------------------------------------------------|
00617> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD--------|
00618> #-----------------|-------------------------------------------------------|
00619> R0005:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00620>     ADD HYD                1.0 05:RD19         116.60    5.289 No_date    3:41
00621>                      +     1.0 10:9A9B          14.20     .365 No_date    3:48
00622>                      +     1.0 09:9C9D           3.21     .029 No_date    3:01
00623>                      +     1.0 07:9E             7.60     .194 No_date    3:16
00624>                      +     1.0 08:9F             3.35     .074 No_date    3:30
00625>                    SUM=    1.0 01:WC9LS        144.96    5.872 No_date    3:41
00626> R0005:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00627>     SAVE HYD               1.0 01:WC9LS        144.96    5.872 No_date    3:41
00628>       fname :WC9LS.0005
00629>       remark:PRE Lakeshore Road Hydrograph
00630>   ** END OF RUN :    5
00631>
00632> ****************************************************************************
00633>
00634>
00635>
00636>
00637>
00638>  RUN#:COMMAND#
00639> R0006:C00001-------------------------------------------------------------------
00640>      START
00641>       [TZERO =    .00 hrs on        0]
00642>       [METOUT=   2    (1=imperial, 2=metric output)]
00643>       [NSTORM=   1 ]
00644>       [NRUN  = 0006 ]
00645> ****************************************************************************
00646> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00647> #  Date        : 2018-09-19
00648> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00649> #  Company     : C.F. Crozier & Associates Inc.
00650> #  License #   : 3737016
00651> ****************************************************************************
00652> ****************************************************************************
00653> R0006:C00002-------------------------------------------------------------------
00654>      READ STORM
00655>       Filename = STORM.001
00656>       Comment  = 100-Year 6 hr Kifer Chu Chicago Storm Event
00657>       [SDT=60.00:SDUR=   6.00:PTOT=  96.00]
00658> #-----------------|-------------------------------------------------------|
00659> #-----------------|-PRE-DEVELOPMENT---------------------------------------|
00660> #-----------------|-------------------------------------------------------|
00661> #-----------------|-------------------------------------------------------|
00662> #-----------------|-Subwatershed 9 External Drainage Area-----------------|
00663> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00664> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00665> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00666> #-----------------|-------------------------------------------------------|
00667> R0006:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00668>     CALIB NASHYD           1.0 01:EXT-9A       101.80    5.697 No_date    3:45
00669>       [CN= 80.0: N= 3.00: Tp= 1.00]
00670> R0006:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00671>     ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    5.697 No_date    3:45
00672>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    5.683 No_date    3:48
00673>        [L/S/n=  550./2.000/.035]
00674>        {Vmax= 2.100:Dmax=  .458}
00675> R0006:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00676>     CALIB STANDHYD         1.0 03:EXT-9B        14.80    2.107 No_date    3:00
00677>       [XIMP=.35:TIMP=.35]
00678>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00679>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00680>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00681> R0006:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00682>     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    2.107 No_date    3:00
00683>                  out <=    1.0 04:Orchards      14.80    1.213 No_date    3:13
00684>      {MxStoUsed=.5363E+00  m3}
00685> #-----------------|-------------------------------------------------------|
00686> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
00687> #-----------------|-------------------------------------------------------|
00688> R0006:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00689>     ADD HYD                1.0 02:Channel      101.80    5.683 No_date    3:48
00690>                      +     1.0 04:Orchards      14.80    1.213 No_date    3:13
00691>                    SUM=    1.0 05:RD19         116.60    6.508 No_date    3:43
00692> #-----------------|-------------------------------------------------------|
00693> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00694> #-----------------|-------------------------------------------------------|
00695> R0006:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00696>     CALIB NASHYD           1.0 01:9A            2.57     .103 No_date    3:09
00697>       [CN= 48.4: N= 3.00: Tp=  .37]
00698> R0006:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB NASHYD           1.0 02:9B           11.63     .423 No_date    3:56
00700>       [CN= 68.5: N= 3.00: Tp= 1.09]
00701> R0006:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     ADD HYD                1.0 01:9A            2.57     .103 No_date    3:09
00703>                      +     1.0 02:9B           11.63     .423 No_date    3:56
00704>                    SUM=    1.0 10:9A9B         14.20     .466 No_date    3:47
00705> R0006:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00706>     CALIB NASHYD           1.0 01:9C            1.19     .038 No_date    3:01
00707>       [CN= 33.2: N= 3.00: Tp=  .14]
00708> R0006:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00709>     CALIB NASHYD           1.0 02:9D            2.02     .087 No_date    3:02
00710>       [CN= 41.9: N= 3.00: Tp=  .15]
00711> #-----------------|-------------------------------------------------------|
00712> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00713> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00714> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00715> #-----------------|-------------------------------------------------------|
00716> R0006:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00717>     ROUTE RESERVOIR ->     1.0 02:9D            2.02     .087 No_date    3:02
00718>  *                  out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00719>      {MxStoUsed=.3546E-01  m3}
00720> R0006:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00721>     ADD HYD                1.0 01:9C            1.19     .038 No_date    3:01
00722>                      +     1.0 04:ExPond        2.02     .000 No_date    0:00
00723>                    SUM=    1.0 09:9C9D          3.21     .038 No_date    3:01
00724> #-----------------|-------------------------------------------------------|
00725> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
00726> #-----------------|-------------------------------------------------------|
00727> R0006:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00728>     CALIB NASHYD           1.0 07:9E            7.60     .253 No_date    3:15
00729>       [CN= 47.1: N= 3.00: Tp=  .48]
00730> R0006:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00731>     CALIB NASHYD           1.0 08:9F            3.35     .097 No_date    3:29
00732>       [CN= 50.4: N= 3.00: Tp=  .71]
00733> #-----------------|-------------------------------------------------------|
00734> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD--------|
00735> #-----------------|-------------------------------------------------------|
00736> R0006:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00737>     ADD HYD                1.0 05:RD19         116.60    6.508 No_date    3:43
00738>                      +     1.0 10:9A9B          14.20     .466 No_date    3:47
00739>                      +     1.0 09:9C9D           3.21     .038 No_date    3:01
00740>                      +     1.0 07:9E             7.60     .253 No_date    3:15
00741>                      +     1.0 08:9F             3.35     .097 No_date    3:29
00742>                    SUM=    1.0 01:WC9LS        144.96    7.259 No_date    3:40
00743> R0006:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00744>     SAVE HYD               1.0 01:WC9LS        144.96    7.259 No_date    3:40
00745>       fname :WC9LS.0006
00746>       remark:PRE Lakeshore Road Hydrograph
00747>   ** END OF RUN :    6
00748>
00749> ****************************************************************************
00750>
00751>
00752>
00753>
00754>
00755>  RUN#:COMMAND#
00756> R0007:C00001-------------------------------------------------------------------
00757>      START
00758>       [TZERO =    .00 hrs on        0]
00759>       [METOUT=   2    (1=imperial, 2=metric output)]
00760>       [NSTORM=   1 ]
00761>       [NRUN  = 0007 ]
00762> ****************************************************************************
00763> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00764> #  Date        : 2018-09-19
00765> #  Modeller    : [OD,BD,BH,JE - ADAPTED FROM NM 2009 MODEL]
00766> #  Company     : C.F. Crozier & Associates Inc.
00767> #  License #   : 3737016
00768> ****************************************************************************
00769> ****************************************************************************
00770> R0007:C00002-------------------------------------------------------------------
00771>      READ STORM
00772>       Filename = STORM.001
00773>       Comment  = Timmins Storm Event
00774>       [SDT=60.00:SDUR=  12.00:PTOT= 193.00]
00775> #-----------------|-------------------------------------------------------|
00776> #-----------------|-PRE-DEVELOPMENT---------------------------------------|
00777> #-----------------|-------------------------------------------------------|
00778> #-----------------|-------------------------------------------------------|
00779> #-----------------|-Subwatershed 9 External Drainage Area-----------------|
00780> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00781> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------|
00782> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00783> #-----------------|-------------------------------------------------------|
00784> R0007:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00785>     CALIB NASHYD           1.0 01:EXT-9A       101.80    6.900 No_date    7:46  1
00786>       [CN= 80.0: N= 3.00: Tp= 1.00]
00787> R0007:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00788>     ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    6.900 No_date    7:46  1
00789>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    6.895 No_date    7:49  1
00790>        [L/S/n=  550./2.000/.035]
00791>        {Vmax= 2.233:Dmax=  .508}
00792> R0007:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00793>     CALIB STANDHYD         1.0 03:EXT-9B        14.80    1.529 No_date    7:00  1
00794>       [XIMP=.35:TIMP=.35]
00795>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00796>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00797>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00798> R0007:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00799>     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    1.529 No_date    7:00  1
00800>                  out <=    1.0 04:Orchards      14.80    1.187 No_date    7:13  1
00801>      {MxStoUsed=.5307E+00  m3}
00802> #-----------------|-------------------------------------------------------|
00803> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
00804> #-----------------|-------------------------------------------------------|
00805> R0007:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00806>     ADD HYD                1.0 02:Channel      101.80    6.895 No_date    7:49  1
00807>                      +     1.0 04:Orchards      14.80    1.187 No_date    7:13  1
00808>                    SUM=    1.0 05:RD19         116.60    7.880 No_date    7:44  1
00809> #-----------------|-------------------------------------------------------|
00810> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
```

```
00811> #-----------------|-------------------------------------------------------------|
00812> R0007:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00813>     CALIB NASHYD          1.0 01:9A            2.57     .127 No_date    7:07
00814>       [CN= 48.4: N= 3.00: Tp=  .37]
00815> R0007:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00816>     CALIB NASHYD          1.0 02:9B           11.63     .614 No_date    8:00  1
00817>       [CN= 68.5: N= 3.00: Tp= 1.09]
00818> R0007:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00819>     ADD HYD               1.0 01:9A            2.57     .127 No_date    7:07
00820>                       +     1.0 02:9B           11.63     .614 No_date    8:00  1
00821>                   SUM=      1.0 10:9A9B         14.20     .694 No_date    7:54  1
00822> R0007:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00823>     CALIB NASHYD          1.0 01:9C            1.19     .042 No_date    7:01
00824>       [CN= 33.2: N= 3.00: Tp=  .14]
00825> R0007:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00826>     CALIB NASHYD          1.0 02:9D            2.02     .094 No_date    7:01
00827>       [CN= 41.9: N= 3.00: Tp=  .15]
00828> #-----------------|-------------------------------------------------------------|
00829> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00830> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00831> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00832> #-----------------|-------------------------------------------------------------|
00833> R0007:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00834>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .094 No_date    7:01
00835>  *              out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00836>      {MxStoUsed=.1286E+00  m3}
00837> R0007:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00838>     ADD HYD               1.0 01:9C            1.19     .042 No_date    7:01
00839>                       +     1.0 04:ExPond        2.02     .000 No_date    0:00
00840>                   SUM=      1.0 09:9C9D          3.21     .042 No_date    7:01
00841> #-----------------|-------------------------------------------------------------|
00842> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00843> #-----------------|-------------------------------------------------------------|
00844> R0007:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00845>     CALIB NASHYD          1.0 07:9E            7.60     .338 No_date    7:13
00846>       [CN= 47.1: N= 3.00: Tp=  .48]
00847> R0007:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00848>     CALIB NASHYD          1.0 08:9F            3.35     .141 No_date    7:28
00849>       [CN= 50.4: N= 3.00: Tp=  .71]
00850> #-----------------|-------------------------------------------------------------|
00851> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00852> #-----------------|-------------------------------------------------------------|
00853> R0007:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00854>     ADD HYD               1.0 05:RD19        116.60    7.880 No_date    7:44  1
00855>                       +     1.0 10:9A9B         14.20     .694 No_date    7:54  1
00856>                       +     1.0 09:9C9D          3.21     .042 No_date    7:01
00857>                       +     1.0 07:9E            7.60     .338 No_date    7:13
00858>                       +     1.0 08:9F            3.35     .141 No_date    7:28
00859>                   SUM=      1.0 01:WC9LS       144.96    9.005 No_date    7:44  1
00860> R0007:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00861>     SAVE HYD              1.0 01:WC9LS         144.96    9.005 No_date    7:44  1
00862>       fname :WC9LS.0007
00863>       remark:PRE Lakeshore Road Hydrograph
00864> R0007:C00002-------------------------------------------------------------------------
00865>     FINISH
00866> -------------------------------------------------------------------------------
00867> *******************************************************************************
00868>      WARNINGS / ERRORS / NOTES
00869>      -------------------------
00870> R0001:C00013  ROUTE RESERVOIR
00871> *** WARNING: Outflow volume is less than inflow volume.
00872> *** WARNING: Outflow volume is less than inflow volume.
00873> *** WARNING: Outflow volume is less than inflow volume.
00874> *** WARNING: Outflow volume is less than inflow volume.
00875> *** WARNING: Outflow volume is less than inflow volume.
00876> *** WARNING: Outflow volume is less than inflow volume.
00877> *** WARNING: Outflow volume is less than inflow volume.
00878>    Simulation ended on 2020-06-10     at 14:02:35
00879> ===============================================================================
00880>
00881>
```

```
2     Metric units
*#************************************************************************
*#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
*#  Date        : 2018-09-18 [UPDATED 2020-06-15]
*#  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
*#  Company     : C.F. Crozier & Associates Inc.
*#  License #   : 3737016
*#************************************************************************
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1]
*%                 ["25mm.stm"] <--storm filename, one per line for NSTORM time
*#************************************************************************
*%------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
READ STORM          STORM_FILENAME=["STORM.001"]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT-----------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area--------------|
*#------------------|-Per 'The Orchards' FSSWM Report--------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)--------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [   0.0100 ,  0.0610 ]
                                   [   0.0400 ,  0.1310 ]
                                   [   0.0700 ,  0.2110 ]
                                   [   0.2600 ,  0.3000 ]
                                   [   0.6000 ,  0.3940 ]
                                   [   1.0200 ,  0.4950 ]
                                   [   1.5200 ,  0.6020 ]
                                   [   2.0800 ,  0.7160 ]
                                   [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing--|
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands--------|
*#------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|---------------------CULVERT #1---------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|---------------------CULVERT #2---------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-AREAS TO SWM FACILITY 1----------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1---------------------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0   ,  0.0   ]
                                   [   0.007 ,  0.027 ]
                                   [   0.018 ,  0.084 ]
                                   [   0.025 ,  0.147 ]
                                   [   0.029 ,  0.199 ]
                                   [   0.032 ,  0.256 ]
                                   [   0.036 ,  0.337 ]
                                   [   0.078 ,  0.426 ]
                                   [   0.151 ,  0.522 ]
                                   [   0.293 ,  0.581 ]
                                   [   0.306 ,  0.656 ]
                                   [   0.330 ,  0.737 ]
                                   [   1.442 ,  0.902 ]
                                   [   2.636 ,  0.976 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands--------|
*#------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED----------------|
*%------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|---------------------CULVERT #3---------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                    DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-LANDS DRAINING TO SWM FACILITY 2-------------------|
*#------------------|------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                    XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[100](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)--------|
*#------------------|------------------------------------------------------|
*%------------------|------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [   0.006 ,  0.019 ]
                                   [   0.016 ,  0.060 ]
                                   [   0.019 ,  0.080 ]
                                   [   0.021 ,  0.103 ]
                                   [   0.025 ,  0.141 ]
                                   [   0.028 ,  0.181 ]
                                   [   0.069 ,  0.240 ]
                                   [   0.142 ,  0.303 ]
                                   [   0.298 ,  0.371 ]
                                   [   0.322 ,  0.403 ]
                                   [   0.560 ,  0.440 ]
                                   [   1.128 ,  0.479 ]
                                   [   1.226 ,  0.511 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|------------------------------------------------------|
*#------------------|------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD----------|
```

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00271> *#-----------------|-------------------------------------------------------------|
00272> *%-----------------|-------------------------------------------------------------|
00273> ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00274> *%-----------------|-------------------------------------------------------------|
00275> SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
00276>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
00277> *%-----------------|-------------------------------------------------------------|
00278> *#-----------------|-------------------------------------------------------------|
00279> *#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
00280> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
00281> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
00282> *#-----------------|-------------------------------------------------------------|
00283> *%-----------------|-------------------------------------------------------------|
00284> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00285>                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00286>                     N=[3], TP=[0.23]hrs,
00287>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00288> *%-----------------|-------------------------------------------------------------|
00289> CALIB NASHYD       ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
00290>                     DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
00291>                     N=[3], TP=[0.44]hrs,
00292>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00293> *%-----------------|-------------------------------------------------------------|
00294> *#-----------------|-------------------------------------------------------------|
00295> *#-----------------|--WATERCOURSE 8 TOTAL------------------------------------------|
00296> *#-----------------|-------------------------------------------------------------|
00297> *%-----------------|-------------------------------------------------------------|
00298> ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
00299> *%-----------------|-------------------------------------------------------------|
00300> *%-----------------|-------------------------------------------------------------|
00301> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[2]
00302> *                   ["2yr.stm"] <--storm filename, one per line for NSTORM time
00303> *%-----------------|-------------------------------------------------------------|
00304> *%-----------------|-------------------------------------------------------------|
00305> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[3]
00306> *                   ["5yr.stm"] <--storm filename, one per line for NSTORM time
00307> *%-----------------|-------------------------------------------------------------|
00308> *%-----------------|-------------------------------------------------------------|
00309> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[4]
00310> *                   ["10yr.stm"] <--storm filename, one per line for NSTORM time
00311> *%-----------------|-------------------------------------------------------------|
00312> *%-----------------|-------------------------------------------------------------|
00313> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[5]
00314> *                   ["25yr.stm"] <--storm filename, one per line for NSTORM time
00315> *%-----------------|-------------------------------------------------------------|
00316> *%-----------------|-------------------------------------------------------------|
00317> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[6]
00318> *                   ["50yr.stm"] <--storm filename, one per line for NSTORM time
00319> *%-----------------|-------------------------------------------------------------|
00320> *%-----------------|-------------------------------------------------------------|
00321> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[7]
00322> *                   ["100yr.stm"] <--storm filename, one per line for NSTORM tim
00323> *%-----------------|-------------------------------------------------------------|
00324> *%-----------------|-------------------------------------------------------------|
00325> START               TZERO=[0.0]hrs or date,  METOUT=[2],  NSTORM=[1],  NRUN=[8]
00326> *                   ["tim.stm"] <--storm filename, one per line for NSTORM time
00327> *%-----------------|-------------------------------------------------------------|
00328> FINISH
00329>
00330>
00331>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M     OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM    O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M    O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M    O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M     OOO         2       0   0   11
00008>                                                                 2       0   0   11
00009>         StormWater Management HYdrologic Model                  222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ****************  A single event and continuous hydrologic simulation model
00014>  ****************     based on the principles of HYMO and its successors
00015>  ****************                 OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  **************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ****************                   Ottawa,  Ontario: (613) 836-3884
00019>  ****************                   Gatineau, Quebec: (819) 243-6858
00020>  ****************                   E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ****************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ****************           Maximum value for ID numbers  :     11
00031>  ****************           Max. number of rainfall points: 105408
00032>  ****************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ****************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2022-03-11     TIME: 14:14:59     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00041>  *               YMO\KCHU\2022.02.03 - POST_KCHU.DAT
00042>  * Output  file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00043>  *               YMO\KCHU\2022.02.03 - POST_KCHU.out
00044>  * Summary file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00045>  *               YMO\KCHU\2022.02.03 - POST_KCHU.sum
00046>  * User comments:
00047>  * 1: ____________________________________________________________________________
00048>  * 2: ____________________________________________________________________________
00049>  * 3: ____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
00056> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001-------------------------------------------------------------------
00062>      START
00063>        [TZERO =    .00 hrs on        0]
00064>        [METOUT=   2    (1=imperial, 2=metric output)]
00065>        [NSTORM=   1 ]
00066>        [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> R0001:C00002-------------------------------------------------------------------
00069>      READ STORM
00070>        Filename = STORM.001
00071>        Comment  = 25mm 6 hr Kifer Chu Chicago Storm Event
00072>        [SDT=60.00:SDUR=   6.00:PTOT=  25.00]
00073> #-----------------|-----------------------------------------------------------|
00074> #-----------------|-POST-DEVELOPMENT--------------------------------------------|
00075> #-----------------|-----------------------------------------------------------|
00076> #-----------------|-----------------------------------------------------------|
00077> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00078> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00079> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)------------------|
00080> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00081> #-----------------|-----------------------------------------------------------|
00082> R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00083>     CALIB NASHYD          1.0 01:EXT-9A       101.80     .496 No_date    3:55
00084>       [CN= 80.0: N= 3.00: Tp= 1.00]
00085> R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00086>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80     .496 No_date    3:55
00087>       [RDT= 1.00] out<-    1.0 02:Channel      101.80     .488 No_date    4:05
00088>        [L/S/n=  550./2.000/.035]
00089>        {Vmax=  .898:Dmax=  .115}
00090> R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00091>  *  CALIB STANDHYD         1.0 03:EXT-9B        14.80     .241 No_date    3:00
00092>        [XIMP=.35:TIMP=.35]
00093>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00094>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00095>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00096> R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00097>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .241 No_date    3:00
00098>                  out <-   1.0 04:Orchards      14.80     .026 No_date    4:13
00099>       {MxStoUsed=.9900E-01  m3}
00100> #-----------------|-----------------------------------------------------------|
00101> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00102> #-----------------|-----------------------------------------------------------|
00103> R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00104>     ADD HYD               1.0 02:Channel      101.80     .488 No_date    4:05
00105>                     +     1.0 04:Orchards      14.80     .026 No_date    4:13
00106>                   SUM=    1.0 05:RD19         116.60     .514 No_date    4:05
00107> #-----------------|-----------------------------------------------------------|
00108> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00109> #-----------------|-----------------------------------------------------------|
00110> R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00111>     CALIB NASHYD          1.0 01:EXT-9C         .65     .009 No_date    3:04
00112>       [CN= 82.7: N= 3.00: Tp=  .24]
00113> R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00114>     CALIB NASHYD          1.0 02:9A             .58     .008 No_date    3:00
00115>       [CN= 79.0: N= 3.00: Tp=  .06]
00116> #-----------------|-----------------------CULVERT #1-------------------------|
00117> R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00118>     ADD HYD               1.0 01:EXT-9C         .65     .009 No_date    3:04
00119>                     +     1.0 02:9A             .58     .008 No_date    3:00
00120>                     +     1.0 05:RD19         116.60     .514 No_date    4:05
00121>                   SUM=    1.0 03:CULV1        117.83     .517 No_date    4:05
00122> R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00123>     CALIB NASHYD          1.0 01:9B            2.10     .005 No_date    3:08
00124>       [CN= 51.5: N= 3.00: Tp=  .28]
00125> #-----------------|-----------------------CULVERT #2-------------------------|
00126> R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00127>     ADD HYD               1.0 01:9B            2.10     .005 No_date    3:08
00128>                     +     1.0 03:CULV1        117.83     .517 No_date    4:05
00129>                   SUM=    1.0 04:WC9a         119.93     .518 No_date    4:04
00130> #-----------------|-----------------------------------------------------------|
00131> #-----------------|-AREAS TO SWM FACILITY 1-------------------------------------|
00132> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00133> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1---------------------|
00134> #-----------------|-----------------------------------------------------------|
00135> R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00136>     CALIB NASHYD          1.0 01:EXT-1A         8.37     .037 No_date    3:20
00137>       [CN= 74.9: N= 3.00: Tp=  .47]
00138> R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00139>     CALIB STANDHYD        1.0 03:1A           2.95     .060 No_date    3:00
00140>       [XIMP=.31:TIMP=.51]
00141>       [LOSS= 2 :CN= 67.0]
00142>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00143>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00144> R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00145>     ADD HYD               1.0 01:EXT-1A         8.37     .037 No_date    3:20
00146>                     +     1.0 03:1A             2.95     .060 No_date    3:00
00147>                   SUM=    1.0 06:NODE          11.32     .084 No_date    3:00
00148> R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00149>     CALIB NASHYD          1.0 05:1B             1.81     .005 No_date    3:01
00150>       [CN= 44.3: N= 3.00: Tp=  .11]
00151> R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>     ADD HYD               1.0 01:EXT-1A         8.37     .037 No_date    3:20
00153>                     +     1.0 03:1A             2.95     .060 No_date    3:00
00154>                     +     1.0 05:1B             1.81     .005 No_date    3:01
00155>                   SUM=    1.0 06:SWMF1         13.13     .088 No_date    3:00
00156> #-----------------|-----------------------------------------------------------|
00157> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00158> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00159> #-----------------|-----------------------------------------------------------|
00160> R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00161>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .088 No_date    3:00
00162>                  out <-   1.0 01:SWMF-1        13.13     .010 No_date    6:02
00163>       {MxStoUsed=.4163E-01  m3}
00164> R0001:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00165>     ADD HYD               1.0 01:SWMF-1        13.13     .010 No_date    6:02
00166>                     +     1.0 04:WC9a         119.93     .518 No_date    4:04
00167>                   SUM=    1.0 07:WC9b         133.06     .527 No_date    4:05
00168> #-----------------|-----------------------------------------------------------|
00169> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00170> #-----------------|-----------------------------------------------------------|
00171> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00172> #-----------------|-----------------------------------------------------------|
00173> R0001:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00174>     CALIB STANDHYD        1.0 10:9D           1.32     .033 No_date    3:00
00175>       [XIMP=.35:TIMP=.71]
00176>       [LOSS= 2 :CN= 66.1]
00177>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00178>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00179> #-----------------|-----------------------------------------------------------|
00180> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-------------------------|
00181> #-----------------|-----------------------------------------------------------|
00182> R0001:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00183>     CALIB NASHYD          1.0 01:9C             .82     .001 No_date    3:07
00184>       [CN= 40.9: N= 3.00: Tp=  .25]
00185> #-----------------|-----------------------CULVERT #3-------------------------|
00186> R0001:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00187>     ADD HYD               1.0 07:WC9b         133.06     .527 No_date    4:05
00188>                     +     1.0 01:9C             .82     .001 No_date    3:07
00189>                   SUM=    1.0 04:CULV3        133.88     .528 No_date    4:05
00190> R0001:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00191>     CALIB NASHYD          1.0 01:9F             .38     .001 No_date    3:10
00192>       [CN= 52.2: N= 3.00: Tp=  .32]
00193> R0001:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00194>     CALIB NASHYD          1.0 02:EXT-9D         .78     .005 No_date    3:22
00195>       [CN= 78.8: N= 3.00: Tp=  .52]
00196> R0001:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00197>     CALIB NASHYD          1.0 03:9E            1.24     .007 No_date    3:05
00198>       [CN= 66.3: N= 3.00: Tp=  .23]
00199> R0001:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00200>     ADD HYD               1.0 01:9F             .38     .001 No_date    3:10
00201>                     +     1.0 02:EXT-9D         .78     .005 No_date    3:22
00202>                     +     1.0 03:9E            1.24     .007 No_date    3:05
00203>                     +     1.0 10:9D            1.32     .033 No_date    3:00
00204>                   SUM=    1.0 05:NODE          3.72     .043 No_date    3:00
00205> R0001:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00206>     ADD HYD               1.0 01:9F             .38     .001 No_date    3:10
00207>                     +     1.0 02:EXT-9D         .78     .005 No_date    3:22
00208>                     +     1.0 03:9E            1.24     .007 No_date    3:05
00209>                     +     1.0 04:CULV3        133.88     .528 No_date    4:05
00210>                     +     1.0 10:9D            1.32     .033 No_date    3:00
00211>                   SUM=    1.0 05:WC9LOWER     137.60     .538 No_date    4:03
00212> #-----------------|-----------------------------------------------------------|
00213> #-----------------|-LANDS DRAINING TO SWM FACILITY 2----------------------------|
00214> #-----------------|-----------------------------------------------------------|
00215> R0001:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00216>     CALIB NASHYD          1.0 01:2A            1.19     .002 No_date    3:02
00217>       [CN= 33.2: N= 3.00: Tp=  .14]
00218> R0001:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00219>     CALIB NASHYD          1.0 02:2B            1.67     .002 No_date    3:11
00220>       [CN= 34.7: N= 3.00: Tp=  .32]
00221> R0001:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00222>     ADD HYD               1.0 01:2A            1.19     .002 No_date    3:02
00223>                     +     1.0 02:2B            1.67     .002 No_date    3:11
00224>                   SUM=    1.0 10:2A2B          2.86     .003 No_date    3:04
00225> R0001:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00226>     CALIB STANDHYD        1.0 03:2C            1.96     .033 No_date    3:00
00227>       [XIMP=.30:TIMP=.60]
00228>       [LOSS= 2 :CN= 49.0]
00229>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00230>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00231> R0001:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00232>     CALIB STANDHYD        1.0 07:2D            3.28     .051 No_date    3:00
00233>       [XIMP=.25:TIMP=.50]
00234>       [LOSS= 2 :CN= 59.0]
00235>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00236>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00237> R0001:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00238>     CALIB STANDHYD        1.0 04:2E            1.49     .030 No_date    3:00
00239>       [XIMP=.37:TIMP=.42]
00240>       [LOSS= 2 :CN= 69.0]
00241>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00242>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00243> R0001:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00244>     ADD HYD               1.0 10:2A2B          2.86     .003 No_date    3:04
00245>                     +     1.0 03:2C            1.96     .033 No_date    3:00
00246>                     +     1.0 04:2E            1.49     .030 No_date    3:00
00247>                     +     1.0 07:2D            3.28     .051 No_date    3:00
00248>                   SUM=    1.0 06:SWMF2         9.59     .117 No_date    3:00
00249> #-----------------|-----------------------------------------------------------|
00250> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00251> #-----------------|-----------------------------------------------------------|
00252> R0001:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00253>     ROUTE RESERVOIR ->    1.0 06:SWMF2         9.59     .117 No_date    3:00
00254>                  out <-   1.0 09:SWMF-2        9.59     .013 No_date    5:01
00255>       {MxStoUsed=.4676E-01  m3}
00256> #-----------------|-----------------------------------------------------------|
00257> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------------|
00258> #-----------------|-----------------------------------------------------------|
00259> R0001:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00260>     ADD HYD               1.0 09:SWMF-2        9.59     .013 No_date    5:01
00261>                     +     1.0 05:WC9LOWER     137.60     .538 No_date    4:03
00262>                   SUM=    1.0 01:WC9c         147.19     .550 No_date    4:03
00263> R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00264>     SAVE HYD              1.0 01:WC9c         147.19     .550 No_date    4:03
00265>       fname :WC9c.0001
00266>       remark:POST-DEV LAKESHORE
00267> #-----------------|-----------------------------------------------------------|
00268> #-----------------|--WATERCOURSE 8 CATCHMENTS-----------------------------------|
00269> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8----------------------|
00270> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8------------------|
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00271> #-----------------|-------------------------------------------------------|
00272> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00273>     CALIB NASHYD          1.0 01:8A            2.27     .003 No_date    3:06
00274>       [CN= 36.2: N= 3.00: Tp=  .23]
00275> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00276>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .030 No_date    3:17
00277>       [CN= 68.9: N= 3.00: Tp=  .44]
00278> #-----------------|-------------------------------------------------------|
00279> #-----------------|--WATERCOURSE 8 TOTAL--------------------------------|
00280> #-----------------|-------------------------------------------------------|
00281> R0001:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00282>     ADD HYD               1.0 01:8A            2.27     .003 No_date    3:06
00283>                   +       1.0 02:EXT-8A         7.14     .030 No_date    3:17
00284>                 SUM=      1.0 03:WC8            9.41     .033 No_date    3:15
00285>   ** END OF RUN :    1
00286>
00287> ********************************************************************************
00288>
00289>
00290>
00291>
00292>
00293>  RUN#:COMMAND#
00294> R0002:C00001------------------------------------------------------------------
00295>      START
00296>       [TZERO =    .00 hrs on        0]
00297>       [METOUT=   2    (1=imperial, 2=metric output)]
00298>       [NSTORM=   1 ]
00299>       [NRUN  = 0002 ]
00300> ********************************************************************************
00301> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00302> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
00303> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
00304> #  Company     : C.F. Crozier & Associates Inc.
00305> #  License #   : 3737016
00306> ********************************************************************************
00307> ********************************************************************************
00308> R0002:C00002------------------------------------------------------------------
00309>      READ STORM
00310>       Filename = STORM.001
00311>       Comment  = 2-Year 6 hr Kefer Chu Chicago Storm Event
00312>       [SDT=60.00:SDUR=   6.00:PTOT=  37.90]
00313> #-----------------|-------------------------------------------------------|
00314> #-----------------|-POST-DEVELOPMENT------------------------------------|
00315> #-----------------|-------------------------------------------------------|
00316> #-----------------|-------------------------------------------------------|
00317> #-----------------|-Subwatershed 9 External Drainage Area---------------|
00318> #-----------------|-Per 'The Orchards' FSSWM Report---------------------|
00319> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
00320> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00321> #-----------------|-------------------------------------------------------|
00322> R0002:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00323>     CALIB NASHYD          1.0 01:EXT-9A        101.80    1.200 No_date    3:51
00324>       [CN= 80.0: N= 3.00: Tp= 1.00]
00325> R0002:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00326>     ROUTE CHANNEL   ->    1.0 01:EXT-9A        101.80    1.200 No_date    3:51
00327>       [RDT= 1.00] out<-   1.0 02:Channel       101.80    1.195 No_date    3:54
00328>       [L/S/n=  550./2.000/.035]
00329>       {Vmax= 1.224:Dmax=  .193}
00330> R0002:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00331>     CALIB STANDHYD        1.0 03:EXT-9B         14.80     .439 No_date    3:01
00332>       [XIMP=.35:TIMP=.35]
00333>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00334>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00335>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00336> R0002:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00337>     ROUTE RESERVOIR ->    1.0 03:EXT-9B         14.80     .439 No_date    3:01
00338>                  out <=   1.0 04:Orchards       14.80     .059 No_date    4:13
00339>       {MxStoUsed=.1807E+00  m3}
00340> #-----------------|-------------------------------------------------------|
00341> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing--------|
00342> #-----------------|-------------------------------------------------------|
00343> R0002:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00344>     ADD HYD               1.0 02:Channel       101.80    1.195 No_date    3:54
00345>                   +       1.0 04:Orchards       14.80     .059 No_date    4:13
00346>                 SUM=      1.0 05:RD19          116.60    1.253 No_date    3:54
00347> #-----------------|-------------------------------------------------------|
00348> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------|
00349> #-----------------|-------------------------------------------------------|
00350> R0002:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00351>     CALIB NASHYD          1.0 01:EXT-9C          .65     .020 No_date    3:04
00352>       [CN= 82.7: N= 3.00: Tp=  .24]
00353> R0002:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00354>     CALIB NASHYD          1.0 02:9A             .58     .018 No_date    3:00
00355>       [CN= 79.0: N= 3.00: Tp=  .06]
00356> #-----------------|---------------------CULVERT #1--------------------------|
00357> R0002:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00358>     ADD HYD               1.0 01:EXT-9C          .65     .020 No_date    3:04
00359>                   +       1.0 02:9A             .58     .018 No_date    3:00
00360>                   +       1.0 05:RD19          116.60    1.253 No_date    3:54
00361>                 SUM=      1.0 03:CULV1         117.83    1.260 No_date    3:54
00362> R0002:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00363>     CALIB NASHYD          1.0 01:9B            2.10     .015 No_date    3:07
00364>       [CN= 51.5: N= 3.00: Tp=  .28]
00365> #-----------------|---------------------CULVERT #2--------------------------|
00366> R0002:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00367>     ADD HYD               1.0 01:9B            2.10     .015 No_date    3:07
00368>                   +       1.0 03:CULV1         117.83    1.260 No_date    3:54
00369>                 SUM=      1.0 04:WC9a          119.93    1.265 No_date    3:54
00370> #-----------------|-------------------------------------------------------|
00371> #-----------------|-AREAS TO SWM FACILITY 1-----------------------------|
00372> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
00373> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1--------------------|
00374> #-----------------|-------------------------------------------------------|
00375> R0002:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00376>     CALIB NASHYD          1.0 01:EXT-1A         8.37     .111 No_date    3:17
00377>       [CN= 74.9: N= 3.00: Tp=  .47]
00378> R0002:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00379>     CALIB STANDHYD        1.0 03:1A             2.95     .111 No_date    3:00
00380>       [XIMP=.31:TIMP=.51]
00381>       [LOSS= 2 :CN= 67.0]
00382>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00383>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00384> R0002:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00385>     ADD HYD               1.0 01:EXT-1A         8.37     .111 No_date    3:17
00386>                   +       1.0 03:1A             2.95     .111 No_date    3:00
00387>                 SUM=      1.0 06:NODE          11.32     .193 No_date    3:00
00388> R0002:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00389>     CALIB NASHYD          1.0 05:1B             1.81     .014 No_date    3:01
00390>       [CN= 44.3: N= 3.00: Tp=  .11]
00391> R0002:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00392>     ADD HYD               1.0 01:EXT-1A         8.37     .111 No_date    3:17
00393>                   +       1.0 03:1A             2.95     .111 No_date    3:00
00394>                   +       1.0 05:1B             1.81     .014 No_date    3:01
00395>                 SUM=      1.0 06:SWMF1         13.13     .207 No_date    3:00
00396> #-----------------|-------------------------------------------------------|
00397> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00398> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------|
00399> #-----------------|-------------------------------------------------------|
00400> R0002:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00401>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .207 No_date    3:00
00402>                  out <=   1.0 01:SWMF-1        13.13     .019 No_date    6:03
00403>       {MxStoUsed=.9623E-01  m3}
00404> R0002:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00405>     ADD HYD               1.0 01:SWMF-1        13.13     .019 No_date    6:03
00406>                   +       1.0 04:WC9a          119.93    1.265 No_date    3:54
00407>                 SUM=      1.0 07:WC9b          133.06    1.282 No_date    3:54
00408> #-----------------|-------------------------------------------------------|
00409> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------|
00410> #-----------------|-------------------------------------------------------|
00411> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00412> #-----------------|-------------------------------------------------------|
00413> R0002:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00414>     CALIB STANDHYD        1.0 10:9D             1.32     .060 No_date    3:00
00415>       [XIMP=.35:TIMP=.71]
00416>       [LOSS= 2 :CN= 66.1]
00417>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00418>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00419> #-----------------|-------------------------------------------------------|
00420> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------|
00421> #-----------------|-------------------------------------------------------|
00422> R0002:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00423>     CALIB NASHYD          1.0 01:9C              .82     .004 No_date    3:06
00424>       [CN= 40.9: N= 3.00: Tp=  .25]
00425> #-----------------|---------------------CULVERT #3--------------------------|
00426> R0002:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>     ADD HYD               1.0 07:WC9b          133.06    1.282 No_date    3:54
00428>                   +       1.0 01:9C              .82     .004 No_date    3:06
00429>                 SUM=      1.0 04:CULV3         133.88    1.283 No_date    3:54
00430> R0002:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00431>     CALIB NASHYD          1.0 01:9F              .38     .003 No_date    3:08
00432>       [CN= 52.2: N= 3.00: Tp=  .32]
00433> R0002:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00434>     CALIB NASHYD          1.0 02:EXT-9D          .78     .012 No_date    3:19
00435>       [CN= 78.8: N= 3.00: Tp=  .52]
00436> R0002:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00437>     CALIB NASHYD          1.0 03:9E             1.24     .019 No_date    3:04
00438>       [CN= 66.3: N= 3.00: Tp=  .23]
00439> R0002:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00440>     ADD HYD               1.0 01:9F              .38     .003 No_date    3:08
00441>                   +       1.0 02:EXT-9D          .78     .012 No_date    3:19
00442>                   +       1.0 03:9E             1.24     .019 No_date    3:04
00443>                   +       1.0 10:9D             1.32     .060 No_date    3:00
00444>                 SUM=      1.0 05:NODE           3.72     .089 No_date    3:00
00445> R0002:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00446>     ADD HYD               1.0 01:9F              .38     .003 No_date    3:08
00447>                   +       1.0 02:EXT-9D          .78     .012 No_date    3:19
00448>                   +       1.0 03:9E             1.24     .019 No_date    3:04
00449>                   +       1.0 04:CULV3         133.88    1.283 No_date    3:54
00450>                   +       1.0 10:9D             1.32     .060 No_date    3:00
00451>                 SUM=      1.0 05:WC9LOWER      137.60    1.307 No_date    3:53
00452> #-----------------|-------------------------------------------------------|
00453> #-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------|
00454> #-----------------|-------------------------------------------------------|
00455> R0002:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00456>     CALIB NASHYD          1.0 01:2A             1.19     .005 No_date    3:02
00457>       [CN= 33.2: N= 3.00: Tp=  .14]
00458> R0002:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00459>     CALIB NASHYD          1.0 02:2B             1.67     .006 No_date    3:09
00460>       [CN= 34.7: N= 3.00: Tp=  .32]
00461> R0002:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00462>     ADD HYD               1.0 01:2A             1.19     .005 No_date    3:02
00463>                   +       1.0 02:2B             1.67     .006 No_date    3:09
00464>                 SUM=      1.0 10:2A2B           2.86     .011 No_date    3:04
00465> R0002:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00466>     CALIB STANDHYD        1.0 03:2C             1.96     .059 No_date    3:00
00467>       [XIMP=.30:TIMP=.60]
00468>       [LOSS= 2 :CN= 49.0]
00469>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00470>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00471> R0002:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00472>     CALIB STANDHYD        1.0 07:2D             3.28     .095 No_date    3:00
00473>       [XIMP=.25:TIMP=.50]
00474>       [LOSS= 2 :CN= 59.0]
00475>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00476>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00477> R0002:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00478>     CALIB STANDHYD        1.0 04:2E             1.49     .053 No_date    3:00
00479>       [XIMP=.37:TIMP=.42]
00480>       [LOSS= 2 :CN= 69.0]
00481>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00482>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00483> R0002:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00484>     ADD HYD               1.0 10:2A2B           2.86     .011 No_date    3:04
00485>                   +       1.0 03:2C             1.96     .059 No_date    3:00
00486>                   +       1.0 04:2E             1.49     .053 No_date    3:00
00487>                   +       1.0 07:2D             3.28     .095 No_date    3:00
00488>                 SUM=      1.0 06:SWMF2          9.59     .218 No_date    3:00
00489> #-----------------|-------------------------------------------------------|
00490> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00491> #-----------------|-------------------------------------------------------|
00492> R0002:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00493>     ROUTE RESERVOIR ->    1.0 06:SWMF2          9.59     .218 No_date    3:00
00494>                  out <=   1.0 09:SWMF-2         9.59     .020 No_date    5:07
00495>       {MxStoUsed=.8648E-01  m3}
00496> #-----------------|-------------------------------------------------------|
00497> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------|
00498> #-----------------|-------------------------------------------------------|
00499> R0002:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00500>     ADD HYD               1.0 09:SWMF-2          9.59     .020 No_date    5:07
00501>                   +       1.0 05:WC9LOWER      137.60    1.307 No_date    3:53
00502>                 SUM=      1.0 01:WC9c          147.19    1.326 No_date    3:54
00503> R0002:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00504>     SAVE HYD              1.0 01:WC9c          147.19    1.326 No_date    3:54
00505>       fname :WC9c.0002
00506>       remark:POST-DEV LAKESHORE
00507> #-----------------|-------------------------------------------------------|
00508> #-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------|
00509> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8----------------|
00510> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8------------|
00511> #-----------------|-------------------------------------------------------|
00512> R0002:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00513>     CALIB NASHYD          1.0 01:8A             2.27     .010 No_date    3:05
00514>       [CN= 36.2: N= 3.00: Tp=  .23]
00515> R0002:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00516>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .085 No_date    3:14
00517>       [CN= 68.9: N= 3.00: Tp=  .44]
00518> #-----------------|-------------------------------------------------------|
00519> #-----------------|--WATERCOURSE 8 TOTAL--------------------------------|
00520> #-----------------|-------------------------------------------------------|
00521> R0002:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00522>     ADD HYD               1.0 01:8A             2.27     .010 No_date    3:05
00523>                   +       1.0 02:EXT-8A         7.14     .085 No_date    3:14
00524>                 SUM=      1.0 03:WC8            9.41     .093 No_date    3:13
00525>   ** END OF RUN :    2
00526>
00527> ********************************************************************************
00528>
00529>
00530>
00531>
00532>
00533>  RUN#:COMMAND#
00534> R0003:C00001------------------------------------------------------------------
00535>      START
00536>       [TZERO =    .00 hrs on        0]
00537>       [METOUT=   2    (1=imperial, 2=metric output)]
00538>       [NSTORM=   1 ]
00539>       [NRUN  = 0003 ]
00540> ********************************************************************************
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00541> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00542> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
00543> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
00544> #  Company     : C.F. Crozier & Associates Inc.
00545> #  License #   : 3737016
00546> #*****************************************************************************
00547> #*****************************************************************************
00548> R0003:C00002------------------------------------------------------------------
00549>       READ STORM
00550>        Filename = STORM.001
00551>        Comment  = 5-Year 6 hr Kifer Chu Chicago Storm Event
00552>        [SDT=60.00:SDUR=   6.00:PTOT=  52.70]
00553> #-----------------|-----------------------------------------------------------|
00554> #-----------------|-POST-DEVELOPMENT--------------------------------------------|
00555> #-----------------|-----------------------------------------------------------|
00556> #-----------------|-----------------------------------------------------------|
00557> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00558> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00559> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00560> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00561> #-----------------|-----------------------------------------------------------|
00562> R0003:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00563>     CALIB NASHYD          1.0 01:EXT-9A       101.80    2.169 No_date    3:49
00564>       [CN= 80.0: N= 3.00: Tp= 1.00]
00565> R0003:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00566>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.169 No_date    3:49
00567>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.160 No_date    3:53
00568>       [L/S/n=  550./2.000/.035]
00569>       {Vmax= 1.515:Dmax=  .268}
00570> R0003:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00571>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .867 No_date    3:01
00572>       [XIMP=.35:TIMP=.35]
00573>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00574>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00575>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00576> R0003:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00577>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .867 No_date    3:01
00578>                  out <=   1.0 04:Orchards      14.80     .226 No_date    3:36
00579>      {MxStoUsed=.2842E+00  m3}
00580> #-----------------|-----------------------------------------------------------|
00581> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00582> #-----------------|-----------------------------------------------------------|
00583> R0003:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00584>     ADD HYD               1.0 02:Channel      101.80    2.160 No_date    3:53
00585>                     +     1.0 04:Orchards      14.80     .226 No_date    3:36
00586>                   SUM=    1.0 05:RD19         116.60    2.377 No_date    3:51
00587> #-----------------|-----------------------------------------------------------|
00588> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00589> #-----------------|-----------------------------------------------------------|
00590> R0003:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00591>     CALIB NASHYD          1.0 01:EXT-9C         .65     .034 No_date    3:03
00592>       [CN= 82.7: N= 3.00: Tp=  .24]
00593> R0003:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00594>     CALIB NASHYD          1.0 02:9A             .58     .031 No_date    3:00
00595>       [CN= 79.0: N= 3.00: Tp=  .06]
00596> #-----------------|-----------------------CULVERT #1-------------------------|
00597> R0003:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00598>     ADD HYD               1.0 01:EXT-9C         .65     .034 No_date    3:03
00599>                     +     1.0 02:9A             .58     .031 No_date    3:00
00600>                     +     1.0 05:RD19         116.60    2.377 No_date    3:51
00601>                   SUM=    1.0 03:CULV1        117.83    2.390 No_date    3:51
00602> R0003:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00603>     CALIB NASHYD          1.0 01:9B            2.10     .032 No_date    3:06
00604>       [CN= 51.5: N= 3.00: Tp=  .28]
00605> #-----------------|-----------------------CULVERT #2-------------------------|
00606> R0003:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00607>     ADD HYD               1.0 01:9B            2.10     .032 No_date    3:06
00608>                     +     1.0 03:CULV1        117.83    2.390 No_date    3:51
00609>                   SUM=    1.0 04:WC9a         119.93    2.399 No_date    3:51
00610> #-----------------|-----------------------------------------------------------|
00611> #-----------------|-AREAS TO SWM FACILITY 1-------------------------------------|
00612> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00613> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00614> #-----------------|-----------------------------------------------------------|
00615> R0003:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00616>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .219 No_date    3:15
00617>       [CN= 74.9: N= 3.00: Tp=  .47]
00618> R0003:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00619>     CALIB STANDHYD        1.0 03:1A            2.95     .173 No_date    3:00
00620>       [XIMP=.31:TIMP=.51]
00621>       [LOSS= 2 :CN= 67.0]
00622>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00623>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00624> R0003:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00625>     ADD HYD               1.0 01:EXT-1A        8.37     .219 No_date    3:15
00626>                     +     1.0 03:1A            2.95     .173 No_date    3:00
00627>                   SUM=    1.0 06:NODE         11.32     .347 No_date    3:00
00628> R0003:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00629>     CALIB NASHYD          1.0 05:1B            1.81     .028 No_date    3:01
00630>       [CN= 44.3: N= 3.00: Tp=  .11]
00631> R0003:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00632>     ADD HYD               1.0 01:EXT-1A        8.37     .219 No_date    3:15
00633>                     +     1.0 03:1A            2.95     .173 No_date    3:00
00634>                     +     1.0 05:1B            1.81     .028 No_date    3:01
00635>                   SUM=    1.0 06:SWMF1        13.13     .374 No_date    3:00
00636> #-----------------|-----------------------------------------------------------|
00637> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00638> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00639> #-----------------|-----------------------------------------------------------|
00640> R0003:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00641>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .374 No_date    3:00
00642>                  out <=   1.0 01:SWMF-1       13.13     .028 No_date    6:15
00643>      {MxStoUsed=.1821E+00  m3}
00644> R0003:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00645>     ADD HYD               1.0 01:SWMF-1        13.13     .028 No_date    6:15
00646>                     +     1.0 04:WC9a         119.93    2.399 No_date    3:51
00647>                   SUM=    1.0 07:WC9b         133.06    2.424 No_date    3:51
00648> #-----------------|-----------------------------------------------------------|
00649> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00650> #-----------------|-----------------------------------------------------------|
00651> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00652> #-----------------|-----------------------------------------------------------|
00653> R0003:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00654>     CALIB STANDHYD        1.0 10:9D            1.32     .091 No_date    3:00
00655>       [XIMP=.35:TIMP=.71]
00656>       [LOSS= 2 :CN= 66.1]
00657>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00658>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00659> #-----------------|-----------------------------------------------------------|
00660> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
00661> #-----------------|-----------------------------------------------------------|
00662> R0003:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00663>     CALIB NASHYD          1.0 01:9C             .82     .009 No_date    3:05
00664>       [CN= 40.9: N= 3.00: Tp=  .25]
00665> #-----------------|-----------------------CULVERT #3-------------------------|
00666> R0003:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00667>     ADD HYD               1.0 07:WC9b         133.06    2.424 No_date    3:51
00668>                     +     1.0 01:9C             .82     .009 No_date    3:05
00669>                   SUM=    1.0 04:CULV3        133.88    2.426 No_date    3:51
00670> R0003:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00671>     CALIB NASHYD          1.0 01:9F             .38     .006 No_date    3:08
00672>       [CN= 52.2: N= 3.00: Tp=  .32]
00673> R0003:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00674>     CALIB NASHYD          1.0 02:EXT-9D         .78     .023 No_date    3:17
00675>       [CN= 78.8: N= 3.00: Tp=  .52]
00676> R0003:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00677>     CALIB NASHYD          1.0 03:9E            1.24     .035 No_date    3:04
00678>       [CN= 66.3: N= 3.00: Tp=  .23]
00679> R0003:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00680>     ADD HYD               1.0 01:9F             .38     .006 No_date    3:08
00681>                     +     1.0 02:EXT-9D         .78     .023 No_date    3:17
00682>                     +     1.0 03:9E            1.24     .035 No_date    3:04
00683>                     +     1.0 10:9D            1.32     .091 No_date    3:00
00684>                   SUM=    1.0 05:NODE          3.72     .149 No_date    3:00
00685> R0003:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00686>     ADD HYD               1.0 01:9F             .38     .006 No_date    3:08
00687>                     +     1.0 02:EXT-9D         .78     .023 No_date    3:17
00688>                     +     1.0 03:9E            1.24     .035 No_date    3:04
00689>                     +     1.0 04:CULV3        133.88    2.426 No_date    3:51
00690>                     +     1.0 10:9D            1.32     .091 No_date    3:00
00691>                   SUM=    1.0 05:WC9LOWER     137.60    2.467 No_date    3:50
00692> #-----------------|-----------------------------------------------------------|
00693> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00694> #-----------------|-----------------------------------------------------------|
00695> R0003:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00696>     CALIB NASHYD          1.0 01:2A            1.19     .011 No_date    3:02
00697>       [CN= 33.2: N= 3.00: Tp=  .14]
00698> R0003:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB NASHYD          1.0 02:2B            1.67     .013 No_date    3:08
00700>       [CN= 34.7: N= 3.00: Tp=  .32]
00701> R0003:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     ADD HYD               1.0 01:2A            1.19     .011 No_date    3:02
00703>                     +     1.0 02:2B            1.67     .013 No_date    3:08
00704>                   SUM=    1.0 10:2A2B          2.86     .023 No_date    3:03
00705> R0003:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00706>     CALIB STANDHYD        1.0 03:2C            1.96     .092 No_date    3:00
00707>       [XIMP=.30:TIMP=.60]
00708>       [LOSS= 2 :CN= 49.0]
00709>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00710>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00711> R0003:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00712>     CALIB STANDHYD        1.0 07:2D            3.28     .153 No_date    3:00
00713>       [XIMP=.25:TIMP=.50]
00714>       [LOSS= 2 :CN= 59.0]
00715>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00716>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00717> R0003:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00718>     CALIB STANDHYD        1.0 04:2E            1.49     .083 No_date    3:00
00719>       [XIMP=.37:TIMP=.42]
00720>       [LOSS= 2 :CN= 69.0]
00721>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00722>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00723> R0003:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00724>     ADD HYD               1.0 10:2A2B          2.86     .023 No_date    3:03
00725>                     +     1.0 03:2C            1.96     .092 No_date    3:00
00726>                     +     1.0 04:2E            1.49     .083 No_date    3:00
00727>                     +     1.0 07:2D            3.28     .153 No_date    3:00
00728>                   SUM=    1.0 06:SWMF2         9.59     .350 No_date    3:00
00729> #-----------------|-----------------------------------------------------------|
00730> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)----------|
00731> #-----------------|-----------------------------------------------------------|
00732> R0003:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00733>     ROUTE RESERVOIR ->    1.0 06:SWMF2         9.59     .350 No_date    3:00
00734>                  out <=   1.0 09:SWMF-2        9.59     .025 No_date    6:02
00735>      {MxStoUsed=.1430E+00  m3}
00736> #-----------------|-----------------------------------------------------------|
00737> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD------------------|
00738> #-----------------|-----------------------------------------------------------|
00739> R0003:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00740>     ADD HYD               1.0 09:SWMF-2        9.59     .025 No_date    6:02
00741>                     +     1.0 05:WC9LOWER     137.60    2.467 No_date    3:50
00742>                   SUM=    1.0 01:WC9c         147.19    2.491 No_date    3:50
00743> R0003:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00744>     SAVE HYD              1.0 01:WC9c         147.19    2.491 No_date    3:50
00745>        fname :WC9c.0003
00746>        remark:POST-DEV LAKESHORE
00747> #-----------------|-----------------------------------------------------------|
00748> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00749> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00750> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00751> #-----------------|-----------------------------------------------------------|
00752> R0003:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00753>     CALIB NASHYD          1.0 01:8A            2.27     .021 No_date    3:04
00754>       [CN= 36.2: N= 3.00: Tp=  .23]
00755> R0003:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00756>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .165 No_date    3:13
00757>       [CN= 68.9: N= 3.00: Tp=  .44]
00758> #-----------------|-----------------------------------------------------------|
00759> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
00760> #-----------------|-----------------------------------------------------------|
00761> R0003:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00762>     ADD HYD               1.0 01:8A            2.27     .021 No_date    3:04
00763>                     +     1.0 02:EXT-8A        7.14     .165 No_date    3:13
00764>                   SUM=    1.0 03:WC8           9.41     .183 No_date    3:11
00765>   ** END OF RUN :    3
00766>
00767> *****************************************************************************
00768>
00769>
00770>
00771>
00772>
00773>  RUN#:COMMAND#
00774> R0004:C00001------------------------------------------------------------------
00775>      START
00776>       [TZERO =    .00 hrs on        0]
00777>       [METOUT=   2    (1=imperial, 2=metric output)]
00778>       [NSTORM=   1 ]
00779>       [NRUN   = 0004 ]
00780> #*****************************************************************************
00781> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00782> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
00783> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
00784> #  Company     : C.F. Crozier & Associates Inc.
00785> #  License #   : 3737016
00786> #*****************************************************************************
00787> #*****************************************************************************
00788> R0004:C00002------------------------------------------------------------------
00789>       READ STORM
00790>        Filename = STORM.001
00791>        Comment  = 10yr 6 hr Kifer Chu Chicago Storm Event
00792>        [SDT=60.00:SDUR=   6.00:PTOT=  66.00]
00793> #-----------------|-----------------------------------------------------------|
00794> #-----------------|-POST-DEVELOPMENT--------------------------------------------|
00795> #-----------------|-----------------------------------------------------------|
00796> #-----------------|-----------------------------------------------------------|
00797> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00798> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00799> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00800> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00801> #-----------------|-----------------------------------------------------------|
00802> R0004:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00803>     CALIB NASHYD          1.0 01:EXT-9A       101.80    3.210 No_date    3:47
00804>       [CN= 80.0: N= 3.00: Tp= 1.00]
00805> R0004:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00806>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    3.210 No_date    3:47
00807>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.198 No_date    3:51
00808>       [L/S/n=  550./2.000/.035]
00809>       {Vmax= 1.754:Dmax=  .336}
00810> R0004:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
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00811>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.268 No_date    3:01
00812>       [XIMP=.35:TIMP=.35]
00813>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00814>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00815>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00816> R0004:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00817>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.268 No_date    3:01
00818>                  out <=    1.0 04:Orchards      14.80     .515 No_date    3:22
00819>      {MxStoUsed=.3704E+00  m3}
00820> #-----------------|-------------------------------------------------------------|
00821> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00822> #-----------------|-------------------------------------------------------------|
00823> R0004:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00824>     ADD HYD               1.0 02:Channel      101.80    3.198 No_date    3:51
00825>                    +      1.0 04:Orchards      14.80     .515 No_date    3:22
00826>                  SUM=     1.0 05:RD19         116.60    3.614 No_date    3:46
00827> #-----------------|-------------------------------------------------------------|
00828> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00829> #-----------------|-------------------------------------------------------------|
00830> R0004:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00831>     CALIB NASHYD          1.0 01:EXT-9C         .65     .049 No_date    3:03
00832>       [CN= 82.7: N= 3.00: Tp=  .24]
00833> R0004:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00834>     CALIB NASHYD          1.0 02:9A             .58     .044 No_date    3:00
00835>       [CN= 79.0: N= 3.00: Tp=  .06]
00836> #-----------------|-----------------------CULVERT #1-----------------------|
00837> R0004:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00838>     ADD HYD               1.0 01:EXT-9C         .65     .049 No_date    3:03
00839>                    +      1.0 02:9A             .58     .044 No_date    3:00
00840>                    +      1.0 05:RD19         116.60    3.614 No_date    3:46
00841>                  SUM=     1.0 03:CULV1        117.83    3.632 No_date    3:46
00842> R0004:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00843>     CALIB NASHYD          1.0 01:9B            2.10     .052 No_date    3:06
00844>       [CN= 51.5: N= 3.00: Tp=  .28]
00845> #-----------------|-----------------------CULVERT #2-----------------------|
00846> R0004:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00847>     ADD HYD               1.0 01:9B            2.10     .052 No_date    3:06
00848>                    +      1.0 03:CULV1        117.83    3.632 No_date    3:46
00849>                  SUM=     1.0 04:WC9a         119.93    3.648 No_date    3:45
00850> #-----------------|-------------------------------------------------------------|
00851> #-----------------|-AREAS TO SWM FACILITY 1---------------------------------|
00852> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00853> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00854> #-----------------|-------------------------------------------------------------|
00855> R0004:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00856>     CALIB NASHYD          1.0 01:EXT-1A         8.37     .341 No_date    3:14
00857>       [CN= 74.9: N= 3.00: Tp=  .47]
00858> R0004:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00859>     CALIB STANDHYD        1.0 03:1A            2.95     .239 No_date    3:00
00860>       [XIMP=.31:TIMP=.51]
00861>       [LOSS= 2 :CN= 67.0]
00862>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00863>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00864> R0004:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00865>     ADD HYD               1.0 01:EXT-1A         8.37     .341 No_date    3:14
00866>                    +      1.0 03:1A            2.95     .239 No_date    3:00
00867>                  SUM=     1.0 06:NODE         11.32     .519 No_date    3:00
00868> R0004:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00869>     CALIB NASHYD          1.0 05:1B            1.81     .044 No_date    3:01
00870>       [CN= 44.3: N= 3.00: Tp=  .11]
00871> R0004:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00872>     ADD HYD               1.0 01:EXT-1A         8.37     .341 No_date    3:14
00873>                    +      1.0 03:1A            2.95     .239 No_date    3:00
00874>                    +      1.0 05:1B            1.81     .044 No_date    3:01
00875>                  SUM=     1.0 06:SWMF1        13.13     .563 No_date    3:00
00876> #-----------------|-------------------------------------------------------------|
00877> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00878> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00879> #-----------------|-------------------------------------------------------------|
00880> R0004:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00881>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .563 No_date    3:00
00882>                  out <=    1.0 01:SWMF-1       13.13     .033 No_date    6:21
00883>      {MxStoUsed=.2759E+00  m3}
00884> R0004:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00885>     ADD HYD               1.0 01:SWMF-1        13.13     .033 No_date    6:21
00886>                    +      1.0 04:WC9a         119.93    3.648 No_date    3:45
00887>                  SUM=     1.0 07:WC9b         133.06    3.678 No_date    3:46
00888> #-----------------|-------------------------------------------------------------|
00889> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00890> #-----------------|-------------------------------------------------------------|
00891> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00892> #-----------------|-------------------------------------------------------------|
00893> R0004:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00894>     CALIB STANDHYD        1.0 10:9D            1.32     .123 No_date    3:00
00895>       [XIMP=.35:TIMP=.71]
00896>       [LOSS= 2 :CN= 66.1]
00897>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00898>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00899> #-----------------|-------------------------------------------------------------|
00900> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
00901> #-----------------|-------------------------------------------------------------|
00902> R0004:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00903>     CALIB NASHYD          1.0 01:9C             .82     .015 No_date    3:05
00904>       [CN= 40.9: N= 3.00: Tp=  .25]
00905> #-----------------|-----------------------CULVERT #3-----------------------|
00906> R0004:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00907>     ADD HYD               1.0 07:WC9b         133.06    3.678 No_date    3:46
00908>                    +      1.0 01:9C             .82     .015 No_date    3:05
00909>                  SUM=     1.0 04:CULV3        133.88    3.682 No_date    3:45
00910> R0004:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00911>     CALIB NASHYD          1.0 01:9F             .38     .009 No_date    3:07
00912>       [CN= 52.2: N= 3.00: Tp=  .32]
00913> R0004:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00914>     CALIB NASHYD          1.0 02:EXT-9D         .78     .035 No_date    3:16
00915>       [CN= 78.8: N= 3.00: Tp=  .52]
00916> R0004:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00917>     CALIB NASHYD          1.0 03:9E            1.24     .054 No_date    3:04
00918>       [CN= 66.3: N= 3.00: Tp=  .23]
00919> R0004:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00920>     ADD HYD               1.0 01:9F             .38     .009 No_date    3:07
00921>                    +      1.0 02:EXT-9D         .78     .035 No_date    3:16
00922>                    +      1.0 03:9E            1.24     .054 No_date    3:04
00923>                    +      1.0 10:9D            1.32     .123 No_date    3:00
00924>                  SUM=     1.0 05:NODE          3.72     .212 No_date    3:00
00925> R0004:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00926>     ADD HYD               1.0 01:9F             .38     .009 No_date    3:07
00927>                    +      1.0 02:EXT-9D         .78     .035 No_date    3:16
00928>                    +      1.0 03:9E            1.24     .054 No_date    3:04
00929>                    +      1.0 04:CULV3        133.88    3.682 No_date    3:45
00930>                    +      1.0 10:9D            1.32     .123 No_date    3:00
00931>                  SUM=     1.0 05:WC9LOWER     137.60    3.744 No_date    3:45
00932> #-----------------|-------------------------------------------------------------|
00933> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00934> #-----------------|-------------------------------------------------------------|
00935> R0004:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00936>     CALIB NASHYD          1.0 01:2A            1.19     .018 No_date    3:02
00937>       [CN= 33.2: N= 3.00: Tp=  .14]
00938> R0004:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00939>     CALIB NASHYD          1.0 02:2B            1.67     .021 No_date    3:08
00940>       [CN= 34.7: N= 3.00: Tp=  .32]
00941> R0004:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00942>     ADD HYD               1.0 01:2A            1.19     .018 No_date    3:02
00943>                    +      1.0 02:2B            1.67     .021 No_date    3:08
00944>                  SUM=     1.0 10:2A2B          2.86     .038 No_date    3:03
00945> R0004:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00946>     CALIB STANDHYD        1.0 03:2C            1.96     .128 No_date    3:00
00947>       [XIMP=.30:TIMP=.60]
00948>       [LOSS= 2 :CN= 49.0]
00949>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00950>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00951> R0004:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00952>     CALIB STANDHYD        1.0 07:2D            3.28     .216 No_date    3:00
00953>       [XIMP=.25:TIMP=.50]
00954>       [LOSS= 2 :CN= 59.0]
00955>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00956>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00957> R0004:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00958>     CALIB STANDHYD        1.0 04:2E            1.49     .114 No_date    3:00
00959>       [XIMP=.37:TIMP=.42]
00960>       [LOSS= 2 :CN= 69.0]
00961>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00962>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00963> R0004:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00964>     ADD HYD               1.0 10:2A2B          2.86     .038 No_date    3:03
00965>                    +      1.0 03:2C            1.96     .128 No_date    3:00
00966>                    +      1.0 04:2E            1.49     .114 No_date    3:00
00967>                    +      1.0 07:2D            3.28     .216 No_date    3:00
00968>                  SUM=     1.0 06:SWMF2         9.59     .494 No_date    3:00
00969> #-----------------|-------------------------------------------------------------|
00970> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)----------|
00971> #-----------------|-------------------------------------------------------------|
00972> R0004:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00973>     ROUTE RESERVOIR ->    1.0 06:SWMF2         9.59     .494 No_date    3:00
00974>                  out <=    1.0 09:SWMF-2        9.59     .039 No_date    5:21
00975>      {MxStoUsed=.1967E+00  m3}
00976> #-----------------|-------------------------------------------------------------|
00977> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD------------------|
00978> #-----------------|-------------------------------------------------------------|
00979> R0004:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00980>     ADD HYD               1.0 09:SWMF-2        9.59     .039 No_date    5:21
00981>                    +      1.0 05:WC9LOWER     137.60    3.744 No_date    3:45
00982>                  SUM=     1.0 01:WC9c         147.19    3.773 No_date    3:45
00983> R0004:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00984>     SAVE HYD              1.0 01:WC9c         147.19    3.773 No_date    3:45
00985>       fname :WC9c.0004
00986>       remark:POST-DEV LAKESHORE
00987> #-----------------|-------------------------------------------------------------|
00988> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00989> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00990> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00991> #-----------------|-------------------------------------------------------------|
00992> R0004:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00993>     CALIB NASHYD          1.0 01:8A            2.27     .035 No_date    3:04
00994>       [CN= 36.2: N= 3.00: Tp=  .23]
00995> R0004:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00996>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .257 No_date    3:13
00997>       [CN= 68.9: N= 3.00: Tp=  .44]
00998> #-----------------|-------------------------------------------------------------|
00999> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
01000> #-----------------|-------------------------------------------------------------|
01001> R0004:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01002>     ADD HYD               1.0 01:8A            2.27     .035 No_date    3:04
01003>                    +      1.0 02:EXT-8A        7.14     .257 No_date    3:13
01004>                  SUM=     1.0 03:WC8           9.41     .287 No_date    3:11
01005>   ** END OF RUN :    4
01006>
01007> ************************************************************************
01008>
01009>
01010>
01011>
01012>
01013>  RUN#:COMMAND#
01014> R0005:C00001------------------------------------------------------------------
01015>      START
01016>       [TZERO =    .00 hrs on        0]
01017>       [METOUT=   2    (1=imperial, 2=metric output)]
01018>       [NSTORM=   1 ]
01019>       [NRUN  = 0005 ]
01020> #**********************************************************************
01021> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
01022> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
01023> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
01024> #  Company     : C.F. Crozier & Associates Inc.
01025> #  License #   : 3737016
01026> #**********************************************************************
01027> #**********************************************************************
01028> R0005:C00002------------------------------------------------------------------
01029>      READ STORM
01030>       Filename = STORM.001
01031>       Comment  = 25-Year 6 hr Kifer Chu Chicago Storm Event
01032>       [SDT=60.00:SDUR=   6.00:PTOT=  77.90]
01033> #-----------------|-------------------------------------------------------------|
01034> #-----------------|-POST-DEVELOPMENT-------------------------------------------|
01035> #-----------------|-------------------------------------------------------------|
01036> #-----------------|-------------------------------------------------------------|
01037> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
01038> #-----------------|-Per 'The Shaeds' FSWM Report-------------------------------|
01039> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
01040> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01041> #-----------------|-------------------------------------------------------------|
01042> R0005:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01043>     CALIB NASHYD          1.0 01:EXT-9A       101.80    4.139 No_date    3:46
01044>       [CN= 80.0: N= 3.00: Tp= 1.00]
01045> R0005:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01046>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    4.139 No_date    3:46
01047>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    4.128 No_date    3:50
01048>       [L/S/n=  550./2.000/.035]
01049>       (Vmax= 1.895:Dmax=  .385)
01050> R0005:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01051>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.607 No_date    3:00
01052>       [XIMP=.35:TIMP=.35]
01053>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01054>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01055>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01056> R0005:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01057>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.607 No_date    3:00
01058>                  out <=    1.0 04:Orchards      14.80     .796 No_date    3:17
01059>      {MxStoUsed=.4411E+00  m3}
01060> #-----------------|-------------------------------------------------------------|
01061> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
01062> #-----------------|-------------------------------------------------------------|
01063> R0005:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01064>     ADD HYD               1.0 02:Channel      101.80    4.128 No_date    3:50
01065>                    +      1.0 04:Orchards      14.80     .796 No_date    3:17
01066>                  SUM=     1.0 05:RD19         116.60    4.714 No_date    3:46
01067> #-----------------|-------------------------------------------------------------|
01068> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
01069> #-----------------|-------------------------------------------------------------|
01070> R0005:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01071>     CALIB NASHYD          1.0 01:EXT-9C         .65     .061 No_date    3:03
01072>       [CN= 82.7: N= 3.00: Tp=  .24]
01073> R0005:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01074>     CALIB NASHYD          1.0 02:9A             .58     .055 No_date    3:00
01075>       [CN= 79.0: N= 3.00: Tp=  .06]
01076> #-----------------|-----------------------CULVERT #1-----------------------|
01077> R0005:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01078>     ADD HYD               1.0 01:EXT-9C         .65     .061 No_date    3:03
01079>                    +      1.0 02:9A             .58     .055 No_date    3:00
01080>                    +      1.0 05:RD19         116.60    4.714 No_date    3:46
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```
01081>                SUM=     1.0 03:CULV1        117.83    4.738 No_date    3:42
01082> R0005:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01083>     CALIB NASHYD          1.0 01:9B            2.10     .070 No_date    3:06
01084>       [CN= 51.5: N= 3.00: Tp=  .28]
01085> #-----------------|----------------------CULVERT #2-------------------------|
01086> R0005:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01087>     ADD HYD               1.0 01:9B            2.10     .070 No_date    3:06
01088>                      +    1.0 03:CULV1        117.83    4.738 No_date    3:42
01089>                SUM=     1.0 04:WC9a         119.93    4.762 No_date    3:42
01090> #-----------------|-------------------------------------------------------|
01091> #-----------------|-AREAS TO SWM FACILITY 1-----------------------------|
01092> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
01093> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
01094> #-----------------|-------------------------------------------------------|
01095> R0005:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01096>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .449 No_date    3:14
01097>       [CN= 74.9: N= 3.00: Tp=  .47]
01098> R0005:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01099>     CALIB STANDHYD        1.0 03:1A            2.95     .291 No_date    3:00
01100>       [XIMP=.31:TIMP=.51]
01101>       [LOSS= 2 :CN= 67.0]
01102>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01103>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01104> R0005:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01105>     ADD HYD               1.0 01:EXT-1A        8.37     .449 No_date    3:14
01106>                      +    1.0 03:1A            2.95     .291 No_date    3:00
01107>                SUM=     1.0 06:NODE         11.32     .669 No_date    3:00
01108> R0005:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01109>     CALIB NASHYD          1.0 05:1B            1.81     .060 No_date    3:01
01110>       [CN= 44.3: N= 3.00: Tp=  .11]
01111> R0005:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01112>     ADD HYD               1.0 01:EXT-1A        8.37     .449 No_date    3:14
01113>                      +    1.0 03:1A            2.95     .291 No_date    3:00
01114>                      +    1.0 05:1B            1.81     .060 No_date    3:01
01115>                SUM=     1.0 06:SWMF1        13.13     .728 No_date    3:00
01116> #-----------------|-------------------------------------------------------|
01117> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01118> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
01119> #-----------------|-------------------------------------------------------|
01120> R0005:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01121>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .728 No_date    3:00
01122>                   out <=    1.0 01:SWMF-1       13.13     .049 No_date    6:17
01123>      {MxStoUsed=.3648E+00  m3}
01124> R0005:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01125>     ADD HYD               1.0 01:SWMF-1        13.13     .049 No_date    6:17
01126>                      +    1.0 04:WC9a         119.93    4.762 No_date    3:42
01127>                SUM=     1.0 07:WC9b         133.06    4.791 No_date    3:42
01128> #-----------------|-------------------------------------------------------|
01129> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
01130> #-----------------|-------------------------------------------------------|
01131> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
01132> #-----------------|-------------------------------------------------------|
01133> R0005:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01134>     CALIB STANDHYD        1.0 10:9D            1.32     .148 No_date    3:00
01135>       [XIMP=.35:TIMP=.71]
01136>       [LOSS= 2 :CN= 66.1]
01137>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01138>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01139> #-----------------|-------------------------------------------------------|
01140> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
01141> #-----------------|-------------------------------------------------------|
01142> R0005:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01143>     CALIB NASHYD          1.0 01:9C             .82     .020 No_date    3:05
01144>       [CN= 40.9: N= 3.00: Tp=  .25]
01145> #-----------------|----------------------CULVERT #3-------------------------|
01146> R0005:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01147>     ADD HYD               1.0 07:WC9b         133.06    4.795 No_date    3:42
01148>                      +    1.0 01:9C             .82     .020 No_date    3:05
01149>                SUM=     1.0 04:CULV3        133.88    4.801 No_date    3:42
01150> R0005:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01151>     CALIB NASHYD          1.0 01:9F             .38     .013 No_date    3:07
01152>       [CN= 52.2: N= 3.00: Tp=  .32]
01153> R0005:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01154>     CALIB NASHYD          1.0 02:EXT-9D         .78     .046 No_date    3:16
01155>       [CN= 78.8: N= 3.00: Tp=  .52]
01156> R0005:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01157>     CALIB NASHYD          1.0 03:9E            1.24     .071 No_date    3:03
01158>       [CN= 66.3: N= 3.00: Tp=  .23]
01159> R0005:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01160>     ADD HYD               1.0 01:9F             .38     .013 No_date    3:07
01161>                      +    1.0 02:EXT-9D         .78     .046 No_date    3:16
01162>                      +    1.0 03:9E            1.24     .071 No_date    3:03
01163>                      +    1.0 10:9D            1.32     .148 No_date    3:00
01164>                SUM=     1.0 05:NODE          3.72     .267 No_date    3:00
01165> R0005:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01166>     ADD HYD               1.0 01:9F             .38     .013 No_date    3:07
01167>                      +    1.0 02:EXT-9D         .78     .046 No_date    3:16
01168>                      +    1.0 03:9E            1.24     .071 No_date    3:03
01169>                      +    1.0 04:CULV3        133.88    4.801 No_date    3:42
01170>                      +    1.0 10:9D            1.32     .148 No_date    3:00
01171>                SUM=     1.0 05:WC9LOWER     137.60    4.885 No_date    3:42
01172> #-----------------|-------------------------------------------------------|
01173> #-----------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------|
01174> #-----------------|-------------------------------------------------------|
01175> R0005:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01176>     CALIB NASHYD          1.0 01:2A            1.19     .025 No_date    3:02
01177>       [CN= 33.2: N= 3.00: Tp=  .14]
01178> R0005:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01179>     CALIB NASHYD          1.0 02:2B            1.67     .029 No_date    3:08
01180>       [CN= 34.7: N= 3.00: Tp=  .32]
01181> R0005:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01182>     ADD HYD               1.0 01:2A            1.19     .025 No_date    3:02
01183>                      +    1.0 02:2B            1.67     .029 No_date    3:08
01184>                SUM=     1.0 10:2A2B          2.86     .052 No_date    3:03
01185> R0005:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01186>     CALIB STANDHYD        1.0 03:2C            1.96     .158 No_date    3:00
01187>       [XIMP=.30:TIMP=.60]
01188>       [LOSS= 2 :CN= 49.0]
01189>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01190>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01191> R0005:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01192>     CALIB STANDHYD        1.0 07:2D            3.28     .269 No_date    3:00
01193>       [XIMP=.25:TIMP=.50]
01194>       [LOSS= 2 :CN= 59.0]
01195>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01196>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01197> R0005:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01198>     CALIB STANDHYD        1.0 04:2E            1.49     .139 No_date    3:00
01199>       [XIMP=.37:TIMP=.42]
01200>       [LOSS= 2 :CN= 69.0]
01201>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01202>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01203> R0005:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01204>     ADD HYD               1.0 10:2A2B          2.86     .052 No_date    3:03
01205>                      +    1.0 03:2C            1.96     .158 No_date    3:00
01206>                      +    1.0 04:2E            1.49     .139 No_date    3:00
01207>                      +    1.0 07:2D            3.28     .269 No_date    3:00
01208>                SUM=     1.0 06:SWMF2         9.59     .617 No_date    3:00
01209> #-----------------|-------------------------------------------------------|
01210> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01211> #-----------------|-------------------------------------------------------|
01212> R0005:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01213>     ROUTE RESERVOIR ->    1.0 06:SWMF2         9.59     .617 No_date    3:00
01214>                   out <=    1.0 09:SWMF-2        9.59     .066 No_date    5:02
01215>      {MxStoUsed=.2354E+00  m3}
01216> #-----------------|-------------------------------------------------------|
01217> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
01218> #-----------------|-------------------------------------------------------|
01219> R0005:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01220>     ADD HYD               1.0 09:SWMF-2        9.59     .066 No_date    5:02
01221>                      +    1.0 05:WC9LOWER     137.60    4.885 No_date    3:42
01222>                SUM=     1.0 01:WC9c         147.19    4.942 No_date    3:42
01223> R0005:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01224>     SAVE HYD              1.0 01:WC9c         147.19    4.942 No_date    3:42
01225>       fname :WC9c.0005
01226>       remark:POST-DEV LAKESHORE
01227> #-----------------|-------------------------------------------------------|
01228> #-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
01229> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
01230> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
01231> #-----------------|-------------------------------------------------------|
01232> R0005:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01233>     CALIB NASHYD          1.0 01:8A            2.27     .048 No_date    3:04
01234>       [CN= 36.2: N= 3.00: Tp=  .23]
01235> R0005:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01236>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .340 No_date    3:12
01237>       [CN= 68.9: N= 3.00: Tp=  .44]
01238> #-----------------|-------------------------------------------------------|
01239> #-----------------|--WATERCOURSE 8 TOTAL--------------------------------------|
01240> #-----------------|-------------------------------------------------------|
01241> R0005:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01242>     ADD HYD               1.0 01:8A            2.27     .048 No_date    3:04
01243>                      +    1.0 02:EXT-8A        7.14     .340 No_date    3:12
01244>                SUM=     1.0 03:WC8           9.41     .382 No_date    3:10
01245>   ** END OF RUN :    5
01246>
01247> ****************************************************************************
01248>
01249>
01250>
01251>
01252>
01253>  RUN#:COMMAND#
01254> R0006:C00001------------------------------------------------------------------
01255>      START
01256>       [TZERO =    .00 hrs on       0]
01257>       [METOUT=   2    (1=imperial, 2=metric output)]
01258>       [NSTORM=   1 ]
01259>       [NRUN  = 0006 ]
01260> #****************************************************************************
01261> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
01262> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
01263> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
01264> #  Company     : C.F. Crozier & Associates Inc.
01265> #  License #   : 3737016
01266> #****************************************************************************
01267> #****************************************************************************
01268> R0006:C00002------------------------------------------------------------------
01269>      READ STORM
01270>       Filename = STORM.001
01271>       Comment  = 50-Year 6 hr Kifer Chu Chicago Storm Event
01272>       [SDT=60.00:SDUR=   6.00:PTOT=  83.90]
01273> #-----------------|-------------------------------------------------------|
01274> #-----------------|-POST-DEVELOPMENT-------------------------------------|
01275> #-----------------|-------------------------------------------------------|
01276> #-----------------|-------------------------------------------------------|
01277> #-----------------|-Subwatershed 9 External Drainage Area-------------------|
01278> #-----------------|-Per 'The Orchards' FSSWM Report--------------------------|
01279> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
01280> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01281> #-----------------|-------------------------------------------------------|
01282> R0006:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01283>     CALIB NASHYD          1.0 01:EXT-9A       101.80    4.631 No_date    3:46
01284>       [CN= 80.0: N= 3.00: Tp= 1.00]
01285> R0006:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01286>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    4.631 No_date    3:46
01287>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    4.621 No_date    3:49
01288>       [L/S/n=  550./2.000/.035]
01289>       {Vmax= 1.979:Dmax=  .411}
01290> R0006:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01291>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.769 No_date    3:00
01292>       [XIMP=.35:TIMP=.35]
01293>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01294>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01295>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01296> R0006:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01297>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.769 No_date    3:00
01298>                   out <=    1.0 04:Orchards      14.80     .927 No_date    3:16
01299>      {MxStoUsed=.4726E+00  m3}
01300> #-----------------|-------------------------------------------------------|
01301> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
01302> #-----------------|-------------------------------------------------------|
01303> R0006:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01304>     ADD HYD               1.0 02:Channel      101.80    4.621 No_date    3:49
01305>                      +    1.0 04:Orchards      14.80     .927 No_date    3:16
01306>                SUM=     1.0 05:RD19         116.60    5.289 No_date    3:41
01307> #-----------------|-------------------------------------------------------|
01308> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-------------|
01309> #-----------------|-------------------------------------------------------|
01310> R0006:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01311>     CALIB NASHYD          1.0 01:EXT-9C         .65     .067 No_date    3:03
01312>       [CN= 82.7: N= 3.00: Tp=  .24]
01313> R0006:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01314>     CALIB NASHYD          1.0 02:9A             .58     .061 No_date    3:00
01315>       [CN= 79.0: N= 3.00: Tp=  .06]
01316> #-----------------|----------------------CULVERT #1-------------------------|
01317> R0006:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01318>     ADD HYD               1.0 01:EXT-9C         .65     .067 No_date    3:03
01319>                      +    1.0 02:9A             .58     .061 No_date    3:00
01320>                      +    1.0 05:RD19         116.60    5.289 No_date    3:41
01321>                SUM=     1.0 03:CULV1        117.83    5.317 No_date    3:41
01322> R0006:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01323>     CALIB NASHYD          1.0 01:9B            2.10     .080 No_date    3:06
01324>       [CN= 51.5: N= 3.00: Tp=  .28]
01325> #-----------------|----------------------CULVERT #2-------------------------|
01326> R0006:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01327>     ADD HYD               1.0 01:9B            2.10     .080 No_date    3:06
01328>                      +    1.0 03:CULV1        117.83    5.317 No_date    3:41
01329>                SUM=     1.0 04:WC9a         119.93    5.345 No_date    3:41
01330> #-----------------|-------------------------------------------------------|
01331> #-----------------|-AREAS TO SWM FACILITY 1-----------------------------|
01332> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
01333> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
01334> #-----------------|-------------------------------------------------------|
01335> R0006:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01336>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .508 No_date    3:13
01337>       [CN= 74.9: N= 3.00: Tp=  .47]
01338> R0006:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01339>     CALIB STANDHYD        1.0 03:1A            2.95     .320 No_date    3:00
01340>       [XIMP=.31:TIMP=.51]
01341>       [LOSS= 2 :CN= 67.0]
01342>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01343>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01344> R0006:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01345>     ADD HYD               1.0 01:EXT-1A        8.37     .508 No_date    3:13
01346>                      +    1.0 03:1A            2.95     .320 No_date    3:00
01347>                SUM=     1.0 06:NODE         11.32     .751 No_date    3:00
01348> R0006:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01349>     CALIB NASHYD          1.0 05:1B            1.81     .068 No_date    3:01
01350>       [CN= 44.3: N= 3.00: Tp=  .11]
```

```
01351> R0006:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01352>     ADD HYD              1.0 01:EXT-1A        8.37     .508 No_date    3:13
01353>                    +     1.0 03:1A            2.95     .320 No_date    3:00
01354>                    +     1.0 05:1B            1.81     .068 No_date    3:01
01355>                  SUM=    1.0 06:SWMF1        13.13     .820 No_date    3:00
01356> #-----------------|-------------------------------------------------------------|
01357> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01358> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01359> #-----------------|-------------------------------------------------------------|
01360> R0006:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01361>     ROUTE RESERVOIR ->   1.0 06:SWMF1        13.13     .820 No_date    3:00
01362>                  out <=  1.0 01:SWMF-1       13.13     .067 No_date    6:11
01363>      (MxStoUsed=.4026E+00  m3)
01364> R0006:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01365>     ADD HYD              1.0 01:SWMF-1        13.13     .067 No_date    6:11
01366>                    +     1.0 04:WC9a         119.93    5.345 No_date    3:41
01367>                  SUM=    1.0 07:WC9b         133.06    5.379 No_date    3:41
01368> #-----------------|-------------------------------------------------------------|
01369> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
01370> #-----------------|-------------------------------------------------------------|
01371> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
01372> #-----------------|-------------------------------------------------------------|
01373> R0006:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01374>     CALIB STANDHYD       1.0 10:9D            1.32     .162 No_date    3:00
01375>       [XIMP=.35:TIMP=.71]
01376>       [LOSS= 2 :CN= 66.1]
01377>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01378>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01379> #-----------------|-------------------------------------------------------------|
01380> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
01381> #-----------------|-------------------------------------------------------------|
01382> R0006:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01383>     CALIB NASHYD         1.0 01:9C             .82     .023 No_date    3:05
01384>       [CN= 40.9: N= 3.00: Tp=  .25]
01385> #-----------------|-------------------------CULVERT #3-------------------------|
01386> R0006:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01387>     ADD HYD              1.0 07:WC9b         133.06    5.379 No_date    3:41
01388>                    +     1.0 01:9C             .82     .023 No_date    3:05
01389>                  SUM=    1.0 04:CULV3        133.88    5.386 No_date    3:41
01390> R0006:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01391>     CALIB NASHYD         1.0 01:9F             .38     .015 No_date    3:07
01392>       [CN= 52.2: N= 3.00: Tp=  .32]
01393> R0006:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01394>     CALIB NASHYD         1.0 02:EXT-9D         .78     .051 No_date    3:15
01395>       [CN= 78.8: N= 3.00: Tp=  .52]
01396> R0006:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01397>     CALIB NASHYD         1.0 03:9E            1.24     .081 No_date    3:03
01398>       [CN= 66.3: N= 3.00: Tp=  .23]
01399> R0006:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01400>     ADD HYD              1.0 01:9F             .38     .015 No_date    3:07
01401>                    +     1.0 02:EXT-9D         .78     .051 No_date    3:15
01402>                    +     1.0 03:9E            1.24     .081 No_date    3:03
01403>                    +     1.0 10:9D            1.32     .162 No_date    3:00
01404>                  SUM=    1.0 05:NODE          3.72     .296 No_date    3:00
01405> R0006:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01406>     ADD HYD              1.0 01:9F             .38     .015 No_date    3:07
01407>                    +     1.0 02:EXT-9D         .78     .051 No_date    3:15
01408>                    +     1.0 03:9E            1.24     .081 No_date    3:03
01409>                    +     1.0 04:CULV3        133.88    5.386 No_date    3:41
01410>                    +     1.0 10:9D            1.32     .162 No_date    3:00
01411>                  SUM=    1.0 05:WC9LOWER     137.60    5.481 No_date    3:41
01412> #-----------------|-------------------------------------------------------------|
01413> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
01414> #-----------------|-------------------------------------------------------------|
01415> R0006:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01416>     CALIB NASHYD         1.0 01:2A            1.19     .029 No_date    3:01
01417>       [CN= 33.2: N= 3.00: Tp=  .14]
01418> R0006:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01419>     CALIB NASHYD         1.0 02:2B            1.67     .034 No_date    3:08
01420>       [CN= 34.7: N= 3.00: Tp=  .32]
01421> R0006:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01422>     ADD HYD              1.0 01:2A            1.19     .029 No_date    3:01
01423>                    +     1.0 02:2B            1.67     .034 No_date    3:08
01424>                  SUM=    1.0 10:2A2B          2.86     .061 No_date    3:03
01425> R0006:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01426>     CALIB STANDHYD       1.0 03:2C            1.96     .174 No_date    3:00
01427>       [XIMP=.30:TIMP=.60]
01428>       [LOSS= 2 :CN= 49.0]
01429>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01430>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01431> R0006:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01432>     CALIB STANDHYD       1.0 07:2D            3.28     .299 No_date    3:00
01433>       [XIMP=.25:TIMP=.50]
01434>       [LOSS= 2 :CN= 59.0]
01435>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01436>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01437> R0006:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01438>     CALIB STANDHYD       1.0 04:2E            1.49     .154 No_date    3:00
01439>       [XIMP=.37:TIMP=.42]
01440>       [LOSS= 2 :CN= 69.0]
01441>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01442>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01443> R0006:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01444>     ADD HYD              1.0 10:2A2B          2.86     .061 No_date    3:03
01445>                    +     1.0 03:2C            1.96     .174 No_date    3:00
01446>                    +     1.0 04:2E            1.49     .154 No_date    3:00
01447>                    +     1.0 07:2D            3.28     .299 No_date    3:00
01448>                  SUM=    1.0 06:SWMF2         9.59     .685 No_date    3:00
01449> #-----------------|-------------------------------------------------------------|
01450> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)----------|
01451> #-----------------|-------------------------------------------------------------|
01452> R0006:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01453>     ROUTE RESERVOIR ->   1.0 06:SWMF2         9.59     .685 No_date    3:00
01454>                  out <=  1.0 09:SWMF-2        9.59     .085 No_date    4:21
01455>      (MxStoUsed=.2541E+00  m3)
01456> #-----------------|-------------------------------------------------------------|
01457> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD------------------|
01458> #-----------------|-------------------------------------------------------------|
01459> R0006:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01460>     ADD HYD              1.0 09:SWMF-2        9.59     .085 No_date    4:21
01461>                    +     1.0 05:WC9LOWER     137.60    5.481 No_date    3:41
01462>                  SUM=    1.0 01:WC9c         147.19    5.555 No_date    3:41
01463> R0006:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01464>     SAVE HYD             1.0 01:WC9c         147.19    5.555 No_date    3:41
01465>       fname :WC9c.0006
01466>       remark:POST-DEV LAKESHORE
01467> #-----------------|-------------------------------------------------------------|
01468> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
01469> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
01470> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
01471> #-----------------|-------------------------------------------------------------|
01472> R0006:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01473>     CALIB NASHYD         1.0 01:8A            2.27     .056 No_date    3:04
01474>       [CN= 36.2: N= 3.00: Tp=  .23]
01475> R0006:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01476>     CALIB NASHYD         1.0 02:EXT-8A        7.14     .386 No_date    3:12
01477>       [CN= 68.9: N= 3.00: Tp=  .44]
01478> #-----------------|-------------------------------------------------------------|
01479> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
01480> #-----------------|-------------------------------------------------------------|
01481> R0006:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01482>     ADD HYD              1.0 01:8A            2.27     .056 No_date    3:04
01483>                    +     1.0 02:EXT-8A        7.14     .386 No_date    3:12
01484>                  SUM=    1.0 03:WC8           9.41     .435 No_date    3:10
01485>   ** END OF RUN :    6
01486>
01487> ************************************************************************
01488>
01489>
01490>
01491>
01492>
01493>  RUN#:COMMAND#
01494> R0007:C00001------------------------------------------------------------------
01495>      START
01496>        [ZEERO =    .00 hrs on        0]
01497>        [METOUT=   2    (1=imperial, 2=metric output)]
01498>        [NSTORM=   1 ]
01499>        [NRUN  = 0007 ]
01500> #*********************************************************************
01501> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
01502> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
01503> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
01504> #  Company     : C.F. Crozier & Associates Inc.
01505> #  License #   : 3737016
01506> #*********************************************************************
01507> #*********************************************************************
01508> R0007:C00002------------------------------------------------------------------
01509>      READ STORM
01510>        Filename = STORM.001
01511>        Comment  = 100-Year 6 hr Kifer Chu Chicago Storm Event
01512>       [SDT=60.00:SDUR=   6.00:PTOT=  96.00]
01513> #-----------------|-------------------------------------------------------------|
01514> #-----------------|-POST-DEVELOPMENT-------------------------------------------|
01515> #-----------------|-------------------------------------------------------------|
01516> #-----------------|-------------------------------------------------------------|
01517> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
01518> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
01519> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
01520> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01521> #-----------------|-------------------------------------------------------------|
01522> R0007:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01523>     CALIB NASHYD         1.0 01:EXT-9A       101.80    5.697 No_date    3:45
01524>       [CN= 80.0: N= 3.00: Tp= 1.00]
01525> R0007:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01526>     ROUTE CHANNEL   ->   1.0 01:EXT-9A       101.80    5.697 No_date    3:45
01527>      [RDT= 1.00] out<-   1.0 02:Channel      101.80    5.683 No_date    3:48
01528>       [L/S/n=  550./2.000/.035]
01529>       (Vmax= 2.100:Dmax=  .458)
01530> R0007:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01531>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    2.107 No_date    3:00
01532>       [XIMP=.35:TIMP=.35]
01533>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01534>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01535>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01536> R0007:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01537>     ROUTE RESERVOIR ->   1.0 03:EXT-9B        14.80    2.107 No_date    3:00
01538>                  out <=  1.0 04:Orchards      14.80    1.213 No_date    3:13
01539>      (MxStoUsed=.5363E+00  m3)
01540> #-----------------|-------------------------------------------------------------|
01541> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
01542> #-----------------|-------------------------------------------------------------|
01543> R0007:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01544>     ADD HYD              1.0 02:Channel      101.80    5.683 No_date    3:48
01545>                    +     1.0 04:Orchards      14.80    1.213 No_date    3:13
01546>                  SUM=    1.0 05:RD19         116.60    6.508 No_date    3:43
01547> #-----------------|-------------------------------------------------------------|
01548> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
01549> #-----------------|-------------------------------------------------------------|
01550> R0007:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01551>     CALIB NASHYD         1.0 01:EXT-9C         .65     .081 No_date    3:02
01552>       [CN= 82.7: N= 3.00: Tp=  .24]
01553> R0007:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01554>     CALIB NASHYD         1.0 02:9A             .58     .073 No_date    3:00
01555>       [CN= 79.0: N= 3.00: Tp=  .06]
01556> #-----------------|-------------------------CULVERT #1-------------------------|
01557> R0007:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01558>     ADD HYD              1.0 01:EXT-9C         .65     .081 No_date    3:02
01559>                    +     1.0 02:9A             .58     .073 No_date    3:00
01560>                    +     1.0 05:RD19         116.60    6.508 No_date    3:43
01561>                  SUM=    1.0 03:CULV1        117.83    6.540 No_date    3:43
01562> R0007:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01563>     CALIB NASHYD         1.0 01:9B            2.10     .104 No_date    3:05
01564>       [CN= 51.5: N= 3.00: Tp=  .28]
01565> #-----------------|-------------------------CULVERT #2-------------------------|
01566> R0007:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01567>     ADD HYD              1.0 01:9B            2.10     .104 No_date    3:05
01568>                    +     1.0 03:CULV1        117.83    6.540 No_date    3:43
01569>                  SUM=    1.0 04:WC9a         119.93    6.577 No_date    3:40
01570> #-----------------|-------------------------------------------------------------|
01571> #-----------------|-AREAS TO SWM FACILITY 1------------------------------------|
01572> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
01573> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1----------------------|
01574> #-----------------|-------------------------------------------------------------|
01575> R0007:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01576>     CALIB NASHYD         1.0 01:EXT-1A        8.37     .636 No_date    3:13
01577>       [CN= 74.9: N= 3.00: Tp=  .47]
01578> R0007:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01579>     CALIB STANDHYD       1.0 03:1A            2.95     .380 No_date    3:00
01580>       [XIMP=.31:TIMP=.51]
01581>       [LOSS= 2 :CN= 67.0]
01582>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01583>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01584> R0007:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01585>     ADD HYD              1.0 01:EXT-1A        8.37     .636 No_date    3:13
01586>                    +     1.0 03:1A            2.95     .380 No_date    3:00
01587>                  SUM=    1.0 06:NODE         11.32     .928 No_date    3:00
01588> R0007:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01589>     CALIB NASHYD         1.0 05:1B            1.81     .088 No_date    3:01
01590>       [CN= 44.3: N= 3.00: Tp=  .11]
01591> R0007:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01592>     ADD HYD              1.0 01:EXT-1A        8.37     .636 No_date    3:13
01593>                    +     1.0 03:1A            2.95     .380 No_date    3:00
01594>                    +     1.0 05:1B            1.81     .088 No_date    3:01
01595>                  SUM=    1.0 06:SWMF1        13.13    1.016 No_date    3:00
01596> #-----------------|-------------------------------------------------------------|
01597> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01598> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01599> #-----------------|-------------------------------------------------------------|
01600> R0007:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01601>     ROUTE RESERVOIR ->   1.0 06:SWMF1        13.13    1.016 No_date    3:00
01602>                  out <=  1.0 01:SWMF-1       13.13     .113 No_date    5:47
01603>      (MxStoUsed=.4720E+00  m3)
01604> R0007:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01605>     ADD HYD              1.0 01:SWMF-1        13.13     .113 No_date    5:47
01606>                    +     1.0 04:WC9a         119.93    6.577 No_date    3:40
01607>                  SUM=    1.0 07:WC9b         133.06    6.631 No_date    3:43
01608> #-----------------|-------------------------------------------------------------|
01609> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
01610> #-----------------|-------------------------------------------------------------|
01611> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
01612> #-----------------|-------------------------------------------------------------|
01613> R0007:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01614>     CALIB STANDHYD       1.0 10:9D            1.32     .190 No_date    3:00
01615>       [XIMP=.35:TIMP=.71]
01616>       [LOSS= 2 :CN= 66.1]
01617>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01618>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01619> #-----------------|-------------------------------------------------------------|
01620> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
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01621> #------------------|-------------------------------------------------------------|
01622> R0007:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01623>      CALIB NASHYD           1.0 01:9C             .82     .030 No_date    3:05
01624>        [CN= 40.9: N= 3.00: Tp=  .25]
01625> #------------------|---------------------CULVERT #3-------------------------|
01626> R0007:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01627>      ADD HYD                1.0 07:WC9b         133.06    6.631 No_date    3:43
01628>                     +       1.0 01:9C             .82     .030 No_date    3:05
01629>                   SUM=      1.0 04:CULV3        133.88    6.640 No_date    3:43
01630> R0007:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01631>      CALIB NASHYD           1.0 01:9F             .38     .019 No_date    3:07
01632>        [CN= 52.2: N= 3.00: Tp=  .32]
01633> R0007:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01634>      CALIB NASHYD           1.0 02:EXT-9D         .78     .063 No_date    3:15
01635>        [CN= 78.8: N= 3.00: Tp=  .52]
01636> R0007:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01637>      CALIB NASHYD           1.0 03:9E            1.24     .101 No_date    3:03
01638>        [CN= 66.3: N= 3.00: Tp=  .23]
01639> R0007:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01640>      ADD HYD                1.0 01:9F             .38     .019 No_date    3:07
01641>                     +       1.0 02:EXT-9D         .78     .063 No_date    3:15
01642>                     +       1.0 03:9E            1.24     .101 No_date    3:03
01643>                     +       1.0 10:9D            1.32     .190 No_date    3:00
01644>                   SUM=      1.0 05:NODE          3.72     .360 No_date    3:00
01645> R0007:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01646>      ADD HYD                1.0 01:9F             .38     .019 No_date    3:07
01647>                     +       1.0 02:EXT-9D         .78     .063 No_date    3:15
01648>                     +       1.0 03:9E            1.24     .101 No_date    3:03
01649>                     +       1.0 04:CULV3       133.88    6.640 No_date    3:43
01650>                     +       1.0 10:9D            1.32     .190 No_date    3:00
01651>                   SUM=      1.0 05:WC9LOWER    137.60    6.755 No_date    3:40
01652> #------------------|-------------------------------------------------------------|
01653> #------------------|-LANDS DRAINING TO SWM FACILITY 2-------------------------|
01654> #------------------|-------------------------------------------------------------|
01655> R0007:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01656>      CALIB NASHYD           1.0 01:2A            1.19     .038 No_date    3:01
01657>        [CN= 33.2: N= 3.00: Tp=  .14]
01658> R0007:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01659>      CALIB NASHYD           1.0 02:2B            1.67     .044 No_date    3:07
01660>        [CN= 34.7: N= 3.00: Tp=  .32]
01661> R0007:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01662>      ADD HYD                1.0 01:2A            1.19     .038 No_date    3:01
01663>                     +       1.0 02:2B            1.67     .044 No_date    3:07
01664>                   SUM=      1.0 10:2A2B          2.86     .080 No_date    3:03
01665> R0007:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01666>      CALIB STANDHYD         1.0 03:2C            1.96     .209 No_date    3:00
01667>        [XIMP=.30:TIMP=.60]
01668>        [LOSS= 2 :CN= 49.0]
01669>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01670>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01671> R0007:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01672>      CALIB STANDHYD         1.0 07:2D            3.28     .360 No_date    3:00
01673>        [XIMP=.25:TIMP=.50]
01674>        [LOSS= 2 :CN= 59.0]
01675>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01676>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01677> R0007:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01678>      CALIB STANDHYD         1.0 04:2E            1.49     .183 No_date    3:00
01679>        [XIMP=.37:TIMP=.42]
01680>        [LOSS= 2 :CN= 69.0]
01681>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01682>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01683> R0007:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01684>      ADD HYD                1.0 10:2A2B          2.86     .080 No_date    3:03
01685>                     +       1.0 03:2C            1.96     .209 No_date    3:00
01686>                     +       1.0 04:2E            1.49     .183 No_date    3:00
01687>                     +       1.0 07:2D            3.28     .360 No_date    3:00
01688>                   SUM=      1.0 06:SWMF2         9.59     .830 No_date    3:00
01689> #------------------|-------------------------------------------------------------|
01690> #------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01691> #------------------|-------------------------------------------------------------|
01692> R0007:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01693>      ROUTE RESERVOIR ->     1.0 06:SWMF2         9.59     .830 No_date    3:00
01694>                    out <=    1.0 09:SWMF-2        9.59     .131 No_date    4:09
01695>       {MxStoUsed=.2936E+00  m3}
01696> #------------------|-------------------------------------------------------------|
01697> #------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
01698> #------------------|-------------------------------------------------------------|
01699> R0007:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01700>      ADD HYD                1.0 09:SWMF-2        9.59     .131 No_date    4:09
01701>                     +       1.0 05:WC9LOWER    137.60    6.755 No_date    3:40
01702>                   SUM=      1.0 01:WC9c          147.19    6.879 No_date    3:40
01703> R0007:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01704>      SAVE HYD               1.0 01:WC9c          147.19    6.879 No_date    3:40
01705>        fname :WC9c.0007
01706>        remark:POST-DEV LAKESHORE
01707> #------------------|-------------------------------------------------------------|
01708> #------------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
01709> #------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
01710> #------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
01711> #------------------|-------------------------------------------------------------|
01712> R0007:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01713>      CALIB NASHYD           1.0 01:8A            2.27     .073 No_date    3:04
01714>        [CN= 36.2: N= 3.00: Tp=  .23]
01715> R0007:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01716>      CALIB NASHYD           1.0 02:EXT-8A        7.14     .485 No_date    3:12
01717>        [CN= 68.9: N= 3.00: Tp=  .44]
01718> #------------------|-------------------------------------------------------------|
01719> #------------------|--WATERCOURSE 8 TOTAL--------------------------------------|
01720> #------------------|-------------------------------------------------------------|
01721> R0007:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01722>      ADD HYD                1.0 01:8A            2.27     .073 No_date    3:04
01723>                     +       1.0 02:EXT-8A        7.14     .485 No_date    3:12
01724>                   SUM=      1.0 03:WC8           9.41     .550 No_date    3:10
01725>   ** END OF RUN :    7
01726>
01727> ****************************************************************************
01728>
01729>
01730>
01731>
01732>
01733>  RUN#:COMMAND#
01734> R0008:C00001-------------------------------------------------------------------
01735>       START
01736>         [TZERO =    .00 hrs on        0]
01737>         [METOUT=   2    (1=imperial, 2=metric output)]
01738>         [NSTORM=   1 ]
01739>         [NRUN  = 0008 ]
01740> ****************************************************************************
01741> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
01742> #  Date        : 2018-09-18 [UPDATED 2020-06-15]
01743> #  Modeller    : [OD - UPDATED BY BD/BH - UPDATED BY JE]
01744> #  Company     : C.F. Crozier & Associates Inc.
01745> #  License #   : 3737016
01746> ****************************************************************************
01747> ****************************************************************************
01748> R0008:C00002-------------------------------------------------------------------
01749>       READ STORM
01750>        Filename = STORM.001
01751>        Comment  = Timmins Storm Event
01752>        [SDT=60.00:SDUR=  12.00:PTOT= 193.00]
01753> #------------------|-------------------------------------------------------------|
01754> #------------------|-POST-DEVELOPMENT-------------------------------------------|
01755> #------------------|-------------------------------------------------------------|
01756> #------------------|-------------------------------------------------------------|
01757> #------------------|-Subwatershed 9 External Drainage Area----------------------|
01758> #------------------|-Per 'The Orchards' FSSWM Report----------------------------|
01759> #------------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
01760> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01761> #------------------|-------------------------------------------------------------|
01762> R0008:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01763>      CALIB NASHYD           1.0 01:EXT-9A       101.80    6.900 No_date    7:46  1
01764>        [CN= 80.0: N= 3.00: Tp= 1.00]
01765> R0008:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01766>      ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    6.900 No_date    7:46  1
01767>       {RDT= 1.00} out<-     1.0 02:Channel      101.80    6.895 No_date    7:49  1
01768>         [L/S/n=  550./2.000/.035]
01769>         {Vmax= 2.233:Dmax=  .508}
01770> R0008:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01771>      CALIB STANDHYD         1.0 03:EXT-9B        14.80    1.529 No_date    7:00  1
01772>        [XIMP=.35:TIMP=.35]
01773>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01774>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01775>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01776> R0008:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01777>      ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    1.529 No_date    7:00  1
01778>                    out <=    1.0 04:Orchards      14.80    1.187 No_date    7:13  1
01779>       {MxStoUsed=.5307E+00  m3}
01780> #------------------|-------------------------------------------------------------|
01781> #------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
01782> #------------------|-------------------------------------------------------------|
01783> R0008:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01784>      ADD HYD                1.0 02:Channel      101.80    6.895 No_date    7:49  1
01785>                     +       1.0 04:Orchards      14.80    1.187 No_date    7:13  1
01786>                   SUM=      1.0 05:RD19         116.60    7.880 No_date    7:44  1
01787> #------------------|-------------------------------------------------------------|
01788> #------------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
01789> #------------------|-------------------------------------------------------------|
01790> R0008:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01791>      CALIB NASHYD           1.0 01:EXT-9C         .65     .067 No_date    7:01  1
01792>        [CN= 82.7: N= 3.00: Tp=  .24]
01793> R0008:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01794>      CALIB NASHYD           1.0 02:9A             .58     .059 No_date    7:00  1
01795>        [CN= 79.0: N= 3.00: Tp=  .06]
01796> #------------------|---------------------CULVERT #1--------------------------|
01797> R0008:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01798>      ADD HYD                1.0 01:EXT-9C         .65     .067 No_date    7:01  1
01799>                     +       1.0 02:9A             .58     .059 No_date    7:00  1
01800>                     +       1.0 05:RD19         116.60    7.880 No_date    7:44  1
01801>                   SUM=      1.0 02:CULV1        117.83    7.942 No_date    7:44  1
01802> R0008:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01803>      CALIB NASHYD           1.0 01:9B            2.10     .118 No_date    7:04
01804>        [CN= 51.5: N= 3.00: Tp=  .28]
01805> #------------------|---------------------CULVERT #2--------------------------|
01806> R0008:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01807>      ADD HYD                1.0 01:9B            2.10     .118 No_date    7:04
01808>                     +       1.0 03:CULV1        117.83    7.942 No_date    7:44  1
01809>                   SUM=      1.0 04:WC9a         119.93    8.012 No_date    7:44  1
01810> #------------------|-------------------------------------------------------------|
01811> #------------------|-AREAS TO SWM FACILITY 1------------------------------------|
01812> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------------|
01813> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
01814> #------------------|-------------------------------------------------------------|
01815> R0008:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01816>      CALIB NASHYD           1.0 01:EXT-1A         8.37     .684 No_date    7:10  1
01817>        [CN= 74.9: N= 3.00: Tp=  .47]
01818> R0008:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01819>      CALIB STANDHYD         1.0 03:1A            2.95     .301 No_date    7:00  1
01820>        [XIMP=.31:TIMP=.51]
01821>        [LOSS= 2 :CN= 67.0]
01822>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01823>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01824> R0008:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01825>      ADD HYD                1.0 01:EXT-1A         8.37     .684 No_date    7:10  1
01826>                     +       1.0 03:1A            2.95     .301 No_date    7:00  1
01827>                   SUM=      1.0 06:NODE         11.32     .956 No_date    7:00  1
01828> R0008:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01829>      CALIB NASHYD           1.0 05:1B            1.81     .091 No_date    7:00
01830>        [CN= 44.3: N= 3.00: Tp=  .11]
01831> R0008:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01832>      ADD HYD                1.0 01:EXT-1A         8.37     .684 No_date    7:10  1
01833>                     +       1.0 03:1A            2.95     .301 No_date    7:00  1
01834>                     +       1.0 05:1B            1.81     .091 No_date    7:00
01835>                   SUM=      1.0 06:SWMF1        13.13    1.047 No_date    7:00  1
01836> #------------------|-------------------------------------------------------------|
01837> #------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
01838> #------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01839> #------------------|-------------------------------------------------------------|
01840> R0008:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01841>      ROUTE RESERVOIR ->     1.0 06:SWMF1        13.13    1.047 No_date    7:00  1
01842>                    out <=    1.0 01:SWMF-1       13.13     .622 No_date    9:08  1
01843>       {MxStoUsed=.7803E+00  m3}
01844> R0008:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01845>      ADD HYD                1.0 01:SWMF-1        13.13     .622 No_date    9:08  1
01846>                     +       1.0 04:WC9a         119.93    8.012 No_date    7:44  1
01847>                   SUM=      1.0 07:WC9b         133.06    8.324 No_date    7:44  1
01848> #------------------|-------------------------------------------------------------|
01849> #------------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
01850> #------------------|-------------------------------------------------------------|
01851> #------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
01852> #------------------|-------------------------------------------------------------|
01853> R0008:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01854>      CALIB STANDHYD         1.0 10:9D            1.32     .145 No_date    7:00  1
01855>        [XIMP=.35:TIMP=.71]
01856>        [LOSS= 2 :CN= 66.1]
01857>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01858>        [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01859> #------------------|-------------------------------------------------------------|
01860> #------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
01861> #------------------|-------------------------------------------------------------|
01862> R0008:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01863>      CALIB NASHYD           1.0 01:9C             .82     .035 No_date    7:03
01864>        [CN= 40.9: N= 3.00: Tp=  .25]
01865> #------------------|---------------------CULVERT #3--------------------------|
01866> R0008:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01867>      ADD HYD                1.0 07:WC9b         133.06    8.324 No_date    7:44  1
01868>                     +       1.0 01:9C             .82     .035 No_date    7:03
01869>                   SUM=      1.0 04:CULV3        133.88    8.344 No_date    7:44  1
01870> R0008:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01871>      CALIB NASHYD           1.0 01:9F             .38     .021 No_date    7:05
01872>        [CN= 52.2: N= 3.00: Tp=  .32]
01873> R0008:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01874>      CALIB NASHYD           1.0 02:EXT-9D         .78     .066 No_date    7:12  1
01875>        [CN= 78.8: N= 3.00: Tp=  .52]
01876> R0008:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01877>      CALIB NASHYD           1.0 03:9E            1.24     .099 No_date    7:02  1
01878>        [CN= 66.3: N= 3.00: Tp=  .23]
01879> R0008:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01880>      ADD HYD                1.0 01:9F             .38     .021 No_date    7:05
01881>                     +       1.0 02:EXT-9D         .78     .066 No_date    7:12  1
01882>                     +       1.0 03:9E            1.24     .099 No_date    7:02  1
01883>                     +       1.0 10:9D            1.32     .145 No_date    7:00  1
01884>                   SUM=      1.0 05:NODE          3.72     .327 No_date    7:00  1
01885> R0008:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01886>      ADD HYD                1.0 01:9F             .38     .021 No_date    7:05
01887>                     +       1.0 02:EXT-9D         .78     .066 No_date    7:12  1
01888>                     +       1.0 03:9E            1.24     .099 No_date    7:02  1
01889>                     +       1.0 04:CULV3        133.88    8.344 No_date    7:44  1
01890>                     +       1.0 10:9D            1.32     .145 No_date    7:00  1
```

