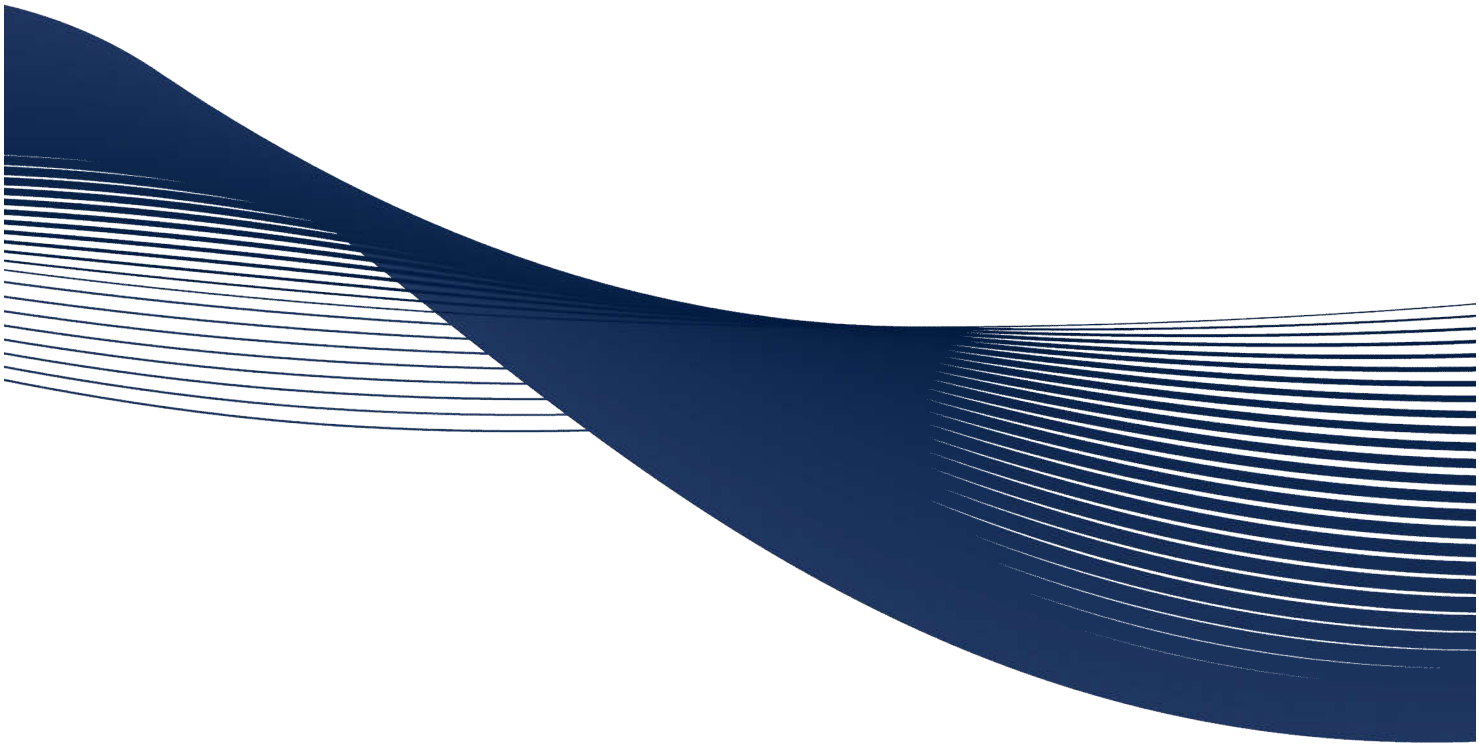
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The Manors of Belfountain Corp.

FUNCTIONAL SERVICING REPORT

The Manors of Belfountain, Town of Caledon

2017-0701



March 2018
June 2020 (Revised)

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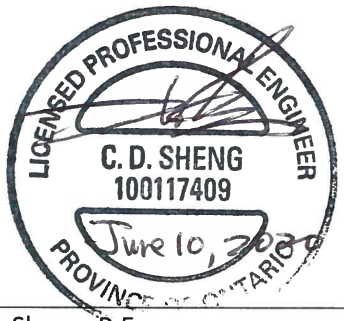
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Issues and Revisions Registry

Identification	Date	Description of issued and/or revision
1st Functional Servicing Report	March 5, 2018	Issued for Town Submission
2nd Functional Servicing Report	June 2020	Issued for Town Submission

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Statement of Conditions

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1 Introduction

Cole Engineering Group Ltd. (COLE) was retained by The Manors of Belfountain Corp., (the "Owner") to prepare a site specific Functional Servicing Report (FSR), for a proposed estate residential development on the property, in accordance with the Town of Caledon (the "Town"), the Niagara Escarpment Plan and the Regional Municipality of Peel (the "Region") development guidelines.

The purpose of this FSR is to provide site specific information for review by the municipalities and approval agencies with respect to the infrastructure required to support the proposed development and demonstrate that the requirements, including storm water management (SWM), sanitary servicing, potable water supply, from the related review agencies, can be achieved by the engineering services proposed in this Report.

This FSR is based on a proposed **Draft Plan of Subdivision** dated April 24, 2020.

1.1 Background Documents

The following documents were reviewed in the preparation of this report:

- Development Standards Manual, Town of Caledon, Version 5, dated 2019;
- *Stormwater Management Planning and Design Manual*, prepared by the Ministry of Environment, Conservation, and Parks, dated March 2003;
- CVC Stormwater Management Criteria, Aug 2012;
- Depression Storage Areas, Falby Burnside Associates, DWG 9659 SWM2, dated Mar 1998;
- Memos and previous engineering work for the site, Burnside Associates, 2000 to 2012;
- *Hydrogeological Investigation Report*, Cole Engineering Group Ltd., 2018 & 2020; and,
- Terraprobe Limited, 1990. Hydrogeological Investigation, Proposed Residential Subdivision Part Lot 9 Concession 5 WHS, Town of Caledon (Belfountain), Region of Peel.

2 Existing Site Conditions

The Site is approximately 70.28 hectares (ha) in area, Part of Lots 8 & 9, Concession 5, WHS (CAL), Ward 1 in Caledon, Ontario and is currently used for agricultural purposes.

It is generally bounded by Bush Street to the northwest, Shaws Creek Road to the southwest, Mississauga Road to the north and vacant lands to the southeast, in the Hamlet of Belfountain. The Belfountain Public School and several existing residential properties are located northwest of the Site. Refer to **Figure 2-1**, **LP, Location Plan**, for the proposed development location.

2.1 Existing Topography

The topography of the site is hummocky with numerous depressions distributed across the site, as shown in **Drawing ST-1, Pre-Development Drainage Area Plan**, following this report. Elevations of the site, within the intended development area, range from approximately 399 MASL (located near Shaws Creek Road) to 411 MASL (located at the southwest corner of the site). Due to the hummocky and rolling nature of the site, existing slopes range from relatively flat to approximately 30%. Existing grades steeper than 30% occur within the site, but external to the development area and are located to the northeast as the ground falls towards Mississauga Road and will remain as Open Space. The agricultural portion of the site will generally be the area of proposed development.

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LOCATION PLAN

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

DATE:	MAY 2020	PROJECT No.	2017-0701
SCALE:	NTS	FIGURE No.	2-1

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2.2 Shaws Creek Road

Abutting the site to the west is Shaws Creek Road, owned by the Town of Caledon, is a gravel road with rural cross section exhibiting undefined ditches. Along the frontage of the site, storm runoff from Shaws Creek Road is generally directed from south-to-north and from north-to-south towards an existing low point of the road, situated approximately mid-way along the site frontage, with existing centerline elevation of 400.80 metres (m), as shown on **Drawing ST-1, Pre-Development Drainage Area Plan** following this report.

2.3 Existing Storm Drainage

The site is bisected by a natural drainage divide, or topographic ridge, aligned east-to-west through the property. The lands to the north of the natural drainage divide consists of some agricultural land but primarily of wooded area and steeper slopes located within the northern quadrant of the site. The lands to the south of the natural drainage divide consists of the existing agricultural area, which is proposed for development, as shown on **Drawing ST-1, Pre-Development Drainage Area Plan**, following this report.

Due to the hummocky topography and natural depressions within the property, all rainfall generated to the south of the natural drainage divide and across the agricultural portion of the site is retained on site. During a significant storm event (or series of significant events) in which the capacity of these natural depressions may be exceeded, overland flows spill through the series of natural depressions, generally spilling from east to west, with the ultimate overland spill relief from the site occurring at the topographic low point, at Shaws Creek Road.

As per the existing ground topography obtained for the site (aerial survey data; First Base Solutions), the centerline of road low point on Shaws Creek Road (at an elevation of 400.80 masl) is the lowest topographic perimeter elevation in relation to the agricultural area located on the south side of the natural drainage divide. During significant storm events (or series of significant events), the potential exists that stormwater may collect and pond on site and eventually overtop Shaws Creek Road, with storm runoff following lower topography and directed westerly through neighboring private properties towards the Credit River.

2.4 Existing Soils and Groundwater Conditions

Overburden geology (soils) at the site consists of approximately 10 m to 20 m of sand and gravel outwash deposits with groundwater levels measured across the site at 10 m to 20 m below ground surface, with the exception of the on-site wetland features, where groundwater is typically 0 m to 1 m below ground. The combination of pervious soils and deep groundwater water table provide excellent opportunities for infiltration and accounts for the existing condition in which the majority of storm runoff is retained within the site and infiltrated. For further information related to groundwater conditions, refer to the Hydrogeological Investigation Report, prepared by COLE, revised 2020.

The existing ground topography, drainage pattern and depressions which currently collect runoff, are shown on **Drawing ST-1, Pre-Development Drainage Area Plan**, following this report.

3 Proposed Development

Based on the **Draft Plan of Subdivision** for Manors of Belfountain Corp., dated April 2020 the proposed development consists of:

- 75 rural, individually serviced estates lots;

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- a 2.38 hectare Park Block;
- a 21.53 hectare Open Space area and associated 10 m Buffer; and,
- 5.98 hectares of Stormwater Management Facilities (Ponds and Channel).

A copy of the proposed **Draft Plan of Subdivision** is located at the end of this report.

The residential lots are proposed to be serviced by individual private wells and private wastewater (tertiary treatment) septic systems regarding potable water and sanitary services. Due to higher nitrate levels found within the eastern portion of the site, placement of the private water wells in the eastern area of the site are subject to a Nitrate Line buffer. Refer to the Hydrogeological Investigation Report, prepared by COLE, dated May 2020, for more information related to the restricted area of water well placement and site nitrates.

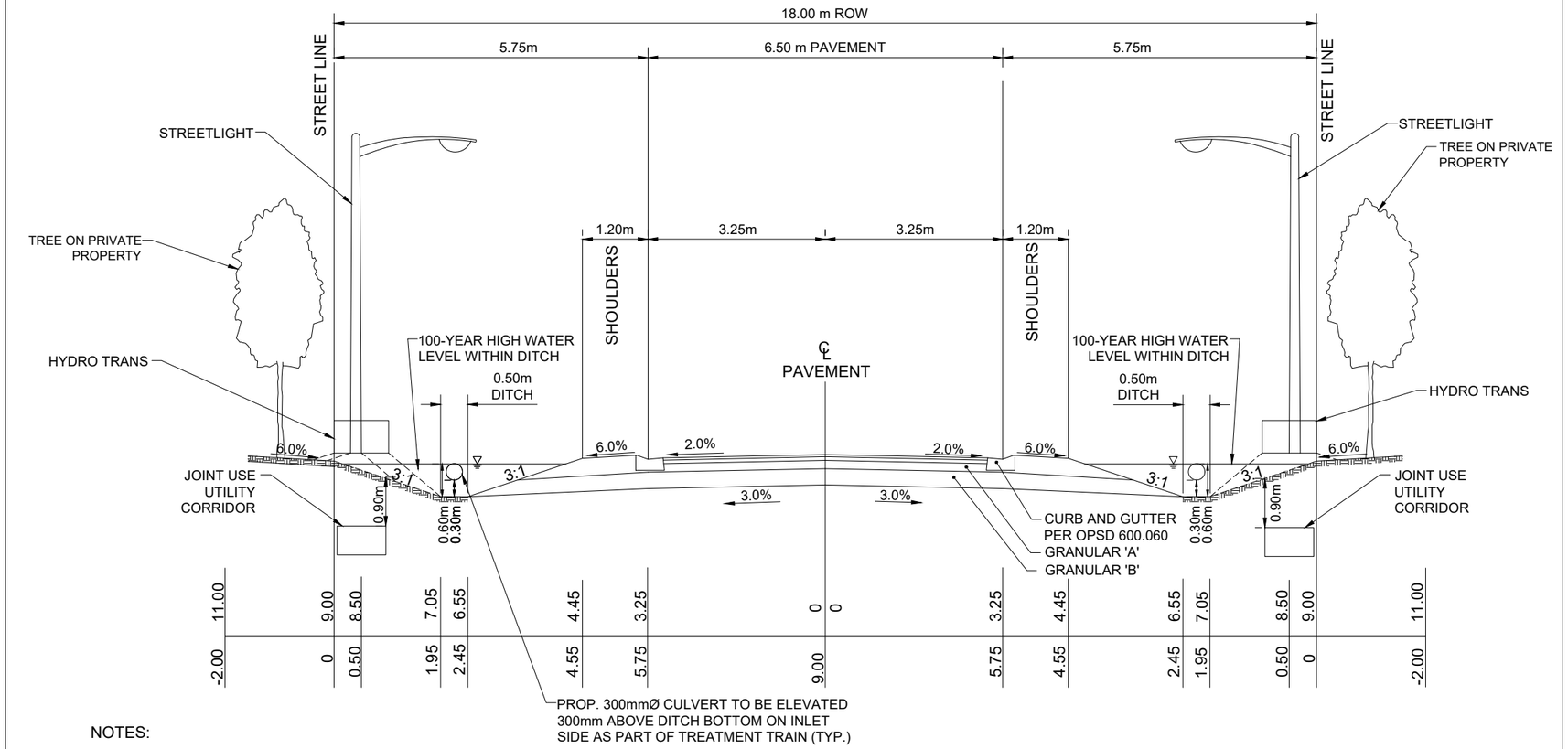
Refer to **Drawing GP-1, Functional Grading Plan,** located at the end of this report, for the location of proposed private wells, the Nitrate Line and proposed private septic systems within the Lots.

Vehicular access will be accomplished via two (2) local road connections from the internal roads to the existing Shaws Creek Road on the west side of the development.

The proposed road cross section is a paved rural road cross section with roll over curbs drained by concrete curb outlets into the flat bottom grassed ditches on both sides of the right-of-way. See **Figure 3-1, DET-1, 18.0m ROW Rural Cross Section Roadway (6.5m Pavement) No Sidewalk** and **Figure 3-2, DET-2, 20.0m ROW Rural Cross Section Roadway (6.5m Pavement) With Sidewalk**, for an illustration of the proposed right-of-way cross-sections.

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NOTES:

1. UTILITY CORRIDOR TO HAVE A MINIMUM COVER OF 0.90m.
2. THE FOLLOWING IS A MINIMUM ROAD BASE AND WILL REQUIRE A SOIL REPORT VERIFICATION:
   40 mm HL3
   65 mm HL8
   150 mm GRANULAR 'A'
   300 mm GRANULAR 'B'
3. TREES TO BE PLACED IN LOCATIONS PER APPROVED ARCHITECTURAL PLAN.
4. DITCHES AND SLOPES ARE REQUIRED MINIMUM OF 300mm TOPSOIL AND NURSERY SOD.
5. STREETLIGHT FIXTURE PER APPROVED TOWN STANDARDS.
6. SUB-GRADE SHALL BE COMPACTED TO A MINIMUM 95% OF S.P.D. AT OPTIMUM MOISTURE CONTENT.
7. LONG DIMENSION OF TRANSFORMER TO BE PARALLEL TO STREET LINE.

18.00m ROW RURAL CROSS SECTION
ROADWAY (6.5m PAVEMENT)
-NO SIDEWALK

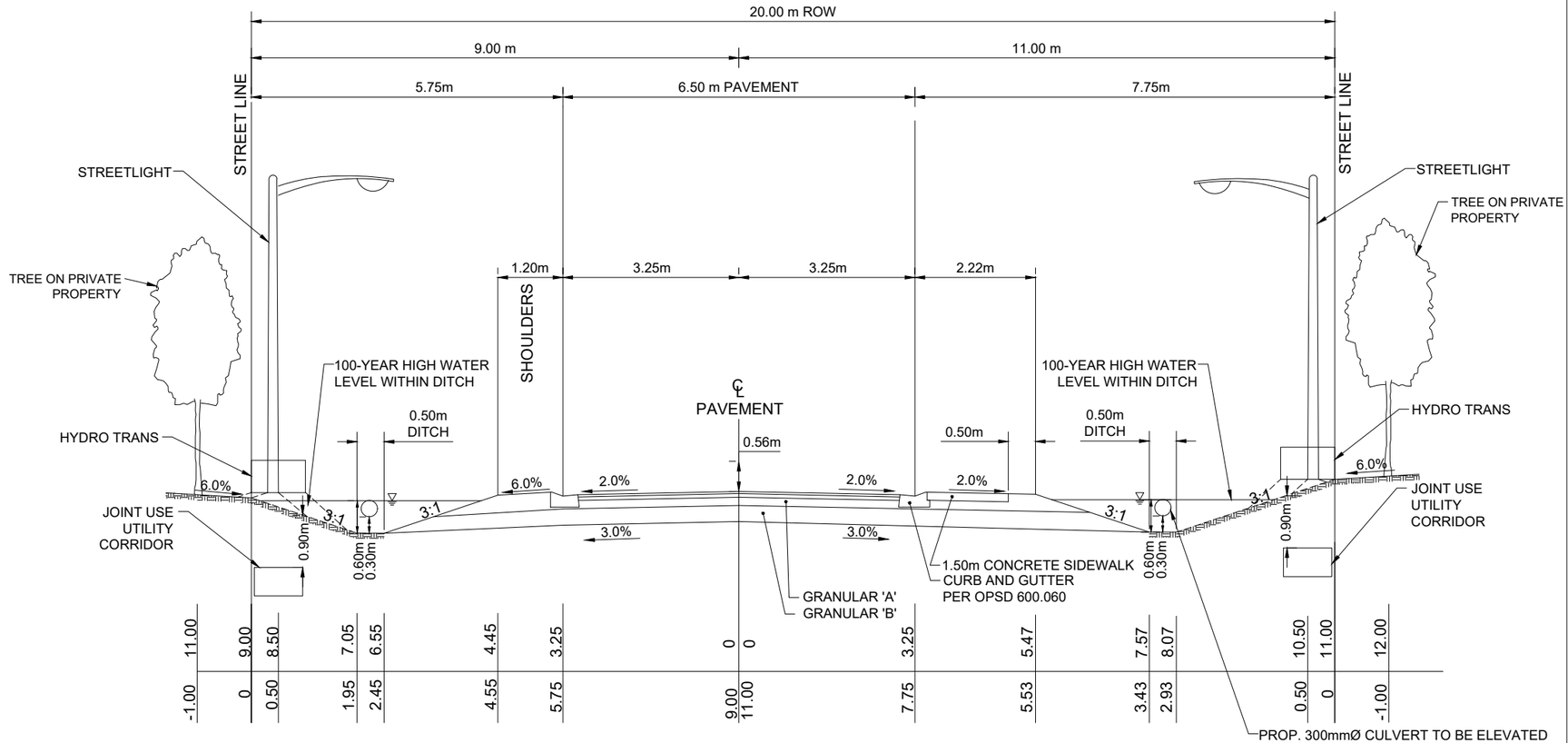
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DRAWN: --
DATE: MAY 2020
SCALE: NTS

FIGURE No.: 3-1

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NOTES:

1. UTILITY CORRIDOR TO HAVE A MINIMUM COVER OF 0.90m.
2. THE FOLLOWING IS A MINIMUM ROAD BASE AND WILL REQUIRE A SOIL REPORT VERIFICATION:
   40 mm HL3
   65 mm HL8
   150 mm GRANULAR 'A'
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4. DITCHES AND SLOPES ARE REQUIRED MINIMUM OF 300mm TOPSOIL AND NURSERY SOD.
5. STREETLIGHT FIXTURE PER APPROVED TOWN STANDARDS.
6. SUB-GRADE SHALL BE COMPACTED TO A MINIMUM 95% OF S.P.D. AT OPTIMUM MOISTURE CONTENT.
7. LONG DIMENSION OF TRANSFORMER TO BE PARALLEL TO STREET LINE.

20.00m ROW RURAL CROSS SECTION
ROADWAY (6.5m PAVEMENT)
-WITH SIDEWALK

No.	REVISION	APR'D:	DATE:

APR'D: --
DATE: MAY 2020
DRAWN: --
SCALE: NTS

FIGURE No.: 3-2

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4 Site Grading

4.1 Existing Grades

As described in **Section 2.1, Existing Topography**, the topography of the site is hummocky with numerous depressions distributed across the site. Elevations of the site, within the intended development area, range from approximately 399 MASL (located near Shaws Creek Road) to 411 MASL (located at the southwestern corner of the site). Due to the hummocky and rolling nature of the site, existing slopes range from relatively flat to approximately 30%. Existing grades steeper than 30% occur within the site, but external to the development area and are located to the northeast as the ground falls towards Mississauga Road and will remain as Open Space. Development is proposed where existing grades, less than 25%, occur within the site.

There are 14 existing, defined depressions, where storm runoff accumulates and infiltrates. It is these features that create the condition of almost no storm runoff from the site.

Existing ground topography for the site (aerial survey data) was obtained from First Base Solutions. A depiction of the existing grades (in contour format), existing depressions and drainage direction on site are shown on **Drawing ST-1, Pre-Development Drainage Area Plan** and also depicted on **Drawing GP-1, Functional Grading Plan,** both drawings are located at the end of this report.