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01891>                  SUM=     1.0 05:WC9LOWER     137.60    8.532 No_date    7:44  1
01892> #-----------------|-----------------------------------------------------------------|
01893> #-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
01894> #-----------------|-----------------------------------------------------------------|
01895> R0008:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01896>     CALIB NASHYD          1.0 01:2A             1.19     .042 No_date    7:01
01897>       [CN= 33.2: N= 3.00: Tp=  .14]
01898> R0008:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01899>     CALIB NASHYD          1.0 02:2B             1.67     .057 No_date    7:06
01900>       [CN= 34.7: N= 3.00: Tp=  .32]
01901> R0008:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01902>     ADD HYD               1.0 01:2A             1.19     .042 No_date    7:01
01903>                   +       1.0 02:2B             1.67     .057 No_date    7:06
01904>                  SUM=     1.0 10:2A2B           2.86     .098 No_date    7:02
01905> R0008:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01906>     CALIB STANDHYD        1.0 03:2C             1.96     .174 No_date    7:00  1
01907>       [XIMP=.30:TIMP=.60]
01908>       [LOSS= 2 :CN= 49.0]
01909>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01910>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01911> R0008:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01912>     CALIB STANDHYD        1.0 07:2D             3.28     .303 No_date    7:00  1
01913>       [XIMP=.25:TIMP=.50]
01914>       [LOSS= 2 :CN= 59.0]
01915>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01916>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01917> R0008:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01918>     CALIB STANDHYD        1.0 04:2E             1.49     .147 No_date    7:00  1
01919>       [XIMP=.37:TIMP=.42]
01920>       [LOSS= 2 :CN= 69.0]
01921>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01922>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01923> R0008:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01924>     ADD HYD               1.0 10:2A2B           2.86     .098 No_date    7:02
01925>                   +       1.0 03:2C             1.96     .174 No_date    7:00  1
01926>                   +       1.0 04:2E             1.49     .147 No_date    7:00  1
01927>                   +       1.0 07:2D             3.28     .303 No_date    7:00  1
01928>                  SUM=     1.0 06:SWMF2          9.59     .722 No_date    7:00  1
01929> #-----------------|-----------------------------------------------------------------|
01930> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01931> #-----------------|-----------------------------------------------------------------|
01932> R0008:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01933>     ROUTE RESERVOIR ->    1.0 06:SWMF2          9.59     .722 No_date    7:00  1
01934>                  out <=   1.0 09:SWMF-2         9.59     .422 No_date    9:03  1
01935>       (MxStoUsed=.4186E+00  m3)
01936> #-----------------|-----------------------------------------------------------------|
01937> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
01938> #-----------------|-----------------------------------------------------------------|
01939> R0008:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01940>     ADD HYD               1.0 09:SWMF-2         9.59     .422 No_date    9:03  1
01941>                   +       1.0 05:WC9LOWER     137.60    8.532 No_date    7:44  1
01942>                  SUM=     1.0 01:WC9c         147.19    8.903 No_date    7:44  1
01943> R0008:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01944>     SAVE HYD              1.0 01:WC9c         147.19    8.903 No_date    7:44  1
01945>       fname :WC9c.0008
01946>       remark:POST-DEV LAKESHORE
01947> #-----------------|-----------------------------------------------------------------|
01948> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
01949> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
01950> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
01951> #-----------------|-----------------------------------------------------------------|
01952> R0008:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01953>     CALIB NASHYD          1.0 01:8A             2.27     .086 No_date    7:03
01954>       [CN= 36.2: N= 3.00: Tp=  .23]
01955> R0008:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01956>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .536 No_date    7:09  1
01957>       [CN= 68.9: N= 3.00: Tp=  .44]
01958> #-----------------|-----------------------------------------------------------------|
01959> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
01960> #-----------------|-----------------------------------------------------------------|
01961> R0008:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01962>     ADD HYD               1.0 01:8A             2.27     .086 No_date    7:03
01963>                   +       1.0 02:EXT-8A         7.14     .536 No_date    7:09  1
01964>                  SUM=     1.0 03:WC8            9.41     .618 No_date    7:07  1
01965> R0008:C00002------------------------------------------------------------------------
01966>     FINISH
01967> ------------------------------------------------------------------------------
01968> ******************************************************************************
01969>      WARNINGS / ERRORS / NOTES
01970>      -------------------------
01971> R0001:C00005  CALIB STANDHYD
01972> *** NOTE: The pervious area has no runoff.
01973>    Simulation ended on 2022-03-11    at 14:15:00
01974> ==============================================================================
01975>
01976>
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2018-09-20
00005> *#  Modeller    : [OD - UPDATED BY JM/BD - UPDATED BY JE]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1]
00010> *%                   ["25mm.stm"] <--storm filename, one per line for NSTORM tim
00011> *%-----------------|---------------------------------------------------------|
00012>
00013> *#************************************************************************
00014> *#*****************************25mm storm*********************************
00015> *#************************************************************************
00016>
00017> READ STORM          STORM_FILENAME=["25mm.stm"]
00018>
00019> *%-----------------|---------------------------------------------------------|
00020> *%-----------------|---------------------------------------------------------|
00021> *#-----------------|---------------------------------------------------------|
00022> *#-----------------|-PRE-DEVELOPMENT-------------------------------------------|
00023> *#-----------------|---------------------------------------------------------|
00024> *#-----------------|---------------------------------------------------------|
00025> *#-----------------|-Subwatershed 9 External Drainage Area---------------------|
00026> *#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
00027> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00028> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00029> *#-----------------|---------------------------------------------------------|
00030> *%-----------------|---------------------------------------------------------|
00031> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00032>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00033>                     N=[3], TP=[1.00]hrs,
00034>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00035> *%-----------------|---------------------------------------------------------|
00036> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00037>                     RDT=[1](min),
00038>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00039>                                       FPSLOPE=[2](%),
00040>                     SECNUM=[1],       NSEG=[3]
00041>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00042>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00043>                                                     [8,100]
00044>                                                     [12,100]
00045>                                                     [20,102]
00046> *%-----------------|---------------------------------------------------------|
00047> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00048>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00049>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00050>                             DCAY=[2](/hr), F=[0](mm),
00051>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00052>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00053>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00054>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00055>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00056> *%-----------------|---------------------------------------------------------|
00057> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00058>                     RDT=[1](min),
00059>                           TABLE of ( OUTFLOW-STORAGE ) values
00060>                                      (cms) - (ha-m)
00061>                                    [   0.0 ,  0.0 ]
00062>                                    [   0.0100 ,  0.0610 ]
00063>                                    [   0.0400 ,  0.1310 ]
00064>                                    [   0.0700 ,  0.2110 ]
00065>                                    [   0.2600 ,  0.3000 ]
00066>                                    [   0.6000 ,  0.3940 ]
00067>                                    [   1.0200 ,  0.4950 ]
00068>                                    [   1.5200 ,  0.6020 ]
00069>                                    [   2.0800 ,  0.7160 ]
00070>                                    [   2.6900 ,  0.8370 ]
00071>                                    [   -1  ,  -1  ]  (max twenty pts)
00072>                           IDovf=[   ], NHYDovf=[   ]
00073> *%-----------------|---------------------------------------------------------|
00074> *#-----------------|---------------------------------------------------------|
00075> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00076> *#-----------------|---------------------------------------------------------|
00077> *%-----------------|---------------------------------------------------------|
00078> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00079> *%-----------------|---------------------------------------------------------|
00080> *#-----------------|---------------------------------------------------------|
00081> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00082> *#-----------------|---------------------------------------------------------|
00083> *%-----------------|---------------------------------------------------------|
00084> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00085>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00086>                     N=[3], TP=[0.37]hrs,
00087>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00088> *%-----------------|---------------------------------------------------------|
00089> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00090>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00091>                     N=[3], TP=[1.09]hrs,
00092>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00093> *%-----------------|---------------------------------------------------------|
00094> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00095> *%-----------------|---------------------------------------------------------|
00096> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00097>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00098>                     N=[3], TP=[0.14]hrs,
00099>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00100> *%-----------------|---------------------------------------------------------|
00101> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00102>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00103>                     N=[3], TP=[0.15]hrs,
00104>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00105> *%-----------------|---------------------------------------------------------|
00106> *#-----------------|---------------------------------------------------------|
00107> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00108> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00109> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00110> *#-----------------|---------------------------------------------------------|
00111> *%-----------------|---------------------------------------------------------|
00112> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00113>                     RDT=[1](min),
00114>                           TABLE of ( OUTFLOW-STORAGE ) values
00115>                                      (cms) - (ha-m)
00116>                                    [   0.0 ,  0.0 ]
00117>                                    [   0.00 ,  0.479 ]
00118>                                    [   0.00 ,  1.249 ]
00119>                                    [   -1  ,  -1  ]  (max twenty pts)
00120>                           IDovf=[   ], NHYDovf=[   ]
00121> *%-----------------|---------------------------------------------------------|
00122> ADD HYD            IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00123> *%-----------------|---------------------------------------------------------|
00124> *#-----------------|---------------------------------------------------------|
00125> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00126> *#-----------------|---------------------------------------------------------|
00127> *%-----------------|---------------------------------------------------------|
00128> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00129>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00130>                     N=[3], TP=[0.48]hrs,
00131>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00132> *%-----------------|---------------------------------------------------------|
00133> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00134>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00135>                     N=[3], TP=[0.71]hrs,
00136>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00137> *%-----------------|---------------------------------------------------------|
00138> *#-----------------|---------------------------------------------------------|
00139> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00140> *#-----------------|---------------------------------------------------------|
00141> *%-----------------|---------------------------------------------------------|
00142> ADD HYD            IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00143> *%-----------------|---------------------------------------------------------|
00144> SAVE HYD           ID=[1],   # OF PCYCLES=[10],  ICASESh=[1]
00145>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00146> *%-----------------|---------------------------------------------------------|
00147> *#************************************************************************
00148> *#**************************Chicago 2yr 4-hr storm**************************
00149> *#************************************************************************
00150> *%-----------------|---------------------------------------------------------|
00151>
00152> CHICAGO STORM      IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
00153>                     ICASEcs=[2],
00154>                     Enter ordinates of IDF curve below, at least seven points
00155>                         TIME (min)    Intensity(mm/hr)
00156>                           [   5    ]       [  117.0  ]
00157>                           [   10   ]       [  72.1   ]
00158>                           [   15   ]       [  54.3   ]
00159>                           [   30   ]       [  33.4   ]
00160>                           [   60   ]       [  20.6   ]
00161>                           [   120  ]       [  12.7   ]
00162>                           [   360  ]       [  5.9    ]
00163>                           [   720  ]       [  3.6    ]
00164>                           [   1440 ]       [  2.2    ]
00165>                             -1               -1
00166> *%-----------------|---------------------------------------------------------|
00167>
00168> *%-----------------|---------------------------------------------------------|
00169> *%-----------------|---------------------------------------------------------|
00170> *#-----------------|---------------------------------------------------------|
00171> *#-----------------|-PRE-DEVELOPMENT-------------------------------------------|
00172> *#-----------------|---------------------------------------------------------|
00173> *#-----------------|---------------------------------------------------------|
00174> *#-----------------|-Subwatershed 9 External Drainage Area---------------------|
00175> *#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
00176> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00177> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00178> *#-----------------|---------------------------------------------------------|
00179> *%-----------------|---------------------------------------------------------|
00180> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00181>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00182>                     N=[3], TP=[1.00]hrs,
00183>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00184> *%-----------------|---------------------------------------------------------|
00185> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00186>                     RDT=[1](min),
00187>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00188>                                       FPSLOPE=[2](%),
00189>                     SECNUM=[1],       NSEG=[3]
00190>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00191>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00192>                                                     [8,100]
00193>                                                     [12,100]
00194>                                                     [20,102]
00195> *%-----------------|---------------------------------------------------------|
00196> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00197>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00198>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00199>                             DCAY=[2](/hr), F=[0](mm),
00200>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00201>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00202>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00203>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00204>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00205> *%-----------------|---------------------------------------------------------|
00206> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00207>                     RDT=[1](min),
00208>                           TABLE of ( OUTFLOW-STORAGE ) values
00209>                                      (cms) - (ha-m)
00210>                                    [   0.0 ,  0.0 ]
00211>                                    [   0.0100 ,  0.0610 ]
00212>                                    [   0.0400 ,  0.1310 ]
00213>                                    [   0.0700 ,  0.2110 ]
00214>                                    [   0.2600 ,  0.3000 ]
00215>                                    [   0.6000 ,  0.3940 ]
00216>                                    [   1.0200 ,  0.4950 ]
00217>                                    [   1.5200 ,  0.6020 ]
00218>                                    [   2.0800 ,  0.7160 ]
00219>                                    [   2.6900 ,  0.8370 ]
00220>                                    [   -1  ,  -1  ]  (max twenty pts)
00221>                           IDovf=[   ], NHYDovf=[   ]
00222> *%-----------------|---------------------------------------------------------|
00223> *#-----------------|---------------------------------------------------------|
00224> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00225> *#-----------------|---------------------------------------------------------|
00226> *%-----------------|---------------------------------------------------------|
00227> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00228> *%-----------------|---------------------------------------------------------|
00229> *#-----------------|---------------------------------------------------------|
00230> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00231> *#-----------------|---------------------------------------------------------|
00232> *%-----------------|---------------------------------------------------------|
00233> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00234>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00235>                     N=[3], TP=[0.37]hrs,
00236>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00237> *%-----------------|---------------------------------------------------------|
00238> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00239>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00240>                     N=[3], TP=[1.09]hrs,
00241>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00242> *%-----------------|---------------------------------------------------------|
00243> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00244> *%-----------------|---------------------------------------------------------|
00245> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00246>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00247>                     N=[3], TP=[0.14]hrs,
00248>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00249> *%-----------------|---------------------------------------------------------|
00250> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00251>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00252>                     N=[3], TP=[0.15]hrs,
00253>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00254> *%-----------------|---------------------------------------------------------|
00255> *#-----------------|---------------------------------------------------------|
00256> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00257> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00258> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00259> *#-----------------|---------------------------------------------------------|
00260> *%-----------------|---------------------------------------------------------|
00261> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00262>                     RDT=[1](min),
00263>                           TABLE of ( OUTFLOW-STORAGE ) values
00264>                                      (cms) - (ha-m)
00265>                                    [   0.0 ,  0.0 ]
00266>                                    [   0.00 ,  0.479 ]
00267>                                    [   0.00 ,  1.249 ]
00268>                                    [   -1  ,  -1  ]  (max twenty pts)
00269>                           IDovf=[   ], NHYDovf=[   ]
00270> *%-----------------|---------------------------------------------------------|
```

```
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 5yr 4-hr storm*****************************
*#*****************************************************************************
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)     Intensity(mm/hr)
                           [   5   ]       [  156.2  ]
                           [   10  ]       [  96.2   ]
                           [   15  ]       [  72.5   ]
                           [   30  ]       [  44.6   ]
                           [   60  ]       [  27.5   ]
                           [   120 ]       [  16.9   ]
                           [   360 ]       [  7.9    ]
                           [   720 ]       [  4.8    ]
                           [   1440 ]      [  3.0    ]
                              -1              -1

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-PRE-DEVELOPMENT-------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|

*#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.00 ,  0.479 ]
                                  [   0.00 ,  1.249 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 10yr 4-hr storm****************************
*#*****************************************************************************
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)     Intensity(mm/hr)
                           [   5   ]       [  182.3  ]
                           [   10  ]       [  112.3  ]
                           [   15  ]       [  84.6   ]
                           [   30  ]       [  52.1   ]
                           [   60  ]       [  32.1   ]
                           [   120 ]       [  19.8   ]
                           [   360 ]       [  9.2    ]
                           [   720 ]       [  5.7    ]
                           [   1440 ]      [  3.5    ]
                              -1              -1

*%------------------|-------------------------------------------------------------|

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-PRE-DEVELOPMENT-------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
```

```
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.00 ,  0.479 ]
                                [   0.00 ,  1.249 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
*#*****************************************************************************
*#************************Chicago 25yr 4-hr storm**************************
*#*****************************************************************************
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5    ]       [  215.3  ]
                          [   10   ]       [  132.6   ]
                          [   15   ]       [  99.9   ]
                          [   30   ]       [  61.5   ]
                          [   60   ]       [  37.9   ]
                          [   120  ]       [  23.3   ]
                          [   360  ]       [  10.8    ]
                          [   720  ]       [  6.7     ]
                          [   1440 ]       [  4.1     ]
                            -1               -1

*%------------------|-------------------------------------------------------------|

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-PRE-DEVELOPMENT--------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area----------------------|
*#------------------|-Per 'The Orchards' FSSWM Report----------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.0100 ,  0.0610 ]
                                [   0.0400 ,  0.1310 ]
                                [   0.0700 ,  0.2110 ]
                                [   0.2600 ,  0.3000 ]
                                [   0.6000 ,  0.3940 ]
                                [   1.0200 ,  0.4950 ]
                                [   1.5200 ,  0.6020 ]
                                [   2.0800 ,  0.7160 ]
                                [   2.6900 ,  0.8370 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
```

```
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.00 ,  0.479 ]
                                [   0.00 ,  1.249 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
*#*****************************************************************************
*#************************Chicago 50yr 4-hr storm**************************
*#*****************************************************************************
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5    ]       [  239.7  ]
                          [   10   ]       [  147.7  ]
                          [   15   ]       [  111.2  ]
                          [   30   ]       [  68.5   ]
                          [   60   ]       [  42.2   ]
                          [   120  ]       [  26.0   ]
                          [   360  ]       [  12.1   ]
                          [   720  ]       [  7.4    ]
                          [   1440 ]       [  4.6    ]
                            -1               -1

*%------------------|-------------------------------------------------------------|

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-PRE-DEVELOPMENT--------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area----------------------|
*#------------------|-Per 'The Orchards' FSSWM Report----------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.0100 ,  0.0610 ]
                                [   0.0400 ,  0.1310 ]
                                [   0.0700 ,  0.2110 ]
                                [   0.2600 ,  0.3000 ]
```

```
                                    [   0.6000 ,  0.3940 ]
                                    [   1.0200 ,  0.4950 ]
                                    [   1.5200 ,  0.6020 ]
                                    [   2.0800 ,  0.7160 ]
                                    [   2.6900 ,  0.8370 ]
                                    [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.00 ,  0.479 ]
                                  [   0.00 ,  1.249 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 100yr 4-hr storm*************************
*#*****************************************************************************
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5    ]       [  263.3  ]
                          [   10   ]       [  162.3  ]
                          [   15   ]       [  122.3  ]
                          [   30   ]       [  75.3   ]
                          [   60   ]       [  46.4   ]
                          [   120  ]       [  28.6   ]
                          [   360  ]       [  13.3   ]
                          [   720  ]       [  8.2    ]
                          [   1440 ]       [  5.0    ]
                             -1               -1
*%------------------|-------------------------------------------------------------|

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-PRE-DEVELOPMENT-------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.00 ,  0.479 ]
                                  [   0.00 ,  1.249 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%------------------|-------------------------------------------------------------|
FINISH
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M     OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM    O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M    O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M    O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M     OOO         2       0   0   11
00008>                                                                 2       0   0   11
00009>         StormWater Management HYdrologic Model                 222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ******************  A single event and continuous hydrologic simulation model
00014>  ******************     based on the principles of HYMO and its successors
00015>  ******************                 OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  ****************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ******************                  Ottawa,  Ontario: (613) 836-3884
00019>  ******************                  Gatineau, Quebec: (819) 243-6858
00020>  ******************                  E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ******************           Maximum value for ID numbers  :     11
00031>  ******************           Max. number of rainfall points: 105408
00032>  ******************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ******************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2020-06-15     TIME: 12:06:20     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00041>  *               HYMO\CHI\PRE_CHI.DAT
00042>  * Output  file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00043>  *               HYMO\CHI\PRE_CHI.out
00044>  * Summary file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00045>  *               HYMO\CHI\PRE_CHI.sum
00046>  * User comments:
00047>  * 1: ____________________________________________________________________________
00048>  * 2: ____________________________________________________________________________
00049>  * 3: ____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2018-09-20
00056> #  Modeller    : [OD - UPDATED BY JM/BD - UPDATED BY JE]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001------------------------------------------------------------------
00062>      START
00063>       [TZERO =    .00 hrs on        0]
00064>       [METOUT=   2    (1=imperial, 2=metric output)]
00065>       [NSTORM=   1 ]
00066>       [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> #*************************25mm storm*****************************************
00069> #*******************************************************************************
00070> R0001:C00002------------------------------------------------------------------
00071>      READ STORM
00072>       Filename = 25mm.stm
00073>       Comment  = 25mm Event
00074>       [SDT= 5.00:SDUR=   4.00:PTOT=  24.99]
00075> #-----------------|-----------------------------------------------------------|
00076> #-----------------|-PRE-DEVELOPMENT---------------------------------------------|
00077> #-----------------|-----------------------------------------------------------|
00078> #-----------------|-----------------------------------------------------------|
00079> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00080> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00081> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00082> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00083> #-----------------|-----------------------------------------------------------|
00084> R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00085>     CALIB NASHYD          1.0 01:EXT-9A       101.80     .507 No_date    2:46
00086>       [CN= 80.0: N= 3.00: Tp= 1.00]
00087> R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00088>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80     .507 No_date    2:46
00089>      [RDT= 1.00] out<-    1.0 02:Channel      101.80     .500 No_date    2:56
00090>       [L/S/n=  550./2.000/.035]
00091>       {Vmax=  .902:Dmax=  .117}
00092> R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00093>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .713 No_date    1:24
00094>       [XIMP=.35:TIMP=.35]
00095>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00096>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00097>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00098> R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00099>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .713 No_date    1:24
00100>                  out <=    1.0 04:Orchards     14.80     .038 No_date    2:58
00101>      {MxStoUsed=.1255E+00  m3}
00102> #-----------------|-----------------------------------------------------------|
00103> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00104> #-----------------|-----------------------------------------------------------|
00105> R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00106>     ADD HYD               1.0 02:Channel     101.80     .500 No_date    2:56
00107>                  +     1.0 04:Orchards      14.80     .038 No_date    2:58
00108>                SUM=    1.0 05:RD19         116.60     .538 No_date    2:56
00109> #-----------------|-----------------------------------------------------------|
00110> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00111> #-----------------|-----------------------------------------------------------|
00112> R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00113>     CALIB NASHYD          1.0 01:9A            2.57     .004 No_date    1:59
00114>       [CN= 48.4: N= 3.00: Tp=  .37]
00115> R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00116>     CALIB NASHYD          1.0 02:9B           11.63     .024 No_date    3:04
00117>       [CN= 68.5: N= 3.00: Tp= 1.09]
00118> R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00119>     ADD HYD               1.0 01:9A            2.57     .004 No_date    1:59
00120>                  +     1.0 02:9B           11.63     .024 No_date    3:04
00121>                SUM=    1.0 10:9A9B         14.20     .026 No_date    2:58
00122> R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00123>     CALIB NASHYD          1.0 01:9C            1.19     .001 No_date    1:38
00124>       [CN= 33.2: N= 3.00: Tp=  .14]
00125> R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00126>     CALIB NASHYD          1.0 02:9D            2.02     .004 No_date    1:37
00127>       [CN= 41.9: N= 3.00: Tp=  .15]
00128> #-----------------|-----------------------------------------------------------|
00129> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00130> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00131> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00132> #-----------------|-----------------------------------------------------------|
00133> R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00134>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .004 No_date    1:37
00135>  *                out <=    1.0 04:ExPond       2.02     .000 No_date    0:00
00136>      {MxStoUsed=.1560E-02  m3}
00137> R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00138>     ADD HYD               1.0 01:9C            1.19     .001 No_date    1:38
00139>                  +     1.0 04:ExPond          2.02     .000 No_date    0:00
00140>                SUM=    1.0 09:9C9D          3.21     .001 No_date    1:38
00141> #-----------------|-----------------------------------------------------------|
00142> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00143> #-----------------|-----------------------------------------------------------|
00144> R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00145>     CALIB NASHYD          1.0 07:9E            7.60     .010 No_date    2:11
00146>       [CN= 47.1: N= 3.00: Tp=  .48]
00147> R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00148>     CALIB NASHYD          1.0 08:9F            3.35     .004 No_date    2:31
00149>       [CN= 50.4: N= 3.00: Tp=  .71]
00150> #-----------------|-----------------------------------------------------------|
00151> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00152> #-----------------|-----------------------------------------------------------|
00153> R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00154>     ADD HYD               1.0 05:RD19        116.60     .538 No_date    2:56
00155>                  +     1.0 10:9A9B          14.20     .026 No_date    2:58
00156>                  +     1.0 09:9C9D          3.21      .001 No_date    1:38
00157>                  +     1.0 07:9E            7.60      .010 No_date    2:11
00158>                  +     1.0 08:9F            3.35      .004 No_date    2:31
00159>                SUM=    1.0 01:WC9LS       144.96      .574 No_date    2:55
00160> R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00161>     SAVE HYD              1.0 01:WC9LS       144.96      .574 No_date    2:55
00162>       fname :WC9LS.0001
00163>       remark:Lakeshore Road Hydrograph
00164> #*******************************************************************************
00165> #****************************Chicago 2yr 4-hr storm*****************************
00166> #*******************************************************************************
00167> R0001:C00019------------------------------------------------------------------
00168>      CHICAGO STORM
00169>       [SDT= 5.00:SDUR=   4.00:PTOT=  31.55]
00170>       {A/B/C= 425.976/   1.500/    .727: R=.9997}
00171> #-----------------|-----------------------------------------------------------|
00172> #-----------------|-PRE-DEVELOPMENT---------------------------------------------|
00173> #-----------------|-----------------------------------------------------------|
00174> #-----------------|-----------------------------------------------------------|
00175> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00176> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00177> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00178> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00179> #-----------------|-----------------------------------------------------------|
00180> R0001:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00181>     CALIB NASHYD          1.0 01:EXT-9A       101.80     .779 No_date    2:48
00182>       [CN= 80.0: N= 3.00: Tp= 1.00]
00183> R0001:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00184>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80     .779 No_date    2:48
00185>      [RDT= 1.00] out<-    1.0 02:Channel      101.80     .773 No_date    2:55
00186>       [L/S/n=  550./2.000/.035]
00187>       {Vmax= 1.006:Dmax=  .147}
00188> R0001:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00189>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.089 No_date    1:23
00190>       [XIMP=.35:TIMP=.35]
00191>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00192>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00193>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00194> R0001:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00195>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.089 No_date    1:23
00196>                  out <=    1.0 04:Orchards     14.80     .055 No_date    2:51
00197>      {MxStoUsed=.1723E+00  m3}
00198> #-----------------|-----------------------------------------------------------|
00199> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00200> #-----------------|-----------------------------------------------------------|
00201> R0001:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00202>     ADD HYD               1.0 02:Channel     101.80     .773 No_date    2:55
00203>                  +     1.0 04:Orchards      14.80     .055 No_date    2:51
00204>                SUM=    1.0 05:RD19         116.60     .829 No_date    2:55
00205> #-----------------|-----------------------------------------------------------|
00206> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00207> #-----------------|-----------------------------------------------------------|
00208> R0001:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00209>     CALIB NASHYD          1.0 01:9A            2.57     .007 No_date    1:56
00210>       [CN= 48.4: N= 3.00: Tp=  .37]
00211> R0001:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00212>     CALIB NASHYD          1.0 02:9B           11.63     .041 No_date    3:07
00213>       [CN= 68.5: N= 3.00: Tp= 1.09]
00214> R0001:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00215>     ADD HYD               1.0 01:9A            2.57     .007 No_date    1:56
00216>                  +     1.0 02:9B           11.63     .041 No_date    3:07
00217>                SUM=    1.0 10:9A9B         14.20     .045 No_date    3:02
00218> R0001:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00219>     CALIB NASHYD          1.0 01:9C            1.19     .002 No_date    1:33
00220>       [CN= 33.2: N= 3.00: Tp=  .14]
00221> R0001:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00222>     CALIB NASHYD          1.0 02:9D            2.02     .007 No_date    1:33
00223>       [CN= 41.9: N= 3.00: Tp=  .15]
00224> #-----------------|-----------------------------------------------------------|
00225> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00226> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00227> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00228> #-----------------|-----------------------------------------------------------|
00229> R0001:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00230>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .007 No_date    1:33
00231>  *                out <=    1.0 04:ExPond       2.02     .000 No_date    0:00
00232>      {MxStoUsed=.2955E-02  m3}
00233> R0001:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00234>     ADD HYD               1.0 01:9C            1.19     .002 No_date    1:33
00235>                  +     1.0 04:ExPond          2.02     .000 No_date    0:00
00236>                SUM=    1.0 09:9C9D          3.21      .002 No_date    1:33
00237> #-----------------|-----------------------------------------------------------|
00238> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00239> #-----------------|-----------------------------------------------------------|
00240> R0001:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00241>     CALIB NASHYD          1.0 07:9E            7.60     .017 No_date    2:08
00242>       [CN= 47.1: N= 3.00: Tp=  .48]
00243> R0001:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00244>     CALIB NASHYD          1.0 08:9F            3.35     .007 No_date    2:31
00245>       [CN= 50.4: N= 3.00: Tp=  .71]
00246> #-----------------|-----------------------------------------------------------|
00247> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00248> #-----------------|-----------------------------------------------------------|
00249> R0001:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00250>     ADD HYD               1.0 05:RD19        116.60     .829 No_date    2:55
00251>                  +     1.0 10:9A9B          14.20     .045 No_date    3:02
00252>                  +     1.0 09:9C9D          3.21      .002 No_date    1:33
00253>                  +     1.0 07:9E            7.60      .017 No_date    2:08
00254>                  +     1.0 08:9F            3.35      .007 No_date    2:31
00255>                SUM=    1.0 01:WC9LS       144.96      .893 No_date    2:54
00256> R0001:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00257>     SAVE HYD              1.0 01:WC9LS       144.96      .893 No_date    2:54
00258>       fname :WC9LS.0001
00259>       remark:Lakeshore Road Hydrograph
00260> #*******************************************************************************
00261> #****************************Chicago 5yr 4-hr storm*****************************
00262> #*******************************************************************************
00263> R0001:C00036------------------------------------------------------------------
00264>      CHICAGO STORM
00265>       [SDT= 5.00:SDUR=   4.00:PTOT=  42.28]
00266>       {A/B/C= 564.587/   1.500/    .725: R=.9997}
00267> #-----------------|-----------------------------------------------------------|
00268> #-----------------|-PRE-DEVELOPMENT---------------------------------------------|
00269> #-----------------|-----------------------------------------------------------|
00270> #-----------------|-----------------------------------------------------------|
```

```
#-----------------|-Subwatershed 9 External Drainage Area---------------------|
#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
#-----------------|-------------------------------------------------------------|
R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:EXT-9A       101.80    1.403 No_date    2:44
       [CN= 80.0: N= 3.00: Tp= 1.00]
R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE CHANNEL    ->    1.0 01:EXT-9A       101.80    1.403 No_date    2:44
      [RDT= 1.00] out<-     1.0 02:Channel      101.80    1.398 No_date    2:49
       [L/S/n=  550./2.000/.035]
       {Vmax= 1.343:Dmax=  .214}
R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB STANDHYD         1.0 03:EXT-9B        14.80    1.648 No_date    1:22
       [XIMP=.35:TIMP=.35]
       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
R0001:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    1.648 No_date    1:22
                out <=     1.0 04:Orchards      14.80     .133 No_date    2:16
      {MxStoUsed=.2403E+00  m3}
#-----------------|-------------------------------------------------------------|
#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
#-----------------|-------------------------------------------------------------|
R0001:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 02:Channel      101.80    1.398 No_date    2:49
                       +    1.0 04:Orchards      14.80     .133 No_date    2:16
                  SUM=      1.0 05:RD19         116.60    1.517 No_date    2:46
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9A            2.57     .016 No_date    1:53
       [CN= 48.4: N= 3.00: Tp=  .37]
R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9B           11.63     .082 No_date    3:00
       [CN= 68.5: N= 3.00: Tp= 1.09]
R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9A            2.57     .016 No_date    1:53
                       +    1.0 02:9B           11.63     .082 No_date    3:00
                  SUM=      1.0 10:9A9B         14.20     .090 No_date    2:55
R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9C            1.19     .006 No_date    1:32
       [CN= 33.2: N= 3.00: Tp=  .14]
R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9D            2.02     .017 No_date    1:32
       [CN= 41.9: N= 3.00: Tp=  .15]
#-----------------|-------------------------------------------------------------|
#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
#-----------------|-------------------------------------------------------------|
R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 02:9D            2.02     .017 No_date    1:32
 *              out <=     1.0 04:ExPond        2.02     .000 No_date    0:00
      {MxStoUsed=.6105E-02  m3}
R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9C            1.19     .006 No_date    1:32
                       +    1.0 04:ExPond        2.02     .000 No_date    0:00
                  SUM=      1.0 09:9C9D          3.21     .006 No_date    1:32
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 07:9E            7.60     .038 No_date    2:04
       [CN= 47.1: N= 3.00: Tp=  .48]
R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 08:9F            3.35     .015 No_date    2:26
       [CN= 50.4: N= 3.00: Tp=  .71]
#-----------------|-------------------------------------------------------------|
#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
#-----------------|-------------------------------------------------------------|
R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 05:RD19         116.60    1.517 No_date    2:46
                       +    1.0 10:9A9B          14.20     .090 No_date    2:55
                       +    1.0 09:9C9D           3.21     .006 No_date    1:32
                       +    1.0 07:9E             7.60     .038 No_date    2:04
                       +    1.0 08:9F             3.35     .015 No_date    2:26
                  SUM=      1.0 01:WC9LS        144.96    1.649 No_date    2:46
R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     SAVE HYD               1.0 01:WC9LS        144.96    1.649 No_date    2:46
       fname :WC9LS.0001
       remark:Lakeshore Road Hydrograph
#*******************************************************************************
#**************************Chicago 10yr 4-hr storm**************************
#*******************************************************************************
R0001:C00053-------------------------------------------------------------------
      CHICAGO STORM
       [SDT= 5.00:SDUR=   4.00:PTOT=  49.47]
       {A/B/C= 656.948/   1.500/    .724: R=.9997}
#-----------------|-------------------------------------------------------------|
#-----------------|-PRE-DEVELOPMENT--------------------------------------------|
#-----------------|-------------------------------------------------------------|
#-----------------|-------------------------------------------------------------|
#-----------------|-Subwatershed 9 External Drainage Area---------------------|
#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
#-----------------|-------------------------------------------------------------|
R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:EXT-9A       101.80    1.883 No_date    2:42
       [CN= 80.0: N= 3.00: Tp= 1.00]
R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE CHANNEL    ->    1.0 01:EXT-9A       101.80    1.883 No_date    2:42
      [RDT= 1.00] out<-     1.0 02:Channel      101.80    1.875 No_date    2:47
       [L/S/n=  550./2.000/.035]
       {Vmax= 1.446:Dmax=  .248}
R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB STANDHYD         1.0 03:EXT-9B        14.80    2.042 No_date    1:22
       [XIMP=.35:TIMP=.35]
       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    2.042 No_date    1:22
                out <=     1.0 04:Orchards      14.80     .221 No_date    2:04
      {MxStoUsed=.2816E+00  m3}
#-----------------|-------------------------------------------------------------|
#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
#-----------------|-------------------------------------------------------------|
R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 02:Channel      101.80    1.875 No_date    2:47
                       +    1.0 04:Orchards      14.80     .221 No_date    2:04
                  SUM=      1.0 05:RD19         116.60    2.056 No_date    2:44
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00059------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9A            2.57     .024 No_date    1:52
       [CN= 48.4: N= 3.00: Tp=  .37]
R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9B           11.63     .116 No_date    2:57
       [CN= 68.5: N= 3.00: Tp= 1.09]
R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9A            2.57     .024 No_date    1:52
                       +    1.0 02:9B           11.63     .116 No_date    2:57
                  SUM=      1.0 10:9A9B         14.20     .127 No_date    2:52
R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9C            1.19     .010 No_date    1:31
       [CN= 33.2: N= 3.00: Tp=  .14]
R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9D            2.02     .025 No_date    1:31
       [CN= 41.9: N= 3.00: Tp=  .15]
#-----------------|-------------------------------------------------------------|
#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
#-----------------|-------------------------------------------------------------|
R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 02:9D            2.02     .025 No_date    1:31
 *              out <=     1.0 04:ExPond        2.02     .000 No_date    0:00
      {MxStoUsed=.8780E-02  m3}
R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9C            1.19     .010 No_date    1:31
                       +    1.0 04:ExPond        2.02     .000 No_date    0:00
                  SUM=      1.0 09:9C9D          3.21     .010 No_date    1:31
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 07:9E            7.60     .056 No_date    2:03
       [CN= 47.1: N= 3.00: Tp=  .48]
R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 08:9F            3.35     .023 No_date    2:24
       [CN= 50.4: N= 3.00: Tp=  .71]
#-----------------|-------------------------------------------------------------|
#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
#-----------------|-------------------------------------------------------------|
R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 05:RD19         116.60    2.056 No_date    2:44
                       +    1.0 10:9A9B          14.20     .127 No_date    2:52
                       +    1.0 09:9C9D           3.21     .010 No_date    1:31
                       +    1.0 07:9E             7.60     .056 No_date    2:03
                       +    1.0 08:9F             3.35     .023 No_date    2:24
                  SUM=      1.0 01:WC9LS        144.96    2.245 No_date    2:44
R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     SAVE HYD               1.0 01:WC9LS        144.96    2.245 No_date    2:44
       fname :WC9LS.0001
       remark:Lakeshore Road Hydrograph
#*******************************************************************************
#**************************Chicago 25yr 4-hr storm**************************
#*******************************************************************************
R0001:C00070-------------------------------------------------------------------
      CHICAGO STORM
       [SDT= 5.00:SDUR=   4.00:PTOT=  58.02]
       {A/B/C= 778.937/   1.500/    .726: R=.9997}
#-----------------|-------------------------------------------------------------|
#-----------------|-PRE-DEVELOPMENT--------------------------------------------|
#-----------------|-------------------------------------------------------------|
#-----------------|-------------------------------------------------------------|
#-----------------|-Subwatershed 9 External Drainage Area---------------------|
#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
#-----------------|-------------------------------------------------------------|
R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:EXT-9A       101.80    2.512 No_date    2:41
       [CN= 80.0: N= 3.00: Tp= 1.00]
R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE CHANNEL    ->    1.0 01:EXT-9A       101.80    2.512 No_date    2:41
      [RDT= 1.00] out<-     1.0 02:Channel      101.80    2.508 No_date    2:44
       [L/S/n=  550./2.000/.035]
       {Vmax= 1.607:Dmax=  .293}
R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB STANDHYD         1.0 03:EXT-9B        14.80    2.732 No_date    1:23
       [XIMP=.35:TIMP=.35]
       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    2.732 No_date    1:23
                out <=     1.0 04:Orchards      14.80     .395 No_date    1:54
      {MxStoUsed=.3373E+00  m3}
#-----------------|-------------------------------------------------------------|
#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
#-----------------|-------------------------------------------------------------|
R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 02:Channel      101.80    2.508 No_date    2:44
                       +    1.0 04:Orchards      14.80     .395 No_date    1:54
                  SUM=      1.0 05:RD19         116.60    2.755 No_date    2:44
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9A            2.57     .035 No_date    1:51
       [CN= 48.4: N= 3.00: Tp=  .37]
R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9B           11.63     .162 No_date    2:54
       [CN= 68.5: N= 3.00: Tp= 1.09]
R0001:C00078------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9A            2.57     .035 No_date    1:51
                       +    1.0 02:9B           11.63     .162 No_date    2:54
                  SUM=      1.0 10:9A9B         14.20     .178 No_date    2:49
R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 01:9C            1.19     .015 No_date    1:30
       [CN= 33.2: N= 3.00: Tp=  .14]
R0001:C00080------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 02:9D            2.02     .038 No_date    1:31
       [CN= 41.9: N= 3.00: Tp=  .15]
#-----------------|-------------------------------------------------------------|
#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
#-----------------|-------------------------------------------------------------|
R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ROUTE RESERVOIR ->     1.0 02:9D            2.02     .038 No_date    1:31
 *              out <=     1.0 04:ExPond        2.02     .000 No_date    0:00
      {MxStoUsed=.1251E-01  m3}
R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 01:9C            1.19     .015 No_date    1:30
                       +    1.0 04:ExPond        2.02     .000 No_date    0:00
                  SUM=      1.0 09:9C9D          3.21     .015 No_date    1:30
#-----------------|-------------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
#-----------------|-------------------------------------------------------------|
R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 07:9E            7.60     .082 No_date    2:01
       [CN= 47.1: N= 3.00: Tp=  .48]
R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     CALIB NASHYD           1.0 08:9F            3.35     .033 No_date    2:22
       [CN= 50.4: N= 3.00: Tp=  .71]
#-----------------|-------------------------------------------------------------|
#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
#-----------------|-------------------------------------------------------------|
R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
     ADD HYD                1.0 05:RD19         116.60    2.755 No_date    2:44
                       +    1.0 10:9A9B          14.20     .178 No_date    2:49
                       +    1.0 09:9C9D           3.21     .015 No_date    1:30
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00541>                    +     1.0 07:9E             7.60     .082 No_date    2:01
00542>                    +     1.0 08:9F             3.35     .033 No_date    2:22
00543>                  SUM=    1.0 01:WC9LS        144.96    3.021 No_date    2:44
00544> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00545>     SAVE HYD             1.0 01:WC9LS        144.96    3.021 No_date    2:44
00546>       fname :WC9LS.0001
00547>       remark:Lakeshore Road Hydrograph
00548> #*******************************************************************************
00549> #***************************Chicago 50yr 4-hr storm*****************************
00550> #*******************************************************************************
00551> R0001:C00087------------------------------------------------------------------
00552>      CHICAGO STORM
00553>       {SDT= 5.00:SDUR=   4.00:PTOT=  64.88]
00554>       {A/B/C= 866.281/   1.500/    .725: R=.9997}
00555> #-----------------|-------------------------------------------------------|
00556> #-----------------|-PRE-DEVELOPMENT-------------------------------------|
00557> #-----------------|-------------------------------------------------------|
00558> #-----------------|-------------------------------------------------------|
00559> #-----------------|-Subwatershed 9 External Drainage Area---------------|
00560> #-----------------|-Per 'The Orchards' FSSWM Report---------------------|
00561> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
00562> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00563> #-----------------|-------------------------------------------------------|
00564> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00565>     CALIB NASHYD         1.0 01:EXT-9A       101.80    3.045 No_date    2:40
00566>       [CN= 80.0: N= 3.00: Tp= 1.00]
00567> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00568>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    3.045 No_date    2:40
00569>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.036 No_date    2:44
00570>       {L/S/n=  550./2.000/.035}
00571>       {Vmax= 1.731:Dmax=  .327}
00572> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00573>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    3.312 No_date    1:23
00574>       [XIMP=.35:TIMP=.35]
00575>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00576>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00577>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00578> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00579>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.312 No_date    1:23
00580>                 out <=    1.0 04:Orchards      14.80     .553 No_date    1:51
00581>      {MxStoUsed=.3809E+00  m3}
00582> #-----------------|-------------------------------------------------------|
00583> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00584> #-----------------|-------------------------------------------------------|
00585> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00586>     ADD HYD              1.0 02:Channel      101.80    3.036 No_date    2:44
00587>                    +     1.0 04:Orchards      14.80     .553 No_date    1:51
00588>                  SUM=    1.0 05:RD19         116.60    3.349 No_date    2:40
00589> #-----------------|-------------------------------------------------------|
00590> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00591> #-----------------|-------------------------------------------------------|
00592> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00593>     CALIB NASHYD         1.0 01:9A            2.57     .045 No_date    1:50
00594>       [CN= 48.4: N= 3.00: Tp=  .37]
00595> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00596>     CALIB NASHYD         1.0 02:9B           11.63     .203 No_date    2:53
00597>       [CN= 68.5: N= 3.00: Tp= 1.09]
00598> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00599>     ADD HYD              1.0 01:9A            2.57     .045 No_date    1:50
00600>                    +     1.0 02:9B           11.63     .203 No_date    2:53
00601>                  SUM=    1.0 10:9A9B         14.20     .223 No_date    2:47
00602> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00603>     CALIB NASHYD         1.0 01:9C            1.19     .020 No_date    1:30
00604>       [CN= 33.2: N= 3.00: Tp=  .14]
00605> R0001:C00097------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00606>     CALIB NASHYD         1.0 02:9D            2.02     .049 No_date    1:31
00607>       [CN= 41.9: N= 3.00: Tp=  .15]
00608> #-----------------|-------------------------------------------------------|
00609> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00610> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00611> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00612> #-----------------|-------------------------------------------------------|
00613> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00614>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .049 No_date    1:31
00615>  *              out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00616>      {MxStoUsed=.1592E-01  m3}
00617> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00618>     ADD HYD              1.0 01:9C            1.19     .020 No_date    1:30
00619>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00620>                  SUM=    1.0 09:9C9D          3.21     .020 No_date    1:30
00621> #-----------------|-------------------------------------------------------|
00622> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands--------------|
00623> #-----------------|-------------------------------------------------------|
00624> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00625>     CALIB NASHYD         1.0 07:9E            7.60     .106 No_date    2:01
00626>       [CN= 47.1: N= 3.00: Tp=  .48]
00627> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00628>     CALIB NASHYD         1.0 08:9F            3.35     .042 No_date    2:21
00629>       [CN= 50.4: N= 3.00: Tp=  .71]
00630> #-----------------|-------------------------------------------------------|
00631> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00632> #-----------------|-------------------------------------------------------|
00633> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00634>     ADD HYD              1.0 05:RD19         116.60    3.349 No_date    2:40
00635>                    +     1.0 10:9A9B          14.20     .223 No_date    2:47
00636>                    +     1.0 09:9C9D           3.21     .020 No_date    1:30
00637>                    +     1.0 07:9E             7.60     .106 No_date    2:01
00638>                    +     1.0 08:9F             3.35     .042 No_date    2:21
00639>                  SUM=    1.0 01:WC9LS        144.96    3.688 No_date    2:39
00640> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00641>     SAVE HYD             1.0 01:WC9LS        144.96    3.688 No_date    2:39
00642>       fname :WC9LS.0001
00643>       remark:Lakeshore Road Hydrograph
00644> #*******************************************************************************
00645> #***************************Chicago 100yr 4-hr storm****************************
00646> #*******************************************************************************
00647> R0001:C00104------------------------------------------------------------------
00648>      CHICAGO STORM
00649>       {SDT= 5.00:SDUR=   4.00:PTOT=  71.43]
00650>       {A/B/C= 953.793/   1.500/    .725: R=.9997}
00651> #-----------------|-------------------------------------------------------|
00652> #-----------------|-PRE-DEVELOPMENT-------------------------------------|
00653> #-----------------|-------------------------------------------------------|
00654> #-----------------|-------------------------------------------------------|
00655> #-----------------|-Subwatershed 9 External Drainage Area---------------|
00656> #-----------------|-Per 'The Orchards' FSSWM Report---------------------|
00657> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
00658> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00659> #-----------------|-------------------------------------------------------|
00660> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00661>     CALIB NASHYD         1.0 01:EXT-9A       101.80    3.581 No_date    2:39
00662>       [CN= 80.0: N= 3.00: Tp= 1.00]
00663> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00664>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    3.581 No_date    2:39
00665>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.570 No_date    2:43
00666>       {L/S/n=  550./2.000/.035}
00667>       {Vmax= 1.807:Dmax=  .356}
00668> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00669>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    3.763 No_date    1:23
00670>       [XIMP=.35:TIMP=.35]
00671>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00672>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00673>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00674> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00675>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.763 No_date    1:23
00676>                 out <=    1.0 04:Orchards      14.80     .713 No_date    1:50
00677>      {MxStoUsed=.4213E+00  m3}
00678> #-----------------|-------------------------------------------------------|
00679> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00680> #-----------------|-------------------------------------------------------|
00681> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00682>     ADD HYD              1.0 02:Channel      101.80    3.570 No_date    2:43
00683>                    +     1.0 04:Orchards      14.80     .713 No_date    1:50
00684>                  SUM=    1.0 05:RD19         116.60    3.964 No_date    2:37
00685> #-----------------|-------------------------------------------------------|
00686> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00687> #-----------------|-------------------------------------------------------|
00688> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00689>     CALIB NASHYD         1.0 01:9A            2.57     .055 No_date    1:50
00690>       [CN= 48.4: N= 3.00: Tp=  .37]
00691> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00692>     CALIB NASHYD         1.0 02:9B           11.63     .245 No_date    2:52
00693>       [CN= 68.5: N= 3.00: Tp= 1.09]
00694> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00695>     ADD HYD              1.0 01:9A            2.57     .055 No_date    1:50
00696>                    +     1.0 02:9B           11.63     .245 No_date    2:52
00697>                  SUM=    1.0 10:9A9B         14.20     .269 No_date    2:46
00698> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB NASHYD         1.0 01:9C            1.19     .025 No_date    1:30
00700>       [CN= 33.2: N= 3.00: Tp=  .14]
00701> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     CALIB NASHYD         1.0 02:9D            2.02     .061 No_date    1:30
00703>       [CN= 41.9: N= 3.00: Tp=  .15]
00704> #-----------------|-------------------------------------------------------|
00705> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00706> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00707> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00708> #-----------------|-------------------------------------------------------|
00709> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00710>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .061 No_date    1:30
00711>  *              out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00712>      {MxStoUsed=.1949E-01  m3}
00713> R0001:C00116------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00714>     ADD HYD              1.0 01:9C            1.19     .025 No_date    1:30
00715>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00716>                  SUM=    1.0 09:9C9D          3.21     .025 No_date    1:30
00717> #-----------------|-------------------------------------------------------|
00718> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00719> #-----------------|-------------------------------------------------------|
00720> R0001:C00117------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00721>     CALIB NASHYD         1.0 07:9E            7.60     .132 No_date    2:00
00722>       [CN= 47.1: N= 3.00: Tp=  .48]
00723> R0001:C00118------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00724>     CALIB NASHYD         1.0 08:9F            3.35     .051 No_date    2:21
00725>       [CN= 50.4: N= 3.00: Tp=  .71]
00726> #-----------------|-------------------------------------------------------|
00727> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00728> #-----------------|-------------------------------------------------------|
00729> R0001:C00119------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00730>     ADD HYD              1.0 05:RD19         116.60    3.964 No_date    2:37
00731>                    +     1.0 10:9A9B          14.20     .269 No_date    2:46
00732>                    +     1.0 09:9C9D           3.21     .025 No_date    1:30
00733>                    +     1.0 07:9E             7.60     .132 No_date    2:00
00734>                    +     1.0 08:9F             3.35     .051 No_date    2:21
00735>                  SUM=    1.0 01:WC9LS        144.96    4.378 No_date    2:37
00736> R0001:C00120------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00737>     SAVE HYD             1.0 01:WC9LS        144.96    4.378 No_date    2:37
00738>       fname :WC9LS.0001
00739>       remark:Lakeshore Road Hydrograph
00740> R0001:C00121------------------------------------------------------------------
00741>     FINISH
00742> -------------------------------------------------------------------------------
00743> ***************************************************************************
00744>      WARNINGS / ERRORS / NOTES
00745>      -------------------------
00746> R0001:C00013  ROUTE RESERVOIR
00747> *** WARNING: Outflow volume is less than inflow volume.
00748> R0001:C00030  ROUTE RESERVOIR
00749> *** WARNING: Outflow volume is less than inflow volume.
00750> R0001:C00047  ROUTE RESERVOIR
00751> *** WARNING: Outflow volume is less than inflow volume.
00752> R0001:C00064  ROUTE RESERVOIR
00753> *** WARNING: Outflow volume is less than inflow volume.
00754> R0001:C00081  ROUTE RESERVOIR
00755> *** WARNING: Outflow volume is less than inflow volume.
00756> R0001:C00098  ROUTE RESERVOIR
00757> *** WARNING: Outflow volume is less than inflow volume.
00758> R0001:C00115  ROUTE RESERVOIR
00759> *** WARNING: Outflow volume is less than inflow volume.
00760>    Simulation ended on 2020-06-15     at 12:06:27
00761> ===============================================================================
00762>
00763>
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2018-09-20 [UPDATED 2020-06-15]
00005> *#  Modeller    : [OD - UPDATED BY JM/BD - UPDATED BY JE]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1]
00010> *%                   ["25mm.stm"] <--storm filename, one per line for NSTORM tim
00011> *%-----------------|---------------------------------------------------------|
00012>
00013> *#************************************************************************
00014> *#*****************************25mm storm*********************************
00015> *#************************************************************************
00016>
00017> READ STORM          STORM_FILENAME=["25mm.stm"]
00018>
00019> *%-----------------|---------------------------------------------------------|
00020> *%-----------------|---------------------------------------------------------|
00021> *#-----------------|---------------------------------------------------------|
00022> *#-----------------|-POST-DEVELOPMENT--------------------------------------|
00023> *#-----------------|---------------------------------------------------------|
00024> *#-----------------|---------------------------------------------------------|
00025> *#-----------------|-Subwatershed 9 External Drainage Area-----------------|
00026> *#-----------------|-Per 'The Orchards' FSSWM Report-----------------------|
00027> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)------------|
00028> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00029> *#-----------------|---------------------------------------------------------|
00030> *%-----------------|---------------------------------------------------------|
00031> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00032>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00033>                     N=[3], TP=[1.00]hrs,
00034>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00035> *%-----------------|---------------------------------------------------------|
00036> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00037>                     RDT=[1](min),
00038>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00039>                                       FPSLOPE=[2](%),
00040>                     SECNUM=[1],       NSEG=[3]
00041>                     ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00042>                     ( DISTANCE (m), ELEVATION (m))=[0,102]
00043>                                                   [8,100]
00044>                                                   [12,100]
00045>                                                   [20,102]
00046> *%-----------------|---------------------------------------------------------|
00047> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00048>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00049>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00050>                             DCAY=[2](/hr), F=[0](mm),
00051>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00052>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00053>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00054>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00055>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00056> *%-----------------|---------------------------------------------------------|
00057> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00058>                     RDT=[1](min),
00059>                           TABLE of ( OUTFLOW-STORAGE ) values
00060>                                    (cms) - (ha-m)
00061>                                  [   0.0 ,  0.0 ]
00062>                                  [   0.0100 ,  0.0610 ]
00063>                                  [   0.0400 ,  0.1310 ]
00064>                                  [   0.0700 ,  0.2110 ]
00065>                                  [   0.2600 ,  0.3000 ]
00066>                                  [   0.6000 ,  0.3940 ]
00067>                                  [   1.0200 ,  0.4950 ]
00068>                                  [   1.5200 ,  0.6020 ]
00069>                                  [   2.0800 ,  0.7160 ]
00070>                                  [   2.6900 ,  0.8370 ]
00071>                           IDovf=[ ], NHYDovf=[  ]
00072> *%-----------------|---------------------------------------------------------|
00073> *#-----------------|---------------------------------------------------------|
00074> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00075> *#-----------------|---------------------------------------------------------|
00076> *%-----------------|---------------------------------------------------------|
00077> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00078> *%-----------------|---------------------------------------------------------|
00079> *#-----------------|---------------------------------------------------------|
00080> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------|
00081> *#-----------------|---------------------------------------------------------|
00082> *%-----------------|---------------------------------------------------------|
00083> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00084>                     DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00085>                     N=[3], TP=[0.24]hrs,
00086>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00087> *%-----------------|---------------------------------------------------------|
00088> CALIB NASHYD       ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
00089>                     DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
00090>                     N=[3], TP=[0.06]hrs,
00091>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00092> *#-----------------|-----------------------CULVERT #1--------------------------|
00093> ADD HYD            IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
00094> *%-----------------|---------------------------------------------------------|
00095> CALIB NASHYD       ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
00096>                     DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
00097>                     N=[3], TP=[0.28]hrs,
00098>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00099> *#-----------------|-----------------------CULVERT #2--------------------------|
00100> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
00101> *%-----------------|---------------------------------------------------------|
00102> *#-----------------|---------------------------------------------------------|
00103> *#-----------------|-AREAS TO SWM FACILITY 1-------------------------------|
00104> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
00105> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
00106> *#-----------------|---------------------------------------------------------|
00107> *%-----------------|---------------------------------------------------------|
00108> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00109>                     DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00110>                     N=[3], TP=[0.47]hrs,
00111>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00112> *%-----------------|---------------------------------------------------------|
00113> CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00114>                     XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00115>                     SCS curve number CN=[67.0],
00116>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00117>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00118>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00119>                                          LGI=[44](m), MNI=[0.013], SCI=[0](min),
00120>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00121> *%-----------------|---------------------------------------------------------|
00122> ADD HYD            IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
00123> *%-----------------|---------------------------------------------------------|
00124> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00125>                     DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00126>                     N=[3], TP=[0.11]hrs,
00127>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00128> *%-----------------|---------------------------------------------------------|
00129> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00130> *%-----------------|---------------------------------------------------------|
00131> *#-----------------|---------------------------------------------------------|
00132> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00133> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
00134> *#-----------------|---------------------------------------------------------|
00135> *%-----------------|---------------------------------------------------------|
00136> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00137>                     RDT=[1](min),
00138>                           TABLE of ( OUTFLOW-STORAGE ) values
00139>                                    (cms) - (ha-m)
00140>                                  [   0.0 ,  0.0 ]
00141>                                  [   0.007 ,  0.027 ]
00142>                                  [   0.018 ,  0.084 ]
00143>                                  [   0.025 ,  0.147 ]
00144>                                  [   0.029 ,  0.199 ]
00145>                                  [   0.032 ,  0.256 ]
00146>                                  [   0.036 ,  0.337 ]
00147>                                  [   0.078 ,  0.426 ]
00148>                                  [   0.151 ,  0.522 ]
00149>                                  [   0.293 ,  0.581 ]
00150>                                  [   0.306 ,  0.656 ]
00151>                                  [   0.330 ,  0.737 ]
00152>                                  [   1.442 ,  0.902 ]
00153>                                  [   2.636 ,  0.976 ]
00154>                                  [   -1  ,  -1  ]  (max twenty pts)
00155>                           IDovf=[   ], NHYDovf=[   ]
00156> *%-----------------|---------------------------------------------------------|
00157> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00158> *%-----------------|---------------------------------------------------------|
00159> *#-----------------|---------------------------------------------------------|
00160> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands-------------|
00161> *#-----------------|---------------------------------------------------------|
00162> *%-----------------|---------------------------------------------------------|
00163> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00164> *#-----------------|---------------------------------------------------------|
00165> CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
00166>                     XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
00167>                     SCS curve number CN=[66.1],
00168>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00169>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00170>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00171>                                          LGI=[96](m), MNI=[0.013], SCI=[0](min),
00172>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00173> *%-----------------|---------------------------------------------------------|
00174> *#-----------------|---------------------------------------------------------|
00175> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00176> *#-----------------|---------------------------------------------------------|
00177> *%-----------------|---------------------------------------------------------|
00178> *%-----------------|---------------------------------------------------------|
00179> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
00180>                     DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
00181>                     N=[3], TP=[0.25]hrs,
00182>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00183> *#-----------------|-----------------------CULVERT #3--------------------------|
00184> ADD HYD            IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
00185> *%-----------------|---------------------------------------------------------|
00186> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
00187>                     DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
00188>                     N=[3], TP=[0.32]hrs,
00189>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00190> *%-----------------|---------------------------------------------------------|
00191> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
00192>                     DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
00193>                     N=[3], TP=[0.52]hrs,
00194>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00195> *%-----------------|---------------------------------------------------------|
00196> CALIB NASHYD       ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
00197>                     DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
00198>                     N=[3], TP=[0.23]hrs,
00199>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00200> *%-----------------|---------------------------------------------------------|
00201> ADD HYD            IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
00202> *%-----------------|---------------------------------------------------------|
00203> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
00204> *%-----------------|---------------------------------------------------------|
00205> *#-----------------|---------------------------------------------------------|
00206> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00207> *#-----------------|---------------------------------------------------------|
00208> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00209>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00210>                     N=[3], TP=[0.14]hrs,
00211>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00212> *%-----------------|---------------------------------------------------------|
00213> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00214>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00215>                     N=[3], TP=[0.32]hrs,
00216>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00217> *%-----------------|---------------------------------------------------------|
00218> ADD HYD            IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
00219> *%-----------------|---------------------------------------------------------|
00220> CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00221>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00222>                     SCS curve number CN=[49],
00223>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00224>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00225>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00226>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
00227>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00228> *%-----------------|---------------------------------------------------------|
00229> CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00230>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00231>                     SCS curve number CN=[59],
00232>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00233>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00234>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00235>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
00236>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00237> *%-----------------|---------------------------------------------------------|
00238> CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
00239>                     XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
00240>                     SCS curve number CN=[69],
00241>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00242>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00243>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00244>                                          LGI=[100](m), MNI=[0.013], SCI=[0](min)
00245>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00246> *%-----------------|---------------------------------------------------------|
00247> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
00248> *%-----------------|---------------------------------------------------------|
00249> *#-----------------|---------------------------------------------------------|
00250> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00251> *#-----------------|---------------------------------------------------------|
00252> *%-----------------|---------------------------------------------------------|
00253> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00254>                     RDT=[1](min),
00255>                           TABLE of ( OUTFLOW-STORAGE ) values
00256>                                    (cms) - (ha-m)
00257>                                  [   0.0 ,  0.0 ]
00258>                                  [   0.006 ,  0.019 ]
00259>                                  [   0.016 ,  0.060 ]
00260>                                  [   0.019 ,  0.080 ]
00261>                                  [   0.021 ,  0.103 ]
00262>                                  [   0.025 ,  0.141 ]
00263>                                  [   0.028 ,  0.181 ]
00264>                                  [   0.069 ,  0.240 ]
00265>                                  [   0.142 ,  0.303 ]
00266>                                  [   0.298 ,  0.371 ]
00267>                                  [   0.322 ,  0.403 ]
00268>                                  [   0.560 ,  0.440 ]
00269>                                  [   1.128 ,  0.479 ]
00270>                                  [   1.226 ,  0.511 ]
```

```
                                    [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD---------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%-----------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
*#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.44]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 TOTAL------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 2yr 4-hr storm**************************
*#*****************************************************************************
*%-----------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5   ]       [  117.0  ]
                          [   10  ]       [  72.1   ]
                          [   15  ]       [  54.3   ]
                          [   30  ]       [  33.4   ]
                          [   60  ]       [  20.6   ]
                          [   120 ]       [  12.7   ]
                          [   360 ]       [  5.9    ]
                          [   720 ]       [  3.6    ]
                          [   1440 ]      [  2.2    ]
                             -1              -1
*%-----------------|-------------------------------------------------------------|

*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT----------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area-------------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                           DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                        (cms) - (ha-m)
                                    [   0.0 ,  0.0 ]
                                    [   0.0100 ,  0.0610 ]
                                    [   0.0400 ,  0.1310 ]
                                    [   0.0700 ,  0.2110 ]
                                    [   0.2600 ,  0.3000 ]
                                    [   0.6000 ,  0.3940 ]
                                    [   1.0200 ,  0.4950 ]
                                    [   1.5200 ,  0.6020 ]
                                    [   2.0800 ,  0.7160 ]
                                    [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands-------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|---------------------CULVERT #1----------------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|---------------------CULVERT #2----------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-AREAS TO SWM FACILITY 1---------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1--------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-----------|
*#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                        (cms) - (ha-m)
                                    [   0.0 ,  0.0 ]
                                    [   0.007 ,  0.027 ]
                                    [   0.018 ,  0.084 ]
                                    [   0.025 ,  0.147 ]
                                    [   0.029 ,  0.199 ]
                                    [   0.032 ,  0.256 ]
                                    [   0.036 ,  0.337 ]
                                    [   0.078 ,  0.426 ]
                                    [   0.151 ,  0.522 ]
                                    [   0.293 ,  0.581 ]
                                    [   0.306 ,  0.656 ]
                                    [   0.330 ,  0.737 ]
                                    [   1.442 ,  0.902 ]
                                    [   2.636 ,  0.976 ]
                                    [   -1    ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands-------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-----------|
*#-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED---------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|---------------------CULVERT #3----------------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                    DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2------------------------------|
*#-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
```

```
                                        LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                        LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                    XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                        LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                        LGI=[100](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.006 ,  0.019 ]
                                [   0.016 ,  0.060 ]
                                [   0.019 ,  0.080 ]
                                [   0.021 ,  0.103 ]
                                [   0.025 ,  0.141 ]
                                [   0.028 ,  0.181 ]
                                [   0.069 ,  0.240 ]
                                [   0.142 ,  0.303 ]
                                [   0.298 ,  0.371 ]
                                [   0.322 ,  0.403 ]
                                [   0.560 ,  0.440 ]
                                [   1.128 ,  0.479 ]
                                [   1.226 ,  0.511 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|---------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.44]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 TOTAL--------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%------------------|---------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 5yr 4-hr storm**************************
*#*****************************************************************************
*%------------------|---------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)     Intensity(mm/hr)
                          [   5   ]       [  156.2  ]
                          [   10  ]       [  96.2   ]
                          [   15  ]       [  72.5   ]
                          [   30  ]       [  44.6   ]
                          [   60  ]       [  27.5   ]
                          [   120 ]       [  16.9   ]
                          [   360 ]       [  7.9    ]
                          [   720 ]       [  4.8    ]
                          [   1440 ]      [  3.0    ]
                             -1              -1
*%------------------|---------------------------------------------------------|

*%------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                           DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                        LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                        LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.0100 ,  0.0610 ]
                                [   0.0400 ,  0.1310 ]
                                [   0.0700 ,  0.2110 ]
                                [   0.2600 ,  0.3000 ]
                                [   0.6000 ,  0.3940 ]
                                [   1.0200 ,  0.4950 ]
                                [   1.5200 ,  0.6020 ]
                                [   2.0800 ,  0.7160 ]
                                [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #1--------------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #2--------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-AREAS TO SWM FACILITY 1-----------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                        LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                        LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.007 ,  0.027 ]
                                [   0.018 ,  0.084 ]
                                [   0.025 ,  0.147 ]
                                [   0.029 ,  0.199 ]
                                [   0.032 ,  0.256 ]
                                [   0.036 ,  0.337 ]
                                [   0.078 ,  0.426 ]
                                [   0.151 ,  0.522 ]
                                [   0.293 ,  0.581 ]
                                [   0.306 ,  0.656 ]
                                [   0.330 ,  0.737 ]
                                [   1.442 ,  0.902 ]
                                [   2.636 ,  0.976 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                        LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                        LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #3--------------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
```

```
00811> CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
00812>                     DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
00813>                     N=[3], TP=[0.23]hrs,
00814>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00815> *%------------------|-------------------------------------------------------------|
00816> ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
00817> *%------------------|-------------------------------------------------------------|
00818> ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
00819> *%------------------|-------------------------------------------------------------|
00820> *#------------------|-------------------------------------------------------------|
00821> *#------------------|-LANDS DRAINING TO SWM FACILITY 2-------------------------------|
00822> *#------------------|-------------------------------------------------------------|
00823> CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00824>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00825>                     N=[3], TP=[0.14]hrs,
00826>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00827> *%------------------|-------------------------------------------------------------|
00828> CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00829>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00830>                     N=[3], TP=[0.32]hrs,
00831>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00832> *%------------------|-------------------------------------------------------------|
00833> ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
00834> *%------------------|-------------------------------------------------------------|
00835> CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00836>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00837>                     SCS curve number CN=[49],
00838>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00839>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00840>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00841>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
00842>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00843> *%------------------|-------------------------------------------------------------|
00844> CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00845>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00846>                     SCS curve number CN=[59],
00847>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00848>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00849>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00850>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
00851>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00852> *%------------------|-------------------------------------------------------------|
00853> CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
00854>                     XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
00855>                     SCS curve number CN=[69],
00856>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00857>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00858>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00859>                                          LGI=[100](m), MNI=[0.013], SCI=[0](min)
00860>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00861> *%------------------|-------------------------------------------------------------|
00862> ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
00863> *%------------------|-------------------------------------------------------------|
00864> *#------------------|-------------------------------------------------------------|
00865> *#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-------------|
00866> *#------------------|-------------------------------------------------------------|
00867> *%------------------|-------------------------------------------------------------|
00868> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00869>                     RDT=[1](min),
00870>                          TABLE of ( OUTFLOW-STORAGE ) values
00871>                                     (cms) - (ha-m)
00872>                                   [   0.0 ,  0.0 ]
00873>                                   [   0.006 ,  0.019 ]
00874>                                   [   0.016 ,  0.060 ]
00875>                                   [   0.019 ,  0.080 ]
00876>                                   [   0.021 ,  0.103 ]
00877>                                   [   0.025 ,  0.141 ]
00878>                                   [   0.028 ,  0.181 ]
00879>                                   [   0.069 ,  0.240 ]
00880>                                   [   0.142 ,  0.303 ]
00881>                                   [   0.298 ,  0.371 ]
00882>                                   [   0.322 ,  0.403 ]
00883>                                   [   0.560 ,  0.440 ]
00884>                                   [   1.128 ,  0.479 ]
00885>                                   [   1.226 ,  0.511 ]
00886>                                   [   -1  ,  -1  ]  (max twenty pts)
00887>                          IDovf=[   ], NHYDovf=[   ]
00888> *%------------------|-------------------------------------------------------------|
00889> *#------------------|-------------------------------------------------------------|
00890> *#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD----------------------|
00891> *#------------------|-------------------------------------------------------------|
00892> *%------------------|-------------------------------------------------------------|
00893> ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00894> *%------------------|-------------------------------------------------------------|
00895> SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
00896>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
00897> *%------------------|-------------------------------------------------------------|
00898> *#------------------|-------------------------------------------------------------|
00899> *#------------------|--WATERCOURSE 8 CATCHMENTS--------------------------------------|
00900> *#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-------------------------|
00901> *#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8---------------------|
00902> *#------------------|-------------------------------------------------------------|
00903> *%------------------|-------------------------------------------------------------|
00904> CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00905>                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00906>                     N=[3], TP=[0.23]hrs,
00907>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00908> *%------------------|-------------------------------------------------------------|
00909> CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
00910>                     DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
00911>                     N=[3], TP=[0.44]hrs,
00912>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00913> *%------------------|-------------------------------------------------------------|
00914> *#------------------|-------------------------------------------------------------|
00915> *#------------------|--WATERCOURSE 8 TOTAL-------------------------------------------|
00916> *#------------------|-------------------------------------------------------------|
00917> *%------------------|-------------------------------------------------------------|
00918> ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
00919> *%------------------|-------------------------------------------------------------|
00920> *#*************************************************************************
00921> *#**************************Chicago 10yr 4-hr storm**************************
00922> *#*************************************************************************
00923> *%------------------|-------------------------------------------------------------|
00924>
00925> CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
00926>                     ICASEcc=[2],
00927>                     Enter ordinates of IDF curve below, at least seven points
00928>                          TIME (min)    Intensity(mm/hr)
00929>                          [   5    ]       [  182.3  ]
00930>                          [   10   ]       [  112.3   ]
00931>                          [   15   ]       [  84.6   ]
00932>                          [   30   ]       [  52.1   ]
00933>                          [   60   ]       [  32.1   ]
00934>                          [   120  ]       [  19.8   ]
00935>                          [   360  ]       [  9.2    ]
00936>                          [   720  ]       [  5.7    ]
00937>                          [   1440 ]       [  3.5    ]
00938>                             -1               -1
00939> *%------------------|-------------------------------------------------------------|
00940>
00941> *%------------------|-------------------------------------------------------------|
00942> *%------------------|-------------------------------------------------------------|
00943> *#------------------|-------------------------------------------------------------|
00944> *#------------------|-POST-DEVELOPMENT-----------------------------------------------|
00945> *#------------------|-------------------------------------------------------------|
00946> *#------------------|-------------------------------------------------------------|
00947> *#------------------|-Subwatershed 9 External Drainage Area--------------------------|
00948> *#------------------|-Per 'The Orchards' FSSWM Report--------------------------------|
00949> *#------------------|-Prepared by Higgins Engineering (Jan. 2005)--------------------|
00950> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00951> *#------------------|-------------------------------------------------------------|
00952> *%------------------|-------------------------------------------------------------|
00953> CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00954>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00955>                     N=[3], TP=[1.00]hrs,
00956>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00957> *%------------------|-------------------------------------------------------------|
00958> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00959>                     RDT=[1](min),
00960>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00961>                                         FPSLOPE=[2](%),
00962>                     SECNUM=[1],       NSEG=[3]
00963>                     ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00964>                     ( DISTANCE (m), ELEVATION (m))=[0,102]
00965>                                                   [8,100]
00966>                                                   [12,100]
00967>                                                   [20,102]
00968> *%------------------|-------------------------------------------------------------|
00969> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00970>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00971>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00972>                             DCAY=[2](/hr), F=[0](mm),
00973>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00974>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00975>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00976>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00977>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00978> *%------------------|-------------------------------------------------------------|
00979> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00980>                     RDT=[1](min),
00981>                          TABLE of ( OUTFLOW-STORAGE ) values
00982>                                     (cms) - (ha-m)
00983>                                   [   0.0 ,  0.0 ]
00984>                                   [   0.0100 ,  0.0610 ]
00985>                                   [   0.0400 ,  0.1310 ]
00986>                                   [   0.0700 ,  0.2110 ]
00987>                                   [   0.2600 ,  0.3000 ]
00988>                                   [   0.6000 ,  0.3940 ]
00989>                                   [   1.0200 ,  0.4950 ]
00990>                                   [   1.5200 ,  0.6020 ]
00991>                                   [   2.0800 ,  0.7160 ]
00992>                                   [   2.6900 ,  0.8370 ]
00993>                          IDovf=[ ], NHYDovf=[ ]
00994> *%------------------|-------------------------------------------------------------|
00995> *#------------------|-------------------------------------------------------------|
00996> *#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00997> *#------------------|-------------------------------------------------------------|
00998> *%------------------|-------------------------------------------------------------|
00999> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
01000> *%------------------|-------------------------------------------------------------|
01001> *#------------------|-------------------------------------------------------------|
01002> *#------------------|-Parkbridge Craigleith - Upper Terrace Lands--------------|
01003> *#------------------|-------------------------------------------------------------|
01004> *%------------------|-------------------------------------------------------------|
01005> CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
01006>                     DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
01007>                     N=[3], TP=[0.24]hrs,
01008>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01009> *%------------------|-------------------------------------------------------------|
01010> CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
01011>                     DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
01012>                     N=[3], TP=[0.06]hrs,
01013>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01014> *#------------------|----------------CULVERT #1-----------------------------------|
01015> ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
01016> *%------------------|-------------------------------------------------------------|
01017> CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
01018>                     DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
01019>                     N=[3], TP=[0.28]hrs,
01020>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01021> *#------------------|----------------CULVERT #2-----------------------------------|
01022> ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
01023> *%------------------|-------------------------------------------------------------|
01024> *#------------------|-------------------------------------------------------------|
01025> *#------------------|-AREAS TO SWM FACILITY 1----------------------------------------|
01026> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
01027> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
01028> *#------------------|-------------------------------------------------------------|
01029> *%------------------|-------------------------------------------------------------|
01030> CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
01031>                     DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
01032>                     N=[3], TP=[0.47]hrs,
01033>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01034> *%------------------|-------------------------------------------------------------|
01035> CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
01036>                     XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
01037>                     SCS curve number CN=[67.0],
01038>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
01039>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01040>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
01041>                                          LGI=[44](m), MNI=[0.013], SCI=[0](min),
01042>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01043> *%------------------|-------------------------------------------------------------|
01044> ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
01045> *%------------------|-------------------------------------------------------------|
01046> CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
01047>                     DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
01048>                     N=[3], TP=[0.11]hrs,
01049>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01050> *%------------------|-------------------------------------------------------------|
01051> ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
01052> *%------------------|-------------------------------------------------------------|
01053> *#------------------|-------------------------------------------------------------|
01054> *#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01055> *#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01056> *#------------------|-------------------------------------------------------------|
01057> *%------------------|-------------------------------------------------------------|
01058> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
01059>                     RDT=[1](min),
01060>                          TABLE of ( OUTFLOW-STORAGE ) values
01061>                                     (cms) - (ha-m)
01062>                                   [   0.0 ,  0.0 ]
01063>                                   [   0.007 ,  0.027 ]
01064>                                   [   0.018 ,  0.084 ]
01065>                                   [   0.025 ,  0.147 ]
01066>                                   [   0.029 ,  0.199 ]
01067>                                   [   0.032 ,  0.256 ]
01068>                                   [   0.036 ,  0.337 ]
01069>                                   [   0.078 ,  0.426 ]
01070>                                   [   0.151 ,  0.522 ]
01071>                                   [   0.293 ,  0.581 ]
01072>                                   [   0.306 ,  0.656 ]
01073>                                   [   0.330 ,  0.737 ]
01074>                                   [   1.442 ,  0.902 ]
01075>                                   [   2.636 ,  0.976 ]
01076>                                   [   -1  ,  -1  ]  (max twenty pts)
01077>                          IDovf=[   ], NHYDovf=[   ]
01078> *%------------------|-------------------------------------------------------------|
01079> ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
01080> *%------------------|-------------------------------------------------------------|
```

```
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED----------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|-----------------------CULVERT #3--------------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                    DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                    XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[100](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                (cms) - (ha-m)
                              [   0.0 ,  0.0 ]
                              [   0.006 ,  0.019 ]
                              [   0.016 ,  0.060 ]
                              [   0.019 ,  0.080 ]
                              [   0.021 ,  0.103 ]
                              [   0.025 ,  0.141 ]
                              [   0.028 ,  0.181 ]
                              [   0.069 ,  0.240 ]
                              [   0.142 ,  0.303 ]
                              [   0.298 ,  0.371 ]
                              [   0.322 ,  0.403 ]
                              [   0.560 ,  0.440 ]
                              [   1.128 ,  0.479 ]
                              [   1.226 ,  0.511 ]
                              [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%-----------------|--------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.44]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 TOTAL--------------------------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%-----------------|--------------------------------------------------------------|
*#****************************************************************************
*#***************************Chicago 25yr 4-hr storm*************************
*#****************************************************************************
*%-----------------|--------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5    ]       [  215.3  ]
                          [   10   ]       [  132.6   ]
                          [   15   ]       [  99.9   ]
                          [   30   ]       [  61.5   ]
                          [   60   ]       [  37.9   ]
                          [   120  ]       [  23.3   ]
                          [   360  ]       [  10.8    ]
                          [   720  ]       [  6.7    ]
                          [   1440 ]       [  4.1    ]
                             -1              -1
*%-----------------|--------------------------------------------------------------|

*%-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                   [8,100]
                                                   [12,100]
                                                   [20,102]
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                (cms) - (ha-m)
                              [   0.0 ,  0.0 ]
                              [   0.0100 ,  0.0610 ]
                              [   0.0400 ,  0.1310 ]
                              [   0.0700 ,  0.2110 ]
                              [   0.2600 ,  0.3000 ]
                              [   0.6000 ,  0.3940 ]
                              [   1.0200 ,  0.4950 ]
                              [   1.5200 ,  0.6020 ]
                              [   2.0800 ,  0.7160 ]
                              [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|-----------------------CULVERT #1--------------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|-----------------------CULVERT #2--------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-AREAS TO SWM FACILITY 1-----------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
```