4.2 Proposed Grading

Proposed grading for the site shall conform to several objectives in order to maintain to the extent possible the overall character of the site under the guidelines for: 'Development Affecting Steep Slopes and Ravines', Part 2.5.4 & 2.5.6, 'Infrastructure', Part 2.12 and 'Scenic Resource and Landform Conservation', Part 2.13 all by the Niagara Escarpment Commission (NEC), Niagara Escarpment Plan. The grading related objectives are:

- Existing hedgerows and topographic features, i.e. depressions, are retained in their existing undisturbed state, where possible;
- Proposed road elevations match as closely as possible to existing topography to avoid excessive earthmoving operations and limit the zones of disturbance within the proposed Lots; and,
- That final grading be designed to avoid importing and minimize exporting of soils.

For reference, the pertinent NEC's guidelines are presented below:

Development Affecting Steep Slopes and Ravines

2.5.4 Development shall not be permitted on slopes in excess of 25 percent (1:4 slope) or if the stability of the slope or ravine is in question, unless an engineering report has been prepared by the applicant that demonstrated the future stability of the slope would not be affected.

2.5.6 Development should be designed in such a way as to minimize the disturbance and ensure the stability of Escarpment and ravine slopes.

Infrastructure

2.12.2 Infrastructure shall be sited and designed to minimize the negative impact on the Escarpment environment. Examples of such siting and design considerations include, but are not limited to the following:

a) blasting, grading and tree removal should be minimized where possible through realignment and utilization of devices, such as curbs and gutters, retaining walls and tree wells;

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b) finished slopes should have grades no steeper than 50 per cent (1:2 slope) and be planted; large cuts should be terraced to minimize surface erosion and slope failure;
c) site rehabilitation should use native species of vegetation and protect and enhance the natural environment;
d) a development setback from the Escarpment brow shall be established by the implementing authority to minimize visual impacts; and
e) visual impacts from infrastructure should be minimized by siting, structural design, colouration and landscape planting and/or vegetation screening.

Scenic Resources and Landform Conservation

2.13 The objective is to ensure that development preserves the natural scenery and maintains Escarpment related landforms and the open landscape character of the escarpment.

Scenic Resources

2.13.4 Appropriate siting and design measures shall be used to minimize the impact of development on the scenic resources of the Escarpment, including:
a) establishing appropriate setbacks and maximum building heights;
b) changing the orientation and height of built form to reduce visibility and skylining;
d) minimizing the development footprint and changes to the existing topography and vegetation;
e) using natural topography and vegetation as screening for visual mitigation;
f) where there is minimal existing screening or vegetation that cannot be retained, providing new planting of native species to screen development;
g) using non-reflective materials on roofs and walls along with measures to reduce reflectivity associated with windows; and
h) minimizing the effect from exterior lighting (e.g., lighting directed downward)

Landform Conservation

2.13.5 Planning, design and construction practices shall ensure that Escarpment related landforms are maintained and enhanced, and that development is visually compatible with the natural scenery and open landscape character of the Niagara Escarpment.

2.13.6 Use of impervious surfacing should be minimized and limited to areas of the site where it is necessary to the permitted use (e.g. driveways, walkways, patios, parking, recreational surfaces)

2.13.7 Except as provided for in Part 2.9 (Mineral Aggregate Resources), the construction of berms will only be permitted in cases where natural vegetation is insufficient to mitigate visually incompatible land uses, or where noise attenuation is required.

2.13.8 Excess excavated materials related to new development should be retained on site and integrated into the site plan so as to maintain natural drainage, protect existing vegetation, and minimize contour changes.

2.13.9 Any proposed cutting and filling must be clearly shown on a proper grading and drainage plan. If imported fill is needed, a fill management plan, prepared and overseen by a professional geoscientist or professional engineer, may be required at the discretion of the implementing authority.

2.13.10 Any fill imported onto a site must meet or exceed existing on-site soil quality conditions. The objective is that imported fill shall meet Table 1 of the Soil and Groundwater and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act, R.S.O. 1990, c.E.19, unless at the discretion of the implementing authority, a different Table Standard is deemed safe and appropriate. This assessment will be based on site conditions, the quantity of fill proposed and a consideration of possible impacts on human health and the environment.

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4.3 Proposed Lot Grading

The proposed lot pattern has been successful in retaining most of the hedgerows and natural topography as required by the NEC's landform preservation criteria. Limited grading of the local humps and depressions is required to design lots that conform to Town engineering design standards.

Lot sizes are large, generally half-hectare in size, with houses exhibiting an average building footprint of 350m^2 (3,800 ft^2), which allows for considerable flexibility in the placement of the house, private water well and private septic system within each lot.

4.4 Perimeter Lot Grading

Preliminary lot perimeter grading design has been prepared for all proposed lots within the plan of subdivision. Lot corner grades along the edge of proposed Right-Of-Ways are designed to suit standard municipal right-of-way cross sections and may deviate slightly from existing grade. Proposed lot perimeter grades along the side and rear yards have been maintained to match existing grade as closely as possible to suit the NEC's criteria with respect to landform conservation to avoid site-wide grading activity. As a result, sideyard and rearyard property line gradients in certain instances may not always meet the Town of Caledon grading standards of minimum 2% swale gradient. The design principle of utilizing property line grades flatter than 2% should be applied sparingly and reserved only for isolated locations where the benefit of standard drainage swales is outweighed by the benefit of minimizing disturbance to existing ground or vegetation, in particular within existing depressions.

Based on the preliminary lot grading design, a few lot lines exhibit grades less than 2%, and as flat as 0.7%. Due to the presence of well-draining soils on site, the use of reduced lot grading will promote infiltration, provided that areas of reduced lot grades are located external to building envelopes and amenity areas around the house footprint are graded according to Town standards.

Detailed lot grading design shall be completed after draft plan approval, in support of the final design stage and lot grading flexibility / deviations from Town standards should be discussed as a balance to avoiding site-wide earthworks.

4.5 Building Envelopes

At the detailed design stage, building envelopes should be finalized for each lot in conjunction with detailed lot grading to identify the maximum extent of disturbance within the lots. The building envelopes should encompass the proposed house, driveway, amenity space, septic system and private well. In addition, proposed building envelopes should consider separation distance from existing trees / hedgerows, where such vegetation exists within the lot, based on the tree preservation zones prepared by the project arborist.

Where the proposed lots are situated within or encompass an existing low lying area, elevated platforms will be graded for the house, driveway, amenity space, well and septic system to prevent the potential of ponding stormwater that may collect in the existing depressions from encroaching into the building envelope. All low depression areas will be drained by rear yard catchbasins, discussed below, and in conjunction with the presence of pervious soils, therefore the risk of rear yard ponding is low.

To demonstrate the principle of lot grading to avoid rear yard ponding encroachments into building envelopes, two (2) representative cross sections have been prepared and presented on the following pages: **Figure 4-1, XS-AA, Lot Grading Cross Section A-A, No Platforming**, for an example how the proposed houses utilize the existing local high points within the lot to minimize the required grading and **Figure 4-2, XS-BB, Lot Grading Cross Section B-B, Platforming Required,** for an example how an elevated

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grading platform is utilized, generally by filling, within the rear yard to provide an area devoid of potential ponding for the building envelope.

4.6 Rear Yard Catchbasins

Rear yards that contain existing depressions will be serviced with proposed rear yard catchbasins to facilitate drainage and will be connected to storm sewers under the roads.

Under emergency situations, where the rear yard catchbasin or lead is completely blocked, Town standards indicate a maximum allowable ponding depth of 0.3 m. To avoid re-grading or filling of existing depressions, and based on discussion with Town staff, an exception to Town standard has been permitted to allow rear yard ponding, up to a maximum depth of 1.0 m, prior to spilling towards the intended overland flow route, thus proposed septic beds, private wells and rear yard amenity areas will not be inundated by stormwater runoff. Rear yard ponding up to these depths would occur under emergency situations only, should the proposed rear-yard catchbasin or lead become completely blocked. The catchbasin and lead should be situated wholly within a single lot.

Refer to **Drawing ST-2, Storm Drainage Plan-Internal** for a depiction of the proposed rear yard catchbasin locations. The preliminary design depicts a single rear yard catchbasin at the low point of a rear yard depression. The final design shall determine the number of rear yard catchbasins required, their final locations, adequate grate type and lead sizing, designed to accommodate the contributing drainage area.

Based on the expected size of contributing drainage area to each rear yard catchbasin, it is recommended that maintenance easements be dedicated to the Town of Caledon covering the catchbasin and lead within the private lot. Alternatively, maintenance of rear yard catchbasins could be the responsibility of the homeowner within the lot that it resides and suitable provisions should be included within the Subdivision Agreement between the Town and Developer and subsequently included within Agreement of Purchase and Sale between the Builder and home buyer. Another alternative to provision for rear yard catchbasin maintenance is to provide easement rights to all private lots that drain towards a designated rear yard catchbasin, to allow such upstream homeowners the ability to enter, maintain and clear any blockage of drainage facilities located on downstream private lots.

Responsibility for maintenance of rear yard catchbasins shall be confirmed at the final design stage.

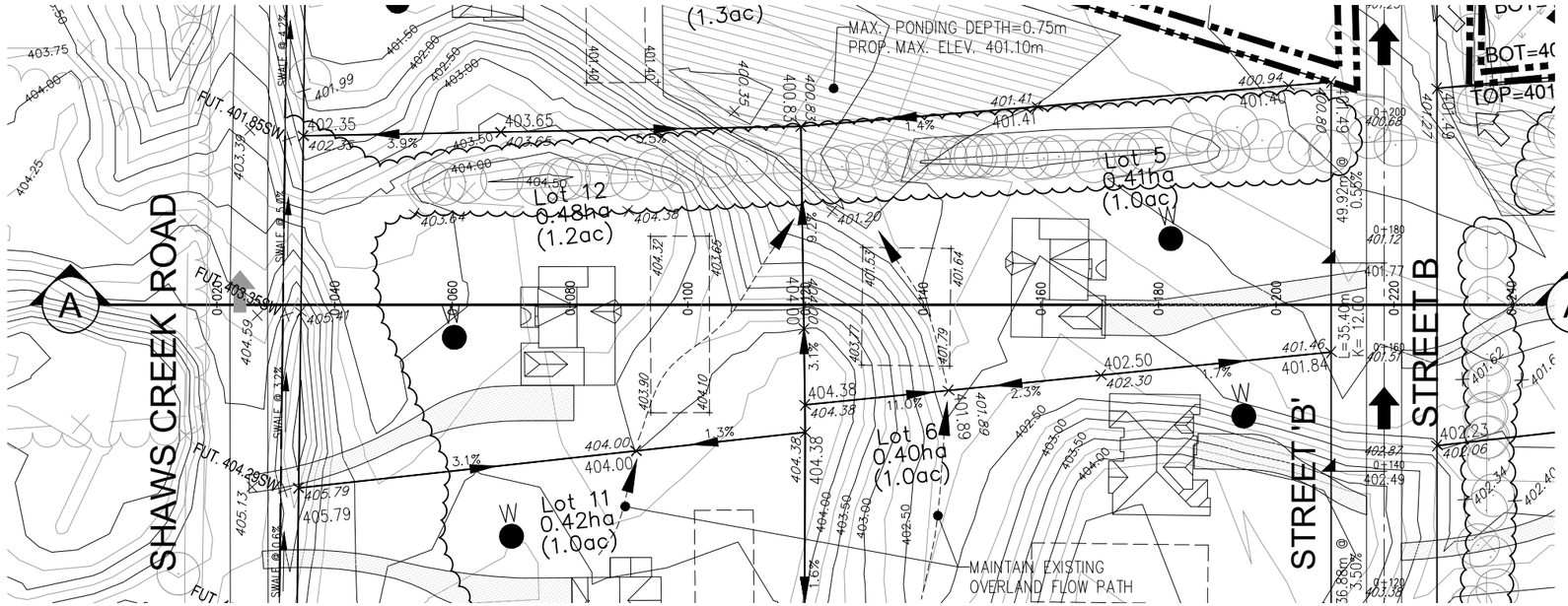
4.7 Final Lot Grading Design

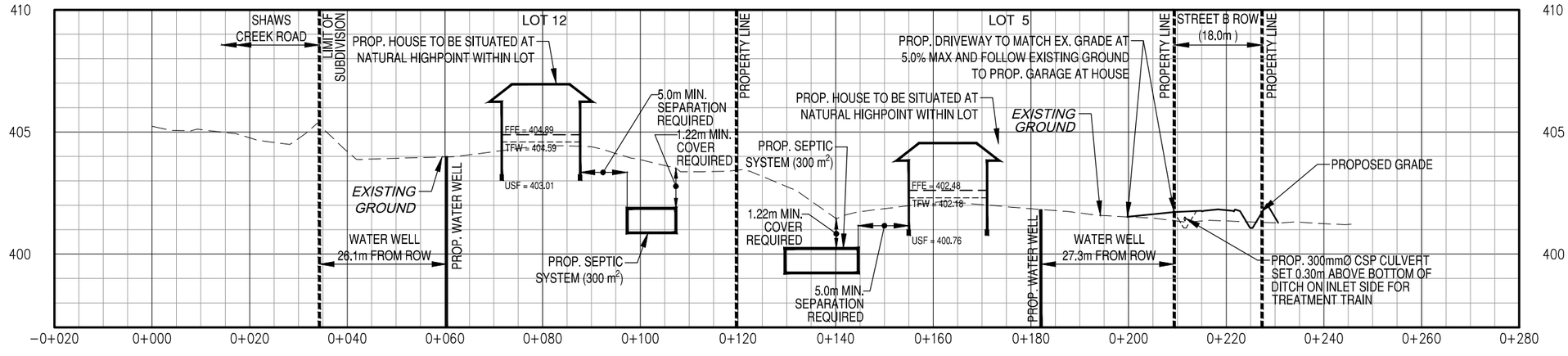
Detailed lot grading for each individual lot will be developed at the detailed design stage to suit the character and features of each individual lot and retain desired features such as existing hedgerows and hummocky topography, to the extent possible, while adhering to Town grading standards, where not in conflict with site-specific criteria as described above. For grading constraints and/or re-purposing of existing cultural walls on site, refer to the reports prepared by Archaeological Services Inc. and Baker Turner Inc. The proposed site boundary grading blends into the existing grades along the site perimeter and grading alterations will not have a negative effect on the neighbouring properties.

For preliminary lot grading design, refer to **Drawing GP-1, Functional Grading Plan** located at the back of this report.

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MANORS OF BELFOUNTAIN
SECTION A-A - NO PLATFORMING

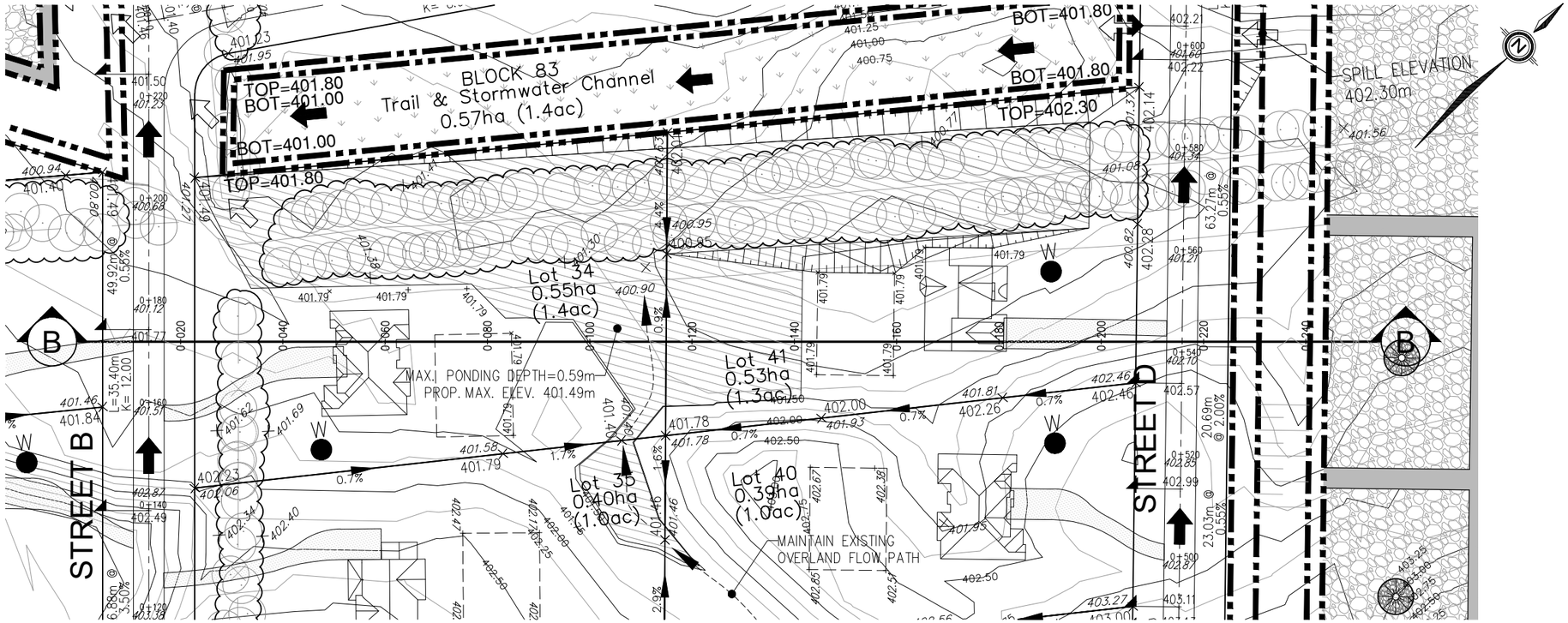
TOWN OF CALEDON
REGION OF PEEL

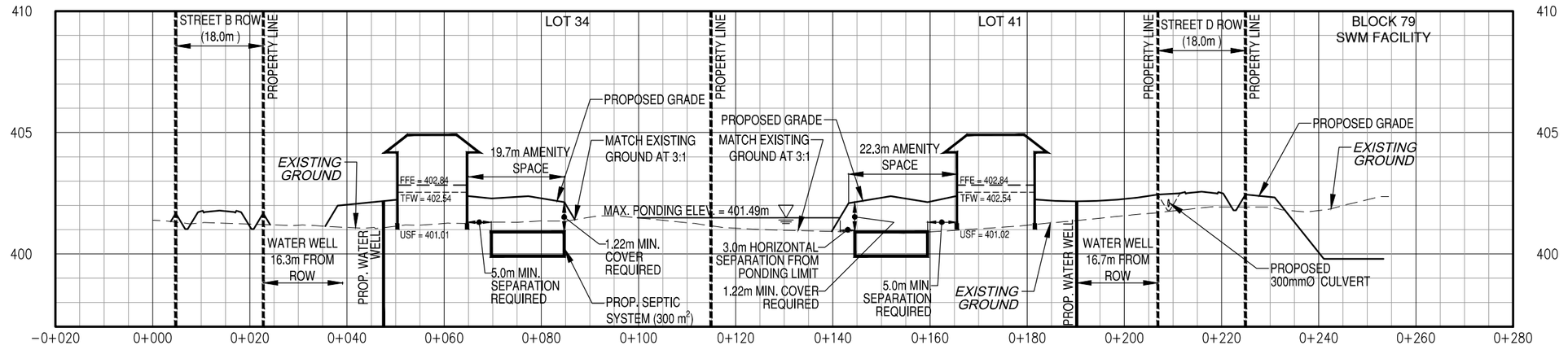
DATE:	MAY 2020	PROJECT No.:	2017-0701
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MANORS OF BELFOUNTAIN
SECTION B-B - PLATFORMING REQUIRED

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DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	HOR. 1:1000, VERT. 1:200	FIGURE No.:	4-2

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4.8 Proposed Road Grading

The proposed road layout has been successful in retaining most of the hedgerows and natural topography as required by the NEC's landform preservation criteria. Limited grading of the local humps and depressions is required to design roads that conform to Town engineering design standards and promote positive drainage within the ditches.

The preliminary road grading scheme has been developed based on the current Town's engineering design criteria and defines the proposed major system drainage divides to conform to the proposed stormwater management strategy described within **Section 5, Stormwater Management,** of this report.

The proposed centerline of road grading within the development is designed with a reduced minimum road grade of 0.50% in some areas to reduce earthworks, reduce cut/fill and to preserve the existing hedgerow features, notwithstanding the minimum Town standard is 0.75%. The amended Town standard for road gradients was confirmed with Town staff via email on June 25th, 2019, however where there are bends in the road, cul-de-sacs or intersections, it is preferred that a 0.75% slope be used. The proposed Cut and Fill limits for proposed municipal Right-Of-Ways is depicted on **Drawing CF-1, Preliminary Cut and Fill Plan-R.O.W.'s,** following this report.

Vertical curves for roadway crests and sags will be designed based on the Town standard K value for such vertical curves (minimum K = 12 for Sag and minimum K = 8 for Crest).

The municipal right-of-ways will be comprised of a paved road with mountable curbs as per OPSD 600.060, which will discharge into the roadside ditch via concrete curb outlets as per OPSD 604.010 with rip-rap protection to prevent erosion. The flat bottomed roadside ditches will drain towards either of the two (2) Stormwater Management Facilities, i.e. SWM Pond Block 81 or Block 82. At certain local intersections within the development, culverts will be required to direct ditch drainage under the road to promote continuous conveyance towards the SWM Ponds.

As the proposed road grading generally follows existing ground, there will be instances where proposed road low points (and associated ditch low points) will occur due to topography. At these ditch low points, ditch inlet catchbasins will be required on both sides of the road and connected to a local storm sewer network that outlets to the SWM Ponds. The DICB inlet grates and storm sewer should be sized for capture and conveyance of the 100-year storm event to prevent excessive ponding in the ditches.

For preliminary road plan view grading design refer to **Drawing GP-1, Functional Grading Plan;** for preliminary centerline of road profile view of the proposed local roads refer to **Drawing PR-1, Road Profiles**, both following this report.

Discussion surrounding driveway / ditch culverts, ditch conveyance capacity and quality and quantity control for lot and roadside storm runoff are discussed in **Section 5, Stormwater Management**, of this report.