```
ADD HYD              IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                     DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                     N=[3], TP=[0.11]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR      IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                     RDT=[1](min),
                           TABLE of ( OUTFLOW-STORAGE ) values
                                       (cms) - (ha-m)
                                     [   0.0 ,   0.0 ]
                                     [   0.007 ,  0.027 ]
                                     [   0.018 ,  0.084 ]
                                     [   0.025 ,  0.147 ]
                                     [   0.029 ,  0.199 ]
                                     [   0.032 ,  0.256 ]
                                     [   0.036 ,  0.337 ]
                                     [   0.078 ,  0.426 ]
                                     [   0.151 ,  0.522 ]
                                     [   0.293 ,  0.581 ]
                                     [   0.306 ,  0.656 ]
                                     [   0.330 ,  0.737 ]
                                     [   1.442 ,  0.902 ]
                                     [   2.636 ,  0.976 ]
                                     [   -1   ,   -1  ]  (max twenty pts)
                           IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#-----------------|-------------------------------------------------------------|
CALIB STANDHYD       ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                     XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                     SCS curve number CN=[66.1],
                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                          LGI=[96](m), MNI=[0.013], SCI=[0](min),
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                     DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                     N=[3], TP=[0.25]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#-----------------|-----------------------CULVERT #3--------------------------|
ADD HYD              IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                     DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                     N=[3], TP=[0.32]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                     DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                     N=[3], TP=[0.52]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                     DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                     N=[3], TP=[0.23]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                     N=[3], TP=[0.14]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                     N=[3], TP=[0.32]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD       ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                     SCS curve number CN=[49],
                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD       ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                     SCS curve number CN=[59],
                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD       ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                     XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                     SCS curve number CN=[69],
                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                          LGI=[100](m), MNI=[0.013], SCI=[0](min)
                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR      IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                     RDT=[1](min),
                           TABLE of ( OUTFLOW-STORAGE ) values
                                       (cms) - (ha-m)
                                      [   0.0 ,   0.0 ]
                                     [   0.006 ,  0.019 ]
                                     [   0.016 ,  0.060 ]
                                     [   0.019 ,  0.080 ]
                                     [   0.021 ,  0.103 ]
                                     [   0.025 ,  0.141 ]
                                     [   0.028 ,  0.181 ]
                                     [   0.069 ,  0.240 ]
                                     [   0.142 ,  0.303 ]
                                     [   0.298 ,  0.371 ]
                                     [   0.322 ,  0.403 ]
                                     [   0.560 ,  0.440 ]
                                     [   1.128 ,  0.479 ]
                                     [   1.226 ,  0.511 ]
                                     [   -1   ,   -1  ]  (max twenty pts)
                           IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%-----------------|-------------------------------------------------------------|
SAVE HYD             ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                     HYD_COMMENT=["POST-DEV LAKESHORE"]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                     N=[3], TP=[0.23]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                     DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                     N=[3], TP=[0.44]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 TOTAL--------------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
*#*****************************************************************************
*#**************************Chicago 50yr 4-hr storm**************************
*#*****************************************************************************
*%-----------------|-------------------------------------------------------------|

CHICAGO STORM        IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                     ICASEcs=[2],
                     Enter ordinates of IDF curve below, at least seven points
                         TIME (min)    Intensity(mm/hr)
                           [   5    ]       [  239.7  ]
                           [   10   ]       [  147.7  ]
                           [   15   ]       [  111.2  ]
                           [   30   ]       [  68.5   ]
                           [   60   ]       [  42.2   ]
                           [   120  ]       [  26.0   ]
                           [   360  ]       [  12.1   ]
                           [   720  ]       [  7.4    ]
                           [   1440 ]       [  4.6    ]
                              -1              -1
*%-----------------|-------------------------------------------------------------|

*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                     N=[3], TP=[1.00]hrs,
                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE CHANNEL        IDout=[2], NHYD=["Channel"], IDin=[1],
                     RDT=[1](min),
                     CHLGTH=[550](m),  CHSLOPE=[2](%),
                                           FPSLOPE=[2](%),
                     SECNUM=[1],       NSEG=[3]
                     ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                     ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD       ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                             DCAY=[2](/hr), F=[0](mm),
                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR      IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                     RDT=[1](min),
                           TABLE of ( OUTFLOW-STORAGE ) values
                                       (cms) - (ha-m)
                                     [   0.0 ,  0.0 ]
                                     [   0.0100 ,  0.0610 ]
                                     [   0.0400 ,  0.1310 ]
                                     [   0.0700 ,  0.2110 ]
                                     [   0.2600 ,  0.3000 ]
                                     [   0.6000 ,  0.3940 ]
                                     [   1.0200 ,  0.4950 ]
                                     [   1.5200 ,  0.6020 ]
                                     [   2.0800 ,  0.7160 ]
                                     [   2.6900 ,  0.8370 ]
                           IDovf=[ ], NHYDovf=[  ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD              IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD         ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                     DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
```

```
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #1----------------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #2----------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-AREAS TO SWM FACILITY 1---------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.007 ,  0.027 ]
                                  [   0.018 ,  0.084 ]
                                  [   0.025 ,  0.147 ]
                                  [   0.029 ,  0.199 ]
                                  [   0.032 ,  0.256 ]
                                  [   0.036 ,  0.337 ]
                                  [   0.078 ,  0.426 ]
                                  [   0.151 ,  0.522 ]
                                  [   0.293 ,  0.581 ]
                                  [   0.306 ,  0.656 ]
                                  [   0.330 ,  0.737 ]
                                  [   1.442 ,  0.902 ]
                                  [   2.636 ,  0.976 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                         IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
*#------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #3----------------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                    DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
*#------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                    XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[100](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                         TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.006 ,  0.019 ]
                                  [   0.016 ,  0.060 ]
                                  [   0.019 ,  0.080 ]
                                  [   0.021 ,  0.103 ]
                                  [   0.025 ,  0.141 ]
                                  [   0.028 ,  0.181 ]
                                  [   0.069 ,  0.240 ]
                                  [   0.142 ,  0.303 ]
                                  [   0.298 ,  0.371 ]
                                  [   0.322 ,  0.403 ]
                                  [   0.560 ,  0.440 ]
                                  [   1.128 ,  0.479 ]
                                  [   1.226 ,  0.511 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                         IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
*#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.44]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 8 TOTAL-----------------------------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%------------------|-------------------------------------------------------------|
*##################################################################################
*##########################Chicago 100yr 4-hr storm#################################
*##################################################################################
*%------------------|-------------------------------------------------------------|

CHICAGO STORM       IUNITS=[2],  TD=[4.0](hrs), TPRAT=[0.33],  CSDT=[5](min),
                    ICASEcs=[2],
                    Enter ordinates of IDF curve below, at least seven points
                        TIME (min)    Intensity(mm/hr)
                          [   5   ]       [  263.3  ]
                          [   10  ]       [  162.3  ]
                          [   15  ]       [  122.3  ]
                          [   30  ]       [  75.3   ]
                          [   60  ]       [  46.4   ]
                          [   120 ]       [  28.6   ]
                          [   360 ]       [  13.3   ]
                          [   720 ]       [  8.2    ]
                          [   1440 ]      [  5.0    ]
                             -1              -1
*%------------------|-------------------------------------------------------------|

*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT---------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area------------------------|
*#------------------|-Per 'The Orchards' FSSWM Report------------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)------------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-----------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
```

```
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                           DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.0100 ,  0.0610 ]
                                [   0.0400 ,  0.1310 ]
                                [   0.0700 ,  0.2110 ]
                                [   0.2600 ,  0.3000 ]
                                [   0.6000 ,  0.3940 ]
                                [   1.0200 ,  0.4950 ]
                                [   1.5200 ,  0.6020 ]
                                [   2.0800 ,  0.7160 ]
                                [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A"], DT=[1]min, AREA=[0.58](ha),
                    DWF=[0](cms),  CN/C=[79], IA=[6.59](mm),
                    N=[3], TP=[0.06]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #1------------------------|
ADD HYD             IDsum=[3], NHYD=["CULV1"], IDs to add=[1,2,5]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9B"], DT=[1]min, AREA=[2.10](ha),
                    DWF=[0](cms),  CN/C=[51.5], IA=[8.67](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #2------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,3]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-AREAS TO SWM FACILITY 1-----------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["NODE"], IDs to add=[1,3]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.007 ,  0.027 ]
                                [   0.018 ,  0.084 ]
                                [   0.025 ,  0.147 ]
                                [   0.029 ,  0.199 ]
                                [   0.032 ,  0.256 ]
                                [   0.036 ,  0.337 ]
                                [   0.078 ,  0.426 ]
                                [   0.151 ,  0.522 ]
                                [   0.293 ,  0.581 ]
                                [   0.306 ,  0.656 ]
                                [   0.330 ,  0.737 ]
                                [   1.442 ,  0.902 ]
                                [   2.636 ,  0.976 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.32](ha),
                    XIMP=[0.349], TIMP=[0.713], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.1],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[0.82](ha),
                    DWF=[0](cms),  CN/C=[40.9], IA=[8.46](mm),
                    N=[3], TP=[0.25]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*#------------------|-----------------------CULVERT #3------------------------|
ADD HYD             IDsum=[4], NHYD=["CULV3"], IDs to add=[7,1]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.38](ha),
                    DWF=[0](cms),  CN/C=[52.2], IA=[7.05](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.78](ha),
                    DWF=[0](cms),  CN/C=[78.8], IA=[7.26](mm),
                    N=[3], TP=[0.52]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9E"], DT=[1]min, AREA=[1.24](ha),
                    DWF=[0](cms),  CN/C=[66.3], IA=[6.71](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["NODE"], IDs to add=[1,2,3,10]
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,4,10]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["2A2B"], IDs to add=[1,2]
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[1.49](ha),
                    XIMP=[0.368], TIMP=[0.424], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[100](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[10,3,4,7]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                [   0.0 ,  0.0 ]
                                [   0.006 ,  0.019 ]
                                [   0.016 ,  0.060 ]
                                [   0.019 ,  0.080 ]
                                [   0.021 ,  0.103 ]
                                [   0.025 ,  0.141 ]
                                [   0.028 ,  0.181 ]
                                [   0.069 ,  0.240 ]
                                [   0.142 ,  0.303 ]
                                [   0.298 ,  0.371 ]
                                [   0.322 ,  0.403 ]
                                [   0.560 ,  0.440 ]
                                [   1.128 ,  0.479 ]
                                [   1.226 ,  0.511 ]
                                [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|---------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.44]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 TOTAL--------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[3], NHYD=["WC8"], IDs to add=[1,2]
*%------------------|---------------------------------------------------------|

FINISH
```

```
==============================================================================

SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO         222     000    11
S        W W W   MM MM   H   H    Y Y    MM MM   O   O          2   0   0   11
SSSSS    W W W   M M M   HHHHH     Y     M M M   O   O          2   0   0   11
    S     W W    M   M   H   H     Y     M   M   O   O        222   0   0   11
SSSSS     W W    M   M   H   H     Y     M   M    OOO         2     0   0   11
                                                              2     0   0   11
      StormWater Management HYdrologic Model                  222     000    11

******************************************************************************
*************************************  SWMHYMO Ver4.05.0  *******************
*****************  A single event and continuous hydrologic simulation model
*****************     based on the principles of HYMO and its successors
*****************                    OTTHYMO-83 and OTTHYMO-89.
******************************************************************************
***************** Distributed by:  J.F. Sabourin and Associates Inc.
*****************                  Ottawa,  Ontario: (613) 836-3884
*****************                  Gatineau, Quebec: (819) 243-6858
*****************                  E-Mail: swmhymo@jfsa.com
******************************************************************************

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
+++++++++++++++++                 Collingwood            SERIAL#:3737016
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

******************************************************************************
*****************             ++++++ PROGRAM ARRAY DIMENSIONS ++++++
*****************             Maximum value for ID numbers  :     11
*****************             Max. number of rainfall points: 105408
*****************             Max. number of flow points    : 105408
******************************************************************************


********************************   S U M M A R Y   O U T P U T   *************
******************************************************************************
*                  RUN DATE: 2022-03-11     TIME: 14:31:24     RUN COUNTER: 0000
******************************************************************************
* Input   file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
*               YMO\CHI\2022.02.16-POST_CHI.DAT
* Output  file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
*               YMO\CHI\2022.02.16-POST_CHI.out
* Summary file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
*               YMO\CHI\2022.02.16-POST_CHI.sum
* User comments:
* 1:__________________________________________________________________________
* 2:__________________________________________________________________________
* 3:__________________________________________________________________________
******************************************************************************


#*****************************************************************************
#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
#  Date        : 2018-09-20 [UPDATED 2020-06-15]
#  Modeller    : [OD - UPDATED BY JM/BD - UPDATED BY JE]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#*****************************************************************************
 RUN#:COMMAND#
R0001:C00001------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  = 0001 ]
#*****************************************************************************
#*******************************25mm storm************************************
#*****************************************************************************
R0001:C00002------------------------------------------------------------------
     READ STORM
      Filename = 25mm.stm
      Comment  = 25mm Event
      [SDT= 5.00:SDUR=   4.00:PTOT=  24.99]
#-----------------|-----------------------------------------------------------|
#-----------------|-POST-DEVELOPMENT------------------------------------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-Subwatershed 9 External Drainage Area---------------------|
#-----------------|-Per 'The Orchards' FSSWM Report--------------------------|
#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
#-----------------|-----------------------------------------------------------|
R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:EXT-9A        101.80     .507 No_date    2:46
      [CN= 80.0: N= 3.00: Tp= 1.00]
R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE CHANNEL   ->    1.0 01:EXT-9A        101.80     .507 No_date    2:46
     [RDT= 1.00] out<-    1.0 02:Channel       101.80     .500 No_date    2:56
      [L/S/n=  550./2.000/.035]
      {Vmax=  .902:Dmax=  .117}
R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 03:EXT-9B         14.80     .713 No_date    1:24
      [XIMP=.35:TIMP=.35]
      [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
      [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->    1.0 03:EXT-9B         14.80     .713 No_date    1:24
                out <=    1.0 04:Orchards       14.80     .038 No_date    2:58
     {MxStoUsed=.1255E+00  m3}
#-----------------|-----------------------------------------------------------|
#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
#-----------------|-----------------------------------------------------------|
R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 02:Channel       101.80     .500 No_date    2:56
                     +    1.0 04:Orchards       14.80     .038 No_date    2:58
                  SUM=    1.0 05:RD19          116.60     .538 No_date    2:56
#-----------------|-----------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
#-----------------|-----------------------------------------------------------|
R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:EXT-9C           .65     .010 No_date    1:41
      [CN= 82.7: N= 3.00: Tp=  .24]
R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 02:9A               .58     .010 No_date    1:26
      [CN= 79.0: N= 3.00: Tp=  .06]
#-----------------|----------------------CULVERT #1-------------------------|
R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:EXT-9C           .65     .010 No_date    1:41
                     +    1.0 02:9A               .58     .010 No_date    1:26
                     +    1.0 05:RD19          116.60     .538 No_date    2:56
                  SUM=    1.0 03:CULV1         117.83     .541 No_date    2:56
R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:9B              2.10     .004 No_date    1:51
      [CN= 51.5: N= 3.00: Tp=  .28]
#-----------------|----------------------CULVERT #2-------------------------|
R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:9B              2.10     .004 No_date    1:51
                     +    1.0 03:CULV1         117.83     .541 No_date    2:56
                  SUM=    1.0 04:WC9a          119.93     .543 No_date    2:56
#-----------------|-----------------------------------------------------------|
#-----------------|-AREAS TO SWM FACILITY 1-----------------------------------|
#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:EXT-1A          8.37     .035 No_date    2:08
      [CN= 74.9: N= 3.00: Tp=  .47]
R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 03:1A              2.95     .198 No_date    1:20
      [XIMP=.31:TIMP=.51]
      [LOSS= 2 :CN= 67.0]
      [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:EXT-1A          8.37     .035 No_date    2:08
                     +    1.0 03:1A              2.95     .198 No_date    1:20
                  SUM=    1.0 06:NODE           11.32     .198 No_date    1:20
R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 05:1B              1.81     .004 No_date    1:33
      [CN= 44.3: N= 3.00: Tp=  .11]
R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:EXT-1A          8.37     .035 No_date    2:08
                     +    1.0 03:1A              2.95     .198 No_date    1:20
                     +    1.0 05:1B              1.81     .004 No_date    1:33
                  SUM=    1.0 06:SWMF1          13.13     .198 No_date    1:20
#-----------------|-----------------------------------------------------------|
#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
#-----------------|-----------------------------------------------------------|
R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->    1.0 06:SWMF1          13.13     .198 No_date    1:20
                out <=    1.0 01:SWMF-1         13.13     .010 No_date    4:18
     {MxStoUsed=.4361E-01  m3}
R0001:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:SWMF-1         13.13     .010 No_date    4:18
                     +    1.0 04:WC9a          119.93     .543 No_date    2:56
                  SUM=    1.0 07:WC9b          133.06     .552 No_date    2:56
#-----------------|-----------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
#-----------------|-----------------------------------------------------------|
R0001:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 10:9D              1.32     .091 No_date    1:20
      [XIMP=.35:TIMP=.71]
      [LOSS= 2 :CN= 66.1]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
#-----------------|-----------------------------------------------------------|
#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED----------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:9C               .82     .001 No_date    1:48
      [CN= 40.9: N= 3.00: Tp=  .25]
#-----------------|----------------------CULVERT #3-------------------------|
R0001:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 07:WC9b          133.06     .552 No_date    2:56
                     +    1.0 01:9C               .82     .001 No_date    1:48
                  SUM=    1.0 04:CULV3         133.88     .552 No_date    2:56
R0001:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:9F               .38     .001 No_date    1:52
      [CN= 52.2: N= 3.00: Tp=  .32]
R0001:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 02:EXT-9D           .78     .004 No_date    2:10
      [CN= 78.8: N= 3.00: Tp=  .52]
R0001:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 03:9E              1.24     .007 No_date    1:43
      [CN= 66.3: N= 3.00: Tp=  .23]
R0001:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:9F               .38     .001 No_date    1:52
                     +    1.0 02:EXT-9D           .78     .004 No_date    2:10
                     +    1.0 03:9E              1.24     .007 No_date    1:43
                     +    1.0 10:9D              1.32     .091 No_date    1:20
                  SUM=    1.0 05:NODE            3.72     .092 No_date    1:20
R0001:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:9F               .38     .001 No_date    1:52
                     +    1.0 02:EXT-9D           .78     .004 No_date    2:10
                     +    1.0 03:9E              1.24     .007 No_date    1:43
                     +    1.0 04:CULV3         133.88     .552 No_date    2:56
                     +    1.0 10:9D              1.32     .091 No_date    1:20
                  SUM=    1.0 05:WC9LOWER      137.60     .562 No_date    2:55
#-----------------|-----------------------------------------------------------|
#-----------------|-LANDS DRAINING TO SWM FACILITY 2-------------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 01:2A              1.19     .001 No_date    1:38
      [CN= 33.2: N= 3.00: Tp=  .14]
R0001:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD          1.0 02:2B              1.67     .002 No_date    1:56
      [CN= 34.7: N= 3.00: Tp=  .32]
R0001:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 01:2A              1.19     .001 No_date    1:38
                     +    1.0 02:2B              1.67     .002 No_date    1:56
                  SUM=    1.0 10:2A2B            2.86     .003 No_date    1:47
R0001:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 03:2C              1.96     .102 No_date    1:21
      [XIMP=.30:TIMP=.60]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
R0001:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 07:2D              3.28     .134 No_date    1:22
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
R0001:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD        1.0 04:2E              1.49     .096 No_date    1:21
      [XIMP=.37:TIMP=.42]
      [LOSS= 2 :CN= 69.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
R0001:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 10:2A2B            2.86     .003 No_date    1:47
                     +    1.0 03:2C              1.96     .102 No_date    1:21
                     +    1.0 04:2E              1.49     .096 No_date    1:21
                     +    1.0 07:2D              3.28     .134 No_date    1:22
                  SUM=    1.0 06:SWMF2           9.59     .331 No_date    1:21
#-----------------|-----------------------------------------------------------|
#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
#-----------------|-----------------------------------------------------------|
R0001:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->    1.0 06:SWMF2           9.59     .331 No_date    1:21
                out <=    1.0 09:SWMF-2          9.59     .013 No_date    3:58
     {MxStoUsed=.4911E-01  m3}
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
#-----------------|-----------------------------------------------------------|
R0001:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD               1.0 09:SWMF-2          9.59     .013 No_date    3:58
                     +    1.0 05:WC9LOWER      137.60     .562 No_date    2:55
                  SUM=    1.0 01:WC9c          147.19     .575 No_date    2:55
R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    SAVE HYD              1.0 01:WC9c          147.19     .575 No_date    2:55
      fname :WC9c.0001
      remark:POST-DEV LAKESHORE
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 8 CATCHMENTS--------------------------------|
```

```
00271> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
00272> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
00273> #-----------------|-------------------------------------------------------|
00274> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00275>      CALIB NASHYD          1.0 01:8A            2.27     .003 No_date    1:46
00276>        [CN= 36.2: N= 3.00: Tp=  .23]
00277> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00278>      CALIB NASHYD          1.0 02:EXT-8A        7.14     .028 No_date    2:03
00279>        [CN= 68.9: N= 3.00: Tp=  .44]
00280> #-----------------|-------------------------------------------------------|
00281> #-----------------|--WATERCOURSE 8 TOTAL--------------------------------|
00282> #-----------------|-------------------------------------------------------|
00283> R0001:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00284>      ADD HYD               1.0 01:8A            2.27     .003 No_date    1:46
00285>                       +    1.0 02:EXT-8A        7.14     .028 No_date    2:03
00286>                     SUM=   1.0 03:WC8           9.41     .030 No_date    2:01
00287> #*************************************************************************
00288> #**************************Chicago 2yr 4-hr storm*****************************
00289> #*************************************************************************
00290> R0001:C00041------------------------------------------------------------------
00291>       CHICAGO STORM
00292>        [SDT= 5.00:SDUR=   4.00:PTOT=  31.55]
00293>        {A/B/C= 425.976/   1.500/     .727: R=.9997}
00294> #-----------------|-------------------------------------------------------|
00295> #-----------------|-POST-DEVELOPMENT------------------------------------|
00296> #-----------------|-------------------------------------------------------|
00297> #-----------------|-------------------------------------------------------|
00298> #-----------------|-Subwatershed 9 External Drainage Area---------------------|
00299> #-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
00300> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00301> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00302> #-----------------|-------------------------------------------------------|
00303> R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00304>      CALIB NASHYD          1.0 01:EXT-9A      101.80     .779 No_date    2:48
00305>        [CN= 80.0: N= 3.00: Tp= 1.00]
00306> R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00307>      ROUTE CHANNEL   ->    1.0 01:EXT-9A      101.80     .779 No_date    2:48
00308>       [RDT= 1.00] out<-    1.0 02:Channel     101.80     .773 No_date    2:55
00309>        {L/S/n=  550./2.000/.035]
00310>        {Vmax= 1.006:Dmax=  .147}
00311> R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00312>      CALIB STANDHYD        1.0 03:EXT-9B       14.80    1.089 No_date    1:23
00313>        [XIMP=.35:TIMP=.35]
00314>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00315>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00316>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00317> R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00318>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80    1.089 No_date    1:23
00319>                  out <=    1.0 04:Orchards     14.80     .055 No_date    2:51
00320>       {MxStoUsed=.1723E+00  m3}
00321> #-----------------|-------------------------------------------------------|
00322> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00323> #-----------------|-------------------------------------------------------|
00324> R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00325>      ADD HYD               1.0 02:Channel     101.80     .773 No_date    2:55
00326>                       +    1.0 04:Orchards     14.80     .055 No_date    2:51
00327>                     SUM=   1.0 05:RD19        116.60     .829 No_date    2:55
00328> #-----------------|-------------------------------------------------------|
00329> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00330> #-----------------|-------------------------------------------------------|
00331> R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00332>      CALIB NASHYD          1.0 01:EXT-9C        .65     .015 No_date    1:38
00333>        [CN= 82.7: N= 3.00: Tp=  .24]
00334> R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00335>      CALIB NASHYD          1.0 02:9A            .58     .019 No_date    1:23
00336>        [CN= 79.0: N= 3.00: Tp=  .06]
00337> #-----------------|----------------------CULVERT #1----------------------|
00338> R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00339>      ADD HYD               1.0 01:EXT-9C        .65     .015 No_date    1:38
00340>                       +    1.0 02:9A            .58     .019 No_date    1:23
00341>                       +    1.0 05:RD19       116.60     .829 No_date    2:55
00342>                     SUM=   1.0 03:CULV1       117.83     .835 No_date    2:54
00343> R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00344>      CALIB NASHYD          1.0 01:9B           2.10     .007 No_date    1:47
00345>        [CN= 51.5: N= 3.00: Tp=  .28]
00346> #-----------------|----------------------CULVERT #2----------------------|
00347> R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00348>      ADD HYD               1.0 01:9B           2.10     .007 No_date    1:47
00349>                       +    1.0 03:CULV1       117.83     .835 No_date    2:54
00350>                     SUM=   1.0 04:WC9a        119.93     .838 No_date    2:54
00351> #-----------------|-------------------------------------------------------|
00352> #-----------------|-AREAS TO SWM FACILITY 1-----------------------------------|
00353> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00354> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00355> #-----------------|-------------------------------------------------------|
00356> R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00357>      CALIB NASHYD          1.0 01:EXT-1A        8.37     .058 No_date    2:05
00358>        [CN= 74.9: N= 3.00: Tp=  .47]
00359> R0001:C00053------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00360>      CALIB STANDHYD        1.0 03:1A            2.95     .289 No_date    1:20
00361>        [XIMP=.31:TIMP=.51]
00362>        [LOSS= 2 :CN= 67.0]
00363>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00364>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00365> R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00366>      ADD HYD               1.0 01:EXT-1A        8.37     .058 No_date    2:05
00367>                       +    1.0 03:1A            2.95     .289 No_date    1:20
00368>                     SUM=   1.0 06:NODE         11.32     .290 No_date    1:20
00369> R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00370>      CALIB NASHYD          1.0 05:1B            1.81     .008 No_date    1:29
00371>        [CN= 44.3: N= 3.00: Tp=  .11]
00372> R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00373>      ADD HYD               1.0 01:EXT-1A        8.37     .058 No_date    2:05
00374>                       +    1.0 03:1A            2.95     .289 No_date    1:20
00375>                       +    1.0 05:1B            1.81     .008 No_date    1:29
00376>                     SUM=   1.0 06:SWMF1        13.13     .292 No_date    1:20
00377> #-----------------|-------------------------------------------------------|
00378> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00379> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00380> #-----------------|-------------------------------------------------------|
00381> R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00382>      ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .292 No_date    1:20
00383>                  out <=    1.0 01:SWMF-1       13.13     .015 No_date    4:28
00384>       {MxStoUsed=.6982E-01  m3}
00385> R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00386>      ADD HYD               1.0 01:SWMF-1       13.13     .015 No_date    4:28
00387>                       +    1.0 04:WC9a        119.93     .838 No_date    2:54
00388>                     SUM=   1.0 07:WC9b        133.06     .851 No_date    2:55
00389> #-----------------|-------------------------------------------------------|
00390> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00391> #-----------------|-------------------------------------------------------|
00392> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00393> #-----------------|-------------------------------------------------------|
00394> R0001:C00059------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00395>      CALIB STANDHYD        1.0 10:9D            1.32     .137 No_date    1:20
00396>        [XIMP=.35:TIMP=.71]
00397>        [LOSS= 2 :CN= 66.1]
00398>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00399>        [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00400> #-----------------|-------------------------------------------------------|
00401> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00402> #-----------------|-------------------------------------------------------|
00403> R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00404>      CALIB NASHYD          1.0 01:9C            .82     .002 No_date    1:44
00405>        [CN= 40.9: N= 3.00: Tp=  .25]
00406> #-----------------|----------------------CULVERT #3----------------------|
00407> R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00408>      ADD HYD               1.0 07:WC9b        133.06     .851 No_date    2:55
00409>                       +    1.0 01:9C            .82     .002 No_date    1:44
00410>                     SUM=   1.0 04:CULV3       133.88     .851 No_date    2:55
00411> R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00412>      CALIB NASHYD          1.0 01:9F            .38     .002 No_date    1:49
00413>        [CN= 52.2: N= 3.00: Tp=  .32]
00414> R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00415>      CALIB NASHYD          1.0 02:EXT-9D        .78     .007 No_date    2:07
00416>        [CN= 78.8: N= 3.00: Tp=  .52]
00417> R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00418>      CALIB NASHYD          1.0 03:9E           1.24     .011 No_date    1:40
00419>        [CN= 66.3: N= 3.00: Tp=  .23]
00420> R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00421>      ADD HYD               1.0 01:9F            .38     .002 No_date    1:49
00422>                       +    1.0 02:EXT-9D        .78     .007 No_date    2:07
00423>                       +    1.0 03:9E           1.24     .011 No_date    1:40
00424>                       +    1.0 10:9D           1.32     .137 No_date    1:20
00425>                     SUM=   1.0 05:NODE         3.72     .138 No_date    1:20
00426> R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>      ADD HYD               1.0 01:9F            .38     .002 No_date    1:49
00428>                       +    1.0 02:EXT-9D        .78     .007 No_date    2:07
00429>                       +    1.0 03:9E           1.24     .011 No_date    1:40
00430>                       +    1.0 04:CULV3       133.88     .851 No_date    2:55
00431>                       +    1.0 10:9D           1.32     .137 No_date    1:20
00432>                     SUM=   1.0 05:WC9LOWER     137.60     .869 No_date    2:54
00433> #-----------------|-------------------------------------------------------|
00434> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00435> #-----------------|-------------------------------------------------------|
00436> R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00437>      CALIB NASHYD          1.0 01:2A           1.19     .002 No_date    1:33
00438>        [CN= 33.2: N= 3.00: Tp=  .14]
00439> R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00440>      CALIB NASHYD          1.0 02:2B           1.67     .003 No_date    1:52
00441>        [CN= 34.7: N= 3.00: Tp=  .32]
00442> R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00443>      ADD HYD               1.0 01:2A           1.19     .002 No_date    1:33
00444>                       +    1.0 02:2B           1.67     .003 No_date    1:52
00445>                     SUM=   1.0 10:2A2B         2.86     .005 No_date    1:42
00446> R0001:C00070------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00447>      CALIB STANDHYD        1.0 03:2C           1.96     .147 No_date    1:21
00448>        [XIMP=.30:TIMP=.60]
00449>        [LOSS= 2 :CN= 49.0]
00450>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00451>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00452> R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00453>      CALIB STANDHYD        1.0 07:2D           3.28     .200 No_date    1:21
00454>        [XIMP=.25:TIMP=.50]
00455>        [LOSS= 2 :CN= 59.0]
00456>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00457>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00458> R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00459>      CALIB STANDHYD        1.0 04:2E           1.49     .145 No_date    1:20
00460>        [XIMP=.37:TIMP=.42]
00461>        [LOSS= 2 :CN= 69.0]
00462>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00463>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00464> R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00465>      ADD HYD               1.0 10:2A2B         2.86     .005 No_date    1:42
00466>                       +    1.0 03:2C           1.96     .147 No_date    1:21
00467>                       +    1.0 04:2E           1.49     .145 No_date    1:20
00468>                       +    1.0 07:2D           3.28     .200 No_date    1:21
00469>                     SUM=   1.0 06:SWMF2        9.59     .486 No_date    1:20
00470> #-----------------|-------------------------------------------------------|
00471> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00472> #-----------------|-------------------------------------------------------|
00473> R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00474>      ROUTE RESERVOIR ->    1.0 06:SWMF2        9.59     .486 No_date    1:20
00475>                  out <=    1.0 09:SWMF-2       9.59     .017 No_date    4:03
00476>       {MxStoUsed=.6883E-01  m3}
00477> #-----------------|-------------------------------------------------------|
00478> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00479> #-----------------|-------------------------------------------------------|
00480> R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00481>      ADD HYD               1.0 09:SWMF-2        9.59     .017 No_date    4:03
00482>                       +    1.0 05:WC9LOWER     137.60     .869 No_date    2:54
00483>                     SUM=   1.0 01:WC9c         147.19     .886 No_date    2:54
00484> R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00485>      SAVE HYD              1.0 01:WC9c         147.19     .886 No_date    2:54
00486>        fname :WC9c.0001
00487>        remark:POST-DEV LAKESHORE
00488> #-----------------|-------------------------------------------------------|
00489> #-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
00490> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
00491> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
00492> #-----------------|-------------------------------------------------------|
00493> R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00494>      CALIB NASHYD          1.0 01:8A           2.27     .005 No_date    1:42
00495>        [CN= 36.2: N= 3.00: Tp=  .23]
00496> R0001:C00078------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00497>      CALIB NASHYD          1.0 02:EXT-8A        7.14     .046 No_date    2:00
00498>        [CN= 68.9: N= 3.00: Tp=  .44]
00499> #-----------------|-------------------------------------------------------|
00500> #-----------------|--WATERCOURSE 8 TOTAL--------------------------------|
00501> #-----------------|-------------------------------------------------------|
00502> R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00503>      ADD HYD               1.0 01:8A           2.27     .005 No_date    1:42
00504>                       +    1.0 02:EXT-8A        7.14     .046 No_date    2:00
00505>                     SUM=   1.0 03:WC8           9.41     .050 No_date    1:59
00506> #*************************************************************************
00507> #**************************Chicago 5yr 4-hr storm*****************************
00508> #*************************************************************************
00509> R0001:C00080------------------------------------------------------------------
00510>       CHICAGO STORM
00511>        [SDT= 5.00:SDUR=   4.00:PTOT=  42.28]
00512>        {A/B/C= 564.587/   1.500/     .725: R=.9997}
00513> #-----------------|-------------------------------------------------------|
00514> #-----------------|-POST-DEVELOPMENT------------------------------------|
00515> #-----------------|-------------------------------------------------------|
00516> #-----------------|-------------------------------------------------------|
00517> #-----------------|-Subwatershed 9 External Drainage Area---------------------|
00518> #-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
00519> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00520> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00521> #-----------------|-------------------------------------------------------|
00522> R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00523>      CALIB NASHYD          1.0 01:EXT-9A      101.80    1.403 No_date    2:44
00524>        [CN= 80.0: N= 3.00: Tp= 1.00]
00525> R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00526>      ROUTE CHANNEL   ->    1.0 01:EXT-9A      101.80    1.403 No_date    2:44
00527>       [RDT= 1.00] out<-    1.0 02:Channel     101.80    1.398 No_date    2:49
00528>        {L/S/n=  550./2.000/.035]
00529>        {Vmax= 1.343:Dmax=  .214}
00530> R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00531>      CALIB STANDHYD        1.0 03:EXT-9B       14.80    1.648 No_date    1:22
00532>        [XIMP=.35:TIMP=.35]
00533>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00534>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00535>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00536> R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00537>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80    1.648 No_date    1:22
00538>                  out <=    1.0 04:Orchards     14.80     .133 No_date    2:16
00539>       {MxStoUsed=.2403E+00  m3}
00540> #-----------------|-------------------------------------------------------|
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00541> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00542> #-----------------|-----------------------------------------------------------|
00543> R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00544>     ADD HYD              1.0 02:Channel      101.80    1.398 No_date    2:49
00545>                    +     1.0 04:Orchards      14.80     .133 No_date    2:16
00546>                SUM=      1.0 05:RD19         116.60    1.517 No_date    2:46
00547> #-----------------|-----------------------------------------------------------|
00548> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00549> #-----------------|-----------------------------------------------------------|
00550> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00551>     CALIB NASHYD         1.0 01:EXT-9C         .65     .027 No_date    1:37
00552>       [CN= 82.7: N= 3.00: Tp=  .24]
00553> R0001:C00087------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00554>     CALIB NASHYD         1.0 02:9A             .58     .039 No_date    1:22
00555>       [CN= 79.0: N= 3.00: Tp=  .06]
00556> #-----------------|----------------------CULVERT #1----------------------|
00557> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00558>     ADD HYD              1.0 01:EXT-9C         .65     .027 No_date    1:37
00559>                    +     1.0 02:9A             .58     .039 No_date    1:22
00560>                    +     1.0 05:RD19         116.60    1.517 No_date    2:46
00561>                SUM=      1.0 03:CULV1        117.83    1.527 No_date    2:46
00562> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00563>     CALIB NASHYD         1.0 01:9B            2.10     .017 No_date    1:44
00564>       [CN= 51.5: N= 3.00: Tp=  .28]
00565> #-----------------|----------------------CULVERT #2----------------------|
00566> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00567>     ADD HYD              1.0 01:9B            2.10     .017 No_date    1:44
00568>                    +     1.0 03:CULV1        117.83    1.527 No_date    2:46
00569>                SUM=      1.0 04:WC9a         119.93    1.534 No_date    2:46
00570> #-----------------|-----------------------------------------------------------|
00571> #-----------------|-AREAS TO SWM FACILITY 1-------------------------------------|
00572> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00573> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00574> #-----------------|-----------------------------------------------------------|
00575> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00576>     CALIB NASHYD         1.0 01:EXT-1A         8.37     .122 No_date    2:01
00577>       [CN= 74.9: N= 3.00: Tp=  .47]
00578> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00579>     CALIB STANDHYD       1.0 03:1A             2.95     .403 No_date    1:20
00580>       [XIMP=.31:TIMP=.51]
00581>       [LOSS= 2 :CN= 67.0]
00582>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00583>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00584> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00585>     ADD HYD              1.0 01:EXT-1A         8.37     .122 No_date    2:01
00586>                    +     1.0 03:1A             2.95     .403 No_date    1:20
00587>                SUM=      1.0 06:NODE          11.32     .406 No_date    1:20
00588> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00589>     CALIB NASHYD         1.0 05:1B             1.81     .019 No_date    1:28
00590>       [CN= 44.3: N= 3.00: Tp=  .11]
00591> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00592>     ADD HYD              1.0 01:EXT-1A         8.37     .122 No_date    2:01
00593>                    +     1.0 03:1A             2.95     .403 No_date    1:20
00594>                    +     1.0 05:1B             1.81     .019 No_date    1:28
00595>                SUM=      1.0 06:SWMF1         13.13     .411 No_date    1:20
00596> #-----------------|-----------------------------------------------------------|
00597> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00598> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00599> #-----------------|-----------------------------------------------------------|
00600> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00601>     ROUTE RESERVOIR ->   1.0 06:SWMF1         13.13     .411 No_date    1:20
00602>                   out <=   1.0 01:SWMF-1      13.13     .022 No_date    4:32
00603>      (MxStoUsed=.1239E+00  m3)
00604> R0001:C00097------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00605>     ADD HYD              1.0 01:SWMF-1         13.13     .022 No_date    4:32
00606>                    +     1.0 04:WC9a         119.93    1.534 No_date    2:46
00607>                SUM=      1.0 07:WC9b         133.06    1.554 No_date    2:46
00608> #-----------------|-----------------------------------------------------------|
00609> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00610> #-----------------|-----------------------------------------------------------|
00611> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00612> #-----------------|-----------------------------------------------------------|
00613> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00614>     CALIB STANDHYD       1.0 10:9D             1.32     .198 No_date    1:20
00615>       [XIMP=.35:TIMP=.71]
00616>       [LOSS= 2 :CN= 66.1]
00617>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00618>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00619> #-----------------|-----------------------------------------------------------|
00620> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
00621> #-----------------|-----------------------------------------------------------|
00622> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00623>     CALIB NASHYD         1.0 01:9C              .82     .005 No_date    1:42
00624>       [CN= 40.9: N= 3.00: Tp=  .25]
00625> #-----------------|----------------------CULVERT #3----------------------|
00626> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00627>     ADD HYD              1.0 07:WC9b         133.06    1.554 No_date    2:46
00628>                    +     1.0 01:9C              .82     .005 No_date    1:42
00629>                SUM=      1.0 04:CULV3        133.88    1.555 No_date    2:46
00630> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00631>     CALIB NASHYD         1.0 01:9F              .38     .003 No_date    1:47
00632>       [CN= 52.2: N= 3.00: Tp=  .32]
00633> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00634>     CALIB NASHYD         1.0 02:EXT-9D          .78     .014 No_date    2:04
00635>       [CN= 78.8: N= 3.00: Tp=  .52]
00636> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00637>     CALIB NASHYD         1.0 03:9E             1.24     .023 No_date    1:38
00638>       [CN= 66.3: N= 3.00: Tp=  .23]
00639> R0001:C00104------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00640>     ADD HYD              1.0 01:9F              .38     .003 No_date    1:47
00641>                    +     1.0 02:EXT-9D          .78     .014 No_date    2:04
00642>                    +     1.0 03:9E             1.24     .023 No_date    1:38
00643>                    +     1.0 10:9D             1.32     .198 No_date    1:20
00644>                SUM=      1.0 05:NODE           3.72     .201 No_date    1:20
00645> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00646>     ADD HYD              1.0 01:9F              .38     .003 No_date    1:47
00647>                    +     1.0 02:EXT-9D          .78     .014 No_date    2:04
00648>                    +     1.0 03:9E             1.24     .023 No_date    1:38
00649>                    +     1.0 04:CULV3        133.88    1.555 No_date    2:46
00650>                    +     1.0 10:9D             1.32     .198 No_date    1:20
00651>                SUM=      1.0 05:WC9LOWER     137.60    1.586 No_date    2:46
00652> #-----------------|-----------------------------------------------------------|
00653> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00654> #-----------------|-----------------------------------------------------------|
00655> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00656>     CALIB NASHYD         1.0 01:2A             1.19     .006 No_date    1:32
00657>       [CN= 33.2: N= 3.00: Tp=  .14]
00658> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00659>     CALIB NASHYD         1.0 02:2B             1.67     .006 No_date    1:49
00660>       [CN= 34.7: N= 3.00: Tp=  .32]
00661> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00662>     ADD HYD              1.0 01:2A             1.19     .006 No_date    1:32
00663>                    +     1.0 02:2B             1.67     .006 No_date    1:49
00664>                SUM=      1.0 10:2A2B           2.86     .011 No_date    1:38
00665> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00666>     CALIB STANDHYD       1.0 03:2C             1.96     .214 No_date    1:20
00667>       [XIMP=.30:TIMP=.60]
00668>       [LOSS= 2 :CN= 49.0]
00669>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00670>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00671> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00672>     CALIB STANDHYD       1.0 07:2D             3.28     .286 No_date    1:21
00673>       [XIMP=.25:TIMP=.50]
00674>       [LOSS= 2 :CN= 59.0]
00675>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00676>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00677> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00678>     CALIB STANDHYD       1.0 04:2E             1.49     .202 No_date    1:20
00679>       [XIMP=.37:TIMP=.42]
00680>       [LOSS= 2 :CN= 69.0]
00681>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00682>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00683> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00684>     ADD HYD              1.0 10:2A2B           2.86     .011 No_date    1:38
00685>                    +     1.0 03:2C             1.96     .214 No_date    1:20
00686>                    +     1.0 04:2E             1.49     .202 No_date    1:20
00687>                    +     1.0 07:2D             3.28     .286 No_date    1:21
00688>                SUM=      1.0 06:SWMF2          9.59     .697 No_date    1:20
00689> #-----------------|-----------------------------------------------------------|
00690> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00691> #-----------------|-----------------------------------------------------------|
00692> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00693>     ROUTE RESERVOIR ->   1.0 06:SWMF2          9.59     .697 No_date    1:20
00694>                   out <=   1.0 09:SWMF-2       9.59     .021 No_date    4:06
00695>      {MxStoUsed=.1077E+00  m3}
00696> #-----------------|-----------------------------------------------------------|
00697> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD------------------|
00698> #-----------------|-----------------------------------------------------------|
00699> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00700>     ADD HYD              1.0 09:SWMF-2          9.59     .021 No_date    4:06
00701>                    +     1.0 05:WC9LOWER     137.60    1.586 No_date    2:46
00702>                SUM=      1.0 01:WC9c         147.19    1.606 No_date    2:46
00703> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00704>     SAVE HYD             1.0 01:WC9c         147.19    1.606 No_date    2:46
00705>       fname :WC9c.0001
00706>       remark:POST-DEV LAKESHORE
00707> #-----------------|-----------------------------------------------------------|
00708> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00709> #-----------------|- WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00710> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00711> #-----------------|-----------------------------------------------------------|
00712> R0001:C00116------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00713>     CALIB NASHYD         1.0 01:8A             2.27     .011 No_date    1:40
00714>       [CN= 36.2: N= 3.00: Tp=  .23]
00715> R0001:C00117------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00716>     CALIB NASHYD         1.0 02:EXT-8A         7.14     .094 No_date    1:58
00717>       [CN= 68.9: N= 3.00: Tp=  .44]
00718> #-----------------|-----------------------------------------------------------|
00719> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
00720> #-----------------|-----------------------------------------------------------|
00721> R0001:C00118------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00722>     ADD HYD              1.0 01:8A             2.27     .011 No_date    1:40
00723>                    +     1.0 02:EXT-8A         7.14     .094 No_date    1:58
00724>                SUM=      1.0 03:WC8            9.41     .102 No_date    1:56
00725> #*****************************************************************************
00726> #**************************Chicago 10yr 4-hr storm*****************************
00727> #*****************************************************************************
00728> R0001:C00119------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00729>      CHICAGO STORM
00730>       [SDT= 5.00:SDUR=   4.00:PTOT=  49.47]
00731>       {A/B/C= 656.948/   1.500/    .724: R=.9997}
00732> #-----------------|-----------------------------------------------------------|
00733> #-----------------|-POST-DEVELOPMENT-------------------------------------------|
00734> #-----------------|-----------------------------------------------------------|
00735> #-----------------|-----------------------------------------------------------|
00736> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
00737> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00738> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00739> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha--------|
00740> #-----------------|-----------------------------------------------------------|
00741> R0001:C00120------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00742>     CALIB NASHYD         1.0 01:EXT-9A       101.80    1.883 No_date    2:42
00743>       [CN= 80.0: N= 3.00: Tp= 1.00]
00744> R0001:C00121------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00745>     ROUTE CHANNEL   ->   1.0 01:EXT-9A       101.80    1.883 No_date    2:42
00746>       [RDT= 1.00] out<-   1.0 02:Channel     101.80    1.875 No_date    2:47
00747>        [L/S/n=  550./2.000/.035]
00748>        {Vmax= 1.446:Dmax=  .248}
00749> R0001:C00122------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00750>     CALIB STANDHYD       1.0 03:EXT-9B        14.80    2.042 No_date    1:22
00751>       [XIMP=.35:TIMP=.35]
00752>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00753>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00754>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00755> R0001:C00123------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00756>     ROUTE RESERVOIR ->   1.0 03:EXT-9B        14.80    2.042 No_date    1:22
00757>                   out <=   1.0 04:Orchards    14.80     .221 No_date    2:04
00758>      {MxStoUsed=.2816E+00  m3}
00759> #-----------------|-----------------------------------------------------------|
00760> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00761> #-----------------|-----------------------------------------------------------|
00762> R0001:C00124------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00763>     ADD HYD              1.0 02:Channel      101.80    1.875 No_date    2:47
00764>                    +     1.0 04:Orchards      14.80     .221 No_date    2:04
00765>                SUM=      1.0 05:RD19         116.60    2.056 No_date    2:44
00766> #-----------------|-----------------------------------------------------------|
00767> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00768> #-----------------|-----------------------------------------------------------|
00769> R0001:C00125------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00770>     CALIB NASHYD         1.0 01:EXT-9C         .65     .036 No_date    1:37
00771>       [CN= 82.7: N= 3.00: Tp=  .24]
00772> R0001:C00126------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00773>     CALIB NASHYD         1.0 02:9A             .58     .055 No_date    1:22
00774>       [CN= 79.0: N= 3.00: Tp=  .06]
00775> #-----------------|----------------------CULVERT #1----------------------|
00776> R0001:C00127------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00777>     ADD HYD              1.0 01:EXT-9C         .65     .036 No_date    1:37
00778>                    +     1.0 02:9A             .58     .055 No_date    1:22
00779>                    +     1.0 05:RD19         116.60    2.056 No_date    2:44
00780>                SUM=      1.0 03:CULV1        117.83    2.069 No_date    2:44
00781> R0001:C00128------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00782>     CALIB NASHYD         1.0 01:9B            2.10     .025 No_date    1:43
00783>       [CN= 51.5: N= 3.00: Tp=  .28]
00784> #-----------------|----------------------CULVERT #2----------------------|
00785> R0001:C00129------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00786>     ADD HYD              1.0 01:9B            2.10     .025 No_date    1:43
00787>                    +     1.0 03:CULV1        117.83    2.069 No_date    2:44
00788>                SUM=      1.0 04:WC9a         119.93    2.079 No_date    2:44
00789> #-----------------|-----------------------------------------------------------|
00790> #-----------------|-AREAS TO SWM FACILITY 1-------------------------------------|
00791> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00792> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00793> #-----------------|-----------------------------------------------------------|
00794> R0001:C00130------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00795>     CALIB NASHYD         1.0 01:EXT-1A         8.37     .175 No_date    2:00
00796>       [CN= 74.9: N= 3.00: Tp=  .47]
00797> R0001:C00131------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00798>     CALIB STANDHYD       1.0 03:1A             2.95     .486 No_date    1:20
00799>       [XIMP=.31:TIMP=.51]
00800>       [LOSS= 2 :CN= 67.0]
00801>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00802>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00803> R0001:C00132------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00804>     ADD HYD              1.0 01:EXT-1A         8.37     .175 No_date    2:00
00805>                    +     1.0 03:1A             2.95     .486 No_date    1:20
00806>                SUM=      1.0 06:NODE          11.32     .491 No_date    1:20
00807> R0001:C00133------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00808>     CALIB NASHYD         1.0 05:1B             1.81     .028 No_date    1:28
00809>       [CN= 44.3: N= 3.00: Tp=  .11]
00810> R0001:C00134------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
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00811>     ADD HYD                1.0 01:EXT-1A         8.37     .175 No_date    2:00
00812>                       +     1.0 03:1A             2.95     .486 No_date    1:20
00813>                       +     1.0 05:1B             1.81     .028 No_date    1:28
00814>                   SUM=      1.0 06:SWMF1         13.13     .501 No_date    1:20
00815> #-----------------|-------------------------------------------------------------|
00816> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00817> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00818> #-----------------|-------------------------------------------------------------|
00819> R0001:C00135------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00820>     ROUTE RESERVOIR ->     1.0 06:SWMF1         13.13     .501 No_date    1:20
00821>                    out <=  1.0 01:SWMF-1        13.13     .027 No_date    4:35
00822>       {MxStoUsed=.1670E+00  m3}
00823> R0001:C00136------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00824>     ADD HYD                1.0 01:SWMF-1        13.13     .027 No_date    4:35
00825>                       +     1.0 04:WC9a         119.93    2.079 No_date    2:44
00826>                   SUM=      1.0 07:WC9b         133.06    2.102 No_date    2:44
00827> #-----------------|-------------------------------------------------------------|
00828> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands--------------|
00829> #-----------------|-------------------------------------------------------------|
00830> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00831> #-----------------|-------------------------------------------------------------|
00832> R0001:C00137------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00833>     CALIB STANDHYD         1.0 10:9D            1.32     .244 No_date    1:20
00834>       [XIMP=.35:TIMP=.71]
00835>       [LOSS= 2 :CN= 66.1]
00836>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00837>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00838> #-----------------|-------------------------------------------------------------|
00839> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00840> #-----------------|-------------------------------------------------------------|
00841> R0001:C00138------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00842>     CALIB NASHYD           1.0 01:9C             .82     .007 No_date    1:41
00843>       [CN= 40.9: N= 3.00: Tp=  .25]
00844> #-----------------|-------------------------CULVERT #3-------------------------|
00845> R0001:C00139------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00846>     ADD HYD                1.0 07:WC9b        133.06    2.102 No_date    2:44
00847>                       +     1.0 01:9C             .82     .007 No_date    1:41
00848>                   SUM=      1.0 04:CULV3        133.88    2.104 No_date    2:44
00849> R0001:C00140------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00850>     CALIB NASHYD           1.0 01:9F             .38     .005 No_date    1:46
00851>       [CN= 52.2: N= 3.00: Tp=  .32]
00852> R0001:C00141------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00853>     CALIB NASHYD           1.0 02:EXT-9D         .78     .019 No_date    2:03
00854>       [CN= 78.8: N= 3.00: Tp=  .52]
00855> R0001:C00142------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00856>     CALIB NASHYD           1.0 03:9E            1.24     .032 No_date    1:38
00857>       [CN= 66.3: N= 3.00: Tp=  .23]
00858> R0001:C00143------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00859>     ADD HYD                1.0 01:9F             .38     .005 No_date    1:46
00860>                       +     1.0 02:EXT-9D         .78     .019 No_date    2:03
00861>                       +     1.0 03:9E            1.24     .032 No_date    1:38
00862>                       +     1.0 10:9D            1.32     .244 No_date    1:20
00863>                   SUM=      1.0 05:NODE          3.72     .250 No_date    1:20
00864> R0001:C00144------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00865>     ADD HYD                1.0 01:9F             .38     .005 No_date    1:46
00866>                       +     1.0 02:EXT-9D         .78     .019 No_date    2:03
00867>                       +     1.0 03:9E            1.24     .032 No_date    1:38
00868>                       +     1.0 04:CULV3        133.88    2.104 No_date    2:44
00869>                       +     1.0 10:9D            1.32     .244 No_date    1:20
00870>                   SUM=      1.0 05:WC9LOWER     137.60    2.145 No_date    2:44
00871> #-----------------|-------------------------------------------------------------|
00872> #-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00873> #-----------------|-------------------------------------------------------------|
00874> R0001:C00145------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00875>     CALIB NASHYD           1.0 01:2A            1.19     .010 No_date    1:31
00876>       [CN= 33.2: N= 3.00: Tp=  .14]
00877> R0001:C00146------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00878>     CALIB NASHYD           1.0 02:2B            1.67     .009 No_date    1:48
00879>       [CN= 34.7: N= 3.00: Tp=  .32]
00880> R0001:C00147------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00881>     ADD HYD                1.0 01:2A            1.19     .010 No_date    1:31
00882>                       +     1.0 02:2B            1.67     .009 No_date    1:48
00883>                   SUM=      1.0 10:2A2B          2.86     .017 No_date    1:37
00884> R0001:C00148------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00885>     CALIB STANDHYD         1.0 03:2C            1.96     .259 No_date    1:20
00886>       [XIMP=.30:TIMP=.60]
00887>       [LOSS= 2 :CN= 49.0]
00888>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00889>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00890> R0001:C00149------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00891>     CALIB STANDHYD         1.0 07:2D            3.28     .347 No_date    1:21
00892>       [XIMP=.25:TIMP=.50]
00893>       [LOSS= 2 :CN= 59.0]
00894>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00895>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00896> R0001:C00150------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00897>     CALIB STANDHYD         1.0 04:2E            1.49     .242 No_date    1:20
00898>       [XIMP=.37:TIMP=.42]
00899>       [LOSS= 2 :CN= 69.0]
00900>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00901>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
00902> R0001:C00151------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00903>     ADD HYD                1.0 04:2A2B          2.86     .017 No_date    1:37
00904>                       +     1.0 03:2C            1.96     .259 No_date    1:20
00905>                       +     1.0 04:2E            1.49     .242 No_date    1:20
00906>                       +     1.0 07:2D            3.28     .347 No_date    1:21
00907>                   SUM=      1.0 06:SWMF2         9.59     .843 No_date    1:20
00908> #-----------------|-------------------------------------------------------------|
00909> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00910> #-----------------|-------------------------------------------------------------|
00911> R0001:C00152------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00912>     ROUTE RESERVOIR ->     1.0 06:SWMF2         9.59     .843 No_date    1:20
00913>                    out <=  1.0 09:SWMF-2        9.59     .025 No_date    4:07
00914>       {MxStoUsed=.1370E+00  m3}
00915> #-----------------|-------------------------------------------------------------|
00916> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00917> #-----------------|-------------------------------------------------------------|
00918> R0001:C00153------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00919>     ADD HYD                1.0 09:SWMF-2        9.59     .025 No_date    4:07
00920>                       +     1.0 05:WC9LOWER     137.60    2.145 No_date    2:44
00921>                   SUM=      1.0 01:WC9c         147.19    2.168 No_date    2:44
00922> R0001:C00154------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00923>     SAVE HYD               1.0 01:WC9c          147.19    2.168 No_date    2:44
00924>       fname :WC9c.0001
00925>       remark:POST-DEV LAKESHORE
00926> #-----------------|-------------------------------------------------------------|
00927> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00928> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00929> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00930> #-----------------|-------------------------------------------------------------|
00931> R0001:C00155------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00932>     CALIB NASHYD           1.0 01:8A            2.27     .017 No_date    1:39
00933>       [CN= 36.2: N= 3.00: Tp=  .23]
00934> R0001:C00156------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00935>     CALIB NASHYD           1.0 02:EXT-8A        7.14     .133 No_date    1:57
00936>       [CN= 68.9: N= 3.00: Tp=  .44]
00937> #-----------------|-------------------------------------------------------------|
00938> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------------|
00939> #-----------------|-------------------------------------------------------------|
00940> R0001:C00157------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00941>     ADD HYD                1.0 01:8A            2.27     .017 No_date    1:39
00942>                       +     1.0 02:EXT-8A        7.14     .133 No_date    1:57
00943>                   SUM=      1.0 03:WC8           9.41     .146 No_date    1:55
00944> #*******************************************************************************
00945> #*************************Chicago 25yr 4-hr storm*****************************
00946> #*******************************************************************************
00947> R0001:C00158------------------------------------------------------------------
00948>      CHICAGO STORM
00949>       [SDT= 5.00:SDUR=   4.00:PTOT=  58.02]
00950>       {A/B/C= 778.937/   1.500/    .726: R=.9997}
00951> #-----------------|-------------------------------------------------------------|
00952> #-----------------|-POST-DEVELOPMENT-------------------------------------------|
00953> #-----------------|-------------------------------------------------------------|
00954> #-----------------|-------------------------------------------------------------|
00955> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
00956> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00957> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00958> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00959> #-----------------|-------------------------------------------------------------|
00960> R0001:C00159------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00961>     CALIB NASHYD           1.0 01:EXT-9A       101.80    2.512 No_date    2:41
00962>       [CN= 80.0: N= 3.00: Tp= 1.00]
00963> R0001:C00160------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00964>     ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    2.512 No_date    2:41
00965>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.508 No_date    2:44
00966>       [L/S/n=  550./2.000/.035]
00967>       {Vmax= 1.607:Dmax=  .293}
00968> R0001:C00161------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00969>     CALIB STANDHYD         1.0 03:EXT-9B        14.80    2.732 No_date    1:23
00970>       [XIMP=.35:TIMP=.35]
00971>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00972>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00973>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00974> R0001:C00162------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00975>     ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    2.732 No_date    1:23
00976>                    out <=  1.0 04:Orchards      14.80     .395 No_date    1:54
00977>       {MxStoUsed=.3373E+00  m3}
00978> #-----------------|-------------------------------------------------------------|
00979> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00980> #-----------------|-------------------------------------------------------------|
00981> R0001:C00163------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00982>     ADD HYD                1.0 02:Channel      101.80    2.508 No_date    2:44
00983>                       +     1.0 04:Orchards      14.80     .395 No_date    1:54
00984>                   SUM=      1.0 05:RD19         116.60    2.755 No_date    2:44
00985> #-----------------|-------------------------------------------------------------|
00986> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00987> #-----------------|-------------------------------------------------------------|
00988> R0001:C00164------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00989>     CALIB NASHYD           1.0 01:EXT-9C         .65     .048 No_date    1:36
00990>       [CN= 82.7: N= 3.00: Tp=  .24]
00991> R0001:C00165------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00992>     CALIB NASHYD           1.0 02:9A             .58     .078 No_date    1:22
00993>       [CN= 79.0: N= 3.00: Tp=  .06]
00994> #-----------------|-----------------------CULVERT #1-----------------------|
00995> R0001:C00166------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00996>     ADD HYD                1.0 01:EXT-9C         .65     .048 No_date    1:36
00997>                       +     1.0 02:9A             .58     .078 No_date    1:22
00998>                       +     1.0 05:RD19         116.60    2.755 No_date    2:44
00999>                   SUM=      1.0 03:CULV1        117.83    2.772 No_date    2:44
01000> R0001:C00167------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01001>     CALIB NASHYD           1.0 01:9B            2.10     .037 No_date    1:43
01002>       [CN= 51.5: N= 3.00: Tp=  .28]
01003> #-----------------|-----------------------CULVERT #2-----------------------|
01004> R0001:C00168------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01005>     ADD HYD                1.0 01:9B            2.10     .037 No_date    1:43
01006>                       +     1.0 03:CULV1        117.83    2.772 No_date    2:44
01007>                   SUM=      1.0 04:WC9a         119.93    2.785 No_date    2:44
01008> #-----------------|-------------------------------------------------------------|
01009> #-----------------|-AREAS TO SWM FACILITY 1------------------------------------|
01010> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01011> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
01012> #-----------------|-------------------------------------------------------------|
01013> R0001:C00169------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01014>     CALIB NASHYD           1.0 01:EXT-1A        8.37     .247 No_date    1:58
01015>       [CN= 74.9: N= 3.00: Tp=  .47]
01016> R0001:C00170------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01017>     CALIB STANDHYD         1.0 03:1A            2.95     .602 No_date    1:20
01018>       [XIMP=.31:TIMP=.51]
01019>       [LOSS= 2 :CN= 67.0]
01020>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01021>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01022> R0001:C00171------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01023>     ADD HYD                1.0 01:EXT-1A        8.37     .247 No_date    1:58
01024>                       +     1.0 03:1A            2.95     .602 No_date    1:20
01025>                   SUM=      1.0 06:NODE         11.32     .611 No_date    1:20
01026> R0001:C00172------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01027>     CALIB NASHYD           1.0 05:1B            1.81     .043 No_date    1:27
01028>       [CN= 44.3: N= 3.00: Tp=  .11]
01029> R0001:C00173------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01030>     ADD HYD                1.0 01:EXT-1A        8.37     .247 No_date    1:58
01031>                       +     1.0 03:1A            2.95     .602 No_date    1:20
01032>                       +     1.0 05:1B            1.81     .043 No_date    1:27
01033>                   SUM=      1.0 06:SWMF1        13.13     .628 No_date    1:20
01034> #-----------------|-------------------------------------------------------------|
01035> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01036> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
01037> #-----------------|-------------------------------------------------------------|
01038> R0001:C00174------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01039>     ROUTE RESERVOIR ->     1.0 06:SWMF1        13.13     .628 No_date    1:20
01040>                    out <=  1.0 01:SWMF-1       13.13     .030 No_date    4:38
01041>       {MxStoUsed=.2244E+00  m3}
01042> R0001:C00175------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01043>     ADD HYD                1.0 01:SWMF-1       13.13     .030 No_date    4:38
01044>                       +     1.0 04:WC9a         119.93    2.785 No_date    2:44
01045>                   SUM=      1.0 07:WC9b         133.06    2.812 No_date    2:44
01046> #-----------------|-------------------------------------------------------------|
01047> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
01048> #-----------------|-------------------------------------------------------------|
01049> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
01050> #-----------------|-------------------------------------------------------------|
01051> R0001:C00176------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01052>     CALIB STANDHYD         1.0 10:9D            1.32     .310 No_date    1:20
01053>       [XIMP=.35:TIMP=.71]
01054>       [LOSS= 2 :CN= 66.1]
01055>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01056>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01057> #-----------------|-------------------------------------------------------------|
01058> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
01059> #-----------------|-------------------------------------------------------------|
01060> R0001:C00177------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01061>     CALIB NASHYD           1.0 01:9C             .82     .011 No_date    1:40
01062>       [CN= 40.9: N= 3.00: Tp=  .25]
01063> #-----------------|-----------------------CULVERT #3-----------------------|
01064> R0001:C00178------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01065>     ADD HYD                1.0 07:WC9b         133.06    2.812 No_date    2:44
01066>                       +     1.0 01:9C             .82     .011 No_date    1:40
01067>                   SUM=      1.0 04:CULV3        133.88    2.815 No_date    2:44
01068> R0001:C00179------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01069>     CALIB NASHYD           1.0 01:9F             .38     .007 No_date    1:46
01070>       [CN= 52.2: N= 3.00: Tp=  .32]
01071> R0001:C00180------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01072>     CALIB NASHYD           1.0 02:EXT-9D         .78     .026 No_date    2:02
01073>       [CN= 78.8: N= 3.00: Tp=  .52]
01074> R0001:C00181------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01075>     CALIB NASHYD           1.0 03:9E            1.24     .046 No_date    1:37
01076>       [CN= 66.3: N= 3.00: Tp=  .23]
01077> R0001:C00182------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01078>     ADD HYD                1.0 01:9F             .38     .007 No_date    1:46
01079>                       +     1.0 02:EXT-9D         .78     .026 No_date    2:02
01080>                       +     1.0 03:9E            1.24     .046 No_date    1:37
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01081>                    +     1.0 10:9D             1.32     .310 No_date    1:20
01082>                  SUM=    1.0 05:NODE           3.72     .319 No_date    1:20
01083> R0001:C00183------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01084>     ADD HYD              1.0 01:9F              .38     .007 No_date    1:46
01085>                    +     1.0 02:EXT-9D          .78     .026 No_date    2:02
01086>                    +     1.0 03:9E             1.24     .046 No_date    1:37
01087>                    +     1.0 04:CULV3        133.88    2.815 No_date    2:44
01088>                    +     1.0 10:9D             1.32     .310 No_date    1:20
01089>                  SUM=    1.0 05:WC9LOWER     137.60    2.868 No_date    2:40
01090> #-----------------|-------------------------------------------------------|
01091> #-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------|
01092> #-----------------|-------------------------------------------------------|
01093> R0001:C00184------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01094>     CALIB NASHYD         1.0 01:2A              1.19     .015 No_date    1:30
01095>       [CN= 33.2: N= 3.00: Tp=  .14]
01096> R0001:C00185------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01097>     CALIB NASHYD         1.0 02:2B              1.67     .014 No_date    1:47
01098>       [CN= 34.7: N= 3.00: Tp=  .32]
01099> R0001:C00186------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01100>     ADD HYD              1.0 01:2A              1.19     .015 No_date    1:30
01101>                    +     1.0 02:2B              1.67     .014 No_date    1:47
01102>                  SUM=    1.0 10:2A2B            2.86     .025 No_date    1:36
01103> R0001:C00187------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01104>     CALIB STANDHYD       1.0 03:2C              1.96     .317 No_date    1:20
01105>       [XIMP=.30:TIMP=.60]
01106>       [LOSS= 2 :CN= 49.0]
01107>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01108>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01109> R0001:C00188------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01110>     CALIB STANDHYD       1.0 07:2D              3.28     .445 No_date    1:20
01111>       [XIMP=.25:TIMP=.50]
01112>       [LOSS= 2 :CN= 59.0]
01113>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01114>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01115> R0001:C00189------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01116>     CALIB STANDHYD       1.0 04:2E              1.49     .295 No_date    1:20
01117>       [XIMP=.37:TIMP=.42]
01118>       [LOSS= 2 :CN= 69.0]
01119>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01120>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01121> R0001:C00190------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01122>     ADD HYD              1.0 10:2A2B            2.86     .025 No_date    1:36
01123>                    +     1.0 03:2C              1.96     .317 No_date    1:20
01124>                    +     1.0 04:2E              1.49     .295 No_date    1:20
01125>                    +     1.0 07:2D              3.28     .445 No_date    1:20
01126>                  SUM=    1.0 06:SWMF2           9.59    1.061 No_date    1:20
01127> #-----------------|-------------------------------------------------------|
01128> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01129> #-----------------|-------------------------------------------------------|
01130> R0001:C00191------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01131>     ROUTE RESERVOIR ->   1.0 06:SWMF2           9.59    1.061 No_date    1:20
01132>                    out <=    1.0 09:SWMF-2       9.59     .028 No_date    4:08
01133>      {MxStoUsed=.1745E+00  m3}
01134> #-----------------|-------------------------------------------------------|
01135> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
01136> #-----------------|-------------------------------------------------------|
01137> R0001:C00192------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01138>     ADD HYD              1.0 09:SWMF-2          9.59     .028 No_date    4:08
01139>                    +     1.0 05:WC9LOWER     137.60    2.868 No_date    2:40
01140>                  SUM=    1.0 01:WC9c         147.19    2.894 No_date    2:40
01141> R0001:C00193------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01142>     SAVE HYD             1.0 01:WC9c         147.19    2.894 No_date    2:40
01143>       fname :WC9c.0001
01144>       remark:POST-DEV LAKESHORE
01145> #-----------------|-------------------------------------------------------|
01146> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------|
01147> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------|
01148> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------|
01149> #-----------------|-------------------------------------------------------|
01150> R0001:C00194------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01151>     CALIB NASHYD         1.0 01:8A              2.27     .026 No_date    1:38
01152>       [CN= 36.2: N= 3.00: Tp=  .23]
01153> R0001:C00195------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01154>     CALIB NASHYD         1.0 02:EXT-8A          7.14     .188 No_date    1:56
01155>       [CN= 68.9: N= 3.00: Tp=  .44]
01156> #-----------------|-------------------------------------------------------|
01157> #-----------------|--WATERCOURSE 8 TOTAL---------------------------------|
01158> #-----------------|-------------------------------------------------------|
01159> R0001:C00196------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01160>     ADD HYD              1.0 01:8A              2.27     .026 No_date    1:38
01161>                    +     1.0 02:EXT-8A          7.14     .188 No_date    1:56
01162>                  SUM=    1.0 03:WC8             9.41     .207 No_date    1:54
01163> ************************************************************************
01164> **************************Chicago 50yr 4-hr storm***************************
01165> ************************************************************************
01166> R0001:C00197------------------------------------------------------------------
01167>      CHICAGO STORM
01168>       {SDT= 5.00:SDUR=   4.00:PTOT=  64.88}
01169>       {A/B/C= 866.281/   1.500/    .725: R=.9997}
01170> #-----------------|-------------------------------------------------------|
01171> #-----------------|-POST-DEVELOPMENT-------------------------------------|
01172> #-----------------|-------------------------------------------------------|
01173> #-----------------|-------------------------------------------------------|
01174> #-----------------|-Subwatershed 9 External Drainage Area----------------|
01175> #-----------------|-Per 'The Orchards' FSSWM Report----------------------|
01176> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
01177> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01178> #-----------------|-------------------------------------------------------|
01179> R0001:C00198------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01180>     CALIB NASHYD         1.0 01:EXT-9A        101.80    3.045 No_date    2:40
01181>       [CN= 80.0: N= 3.00: Tp= 1.00]
01182> R0001:C00199------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01183>     ROUTE CHANNEL    ->   1.0 01:EXT-9A        101.80    3.045 No_date    2:40
01184>      [RD= 1.00] out<-     1.0 02:Channel       101.80    3.036 No_date    2:44
01185>       [L/S/n=  550./2.000/.035]
01186>       {Vmax= 1.731:Dmax=  .327}
01187> R0001:C00200------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01188>     CALIB STANDHYD       1.0 03:EXT-9B         14.80    3.312 No_date    1:23
01189>       [XIMP=.35:TIMP=.35]
01190>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01191>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01192>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01193> R0001:C00201------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01194>     ROUTE RESERVOIR ->   1.0 03:EXT-9B         14.80    3.312 No_date    1:23
01195>                    out <=    1.0 04:Orchards     14.80     .553 No_date    1:51
01196>      {MxStoUsed=.3809E+00  m3}
01197> #-----------------|-------------------------------------------------------|
01198> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----|
01199> #-----------------|-------------------------------------------------------|
01200> R0001:C00202------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01201>     ADD HYD              1.0 02:Channel       101.80    3.036 No_date    2:44
01202>                    +     1.0 04:Orchards      14.80     .553 No_date    1:51
01203>                  SUM=    1.0 05:RD19          116.60    3.349 No_date    2:40
01204> #-----------------|-------------------------------------------------------|
01205> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------|
01206> #-----------------|-------------------------------------------------------|
01207> R0001:C00203------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01208>     CALIB NASHYD         1.0 01:EXT-9C          .65     .059 No_date    1:36
01209>       [CN= 82.7: N= 3.00: Tp=  .24]
01210> R0001:C00204------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01211>     CALIB NASHYD         1.0 02:9A              .58     .096 No_date    1:22
01212>       [CN= 79.0: N= 3.00: Tp=  .06]
01213> #-----------------|----------------------CULVERT #1-----------------------|
01214> R0001:C00205------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01215>     ADD HYD              1.0 01:EXT-9C          .65     .059 No_date    1:36
01216>                    +     1.0 02:9A              .58     .096 No_date    1:22
01217>                    +     1.0 05:RD19         116.60    3.349 No_date    2:40
01218>                  SUM=    1.0 03:CULV1        117.83    3.370 No_date    2:40
01219> R0001:C00206------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01220>     CALIB NASHYD         1.0 01:9B             2.10     .048 No_date    1:42
01221>       [CN= 51.5: N= 3.00: Tp=  .28]
01222> #-----------------|----------------------CULVERT #2-----------------------|
01223> R0001:C00207------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01224>     ADD HYD              1.0 01:9B             2.10     .048 No_date    1:42
01225>                    +     1.0 03:CULV1        117.83    3.370 No_date    2:40
01226>                  SUM=    1.0 04:WC9a         119.93    3.388 No_date    2:40
01227> #-----------------|-------------------------------------------------------|
01228> #-----------------|-AREAS TO SWM FACILITY 1------------------------------|
01229> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
01230> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
01231> #-----------------|-------------------------------------------------------|
01232> R0001:C00208------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01233>     CALIB NASHYD         1.0 01:EXT-1A         8.37     .310 No_date    1:58
01234>       [CN= 74.9: N= 3.00: Tp=  .47]
01235> R0001:C00209------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01236>     CALIB STANDHYD       1.0 03:1A             2.95     .708 No_date    1:20
01237>       [XIMP=.31:TIMP=.51]
01238>       [LOSS= 2 :CN= 67.0]
01239>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01240>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01241> R0001:C00210------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01242>     ADD HYD              1.0 01:EXT-1A         8.37     .310 No_date    1:58
01243>                    +     1.0 03:1A             2.95     .708 No_date    1:20
01244>                  SUM=    1.0 06:NODE          11.32     .722 No_date    1:20
01245> R0001:C00211------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01246>     CALIB NASHYD         1.0 05:1B             1.81     .056 No_date    1:27
01247>       [CN= 44.3: N= 3.00: Tp=  .11]
01248> R0001:C00212------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01249>     ADD HYD              1.0 01:EXT-1A         8.37     .310 No_date    1:58
01250>                    +     1.0 03:1A             2.95     .708 No_date    1:20
01251>                    +     1.0 05:1B             1.81     .056 No_date    1:27
01252>                  SUM=    1.0 06:SWMF1         13.13     .745 No_date    1:20
01253> #-----------------|-------------------------------------------------------|
01254> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01255> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------|
01256> #-----------------|-------------------------------------------------------|
01257> R0001:C00213------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01258>     ROUTE RESERVOIR ->   1.0 06:SWMF1         13.13     .745 No_date    1:20
01259>                    out <=    1.0 01:SWMF-1       13.13     .033 No_date    4:41
01260>      {MxStoUsed=.2747E+00  m3}
01261> R0001:C00214------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01262>     ADD HYD              1.0 01:SWMF-1         13.13     .033 No_date    4:41
01263>                    +     1.0 04:WC9a          119.93    3.388 No_date    2:40
01264>                  SUM=    1.0 07:WC9b          133.06    3.417 No_date    2:40
01265> #-----------------|-------------------------------------------------------|
01266> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------|
01267> #-----------------|-------------------------------------------------------|
01268> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
01269> #-----------------|-------------------------------------------------------|
01270> R0001:C00215------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01271>     CALIB STANDHYD       1.0 10:9D             1.32     .362 No_date    1:20
01272>       [XIMP=.35:TIMP=.71]
01273>       [LOSS= 2 :CN= 66.1]
01274>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01275>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01276> #-----------------|-------------------------------------------------------|
01277> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED----------------------|
01278> #-----------------|-------------------------------------------------------|
01279> R0001:C00216------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01280>     CALIB NASHYD         1.0 01:9C              .82     .014 No_date    1:40
01281>       [CN= 40.9: N= 3.00: Tp=  .25]
01282> #-----------------|----------------------CULVERT #3-----------------------|
01283> R0001:C00217------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01284>     ADD HYD              1.0 07:WC9b          133.06    3.417 No_date    2:40
01285>                    +     1.0 01:9C              .82     .014 No_date    1:40
01286>                  SUM=    1.0 04:CULV3         133.88    3.422 No_date    2:40
01287> R0001:C00218------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01288>     CALIB NASHYD         1.0 01:9F              .38     .009 No_date    1:45
01289>       [CN= 52.2: N= 3.00: Tp=  .32]
01290> R0001:C00219------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01291>     CALIB NASHYD         1.0 02:EXT-9D          .78     .033 No_date    2:01
01292>       [CN= 78.8: N= 3.00: Tp=  .52]
01293> R0001:C00220------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01294>     CALIB NASHYD         1.0 03:9E             1.24     .058 No_date    1:37
01295>       [CN= 66.3: N= 3.00: Tp=  .23]
01296> R0001:C00221------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01297>     ADD HYD              1.0 01:9F              .38     .009 No_date    1:45
01298>                    +     1.0 02:EXT-9D          .78     .033 No_date    2:01
01299>                    +     1.0 03:9E             1.24     .058 No_date    1:37
01300>                    +     1.0 10:9D             1.32     .362 No_date    1:20
01301>                  SUM=    1.0 05:NODE           3.72     .374 No_date    1:20
01302> R0001:C00222------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01303>     ADD HYD              1.0 01:9F              .38     .009 No_date    1:45
01304>                    +     1.0 02:EXT-9D          .78     .033 No_date    2:01
01305>                    +     1.0 03:9E             1.24     .058 No_date    1:37
01306>                    +     1.0 04:CULV3        133.88    3.422 No_date    2:40
01307>                    +     1.0 10:9D             1.32     .362 No_date    1:20
01308>                  SUM=    1.0 05:WC9LOWER     137.60    3.486 No_date    2:39
01309> #-----------------|-------------------------------------------------------|
01310> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------|
01311> #-----------------|-------------------------------------------------------|
01312> R0001:C00223------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01313>     CALIB NASHYD         1.0 01:2A             1.19     .020 No_date    1:30
01314>       [CN= 33.2: N= 3.00: Tp=  .14]
01315> R0001:C00224------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01316>     CALIB NASHYD         1.0 02:2B             1.67     .018 No_date    1:46
01317>       [CN= 34.7: N= 3.00: Tp=  .32]
01318> R0001:C00225------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01319>     ADD HYD              1.0 01:2A             1.19     .020 No_date    1:30
01320>                    +     1.0 02:2B             1.67     .018 No_date    1:46
01321>                  SUM=    1.0 10:2A2B           2.86     .033 No_date    1:36
01322> R0001:C00226------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01323>     CALIB STANDHYD       1.0 03:2C             1.96     .364 No_date    1:20
01324>       [XIMP=.30:TIMP=.60]
01325>       [LOSS= 2 :CN= 49.0]
01326>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01327>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01328> R0001:C00227------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01329>     CALIB STANDHYD       1.0 07:2D             3.28     .518 No_date    1:20
01330>       [XIMP=.25:TIMP=.50]
01331>       [LOSS= 2 :CN= 59.0]
01332>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01333>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01334> R0001:C00228------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01335>     CALIB STANDHYD       1.0 04:2E             1.49     .337 No_date    1:20
01336>       [XIMP=.37:TIMP=.42]
01337>       [LOSS= 2 :CN= 69.0]
01338>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01339>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
01340> R0001:C00229------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01341>     ADD HYD              1.0 10:2A2B           2.86     .033 No_date    1:36
01342>                    +     1.0 03:2C             1.96     .364 No_date    1:20
01343>                    +     1.0 04:2E             1.49     .337 No_date    1:20
01344>                    +     1.0 07:2D             3.28     .518 No_date    1:20
01345>                  SUM=    1.0 06:SWMF2          9.59    1.225 No_date    1:20
01346> #-----------------|-------------------------------------------------------|
01347> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01348> #-----------------|-------------------------------------------------------|
01349> R0001:C00230------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01350>     ROUTE RESERVOIR ->   1.0 06:SWMF2          9.59    1.225 No_date    1:20
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                  out <=    1.0 09:SWMF-2         9.59     .043 No_date    4:04
       {MxStoUsed=.2026E+00  m3}
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
#-----------------|-----------------------------------------------------------|
R0001:C00231------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 09:SWMF-2         9.59     .043 No_date    4:04
                     +     1.0 05:WC9LOWER     137.60    3.486 No_date    2:39
                  SUM=     1.0 01:WC9c         147.19    3.514 No_date    2:39
R0001:C00232------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    SAVE HYD               1.0 01:WC9c         147.19    3.514 No_date    2:39
      fname :WC9c.0001
      remark:POST-DEV LAKESHORE
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
#-----------------|-----------------------------------------------------------|
R0001:C00233------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:8A             2.27     .033 No_date    1:38
      [CN= 36.2: N= 3.00: Tp=  .23]
R0001:C00234------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 02:EXT-8A         7.14     .236 No_date    1:55
      [CN= 68.9: N= 3.00: Tp=  .44]
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 8 TOTAL--------------------------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00235------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:8A             2.27     .033 No_date    1:38
                     +     1.0 02:EXT-8A         7.14     .236 No_date    1:55
                  SUM=     1.0 03:WC8            9.41     .261 No_date    1:53
#******************************************************************************
#*****************************Chicago 100yr 4-hr storm*************************
#******************************************************************************
R0001:C00236--------------------------------------------------------------------
     CHICAGO STORM
      [SDT= 5.00:SDUR=   4.00:PTOT=  71.43]
      {A/B/C= 953.793/   1.500/    .725: R=.9997}
#-----------------|-----------------------------------------------------------|
#-----------------|-POST-DEVELOPMENT------------------------------------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-Subwatershed 9 External Drainage Area--------------------|
#-----------------|-Per 'The Orchards' FSSWM Report--------------------------|
#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
#-----------------|-----------------------------------------------------------|
R0001:C00237------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:EXT-9A       101.80    3.581 No_date    2:39
      [CN= 80.0: N= 3.00: Tp= 1.00]
R0001:C00238------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80    3.581 No_date    2:39
     [RDT= 1.00] out<-     1.0 02:Channel      101.80    3.570 No_date    2:43
      [L/S/n=  550./2.000/.035]
      {Vmax= 1.807:Dmax=  .356}
R0001:C00239------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 03:EXT-9B        14.80    3.763 No_date    1:23
      [XIMP=.35:TIMP=.35]
      [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
      [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
R0001:C00240------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80    3.763 No_date    1:23
                  out <=   1.0 04:Orchards      14.80     .713 No_date    1:50
      {MxStoUsed=.4213E+00  m3}
#-----------------|-----------------------------------------------------------|
#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
#-----------------|-----------------------------------------------------------|
R0001:C00241------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 02:Channel      101.80    3.570 No_date    2:43
                     +     1.0 04:Orchards      14.80     .713 No_date    1:50
                  SUM=     1.0 05:RD19         116.60    3.964 No_date    2:37
#-----------------|-----------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
#-----------------|-----------------------------------------------------------|
R0001:C00242------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:EXT-9C          .65     .069 No_date    1:36
      [CN= 82.7: N= 3.00: Tp=  .24]
R0001:C00243------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 02:9A              .58     .116 No_date    1:22
      [CN= 79.0: N= 3.00: Tp=  .06]
#-----------------|-----------------------CULVERT #1-------------------------|
R0001:C00244------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:EXT-9C          .65     .069 No_date    1:36
                     +     1.0 02:9A              .58     .116 No_date    1:22
                     +     1.0 05:RD19         116.60    3.964 No_date    2:37
                  SUM=     1.0 03:CULV1        117.83    3.989 No_date    2:37
R0001:C00245------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:9B             2.10     .059 No_date    1:42
      [CN= 51.5: N= 3.00: Tp=  .28]
#-----------------|-----------------------CULVERT #2-------------------------|
R0001:C00246------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:9B             2.10     .059 No_date    1:42
                     +     1.0 03:CULV1        117.83    3.989 No_date    2:37
                  SUM=     1.0 04:WC9a         119.93    4.010 No_date    2:37
#-----------------|-----------------------------------------------------------|
#-----------------|-AREAS TO SWM FACILITY 1-----------------------------------|
#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00247------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:EXT-1A         8.37     .375 No_date    1:57
      [CN= 74.9: N= 3.00: Tp=  .47]
R0001:C00248------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 03:1A             2.95     .799 No_date    1:20
      [XIMP=.31:TIMP=.51]
      [LOSS= 2 :CN= 67.0]
      [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
R0001:C00249------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:EXT-1A         8.37     .375 No_date    1:57
                     +     1.0 03:1A             2.95     .799 No_date    1:20
                  SUM=     1.0 06:NODE          11.32     .818 No_date    1:20
R0001:C00250------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 05:1B             1.81     .070 No_date    1:27
      [CN= 44.3: N= 3.00: Tp=  .11]
R0001:C00251------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:EXT-1A         8.37     .375 No_date    1:57
                     +     1.0 03:1A             2.95     .799 No_date    1:20
                     +     1.0 05:1B             1.81     .070 No_date    1:27
                  SUM=     1.0 06:SWMF1         13.13     .848 No_date    1:20
#-----------------|-----------------------------------------------------------|
#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
#-----------------|-----------------------------------------------------------|
R0001:C00252------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->     1.0 06:SWMF1         13.13     .848 No_date    1:20
                  out <=   1.0 01:SWMF-1        13.13     .035 No_date    4:42
      {MxStoUsed=.3256E+00  m3}
R0001:C00253------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:SWMF-1        13.13     .035 No_date    4:42
                     +     1.0 04:WC9a         119.93    4.010 No_date    2:37
                  SUM=     1.0 07:WC9b         133.06    4.041 No_date    2:37
#-----------------|-----------------------------------------------------------|
#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
#-----------------|-----------------------------------------------------------|
#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
#-----------------|-----------------------------------------------------------|
R0001:C00254------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 10:9D             1.32     .431 No_date    1:20
      [XIMP=.35:TIMP=.71]
      [LOSS= 2 :CN= 66.1]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
#-----------------|-----------------------------------------------------------|
#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00255------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:9C              .82     .017 No_date    1:39
      [CN= 40.9: N= 3.00: Tp=  .25]
#-----------------|-----------------------CULVERT #3-------------------------|
R0001:C00256------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 07:WC9b         133.06    4.041 No_date    2:37
                     +     1.0 01:9C              .82     .017 No_date    1:39
                  SUM=     1.0 04:CULV3        133.88    4.047 No_date    2:37
R0001:C00257------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:9F              .38     .011 No_date    1:45
      [CN= 52.2: N= 3.00: Tp=  .32]
R0001:C00258------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 02:EXT-9D          .78     .039 No_date    2:00
      [CN= 78.8: N= 3.00: Tp=  .52]
R0001:C00259------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 03:9E             1.24     .070 No_date    1:37
      [CN= 66.3: N= 3.00: Tp=  .23]
R0001:C00260------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:9F              .38     .011 No_date    1:45
                     +     1.0 02:EXT-9D          .78     .039 No_date    2:00
                     +     1.0 03:9E             1.24     .070 No_date    1:37
                     +     1.0 10:9D             1.32     .431 No_date    1:20
                  SUM=     1.0 05:NODE           3.72     .447 No_date    1:20
R0001:C00261------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:9F              .38     .011 No_date    1:45
                     +     1.0 02:EXT-9D          .78     .039 No_date    2:00
                     +     1.0 03:9E             1.24     .070 No_date    1:37
                     +     1.0 04:CULV3        133.88    4.047 No_date    2:37
                     +     1.0 10:9D             1.32     .431 No_date    1:20
                  SUM=     1.0 05:WC9LOWER     137.60    4.124 No_date    2:37
#-----------------|-----------------------------------------------------------|
#-----------------|-LANDS DRAINING TO SWM FACILITY 2-------------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00262------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:2A             1.19     .025 No_date    1:30
      [CN= 33.2: N= 3.00: Tp=  .14]
R0001:C00263------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 02:2B             1.67     .023 No_date    1:46
      [CN= 34.7: N= 3.00: Tp=  .32]
R0001:C00264------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:2A             1.19     .025 No_date    1:30
                     +     1.0 02:2B             1.67     .023 No_date    1:46
                  SUM=     1.0 10:2A2B           2.86     .041 No_date    1:35
R0001:C00265------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 03:2C             1.96     .414 No_date    1:20
      [XIMP=.30:TIMP=.60]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
R0001:C00266------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 07:2D             3.28     .585 No_date    1:20
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
R0001:C00267------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB STANDHYD         1.0 04:2E             1.49     .381 No_date    1:20
      [XIMP=.37:TIMP=.42]
      [LOSS= 2 :CN= 69.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=   .0]
R0001:C00268------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 10:2A2B           2.86     .041 No_date    1:35
                     +     1.0 03:2C             1.96     .414 No_date    1:20
                     +     1.0 04:2E             1.49     .381 No_date    1:20
                     +     1.0 07:2D             3.28     .585 No_date    1:20
                  SUM=     1.0 06:SWMF2          9.59    1.390 No_date    1:20
#-----------------|-----------------------------------------------------------|
#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
#-----------------|-----------------------------------------------------------|
R0001:C00269------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ROUTE RESERVOIR ->     1.0 06:SWMF2          9.59    1.390 No_date    1:20
                  out <=   1.0 09:SWMF-2         9.59     .059 No_date    4:02
      {MxStoUsed=.2256E+00  m3}
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
#-----------------|-----------------------------------------------------------|
R0001:C00270------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 09:SWMF-2         9.59     .059 No_date    4:02
                     +     1.0 05:WC9LOWER     137.60    4.124 No_date    2:37
                  SUM=     1.0 01:WC9c         147.19    4.167 No_date    2:37
R0001:C00271------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    SAVE HYD               1.0 01:WC9c         147.19    4.167 No_date    2:37
      fname :WC9c.0001
      remark:POST-DEV LAKESHORE
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
#-----------------|-----------------------------------------------------------|
R0001:C00272------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 01:8A             2.27     .042 No_date    1:38
      [CN= 36.2: N= 3.00: Tp=  .23]
R0001:C00273------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    CALIB NASHYD           1.0 02:EXT-8A         7.14     .285 No_date    1:55
      [CN= 68.9: N= 3.00: Tp=  .44]
#-----------------|-----------------------------------------------------------|
#-----------------|--WATERCOURSE 8 TOTAL--------------------------------------|
#-----------------|-----------------------------------------------------------|
R0001:C00274------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
    ADD HYD                1.0 01:8A             2.27     .042 No_date    1:38
                     +     1.0 02:EXT-8A         7.14     .285 No_date    1:55
                  SUM=     1.0 03:WC8            9.41     .316 No_date    1:52
R0001:C00275--------------------------------------------------------------------
    FINISH
--------------------------------------------------------------------------------
********************************************************************************
     WARNINGS / ERRORS / NOTES
     -------------------------
   Simulation ended on 2022-03-11     at 14:31:25
================================================================================
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2021-04-29
00005> *#  Modeller    : [JE - ADAPTED FROM NM 2009 MODEL]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[0],  NRUN=[0]
00010> *%                   [ ] <--storm filename, one per line for NSTORM time
00011> *#************************************************************************
00012> *%-----------------|-------------------------------------------------------|
00013> *#-----------------|-------------------------------------------------------|
00014> *#-----------------|-PRE-DEVELOPMENT---24hr SCS STORMS-----------------------|
00015> *#-----------------|-------------------------------------------------------|
00016>
00017> *#************************************************************************
00018> *#                              2yr SCS Storm (24hr)
00019> *#************************************************************************
00020> *#************************************************************************
00021> MASS STORM          PTOTAL=[45.60](mm), CSDT=[1](min),
00022>                     CURVE_FILENAME=["SCS24HII.mst"]
00023> *#************************************************************************
00024> *#-----------------|-------------------------------------------------------|
00025> *#-----------------|-------------------------------------------------------|
00026> *#-----------------|-Subwatershed 9 External Drainage Area-------------------|
00027> *#-----------------|-Per 'The Orchards' FSSWM Report-------------------------|
00028> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------|
00029> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00030> *#-----------------|-------------------------------------------------------|
00031> *%-----------------|-------------------------------------------------------|
00032> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00033>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00034>                     N=[3], TP=[1.00]hrs,
00035>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00036> *%-----------------|-------------------------------------------------------|
00037> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00038>                     RDT=[1](min),
00039>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00040>                                       FPSLOPE=[2](%),
00041>                     SECNUM=[1],       NSEG=[3]
00042>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00043>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00044>                                                     [8,100]
00045>                                                     [12,100]
00046>                                                     [20,102]
00047> *%-----------------|-------------------------------------------------------|
00048> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00049>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00050>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00051>                             DCAY=[2](/hr), F=[0](mm),
00052>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00053>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00054>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00055>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00056>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00057> *%-----------------|-------------------------------------------------------|
00058> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00059>                     RDT=[1](min),
00060>                           TABLE of ( OUTFLOW-STORAGE ) values
00061>                                      (cms) - (ha-m)
00062>                                    [   0.0 ,  0.0 ]
00063>                                    [   0.0100 ,  0.0610 ]
00064>                                    [   0.0400 ,  0.1310 ]
00065>                                    [   0.0700 ,  0.2110 ]
00066>                                    [   0.2600 ,  0.3000 ]
00067>                                    [   0.6000 ,  0.3940 ]
00068>                                    [   1.0200 ,  0.4950 ]
00069>                                    [   1.5200 ,  0.6020 ]
00070>                                    [   2.0800 ,  0.7160 ]
00071>                                    [   2.6900 ,  0.8370 ]
00072>                                    [   -1  ,  -1  ]  (max twenty pts)
00073>                           IDovf=[   ], NHYDovf=[   ]
00074> *%-----------------|-------------------------------------------------------|
00075> *#-----------------|-------------------------------------------------------|
00076> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00077> *#-----------------|-------------------------------------------------------|
00078> *%-----------------|-------------------------------------------------------|
00079> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00080> *%-----------------|-------------------------------------------------------|
00081> *#-----------------|-------------------------------------------------------|
00082> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00083> *#-----------------|-------------------------------------------------------|
00084> *%-----------------|-------------------------------------------------------|
00085> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00086>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00087>                     N=[3], TP=[0.37]hrs,
00088>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00089> *%-----------------|-------------------------------------------------------|
00090> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00091>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00092>                     N=[3], TP=[1.09]hrs,
00093>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00094> *%-----------------|-------------------------------------------------------|
00095> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00096> *%-----------------|-------------------------------------------------------|
00097> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00098>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00099>                     N=[3], TP=[0.14]hrs,
00100>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00101> *%-----------------|-------------------------------------------------------|
00102> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00103>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00104>                     N=[3], TP=[0.15]hrs,
00105>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00106> *%-----------------|-------------------------------------------------------|
00107> *#-----------------|-------------------------------------------------------|
00108> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00109> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00110> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00111> *#-----------------|-------------------------------------------------------|
00112> *%-----------------|-------------------------------------------------------|
00113> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00114>                     RDT=[1](min),
00115>                           TABLE of ( OUTFLOW-STORAGE ) values
00116>                                      (cms) - (ha-m)
00117>                                    [   0.0 ,  0.0 ]
00118>                                    [   0.00 ,  0.479 ]
00119>                                    [   0.00 ,  1.249 ]
00120>                                    [   -1  ,  -1  ]  (max twenty pts)
00121>                           IDovf=[   ], NHYDovf=[   ]
00122> *%-----------------|-------------------------------------------------------|
00123> ADD HYD            IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00124> *%-----------------|-------------------------------------------------------|
00125> *#-----------------|-------------------------------------------------------|
00126> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00127> *#-----------------|-------------------------------------------------------|
00128> *%-----------------|-------------------------------------------------------|
00129> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00130>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00131>                     N=[3], TP=[0.48]hrs,
00132>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00133> *%-----------------|-------------------------------------------------------|
00134> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00135>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00136>                     N=[3], TP=[0.71]hrs,
00137>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00138> *%-----------------|-------------------------------------------------------|
00139> *#-----------------|-------------------------------------------------------|
00140> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-----------|
00141> *#-----------------|-------------------------------------------------------|
00142> *%-----------------|-------------------------------------------------------|
00143> ADD HYD            IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00144> *%-----------------|-------------------------------------------------------|
00145> SAVE HYD           ID=[1],   # OF PCYCLES=[10],  ICASESh=[1]
00146>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00147> *%-----------------|-------------------------------------------------------|
00148> *#-----------------|-------------------------------------------------------|
00149> *#-----------------|----------WATERCOURSE 8--------------------------------|
00150> *#-----------------|-------------------------------------------------------|
00151> *%-----------------|-------------------------------------------------------|
00152> CALIB NASHYD       ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00153>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00154>                     N=[3], TP=[0.56]hrs,
00155>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00156> *%-----------------|-------------------------------------------------------|
00157> *#-----------------|-------------------------------------------------------|
00158> *#-----------------|----------WATERCOURSE 10-------------------------------|
00159> *#-----------------|-------------------------------------------------------|
00160> *%-----------------|-------------------------------------------------------|
00161> CALIB NASHYD       ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00162>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00163>                     N=[3], TP=[0.21]hrs,
00164>
00165>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00166> *%-----------------|-------------------------------------------------------|
00167>
00168> *#************************************************************************
00169> *#************************************************************************
00170> *#                              5yr SCS Storm (24hr)
00171> *#************************************************************************
00172> *#************************************************************************
00173> MASS STORM          PTOTAL=[62.4](mm), CSDT=[1](min),
00174>                     CURVE_FILENAME=["SCS24HII.mst"]
00175> *#************************************************************************
00176> *#-----------------|-------------------------------------------------------|
00177> *#-----------------|-------------------------------------------------------|
00178> *#-----------------|-Subwatershed 9 External Drainage Area-------------------|
00179> *#-----------------|-Per 'The Orchards' FSSWM Report-------------------------|
00180> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------|
00181> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00182> *#-----------------|-------------------------------------------------------|
00183> *%-----------------|-------------------------------------------------------|
00184> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00185>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00186>                     N=[3], TP=[1.00]hrs,
00187>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00188> *%-----------------|-------------------------------------------------------|
00189> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00190>                     RDT=[1](min),
00191>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00192>                                       FPSLOPE=[2](%),
00193>                     SECNUM=[1],       NSEG=[3]
00194>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00195>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00196>                                                     [8,100]
00197>                                                     [12,100]
00198>                                                     [20,102]
00199> *%-----------------|-------------------------------------------------------|
00200> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00201>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00202>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00203>                             DCAY=[2](/hr), F=[0](mm),
00204>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00205>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00206>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00207>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00208>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00209> *%-----------------|-------------------------------------------------------|
00210> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00211>                     RDT=[1](min),
00212>                           TABLE of ( OUTFLOW-STORAGE ) values
00213>                                      (cms) - (ha-m)
00214>                                    [   0.0 ,  0.0 ]
00215>                                    [   0.0100 ,  0.0610 ]
00216>                                    [   0.0400 ,  0.1310 ]
00217>                                    [   0.0700 ,  0.2110 ]
00218>                                    [   0.2600 ,  0.3000 ]
00219>                                    [   0.6000 ,  0.3940 ]
00220>                                    [   1.0200 ,  0.4950 ]
00221>                                    [   1.5200 ,  0.6020 ]
00222>                                    [   2.0800 ,  0.7160 ]
00223>                                    [   2.6900 ,  0.8370 ]
00224>                                    [   -1  ,  -1  ]  (max twenty pts)
00225>                           IDovf=[   ], NHYDovf=[   ]
00226> *%-----------------|-------------------------------------------------------|
00227> *#-----------------|-------------------------------------------------------|
00228> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00229> *#-----------------|-------------------------------------------------------|
00230> *%-----------------|-------------------------------------------------------|
00231> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00232> *%-----------------|-------------------------------------------------------|
00233> *#-----------------|-------------------------------------------------------|
00234> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00235> *#-----------------|-------------------------------------------------------|
00236> *%-----------------|-------------------------------------------------------|
00237> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00238>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00239>                     N=[3], TP=[0.37]hrs,
00240>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00241> *%-----------------|-------------------------------------------------------|
00242> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00243>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00244>                     N=[3], TP=[1.09]hrs,
00245>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00246> *%-----------------|-------------------------------------------------------|
00247> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00248> *%-----------------|-------------------------------------------------------|
00249> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00250>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00251>                     N=[3], TP=[0.14]hrs,
00252>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00253> *%-----------------|-------------------------------------------------------|
00254> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00255>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00256>                     N=[3], TP=[0.15]hrs,
00257>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00258> *%-----------------|-------------------------------------------------------|
00259> *#-----------------|-------------------------------------------------------|
00260> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00261> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00262> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00263> *#-----------------|-------------------------------------------------------|
00264> *%-----------------|-------------------------------------------------------|
00265> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00266>                     RDT=[1](min),
00267>                           TABLE of ( OUTFLOW-STORAGE ) values
00268>                                      (cms) - (ha-m)
00269>                                    [   0.0 ,  0.0 ]
00270>                                    [   0.00 ,  0.479 ]
```

```
00271>                                  [   0.00 ,  1.249 ]
00272>                                  [   -1  ,  -1  ]  (max twenty pts)
00273>                          IDovf=[   ], NHYDovf=[   ]
00274> *%-----------------|-------------------------------------------------------------|
00275> ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00276> *%-----------------|-------------------------------------------------------------|
00277> *#-----------------|-------------------------------------------------------------|
00278> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00279> *#-----------------|-------------------------------------------------------------|
00280> *%-----------------|-------------------------------------------------------------|
00281> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00282>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00283>                     N=[3], TP=[0.48]hrs,
00284>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00285> *%-----------------|-------------------------------------------------------------|
00286> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00287>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00288>                     N=[3], TP=[0.71]hrs,
00289>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00290> *%-----------------|-------------------------------------------------------------|
00291> *#-----------------|-------------------------------------------------------------|
00292> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00293> *#-----------------|-------------------------------------------------------------|
00294> *%-----------------|-------------------------------------------------------------|
00295> ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00296> *%-----------------|-------------------------------------------------------------|
00297> SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00298>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00299> *%-----------------|-------------------------------------------------------------|
00300> *#-----------------|-------------------------------------------------------------|
00301> *#-----------------|----------WATERCOURSE 8--------------------------------------|
00302> *#-----------------|-------------------------------------------------------------|
00303> *%-----------------|-------------------------------------------------------------|
00304> CALIB NASHYD       ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00305>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00306>                     N=[3], TP=[0.56]hrs,
00307>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00308> *%-----------------|-------------------------------------------------------------|
00309> *#-----------------|-------------------------------------------------------------|
00310> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00311> *#-----------------|-------------------------------------------------------------|
00312> *%-----------------|-------------------------------------------------------------|
00313> CALIB NASHYD       ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00314>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00315>                     N=[3], TP=[0.21]hrs,
00316>
00317>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00318> *%-----------------|-------------------------------------------------------------|
00319>
00320>
00321>
00322>
00323> *#*************************************************************************
00324> *#*************************************************************************
00325> *#                          10yr SCS Storm (24hr)
00326> *#*************************************************************************
00327> *#*************************************************************************
00328> MASS STORM          PTOTAL=[72.0](mm), CSDT=[1](min),
00329>                     CURVE_FILENAME=["SCS24HII.mst"]
00330> *#*************************************************************************
00331> *#-----------------|-------------------------------------------------------------|
00332> *#-----------------|-------------------------------------------------------------|
00333> *#-----------------|-Subwatershed 9 External Drainage Area----------------------|
00334> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00335> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00336> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00337> *#-----------------|-------------------------------------------------------------|
00338> *%-----------------|-------------------------------------------------------------|
00339> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00340>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00341>                     N=[3], TP=[1.00]hrs,
00342>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00343> *%-----------------|-------------------------------------------------------------|
00344> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00345>                     RDT=[1](min),
00346>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00347>                                       FPSLOPE=[2](%),
00348>                     SECNUM=[1],       NSEG=[3]
00349>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00350>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00351>                                                     [8,100]
00352>                                                     [12,100]
00353>                                                     [20,102]
00354> *%-----------------|-------------------------------------------------------------|
00355> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00356>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00357>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00358>                             DCAY=[2](/hr), F=[0](mm),
00359>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00360>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00361>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00362>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00363>                     RAINFALL=[ ,  ,  ,  ](mm/hr) ,  END=-1
00364> *%-----------------|-------------------------------------------------------------|
00365> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00366>                     RDT=[1](min),
00367>                           TABLE of ( OUTFLOW-STORAGE ) values
00368>                                      (cms) - (ha-m)
00369>                                   [   0.0 ,  0.0 ]
00370>                                   [   0.0100 ,  0.0610 ]
00371>                                   [   0.0400 ,  0.1310 ]
00372>                                   [   0.0700 ,  0.2110 ]
00373>                                   [   0.2600 ,  0.3000 ]
00374>                                   [   0.6000 ,  0.3940 ]
00375>                                   [   1.0200 ,  0.4950 ]
00376>                                   [   1.5200 ,  0.6020 ]
00377>                                   [   2.0800 ,  0.7160 ]
00378>                                   [   2.6900 ,  0.8370 ]
00379>                                   [   -1  ,  -1  ]  (max twenty pts)
00380>                           IDovf=[   ], NHYDovf=[   ]
00381> *%-----------------|-------------------------------------------------------------|
00382> *#-----------------|-------------------------------------------------------------|
00383> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00384> *#-----------------|-------------------------------------------------------------|
00385> *%-----------------|-------------------------------------------------------------|
00386> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00387> *%-----------------|-------------------------------------------------------------|
00388> *#-----------------|-------------------------------------------------------------|
00389> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00390> *#-----------------|-------------------------------------------------------------|
00391> *%-----------------|-------------------------------------------------------------|
00392> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00393>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00394>                     N=[3], TP=[0.37]hrs,
00395>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00396> *%-----------------|-------------------------------------------------------------|
00397> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00398>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00399>                     N=[3], TP=[1.09]hrs,
00400>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00401> *%-----------------|-------------------------------------------------------------|
00402> ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00403> *%-----------------|-------------------------------------------------------------|
00404> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00405>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00406>                     N=[3], TP=[0.14]hrs,
00407>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00408> *%-----------------|-------------------------------------------------------------|
00409> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00410>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00411>                     N=[3], TP=[0.15]hrs,
00412>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00413> *%-----------------|-------------------------------------------------------------|
00414> *#-----------------|-------------------------------------------------------------|
00415> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00416> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN---------|
00417> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00418> *#-----------------|-------------------------------------------------------------|
00419> *%-----------------|-------------------------------------------------------------|
00420> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00421>                     RDT=[1](min),
00422>                           TABLE of ( OUTFLOW-STORAGE ) values
00423>                                      (cms) - (ha-m)
00424>                                   [   0.0 ,  0.0 ]
00425>                                   [   0.00 ,  0.479 ]
00426>                                   [   0.00 ,  1.249 ]
00427>                                   [   -1  ,  -1  ]  (max twenty pts)
00428>                           IDovf=[   ], NHYDovf=[   ]
00429> *%-----------------|-------------------------------------------------------------|
00430> ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00431> *%-----------------|-------------------------------------------------------------|
00432> *#-----------------|-------------------------------------------------------------|
00433> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00434> *#-----------------|-------------------------------------------------------------|
00435> *%-----------------|-------------------------------------------------------------|
00436> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00437>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00438>                     N=[3], TP=[0.48]hrs,
00439>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00440> *%-----------------|-------------------------------------------------------------|
00441> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00442>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00443>                     N=[3], TP=[0.71]hrs,
00444>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00445> *%-----------------|-------------------------------------------------------------|
00446> *#-----------------|-------------------------------------------------------------|
00447> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00448> *#-----------------|-------------------------------------------------------------|
00449> *%-----------------|-------------------------------------------------------------|
00450> ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00451> *%-----------------|-------------------------------------------------------------|
00452> SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00453>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00454> *%-----------------|-------------------------------------------------------------|
00455> *#-----------------|-------------------------------------------------------------|
00456> *#-----------------|----------WATERCOURSE 8--------------------------------------|
00457> *#-----------------|-------------------------------------------------------------|
00458> *%-----------------|-------------------------------------------------------------|
00459> CALIB NASHYD       ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00460>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00461>                     N=[3], TP=[0.56]hrs,
00462>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00463> *%-----------------|-------------------------------------------------------------|
00464> *#-----------------|-------------------------------------------------------------|
00465> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00466> *#-----------------|-------------------------------------------------------------|
00467> *%-----------------|-------------------------------------------------------------|
00468> CALIB NASHYD       ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00469>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00470>                     N=[3], TP=[0.21]hrs,
00471>
00472>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00473> *%-----------------|-------------------------------------------------------------|
00474>
00475>
00476>
00477>
00478>
00479> *#*************************************************************************
00480> *#*************************************************************************
00481> *#                             25yr SCS Storm (24hr)
00482> *#*************************************************************************
00483> *#*************************************************************************
00484> MASS STORM          PTOTAL=[86.4](mm), CSDT=[1](min),
00485>                     CURVE_FILENAME=["SCS24HII.mst"]
00486> *#*************************************************************************
00487> *#-----------------|-------------------------------------------------------------|
00488> *#-----------------|-------------------------------------------------------------|
00489> *#-----------------|-Subwatershed 9 External Drainage Area----------------------|
00490> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00491> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00492> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00493> *#-----------------|-------------------------------------------------------------|
00494> *%-----------------|-------------------------------------------------------------|
00495> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00496>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00497>                     N=[3], TP=[1.00]hrs,
00498>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00499> *%-----------------|-------------------------------------------------------------|
00500> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00501>                     RDT=[1](min),
00502>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00503>                                       FPSLOPE=[2](%),
00504>                     SECNUM=[1],       NSEG=[3]
00505>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00506>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00507>                                                     [8,100]
00508>                                                     [12,100]
00509>                                                     [20,102]
00510> *%-----------------|-------------------------------------------------------------|
00511> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00512>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00513>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00514>                             DCAY=[2](/hr), F=[0](mm),
00515>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00516>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00517>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00518>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00519>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00520> *%-----------------|-------------------------------------------------------------|
00521> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00522>                     RDT=[1](min),
00523>                           TABLE of ( OUTFLOW-STORAGE ) values
00524>                                      (cms) - (ha-m)
00525>                                   [   0.0 ,  0.0 ]
00526>                                   [   0.0100 ,  0.0610 ]
00527>                                   [   0.0400 ,  0.1310 ]
00528>                                   [   0.0700 ,  0.2110 ]
00529>                                   [   0.2600 ,  0.3000 ]
00530>                                   [   0.6000 ,  0.3940 ]
00531>                                   [   1.0200 ,  0.4950 ]
00532>                                   [   1.5200 ,  0.6020 ]
00533>                                   [   2.0800 ,  0.7160 ]
00534>                                   [   2.6900 ,  0.8370 ]
00535>                                   [   -1  ,  -1  ]  (max twenty pts)
00536>                           IDovf=[   ], NHYDovf=[   ]
00537> *%-----------------|-------------------------------------------------------------|
00538> *#-----------------|-------------------------------------------------------------|
00539> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00540> *#-----------------|-------------------------------------------------------------|
```

```
00541> *%-----------------|-------------------------------------------------------------|
00542> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00543> *%-----------------|-------------------------------------------------------------|
00544> *#-----------------|-------------------------------------------------------------|
00545> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00546> *#-----------------|-------------------------------------------------------------|
00547> *%-----------------|-------------------------------------------------------------|
00548> CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00549>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00550>                     N=[3], TP=[0.37]hrs,
00551>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00552> *%-----------------|-------------------------------------------------------------|
00553> CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00554>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00555>                     N=[3], TP=[1.09]hrs,
00556>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00557> *%-----------------|-------------------------------------------------------------|
00558> ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00559> *%-----------------|-------------------------------------------------------------|
00560> CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00561>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00562>                     N=[3], TP=[0.14]hrs,
00563>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00564> *%-----------------|-------------------------------------------------------------|
00565> CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00566>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00567>                     N=[3], TP=[0.15]hrs,
00568>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00569> *%-----------------|-------------------------------------------------------------|
00570> *#-----------------|-------------------------------------------------------------|
00571> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00572> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00573> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00574> *#-----------------|-------------------------------------------------------------|
00575> *%-----------------|-------------------------------------------------------------|
00576> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00577>                     RDT=[1](min),
00578>                           TABLE of ( OUTFLOW-STORAGE ) values
00579>                                      (cms) - (ha-m)
00580>                                    [   0.0 ,  0.0 ]
00581>                                    [   0.00 ,  0.479 ]
00582>                                    [   0.00 ,  1.249 ]
00583>                                    [   -1  ,  -1  ]  (max twenty pts)
00584>                           IDovf=[   ], NHYDovf=[   ]
00585> *%-----------------|-------------------------------------------------------------|
00586> ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00587> *%-----------------|-------------------------------------------------------------|
00588> *#-----------------|-------------------------------------------------------------|
00589> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00590> *#-----------------|-------------------------------------------------------------|
00591> *%-----------------|-------------------------------------------------------------|
00592> CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00593>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00594>                     N=[3], TP=[0.48]hrs,
00595>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00596> *%-----------------|-------------------------------------------------------------|
00597> CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00598>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00599>                     N=[3], TP=[0.71]hrs,
00600>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00601> *%-----------------|-------------------------------------------------------------|
00602> *#-----------------|-------------------------------------------------------------|
00603> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00604> *#-----------------|-------------------------------------------------------------|
00605> *%-----------------|-------------------------------------------------------------|
00606> ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00607> *%-----------------|-------------------------------------------------------------|
00608> SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00609>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00610> *%-----------------|-------------------------------------------------------------|
00611> *#-----------------|-------------------------------------------------------------|
00612> *#-----------------|-----------WATERCOURSE 8-------------------------------------|
00613> *#-----------------|-------------------------------------------------------------|
00614> *%-----------------|-------------------------------------------------------------|
00615> CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00616>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00617>                     N=[3], TP=[0.56]hrs,
00618>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00619> *%-----------------|-------------------------------------------------------------|
00620> *#-----------------|-------------------------------------------------------------|
00621> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00622> *#-----------------|-------------------------------------------------------------|
00623> *%-----------------|-------------------------------------------------------------|
00624> CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00625>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00626>                     N=[3], TP=[0.21]hrs,
00627>
00628>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00629> *%-----------------|-------------------------------------------------------------|
00630>
00631>
00632>
00633>
00634>
00635> *#*************************************************************************
00636> *#*************************************************************************
00637> *#                              50yr SCS Storm (24hr)
00638> *#*************************************************************************
00639> *#*************************************************************************
00640> MASS STORM           PTOTAL=[96.0](mm), CSDT=[1](min),
00641>                     CURVE_FILENAME=["SCS24HII.mst"]
00642> *#*************************************************************************
00643> *#-----------------|-------------------------------------------------------------|
00644> *#-----------------|-------------------------------------------------------------|
00645> *#-----------------|-Subwatershed 9 External Drainage Area----------------------|
00646> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00647> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00648> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00649> *#-----------------|-------------------------------------------------------------|
00650> *%-----------------|-------------------------------------------------------------|
00651> CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00652>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00653>                     N=[3], TP=[1.00]hrs,
00654>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00655> *%-----------------|-------------------------------------------------------------|
00656> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00657>                     RDT=[1](min),
00658>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00659>                                       FPSLOPE=[2](%),
00660>                     SECNUM=[1],       NSEG=[3]
00661>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00662>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00663>                                                     [8,100]
00664>                                                     [12,100]
00665>                                                     [20,102]
00666> *%-----------------|-------------------------------------------------------------|
00667> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00668>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00669>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00670>                             DCAY=[2](/hr), F=[0](mm),
00671>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00672>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00673>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00674>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00675>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00676> *%-----------------|-------------------------------------------------------------|
00677> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00678>                     RDT=[1](min),
00679>                           TABLE of ( OUTFLOW-STORAGE ) values
00680>                                      (cms) - (ha-m)
00681>                                    [   0.0 ,  0.0 ]
00682>                                    [   0.0100 ,  0.0610 ]
00683>                                    [   0.0400 ,  0.1310 ]
00684>                                    [   0.0700 ,  0.2110 ]
00685>                                    [   0.2600 ,  0.3000 ]
00686>                                    [   0.6000 ,  0.3940 ]
00687>                                    [   1.0200 ,  0.4950 ]
00688>                                    [   1.5200 ,  0.6020 ]
00689>                                    [   2.0800 ,  0.7160 ]
00690>                                    [   2.6900 ,  0.8370 ]
00691>                                    [   -1  ,  -1  ]  (max twenty pts)
00692>                           IDovf=[   ], NHYDovf=[   ]
00693> *%-----------------|-------------------------------------------------------------|
00694> *#-----------------|-------------------------------------------------------------|
00695> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00696> *#-----------------|-------------------------------------------------------------|
00697> *%-----------------|-------------------------------------------------------------|
00698> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00699> *%-----------------|-------------------------------------------------------------|
00700> *#-----------------|-------------------------------------------------------------|
00701> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00702> *#-----------------|-------------------------------------------------------------|
00703> *%-----------------|-------------------------------------------------------------|
00704> CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00705>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00706>                     N=[3], TP=[0.37]hrs,
00707>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00708> *%-----------------|-------------------------------------------------------------|
00709> CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00710>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00711>                     N=[3], TP=[1.09]hrs,
00712>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00713> *%-----------------|-------------------------------------------------------------|
00714> ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00715> *%-----------------|-------------------------------------------------------------|
00716> CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00717>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00718>                     N=[3], TP=[0.14]hrs,
00719>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00720> *%-----------------|-------------------------------------------------------------|
00721> CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00722>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00723>                     N=[3], TP=[0.15]hrs,
00724>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00725> *%-----------------|-------------------------------------------------------------|
00726> *#-----------------|-------------------------------------------------------------|
00727> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00728> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00729> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00730> *#-----------------|-------------------------------------------------------------|
00731> *%-----------------|-------------------------------------------------------------|
00732> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00733>                     RDT=[1](min),
00734>                           TABLE of ( OUTFLOW-STORAGE ) values
00735>                                      (cms) - (ha-m)
00736>                                    [   0.0 ,  0.0 ]
00737>                                    [   0.00 ,  0.479 ]
00738>                                    [   0.00 ,  1.249 ]
00739>                                    [   -1  ,  -1  ]  (max twenty pts)
00740>                           IDovf=[   ], NHYDovf=[   ]
00741> *%-----------------|-------------------------------------------------------------|
00742> ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00743> *%-----------------|-------------------------------------------------------------|
00744> *#-----------------|-------------------------------------------------------------|
00745> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00746> *#-----------------|-------------------------------------------------------------|
00747> *%-----------------|-------------------------------------------------------------|
00748> CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00749>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00750>                     N=[3], TP=[0.48]hrs,
00751>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00752> *%-----------------|-------------------------------------------------------------|
00753> CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00754>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00755>                     N=[3], TP=[0.71]hrs,
00756>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00757> *%-----------------|-------------------------------------------------------------|
00758> *#-----------------|-------------------------------------------------------------|
00759> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00760> *#-----------------|-------------------------------------------------------------|
00761> *%-----------------|-------------------------------------------------------------|
00762> ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00763> *%-----------------|-------------------------------------------------------------|
00764> SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00765>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00766> *%-----------------|-------------------------------------------------------------|
00767> *#-----------------|-------------------------------------------------------------|
00768> *#-----------------|-----------WATERCOURSE 8-------------------------------------|
00769> *#-----------------|-------------------------------------------------------------|
00770> *%-----------------|-------------------------------------------------------------|
00771> CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00772>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00773>                     N=[3], TP=[0.56]hrs,
00774>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00775> *%-----------------|-------------------------------------------------------------|
00776> *#-----------------|-------------------------------------------------------------|
00777> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00778> *#-----------------|-------------------------------------------------------------|
00779> *%-----------------|-------------------------------------------------------------|
00780> CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00781>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00782>                     N=[3], TP=[0.21]hrs,
00783>
00784>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00785> *%-----------------|-------------------------------------------------------------|
00786>
00787>
00788>
00789>
00790>
00791> *#*************************************************************************
00792> *#*************************************************************************
00793> *#                              100yr SCS Storm (24hr)
00794> *#*************************************************************************
00795> *#*************************************************************************
00796> MASS STORM           PTOTAL=[108.0](mm), CSDT=[1](min),
00797>                     CURVE_FILENAME=["SCS24HII.mst"]
00798> *#*************************************************************************
00799> *#-----------------|-------------------------------------------------------------|
00800> *#-----------------|-------------------------------------------------------------|
00801> *#-----------------|-Subwatershed 9 External Drainage Area----------------------|
00802> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00803> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00804> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00805> *#-----------------|-------------------------------------------------------------|
00806> *%-----------------|-------------------------------------------------------------|
00807> CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00808>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00809>                     N=[3], TP=[1.00]hrs,
00810>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
```

```
00811> *%-----------------|-------------------------------------------------------------|
00812> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00813>                    RDT=[1](min),
00814>                    CHLGTH=[550](m),  CHSLOPE=[2](%),
00815>                                      FPSLOPE=[2](%),
00816>                    SECNUM=[1],       NSEG=[3]
00817>                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00818>                    ( DISTANCE (m), ELEVATION (m))= [0,102]
00819>                                                    [8,100]
00820>                                                    [12,100]
00821>                                                    [20,102]
00822> *%-----------------|-------------------------------------------------------------|
00823> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00824>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00825>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00826>                            DCAY=[2](/hr), F=[0](mm),
00827>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00828>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00829>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00830>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00831>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00832> *%-----------------|-------------------------------------------------------------|
00833> ROUTE RESERVOIR    IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00834>                    RDT=[1](min),
00835>                          TABLE of ( OUTFLOW-STORAGE ) values
00836>                                     (cms) - (ha-m)
00837>                                [   0.0 ,  0.0 ]
00838>                                [   0.0100 ,  0.0610 ]
00839>                                [   0.0400 ,  0.1310 ]
00840>                                [   0.0700 ,  0.2110 ]
00841>                                [   0.2600 ,  0.3000 ]
00842>                                [   0.6000 ,  0.3940 ]
00843>                                [   1.0200 ,  0.4950 ]
00844>                                [   1.5200 ,  0.6020 ]
00845>                                [   2.0800 ,  0.7160 ]
00846>                                [   2.6900 ,  0.8370 ]
00847>                                [   -1  ,  -1  ]  (max twenty pts)
00848>                          IDovf=[   ], NHYDovf=[   ]
00849> *%-----------------|-------------------------------------------------------------|
00850> *#-----------------|-------------------------------------------------------------|
00851> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00852> *#-----------------|-------------------------------------------------------------|
00853> *%-----------------|-------------------------------------------------------------|
00854> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00855> *%-----------------|-------------------------------------------------------------|
00856> *#-----------------|-------------------------------------------------------------|
00857> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00858> *#-----------------|-------------------------------------------------------------|
00859> *%-----------------|-------------------------------------------------------------|
00860> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00861>                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00862>                    N=[3], TP=[0.37]hrs,
00863>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00864> *%-----------------|-------------------------------------------------------------|
00865> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00866>                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00867>                    N=[3], TP=[1.09]hrs,
00868>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00869> *%-----------------|-------------------------------------------------------------|
00870> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00871> *%-----------------|-------------------------------------------------------------|
00872> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00873>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00874>                    N=[3], TP=[0.14]hrs,
00875>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00876> *%-----------------|-------------------------------------------------------------|
00877> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00878>                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00879>                    N=[3], TP=[0.15]hrs,
00880>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00881> *%-----------------|-------------------------------------------------------------|
00882> *#-----------------|-------------------------------------------------------------|
00883> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00884> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00885> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00886> *#-----------------|-------------------------------------------------------------|
00887> *%-----------------|-------------------------------------------------------------|
00888> ROUTE RESERVOIR    IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00889>                    RDT=[1](min),
00890>                          TABLE of ( OUTFLOW-STORAGE ) values
00891>                                     (cms) - (ha-m)
00892>                                [   0.0 ,  0.0 ]
00893>                                [   0.00 ,  0.479 ]
00894>                                [   0.00 ,  1.249 ]
00895>                                [   -1  ,  -1  ]  (max twenty pts)
00896>                          IDovf=[   ], NHYDovf=[   ]
00897> *%-----------------|-------------------------------------------------------------|
00898> ADD HYD            IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00899> *%-----------------|-------------------------------------------------------------|
00900> *#-----------------|-------------------------------------------------------------|
00901> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00902> *#-----------------|-------------------------------------------------------------|
00903> *%-----------------|-------------------------------------------------------------|
00904> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00905>                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00906>                    N=[3], TP=[0.48]hrs,
00907>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00908> *%-----------------|-------------------------------------------------------------|
00909> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00910>                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00911>                    N=[3], TP=[0.71]hrs,
00912>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00913> *%-----------------|-------------------------------------------------------------|
00914> *#-----------------|-------------------------------------------------------------|
00915> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00916> *#-----------------|-------------------------------------------------------------|
00917> *%-----------------|-------------------------------------------------------------|
00918> ADD HYD            IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00919> *%-----------------|-------------------------------------------------------------|
00920> SAVE HYD           ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00921>                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
00922> *%-----------------|-------------------------------------------------------------|
00923> *#-----------------|-------------------------------------------------------------|
00924> *#-----------------|----------WATERCOURSE 8--------------------------------------|
00925> *#-----------------|-------------------------------------------------------------|
00926> *%-----------------|-------------------------------------------------------------|
00927> CALIB NASHYD       ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00928>                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00929>                    N=[3], TP=[0.56]hrs,
00930>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00931> *%-----------------|-------------------------------------------------------------|
00932> *#-----------------|-------------------------------------------------------------|
00933> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00934> *#-----------------|-------------------------------------------------------------|
00935> *%-----------------|-------------------------------------------------------------|
00936> CALIB NASHYD       ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00937>                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00938>                    N=[3], TP=[0.21]hrs,
00939>
00940>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00941> *%-----------------|-------------------------------------------------------------|
00942>
00943>
00944> FINISH
00945>
00946>
00947>
00948>
00949>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W    W   M   M   H   H   Y   Y   M   M     OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM    O   O           2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M    O   O           2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M    O   O         222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M     OOO        2       0   0   11
00008>                                                               2       0   0   11
00009>         StormWater Management HYdrologic Model                222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ******************  A single event and continuous hydrologic simulation model
00014>  ******************     based on the principles of HYMO and its successors
00015>  ******************                 OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  ****************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ******************                  Ottawa,  Ontario: (613) 836-3884
00019>  ******************                  Gatineau, Quebec: (819) 243-6858
00020>  ******************                  E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ********************************************************************************
00024>  ****************** Licensed user: C.F. Crozier & Associates Inc.
00025>  ******************                Collingwood          SERIAL#:3737016
00026>  ********************************************************************************
00027>
00028>  ********************************************************************************
00029>  ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ******************           Maximum value for ID numbers  :     11
00031>  ******************           Max. number of rainfall points: 105408
00032>  ******************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ******************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2021-04-29     TIME: 12:00:24     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00041>  *               ailed Design 3rd Sub\SWM\SWMHYMO\SCS\PRE_SCS24.dat
00042>  * Output  file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00043>  *               ailed Design 3rd Sub\SWM\SWMHYMO\SCS\PRE_SCS24.out
00044>  * Summary file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00045>  *               ailed Design 3rd Sub\SWM\SWMHYMO\SCS\PRE_SCS24.sum
00046>  * User comments:
00047>  * 1: ____________________________________________________________________________
00048>  * 2: ____________________________________________________________________________
00049>  * 3: ____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2021-04-29
00056> #  Modeller    : [JE - ADAPTED FROM NM 2009 MODEL]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001-------------------------------------------------------------------
00062>      START
00063>        [TZERO =    .00 hrs on        0]
00064>        [METOUT=   2    (1=imperial, 2=metric output)]
00065>        [NSTORM=   0 ]
00066>        [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> #-----------------|-------------------------------------------------------------|
00069> #-----------------|-PRE-DEVELOPMENT----24hr SCS STORMS----------------------------|
00070> #-----------------|-------------------------------------------------------------|
00071> #*******************************************************************************
00072> #                             2yr SCS Storm (24hr)
00073> #*******************************************************************************
00074> #*******************************************************************************
00075> R0001:C00002-------------------------------------------------------------------
00076>      MASS STORM
00077>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00078>       Comment  = 24 hour SCS II storm mass curve
00079>       [SDT= 1.00:SDUR=  24.00:PTOT=  45.60]
00080> #*******************************************************************************
00081> #-----------------|-------------------------------------------------------------|
00082> #-----------------|-------------------------------------------------------------|
00083> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00084> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00085> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00086> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00087> #-----------------|-------------------------------------------------------------|
00088> R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00089>      CALIB NASHYD          1.0 01:EXT-9A       101.80    1.269 No_date   13:13
00090>        [CN= 80.0: N= 3.00: Tp= 1.00]
00091> R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00092>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    1.269 No_date   13:13
00093>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    1.266 No_date   13:15
00094>        [L/S/n=  550./2.000/.035]
00095>        {Vmax= 1.269:Dmax=  .200}
00096> R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00097>      CALIB STANDHYD        1.0 03:EXT-9B       14.80     .832 No_date   12:15
00098>        [XIMP=.35:TIMP=.35]
00099>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00100>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00101>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00102> R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00103>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80     .832 No_date   12:15
00104>                  out <=    1.0 04:Orchards     14.80     .069 No_date   13:16
00105>       {MxStoUsed=.2095E+00  m3}
00106> #-----------------|-------------------------------------------------------------|
00107> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00108> #-----------------|-------------------------------------------------------------|
00109> R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00110>      ADD HYD               1.0 02:Channel      101.80    1.266 No_date   13:15
00111>                      +     1.0 04:Orchards     14.80     .069 No_date   13:16
00112>                    SUM=    1.0 05:RD19         116.60    1.336 No_date   13:15
00113> #-----------------|-------------------------------------------------------------|
00114> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00115> #-----------------|-------------------------------------------------------------|
00116> R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00117>      CALIB NASHYD          1.0 01:9A            2.57     .017 No_date   12:31
00118>        [CN= 48.4: N= 3.00: Tp=  .37]
00119> R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00120>      CALIB NASHYD          1.0 02:9B           11.63     .074 No_date   13:23
00121>        [CN= 68.5: N= 3.00: Tp= 1.09]
00122> R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00123>      ADD HYD               1.0 01:9A            2.57     .017 No_date   12:31
00124>                      +     1.0 02:9B           11.63     .074 No_date   13:23
00125>                    SUM=    1.0 10:9A9B         14.20     .080 No_date   13:16
00126> R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00127>      CALIB NASHYD          1.0 01:9C            1.19     .007 No_date   12:16
00128>        [CN= 33.2: N= 3.00: Tp=  .14]
00129> R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00130>      CALIB NASHYD          1.0 02:9D            2.02     .019 No_date   12:16
00131>        [CN= 41.9: N= 3.00: Tp=  .15]
00132> #-----------------|-------------------------------------------------------------|
00133> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00134> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00135> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00136> #-----------------|-------------------------------------------------------------|
00137> R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00138>      ROUTE RESERVOIR ->    1.0 02:9D            2.02     .019 No_date   12:16
00139>  *               out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00140>       {MxStoUsed=.7286E-02  m3}
00141> R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00142>      ADD HYD               1.0 01:9C            1.19     .007 No_date   12:16
00143>                      +     1.0 04:ExPond        2.02     .000 No_date    0:00
00144>                    SUM=    1.0 09:9C9D          3.21     .007 No_date   12:16
00145> #-----------------|-------------------------------------------------------------|
00146> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00147> #-----------------|-------------------------------------------------------------|
00148> R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00149>      CALIB NASHYD          1.0 07:9E            7.60     .039 No_date   12:39
00150>        [CN= 47.1: N= 3.00: Tp=  .48]
00151> R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>      CALIB NASHYD          1.0 08:9F            3.35     .015 No_date   12:56
00153>        [CN= 50.4: N= 3.00: Tp=  .71]
00154> #-----------------|-------------------------------------------------------------|
00155> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00156> #-----------------|-------------------------------------------------------------|
00157> R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00158>      ADD HYD               1.0 05:RD19        116.60    1.336 No_date   13:15
00159>                      +     1.0 10:9A9B         14.20     .080 No_date   13:16
00160>                      +     1.0 09:9C9D          3.21     .007 No_date   12:16
00161>                      +     1.0 07:9E            7.60     .039 No_date   12:39
00162>                      +     1.0 08:9F            3.35     .015 No_date   12:56
00163>                    SUM=    1.0 01:WC9LS       144.96    1.454 No_date   13:15
00164> R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00165>      SAVE HYD              1.0 01:WC9LS       144.96    1.454 No_date   13:15
00166>        fname :WC9LS.0001
00167>        remark:Lakeshore Road Hydrograph
00168> #-----------------|-------------------------------------------------------------|
00169> #-----------------|-WATERCOURSE 8-------------------------------------------------|
00170> #-----------------|-------------------------------------------------------------|
00171> R0001:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00172>      CALIB NASHYD          1.0 07:8A           12.13     .091 No_date   12:44
00173>        [CN= 60.4: N= 3.00: Tp=  .56]
00174> #-----------------|-------------------------------------------------------------|
00175> #-----------------|-WATERCOURSE 10------------------------------------------------|
00176> #-----------------|-------------------------------------------------------------|
00177> R0001:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00178>      CALIB NASHYD          1.0 07:10A           2.08     .039 No_date   12:20
00179>        [CN= 67.3: N= 3.00: Tp=  .21]
00180> #*******************************************************************************
00181> #*******************************************************************************
00182> #                             5yr SCS Storm (24hr)
00183> #*******************************************************************************
00184> #*******************************************************************************
00185> R0001:C00021-------------------------------------------------------------------
00186>      MASS STORM
00187>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00188>       Comment  = 24 hour SCS II storm mass curve
00189>       [SDT= 1.00:SDUR=  24.00:PTOT=  62.40]
00190> #*******************************************************************************
00191> #-----------------|-------------------------------------------------------------|
00192> #-----------------|-------------------------------------------------------------|
00193> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00194> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00195> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00196> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00197> #-----------------|-------------------------------------------------------------|
00198> R0001:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00199>      CALIB NASHYD          1.0 01:EXT-9A       101.80    2.230 No_date   13:11
00200>        [CN= 80.0: N= 3.00: Tp= 1.00]
00201> R0001:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00202>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.230 No_date   13:11
00203>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.221 No_date   13:15
00204>        [L/S/n=  550./2.000/.035]
00205>        {Vmax= 1.530:Dmax=  .273}
00206> R0001:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00207>      CALIB STANDHYD        1.0 03:EXT-9B       14.80    1.476 No_date   12:15
00208>        [XIMP=.35:TIMP=.35]
00209>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00210>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00211>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00212> R0001:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00213>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80    1.476 No_date   12:15
00214>                  out <=    1.0 04:Orchards     14.80     .249 No_date   12:47
00215>       {MxStoUsed=.2950E+00  m3}
00216> #-----------------|-------------------------------------------------------------|
00217> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00218> #-----------------|-------------------------------------------------------------|
00219> R0001:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00220>      ADD HYD               1.0 02:Channel      101.80    2.221 No_date   13:15
00221>                      +     1.0 04:Orchards     14.80     .249 No_date   12:47
00222>                    SUM=    1.0 05:RD19         116.60    2.440 No_date   13:14
00223> #-----------------|-------------------------------------------------------------|
00224> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00225> #-----------------|-------------------------------------------------------------|
00226> R0001:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00227>      CALIB NASHYD          1.0 01:9A            2.57     .035 No_date   12:30
00228>        [CN= 48.4: N= 3.00: Tp=  .37]
00229> R0001:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00230>      CALIB NASHYD          1.0 02:9B           11.63     .145 No_date   13:21
00231>        [CN= 68.5: N= 3.00: Tp= 1.09]
00232> R0001:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00233>      ADD HYD               1.0 01:9A            2.57     .035 No_date   12:30
00234>                      +     1.0 02:9B           11.63     .145 No_date   13:21
00235>                    SUM=    1.0 10:9A9B         14.20     .158 No_date   13:13
00236> R0001:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00237>      CALIB NASHYD          1.0 01:9C            1.19     .016 No_date   12:16
00238>        [CN= 33.2: N= 3.00: Tp=  .14]
00239> R0001:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00240>      CALIB NASHYD          1.0 02:9D            2.02     .038 No_date   12:16
00241>        [CN= 41.9: N= 3.00: Tp=  .15]
00242> #-----------------|-------------------------------------------------------------|
00243> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00244> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00245> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00246> #-----------------|-------------------------------------------------------------|
00247> R0001:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00248>      ROUTE RESERVOIR ->    1.0 02:9D            2.02     .038 No_date   12:16
00249>  *               out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00250>       {MxStoUsed=.1465E-01  m3}
00251> R0001:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00252>      ADD HYD               1.0 01:9C            1.19     .016 No_date   12:16
00253>                      +     1.0 04:ExPond        2.02     .000 No_date    0:00
00254>                    SUM=    1.0 09:9C9D          3.21     .016 No_date   12:16
00255> #-----------------|-------------------------------------------------------------|
00256> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00257> #-----------------|-------------------------------------------------------------|
00258> R0001:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00259>      CALIB NASHYD          1.0 07:9E            7.60     .081 No_date   12:38
00260>        [CN= 47.1: N= 3.00: Tp=  .48]
00261> R0001:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00262>      CALIB NASHYD          1.0 08:9F            3.35     .031 No_date   12:54
00263>        [CN= 50.4: N= 3.00: Tp=  .71]
00264> #-----------------|-------------------------------------------------------------|
00265> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00266> #-----------------|-------------------------------------------------------------|
00267> R0001:C00036------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00268>      ADD HYD               1.0 05:RD19        116.60    2.440 No_date   13:14
00269>                      +     1.0 10:9A9B         14.20     .158 No_date   13:13
00270>                      +     1.0 09:9C9D          3.21     .016 No_date   12:16
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00271>                    +     1.0 07:9E            7.60     .081 No_date   12:38
00272>                    +     1.0 08:9F            3.35     .031 No_date   12:54
00273>                SUM=      1.0 01:WC9LS       144.96    2.676 No_date   13:14
00274> R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00275>     SAVE HYD              1.0 01:WC9LS       144.96    2.676 No_date   13:14
00276>       fname :WC9LS.0001
00277>       remark:Lakeshore Road Hydrograph
00278> #-----------------|-------------------------------------------------------------|
00279> #-----------------|-----------WATERCOURSE 8---------------------------------------|
00280> #-----------------|-------------------------------------------------------------|
00281> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00282>     CALIB NASHYD          1.0 07:8A           12.13     .185 No_date   12:43
00283>       [CN= 60.4: N= 3.00: Tp=  .56]
00284> #-----------------|-------------------------------------------------------------|
00285> #-----------------|-----------WATERCOURSE 10--------------------------------------|
00286> #-----------------|-------------------------------------------------------------|
00287> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00288>     CALIB NASHYD          1.0 07:10A           2.08     .077 No_date   12:19
00289>       [CN= 67.3: N= 3.00: Tp=  .21]
00290> ##############################################################################
00291> ##############################################################################
00292> #                             10yr SCS Storm (24hr)
00293> ##############################################################################
00294> ##############################################################################
00295> R0001:C00040------------------------------------------------------------------
00296>      MASS STORM
00297>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00298>       Comment  = 24 hour SCS II storm mass curve
00299>       [SDT= 1.00:SDUR=  24.00:PTOT=  72.00]
00300> ##############################################################################
00301> #-----------------|-------------------------------------------------------------|
00302> #-----------------|-------------------------------------------------------------|
00303> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00304> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00305> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00306> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00307> #-----------------|-------------------------------------------------------------|
00308> R0001:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00309>     CALIB NASHYD          1.0 01:EXT-9A       101.80    2.835 No_date   13:11
00310>       [CN= 80.0: N= 3.00: Tp= 1.00]
00311> R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00312>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.835 No_date   13:11
00313>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.826 No_date   13:14
00314>       [L/S/n=  550./2.000/.035]
00315>       {Vmax= 1.703:Dmax=  .316}
00316> R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00317>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.903 No_date   12:15
00318>       [XIMP=.35:TIMP=.35]
00319>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00320>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00321>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00322> R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00323>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.903 No_date   12:15
00324>                  out <=   1.0 04:Orchards      14.80     .433 No_date   12:41
00325>      {MxStoUsed=.3480E+00  m3}
00326> #-----------------|-------------------------------------------------------------|
00327> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00328> #-----------------|-------------------------------------------------------------|
00329> R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00330>     ADD HYD               1.0 02:Channel      101.80    2.826 No_date   13:14
00331>                    +      1.0 04:Orchards      14.80     .433 No_date   12:41
00332>                SUM=       1.0 05:RD19         116.60    3.148 No_date   13:08
00333> #-----------------|-------------------------------------------------------------|
00334> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00335> #-----------------|-------------------------------------------------------------|
00336> R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00337>     CALIB NASHYD          1.0 01:9A            2.57     .048 No_date   12:30
00338>       [CN= 48.4: N= 3.00: Tp=  .37]
00339> R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00340>     CALIB NASHYD          1.0 02:9B           11.63     .193 No_date   13:20
00341>       [CN= 68.5: N= 3.00: Tp= 1.09]
00342> R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00343>     ADD HYD               1.0 01:9A            2.57     .048 No_date   12:30
00344>                    +      1.0 02:9B           11.63     .193 No_date   13:20
00345>                SUM=       1.0 10:9A9B         14.20     .210 No_date   13:12
00346> R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00347>     CALIB NASHYD          1.0 01:9C            1.19     .022 No_date   12:16
00348>       [CN= 33.2: N= 3.00: Tp=  .14]
00349> R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00350>     CALIB NASHYD          1.0 02:9D            2.02     .052 No_date   12:16
00351>       [CN= 41.9: N= 3.00: Tp=  .15]
00352> #-----------------|-------------------------------------------------------------|
00353> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00354> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00355> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00356> #-----------------|-------------------------------------------------------------|
00357> R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00358>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .052 No_date   12:16
00359>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00360>      {MxStoUsed=.1982E-01  m3}
00361> R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00362>     ADD HYD               1.0 01:9C            1.19     .022 No_date   12:16
00363>                    +      1.0 04:ExPond        2.02     .000 No_date    0:00
00364>                SUM=       1.0 09:9C9D          3.21     .022 No_date   12:16
00365> #-----------------|-------------------------------------------------------------|
00366> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00367> #-----------------|-------------------------------------------------------------|
00368> R0001:C00053------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00369>     CALIB NASHYD          1.0 07:9E            7.60     .111 No_date   12:38
00370>       [CN= 47.1: N= 3.00: Tp=  .48]
00371> R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00372>     CALIB NASHYD          1.0 08:9F            3.35     .042 No_date   12:54
00373>       [CN= 50.4: N= 3.00: Tp=  .71]
00374> #-----------------|-------------------------------------------------------------|
00375> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00376> #-----------------|-------------------------------------------------------------|
00377> R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00378>     ADD HYD               1.0 05:RD19         116.60    3.148 No_date   13:08
00379>                    +      1.0 10:9A9B          14.20     .210 No_date   13:12
00380>                    +      1.0 09:9C9D           3.21     .022 No_date   12:16
00381>                    +      1.0 07:9E             7.60     .111 No_date   12:38
00382>                    +      1.0 08:9F             3.35     .042 No_date   12:54
00383>                SUM=       1.0 01:WC9LS        144.96    3.474 No_date   13:08
00384> R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00385>     SAVE HYD              1.0 01:WC9LS        144.96    3.474 No_date   13:08
00386>       fname :WC9LS.0001
00387>       remark:Lakeshore Road Hydrograph
00388> #-----------------|-------------------------------------------------------------|
00389> #-----------------|-----------WATERCOURSE 8---------------------------------------|
00390> #-----------------|-------------------------------------------------------------|
00391> R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00392>     CALIB NASHYD          1.0 07:8A           12.13     .250 No_date   12:43
00393>       [CN= 60.4: N= 3.00: Tp=  .56]
00394> #-----------------|-------------------------------------------------------------|
00395> #-----------------|-----------WATERCOURSE 10--------------------------------------|
00396> #-----------------|-------------------------------------------------------------|
00397> R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00398>     CALIB NASHYD          1.0 07:10A           2.08     .103 No_date   12:19
00399>       [CN= 67.3: N= 3.00: Tp=  .21]
00400> ##############################################################################
00401> ##############################################################################
00402> #                             25yr SCS Storm (24hr)
00403> ##############################################################################
00404> ##############################################################################
00405> R0001:C00059------------------------------------------------------------------
00406>      MASS STORM
00407>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00408>       Comment  = 24 hour SCS II storm mass curve
00409>       [SDT= 1.00:SDUR=  24.00:PTOT=  86.40]
00410> ##############################################################################
00411> #-----------------|-------------------------------------------------------------|
00412> #-----------------|-------------------------------------------------------------|
00413> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00414> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00415> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00416> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00417> #-----------------|-------------------------------------------------------------|
00418> R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00419>     CALIB NASHYD          1.0 01:EXT-9A       101.80    3.796 No_date   13:10
00420>       [CN= 80.0: N= 3.00: Tp= 1.00]
00421> R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00422>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    3.796 No_date   13:10
00423>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.784 No_date   13:14
00424>       [L/S/n=  550./2.000/.035]
00425>       {Vmax= 1.840:Dmax=  .367}
00426> R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    2.516 No_date   12:14
00428>       [XIMP=.35:TIMP=.35]
00429>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00430>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00431>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00432> R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00433>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    2.516 No_date   12:14
00434>                  out <=   1.0 04:Orchards      14.80     .723 No_date   12:36
00435>      {MxStoUsed=.4236E+00  m3}
00436> #-----------------|-------------------------------------------------------------|
00437> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00438> #-----------------|-------------------------------------------------------------|
00439> R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00440>     ADD HYD               1.0 02:Channel      101.80    3.784 No_date   13:14
00441>                    +      1.0 04:Orchards      14.80     .723 No_date   12:36
00442>                SUM=       1.0 05:RD19         116.60    4.258 No_date   13:08
00443> #-----------------|-------------------------------------------------------------|
00444> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00445> #-----------------|-------------------------------------------------------------|
00446> R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00447>     CALIB NASHYD          1.0 01:9A            2.57     .070 No_date   12:30
00448>       [CN= 48.4: N= 3.00: Tp=  .37]
00449> R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00450>     CALIB NASHYD          1.0 02:9B           11.63     .271 No_date   13:19
00451>       [CN= 68.5: N= 3.00: Tp= 1.09]
00452> R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00453>     ADD HYD               1.0 01:9A            2.57     .070 No_date   12:30
00454>                    +      1.0 02:9B           11.63     .271 No_date   13:19
00455>                SUM=       1.0 10:9A9B         14.20     .297 No_date   13:10
00456> R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00457>     CALIB NASHYD          1.0 01:9C            1.19     .032 No_date   12:16
00458>       [CN= 33.2: N= 3.00: Tp=  .14]
00459> R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00460>     CALIB NASHYD          1.0 02:9D            2.02     .076 No_date   12:16
00461>       [CN= 41.9: N= 3.00: Tp=  .15]
00462> #-----------------|-------------------------------------------------------------|
00463> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00464> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00465> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00466> #-----------------|-------------------------------------------------------------|
00467> R0001:C00070------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00468>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .076 No_date   12:16
00469>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00470>      {MxStoUsed=.2876E-01  m3}
00471> R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00472>     ADD HYD               1.0 01:9C            1.19     .032 No_date   12:16
00473>                    +      1.0 04:ExPond        2.02     .000 No_date    0:00
00474>                SUM=       1.0 09:9C9D          3.21     .032 No_date   12:16
00475> #-----------------|-------------------------------------------------------------|
00476> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00477> #-----------------|-------------------------------------------------------------|
00478> R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00479>     CALIB NASHYD          1.0 07:9E            7.60     .163 No_date   12:37
00480>       [CN= 47.1: N= 3.00: Tp=  .48]
00481> R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00482>     CALIB NASHYD          1.0 08:9F            3.35     .061 No_date   12:53
00483>       [CN= 50.4: N= 3.00: Tp=  .71]
00484> #-----------------|-------------------------------------------------------------|
00485> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00486> #-----------------|-------------------------------------------------------------|
00487> R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00488>     ADD HYD               1.0 05:RD19         116.60    4.258 No_date   13:08
00489>                    +      1.0 10:9A9B          14.20     .297 No_date   13:10
00490>                    +      1.0 09:9C9D           3.21     .032 No_date   12:16
00491>                    +      1.0 07:9E             7.60     .163 No_date   12:37
00492>                    +      1.0 08:9F             3.35     .061 No_date   12:53
00493>                SUM=       1.0 01:WC9LS        144.96    4.726 No_date   13:07
00494> R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00495>     SAVE HYD              1.0 01:WC9LS        144.96    4.726 No_date   13:07
00496>       fname :WC9LS.0001
00497>       remark:Lakeshore Road Hydrograph
00498> #-----------------|-------------------------------------------------------------|
00499> #-----------------|-----------WATERCOURSE 8---------------------------------------|
00500> #-----------------|-------------------------------------------------------------|
00501> R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00502>     CALIB NASHYD          1.0 07:8A           12.13     .359 No_date   12:42
00503>       [CN= 60.4: N= 3.00: Tp=  .56]
00504> #-----------------|-------------------------------------------------------------|
00505> #-----------------|-----------WATERCOURSE 10--------------------------------------|
00506> #-----------------|-------------------------------------------------------------|
00507> R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00508>     CALIB NASHYD          1.0 07:10A           2.08     .145 No_date   12:19
00509>       [CN= 67.3: N= 3.00: Tp=  .21]
00510> ##############################################################################
00511> ##############################################################################
00512> #                             50yr SCS Storm (24hr)
00513> ##############################################################################
00514> ##############################################################################
00515> R0001:C00078------------------------------------------------------------------
00516>      MASS STORM
00517>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00518>       Comment  = 24 hour SCS II storm mass curve
00519>       [SDT= 1.00:SDUR=  24.00:PTOT=  96.00]
00520> ##############################################################################
00521> #-----------------|-------------------------------------------------------------|
00522> #-----------------|-------------------------------------------------------------|
00523> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00524> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00525> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00526> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00527> #-----------------|-------------------------------------------------------------|
00528> R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00529>     CALIB NASHYD          1.0 01:EXT-9A       101.80    4.464 No_date   13:10
00530>       [CN= 80.0: N= 3.00: Tp= 1.00]
00531> R0001:C00080------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00532>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    4.464 No_date   13:10
00533>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    4.454 No_date   13:13
00534>       [L/S/n=  550./2.000/.035]
00535>       {Vmax= 1.950:Dmax=  .402}
00536> R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00537>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    2.942 No_date   12:14
00538>       [XIMP=.35:TIMP=.35]
00539>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00540>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
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00541>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00542> R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00543>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     2.942 No_date   12:14
00544>                   out <=    1.0 04:Orchards      14.80      .912 No_date   12:34
00545>      {MxStoUsed=.4691E+00  m3}
00546> #-----------------|-------------------------------------------------------------|
00547> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00548> #-----------------|-------------------------------------------------------------|
00549> R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00550>     ADD HYD               1.0 02:Channel      101.80    4.454 No_date   13:13
00551>                     +     1.0 04:Orchards      14.80     .912 No_date   12:34
00552>                   SUM=    1.0 05:RD19         116.60    5.020 No_date   13:06
00553> #-----------------|-------------------------------------------------------------|
00554> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00555> #-----------------|-------------------------------------------------------------|
00556> R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00557>     CALIB NASHYD          1.0 01:9A            2.57      .086 No_date   12:30
00558>       [CN= 48.4: N= 3.00: Tp=  .37]
00559> R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00560>     CALIB NASHYD          1.0 02:9B           11.63      .328 No_date   13:18
00561>       [CN= 68.5: N= 3.00: Tp= 1.09]
00562> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00563>     ADD HYD               1.0 01:9A            2.57      .086 No_date   12:30
00564>                     +     1.0 02:9B           11.63      .328 No_date   13:18
00565>                   SUM=    1.0 10:9A9B         14.20      .360 No_date   13:10
00566> R0001:C00087------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00567>     CALIB NASHYD          1.0 01:9C            1.19      .041 No_date   12:16
00568>       [CN= 33.2: N= 3.00: Tp=  .14]
00569> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00570>     CALIB NASHYD          1.0 02:9D            2.02      .095 No_date   12:16
00571>       [CN= 41.9: N= 3.00: Tp=  .15]
00572> #-----------------|-------------------------------------------------------------|
00573> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00574> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00575> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00576> #-----------------|-------------------------------------------------------------|
00577> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00578>     ROUTE RESERVOIR ->    1.0 02:9D            2.02      .095 No_date   12:16
00579>  *                out <=    1.0 04:ExPond        2.02      .000 No_date    0:00
00580>      {MxStoUsed=.3546E-01  m3}
00581> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00582>     ADD HYD               1.0 01:9C            1.19      .041 No_date   12:16
00583>                     +     1.0 04:ExPond        2.02      .000 No_date    0:00
00584>                   SUM=    1.0 09:9C9D          3.21      .041 No_date   12:16
00585> #-----------------|-------------------------------------------------------------|
00586> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00587> #-----------------|-------------------------------------------------------------|
00588> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00589>     CALIB NASHYD          1.0 07:9E            7.60      .202 No_date   12:37
00590>       [CN= 47.1: N= 3.00: Tp=  .48]
00591> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00592>     CALIB NASHYD          1.0 08:9F            3.35      .075 No_date   12:53
00593>       [CN= 50.4: N= 3.00: Tp=  .71]
00594> #-----------------|-------------------------------------------------------------|
00595> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00596> #-----------------|-------------------------------------------------------------|
00597> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00598>     ADD HYD               1.0 05:RD19         116.60    5.020 No_date   13:06
00599>                     +     1.0 10:9A9B          14.20     .360 No_date   13:10
00600>                     +     1.0 09:9C9D           3.21     .041 No_date   12:16
00601>                     +     1.0 07:9E             7.60     .202 No_date   12:37
00602>                     +     1.0 08:9F             3.35     .075 No_date   12:53
00603>                   SUM=    1.0 01:WC9LS        144.96    5.593 No_date   13:06
00604> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00605>     SAVE HYD              1.0 01:WC9LS        144.96    5.593 No_date   13:06
00606>       fname :WC9LS.0001
00607>       remark:Lakeshore Road Hydrograph
00608> #-----------------|-------------------------------------------------------------|
00609> #-----------------|-----------WATERCOURSE 8-------------------------------------|
00610> #-----------------|-------------------------------------------------------------|
00611> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00612>     CALIB NASHYD          1.0 07:8A           12.13      .438 No_date   12:42
00613>       [CN= 60.4: N= 3.00: Tp=  .56]
00614> #-----------------|-------------------------------------------------------------|
00615> #-----------------|-----------WATERCOURSE 10------------------------------------|
00616> #-----------------|-------------------------------------------------------------|
00617> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00618>     CALIB NASHYD          1.0 07:10A           2.08      .176 No_date   12:19
00619>       [CN= 67.3: N= 3.00: Tp=  .21]
00620> ********************************************************************************
00621> ********************************************************************************
00622> #                            100yr SCS Storm (24hr)
00623> ********************************************************************************
00624> ********************************************************************************
00625> R0001:C00097------------------------------------------------------------------------
00626>      MASS STORM
00627>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00628>       Comment  = 24 hour SCS II storm mass curve
00629>       [SDT= 1.00:SDUR=  24.00:PTOT= 108.00]
00630> ********************************************************************************
00631> #-----------------|-------------------------------------------------------------|
00632> #-----------------|-------------------------------------------------------------|
00633> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
00634> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00635> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00636> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00637> #-----------------|-------------------------------------------------------------|
00638> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00639>     CALIB NASHYD          1.0 01:EXT-9A       101.80    5.323 No_date   13:09
00640>       [CN= 80.0: N= 3.00: Tp= 1.00]
00641> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00642>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    5.323 No_date   13:09
00643>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    5.308 No_date   13:13
00644>       [L/S/n=  550./2.000/.035]
00645>       {Vmax= 2.062:Dmax=  .442}
00646> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00647>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    3.462 No_date   12:14
00648>       [XIMP=.35:TIMP=.35]
00649>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00650>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00651>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00652> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00653>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.462 No_date   12:14
00654>                   out <=    1.0 04:Orchards      14.80    1.155 No_date   12:32
00655>      {MxStoUsed=.5239E+00  m3}
00656> #-----------------|-------------------------------------------------------------|
00657> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00658> #-----------------|-------------------------------------------------------------|
00659> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00660>     ADD HYD               1.0 02:Channel      101.80    5.308 No_date   13:13
00661>                     +     1.0 04:Orchards      14.80    1.155 No_date   12:32
00662>                   SUM=    1.0 05:RD19         116.60    5.991 No_date   13:06
00663> #-----------------|-------------------------------------------------------------|
00664> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00665> #-----------------|-------------------------------------------------------------|
00666> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00667>     CALIB NASHYD          1.0 01:9A            2.57      .108 No_date   12:29
00668>       [CN= 48.4: N= 3.00: Tp=  .37]
00669> R0001:C00104------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00670>     CALIB NASHYD          1.0 02:9B           11.63      .403 No_date   13:18
00671>       [CN= 68.5: N= 3.00: Tp= 1.09]
00672> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00673>     ADD HYD               1.0 01:9A            2.57      .108 No_date   12:29
00674>                     +     1.0 02:9B           11.63      .403 No_date   13:18
00675>                   SUM=    1.0 10:9A9B         14.20      .443 No_date   13:09
00676> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00677>     CALIB NASHYD          1.0 01:9C            1.19      .052 No_date   12:16
00678>       [CN= 33.2: N= 3.00: Tp=  .14]
00679> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00680>     CALIB NASHYD          1.0 02:9D            2.02      .119 No_date   12:16
00681>       [CN= 41.9: N= 3.00: Tp=  .15]
00682> #-----------------|-------------------------------------------------------------|
00683> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00684> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00685> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00686> #-----------------|-------------------------------------------------------------|
00687> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00688>     ROUTE RESERVOIR ->    1.0 02:9D            2.02      .119 No_date   12:16
00689>  *                out <=    1.0 04:ExPond        2.02      .000 No_date    0:00
00690>      {MxStoUsed=.4458E-01  m3}
00691> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00692>     ADD HYD               1.0 01:9C            1.19      .052 No_date   12:16
00693>                     +     1.0 04:ExPond        2.02      .000 No_date    0:00
00694>                   SUM=    1.0 09:9C9D          3.21      .052 No_date   12:16
00695> #-----------------|-------------------------------------------------------------|
00696> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00697> #-----------------|-------------------------------------------------------------|
00698> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB NASHYD          1.0 07:9E            7.60      .255 No_date   12:37
00700>       [CN= 47.1: N= 3.00: Tp=  .48]
00701> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     CALIB NASHYD          1.0 08:9F            3.35      .094 No_date   12:52
00703>       [CN= 50.4: N= 3.00: Tp=  .71]
00704> #-----------------|-------------------------------------------------------------|
00705> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00706> #-----------------|-------------------------------------------------------------|
00707> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00708>     ADD HYD               1.0 05:RD19         116.60    5.991 No_date   13:06
00709>                     +     1.0 10:9A9B          14.20     .443 No_date   13:09
00710>                     +     1.0 09:9C9D           3.21     .052 No_date   12:16
00711>                     +     1.0 07:9E             7.60     .255 No_date   12:37
00712>                     +     1.0 08:9F             3.35     .094 No_date   12:52
00713>                   SUM=    1.0 01:WC9LS        144.96    6.705 No_date   13:05
00714> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00715>     SAVE HYD              1.0 01:WC9LS        144.96    6.705 No_date   13:05
00716>       fname :WC9LS.0001
00717>       remark:Lakeshore Road Hydrograph
00718> #-----------------|-------------------------------------------------------------|
00719> #-----------------|-----------WATERCOURSE 8-------------------------------------|
00720> #-----------------|-------------------------------------------------------------|
00721> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00722>     CALIB NASHYD          1.0 07:8A           12.13      .545 No_date   12:42
00723>       [CN= 60.4: N= 3.00: Tp=  .56]
00724> #-----------------|-------------------------------------------------------------|
00725> #-----------------|-----------WATERCOURSE 10------------------------------------|
00726> #-----------------|-------------------------------------------------------------|
00727> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00728>     CALIB NASHYD          1.0 07:10A           2.08      .216 No_date   12:19
00729>       [CN= 67.3: N= 3.00: Tp=  .21]
00730> R0001:C00116------------------------------------------------------------------------
00731>     FINISH
00732> ------------------------------------------------------------------------------
00733> ********************************************************************************
00734>      WARNINGS / ERRORS / NOTES
00735>      -------------------------
00736> R0001:C00013  ROUTE RESERVOIR
00737> *** WARNING: Outflow volume is less than inflow volume.
00738> R0001:C00032  ROUTE RESERVOIR
00739> *** WARNING: Outflow volume is less than inflow volume.
00740> R0001:C00051  ROUTE RESERVOIR
00741> *** WARNING: Outflow volume is less than inflow volume.
00742> R0001:C00070  ROUTE RESERVOIR
00743> *** WARNING: Outflow volume is less than inflow volume.
00744> R0001:C00089  ROUTE RESERVOIR
00745> *** WARNING: Outflow volume is less than inflow volume.
00746> R0001:C00108  ROUTE RESERVOIR
00747> *** WARNING: Outflow volume is less than inflow volume.
00748>    Simulation ended on 2021-04-29     at 12:00:32
00749> ================================================================================
00750>
00751>
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2021.04.29
00005> *#  Modeller    : [JE]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[0],  NRUN=[0]
00010> *%                   [ ] <--storm filename, one per line for NSTORM time
00011> *#************************************************************************
00012> *%-----------------|------------------------------------------------------|
00013> *#-----------------|------------------------------------------------------|
00014> *#-----------------|-POST-DEVELOPMENT----24 hr SCS STORMS-----------------|
00015> *#-----------------|------------------------------------------------------|
00016>
00017> *#************************************************************************
00018> *#                            2yr SCS Storm (24hr)
00019> *#************************************************************************
00020> *#************************************************************************
00021> MASS STORM          PTOTAL=[45.60](mm), CSDT=[1](min),
00022>                     CURVE_FILENAME=["SCS24HII.mst"]
00023> *#************************************************************************
00024> *#-----------------|------------------------------------------------------|
00025> *#-----------------|-Subwatershed 9 External Drainage Area----------------|
00026> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------|
00027> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
00028> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00029> *#-----------------|------------------------------------------------------|
00030> *%-----------------|------------------------------------------------------|
00031> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00032>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00033>                     N=[3], TP=[1.00]hrs,
00034>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00035> *%-----------------|------------------------------------------------------|
00036> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00037>                     RDT=[1](min),
00038>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00039>                                       FPSLOPE=[2](%),
00040>                     SECNUM=[1],       NSEG=[3]
00041>                     ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00042>                     ( DISTANCE (m), ELEVATION (m))=[0,102]
00043>                                                   [8,100]
00044>                                                   [12,100]
00045>                                                   [20,102]
00046> *%-----------------|------------------------------------------------------|
00047> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00048>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00049>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00050>                             DCAY=[2](/hr), F=[0](mm),
00051>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00052>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00053>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00054>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00055>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00056> *%-----------------|------------------------------------------------------|
00057> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00058>                     RDT=[1](min),
00059>                           TABLE of ( OUTFLOW-STORAGE ) values
00060>                                      (cms) - (ha-m)
00061>                                    [   0.0 ,  0.0 ]
00062>                                    [   0.0100 ,  0.0610 ]
00063>                                    [   0.0400 ,  0.1310 ]
00064>                                    [   0.0700 ,  0.2110 ]
00065>                                    [   0.2600 ,  0.3000 ]
00066>                                    [   0.6000 ,  0.3940 ]
00067>                                    [   1.0200 ,  0.4950 ]
00068>                                    [   1.5200 ,  0.6020 ]
00069>                                    [   2.0800 ,  0.7160 ]
00070>                                    [   2.6900 ,  0.8370 ]
00071>                           IDovf=[ ], NHYDovf=[  ]
00072> *%-----------------|------------------------------------------------------|
00073> *#-----------------|------------------------------------------------------|
00074> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00075> *#-----------------|------------------------------------------------------|
00076> *%-----------------|------------------------------------------------------|
00077> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00078> *%-----------------|------------------------------------------------------|
00079> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00080>                     DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00081>                     N=[3], TP=[0.24]hrs,
00082>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00083> *%-----------------|------------------------------------------------------|
00084> *#-----------------|------------------------------------------------------|
00085> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------|
00086> *#-----------------|------------------------------------------------------|
00087> *%-----------------|------------------------------------------------------|
00088> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
00089>                     DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
00090>                     N=[3], TP=[0.30]hrs,
00091>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00092> *%-----------------|------------------------------------------------------|
00093> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
00094> *%-----------------|------------------------------------------------------|
00095> *#-----------------|------------------------------------------------------|
00096> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------|
00097> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
00098> *#-----------------|------------------------------------------------------|
00099> *%-----------------|------------------------------------------------------|
00100> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00101>                     DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00102>                     N=[3], TP=[0.47]hrs,
00103>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00104> *%-----------------|------------------------------------------------------|
00105> CALIB STANDHYD     ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00106>                     XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00107>                     SCS curve number CN=[67.0],
00108>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00109>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00110>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00111>                                          LGI=[44](m), MNI=[0.013], SCI=[0](min),
00112>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00113> *%-----------------|------------------------------------------------------|
00114> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00115>                     DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00116>                     N=[3], TP=[0.11]hrs,
00117>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00118> *%-----------------|------------------------------------------------------|
00119> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00120> *%-----------------|------------------------------------------------------|
00121> *#-----------------|------------------------------------------------------|
00122> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00123> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00124> *#-----------------|------------------------------------------------------|
00125> *%-----------------|------------------------------------------------------|
00126> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00127>                     RDT=[1](min),
00128>                           TABLE of ( OUTFLOW-STORAGE ) values
00129>                                      (cms) - (ha-m)
00130>                                    [   0.0 ,  0.0 ]
00131>                                    [   0.007 ,  0.027 ]
00132>                                    [   0.018 ,  0.084 ]
00133>                                    [   0.025 ,  0.147 ]
00134>                                    [   0.029 ,  0.199 ]
00135>                                    [   0.032 ,  0.256 ]
00136>                                    [   0.036 ,  0.337 ]
00137>                                    [   0.078 ,  0.426 ]
00138>                                    [   0.151 ,  0.522 ]
00139>                                    [   0.293 ,  0.581 ]
00140>                                    [   0.306 ,  0.656 ]
00141>                                    [   0.330 ,  0.737 ]
00142>                                    [   1.442 ,  0.902 ]
00143>                                    [   2.636 ,  0.976 ]
00144>                                    [   -1  ,  -1  ]  (max twenty pts)
00145>                           IDovf=[   ], NHYDovf=[   ]
00146> *%-----------------|------------------------------------------------------|
00147> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00148> *%-----------------|------------------------------------------------------|
00149> *#-----------------|------------------------------------------------------|
00150> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------|
00151> *#-----------------|------------------------------------------------------|
00152> *%-----------------|------------------------------------------------------|
00153> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00154> *#-----------------|------------------------------------------------------|
00155> CALIB STANDHYD     ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
00156>                     XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
00157>                     SCS curve number CN=[66.2],
00158>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00159>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00160>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00161>                                          LGI=[96](m), MNI=[0.013], SCI=[0](min),
00162>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00163> *%-----------------|------------------------------------------------------|
00164> *#-----------------|------------------------------------------------------|
00165> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------|
00166> *#-----------------|------------------------------------------------------|
00167> *%-----------------|------------------------------------------------------|
00168> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
00169>                     DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
00170>                     N=[3], TP=[0.28]hrs,
00171>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00172> *%-----------------|------------------------------------------------------|
00173> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
00174>                     DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
00175>                     N=[3], TP=[0.62]hrs,
00176>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00177> *%-----------------|------------------------------------------------------|
00178> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
00179>                     DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
00180>                     N=[3], TP=[0.33]hrs,
00181>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00182> *%-----------------|------------------------------------------------------|
00183> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
00184> *%-----------------|------------------------------------------------------|
00185> *#-----------------|------------------------------------------------------|
00186> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------|
00187> *#-----------------|------------------------------------------------------|
00188> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00189>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00190>                     N=[3], TP=[0.14]hrs,
00191>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00192> *%-----------------|------------------------------------------------------|
00193> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00194>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00195>                     N=[3], TP=[0.32]hrs,
00196>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00197> *%-----------------|------------------------------------------------------|
00198> CALIB STANDHYD     ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00199>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00200>                     SCS curve number CN=[49],
00201>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00202>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00203>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00204>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
00205>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00206> *%-----------------|------------------------------------------------------|
00207> CALIB STANDHYD     ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00208>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00209>                     SCS curve number CN=[59],
00210>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00211>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00212>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00213>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
00214>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00215> *%-----------------|------------------------------------------------------|
00216> CALIB STANDHYD     ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
00217>                     XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
00218>                     SCS curve number CN=[69],
00219>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00220>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00221>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00222>                                          LGI=[118](m), MNI=[0.013], SCI=[0](min)
00223>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00224> *%-----------------|------------------------------------------------------|
00225> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
00226> *%-----------------|------------------------------------------------------|
00227> *#-----------------|------------------------------------------------------|
00228> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00229> *#-----------------|------------------------------------------------------|
00230> *%-----------------|------------------------------------------------------|
00231> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00232>                     RDT=[1](min),
00233>                           TABLE of ( OUTFLOW-STORAGE ) values
00234>                                      (cms) - (ha-m)
00235>                                    [   0.0 ,  0.0 ]
00236>                                    [   0.006 ,  0.019 ]
00237>                                    [   0.016 ,  0.060 ]
00238>                                    [   0.019 ,  0.080 ]
00239>                                    [   0.021 ,  0.103 ]
00240>                                    [   0.025 ,  0.141 ]
00241>                                    [   0.028 ,  0.181 ]
00242>                                    [   0.069 ,  0.240 ]
00243>                                    [   0.142 ,  0.303 ]
00244>                                    [   0.298 ,  0.371 ]
00245>                                    [   0.322 ,  0.403 ]
00246>                                    [   0.560 ,  0.440 ]
00247>                                    [   1.128 ,  0.479 ]
00248>                                    [   1.226 ,  0.511 ]
00249>                                    [   -1  ,  -1  ]  (max twenty pts)
00250>                           IDovf=[   ], NHYDovf=[   ]
00251> *%-----------------|------------------------------------------------------|
00252> *#-----------------|------------------------------------------------------|
00253> *#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD------------|
00254> *#-----------------|------------------------------------------------------|
00255> *%-----------------|------------------------------------------------------|
00256> ADD HYD            IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00257> *%-----------------|------------------------------------------------------|
00258> SAVE HYD           ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
00259>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
00260> *%-----------------|------------------------------------------------------|
00261> *#-----------------|------------------------------------------------------|
00262> *#-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------|
00263> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------|
00264> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------|
00265> *#-----------------|------------------------------------------------------|
00266> *%-----------------|------------------------------------------------------|
00267> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00268>                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00269>                     N=[3], TP=[0.23]hrs,
00270>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
```

```
00271> *%-----------------|-------------------------------------------------------|
00272> CALIB NASHYD       ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
00273>                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
00274>                    N=[3], TP=[0.41]hrs,
00275>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00276> *%-----------------|-------------------------------------------------------|
00277> CALIB NASHYD       ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
00278>                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
00279>                    N=[3], TP=[0.41]hrs,
00280>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00281> *%-----------------|-------------------------------------------------------|
00282> *#-----------------|-------------------------------------------------------|
00283> *#-----------------|-----------WATERCOURSE 8-----------------------------|
00284> *#-----------------|-------------------------------------------------------|
00285> *%-----------------|-------------------------------------------------------|
00286> ADD HYD            IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
00287> *%-----------------|-------------------------------------------------------|
00288> *%-----------------|-------------------------------------------------------|
00289> *#-----------------|-------------------------------------------------------|
00290> *#-----------------|--WATERCOURSE 10 CATCHMENT---------------------------|
00291> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10----------|
00292> *#-----------------|-------------------------------------------------------|
00293> *%-----------------|-------------------------------------------------------|
00294> CALIB NASHYD       ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
00295>                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
00296>                    N=[3], TP=[0.21]hrs,
00297>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00298> *%-----------------|-------------------------------------------------------|
00299>
00300>
00301>
00302> *#*****************************************************************************
00303> *#*****************************************************************************
00304> *#                          5yr SCS Storm (24hr)
00305> *#*****************************************************************************
00306> *#*****************************************************************************
00307> MASS STORM          PTOTAL=[62.4](mm), CSDT=[1](min),
00308>                    CURVE_FILENAME=["SCS24HII.mst"]
00309> *#*****************************************************************************
00310> *#-----------------|-------------------------------------------------------|
00311> *#-----------------|-Subwatershed 9 External Drainage Area---------------------|
00312> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00313> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00314> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00315> *#-----------------|-------------------------------------------------------|
00316> *%-----------------|-------------------------------------------------------|
00317> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00318>                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00319>                    N=[3], TP=[1.00]hrs,
00320>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00321> *%-----------------|-------------------------------------------------------|
00322> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00323>                    RDT=[1](min),
00324>                    CHLGTH=[550](m),  CHSLOPE=[2](%),
00325>                                        FPSLOPE=[2](%),
00326>                    SECNUM=[1],      NSEG=[3]
00327>                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00328>                    ( DISTANCE (m), ELEVATION (m))=[0,102]
00329>                                                  [8,100]
00330>                                                  [12,100]
00331>                                                  [20,102]
00332> *%-----------------|-------------------------------------------------------|
00333> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00334>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00335>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00336>                            DCAY=[2](/hr), F=[0](mm),
00337>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00338>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00339>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00340>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00341>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00342> *%-----------------|-------------------------------------------------------|
00343> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00344>                    RDT=[1](min),
00345>                          TABLE of ( OUTFLOW-STORAGE ) values
00346>                                     (cms) - (ha-m)
00347>                                  [   0.0 ,  0.0 ]
00348>                                  [   0.0100 ,  0.0610 ]
00349>                                  [   0.0400 ,  0.1310 ]
00350>                                  [   0.0700 ,  0.2110 ]
00351>                                  [   0.2600 ,  0.3000 ]
00352>                                  [   0.6000 ,  0.3940 ]
00353>                                  [   1.0200 ,  0.4950 ]
00354>                                  [   1.5200 ,  0.6020 ]
00355>                                  [   2.0800 ,  0.7160 ]
00356>                                  [   2.6900 ,  0.8370 ]
00357>                          IDovf=[ ], NHYDovf=[  ]
00358> *%-----------------|-------------------------------------------------------|
00359> *#-----------------|-------------------------------------------------------|
00360> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00361> *#-----------------|-------------------------------------------------------|
00362> *%-----------------|-------------------------------------------------------|
00363> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00364> *%-----------------|-------------------------------------------------------|
00365> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00366>                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00367>                    N=[3], TP=[0.24]hrs,
00368>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00369> *%-----------------|-------------------------------------------------------|
00370> *#-----------------|-------------------------------------------------------|
00371> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00372> *#-----------------|-------------------------------------------------------|
00373> *%-----------------|-------------------------------------------------------|
00374> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
00375>                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
00376>                    N=[3], TP=[0.30]hrs,
00377>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00378> *%-----------------|-------------------------------------------------------|
00379> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
00380> *%-----------------|-------------------------------------------------------|
00381> *#-----------------|-------------------------------------------------------|
00382> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00383> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00384> *#-----------------|-------------------------------------------------------|
00385> *%-----------------|-------------------------------------------------------|
00386> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00387>                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00388>                    N=[3], TP=[0.47]hrs,
00389>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00390> *%-----------------|-------------------------------------------------------|
00391> CALIB STANDHYD     ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00392>                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00393>                    SCS curve number CN=[67.0],
00394>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00395>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00396>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00397>                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
00398>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00399> *%-----------------|-------------------------------------------------------|
00400> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00401>                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00402>                    N=[3], TP=[0.11]hrs,
00403>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00404> *%-----------------|-------------------------------------------------------|
00405> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00406> *%-----------------|-------------------------------------------------------|
00407> *#-----------------|-------------------------------------------------------|
00408> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00409> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00410> *#-----------------|-------------------------------------------------------|
00411> *%-----------------|-------------------------------------------------------|
00412> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00413>                    RDT=[1](min),
00414>                          TABLE of ( OUTFLOW-STORAGE ) values
00415>                                     (cms) - (ha-m)
00416>                                  [   0.0 ,  0.0 ]
00417>                                  [   0.007 ,  0.027 ]
00418>                                  [   0.018 ,  0.084 ]
00419>                                  [   0.025 ,  0.147 ]
00420>                                  [   0.029 ,  0.199 ]
00421>                                  [   0.032 ,  0.256 ]
00422>                                  [   0.036 ,  0.337 ]
00423>                                  [   0.078 ,  0.426 ]
00424>                                  [   0.151 ,  0.522 ]
00425>                                  [   0.293 ,  0.581 ]
00426>                                  [   0.306 ,  0.656 ]
00427>                                  [   0.330 ,  0.737 ]
00428>                                  [   1.442 ,  0.902 ]
00429>                                  [   2.636 ,  0.976 ]
00430>                                  [   -1  ,  -1  ]  (max twenty pts)
00431>                          IDovf=[   ], NHYDovf=[   ]
00432> *%-----------------|-------------------------------------------------------|
00433> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00434> *%-----------------|-------------------------------------------------------|
00435> *#-----------------|-------------------------------------------------------|
00436> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands--------------|
00437> *#-----------------|-------------------------------------------------------|
00438> *%-----------------|-------------------------------------------------------|
00439> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00440> *#-----------------|-------------------------------------------------------|
00441> CALIB STANDHYD     ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
00442>                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
00443>                    SCS curve number CN=[66.2],
00444>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00445>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00446>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00447>                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
00448>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00449> *%-----------------|-------------------------------------------------------|
00450> *#-----------------|-------------------------------------------------------|
00451> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00452> *#-----------------|-------------------------------------------------------|
00453> *%-----------------|-------------------------------------------------------|
00454> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
00455>                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
00456>                    N=[3], TP=[0.28]hrs,
00457>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00458> *%-----------------|-------------------------------------------------------|
00459> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
00460>                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
00461>                    N=[3], TP=[0.62]hrs,
00462>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00463> *%-----------------|-------------------------------------------------------|
00464> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
00465>                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
00466>                    N=[3], TP=[0.33]hrs,
00467>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00468> *%-----------------|-------------------------------------------------------|
00469> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
00470> *%-----------------|-------------------------------------------------------|
00471> *#-----------------|-------------------------------------------------------|
00472> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00473> *#-----------------|-------------------------------------------------------|
00474> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00475>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00476>                    N=[3], TP=[0.14]hrs,
00477>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00478> *%-----------------|-------------------------------------------------------|
00479> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00480>                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00481>                    N=[3], TP=[0.32]hrs,
00482>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00483> *%-----------------|-------------------------------------------------------|
00484> CALIB STANDHYD     ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00485>                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00486>                    SCS curve number CN=[49],
00487>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00488>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00489>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00490>                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
00491>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00492> *%-----------------|-------------------------------------------------------|
00493> CALIB STANDHYD     ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00494>                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00495>                    SCS curve number CN=[59],
00496>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00497>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00498>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00499>                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
00500>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00501> *%-----------------|-------------------------------------------------------|
00502> CALIB STANDHYD     ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
00503>                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
00504>                    SCS curve number CN=[69],
00505>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00506>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00507>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00508>                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
00509>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00510> *%-----------------|-------------------------------------------------------|
00511> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
00512> *%-----------------|-------------------------------------------------------|
00513> *#-----------------|-------------------------------------------------------|
00514> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00515> *#-----------------|-------------------------------------------------------|
00516> *%-----------------|-------------------------------------------------------|
00517> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00518>                    RDT=[1](min),
00519>                          TABLE of ( OUTFLOW-STORAGE ) values
00520>                                     (cms) - (ha-m)
00521>                                  [   0.0 ,  0.0 ]
00522>                                  [   0.006 ,  0.019 ]
00523>                                  [   0.016 ,  0.060 ]
00524>                                  [   0.019 ,  0.080 ]
00525>                                  [   0.021 ,  0.103 ]
00526>                                  [   0.025 ,  0.141 ]
00527>                                  [   0.028 ,  0.181 ]
00528>                                  [   0.069 ,  0.240 ]
00529>                                  [   0.142 ,  0.303 ]
00530>                                  [   0.298 ,  0.371 ]
00531>                                  [   0.322 ,  0.403 ]
00532>                                  [   0.560 ,  0.440 ]
00533>                                  [   1.128 ,  0.479 ]
00534>                                  [   1.226 ,  0.511 ]
00535>                                  [   -1  ,  -1  ]  (max twenty pts)
00536>                          IDovf=[   ], NHYDovf=[   ]
00537> *%-----------------|-------------------------------------------------------|
00538> *#-----------------|-------------------------------------------------------|
00539> *#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00540> *#-----------------|-------------------------------------------------------|
```

```
00541> *%-----------------|-------------------------------------------------------------|
00542> ADD HYD            IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00543> *%-----------------|-------------------------------------------------------------|
00544> SAVE HYD           ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
00545>                    HYD_COMMENT=["POST-DEV LAKESHORE"]
00546> *%-----------------|-------------------------------------------------------------|
00547> *#-----------------|-------------------------------------------------------------|
00548> *#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
00549> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
00550> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
00551> *#-----------------|-------------------------------------------------------------|
00552> *%-----------------|-------------------------------------------------------------|
00553> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00554>                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00555>                    N=[3], TP=[0.23]hrs,
00556>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00557> *%-----------------|-------------------------------------------------------------|
00558> CALIB NASHYD       ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
00559>                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
00560>                    N=[3], TP=[0.41]hrs,
00561>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00562> *%-----------------|-------------------------------------------------------------|
00563> CALIB NASHYD       ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
00564>                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
00565>                    N=[3], TP=[0.41]hrs,
00566>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00567> *%-----------------|-------------------------------------------------------------|
00568> *#-----------------|-------------------------------------------------------------|
00569> *#-----------------|----------WATERCOURSE 8----------------------------------------|
00570> *#-----------------|-------------------------------------------------------------|
00571> *%-----------------|-------------------------------------------------------------|
00572> ADD HYD            IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
00573> *%-----------------|-------------------------------------------------------------|
00574> *%-----------------|-------------------------------------------------------------|
00575> *#-----------------|-------------------------------------------------------------|
00576> *#-----------------|--WATERCOURSE 10 CATCHMENT-------------------------------------|
00577> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-------------------|
00578> *#-----------------|-------------------------------------------------------------|
00579> *%-----------------|-------------------------------------------------------------|
00580> CALIB NASHYD       ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
00581>                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
00582>                    N=[3], TP=[0.21]hrs,
00583>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00584> *%-----------------|-------------------------------------------------------------|
00585>
00586>
00587>
00588>
00589> *#*****************************************************************************
00590> *#*****************************************************************************
00591> *#                              10yr SCS Storm (24hr)
00592> *#*****************************************************************************
00593> *#*****************************************************************************
00594> MASS STORM          PTOTAL=[72.0](mm), CSDT=[1](min),
00595>                    CURVE_FILENAME=["SCS24HII.mst"]
00596> *#*****************************************************************************
00597> *#-----------------|-------------------------------------------------------------|
00598> *#-----------------|-Subwatershed 9 External Drainage Area-------------------------|
00599> *#-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
00600> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)--------------------|
00601> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00602> *#-----------------|-------------------------------------------------------------|
00603> *%-----------------|-------------------------------------------------------------|
00604> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00605>                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00606>                    N=[3], TP=[1.00]hrs,
00607>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00608> *%-----------------|-------------------------------------------------------------|
00609> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00610>                    RDT=[1](min),
00611>                    CHLGTH[550](m),  CHSLOPE=[2](%),
00612>                                     FPSLOPE=[2](%),
00613>                    SECNUM=[1],      NSEG=[3]
00614>                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00615>                    ( DISTANCE (m), ELEVATION (m))=[0,102]
00616>                                                  [8,100]
00617>                                                  [12,100]
00618>                                                  [20,102]
00619> *%-----------------|-------------------------------------------------------------|
00620> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00621>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00622>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00623>                            DCAY=[2](/hr), F=[0](mm),
00624>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00625>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00626>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00627>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00628>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00629> *%-----------------|-------------------------------------------------------------|
00630> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00631>                    RDT=[1](min),
00632>                          TABLE of ( OUTFLOW-STORAGE ) values
00633>                                       (cms) - (ha-m)
00634>                                    [   0.0 ,  0.0 ]
00635>                                    [   0.0100 ,  0.0610 ]
00636>                                    [   0.0400 ,  0.1310 ]
00637>                                    [   0.0700 ,  0.2110 ]
00638>                                    [   0.2600 ,  0.3000 ]
00639>                                    [   0.6000 ,  0.3940 ]
00640>                                    [   1.0200 ,  0.4950 ]
00641>                                    [   1.5200 ,  0.6020 ]
00642>                                    [   2.0800 ,  0.7160 ]
00643>                                    [   2.6900 ,  0.8370 ]
00644>                          IDovf=[ ], NHYDovf=[  ]
00645> *%-----------------|-------------------------------------------------------------|
00646> *#-----------------|-------------------------------------------------------------|
00647> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00648> *#-----------------|-------------------------------------------------------------|
00649> *%-----------------|-------------------------------------------------------------|
00650> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00651> *%-----------------|-------------------------------------------------------------|
00652> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00653>                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00654>                    N=[3], TP=[0.24]hrs,
00655>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00656> *%-----------------|-------------------------------------------------------------|
00657> *#-----------------|-------------------------------------------------------------|
00658> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00659> *#-----------------|-------------------------------------------------------------|
00660> *%-----------------|-------------------------------------------------------------|
00661> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
00662>                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
00663>                    N=[3], TP=[0.30]hrs,
00664>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00665> *%-----------------|-------------------------------------------------------------|
00666> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
00667> *%-----------------|-------------------------------------------------------------|
00668> *#-----------------|-------------------------------------------------------------|
00669> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00670> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00671> *#-----------------|-------------------------------------------------------------|
00672> *%-----------------|-------------------------------------------------------------|
00673> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00674>                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00675>                    N=[3], TP=[0.47]hrs,
00676>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00677> *%-----------------|-------------------------------------------------------------|
00678> CALIB STANDHYD     ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00679>                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00680>                    SCS curve number CN=[67.0],
00681>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00682>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00683>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00684>                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
00685>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00686> *%-----------------|-------------------------------------------------------------|
00687> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00688>                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00689>                    N=[3], TP=[0.11]hrs,
00690>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00691> *%-----------------|-------------------------------------------------------------|
00692> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00693> *%-----------------|-------------------------------------------------------------|
00694> *#-----------------|-------------------------------------------------------------|
00695> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00696> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00697> *#-----------------|-------------------------------------------------------------|
00698> *%-----------------|-------------------------------------------------------------|
00699> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00700>                    RDT=[1](min),
00701>                          TABLE of ( OUTFLOW-STORAGE ) values
00702>                                       (cms) - (ha-m)
00703>                                    [   0.0 ,  0.0 ]
00704>                                    [   0.007 ,  0.027 ]
00705>                                    [   0.018 ,  0.084 ]
00706>                                    [   0.025 ,  0.147 ]
00707>                                    [   0.029 ,  0.199 ]
00708>                                    [   0.032 ,  0.256 ]
00709>                                    [   0.036 ,  0.337 ]
00710>                                    [   0.078 ,  0.426 ]
00711>                                    [   0.151 ,  0.522 ]
00712>                                    [   0.293 ,  0.581 ]
00713>                                    [   0.306 ,  0.656 ]
00714>                                    [   0.330 ,  0.737 ]
00715>                                    [   1.442 ,  0.902 ]
00716>                                    [   2.636 ,  0.976 ]
00717>                                    [   -1  ,  -1  ]  (max twenty pts)
00718>                          IDovf=[   ], NHYDovf=[   ]
00719> *%-----------------|-------------------------------------------------------------|
00720> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00721> *%-----------------|-------------------------------------------------------------|
00722> *#-----------------|-------------------------------------------------------------|
00723> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00724> *#-----------------|-------------------------------------------------------------|
00725> *%-----------------|-------------------------------------------------------------|
00726> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00727> *#-----------------|-------------------------------------------------------------|
00728> CALIB STANDHYD     ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
00729>                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
00730>                    SCS curve number CN=[66.2],
00731>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00732>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00733>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00734>                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
00735>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00736> *%-----------------|-------------------------------------------------------------|
00737> *#-----------------|-------------------------------------------------------------|
00738> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-------------------------|
00739> *#-----------------|-------------------------------------------------------------|
00740> *%-----------------|-------------------------------------------------------------|
00741> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
00742>                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
00743>                    N=[3], TP=[0.28]hrs,
00744>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00745> *%-----------------|-------------------------------------------------------------|
00746> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
00747>                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
00748>                    N=[3], TP=[0.62]hrs,
00749>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00750> *%-----------------|-------------------------------------------------------------|
00751> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
00752>                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
00753>                    N=[3], TP=[0.33]hrs,
00754>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00755> *%-----------------|-------------------------------------------------------------|
00756> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
00757> *%-----------------|-------------------------------------------------------------|
00758> *#-----------------|-------------------------------------------------------------|
00759> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00760> *#-----------------|-------------------------------------------------------------|
00761> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00762>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00763>                    N=[3], TP=[0.14]hrs,
00764>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00765> *%-----------------|-------------------------------------------------------------|
00766> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00767>                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00768>                    N=[3], TP=[0.32]hrs,
00769>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00770> *%-----------------|-------------------------------------------------------------|
00771> CALIB STANDHYD     ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00772>                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00773>                    SCS curve number CN=[49],
00774>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00775>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00776>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00777>                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
00778>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00779> *%-----------------|-------------------------------------------------------------|
00780> CALIB STANDHYD     ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00781>                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00782>                    SCS curve number CN=[59],
00783>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00784>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00785>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00786>                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
00787>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00788> *%-----------------|-------------------------------------------------------------|
00789> CALIB STANDHYD     ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
00790>                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
00791>                    SCS curve number CN=[69],
00792>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00793>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00794>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00795>                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
00796>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00797> *%-----------------|-------------------------------------------------------------|
00798> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
00799> *%-----------------|-------------------------------------------------------------|
00800> *#-----------------|-------------------------------------------------------------|
00801> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00802> *#-----------------|-------------------------------------------------------------|
00803> *%-----------------|-------------------------------------------------------------|
00804> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00805>                    RDT=[1](min),
00806>                          TABLE of ( OUTFLOW-STORAGE ) values
00807>                                       (cms) - (ha-m)
00808>                                    [   0.0 ,  0.0 ]
00809>                                    [   0.006 ,  0.019 ]
00810>                                    [   0.016 ,  0.060 ]
```

```
                                      [   0.019 ,  0.080 ]
                                      [   0.021 ,  0.103 ]
                                      [   0.025 ,  0.141 ]
                                      [   0.028 ,  0.181 ]
                                      [   0.069 ,  0.240 ]
                                      [   0.142 ,  0.303 ]
                                      [   0.298 ,  0.371 ]
                                      [   0.322 ,  0.403 ]
                                      [   0.560 ,  0.440 ]
                                      [   1.128 ,  0.479 ]
                                      [   1.226 ,  0.511 ]
                                      [   -1  ,   -1  ]  (max twenty pts)
                            IDovf=[   ], NHYDovf=[   ]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%-----------------|--------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 8-----------------------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|--WATERCOURSE 10 CATCHMENT---------------------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10---------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|