4.9 Shaws Creek Road

As described in **Section 2, Existing Site Conditions**, Shaws Creek Road is an existing gravel road adjacent the frontage of the site, owned by the Town of Caledon, with rural cross section exhibiting undefined ditches. As per emails from Town staff (D. Haines Aug. 21, 2019 and R. Grodecki Aug. 26, 2019), the Town's DC By-Law Study recommends reconstruction of Shaws Creek Road from the southern limits of Belfountain to Bush Street, which encompasses the frontage of the subject site. The Town recognizes that due to approval challenges, an urban cross section may not be feasible, therefore the Town has suggested a Rural Cross Section (Collector Road) be considered, complete with:

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a) ROW width of 22 m – 26 m;

b) Minimum 10 m wide paved road width (incorporating 2 x 1.5 m wide paved shoulders);

c) 0.60 m wide granular shoulders; and,

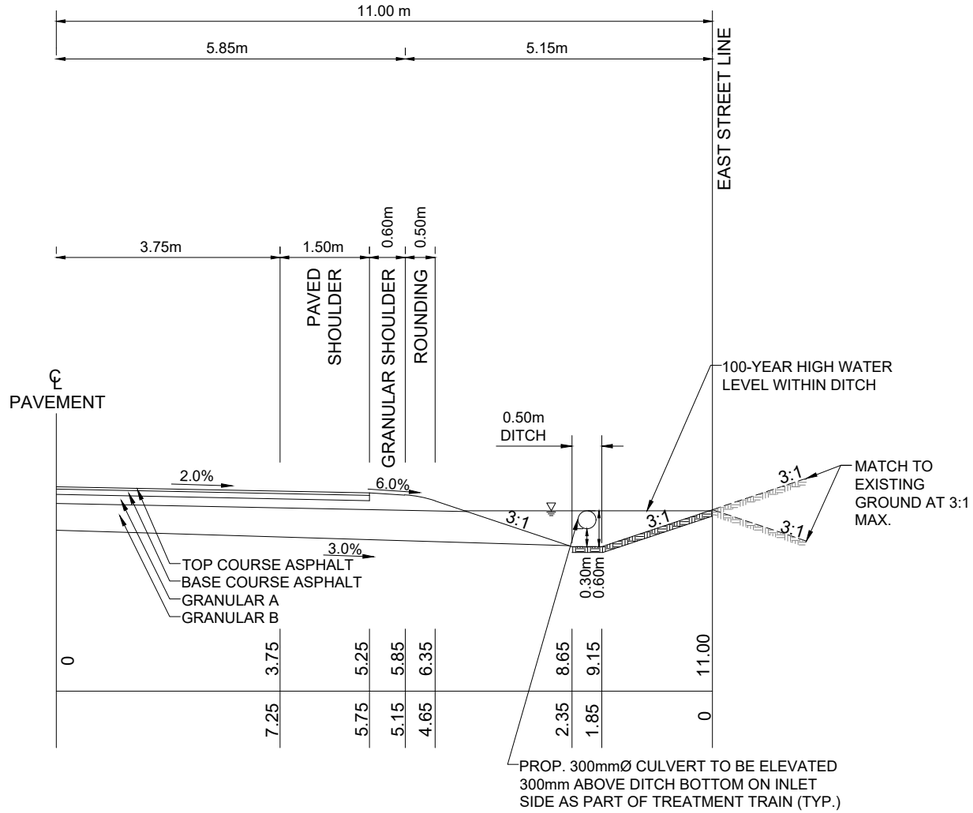
d) Defined ditches.

Based on these preliminary design parameters, a representative depiction of the rural cross section for the east half of Shaws Creek Road, fronting the subject site, is provided in **Figure 4-3, DET-3, Shaws Creek Road Rural Cross Section ROW, East Half of ROW, No Sidewalk**. The final cross section will be determined through the municipality's Class Environmental Assessment process and will be based on property availability / requirements along the corridor, traffic demands, storm drainage design, environmental constraints etc.

The Town has indicated that quantity and quality control for storm water runoff from the east half of Shaws Creek Road ROW be accommodated within the proposed stormwater management facility within the site. Refer to **Drawing ST-2, Storm Drainage Plan – Internal**, for a depiction of the limits of Shaws Creek Road drainage to be accommodated and refer to **Section 5, Stormwater Management**, for details related to quantity and quality control for Shaws Creek storm runoff along the east half of the ROW.

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NOTES:

1. THE FOLLOWING IS A MINIMUM ROADBASE AND WILL REQUIRE A GEOTECHNICAL REPORT VERIFICATION:
40mm HL3
90mm HL8
150mm GRANULAR 'A'
450mm GRANULAR 'B'

2. DITCHES AND SLOPES ARE REQUIRED MINIMUM OF 300mm TOPSOIL AND NURSERY SOD.

3. SUB-GRADE SHALL BE COMPACTED TO A MINIMUM 95% OF S.P.D. AT OPTIMUM MOISTURE CONTENT.

SHAWS CREEK ROAD RURAL CROSS SECTION ROADWAY EAST HALF OF RIGHT-OF-WAY -NO SIDEWALK				APR'D: --	DATE: MAY 2020
				DRAWN: --	SCALE: NTS
	No.	REVISION	APR'D:	DATE:	FIGURE No.: 4-3

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5 Stormwater Management

5.1 Stormwater Management Design Criteria

Design criteria for the proposed development shall be in accordance with the Town of Caledon Development Standards, Policies, & Guidelines, Credit Valley Conservation (CVC) Stormwater Management Criteria, as well as Province of Ontario standards as set out in the Ministry of the Environment 2003 Stormwater Management Planning & Design Manual.

Based on existing topography and discussions with the Town during the preliminary design process, it has been determined that the proposed development area within the property (the current agricultural zone) does not exhibit an existing outlet in the traditional sense, in terms of a continuous overland flow route for storm runoff leaving the site. In fact, based on the series of existing natural depressions occurring within the current agricultural zone, along with the highly pervious soils, the site is deemed to exhibit the ability to retain all storm runoff up to the 100-year storm event, with no runoff leaving the site under existing conditions.

As a result of this existing stormwater retention situation, the allowable pre-development stormwater release rate, in the traditional sense, is 0 L/s, in terms of overland flow leaving the property up to the 100-year event. Therefore, the proposed stormwater management design will rely solely on infiltration as the primary means to drain stormwater collected on site, which is consistent with existing conditions.

The stormwater management approach for the proposed site will address the following criteria:

- On-site stormwater retention storage volume to be provided shall be sized to accommodate the runoff generated by two (2) 100-year storm events occurring back-to- back;
- Stormwater runoff is to be retained and infiltrated on-site, mimicking the existing site conditions;
- The existing storm drainage parameters, such as drainage boundaries, overland spill route, etc., shall be essentially maintained unaltered in the post-development condition;
- Provide Enhanced (Level 1) stormwater quality treatment corresponding to an 80% removal of Total Suspended Solids (TSS);
- Stormwater management practices which enhance or maintain infiltration are encouraged; and,
- The Town's Intensity-Duration-Frequency (IDF) data shall be used for the analysis.

5.2 Existing Site Drainage Conditions

As previously discussed in **Section 2, Existing Site Conditions**, the existing site topography is classified as hummocky, comprising of numerous natural depressions and generally sloping from the southeast to the northwest, within the existing agricultural zone, which is the area of proposed development. As noted above in **Section 5.1, Stormwater Management Design Criteria**, the site does not exhibit an existing stormwater outlet, in the traditional sense in terms of overland flow. All storm water generated and collected within the current agricultural zone of the property is retained on site.

5.2.1 Existing Drainage Divide

As discussed in **Section 2**, **Existing Site Conditions**, the site is bisected by a natural drainage divide, or topographic ridge, aligned east-to-west through the property, roughly dividing the property into two halves. The lands to the north of the natural drainage divide, approximately 32.28 ha in area, consists of

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some agricultural land but primarily of wooded area and steeper slopes located within the northern quadrant of the site. The lands to the south of the natural drainage divide, approximately 38.03 ha in area, consists of the existing agricultural area, which is proposed for development. During a significant storm event (or series of significant events) in which the capacity of these natural depressions may be exceeded, overland flows spill through the series of natural depressions, generally spilling from east to west, with the ultimate overland spill relief from the site occurring at the topographic low point, at Shaws Creek Road. The major storm event that would cause such a spill occurrence at Shaws Creek Road has not been observed, however, it is generally accepted that no spill overtop Shaws Creek Road would occur from the site as a result of a single 100-year storm event.

A pre-development drainage area plan for the site is provided as **Drawing ST-1, Pre-Development Drainage Plan**, following this report.

5.2.2 Existing Site Infiltration Capability

A Hydrogeological Investigation Report was prepared by COLE (dated 2020) which characterizes the existing groundwater and soil conditions across the site. As described in **Section 2**, **Existing Site Conditions**, overburden geology (soils) at the site consists of approximately 10 m to 20 m of sand and gravel outwash deposits with groundwater levels measured across the site at 10 m to 20 m below ground surface, with the exception of the on-site wetland features, where groundwater is typically 0m to 1m below ground.

Additional in-situ soil infiltration testing (Guelph Permeameter method) was completed by COLE in November 2019 by means of test pits excavated to depths between 1 m to 2 m deep at various locations across the site. Based on the November 2019 testing, the site soils exhibit a range of infiltration ability with percolation rates between 38 mm/hour to 171 mm/hour, averaging approximately 100 mm/hour in the shallow overburden soils. For details regarding the in-situ infiltration testing results, please refer to Section 5, Table 5.4 of the updated Hydrogeological Investigation Report prepared by COLE, issued under separate cover.

5.2.3 Existing Site Wetlands

Based on the Environmental Impact Study reporting (Savanta 2018), there are two (2) on-site wetlands located in the northern areas of the Site, described as Cattail Marsh (MAS3-1) and Willow Thicket Swamp (SWT3-2). These existing wetlands are located near Mississauga Road and situated at a significantly lower elevation compared to the proposed development area of the site and are over 200 m away from intended development activity. Refer to the Environmental Study and Addendum Study, prepared by Beacon Environmental (2020) for details pertaining to the existing on-site wetlands.

5.3 External Drainage Conditions

The subject site is situated at a relative low elevation within a larger stormwater catchment area, where higher ground elevations are located to the south of the property, ranging up to elevation 432.00 masl at The Grange Sideroad, nearly 2 km south of the site.

A total external drainage area of 253.36 ha for lands located to the south consists mainly of natural open space and is also identified as having hummocky topography and natural depressions (similar to the subject site area) which collect and retain the majority of stormwater runoff locally within the external lands itself. Based on aerial topographic survey information obtained from First Base Solutions, the existing contour mapping was produced for the lands to the south and up to 140 existing depressions of varying size have been identified within the 253.36 ha external area. The topography at each existing

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depression was analyzed to assess the natural stormwater storage capability exhibited by the external lands and it was found that the 140 existing depressions demonstrate a natural stormwater storage volume of up to 240,000 cu.m. Refer to **Drawing ST-3, Storm Drainage Plan – External**, for a depiction of the external drainage area topography and existing depression areas. Refer to **Appendix A, External Drainage Ponding Area Volumes**, for a table summary of the 140 existing depressions and their individual storage volumes.

Excess stormwater flow generated from the external lands to the south, which is not infiltrated or contained within the existing natural depressions, will be directed overland, in a northerly direction towards the subject site. External runoff from lands to the south enters the property generally along the entire south property limit, however, the majority of external overland flow is concentrated towards the site via an existing draw on external lands, entering the property from the south at approximately 650 m east of Shaws Creek Road, at property line elevation 403.00 masl.

External drainage areas will not be altered by the proposed development plan and will therefore maintain their existing drainage patterns. As such, the proposed grading plan for the subject Manors of Belfountain site shall be designed to accommodate external drainage. As per discussions with the Town, runoff volumes generated from the external lands resulting from two (2) 100-year back-to-back storm events will be captured and retained on site in proposed SWM retention facilities.

Since the external drainage areas also exhibit hummocky topography with naturally occurring depressions, it is expected that minimal overland runoff will be generated from the external lands during the first 100-year storm. However, during the second 100-year storm in which the capacity of the natural depression areas may be exceeded due to the first storm event, runoff from the external areas will drain overland towards the subject site. A SWM retention facility is proposed within Block 81 (large pond), in the location where external overland flow enters the property and will be designed to provide quantity control to accommodate runoff from the external drainage area.

5.3.1 External Lands Modeling

Hydrological models were prepared using Visual OttHYMO (VO5) in order to model the flows and runoff volumes generated by the external drainage areas. To quantify the naturally occurring storage capacity of the existing external depression areas, the ponding volumes were calculated based on existing topography using Autodesk Civil 3D. The ponding volumes were then used to calculate an equivalent initial abstraction depth over the subject catchment area. Detailed calculations are provided in **Appendix A**. As previously mentioned, the calculated initial abstraction values were only applied to model the first 100-year storm, as a conservative measure. A 5 mm initial abstraction depth was applied to model the second 100-year storm scenario, as this assumes all the depression ponding areas have been filled during the first 100-year storm.

CN numbers were assigned based on the existing land cover and soils information. The external drainage areas comprise primarily of forested and agricultural land uses which will remain unaltered by the proposed development. As such, these areas were modelled in the proposed condition VO 5.0 model as NASHYD commands, which are typically used to represent natural areas with low imperviousness. The dominant soil types in this area based on Ontario Soil Survey of Peel County are loam and sandy loam, which are classified as Hydrologic Soil Group 'A'. A copy of the Ontario Soil Survey is provided in **Appendix A** for reference. The majority of the external drainage areas comprise of a mix of forested and cultivated cover, therefore a composite SCS Curve Number (CN) of 45 was calculated to represent the majority of the external drainage areas, with some adjustment to CN values made to suit the specific land cover in each catchment, as summarized in **Table 5.1 - CN Value Assignments** below. A summary table of the

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'NASHYD Input Parameters' and individual CN values for each of the discretized external drainage areas is provided in **Appendix A**. Based on the existing topography, time to peak values were calculated for each of the sub-catchments using Uplands Method. Detailed VO5 model parameter calculations are provided in **Appendix A**.

Table 5.1 - CN Value Assignments

Soil Type	Hydrologic Soil Group	Land Use Cover	SCS Curve Number (CN)
Loam and Sandy Loam	A	Mix of Forested and Cultivated	45
		Forested	30
		Cultivated	62
		Pasture	38
		Open Space / lawns	62
Muck	D	Forested	82

Soil Types based on the Ontario Soil Survey of Peel County
Hydrologic Soil Groups classified based on MTO Design Chart 1.08
CN Values are based on AMCII and assigned based on MTO Design Chart 1.09

Based on the VO modeling results using the modeling approach and parameters described above, it is expected that 9,982 cu.m of storm runoff will be conveyed to the site's southern property boundary from the external lands during the first 100-year storm event. The second 100-year storm event occurring subsequent to the first (back-to-back) shall generate an additional 52,167 cu.m of storm runoff volume and appropriate quantity control within the site shall be designed to accommodate this external runoff.

5.4 Proposed Drainage Conditions

As per the current development plan, a total of 75 estate residential lots are proposed. The proposed development plan will increase the overall imperviousness, altering the existing hydrologic conditions of the site, therefore, stormwater management measures are proposed in order to mitigate these effects.

The proposed preliminary grading design for the site was completed with the principle that the existing topography will be mostly maintained, to the extent possible, for landform conservation purposes. Hence, the overland flow patterns will also be generally maintained under the post-development conditions to match pre-development overland flow. The proposed stormwater management servicing strategy was also designed according to this principle, therefore, the existing site drainage patterns, including drainage divides, overland flow paths, external area overland flow paths, and the site discharge point, were all generally maintained as per existing conditions. Refer to **Drawing GP-1, Functional Grading Plan** and **Drawing ST-2, Storm Drainage Plan - Internal**, both following this report, for a depiction of the preliminary grading design and post-development storm drainage areas within the property.

The post-development site drainage areas were programmed into the Visual OttHYMO models as StandHYD commands at an overall 18% imperviousness. As previously noted, external areas will not be altered by the proposed development and therefore remain as NASHYD commands within the VO model as discussed in **Section 5.3, External Drainage Conditions**.

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5.4.1 SWM Dry Ponds

Storm runoff generated by the proposed development area within the site will be captured and conveyed via a combination of proposed road-side ditches and storm sewers to one of the two (2) on-site stormwater management facilities. Two (2) stormwater management dry pond retention facilities are proposed within the site to provide quantity control of post-development runoff from the site and external areas. The SWM Pond within Block 81 (Large Pond) provides a total storage volume of 76,862 m^3 and the SWM Pond within Block 82 (Small Pond) provides a total storage volume of 16,161 m^3. Each of these retention facilities will be constructed lower than existing ground level and without a typical outlet structure, thereby relying on infiltration as the primary outflow. The on-site retention facilities were sized to accommodate runoff volumes from two (2) 100-year storm events (occurring back-to-back).

5.4.2 Emergency Overland Flow Channel

An emergency overland spill route (Channel) is proposed within Block 83 to provide a safe conveyance route for emergency overflow in the event that stormwater overtops the proposed SWM Pond in Block 81. This emergency spill route was sized based on the 100-year uncontrolled flow as per MOE criteria, however since the SWM Pond in Block 81 (Large Pond) has been oversized to detain back-to-back 100-year storm events, it is very unlikely that the Channel will ever be utilized for emergency conveyance purposes.

This emergency overland spill route provides approximately 12.56 m^3/s of conveyance capacity, and is therefore sufficient in order to convey the emergency, uncontrolled 100-year from the pond of 6.22 m^3/s. Based on the FlowMaster model results, the 100-year flow will be conveyed through Block 83 (Channel) with a velocity of 1.07m/s. Refer to conveyance calculations provided in **Appendix A**.

The proposed emergency overland flow Channel in Block 83 will direct stormwater towards the proposed SWM Pond in Block 82 and ultimately towards the existing low point at Shaws Creek Road, at an existing centerline of road elevation of 400.80 m. The emergency stormwater spill from the site coincides with the existing, pre-development spill location identified at Shaws Creek Road.

5.4.3 Shaws Creek Road

As noted in **Section 4.9**, **Shaws Creek Road**, the Town has requested that proposed on-site stormwater management facility be designed to accommodate storm runoff from the east half of Shaws Creek Road, between existing high points, which is naturally draining towards the existing low point at Shaws Creek Road, elevation 400.80 m. For the purpose of preliminary design, we have located the existing high points on Shaws Creek Road to be: a) the northerly high point at elevation 402.42 m situated near the north corner of the proposed development site and b) the southerly high point at elevation 419.90 m situated approximately 380m south of the subject property; for a total length of 953 m.

The Town has indicated that Shaws Creek road may be widened in the future and based on the future rural road cross section design parameters discussed in **Section 4.9, Shaws Creek Road**, the east half of a widened Shaws Creek Right-Of-Way (approx. 1.05 ha, with corresponding runoff coefficient of 0.65) has been accommodated for quantity control in the proposed SWM Pond design within Block 82 (Small Pond). It is noted that storm runoff from the east half of Shaws Creek Road (un-widened, present day condition) will be directed overland towards the low point adjacent to SWM Pond Block 82, based on existing road topography.

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5.4.4 Minor Drainage Diversions

Due to the proposed road pattern, two (2) small drainage diversion areas will occur along the northern limit of the site where the proposed road (Street 'E') crosses the existing drainage divide line and will deviate from the pre-development drainage boundary. The two (2) diversion areas are approximately 0.17 ha and 0.71 ha in size.

For the smaller diversion area (0.17 ha), the area drains to Open Space Block 84 under pre-development conditions and will be re-routed to proposed SWM Pond Block 82. No offsetting drainage area is proposed to address this minor diversion area. However, if a surface runoff water balance is sought at the detailed design stage to offset the loss of runoff towards Open Space Block 84, the rear yards of proposed lots 29 to 33 can be re-graded slightly by an equivalent area to compensate.

For the larger diversion area (0.71 ha), the area drains northerly towards Mississauga Road and environmental features MAS3-1 and SWT3-2, located along the northern boundary of the site. A simple surface runoff water balance calculation has been completed such that the loss of drainage area and associated runoff will be compensated by introducing houses within increased runoff from proposed rooftops, such that the corresponding A x R (pre-development) matches A x R (post-development). Refer to the table on **Drawing ST-2, Storm Drainage Plan - Internal** for detailed A x R value calculations which demonstrates that pre-development A x R (0.7122 ha x 0.20 = 0.142) is equivalent to post-development A x R (0.2028 ha x 0.70 = 0.142), where 0.2028 ha represents the area of new rooftops and 0.70 represents the increase in runoff coefficient from agricultural land to rooftop and volume of storm runoff directed to the north from Lots 48 – 52 will be maintained as per existing conditions. At the detailed design stage, the Grading Plan should indicate the requirement that future plot plans for Lots 48, 49, 50, 51 & 52, prepared by the Builder, must include houses properly situated and lot graded to respect the proposed surface water balance, to be checked and approved by the subdivision civil engineer.

5.5 Storm Drainage Conveyance System

5.5.1 Minor System Drainage

Minor system drainage (from events up to and including the 5-year storm event) from the majority of the site (comprising mainly of front-yard and road right-of way drainage) will be conveyed via a series of road-side ditches and driveway culverts to the respective SWM Ponds. **Drawing ST-2, Storm Drainage Plan - Internal,** provides the proposed drainage plan. As per the SWM plan, a total 17.96 ha of the site area (mainly the eastern portion of the site) will drain into the Block 81 SWM pond (Large Pond) and a total 20.84 ha of the site area (mainly the western portion of the site) will be conveyed and retained in the Block 82 SWM pond (Small Pond).

5.5.2 Major System Drainage & Road-Side Ditches

Major system runoff (up to and including the 100-year storm event) from the majority of the site area (comprising mainly of front-yard and road right-of way drainage) will be conveyed via overland flow within road-side ditches within the road right-of-way (ROW) to the proposed SWM Ponds.

Road-side ditches are proposed along both sides of the proposed roadways and comprise of a 0.5 m wide flat bottom ditch with 3:1 side slopes, providing a minimum depth of 0.70 m. Driveway culverts are proposed to allow a continuous drainage path, and will be perched 0.30 m above the bottom of the ditch. It is noted that the bottom 0.30 m portion of the ditch (below the driveway culvert inverts) will be used for quality control, and is therefore not considered as providing flow conveyance.