*#*****************************************************************************
*#*****************************************************************************
*#                               25yr SCS Storm (24hr)
*#*****************************************************************************
*#*****************************************************************************
MASS STORM          PTOTAL=[86.4](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS24HII.mst"]
*#*****************************************************************************
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                          FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                   [8,100]
                                                   [12,100]
                                                   [20,102]
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                    N=[3], TP=[0.30]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.007 ,  0.027 ]
                                  [   0.018 ,  0.084 ]
                                  [   0.025 ,  0.147 ]
                                  [   0.029 ,  0.199 ]
                                  [   0.032 ,  0.256 ]
                                  [   0.036 ,  0.337 ]
                                  [   0.078 ,  0.426 ]
                                  [   0.151 ,  0.522 ]
                                  [   0.293 ,  0.581 ]
                                  [   0.306 ,  0.656 ]
                                  [   0.330 ,  0.737 ]
                                  [   1.442 ,  0.902 ]
                                  [   2.636 ,  0.976 ]
                                  [   -1  ,   -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.2],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED----------------------|
*#-----------------|--------------------------------------------------------------|
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                    N=[3], TP=[0.62]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                    N=[3], TP=[0.33]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%-----------------|--------------------------------------------------------------|
*#-----------------|--------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|--------------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
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01081>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01082>                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
01083>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01084> *%-----------------|-------------------------------------------------------------|
01085> ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
01086> *%-----------------|-------------------------------------------------------------|
01087> *#-----------------|-------------------------------------------------------------|
01088> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
01089> *#-----------------|-------------------------------------------------------------|
01090> *%-----------------|-------------------------------------------------------------|
01091> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
01092>                    RDT=[1](min),
01093>                         TABLE of ( OUTFLOW-STORAGE ) values
01094>                                    (cms) - (ha-m)
01095>                                  [   0.0 ,  0.0 ]
01096>                                  [   0.006 ,  0.019 ]
01097>                                  [   0.016 ,  0.060 ]
01098>                                  [   0.019 ,  0.080 ]
01099>                                  [   0.021 ,  0.103 ]
01100>                                  [   0.025 ,  0.141 ]
01101>                                  [   0.028 ,  0.181 ]
01102>                                  [   0.069 ,  0.240 ]
01103>                                  [   0.142 ,  0.303 ]
01104>                                  [   0.298 ,  0.371 ]
01105>                                  [   0.322 ,  0.403 ]
01106>                                  [   0.560 ,  0.440 ]
01107>                                  [   1.128 ,  0.479 ]
01108>                                  [   1.226 ,  0.511 ]
01109>                                  [   -1  ,  -1  ]  (max twenty pts)
01110>                         IDovf=[   ], NHYDovf=[   ]
01111> *%-----------------|-------------------------------------------------------------|
01112> *#-----------------|-------------------------------------------------------------|
01113> *#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD---------------------|
01114> *#-----------------|-------------------------------------------------------------|
01115> *%-----------------|-------------------------------------------------------------|
01116> ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
01117> *%-----------------|-------------------------------------------------------------|
01118> SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
01119>                    HYD_COMMENT=["POST-DEV LAKESHORE"]
01120> *%-----------------|-------------------------------------------------------------|
01121> *#-----------------|-------------------------------------------------------------|
01122> *#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
01123> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
01124> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
01125> *#-----------------|-------------------------------------------------------------|
01126> *%-----------------|-------------------------------------------------------------|
01127> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
01128>                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
01129>                    N=[3], TP=[0.23]hrs,
01130>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01131> *%-----------------|-------------------------------------------------------------|
01132> CALIB NASHYD       ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
01133>                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
01134>                    N=[3], TP=[0.41]hrs,
01135>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01136> *%-----------------|-------------------------------------------------------------|
01137> CALIB NASHYD       ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
01138>                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
01139>                    N=[3], TP=[0.41]hrs,
01140>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01141> *%-----------------|-------------------------------------------------------------|
01142> *#-----------------|-------------------------------------------------------------|
01143> *#-----------------|----------WATERCOURSE 8----------------------------------------|
01144> *#-----------------|-------------------------------------------------------------|
01145> *%-----------------|-------------------------------------------------------------|
01146> ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
01147> *%-----------------|-------------------------------------------------------------|
01148> *%-----------------|-------------------------------------------------------------|
01149> *#-----------------|-------------------------------------------------------------|
01150> *#-----------------|--WATERCOURSE 10 CATCHMENT-------------------------------------|
01151> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-------------------|
01152> *#-----------------|-------------------------------------------------------------|
01153> *%-----------------|-------------------------------------------------------------|
01154> CALIB NASHYD       ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
01155>                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
01156>                    N=[3], TP=[0.21]hrs,
01157>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01158> *%-----------------|-------------------------------------------------------------|
01159>
01160>
01161>
01162>
01163> *#*************************************************************************
01164> *#*************************************************************************
01165> *#                            50yr SCS Storm (24hr)
01166> *#*************************************************************************
01167> *#*************************************************************************
01168> MASS STORM          PTOTAL=[96.0](mm), CSDT=[1](min),
01169>                    CURVE_FILENAME=["SCS24HII.mst"]
01170> *#*************************************************************************
01171> *#-----------------|-------------------------------------------------------------|
01172> *#-----------------|-Subwatershed 9 External Drainage Area-------------------------|
01173> *#-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
01174> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-------------------|
01175> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01176> *#-----------------|-------------------------------------------------------------|
01177> *%-----------------|-------------------------------------------------------------|
01178> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
01179>                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
01180>                    N=[3], TP=[1.00]hrs,
01181>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01182> *%-----------------|-------------------------------------------------------------|
01183> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
01184>                    RDT=[1](min),
01185>                    CHLGTH=[550](m),  CHSLOPE=[2](%),
01186>                                      FPSLOPE=[2](%),
01187>                    SECNUM=[1],       NSEG=[3]
01188>                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
01189>                    ( DISTANCE (m), ELEVATION (m))=[0,102]
01190>                                                  [8,100]
01191>                                                  [12,100]
01192>                                                  [20,102]
01193> *%-----------------|-------------------------------------------------------------|
01194> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
01195>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
01196>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
01197>                            DCAY=[2](/hr), F=[0](mm),
01198>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
01199>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
01200>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
01201>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
01202>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01203> *%-----------------|-------------------------------------------------------------|
01204> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
01205>                    RDT=[1](min),
01206>                         TABLE of ( OUTFLOW-STORAGE ) values
01207>                                    (cms) - (ha-m)
01208>                                  [   0.0 ,   0.0 ]
01209>                                  [   0.0100 ,  0.0610 ]
01210>                                  [   0.0400 ,  0.1310 ]
01211>                                  [   0.0700 ,  0.2110 ]
01212>                                  [   0.2600 ,  0.3000 ]
01213>                                  [   0.6000 ,  0.3940 ]
01214>                                  [   1.0200 ,  0.4950 ]
01215>                                  [   1.5200 ,  0.6020 ]
01216>                                  [   2.0800 ,  0.7160 ]
01217>                                  [   2.6900 ,  0.8370 ]
01218>                         IDovf=[ ], NHYDovf=[ ]
01219> *%-----------------|-------------------------------------------------------------|
01220> *#-----------------|-------------------------------------------------------------|
01221> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing--------|
01222> *#-----------------|-------------------------------------------------------------|
01223> *%-----------------|-------------------------------------------------------------|
01224> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
01225> *%-----------------|-------------------------------------------------------------|
01226> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
01227>                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
01228>                    N=[3], TP=[0.24]hrs,
01229>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01230> *%-----------------|-------------------------------------------------------------|
01231> *#-----------------|-------------------------------------------------------------|
01232> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
01233> *#-----------------|-------------------------------------------------------------|
01234> *%-----------------|-------------------------------------------------------------|
01235> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
01236>                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
01237>                    N=[3], TP=[0.30]hrs,
01238>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01239> *%-----------------|-------------------------------------------------------------|
01240> ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
01241> *%-----------------|-------------------------------------------------------------|
01242> *#-----------------|-------------------------------------------------------------|
01243> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01244> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
01245> *#-----------------|-------------------------------------------------------------|
01246> *%-----------------|-------------------------------------------------------------|
01247> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
01248>                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
01249>                    N=[3], TP=[0.47]hrs,
01250>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01251> *%-----------------|-------------------------------------------------------------|
01252> CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
01253>                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
01254>                    SCS curve number CN=[67.0],
01255>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
01256>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
01257>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
01258>                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
01259>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01260> *%-----------------|-------------------------------------------------------------|
01261> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
01262>                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
01263>                    N=[3], TP=[0.11]hrs,
01264>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01265> *%-----------------|-------------------------------------------------------------|
01266> ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
01267> *%-----------------|-------------------------------------------------------------|
01268> *#-----------------|-------------------------------------------------------------|
01269> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
01270> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
01271> *#-----------------|-------------------------------------------------------------|
01272> *%-----------------|-------------------------------------------------------------|
01273> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
01274>                    RDT=[1](min),
01275>                         TABLE of ( OUTFLOW-STORAGE ) values
01276>                                    (cms) - (ha-m)
01277>                                  [   0.0 ,  0.0 ]
01278>                                  [   0.007 ,  0.027 ]
01279>                                  [   0.018 ,  0.084 ]
01280>                                  [   0.025 ,  0.147 ]
01281>                                  [   0.029 ,  0.199 ]
01282>                                  [   0.032 ,  0.256 ]
01283>                                  [   0.036 ,  0.337 ]
01284>                                  [   0.078 ,  0.426 ]
01285>                                  [   0.151 ,  0.522 ]
01286>                                  [   0.293 ,  0.581 ]
01287>                                  [   0.306 ,  0.656 ]
01288>                                  [   0.330 ,  0.737 ]
01289>                                  [   1.442 ,  0.902 ]
01290>                                  [   2.636 ,  0.976 ]
01291>                                  [   -1  ,  -1  ]  (max twenty pts)
01292>                         IDovf=[   ], NHYDovf=[   ]
01293> *%-----------------|-------------------------------------------------------------|
01294> ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
01295> *%-----------------|-------------------------------------------------------------|
01296> *#-----------------|-------------------------------------------------------------|
01297> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
01298> *#-----------------|-------------------------------------------------------------|
01299> *%-----------------|-------------------------------------------------------------|
01300> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
01301> *#-----------------|-------------------------------------------------------------|
01302> CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
01303>                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
01304>                    SCS curve number CN=[66.2],
01305>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01306>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
01307>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
01308>                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
01309>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01310> *%-----------------|-------------------------------------------------------------|
01311> *#-----------------|-------------------------------------------------------------|
01312> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
01313> *#-----------------|-------------------------------------------------------------|
01314> *%-----------------|-------------------------------------------------------------|
01315> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
01316>                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
01317>                    N=[3], TP=[0.28]hrs,
01318>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01319> *%-----------------|-------------------------------------------------------------|
01320> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
01321>                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
01322>                    N=[3], TP=[0.62]hrs,
01323>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01324> *%-----------------|-------------------------------------------------------------|
01325> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
01326>                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
01327>                    N=[3], TP=[0.33]hrs,
01328>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01329> *%-----------------|-------------------------------------------------------------|
01330> ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
01331> *%-----------------|-------------------------------------------------------------|
01332> *#-----------------|-------------------------------------------------------------|
01333> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
01334> *#-----------------|-------------------------------------------------------------|
01335> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
01336>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
01337>                    N=[3], TP=[0.14]hrs,
01338>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01339> *%-----------------|-------------------------------------------------------------|
01340> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
01341>                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
01342>                    N=[3], TP=[0.32]hrs,
01343>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01344> *%-----------------|-------------------------------------------------------------|
01345> CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
01346>                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
01347>                    SCS curve number CN=[49],
01348>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01349>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
01350>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
```

```
                                                   LGI=[114](m), MNI=[0.013], SCI=[0](min)
                         RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD           ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                         XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                         SCS curve number CN=[59],
                         Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                              LGP=[30](m), MNP=[0.25], SCP=[0](min),
                         Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                              LGI=[148](m), MNI=[0.013], SCI=[0](min)
                         RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD           ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
                         XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
                         SCS curve number CN=[69],
                         Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                              LGP=[30](m), MNP=[0.25], SCP=[0](min),
                         Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                              LGI=[118](m), MNI=[0.013], SCI=[0](min)
                         RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR          IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                         RDT=[1](min),
                               TABLE of ( OUTFLOW-STORAGE ) values
                                           (cms) - (ha-m)
                                          [   0.0 ,   0.0 ]
                                         [   0.006 ,  0.019 ]
                                         [   0.016 ,  0.060 ]
                                         [   0.019 ,  0.080 ]
                                         [   0.021 ,  0.103 ]
                                         [   0.025 ,  0.141 ]
                                         [   0.028 ,  0.181 ]
                                         [   0.069 ,  0.240 ]
                                         [   0.142 ,  0.303 ]
                                         [   0.298 ,  0.371 ]
                                         [   0.322 ,  0.403 ]
                                         [   0.560 ,  0.440 ]
                                         [   1.128 ,  0.479 ]
                                         [   1.226 ,  0.511 ]
                                         [   -1  ,  -1  ]  (max twenty pts)
                               IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%-----------------|-------------------------------------------------------------|
SAVE HYD                 ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                         HYD_COMMENT=["POST-DEV LAKESHORE"]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                         DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                         N=[3], TP=[0.23]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                         DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                         N=[3], TP=[0.41]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                         DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                         N=[3], TP=[0.41]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 8-----------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 10 CATCHMENT---------------------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                         DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                         N=[3], TP=[0.21]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|



*#****************************************************************************
*#****************************************************************************
*#                              100yr SCS Storm (24hr)
*#****************************************************************************
*#****************************************************************************
MASS STORM               PTOTAL=[108.0](mm), CSDT=[1](min),
                         CURVE_FILENAME=["SCS24HII.mst"]
*#****************************************************************************
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                         DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                         N=[3], TP=[1.00]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE CHANNEL            IDout=[2], NHYD=["Channel"], IDin=[1],
                         RDT=[1](min),
                         CHLGTH=[550](m),  CHSLOPE=[2](%),
                                             FPSLOPE=[2](%),
                         SECNUM=[1],        NSEG=[3]
                         ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                         ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                         [8,100]
                                                         [12,100]
                                                         [20,102]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD           ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                         XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                         Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                                 DCAY=[2](/hr), F=[0](mm),
                         Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                              LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                         Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                              LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                         RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR          IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                         RDT=[1](min),
                               TABLE of ( OUTFLOW-STORAGE ) values
                                           (cms) - (ha-m)
                                       [   0.0 ,   0.0 ]
                                       [   0.0100 ,  0.0610 ]
                                       [   0.0400 ,  0.1310 ]
                                       [   0.0700 ,  0.2110 ]
                                       [   0.2600 ,  0.3000 ]
                                       [   0.6000 ,  0.3940 ]
                                       [   1.0200 ,  0.4950 ]
                                       [   1.5200 ,  0.6020 ]
                                       [   2.0800 ,  0.7160 ]
                                       [   2.6900 ,  0.8370 ]
                               IDovf=[ ], NHYDovf=[  ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                         DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                         N=[3], TP=[0.24]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                         DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                         N=[3], TP=[0.30]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                         DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                         N=[3], TP=[0.47]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD           ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                         XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                         SCS curve number CN=[67.0],
                         Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                              LGP=[30](m), MNP=[0.25], SCP=[0](min),
                         Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                              LGI=[44](m), MNI=[0.013], SCI=[0](min),
                         RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                         DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                         N=[3], TP=[0.11]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR          IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                         RDT=[1](min),
                               TABLE of ( OUTFLOW-STORAGE ) values
                                           (cms) - (ha-m)
                                       [   0.0 ,   0.0 ]
                                       [   0.007 ,  0.027 ]
                                       [   0.018 ,  0.084 ]
                                       [   0.025 ,  0.147 ]
                                       [   0.029 ,  0.199 ]
                                       [   0.032 ,  0.256 ]
                                       [   0.036 ,  0.337 ]
                                       [   0.078 ,  0.426 ]
                                       [   0.151 ,  0.522 ]
                                       [   0.293 ,  0.581 ]
                                       [   0.306 ,  0.656 ]
                                       [   0.330 ,  0.737 ]
                                       [   1.442 ,  0.902 ]
                                       [   2.636 ,  0.976 ]
                                       [   -1  ,  -1  ]  (max twenty pts)
                               IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#-----------------|-------------------------------------------------------------|
CALIB STANDHYD           ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                         XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                         SCS curve number CN=[66.2],
                         Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                              LGP=[30](m), MNP=[0.25], SCP=[0](min),
                         Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                              LGI=[96](m), MNI=[0.013], SCI=[0](min),
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                         DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                         N=[3], TP=[0.28]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                         DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                         N=[3], TP=[0.62]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD             ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                         DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                         N=[3], TP=[0.33]hrs,
                         RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD                  IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#-----------------|-------------------------------------------------------------|
```

```
01621> CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
01622>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
01623>                     N=[3], TP=[0.14]hrs,
01624>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01625> *%------------------|-------------------------------------------------------------|
01626> CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
01627>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
01628>                     N=[3], TP=[0.32]hrs,
01629>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01630> *%------------------|-------------------------------------------------------------|
01631> CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
01632>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
01633>                     SCS curve number CN=[49],
01634>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01635>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01636>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01637>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
01638>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01639> *%------------------|-------------------------------------------------------------|
01640> CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
01641>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
01642>                     SCS curve number CN=[59],
01643>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01644>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01645>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01646>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
01647>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01648> *%------------------|-------------------------------------------------------------|
01649> CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
01650>                     XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
01651>                     SCS curve number CN=[69],
01652>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01653>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01654>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01655>                                          LGI=[118](m), MNI=[0.013], SCI=[0](min)
01656>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01657> *%------------------|-------------------------------------------------------------|
01658> ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
01659> *%------------------|-------------------------------------------------------------|
01660> *#------------------|-------------------------------------------------------------|
01661> *#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
01662> *#------------------|-------------------------------------------------------------|
01663> *%------------------|-------------------------------------------------------------|
01664> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
01665>                     RDT=[1](min),
01666>                           TABLE of ( OUTFLOW-STORAGE ) values
01667>                                      (cms) -  (ha-m)
01668>                                     [   0.0 ,   0.0 ]
01669>                                    [   0.006 ,  0.019 ]
01670>                                    [   0.016 ,  0.060 ]
01671>                                    [   0.019 ,  0.080 ]
01672>                                    [   0.021 ,  0.103 ]
01673>                                    [   0.025 ,  0.141 ]
01674>                                    [   0.028 ,  0.181 ]
01675>                                    [   0.069 ,  0.240 ]
01676>                                    [   0.142 ,  0.303 ]
01677>                                    [   0.298 ,  0.371 ]
01678>                                    [   0.322 ,  0.403 ]
01679>                                    [   0.560 ,  0.440 ]
01680>                                    [   1.128 ,  0.479 ]
01681>                                    [   1.226 ,  0.511 ]
01682>                                    [   -1  ,  -1  ]  (max twenty pts)
01683>                           IDovf=[   ], NHYDovf=[   ]
01684> *%------------------|-------------------------------------------------------------|
01685> *#------------------|-------------------------------------------------------------|
01686> *#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
01687> *#------------------|-------------------------------------------------------------|
01688> *%------------------|-------------------------------------------------------------|
01689> ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
01690> *%------------------|-------------------------------------------------------------|
01691> SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
01692>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
01693> *%------------------|-------------------------------------------------------------|
01694> *#------------------|-------------------------------------------------------------|
01695> *#------------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
01696> *#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
01697> *#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
01698> *#------------------|-------------------------------------------------------------|
01699> *%------------------|-------------------------------------------------------------|
01700> CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
01701>                     DWF=[0](cms),   CN/C=[36.2], IA=[8.6](mm),
01702>                     N=[3], TP=[0.23]hrs,
01703>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01704> *%------------------|-------------------------------------------------------------|
01705> CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
01706>                     DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
01707>                     N=[3], TP=[0.41]hrs,
01708>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01709> *%------------------|-------------------------------------------------------------|
01710> CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
01711>                     DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
01712>                     N=[3], TP=[0.41]hrs,
01713>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01714> *%------------------|-------------------------------------------------------------|
01715> *#------------------|-------------------------------------------------------------|
01716> *#------------------|----------WATERCOURSE 8---------------------------------------|
01717> *#------------------|-------------------------------------------------------------|
01718> *%------------------|-------------------------------------------------------------|
01719> ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
01720> *%------------------|-------------------------------------------------------------|
01721> *%------------------|-------------------------------------------------------------|
01722> *#------------------|-------------------------------------------------------------|
01723> *#------------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
01724> *#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
01725> *#------------------|-------------------------------------------------------------|
01726> *%------------------|-------------------------------------------------------------|
01727> CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
01728>                     DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
01729>                     N=[3], TP=[0.21]hrs,
01730>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01731> *%------------------|-------------------------------------------------------------|
01732>
01733>
01734> FINISH
01735>
01736>
01737>
01738>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM   O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M   O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO        2       0   0   11
00008>                                                              2       0   0   11
00009>         StormWater Management HYdrologic Model                222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ******************  A single event and continuous hydrologic simulation model
00014>  ******************     based on the principles of HYMO and its successors
00015>  ******************                OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  ****************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ******************                 Ottawa,  Ontario: (613) 836-3884
00019>  ******************                 Gatineau, Quebec: (819) 243-6858
00020>  ******************                 E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ******************           Maximum value for ID numbers  :     11
00031>  ******************           Max. number of rainfall points: 105408
00032>  ******************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ****************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2022-03-11     TIME: 14:26:22     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00041>  *               YMO\SCS24\2022.02.16-POST_SCS24.DAT
00042>  * Output  file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00043>  *               YMO\SCS24\2022.02.16-POST_SCS24.out
00044>  * Summary file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00045>  *               YMO\SCS24\2022.02.16-POST_SCS24.sum
00046>  * User comments:
00047>  * 1: ____________________________________________________________________________
00048>  * 2: ____________________________________________________________________________
00049>  * 3: ____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2021.04.29
00056> #  Modeller    : [JE]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001-------------------------------------------------------------------
00062>      START
00063>        [TZERO =    .00 hrs on        0]
00064>        [METOUT=   2    (1=imperial, 2=metric output)]
00065>        [NSTORM=   0 ]
00066>        [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> #-----------------|-------------------------------------------------------------|
00069> #-----------------|-POST-DEVELOPMENT----24 hr SCS STORMS-------------------------|
00070> #-----------------|-------------------------------------------------------------|
00071> #*******************************************************************************
00072> #                              2yr SCS Storm (24hr)
00073> #*******************************************************************************
00074> #*******************************************************************************
00075> R0001:C00002-------------------------------------------------------------------
00076>      MASS STORM
00077>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00078>       Comment  = 24 hour SCS II storm mass curve
00079>       [SDT= 1.00:SDUR=  24.00:PTOT=  45.60]
00080> #*******************************************************************************
00081> #-----------------|-------------------------------------------------------------|
00082> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00083> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00084> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00085> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00086> #-----------------|-------------------------------------------------------------|
00087> R0001:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00088>     CALIB NASHYD          1.0 01:EXT-9A       101.80    1.269 No_date   13:13
00089>       [CN= 80.0: N= 3.00: Tp= 1.00]
00090> R0001:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00091>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    1.269 No_date   13:13
00092>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    1.266 No_date   13:15
00093>       [L/S/n=  550./2.000/.035]
00094>       {Vmax= 1.269:Dmax=  .200}
00095> R0001:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00096>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .832 No_date   12:15
00097>       [XIMP=.35:TIMP=.35]
00098>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00099>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00100>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00101> R0001:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00102>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .832 No_date   12:15
00103>                  out <-   1.0 04:Orchards      14.80     .069 No_date   13:16
00104>     {MxStoUsed=.2095E+00  m3}
00105> #-----------------|-------------------------------------------------------------|
00106> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00107> #-----------------|-------------------------------------------------------------|
00108> R0001:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00109>     ADD HYD               1.0 02:Channel      101.80    1.266 No_date   13:15
00110>                     +     1.0 04:Orchards      14.80     .069 No_date   13:16
00111>                   SUM=    1.0 05:RD19         116.60    1.336 No_date   13:15
00112> R0001:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00113>     CALIB NASHYD          1.0 01:EXT-9C         .65     .025 No_date   12:21
00114>       [CN= 82.7: N= 3.00: Tp=  .24]
00115> #-----------------|-------------------------------------------------------------|
00116> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00117> #-----------------|-------------------------------------------------------------|
00118> R0001:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00119>     CALIB NASHYD          1.0 02:9A9B          2.68     .027 No_date   12:26
00120>       [CN= 55.9: N= 3.00: Tp=  .30]
00121> R0001:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00122>     ADD HYD               1.0 01:EXT-9C         .65     .025 No_date   12:21
00123>                     +     1.0 02:9A9B          2.68     .027 No_date   12:26
00124>                     +     1.0 05:RD19         116.60    1.336 No_date   13:15
00125>                   SUM=    1.0 04:WC9a         119.93    1.347 No_date   13:15
00126> #-----------------|-------------------------------------------------------------|
00127> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00128> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
00129> #-----------------|-------------------------------------------------------------|
00130> R0001:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00131>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .124 No_date   12:37
00132>       [CN= 74.9: N= 3.00: Tp=  .47]
00133> R0001:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00134>     CALIB STANDHYD        1.0 03:1A            2.95     .193 No_date   12:12
00135>       [XIMP=.31:TIMP=.51]
00136>       [LOSS= 2 :CN= 67.0]
00137>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00138>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00139> R0001:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00140>     CALIB NASHYD          1.0 05:1B            1.81     .021 No_date   12:14
00141>       [CN= 44.3: N= 3.00: Tp=  .11]
00142> R0001:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00143>     ADD HYD               1.0 01:EXT-1A        8.37     .124 No_date   12:37
00144>                     +     1.0 03:1A            2.95     .193 No_date   12:12
00145>                     +     1.0 05:1B            1.81     .021 No_date   12:14
00146>                   SUM=    1.0 06:SWMF1        13.13     .261 No_date   12:12
00147> #-----------------|-------------------------------------------------------------|
00148> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
00149> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00150> #-----------------|-------------------------------------------------------------|
00151> R0001:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .261 No_date   12:12
00153>                  out <-   1.0 01:SWMF-1       13.13     .020 No_date   16:10
00154>     {MxStoUsed=.1010E+00  m3}
00155> R0001:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00156>     ADD HYD               1.0 01:SWMF-1        13.13     .020 No_date   16:10
00157>                     +     1.0 04:WC9a         119.93    1.347 No_date   13:15
00158>                   SUM=    1.0 07:WC9b         133.06    1.365 No_date   13:15
00159> #-----------------|-------------------------------------------------------------|
00160> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
00161> #-----------------|-------------------------------------------------------------|
00162> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00163> #-----------------|-------------------------------------------------------------|
00164> R0001:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00165>     CALIB STANDHYD        1.0 10:9D            1.38     .102 No_date   12:12
00166>       [XIMP=.33:TIMP=.68]
00167>       [LOSS= 2 :CN= 66.2]
00168>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00169>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00170> #-----------------|-------------------------------------------------------------|
00171> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
00172> #-----------------|-------------------------------------------------------------|
00173> R0001:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00174>     CALIB NASHYD          1.0 01:9F             .73     .009 No_date   12:24
00175>       [CN= 56.7: N= 3.00: Tp=  .28]
00176> R0001:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00177>     CALIB NASHYD          1.0 02:EXT-9D         .41     .003 No_date   12:48
00178>       [CN= 65.0: N= 3.00: Tp=  .62]
00179> R0001:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00180>     CALIB NASHYD          1.0 03:9C9E          2.06     .022 No_date   12:28
00181>       [CN= 58.2: N= 3.00: Tp=  .33]
00182> R0001:C00021-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00183>     ADD HYD               1.0 01:9F             .73     .009 No_date   12:24
00184>                     +     1.0 02:EXT-9D         .41     .003 No_date   12:48
00185>                     +     1.0 03:9C9E          2.06     .022 No_date   12:28
00186>                     +     1.0 07:WC9b         133.06    1.365 No_date   13:15
00187>                     +     1.0 10:9D            1.38     .102 No_date   12:12
00188>                   SUM=    1.0 05:WC9LOWER     137.64    1.385 No_date   13:15
00189> #-----------------|-------------------------------------------------------------|
00190> #-----------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
00191> #-----------------|-------------------------------------------------------------|
00192> R0001:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00193>     CALIB NASHYD          1.0 01:2A            1.19     .007 No_date   12:16
00194>       [CN= 33.2: N= 3.00: Tp=  .14]
00195> R0001:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00196>     CALIB NASHYD          1.0 02:2B            1.67     .007 No_date   12:28
00197>       [CN= 34.7: N= 3.00: Tp=  .32]
00198> R0001:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00199>     CALIB STANDHYD        1.0 03:2C            1.96     .099 No_date   12:12
00200>       [XIMP=.30:TIMP=.60]
00201>       [LOSS= 2 :CN= 49.0]
00202>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00203>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00204> R0001:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00205>     CALIB STANDHYD        1.0 07:2D            3.28     .149 No_date   12:12
00206>       [XIMP=.25:TIMP=.50]
00207>       [LOSS= 2 :CN= 59.0]
00208>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00209>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00210> R0001:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00211>     CALIB STANDHYD        1.0 04:2E            2.09     .100 No_date   12:12
00212>       [XIMP=.26:TIMP=.35]
00213>       [LOSS= 2 :CN= 69.0]
00214>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00215>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00216> R0001:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00217>     ADD HYD               1.0 01:2A            1.19     .007 No_date   12:16
00218>                     +     1.0 02:2B            1.67     .007 No_date   12:28
00219>                     +     1.0 03:2C            1.96     .099 No_date   12:12
00220>                     +     1.0 04:2E            2.09     .100 No_date   12:12
00221>                     +     1.0 07:2D            3.28     .149 No_date   12:12
00222>                   SUM=    1.0 06:SWMF2        10.19     .358 No_date   12:12
00223> #-----------------|-------------------------------------------------------------|
00224> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00225> #-----------------|-------------------------------------------------------------|
00226> R0001:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00227>     ROUTE RESERVOIR ->    1.0 06:SWMF2        10.19     .358 No_date   12:12
00228>                  out <-   1.0 09:SWMF-2       10.19     .020 No_date   14:30
00229>     {MxStoUsed=.9168E-01  m3}
00230> #-----------------|-------------------------------------------------------------|
00231> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
00232> #-----------------|-------------------------------------------------------------|
00233> R0001:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00234>     ADD HYD               1.0 09:SWMF-2        10.19     .020 No_date   14:30
00235>                     +     1.0 05:WC9LOWER     137.64    1.385 No_date   13:15
00236>                   SUM=    1.0 01:WC9c         147.83    1.405 No_date   13:15
00237> R0001:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00238>     SAVE HYD              1.0 01:WC9c         147.83    1.405 No_date   13:15
00239>       fname :WC9c.0001
00240>       remark:POST-DEV LAKESHORE
00241> #-----------------|-------------------------------------------------------------|
00242> #-----------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
00243> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
00244> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
00245> #-----------------|-------------------------------------------------------------|
00246> R0001:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00247>     CALIB NASHYD          1.0 01:8A            2.27     .013 No_date   12:21
00248>       [CN= 36.2: N= 3.00: Tp=  .23]
00249> R0001:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00250>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .099 No_date   12:33
00251>       [CN= 68.9: N= 3.00: Tp=  .41]
00252> R0001:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00253>     CALIB NASHYD          1.0 03:EXT-8B        1.04     .010 No_date   12:33
00254>       [CN= 58.6: N= 3.00: Tp=  .41]
00255> #-----------------|-------------------------------------------------------------|
00256> #-----------------|----------WATERCOURSE 8---------------------------------------|
00257> #-----------------|-------------------------------------------------------------|
00258> R0001:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00259>     ADD HYD               1.0 01:8A            2.27     .013 No_date   12:21
00260>                     +     1.0 02:EXT-8A        7.14     .099 No_date   12:33
00261>                     +     1.0 03:EXT-8B        1.04     .010 No_date   12:33
00262>                   SUM=    1.0 04:WC8          10.45     .120 No_date   12:31
00263> #-----------------|-------------------------------------------------------------|
00264> #-----------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
00265> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
00266> #-----------------|-------------------------------------------------------------|
00267> R0001:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00268>     CALIB NASHYD          1.0 01:10A           1.99     .028 No_date   12:20
00269>       [CN= 59.4: N= 3.00: Tp=  .21]
00270> #*******************************************************************************
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00271> #*******************************************************************************
00272> #                              5yr SCS Storm (24hr)
00273> #*******************************************************************************
00274> #*******************************************************************************
00275> R0001:C00036------------------------------------------------------------------------
00276>      MASS STORM
00277>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00278>       Comment  = 24 hour SCS II storm mass curve
00279>       [SDT= 1.00:SDUR=  24.00:PTOT=  62.40]
00280> ********************************************************************************
00281> #-----------------|-------------------------------------------------------------|
00282> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00283> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00284> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00285> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00286> #-----------------|-------------------------------------------------------------|
00287> R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00288>      CALIB NASHYD          1.0 01:EXT-9A       101.80    2.230 No_date   13:11
00289>        [CN= 80.0: N= 3.00: Tp= 1.00]
00290> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00291>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.230 No_date   13:11
00292>        [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.221 No_date   13:15
00293>        [L/S/n=  550./2.000/.035]
00294>        {Vmax= 1.530:Dmax=  .273}
00295> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00296>      CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.476 No_date   12:15
00297>        [XIMP=.35:TIMP=.35]
00298>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00299>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00300>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00301> R0001:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00302>      ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.476 No_date   12:15
00303>                   out <=    1.0 04:Orchards      14.80     .249 No_date   12:47
00304>       {MxStoUsed=.2950E+00  m3}
00305> #-----------------|-------------------------------------------------------------|
00306> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00307> #-----------------|-------------------------------------------------------------|
00308> R0001:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00309>      ADD HYD               1.0 02:Channel      101.80    2.221 No_date   13:15
00310>                       +     1.0 04:Orchards      14.80     .249 No_date   12:47
00311>                   SUM=      1.0 05:RD19         116.60    2.440 No_date   13:14
00312> R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00313>      CALIB NASHYD          1.0 01:EXT-9C         .65     .043 No_date   12:20
00314>        [CN= 82.7: N= 3.00: Tp=  .24]
00315> #-----------------|-------------------------------------------------------------|
00316> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00317> #-----------------|-------------------------------------------------------------|
00318> R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00319>      CALIB NASHYD          1.0 02:9A9B          2.68     .055 No_date   12:25
00320>        [CN= 55.9: N= 3.00: Tp=  .30]
00321> R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00322>      ADD HYD               1.0 01:EXT-9C         .65     .043 No_date   12:20
00323>                       +     1.0 02:9A9B          2.68     .055 No_date   12:25
00324>                       +     1.0 05:RD19         116.60    2.440 No_date   13:14
00325>                   SUM=      1.0 04:WC9a         119.93    2.461 No_date   13:14
00326> #-----------------|-------------------------------------------------------------|
00327> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00328> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00329> #-----------------|-------------------------------------------------------------|
00330> R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00331>      CALIB NASHYD          1.0 01:EXT-1A        8.37     .241 No_date   12:36
00332>        [CN= 74.9: N= 3.00: Tp=  .47]
00333> R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00334>      CALIB STANDHYD        1.0 03:1A            2.95     .308 No_date   12:12
00335>        [XIMP=.31:TIMP=.51]
00336>        [LOSS= 2 :CN= 67.0]
00337>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00338>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00339> R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00340>      CALIB NASHYD          1.0 05:1B            1.81     .043 No_date   12:14
00341>        [CN= 44.3: N= 3.00: Tp=  .11]
00342> R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00343>      ADD HYD               1.0 01:EXT-1A        8.37     .241 No_date   12:36
00344>                       +     1.0 03:1A            2.95     .308 No_date   12:12
00345>                       +     1.0 05:1B            1.81     .043 No_date   12:14
00346>                   SUM=      1.0 06:SWMF1        13.13     .454 No_date   12:12
00347> #-----------------|-------------------------------------------------------------|
00348> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
00349> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00350> #-----------------|-------------------------------------------------------------|
00351> R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00352>      ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .454 No_date   12:12
00353>                   out <=    1.0 01:SWMF-1       13.13     .028 No_date   17:13
00354>       {MxStoUsed=.1877E+00  m3}
00355> R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00356>      ADD HYD               1.0 01:SWMF-1        13.13     .028 No_date   17:13
00357>                       +     1.0 04:WC9a         119.93    2.461 No_date   13:14
00358>                   SUM=      1.0 07:WC9b         133.06    2.487 No_date   13:14
00359> #-----------------|-------------------------------------------------------------|
00360> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
00361> #-----------------|-------------------------------------------------------------|
00362> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00363> #-----------------|-------------------------------------------------------------|
00364> R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00365>      CALIB STANDHYD        1.0 10:9D            1.38     .159 No_date   12:12
00366>        [XIMP=.33:TIMP=.68]
00367>        [LOSS= 2 :CN= 66.2]
00368>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00369>        [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00370> #-----------------|-------------------------------------------------------------|
00371> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-------------------------|
00372> #-----------------|-------------------------------------------------------------|
00373> R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00374>      CALIB NASHYD          1.0 01:9F             .73     .017 No_date   12:24
00375>        [CN= 56.7: N= 3.00: Tp=  .28]
00376> R0001:C00053------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00377>      CALIB NASHYD          1.0 02:EXT-9D         .41     .007 No_date   12:47
00378>        [CN= 65.0: N= 3.00: Tp=  .62]
00379> R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00380>      CALIB NASHYD          1.0 03:9C9E          2.06     .044 No_date   12:27
00381>        [CN= 58.2: N= 3.00: Tp=  .33]
00382> R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00383>      ADD HYD               1.0 01:9F             .73     .017 No_date   12:24
00384>                       +     1.0 02:EXT-9D         .41     .007 No_date   12:47
00385>                       +     1.0 03:9C9E          2.06     .044 No_date   12:27
00386>                       +     1.0 07:WC9b         133.06    2.487 No_date   13:14
00387>                       +     1.0 10:9D            1.38     .159 No_date   12:12
00388>                   SUM=      1.0 05:WC9LOWER     137.64    2.522 No_date   13:14
00389> #-----------------|-------------------------------------------------------------|
00390> #-----------------|-LANDS DRAINING TO SWM FACILITY 2----------------------------|
00391> #-----------------|-------------------------------------------------------------|
00392> R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00393>      CALIB NASHYD          1.0 01:2A            1.19     .016 No_date   12:16
00394>        [CN= 33.2: N= 3.00: Tp=  .14]
00395> R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00396>      CALIB NASHYD          1.0 02:2B            1.67     .015 No_date   12:27
00397>        [CN= 34.7: N= 3.00: Tp=  .32]
00398> R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00399>      CALIB STANDHYD        1.0 03:2C            1.96     .156 No_date   12:12
00400>        [XIMP=.30:TIMP=.60]
00401>        [LOSS= 2 :CN= 49.0]
00402>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00403>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00404> R0001:C00059------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00405>      CALIB STANDHYD        1.0 07:2D            3.28     .242 No_date   12:13
00406>        [XIMP=.25:TIMP=.50]
00407>        [LOSS= 2 :CN= 59.0]
00408>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00409>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00410> R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00411>      CALIB STANDHYD        1.0 04:2E            2.09     .163 No_date   12:12
00412>        [XIMP=.26:TIMP=.35]
00413>        [LOSS= 2 :CN= 69.0]
00414>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00415>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00416> R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00417>      ADD HYD               1.0 01:2A            1.19     .016 No_date   12:16
00418>                       +     1.0 02:2B            1.67     .015 No_date   12:27
00419>                       +     1.0 03:2C            1.96     .156 No_date   12:12
00420>                       +     1.0 04:2E            2.09     .163 No_date   12:12
00421>                       +     1.0 07:2D            3.28     .242 No_date   12:13
00422>                   SUM=      1.0 06:SWMF2        10.19     .581 No_date   12:12
00423> #-----------------|-------------------------------------------------------------|
00424> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00425> #-----------------|-------------------------------------------------------------|
00426> R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>      ROUTE RESERVOIR ->    1.0 06:SWMF2        10.19     .581 No_date   12:12
00428>                   out <=    1.0 09:SWMF-2       10.19     .026 No_date   15:16
00429>       {MxStoUsed=.1494E+00  m3}
00430> #-----------------|-------------------------------------------------------------|
00431> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------------|
00432> #-----------------|-------------------------------------------------------------|
00433> R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00434>      ADD HYD               1.0 09:SWMF-2        10.19     .026 No_date   15:16
00435>                       +     1.0 05:WC9LOWER     137.64    2.522 No_date   13:14
00436>                   SUM=      1.0 01:WC9c         147.83    2.547 No_date   13:14
00437> R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00438>      SAVE HYD              1.0 01:WC9c         147.83    2.547 No_date   13:14
00439>        fname :WC9c.0001
00440>        remark:POST-DEV LAKESHORE
00441> #-----------------|-------------------------------------------------------------|
00442> #-----------------|--WATERCOURSE 8 CATCHMENTS-----------------------------------|
00443> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8----------------------|
00444> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8------------------|
00445> #-----------------|-------------------------------------------------------------|
00446> R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00447>      CALIB NASHYD          1.0 01:8A            2.27     .027 No_date   12:21
00448>        [CN= 36.2: N= 3.00: Tp=  .23]
00449> R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00450>      CALIB NASHYD          1.0 02:EXT-8A         7.14     .191 No_date   12:32
00451>        [CN= 68.9: N= 3.00: Tp=  .41]
00452> R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00453>      CALIB NASHYD          1.0 03:EXT-8B         1.04     .020 No_date   12:32
00454>        [CN= 58.6: N= 3.00: Tp=  .41]
00455> #-----------------|-------------------------------------------------------------|
00456> #-----------------|----------WATERCOURSE 8--------------------------------------|
00457> #-----------------|-------------------------------------------------------------|
00458> R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00459>      ADD HYD               1.0 01:8A            2.27     .027 No_date   12:21
00460>                       +     1.0 02:EXT-8A         7.14     .191 No_date   12:32
00461>                       +     1.0 03:EXT-8B         1.04     .020 No_date   12:32
00462>                   SUM=      1.0 04:WC8           10.45     .232 No_date   12:30
00463> #-----------------|-------------------------------------------------------------|
00464> #-----------------|--WATERCOURSE 10 CATCHMENT-----------------------------------|
00465> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-----------------|
00466> #-----------------|-------------------------------------------------------------|
00467> R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00468>      CALIB NASHYD          1.0 01:10A           1.99     .056 No_date   12:20
00469>        [CN= 59.4: N= 3.00: Tp=  .21]
00470> #*******************************************************************************
00471> #*******************************************************************************
00472> #                              10yr SCS Storm (24hr)
00473> #*******************************************************************************
00474> #*******************************************************************************
00475> R0001:C00070------------------------------------------------------------------------
00476>      MASS STORM
00477>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00478>       Comment  = 24 hour SCS II storm mass curve
00479>       [SDT= 1.00:SDUR=  24.00:PTOT=  72.00]
00480> ********************************************************************************
00481> #-----------------|-------------------------------------------------------------|
00482> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00483> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00484> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00485> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00486> #-----------------|-------------------------------------------------------------|
00487> R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00488>      CALIB NASHYD          1.0 01:EXT-9A       101.80    2.835 No_date   13:11
00489>        [CN= 80.0: N= 3.00: Tp= 1.00]
00490> R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00491>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.835 No_date   13:11
00492>        [RDT= 1.00] out<-    1.0 02:Channel      101.80    2.826 No_date   13:14
00493>        [L/S/n=  550./2.000/.035]
00494>        {Vmax= 1.703:Dmax=  .316}
00495> R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00496>      CALIB STANDHYD        1.0 03:EXT-9B        14.80    1.903 No_date   12:15
00497>        [XIMP=.35:TIMP=.35]
00498>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00499>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00500>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00501> R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00502>      ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    1.903 No_date   12:15
00503>                   out <=    1.0 04:Orchards      14.80     .433 No_date   12:41
00504>       {MxStoUsed=.3480E+00  m3}
00505> #-----------------|-------------------------------------------------------------|
00506> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00507> #-----------------|-------------------------------------------------------------|
00508> R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00509>      ADD HYD               1.0 02:Channel      101.80    2.826 No_date   13:14
00510>                       +     1.0 04:Orchards      14.80     .433 No_date   12:41
00511>                   SUM=      1.0 05:RD19         116.60    3.148 No_date   13:08
00512> R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00513>      CALIB NASHYD          1.0 01:EXT-9C         .65     .054 No_date   12:20
00514>        [CN= 82.7: N= 3.00: Tp=  .24]
00515> #-----------------|-------------------------------------------------------------|
00516> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00517> #-----------------|-------------------------------------------------------------|
00518> R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00519>      CALIB NASHYD          1.0 02:9A9B          2.68     .074 No_date   12:25
00520>        [CN= 55.9: N= 3.00: Tp=  .30]
00521> R0001:C00078------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00522>      ADD HYD               1.0 01:EXT-9C         .65     .054 No_date   12:20
00523>                       +     1.0 02:9A9B          2.68     .074 No_date   12:25
00524>                       +     1.0 05:RD19         116.60    3.148 No_date   13:08
00525>                   SUM=      1.0 04:WC9a         119.93    3.180 No_date   13:08
00526> #-----------------|-------------------------------------------------------------|
00527> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00528> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00529> #-----------------|-------------------------------------------------------------|
00530> R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00531>      CALIB NASHYD          1.0 01:EXT-1A        8.37     .316 No_date   12:36
00532>        [CN= 74.9: N= 3.00: Tp=  .47]
00533> R0001:C00080------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00534>      CALIB STANDHYD        1.0 03:1A            2.95     .376 No_date   12:12
00535>        [XIMP=.31:TIMP=.51]
00536>        [LOSS= 2 :CN= 67.0]
00537>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00538>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00539> R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00540>      CALIB NASHYD          1.0 05:1B            1.81     .058 No_date   12:14
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00541>       [CN= 44.3: N= 3.00: Tp=  .11]
00542> R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00543>     ADD HYD              1.0 01:EXT-1A         8.37     .316 No_date   12:36
00544>                    +     1.0 03:1A             2.95     .376 No_date   12:12
00545>                    +     1.0 05:1B             1.81     .058 No_date   12:14
00546>                  SUM=    1.0 06:SWMF1         13.13     .575 No_date   12:12
00547> #----------------|-------------------------------------------------------|
00548> #----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00549> #----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00550> #----------------|-------------------------------------------------------|
00551> R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00552>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .575 No_date   12:12
00553>                   out <=  1.0 01:SWMF-1        13.13     .032 No_date   17:37
00554>      {MxStoUsed=.2468E+00  m3}
00555> R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00556>     ADD HYD              1.0 01:SWMF-1         13.13     .032 No_date   17:37
00557>                    +     1.0 04:WC9a          119.93    3.180 No_date   13:08
00558>                  SUM=    1.0 07:WC9b          133.06    3.208 No_date   13:08
00559> #----------------|-------------------------------------------------------|
00560> #----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00561> #----------------|-------------------------------------------------------|
00562> #----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00563> #----------------|-------------------------------------------------------|
00564> R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00565>     CALIB STANDHYD       1.0 10:9D             1.38     .196 No_date   12:12
00566>       [XIMP=.33:TIMP=.68]
00567>       [LOSS= 2 :CN= 66.2]
00568>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00569>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00570> #----------------|-------------------------------------------------------|
00571> #----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00572> #----------------|-------------------------------------------------------|
00573> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00574>     CALIB NASHYD         1.0 01:9F              .73     .023 No_date   12:24
00575>       [CN= 56.7: N= 3.00: Tp=  .28]
00576> R0001:C00087------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00577>     CALIB NASHYD         1.0 02:EXT-9D          .41     .009 No_date   12:46
00578>       [CN= 65.0: N= 3.00: Tp=  .62]
00579> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00580>     CALIB NASHYD         1.0 03:9C9E           2.06     .059 No_date   12:27
00581>       [CN= 58.2: N= 3.00: Tp=  .33]
00582> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00583>     ADD HYD              1.0 01:9F              .73     .023 No_date   12:24
00584>                    +     1.0 02:EXT-9D          .41     .009 No_date   12:46
00585>                    +     1.0 03:9C9E           2.06     .059 No_date   12:27
00586>                    +     1.0 07:WC9b         133.06    3.208 No_date   13:08
00587>                    +     1.0 10:9D             1.38     .196 No_date   12:12
00588>                  SUM=    1.0 05:WC9LOWER     137.64    3.259 No_date   13:08
00589> #----------------|-------------------------------------------------------|
00590> #----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00591> #----------------|-------------------------------------------------------|
00592> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00593>     CALIB NASHYD         1.0 01:2A             1.19     .022 No_date   12:16
00594>       [CN= 33.2: N= 3.00: Tp=  .14]
00595> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00596>     CALIB NASHYD         1.0 02:2B             1.67     .020 No_date   12:27
00597>       [CN= 34.7: N= 3.00: Tp=  .32]
00598> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00599>     CALIB STANDHYD       1.0 03:2C             1.96     .192 No_date   12:12
00600>       [XIMP=.30:TIMP=.60]
00601>       [LOSS= 2 :CN= 49.0]
00602>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00603>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00604> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00605>     CALIB STANDHYD       1.0 07:2D             3.28     .310 No_date   12:13
00606>       [XIMP=.25:TIMP=.50]
00607>       [LOSS= 2 :CN= 59.0]
00608>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00609>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00610> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00611>     CALIB STANDHYD       1.0 04:2E             2.09     .204 No_date   12:12
00612>       [XIMP=.26:TIMP=.35]
00613>       [LOSS= 2 :CN= 69.0]
00614>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00615>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00616> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00617>     ADD HYD              1.0 01:2A             1.19     .022 No_date   12:16
00618>                    +     1.0 02:2B             1.67     .020 No_date   12:27
00619>                    +     1.0 03:2C             1.96     .192 No_date   12:12
00620>                    +     1.0 04:2E             2.09     .204 No_date   12:12
00621>                    +     1.0 07:2D             3.28     .310 No_date   12:13
00622>                  SUM=    1.0 06:SWMF2         10.19     .734 No_date   12:12
00623> #----------------|-------------------------------------------------------|
00624> #----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00625> #----------------|-------------------------------------------------------|
00626> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00627>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19     .734 No_date   12:12
00628>                   out <=  1.0 09:SWMF-2        10.19     .031 No_date   15:16
00629>      {MxStoUsed=.1858E+00  m3}
00630> #----------------|-------------------------------------------------------|
00631> #----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00632> #----------------|-------------------------------------------------------|
00633> R0001:C00097------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00634>     ADD HYD              1.0 09:SWMF-2         10.19     .031 No_date   15:16
00635>                    +     1.0 05:WC9LOWER     137.64    3.259 No_date   13:08
00636>                  SUM=    1.0 01:WC9c          147.83    3.286 No_date   13:08
00637> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00638>     SAVE HYD             1.0 01:WC9c          147.83    3.286 No_date   13:08
00639>       fname :WC9c.0001
00640>       remark:POST-DEV LAKESHORE
00641> #----------------|-------------------------------------------------------|
00642> #----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00643> #----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00644> #----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00645> #----------------|-------------------------------------------------------|
00646> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00647>     CALIB NASHYD         1.0 01:8A             2.27     .036 No_date   12:21
00648>       [CN= 36.2: N= 3.00: Tp=  .23]
00649> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00650>     CALIB NASHYD         1.0 02:EXT-8A         7.14     .251 No_date   12:32
00651>       [CN= 68.9: N= 3.00: Tp=  .41]
00652> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00653>     CALIB NASHYD         1.0 03:EXT-8B         1.04     .026 No_date   12:32
00654>       [CN= 58.6: N= 3.00: Tp=  .41]
00655> #----------------|-------------------------------------------------------|
00656> #----------------|-----------------WATERCOURSE 8-----------------------------|
00657> #----------------|-------------------------------------------------------|
00658> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00659>     ADD HYD              1.0 01:8A             2.27     .036 No_date   12:21
00660>                    +     1.0 02:EXT-8A         7.14     .251 No_date   12:32
00661>                    +     1.0 03:EXT-8B         1.04     .026 No_date   12:32
00662>                  SUM=    1.0 04:WC8           10.45     .307 No_date   12:30
00663> #----------------|-------------------------------------------------------|
00664> #----------------|--WATERCOURSE 10 CATCHMENT----------------------------------|
00665> #----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10----------------|
00666> #----------------|-------------------------------------------------------|
00667> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00668>     CALIB NASHYD         1.0 01:10A            1.99     .076 No_date   12:19
00669>       [CN= 59.4: N= 3.00: Tp=  .21]
00670> ********************************************************************************
00671> ********************************************************************************
00672> #                            25yr SCS Storm (24hr)
00673> ********************************************************************************
00674> ********************************************************************************
00675> R0001:C00104------------------------------------------------------------------
00676>      MASS STORM
00677>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00678>       Comment  = 24 hour SCS II storm mass curve
00679>       [SDT= 1.00:SDUR=  24.00:PTOT=  86.40]
00680> ********************************************************************************
00681> #----------------|-------------------------------------------------------|
00682> #----------------|-Subwatershed 9 External Drainage Area----------------------|
00683> #----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00684> #----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00685> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00686> #----------------|-------------------------------------------------------|
00687> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00688>     CALIB NASHYD         1.0 01:EXT-9A        101.80    3.796 No_date   13:10
00689>       [CN= 80.0: N= 3.00: Tp= 1.00]
00690> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00691>     ROUTE CHANNEL   ->    1.0 01:EXT-9A        101.80    3.796 No_date   13:10
00692>      [RDT= 1.00] out<-    1.0 02:Channel       101.80    3.784 No_date   13:14
00693>       [L/S/n=  550./2.000/.035]
00694>       {Vmax= 1.840:Dmax=  .367}
00695> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00696>     CALIB STANDHYD       1.0 03:EXT-9B         14.80    2.516 No_date   12:14
00697>       [XIMP=.35:TIMP=.35]
00698>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00699>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00700>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00701> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     ROUTE RESERVOIR ->    1.0 03:EXT-9B         14.80    2.516 No_date   12:14
00703>                   out <=  1.0 04:Orchards       14.80     .723 No_date   12:36
00704>      {MxStoUsed=.4236E+00  m3}
00705> #----------------|-------------------------------------------------------|
00706> #----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00707> #----------------|-------------------------------------------------------|
00708> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00709>     ADD HYD              1.0 02:Channel       101.80    3.784 No_date   13:14
00710>                    +     1.0 04:Orchards       14.80     .723 No_date   12:36
00711>                  SUM=    1.0 05:RD19          116.60    4.258 No_date   13:08
00712> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00713>     CALIB NASHYD         1.0 01:EXT-9C          .65     .071 No_date   12:20
00714>       [CN= 82.7: N= 3.00: Tp=  .24]
00715> #----------------|-------------------------------------------------------|
00716> #----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00717> #----------------|-------------------------------------------------------|
00718> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00719>     CALIB NASHYD         1.0 02:9A9B           2.68     .107 No_date   12:25
00720>       [CN= 55.9: N= 3.00: Tp=  .30]
00721> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00722>     ADD HYD              1.0 01:EXT-9C          .65     .071 No_date   12:20
00723>                    +     1.0 02:9A9B           2.68     .107 No_date   12:25
00724>                    +     1.0 05:RD19         116.60    4.258 No_date   13:08
00725>                  SUM=    1.0 04:WC9a         119.93    4.304 No_date   13:07
00726> #----------------|-------------------------------------------------------|
00727> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00728> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00729> #----------------|-------------------------------------------------------|
00730> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00731>     CALIB NASHYD         1.0 01:EXT-1A         8.37     .439 No_date   12:35
00732>       [CN= 74.9: N= 3.00: Tp=  .47]
00733> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00734>     CALIB STANDHYD       1.0 03:1A             2.95     .492 No_date   12:12
00735>       [XIMP=.31:TIMP=.51]
00736>       [LOSS= 2 :CN= 67.0]
00737>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00738>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00739> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00740>     CALIB NASHYD         1.0 05:1B             1.81     .085 No_date   12:14
00741>       [CN= 44.3: N= 3.00: Tp=  .11]
00742> R0001:C00116------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00743>     ADD HYD              1.0 01:EXT-1A         8.37     .439 No_date   12:35
00744>                    +     1.0 03:1A             2.95     .492 No_date   12:12
00745>                    +     1.0 05:1B             1.81     .085 No_date   12:14
00746>                  SUM=    1.0 06:SWMF1         13.13     .781 No_date   12:12
00747> #----------------|-------------------------------------------------------|
00748> #----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00749> #----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00750> #----------------|-------------------------------------------------------|
00751> R0001:C00117------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00752>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .781 No_date   12:12
00753>                   out <=  1.0 01:SWMF-1        13.13     .039 No_date   17:44
00754>      {MxStoUsed=.3437E+00  m3}
00755> R0001:C00118------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00756>     ADD HYD              1.0 01:SWMF-1         13.13     .039 No_date   17:44
00757>                    +     1.0 04:WC9a          119.93    4.304 No_date   13:07
00758>                  SUM=    1.0 07:WC9b          133.06    4.336 No_date   13:07
00759> #----------------|-------------------------------------------------------|
00760> #----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00761> #----------------|-------------------------------------------------------|
00762> #----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00763> #----------------|-------------------------------------------------------|
00764> R0001:C00119------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00765>     CALIB STANDHYD       1.0 10:9D             1.38     .255 No_date   12:12
00766>       [XIMP=.33:TIMP=.68]
00767>       [LOSS= 2 :CN= 66.2]
00768>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00769>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00770> #----------------|-------------------------------------------------------|
00771> #----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00772> #----------------|-------------------------------------------------------|
00773> R0001:C00120------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00774>     CALIB NASHYD         1.0 01:9F              .73     .032 No_date   12:24
00775>       [CN= 56.7: N= 3.00: Tp=  .28]
00776> R0001:C00121------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00777>     CALIB NASHYD         1.0 02:EXT-9D          .41     .013 No_date   12:46
00778>       [CN= 65.0: N= 3.00: Tp=  .62]
00779> R0001:C00122------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00780>     CALIB NASHYD         1.0 03:9C9E           2.06     .084 No_date   12:27
00781>       [CN= 58.2: N= 3.00: Tp=  .33]
00782> R0001:C00123------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00783>     ADD HYD              1.0 01:9F              .73     .032 No_date   12:24
00784>                    +     1.0 02:EXT-9D          .41     .013 No_date   12:46
00785>                    +     1.0 03:9C9E           2.06     .084 No_date   12:27
00786>                    +     1.0 07:WC9b         133.06    4.336 No_date   13:07
00787>                    +     1.0 10:9D             1.38     .255 No_date   12:12
00788>                  SUM=    1.0 05:WC9LOWER     137.64    4.406 No_date   13:07
00789> #----------------|-------------------------------------------------------|
00790> #----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00791> #----------------|-------------------------------------------------------|
00792> R0001:C00124------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00793>     CALIB NASHYD         1.0 01:2A             1.19     .032 No_date   12:16
00794>       [CN= 33.2: N= 3.00: Tp=  .14]
00795> R0001:C00125------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00796>     CALIB NASHYD         1.0 02:2B             1.67     .030 No_date   12:27
00797>       [CN= 34.7: N= 3.00: Tp=  .32]
00798> R0001:C00126------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00799>     CALIB STANDHYD       1.0 03:2C             1.96     .250 No_date   12:12
00800>       [XIMP=.30:TIMP=.60]
00801>       [LOSS= 2 :CN= 49.0]
00802>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00803>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00804> R0001:C00127------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00805>     CALIB STANDHYD       1.0 07:2D             3.28     .410 No_date   12:12
00806>       [XIMP=.25:TIMP=.50]
00807>       [LOSS= 2 :CN= 59.0]
00808>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00809>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00810> R0001:C00128------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
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00811>     CALIB STANDHYD        1.0 04:2E             2.09     .276 No_date   12:12
00812>       [XIMP=.26:TIMP=.35]
00813>       [LOSS= 2 :CN= 69.0]
00814>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00815>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00816> R0001:C00129------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00817>     ADD HYD               1.0 01:2A             1.19     .032 No_date   12:16
00818>                       +     1.0 02:2B             1.67     .030 No_date   12:27
00819>                       +     1.0 03:2C             1.96     .250 No_date   12:12
00820>                       +     1.0 04:2E             2.09     .276 No_date   12:12
00821>                       +     1.0 07:2D             3.28     .410 No_date   12:12
00822>                   SUM=      1.0 06:SWMF2         10.19     .982 No_date   12:12
00823> #-----------------|-------------------------------------------------------------|
00824> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00825> #-----------------|-------------------------------------------------------------|
00826> R0001:C00130------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00827>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19     .982 No_date   12:12
00828>                   out <=    1.0 09:SWMF-2        10.19     .061 No_date   14:17
00829>      {MxStoUsed=.2279E+00  m3}
00830> #-----------------|-------------------------------------------------------------|
00831> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
00832> #-----------------|-------------------------------------------------------------|
00833> R0001:C00131------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00834>     ADD HYD               1.0 09:SWMF-2         10.19     .061 No_date   14:17
00835>                       +     1.0 05:WC9LOWER     137.64    4.406 No_date   13:07
00836>                   SUM=      1.0 01:WC9c          147.83    4.461 No_date   13:07
00837> R0001:C00132------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00838>     SAVE HYD              1.0 01:WC9c          147.83    4.461 No_date   13:07
00839>       fname :WC9c.0001
00840>       remark:POST-DEV LAKESHORE
00841> #-----------------|-------------------------------------------------------------|
00842> #-----------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
00843> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
00844> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
00845> #-----------------|-------------------------------------------------------------|
00846> R0001:C00133------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00847>     CALIB NASHYD          1.0 01:8A             2.27     .054 No_date   12:21
00848>       [CN= 36.2: N= 3.00: Tp=  .23]
00849> R0001:C00134------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00850>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .351 No_date   12:32
00851>       [CN= 68.9: N= 3.00: Tp=  .41]
00852> R0001:C00135------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00853>     CALIB NASHYD          1.0 03:EXT-8B         1.04     .038 No_date   12:32
00854>       [CN= 58.6: N= 3.00: Tp=  .41]
00855> #-----------------|-------------------------------------------------------------|
00856> #-----------------|-----------WATERCOURSE 8---------------------------------------|
00857> #-----------------|-------------------------------------------------------------|
00858> R0001:C00136------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00859>     ADD HYD               1.0 01:8A             2.27     .054 No_date   12:21
00860>                       +     1.0 02:EXT-8A         7.14     .351 No_date   12:32
00861>                       +     1.0 03:EXT-8B         1.04     .038 No_date   12:32
00862>                   SUM=      1.0 04:WC8           10.45    .432 No_date   12:30
00863> #-----------------|-------------------------------------------------------------|
00864> #-----------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
00865> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
00866> #-----------------|-------------------------------------------------------------|
00867> R0001:C00137------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00868>     CALIB NASHYD          1.0 01:10A            1.99     .109 No_date   12:19
00869>       [CN= 59.4: N= 3.00: Tp=  .21]
00870> ********************************************************************************
00871> ********************************************************************************
00872> #                            50yr SCS Storm (24hr)
00873> ********************************************************************************
00874> ********************************************************************************
00875> R0001:C00138------------------------------------------------------------------------
00876>      MASS STORM
00877>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00878>       Comment  = 24 hour SCS II storm mass curve
00879>       [SDT= 1.00:SDUR=  24.00:PTOT=  96.00]
00880> ********************************************************************************
00881> #-----------------|-------------------------------------------------------------|
00882> #-----------------|-Subwatershed 9 External Drainage Area------------------------|
00883> #-----------------|-Per 'The Orchards' FSSWM Report------------------------------|
00884> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)------------------|
00885> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00886> #-----------------|-------------------------------------------------------------|
00887> R0001:C00139------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00888>     CALIB NASHYD          1.0 01:EXT-9A       101.80    4.464 No_date   13:10
00889>       [CN= 80.0: N= 3.00: Tp= 1.00]
00890> R0001:C00140------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00891>     ROUTE CHANNEL     ->    1.0 01:EXT-9A       101.80    4.464 No_date   13:10
00892>      [RDT= 1.00]  out<-    1.0 02:Channel      101.80    4.454 No_date   13:13
00893>       [L/S/n=  550./2.000/.035]
00894>       {Vmax= 1.950:Dmax=  .402}
00895> R0001:C00141------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00896>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    2.942 No_date   12:14
00897>       [XIMP=.35:TIMP=.35]
00898>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00899>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00900>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00901> R0001:C00142------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00902>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    2.942 No_date   12:14
00903>                   out <=    1.0 04:Orchards     14.80     .912 No_date   12:34
00904>      {MxStoUsed=.4691E+00  m3}
00905> #-----------------|-------------------------------------------------------------|
00906> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00907> #-----------------|-------------------------------------------------------------|
00908> R0001:C00143------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00909>     ADD HYD               1.0 02:Channel      101.80    4.454 No_date   13:13
00910>                       +     1.0 04:Orchards     14.80     .912 No_date   12:34
00911>                   SUM=      1.0 05:RD19         116.60    5.020 No_date   13:06
00912> R0001:C00144------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00913>     CALIB NASHYD          1.0 01:EXT-9C         .65     .083 No_date   12:20
00914>       [CN= 82.7: N= 3.00: Tp=  .24]
00915> #-----------------|-------------------------------------------------------------|
00916> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00917> #-----------------|-------------------------------------------------------------|
00918> R0001:C00145------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00919>     CALIB NASHYD          1.0 02:9A9B           2.68     .131 No_date   12:25
00920>       [CN= 55.9: N= 3.00: Tp=  .30]
00921> R0001:C00146------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00922>     ADD HYD               1.0 01:EXT-9C         .65     .083 No_date   12:20
00923>                       +     1.0 02:9A9B           2.68     .131 No_date   12:25
00924>                       +     1.0 05:RD19         116.60    5.020 No_date   13:06
00925>                   SUM=      1.0 04:WC9a         119.93    5.076 No_date   13:06
00926> #-----------------|-------------------------------------------------------------|
00927> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00928> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1----------------------|
00929> #-----------------|-------------------------------------------------------------|
00930> R0001:C00147------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00931>     CALIB NASHYD          1.0 01:EXT-1A         8.37     .526 No_date   12:35
00932>       [CN= 74.9: N= 3.00: Tp=  .47]
00933> R0001:C00148------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00934>     CALIB STANDHYD        1.0 03:1A             2.95     .577 No_date   12:12
00935>       [XIMP=.31:TIMP=.51]
00936>       [LOSS= 2 :CN= 67.0]
00937>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00938>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00939> R0001:C00149------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00940>     CALIB NASHYD          1.0 05:1B             1.81     .105 No_date   12:14
00941>       [CN= 44.3: N= 3.00: Tp=  .11]
00942> R0001:C00150------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00943>     ADD HYD               1.0 01:EXT-1A         8.37     .526 No_date   12:35
00944>                       +     1.0 03:1A             2.95     .577 No_date   12:12
00945>                       +     1.0 05:1B             1.81     .105 No_date   12:14
00946>                   SUM=      1.0 06:SWMF1         13.13     .931 No_date   12:12
00947> #-----------------|-------------------------------------------------------------|
00948> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
00949> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------------|
00950> #-----------------|-------------------------------------------------------------|
00951> R0001:C00151------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00952>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .931 No_date   12:12
00953>                   out <=    1.0 01:SWMF-1        13.13     .060 No_date   17:00
00954>      {MxStoUsed=.3889E+00  m3}
00955> R0001:C00152------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00956>     ADD HYD               1.0 01:SWMF-1         13.13     .060 No_date   17:00
00957>                       +     1.0 04:WC9a         119.93    5.076 No_date   13:06
00958>                   SUM=      1.0 07:WC9b         133.06    5.110 No_date   13:06
00959> #-----------------|-------------------------------------------------------------|
00960> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
00961> #-----------------|-------------------------------------------------------------|
00962> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00963> #-----------------|-------------------------------------------------------------|
00964> R0001:C00153------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00965>     CALIB STANDHYD        1.0 10:9D             1.38     .293 No_date   12:12
00966>       [XIMP=.33:TIMP=.68]
00967>       [LOSS= 2 :CN= 66.2]
00968>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00969>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00970> #-----------------|-------------------------------------------------------------|
00971> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
00972> #-----------------|-------------------------------------------------------------|
00973> R0001:C00154------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00974>     CALIB NASHYD          1.0 01:9F              .73     .039 No_date   12:23
00975>       [CN= 56.7: N= 3.00: Tp=  .28]
00976> R0001:C00155------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00977>     CALIB NASHYD          1.0 02:EXT-9D          .41     .016 No_date   12:46
00978>       [CN= 65.0: N= 3.00: Tp=  .62]
00979> R0001:C00156------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00980>     CALIB NASHYD          1.0 03:9C9E           2.06     .103 No_date   12:27
00981>       [CN= 58.2: N= 3.00: Tp=  .33]
00982> R0001:C00157------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00983>     ADD HYD               1.0 01:9F              .73     .039 No_date   12:23
00984>                       +     1.0 02:EXT-9D          .41     .016 No_date   12:46
00985>                       +     1.0 03:9C9E           2.06     .103 No_date   12:27
00986>                       +     1.0 07:WC9b         133.06    5.110 No_date   13:06
00987>                       +     1.0 10:9D             1.38     .293 No_date   12:12
00988>                   SUM=      1.0 05:WC9LOWER     137.64    5.196 No_date   13:06
00989> #-----------------|-------------------------------------------------------------|
00990> #-----------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
00991> #-----------------|-------------------------------------------------------------|
00992> R0001:C00158------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00993>     CALIB NASHYD          1.0 01:2A             1.19     .041 No_date   12:16
00994>       [CN= 33.2: N= 3.00: Tp=  .14]
00995> R0001:C00159------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00996>     CALIB NASHYD          1.0 02:2B             1.67     .037 No_date   12:27
00997>       [CN= 34.7: N= 3.00: Tp=  .32]
00998> R0001:C00160------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00999>     CALIB STANDHYD        1.0 03:2C             1.96     .295 No_date   12:12
01000>       [XIMP=.30:TIMP=.60]
01001>       [LOSS= 2 :CN= 49.0]
01002>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01003>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01004> R0001:C00161------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01005>     CALIB STANDHYD        1.0 07:2D             3.28     .478 No_date   12:12
01006>       [XIMP=.25:TIMP=.50]
01007>       [LOSS= 2 :CN= 59.0]
01008>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01009>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01010> R0001:C00162------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01011>     CALIB STANDHYD        1.0 04:2E             2.09     .322 No_date   12:12
01012>       [XIMP=.26:TIMP=.35]
01013>       [LOSS= 2 :CN= 69.0]
01014>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01015>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
01016> R0001:C00163------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01017>     ADD HYD               1.0 01:2A             1.19     .041 No_date   12:16
01018>                       +     1.0 02:2B             1.67     .037 No_date   12:27
01019>                       +     1.0 03:2C             1.96     .295 No_date   12:12
01020>                       +     1.0 04:2E             2.09     .322 No_date   12:12
01021>                       +     1.0 07:2D             3.28     .478 No_date   12:12
01022>                   SUM=      1.0 06:SWMF2         10.19    1.152 No_date   12:12
01023> #-----------------|-------------------------------------------------------------|
01024> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01025> #-----------------|-------------------------------------------------------------|
01026> R0001:C00164------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01027>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19    1.152 No_date   12:12
01028>                   out <=    1.0 09:SWMF-2        10.19     .087 No_date   13:27
01029>      {MxStoUsed=.2552E+00  m3}
01030> #-----------------|-------------------------------------------------------------|
01031> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
01032> #-----------------|-------------------------------------------------------------|
01033> R0001:C00165------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01034>     ADD HYD               1.0 09:SWMF-2         10.19     .087 No_date   13:27
01035>                       +     1.0 05:WC9LOWER     137.64    5.196 No_date   13:06
01036>                   SUM=      1.0 01:WC9c          147.83    5.280 No_date   13:06
01037> R0001:C00166------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01038>     SAVE HYD              1.0 01:WC9c          147.83    5.280 No_date   13:06
01039>       fname :WC9c.0001
01040>       remark:POST-DEV LAKESHORE
01041> #-----------------|-------------------------------------------------------------|
01042> #-----------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
01043> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
01044> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
01045> #-----------------|-------------------------------------------------------------|
01046> R0001:C00167------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01047>     CALIB NASHYD          1.0 01:8A             2.27     .067 No_date   12:21
01048>       [CN= 36.2: N= 3.00: Tp=  .23]
01049> R0001:C00168------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01050>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .423 No_date   12:31
01051>       [CN= 68.9: N= 3.00: Tp=  .41]
01052> R0001:C00169------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01053>     CALIB NASHYD          1.0 03:EXT-8B         1.04     .046 No_date   12:32
01054>       [CN= 58.6: N= 3.00: Tp=  .41]
01055> #-----------------|-------------------------------------------------------------|
01056> #-----------------|-----------WATERCOURSE 8---------------------------------------|
01057> #-----------------|-------------------------------------------------------------|
01058> R0001:C00170------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01059>     ADD HYD               1.0 01:8A             2.27     .067 No_date   12:21
01060>                       +     1.0 02:EXT-8A         7.14     .423 No_date   12:31
01061>                       +     1.0 03:EXT-8B         1.04     .046 No_date   12:32
01062>                   SUM=      1.0 04:WC8           10.45    .523 No_date   12:30
01063> #-----------------|-------------------------------------------------------------|
01064> #-----------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
01065> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
01066> #-----------------|-------------------------------------------------------------|
01067> R0001:C00171------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01068>     CALIB NASHYD          1.0 01:10A            1.99     .133 No_date   12:19
01069>       [CN= 59.4: N= 3.00: Tp=  .21]
01070> ********************************************************************************
01071> ********************************************************************************
01072> #                            100yr SCS Storm (24hr)
01073> ********************************************************************************
01074> ********************************************************************************
01075> R0001:C00172------------------------------------------------------------------------
01076>      MASS STORM
01077>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
01078>       Comment  = 24 hour SCS II storm mass curve
01079>       [SDT= 1.00:SDUR=  24.00:PTOT= 108.00]
01080> ********************************************************************************
```

```
01081> #-----------------|---------------------------------------------------------------|
01082> #-----------------|-Subwatershed 9 External Drainage Area---------------------|
01083> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
01084> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
01085> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01086> #-----------------|---------------------------------------------------------------|
01087> R0001:C00173------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01088>     CALIB NASHYD          1.0 01:EXT-9A       101.80    5.323 No_date   13:09
01089>       [CN= 80.0: N= 3.00: Tp= 1.00]
01090> R0001:C00174------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01091>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    5.323 No_date   13:09
01092>       [RDF= 1.00] out<-    1.0 02:Channel      101.80    5.308 No_date   13:13
01093>       [L/S/n=  550./2.000/.035]
01094>       {Vmax= 2.062:Dmax=  .442}
01095> R0001:C00175------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01096>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    3.462 No_date   12:14
01097>       [XIMP=.35:TIMP=.35]
01098>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01099>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01100>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01101> R0001:C00176------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01102>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.462 No_date   12:14
01103>                  out <=    1.0 04:Orchards     14.80    1.155 No_date   12:32
01104>      {MxStoUsed=.5239E+00  m3}
01105> #-----------------|---------------------------------------------------------------|
01106> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
01107> #-----------------|---------------------------------------------------------------|
01108> R0001:C00177------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01109>     ADD HYD               1.0 02:Channel      101.80    5.308 No_date   13:13
01110>                      +    1.0 04:Orchards     14.80    1.155 No_date   12:32
01111>                    SUM=   1.0 05:RD19         116.60    5.991 No_date   13:06
01112> R0001:C00178------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01113>     CALIB NASHYD          1.0 01:EXT-9C         .65     .098 No_date   12:20
01114>       [CN= 82.7: N= 3.00: Tp=  .24]
01115> #-----------------|---------------------------------------------------------------|
01116> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
01117> #-----------------|---------------------------------------------------------------|
01118> R0001:C00179------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01119>     CALIB NASHYD          1.0 02:9A9B          2.68     .163 No_date   12:25
01120>       [CN= 55.9: N= 3.00: Tp=  .30]
01121> R0001:C00180------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01122>     ADD HYD               1.0 01:EXT-9C         .65     .098 No_date   12:20
01123>                      +    1.0 02:9A9B          2.68     .163 No_date   12:25
01124>                      +    1.0 05:RD19        116.60    5.991 No_date   13:06
01125>                    SUM=   1.0 04:WC9a        119.93    6.060 No_date   13:05
01126> #-----------------|---------------------------------------------------------------|
01127> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
01128> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1----------------------|
01129> #-----------------|---------------------------------------------------------------|
01130> R0001:C00181------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01131>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .639 No_date   12:35
01132>       [CN= 74.9: N= 3.00: Tp=  .47]
01133> R0001:C00182------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01134>     CALIB STANDHYD        1.0 03:1A            2.95     .678 No_date   12:12
01135>       [XIMP=.31:TIMP=.51]
01136>       [LOSS= 2 :CN= 67.0]
01137>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01138>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01139> R0001:C00183------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01140>     CALIB NASHYD          1.0 05:1B            1.81     .133 No_date   12:14
01141>       [CN= 44.3: N= 3.00: Tp=  .11]
01142> R0001:C00184------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01143>     ADD HYD               1.0 01:EXT-1A        8.37     .639 No_date   12:35
01144>                      +    1.0 03:1A            2.95     .678 No_date   12:12
01145>                      +    1.0 05:1B            1.81     .133 No_date   12:14
01146>                    SUM=   1.0 06:SWMF1        13.13    1.119 No_date   12:12
01147> #-----------------|---------------------------------------------------------------|
01148> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
01149> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01150> #-----------------|---------------------------------------------------------------|
01151> R0001:C00185------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01152>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13    1.119 No_date   12:12
01153>                  out <=    1.0 01:SWMF-1       13.13     .095 No_date   15:04
01154>      {MxStoUsed=.4481E+00  m3}
01155> R0001:C00186------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01156>     ADD HYD               1.0 01:SWMF-1        13.13     .095 No_date   15:04
01157>                      +    1.0 04:WC9a         119.93    6.060 No_date   13:05
01158>                    SUM=   1.0 07:WC9b         133.06    6.110 No_date   13:05
01159> #-----------------|---------------------------------------------------------------|
01160> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
01161> #-----------------|---------------------------------------------------------------|
01162> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
01163> #-----------------|---------------------------------------------------------------|
01164> R0001:C00187------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01165>     CALIB STANDHYD        1.0 10:9D            1.38     .346 No_date   12:12
01166>       [XIMP=.33:TIMP=.68]
01167>       [LOSS= 2 :CN= 66.2]
01168>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01169>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01170> #-----------------|---------------------------------------------------------------|
01171> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
01172> #-----------------|---------------------------------------------------------------|
01173> R0001:C00188------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01174>     CALIB NASHYD          1.0 01:9F             .73     .049 No_date   12:23
01175>       [CN= 56.7: N= 3.00: Tp=  .28]
01176> R0001:C00189------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01177>     CALIB NASHYD          1.0 02:EXT-9D         .41     .020 No_date   12:45
01178>       [CN= 65.0: N= 3.00: Tp=  .62]
01179> R0001:C00190------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01180>     CALIB NASHYD          1.0 03:9C9E          2.06     .128 No_date   12:26
01181>       [CN= 58.2: N= 3.00: Tp=  .33]
01182> R0001:C00191------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01183>     ADD HYD               1.0 01:9F             .73     .049 No_date   12:23
01184>                      +    1.0 02:EXT-9D         .41     .020 No_date   12:45
01185>                      +    1.0 03:9C9E          2.06     .128 No_date   12:26
01186>                      +    1.0 07:WC9b        133.06    6.110 No_date   13:05
01187>                      +    1.0 10:9D            1.38     .346 No_date   12:12
01188>                    SUM=   1.0 05:WC9LOWER     137.64    6.215 No_date   13:05
01189> #-----------------|---------------------------------------------------------------|
01190> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
01191> #-----------------|---------------------------------------------------------------|
01192> R0001:C00192------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01193>     CALIB NASHYD          1.0 01:2A            1.19     .052 No_date   12:16
01194>       [CN= 33.2: N= 3.00: Tp=  .14]
01195> R0001:C00193------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01196>     CALIB NASHYD          1.0 02:2B            1.67     .048 No_date   12:26
01197>       [CN= 34.7: N= 3.00: Tp=  .32]
01198> R0001:C00194------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01199>     CALIB STANDHYD        1.0 03:2C            1.96     .353 No_date   12:12
01200>       [XIMP=.30:TIMP=.60]
01201>       [LOSS= 2 :CN= 49.0]
01202>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01203>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01204> R0001:C00195------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01205>     CALIB STANDHYD        1.0 07:2D            3.28     .578 No_date   12:12
01206>       [XIMP=.25:TIMP=.50]
01207>       [LOSS= 2 :CN= 59.0]
01208>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01209>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01210> R0001:C00196------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01211>     CALIB STANDHYD        1.0 04:2E            2.09     .389 No_date   12:12
01212>       [XIMP=.26:TIMP=.35]
01213>       [LOSS= 2 :CN= 69.0]
01214>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01215>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
01216> R0001:C00197------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01217>     ADD HYD               1.0 01:2A            1.19     .052 No_date   12:16
01218>                      +    1.0 02:2B            1.67     .048 No_date   12:26
01219>                      +    1.0 03:2C            1.96     .353 No_date   12:12
01220>                      +    1.0 04:2E            2.09     .389 No_date   12:12
01221>                      +    1.0 07:2D            3.28     .578 No_date   12:12
01222>                    SUM=   1.0 06:SWMF2        10.19    1.394 No_date   12:12
01223> #-----------------|---------------------------------------------------------------|
01224> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)----------|
01225> #-----------------|---------------------------------------------------------------|
01226> R0001:C00198------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01227>     ROUTE RESERVOIR ->    1.0 06:SWMF2        10.19    1.394 No_date   12:12
01228>                  out <=    1.0 09:SWMF-2       10.19     .129 No_date   13:13
01229>      {MxStoUsed=.2916E+00  m3}
01230> #-----------------|---------------------------------------------------------------|
01231> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------------|
01232> #-----------------|---------------------------------------------------------------|
01233> R0001:C00199------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01234>     ADD HYD               1.0 09:SWMF-2        10.19     .129 No_date   13:13
01235>                      +    1.0 05:WC9LOWER     137.64    6.215 No_date   13:05
01236>                    SUM=   1.0 01:WC9c         147.83    6.343 No_date   13:05
01237> R0001:C00200------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01238>     SAVE HYD              1.0 01:WC9c         147.83    6.343 No_date   13:05
01239>       fname :WC9c.0001
01240>       remark:POST-DEV LAKESHORE
01241> #-----------------|---------------------------------------------------------------|
01242> #-----------------|--WATERCOURSE 8 CATCHMENTS-----------------------------------|
01243> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8----------------------|
01244> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8------------------|
01245> #-----------------|---------------------------------------------------------------|
01246> R0001:C00201------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01247>     CALIB NASHYD          1.0 01:8A            2.27     .085 No_date   12:21
01248>       [CN= 36.2: N= 3.00: Tp=  .23]
01249> R0001:C00202------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01250>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .517 No_date   12:31
01251>       [CN= 68.9: N= 3.00: Tp=  .41]
01252> R0001:C00203------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01253>     CALIB NASHYD          1.0 03:EXT-8B        1.04     .057 No_date   12:32
01254>       [CN= 58.6: N= 3.00: Tp=  .41]
01255> #-----------------|---------------------------------------------------------------|
01256> #-----------------|----------WATERCOURSE 8--------------------------------------|
01257> #-----------------|---------------------------------------------------------------|
01258> R0001:C00204------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01259>     ADD HYD               1.0 01:8A            2.27     .085 No_date   12:21
01260>                      +    1.0 02:EXT-8A        7.14     .517 No_date   12:31
01261>                      +    1.0 03:EXT-8B        1.04     .057 No_date   12:32
01262>                    SUM=   1.0 04:WC8          10.45     .644 No_date   12:29
01263> #-----------------|---------------------------------------------------------------|
01264> #-----------------|--WATERCOURSE 10 CATCHMENT-----------------------------------|
01265> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-----------------|
01266> #-----------------|---------------------------------------------------------------|
01267> R0001:C00205------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01268>     CALIB NASHYD          1.0 01:10A           1.99     .166 No_date   12:19
01269>       [CN= 59.4: N= 3.00: Tp=  .21]
01270> R0001:C00206-------------------------------------------------------------------
01271>     FINISH
01272> -------------------------------------------------------------------------------
01273> *******************************************************************************
01274>      WARNINGS / ERRORS / NOTES
01275>      -------------------------
01276>    Simulation ended on 2022-03-11     at 14:26:23
01277> ===============================================================================
01278>
01279>
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2021-04-29
00005> *#  Modeller    : [JE - ADAPTED FROM NM 2009 MODEL]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[0],  NRUN=[0]
00010> *%                   [ ] <--storm filename, one per line for NSTORM time
00011> *#************************************************************************
00012> *%------------------|---------------------------------------------------|
00013> *#------------------|---------------------------------------------------|
00014> *#------------------|-PRE-DEVELOPMENT---12hr SCS STORMS-----------------|
00015> *#------------------|---------------------------------------------------|
00016>
00017> *#************************************************************************
00018> *#                              2yr SCS Storm (12hr)
00019> *#************************************************************************
00020> *#************************************************************************
00021> MASS STORM          PTOTAL=[39.6](mm), CSDT=[1](min),
00022>                     CURVE_FILENAME=["SCS12HII.mst"]
00023> *#************************************************************************
00024> *#------------------|---------------------------------------------------|
00025> *#------------------|---------------------------------------------------|
00026> *#------------------|-Subwatershed 9 External Drainage Area-------------|
00027> *#------------------|-Per 'The Orchards' FSSWM Report-------------------|
00028> *#------------------|-Prepared by Higgins Engineering (Jan. 2005)-------|
00029> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00030> *#------------------|---------------------------------------------------|
00031> *%------------------|---------------------------------------------------|
00032> CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00033>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00034>                     N=[3], TP=[1.00]hrs,
00035>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00036> *%------------------|---------------------------------------------------|
00037> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00038>                     RDT=[1](min),
00039>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00040>                                       FPSLOPE=[2](%),
00041>                     SECNUM=[1],       NSEG=[3]
00042>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00043>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00044>                                                     [8,100]
00045>                                                     [12,100]
00046>                                                     [20,102]
00047> *%------------------|---------------------------------------------------|
00048> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00049>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00050>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00051>                             DCAY=[2](/hr), F=[0](mm),
00052>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00053>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00054>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00055>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00056>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00057> *%------------------|---------------------------------------------------|
00058> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00059>                     RDT=[1](min),
00060>                           TABLE of ( OUTFLOW-STORAGE ) values
00061>                                      (cms) - (ha-m)
00062>                                    [   0.0 ,  0.0 ]
00063>                                    [   0.0100 ,  0.0610 ]
00064>                                    [   0.0400 ,  0.1310 ]
00065>                                    [   0.0700 ,  0.2110 ]
00066>                                    [   0.2600 ,  0.3000 ]
00067>                                    [   0.6000 ,  0.3940 ]
00068>                                    [   1.0200 ,  0.4950 ]
00069>                                    [   1.5200 ,  0.6020 ]
00070>                                    [   2.0800 ,  0.7160 ]
00071>                                    [   2.6900 ,  0.8370 ]
00072>                                    [   -1  ,  -1  ]  (max twenty pts)
00073>                           IDovf=[   ], NHYDovf=[   ]
00074> *%------------------|---------------------------------------------------|
00075> *#------------------|---------------------------------------------------|
00076> *#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00077> *#------------------|---------------------------------------------------|
00078> *%------------------|---------------------------------------------------|
00079> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00080> *%------------------|---------------------------------------------------|
00081> *#------------------|---------------------------------------------------|
00082> *#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00083> *#------------------|---------------------------------------------------|
00084> *%------------------|---------------------------------------------------|
00085> CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00086>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00087>                     N=[3], TP=[0.37]hrs,
00088>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00089> *%------------------|---------------------------------------------------|
00090> CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00091>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00092>                     N=[3], TP=[1.09]hrs,
00093>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00094> *%------------------|---------------------------------------------------|
00095> ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00096> *%------------------|---------------------------------------------------|
00097> CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00098>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00099>                     N=[3], TP=[0.14]hrs,
00100>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00101> *%------------------|---------------------------------------------------|
00102> CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00103>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00104>                     N=[3], TP=[0.15]hrs,
00105>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00106> *%------------------|---------------------------------------------------|
00107> *#------------------|---------------------------------------------------|
00108> *#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00109> *#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00110> *#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00111> *#------------------|---------------------------------------------------|
00112> *%------------------|---------------------------------------------------|
00113> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00114>                     RDT=[1](min),
00115>                           TABLE of ( OUTFLOW-STORAGE ) values
00116>                                      (cms) - (ha-m)
00117>                                    [   0.0 ,  0.0 ]
00118>                                    [   0.00 ,  0.479 ]
00119>                                    [   0.00 ,  1.249 ]
00120>                                    [   -1  ,  -1  ]  (max twenty pts)
00121>                           IDovf=[   ], NHYDovf=[   ]
00122> *%------------------|---------------------------------------------------|
00123> ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00124> *%------------------|---------------------------------------------------|
00125> *#------------------|---------------------------------------------------|
00126> *#------------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00127> *#------------------|---------------------------------------------------|
00128> *%------------------|---------------------------------------------------|
00129> CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00130>                     DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00131>                     N=[3], TP=[0.48]hrs,
00132>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00133> *%------------------|---------------------------------------------------|
00134> CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00135>                     DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00136>                     N=[3], TP=[0.71]hrs,
00137>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00138> *%------------------|---------------------------------------------------|
00139> *#------------------|---------------------------------------------------|
00140> *#------------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00141> *#------------------|---------------------------------------------------|
00142> *%------------------|---------------------------------------------------|
00143> ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00144> *%------------------|---------------------------------------------------|
00145> SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASESh=[1]
00146>                     HYD_COMMENT=["Lakeshore Road Hydrograph"]
00147> *%------------------|---------------------------------------------------|
00148> *#------------------|---------------------------------------------------|
00149> *#------------------|----------WATERCOURSE 8----------------------------|
00150> *#------------------|---------------------------------------------------|
00151> *%------------------|---------------------------------------------------|
00152> CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00153>                     DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00154>                     N=[3], TP=[0.56]hrs,
00155>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00156> *%------------------|---------------------------------------------------|
00157> *#------------------|---------------------------------------------------|
00158> *#------------------|----------WATERCOURSE 10---------------------------|
00159> *#------------------|---------------------------------------------------|
00160> *%------------------|---------------------------------------------------|
00161> CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00162>                     DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00163>                     N=[3], TP=[0.21]hrs,
00164>
00165>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00166> *%------------------|---------------------------------------------------|
00167>
00168> *#************************************************************************
00169> *#************************************************************************
00170> *#                              5yr SCS Storm (12hr)
00171> *#************************************************************************
00172> *#************************************************************************
00173> MASS STORM          PTOTAL=[55.2](mm), CSDT=[1](min),
00174>                     CURVE_FILENAME=["SCS12HII.mst"]
00175> *#************************************************************************
00176> *#------------------|---------------------------------------------------|
00177> *#------------------|---------------------------------------------------|
00178> *#------------------|-Subwatershed 9 External Drainage Area-------------|
00179> *#------------------|-Per 'The Orchards' FSSWM Report-------------------|
00180> *#------------------|-Prepared by Higgins Engineering (Jan. 2005)-------|
00181> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00182> *#------------------|---------------------------------------------------|
00183> *%------------------|---------------------------------------------------|
00184> CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00185>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00186>                     N=[3], TP=[1.00]hrs,
00187>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00188> *%------------------|---------------------------------------------------|
00189> ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
00190>                     RDT=[1](min),
00191>                     CHLGTH=[550](m),  CHSLOPE=[2](%),
00192>                                       FPSLOPE=[2](%),
00193>                     SECNUM=[1],       NSEG=[3]
00194>                     ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00195>                     ( DISTANCE (m), ELEVATION (m))= [0,102]
00196>                                                     [8,100]
00197>                                                     [12,100]
00198>                                                     [20,102]
00199> *%------------------|---------------------------------------------------|
00200> CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00201>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00202>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00203>                             DCAY=[2](/hr), F=[0](mm),
00204>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00205>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00206>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00207>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00208>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00209> *%------------------|---------------------------------------------------|
00210> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00211>                     RDT=[1](min),
00212>                           TABLE of ( OUTFLOW-STORAGE ) values
00213>                                      (cms) - (ha-m)
00214>                                    [   0.0 ,  0.0 ]
00215>                                    [   0.0100 ,  0.0610 ]
00216>                                    [   0.0400 ,  0.1310 ]
00217>                                    [   0.0700 ,  0.2110 ]
00218>                                    [   0.2600 ,  0.3000 ]
00219>                                    [   0.6000 ,  0.3940 ]
00220>                                    [   1.0200 ,  0.4950 ]
00221>                                    [   1.5200 ,  0.6020 ]
00222>                                    [   2.0800 ,  0.7160 ]
00223>                                    [   2.6900 ,  0.8370 ]
00224>                                    [   -1  ,  -1  ]  (max twenty pts)
00225>                           IDovf=[   ], NHYDovf=[   ]
00226> *%------------------|---------------------------------------------------|
00227> *#------------------|---------------------------------------------------|
00228> *#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00229> *#------------------|---------------------------------------------------|
00230> *%------------------|---------------------------------------------------|
00231> ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00232> *%------------------|---------------------------------------------------|
00233> *#------------------|---------------------------------------------------|
00234> *#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00235> *#------------------|---------------------------------------------------|
00236> *%------------------|---------------------------------------------------|
00237> CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00238>                     DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00239>                     N=[3], TP=[0.37]hrs,
00240>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00241> *%------------------|---------------------------------------------------|
00242> CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00243>                     DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00244>                     N=[3], TP=[1.09]hrs,
00245>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00246> *%------------------|---------------------------------------------------|
00247> ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00248> *%------------------|---------------------------------------------------|
00249> CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00250>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00251>                     N=[3], TP=[0.14]hrs,
00252>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00253> *%------------------|---------------------------------------------------|
00254> CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00255>                     DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00256>                     N=[3], TP=[0.15]hrs,
00257>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00258> *%------------------|---------------------------------------------------|
00259> *#------------------|---------------------------------------------------|
00260> *#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00261> *#------------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00262> *#------------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00263> *#------------------|---------------------------------------------------|
00264> *%------------------|---------------------------------------------------|
00265> ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00266>                     RDT=[1](min),
00267>                           TABLE of ( OUTFLOW-STORAGE ) values
00268>                                      (cms) - (ha-m)
00269>                                    [   0.0 ,  0.0 ]
00270>                                    [   0.00 ,  0.479 ]
```

```
                                     [    0.00 ,  1.249 ]
                                     [    -1   ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%-----------------|---------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 8-----------------------------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
                    N=[3], TP=[0.56]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 10----------------------------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,

                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|




*#*******************************************************************************
*#*******************************************************************************
*#                               10yr SCS Storm (12hr)
*#*******************************************************************************
*#*******************************************************************************
MASS STORM          PTOTAL=[66](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#*******************************************************************************
*#-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],        NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%-----------------|---------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|---------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [    0.0 ,  0.0 ]
                                  [    0.0100 ,  0.0610 ]
                                  [    0.0400 ,  0.1310 ]
                                  [    0.0700 ,  0.2110 ]
                                  [    0.2600 ,  0.3000 ]
                                  [    0.6000 ,  0.3940 ]
                                  [    1.0200 ,  0.4950 ]
                                  [    1.5200 ,  0.6020 ]
                                  [    2.0800 ,  0.7160 ]
                                  [    2.6900 ,  0.8370 ]
                                  [    -1   ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [    0.0 ,  0.0 ]
                                  [    0.00 ,  0.479 ]
                                  [    0.00 ,  1.249 ]
                                  [    -1   ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%-----------------|---------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 8-----------------------------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
                    N=[3], TP=[0.56]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 10----------------------------------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,

                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|





*#*******************************************************************************
*#*******************************************************************************
*#                               25yr SCS Storm (12hr)
*#*******************************************************************************
*#*******************************************************************************
MASS STORM          PTOTAL=[79.2](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#*******************************************************************************
*#-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|---------------------------------------------------------------|
*%-----------------|---------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|---------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],        NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%-----------------|---------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|---------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [    0.0 ,  0.0 ]
                                  [    0.0100 ,  0.0610 ]
                                  [    0.0400 ,  0.1310 ]
                                  [    0.0700 ,  0.2110 ]
                                  [    0.2600 ,  0.3000 ]
                                  [    0.6000 ,  0.3940 ]
                                  [    1.0200 ,  0.4950 ]
                                  [    1.5200 ,  0.6020 ]
                                  [    2.0800 ,  0.7160 ]
                                  [    2.6900 ,  0.8370 ]
                                  [    -1   ,  -1  ]  (max twenty pts)
                          IDovf=[    ], NHYDovf=[    ]
*%-----------------|---------------------------------------------------------------|
*#-----------------|---------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|---------------------------------------------------------------|
```

```
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.00 ,  0.479 ]
                                  [   0.00 ,  1.249 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%-----------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|----------WATERCOURSE 8-----------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
                    N=[3], TP=[0.56]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|----------WATERCOURSE 10----------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,

                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|


*#**************************************************************************
*#**************************************************************************
*#                              50yr SCS Storm (12hr)
*#**************************************************************************
*#**************************************************************************
MASS STORM          PTOTAL=[88.8](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#**************************************************************************
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
                    ( DISTANCE (m), ELEVATION (m))= [0,102]
                                                    [8,100]
                                                    [12,100]
                                                    [20,102]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                                DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
```

```
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
                    N=[3], TP=[0.37]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
                    N=[3], TP=[1.09]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
                    N=[3], TP=[0.15]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
*#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
*#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["ExPond"],  IDin=[2],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.00 ,  0.479 ]
                                  [   0.00 ,  1.249 ]
                                  [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
                    N=[3], TP=[0.48]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
                    N=[3], TP=[0.71]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
*%-----------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|----------WATERCOURSE 8-----------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
                    N=[3], TP=[0.56]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|----------WATERCOURSE 10----------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,

                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|


*#**************************************************************************
*#**************************************************************************
*#                              100yr SCS Storm (12hr)
*#**************************************************************************
*#**************************************************************************
MASS STORM          PTOTAL=[98.4](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#**************************************************************************
*#-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area---------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
```

```
00811> *%-----------------|-------------------------------------------------------------|
00812> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00813>                    RDT=[1](min),
00814>                    CHLGTH=[550](m),  CHSLOPE=[2](%),
00815>                                        FPSLOPE=[2](%),
00816>                    SECNUM=[1],       NSEG=[3]
00817>                    ( SEGROUGH, SEGDIST (m))=[0.035,8  -0.035,12  0.035,20]
00818>                    ( DISTANCE (m), ELEVATION (m))= [0,102]
00819>                                                    [8,100]
00820>                                                    [12,100]
00821>                                                    [20,102]
00822> *%-----------------|-------------------------------------------------------------|
00823> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00824>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00825>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00826>                            DCAY=[2](/hr), F=[0](mm),
00827>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00828>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00829>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00830>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00831>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00832> *%-----------------|-------------------------------------------------------------|
00833> ROUTE RESERVOIR    IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00834>                    RDT=[1](min),
00835>                          TABLE of ( OUTFLOW-STORAGE ) values
00836>                                     (cms) - (ha-m)
00837>                                [   0.0 ,  0.0 ]
00838>                                [   0.0100 ,  0.0610 ]
00839>                                [   0.0400 ,  0.1310 ]
00840>                                [   0.0700 ,  0.2110 ]
00841>                                [   0.2600 ,  0.3000 ]
00842>                                [   0.6000 ,  0.3940 ]
00843>                                [   1.0200 ,  0.4950 ]
00844>                                [   1.5200 ,  0.6020 ]
00845>                                [   2.0800 ,  0.7160 ]
00846>                                [   2.6900 ,  0.8370 ]
00847>                                [   -1  ,  -1  ]  (max twenty pts)
00848>                          IDovf=[   ], NHYDovf=[   ]
00849> *%-----------------|-------------------------------------------------------------|
00850> *#-----------------|-------------------------------------------------------------|
00851> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00852> *#-----------------|-------------------------------------------------------------|
00853> *%-----------------|-------------------------------------------------------------|
00854> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00855> *%-----------------|-------------------------------------------------------------|
00856> *#-----------------|-------------------------------------------------------------|
00857> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00858> *#-----------------|-------------------------------------------------------------|
00859> *%-----------------|-------------------------------------------------------------|
00860> CALIB NASHYD       ID[1], NHYD=["9A"], DT=[1]min, AREA=[2.57](ha),
00861>                    DWF=[0](cms),  CN/C=[48.4], IA=[8.4](mm),
00862>                    N=[3], TP=[0.37]hrs,
00863>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00864> *%-----------------|-------------------------------------------------------------|
00865> CALIB NASHYD       ID=[2], NHYD=["9B"], DT=[1]min, AREA=[11.63](ha),
00866>                    DWF=[0](cms),  CN/C=[68.5], IA=[7.98](mm),
00867>                    N=[3], TP=[1.09]hrs,
00868>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00869> *%-----------------|-------------------------------------------------------------|
00870> ADD HYD            IDsum=[10], NHYD=["9A9B"], IDs to add=[1,2]
00871> *%-----------------|-------------------------------------------------------------|
00872> CALIB NASHYD       ID=[1], NHYD=["9C"], DT=[1]min, AREA=[1.19](ha),
00873>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00874>                    N=[3], TP=[0.14]hrs,
00875>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00876> *%-----------------|-------------------------------------------------------------|
00877> CALIB NASHYD       ID=[2], NHYD=["9D"], DT=[1]min, AREA=[2.02](ha),
00878>                    DWF=[0](cms),  CN/C=[41.9], IA=[8.11](mm),
00879>                    N=[3], TP=[0.15]hrs,
00880>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00881> *%-----------------|-------------------------------------------------------------|
00882> *#-----------------|-------------------------------------------------------------|
00883> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00884> *#-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00885> *#-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00886> *#-----------------|-------------------------------------------------------------|
00887> *%-----------------|-------------------------------------------------------------|
00888> ROUTE RESERVOIR    IDout=[4],   NHYD=["ExPond"],  IDin=[2],
00889>                    RDT=[1](min),
00890>                          TABLE of ( OUTFLOW-STORAGE ) values
00891>                                     (cms) - (ha-m)
00892>                                [   0.0 ,  0.0 ]
00893>                                [   0.00 ,  0.479 ]
00894>                                [   0.00 ,  1.249 ]
00895>                                [   -1  ,  -1  ]  (max twenty pts)
00896>                          IDovf=[   ], NHYDovf=[   ]
00897> *%-----------------|-------------------------------------------------------------|
00898> ADD HYD            IDsum=[9], NHYD=["9C9D"], IDs to add=[1,4]
00899> *%-----------------|-------------------------------------------------------------|
00900> *#-----------------|-------------------------------------------------------------|
00901> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00902> *#-----------------|-------------------------------------------------------------|
00903> *%-----------------|-------------------------------------------------------------|
00904> CALIB NASHYD       ID=[7], NHYD=["9E"], DT=[1]min, AREA=[7.6](ha),
00905>                    DWF=[0](cms),  CN/C=[47.1], IA=[8.7](mm),
00906>                    N=[3], TP=[0.48]hrs,
00907>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00908> *%-----------------|-------------------------------------------------------------|
00909> CALIB NASHYD       ID=[8], NHYD=["9F"], DT=[1]min, AREA=[3.35](ha),
00910>                    DWF=[0](cms),  CN/C=[50.4], IA=[8.4](mm),
00911>                    N=[3], TP=[0.71]hrs,
00912>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00913> *%-----------------|-------------------------------------------------------------|
00914> *#-----------------|-------------------------------------------------------------|
00915> *#-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00916> *#-----------------|-------------------------------------------------------------|
00917> *%-----------------|-------------------------------------------------------------|
00918> ADD HYD            IDsum=[1], NHYD=["WC9LS"], IDs to add=[5,10,9,7,8]
00919> *%-----------------|-------------------------------------------------------------|
00920> SAVE HYD           ID=[1],   # OF PCYCLES=[10],  ICASEsh=[1]
00921>                    HYD_COMMENT=["Lakeshore Road Hydrograph"]
00922> *%-----------------|-------------------------------------------------------------|
00923> *#-----------------|-------------------------------------------------------------|
00924> *#-----------------|----------WATERCOURSE 8--------------------------------------|
00925> *#-----------------|-------------------------------------------------------------|
00926> *%-----------------|-------------------------------------------------------------|
00927> CALIB NASHYD       ID=[7], NHYD=["8A"], DT=[1]min, AREA=[12.13](ha),
00928>                    DWF=[0](cms),  CN/C=[60.4], IA=[8.42](mm),
00929>                    N=[3], TP=[0.56]hrs,
00930>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00931> *%-----------------|-------------------------------------------------------------|
00932> *#-----------------|-------------------------------------------------------------|
00933> *#-----------------|----------WATERCOURSE 10-------------------------------------|
00934> *#-----------------|-------------------------------------------------------------|
00935> *%-----------------|-------------------------------------------------------------|
00936> CALIB NASHYD       ID=[7], NHYD=["10A"], DT=[1]min, AREA=[2.08](ha),
00937>                    DWF=[0](cms),  CN/C=[67.3], IA=[8.6](mm),
00938>                    N=[3], TP=[0.21]hrs,
00939>
00940>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00941> *%-----------------|-------------------------------------------------------------|
00942>
00943>
00944> FINISH
00945>
00946>
00947>
00948>
00949>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM   O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M   O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO        2       0   0   11
00008>                                                              2       0   0   11
00009>         StormWater Management HYdrologic Model                222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ******************  A single event and continuous hydrologic simulation model
00014>  ******************     based on the principles of HYMO and its successors
00015>  ******************                 OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  ****************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ******************                  Ottawa,  Ontario: (613) 836-3884
00019>  ******************                  Gatineau, Quebec: (819) 243-6858
00020>  ******************                  E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ******************           Maximum value for ID numbers  :     11
00031>  ******************           Max. number of rainfall points: 105408
00032>  ******************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  *******************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                 RUN DATE: 2021-04-29     TIME: 14:33:11     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00041>  *                Desn 3rd Sub\SWM\SWMHYMO\SCS12\PRE_SCS12.dat
00042>  * Output  file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00043>  *                Desn 3rd Sub\SWM\SWMHYMO\SCS12\PRE_SCS12.out
00044>  * Summary file: J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00045>  *                Desn 3rd Sub\SWM\SWMHYMO\SCS12\PRE_SCS12.sum
00046>  * User comments:
00047>  * 1: ____________________________________________________________________________
00048>  * 2: ____________________________________________________________________________
00049>  * 3: ____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2021-04-29
00056> #  Modeller    : [JE - ADAPTED FROM NM 2009 MODEL]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001-------------------------------------------------------------------
00062>      START
00063>        [TZERO =    .00 hrs on        0]
00064>        [METOUT=   2    (1=imperial, 2=metric output)]
00065>        [NSTORM=   0 ]
00066>        [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> #-----------------|-------------------------------------------------------------|
00069> #-----------------|-PRE-DEVELOPMENT----12hr SCS STORMS----------------------------|
00070> #-----------------|-------------------------------------------------------------|
00071> #*******************************************************************************
00072> #                             2yr SCS Storm (12hr)
00073> #*******************************************************************************
00074> #*******************************************************************************
00075> R0001:C00002-------------------------------------------------------------------
00076>      MASS STORM
00077>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00078>       Comment  = 12 hour SCS II storm mass curve
00079>       [SDT= 1.00:SDUR=  12.00:PTOT=  39.60]
00080> #*******************************************************************************
00081> #-----------------|-------------------------------------------------------------|
00082> #-----------------|-------------------------------------------------------------|
00083> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00084> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00085> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00086> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00087> #-----------------|-------------------------------------------------------------|
00088> R0001:C00003-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00089>      CALIB NASHYD          1.0 01:EXT-9A       101.80    1.144 No_date    7:04
00090>        [CN= 80.0: N= 3.00: Tp= 1.00]
00091> R0001:C00004-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00092>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    1.144 No_date    7:04
00093>        [RDT= 1.00] out<-   1.0 02:Channel      101.80    1.139 No_date    7:07
00094>          [L/S/n=  550./2.000/.035]
00095>          {Vmax= 1.190:Dmax=  .187}
00096> R0001:C00005-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00097>      CALIB STANDHYD        1.0 03:EXT-9B       14.80     .842 No_date    6:03
00098>        [XIMP=.35:TIMP=.35]
00099>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00100>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00101>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00102> R0001:C00006-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00103>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80     .842 No_date    6:03
00104>                    out <=  1.0 04:Orchards     14.80     .066 No_date    7:07
00105>       {MxStoUsed=.2008E+00  m3}
00106> #-----------------|-------------------------------------------------------------|
00107> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00108> #-----------------|-------------------------------------------------------------|
00109> R0001:C00007-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00110>      ADD HYD               1.0 02:Channel      101.80    1.139 No_date    7:07
00111>                      +     1.0 04:Orchards     14.80     .066 No_date    7:07
00112>                    SUM=    1.0 05:RD19         116.60    1.205 No_date    7:07
00113> #-----------------|-------------------------------------------------------------|
00114> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00115> #-----------------|-------------------------------------------------------------|
00116> R0001:C00008-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00117>      CALIB NASHYD          1.0 01:9A           2.57      .014 No_date    6:20
00118>        [CN= 48.4: N= 3.00: Tp=  .37]
00119> R0001:C00009-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00120>      CALIB NASHYD          1.0 02:9B           11.63     .064 No_date    7:15
00121>        [CN= 68.5: N= 3.00: Tp= 1.09]
00122> R0001:C00010-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00123>      ADD HYD               1.0 01:9A           2.57      .014 No_date    6:20
00124>                      +     1.0 02:9B           11.63     .064 No_date    7:15
00125>                    SUM=    1.0 10:9A9B         14.20     .069 No_date    7:08
00126> R0001:C00011-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00127>      CALIB NASHYD          1.0 01:9C           1.19      .006 No_date    6:04
00128>        [CN= 33.2: N= 3.00: Tp=  .14]
00129> R0001:C00012-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00130>      CALIB NASHYD          1.0 02:9D           2.02      .016 No_date    6:04
00131>        [CN= 41.9: N= 3.00: Tp=  .15]
00132> #-----------------|-------------------------------------------------------------|
00133> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00134> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00135> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00136> #-----------------|-------------------------------------------------------------|
00137> R0001:C00013-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00138>      ROUTE RESERVOIR ->    1.0 02:9D           2.02      .016 No_date    6:04
00139>  *                 out <=  1.0 04:ExPond       2.02      .000 No_date    0:00
00140>       {MxStoUsed=.5220E-02  m3}
00141> R0001:C00014-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00142>      ADD HYD               1.0 01:9C           1.19      .006 No_date    6:04
00143>                      +     1.0 04:ExPond       2.02      .000 No_date    0:00
00144>                    SUM=    1.0 09:9C9D         3.21      .006 No_date    6:04
00145> #-----------------|-------------------------------------------------------------|
00146> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00147> #-----------------|-------------------------------------------------------------|
00148> R0001:C00015-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00149>      CALIB NASHYD          1.0 07:9E           7.60      .032 No_date    6:30
00150>        [CN= 47.1: N= 3.00: Tp=  .48]
00151> R0001:C00016-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>      CALIB NASHYD          1.0 08:9F           3.35      .013 No_date    6:47
00153>        [CN= 50.4: N= 3.00: Tp=  .71]
00154> #-----------------|-------------------------------------------------------------|
00155> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00156> #-----------------|-------------------------------------------------------------|
00157> R0001:C00017-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00158>      ADD HYD               1.0 05:RD19         116.60    1.205 No_date    7:07
00159>                      +     1.0 10:9A9B         14.20     .069 No_date    7:08
00160>                      +     1.0 09:9C9D         3.21      .006 No_date    6:04
00161>                      +     1.0 07:9E           7.60      .032 No_date    6:30
00162>                      +     1.0 08:9F           3.35      .013 No_date    6:47
00163>                    SUM=    1.0 01:WC9LS        144.96    1.306 No_date    7:06
00164> R0001:C00018-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00165>      SAVE HYD              1.0 01:WC9LS        144.96    1.306 No_date    7:06
00166>        fname :WC9LS.0001
00167>        remark:Lakeshore Road Hydrograph
00168> #-----------------|-------------------------------------------------------------|
00169> #-----------------|-----------WATERCOURSE 8-------------------------------------|
00170> #-----------------|-------------------------------------------------------------|
00171> R0001:C00019-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00172>      CALIB NASHYD          1.0 07:8A           12.13     .077 No_date    6:36
00173>        [CN= 60.4: N= 3.00: Tp=  .56]
00174> #-----------------|-------------------------------------------------------------|
00175> #-----------------|-----------WATERCOURSE 10------------------------------------|
00176> #-----------------|-------------------------------------------------------------|
00177> R0001:C00020-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00178>      CALIB NASHYD          1.0 07:10A          2.08      .034 No_date    6:08
00179>        [CN= 67.3: N= 3.00: Tp=  .21]
00180> #*******************************************************************************
00181> #*******************************************************************************
00182> #                              5yr SCS Storm (12hr)
00183> #*******************************************************************************
00184> #*******************************************************************************
00185> R0001:C00021-------------------------------------------------------------------
00186>      MASS STORM
00187>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00188>       Comment  = 12 hour SCS II storm mass curve
00189>       [SDT= 1.00:SDUR=  12.00:PTOT=  55.20]
00190> #*******************************************************************************
00191> #-----------------|-------------------------------------------------------------|
00192> #-----------------|-------------------------------------------------------------|
00193> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00194> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00195> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
00196> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00197> #-----------------|-------------------------------------------------------------|
00198> R0001:C00022-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00199>      CALIB NASHYD          1.0 01:EXT-9A       101.80    2.126 No_date    7:02
00200>        [CN= 80.0: N= 3.00: Tp= 1.00]
00201> R0001:C00023-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00202>      ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    2.126 No_date    7:02
00203>        [RDT= 1.00] out<-   1.0 02:Channel      101.80    2.116 No_date    7:06
00204>          [L/S/n=  550./2.000/.035]
00205>          {Vmax= 1.504:Dmax=  .265}
00206> R0001:C00024-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00207>      CALIB STANDHYD        1.0 03:EXT-9B       14.80    1.558 No_date    6:02
00208>        [XIMP=.35:TIMP=.35]
00209>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00210>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00211>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00212> R0001:C00025-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00213>      ROUTE RESERVOIR ->    1.0 03:EXT-9B       14.80    1.558 No_date    6:02
00214>                    out <=  1.0 04:Orchards     14.80     .242 No_date    6:37
00215>       {MxStoUsed=.2913E+00  m3}
00216> #-----------------|-------------------------------------------------------------|
00217> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00218> #-----------------|-------------------------------------------------------------|
00219> R0001:C00026-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00220>      ADD HYD               1.0 02:Channel      101.80    2.116 No_date    7:06
00221>                      +     1.0 04:Orchards     14.80     .242 No_date    6:37
00222>                    SUM=    1.0 05:RD19         116.60    2.325 No_date    7:03
00223> #-----------------|-------------------------------------------------------------|
00224> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00225> #-----------------|-------------------------------------------------------------|
00226> R0001:C00027-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00227>      CALIB NASHYD          1.0 01:9A           2.57      .032 No_date    6:18
00228>        [CN= 48.4: N= 3.00: Tp=  .37]
00229> R0001:C00028-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00230>      CALIB NASHYD          1.0 02:9B           11.63     .134 No_date    7:11
00231>        [CN= 68.5: N= 3.00: Tp= 1.09]
00232> R0001:C00029-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00233>      ADD HYD               1.0 01:9A           2.57      .032 No_date    6:18
00234>                      +     1.0 02:9B           11.63     .134 No_date    7:11
00235>                    SUM=    1.0 10:9A9B         14.20     .145 No_date    7:04
00236> R0001:C00030-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00237>      CALIB NASHYD          1.0 01:9C           1.19      .015 No_date    6:04
00238>        [CN= 33.2: N= 3.00: Tp=  .14]
00239> R0001:C00031-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00240>      CALIB NASHYD          1.0 02:9D           2.02      .036 No_date    6:04
00241>        [CN= 41.9: N= 3.00: Tp=  .15]
00242> #-----------------|-------------------------------------------------------------|
00243> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00244> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00245> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00246> #-----------------|-------------------------------------------------------------|
00247> R0001:C00032-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00248>      ROUTE RESERVOIR ->    1.0 02:9D           2.02      .036 No_date    6:04
00249>  *                 out <=  1.0 04:ExPond       2.02      .000 No_date    0:00
00250>       {MxStoUsed=.1122E-01  m3}
00251> R0001:C00033-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00252>      ADD HYD               1.0 01:9C           1.19      .015 No_date    6:04
00253>                      +     1.0 04:ExPond       2.02      .000 No_date    0:00
00254>                    SUM=    1.0 09:9C9D         3.21      .015 No_date    6:04
00255> #-----------------|-------------------------------------------------------------|
00256> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00257> #-----------------|-------------------------------------------------------------|
00258> R0001:C00034-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00259>      CALIB NASHYD          1.0 07:9E           7.60      .073 No_date    6:28
00260>        [CN= 47.1: N= 3.00: Tp=  .48]
00261> R0001:C00035-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00262>      CALIB NASHYD          1.0 08:9F           3.35      .028 No_date    6:45
00263>        [CN= 50.4: N= 3.00: Tp=  .71]
00264> #-----------------|-------------------------------------------------------------|
00265> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00266> #-----------------|-------------------------------------------------------------|
00267> R0001:C00036-----------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00268>      ADD HYD               1.0 05:RD19         116.60    2.325 No_date    7:03
00269>                      +     1.0 10:9A9B         14.20     .145 No_date    7:04
00270>                      +     1.0 09:9C9D         3.21      .015 No_date    6:04
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00271>                    +     1.0 07:9E            7.60     .073 No_date    6:28
00272>                    +     1.0 08:9F            3.35     .028 No_date    6:45
00273>                SUM=      1.0 01:WC9LS       144.96    2.543 No_date    7:03
00274> R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00275>     SAVE HYD             1.0 01:WC9LS       144.96    2.543 No_date    7:03
00276>       fname :WC9LS.0001
00277>       remark:Lakeshore Road Hydrograph
00278> #-----------------|-------------------------------------------------------------|
00279> #-----------------|----------WATERCOURSE 8----------------------------------------|
00280> #-----------------|-------------------------------------------------------------|
00281> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00282>     CALIB NASHYD         1.0 07:8A          12.13     .169 No_date    6:34
00283>       [CN= 60.4: N= 3.00: Tp=  .56]
00284> #-----------------|-------------------------------------------------------------|
00285> #-----------------|----------WATERCOURSE 10---------------------------------------|
00286> #-----------------|-------------------------------------------------------------|
00287> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00288>     CALIB NASHYD         1.0 07:10A           2.08     .073 No_date    6:07
00289>       [CN= 67.3: N= 3.00: Tp=  .21]
00290> ##############################################################################
00291> ##############################################################################
00292> #                            10yr SCS Storm (12hr)
00293> ##############################################################################
00294> ##############################################################################
00295> R0001:C00040------------------------------------------------------------------
00296>      MASS STORM
00297>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00298>       Comment  = 12 hour SCS II storm mass curve
00299>       [SDT= 1.00:SDUR=  12.00:PTOT=  66.00]
00300> ##############################################################################
00301> #-----------------|-------------------------------------------------------------|
00302> #-----------------|-------------------------------------------------------------|
00303> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00304> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00305> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00306> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00307> #-----------------|-------------------------------------------------------------|
00308> R0001:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00309>     CALIB NASHYD         1.0 01:EXT-9A      101.80    2.893 No_date    7:01
00310>       [CN= 80.0: N= 3.00: Tp= 1.00]
00311> R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00312>     ROUTE CHANNEL   ->    1.0 01:EXT-9A      101.80    2.893 No_date    7:01
00313>      [RDT= 1.00] out<-    1.0 02:Channel     101.80    2.883 No_date    7:05
00314>       [L/S/n=  550./2.000/.035]
00315>       {Vmax= 1.710:Dmax=  .319}
00316> R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00317>     CALIB STANDHYD       1.0 03:EXT-9B      14.80    2.078 No_date    6:02
00318>       [XIMP=.35:TIMP=.35]
00319>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00320>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00321>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00322> R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00323>     ROUTE RESERVOIR ->    1.0 03:EXT-9B      14.80    2.078 No_date    6:02
00324>                  out <=   1.0 04:Orchards    14.80     .446 No_date    6:29
00325>      {MxStoUsed=.3514E+00  m3}
00326> #-----------------|-------------------------------------------------------------|
00327> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00328> #-----------------|-------------------------------------------------------------|
00329> R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00330>     ADD HYD              1.0 02:Channel     101.80    2.883 No_date    7:05
00331>                    +     1.0 04:Orchards     14.80     .446 No_date    6:29
00332>                SUM=      1.0 05:RD19        116.60    3.198 No_date    7:00
00333> #-----------------|-------------------------------------------------------------|
00334> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00335> #-----------------|-------------------------------------------------------------|
00336> R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00337>     CALIB NASHYD         1.0 01:9A            2.57     .047 No_date    6:18
00338>       [CN= 48.4: N= 3.00: Tp=  .37]
00339> R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00340>     CALIB NASHYD         1.0 02:9B          11.63     .192 No_date    7:10
00341>       [CN= 68.5: N= 3.00: Tp= 1.09]
00342> R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00343>     ADD HYD              1.0 01:9A            2.57     .047 No_date    6:18
00344>                    +     1.0 02:9B          11.63     .192 No_date    7:10
00345>                SUM=      1.0 10:9A9B        14.20     .210 No_date    7:03
00346> R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00347>     CALIB NASHYD         1.0 01:9C            1.19     .022 No_date    6:04
00348>       [CN= 33.2: N= 3.00: Tp=  .14]
00349> R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00350>     CALIB NASHYD         1.0 02:9D            2.02     .054 No_date    6:04
00351>       [CN= 41.9: N= 3.00: Tp=  .15]
00352> #-----------------|-------------------------------------------------------------|
00353> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00354> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00355> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00356> #-----------------|-------------------------------------------------------------|
00357> R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00358>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .054 No_date    6:04
00359>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00360>      {MxStoUsed=.1651E-01  m3}
00361> R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00362>     ADD HYD              1.0 01:9C            1.19     .022 No_date    6:04
00363>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00364>                SUM=      1.0 09:9C9D          3.21     .022 No_date    6:04
00365> #-----------------|-------------------------------------------------------------|
00366> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00367> #-----------------|-------------------------------------------------------------|
00368> R0001:C00053------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00369>     CALIB NASHYD         1.0 07:9E            7.60     .109 No_date    6:27
00370>       [CN= 47.1: N= 3.00: Tp=  .48]
00371> R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00372>     CALIB NASHYD         1.0 08:9F            3.35     .042 No_date    6:44
00373>       [CN= 50.4: N= 3.00: Tp=  .71]
00374> #-----------------|-------------------------------------------------------------|
00375> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00376> #-----------------|-------------------------------------------------------------|
00377> R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00378>     ADD HYD              1.0 05:RD19        116.60    3.198 No_date    7:00
00379>                    +     1.0 10:9A9B         14.20     .210 No_date    7:03
00380>                    +     1.0 09:9C9D          3.21     .022 No_date    6:04
00381>                    +     1.0 07:9E            7.60     .109 No_date    6:27
00382>                    +     1.0 08:9F            3.35     .042 No_date    6:44
00383>                SUM=      1.0 01:WC9LS       144.96    3.521 No_date    6:56
00384> R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00385>     SAVE HYD             1.0 01:WC9LS       144.96    3.521 No_date    6:56
00386>       fname :WC9LS.0001
00387>       remark:Lakeshore Road Hydrograph
00388> #-----------------|-------------------------------------------------------------|
00389> #-----------------|----------WATERCOURSE 8----------------------------------------|
00390> #-----------------|-------------------------------------------------------------|
00391> R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00392>     CALIB NASHYD         1.0 07:8A          12.13     .248 No_date    6:33
00393>       [CN= 60.4: N= 3.00: Tp=  .56]
00394> #-----------------|-------------------------------------------------------------|
00395> #-----------------|----------WATERCOURSE 10---------------------------------------|
00396> #-----------------|-------------------------------------------------------------|
00397> R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00398>     CALIB NASHYD         1.0 07:10A           2.08     .105 No_date    6:07
00399>       [CN= 67.3: N= 3.00: Tp=  .21]
00400> ##############################################################################
00401> ##############################################################################
00402> #                            25yr SCS Storm (12hr)
00403> ##############################################################################
00404> ##############################################################################
00405> R0001:C00059------------------------------------------------------------------
00406>      MASS STORM
00407>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00408>       Comment  = 12 hour SCS II storm mass curve
00409>       [SDT= 1.00:SDUR=  12.00:PTOT=  79.20]
00410> ##############################################################################
00411> #-----------------|-------------------------------------------------------------|
00412> #-----------------|-------------------------------------------------------------|
00413> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00414> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00415> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00416> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00417> #-----------------|-------------------------------------------------------------|
00418> R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00419>     CALIB NASHYD         1.0 01:EXT-9A      101.80    3.899 No_date    7:00
00420>       [CN= 80.0: N= 3.00: Tp= 1.00]
00421> R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00422>     ROUTE CHANNEL   ->    1.0 01:EXT-9A      101.80    3.899 No_date    7:00
00423>      [RDT= 1.00] out<-    1.0 02:Channel     101.80    3.889 No_date    7:03
00424>       [L/S/n=  550./2.000/.035]
00425>       {Vmax= 1.856:Dmax=  .372}
00426> R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>     CALIB STANDHYD       1.0 03:EXT-9B      14.80    2.847 No_date    6:01
00428>       [XIMP=.35:TIMP=.35]
00429>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00430>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00431>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00432> R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00433>     ROUTE RESERVOIR ->    1.0 03:EXT-9B      14.80    2.847 No_date    6:01
00434>                  out <=   1.0 04:Orchards    14.80     .760 No_date    6:23
00435>      {MxStoUsed=.4324E+00  m3}
00436> #-----------------|-------------------------------------------------------------|
00437> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00438> #-----------------|-------------------------------------------------------------|
00439> R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00440>     ADD HYD              1.0 02:Channel     101.80    3.889 No_date    7:03
00441>                    +     1.0 04:Orchards     14.80     .760 No_date    6:23
00442>                SUM=      1.0 05:RD19        116.60    4.376 No_date    6:57
00443> #-----------------|-------------------------------------------------------------|
00444> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00445> #-----------------|-------------------------------------------------------------|
00446> R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00447>     CALIB NASHYD         1.0 01:9A            2.57     .069 No_date    6:18
00448>       [CN= 48.4: N= 3.00: Tp=  .37]
00449> R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00450>     CALIB NASHYD         1.0 02:9B          11.63     .273 No_date    7:09
00451>       [CN= 68.5: N= 3.00: Tp= 1.09]
00452> R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00453>     ADD HYD              1.0 01:9A            2.57     .069 No_date    6:18
00454>                    +     1.0 02:9B          11.63     .273 No_date    7:09
00455>                SUM=      1.0 10:9A9B        14.20     .299 No_date    7:01
00456> R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00457>     CALIB NASHYD         1.0 01:9C            1.19     .033 No_date    6:03
00458>       [CN= 33.2: N= 3.00: Tp=  .14]
00459> R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00460>     CALIB NASHYD         1.0 02:9D            2.02     .079 No_date    6:04
00461>       [CN= 41.9: N= 3.00: Tp=  .15]
00462> #-----------------|-------------------------------------------------------------|
00463> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00464> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00465> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00466> #-----------------|-------------------------------------------------------------|
00467> R0001:C00070------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00468>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .079 No_date    6:04
00469>  *                  out <=   1.0 04:ExPond      2.02     .000 No_date    0:00
00470>      {MxStoUsed=.2412E-01  m3}
00471> R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00472>     ADD HYD              1.0 01:9C            1.19     .033 No_date    6:03
00473>                    +     1.0 04:ExPond        2.02     .000 No_date    0:00
00474>                SUM=      1.0 09:9C9D          3.21     .033 No_date    6:03
00475> #-----------------|-------------------------------------------------------------|
00476> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands-----------------|
00477> #-----------------|-------------------------------------------------------------|
00478> R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00479>     CALIB NASHYD         1.0 07:9E            7.60     .161 No_date    6:26
00480>       [CN= 47.1: N= 3.00: Tp=  .48]
00481> R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00482>     CALIB NASHYD         1.0 08:9F            3.35     .061 No_date    6:43
00483>       [CN= 50.4: N= 3.00: Tp=  .71]
00484> #-----------------|-------------------------------------------------------------|
00485> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD------------|
00486> #-----------------|-------------------------------------------------------------|
00487> R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00488>     ADD HYD              1.0 05:RD19        116.60    4.376 No_date    6:57
00489>                    +     1.0 10:9A9B         14.20     .299 No_date    7:01
00490>                    +     1.0 09:9C9D          3.21     .033 No_date    6:03
00491>                    +     1.0 07:9E            7.60     .161 No_date    6:26
00492>                    +     1.0 08:9F            3.35     .061 No_date    6:43
00493>                SUM=      1.0 01:WC9LS       144.96    4.845 No_date    6:57
00494> R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00495>     SAVE HYD             1.0 01:WC9LS       144.96    4.845 No_date    6:57
00496>       fname :WC9LS.0001
00497>       remark:Lakeshore Road Hydrograph
00498> #-----------------|-------------------------------------------------------------|
00499> #-----------------|----------WATERCOURSE 8----------------------------------------|
00500> #-----------------|-------------------------------------------------------------|
00501> R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00502>     CALIB NASHYD         1.0 07:8A          12.13     .359 No_date    6:32
00503>       [CN= 60.4: N= 3.00: Tp=  .56]
00504> #-----------------|-------------------------------------------------------------|
00505> #-----------------|----------WATERCOURSE 10---------------------------------------|
00506> #-----------------|-------------------------------------------------------------|
00507> R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00508>     CALIB NASHYD         1.0 07:10A           2.08     .150 No_date    6:07
00509>       [CN= 67.3: N= 3.00: Tp=  .21]
00510> ##############################################################################
00511> ##############################################################################
00512> #                            50yr SCS Storm (12hr)
00513> ##############################################################################
00514> ##############################################################################
00515> R0001:C00078------------------------------------------------------------------
00516>      MASS STORM
00517>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00518>       Comment  = 12 hour SCS II storm mass curve
00519>       [SDT= 1.00:SDUR=  12.00:PTOT=  88.80]
00520> ##############################################################################
00521> #-----------------|-------------------------------------------------------------|
00522> #-----------------|-------------------------------------------------------------|
00523> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00524> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00525> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00526> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00527> #-----------------|-------------------------------------------------------------|
00528> R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00529>     CALIB NASHYD         1.0 01:EXT-9A      101.80    4.667 No_date    6:59
00530>       [CN= 80.0: N= 3.00: Tp= 1.00]
00531> R0001:C00080------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00532>     ROUTE CHANNEL   ->    1.0 01:EXT-9A      101.80    4.667 No_date    6:59
00533>      [RDT= 1.00] out<-    1.0 02:Channel     101.80    4.660 No_date    7:02
00534>       [L/S/n=  550./2.000/.035]
00535>       {Vmax= 1.985:Dmax=  .413}
00536> R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00537>     CALIB STANDHYD       1.0 03:EXT-9B      14.80    3.300 No_date    6:01
00538>       [XIMP=.35:TIMP=.35]
00539>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00540>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
```

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00541>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00542> R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00543>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     3.300 No_date    6:01
00544>                   out <=    1.0 04:Orchards      14.80     .969 No_date    6:21
00545>      {MxStoUsed=.4829E+00  m3}
00546> #-----------------|-------------------------------------------------------------|
00547> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00548> #-----------------|-------------------------------------------------------------|
00549> R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00550>     ADD HYD               1.0 02:Channel     101.80    4.660 No_date    7:02
00551>                     +     1.0 04:Orchards      14.80     .969 No_date    6:21
00552>                   SUM=    1.0 05:RD19        116.60    5.259 No_date    6:56
00553> #-----------------|-------------------------------------------------------------|
00554> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00555> #-----------------|-------------------------------------------------------------|
00556> R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00557>     CALIB NASHYD          1.0 01:9A            2.57     .087 No_date    6:17
00558>       [CN= 48.4: N= 3.00: Tp=  .37]
00559> R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00560>     CALIB NASHYD          1.0 02:9B           11.63     .337 No_date    7:08
00561>       [CN= 68.5: N= 3.00: Tp= 1.09]
00562> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00563>     ADD HYD               1.0 01:9A            2.57     .087 No_date    6:17
00564>                     +     1.0 02:9B           11.63     .337 No_date    7:08
00565>                   SUM=    1.0 10:9A9B         14.20     .369 No_date    7:00
00566> R0001:C00087------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00567>     CALIB NASHYD          1.0 01:9C            1.19     .043 No_date    6:03
00568>       [CN= 33.2: N= 3.00: Tp=  .14]
00569> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00570>     CALIB NASHYD          1.0 02:9D            2.02     .100 No_date    6:04
00571>       [CN= 41.9: N= 3.00: Tp=  .15]
00572> #-----------------|-------------------------------------------------------------|
00573> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00574> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00575> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00576> #-----------------|-------------------------------------------------------------|
00577> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00578>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .100 No_date    6:04
00579>  *                out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00580>      {MxStoUsed=.3038E-01  m3}
00581> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00582>     ADD HYD               1.0 01:9C            1.19     .043 No_date    6:03
00583>                     +     1.0 04:ExPond        2.02     .000 No_date    0:00
00584>                   SUM=    1.0 09:9C9D          3.21     .043 No_date    6:03
00585> #-----------------|-------------------------------------------------------------|
00586> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00587> #-----------------|-------------------------------------------------------------|
00588> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00589>     CALIB NASHYD          1.0 07:9E            7.60     .204 No_date    6:26
00590>       [CN= 47.1: N= 3.00: Tp=  .48]
00591> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00592>     CALIB NASHYD          1.0 08:9F            3.35     .077 No_date    6:43
00593>       [CN= 50.4: N= 3.00: Tp=  .71]
00594> #-----------------|-------------------------------------------------------------|
00595> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00596> #-----------------|-------------------------------------------------------------|
00597> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00598>     ADD HYD               1.0 05:RD19        116.60    5.259 No_date    6:56
00599>                     +     1.0 10:9A9B         14.20     .369 No_date    7:00
00600>                     +     1.0 09:9C9D          3.21     .043 No_date    6:03
00601>                     +     1.0 07:9E            7.60     .204 No_date    6:26
00602>                     +     1.0 08:9F            3.35     .077 No_date    6:43
00603>                   SUM=    1.0 01:WC9LS       144.96    5.847 No_date    6:56
00604> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00605>     SAVE HYD              1.0 01:WC9LS       144.96    5.847 No_date    6:56
00606>       fname :WC9LS.0001
00607>       remark:Lakeshore Road Hydrograph
00608> #-----------------|-------------------------------------------------------------|
00609> #-----------------|-----------WATERCOURSE 8---------------------------------|
00610> #-----------------|-------------------------------------------------------------|
00611> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00612>     CALIB NASHYD          1.0 07:8A           12.13     .448 No_date    6:32
00613>       [CN= 60.4: N= 3.00: Tp=  .56]
00614> #-----------------|-------------------------------------------------------------|
00615> #-----------------|-----------WATERCOURSE 10--------------------------------|
00616> #-----------------|-------------------------------------------------------------|
00617> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00618>     CALIB NASHYD          1.0 07:10A           2.08     .186 No_date    6:07
00619>       [CN= 67.3: N= 3.00: Tp=  .21]
00620> ****************************************************************************
00621> ****************************************************************************
00622> #                            100yr SCS Storm (12hr)
00623> ****************************************************************************
00624> ****************************************************************************
00625> R0001:C00097-----------------------------------------------------------------
00626>      MASS STORM
00627>       Filename = J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Ac
00628>       Comment  = 12 hour SCS II storm mass curve
00629>       [SDT= 1.00:SDUR=  12.00:PTOT=  98.40]
00630> ****************************************************************************
00631> #-----------------|-------------------------------------------------------------|
00632> #-----------------|-------------------------------------------------------------|
00633> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
00634> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00635> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00636> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00637> #-----------------|-------------------------------------------------------------|
00638> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00639>     CALIB NASHYD          1.0 01:EXT-9A       101.80    5.459 No_date    6:59
00640>       [CN= 80.0: N= 3.00: Tp= 1.00]
00641> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00642>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    5.459 No_date    6:59
00643>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    5.446 No_date    7:02
00644>       [L/S/n=  550./2.000/.035]
00645>       {Vmax= 2.076:Dmax=  .448}
00646> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00647>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    3.868 No_date    6:01
00648>       [XIMP=.35:TIMP=.35]
00649>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00650>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00651>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00652> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00653>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.868 No_date    6:01
00654>                   out <=    1.0 04:Orchards      14.80    1.227 No_date    6:19
00655>      {MxStoUsed=.5393E+00  m3}
00656> #-----------------|-------------------------------------------------------------|
00657> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00658> #-----------------|-------------------------------------------------------------|
00659> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00660>     ADD HYD               1.0 02:Channel      101.80    5.446 No_date    7:02
00661>                     +     1.0 04:Orchards      14.80    1.227 No_date    6:19
00662>                   SUM=    1.0 05:RD19         116.60    6.162 No_date    6:56
00663> #-----------------|-------------------------------------------------------------|
00664> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00665> #-----------------|-------------------------------------------------------------|
00666> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00667>     CALIB NASHYD          1.0 01:9A            2.57     .107 No_date    6:17
00668>       [CN= 48.4: N= 3.00: Tp=  .37]
00669> R0001:C00104------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00670>     CALIB NASHYD          1.0 02:9B           11.63     .404 No_date    7:08
00671>       [CN= 68.5: N= 3.00: Tp= 1.09]
00672> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00673>     ADD HYD               1.0 01:9A            2.57     .107 No_date    6:17
00674>                     +     1.0 02:9B           11.63     .404 No_date    7:08
00675>                   SUM=    1.0 10:9A9B         14.20     .444 No_date    6:59
00676> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00677>     CALIB NASHYD          1.0 01:9C            1.19     .053 No_date    6:03
00678>       [CN= 33.2: N= 3.00: Tp=  .14]
00679> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00680>     CALIB NASHYD          1.0 02:9D            2.02     .123 No_date    6:04
00681>       [CN= 41.9: N= 3.00: Tp=  .15]
00682> #-----------------|-------------------------------------------------------------|
00683> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SITE UPPER LANDS---|
00684> #-----------------|-REFER TO STAGE-STORAGE-DISCHARGE SHEET PROVIDED IN--------|
00685> #-----------------|-PARKBRIDGE CRAIGLEITH FSSWM REPORT FOR EXISTING POND------|
00686> #-----------------|-------------------------------------------------------------|
00687> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00688>     ROUTE RESERVOIR ->    1.0 02:9D            2.02     .123 No_date    6:04
00689>  *                out <=    1.0 04:ExPond        2.02     .000 No_date    0:00
00690>      {MxStoUsed=.3722E-01  m3}
00691> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00692>     ADD HYD               1.0 01:9C            1.19     .053 No_date    6:03
00693>                     +     1.0 04:ExPond        2.02     .000 No_date    0:00
00694>                   SUM=    1.0 09:9C9D          3.21     .053 No_date    6:03
00695> #-----------------|-------------------------------------------------------------|
00696> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00697> #-----------------|-------------------------------------------------------------|
00698> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB NASHYD          1.0 07:9E            7.60     .251 No_date    6:26
00700>       [CN= 47.1: N= 3.00: Tp=  .48]
00701> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00702>     CALIB NASHYD          1.0 08:9F            3.35     .094 No_date    6:43
00703>       [CN= 50.4: N= 3.00: Tp=  .71]
00704> #-----------------|-------------------------------------------------------------|
00705> #-----------------|-WATERCOURSE 9 TOTAL FLOW AT OLD LAKESHORE ROAD-------------|
00706> #-----------------|-------------------------------------------------------------|
00707> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00708>     ADD HYD               1.0 05:RD19        116.60    6.162 No_date    6:56
00709>                     +     1.0 10:9A9B         14.20     .444 No_date    6:59
00710>                     +     1.0 09:9C9D          3.21     .053 No_date    6:03
00711>                     +     1.0 07:9E            7.60     .251 No_date    6:26
00712>                     +     1.0 08:9F            3.35     .094 No_date    6:43
00713>                   SUM=    1.0 01:WC9LS       144.96    6.874 No_date    6:55
00714> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00715>     SAVE HYD              1.0 01:WC9LS       144.96    6.874 No_date    6:55
00716>       fname :WC9LS.0001
00717>       remark:Lakeshore Road Hydrograph
00718> #-----------------|-------------------------------------------------------------|
00719> #-----------------|-----------WATERCOURSE 8---------------------------------|
00720> #-----------------|-------------------------------------------------------------|
00721> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00722>     CALIB NASHYD          1.0 07:8A           12.13     .543 No_date    6:31
00723>       [CN= 60.4: N= 3.00: Tp=  .56]
00724> #-----------------|-------------------------------------------------------------|
00725> #-----------------|-----------WATERCOURSE 10--------------------------------|
00726> #-----------------|-------------------------------------------------------------|
00727> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00728>     CALIB NASHYD          1.0 07:10A           2.08     .224 No_date    6:07
00729>       [CN= 67.3: N= 3.00: Tp=  .21]
00730> R0001:C00116-----------------------------------------------------------------
00731>     FINISH
00732> ----------------------------------------------------------------------------
00733> ****************************************************************************
00734>      WARNINGS / ERRORS / NOTES
00735>      -------------------------
00736> R0001:C00013  ROUTE RESERVOIR
00737> *** WARNING: Outflow volume is less than inflow volume.
00738> R0001:C00032  ROUTE RESERVOIR
00739> *** WARNING: Outflow volume is less than inflow volume.
00740> R0001:C00051  ROUTE RESERVOIR
00741> *** WARNING: Outflow volume is less than inflow volume.
00742> R0001:C00070  ROUTE RESERVOIR
00743> *** WARNING: Outflow volume is less than inflow volume.
00744> R0001:C00089  ROUTE RESERVOIR
00745> *** WARNING: Outflow volume is less than inflow volume.
00746> R0001:C00108  ROUTE RESERVOIR
00747> *** WARNING: Outflow volume is less than inflow volume.
00748>    Simulation ended on 2021-04-29     at 14:33:20
00749> ============================================================================
00750>
00751>
```

```
00001> 2     Metric units
00002> *#************************************************************************
00003> *#  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00004> *#  Date        : 2021.04.29
00005> *#  Modeller    : [JE]
00006> *#  Company     : C.F. Crozier & Associates Inc.
00007> *#  License #   : 3737016
00008> *#************************************************************************
00009> START              TZERO=[0.0],  METOUT=[2],  NSTORM=[0],  NRUN=[0]
00010> *%                   [ ] <--storm filename, one per line for NSTORM time
00011> *#************************************************************************
00012> *%-----------------|------------------------------------------------------|
00013> *#-----------------|------------------------------------------------------|
00014> *#-----------------|-POST-DEVELOPMENT----12 hr SCS STORMS-----------------|
00015> *#-----------------|------------------------------------------------------|
00016>
00017> *#************************************************************************
00018> *#                              2yr SCS Storm (12hr)
00019> *#************************************************************************
00020> *#************************************************************************
00021> MASS STORM          PTOTAL=[39.6](mm), CSDT=[1](min),
00022>                     CURVE_FILENAME=["SCS12HII.mst"]
00023> *#************************************************************************
00024> *#-----------------|------------------------------------------------------|
00025> *#-----------------|-Subwatershed 9 External Drainage Area----------------|
00026> *#-----------------|-Per 'The Orchards' FSSWM Report----------------------|
00027> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------|
00028> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00029> *#-----------------|------------------------------------------------------|
00030> *%-----------------|------------------------------------------------------|
00031> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00032>                     DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00033>                     N=[3], TP=[1.00]hrs,
00034>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00035> *%-----------------|------------------------------------------------------|
00036> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00037>                     RDT=[1](min),
00038>                     CHLGTH=[550](m),   CHSLOPE=[2](%),
00039>                                        FPSLOPE=[2](%),
00040>                     SECNUM=[1],       NSEG=[3]
00041>                     ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00042>                     ( DISTANCE (m), ELEVATION (m))=[0,102]
00043>                                                   [8,100]
00044>                                                   [12,100]
00045>                                                   [20,102]
00046> *%-----------------|------------------------------------------------------|
00047> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00048>                     XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00049>                     Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00050>                             DCAY=[2](/hr), F=[0](mm),
00051>                     Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00052>                                          LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00053>                     Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00054>                                          LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00055>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00056> *%-----------------|------------------------------------------------------|
00057> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00058>                     RDT=[1](min),
00059>                           TABLE of ( OUTFLOW-STORAGE ) values
00060>                                      (cms) - (ha-m)
00061>                                    [   0.0 ,  0.0 ]
00062>                                    [   0.0100 ,  0.0610 ]
00063>                                    [   0.0400 ,  0.1310 ]
00064>                                    [   0.0700 ,  0.2110 ]
00065>                                    [   0.2600 ,  0.3000 ]
00066>                                    [   0.6000 ,  0.3940 ]
00067>                                    [   1.0200 ,  0.4950 ]
00068>                                    [   1.5200 ,  0.6020 ]
00069>                                    [   2.0800 ,  0.7160 ]
00070>                                    [   2.6900 ,  0.8370 ]
00071>                           IDovf=[ ], NHYDovf=[  ]
00072> *%-----------------|------------------------------------------------------|
00073> *#-----------------|------------------------------------------------------|
00074> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00075> *#-----------------|------------------------------------------------------|
00076> *%-----------------|------------------------------------------------------|
00077> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00078> *%-----------------|------------------------------------------------------|
00079> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00080>                     DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00081>                     N=[3], TP=[0.24]hrs,
00082>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00083> *%-----------------|------------------------------------------------------|
00084> *#-----------------|------------------------------------------------------|
00085> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------|
00086> *#-----------------|------------------------------------------------------|
00087> *%-----------------|------------------------------------------------------|
00088> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
00089>                     DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
00090>                     N=[3], TP=[0.30]hrs,
00091>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00092> *%-----------------|------------------------------------------------------|
00093> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
00094> *%-----------------|------------------------------------------------------|
00095> *#-----------------|------------------------------------------------------|
00096> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------|
00097> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------|
00098> *#-----------------|------------------------------------------------------|
00099> *%-----------------|------------------------------------------------------|
00100> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00101>                     DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00102>                     N=[3], TP=[0.47]hrs,
00103>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00104> *%-----------------|------------------------------------------------------|
00105> CALIB STANDHYD     ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00106>                     XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00107>                     SCS curve number CN=[67.0],
00108>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00109>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00110>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00111>                                          LGI=[44](m), MNI=[0.013], SCI=[0](min),
00112>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00113> *%-----------------|------------------------------------------------------|
00114> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00115>                     DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00116>                     N=[3], TP=[0.11]hrs,
00117>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00118> *%-----------------|------------------------------------------------------|
00119> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00120> *%-----------------|------------------------------------------------------|
00121> *#-----------------|------------------------------------------------------|
00122> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00123> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00124> *#-----------------|------------------------------------------------------|
00125> *%-----------------|------------------------------------------------------|
00126> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00127>                     RDT=[1](min),
00128>                           TABLE of ( OUTFLOW-STORAGE ) values
00129>                                      (cms) - (ha-m)
00130>                                    [   0.0 ,  0.0 ]
00131>                                    [   0.007 ,  0.027 ]
00132>                                    [   0.018 ,  0.084 ]
00133>                                    [   0.025 ,  0.147 ]
00134>                                    [   0.029 ,  0.199 ]
00135>                                    [   0.032 ,  0.256 ]
00136>                                    [   0.036 ,  0.337 ]
00137>                                    [   0.078 ,  0.426 ]
00138>                                    [   0.151 ,  0.522 ]
00139>                                    [   0.293 ,  0.581 ]
00140>                                    [   0.306 ,  0.656 ]
00141>                                    [   0.330 ,  0.737 ]
00142>                                    [   1.442 ,  0.902 ]
00143>                                    [   2.636 ,  0.976 ]
00144>                                    [   -1  ,  -1  ]  (max twenty pts)
00145>                           IDovf=[   ], NHYDovf=[   ]
00146> *%-----------------|------------------------------------------------------|
00147> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00148> *%-----------------|------------------------------------------------------|
00149> *#-----------------|------------------------------------------------------|
00150> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------|
00151> *#-----------------|------------------------------------------------------|
00152> *%-----------------|------------------------------------------------------|
00153> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00154> *#-----------------|------------------------------------------------------|
00155> CALIB STANDHYD     ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
00156>                     XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
00157>                     SCS curve number CN=[66.2],
00158>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00159>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00160>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00161>                                          LGI=[96](m), MNI=[0.013], SCI=[0](min),
00162>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00163> *%-----------------|------------------------------------------------------|
00164> *#-----------------|------------------------------------------------------|
00165> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00166> *#-----------------|------------------------------------------------------|
00167> *%-----------------|------------------------------------------------------|
00168> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
00169>                     DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
00170>                     N=[3], TP=[0.28]hrs,
00171>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00172> *%-----------------|------------------------------------------------------|
00173> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
00174>                     DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
00175>                     N=[3], TP=[0.62]hrs,
00176>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00177> *%-----------------|------------------------------------------------------|
00178> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
00179>                     DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
00180>                     N=[3], TP=[0.33]hrs,
00181>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00182> *%-----------------|------------------------------------------------------|
00183> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
00184> *%-----------------|------------------------------------------------------|
00185> *#-----------------|------------------------------------------------------|
00186> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00187> *#-----------------|------------------------------------------------------|
00188> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00189>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00190>                     N=[3], TP=[0.14]hrs,
00191>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00192> *%-----------------|------------------------------------------------------|
00193> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00194>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00195>                     N=[3], TP=[0.32]hrs,
00196>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00197> *%-----------------|------------------------------------------------------|
00198> CALIB STANDHYD     ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00199>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00200>                     SCS curve number CN=[49],
00201>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00202>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00203>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00204>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
00205>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00206> *%-----------------|------------------------------------------------------|
00207> CALIB STANDHYD     ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00208>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00209>                     SCS curve number CN=[59],
00210>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00211>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00212>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00213>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
00214>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00215> *%-----------------|------------------------------------------------------|
00216> CALIB STANDHYD     ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
00217>                     XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
00218>                     SCS curve number CN=[69],
00219>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00220>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
00221>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00222>                                          LGI=[118](m), MNI=[0.013], SCI=[0](min)
00223>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00224> *%-----------------|------------------------------------------------------|
00225> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
00226> *%-----------------|------------------------------------------------------|
00227> *#-----------------|------------------------------------------------------|
00228> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00229> *#-----------------|------------------------------------------------------|
00230> *%-----------------|------------------------------------------------------|
00231> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00232>                     RDT=[1](min),
00233>                           TABLE of ( OUTFLOW-STORAGE ) values
00234>                                      (cms) - (ha-m)
00235>                                    [   0.0 ,  0.0 ]
00236>                                    [   0.006 ,  0.019 ]
00237>                                    [   0.016 ,  0.060 ]
00238>                                    [   0.019 ,  0.080 ]
00239>                                    [   0.021 ,  0.103 ]
00240>                                    [   0.025 ,  0.141 ]
00241>                                    [   0.028 ,  0.181 ]
00242>                                    [   0.069 ,  0.240 ]
00243>                                    [   0.142 ,  0.303 ]
00244>                                    [   0.298 ,  0.371 ]
00245>                                    [   0.322 ,  0.403 ]
00246>                                    [   0.560 ,  0.440 ]
00247>                                    [   1.128 ,  0.479 ]
00248>                                    [   1.226 ,  0.511 ]
00249>                                    [   -1  ,  -1  ]  (max twenty pts)
00250>                           IDovf=[   ], NHYDovf=[   ]
00251> *%-----------------|------------------------------------------------------|
00252> *#-----------------|------------------------------------------------------|
00253> *#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------|
00254> *#-----------------|------------------------------------------------------|
00255> *%-----------------|------------------------------------------------------|
00256> ADD HYD            IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00257> *%-----------------|------------------------------------------------------|
00258> SAVE HYD           ID=[1],   # OF PCYCLES=[50],  ICASESh=[1]
00259>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
00260> *%-----------------|------------------------------------------------------|
00261> *#-----------------|------------------------------------------------------|
00262> *#-----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
00263> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
00264> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00265> *#-----------------|------------------------------------------------------|
00266> *%-----------------|------------------------------------------------------|
00267> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00268>                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00269>                     N=[3], TP=[0.23]hrs,
00270>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
```

```
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-----------WATERCOURSE 8-------------------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 10 CATCHMENT-----------------------------------|
*#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-----------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|



*#*******************************************************************************
*#*******************************************************************************
*#                            5yr SCS Storm (12hr)
*#*******************************************************************************
*#*******************************************************************************
MASS STORM          PTOTAL=[55.2](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#*******************************************************************************
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Subwatershed 9 External Drainage Area-----------------------|
*#-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
*#-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                   [8,100]
                                                   [12,100]
                                                   [20,102]
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                    (cms) - (ha-m)
                                  [   0.0 ,  0.0 ]
                                  [   0.0100 ,  0.0610 ]
                                  [   0.0400 ,  0.1310 ]
                                  [   0.0700 ,  0.2110 ]
                                  [   0.2600 ,  0.3000 ]
                                  [   0.6000 ,  0.3940 ]
                                  [   1.0200 ,  0.4950 ]
                                  [   1.5200 ,  0.6020 ]
                                  [   2.0800 ,  0.7160 ]
                                  [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                    N=[3], TP=[0.30]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                      (cms) - (ha-m)
                                     [   0.0 ,  0.0 ]
                                   [   0.007 ,  0.027 ]
                                   [   0.018 ,  0.084 ]
                                   [   0.025 ,  0.147 ]
                                   [   0.029 ,  0.199 ]
                                   [   0.032 ,  0.256 ]
                                   [   0.036 ,  0.337 ]
                                   [   0.078 ,  0.426 ]
                                   [   0.151 ,  0.522 ]
                                   [   0.293 ,  0.581 ]
                                   [   0.306 ,  0.656 ]
                                   [   0.330 ,  0.737 ]
                                   [   1.442 ,  0.902 ]
                                   [   2.636 ,  0.976 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
*#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.2],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                    N=[3], TP=[0.62]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                    N=[3], TP=[0.33]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
*#-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%-----------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#-----------------|-------------------------------------------------------------|
*%-----------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                      (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [   0.006 ,  0.019 ]
                                   [   0.016 ,  0.060 ]
                                   [   0.019 ,  0.080 ]
                                   [   0.021 ,  0.103 ]
                                   [   0.025 ,  0.141 ]
                                   [   0.028 ,  0.181 ]
                                   [   0.069 ,  0.240 ]
                                   [   0.142 ,  0.303 ]
                                   [   0.298 ,  0.371 ]
                                   [   0.322 ,  0.403 ]
                                   [   0.560 ,  0.440 ]
                                   [   1.128 ,  0.479 ]
                                   [   1.226 ,  0.511 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%-----------------|-------------------------------------------------------------|
*#-----------------|-------------------------------------------------------------|
*#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#-----------------|-------------------------------------------------------------|
```

```
00541> *%-----------------|-------------------------------------------------------------|
00542> ADD HYD            IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
00543> *%-----------------|-------------------------------------------------------------|
00544> SAVE HYD           ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
00545>                    HYD_COMMENT=["POST-DEV LAKESHORE"]
00546> *%-----------------|-------------------------------------------------------------|
00547> *#-----------------|-------------------------------------------------------------|
00548> *#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
00549> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
00550> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
00551> *#-----------------|-------------------------------------------------------------|
00552> *%-----------------|-------------------------------------------------------------|
00553> CALIB NASHYD       ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
00554>                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
00555>                    N=[3], TP=[0.23]hrs,
00556>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00557> *%-----------------|-------------------------------------------------------------|
00558> CALIB NASHYD       ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
00559>                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
00560>                    N=[3], TP=[0.41]hrs,
00561>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00562> *%-----------------|-------------------------------------------------------------|
00563> CALIB NASHYD       ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
00564>                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
00565>                    N=[3], TP=[0.41]hrs,
00566>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00567> *%-----------------|-------------------------------------------------------------|
00568> *#-----------------|-------------------------------------------------------------|
00569> *#-----------------|----------WATERCOURSE 8----------------------------------------|
00570> *#-----------------|-------------------------------------------------------------|
00571> *%-----------------|-------------------------------------------------------------|
00572> ADD HYD            IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
00573> *%-----------------|-------------------------------------------------------------|
00574> *%-----------------|-------------------------------------------------------------|
00575> *#-----------------|-------------------------------------------------------------|
00576> *#-----------------|--WATERCOURSE 10 CATCHMENT-------------------------------------|
00577> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-------------------|
00578> *#-----------------|-------------------------------------------------------------|
00579> *%-----------------|-------------------------------------------------------------|
00580> CALIB NASHYD       ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
00581>                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
00582>                    N=[3], TP=[0.21]hrs,
00583>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00584> *%-----------------|-------------------------------------------------------------|
00585>
00586>
00587>
00588>
00589> *#*****************************************************************************
00590> *#*****************************************************************************
00591> *#                              10yr SCS Storm (12hr)
00592> *#*****************************************************************************
00593> *#*****************************************************************************
00594> MASS STORM          PTOTAL=[66](mm), CSDT=[1](min),
00595>                    CURVE_FILENAME=["SCS12HII.mst"]
00596> *#*****************************************************************************
00597> *#-----------------|-------------------------------------------------------------|
00598> *#-----------------|-Subwatershed 9 External Drainage Area-------------------------|
00599> *#-----------------|-Per 'The Orchards' FSSWM Report-------------------------------|
00600> *#-----------------|-Prepared by Higgins Engineering (Jan. 2005)--------------------|
00601> *#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00602> *#-----------------|-------------------------------------------------------------|
00603> *%-----------------|-------------------------------------------------------------|
00604> CALIB NASHYD       ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
00605>                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
00606>                    N=[3], TP=[1.00]hrs,
00607>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00608> *%-----------------|-------------------------------------------------------------|
00609> ROUTE CHANNEL      IDout=[2], NHYD=["Channel"], IDin=[1],
00610>                    RDT=[1](min),
00611>                    CHLGTH[550](m),  CHSLOPE=[2](%),
00612>                                       FPSLOPE=[2](%),
00613>                    SECNUM=[1],       NSEG=[3]
00614>                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
00615>                    ( DISTANCE (m), ELEVATION (m))=[0,102]
00616>                                                  [8,100]
00617>                                                  [12,100]
00618>                                                  [20,102]
00619> *%-----------------|-------------------------------------------------------------|
00620> CALIB STANDHYD     ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
00621>                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
00622>                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
00623>                              DCAY=[2](/hr), F=[0](mm),
00624>                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
00625>                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
00626>                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
00627>                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
00628>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00629> *%-----------------|-------------------------------------------------------------|
00630> ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
00631>                    RDT=[1](min),
00632>                          TABLE of ( OUTFLOW-STORAGE ) values
00633>                                        (cms) - (ha-m)
00634>                                   [   0.0 ,  0.0 ]
00635>                                   [   0.0100 ,  0.0610 ]
00636>                                   [   0.0400 ,  0.1310 ]
00637>                                   [   0.0700 ,  0.2110 ]
00638>                                   [   0.2600 ,  0.3000 ]
00639>                                   [   0.6000 ,  0.3940 ]
00640>                                   [   1.0200 ,  0.4950 ]
00641>                                   [   1.5200 ,  0.6020 ]
00642>                                   [   2.0800 ,  0.7160 ]
00643>                                   [   2.6900 ,  0.8370 ]
00644>                          IDovf=[ ], NHYDovf=[  ]
00645> *%-----------------|-------------------------------------------------------------|
00646> *#-----------------|-------------------------------------------------------------|
00647> *#-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
00648> *#-----------------|-------------------------------------------------------------|
00649> *%-----------------|-------------------------------------------------------------|
00650> ADD HYD            IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
00651> *%-----------------|-------------------------------------------------------------|
00652> CALIB NASHYD       ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
00653>                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
00654>                    N=[3], TP=[0.24]hrs,
00655>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00656> *%-----------------|-------------------------------------------------------------|
00657> *#-----------------|-------------------------------------------------------------|
00658> *#-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
00659> *#-----------------|-------------------------------------------------------------|
00660> *%-----------------|-------------------------------------------------------------|
00661> CALIB NASHYD       ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
00662>                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
00663>                    N=[3], TP=[0.30]hrs,
00664>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00665> *%-----------------|-------------------------------------------------------------|
00666> ADD HYD            IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
00667> *%-----------------|-------------------------------------------------------------|
00668> *#-----------------|-------------------------------------------------------------|
00669> *#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00670> *#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00671> *#-----------------|-------------------------------------------------------------|
00672> *%-----------------|-------------------------------------------------------------|
00673> CALIB NASHYD       ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
00674>                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
00675>                    N=[3], TP=[0.47]hrs,
00676>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00677> *%-----------------|-------------------------------------------------------------|
00678> CALIB STANDHYD     ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
00679>                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
00680>                    SCS curve number CN=[67.0],
00681>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
00682>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00683>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
00684>                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
00685>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00686> *%-----------------|-------------------------------------------------------------|
00687> CALIB NASHYD       ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
00688>                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
00689>                    N=[3], TP=[0.11]hrs,
00690>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00691> *%-----------------|-------------------------------------------------------------|
00692> ADD HYD            IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
00693> *%-----------------|-------------------------------------------------------------|
00694> *#-----------------|-------------------------------------------------------------|
00695> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00696> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00697> *#-----------------|-------------------------------------------------------------|
00698> *#-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00699> *#-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00700> *#-----------------|-------------------------------------------------------------|
00701> *%-----------------|-------------------------------------------------------------|
00702> ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
00703>                    RDT=[1](min),
00704>                          TABLE of ( OUTFLOW-STORAGE ) values
00705>                                        (cms) - (ha-m)
00706>                                   [   0.0 ,  0.0 ]
00707>                                   [   0.007 ,  0.027 ]
00708>                                   [   0.018 ,  0.084 ]
00709>                                   [   0.025 ,  0.147 ]
00710>                                   [   0.029 ,  0.199 ]
00711>                                   [   0.032 ,  0.256 ]
00712>                                   [   0.036 ,  0.337 ]
00713>                                   [   0.078 ,  0.426 ]
00714>                                   [   0.151 ,  0.522 ]
00715>                                   [   0.293 ,  0.581 ]
00716>                                   [   0.306 ,  0.656 ]
00717>                                   [   0.330 ,  0.737 ]
00718>                                   [   1.442 ,  0.902 ]
00719>                                   [   2.636 ,  0.976 ]
00720>                                   [   -1    ,  -1   ]  (max twenty pts)
00721>                          IDovf=[   ], NHYDovf=[   ]
00722> *%-----------------|-------------------------------------------------------------|
00723> ADD HYD            IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
00724> *%-----------------|-------------------------------------------------------------|
00725> *#-----------------|-------------------------------------------------------------|
00726> *#-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00727> *#-----------------|-------------------------------------------------------------|
00728> *%-----------------|-------------------------------------------------------------|
00729> *#-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00730> *#-----------------|-------------------------------------------------------------|
00731> CALIB STANDHYD     ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
00732>                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
00733>                    SCS curve number CN=[66.2],
00734>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00735>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00736>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
00737>                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
00738>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00739> *%-----------------|-------------------------------------------------------------|
00740> *#-----------------|-------------------------------------------------------------|
00741> *#-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-------------------------|
00742> *#-----------------|-------------------------------------------------------------|
00743> *%-----------------|-------------------------------------------------------------|
00744> CALIB NASHYD       ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
00745>                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
00746>                    N=[3], TP=[0.28]hrs,
00747>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00748> *%-----------------|-------------------------------------------------------------|
00749> CALIB NASHYD       ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
00750>                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
00751>                    N=[3], TP=[0.62]hrs,
00752>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00753> *%-----------------|-------------------------------------------------------------|
00754> CALIB NASHYD       ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
00755>                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
00756>                    N=[3], TP=[0.33]hrs,
00757>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00758> *%-----------------|-------------------------------------------------------------|
00759> ADD HYD            IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
00760> *%-----------------|-------------------------------------------------------------|
00761> *#-----------------|-------------------------------------------------------------|
00762> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2----------------------------|
00763> *#-----------------|-------------------------------------------------------------|
00764> CALIB NASHYD       ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
00765>                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
00766>                    N=[3], TP=[0.14]hrs,
00767>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00768> *%-----------------|-------------------------------------------------------------|
00769> CALIB NASHYD       ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
00770>                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
00771>                    N=[3], TP=[0.32]hrs,
00772>                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
00773> *%-----------------|-------------------------------------------------------------|
00774> CALIB STANDHYD     ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
00775>                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
00776>                    SCS curve number CN=[49],
00777>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00778>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00779>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00780>                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
00781>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00782> *%-----------------|-------------------------------------------------------------|
00783> CALIB STANDHYD     ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
00784>                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
00785>                    SCS curve number CN=[59],
00786>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00787>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00788>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00789>                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
00790>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00791> *%-----------------|-------------------------------------------------------------|
00792> CALIB STANDHYD     ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
00793>                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
00794>                    SCS curve number CN=[69],
00795>                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
00796>                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
00797>                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
00798>                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
00799>                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
00800> *%-----------------|-------------------------------------------------------------|
00801> ADD HYD            IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
00802> *%-----------------|-------------------------------------------------------------|
00803> *#-----------------|-------------------------------------------------------------|
00804> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00805> *#-----------------|-------------------------------------------------------------|
00806> *%-----------------|-------------------------------------------------------------|
00807> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
00808>                    RDT=[1](min),
00809>                          TABLE of ( OUTFLOW-STORAGE ) values
00810>                                        (cms) - (ha-m)
```

```
                                      [   0.0 ,  0.0 ]
                                      [   0.006 ,  0.019 ]
                                      [   0.016 ,  0.060 ]
                                      [   0.019 ,  0.080 ]
                                      [   0.021 ,  0.103 ]
                                      [   0.025 ,  0.141 ]
                                      [   0.028 ,  0.181 ]
                                      [   0.069 ,  0.240 ]
                                      [   0.142 ,  0.303 ]
                                      [   0.298 ,  0.371 ]
                                      [   0.322 ,  0.403 ]
                                      [   0.560 ,  0.440 ]
                                      [   1.128 ,  0.479 ]
                                      [   1.226 ,  0.511 ]
                                      [   -1  ,  -1  ]  (max twenty pts)
                              IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|-------------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
*#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|----------WATERCOURSE 8-----------------------------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|


*#**************************************************************************
*#**************************************************************************
*#                          25yr SCS Storm (12hr)
*#**************************************************************************
*#**************************************************************************
MASS STORM          PTOTAL=[79.2](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#**************************************************************************
*#------------------|-------------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area------------------------|
*#------------------|-Per 'The Orchards' FSSWM Report------------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)------------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-----------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [   0.0100 ,  0.0610 ]
                                   [   0.0400 ,  0.1310 ]
                                   [   0.0700 ,  0.2110 ]
                                   [   0.2600 ,  0.3000 ]
                                   [   0.6000 ,  0.3940 ]
                                   [   1.0200 ,  0.4950 ]
                                   [   1.5200 ,  0.6020 ]
                                   [   2.0800 ,  0.7160 ]
                                   [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                    N=[3], TP=[0.30]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT-----------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [   0.007 ,  0.027 ]
                                   [   0.018 ,  0.084 ]
                                   [   0.025 ,  0.147 ]
                                   [   0.029 ,  0.199 ]
                                   [   0.032 ,  0.256 ]
                                   [   0.036 ,  0.337 ]
                                   [   0.078 ,  0.426 ]
                                   [   0.151 ,  0.522 ]
                                   [   0.293 ,  0.581 ]
                                   [   0.306 ,  0.656 ]
                                   [   0.330 ,  0.737 ]
                                   [   1.442 ,  0.902 ]
                                   [   2.636 ,  0.976 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
*#------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.2],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
*#------------------|-------------------------------------------------------------|
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                    N=[3], TP=[0.62]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                    N=[3], TP=[0.33]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%------------------|-------------------------------------------------------------|
*#------------------|-------------------------------------------------------------|
*#------------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
*#------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[114](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|-------------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
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                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                (cms) - (ha-m)
                               [   0.0 ,  0.0 ]
                               [   0.006 ,  0.019 ]
                               [   0.016 ,  0.060 ]
                               [   0.019 ,  0.080 ]
                               [   0.021 ,  0.103 ]
                               [   0.025 ,  0.141 ]
                               [   0.028 ,  0.181 ]
                               [   0.069 ,  0.240 ]
                               [   0.142 ,  0.303 ]
                               [   0.298 ,  0.371 ]
                               [   0.322 ,  0.403 ]
                               [   0.560 ,  0.440 ]
                               [   1.128 ,  0.479 ]
                               [   1.226 ,  0.511 ]
                               [  -1  , -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|---------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#------------------|-WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|----------WATERCOURSE 8----------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 10 CATCHMENT---------------------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|


*#**************************************************************************
*#**************************************************************************
*#                              50yr SCS Storm (12hr)
*#**************************************************************************
*#**************************************************************************
MASS STORM          PTOTAL=[88.8](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#**************************************************************************
*#------------------|---------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                      FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                           DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                (cms) - (ha-m)
                               [   0.0 ,  0.0 ]
                               [   0.0100 ,  0.0610 ]
                               [   0.0400 ,  0.1310 ]
                               [   0.0700 ,  0.2110 ]
                               [   0.2600 ,  0.3000 ]
                               [   0.6000 ,  0.3940 ]
                               [   1.0200 ,  0.4950 ]
                               [   1.5200 ,  0.6020 ]
                               [   2.0800 ,  0.7160 ]
                               [   2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                    N=[3], TP=[0.30]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                (cms) - (ha-m)
                               [   0.0 ,  0.0 ]
                               [   0.007 ,  0.027 ]
                               [   0.018 ,  0.084 ]
                               [   0.025 ,  0.147 ]
                               [   0.029 ,  0.199 ]
                               [   0.032 ,  0.256 ]
                               [   0.036 ,  0.337 ]
                               [   0.078 ,  0.426 ]
                               [   0.151 ,  0.522 ]
                               [   0.293 ,  0.581 ]
                               [   0.306 ,  0.656 ]
                               [   0.330 ,  0.737 ]
                               [   1.442 ,  0.902 ]
                               [   2.636 ,  0.976 ]
                               [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.2],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                    N=[3], TP=[0.62]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                    N=[3], TP=[0.33]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
*#------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
                    DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
                    N=[3], TP=[0.14]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
                    DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
                    N=[3], TP=[0.32]hrs,
                    RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
                    XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[49],
```

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                        Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                             LGP=[30](m), MNP=[0.25], SCP=[0](min),
                        Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                             LGI=[114](m), MNI=[0.013], SCI=[0](min)
                        RAINFALL=[ ,  ,  ,  ,  ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
                    XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[59],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[148](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
                    XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[69],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
                                         LGI=[118](m), MNI=[0.013], SCI=[0](min)
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [  0.0 ,  0.0 ]
                                   [  0.006 ,  0.019 ]
                                   [  0.016 ,  0.060 ]
                                   [  0.019 ,  0.080 ]
                                   [  0.021 ,  0.103 ]
                                   [  0.025 ,  0.141 ]
                                   [  0.028 ,  0.181 ]
                                   [  0.069 ,  0.240 ]
                                   [  0.142 ,  0.303 ]
                                   [  0.298 ,  0.371 ]
                                   [  0.322 ,  0.403 ]
                                   [  0.560 ,  0.440 ]
                                   [  1.128 ,  0.479 ]
                                   [  1.226 ,  0.511 ]
                                   [  -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
*%------------------|---------------------------------------------------------|
SAVE HYD            ID=[1],   # OF PCYCLES=[50],   ICASEsh=[1]
                    HYD_COMMENT=["POST-DEV LAKESHORE"]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
*#------------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8----------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
                    DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
                    N=[3], TP=[0.23]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
                    DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
                    DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
                    N=[3], TP=[0.41]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|----------WATERCOURSE 8-----------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
*%------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|--WATERCOURSE 10 CATCHMENT---------------------------------|
*#------------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
                    DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
                    N=[3], TP=[0.21]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|


*#**************************************************************************
*#**************************************************************************
*#                          100yr SCS Storm (12hr)
*#**************************************************************************
*#**************************************************************************
MASS STORM          PTOTAL=[98.4](mm), CSDT=[1](min),
                    CURVE_FILENAME=["SCS12HII.mst"]
*#**************************************************************************
*#------------------|---------------------------------------------------------|
*#------------------|-Subwatershed 9 External Drainage Area---------------------|
*#------------------|-Per 'The Orchards' FSSWM Report---------------------------|
*#------------------|-Prepared by Higgins Engineering (Jan. 2005)---------------|
*#--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha--------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9A"], DT=[1]min, AREA=[101.8](ha),
                    DWF=[0](cms),  CN/C=[80], IA=[5.0](mm),
                    N=[3], TP=[1.00]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ROUTE CHANNEL       IDout=[2], NHYD=["Channel"], IDin=[1],
                    RDT=[1](min),
                    CHLGTH=[550](m),  CHSLOPE=[2](%),
                                        FPSLOPE=[2](%),
                    SECNUM=[1],       NSEG=[3]
                    ( SEGROUGH, SEGDIST (m))=[0.035,8,-0.035,12,0.035,20] NSEG t
                    ( DISTANCE (m), ELEVATION (m))=[0,102]
                                                  [8,100]
                                                  [12,100]
                                                  [20,102]
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["EXT-9B"], DT=[1](min), AREA=[14.8](ha),
                    XIMP=[0.35], TIMP=[0.35], DWF=[0](cms), LOSS=[1],
                    Horton: Fo=[50](mm/hr), Fc=[7.5](mm/hr),
                            DCAY=[2](/hr), F=[0](mm),
                    Pervious   surfaces: IAper=[1.5](mm), SLPP=[2](%),
                                         LGP=[40.0](m), MNP=[0.25], SCP=[0](min)
                    Impervious surfaces: IAimp=[1.0](mm), SLPI=[1](%),
                                         LGI=[314.1](m), MNI=[0.013], SCI=[0](mi
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[4],   NHYD=["Orchards"],  IDin=[3],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [  0.0 ,  0.0 ]
                                   [  0.0100 ,  0.0610 ]
                                   [  0.0400 ,  0.1310 ]
                                   [  0.0700 ,  0.2110 ]
                                   [  0.2600 ,  0.3000 ]
                                   [  0.6000 ,  0.3940 ]
                                   [  1.0200 ,  0.4950 ]
                                   [  1.5200 ,  0.6020 ]
                                   [  2.0800 ,  0.7160 ]
                                   [  2.6900 ,  0.8370 ]
                          IDovf=[ ], NHYDovf=[  ]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing---------|
*#------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["RD19"], IDs to add=[2,4]
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-9C"], DT=[1]min, AREA=[0.65](ha),
                    DWF=[0](cms),  CN/C=[82.7], IA=[4.42](mm),
                    N=[3], TP=[0.24]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["9A9B"], DT=[1]min, AREA=[2.68](ha),
                    DWF=[0](cms),  CN/C=[55.9], IA=[8.0](mm),
                    N=[3], TP=[0.30]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[4], NHYD=["WC9a"], IDs to add=[1,2,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["EXT-1A"], DT=[1]min, AREA=[8.37](ha),
                    DWF=[0](cms),  CN/C=[74.9], IA=[8.4](mm),
                    N=[3], TP=[0.47]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[3], NHYD=["1A"], DT=[1](min), AREA=[2.95](ha),
                    XIMP=[0.315], TIMP=[0.514], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[67.0],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[3.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[5.5](%),
                                         LGI=[44](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr) ,  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[5], NHYD=["1B"], DT=[1]min, AREA=[1.81](ha),
                    DWF=[0](cms),  CN/C=[44.3], IA=[8.57](mm),
                    N=[3], TP=[0.11]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[6], NHYD=["SWMF1"], IDs to add=[1,3,5]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
*#------------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
ROUTE RESERVOIR     IDout=[1],   NHYD=["SWMF-1"],  IDin=[6],
                    RDT=[1](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [  0.0 ,  0.0 ]
                                   [  0.007 ,  0.027 ]
                                   [  0.018 ,  0.084 ]
                                   [  0.025 ,  0.147 ]
                                   [  0.029 ,  0.199 ]
                                   [  0.032 ,  0.256 ]
                                   [  0.036 ,  0.337 ]
                                   [  0.078 ,  0.426 ]
                                   [  0.151 ,  0.522 ]
                                   [  0.293 ,  0.581 ]
                                   [  0.306 ,  0.656 ]
                                   [  0.330 ,  0.737 ]
                                   [  1.442 ,  0.902 ]
                                   [  2.636 ,  0.976 ]
                                   [  -1  ,  -1  ]  (max twenty pts)
                          IDovf=[   ], NHYDovf=[   ]
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[7], NHYD=["WC9b"], IDs to add=[1,4]
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
*#------------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
*#------------------|---------------------------------------------------------|
CALIB STANDHYD      ID=[10], NHYD=["9D"], DT=[1](min), AREA=[1.38](ha),
                    XIMP=[0.334], TIMP=[0.682], DWF=[0](cms), LOSS=[2],
                    SCS curve number CN=[66.2],
                    Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
                                         LGP=[30](m), MNP=[0.25], SCP=[0](min),
                    Impervious surfaces: IAimp=[2.0](mm), SLPI=[2.0](%),
                                         LGI=[96](m), MNI=[0.013], SCI=[0](min),
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
*#------------------|---------------------------------------------------------|
*#------------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
*#------------------|---------------------------------------------------------|
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[1], NHYD=["9F"], DT=[1]min, AREA=[0.73](ha),
                    DWF=[0](cms),  CN/C=[56.7], IA=[6.52](mm),
                    N=[3], TP=[0.28]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[2], NHYD=["EXT-9D"], DT=[1]min, AREA=[0.41](ha),
                    DWF=[0](cms),  CN/C=[65.0], IA=[8.0](mm),
                    N=[3], TP=[0.62]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
CALIB NASHYD        ID=[3], NHYD=["9C9E"], DT=[1]min, AREA=[2.06](ha),
                    DWF=[0](cms),  CN/C=[58.2], IA=[7.32](mm),
                    N=[3], TP=[0.33]hrs,
                    RAINFALL=[ ,  ,  ,  ,  ](mm/hr),  END=-1
*%------------------|---------------------------------------------------------|
ADD HYD             IDsum=[5], NHYD=["WC9LOWER"], IDs to add=[1,2,3,7,10]
*%------------------|---------------------------------------------------------|
```

```
01621> *#-----------------|-------------------------------------------------------------|
01622> *#-----------------|-LANDS DRAINING TO SWM FACILITY 2------------------------|
01623> *#-----------------|-------------------------------------------------------------|
01624> CALIB NASHYD        ID=[1], NHYD=["2A"], DT=[1]min, AREA=[1.19](ha),
01625>                     DWF=[0](cms),  CN/C=[33.2], IA=[9.6](mm),
01626>                     N=[3], TP=[0.14]hrs,
01627>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01628> *%-----------------|-------------------------------------------------------------|
01629> CALIB NASHYD        ID=[2], NHYD=["2B"], DT=[1]min, AREA=[1.67](ha),
01630>                     DWF=[0](cms),  CN/C=[34.7], IA=[9.1](mm),
01631>                     N=[3], TP=[0.32]hrs,
01632>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01633> *%-----------------|-------------------------------------------------------------|
01634> CALIB STANDHYD      ID=[3], NHYD=["2C"], DT=[1](min), AREA=[1.96](ha),
01635>                     XIMP=[0.3], TIMP=[0.6], DWF=[0](cms), LOSS=[2],
01636>                     SCS curve number CN=[49],
01637>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01638>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01639>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01640>                                          LGI=[114](m), MNI=[0.013], SCI=[0](min)
01641>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01642> *%-----------------|-------------------------------------------------------------|
01643> CALIB STANDHYD      ID=[7], NHYD=["2D"], DT=[1](min), AREA=[3.28](ha),
01644>                     XIMP=[0.253], TIMP=[0.497], DWF=[0](cms), LOSS=[2],
01645>                     SCS curve number CN=[59],
01646>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01647>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01648>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01649>                                          LGI=[148](m), MNI=[0.013], SCI=[0](min)
01650>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01651> *%-----------------|-------------------------------------------------------------|
01652> CALIB STANDHYD      ID=[4], NHYD=["2E"], DT=[1](min), AREA=[2.09](ha),
01653>                     XIMP=[0.262], TIMP=[0.35], DWF=[0](cms), LOSS=[2],
01654>                     SCS curve number CN=[69],
01655>                     Pervious   surfaces: IAper=[5.0](mm), SLPP=[2.0](%),
01656>                                          LGP=[30](m), MNP=[0.25], SCP=[0](min),
01657>                     Impervious surfaces: IAimp=[2.0](mm), SLPI=[1.0](%),
01658>                                          LGI=[118](m), MNI=[0.013], SCI=[0](min)
01659>                     RAINFALL=[ ,  ,  ,  , ](mm/hr) ,  END=-1
01660> *%-----------------|-------------------------------------------------------------|
01661> ADD HYD             IDsum=[6], NHYD=["SWMF2"], IDs to add=[1,2,3,4,7]
01662> *%-----------------|-------------------------------------------------------------|
01663> *#-----------------|-------------------------------------------------------------|
01664> *#-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
01665> *#-----------------|-------------------------------------------------------------|
01666> *%-----------------|-------------------------------------------------------------|
01667> ROUTE RESERVOIR     IDout=[9],   NHYD=["SWMF-2"],  IDin=[6],
01668>                     RDT=[1](min),
01669>                          TABLE of ( OUTFLOW-STORAGE ) values
01670>                                     (cms) - (ha-m)
01671>                                   [   0.0 ,  0.0 ]
01672>                                   [   0.006 ,  0.019 ]
01673>                                   [   0.016 ,  0.060 ]
01674>                                   [   0.019 ,  0.080 ]
01675>                                   [   0.021 ,  0.103 ]
01676>                                   [   0.025 ,  0.141 ]
01677>                                   [   0.028 ,  0.181 ]
01678>                                   [   0.069 ,  0.240 ]
01679>                                   [   0.142 ,  0.303 ]
01680>                                   [   0.298 ,  0.371 ]
01681>                                   [   0.322 ,  0.403 ]
01682>                                   [   0.560 ,  0.440 ]
01683>                                   [   1.128 ,  0.479 ]
01684>                                   [   1.226 ,  0.511 ]
01685>                                   [   -1  ,  -1  ]  (max twenty pts)
01686>                          IDovf=[   ], NHYDovf=[   ]
01687> *%-----------------|-------------------------------------------------------------|
01688> *#-----------------|-------------------------------------------------------------|
01689> *#-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD---------------------|
01690> *#-----------------|-------------------------------------------------------------|
01691> *%-----------------|-------------------------------------------------------------|
01692> ADD HYD             IDsum=[1], NHYD=["WC9c"], IDs to add=[9,5]
01693> *%-----------------|-------------------------------------------------------------|
01694> SAVE HYD            ID=[1],   # OF PCYCLES=[50],  ICASEsh=[1]
01695>                     HYD_COMMENT=["POST-DEV LAKESHORE"]
01696> *%-----------------|-------------------------------------------------------------|
01697> *#-----------------|-------------------------------------------------------------|
01698> *#-----------------|--WATERCOURSE 8 CATCHMENTS-------------------------------------|
01699> *#-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8------------------------|
01700> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8--------------------|
01701> *#-----------------|-------------------------------------------------------------|
01702> *%-----------------|-------------------------------------------------------------|
01703> CALIB NASHYD        ID=[1], NHYD=["8A"], DT=[1]min, AREA=[2.27](ha),
01704>                     DWF=[0](cms),  CN/C=[36.2], IA=[8.6](mm),
01705>                     N=[3], TP=[0.23]hrs,
01706>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01707> *%-----------------|-------------------------------------------------------------|
01708> CALIB NASHYD        ID=[2], NHYD=["EXT-8A"], DT=[1]min, AREA=[7.14](ha),
01709>                     DWF=[0](cms),  CN/C=[68.9], IA=[7.11](mm),
01710>                     N=[3], TP=[0.41]hrs,
01711>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01712> *%-----------------|-------------------------------------------------------------|
01713> CALIB NASHYD        ID=[3], NHYD=["EXT-8B"], DT=[1]min, AREA=[1.04](ha),
01714>                     DWF=[0](cms),  CN/C=[58.6], IA=[6.75](mm),
01715>                     N=[3], TP=[0.41]hrs,
01716>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01717> *%-----------------|-------------------------------------------------------------|
01718> *#-----------------|-------------------------------------------------------------|
01719> *#-----------------|----------WATERCOURSE 8----------------------------------------|
01720> *#-----------------|-------------------------------------------------------------|
01721> *%-----------------|-------------------------------------------------------------|
01722> ADD HYD             IDsum=[4], NHYD=["WC8"], IDs to add=[1,2,3]
01723> *%-----------------|-------------------------------------------------------------|
01724> *%-----------------|-------------------------------------------------------------|
01725> *#-----------------|-------------------------------------------------------------|
01726> *#-----------------|--WATERCOURSE 10 CATCHMENT-------------------------------------|
01727> *#-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-------------------|
01728> *#-----------------|-------------------------------------------------------------|
01729> *%-----------------|-------------------------------------------------------------|
01730> CALIB NASHYD        ID=[1], NHYD=["10A"], DT=[1]min, AREA=[1.99](ha),
01731>                     DWF=[0](cms),  CN/C=[59.4], IA=[8.6](mm),
01732>                     N=[3], TP=[0.21]hrs,
01733>                     RAINFALL=[ ,  ,  ,  , ](mm/hr),  END=-1
01734> *%-----------------|-------------------------------------------------------------|
01735>
01736>
01737> FINISH
01738>
01739>
01740>
01741>
```