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Since the bottom 0.30 m portion of the road-side ditches are reserved for quality control, major system conveyance will be provided only by the portion of the ditch which is above the 0.30 m mark, up to a maximum depth of 0.60 m above the ditch invert. At a minimum, the roadside ditches will be graded with a 0.50% longitudinal slope. The minimum conveyance capacity of the proposed rural road cross section was modelled using FlowMaster software, resulting in a conveyance capacity of 1.67 m^3/s, or 0.835 m^3/s conveyance capacity per ditch. Based on the preliminary Grading Plan and Storm Drainage Plan, the maximum 100-year flow directed to any single road-side ditch is 0.107 m^3/s, which is generated by the largest proposed drainage area (3.55 ha, South side of Street 'C'), during the 1st 100-year storm event. During the 2nd 100-year storm event, the external drainage area of 9.27 ha draining through Lots 15 - 18 will generate an additional 0.224 m^3/s for a total 100-year flow in the Street 'C' ditch of 0.331 m^3/s, which is less than the single ditch capacity of 0.835 m^3/s, therefore the proposed rural cross section provides ample conveyance capacity to accommodate up to the 100-year runoff. Refer to the FlowMaster conveyance calculations provided in **Appendix A**.

5.5.3 Rear Yard Catchbasins

As discussed in **Section 4.6**, **Rear Yard Catchbasins**, rear yard catchbasins and storm pipes will be provided for some backyard areas, where the rear yard elevation is lower than the adjacent lots / roads, in order to capture and convey the flows from these low backyard areas to the Block 82 SWM pond (Small Pond). An emergency spill route will be provided for these low rear yard areas with ponding depths up to the allowable maximum of 1.0 m. Emergency spill from rear yards would occur into municipal lands, i.e. roadside ditches or directly to SWM ponds, only under emergency conditions should rear yard catchbasins become completely blocked during a significant storm event. The use of storm sewers is discussed further in **Section 6, Storm Sewers,** of this report.

5.6 Stormwater Management Controls

5.6.1 Quantity Control

As per discussions with Town, quantity control requirements for the subject site shall aim to retain and infiltrate stormwater runoff on-site from all events up to and including the 100-year event, consistent with the existing site conditions. As previously mentioned, two (2) stormwater management dry pond facilities are proposed to provide quantity control for the proposed development and external drainage areas. At the request of the Town, a safety factor is being applied to both ponds in order to accommodate volumes from "back-to-back" 100-year storm events.

5.6.2 SWM Pond Block 81 (Large Pond)

The Block 81 SWM pond (Large Pond) will receive runoff from the eastern portion of the site (17.96 ha in area) as well as runoff from the 253.36 ha external drainage area to the south. As noted in **Section 5.3**, **External Drainage Conditions**, the external drainage area comprises of existing ponding areas which have been calculated and programmed into the post-development Visual OttHYMO model as equivalent initial abstraction values. During the first 100-year storm event, these equivalent initial abstraction volumes are applicable, assuming these ponding areas are vacant and available for storage. However, during the second (back-to-back) 100-year storm event, it is assumed that these existing ponding areas are at capacity from the previous 100-year event, therefore only a 5 mm initial abstraction value is applied to all external areas. As such, two (2) Visual OttHYMO models have been prepared in order to model these distinct hydrologic conditions.

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The Block 81 SWM Pond (Large Pond) has been strategically sited along the southern site property line, in the location where overland flow from the external lands to the south enters the property. Block 81 SWM Pond is situated overtop of two existing depressions, labelled as D9 and D10 on **Drawing ST-1, Pre-Development Drainage Plan**. Existing depression D10 is the first existing depression that receives external runoff and has been identified in previous discussions as a strategic zone of existing infiltration. Excavation of the proposed SWM Pond within Block 81 will not negatively impact the infiltration capability of the area in and around depression D10, rather the infiltration ability will be enhanced as the SWM Pond will consist of a wide, flat bottom facility which promotes infiltration.

The Block 81 SWM Pond has been sized to store runoff from back-to-back 100-year storm events, and relies on infiltration as its primary outlet. Based on the results of the November 2019 infiltration testing within the vicinity of this pond an average infiltration rate of 91 mm/hr was measured. The average infiltration rate of 91mm/hr is based on averaging Test Pit #2 (av. percolation rate of 47mm/hr) and Test Pit #B (av. percolation rate of 141mm/hour). Refer to Hydrogeological Investigation Report, prepared by COLE, revised 2020 for all infiltration testing results, specifically Table 5.4 and Figure 11, both found within the Hydrogeological Report. It should be noted that infiltration testing was performed at both 1 m and 2 m depths below existing ground, and the deeper test pits yielded higher infiltration rates.

The SWM Pond design proposes placement of a 0.15 m thick layer of clear stone applied on the base of the excavated SWM Pond in order to prevent compaction of the in-situ, high conductivity soils. As such, a safety factor of 1.5 was applied to the average measured infiltration rate, resulting in a 61 mm/hr infiltration rate being applied to design of the facility. The preliminary design outlet rate has been calculated as follows:

- Design Infiltration Rate = 61 mm/hr
- Equivalent Release Rate converted to L/s per square meter of Pond Bottom =
    - 0.061 m/hr div. 3600 sec/hr x 1000 L/m^3 = 0.016944 L/s/m^2 of pond bottom
- Proposed SWM Pond Bottom Area = 22,260 m^2
- Release Rate = 22,260 m^2 x 0.016944 L/s/m^2 of pond bottom = 377 L/s
- Adjusted Release Rate Used for Preliminary Design = 0.9 x 377 L/s = **338 L/s**
  (The 0.9 adjustment allows for 10% of the SWM Pond bottom to be covered with access roads)

The proposed facility will provide a total 76,862 m^3 of storage volume up to a maximum water level of 402.30 m (depth of 2.5 m), while providing 0.30 m of freeboard to the top of the pond. A rating table representing the pond was programmed into the post-development Visual OttHYMO model, which was run using the 100-year 12 hour SCS storm event.

Based on the Adjusted Release Rate noted above, the storage requirement results of the VO5 model is provided in **Table 5.2 - Quantity Storage, SWM Pond Block 81** below and demonstrates there is sufficient storage capacity available within the proposed Block 81 SWM Pond to accommodate the required storage volumes. Relevant calculations and VO model outputs are provided in **Appendix A**.

At the final design stage, it is recommended that infiltration testing be conducted at the final design base elevation of the SWM Pond, within the final Pond footprint to substantiate a final design infiltration rate.

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Table 5.2 - Quantity Storage, SWM Pond Block 81

SWM POND BLOCK 81 (Large Pond)	Storage Required (m^3)	Storage Provided (m^3)	Bottom of Pond (m)	High Water Level (m)	Top of Pond (m)	Pond Water Depth (m)
1st 100-Year Storm Event	8,305					0.28
2nd 100-Year Storm Event	47,417					
Back-To-Back 100-Year Storm Events	55,722					1.77
SWM Pond Design Parameters		76,862	399.80	402.30	402.60	

5.6.3 SWM Pond Block 82 (Small Pond)

The proposed SWM pond within Block 82 will receive runoff from a total 20.84 ha area of the site (largely from the western portions of the site) as well as drainage from Shaws Creek Road (1.05 ha).

The Block 82 SWM Pond (Small Pond) has been strategically sited along the western property line, in a location of lowest elevation (on the south side of the existing drainage divide) where overland flow would naturally be directed to under pre-development conditions. Block 82 SWM Pond will be constructed overtop of one existing depression, labelled as D2 on **Drawing ST-1, Pre-Development Drainage Plan**. Existing depression D2 is the final existing depression that receives runoff through the site, prior to overtopping Shaws Creek Road, under emergency storm conditions, at existing centerline road elevation of 400.80m.

Based on the results of the November 2019 infiltration testing within the vicinity of this pond, an average infiltration rate of 112 mm/hr was measured at Test Pit #1. Refer to Hydrogeological Investigation Report, prepared by COLE, revised 2020 for all infiltration testing results, specifically Table 5.4 and Figure 11, both found within the Hydrogeological Report.

The SWM Pond design proposed placement of a 0.15 m thick layer of clear stone applied on the base of the excavated SWM Pond in order to prevent compaction of the in-situ, high conductivity soils. As such, a safety factor of 1.5 was applied to the measured infiltration rate, resulting in a 68 mm/hr infiltration rate being applied to the design of the facility. The preliminary design outlet rate has been calculated as follows:

- Design Infiltration Rate = 68 mm/hr
- Equivalent Release Rate converted to L/s per square meter of Pond Bottom =
  - 0.068 m/hr div. 3600 sec/hr x 1000 L/m^3 = 0.018888 L/s/m^2 of pond bottom
- Proposed SWM Pond Bottom Area = 3,350 m^2
- Release Rate = 3,350 m^2 x 0.018888 L/s/m^2 of pond bottom = 63.3 L/s
- Adjusted Release Rate Used for Preliminary Design = 0.9 x 63.3 L/s = **57 L/s**
  (The 0.9 adjustment allows for 10% of the SWM Pond bottom to be covered with access roads)

The proposed facility will provide a total 16,161 m^3 of storage volume up to a maximum water level of 400.80 m (depth of 2.5 m), while providing 0.30 m of freeboard to the top of the pond. A rating table

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representing the pond was programmed into the post-development Visual OttHYMO model, which was run using the 100-year 12 hour SCS storm event.

Based on the Adjusted Release Rate noted above, the storage requirement results of the VO5 model is provided in **Table 5.3 - Quantity Storage, SWM Pond Block 82** below and demonstrates there is sufficient storage capacity available within the Block 82 SWM pond to accommodate the required storage volumes. Relevant calculations and VO model outputs are provided in **Appendix A**.

At the final design stage, it is recommended that infiltration testing be conducted at the final design base elevation of the SWM Pond, within the final Pond footprint to substantiate the infiltration rate.

Table 5.3 - Quantity Storage, SWM Pond Block 82

SWM POND BLOCK 82 (Small Pond)	Storage Required (m^3)	Storage Provided (m^3)	Bottom of Pond (m)	High Water Level (m)	Top of Pond (m)	Pond Water Depth (m)
1st 100-Year Storm Event	4,731					0.72
2nd 100-Year Storm Event	4,731					
Back-To-Back 100-Year Storm Events	9,462					1.77
SWM Pond Design Parameters		16,161	398.30	400.80	401.10	

5.6.4 Dry Wells

Since the proposed SWM Ponds rely on infiltration as the primary outlet for stormwater to exit the facilities, the installation of dry wells is proposed to facilitate continued infiltration, to a lesser degree, during the winter months when the upper layer of soil (1.2m frost depth) is frozen along the base of the ponds.

A total of twelve dry wells will be installed across the bottom of the Block 81 SWM pond (Large Pond) and three dry wells installed across the bottom of the Block 82 SWM Pond (Small Pond).

The dry wells shall be cylindrical tubes, 1.5m in diameter, installed vertically and spaced along the SWM pond bottom. The wells shall be comprised of CSP pipe, open at the top and bottom, with evenly spaced rows of 100mm diameter holes drilled around the pipe perimeter at suitable spacing, from top to bottom. The CSP pipe shall be lined with geotextile fabric to prevent existing sandy soil from entering the wells and filled with 200mm diameter washed/clean rip-rap to maximize porosity.

Below ground, the dry wells shall extend 2.5m below the base of the SWM Ponds to fully clear the frost zone and be embedded within the free draining, unfrozen soils. Above ground, the dry wells shall extend 0.75m above the base of the SWM Pond bottom to allow storm runoff to enter through the top of the dry well, should the base of the pond be covered in a layer of snow or ice.

The dry wells exhibit a release rate of approximately 4 L/s per well and combined, are intended to provide at least 10% of the normal operating storm pond outflow rate. It should be noted that while 100-year storm events are not typically observed during the winter months, the dry wells provide redundancy to ensure continuous infiltration capability, to a lesser degree, during frozen ground conditions. The final

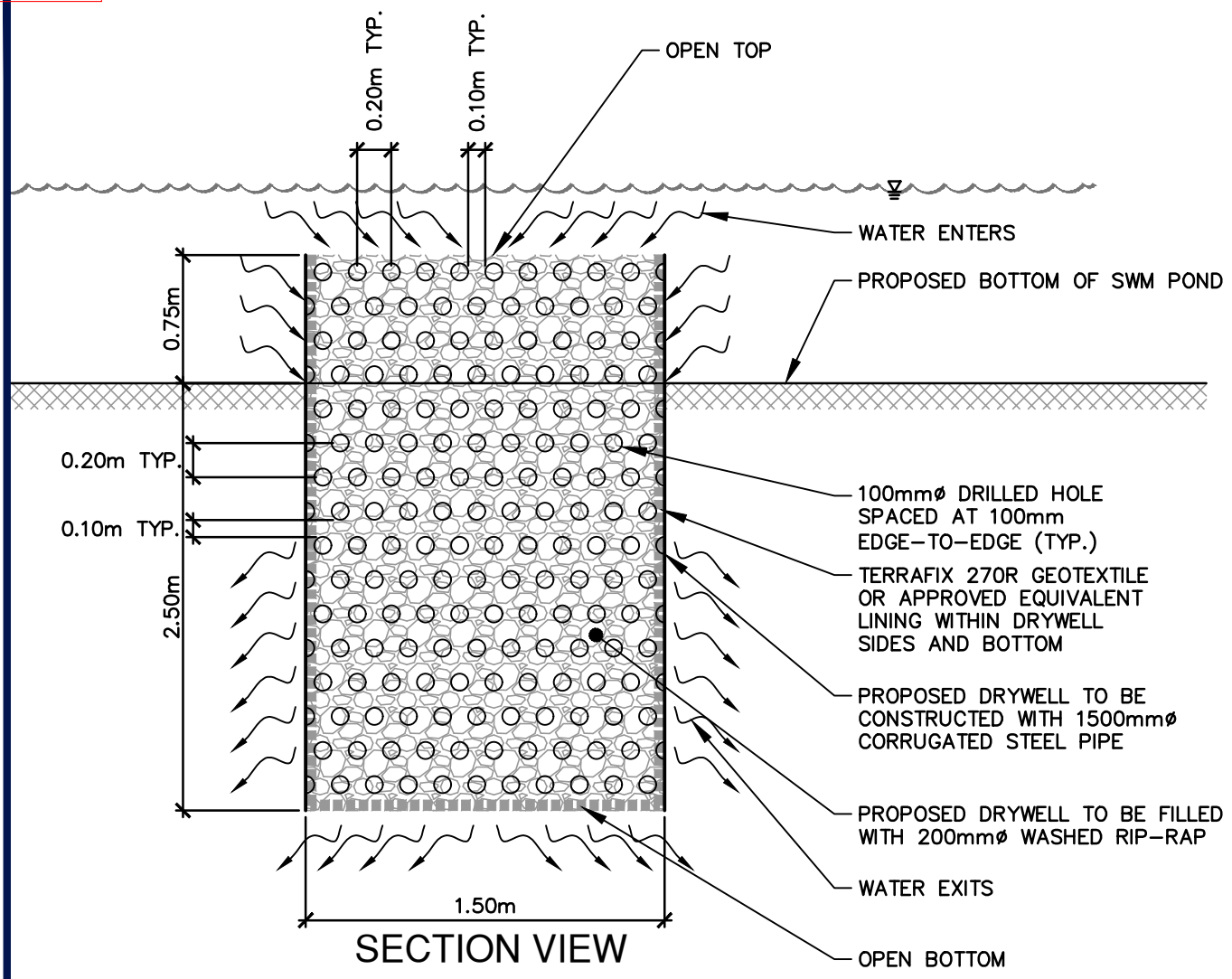
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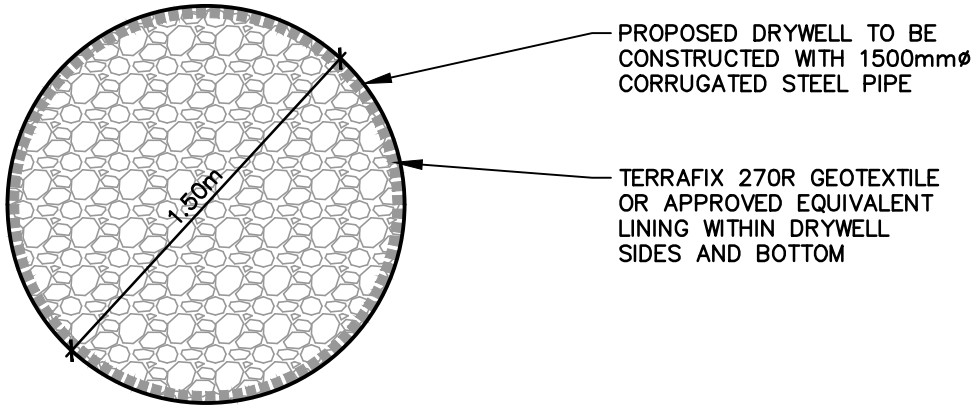
number of dry wells will be confirmed at the detailed design stage to satisfy the desired level of redundancy required by the Town.

Access roads will be provided from the municipal roads down to the base of each SWM Pond in order to facilitate maintenance and inspections of the dry wells. Refer to **Figure DW, Preliminary Dry Well Detail** depicting the Dry Well design.

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SECTION VIEW



PLAN VIEW

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PRELIMINARY DRYWELL DETAIL

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

DATE:	MAY 2020	PROJECT No.	2017-0701
SCALE:	NTS	FIGURE No.	5-1

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5.6.5 Regional Storm Event

The Regional (Hurricane Hazel) storm event was run in Visual OTTHYMO in order to assess the impacts and peak flows resulting from this extreme weather condition. Results of the model show that the capacity of both SWM Ponds within Blocks 81 and Block 82 would be exceeded during the Regional storm event. The peak runoff that would be received by the Block 81 SWM pond (Large Pond) during this Regional storm event is 11.55 m^3/s. Since the overland flow route provided within Block 83 (Channel) provides approximately 12.56 m^3/s of conveyance capacity, a safe conveyance route is therefore provided to convey these Regional flows through the site. The peak runoff that would be received by the Block 82 SWM Pond (Small Pond) is 1.81 m^3/s, resulting in a total 13.36 m^3/s runoff rate during the Regional storm event. Refer to **Appendix A**, 'VO Output sheets for Hurricane Hazel Storm'. The existing low point on Shaws Creek Road, adjacent to SWM Pond Block 82 (Small Pond) will allow flows to spill safely from the site to the west side of the road under emergency conditions.

5.6.6 Quality Control

Enhanced (Level 1) quality control is required for the subject site, corresponding to an overall 80% TSS removal as defined by the MOECP Stormwater Management Planning & Design Manual (2003) and applies to new development areas where hard surfaces, such as asphalt, are introduced that may generate sediment laden runoff.

5.6.6.1 Exclusions from Quality Treatment

For all proposed Lot areas located to the north of the 'pre-development drainage divide line', as described in **Section 5.2**, **Existing Site Drainage Conditions**, along the northern limit of the site which will generate uncontrolled storm runoff directed to the north (areas that do not direct runoff towards the proposed SWM Facilities) these areas are comprised mainly of landscaped and grasses as well as some rooftop area, which are considered as producing inherently "clean" runoff, therefore no additional quality control is proposed for these areas. In addition, external drainage areas that direct storm runoff directly to a SWM Pond, such as Block 81 (Large Pond) do not require quality treatment since the external lands will remain in their existing condition.

5.6.6.2 Treatment Train Approach

For the remainder of the site, which includes all roads and road-side ditches, quality treatment will be provided via a treatment train approach, comprising of infiltration within the grassed road-side ditches as well as proposed Oil / Grit separator units. The proposed Oil / Grit Separators will be located adjacent to or within the proposed SWM Pond Blocks at the downstream end of the ditch network. Storm runoff will be captured in the ditches by ditch inlet catchbasins and will be piped through the Oil/Grit Separator units for treatment, prior to outletting to the SWM Ponds.

For development drainage contributing to the SWM Pond in Block 81 (Large Pond), two Oil / Grit Separators are proposed, one located on the east side and one located on the west side of the SWM Pond.

For development drainage contributing to the SWM Pond in Block 82 (Small Pond), two Oil / Grit Separators are proposed, both located along Street 'B', on the east side of the SWM Pond. An additional Oil / Grit Separator is shown outletting to SWM Pond in Block 82, located along the Shaws Creek Road frontage to accommodate and treat storm runoff generated by the east half of Shaws Creek R.O.W.

It is noted that traditional forebay design has not been utilized for water quality treatment as SWM Ponds containing forebays would require impermeable lining, i.e. importing of clay soils, which is counter to the premise of promoting and relying on infiltration as the primary stormwater outlet.

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5.6.6.3 Sediment Loading

Given the relatively low imperviousness of the proposed estate lot residential development (18% imperviousness), the sediment loading of runoff is expected to be minimal. Roadside ditches will be sized to provide 60% TSS removal (based on MOECP Table 3.2) and oil / grit separator (OGS) units will be sized to provide 80% TSS removal, however OGS units will be credited with 50% TSS removal efficiency for conservatism and design purposes. The proposed treatment train will achieve an overall 80% TSS removal for the site (based on Equation 4-1 of the New Jersey Stormwater Best Management Practices Manual).

Along the road-side ditches, driveway culverts will be perched, with inverts set 0.30 m above the bottom of the ditches in order to retain stormwater runoff to promote settling and infiltration. A 0.15 m thick layer of engineered filter media will be installed below the ditch in order to further promote water quality treatment. Preliminary calculations for the site assessed TSS removal on a lot-level basis, assuming that the drainage received from an average 0.40 ha lot area combined with the road drainage across the subject lot frontage would receive quality treatment only by the section of swale fronting the subject lot. A total average 0.52 ha area of combined lot and road area will therefore contribute runoff to each lot frontage swale segment at a combined imperviousness of approximately 18%. Based on an average lot frontage of 55.8 m, a total 23.4 m^3 retention volume is provided by the 0.50 m wide flat bottom swale and 0.30 m retention depth (with 3:1 side slopes) allowing the opportunity for infiltration. Based on MOE Table 3.2, a 20 m^3/ha infiltration volume is required in order to provide 60% TSS removal for the contributing drainage area at an 18% imperviousness, resulting in a required 10.4 m^3 swale infiltration volume in front of each lot. Therefore, on a localized lot-by-lot basis, sufficient infiltration volume is provided by the proposed swales to achieve 60% TSS removal for the corresponding lot and road drainage received. Refer to calculation sheets 'Roadside Ditch TSS Removal Calculations' and 'Treatment Train Calculations', both located in **Appendix A**.

The proposed treatment train comprising of road-side ditches and oil / grit separators will achieve an overall TSS removal efficiency of 80%, thereby achieving the minimum requirement.