```
00001>  ================================================================================
00002>
00003>  SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222     000    11
00004>  S       W W W   MM MM   H   H    Y Y    MM MM   O   O          2     0   0   11
00005>  SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O          2     0   0   11
00006>      S    W W    M   M   H   H     Y     M   M   O   O        222     0   0   11
00007>  SSSSS    W W    M   M   H   H     Y     M   M    OOO         2       0   0   11
00008>                                                               2       0   0   11
00009>         StormWater Management HYdrologic Model                222     000    11
00010>
00011>  ********************************************************************************
00012>  ************************************ SWMHYMO Ver4.05.0  ************************
00013>  ****************  A single event and continuous hydrologic simulation model
00014>  ****************     based on the principles of HYMO and its successors
00015>  ****************                OTTHYMO-83 and OTTHYMO-89.
00016>  ********************************************************************************
00017>  **************** Distributed by:  J.F. Sabourin and Associates Inc.
00018>  ****************                  Ottawa,  Ontario: (613) 836-3884
00019>  ****************                  Gatineau, Quebec: (819) 243-6858
00020>  ****************                  E-Mail: swmhymo@jfsa.com
00021>  ********************************************************************************
00022>
00023>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00024>  ++++++++++++++++++ Licensed user: C.F. Crozier & Associates Inc.
00025>  ++++++++++++++++++                 Collingwood          SERIAL#:3737016
00026>  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
00027>
00028>  ********************************************************************************
00029>  ****************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
00030>  ****************           Maximum value for ID numbers  :     11
00031>  ****************           Max. number of rainfall points: 105408
00032>  ****************           Max. number of flow points    : 105408
00033>  ********************************************************************************
00034>
00035>
00036>  ****************************   S U M M A R Y   O U T P U T   **************
00037>  ********************************************************************************
00038>  *                  RUN DATE: 2022-03-11     TIME: 14:22:27     RUN COUNTER: 0000
00039>  ********************************************************************************
00040>  * Input   file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00041>  *               YMO\SCS12\2022.02.16-POST_SCS12.DAT
00042>  * Output  file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00043>  *               YMO\SCS12\2022.02.16-POST_SCS12.out
00044>  * Summary file: C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00045>  *               YMO\SCS12\2022.02.16-POST_SCS12.sum
00046>  * User comments:
00047>  * 1: _____________________________________________________________________________
00048>  * 2: _____________________________________________________________________________
00049>  * 3: _____________________________________________________________________________
00050>  ********************************************************************************
00051>
00052>
00053> #*******************************************************************************
00054> #  Project Name: [PARKBRIDGE CRAIGLEITH]    Project Number: [1046-4031]
00055> #  Date        : 2021.04.29
00056> #  Modeller    : [JE]
00057> #  Company     : C.F. Crozier & Associates Inc.
00058> #  License #   : 3737016
00059> #*******************************************************************************
00060>  RUN#:COMMAND#
00061> R0001:C00001-------------------------------------------------------------------
00062>      START
00063>        [TZERO =    .00 hrs on        0]
00064>        [METOUT=   2    (1=imperial, 2=metric output)]
00065>        [NSTORM=   0 ]
00066>        [NRUN  = 0001 ]
00067> #*******************************************************************************
00068> #-----------------|-------------------------------------------------------------|
00069> #-----------------|-POST-DEVELOPMENT----12 hr SCS STORMS-------------------------|
00070> #-----------------|-------------------------------------------------------------|
00071> #*******************************************************************************
00072> #                              2yr SCS Storm (12hr)
00073> #*******************************************************************************
00074> #*******************************************************************************
00075> R0001:C00002-------------------------------------------------------------------
00076>      MASS STORM
00077>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00078>       Comment  = 12 hour SCS II storm mass curve
00079>       [SDT= 1.00:SDUR=  12.00:PTOT=  39.60]
00080> #*******************************************************************************
00081> #-----------------|-------------------------------------------------------------|
00082> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00083> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00084> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00085> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00086> #-----------------|-------------------------------------------------------------|
00087> R0001:C00003------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00088>     CALIB NASHYD          1.0 01:EXT-9A       101.80    1.144 No_date    7:04
00089>       [CN= 80.0: N= 3.00: Tp= 1.00]
00090> R0001:C00004------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00091>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    1.144 No_date    7:04
00092>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    1.139 No_date    7:07
00093>       [L/S/n=  550./2.000/.035]
00094>       {Vmax= 1.190:Dmax=  .187}
00095> R0001:C00005------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00096>     CALIB STANDHYD        1.0 03:EXT-9B        14.80     .842 No_date    6:03
00097>       [XIMP=.35:TIMP=.35]
00098>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00099>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00100>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00101> R0001:C00006------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00102>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80     .842 No_date    6:03
00103>                  out <=   1.0 04:Orchards      14.80     .066 No_date    7:07
00104>     {MxStoUsed=.2008E+00  m3}
00105> #-----------------|-------------------------------------------------------------|
00106> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00107> #-----------------|-------------------------------------------------------------|
00108> R0001:C00007------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00109>     ADD HYD               1.0 02:Channel      101.80    1.139 No_date    7:07
00110>                     +     1.0 04:Orchards      14.80     .066 No_date    7:07
00111>                   SUM=    1.0 05:RD19         116.60    1.205 No_date    7:07
00112> R0001:C00008------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00113>     CALIB NASHYD          1.0 01:EXT-9C         .65     .024 No_date    6:09
00114>       [CN= 82.7: N= 3.00: Tp=  .24]
00115> #-----------------|-------------------------------------------------------------|
00116> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00117> #-----------------|-------------------------------------------------------------|
00118> R0001:C00009------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00119>     CALIB NASHYD          1.0 02:9A9B          2.68     .023 No_date    6:14
00120>       [CN= 55.9: N= 3.00: Tp=  .30]
00121> R0001:C00010------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00122>     ADD HYD               1.0 01:EXT-9C         .65     .024 No_date    6:09
00123>                     +     1.0 02:9A9B          2.68     .023 No_date    6:14
00124>                     +     1.0 05:RD19         116.60    1.205 No_date    7:07
00125>                   SUM=    1.0 04:WC9a         119.93    1.215 No_date    7:07
00126> #-----------------|-------------------------------------------------------------|
00127> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00128> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00129> #-----------------|-------------------------------------------------------------|
00130> R0001:C00011------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00131>     CALIB NASHYD          1.0 01:EXT-1A        8.37     .106 No_date    6:27
00132>       [CN= 74.9: N= 3.00: Tp=  .47]
00133> R0001:C00012------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00134>     CALIB STANDHYD        1.0 03:1A            2.95     .192 No_date    6:00
00135>       [XIMP=.31:TIMP=.51]
00136>       [LOSS= 2 :CN= 67.0]
00137>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00138>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00139> R0001:C00013------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00140>     CALIB NASHYD          1.0 05:1B            1.81     .018 No_date    6:02
00141>       [CN= 44.3: N= 3.00: Tp=  .11]
00142> R0001:C00014------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00143>     ADD HYD               1.0 01:EXT-1A        8.37     .106 No_date    6:27
00144>                     +     1.0 03:1A            2.95     .192 No_date    6:00
00145>                     +     1.0 05:1B            1.81     .018 No_date    6:02
00146>                   SUM=    1.0 06:SWMF1        13.13     .243 No_date    6:00
00147> #-----------------|-------------------------------------------------------------|
00148> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
00149> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00150> #-----------------|-------------------------------------------------------------|
00151> R0001:C00015------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00152>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13     .243 No_date    6:00
00153>                  out <=   1.0 01:SWMF-1       13.13     .019 No_date   10:17
00154>     {MxStoUsed=.9209E-01  m3}
00155> R0001:C00016------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00156>     ADD HYD               1.0 01:SWMF-1        13.13     .019 No_date   10:17
00157>                     +     1.0 04:WC9a         119.93    1.215 No_date    7:07
00158>                   SUM=    1.0 07:WC9b         133.06    1.231 No_date    7:07
00159> #-----------------|-------------------------------------------------------------|
00160> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
00161> #-----------------|-------------------------------------------------------------|
00162> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00163> #-----------------|-------------------------------------------------------------|
00164> R0001:C00017------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00165>     CALIB STANDHYD        1.0 10:9D            1.38     .101 No_date    6:00
00166>       [XIMP=.33:TIMP=.68]
00167>       [LOSS= 2 :CN= 66.2]
00168>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00169>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00170> #-----------------|-------------------------------------------------------------|
00171> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED--------------------------|
00172> #-----------------|-------------------------------------------------------------|
00173> R0001:C00018------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00174>     CALIB NASHYD          1.0 01:9F             .73     .008 No_date    6:12
00175>       [CN= 56.7: N= 3.00: Tp=  .28]
00176> R0001:C00019------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00177>     CALIB NASHYD          1.0 02:EXT-9D         .41     .003 No_date    6:40
00178>       [CN= 65.0: N= 3.00: Tp=  .62]
00179> R0001:C00020------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00180>     CALIB NASHYD          1.0 03:9C9E          2.06     .019 No_date    6:16
00181>       [CN= 58.2: N= 3.00: Tp=  .33]
00182> R0001:C00021------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00183>     ADD HYD               1.0 01:9F             .73     .008 No_date    6:12
00184>                     +     1.0 02:EXT-9D         .41     .003 No_date    6:40
00185>                     +     1.0 03:9C9E          2.06     .019 No_date    6:16
00186>                     +     1.0 07:WC9b         133.06    1.231 No_date    7:07
00187>                     +     1.0 10:9D            1.38     .101 No_date    6:00
00188>                   SUM=    1.0 05:WC9LOWER     137.64    1.250 No_date    7:06
00189> #-----------------|-------------------------------------------------------------|
00190> #-----------------|-LANDS DRAINING TO SWM FACILITY 2-----------------------------|
00191> #-----------------|-------------------------------------------------------------|
00192> R0001:C00022------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00193>     CALIB NASHYD          1.0 01:2A            1.19     .006 No_date    6:04
00194>       [CN= 33.2: N= 3.00: Tp=  .14]
00195> R0001:C00023------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00196>     CALIB NASHYD          1.0 02:2B            1.67     .006 No_date    6:16
00197>       [CN= 34.7: N= 3.00: Tp=  .32]
00198> R0001:C00024------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00199>     CALIB STANDHYD        1.0 03:2C            1.96     .101 No_date    6:00
00200>       [XIMP=.30:TIMP=.60]
00201>       [LOSS= 2 :CN= 49.0]
00202>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00203>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00204> R0001:C00025------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00205>     CALIB STANDHYD        1.0 07:2D            3.28     .150 No_date    6:00
00206>       [XIMP=.25:TIMP=.50]
00207>       [LOSS= 2 :CN= 59.0]
00208>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00209>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00210> R0001:C00026------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00211>     CALIB STANDHYD        1.0 04:2E            2.09     .100 No_date    6:00
00212>       [XIMP=.26:TIMP=.35]
00213>       [LOSS= 2 :CN= 69.0]
00214>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00215>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00216> R0001:C00027------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00217>     ADD HYD               1.0 01:2A            1.19     .006 No_date    6:04
00218>                     +     1.0 02:2B            1.67     .006 No_date    6:16
00219>                     +     1.0 03:2C            1.96     .101 No_date    6:00
00220>                     +     1.0 04:2E            2.09     .100 No_date    6:00
00221>                     +     1.0 07:2D            3.28     .150 No_date    6:00
00222>                   SUM=    1.0 06:SWMF2        10.19     .358 No_date    6:00
00223> #-----------------|-------------------------------------------------------------|
00224> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00225> #-----------------|-------------------------------------------------------------|
00226> R0001:C00028------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00227>     ROUTE RESERVOIR ->    1.0 06:SWMF2        10.19     .358 No_date    6:00
00228>                  out <=   1.0 09:SWMF-2       10.19     .020 No_date    8:20
00229>     {MxStoUsed=.8608E-01  m3}
00230> #-----------------|-------------------------------------------------------------|
00231> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD--------------------|
00232> #-----------------|-------------------------------------------------------------|
00233> R0001:C00029------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00234>     ADD HYD               1.0 09:SWMF-2        10.19     .020 No_date    8:20
00235>                     +     1.0 05:WC9LOWER     137.64    1.250 No_date    7:06
00236>                   SUM=    1.0 01:WC9c         147.83    1.269 No_date    7:06
00237> R0001:C00030------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00238>     SAVE HYD              1.0 01:WC9c         147.83    1.269 No_date    7:06
00239>       fname :WC9c.0001
00240>       remark:POST-DEV LAKESHORE
00241> #-----------------|-------------------------------------------------------------|
00242> #-----------------|--WATERCOURSE 8 CATCHMENTS------------------------------------|
00243> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
00244> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
00245> #-----------------|-------------------------------------------------------------|
00246> R0001:C00031------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00247>     CALIB NASHYD          1.0 01:8A            2.27     .011 No_date    6:09
00248>       [CN= 36.2: N= 3.00: Tp=  .23]
00249> R0001:C00032------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00250>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .086 No_date    6:22
00251>       [CN= 68.9: N= 3.00: Tp=  .41]
00252> R0001:C00033------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00253>     CALIB NASHYD          1.0 03:EXT-8B        1.04     .009 No_date    6:22
00254>       [CN= 58.6: N= 3.00: Tp=  .41]
00255> #-----------------|-------------------------------------------------------------|
00256> #-----------------|----------WATERCOURSE 8---------------------------------------|
00257> #-----------------|-------------------------------------------------------------|
00258> R0001:C00034------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00259>     ADD HYD               1.0 01:8A            2.27     .011 No_date    6:09
00260>                     +     1.0 02:EXT-8A        7.14     .086 No_date    6:22
00261>                     +     1.0 03:EXT-8B        1.04     .009 No_date    6:22
00262>                   SUM=    1.0 04:WC8          10.45     .103 No_date    6:20
00263> #-----------------|-------------------------------------------------------------|
00264> #-----------------|--WATERCOURSE 10 CATCHMENT------------------------------------|
00265> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
00266> #-----------------|-------------------------------------------------------------|
00267> R0001:C00035------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00268>     CALIB NASHYD          1.0 01:10A           1.99     .024 No_date    6:08
00269>       [CN= 59.4: N= 3.00: Tp=  .21]
00270> #*******************************************************************************
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00271> #*****************************************************************************
00272> #                            5yr SCS Storm (12hr)
00273> #*****************************************************************************
00274> #*****************************************************************************
00275> R0001:C00036------------------------------------------------------------------
00276>      MASS STORM
00277>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00278>       Comment  = 12 hour SCS II storm mass curve
00279>       [SDT= 1.00:SDUR=  12.00:PTOT=  55.20]
00280> ******************************************************************************
00281> #-----------------|-------------------------------------------------------------|
00282> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00283> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00284> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00285> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00286> #-----------------|-------------------------------------------------------------|
00287> R0001:C00037------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00288>      CALIB NASHYD           1.0 01:EXT-9A       101.80     2.126 No_date    7:02
00289>        [CN= 80.0: N= 3.00: Tp= 1.00]
00290> R0001:C00038------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00291>      ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80     2.126 No_date    7:02
00292>        [RDT= 1.00] out<-     1.0 02:Channel      101.80     2.116 No_date    7:06
00293>        [L/S/n=  550./2.000/.035]
00294>        {Vmax= 1.504:Dmax=  .265}
00295> R0001:C00039------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00296>      CALIB STANDHYD         1.0 03:EXT-9B        14.80     1.558 No_date    6:02
00297>        [XIMP=.35:TIMP=.35]
00298>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00299>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00300>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00301> R0001:C00040------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00302>      ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80     1.558 No_date    6:02
00303>                   out <=    1.0 04:Orchards      14.80      .242 No_date    6:37
00304>       {MxStoUsed=.2913E+00  m3}
00305> #-----------------|-------------------------------------------------------------|
00306> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00307> #-----------------|-------------------------------------------------------------|
00308> R0001:C00041------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00309>      ADD HYD                1.0 02:Channel      101.80     2.116 No_date    7:06
00310>                        +     1.0 04:Orchards      14.80      .242 No_date    6:37
00311>                    SUM=      1.0 05:RD19         116.60     2.325 No_date    7:03
00312> R0001:C00042------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00313>      CALIB NASHYD           1.0 01:EXT-9C         .65      .043 No_date    6:08
00314>        [CN= 82.7: N= 3.00: Tp=  .24]
00315> #-----------------|-------------------------------------------------------------|
00316> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00317> #-----------------|-------------------------------------------------------------|
00318> R0001:C00043------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00319>      CALIB NASHYD           1.0 02:9A9B          2.68      .051 No_date    6:13
00320>        [CN= 55.9: N= 3.00: Tp=  .30]
00321> R0001:C00044------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00322>      ADD HYD                1.0 01:EXT-9C         .65      .043 No_date    6:08
00323>                        +     1.0 02:9A9B          2.68      .051 No_date    6:13
00324>                        +     1.0 05:RD19         116.60     2.325 No_date    7:03
00325>                    SUM=      1.0 04:WC9a         119.93     2.345 No_date    7:03
00326> #-----------------|-------------------------------------------------------------|
00327> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00328> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00329> #-----------------|-------------------------------------------------------------|
00330> R0001:C00045------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00331>      CALIB NASHYD           1.0 01:EXT-1A        8.37      .221 No_date    6:25
00332>        [CN= 74.9: N= 3.00: Tp=  .47]
00333> R0001:C00046------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00334>      CALIB STANDHYD         1.0 03:1A            2.95      .314 No_date    6:00
00335>        [XIMP=.31:TIMP=.51]
00336>        [LOSS= 2 :CN= 67.0]
00337>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00338>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00339> R0001:C00047------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00340>      CALIB NASHYD           1.0 05:1B            1.81      .041 No_date    6:02
00341>        [CN= 44.3: N= 3.00: Tp=  .11]
00342> R0001:C00048------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00343>      ADD HYD                1.0 01:EXT-1A        8.37      .221 No_date    6:25
00344>                        +     1.0 03:1A            2.95      .314 No_date    6:00
00345>                        +     1.0 05:1B            1.81      .041 No_date    6:02
00346>                    SUM=      1.0 06:SWMF1        13.13      .439 No_date    6:00
00347> #-----------------|-------------------------------------------------------------|
00348> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE---------|
00349> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00350> #-----------------|-------------------------------------------------------------|
00351> R0001:C00049------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00352>      ROUTE RESERVOIR ->     1.0 06:SWMF1        13.13      .439 No_date    6:00
00353>                   out <=    1.0 01:SWMF-1       13.13      .027 No_date   10:40
00354>       {MxStoUsed=.1776E+00  m3}
00355> R0001:C00050------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00356>      ADD HYD                1.0 01:SWMF-1        13.13      .027 No_date   10:40
00357>                        +     1.0 04:WC9a         119.93     2.345 No_date    7:03
00358>                    SUM=      1.0 07:WC9b         133.06     2.369 No_date    7:03
00359> #-----------------|-------------------------------------------------------------|
00360> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands------------------|
00361> #-----------------|-------------------------------------------------------------|
00362> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS---------|
00363> #-----------------|-------------------------------------------------------------|
00364> R0001:C00051------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00365>      CALIB STANDHYD         1.0 10:9D            1.38      .164 No_date    6:00
00366>        [XIMP=.33:TIMP=.68]
00367>        [LOSS= 2 :CN= 66.2]
00368>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00369>        [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00370> #-----------------|-------------------------------------------------------------|
00371> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-------------------------|
00372> #-----------------|-------------------------------------------------------------|
00373> R0001:C00052------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00374>      CALIB NASHYD           1.0 01:9F             .73      .016 No_date    6:12
00375>        [CN= 56.7: N= 3.00: Tp=  .28]
00376> R0001:C00053------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00377>      CALIB NASHYD           1.0 02:EXT-9D         .41      .006 No_date    6:38
00378>        [CN= 65.0: N= 3.00: Tp=  .62]
00379> R0001:C00054------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00380>      CALIB NASHYD           1.0 03:9C9E          2.06      .041 No_date    6:15
00381>        [CN= 58.2: N= 3.00: Tp=  .33]
00382> R0001:C00055------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00383>      ADD HYD                1.0 01:9F             .73      .016 No_date    6:12
00384>                        +     1.0 02:EXT-9D         .41      .006 No_date    6:38
00385>                        +     1.0 03:9C9E          2.06      .041 No_date    6:15
00386>                        +     1.0 07:WC9b         133.06     2.369 No_date    7:03
00387>                        +     1.0 10:9D            1.38      .164 No_date    6:00
00388>                    SUM=      1.0 05:WC9LOWER     137.64     2.404 No_date    7:03
00389> #-----------------|-------------------------------------------------------------|
00390> #-----------------|-LANDS DRAINING TO SWM FACILITY 2----------------------------|
00391> #-----------------|-------------------------------------------------------------|
00392> R0001:C00056------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00393>      CALIB NASHYD           1.0 01:2A            1.19      .015 No_date    6:04
00394>        [CN= 33.2: N= 3.00: Tp=  .14]
00395> R0001:C00057------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00396>      CALIB NASHYD           1.0 02:2B            1.67      .013 No_date    6:15
00397>        [CN= 34.7: N= 3.00: Tp=  .32]
00398> R0001:C00058------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00399>      CALIB STANDHYD         1.0 03:2C            1.96      .161 No_date    6:00
00400>        [XIMP=.30:TIMP=.60]
00401>        [LOSS= 2 :CN= 49.0]
00402>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00403>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00404> R0001:C00059------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00405>      CALIB STANDHYD         1.0 07:2D            3.28      .249 No_date    6:01
00406>        [XIMP=.25:TIMP=.50]
00407>        [LOSS= 2 :CN= 59.0]
00408>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00409>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00410> R0001:C00060------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00411>      CALIB STANDHYD         1.0 04:2E            2.09      .167 No_date    6:00
00412>        [XIMP=.26:TIMP=.35]
00413>        [LOSS= 2 :CN= 69.0]
00414>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00415>        [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00416> R0001:C00061------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00417>      ADD HYD                1.0 01:2A            1.19      .015 No_date    6:04
00418>                        +     1.0 02:2B            1.67      .013 No_date    6:15
00419>                        +     1.0 03:2C            1.96      .161 No_date    6:00
00420>                        +     1.0 04:2E            2.09      .167 No_date    6:00
00421>                        +     1.0 07:2D            3.28      .249 No_date    6:01
00422>                    SUM=      1.0 06:SWMF2        10.19      .596 No_date    6:00
00423> #-----------------|-------------------------------------------------------------|
00424> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)-----------|
00425> #-----------------|-------------------------------------------------------------|
00426> R0001:C00062------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00427>      ROUTE RESERVOIR ->     1.0 06:SWMF2        10.19      .596 No_date    6:00
00428>                   out <=    1.0 09:SWMF-2       10.19      .025 No_date   10:03
00429>       {MxStoUsed=.1453E+00  m3}
00430> #-----------------|-------------------------------------------------------------|
00431> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------------|
00432> #-----------------|-------------------------------------------------------------|
00433> R0001:C00063------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00434>      ADD HYD                1.0 09:SWMF-2        10.19      .025 No_date   10:03
00435>                        +     1.0 05:WC9LOWER     137.64     2.404 No_date    7:03
00436>                    SUM=      1.0 01:WC9c         147.83     2.428 No_date    7:03
00437> R0001:C00064------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00438>      SAVE HYD               1.0 01:WC9c         147.83     2.428 No_date    7:03
00439>        fname :WC9c.0001
00440>        remark:POST-DEV LAKESHORE
00441> #-----------------|-------------------------------------------------------------|
00442> #-----------------|--WATERCOURSE 8 CATCHMENTS-----------------------------------|
00443> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8-----------------------|
00444> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-------------------|
00445> #-----------------|-------------------------------------------------------------|
00446> R0001:C00065------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00447>      CALIB NASHYD           1.0 01:8A            2.27      .024 No_date    6:09
00448>        [CN= 36.2: N= 3.00: Tp=  .23]
00449> R0001:C00066------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00450>      CALIB NASHYD           1.0 02:EXT-8A         7.14      .176 No_date    6:21
00451>        [CN= 68.9: N= 3.00: Tp=  .41]
00452> R0001:C00067------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00453>      CALIB NASHYD           1.0 03:EXT-8B         1.04      .018 No_date    6:21
00454>        [CN= 58.6: N= 3.00: Tp=  .41]
00455> #-----------------|-------------------------------------------------------------|
00456> #-----------------|----------WATERCOURSE 8-------------------------------------|
00457> #-----------------|-------------------------------------------------------------|
00458> R0001:C00068------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00459>      ADD HYD                1.0 01:8A            2.27      .024 No_date    6:09
00460>                        +     1.0 02:EXT-8A         7.14      .176 No_date    6:21
00461>                        +     1.0 03:EXT-8B         1.04      .018 No_date    6:21
00462>                    SUM=      1.0 04:WC8           10.45      .213 No_date    6:19
00463> #-----------------|-------------------------------------------------------------|
00464> #-----------------|--WATERCOURSE 10 CATCHMENT-----------------------------------|
00465> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10------------------|
00466> #-----------------|-------------------------------------------------------------|
00467> R0001:C00069------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00468>      CALIB NASHYD           1.0 01:10A           1.99      .053 No_date    6:07
00469>        [CN= 59.4: N= 3.00: Tp=  .21]
00470> ******************************************************************************
00471> ******************************************************************************
00472> #                            10yr SCS Storm (12hr)
00473> #*****************************************************************************
00474> #*****************************************************************************
00475> R0001:C00070------------------------------------------------------------------
00476>      MASS STORM
00477>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00478>       Comment  = 12 hour SCS II storm mass curve
00479>       [SDT= 1.00:SDUR=  12.00:PTOT=  66.00]
00480> ******************************************************************************
00481> #-----------------|-------------------------------------------------------------|
00482> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
00483> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
00484> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
00485> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00486> #-----------------|-------------------------------------------------------------|
00487> R0001:C00071------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00488>      CALIB NASHYD           1.0 01:EXT-9A       101.80     2.893 No_date    7:01
00489>        [CN= 80.0: N= 3.00: Tp= 1.00]
00490> R0001:C00072------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00491>      ROUTE CHANNEL   ->     1.0 01:EXT-9A       101.80     2.893 No_date    7:01
00492>        [RDT= 1.00] out<-     1.0 02:Channel      101.80     2.883 No_date    7:05
00493>        [L/S/n=  550./2.000/.035]
00494>        {Vmax= 1.710:Dmax=  .319}
00495> R0001:C00073------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00496>      CALIB STANDHYD         1.0 03:EXT-9B        14.80     2.078 No_date    6:02
00497>        [XIMP=.35:TIMP=.35]
00498>        [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00499>        [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00500>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00501> R0001:C00074------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00502>      ROUTE RESERVOIR ->     1.0 03:EXT-9B        14.80     2.078 No_date    6:02
00503>                   out <=    1.0 04:Orchards      14.80      .446 No_date    6:29
00504>       {MxStoUsed=.3514E+00  m3}
00505> #-----------------|-------------------------------------------------------------|
00506> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
00507> #-----------------|-------------------------------------------------------------|
00508> R0001:C00075------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00509>      ADD HYD                1.0 02:Channel      101.80     2.883 No_date    7:05
00510>                        +     1.0 04:Orchards      14.80      .446 No_date    6:29
00511>                    SUM=      1.0 05:RD19         116.60     3.198 No_date    7:00
00512> R0001:C00076------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00513>      CALIB NASHYD           1.0 01:EXT-9C         .65      .057 No_date    6:08
00514>        [CN= 82.7: N= 3.00: Tp=  .24]
00515> #-----------------|-------------------------------------------------------------|
00516> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands-----------------|
00517> #-----------------|-------------------------------------------------------------|
00518> R0001:C00077------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00519>      CALIB NASHYD           1.0 02:9A9B          2.68      .074 No_date    6:13
00520>        [CN= 55.9: N= 3.00: Tp=  .30]
00521> R0001:C00078------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00522>      ADD HYD                1.0 01:EXT-9C         .65      .057 No_date    6:08
00523>                        +     1.0 02:9A9B          2.68      .074 No_date    6:13
00524>                        +     1.0 05:RD19         116.60     3.198 No_date    7:00
00525>                    SUM=      1.0 04:WC9a         119.93     3.229 No_date    7:00
00526> #-----------------|-------------------------------------------------------------|
00527> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT----------------|
00528> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-------------------------|
00529> #-----------------|-------------------------------------------------------------|
00530> R0001:C00079------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00531>      CALIB NASHYD           1.0 01:EXT-1A        8.37      .316 No_date    6:25
00532>        [CN= 74.9: N= 3.00: Tp=  .47]
00533> R0001:C00080------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00534>      CALIB STANDHYD         1.0 03:1A            2.95      .410 No_date    6:00
00535>        [XIMP=.31:TIMP=.51]
00536>        [LOSS= 2 :CN= 67.0]
00537>        [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00538>        [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00539> R0001:C00081------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00540>      CALIB NASHYD           1.0 05:1B            1.81      .060 No_date    6:02
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00541>       [CN= 44.3: N= 3.00: Tp=  .11]
00542> R0001:C00082------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00543>     ADD HYD              1.0 01:EXT-1A         8.37     .316 No_date    6:25
00544>                    +     1.0 03:1A             2.95     .410 No_date    6:00
00545>                    +     1.0 05:1B             1.81     .060 No_date    6:02
00546>                  SUM=    1.0 06:SWMF1         13.13     .599 No_date    6:00
00547> #----------------|-------------------------------------------------------|
00548> #----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00549> #----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00550> #----------------|-------------------------------------------------------|
00551> #----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00552> #----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00553> #----------------|-------------------------------------------------------|
00554> R0001:C00083------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00555>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .599 No_date    6:00
00556>                  out <=   1.0 01:SWMF-1        13.13     .032 No_date   11:06
00557>      {MxStoUsed=.2497E+00  m3}
00558> R0001:C00084------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00559>     ADD HYD              1.0 01:SWMF-1         13.13     .032 No_date   11:06
00560>                    +     1.0 04:WC9a          119.93    3.229 No_date    7:00
00561>                  SUM=    1.0 07:WC9b          133.06    3.257 No_date    7:00
00562> #----------------|-------------------------------------------------------|
00563> #----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
00564> #----------------|-------------------------------------------------------|
00565> #----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
00566> #----------------|-------------------------------------------------------|
00567> R0001:C00085------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00568>     CALIB STANDHYD       1.0 10:9D             1.38     .213 No_date    6:00
00569>       [XIMP=.33:TIMP=.68]
00570>       [LOSS= 2 :CN= 66.2]
00571>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00572>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00573> #----------------|-------------------------------------------------------|
00574> #----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00575> #----------------|-------------------------------------------------------|
00576> R0001:C00086------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00577>     CALIB NASHYD         1.0 01:9F              .73     .023 No_date    6:11
00578>       [CN= 56.7: N= 3.00: Tp=  .28]
00579> R0001:C00087------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00580>     CALIB NASHYD         1.0 02:EXT-9D          .41     .009 No_date    6:37
00581>       [CN= 65.0: N= 3.00: Tp=  .62]
00582> R0001:C00088------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00583>     CALIB NASHYD         1.0 03:9C9E           2.06     .059 No_date    6:15
00584>       [CN= 58.2: N= 3.00: Tp=  .33]
00585> R0001:C00089------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00586>     ADD HYD              1.0 01:9F              .73     .023 No_date    6:11
00587>                    +     1.0 02:EXT-9D          .41     .009 No_date    6:37
00588>                    +     1.0 03:9C9E           2.06     .059 No_date    6:15
00589>                    +     1.0 07:WC9b         133.06    3.257 No_date    7:00
00590>                    +     1.0 10:9D             1.38     .213 No_date    6:00
00591>                  SUM=    1.0 05:WC9LOWER     137.64    3.309 No_date    6:56
00592> #----------------|-------------------------------------------------------|
00593> #----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00594> #----------------|-------------------------------------------------------|
00595> R0001:C00090------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00596>     CALIB NASHYD         1.0 01:2A             1.19     .022 No_date    6:04
00597>       [CN= 33.2: N= 3.00: Tp=  .14]
00598> R0001:C00091------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00599>     CALIB NASHYD         1.0 02:2B             1.67     .020 No_date    6:15
00600>       [CN= 34.7: N= 3.00: Tp=  .32]
00601> R0001:C00092------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00602>     CALIB STANDHYD       1.0 03:2C             1.96     .207 No_date    6:00
00603>       [XIMP=.30:TIMP=.60]
00604>       [LOSS= 2 :CN= 49.0]
00605>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00606>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00607> R0001:C00093------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00608>     CALIB STANDHYD       1.0 07:2D             3.28     .334 No_date    6:00
00609>       [XIMP=.25:TIMP=.50]
00610>       [LOSS= 2 :CN= 59.0]
00611>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00612>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00613> R0001:C00094------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00614>     CALIB STANDHYD       1.0 04:2E             2.09     .224 No_date    6:00
00615>       [XIMP=.26:TIMP=.35]
00616>       [LOSS= 2 :CN= 69.0]
00617>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00618>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00619> R0001:C00095------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00620>     ADD HYD              1.0 01:2A             1.19     .022 No_date    6:04
00621>                    +     1.0 02:2B             1.67     .020 No_date    6:15
00622>                    +     1.0 03:2C             1.96     .207 No_date    6:00
00623>                    +     1.0 04:2E             2.09     .224 No_date    6:00
00624>                    +     1.0 07:2D             3.28     .334 No_date    6:00
00625>                  SUM=    1.0 06:SWMF2         10.19     .796 No_date    6:00
00626> #----------------|-------------------------------------------------------|
00627> #----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00628> #----------------|-------------------------------------------------------|
00629> R0001:C00096------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00630>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19     .796 No_date    6:00
00631>                  out <=   1.0 09:SWMF-2        10.19     .034 No_date   10:02
00632>      {MxStoUsed=.1894E+00  m3}
00633> #----------------|-------------------------------------------------------|
00634> #----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00635> #----------------|-------------------------------------------------------|
00636> R0001:C00097------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00637>     ADD HYD              1.0 09:SWMF-2         10.19     .034 No_date   10:02
00638>                    +     1.0 05:WC9LOWER     137.64    3.309 No_date    6:56
00639>                  SUM=    1.0 01:WC9c          147.83    3.337 No_date    6:56
00640> R0001:C00098------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00641>     SAVE HYD             1.0 01:WC9c          147.83    3.337 No_date    6:56
00642>       fname :WC9c.0001
00643>       remark:POST-DEV LAKESHORE
00644> #----------------|-------------------------------------------------------|
00645> #----------------|--WATERCOURSE 8 CATCHMENTS---------------------------------|
00646> #----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8--------------------|
00647> #----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00648> #----------------|-------------------------------------------------------|
00649> R0001:C00099------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00650>     CALIB NASHYD         1.0 01:8A             2.27     .037 No_date    6:09
00651>       [CN= 36.2: N= 3.00: Tp=  .23]
00652> R0001:C00100------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00653>     CALIB NASHYD         1.0 02:EXT-8A         7.14     .251 No_date    6:20
00654>       [CN= 68.9: N= 3.00: Tp=  .41]
00655> R0001:C00101------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00656>     CALIB NASHYD         1.0 03:EXT-8B         1.04     .026 No_date    6:20
00657>       [CN= 58.6: N= 3.00: Tp=  .41]
00658> #----------------|-------------------------------------------------------|
00659> #----------------|-----------WATERCOURSE 8-----------------------------------|
00660> #----------------|-------------------------------------------------------|
00661> R0001:C00102------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00662>     ADD HYD              1.0 01:8A             2.27     .037 No_date    6:09
00663>                    +     1.0 02:EXT-8A         7.14     .251 No_date    6:20
00664>                    +     1.0 03:EXT-8B         1.04     .026 No_date    6:20
00665>                  SUM=    1.0 04:WC8           10.45     .306 No_date    6:18
00666> #----------------|-------------------------------------------------------|
00667> #----------------|--WATERCOURSE 10 CATCHMENT---------------------------------|
00668> #----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10----------------|
00669> #----------------|-------------------------------------------------------|
00670> R0001:C00103------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00671>     CALIB NASHYD         1.0 01:10A            1.99     .078 No_date    6:07
00672>       [CN= 59.4: N= 3.00: Tp=  .21]
00673> #*******************************************************************************
00674> #*******************************************************************************
00675> #                              25yr SCS Storm (12hr)
00676> #*******************************************************************************
00677> #*******************************************************************************
00678> R0001:C00104------------------------------------------------------------------
00679>      MASS STORM
00680>       Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00681>       Comment  = 12 hour SCS II storm mass curve
00682>       [SDT= 1.00:SDUR=  12.00:PTOT=  79.20]
00683> #*******************************************************************************
00684> #----------------|-------------------------------------------------------|
00685> #----------------|-Subwatershed 9 External Drainage Area---------------------|
00686> #----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00687> #----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00688> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00689> #----------------|-------------------------------------------------------|
00690> R0001:C00105------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00691>     CALIB NASHYD         1.0 01:EXT-9A        101.80    3.899 No_date    7:00
00692>       [CN= 80.0: N= 3.00: Tp= 1.00]
00693> R0001:C00106------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00694>     ROUTE CHANNEL   ->    1.0 01:EXT-9A        101.80    3.899 No_date    7:00
00695>       [RDT= 1.00] out<-    1.0 02:Channel      101.80    3.889 No_date    7:03
00696>       [L/S/n=  550./2.000/.035]
00697>       {Vmax= 1.856:Dmax=  .372}
00698> R0001:C00107------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00699>     CALIB STANDHYD       1.0 03:EXT-9B         14.80    2.847 No_date    6:01
00700>       [XIMP=.35:TIMP=.35]
00701>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00702>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00703>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00704> R0001:C00108------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00705>     ROUTE RESERVOIR ->    1.0 03:EXT-9B         14.80    2.847 No_date    6:01
00706>                  out <=   1.0 04:Orchards       14.80     .760 No_date    6:23
00707>      {MxStoUsed=.4324E+00  m3}
00708> #----------------|-------------------------------------------------------|
00709> #----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00710> #----------------|-------------------------------------------------------|
00711> R0001:C00109------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00712>     ADD HYD              1.0 02:Channel       101.80    3.889 No_date    7:03
00713>                    +     1.0 04:Orchards       14.80     .760 No_date    6:23
00714>                  SUM=    1.0 05:RD19          116.60    4.376 No_date    6:57
00715> R0001:C00110------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00716>     CALIB NASHYD         1.0 01:EXT-9C          .65     .076 No_date    6:08
00717>       [CN= 82.7: N= 3.00: Tp=  .24]
00718> #----------------|-------------------------------------------------------|
00719> #----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00720> #----------------|-------------------------------------------------------|
00721> R0001:C00111------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00722>     CALIB NASHYD         1.0 02:9A9B           2.68     .108 No_date    6:13
00723>       [CN= 55.9: N= 3.00: Tp=  .30]
00724> R0001:C00112------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00725>     ADD HYD              1.0 01:EXT-9C          .65     .076 No_date    6:08
00726>                    +     1.0 02:9A9B           2.68     .108 No_date    6:13
00727>                    +     1.0 05:RD19          116.60    4.376 No_date    6:57
00728>                  SUM=    1.0 04:WC9a          119.93    4.422 No_date    6:57
00729> #----------------|-------------------------------------------------------|
00730> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00731> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00732> #----------------|-------------------------------------------------------|
00733> R0001:C00113------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00734>     CALIB NASHYD         1.0 01:EXT-1A         8.37     .442 No_date    6:24
00735>       [CN= 74.9: N= 3.00: Tp=  .47]
00736> R0001:C00114------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00737>     CALIB STANDHYD       1.0 03:1A             2.95     .530 No_date    6:00
00738>       [XIMP=.31:TIMP=.51]
00739>       [LOSS= 2 :CN= 67.0]
00740>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00741>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00742> R0001:C00115------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00743>     CALIB NASHYD         1.0 05:1B             1.81     .089 No_date    6:02
00744>       [CN= 44.3: N= 3.00: Tp=  .11]
00745> R0001:C00116------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00746>     ADD HYD              1.0 01:EXT-1A         8.37     .442 No_date    6:24
00747>                    +     1.0 03:1A             2.95     .530 No_date    6:00
00748>                    +     1.0 05:1B             1.81     .089 No_date    6:02
00749>                  SUM=    1.0 06:SWMF1         13.13     .809 No_date    6:00
00750> #----------------|-------------------------------------------------------|
00751> #----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
00752> #----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
00753> #----------------|-------------------------------------------------------|
00754> R0001:C00117------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00755>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .809 No_date    6:00
00756>                  out <=   1.0 01:SWMF-1        13.13     .041 No_date   11:13
00757>      {MxStoUsed=.3466E+00  m3}
00758> R0001:C00118------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00759>     ADD HYD              1.0 01:SWMF-1         13.13     .041 No_date   11:13
00760>                    +     1.0 04:WC9a          119.93    4.422 No_date    6:57
00761>                  SUM=    1.0 07:WC9b          133.06    4.453 No_date    6:57
00762> #----------------|-------------------------------------------------------|
00763> #----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00764> #----------------|-------------------------------------------------------|
00765> #----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00766> #----------------|-------------------------------------------------------|
00767> R0001:C00119------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00768>     CALIB STANDHYD       1.0 10:9D             1.38     .276 No_date    6:00
00769>       [XIMP=.33:TIMP=.68]
00770>       [LOSS= 2 :CN= 66.2]
00771>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00772>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00773> #----------------|-------------------------------------------------------|
00774> #----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
00775> #----------------|-------------------------------------------------------|
00776> R0001:C00120------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00777>     CALIB NASHYD         1.0 01:9F              .73     .033 No_date    6:11
00778>       [CN= 56.7: N= 3.00: Tp=  .28]
00779> R0001:C00121------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00780>     CALIB NASHYD         1.0 02:EXT-9D          .41     .013 No_date    6:36
00781>       [CN= 65.0: N= 3.00: Tp=  .62]
00782> R0001:C00122------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00783>     CALIB NASHYD         1.0 03:9C9E           2.06     .085 No_date    6:14
00784>       [CN= 58.2: N= 3.00: Tp=  .33]
00785> R0001:C00123------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00786>     ADD HYD              1.0 01:9F              .73     .033 No_date    6:11
00787>                    +     1.0 02:EXT-9D          .41     .013 No_date    6:36
00788>                    +     1.0 03:9C9E           2.06     .085 No_date    6:14
00789>                    +     1.0 07:WC9b         133.06    4.453 No_date    6:57
00790>                    +     1.0 10:9D             1.38     .276 No_date    6:00
00791>                  SUM=    1.0 05:WC9LOWER     137.64    4.525 No_date    6:57
00792> #----------------|-------------------------------------------------------|
00793> #----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
00794> #----------------|-------------------------------------------------------|
00795> R0001:C00124------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00796>     CALIB NASHYD         1.0 01:2A             1.19     .033 No_date    6:03
00797>       [CN= 33.2: N= 3.00: Tp=  .14]
00798> R0001:C00125------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00799>     CALIB NASHYD         1.0 02:2B             1.67     .030 No_date    6:14
00800>       [CN= 34.7: N= 3.00: Tp=  .32]
00801> R0001:C00126------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00802>     CALIB STANDHYD       1.0 03:2C             1.96     .274 No_date    6:00
00803>       [XIMP=.30:TIMP=.60]
00804>       [LOSS= 2 :CN= 49.0]
00805>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00806>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
00807> R0001:C00127------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00808>     CALIB STANDHYD       1.0 07:2D             3.28     .444 No_date    6:00
00809>       [XIMP=.25:TIMP=.50]
00810>       [LOSS= 2 :CN= 59.0]
```