5.6.6.4 Shaws Creek Road Quality Treatment

As noted in Sections 4.9 and 5.4 above, the Town has indicated that Shaws Creek Road may be widened in the future and has requested that proposed on-site stormwater management facilities be designed to accommodate quality treatment for storm runoff from the east half of Shaws Creek Road R.O.W., between existing high points, which is naturally draining towards the existing low point at Shaws Creek Road, elevation 400.80, for a total road length of 953 m or 1.05 ha of drainage area (based on 11 m half R.O.W. width).

The future ditch along the east side of the subject 953 m length of Shaws Creek Road will be comprised of a 0.50 m wide flat bottom swale with 3:1 side slopes (2:1 where required in some areas) at a minimum depth of 0.50m. Ditch inlets, where necessary, should be perched by 0.15 m, allowing a 0.15 m retention depth within the roadside ditch to promote infiltration. The ditches will receive runoff from a total 1.05 ha drainage area with an overall imperviousness of 64%. Based on MOE Table 3.2, a 20 m^3/ha infiltration volume is required in order to provide 60% TSS removal for the contributing drainage area, resulting in a required 21.0 m^3 infiltration volume to be detained within the ditch. It is recommended that future road widening and associated ditch design along the east side of Shaws Creek Road incorporate the required volume at intermittent locations within flatter sections of the ditch, as dictated by grading conditions.

Consistent with the treatment train approach described above, storm runoff generated along Shaws Creek Road will be captured by ditch inlet catchbasins and will be piped through the proposed Oil / Grit Separator unit for treatment, prior to outletting to the SWM Pond in Block 82 (Small Pond).

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5.7 Water Balance

As previously discussed, the existing site topography is hummocky, comprising of natural closed depressions, resulting in little to no runoff from the site under existing conditions. As per the discussions with Town of Caledon, the stormwater management strategy for the site shall aim to retain and infiltrate stormwater runoff on-site from all events up to and including the 100-year event, consistent with the existing site conditions. **Section 5.6.1, Quantity Control,** outlines the quantity control strategy employed for the site which achieves retention and infiltration of all runoff from "back-to-back" 100-year storm events on-site. As such, water balance is also inherently achieved on site to meet pre-development conditions since all stormwater runoff will be retained and infiltrated, consistent with existing site conditions.

5.8 Operations & Maintenance

Maintenance is an important aspect of SWM pond design in order to prevent failures and/or poor performance. During the first two (2) years of operation, the SWM facilities (including SWM ponds, dry wells, ditches, and oil / grit separator units) should be inspected after every significant storm event to ensure proper functioning (average is about four (4) inspections per year). After this initial time period, and confirmation that the SWM facilities are functioning as intended, frequency of inspections may be lessened to once per year (annually). An inspection report should be filled out during each inspection and kept on file.

SWM facility inspections will determine the extent of required maintenance activities, however **Table 5.4 - SWM Facility Operations & Maintenance Checklist** below, (adapted from Table 6.1 of the MOECP Stormwater Management Planning & Design Manual, 2003) provides an outline of the typical operation and maintenance activities to be completed.

Table 5.4 - SWM Facility Operations & Maintenance Checklist

Item No.	Operation or Maintenance Activity	Dry Ponds	Dry Wells	Ditches	OGS Units	Frequency
1	Inspection	■	■	■	■	4 times per year for 2 years, then inspect annually
2	Grass Cutting	■	-	■	-	As Required
3	Weed Control	■	-	■	-	Annually
4	Upland Vegetation Replanting	□	-	□	-	As Required
5	Removal of Accumulated Sediments	■	-	■	■	As Required
6	Infiltration basin floor tilling	□	□	-	-	As Required
7	Trash Removal	■	■	■	■	Remove trash once during the spring, then as required based on observation

■ *Normally Required*

□ *May be Required*

A standalone Operations & Maintenance Manual will be prepared at detailed design to address the specific maintenance activities applicable to each of the proposed SWM facilities.

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6 Storm Sewers

6.1 Storm Sewer System

The primary means of conveying stormwater runoff shall be via roadside ditches located on either side of the proposed roads, as per the proposed rural cross section identified in **Section 3, Proposed Development**. Roadside ditches will capture both road runoff and lot drainage, where lots are graded or naturally drain towards roadways. Due to the undulating existing topography and the desire to conserve existing landform and minimize filling where possible, a few low points shall be graded along the roadways and associated ditches to suit existing low topographic areas. At these road / ditch low points, where continuous overland ditch drainage cannot be achieved, ditch inlet catchbasins shall be situated and designed to capture the 100-year storm event for the tributary area draining to such ditch low point. Captured storm water shall be routed via proposed storm sewers to the proposed stormwater management facilities for quantity and quality control, as discussed in **Section 5, Stormwater Management**.

Storm sewers shall also service proposed rear yards, in situations where existing depressions are located within the rear of lots and existing topography prohibits typical overland drainage. In these instances, rear yard catchbasins and storm leads shall be utilized to capture and direct rear yard runoff towards the proposed stormwater management facilities. Rear yard storm leads shall be designed to convey the 5-year storm event and should be situated wholly within a single lot. As discussed in **Section 4.6, Rear Yard Catchbasins**, an emergency overland flow route from the rear yards towards municipal property, i.e. Road R.O.W. or SWM Pond Blocks will be designed to limit rear yard ponding depths to 1.0m deep, in the event of complete blockage of the catchbasin or lead. All storm leads from rear yards shall be directed to Stormwater Management Pond (Block 82) adjacent Shaws Creek Road as this pond is situated at the lowest possible elevation relative to the proposed rear yards.

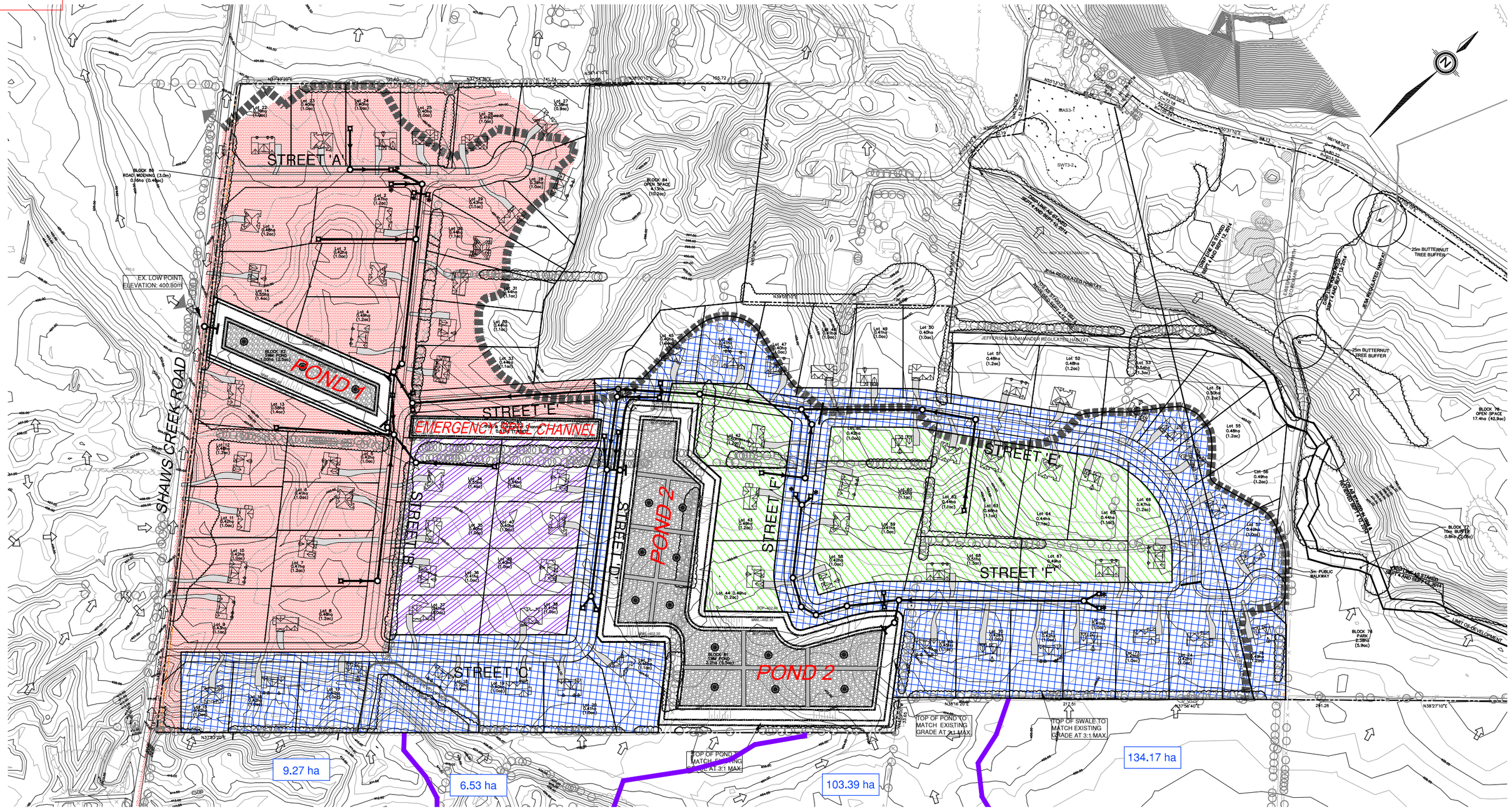
Proposed storm sewers will not include lateral connections to the houses as there is no intention to provide basement foundation drainage from the storm sewer network. Any houses that include basements will require alternate means to drain foundation weepers, as determined by the Builder / Architect at the building permit stage in accordance with the Ontario Building Code.

Proposed storm sewers shall be designed in accordance to the requirements and specifications of the Town of Caledon with storm sewers aligned underneath the paved portion of the road.

Refer to the **Drawing ST-2, Storm Drainage Plan – Internal** for the proposed layout of the storm sewer network, following this report. For a depiction of the tributary drainage area contributing to each of the two (2) Stormwater Management Facilities, refer to **Figure 6-1, ST-4, Pond Drainage Area Plan.**

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LEGEND

- AREA TRIBUTARY TO POND 1
- AREA TRIBUTARY TO POND 2
- MINOR AND MAJOR STORM TRIBUTARY TO POND 1, EMERGENCY SPILL TRIBUTARY TO POND 2
- MINOR AND MAJOR STORM TRIBUTARY TO POND 1, EMERGENCY SPILL TO CHANNEL
- STORM SEWER
- CATCH BASIN (STAR DENOTES CB GRATE AND LEAD TO BE SIZED FOR 100-YEAR CAPTURE)

MANORS OF BELFOUNTAIN
POND DRAINAGE AREA PLAN

TOWN OF CALEDON
REGION OF PEEL

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	1:3500	FIGURE No.:	6-1

File : P:\mrk\2017\2017-0701 Belfountain_Pre Eng FSR_Caledon\400-CADD\401-CAD\402-Design\Sheets\2017-0701 MAJOR DRAINAGE DIVIDE FIGURE.dwg, Date :May 28, 2020 - 2:33pm

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7 Sanitary Servicing

7.1 Individual Septic Systems

There is no municipal sanitary system in the Belfountain area. The proposed development will be serviced through individual, private septic systems with tertiary treatment, meeting Ontario Building Code (OBC) requirements. Hydrogeological reports have found that the soils on site are of high permeability and the water table is sufficiently deep for the usage of in-ground septic beds.

The septic tile bed footprint shown for each unit is 300 m^2 and is based upon the Waterloo Biofilter Advanced Septic System Type A dispersal bed and extended sand area beyond. The ultimate sizing of the septic system is dependent upon the absorption rate of the soil and proposed house design.

Confirmation of the absorption area is conducted with test pits at the time of building permits to confirm the lot subsoils and percolation rates on the basis of the result of gradation analyses, noting that the Burnside report measured infiltration rates at six (6) locations with T times ranging from 1.4 to 20.7 min/cm with most under 5 min/cm – on-site surficial soils are permeable. For the purpose of this report and planning purposes, we conservatively estimated the peak daily design sanitary sewage flow and percolation rate to obtain and confirm the tile bed size of 300 m^2 shown on the drawings.

At the final design stage, in-situ testing and gradation analysis is to be conducted to confirm the percolation rates and final sewage treatment design (including tertiary treatment) will be prepared at the time of the building permit application. Refer to the **Typical Septic Bed Calculation – Preliminary** provided in **Appendix B**.

Based on the preliminary layout of proposed septic systems shown on **Drawing GP-1, Functional Grading Plan** and as per Tables 8.2.1.6A and 8.2.1.6B in the Ontario Building Code, each lot demonstrates that the septic system is capable of being located:

- Minimum of 5.0 m from any proposed structure (house, etc.);
- Minimum of 15 m away from the water well (provided the well contains a watertight casing to a depth of at least 6 m);
- Minimum of 30 m from any other type of well (i.e. dug well);
- Minimum of 15 m from a Pond; and,
- Minimum of 3 m from Property Line.

Septic systems are primarily sited within the rear yards of proposed lots and shall not be located in topographic low areas that may be inundated by storm water runoff. Zones of emergency ponding limits have been identified within certain rear yards that exhibit existing depressions. Proposed septic systems should be situated a minimum of 3 m horizontally and 0.3 m vertically away from the zones of emergency rear yard ponding, where applicable. At the detailed design stage, the septic systems should be designed by a qualified professional and final septic system locations may be adjusted within the lots to suit the final house and outdoor amenity locations, final grading and existing topography; provided the system siting criteria described above are respected.

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8 Water Servicing

8.1 Proposed Domestic Water Supply

Domestic water supply will be provided using individual private drilled wells for each lot. A hydrogeological report has been prepared by COLE addressing water supply from groundwater sources. The report indicates there is sufficient groundwater available such that each well in the development can simultaneously supply average domestic demand for each lot on a continuous, long term, basis.

Locating the private wells must follow all requirements for siting a well in the *Wells Regulation 903 of the Ontario Water Resources Act,* including the following required minimum horizontal separation distances:

- Minimum 30 m recommended clearance from private septic system, and can be reduced to a minimum of 15 m if the well has a watertight casing to a depth greater than 6 m;
- Minimum 30 m from any source of contaminant, and can be reduced to a minimum of 15 m if the well has a watertight casing to a depth greater than 6 m;
- Minimum 30 m to an adjacent private water well; and,
- 7 m offset from the Elevated Nitrate Line as indicated in the Hydrogeological Report.

Based on the preliminary layout of proposed private water wells shown on **Drawing GP-1, Functional Grading Plan,** each lot demonstrates that the well is capable of being located according to the above criteria. Private wells are primarily sited within the front or side yards of proposed lots and shall be situated at a higher elevation than the immediate surrounding area and be accessible for cleaning, treatment, inspection etc. at all times.

Private wells shall not be located in topographic low areas that may be inundated by storm water runoff or sited close to existing treed areas. Zones of emergency ponding limits have been identified within certain rear yards that exhibit existing depressions. Proposed wells should be situated a minimum of 5 m horizontally and 0.5 m vertically away from the zones of emergency rear yard ponding, where applicable, to ensure continuous accessibility. At the detailed design stage, the final private well locations may be adjusted within the lots to suit the final house and outdoor amenity locations, proposed landscaping design, final grading and existing topography; provided the well siting criteria described above are respected.

Treatment of groundwater drawn from the proposed private wells shall be subject to pre-filtration and Ultraviolet water disinfection prior to distribution to the house. In addition, to assist in the removal of nitrates, further treatment in the form of Reverse Osmosis, in combination with Activated Carbon Filters is recommended, such as the Culligan Aqua-Cleer Advanced Drinking Water System or similar equivalent.

Prior to issuance of building permits from the municipality, private wells will need to be installed by a licensed well driller and made operational to demonstrate water availability, and confirmed by the site engineer.

8.2 Elevated Nitrate Level Line

An area of elevated nitrate in the groundwater has been identified at the northeast corner of the site, as per the Hydrogeological Study prepared by COLE. This limits the locations of water wells on several lots located in the northeastern portion of the development. Refer to Section 6.2, Nitrate Loading from the *Hydrogeological Investigation Report* for further details on nitrates within the groundwater.

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The Hydrogeological Study indicates a 'Line of Higher Nitrate Concentration', aligned in an east-west direction and recommends that the proposed water wells should be located a minimum of 7 m to the south/west of the line of elevated nitrate in the groundwater. The Nitrate Line, 7 m Buffer Line and preliminary water well locations are shown on **Drawing GP-1, Functional Grading Plan.**

9 Erosion and Sediment Control

Prior to any site alteration work within the proposed development, a comprehensive Erosion and Sediment Control Plan and Report acceptable to the Town, CVC and NEC will be designed, approved and implemented.

The Erosion and Sediment Control Plan and Report will detail all necessary measures and be designed in accordance with current Town guidelines and the *Erosion and Sediment Control Guidelines for Urban Construction*. In addition, Town approval will be secured for the location of any required temporary construction entrances.

The erosion and sediment control design should consider the following site specific conditions:

- There are several naturally occurring depressions within the agriculturally cultivated area of the site that collect and infiltrate storm runoff generated within the site. Existing depression areas that are not subject to grading should be encompassed with silt fencing to prevent sediment entering the existing low-lying areas.
- Existing depressions shall not be used as temporary sediment ponds or traps.
- Existing vegetation and trees identified for preservation shall be protected with construction fencing, installed at an appropriate buffer as per the Arborists recommendation.
- Temporary stockpiles of topsoil or soils shall be suitably located away from property lines and located within proposed lot areas, away from low-lying topography.
- If development is phased, site grading activity shall be limited to the current phase and interim drainage conditions shall be designed through the use of appropriate temporary cut-off swales to route runoff around construction zones. Any exposed ground left inactive for more than 30 days shall be seeded.

All temporary erosion and sediment control measures will be routinely inspected and repaired during construction. Temporary controls will not be removed until the areas they serve are stabilized or restored.

10 Conclusions and Recommendations

Based on the findings presented within this Report, the proposed development can be serviced with private on-lot sewage systems, private on-lot water wells and stormwater management targets met with reasonable re-grading of the site, while preserving the landform and hedgerows, to the extent possible. Stormwater management is unique as almost all runoff up to the 100 year storm event, is retained and infiltrated on a site wide basis, mimicking pre-development conditions and pre-development water balance. The proposed design follows Town and CVC design standards and our recommendations are summarized as follow:

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10.1 Grading

The proposed road and lot grading scheme follow the Town's Engineering Design Standards and respects the perimeter grades of the surrounding properties. The majority of topographic features and hedgerows can be maintained.

The proposed roads within the development are designed with a reduced minimum road grade of 0.50% in some areas to reduce earthworks - cut and fill and to preserve the existing landform and hedgerow features. The paved road with mountable curbs will drain through concrete curb outlets discharging into the adjacent ditch on both sides of the road.

The proposed grading respects the existing and proposed drainage patterns as defined in the Stormwater Management section of this report. Conceptual lot and road grading designs have been presented for the proposed development.

10.2 Stormwater Management

Due to the highly infiltrative native soils on site, post development runoff from all storm events up to and including the 100-year storm event will be retained and infiltrated on-site. A SWM Pond is proposed within Block 81 (Large Pond) to accommodate the runoff volume from "back-to-back" 100-year storm events from a total 253.36 ha external drainage area and a total 17.96 ha site area. An additional SWM Pond is proposed within Block 82 (Small Pond) to accommodate the runoff volume from "back-to-back" 100-year storm events resulting from a 1.05 ha area of Shaws Creek Road as well as runoff from a total 20.84 ha of the proposed development area. Quality treatment of runoff from the subject development will be achieved via a treatment train approach comprising of infiltration at the base of the road-side grassed swales and downstream oil / grit separator units, resulting in an overall 80% TSS removal.

10.3 Storm Sewers

The rural cross section of the proposed roads will utilize roadside ditches to convey storm runoff from roads and lots, where lots are graded or naturally drain towards roadways. Ditch inlet catchbasins are located at low points in the ditch at a few key locations and shall be designed to capture the 100-year storm event, where continuous overland ditch drainage cannot be achieved due to the existing undulating topography. In addition, several rear lot catchbasins and leads will be required to drain existing low-lying areas that are situated within proposed rear yards. Ditch inlet and rear yard catchbasins shall be connected to the proposed storm sewer system and shall outlet to proposed stormwater management facilities. Proposed storm sewers shall be designed in accordance to the requirements and specifications of the Town of Caledon with storm sewers aligned underneath the paved portion of the road.

10.4 Sanitary Servicing

Sanitary servicing will be through the use of individual private septic systems employing tertiary treatment and in ground septic beds. There is sufficient space available within the lots to accommodate septic beds and maintain setbacks from domestic water wells.

At the final design stage, in-situ testing and gradation analysis is to be conducted to confirm the percolation rates and final sewage treatment design (including tertiary treatment) will be prepared at the time of the building permit application.

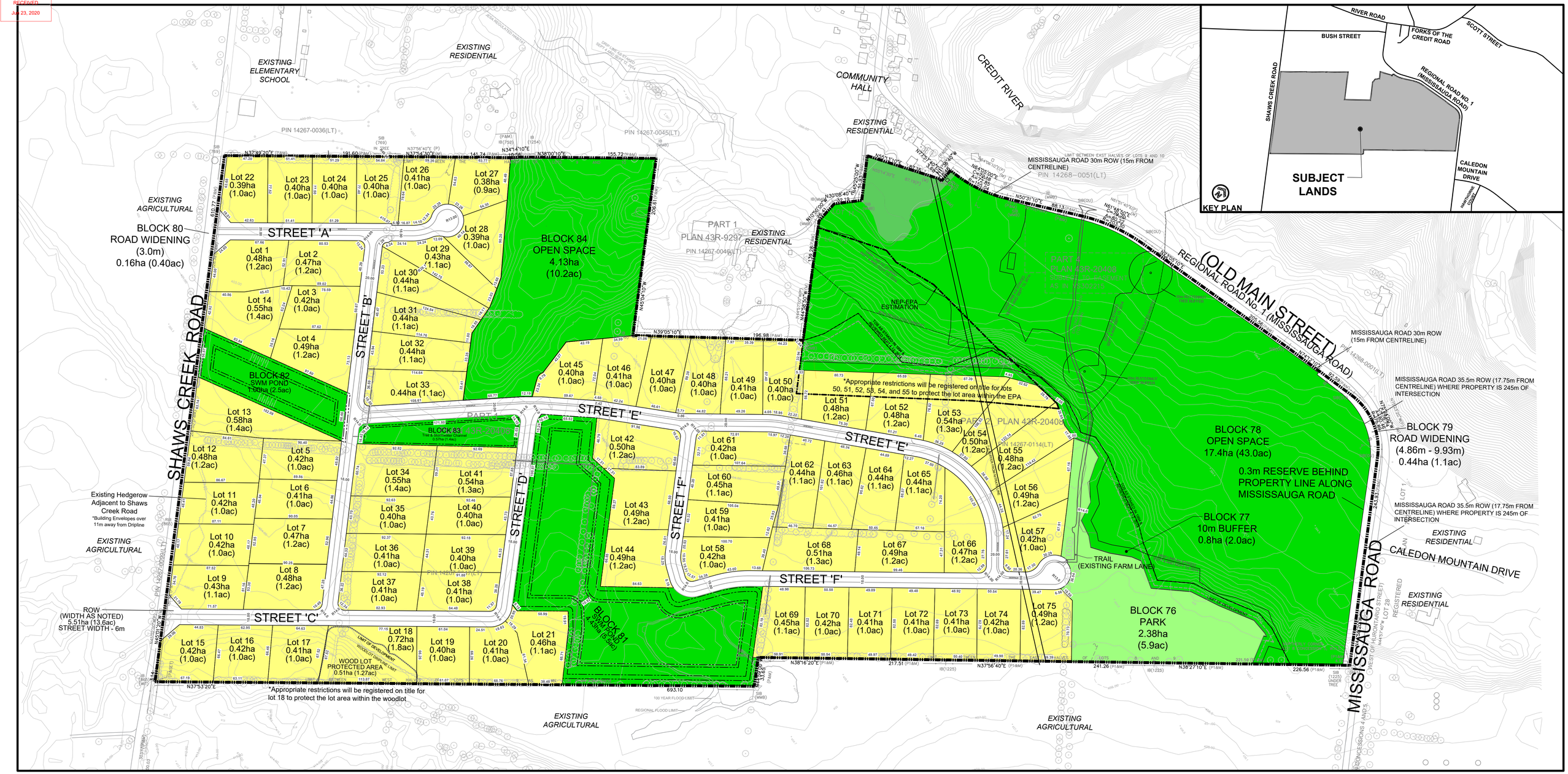
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RECEIVED

Jun 23, 2020

10.5 Domestic Water Supply

Based on the results of the Hydrogeological Investigation, the subject site can be serviced by individual private drilled wells. There is sufficient area within the lots to maintain the required clearances from proposed septic beds and adjacent private wells. At the detailed design stage, the final private well locations may be adjusted within the lots to suit the final house and outdoor amenity locations, proposed landscaping design, final grading and existing topography. Treatment of groundwater from private wells shall be subject to pre-filtration, Ultraviolet disinfection and Reverse Osmosis, in combination with Activated Carbon Filters.

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Jun 23, 2020



DRAFT PLAN OF SUBDIVISION
MANORS OF BELFOUNTAIN CORP

FILE # 21T-91015C

PART OF EAST HALF AND WEST HALF LOT 9
CONCESSION 5, W.H.S.
(HAMLET OF BELFOUNTAIN)
TOWN OF CALEDON,
REGIONAL MUNICIPALITY OF PEEL

SURVEYORS CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE CORRECTLY AND ACCURATELY SHOWN.

SIGNED _____ DATE: _____

ALISTER SANKEY, OLS
DAVID B. SEARLES SURVEYING LTD.
4255 SHERWOODTOWNE BLVD. SUITE 206
MISSISSAUGA, ON, L4Z 1Y5
PHONE: 905-273-6840
EMAIL: info@dbsearles.ca

OWNER'S AUTHORIZATION

I AUTHORIZE MDTR GROUP TO PREPARE AND SUBMIT THIS PLAN FOR DRAFT APPROVAL.

SIGNED _____ DATE: _____

JOHN SPINA, ASO
THE MANORS OF BELFOUNTAIN CORP.
7681 HWY 27 UNIT 16,
WOODBRIDGE, ONTARIO
L4L 4M5

ADDITIONAL INFORMATION

(UNDER SECTION 51(17) OF THE PLANNING ACT) INFORMATION REQUIRED BY CLAUSES A,B,C,D,E,F,G, & J ARE SHOWN ON THE DRAFT AND KEY PLANS.
H) INDIVIDUAL WELLS TO BE PROVIDED
I) SANDY LOAM AND CLAY LOAM
K) INDIVIDUAL SEPTIC TO BE PROVIDED; MUNICIPAL STORM SEWERS TO BE PROVIDED
L) NIL

NOTES

-Pavement illustration is diagrammatic only
-Local to local radii - approx. 14m
-Streets 'A' & 'C' to Shaws Creek Rd. daylight triangles - 15.0 x 15.0
-Top of Slope as staked in 1994, reviewed September 4 & 12, 2014
-Dripline staked Septemer 4 & 12, 2014

REVISIONS

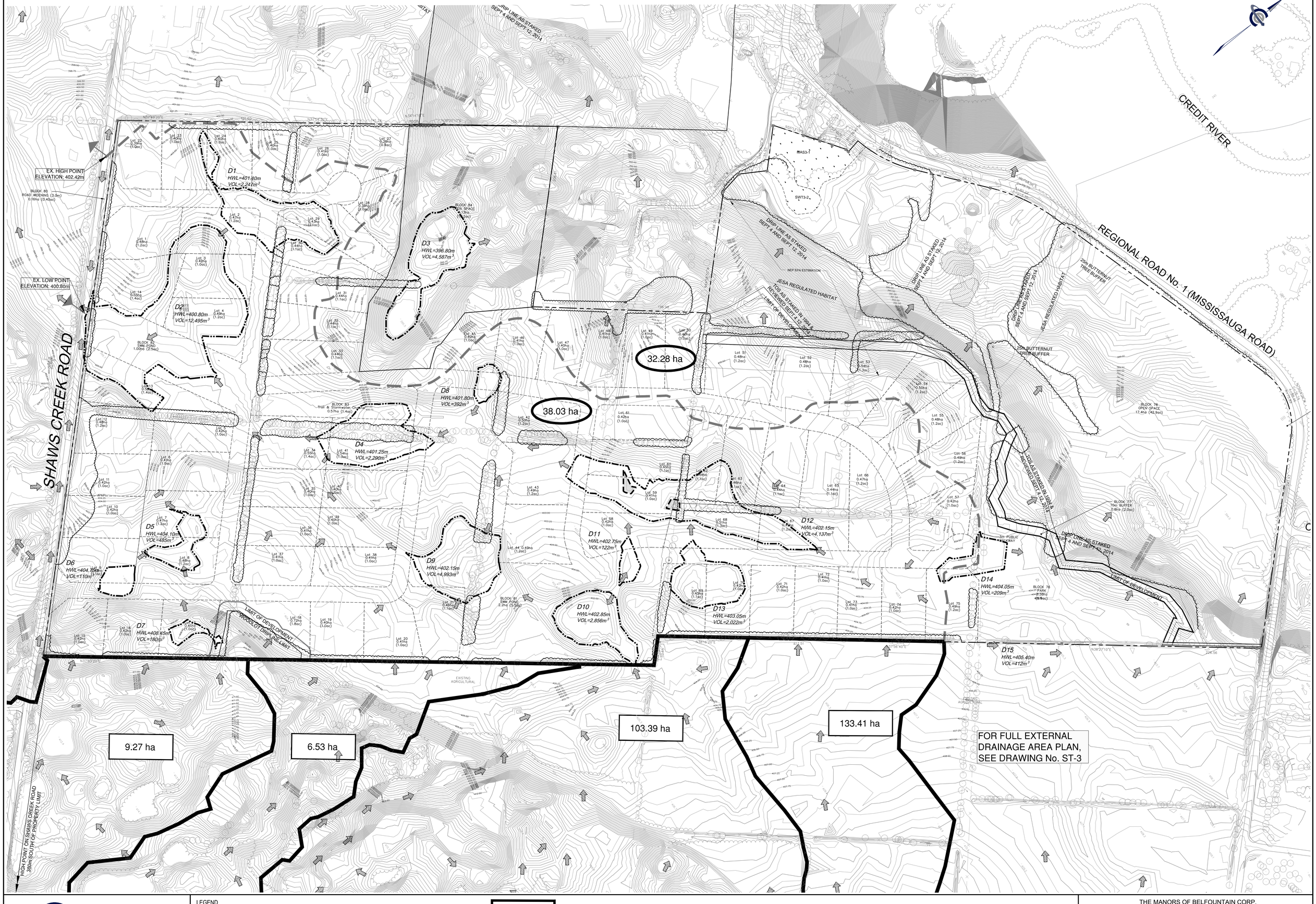
#	Description	Date (YYYY-MM-DD)	By
1	ISSUED FOR MEETING WITH AGENCIES	2018-12-21	N.Y.
2	REVISION	2020-02-21	N.Y.
3	REVISION	2020-01-17	N.Y.
4	REVISION	2020-02-21	N.Y.
5	REVISION	2020-01-17	N.Y.
6	ISSUED FOR RESUBMISSION	2020-03-02	N.Y.
7	REVISION	2020-03-31	N.Y.
8	REVISION	2020-04-21	N.Y.
9	REVISION	2020-04-24	N.Y.

LAND USE SCHEDULE

LAND USE	LOTS/BLOCKS	AREA (HA)	AREA (AC)	UNITS
ESTATE RESIDENTIAL	1-75	33.48	82.7	75
OPEN SPACE	78,84	21.53	53.2	
PARK	76	2.38	5.9	
10m BUFFER	77	0.80	2.0	
STORMWATER PONDS	81,82	5.41	13.4	
STORMWATER CHANNEL	83	0.57	1.4	
ROAD WIDENING	79, 80	0.60	1.5	
18.0m/20.0m ROW (2,840m APPROX. LENGTH)		5.51	13.6	
TOTAL	84	70.28	173.7	75

Scale: 1=2000
April 24, 2020

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COLE ENGINEERING
70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
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LEGEND

- PROPERTY BOUNDARY
- INTERNAL EXISTING DRAINAGE DIVIDE BOUNDARY
- DIRECTION OF OVERLAND FLOW
- D5 HWL=404.10m VOL=485m³ — EXISTING DEPRESSION AREA
- EXISTING VEGETATION GROUPING
- EXISTING WETLAND
- 134.42 ha — EXTERNAL DRAINAGE AREA
- 6.06 ha — EXISTING DRAINAGE AREA WITHIN PROPERTY LIMIT BASED ON INTERNAL EXISTING DRAINAGE DIVIDE BOUNDARY

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
PRE-DEVELOPMENT DRAINAGE PLAN

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	SCALE: 1:1250	DRAWING No.:	ST-1

File : P:\mvk\2017\2017-0701 Belfountain_Pre Eng FSR_Caledon\400-CADD\401-CAD\402-Design\Sheets\SD2017-0701- EXISTING DRAINAGE.dwg, Date : May 07, 2020 - 1:05pm,

TOWN OF CALEDON
PLANNING
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Jun 23, 2020



LEGEND

— — —	PROPERTY BOUNDARY
×404.45	EXISTING ELEVATION
×404.45	PROPOSED ELEVATION
—404.00—	EXISTING CONTOURS
➡	MAJOR DRAINAGE DIRECTION
⇨	EMERGENCY SPILL DIRECTION/LOCATION
	HOUSE LOCATION
←	SWALE DRAINAGE DIRECTION
W ●	WELL (WELL WATERTIGHT CASING TO AT LEAST 6.0m DEPTH, WHERE NECESSARY)
	SEPTIC LOCATION
	EXISTING VEGETATION GROUPING
	EXISTING WETLAND
○	STORM MANHOLE
▪	CATCH BASIN
▬ ▬ ▬	PRE-DEVELOPMENT DRAINAGE BOUNDARY

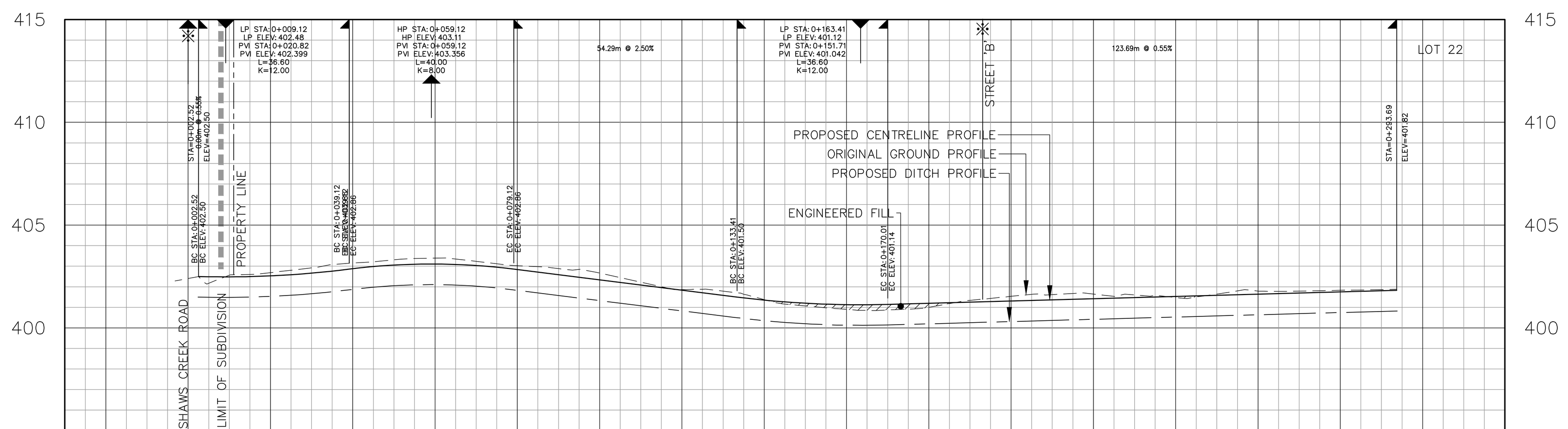
COLE ENGINEERING
70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
T:416.987.6161 / 905.940.6161 F:905.940.2064

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
FUNCTIONAL GRADING PLAN

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	SCALE: 1:1250	DRAWING No.:	GP-1

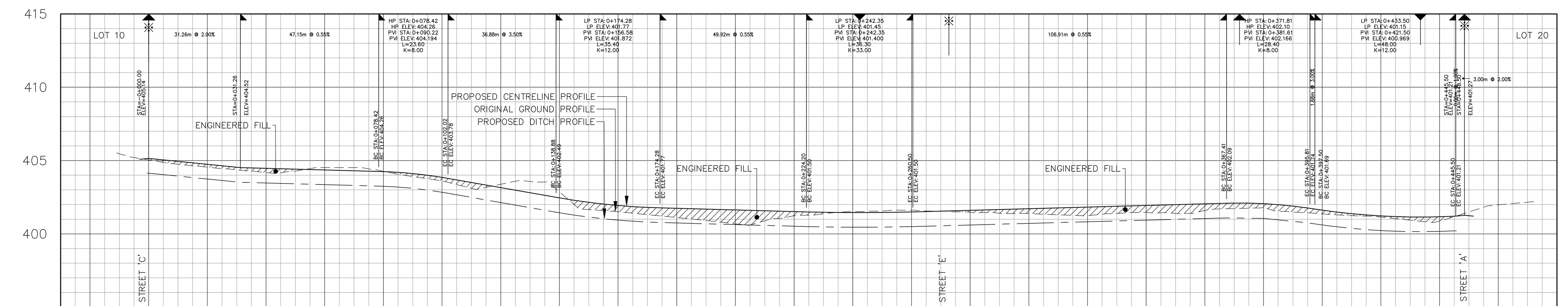
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TOWN OF CALEDON
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Jun 25, 2020



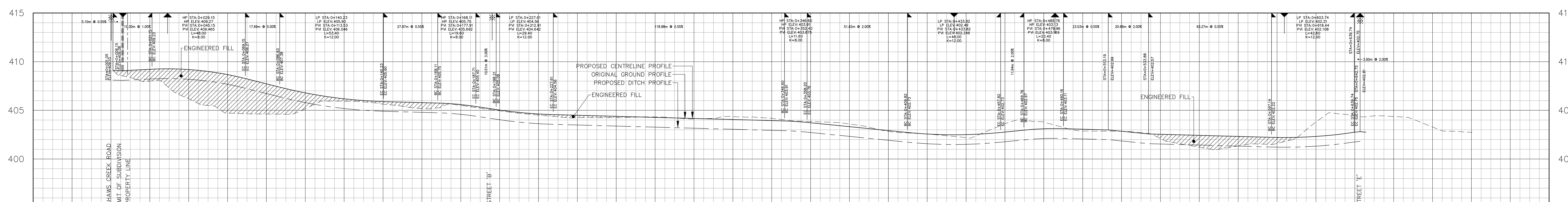
CENTRELINE ROAD CHAINAGE	PROPOSED CENTRELINE ELEVATIONS	EXISTING CENTRELINE ELEVATIONS
0+000		402.40
0+020	402.53	402.69
0+040	402.88	403.16
0+060	403.11	403.39
0+080	402.83	403.02
0+100	402.33	402.67
0+120	401.83	401.86
0+140	401.35	401.37
0+160	401.13	400.90
0+180	401.20	401.00
0+200	401.31	401.53
0+220	401.42	401.65
0+240	401.53	401.48
0+260	401.64	401.79
0+280	401.75	401.83

STREET A



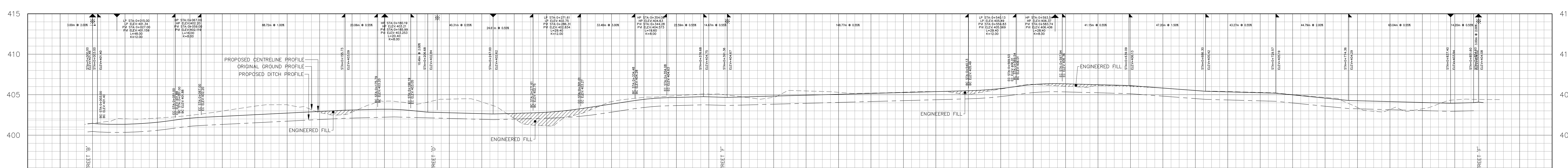
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0+000	405.14	405.04
0+020	404.74	404.55
0+040	404.47	404.18
0+060	404.36	404.52
0+080	404.25	404.27
0+100	403.85	403.62
0+120	403.15	403.38
0+140	402.45	402.87
0+160	401.94	401.51
0+180	401.74	401.12
0+200	401.63	400.68
0+220	401.52	401.23
0+240	401.45	401.52
0+260	401.50	401.62
0+280	401.61	401.47
0+300	401.72	401.40
0+320	401.83	401.25
0+340	401.94	401.46
0+360	402.05	401.59
0+380	402.06	401.78
0+400	401.62	401.36
0+420	401.23	401.14
0+440	401.17	400.86

STREET B



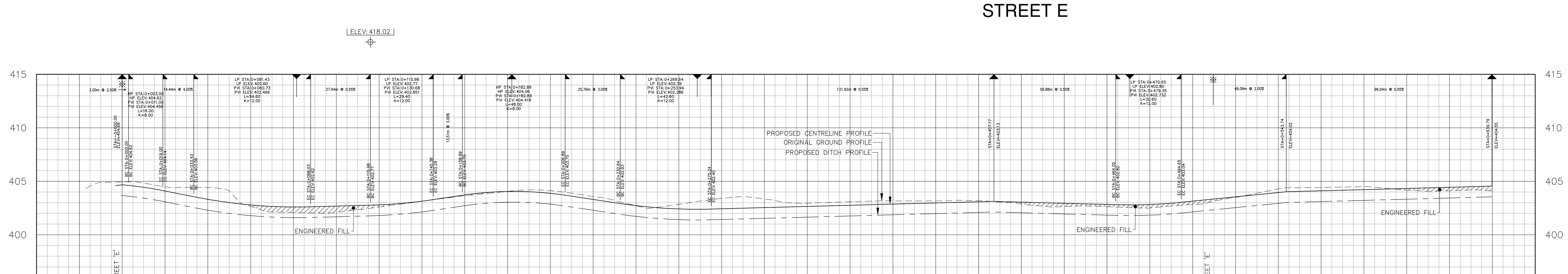
CENTRELINE ROAD CHAINAGE	PROPOSED CENTRELINE ELEVATIONS	EXISTING CENTRELINE ELEVATIONS
0+000		409.06
0+020	409.21	408.00
0+040	409.19	406.19
0+060	408.67	404.72
0+080	407.72	404.61
0+100	406.79	405.16
0+120	406.18	405.93
0+140	405.90	405.63
0+160	405.79	405.18
0+180	405.59	405.50
0+200	405.03	404.95
0+220	404.63	404.51
0+240	404.49	404.23
0+260	404.38	404.25
0+280	404.27	404.32
0+300	404.16	404.12
0+320	404.05	404.35
0+340	403.94	404.18
0+360	403.72	403.85
0+380	403.32	403.60
0+400	402.92	402.84
0+420	402.57	402.57
0+440	402.50	402.19
0+460	402.77	403.63
0+480	403.10	403.78
0+500	403.06	402.87
0+520	402.85	402.85
0+540	402.54	402.10
0+560	402.43	401.21
0+580	402.32	401.34
0+600	402.21	401.60
0+620	402.32	403.79
0+640	402.75	404.45
0+660		404.37
0+680		403.29
0+700		402.74