```
00811>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00812>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
00813> R0001:C00128------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00814>     CALIB STANDHYD        1.0 04:2E             2.09     .299 No_date    6:00
00815>       [XIMP=.26:TIMP=.35]
00816>       [LOSS= 2 :CN= 69.0]
00817>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00818>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
00819> R0001:C00129------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00820>     ADD HYD               1.0 01:2A             1.19     .033 No_date    6:03
00821>                       +     1.0 02:2B             1.67     .030 No_date    6:14
00822>                       +     1.0 03:2C             1.96     .274 No_date    6:00
00823>                       +     1.0 04:2E             2.09     .299 No_date    6:00
00824>                       +     1.0 07:2D             3.28     .444 No_date    6:00
00825>                   SUM=      1.0 06:SWMF2         10.19    1.063 No_date    6:00
00826> #-----------------|-------------------------------------------------------------|
00827> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
00828> #-----------------|-------------------------------------------------------------|
00829> R0001:C00130------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00830>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19    1.063 No_date    6:00
00831>                   out <=    1.0 09:SWMF-2        10.19     .063 No_date    8:06
00832>      {MxStoUsed=.2316E+00  m3}
00833> #-----------------|-------------------------------------------------------------|
00834> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
00835> #-----------------|-------------------------------------------------------------|
00836> R0001:C00131------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00837>     ADD HYD               1.0 09:SWMF-2         10.19     .063 No_date    8:06
00838>                       +     1.0 05:WC9LOWER     137.64    4.525 No_date    6:57
00839>                   SUM=      1.0 01:WC9c          147.83    4.582 No_date    6:57
00840> R0001:C00132------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00841>     SAVE HYD              1.0 01:WC9c          147.83    4.582 No_date    6:57
00842>       fname :WC9c.0001
00843>       remark:POST-DEV LAKESHORE
00844> #-----------------|-------------------------------------------------------------|
00845> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
00846> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
00847> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
00848> #-----------------|-------------------------------------------------------------|
00849> R0001:C00133------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00850>     CALIB NASHYD          1.0 01:8A             2.27     .055 No_date    6:08
00851>       [CN= 36.2: N= 3.00: Tp=  .23]
00852> R0001:C00134------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00853>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .354 No_date    6:20
00854>       [CN= 68.9: N= 3.00: Tp=  .41]
00855> R0001:C00135------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00856>     CALIB NASHYD          1.0 03:EXT-8B         1.04     .038 No_date    6:20
00857>       [CN= 58.6: N= 3.00: Tp=  .41]
00858> #-----------------|-------------------------------------------------------------|
00859> #-----------------|----------WATERCOURSE 8-------------------------------------|
00860> #-----------------|-------------------------------------------------------------|
00861> R0001:C00136------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00862>     ADD HYD               1.0 01:8A             2.27     .055 No_date    6:08
00863>                       +     1.0 02:EXT-8A         7.14     .354 No_date    6:20
00864>                       +     1.0 03:EXT-8B         1.04     .038 No_date    6:20
00865>                   SUM=      1.0 04:WC8           10.45     .435 No_date    6:18
00866> #-----------------|-------------------------------------------------------------|
00867> #-----------------|--WATERCOURSE 10 CATCHMENT----------------------------------|
00868> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10----------------|
00869> #-----------------|-------------------------------------------------------------|
00870> R0001:C00137------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00871>     CALIB NASHYD          1.0 01:10A            1.99     .112 No_date    6:07
00872>       [CN= 59.4: N= 3.00: Tp=  .21]
00873> ##############################################################################
00874> ##############################################################################
00875> #                             50yr SCS Storm (12hr)
00876> ##############################################################################
00877> ##############################################################################
00878> R0001:C00138------------------------------------------------------------------
00879>       MASS STORM
00880>         Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
00881>         Comment  = 12 hour SCS II storm mass curve
00882>         [SDT= 1.00:SDUR=  12.00:PTOT=  88.80]
00883> ##############################################################################
00884> #-----------------|-------------------------------------------------------------|
00885> #-----------------|-Subwatershed 9 External Drainage Area----------------------|
00886> #-----------------|-Per 'The Orchards' FSSWM Report----------------------------|
00887> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)----------------|
00888> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
00889> #-----------------|-------------------------------------------------------------|
00890> R0001:C00139------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00891>     CALIB NASHYD          1.0 01:EXT-9A        101.80    4.667 No_date    6:59
00892>       [CN= 80.0: N= 3.00: Tp= 1.00]
00893> R0001:C00140------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00894>     ROUTE CHANNEL   ->    1.0 01:EXT-9A        101.80    4.667 No_date    6:59
00895>       [RDT= 1.00] out<-    1.0 02:Channel       101.80    4.660 No_date    7:02
00896>         [L/S/n=  550./2.000/.035]
00897>         {Vmax= 1.985:Dmax=  .413}
00898> R0001:C00141------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00899>     CALIB STANDHYD        1.0 03:EXT-9B         14.80    3.300 No_date    6:01
00900>       [XIMP=.35:TIMP=.35]
00901>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
00902>       [Pervious     area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00903>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
00904> R0001:C00142------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00905>     ROUTE RESERVOIR ->    1.0 03:EXT-9B         14.80    3.300 No_date    6:01
00906>                   out <=    1.0 04:Orchards      14.80     .969 No_date    6:21
00907>      {MxStoUsed=.4829E+00  m3}
00908> #-----------------|-------------------------------------------------------------|
00909> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing----------|
00910> #-----------------|-------------------------------------------------------------|
00911> R0001:C00143------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00912>     ADD HYD               1.0 02:Channel       101.80    4.660 No_date    7:02
00913>                       +     1.0 04:Orchards      14.80     .969 No_date    6:21
00914>                   SUM=      1.0 05:RD19          116.60    5.259 No_date    6:56
00915> R0001:C00144------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00916>     CALIB NASHYD          1.0 01:EXT-9C          .65     .090 No_date    6:08
00917>       [CN= 82.7: N= 3.00: Tp=  .24]
00918> #-----------------|-------------------------------------------------------------|
00919> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands----------------|
00920> #-----------------|-------------------------------------------------------------|
00921> R0001:C00145------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00922>     CALIB NASHYD          1.0 02:9A9B           2.68     .135 No_date    6:12
00923>       [CN= 55.9: N= 3.00: Tp=  .30]
00924> R0001:C00146------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00925>     ADD HYD               1.0 01:EXT-9C          .65     .090 No_date    6:08
00926>                       +     1.0 02:9A9B           2.68     .135 No_date    6:12
00927>                       +     1.0 05:RD19          116.60    5.259 No_date    6:56
00928>                   SUM=      1.0 04:WC9a          119.93    5.317 No_date    6:56
00929> #-----------------|-------------------------------------------------------------|
00930> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00931> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1-----------------------|
00932> #-----------------|-------------------------------------------------------------|
00933> R0001:C00147------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00934>     CALIB NASHYD          1.0 01:EXT-1A          8.37     .541 No_date    6:24
00935>       [CN= 74.9: N= 3.00: Tp=  .47]
00936> R0001:C00148------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00937>     CALIB STANDHYD        1.0 03:1A             2.95     .629 No_date    6:00
00938>       [XIMP=.31:TIMP=.51]
00939>       [LOSS= 2 :CN= 67.0]
00940>       [Pervious     area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
00941>       [Impervious   area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
00942> R0001:C00149------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00943>     CALIB NASHYD          1.0 05:1B             1.81     .112 No_date    6:02
00944>       [CN= 44.3: N= 3.00: Tp=  .11]
00945> R0001:C00150------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00946>     ADD HYD               1.0 01:EXT-1A          8.37     .541 No_date    6:24
00947>                       +     1.0 03:1A             2.95     .629 No_date    6:00
00948>                       +     1.0 05:1B             1.81     .112 No_date    6:02
00949>                   SUM=      1.0 06:SWMF1         13.13     .980 No_date    6:00
00950> #-----------------|-------------------------------------------------------------|
00951> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE--------|
00952> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
00953> #-----------------|-------------------------------------------------------------|
00954> R0001:C00151------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00955>     ROUTE RESERVOIR ->    1.0 06:SWMF1         13.13     .980 No_date    6:00
00956>                   out <=    1.0 01:SWMF-1        13.13     .065 No_date   10:16
00957>      {MxStoUsed=.3990E+00  m3}
00958> R0001:C00152------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00959>     ADD HYD               1.0 01:SWMF-1         13.13     .065 No_date   10:16
00960>                       +     1.0 04:WC9a          119.93    5.317 No_date    6:56
00961>                   SUM=      1.0 07:WC9b          133.06    5.351 No_date    6:56
00962> #-----------------|-------------------------------------------------------------|
00963> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands----------------|
00964> #-----------------|-------------------------------------------------------------|
00965> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS--------|
00966> #-----------------|-------------------------------------------------------------|
00967> R0001:C00153------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00968>     CALIB STANDHYD        1.0 10:9D             1.38     .321 No_date    6:00
00969>       [XIMP=.33:TIMP=.68]
00970>       [LOSS= 2 :CN= 66.2]
00971>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
00972>       [Impervious   area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
00973> #-----------------|-------------------------------------------------------------|
00974> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED------------------------|
00975> #-----------------|-------------------------------------------------------------|
00976> R0001:C00154------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00977>     CALIB NASHYD          1.0 01:9F              .73     .041 No_date    6:11
00978>       [CN= 56.7: N= 3.00: Tp=  .28]
00979> R0001:C00155------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00980>     CALIB NASHYD          1.0 02:EXT-9D          .41     .016 No_date    6:36
00981>       [CN= 65.0: N= 3.00: Tp=  .62]
00982> R0001:C00156------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00983>     CALIB NASHYD          1.0 03:9C9E           2.06     .106 No_date    6:14
00984>       [CN= 58.2: N= 3.00: Tp=  .33]
00985> R0001:C00157------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00986>     ADD HYD               1.0 01:9F              .73     .041 No_date    6:11
00987>                       +     1.0 02:EXT-9D          .41     .016 No_date    6:36
00988>                       +     1.0 03:9C9E           2.06     .106 No_date    6:14
00989>                       +     1.0 07:WC9b          133.06    5.351 No_date    6:56
00990>                       +     1.0 10:9D             1.38     .321 No_date    6:00
00991>                   SUM=      1.0 05:WC9LOWER      137.64    5.439 No_date    6:53
00992> #-----------------|-------------------------------------------------------------|
00993> #-----------------|-LANDS DRAINING TO SWM FACILITY 2---------------------------|
00994> #-----------------|-------------------------------------------------------------|
00995> R0001:C00158------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00996>     CALIB NASHYD          1.0 01:2A             1.19     .043 No_date    6:03
00997>       [CN= 33.2: N= 3.00: Tp=  .14]
00998> R0001:C00159------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
00999>     CALIB NASHYD          1.0 02:2B             1.67     .038 No_date    6:14
01000>       [CN= 34.7: N= 3.00: Tp=  .32]
01001> R0001:C00160------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01002>     CALIB STANDHYD        1.0 03:2C             1.96     .322 No_date    6:00
01003>       [XIMP=.30:TIMP=.60]
01004>       [LOSS= 2 :CN= 49.0]
01005>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01006>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01007> R0001:C00161------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01008>     CALIB STANDHYD        1.0 07:2D             3.28     .535 No_date    6:00
01009>       [XIMP=.25:TIMP=.50]
01010>       [LOSS= 2 :CN= 59.0]
01011>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01012>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01013> R0001:C00162------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01014>     CALIB STANDHYD        1.0 04:2E             2.09     .360 No_date    6:00
01015>       [XIMP=.26:TIMP=.35]
01016>       [LOSS= 2 :CN= 69.0]
01017>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01018>       [Impervious   area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
01019> R0001:C00163------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01020>     ADD HYD               1.0 01:2A             1.19     .043 No_date    6:03
01021>                       +     1.0 02:2B             1.67     .038 No_date    6:14
01022>                       +     1.0 03:2C             1.96     .322 No_date    6:00
01023>                       +     1.0 04:2E             2.09     .360 No_date    6:00
01024>                       +     1.0 07:2D             3.28     .535 No_date    6:00
01025>                   SUM=      1.0 06:SWMF2         10.19    1.276 No_date    6:00
01026> #-----------------|-------------------------------------------------------------|
01027> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01028> #-----------------|-------------------------------------------------------------|
01029> R0001:C00164------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01030>     ROUTE RESERVOIR ->    1.0 06:SWMF2         10.19    1.276 No_date    6:00
01031>                   out <=    1.0 09:SWMF-2        10.19     .093 No_date    7:20
01032>      {MxStoUsed=.2604E+00  m3}
01033> #-----------------|-------------------------------------------------------------|
01034> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-----------------|
01035> #-----------------|-------------------------------------------------------------|
01036> R0001:C00165------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01037>     ADD HYD               1.0 09:SWMF-2         10.19     .093 No_date    7:20
01038>                       +     1.0 05:WC9LOWER      137.64    5.439 No_date    6:53
01039>                   SUM=      1.0 01:WC9c          147.83    5.529 No_date    6:56
01040> R0001:C00166------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01041>     SAVE HYD              1.0 01:WC9c          147.83    5.529 No_date    6:56
01042>       fname :WC9c.0001
01043>       remark:POST-DEV LAKESHORE
01044> #-----------------|-------------------------------------------------------------|
01045> #-----------------|--WATERCOURSE 8 CATCHMENTS----------------------------------|
01046> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8---------------------|
01047> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8-----------------|
01048> #-----------------|-------------------------------------------------------------|
01049> R0001:C00167------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01050>     CALIB NASHYD          1.0 01:8A             2.27     .070 No_date    6:08
01051>       [CN= 36.2: N= 3.00: Tp=  .23]
01052> R0001:C00168------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01053>     CALIB NASHYD          1.0 02:EXT-8A         7.14     .435 No_date    6:19
01054>       [CN= 68.9: N= 3.00: Tp=  .41]
01055> R0001:C00169------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01056>     CALIB NASHYD          1.0 03:EXT-8B         1.04     .047 No_date    6:20
01057>       [CN= 58.6: N= 3.00: Tp=  .41]
01058> #-----------------|-------------------------------------------------------------|
01059> #-----------------|----------WATERCOURSE 8-------------------------------------|
01060> #-----------------|-------------------------------------------------------------|
01061> R0001:C00170------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01062>     ADD HYD               1.0 01:8A             2.27     .070 No_date    6:08
01063>                       +     1.0 02:EXT-8A         7.14     .435 No_date    6:19
01064>                       +     1.0 03:EXT-8B         1.04     .047 No_date    6:20
01065>                   SUM=      1.0 04:WC8           10.45     .537 No_date    6:18
01066> #-----------------|-------------------------------------------------------------|
01067> #-----------------|--WATERCOURSE 10 CATCHMENT----------------------------------|
01068> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10----------------|
01069> #-----------------|-------------------------------------------------------------|
01070> R0001:C00171------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01071>     CALIB NASHYD          1.0 01:10A            1.99     .140 No_date    6:07
01072>       [CN= 59.4: N= 3.00: Tp=  .21]
01073> ##############################################################################
01074> ##############################################################################
01075> #                            100yr SCS Storm (12hr)
01076> ##############################################################################
01077> ##############################################################################
01078> R0001:C00172------------------------------------------------------------------
01079>       MASS STORM
01080>         Filename = C:\Users\achatterjee\OneDrive - CF Crozier & Associates\Desktop
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01081>       Comment  = 12 hour SCS II storm mass curve
01082>       [SDT= 1.00:SDUR=  12.00:PTOT=  98.40]
01083> #*******************************************************************************
01084> #-----------------|-------------------------------------------------------------|
01085> #-----------------|-Subwatershed 9 External Drainage Area-----------------------|
01086> #-----------------|-Per 'The Orchards' FSSWM Report-----------------------------|
01087> #-----------------|-Prepared by Higgins Engineering (Jan. 2005)-----------------|
01088> #--'EXT-9A' Total Area 116.6 ha less 'Orchards' 14.8 ha equals 101.8 ha-------|
01089> #-----------------|-------------------------------------------------------------|
01090> R0001:C00173------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01091>     CALIB NASHYD          1.0 01:EXT-9A       101.80    5.459 No_date    6:59
01092>       [CN= 80.0: N= 3.00: Tp= 1.00]
01093> R0001:C00174------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01094>     ROUTE CHANNEL   ->    1.0 01:EXT-9A       101.80    5.459 No_date    6:59
01095>      [RDT= 1.00] out<-    1.0 02:Channel      101.80    5.446 No_date    7:02
01096>       [L/S/n=  550./2.000/.035]
01097>       {Vmax= 2.076:Dmax=  .448}
01098> R0001:C00175------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01099>     CALIB STANDHYD        1.0 03:EXT-9B        14.80    3.868 No_date    6:01
01100>       [XIMP=.35:TIMP=.35]
01101>       [Horton parameters: Fo= 50.00:Fc=  7.50:DCAY=2.00:  F= .00]
01102>       [Pervious    area: IAper= 1.50:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01103>       [Impervious  area: IAimp= 1.00:SLPI=1.00:LGI= 314.:MNI=.013:SCI=   .0]
01104> R0001:C00176------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01105>     ROUTE RESERVOIR ->    1.0 03:EXT-9B        14.80    3.868 No_date    6:01
01106>                  out <=    1.0 04:Orchards      14.80    1.227 No_date    6:19
01107>      {MxStoUsed=.5393E+00  m3}
01108> #-----------------|-------------------------------------------------------------|
01109> #-----------------|-TOTAL FLOW at Watercourse 9 Grey Road 19 Crossing-----------|
01110> #-----------------|-------------------------------------------------------------|
01111> R0001:C00177------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01112>     ADD HYD               1.0 02:Channel      101.80    5.446 No_date    7:02
01113>                     +     1.0 04:Orchards      14.80    1.227 No_date    6:19
01114>                   SUM=    1.0 05:RD19         116.60    6.162 No_date    6:56
01115> R0001:C00178------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01116>     CALIB NASHYD          1.0 01:EXT-9C         .65     .104 No_date    6:08
01117>       [CN= 82.7: N= 3.00: Tp=  .24]
01118> #-----------------|-------------------------------------------------------------|
01119> #-----------------|-Parkbridge Craigleith - Upper Terrace Lands---------------|
01120> #-----------------|-------------------------------------------------------------|
01121> R0001:C00179------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01122>     CALIB NASHYD          1.0 02:9A9B          2.68     .164 No_date    6:12
01123>       [CN= 55.9: N= 3.00: Tp=  .30]
01124> R0001:C00180------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01125>     ADD HYD               1.0 01:EXT-9C         .65     .104 No_date    6:08
01126>                     +     1.0 02:9A9B          2.68     .164 No_date    6:12
01127>                     +     1.0 05:RD19        116.60    6.162 No_date    6:56
01128>                   SUM=    1.0 04:WC9a        119.93    6.230 No_date    6:56
01129> #-----------------|-------------------------------------------------------------|
01130> #--CATCHMENT EXT-1A DIRECTED TO SWM FACILITY 1 POST-DEVELOPMENT---------------|
01131> #--CATCHMENT EXT-1A TO BE CONTROLLED BY SWM FACILITY 1------------------------|
01132> #-----------------|-------------------------------------------------------------|
01133> R0001:C00181------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01134>     CALIB NASHYD          1.0 01:EXT-1A         8.37     .644 No_date    6:23
01135>       [CN= 74.9: N= 3.00: Tp=  .47]
01136> R0001:C00182------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01137>     CALIB STANDHYD        1.0 03:1A            2.95     .725 No_date    6:00
01138>       [XIMP=.31:TIMP=.51]
01139>       [LOSS= 2 :CN= 67.0]
01140>       [Pervious    area: IAper= 5.00:SLPP=3.00:LGP=  30.:MNP=.250:SCP=   .0]
01141>       [Impervious  area: IAimp= 2.00:SLPI=5.50:LGI=  44.:MNI=.013:SCI=   .0]
01142> R0001:C00183------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01143>     CALIB NASHYD          1.0 05:1B            1.81     .137 No_date    6:02
01144>       [CN= 44.3: N= 3.00: Tp=  .11]
01145> R0001:C00184------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01146>     ADD HYD               1.0 01:EXT-1A         8.37     .644 No_date    6:23
01147>                     +     1.0 03:1A            2.95     .725 No_date    6:00
01148>                     +     1.0 05:1B            1.81     .137 No_date    6:02
01149>                   SUM=    1.0 06:SWMF1        13.13    1.153 No_date    6:00
01150> #-----------------|-------------------------------------------------------------|
01151> #-----------------|-EXISTING POND ON PARKBRIDGE CRAIGLEITH SUBJECT SITE-------|
01152> #-----------------|-CONVERTED TO SWM FACILITY 1 POST-DEVELOPMENT--------------|
01153> #-----------------|-------------------------------------------------------------|
01154> R0001:C00185------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01155>     ROUTE RESERVOIR ->    1.0 06:SWMF1        13.13    1.153 No_date    6:00
01156>                  out <=    1.0 01:SWMF-1       13.13     .094 No_date    9:09
01157>      {MxStoUsed=.4476E+00  m3}
01158> R0001:C00186------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01159>     ADD HYD               1.0 01:SWMF-1        13.13     .094 No_date    9:09
01160>                     +     1.0 04:WC9a         119.93    6.230 No_date    6:56
01161>                   SUM=    1.0 07:WC9b         133.06    6.277 No_date    6:56
01162> #-----------------|-------------------------------------------------------------|
01163> #-----------------|-Parkbridge Craigleith - Lower Terrace Lands---------------|
01164> #-----------------|-------------------------------------------------------------|
01165> #-----------------|-CATCHMENT 9D DISCHARGING TO WATERCOURSE 9 AFTER OGS-------|
01166> #-----------------|-------------------------------------------------------------|
01167> R0001:C00187------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01168>     CALIB STANDHYD        1.0 10:9D            1.38     .372 No_date    6:00
01169>       [XIMP=.33:TIMP=.68]
01170>       [LOSS= 2 :CN= 66.2]
01171>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01172>       [Impervious  area: IAimp= 2.00:SLPI=2.00:LGI=  96.:MNI=.013:SCI=   .0]
01173> #-----------------|-------------------------------------------------------------|
01174> #-----------------|-LANDS DRAINING TO WC 9 UNCONTROLLED-----------------------|
01175> #-----------------|-------------------------------------------------------------|
01176> R0001:C00188------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01177>     CALIB NASHYD          1.0 01:9F             .73     .049 No_date    6:11
01178>       [CN= 56.7: N= 3.00: Tp=  .28]
01179> R0001:C00189------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01180>     CALIB NASHYD          1.0 02:EXT-9D         .41     .020 No_date    6:35
01181>       [CN= 65.0: N= 3.00: Tp=  .62]
01182> R0001:C00190------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01183>     CALIB NASHYD          1.0 03:9C9E          2.06     .128 No_date    6:14
01184>       [CN= 58.2: N= 3.00: Tp=  .33]
01185> R0001:C00191------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01186>     ADD HYD               1.0 01:9F             .73     .049 No_date    6:11
01187>                     +     1.0 02:EXT-9D         .41     .020 No_date    6:35
01188>                     +     1.0 03:9C9E          2.06     .128 No_date    6:14
01189>                     +     1.0 07:WC9b         133.06    6.277 No_date    6:56
01190>                     +     1.0 10:9D            1.38     .372 No_date    6:00
01191>                   SUM=    1.0 05:WC9LOWER     137.64    6.381 No_date    6:55
01192> #-----------------|-------------------------------------------------------------|
01193> #-----------------|-LANDS DRAINING TO SWM FACILITY 2--------------------------|
01194> #-----------------|-------------------------------------------------------------|
01195> R0001:C00192------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01196>     CALIB NASHYD          1.0 01:2A            1.19     .053 No_date    6:03
01197>       [CN= 33.2: N= 3.00: Tp=  .14]
01198> R0001:C00193------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01199>     CALIB NASHYD          1.0 02:2B            1.67     .047 No_date    6:14
01200>       [CN= 34.7: N= 3.00: Tp=  .32]
01201> R0001:C00194------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01202>     CALIB STANDHYD        1.0 03:2C            1.96     .378 No_date    6:00
01203>       [XIMP=.30:TIMP=.60]
01204>       [LOSS= 2 :CN= 49.0]
01205>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01206>       [Impervious  area: IAimp= 2.00:SLPI=1.00:LGI= 114.:MNI=.013:SCI=   .0]
01207> R0001:C00195------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01208>     CALIB STANDHYD        1.0 07:2D            3.28     .621 No_date    6:00
01209>       [XIMP=.25:TIMP=.50]
01210>       [LOSS= 2 :CN= 59.0]
01211>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01212>       [Impervious  area: IAimp= 2.00:SLPI=1.00:LGI= 148.:MNI=.013:SCI=   .0]
01213> R0001:C00196------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01214>     CALIB STANDHYD        1.0 04:2E            2.09     .418 No_date    6:00
01215>       [XIMP=.26:TIMP=.35]
01216>       [LOSS= 2 :CN= 69.0]
01217>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  30.:MNP=.250:SCP=   .0]
01218>       [Impervious  area: IAimp= 2.00:SLPI=1.00:LGI= 118.:MNI=.013:SCI=   .0]
01219> R0001:C00197------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01220>     ADD HYD               1.0 01:2A            1.19     .053 No_date    6:03
01221>                     +     1.0 02:2B            1.67     .047 No_date    6:14
01222>                     +     1.0 03:2C            1.96     .378 No_date    6:00
01223>                     +     1.0 04:2E            2.09     .418 No_date    6:00
01224>                     +     1.0 07:2D            3.28     .621 No_date    6:00
01225>                   SUM=    1.0 06:SWMF2        10.19    1.491 No_date    6:00
01226> #-----------------|-------------------------------------------------------------|
01227> #-----------------|-POST-DEVELOPMENT SWM FACILITY 2 (LOWER EAST POND)---------|
01228> #-----------------|-------------------------------------------------------------|
01229> R0001:C00198------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01230>     ROUTE RESERVOIR ->    1.0 06:SWMF2        10.19    1.491 No_date    6:00
01231>                  out <=    1.0 09:SWMF-2       10.19     .129 No_date    7:05
01232>      {MxStoUsed=.2920E+00  m3}
01233> #-----------------|-------------------------------------------------------------|
01234> #-----------------|--WATERCOURSE 9 TOTAL FLOW AT LAKESHORE RD-------------------|
01235> #-----------------|-------------------------------------------------------------|
01236> R0001:C00199------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01237>     ADD HYD               1.0 09:SWMF-2        10.19     .129 No_date    7:05
01238>                     +     1.0 05:WC9LOWER     137.64    6.381 No_date    6:55
01239>                   SUM=    1.0 01:WC9c         147.83    6.509 No_date    6:55
01240> R0001:C00200------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01241>     SAVE HYD              1.0 01:WC9c         147.83    6.509 No_date    6:55
01242>       fname :WC9c.0001
01243>       remark:POST-DEV LAKESHORE
01244> #-----------------|-------------------------------------------------------------|
01245> #-----------------|--WATERCOURSE 8 CATCHMENTS-----------------------------------|
01246> #-----------------|--WC 8 CATCHMENTS TO BE DIRECTED TO WC8----------------------|
01247> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 8------------------|
01248> #-----------------|-------------------------------------------------------------|
01249> R0001:C00201------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01250>     CALIB NASHYD          1.0 01:8A            2.27     .086 No_date    6:08
01251>       [CN= 36.2: N= 3.00: Tp=  .23]
01252> R0001:C00202------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01253>     CALIB NASHYD          1.0 02:EXT-8A        7.14     .521 No_date    6:19
01254>       [CN= 68.9: N= 3.00: Tp=  .41]
01255> R0001:C00203------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01256>     CALIB NASHYD          1.0 03:EXT-8B        1.04     .057 No_date    6:20
01257>       [CN= 58.6: N= 3.00: Tp=  .41]
01258> #-----------------|-------------------------------------------------------------|
01259> #-----------------|----------WATERCOURSE 8-------------------------------------|
01260> #-----------------|-------------------------------------------------------------|
01261> R0001:C00204------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01262>     ADD HYD               1.0 01:8A            2.27     .086 No_date    6:08
01263>                     +     1.0 02:EXT-8A        7.14     .521 No_date    6:19
01264>                     +     1.0 03:EXT-8B        1.04     .057 No_date    6:20
01265>                   SUM=    1.0 04:WC8          10.45     .646 No_date    6:17
01266> #-----------------|-------------------------------------------------------------|
01267> #-----------------|--WATERCOURSE 10 CATCHMENT-----------------------------------|
01268> #-----------------|--EQUIVALENT TO EXISTING CONDITIONS OF WC 10-----------------|
01269> #-----------------|-------------------------------------------------------------|
01270> R0001:C00205------------DTmin-ID:NHYD---------AREAha-QPEAKcms-TpeakDate_hh:mm---
01271>     CALIB NASHYD          1.0 01:10A           1.99     .170 No_date    6:07
01272>       [CN= 59.4: N= 3.00: Tp=  .21]
01273> R0001:C00206-------------------------------------------------------------------
01274>     FINISH
01275> -------------------------------------------------------------------------------
01276> *******************************************************************************
01277>      WARNINGS / ERRORS / NOTES
01278>      -------------------------
01279>    Simulation ended on 2022-03-11     at 14:22:28
01280> ===============================================================================
01281>
01282>
```
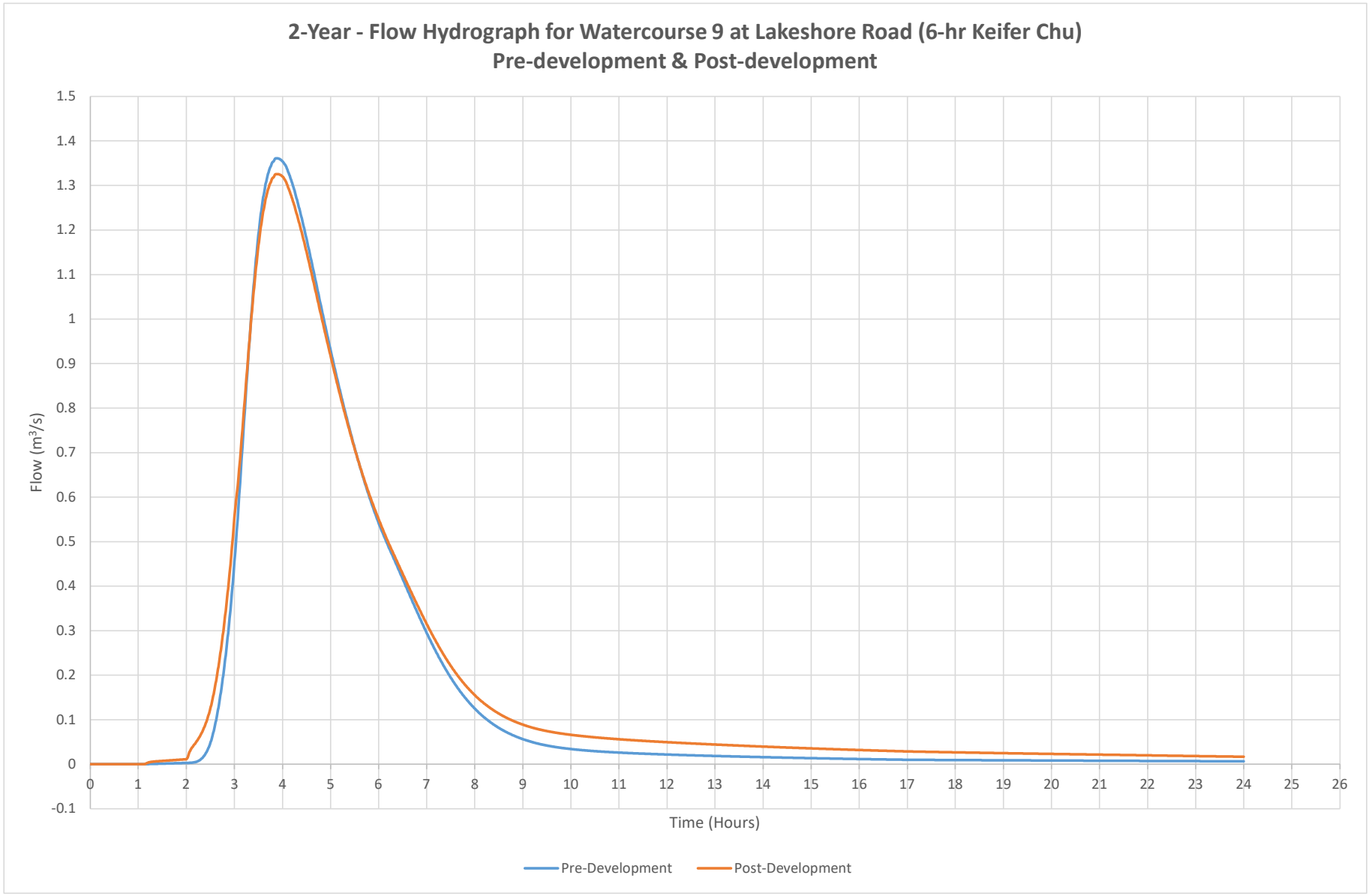
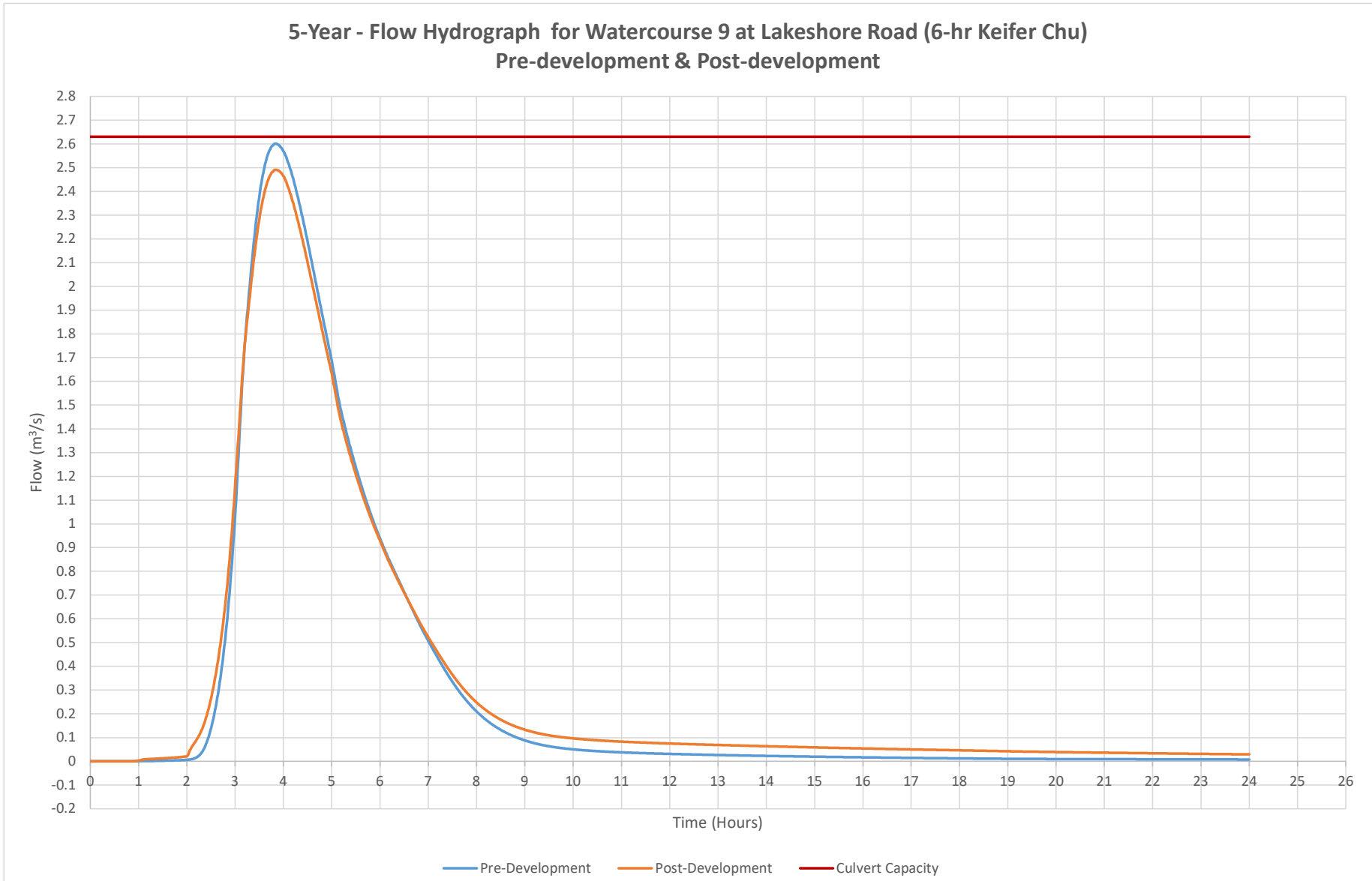
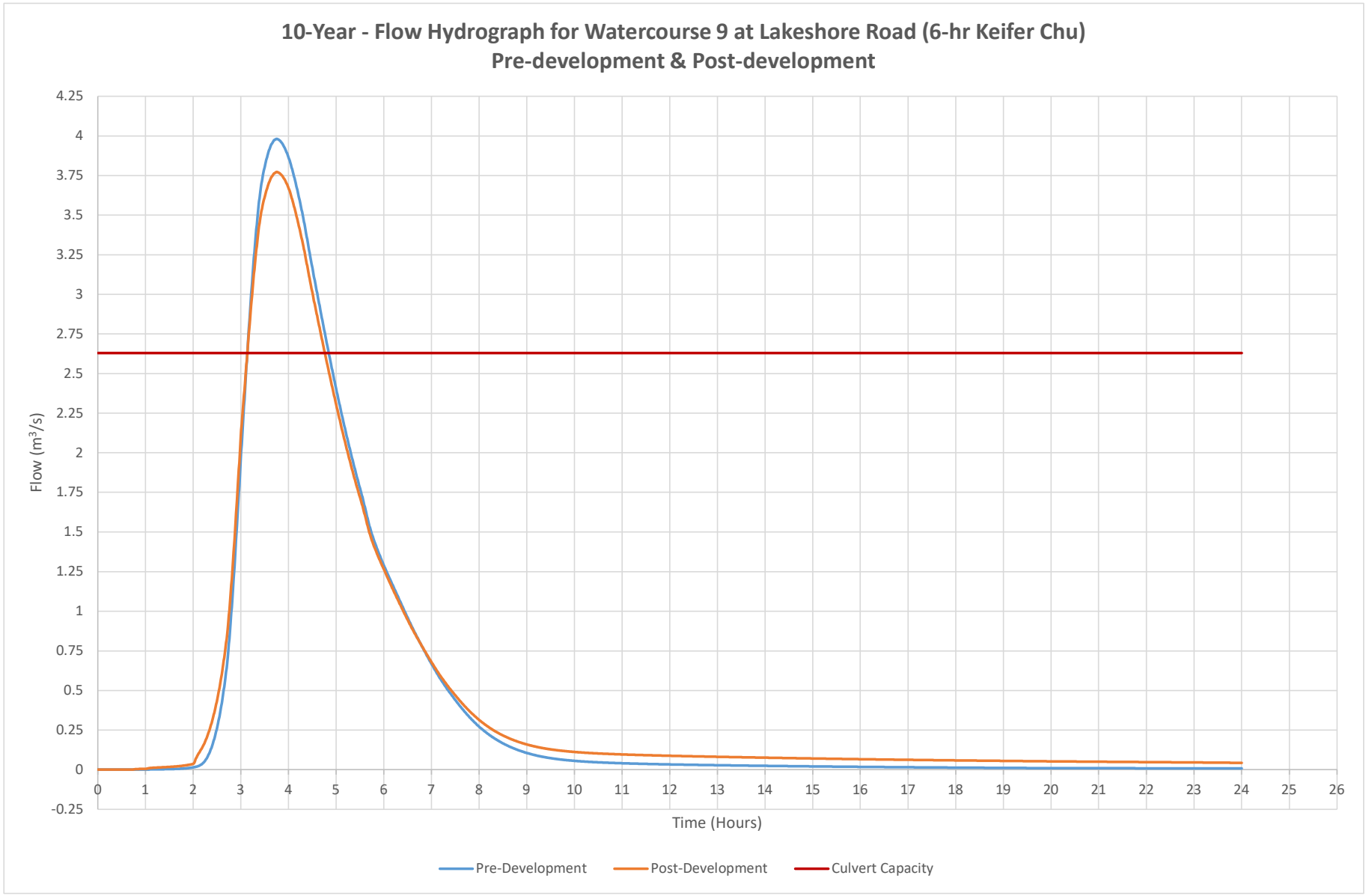
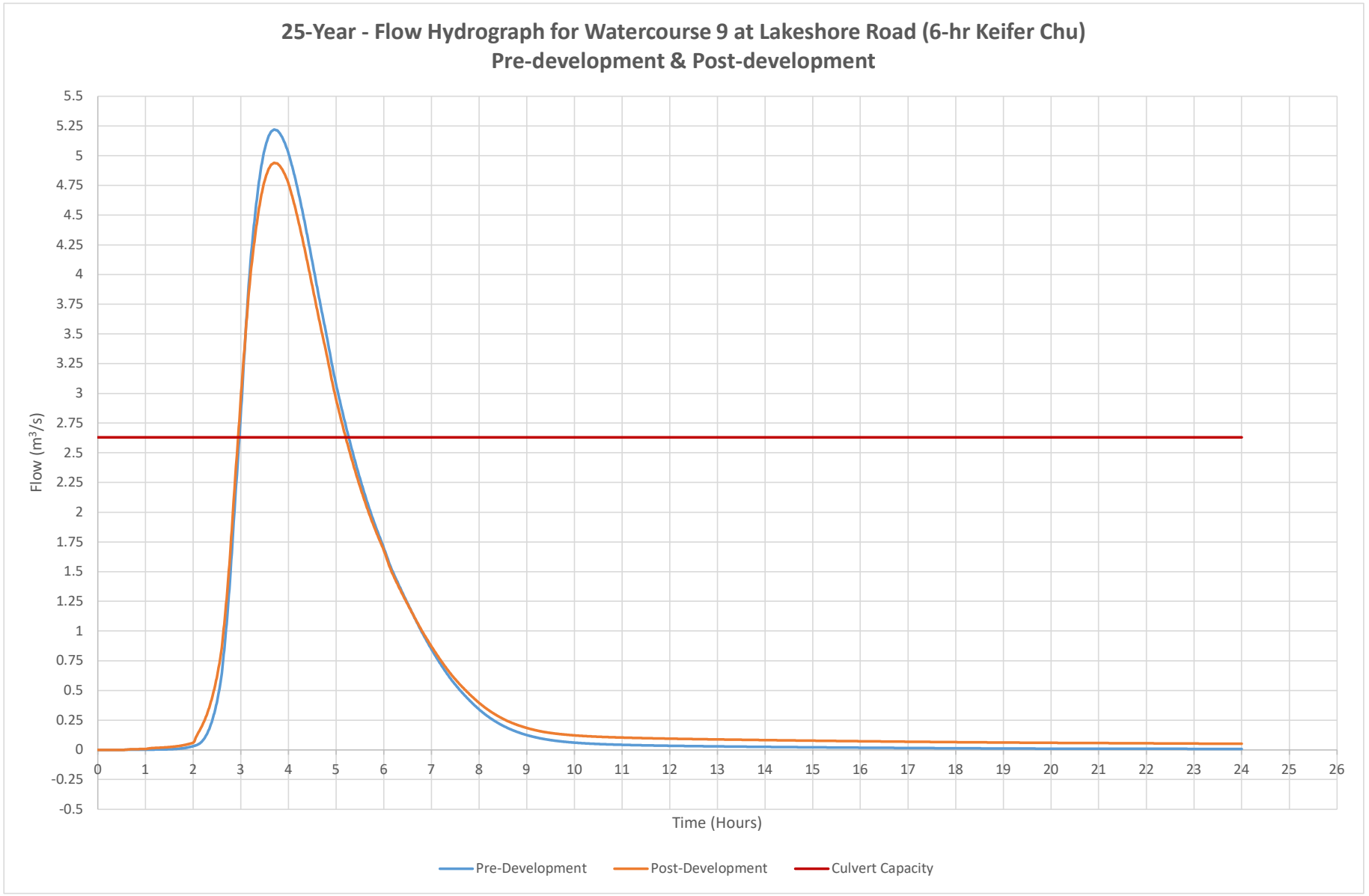
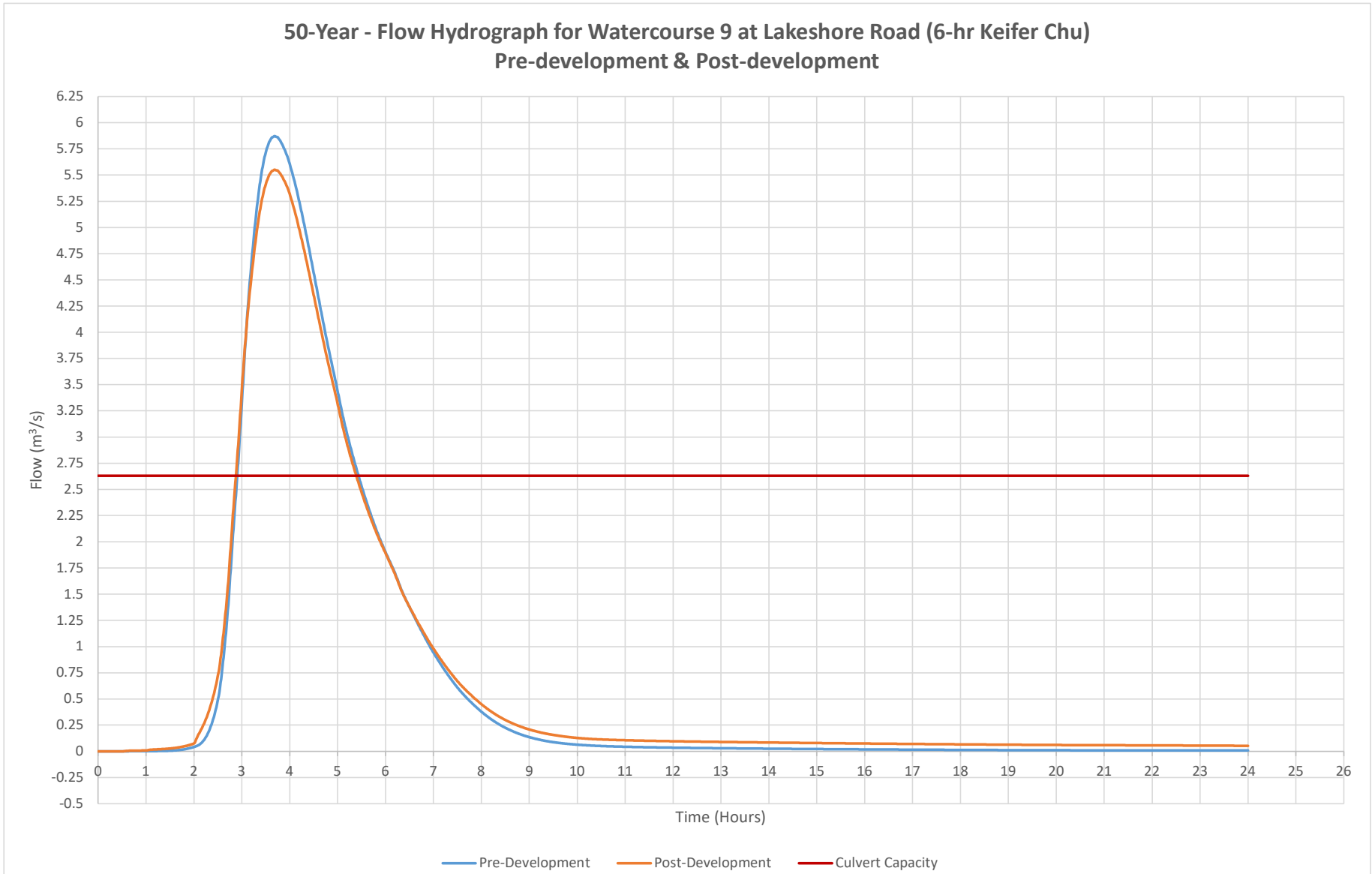
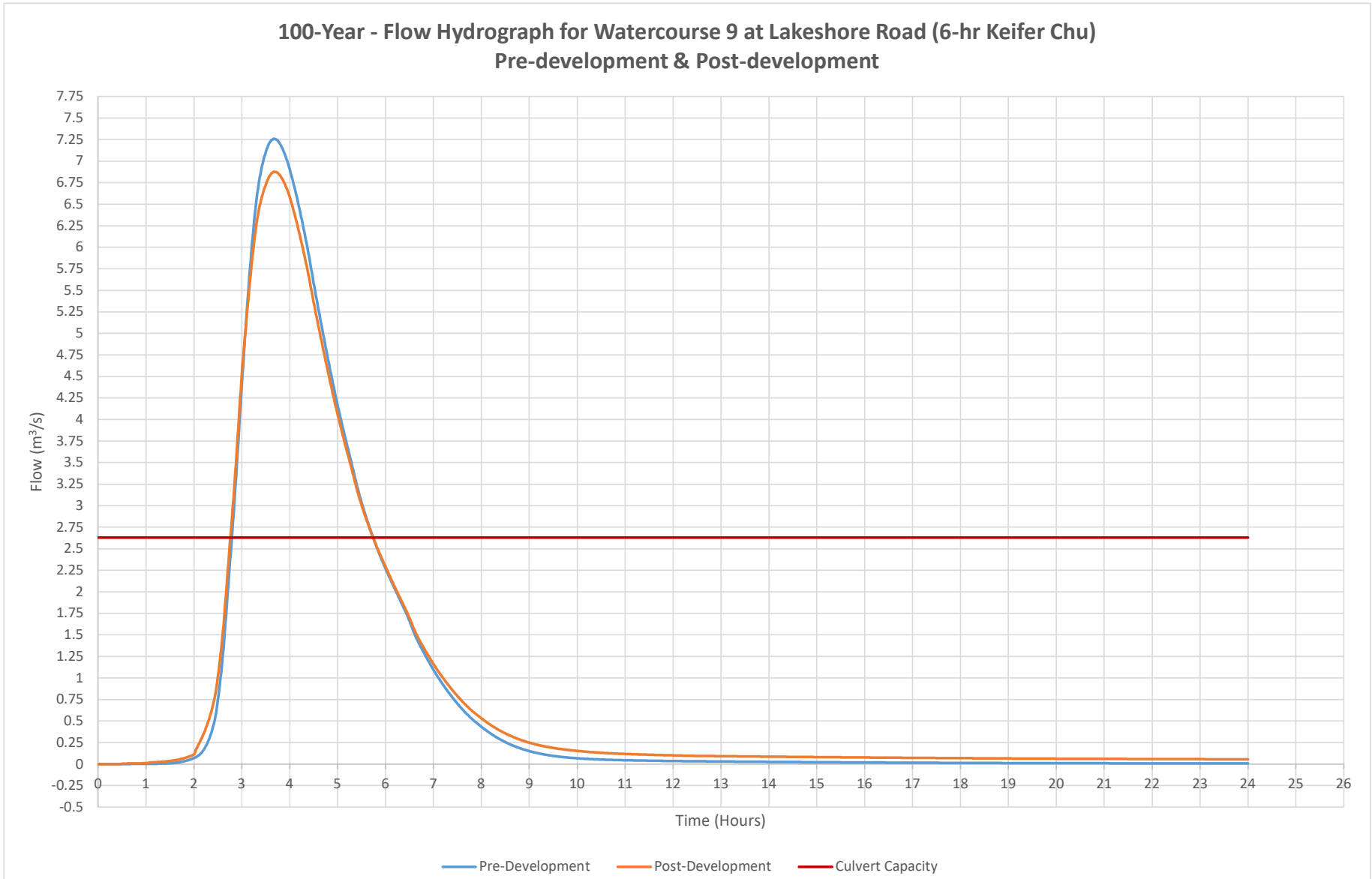


2-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m3/s)
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Time (Hours)
Pre-Development
Post-Development

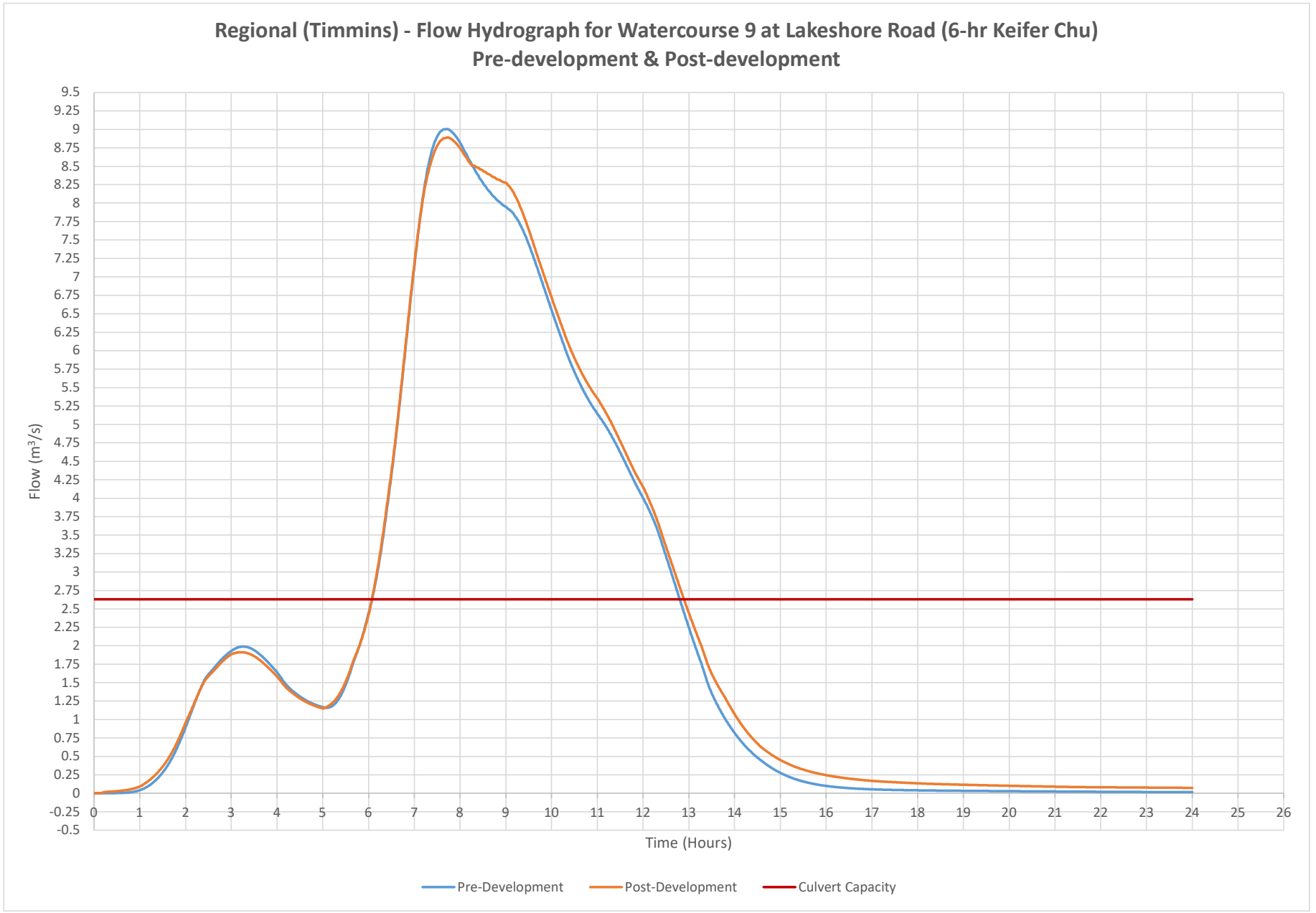

5-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m³/s)
Time (Hours)
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.2
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Pre-Development
Post-Development
Culvert Capacity


10-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m3/s)
4.25
4
3.75
3.5
3.25
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
-0.25
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Time (Hours)
Pre-Development
Post-Development
Culvert Capacity


25-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m3/s)
5.5
5.25
5
4.75
4.5
4.25
4
3.75
3.5
3.25
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
-0.25
-0.5
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Time (Hours)
Pre-Development
Post-Development
Culvert Capacity


50-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m³/s)
6.25
6
5.75
5.5
5.25
5
4.75
4.5
4.25
4
3.75
3.5
3.25
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
-0.25
-0.5
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Time (Hours)
Pre-Development
Post-Development
Culvert Capacity


100-Year - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m³/s)
7.75
7.5
7.25
7
6.75
6.5
6.25
6
5.75
5.5
5.25
5
4.75
4.5
4.25
4
3.75
3.5
3.25
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
-0.25
-0.5
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Time (Hours)
Pre-Development
Post-Development
Culvert Capacity


Regional (Timmins) - Flow Hydrograph for Watercourse 9 at Lakeshore Road (6-hr Keifer Chu)
Pre-development & Post-development
Flow (m³/s)
Time (Hours)
Pre-Development
Post-Development
Culvert Capacity

APPENDIX D

SWM Facility Design

Summary of Pre & Post Development Flows
Summary of Pond Operating Flows & Storage
SWM Facility #1 Quality Requirements, SSD, ED, Forebay
SWM Facility #2 Quality Requirements, SSD, ED, Forebay

CROZIER
CONSULTING ENGINEERS

PROJ. NO:	1046-4031
PROJECT:	Parkbridge Craigleith
DESIGN:	J. Elder/AC
FILE:	Summary of Flows
DATE:	2022.03.11

6-Hour Keifer-Chu Distribution

Location	Return Period	Peak Flow (m^3/s)		% Difference
		Pre-Development	Post-Development	
Lakeshore Road (Watercourse 9)	2-Year	1.36	1.33	-2.6%
	5-Year	2.60	2.49	-4.2%
	10-Year	3.98	3.77	-5.2%
	25-Year	5.22	4.94	-5.3%
	50-Year	5.87	5.56	-5.4%
	100-Year	7.26	6.88	-5.2%
	Regional	9.01	8.90	-1.1%

4-Hour Chicago

Location	Return Period	Peak Flow (m^3/s)		% Difference
		Pre-Development	Post-Development	
Lakeshore Road (Watercourse 9)	25-mm	0.57	0.58	0.2%
	2-Year	0.89	0.89	-0.8%
	5-Year	1.65	1.61	-2.6%
	10-Year	2.25	2.17	-3.4%
	25-Year	3.02	2.89	-4.2%
	50-Year	3.69	3.51	-4.7%
	100-Year	4.38	4.17	-4.8%

24-Hour SCS

Location	Return Period	Peak Flow (m^3/s)		% Difference
		Pre-Development	Post-Development	
Lakeshore Road (Watercourse 9)	2-Year	1.45	1.41	-3.4%
	5-Year	2.68	2.55	-4.8%
	10-Year	3.47	3.29	-5.4%
	25-Year	4.73	4.46	-5.6%
	50-Year	5.59	5.28	-5.6%
	100-Year	6.71	6.34	-5.4%

12-Hour SCS

Location	Return Period	Peak Flow (m^3/s)		% Difference
		Pre-Development	Post-Development	
Lakeshore Road (Watercourse 9)	2-Year	1.31	1.27	-2.8%
	5-Year	2.54	2.43	-4.5%
	10-Year	3.52	3.34	-5.2%
	25-Year	4.85	4.58	-5.4%
	50-Year	5.85	5.53	-5.4%
	100-Year	6.87	6.51	-5.3%

CROZIER
CONSULTING ENGINEERS

PROJ. NO: 1046-4031
PROJECT: Parkbridge Craigleith
DESIGN: J. Elder/AC
FILE: SWMHYMO Pond Summary
DATE: 2022.03.21

6-Hour Keifer Chu Model								
Pond ID	Peak Flow (m^3/s)	Return Period						
		2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	Regional
SWMF #1 (upper)	Peak Flow In	0.21	0.37	0.56	0.73	0.82	1.02	1.05
	Peak Flow Out	0.02	0.03	0.03	0.05	0.07	0.11	0.62
	% Difference	-90.8%	-92.5%	-94.1%	-93.3%	-91.8%	-88.9%	-40.6%
	Storage Required	962	1821	2759	3648	4026	4720	7803
SWMF #2 (lower)	Peak Flow In	0.22	0.35	0.49	0.62	0.69	0.83	0.72
	Peak Flow Out	0.02	0.03	0.04	0.07	0.09	0.13	0.42
	% Difference	-90.8%	-92.9%	-92.1%	-89.3%	-87.6%	-84.2%	-41.6%
	Storage Required	865	1430	1967	2354	2541	2936	4186

4- Hour Chicago Model								
Pond ID	Peak Flow (m^3/s)	Return Period						
		2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	Regional
SWMF #1 (upper)	Peak Flow In	0.29	0.41	0.50	0.63	0.75	0.85	1.05
	Peak Flow Out	0.02	0.02	0.03	0.03	0.03	0.04	0.62
	% Difference	-94.9%	-94.6%	-94.6%	-95.2%	-95.6%	-95.9%	-41.0%
	Storage Required	698	1239	1670	2244	2747	3256	7627
SWMF #2 (lower)	Peak Flow In	0.49	0.70	0.84	1.06	1.23	1.39	0.72
	Peak Flow Out	0.02	0.02	0.03	0.03	0.04	0.06	0.44
	% Difference	-96.5%	-97.0%	-97.0%	-97.4%	-96.5%	-95.8%	-38.5%
	Storage Required	688	1077	1370	1745	2026	2256	3951

Water Quality Requirements

Project #: 1046-4031
Project: Parkbridge Craigleith
Date: March 21, 2022
By: JE

Post-Development Scenario Water Quality Requirements

SWM Facility #1 - Existing Pond converted to Proposed Wetland

Quantity Calculations

Parameter	Impervious Areas	All Areas	Units
Area Statistics			
Contributing Areas	1A	EXT-1A, 1A, 1B	-
Area	2.95	13.13	ha
% Impervious	51.4	13.1	%
MOE Volumes (per Table 3.2)			
MOE Total Water Quality (WQ) Volume	101	80	m^3/ha
MOE Extended Detention (ED) Volume	40	40	m^3/ha
Extended Detention (ED)			
25mm Runoff Depth	10.1	4.1	mm
25mm Runoff Volume	298	**540**	m^3
MOE ED Volume	118	**525**	m^3
Permanent Pool (PP)			
MOE Permanent Pool (PP) Volume	61	40	m^3/ha
MOE PP Volume	178	**525**	m^3

Required Volumes

ED Volume - 25mm RV for All Areas governs	**540**	m^3
PP Volume - All Areas governs	**525**	m^3
Total WQ Volume - ED + PP	**1065**	m^3

CROZIER & ASSOCIATES
Consulting Engineers

Project: 1046-4031
Project No.: Parkbridge Craigleith
File: Stage Storage Discharge
Design by: JE
Checked by: RW
Date: Mar 21, 2022

Proposed SWM Facility #1 - Upper Pond - Stage Storage Discharge Calculations & Extended Detention Calculations

Outlet Structure Dimensions			
Extended Detention Orifice		**Spillway**	
E.D. Orifice Diameter:	0.130 m	Spillway Elev.	191.10 m
E.D. Orifice Invert Elevation:	189.40 m	Spillway Bot. Width	5.00 m
Orifice Coeff (plate):	0.64	Trap. Side Slopes	10:1
Rectangular Weir		**Weir Orifice (used above top of weir)**	
Weir Width	0.25 m	Weir Orifice Area:	0.125 m2
Weir Invert	190.40 m	Weir Orifice Invert Elev:	190.40 m
Top of Weir	190.90 m	Orifice Coeff (Tube):	0.64

Pond Dimensions				Outlet Structure Discharge					Total		
Elev.	Depth Above PP	Area	Storage Volume	ED Orifice Discharge	Rect. Weir Discharge	Spillway Avg. Weir Width	Spillway Discharge	Total Discharge	ED Draw-down time	Total Discharge	Storage
(m)	(m)	(sqm)	(cu.m)	(cu.m/s)	(cu.m/s)	(m)	(cu.m/s)	(cu.m/s)	(hrs)	(cu.m/s)	(ha-m)
189.40	0.00	*2584*	*0*	0.000	0.000	0.00	0.000	0.000	0.0	0.000	0.000
189.50	0.10	2722	265	0.007	0.000	0.00	0.000	0.007	20.9	**0.007**	**0.027**
189.60	0.20	2860	544	0.014	0.000	0.00	0.000	0.014	7.4	0.014	0.054
189.70	*0.30*	2998	835	0.018	0.000	0.00	0.000	0.018	5.0	**0.018**	**0.084**
189.80	*0.40*	3178	1144	0.022	0.000	0.00	0.000	0.022		0.022	0.114
189.90	*0.50*	3358	1471	0.025	0.000	0.00	0.000	0.025		**0.025**	**0.147**
190.00	0.60	3538	1815	0.028	0.000	0.00	0.000	0.028		0.028	0.182
190.05	0.65	3628	1995	0.029	0.000	0.00	0.000	0.029		**0.029**	**0.199**
190.10	0.70	3718	2178	0.030	0.000	0.00	0.000	0.030		0.030	0.218
190.20	0.80	3898	2559	0.032	0.000	0.00	0.000	0.032		**0.032**	**0.256**
190.30	0.90	4078	2958	0.034	0.000	0.00	0.000	0.034		0.034	0.296
190.40	*1.00*	4258	3375	0.036	0.000	0.00	0.000	0.036		**0.036**	**0.337**
190.50	1.10	4438	3810	0.038	0.013	0.00	0.000	0.052		0.052	0.381
190.60	1.20	4618	4262	0.040	0.038	0.00	0.000	0.078		**0.078**	**0.426**
190.70	1.30	4798	4733	0.042	0.070	0.00	0.000	0.112		0.112	0.473
190.80	1.40	4978	5222	0.043	0.108	0.00	0.000	0.151		**0.151**	**0.522**
190.90	1.50	5158	5729	0.045	0.150	0.00	0.000	0.195		0.195	0.573
190.95	1.55	5248	5808	0.046	0.247	0.00	0.000	0.293		**0.293**	**0.581**
191.00	1.60	8033	6560	0.047	0.259	0.00	0.000	0.306		**0.306**	**0.656**
191.10	1.70	8151	7369	0.048	0.282	5.00	0.000	0.330		**0.330**	**0.737**
191.20	1.80	8268	8190	0.050	0.304	6.00	0.324	0.677		0.677	0.819
191.30	1.90	8386	9023	0.051	0.324	7.00	1.067	1.442		**1.442**	**0.902**
191.40	2.00	8503	9757	0.052	0.343	8.00	2.241	2.636		**2.636**	**0.976**
								Total ED Draw Down Time (hrs)	33.4		

Pond designed to spill into natural pond area to the south of the wetland during Regional event. Additional 752 m3 (south pond portion) volume is available above berm elev. 190.95. Applied at elev. 191.00.

CROZIER & ASSOCIATES
Consulting Engineers

Project:	1046-4031
Project No.:	Parkbridge Craigleith
File:	Extended Detention
Design by:	JE
Date:	March 21, 2022

EXTENDED DETENTION SPECIFICATIONS - SWM FACILITY #1

(Per MOECC)

Extended Detention Volume Required (Area x runoff from 25mm event)		540	m^3
Extended Detention Volume Provided		835	m^3
t (drawdown time - seconds, *hours in italics*)	*24.0 hours*	86400	s
Ao (cross section area of orifice - sqm, as designed)		0.013	m^2
h (maximum water elevation above orifice for extended detention- m)		0.30	m
C (discharge coefficient)		0.64	
Ap (average surface area for extended detention - sqm)		2998	m^2

t = 2*Ap*(h^0.5)/(C*Ao*(g*2)^0.5)

Ao = 0.013 sqm d = 131 mm

Extended Detention Orifice Diameter (as designed) d = **130** mm

Drawdown Time Provided (per SSD) t = 33.4 hrs

Project # 1046-4031
Project Name: Parkbridge Craigleith
Prepared by: JE
Date: 2022.03.21

SWMF#1 FOREBAY DESIGN CALCULATIONS

Parameter	*Variable*	*Value*
Forebay Settling Length	Length of forebay bottom (m)	28.9
	Width of forebay bottom (m)	14.2
	Length-to-width ratio of forebay	2.0
	Peak flow rate from forebay in quality event (m^3/s)	0.010
	Settling velocity (m/s)	0.0003
	Required Forebay length (m)	**8.2**
Dispersion Length	Inlet flowrate in 5 year event (m^3/s)	0.37
	Depth of the permanent pool in the forebay (m)	1.00
	Desired velocity in the forebay (m/s)	0.5
	Length of dispersion (m)	**6.0**
Velocity in forebay check	Stage of Pond in 10 Year Event (m)	190.15
	Cross sectional area (m^2)	85.8
	Inlet flowrate in 10 year event (m3/s)	0.56
	Velocity in forebay (m/s)*	**0.0066**
DESIGN FOREBAY LENGTH (m)		**35**

* Desired maximum average velocity in the forebay is 0.15m/s, per MOE, 2003, Page 4-56

Water Quality Requirements

Project #: 1046-4031
Project: Parkbridge Craigleith
Date: 2022.03.21
By: JE

Post-Development Scenario Water Quality Requirements

SWM Facility #2 - Proposed Water Quality Wet Pond (Lower East Pond)

Quantity Calculations

Parameter	Impervious Areas	All Areas	Units
Area Statistics			
Contributing Areas	2C, 2D, 2E	2A, 2B, 2C, 2D, 2E	-
Area	6.73	9.59	ha
% Impervious	51.1	35.8	%
MOE Volumes (per Table 3.2)			
MOE Total Water Quality (WQ) Volume	180	142	m^3/ha
MOE Extended Detention (ED) Volume	40	40	m^3/ha
Extended Detention (ED)			
25mm Runoff Depth	9.0	6.4	mm
25mm Runoff Volume	604	**618**	m^3
MOE ED Volume	269	**384**	m^3
Permanent Pool (PP)			
MOE Permanent Pool (PP) Volume	140	102	m^3/ha
MOE PP Volume	944	**979**	m^3

Required Volumes

ED Volume - 25mm RV for All Areas governs	**618**	m^3
PP Volume - All Areas governs	**979**	m^3
Total WQ Volume - ED + PP	**1598**	m^3

CROZIER & ASSOCIATES
Consulting Engineers

Project: 1046-4031
Project No.: Parkbridge Craigleith
File: Stage Storage Discharge
Design by: JE
Checked by: RW
Date: 2022.03.21

Proposed SWM Facility #2 - Lower Pond - Stage Storage Discharge Calculations
& Extended Detention Calculations

Outlet Structure Dimensions			
Extended Detention Orifice		**Spillway**	
E.D. Orifice Diameter:	0.120 m	Spillway Elev.	182.50 m
E.D. Orifice Invert Elevation:	181.00 m	Spillway Bot. Width	3.00 m
Orifice Coeff (plate):	0.64	Trap. Side Slopes	10:1
Rectangular Weir		**Weir Orifice (used above top of weir)**	
Weir Width	0.25 m	Weir Orifice Area:	0.125 m2
Weir Invert	181.80 m	Weir Orifice Invert Elev:	181.80 m
Top of Weir	182.30 m	Orifice Coeff (Tube):	0.64

Pond Dimensions				Outlet Structure Discharge					Total		
Elev.	Depth Above PP	Area	Storage Volume	ED Orifice Discharge	Rect. Weir Discharge	Spillway Avg. Weir Width	Spillway Discharge	Total Discharge	ED Draw-down time	Total Discharge	Storage
(m)	(m)	(sqm)	(cu.m)	(cu.m/s)	(cu.m/s)	(m)	(cu.m/s)	(cu.m/s)	(hrs)	(cu.m/s)	(ha-m)
181.00	0.00	*1827*	*0*	0.000	0.000	0.00	0.000	0.000	0.0	0.000	0.000
181.10	0.10	1941	188	0.006	0.000	0.00	0.000	0.006	16.3	**0.006**	**0.019**
181.20	0.20	2054	388	0.012	0.000	0.00	0.000	0.012	6.0	0.012	0.039
181.30	*0.30*	2168	599	0.016	0.000	0.00	0.000	0.016	4.2	**0.016**	**0.060**
181.40	*0.40*	2281	798	0.019	0.000	0.00	0.000	0.019	3.2	**0.019**	**0.080**
181.50	*0.50*	2408	1032	0.021	0.000	0.00	0.000	0.021		**0.021**	**0.103**
181.60	0.60	2535	1279	0.024	0.000	0.00	0.000	0.024		0.024	0.128
181.65	0.65	2599	1408	0.025	0.000	0.00	0.000	0.025		**0.025**	**0.141**
181.70	0.70	2662	1539	0.026	0.000	0.00	0.000	0.026		0.026	0.154
181.80	0.80	2789	1812	0.028	0.000	0.00	0.000	0.028		**0.028**	**0.181**
181.90	0.90	2916	2097	0.029	0.013	0.00	0.000	0.043		0.043	0.210
182.00	*1.00*	3043	2395	0.031	0.038	0.00	0.000	0.069		**0.069**	**0.240**
182.10	1.10	3170	2706	0.033	0.070	0.00	0.000	0.103		0.103	0.271
182.20	1.20	3297	3029	0.034	0.108	0.00	0.000	0.142		**0.142**	**0.303**
182.30	1.30	3424	3365	0.036	0.150	0.00	0.000	0.186		0.186	0.336
182.40	1.40	3550	3714	0.037	0.260	0.00	0.000	0.298		**0.298**	**0.371**
182.50	1.50	3677	4028	0.038	0.283	3.00	0.000	0.322		**0.322**	**0.403**
182.60	1.60	3827	4403	0.040	0.305	4.00	0.216	0.560		**0.560**	**0.440**
182.70	1.70	3977	4793	0.041	0.325	5.00	0.762	1.128		**1.128**	**0.479**
182.80	1.80	4127	5114	0.042	0.344	6.00	0.840	1.226		**1.226**	**0.511**

Total ED Draw Down Time (hrs) 29.8

CROZIER & ASSOCIATES
Consulting Engineers

Project:	1046-4031
Project No.:	Parkbridge Craigleith
File:	Extended Detention
Design by:	RW
Date:	2022.03.21

EXTENDED DETENTION SPECIFICATIONS - SWM FACILITY #2

(Per MOECC)

Extended Detention Volume (Area x runoff from 25mm event)		618
Extended Detention Volume Provided		798
t (drawdown time - seconds, *hours in italics*)	*24.0 hours*	86400
Ao (cross section area of orifice - sqm, as designed)		0.011
h (maximum water elevation above orifice for extended detention- m)		0.40
C (discharge coefficient)		0.64
Ap (average surface area for extended detention - sqm)		2281

t = 2*Ap*(h^0.5)/(C*Ao*(g*2)^0.5)

Ao = 0.012 sqm d = 122 mm

Extended Detention Orifice Diameter (as designed)	d =	**120**	mm
Drawdown Time Provided (per SSD)	t =	29.8	hrs

Project # 1046-4031
Project Name: Parkbridge Craigleith
Prepared by: RW
Date: 2022.03.21

SWMF#2 FOREBAY DESIGN CALCULATIONS

Parameter	*Variable*	*Value*
Forebay Settling Length	Length of forebay (bottom) (m)	22.5
	Width of forebay (bottom) (m)	8.5
	Length-to-width ratio of forebay	2.6
	Peak flow rate from forebay in quality event (m^3/s)	0.013
	Settling velocity (m/s)	0.0003
	Required Forebay length (m)	**10.7**
Dispersion Length	Inlet flowrate in 5 year event (m^3/s)	0.35
	Depth of of the permanent pool in the forebay (m)	0.80
	Desired velocity in the forebay (m/s)	0.5
	Length of dispersion (m)	**7.0**
Velocity in forebay check	Stage of Pond in 10 Year Event (m)	181.83
	Cross sectional area (m^2)	54.9
	Inlet flowrate in 10 year event (m3/s)	0.49
	Velocity in forebay (m/s)*	**0.009**
DESIGN FOREBAY LENGTH (m)		**30**

* Desired maximum average velocity in the forebay is 0.15m/s, per MOE, 2003, Page 4-56

APPENDIX E

Stormwater Design Calculations

CulvertMaster – Watercourse 9 Culvert Sizing

Culvert Calculator Report
Culvert - 1

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	212.09	m	Headwater Depth/Height	1.81	
Computed Headwater Elevation	212.09	m	Discharge	13.0133	m³/s
Inlet Control HW Elev.	212.09	m	Tailwater Elevation	0.00	m
Outlet Control HW Elev.	211.85	m	Control Type	Inlet Control	

Grades					
Upstream Invert	209.88	m	Downstream Invert	208.00	m
Length	21.60	m	Constructed Slope	0.087037	m/m

Hydraulic Profile					
Profile	S2		Depth, Downstream	0.58	m
Slope Type	Steep		Normal Depth	0.40	m
Flow Regime	Supercritical		Critical Depth	1.22	m
Velocity Downstream	7.37	m/s	Critical Slope	0.006280	m/m

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	3.05	m
Section Size	3050 x 1220 mm		Rise	1.22	m
Number Sections	1				

Outlet Control Properties					
Outlet Control HW Elev.	211.85	m	Upstream Velocity Head	0.63	m
Ke	0.20		Entrance Loss	0.13	m

Inlet Control Properties					
Inlet Control HW Elev.	212.09	m	Flow Control	N/A	
Inlet Type	90° headwall w 45° bevels		Area Full	3.7	m²
K	0.49500		HDS 5 Chart	10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Culvert Calculator Report
Culvert - 2

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	193.77	m	Headwater Depth/Height	1.75	
Computed Headwater Elevation	193.77	m	Discharge	12.3938	m³/s
Inlet Control HW Elev.	193.77	m	Tailwater Elevation	0.00	m
Outlet Control HW Elev.	193.54	m	Control Type	Inlet Control	

Grades					
Upstream Invert	191.64	m	Downstream Invert	191.15	m
Length	19.10	m	Constructed Slope	0.025654	m/m

Hydraulic Profile					
Profile	S2		Depth, Downstream	0.79	m
Slope Type	Steep		Normal Depth	0.59	m
Flow Regime	Supercritical		Critical Depth	1.19	m
Velocity Downstream	5.12	m/s	Critical Slope	0.003376	m/m

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	3.05	m
Section Size	3050 x 1220 mm		Rise	1.22	m
Number Sections	1				

Outlet Control Properties					
Outlet Control HW Elev.	193.54	m	Upstream Velocity Head	0.60	m
Ke	0.20		Entrance Loss	0.12	m

Inlet Control Properties					
Inlet Control HW Elev.	193.77	m	Flow Control	N/A	
Inlet Type	90° headwall w 45° bevels		Area Full	3.7	m²
K	0.49500		HDS 5 Chart	10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Culvert Calculator Report
Culvert - 3

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	187.09	m	Headwater Depth/Height	1.66	
Computed Headwater Elevation	187.09	m	Discharge	11.7797	m³/s
Inlet Control HW Elev.	187.09	m	Tailwater Elevation	0.00	m
Outlet Control HW Elev.	186.91	m	Control Type	Inlet Control	

Grades					
Upstream Invert	185.07	m	Downstream Invert	184.64	m
Length	17.60	m	Constructed Slope	0.024432	m/m

Hydraulic Profile					
Profile	S2		Depth, Downstream	0.78	m
Slope Type	Steep		Normal Depth	0.58	m
Flow Regime	Supercritical		Critical Depth	1.15	m
Velocity Downstream	4.94	m/s	Critical Slope	0.003348	m/m

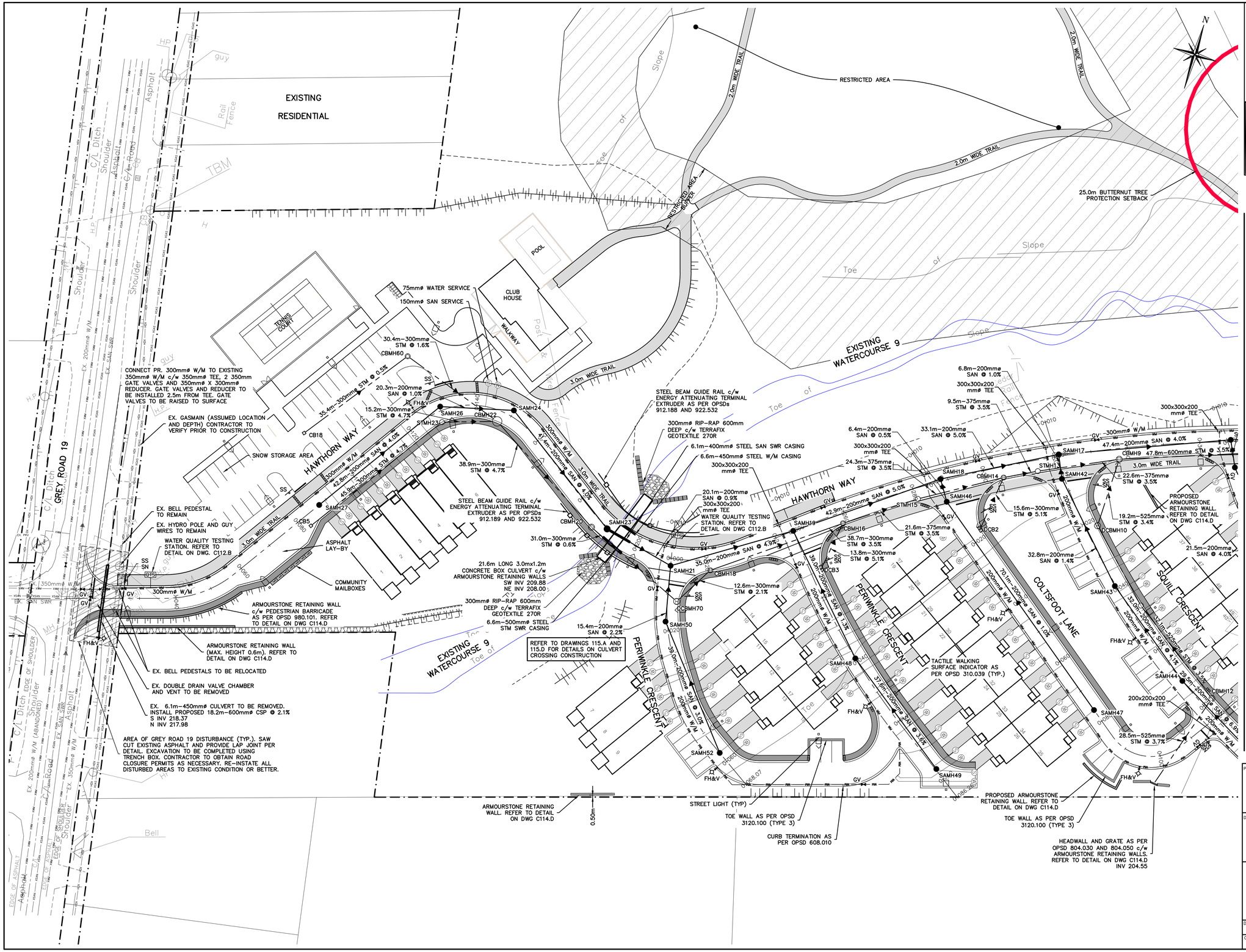
Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	3.05	m
Section Size	3050 x 1220 mm		Rise	1.22	m
Number Sections	1				

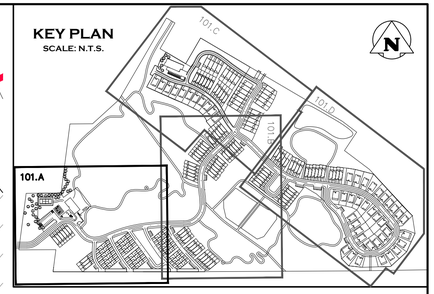
Outlet Control Properties					
Outlet Control HW Elev.	186.91	m	Upstream Velocity Head	0.58	m
Ke	0.20		Entrance Loss	0.12	m

Inlet Control Properties					
Inlet Control HW Elev.	187.09	m	Flow Control	N/A	
Inlet Type	90° headwall w 45° bevels		Area Full	3.7	m²
K	0.49500		HDS 5 Chart	10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

DRAWINGS

Drawings C101.A-D General Site Servicing Plan
Drawings C108.A-C Stormwater Management Facility #1 (Upper Pond)
Drawings C109.A-C Stormwater Management Facility #2 (Lower Pond)
Drawings C114.A-D Watercourse Crossing Plan and Sections, and Notes and Details





NOTE:
UNITS 1-66 TO BE EQUIPPED WITH INDIVIDUAL PRESSURE REDUCING VALVES AS REQUIRED.

NOTE:
ALL GATE VALVES INSTALLED ON THE EDGE OF PAVEMENT ARE TO BE CONSTRUCTED c/w PAVEMENT APRON. REFER TO DETAIL ON DWG C112.C

NOTE:
REFER TO DWG C114.D FOR DETAIL ON STEEL LINER AND CASING SPACERS.

REFER TO DWG 101.B

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TEMPORARY BENCHMARKS

TBM#1 – ELEVATIONS HEREON ARE GEODETIC AND ARE REFERRED TO A SPIKE IN HYDRO POLE ON GREY ROAD 19 SOUTH OF CRAIGLEITH ROAD HAVING AN ELEVATION OF 222.88 METRES.

TOPOGRAPHIC SURVEY COMPLETED BY ZUBEK, EMO, PATTEN AND THOMSEN LTD. O.L.S., DATED MARCH 2006.

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2	ISSUED FOR 3rd SUBMISSION	05/14/2021
3	ISSUED FOR 4th SUBMISSION	03/23/2022

Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
GENERAL SITE SERVICING PLAN (WEST)

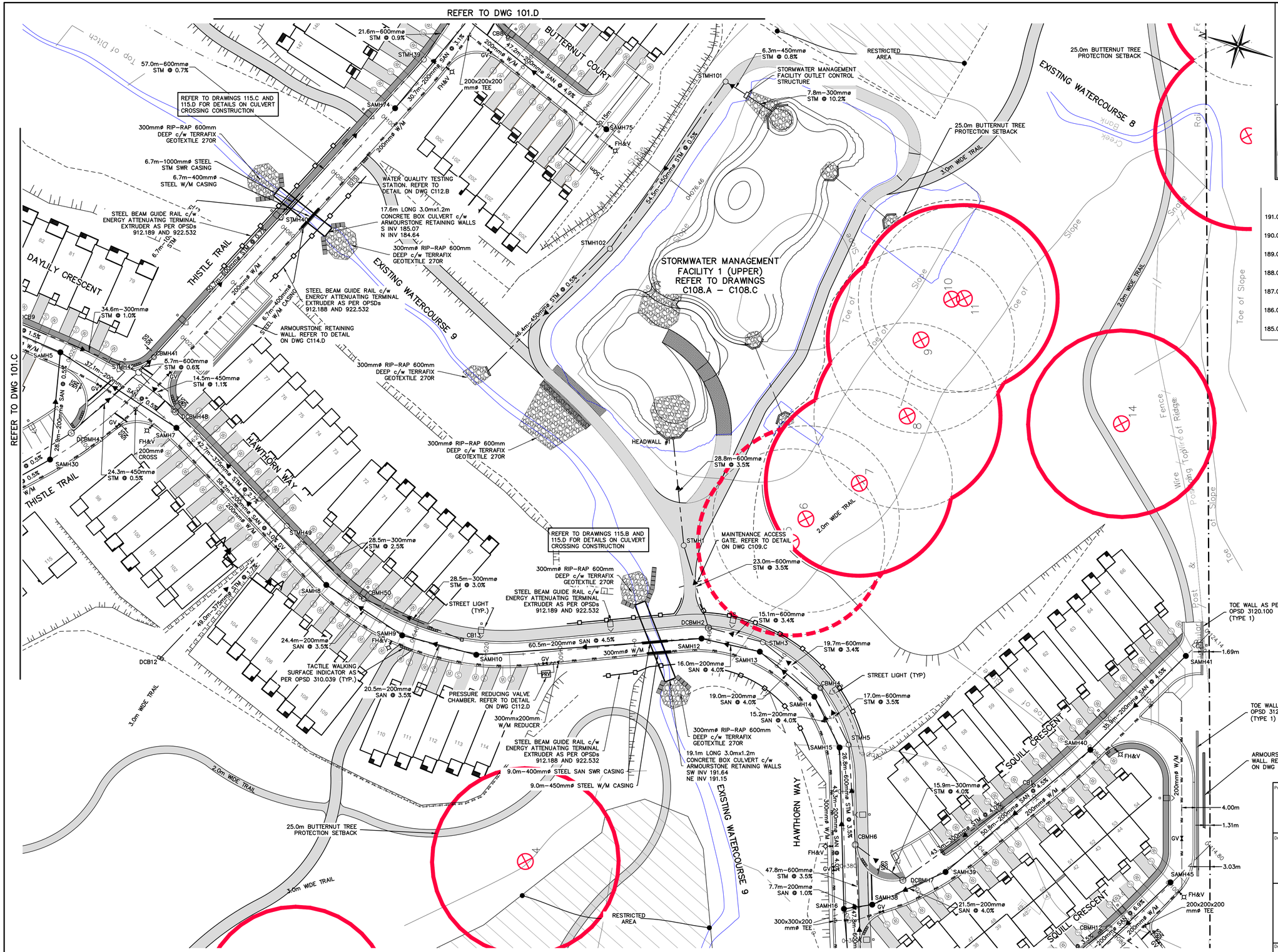
CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

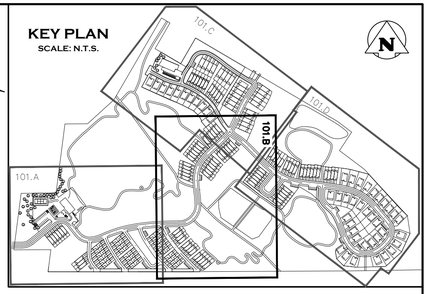
Drawn By	Design By	Project	
L.W.	L.W.		1046-4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:500	C101.A

REFER TO DWG 101.D

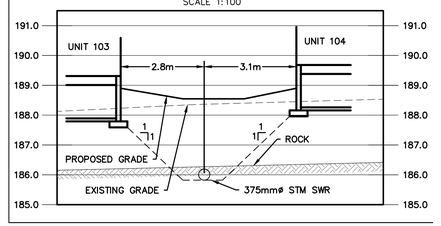
REFER TO DWG 101.C

REFER TO DWG 101.A





SECTION A–A
SCALE 1:100



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TEMPORARY BENCHMARKS

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Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
GENERAL SITE SERVICING PLAN (CENTRAL)

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
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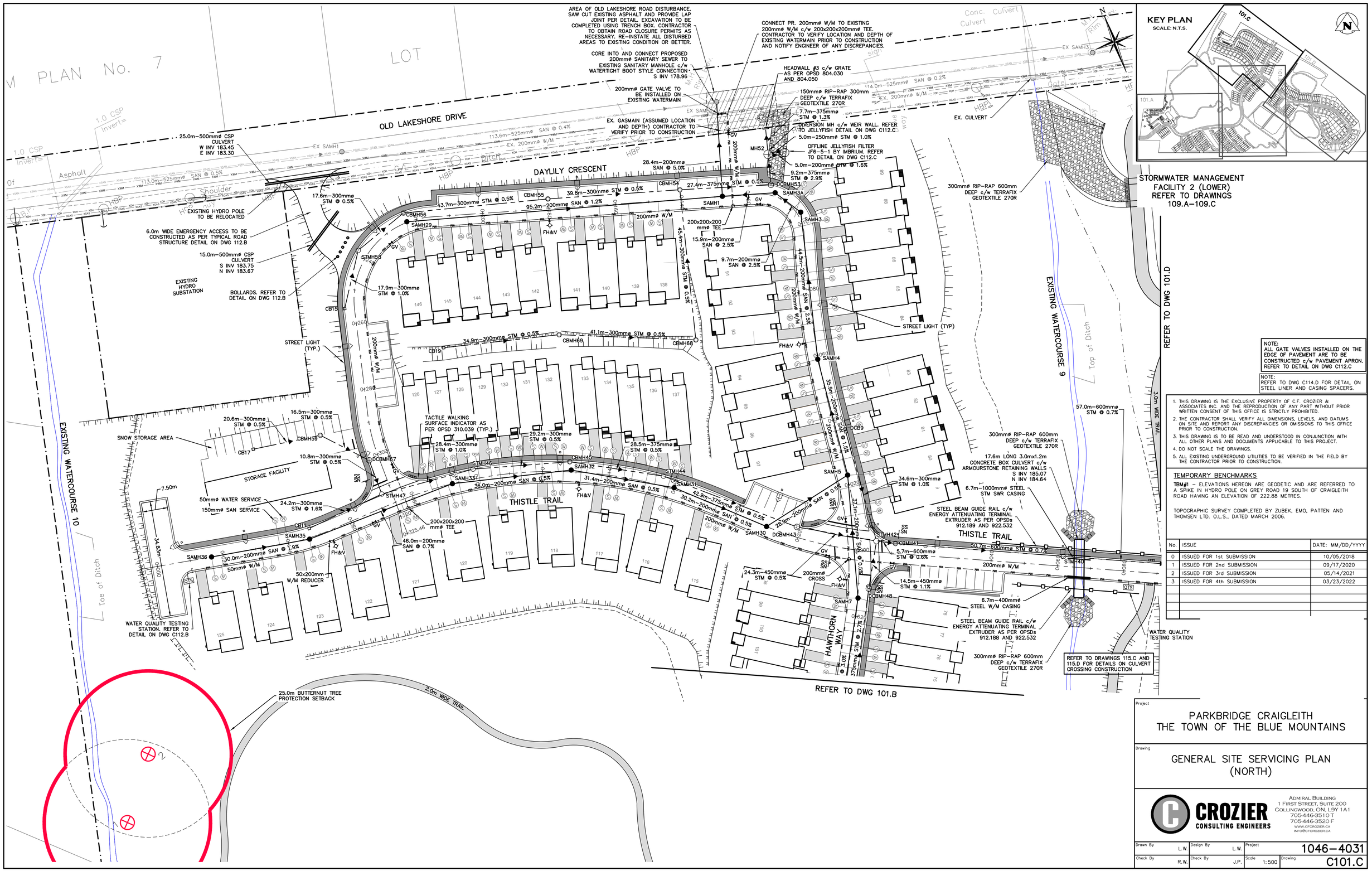
Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:500	C101.B



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OLD LAKESHORE ROAD

TRAIL CONNECTION. REFER TO LANDSCAPE DRAWINGS

7.0m–400mmø CSP TO BE EMBEDDED 0.10m

SAMH77

ACCESS GATE. REFER TO DETAIL ON DWG C109.C

150mmø RIP–RAP 300mm DEEP c/w TERRAFIX GEOTEXTILE 270R

AREA OF OLD LAKESHORE ROAD DISTURBANCE. SAW CUT EXISTING ASPHALT AND PROVIDE LAP JOINT PER DETAIL. EXCAVATION TO BE COMPLETED USING TRENCH BOX. CONTRACTOR TO OBTAIN ROAD CLOSURE PERMITS AS NECESSARY. RE–INSTATE ALL DISTURBED AREAS TO EXISTING CONDITION OR BETTER.

LOT 171

EXISTING RESIDENTIAL

LOT 172

Cedar Rail Fence

STORMWATER MANAGEMENT FACILITY 2 (LOWER) REFER TO DRAWINGS 109.A–109.C

HEADWALL #2

11.4m–900mmø STM @ 0.2%

STMH26

INLET HEADWALL #2 c/w GRATE AS PER OPSD 804.030 AND 804.050

9.6m–300mmø STM @ 2.3%

c/w TIDEFLEX CHECKMATE INLINE CHECK VALVE (OR APPROVED EQUIVALENT)

RESTRICTED AREA

MAINTENANCE ACCESS GATE. REFER TO DETAIL ON DWG C109.C

150mmø RIP–RAP 300mm DEEP c/w TERRAFIX GEOTEXTILE 270R AT PIPE OUTLET

HEADWALL c/w GRATE AS PER OPSD 804.030 AND 804.050 INV 182.28

10.3m–600mmø STM @ 0.2%

6.9m–600mmø STM @ 0.2%

38.2m–200mmø SAN @ 0.5%

22.9m–375mmø STM @ 0.5%

TWIN 47.8m–450mmø STM @ 0.2%

200x200x200mmø W/M TEE

STREET LIGHT (TYP.)

THISTLE TRAIL

32.2m–300mmø STM @ 0.6%

31.0m–200mmø SAN @ 0.6%

89.7m–300mmø STM @ 0.5%

66.3m–200mmø SAN @ 0.5%

200mmø W/M

24.4m–375mmø STM @ 0.5%

24.0m–200mmø SAN @ 0.5%

20.4m–300mmø STM @ 0.5%

20.1m–300mmø STM @ 0.5%

20.6m–300mmø STM @ 0.5%

20.6m–300mmø STM @ 1.0%

20.3m–300mmø STM @ 0.5%

16.4m–300mmø STM @ 0.5%

16.7m–200mmø SAN @ 0.5%

11.2m–300mmø STM @ 0.6%

11.6m–200mmø SAN @ 0.7%

22.2m–200mmø SAN @ 0.6%

24.8m–300mmø STM @ 0.4%

27.0m–200mmø SAN @ 0.5%

22.0m–200mmø SAN @ 0.5%

200x200x200mmø W/M TEE

23.1m–200mmø SAN @ 1.0%

24.7m–200mmø SAN @ 0.5%

200mmø W/M STUB c/w CAP

FUTURE EMERGENCY ACCESS

FH&V

GV

CBMH28

SAMH58

SAMH59

SAMH57

CBMH30

SAMH60

SAMH61

SAMH62

CBMH63

CBMH65

CBMH66

CB7

STMH31

STMH32

CB20

SAMH63

SAMH64

SAMH69

SAMH70

SAMH71

CBMH62

STMH27

STMH29

STMH72

STMH71

SAMH55

STMH25

SAMH56

CBMH26

STMH37

STMH36

CBMH35

SAMH66

SAMH68

CBMH61

STMH34

STMH39

CBMH38

SAMH74

SAMH73

SAMH75

STMH101

STMH102

6.3m–450mmø

STORM INLET STRUCTURE. REFER TO DETAIL ON DWG C112.C.

TACTILE WALKING SURFACE INDICATOR AS PER OPSD 310.039 (TYP.)

RESTRICTED AREA

3.0m WIDE TRAIL

BUTTERNUT COURT

CURB TERMINATION AS PER OPSD 608.010

16.3m–300mmø STM @ 0.7%

47.2m–200mmø SAN @ 4.9%

30.15m

7.50m

14.8m–300mmø STM @ 2.0%

24.0m–300mmø STM @ 1.7%

16.9m–300mmø STM @ 1.6%

41.0m–300mmø STM @ 0.7%

38.7m–200mmø SAN @ 2.0%

33.1m–200mmø SAN @ 2.1%

30.7m–200mmø SAN @ 3.1%

31.7m–200mmø SAN @ 2.6%

53.0m–600mmø STM @ 2.2%

57.2m–200mmø SAN @ 2.6%

24.4m–600mmø STM @ 1.4%

21.6m–600mmø STM @ 0.9%

STORMWATER MANAGEMENT FACILITY 1 (UPPER) REFER TO DRAWINGS 108.A–108.C

REFER TO DWG 101.C

N62°27'15"W 20.82

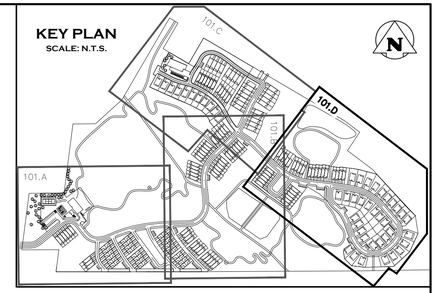
N27°32'45"E

N62°27'15"W 5.00

N27°32'45"E

N60°04'30"E

KEY PLAN
SCALE: N.T.S.



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NOTE:
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Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
GENERAL SITE SERVICING PLAN (EAST)

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:500	C101.D

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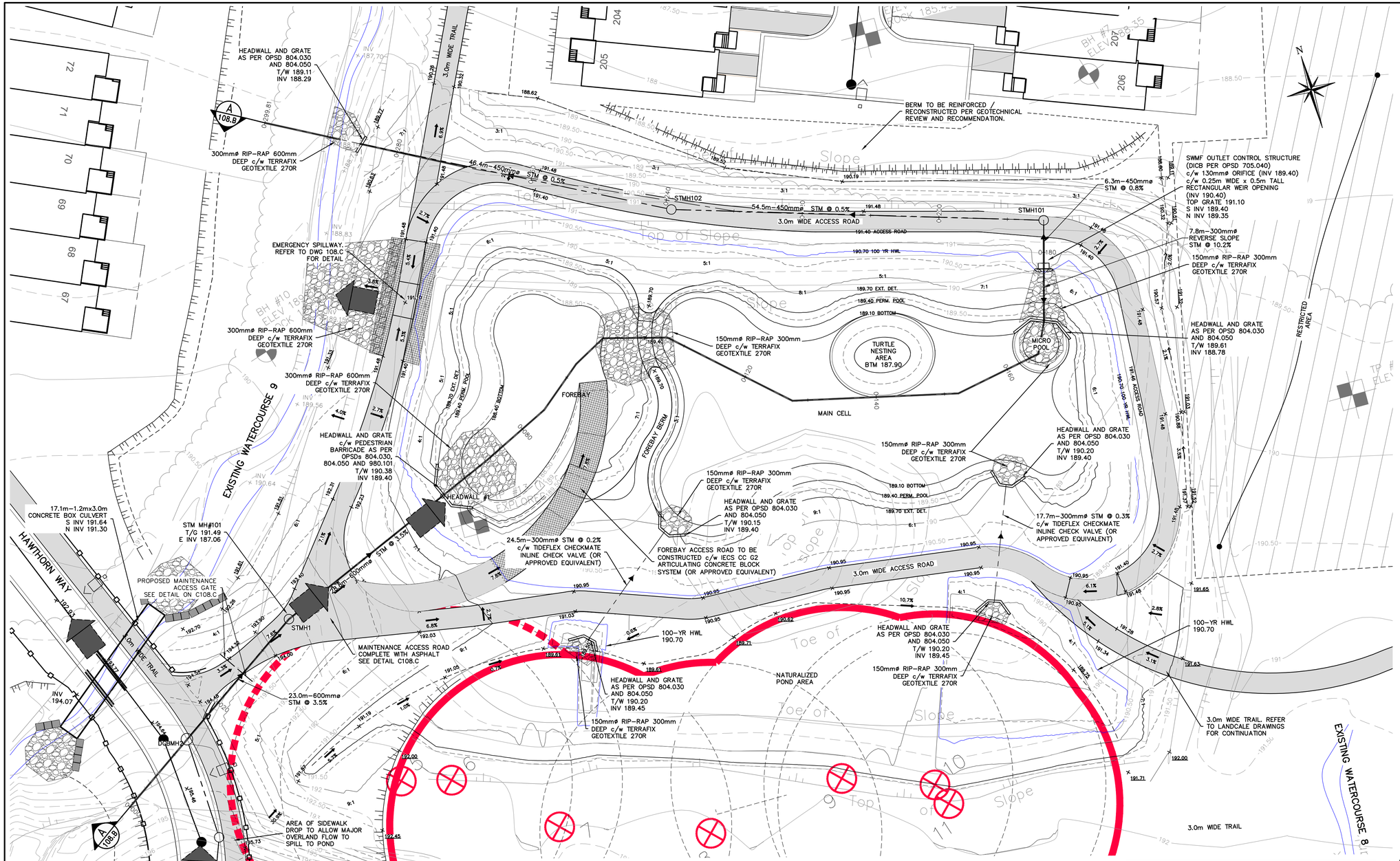

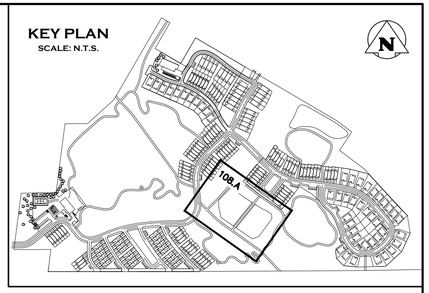

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NOTE:
1. SWM FACILITY TO BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND CONSTRUCTION IS TO BE OVERSEEN BY THE GEOTECHNICAL CONSULTANT.
2. SWM FACILITY BERM MATERIAL TO BE TESTED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
3. STORMWATER MANAGEMENT TO BE APPROVED IN CONJUNCTION WITH DOWNSTREAM REGIONAL DRAINAGE IMPROVEMENTS. REFER TO REGIONAL DRAINAGE IMPROVEMENT DRAWINGS UNDER SEPARATE COVER.

POND CONSTRUCTION NOTES:

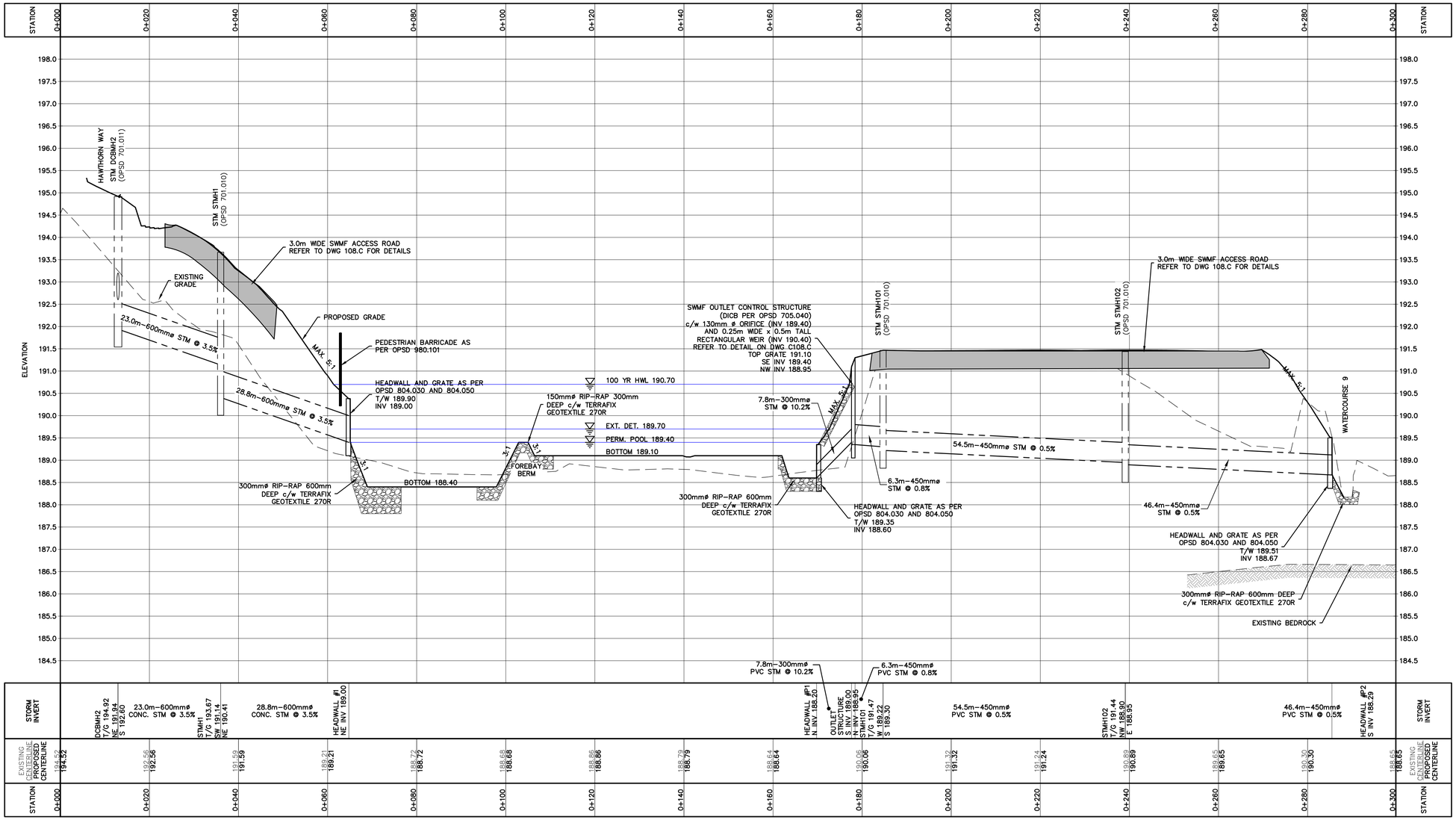
1. WETPOND TO BE FINISHED WITH TOPSOIL AQUATIC PLANTINGS PER LANDSCAPE ARCHITECT.
2. MATERIAL FOR POND BERM LINER CONSTRUCTION TO BE APPROVED AND CERTIFIED BY GEOTECHNICAL CONSULTANT TO ENSURE ADEQUATE STRUCTURAL STRENGTH AND PERMEABILITY. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDATIONS.
3. REFER TO GEOTECHNICAL REPORT FOR TEST PIT INFORMATION.

Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
STORMWATER MANAGEMENT FACILITY 1
(UPPER POND) PLAN

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	L.W.	Design By	L.W.	Project	1046-4031
Check By	R.W.	Check By	J.P.	Scale 1: 300	Drawing C108.A



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Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
STORMWATER MANAGEMENT FACILITY 1
(UPPER POND) CROSS SECTIONS

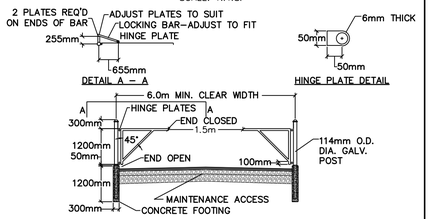
CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	L.W.	Design By	L.W.	Project	1046–4031
Check By	R.W.	Check By	J.P.	Scale V=1:50 H=1:500	Drawing C108.B

J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Acq\CAD\CIVIL\1SHEET\4031_C108 SWM POND 1 UPPER.dwg, C108.B, 2022-03-23 4:56:13 PM, lwaters

MAINTENANCE ACCESS GATE

SCALE: N.T.S.

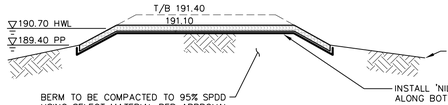


NOTES:
1. CONCRETE 30 MPa. MIN. AFTER 28 DAYS.
2. ALL JOINTS TO BE WELDED.
3. WELDING SHALL CONFORM TO THE LATEST ISSUE OF C.S.A. SPECIFICATION W59.
4. GATE TO BE PREMANUFACTURED AND HOT DIPPED GALVANIZED.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW & APPROVAL OF TOWN & ENGINEER PRIOR TO FABRICATION.
6. WALKWAY/MAINTENANCE GATE TO BE INSTALLED AT MAINTENANCE ACCESS.

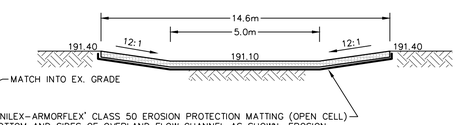
EMERGENCY SPILLWAY

SCALE: N.T.S.

PROFILE

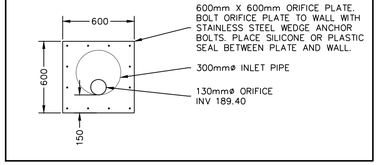


CROSS SECTION



ORIFICE PLATE DETAIL

SCALE: 1:25



3.0m WIDE ACCESS ROAD STRUCTURE DETAIL

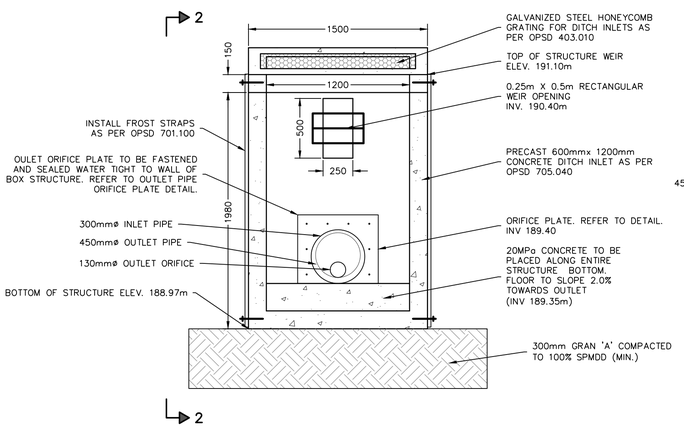
SCALE: N.T.S.

NOTE:
REFER TO CONSTRUCTION NOTES FOR DETAILS ON PLACEMENT OF MATERIALS.

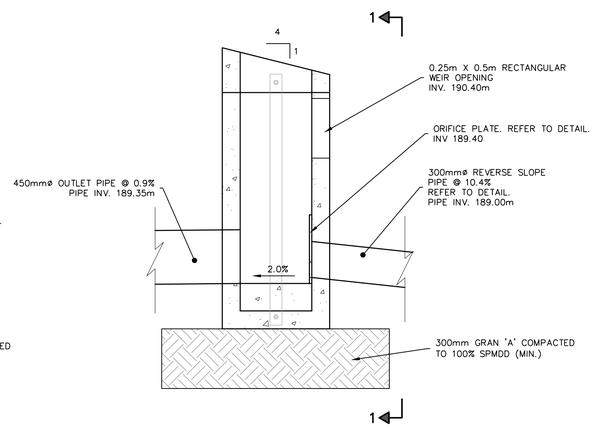
OUTLET STRUCTURE DETAIL (UPPER POND)

SCALE: 1:25

SECTION 1–1



SECTION 2–2



NOTES:
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4. ALL STEEL TO BE DOUBLE HOT DIP GALVANIZED TO G-164, POST FABRICATION.
5. ALL STEEL TO CONFORM TO CSA-CAN-G40.21 M81, GRADE 300.
6. ALL STRUCTURE JOINTS, INLETS & OUTLETS TO BE PARGED TO PROVIDE A WATER TIGHT SEAL.
7. ALL FASTNERS TO BE STAINLESS STEEL.

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TEMPORARY BENCHMARKS

TBM#1 – ELEVATIONS HEREON ARE GEODETIC AND ARE REFERRED TO A SPIKE IN HYDRO POLE ON GREY ROAD 19 SOUTH OF CRAIGLEITH ROAD HAVING AN ELEVATION OF 222.88 METRES.

TOPOGRAPHIC SURVEY COMPLETED BY ZUBEK, EMO, PATTEN AND THOMSEN LTD. O.L.S., DATED MARCH 2006.

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2	ISSUED FOR 3rd SUBMISSION	05/14/2021
3	ISSUED FOR 4th SUBMISSION	03/23/2022

Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

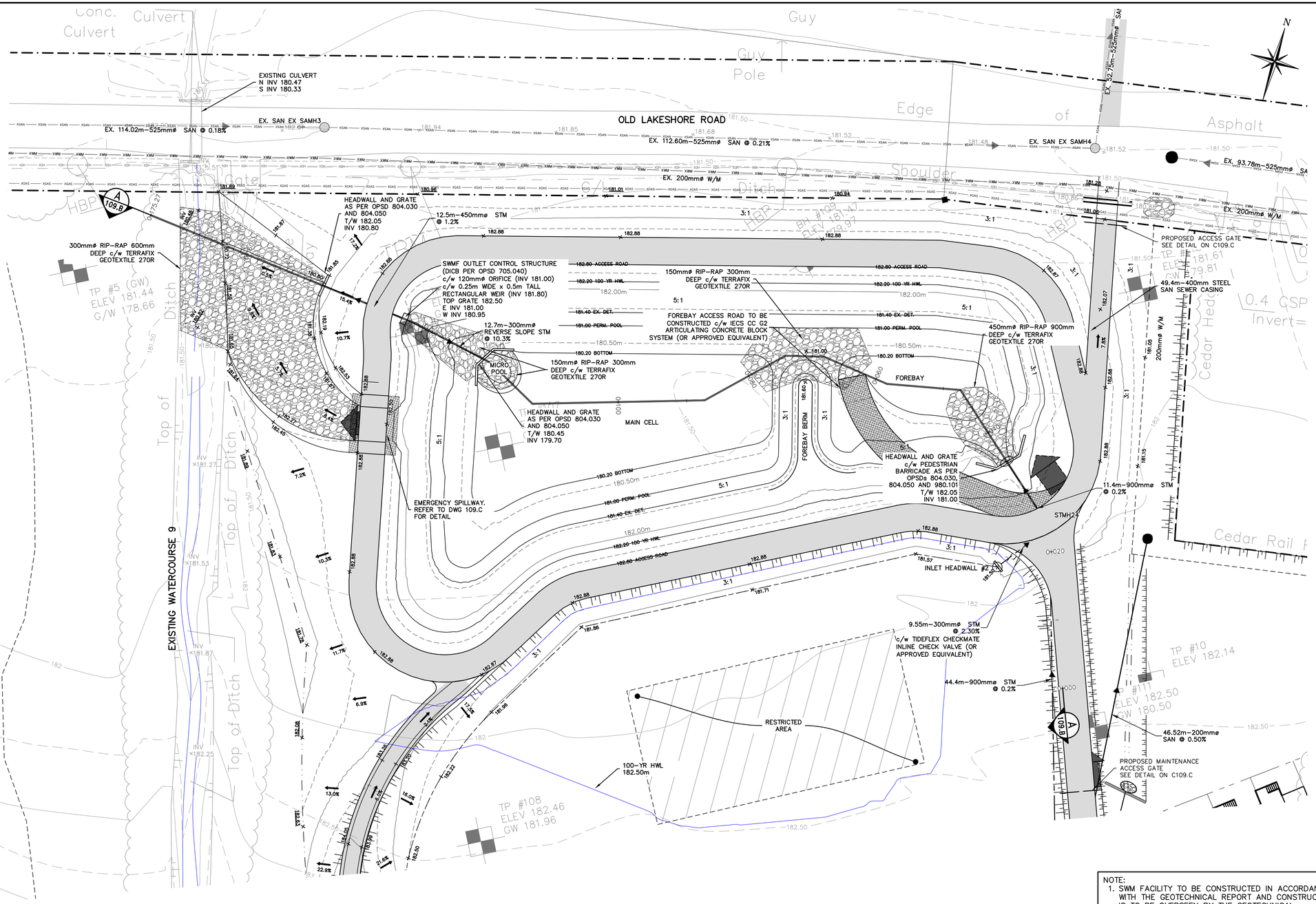
Drawing

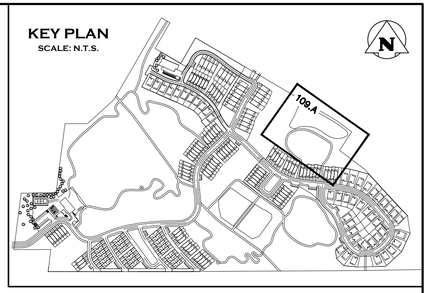
STORMWATER MANAGEMENT FACILITY 1 (UPPER POND) DETAILS

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	AS SHOWN	C108.C

J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Acq\CAD\CIVIL\1SHEET\4031_C108 SWM POND 1 UPPER.dwg, C108.C, 2022-03-23 4:56:22 PM, lwaters





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TEMPORARY BENCHMARKS

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NOTE:
1. SWM FACILITY TO BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND CONSTRUCTION IS TO BE OVERSEEN BY THE GEOTECHNICAL CONSULTANT.
2. SWM FACILITY BERM MATERIAL TO BE TESTED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
3. STORMWATER MANAGEMENT TO BE APPROVED IN CONJUNCTION WITH DOWNSTREAM REGIONAL DRAINAGE IMPROVEMENTS. REFER TO REGIONAL DRAINAGE IMPROVEMENT DRAWINGS UNDER SEPARATE COVER.

POND CONSTRUCTION NOTES:

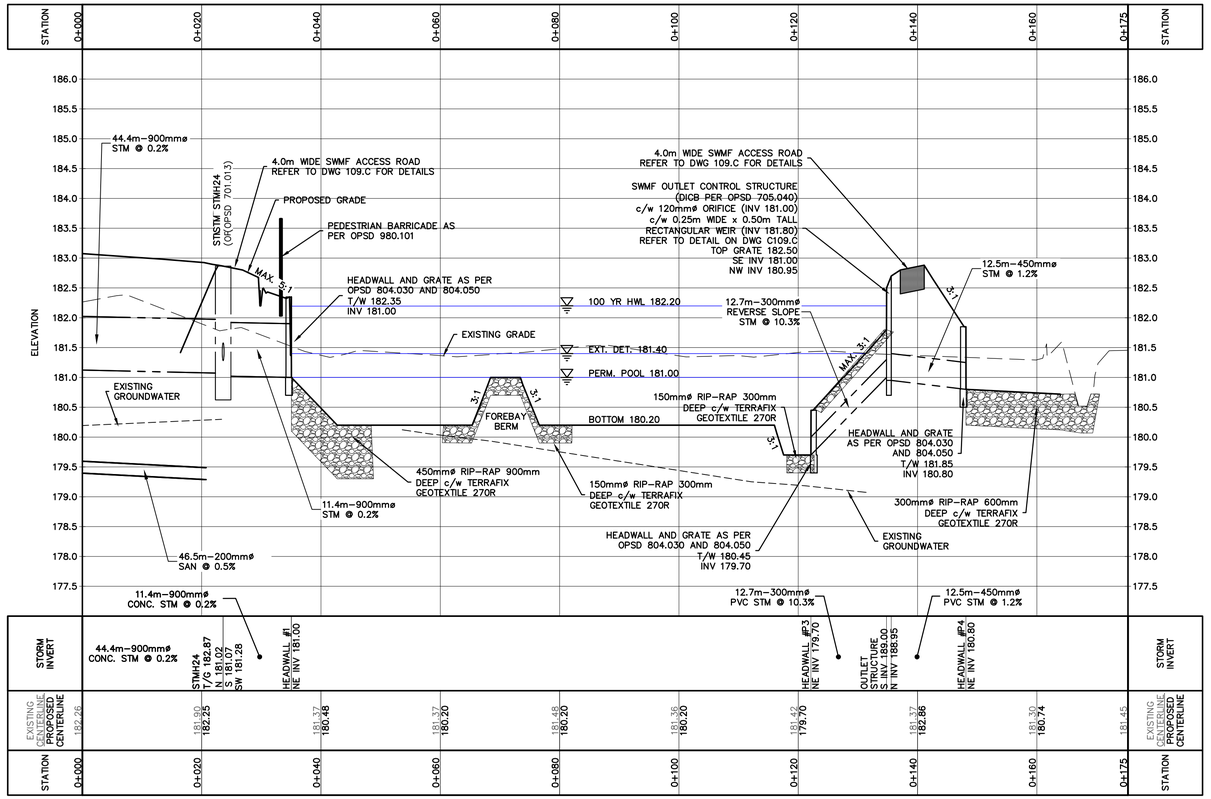
1. WETPOND TO BE FINISHED WITH TOPSOIL AQUATIC PLANTINGS PER LANDSCAPE ARCHITECT.
2. MATERIAL FOR POND BERM LINER CONSTRUCTION TO BE APPROVED AND CERTIFIED BY GEOTECHNICAL CONSULTANT TO ENSURE ADEQUATE STRUCTURAL STRENGTH AND PERMEABILITY. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDATIONS.
3. REFER TO GEOTECHNICAL REPORT FOR TEST PIT INFORMATION.

Project
PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing
STORMWATER MANAGEMENT FACILITY 2 (LOWER POND) PLAN

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	L.W.	Design By	L.W.	Project	1046–4031
Check By	R.W.	Check By	J.P.	Scale 1: 300	Drawing C109.A



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TEMPORARY BENCHMARKS

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Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing

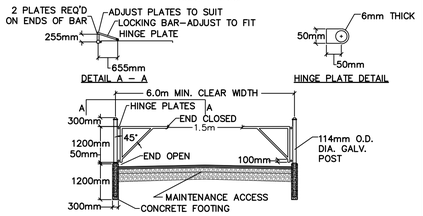
STORMWATER MANAGEMENT FACILITY 2 (LOWER POND) CROSS SECTIONS

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	AS SHOWN	C109.B

MAINTENANCE ACCESS GATE

SCALE: N.T.S.

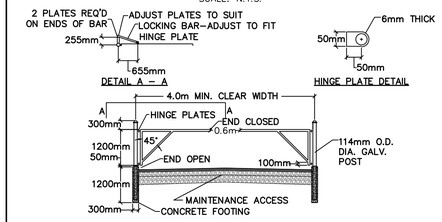


NOTES:

1. CONCRETE 30 MPa. MIN. AFTER 28 DAYS.
2. ALL JOINTS TO BE WELDED.
3. WELDING SHALL CONFORM TO THE LATEST ISSUE OF C.S.A. SPECIFICATION W59.
4. GATE TO BE PREMANUFACTURED AND HOT DIPPED GALVANIZED.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW & APPROVAL OF TOWN & ENGINEER PRIOR TO FABRICATION.
6. WALKWAY/MAINTENANCE GATE TO BE INSTALLED AT MAINTENANCE ACCESS.

ACCESS GATE

SCALE: N.T.S.



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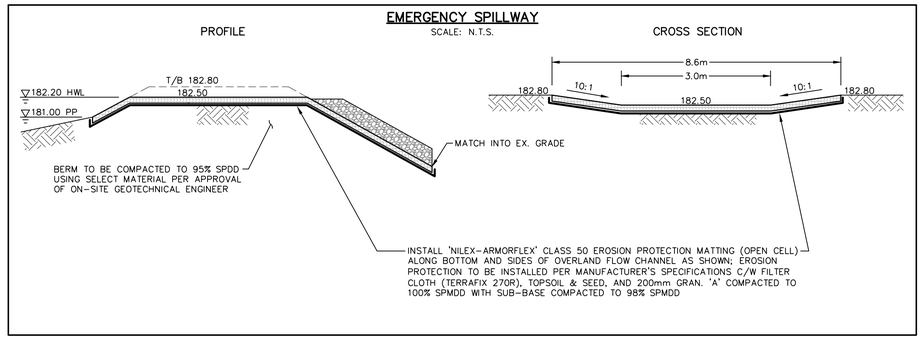
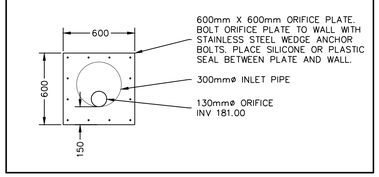
EMERGENCY SPILLWAY

SCALE: N.T.S.



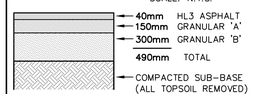
ORIFICE PLATE DETAIL

SCALE: 1:25



4.0m WIDE ACCESS ROAD STRUCTURE DETAIL

SCALE: N.T.S.



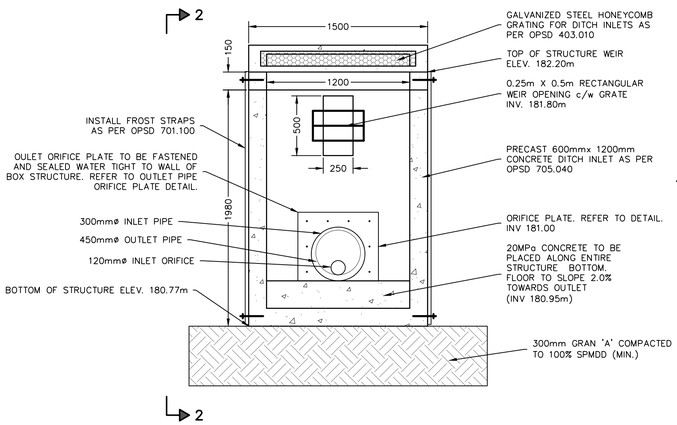
NOTE:

REFER TO CONSTRUCTION NOTES FOR DETAILS ON PLACEMENT OF MATERIALS.

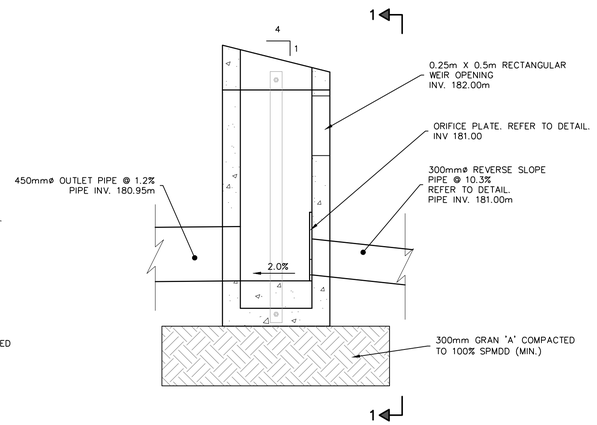
OUTLET STRUCTURE DETAIL (LOWER POND)

SCALE: 1:25

SECTION 1-1



SECTION 2-2



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Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing

STORMWATER MANAGEMENT FACILITY 2
(LOWER POND) DETAILS

CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046-4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	AS SHOWN	C109.C

J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Acq\CAD\CIVIL\1SHEET\4031_C109 SWM POND 2 LOWER.dwg, C109.C, 2022-03-23 4:58:56 PM, lwaters

WATERCOURSE CROSSING #1 DETAIL
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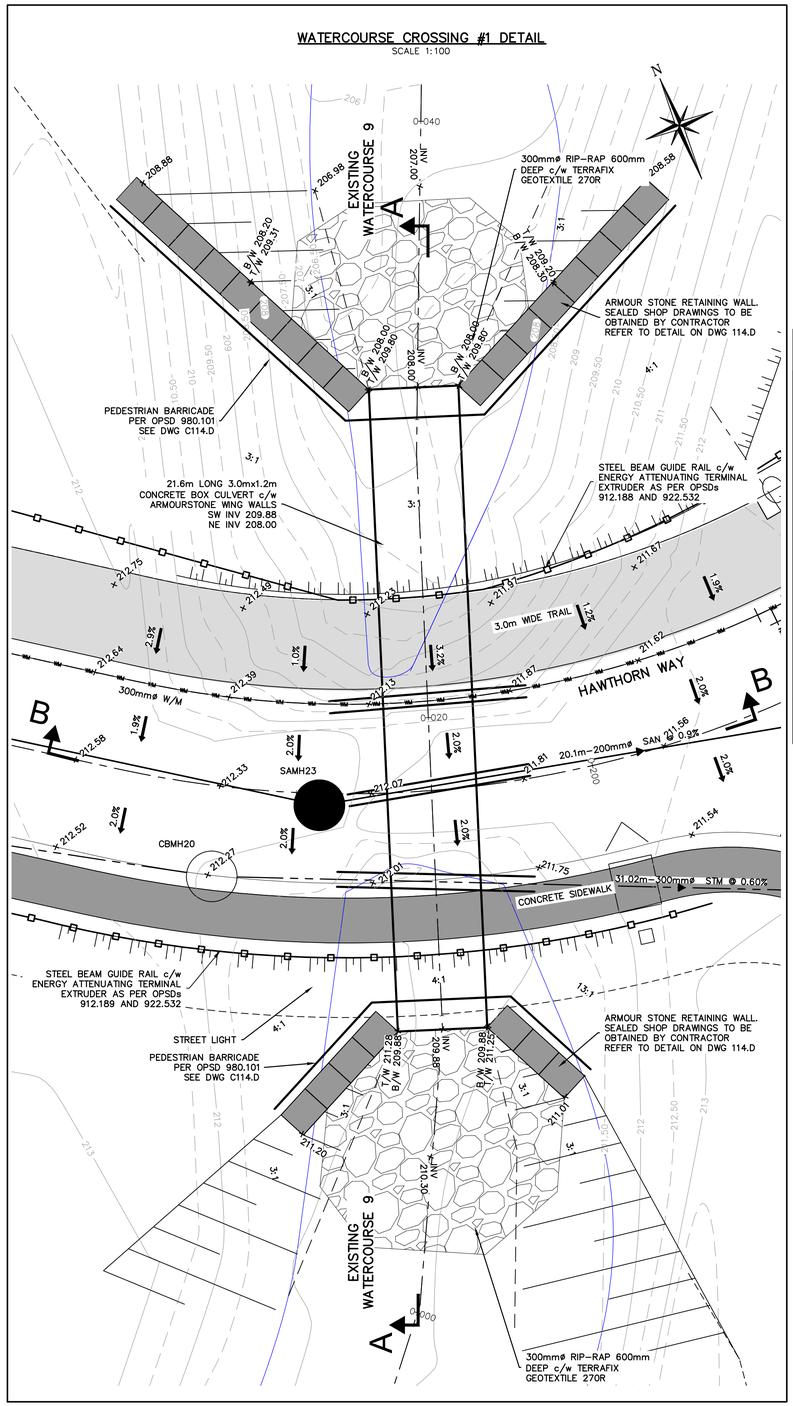

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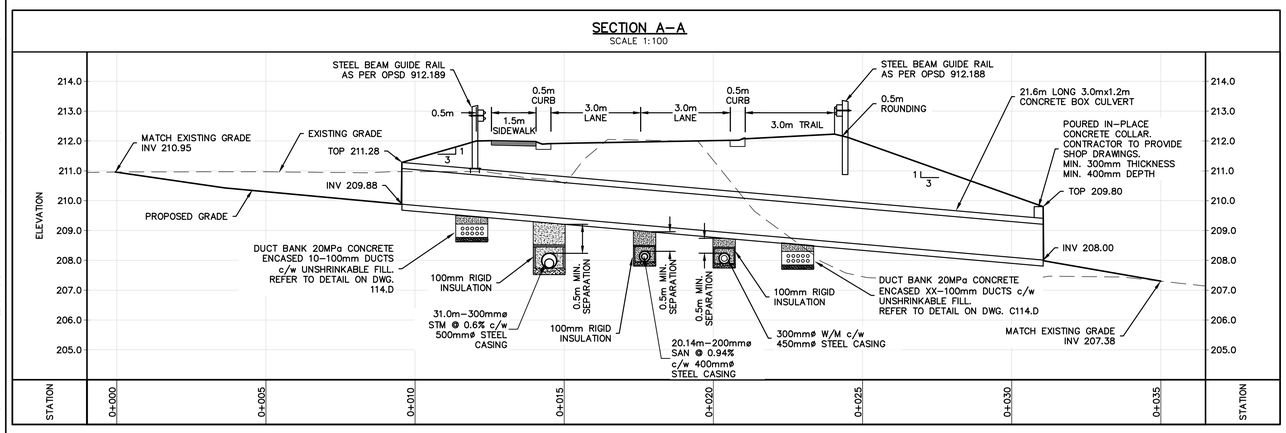

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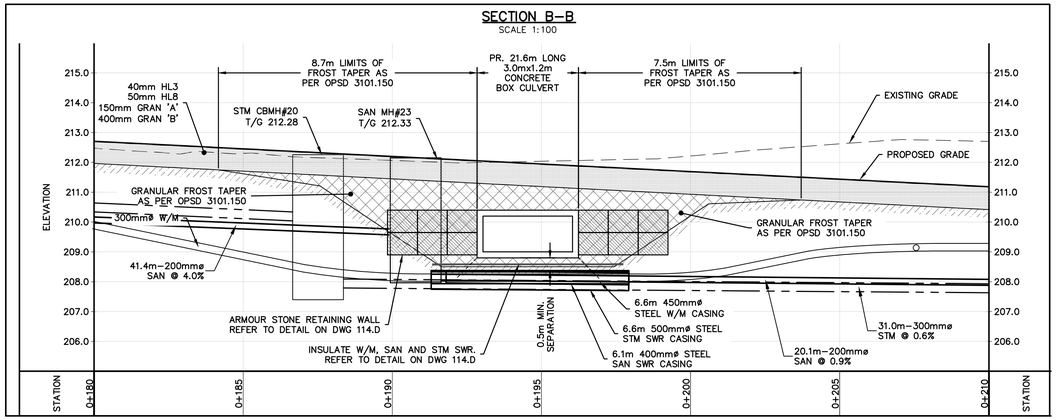
SCALE 1:100



KEY PLAN
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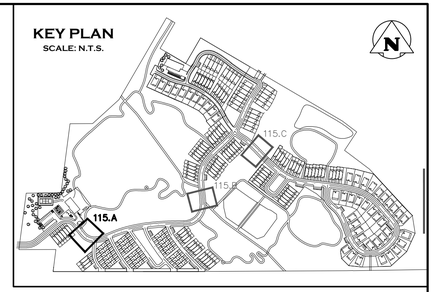

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Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

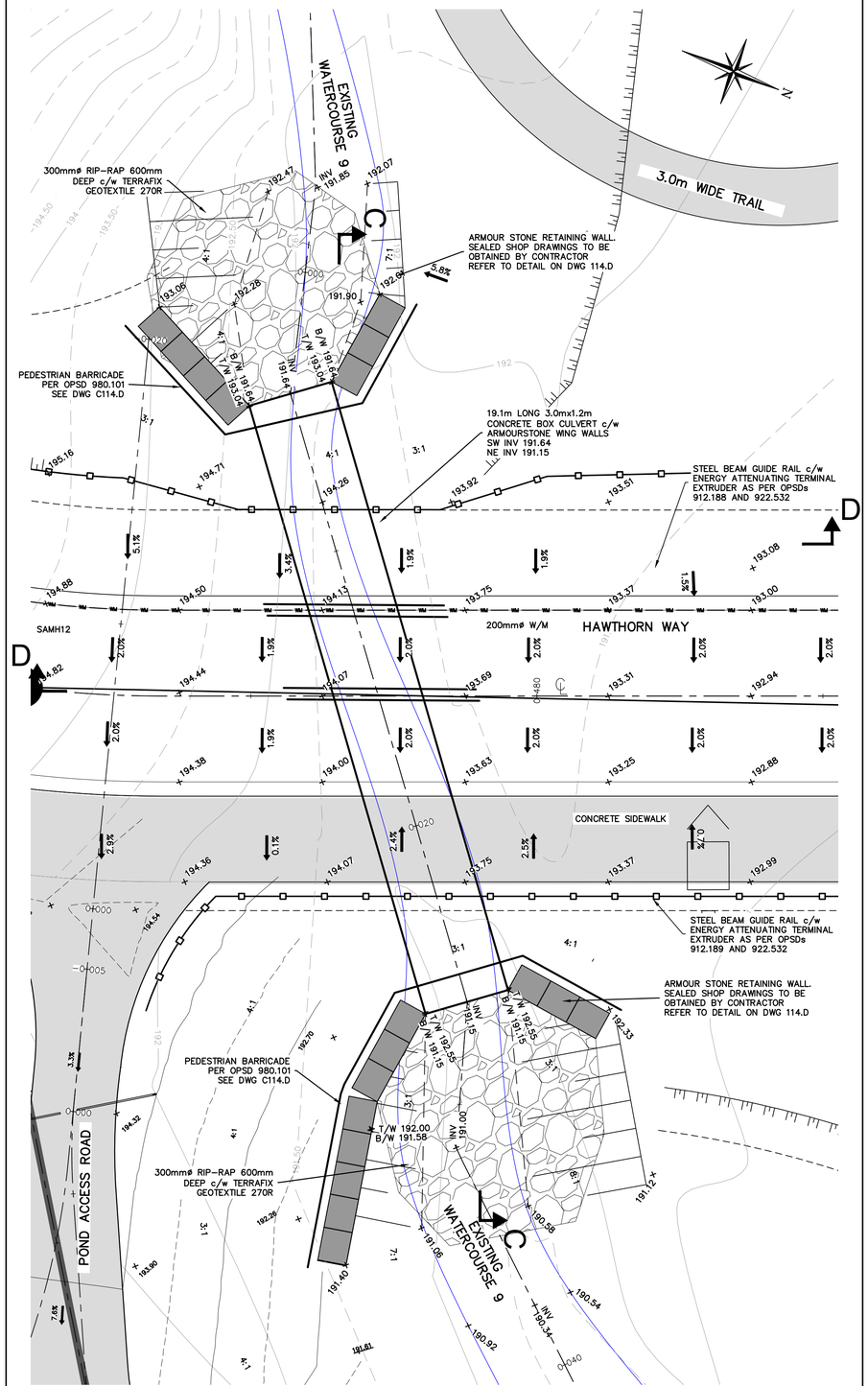
Drawing

WATERCOURSE CROSSING #1
PLAN AND SECTIONS

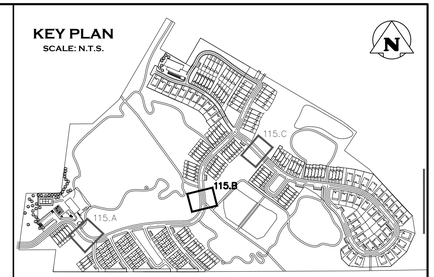
CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046-4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:100	C114.A

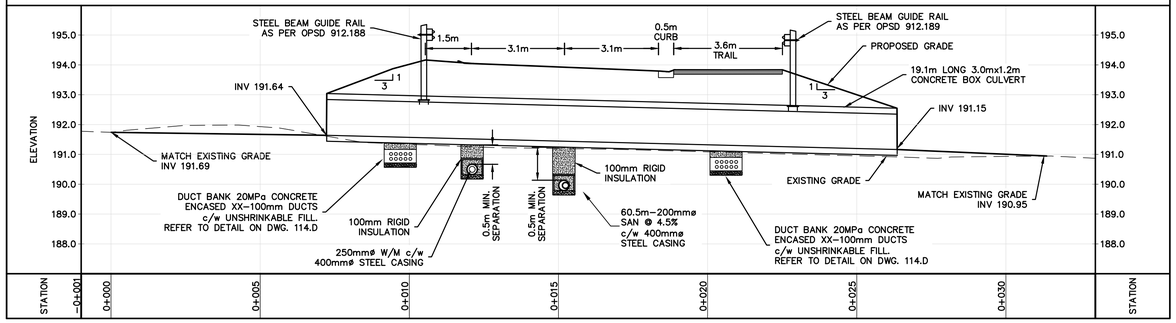
WATERCOURSE CROSSING #2 DETAIL
SCALE 1:100



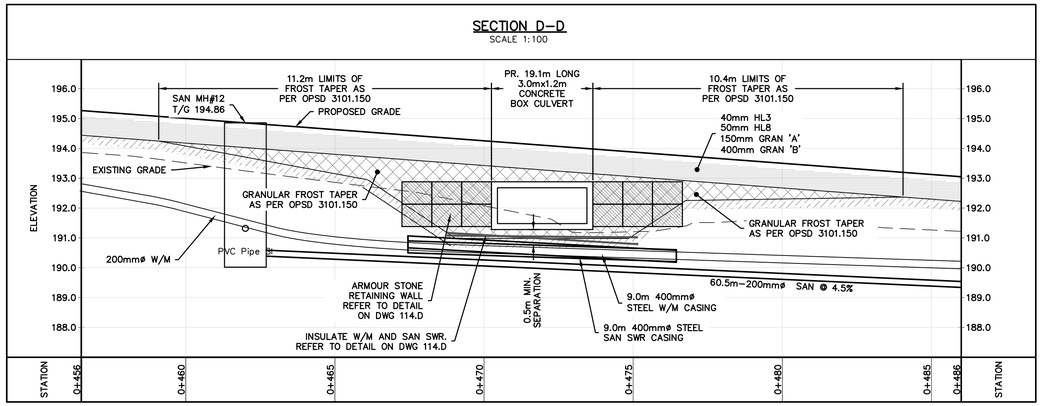
KEY PLAN
SCALE: N.T.S.



SECTION C–C
SCALE 1:100



SECTION D–D
SCALE 1:100



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Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

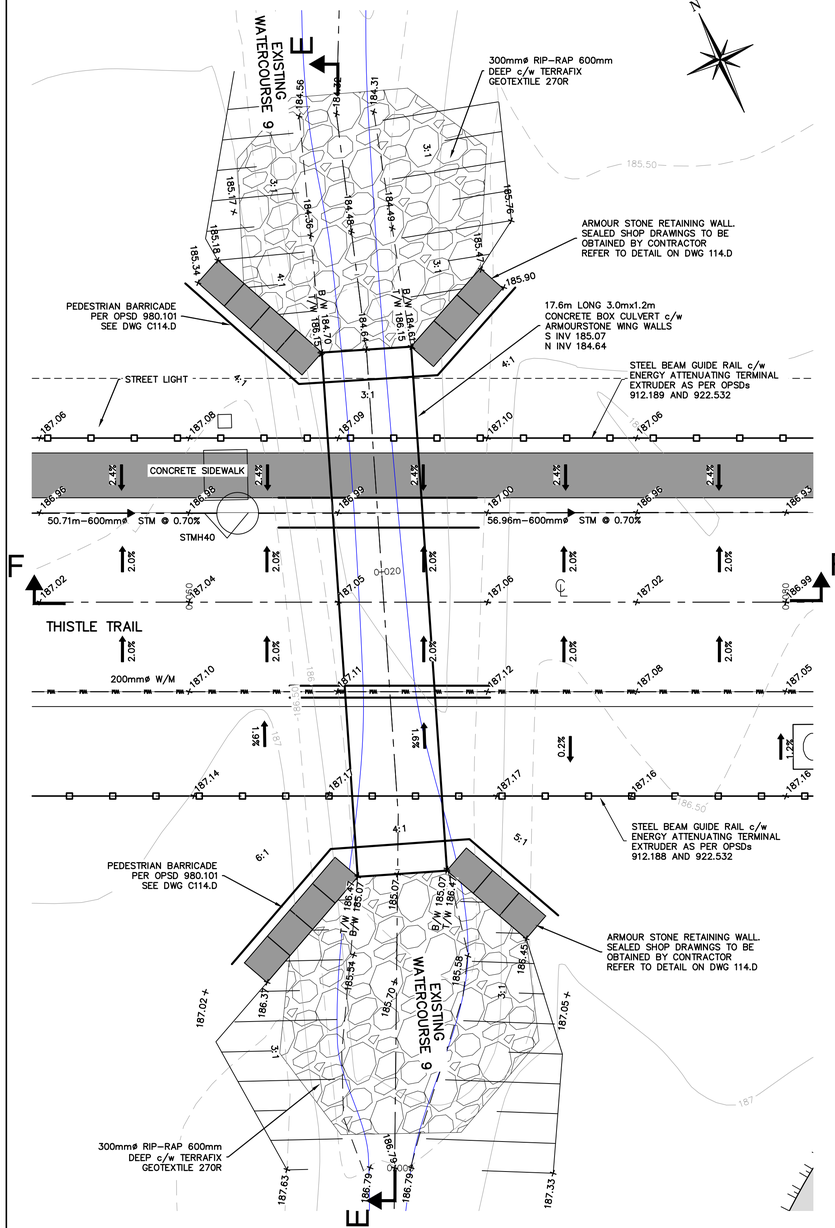
Drawing

WATERCOURSE CROSSING #2
PLAN AND SECTIONS

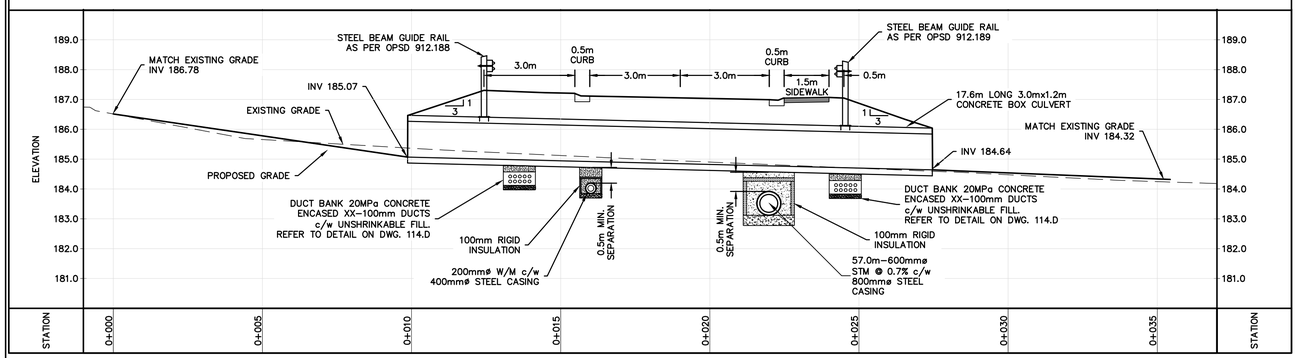
CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:100	C114.B

WATERCOURSE CROSSING #3 DETAIL
SCALE 1:100



SECTION E-E
SCALE 1:100



SECTION F-F
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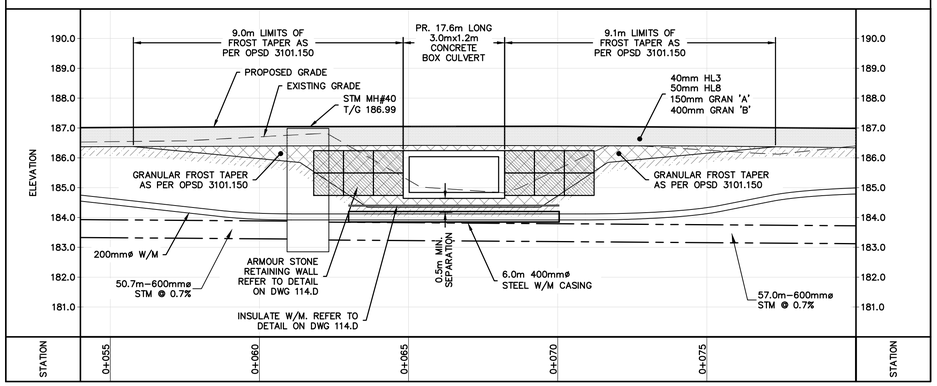
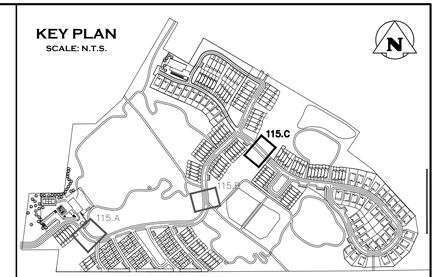


KEY PLAN
SCALE: N.T.S.



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TEMPORARY BENCHMARKS

TBM#1 – ELEVATIONS HEREON ARE GEODETIC AND ARE REFERRED TO A SPIKE IN HYDRO POLE ON GREY ROAD 19 SOUTH OF CRAIGLEITH ROAD HAVING AN ELEVATION OF 222.88 METRES.

TOPOGRAPHIC SURVEY COMPLETED BY ZUBEK, EMO, PATTEN AND THOMSEN LTD. O.L.S., DATED MARCH 2006.

No.	ISSUE	DATE: MM/DD/YYYY
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1	ISSUED FOR 2nd SUBMISSION	09/17/2020
2	ISSUED FOR 3rd SUBMISSION	05/14/2021
3	ISSUED FOR 4th SUBMISSION	03/23/2022

Project

PARKBRIDGE CRAIGLEITH
THE TOWN OF THE BLUE MOUNTAINS

Drawing

WATERCOURSE CROSSING #3
PLAN AND SECTIONS

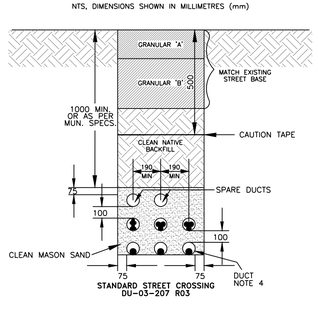
CROZIER CONSULTING ENGINEERS
ADMIRAL BUILDING
1 FIRST STREET, SUITE 200
COLLINGWOOD, ON, L9Y 1A1
705-446-3510 T
705-446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

Drawn By	Design By	Project	
L.W.	L.W.		1046-4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	1:100	C114.C

J:\1000\1046-Parkbridge Lifestyle\4031-Craigleith Fogal Land Acq\CAD\CIVIL\1SHEET\4031_C114 WC CROSSINGS.dwg, C114.C, 2022-03-23 5:09:25 PM, lwaters

TYPICAL DUCT BANK ROAD CROSSING DETAIL

NTS, DIMENSIONS SHOWN IN MILLIMETRES (mm)

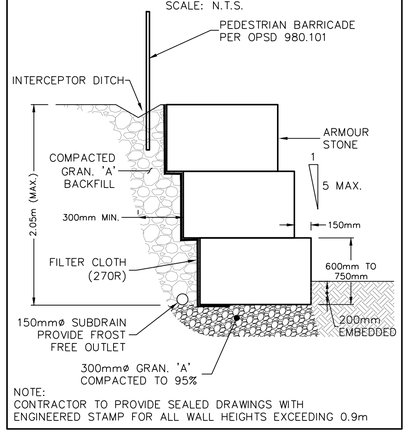


STANDARD STREET CROSSING
DU-03-207 R03

NOTES:
1. ALL DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
2. STREET CROSSING DUCTS TO BE INSTALLED AS PER MUNICIPAL SPECIFICATIONS TO A 1000mm MINIMUM DEPTH FROM FINAL GRADE. CENTER POINT TO BE ELEVATED TO PROVIDE 3% SLOPE TO EXTREMITIES.
3. BACKFILLING & COMPACTION SHALL BE AS PER MUNICIPAL SPECIFICATIONS, COMPACTION SHALL BE A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
4. IF TRENCH BOTTOM IS NOT LEVELED, FREE OF STONES & SHARP OBJECTS, MASON SAND SHALL BE PLACED IN THE TRENCH BOTTOM BEFORE INSTALLING DUCTS.
5. PRIMARY CABLES SHALL BE IN THE LOWER DUCTS AND SECONDARY CABLES IN THE UPPER DUCTS.
6. THIS DRAWING ALSO APPLIES TO CABLES INSTALLED ACROSS DRIVEWAYS IN INDUSTRIAL & COMMERCIAL SUBDIVISIONS AND UNDER PAVED PARKING AREAS.
7. IN CASE OF ABSENCE OF SECONDARY CABLES IN THE TRENCH, THE PRIMARY CABLES CAN BE PLACED IN THE MIDDLE LEVEL DUCTS.

TYPICAL ARMOUR STONE DETAIL

SCALE: N.T.S.



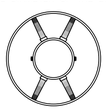
NOTE:
CONTRACTOR TO PROVIDE SEALED DRAWINGS WITH ENGINEERED STAMP FOR ALL WALL HEIGHTS EXCEEDING 0.9m

CASING SPACERS

- CASCADE: CCS – 1320–8 (OR APPROVED EQUAL)

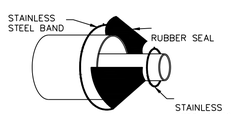
NOTES:

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF MATERIAL AND INSTALLATION METHODOLOGY FOR REVIEW AND APPROVAL.
2. ALL CASING SPACERS ARE TO BE MADE OF T–304 STAINLESS STEEL.
3. BEARING SURFACES (RUNNERS) SHALL BE ULTRA HIGH MOLECULAR WEIGHT POLYMER OR EQUIVALENT.
4. POSITIONING OF SPACERS ALONG THE WATERMAIN IS TO BE AS PER MANUFACTURERS SPECIFICATIONS.
5. POSITION OF WATERMAIN WITHIN LINER TO BE CENTERED AND RESTRAINED, SUFFICIENT ENOUGH TO PROVIDE NO LESS THAN 19mm (¾") CLEARANCE BETWEEN THE CASING PIPE AND THE OUTSIDE DIAMETER OF THE BELL.



CENTERED & RESTRAINED

6. WATERMAIN SHALL BE RESTRAINED LATERALLY FOR THE ENTIRE LENGTH OF THE LINER PLUS ONE FULL PIPE LENGTH BEYOND END OF CASING.
7. LINER TO BE SEALED USING WRAP AROUND RUBBER ENDS COMPLETE WITH STAINLESS STEEL (T–304) BANDING.



GENERAL CONSTRUCTION SCHEDULE

1. IN STREAM WORKS TO COMPLY WITH NVCA/DFO FISHERY TIMING GUIDELINES AND ASSOCIATED PERMITTING.
2. MAINTAIN TEMPORARY BY–PASS CULVERTS AND OVERLAND SPILL ROUTE PRIOR TO ANY EXCAVATION.
3. COMPLETE ASSOCIATED SEDIMENT CONTROLS, CULVERT AND UNDERGROUND SERVICES ENSURING WORKING IN THE DRY AT ALL TIMES.

GENERAL NOTES

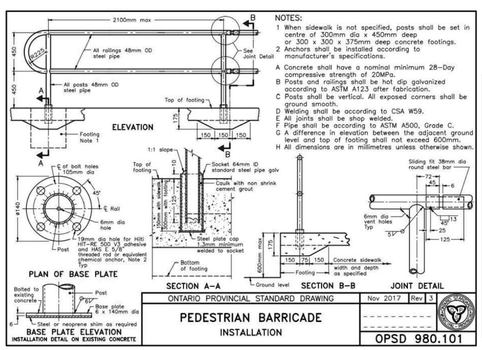
1. ALL WORK TO BE PERFORMED IN DRY DEWATERED CONDITIONS USING COFFER DAMS AND TEMPORARY CULVERTS.
2. NO MAINTENANCE OR REPAIR WORK ON CONSTRUCTION EQUIPMENT IS ALLOWED WITHIN 30 METRES OF WATERCOURSE.
3. ALL SEDIMENT & EROSION CONTROL FACILITIES AND WORKS ARE TO BE CONSTRUCTED AND IN PLACE TO THE APPROVAL OF THE SITE ENGINEER PRIOR TO EXCAVATION WORKS COMMENCING.
4. ALL TEMPORARY SOIL OR DIRT TO BE STOCKPILED PER DESIGNATED AREAS.
5. THE SEDIMENT & EROSION CONTROLS SPECIFIED HEREIN DO NOT NECESSARILY CONSTITUTE ALL MEASURES REQUIRED GIVEN FIELD CONDITIONS. CONTRACTOR TO PROVIDE ANY SUPPLEMENTARY SEDIMENT & EROSION CONTROL MEASURES AS REQUIRED TO ENSURE NO RELEASE OF DELETERIOUS SUBSTANCES TO WATERCOURSE.

GENERAL CULVERT NOTES

1. FOOTING DETAILS (DIMENSIONS & REINFORCING) FOR MUNICIPAL APPROVAL PROCESS ONLY. ACTUAL SIZE OF FOOTINGS AND REINFORCING AS PER DESIGN BY CONTRACTOR.
   FOOTINGS ARE ASSUMED TO BE FOUNDED ON BEDROCK; CONTRACTOR TO CONFIRM IN FIELD.
2. DESIGN IN ACCORDANCE WITH THE CANADIAN HIGHWAY BRIDGE DESIGN CODE (CAN/CSA–S6–06).
3. CONTRACTOR IS TO EXPOSE THE BEDROCK AROUND THE PROPOSED FOOTING FOR REVIEW BY GEOTECHNICAL ENGINEER. ANY LOOSE OR DELETERIOUS MATERIALS SHALL BE REMOVED AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER
4. CLASS OF CAST–IN–PLACE CONCRETE = 30 MPa.
5. CLEAR COVER TO REINFORCING:
   FOOTINGS = 100±25
   DISTRIBUTION SLAB = AS NOTED ON DWG.
6. BAR MARKS WITH SUFFIX 'C' DENOTE COATED BARS.
7. REINFORCING BARS SHALL BE GRADE 400 MPa.
8. CONTRACTOR TO PROVIDE MIN. 0.75m GRANULAR ABOVE CULVERT STRUCTURE DURING CONSTRUCTION.

REQUIREMENTS FOR THE CONTRACTOR

1. PROVIDE STAMPED SHOP DRAWINGS INDICATING THAT THE CULVERT STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE CANADIAN HIGHWAY BRIDGE DESIGN CODE (CHBDC) (CAN/CSA–S6–06). CONTRACTOR TO ALSO PROVIDE COPIES OF ALL SHOP DRAWINGS TO THE TOWN FOR THEIR RECORDS.
2. SUBMISSION SHALL INCLUDE DETAILS ON REACTION LOADS, BOTH HORIZONTAL & VERTICAL, TO BE RESISTED BY FOUNDATION AS WELL AS DETAILS ON PROPOSED ANCHORAGE FOR CULVERT & FOOTINGS.
3. ENSURE THAT THE SHOP DRAWINGS ARE SPECIFIC TO THIS CONTRACT, AND REFERENCED TO CFCA PROJECT No. 721–3505, AND NOT A "STOCK ITEM".
4. ENSURE THAT SHOP DRAWINGS SHOW AND SPECIFY ALL JOINT FILLERS, SEALS AND COMPOUNDS, GROUT, AND GEOTEXTILE INSTALLATIONS AND APPLICATIONS.
5. CONTRACTOR RESPONSIBLE FOR DESIGN AND DETAILING OF CONCRETE HEADWALLS (COLLARS) INCLUDING ANCHORAGE DETAILS TO CULVERT. SEALED & SIGNED SHOP DRAWINGS TO BE PROVIDED.

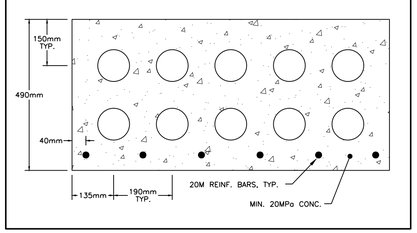


NOTES:
1 When sidewalk is not specified, posts shall be set in centre of 300mm dia x 450mm deep or 300 x 300 x 375mm deep concrete footings.
2 Anchors shall be installed according to manufacturer's specifications.
A Concrete shall have a nominal minimum 28–Day compressive strength of 20MPa.
B Posts and railings shall be hot dip galvanized according to ASTM A123 after fabrication.
C Posts shall be vertical. All exposed corners shall be ground smooth.
D Welding shall be according to CSA W59.
E All joints shall be shop welded.
F Pipe shall be according to ASTM A500, Grade C.
G A difference in elevation between the adjacent ground level and top of footing shall not exceed 600mm.
H All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2017	Rev 3
PEDESTRIAN BARRICADE INSTALLATION		OPSD 980.101

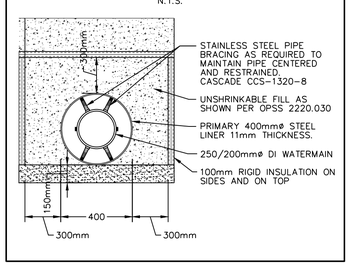
DUCT BANK DETAIL

N.T.S.



STEEL CASING DETAIL

N.T.S.



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NOTES AND DETAILS

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Drawn By	Design By	Project	
L.W.	L.W.		1046–4031
Check By	Check By	Scale	Drawing
R.W.	J.P.	AS SHOWN	C114.D