STREET C&D



CENTRELINE ROAD CHAINAGE	PROPOSED CENTRELINE ELEVATIONS	EXISTING CENTRELINE ELEVATIONS
0+000	401.46	401.46
0+020	401.35	402.03
0+040	401.60	402.11
0+060	402.10	402.45
0+080	402.33	402.98
0+100	402.53	403.58
0+120	402.73	403.75
0+140	402.93	402.78
0+160	403.11	402.84
0+180	403.21	404.18
0+200	402.97	403.82
0+220	402.77	404.45
0+240	402.66	404.11
0+260	402.69	402.07
0+280	402.83	401.16
0+300	403.24	402.61
0+320	403.84	404.14
0+340	404.43	404.67
0+360	404.66	404.88
0+380	404.73	405.08
0+400	404.72	404.75
0+420	404.83	404.69
0+440	404.94	405.46
0+460	405.05	405.29
0+480	405.16	405.20
0+500	405.27	405.31
0+520	405.38	405.39
0+540	405.49	405.01
0+560	405.76	405.70
0+580	406.26	406.27
0+600	406.35	406.04
0+620	406.24	406.13
0+640	406.12	406.07
0+660	405.82	405.81
0+680	405.52	405.53
0+700	405.35	405.40
0+720	405.24	405.28
0+740	404.98	405.01
0+760	404.58	404.66
0+780	404.26	403.42
0+800	404.15	403.18
0+820	404.04	403.26
0+840	403.96	404.36
0+860		404.41

STREET E



CENTRELINE ROAD CHAINAGE	PROPOSED CENTRELINE ELEVATIONS	EXISTING CENTRELINE ELEVATIONS
0+000	404.68	404.94
0+020	404.10	404.49
0+040	403.31	404.42
0+060	402.79	402.65
0+080	402.60	402.08
0+100	402.68	402.10
0+120	402.80	402.59
0+140	403.14	403.13
0+160	403.73	403.64
0+180	404.05	404.06
0+200	403.87	404.13
0+220	403.30	403.59
0+240	402.73	402.71
0+260	402.42	402.85
0+280	402.43	403.40
0+300	402.54	403.35
0+320	402.65	402.95
0+340	402.76	403.09
0+360	402.87	403.17
0+380	402.98	403.17
0+400	403.09	403.19
0+420	403.06	402.89
0+440	402.95	402.64
0+460	402.84	402.62
0+480	402.83	402.51
0+500	403.14	402.83
0+520	403.54	403.48
0+540	403.94	404.29
0+560	404.11	404.42
0+580	404.22	404.51
0+600	404.33	404.18
0+620	404.44	404.12

STREET F

COLE ENGINEERING

70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
T:416.987.6161 / 905.940.6161 F:905.940.2064

LEGEND

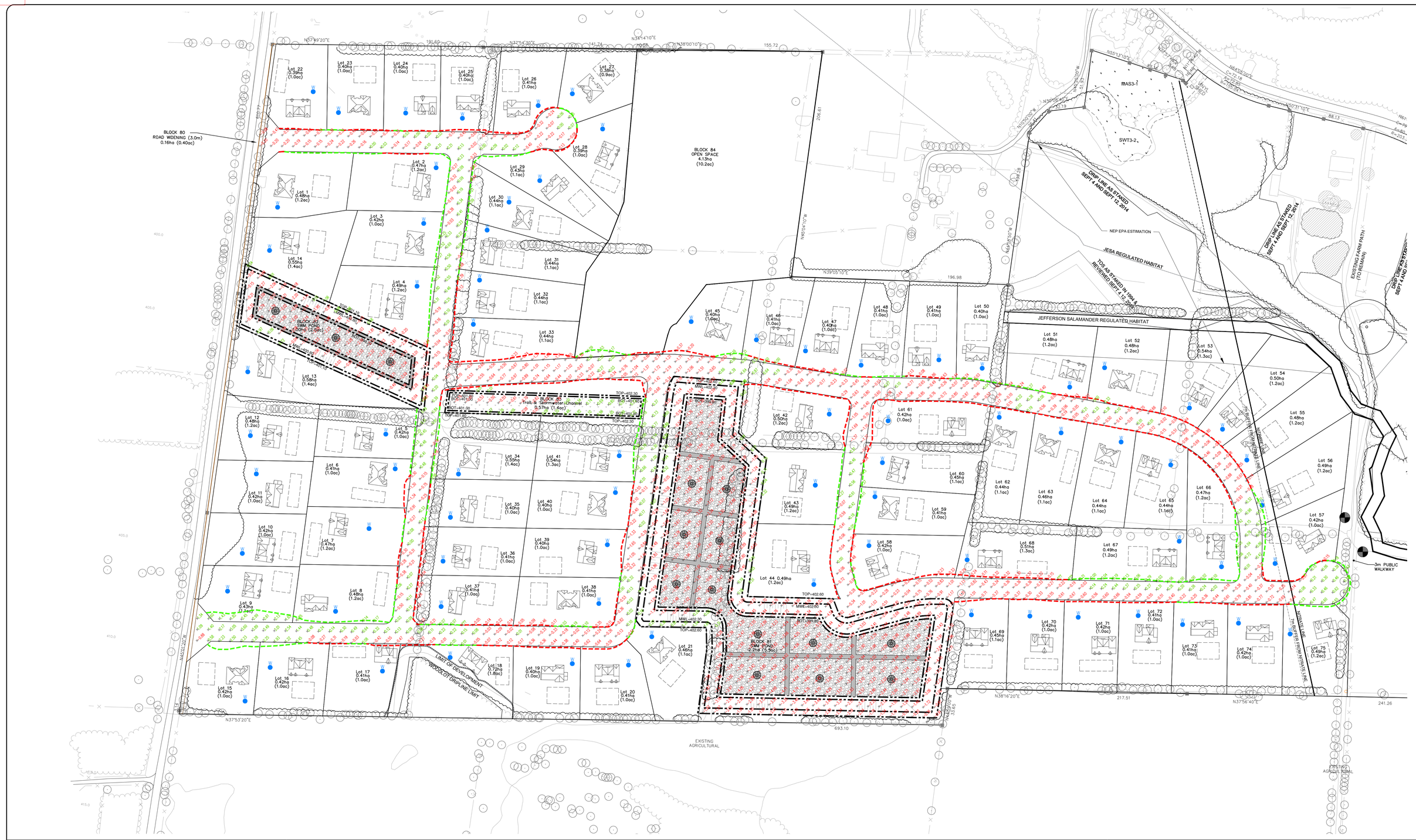
- PROPOSED CENTRELINE PROFILE
- ORIGINAL GROUND PROFILE
- PROPOSED DITCH PROFILE

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
ROAD PROFILES

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	SCALE: H = 1:1000 V = 1:200	DRAWING No.:	PR-1

File : P:\mrk\2017\2017-0701 Belfountain_Pre Eng FSR_Caledon\400-CADD\401-CAD\402-Design\Sheets\SD2017-0701- PROFILES.dwg, Date : May 05, 2020 - 7:35pm,

TOWN OF CALEDON
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Jun 23, 2020



COLE ENGINEERING
70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
T:416.987.6161 / 905.940.6161 F:905.940.2064

LEGEND

- PROPERTY BOUNDARY
- LIMIT AND DEPTH OF CUT (×-0.61)
- HOUSE LOCATION
- LIMIT AND DEPTH OF FILL (×0.43)
- EXISTING VEGETATION GROUPING
- SEPTIC LOCATION

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
CONCEPTUAL CUT AND FILL PLAN (ROADS AND SWM FACILITIES ONLY)

DATE:	MAY 2020	PROJECT No.:	SD17-0701
SCALE:	1:1500	FIGURE No.:	CF-1

File : P:\mrk\2017\2017-0701 Belfountain_Pre Eng FSR_Caledon\400-CADD\401-CAD\402-Design\Earthworks\2020-05-05 Vertical Separation\2020-05-05 CUT-FILL PRESENTATION.dwg, Date :May 06, 2020 - 12:53pm,

TOWN OF CALEDON
PLANNING
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Jun 29, 2020

LOT No.	PROPOSED LOT HARDSCAPE (ROOF+DRIVEWAY, ha)	INCREASE IN RUNOFF COEFFICIENT FROM PRE TO POST	AREAxRUNOFF COEFFICIENT
48	0.0401	0.7	0.028
49	0.0365	0.7	0.026
50	0.0407	0.7	0.028
51	0.0446	0.7	0.031
52	0.0410	0.7	0.029
TOTAL	0.2028		0.142

PRE-DEVELOPMENT AREA DIVERTED AWAY FROM WETLAND BY POST-DEVELOPMENT CONDITIONS (ha)	PRE-DEVELOPMENT RUN-OFF COEFFICIENT	AREAxRUNOFF COEFFICIENT
0.7122	0.2	0.142

STREET 'A'
STREET 'B'
STREET 'C'
STREET 'D'
STREET 'E'
STREET 'F'
STREET 'G'
SHAWS CREEK ROAD
MISSISSAUGA ROAD
EX. HIGH POINT ELEVATION: 402.42m
EX. LOW POINT ELEVATION: 400.80m
BLOCK 80 ROAD WIDENING (3.0m) 0.16ha (0.40ac)
BLOCK 82 SWM POND 1.00ha (2.50ac)
BLOCK 83 Trail & Stormwater Channel 0.57ha (1.4ac)
BLOCK 84 OPEN SPACE 4.13ac (10.2ac)
BLOCK 81 SWM POND 2.2ha (5.5ac)
BLOCK 78 OPEN SPACE 17.4ha (42.9ac)
BLOCK 78 PARK 2.39ha (5.9ac)
BLOCK 77 10m BUFFER 0.8ha (5.0ac)
PROP. DRYWELL (TYP.)
LIMIT OF DEVELOPMENT
0.3m RESERVE BEHIND PROPERTY LINE ALONG MISSISSAUGA ROAD
3m PUBLIC WALKWAY
25m BUTTERNUT TREE BUFFER
JEFFERSON SALAMANDER REGULATED HABITAT
JESA REGULATED HABITAT
DRIP LINE AS STAKED SEPT 4 AND SEPT 12, 2014
EXISTING FARM PATH (TO REMAIN)
TOS AS STAKED IN 2014, REVISED SEPT 12, 2014
NEP SPA ESTIMATION
TOP OF POND TO MATCH EXISTING GRADE AT 3:1 MAX.
TOP OF SWALE TO MATCH EXISTING GRADE AT 3:1 MAX.
9.27 ha
6.53 ha
103.39 ha
134.17 ha
FOR EXTERNAL DRAINAGE AREAS, SEE DRAWING No. ST-3

LEGEND

- PROPERTY BOUNDARY
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- 0.30 / 0.20ha — RUNOFF COEFFICIENT / DRAINAGE AREA
- DRAINAGE AREA BOUNDARY
- DRYWELL
- STORM SEWER
- CATCH BASIN (STAR DENOTES CB GRATE AND LEAD TO BE SIZED FOR 100-YEAR CAPTURE)
- EXTERNAL DRAINAGE AREA BOUNDARY
- 134.32 ha — EXTERNAL DRAINAGE AREA
- EXISTING VEGETATION GROUPING
- EXTERNAL PONDING AREA
- PRE-DEVELOPMENT DRAINAGE DIVIDE
- POST-DEVELOPMENT DRAINAGE AREA DIVERTED AWAY FROM EXISTING WETLAND (FOR WETLAND RECHARGE BALANCING CALCULATION, SEE THIS DRAWING)
- POST-DEVELOPMENT CLEAN IMPERVIOUS AREA COMPENSATION RUNOFF TO EXISTING WETLAND (FOR WETLAND RECHARGE BALANCING CALCULATION, SEE THIS DRAWING)
- EXISTING WETLAND

COLE ENGINEERING
70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
T:416.987.6161 | 905.940.6161 F:905.940.2064

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
STORM DRAINAGE PLAN - INTERNAL

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	SCALE: 1:1250	DRAWING No.:	ST-2

File : P:\vmk\2017\2017-0701 Belfountain_Pre Eng FSR_Caledon\400-CADD\401-CAD\402-Design\Sheets\2017-0701- STM DAP (INTERNAL).dwg, Date : May 08, 2020 - 1:51pm,

TOWN OF CALEDON
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MISSISSAUGA ROAD

SHAWS CREEK ROAD

THE GRANGE SIDEROAD

STREET 'A'

STREET 'B'

STREET 'C'

STREET 'D'

STREET 'E'

STREET 'F'

STREET 'G'

STREET 'H'

STREET 'J'

253.36 ha

COLE ENGINEERING
70 VALLEYWOOD DRIVE, MARKHAM, ON L3R 4T5
T:416.987.6161 / 905.940.6161 F:905.940.2064

LEGEND

PROPERTY BOUNDARY

EXISTING OVERLAND FLOW DIRECTION

96.40 ha — TOTAL EXTERNAL DRAINAGE AREA

EXTERNAL DRAINAGE AREA BOUNDARY

LOCAL PONDING AREA

THE MANORS OF BELFOUNTAIN CORP.
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL
STORM DRAINAGE PLAN - EXTERNAL

DATE:	MAY 2020	PROJECT No.:	2017-0701
SCALE:	1:2500	DRAWING No.:	ST-3

TOWN OF CALEDON
PLANNING
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APPENDIX A

Stormwater Management Calculations

TOWN OF CALEDON
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External Drainage
Ponding Area Volumes

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Drainage Area ID	Depression Area Name	Cut Factor	Fill Factor	2D Area (m2)	2D Area (ha)	Cut (m3)	Fill (m3)	Net (m3)
1-1	1-1 VOL	1	1	4,044	0.404	2,028	0	2,028
	1-2 VOL	1	1	982	0.098	685	0	685
	1-3 VOL	1	1	9,712	0.971	9,607	0.11	9,607
	1-4 VOL	1	1	132	0.013	18	0	18
	1-5 VOL	1	1	549	0.055	249	0	249
	1-6 VOL	1	1	611	0.061	183	0	183
	1-7 VOL	1	1	1,328	0.133	184	0	184
	1-8 VOL	1	1	282	0.028	85	0	85
	1-9 VOL	1	1	862	0.086	269	0	269
	1-15 VOL	1	1	232	0.023	26	0	26
						TOTAL NET VOLUME :		**13,333**
1-2	1-10 VOL	1	1	6,923	0.692	3,792	0	3,792
	1-11 VOL	1	1	661	0.066	54	0	54
	1-12 VOL	1	1	2,455	0.245	1,248	0	1,248
	1-13 VOL	1	1	274	0.027	154	0	154
	1-14 VOL	1	1	1,309	0.131	826	0	826
						TOTAL NET VOLUME :		**6,074**
3-1	3-1 VOL	1	1	1,446	0.145	769	0	769
	3-2 VOL	1	1	934	0.093	202	0	202
	3-3 VOL	1	1	354	0.035	31	0	31
	3-4 VOL	1	1	138	0.014	12	0	12
	3-5 VOL	1	1	712	0.071	344	0	344
	3-6 VOL	1	1	464	0.046	201	0	201
	3-7 VOL	1	1	251	0.025	40	0	40
						TOTAL NET VOLUME :		**1,599**
3-2	3-9 VOL	1	1	143	0.014	9	0	9
	3-10 VOL	1	1	9,933	0.993	10,268	0	10,268
	3-15 VOL	1	1	437	0.044	141	0	141
	3-16 VOL	1	1	1,532	0.153	413	1.08	412
	3-17 VOL	1	1	551	0.055	103	0	103
	3-18 VOL	1	1	1,267	0.127	713	0	713
	3-20 VOL	1	1	1,783	0.178	443	0	443
	3-21 VOL	1	1	257	0.026	54	0	54
						TOTAL NET VOLUME :		**12,144**
3-3	3-8 VOL	1	1	1,016	0.102	904	0	904
	3-11 VOL	1	1	4,705	0.471	7,577	0	7,577
						TOTAL NET VOLUME :		**8,480**
3-4	3-19 VOL	1	1	855	0.085	195	0	**195**
3-5	3-12 VOL	1	1	5,781	0.578	1,494	0	1,494
	3-13 VOL	1	1	6,539	0.654	8,636	0	8,636
	3-14 VOL	1	1	3,447	0.345	177	0	177
	3-22 VOL	1	1	792	0.079	525	0	525
	3-23 VOL	1	1	784	0.078	332	0	332
						TOTAL NET VOLUME :		**11,164**

TOWN OF CALEDON
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External Drainage
Ponding Area Volumes

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Drainage Area ID	Depression Area Name	Cut Factor	Fill Factor	2D Area (m2)	2D Area (ha)	Cut (m3)	Fill (m3)	Net (m3)
3-6	3-27 VOL	1	1	1,300	0.130	362	0	362
	3-28 VOL	1	1	18,443	1.844	7,674	0	7,674
	3-29 VOL	1	1	940	0.094	223	0	223
	3-30 VOL	1	1	2,097	0.210	721	0	721
	3-33 VOL	1	1	640	0.064	300	0	300
	3-34 VOL	1	1	1,445	0.145	809	0	809
	3-35 VOL	1	1	528	0.053	55	0	55
	3-38 VOL	1	1	831	0.083	548	0	548
						TOTAL NET VOLUME :		**10,691**
3-7	3-25 VOL	1	1	2,024	0.202	484	0	484
	3-26 VOL	1	1	10,860	1.086	7,307	0	7,307
	3-31 VOL	1	1	4,193	0.419	854	0	854
						TOTAL NET VOLUME :		**8,645**
3-8	3-24 VOL	1	1	76,393	7.639	19,978	0	19,978
	3-32 VOL	1	1	8,936	0.894	1,894	0	1,894
	3-44 VOL	1	1	1,010	0.101	246	0	246
	3-61 VOL	1	1	426	0.043	103	0	103
	3-62 VOL	1	1	109	0.011	10	0	10
	3-63 VOL	1	1	713	0.071	578	0	578
	3-64 VOL	1	1	1,788	0.179	1,624	0	1,624
						TOTAL NET VOLUME :		**24,433**
3-9	3-59 VOL	1	1	4,022	0.402	277	0	277
	3-60 VOL	1	1	5,627	0.563	1,597	0	1,597
						TOTAL NET VOLUME :		**1,875**
3-10	3-36 VOL	1	1	11,798	1.180	10,263	0	10,263
	3-37 VOL	1	1	6,243	0.624	1,896	0	1,896
						TOTAL NET VOLUME :		**12,160**
3-11	3-39 VOL	1	1	1,412	0.141	366	0	366
	3-40 VOL	1	1	14,235	1.423	2,010	0	2,010
	3-41 VOL	1	1	3,134	0.313	839	0	839
	3-42 VOL	1	1	1,359	0.136	379	0	379
	3-43 VOL	1	1	3,747	0.375	1,873	0	1,873
	3-46 VOL	1	1	222	0.022	19	0	19
						TOTAL NET VOLUME :		**5,486**
3-12	3-45 VOL	1	1	992	0.099	351	0	351
	3-50 VOL	1	1	942	0.094	155	0	155
	3-51 VOL	1	1	317	0.032	18	0	18
	3-52 VOL	1	1	1,401	0.140	173	0	173
	3-53 VOL	1	1	4,669	0.467	2,080	0	2,080
	3-54 VOL	1	1	788	0.079	208	0	208
	3-55 VOL	1	1	1,574	0.157	105	0	105
	3-56 VOL	1	1	713	0.071	147	0	147
						TOTAL NET VOLUME :		**3,237**
3-13	3-57 VOL	1	1	1,996	0.200	1,708	0	1,708
	3-58 VOL	1	1	5,550	0.555	1,136	0	1,136
						TOTAL NET VOLUME :		**2,844**
3-14	3-47 VOL	1	1	755	0.075	103	0	103
	3-48 VOL	1	1	4,550	0.455	6,328	0	6,328
						TOTAL NET VOLUME :		**6,431**
3-15	3-49 VOL	1	1	15,385	1.539	12,743	0	**12,743**

TOWN OF CALEDON
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External Drainage
Ponding Area Volumes

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Drainage Area ID	Depression Area Name	Cut Factor	Fill Factor	2D Area (m2)	2D Area (ha)	Cut (m3)	Fill (m3)	Net (m3)
4-1	4-49 VOL	1	1	73	0.007	16	0	16
	4-50 VOL	1	1	1,239	0.124	159	0	159
							TOTAL NET VOLUME :	**175**
4-2	4-55 VOL	1	1	5,573	0.557	4,722	0	**4,722**
4-3	4-22 VOL	1	1	974	0.097	848	0	848
	4-23 VOL	1	1	1,036	0.104	952	0	952
	4-44 VOL	1	1	146	0.015	26	0	26
	4-45 VOL	1	1	8,751	0.875	4,262	0	4,262
							TOTAL NET VOLUME :	**6,088**
4-4	4-31 VOL	1	1	682	0.068	42	0	42
	4-37 VOL	1	1	1,889	0.189	1,742	0	1,742
	4-48 VOL	1	1	322	0.032	123	0	123
							TOTAL NET VOLUME :	**1,906**
4-5	4-47 VOL	1	1	2,129	0.213	1,477	0	**1,477**
4-6	4-27 VOL	1	1	1,558	0.156	820	0	820
	4-28 VOL	1	1	853	0.085	293	0	293
	4-29 VOL	1	1	658	0.066	274	0	274
	4-30 VOL	1	1	1,459	0.146	488	0	488
	4-32 VOL	1	1	1,142	0.114	768	0	768
	4-33 VOL	1	1	6,249	0.625	4,656	0	4,656
							TOTAL NET VOLUME :	**7,299**
4-7	4-21 VOL	1	1	1,119	0.112	18	0	**18**
4-8	4-12 VOL	1	1	1,209	0.121	742	0	742
	4-13 VOL	1	1	4,282	0.428	3,691	0	3,691
	4-19 VOL	1	1	790	0.079	475	0	475
	4-20 VOL	1	1	2,945	0.294	3,407	0	3,407
	4-24 VOL	1	1	715	0.071	251	0	251
	4-25 VOL	1	1	530	0.053	76	0	76
	4-26 VOL	1	1	1,470	0.147	1,542	0	1,542
	4-34 VOL	1	1	3,929	0.393	3,720	0	3,720
	4-35 VOL	1	1	1,866	0.187	2,094	0	2,094
	4-36 VOL	1	1	1,450	0.145	600	0	600
	4-42 VOL	1	1	418	0.042	51	0	51
	4-46 VOL	1	1	843	0.084	223	0	223
	4-59 VOL	1	1	883	0.088	646	0	646
	4-61 VOL	1	1	684	0.068	97	0	97
							TOTAL NET VOLUME :	**17,615**
4-9	4-39 VOL	1	1	9,705	0.971	11,152	0	11,152
	4-40 VOL	1	1	313	0.031	41	0	41
	4-41 VOL	1	1	291	0.029	32	0	32
	4-43 VOL	1	1	884	0.088	222	0	222
							TOTAL NET VOLUME :	**11,447**
4-10	4-6 VOL	1	1	1,937	0.194	85	0	85
	4-58 VOL	1	1	898	0.090	108	0	108
							TOTAL NET VOLUME :	**192**
4-11	4-8 VOL	1	1	2,230	0.223	904	0	904
	4-9 VOL	1	1	3,189	0.319	3,087	0	3,087
	4-10 VOL	1	1	6,992	0.699	9,551	0	9,551
	4-11 VOL	1	1	845	0.084	472	0	472
							TOTAL NET VOLUME :	**14,015**

TOWN OF CALEDON
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External Drainage
Ponding Area Volumes

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Drainage Area ID	Depression Area Name	Cut Factor	Fill Factor	2D Area (m2)	2D Area (ha)	Cut (m3)	Fill (m3)	Net (m3)
4-12	4-7 VOL	1	1	12,357	1.236	9,303	0	**9,303**
4-13	4-4 VOL	1	1	9,616	0.962	1,064	0	1,064
	4-5 VOL	1	1	3,282	0.328	293	0	293
	4-14 VOL	1	1	776	0.078	73	0	73
	4-15 VOL	1	1	862	0.086	177	0	177
	4-16 VOL	1	1	2,980	0.298	1,601	0	1,601
	4-38 VOL	1	1	10,563	1.056	919	0	919
	4-60 VOL	1	1	934	0.093	238	0	238
						TOTAL NET VOLUME :		**4,363**
4-14	4-17 VOL	1	1	1,949	0.195	1,179	0	1,179
	4-18 VOL	1	1	1,004	0.100	546	0	546
						TOTAL NET VOLUME :		**1,725**
4-15	4-3 VOL	1	1	2,664	0.266	1,154	0	1,154
	4-56 VOL	1	1	213	0.021	42	0	42
	4-57 VOL	1	1	1,211	0.121	329	0	329
						TOTAL NET VOLUME :		**1,524**
4-16	4-1 VOL	1	1	5,986	0.599	519	0	519
	4-2 VOL	1	1	147,647	14.765	14,869	0	14,869
	4-52 VOL	1	1	701	0.070	197	0	197
	4-53 VOL	1	1	1,653	0.165	403	0	403
						TOTAL NET VOLUME :		**15,988**
4-17	4-51 VOL	1	1	3,215	0.322	804	0	804
	4-54 VOL	1	1	3,719	0.372	1,418	0	1,418
						TOTAL NET VOLUME :		**2,222**
				TOTAL	**59.507**	**241,614**	**1.19**	**241,613**

TOWN OF CALEDON
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SOIL MAP OF PEEL COUNTY ONTARIO

SOIL SURVEY REPORT No. 18

Scale - One Inch to One Mile = 1/63360

KEY MAP

REFERENCE

LAKE ONTARIO

LEGEND

Soil Survey by the Department of Soils, Ontario Agricultural College, Guelph, and the Experimental Farms Service, Dominion Department of Agriculture, Ottawa.

TOWN OF CALEDON
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Prepared by: Jessica Lysecki, P.Eng.

Visual OTTHYMO
NASHYD Input Parameters

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Drainage Area ID	Area (m^2)	Area (ha)	Cpre	Hydrologic Soil Group	Landuse	CN	L (m)	Upper Elev. (m)	Lower Elev. (m)	Elev. Change (m)	Sw (%)	Tc Airport (min)	Tc BW (min)	TP (hr)	DT (min)	DWF (cms)	Ponding Area Volume (m^3)	IA (mm)	N	Rain (mm/hr)
1-1	92658	9.26	0.20	A	forest, poor cover	45	281.6	422.78	410.91	11.87	4.22	30.63	9.64	0.34	5	0	13333.1	143.9	3	0-Without Rainfall
1-2	65264	6.53	0.20	A	forest, poor cover	45	512.5	421.00	403.73	17.27	3.37	44.48	18.99	0.49	5	0	6073.8	93.1	3	0-Without Rainfall
3-1	119397	11.94	0.20	A	forest, poor cover	45	671.0	423.39	402.90	20.49	3.05	52.58	23.88	0.58	5	0	1598.5	13.4	3	0-Without Rainfall
3-2	67490	6.75	0.20	A	forest, poor cover	45	441.4	423.76	410.97	12.79	2.90	43.39	16.80	0.48	5	0	12143.5	179.9	3	0-Without Rainfall
3-3	25239	2.52	0.20	A	forest, poor cover	45	287.2	420.00	410.00	10.00	3.48	32.94	11.63	0.37	5	0	8480.4	336.0	3	0-Without Rainfall
3-4	2523	0.25	0.20	A	forest, poor cover	45	25.9	422.00	420.45	1.55	5.99	8.27	1.18	0.09	5	0	194.9	77.3	3	0-Without Rainfall
3-5	70850	7.09	0.20	A	forest, poor cover	45	425.8	427.05	414.67	12.38	2.91	42.57	16.12	0.47	5	0	11164.2	157.6	3	0-Without Rainfall
3-6	96719	9.67	0.20	A	forest, poor cover	45	472.6	429.46	415.38	14.08	2.98	44.49	17.26	0.49	5	0	10691.2	110.5	3	0-Without Rainfall
3-7	69910	6.99	0.20	A	forest, poor cover	45	273.8	429.07	417.08	11.99	4.38	29.82	9.56	0.33	5	0	8644.6	123.7	3	0-Without Rainfall
3-8	209369	20.94	0.20	D	forest, poor cover	82	672.7	436.13	422.23	13.90	2.07	59.89	24.47	0.67	5	0	24433.2	116.7	3	0-Without Rainfall
3-9	35029	3.50	0.20	A	forest, poor cover	45	280.2	437.57	428.84	8.73	3.12	33.75	11.22	0.38	5	0	1874.6	53.5	3	0-Without Rainfall
3-10	70960	7.10	0.20	A	forest, poor cover	45	362.6	433.33	418.40	14.93	4.12	35.02	12.80	0.39	5	0	12159.5	171.4	3	0-Without Rainfall
3-11	79721	7.97	0.20	A	forest, poor cover	45	365.4	434.00	421.00	13.00	3.56	36.89	13.13	0.41	5	0	5486.1	68.8	3	0-Without Rainfall
3-12	87272	8.73	0.20	A	pasture, poor condition	38	528.1	435.14	424.62	10.52	1.99	53.71	21.12	0.60	5	0	3236.5	37.1	3	0-Without Rainfall
3-13	43222	4.32	0.20	A	forest, poor cover	45	268.6	434.07	425.44	8.63	3.21	32.71	10.47	0.36	5	0	2844.2	65.8	3	0-Without Rainfall
3-14	16690	1.67	0.20	A	forest, poor cover	45	189.4	435.80	430.94	4.86	2.57	29.59	8.50	0.33	5	0	6431.0	385.3	3	0-Without Rainfall
3-15	39506	3.95	0.20	A	pasture, poor condition	38	147.3	435.56	428.98	6.58	4.47	21.74	5.43	0.24	5	0	12743.1	322.6	3	0-Without Rainfall
4-1	91286	9.13	0.20	A	cultivated land	62	612.3	418.66	405.30	13.36	2.18	56.12	23.94	0.62	5	0	175.4	1.9	3	0-Without Rainfall
4-2	26714	2.67	0.20	A	forest, poor cover	45	247.4	421.81	409.99	11.82	4.78	27.54	9.35	0.31	5	0	4722.2	176.8	3	0-Without Rainfall
4-3	83509	8.35	0.20	A	forest, poor cover	45	180.9	424.86	413.16	11.70	6.47	21.32	5.74	0.24	5	0	6088.4	72.9	3	0-Without Rainfall
4-4	19077	1.91	0.20	A	forest, poor cover	45	207.4	436.26	422.21	14.05	6.78	22.47	7.56	0.25	5	0	1906.1	99.9	3	0-Without Rainfall
4-5	12371	1.24	0.20	A	forest, poor cover	45	148.3	430.90	419.71	11.19	7.55	18.34	5.52	0.20	5	0	1476.5	119.4	3	0-Without Rainfall
4-6	54605	5.46	0.20	A	open spaces/lawns, fair condition	62	332.2	436.19	426.94	9.25	2.78	38.14	13.02	0.42	5	0	7299.4	133.7	3	0-Without Rainfall
4-7	14026	1.40	0.20	A	forest, poor cover	45	187.1	425.53	416.20	9.33	4.98	23.62	7.48	0.26	5	0	17.9	1.3	3	0-Without Rainfall
4-8	188539	18.85	0.20	A	open spaces/lawns, fair condition	62	587.1	440.13	417.00	23.13	3.94	45.22	18.97	0.50	5	0	17615.4	93.4	3	0-Without Rainfall
4-9	65815	6.58	0.20	A	forest, poor cover	45	386.9	434.81	416.51	18.30	4.73	34.56	13.39	0.38	5	0	11447.0	173.9	3	0-Without Rainfall
4-10	41713	4.17	0.20	A	forest, poor cover	45	364.7	430.51	418.72	11.79	3.23	38.05	14.25	0.42	5	0	192.3	4.6	3	0-Without Rainfall
4-11	58083	5.81	0.20	A	forest, poor cover	45	289.0	439.39	429.24	10.15	3.51	32.95	10.74	0.37	5	0	14014.9	241.3	3	0-Without Rainfall
4-12	46224	4.62	0.20	A	pasture, poor condition	38	284.7	437.03	424.97	12.06	4.24	30.74	10.43	0.34	5	0	9303.3	201.3	3	0-Without Rainfall
4-13	194308	19.43	0.20	A	forest, poor cover	45	896.7	436.26	424.69	11.57	1.29	80.77	36.10	0.90	5	0	4363.1	22.5	3	0-Without Rainfall
4-14	16688	1.67	0.20	A	cultivated land	62	141.0	437.75	430.70	7.05	5.00	20.49	5.53	0.23	5	0	1724.7	103.3	3	0-Without Rainfall
4-15	31127	3.11	0.20	A	forest, good cover	30	279.8	437.86	426.86	11.00	3.93	31.23	10.82	0.35	5	0	1524.4	49.0	3	0-Without Rainfall
4-16	355508	35.55	0.20	A	forest, good cover	30	684.4	436.78	426.12	10.66	1.56	66.32	24.98	0.74	5	0	15987.7	45.0	3	0-Without Rainfall
4-17	42312	4.23	0.20	A	forest, poor cover	45	343.0	430.21	427.77	2.44	0.71	60.81	18.12	0.68	5	0	2222.0	52.5	3	0-Without Rainfall

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STANDHYD Input Parameters
Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Town of Caledon Standard Runoff Coefficients
Pervious (<4ha) 0.25
Impervious 0.90

Area Description	Area (ha)	Runoff Coefficient	TIMP Total Impervious Area	XIMP Impervious Area (Direct Connection)	LGI Overland Flow Length (Impervious)	SLPI Average Slope (Impervious)	DT Time Step Increment	DWF Dry Weather Flow (Base Flow)	LOSS Rainfall Loss Method	SLPP Average Slope (Pervious)	LGP Overland Flow Length (Pervious)	MNP Mannings Roughness Coefficient (Pervious)	DPSI Depression Storage (Pervious)	MNI Manning's Roughness Coefficient (Impervious)	Receiving OGS Unit	Receiver of Minor Flow	Receiver of Major Flow	Receiver of Emergency Flow
Shaws Creek Road (North)	0.62	0.65	0.62	0.62	64.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-4	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Shaws Creek Road (South)	0.73	0.65	0.62	0.62	69.8	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-4	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 23-27 to DICB1	2.00	0.37	0.18	0.12	115.5	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Street 'A' to DICB2	0.21	0.37	0.18	0.18	37.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 28-30 to DICB4	0.91	0.37	0.18	0.12	77.9	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 1-4,14 to RLCB1	2.08	0.37	0.18	0.12	117.8	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 30-32 to Culvert	1.27	0.37	0.18	0.12	92.0	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	n/a	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Street 'B' (North) to DICB3	0.09	0.37	0.18	0.18	24.5	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Street 'B' (Mid) to DICB5	0.23	0.37	0.18	0.18	39.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-5	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 5,6,9-13 to RLCB3	2.87	0.37	0.18	0.12	138.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-5	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 7,8 to RLCB2	0.76	0.37	0.18	0.12	71.0	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-5	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Street 'C' / 'B' to DICB5	0.65	0.37	0.18	0.18	65.8	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-5	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Street 'B' (South) to Culvert	0.67	0.37	0.18	0.18	66.8	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	n/a	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Block 81 Channel	0.43	0.37	0.18	0.18	53.5	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	n/a	Block 80 SWM Pond	Block 80 SWM Pond	Block 80 SWM Pond
Lots 34-41 to RLCB6	3.07	0.37	0.18	0.12	143.1	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-5	Block 80 SWM Pond	Block 80 SWM Pond	Block 81 Channel
Lots 15-21 to DICB16	3.55	0.37	0.18	0.12	153.9	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'C' / 'D' to DICB15	0.42	0.37	0.18	0.18	53.1	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond

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Town of Caledon Standard Runoff Coefficients

Pervious (<4ha) 0.25
Impervious 0.90

Area Description	Area (ha)	Runoff Coefficient	TIMP Total Impervious Area	XIMP Impervious Area (Direct Connection)	LGI Overland Flow Length (Impervious)	SLPI Average Slope (Impervious)	DT Time Step Increment	DWF Dry Weather Flow (Base Flow)	LOSS Rainfall Loss Method	SLPP Average Slope (Pervious)	LGP Overland Flow Length (Pervious)	MNP Mannings Roughness Coefficient (Pervious)	DPSI Depression Storage (Pervious)	MNI Manning's Roughness Coefficient (Impervious)	Receiving OGS Unit	Receiver of Minor Flow	Receiver of Major Flow	Receiver of Emergency Flow
Street 'D' (West) to DICB7	0.28	0.37	0.18	0.18	43.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'D' (East) / Street 'E' (South) to DICB8	0.38	0.37	0.18	0.18	50.3	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'E' (Lot 45) to Culvert/DICB8	0.17	0.37	0.18	0.12	33.7	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 45-47 to Culvert/DICB8	0.74	0.37	0.18	0.12	70.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-2	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 48-51 to Culvert/DICB10	0.53	0.37	0.18	0.12	59.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' (Northwest) to DICB9	0.13	0.37	0.18	0.18	29.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'E' / 'F' (Northwest) to DICB10	0.46	0.37	0.18	0.18	55.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 52-56 to Culvert/DICB13	2.33	0.37	0.18	0.12	124.6	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'E' / 'F' (Southeast) to DICB13	0.35	0.37	0.18	0.18	48.3	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 69-72 to DICB14	1.66	0.37	0.18	0.12	105.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 68-69 to DICB14	0.59	0.37	0.18	0.12	62.6	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' (East) to DICB13	0.11	0.37	0.18	0.18	27.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 66-67 to DICB12	1.16	0.37	0.18	0.12	87.9	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' (Mid) to DICB11	0.24	0.37	0.18	0.18	40.3	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' / 'F' (North) to DICB11	0.13	0.37	0.18	0.18	29.3	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' / 'F' (South) to DICB12	0.12	0.37	0.18	0.18	28.0	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Street 'F' (Southwest) to DICB9	0.21	0.37	0.18	0.18	37.4	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond

TOWN OF CALEDON
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Visual OTTHYMO
STANDHYD Input Parameters
Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Town of Caledon Standard Runoff Coefficients
Pervious (<4ha) 0.25
Impervious 0.90

Area Description	Area (ha)	Runoff Coefficient	TIMP Total Impervious Area	XIMP Impervious Area (Direct Connection)	LGI Overland Flow Length (Impervious)	SLPI Average Slope (Impervious)	DT Time Step Increment	DWF Dry Weather Flow (Base Flow)	LOSS Rainfall Loss Method	SLPP Average Slope (Pervious)	LGP Overland Flow Length (Pervious)	MNP Mannings Roughness Coefficient (Pervious)	DPSI Depression Storage (Pervious)	MNI Manning's Roughness Coefficient (Impervious)	Receiving OGS Unit	Receiver of Minor Flow	Receiver of Major Flow	Receiver of Emergency Flow
Street 'F' (Southeast) to DICB10	0.20	0.37	0.18	0.18	36.2	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-3	Block 79 SWM Pond	Block 79 SWM Pond	Block 79 SWM Pond
Lots 42-44 to RLCB4	1.24	0.37	0.18	0.12	90.9	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 79 SWM Pond
Lots 57-65 to RLCB5	3.36	0.37	0.18	0.12	149.7	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	OGS-1	Block 80 SWM Pond	Block 80 SWM Pond	Block 79 SWM Pond
Block 80 SWM Pond	1.00	0.58	0.50	0.50	81.6	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	n/a	Block 80 SWM Pond	Block 80 SWM Pond	Shaws Creek Road
Block 79 SWM Pond	4.20	0.58	0.50	0.50	167.3	1.0%	5	0	Loss = 2 (SCS Curve Method) CN=38 IA = 1.5mm	2.0%	40	0.25	1 mm	0.013	n/a	Block 79 SWM Pond	Block 79 SWM Pond	Block 81 Channel

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Prepared by: Jessica Lysecki, P.Eng.

Block 81 SWM Pond
Stage-Storage-Discharge

Manors of Belfountain
File No. 2017-0701
Date: May, 2020

Description	Elevation (m)	Area (m^2)	Volume (m^3)	Volume (ha.m)	Average Infiltration Rate (mm/hr)	Safety Factor	Design Infiltration Rate (mm/hr)	SWM Pond Release Rate (L/s)
Bottom of Pond	399.80	22,262.9	0.0	0.0000	91	1.5	61	337.7
	399.90	25,785.9	2,557.8	0.2558				
Max. WL	402.30	36,256.7	76,861.8	7.6862				
Top of Pond	402.60	41,983.0	88,593.3	8.8593				

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Prepared by: Jessica Lysecki, P.Eng.

Block 82 SWM Pond
Stage-Storage-Discharge

Manors of Belfountain
File No. 2017-0701
Date: May, 2020

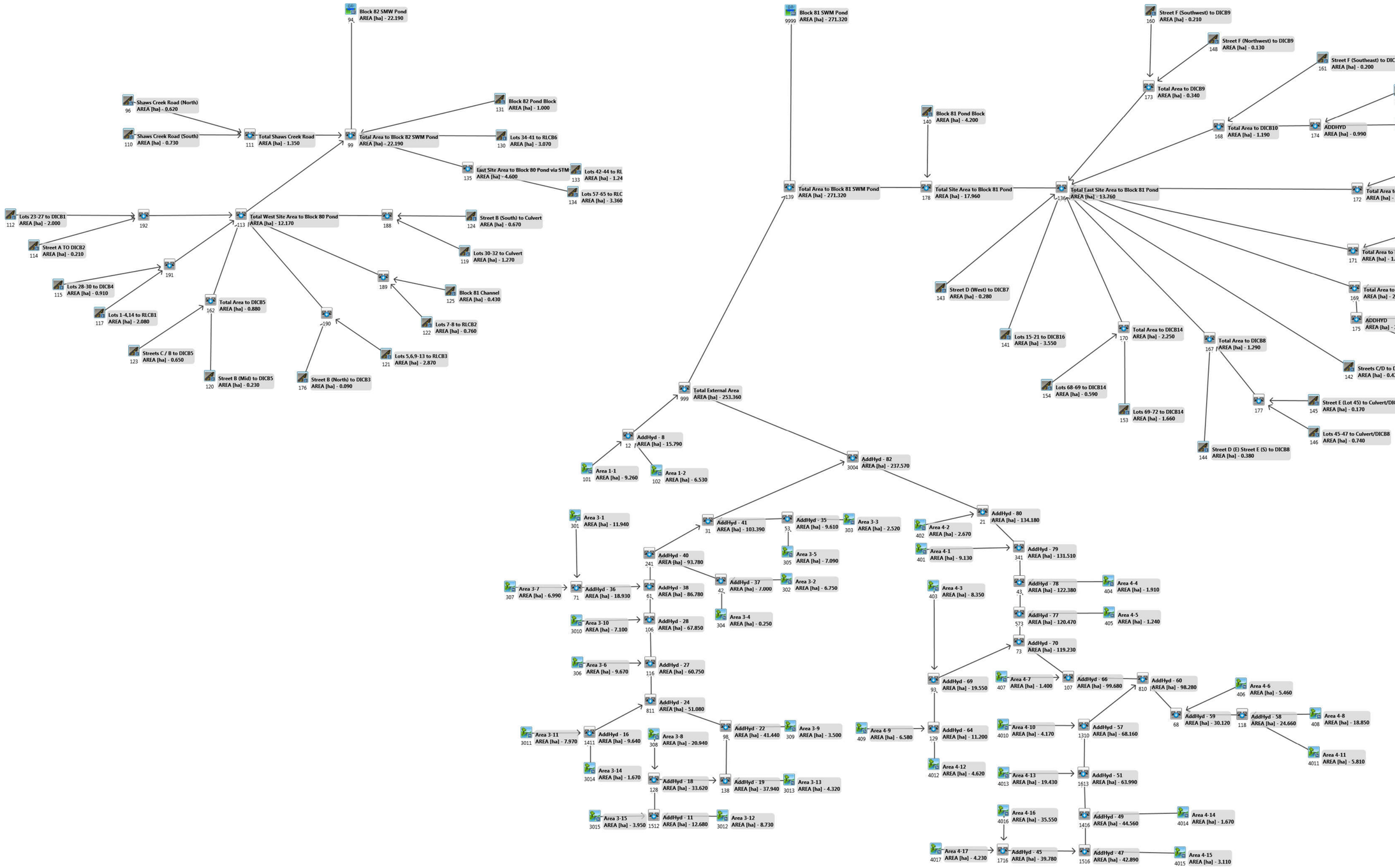
Description	Elevation (m)	Area (m^2)	Volume (m^3)	Volume (ha.m)	Average Infiltration Rate (mm/hr)	Safety Factor	Design Infiltration Rate (mm/hr)	SWM Pond Release Rate (L/s)
Bottom of Pond	398.30	3,356.2	0.0	0.0000	103	1.5	68	57.3
	398.40	4,596.7	452.1	0.0452				
Max. WL	400.80	8,623.1	16,161.2	1.6161				
Top of Pond	401.10	10,040.0	18,958.8	1.8959				

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2017-0701 The Manors of Belfountain

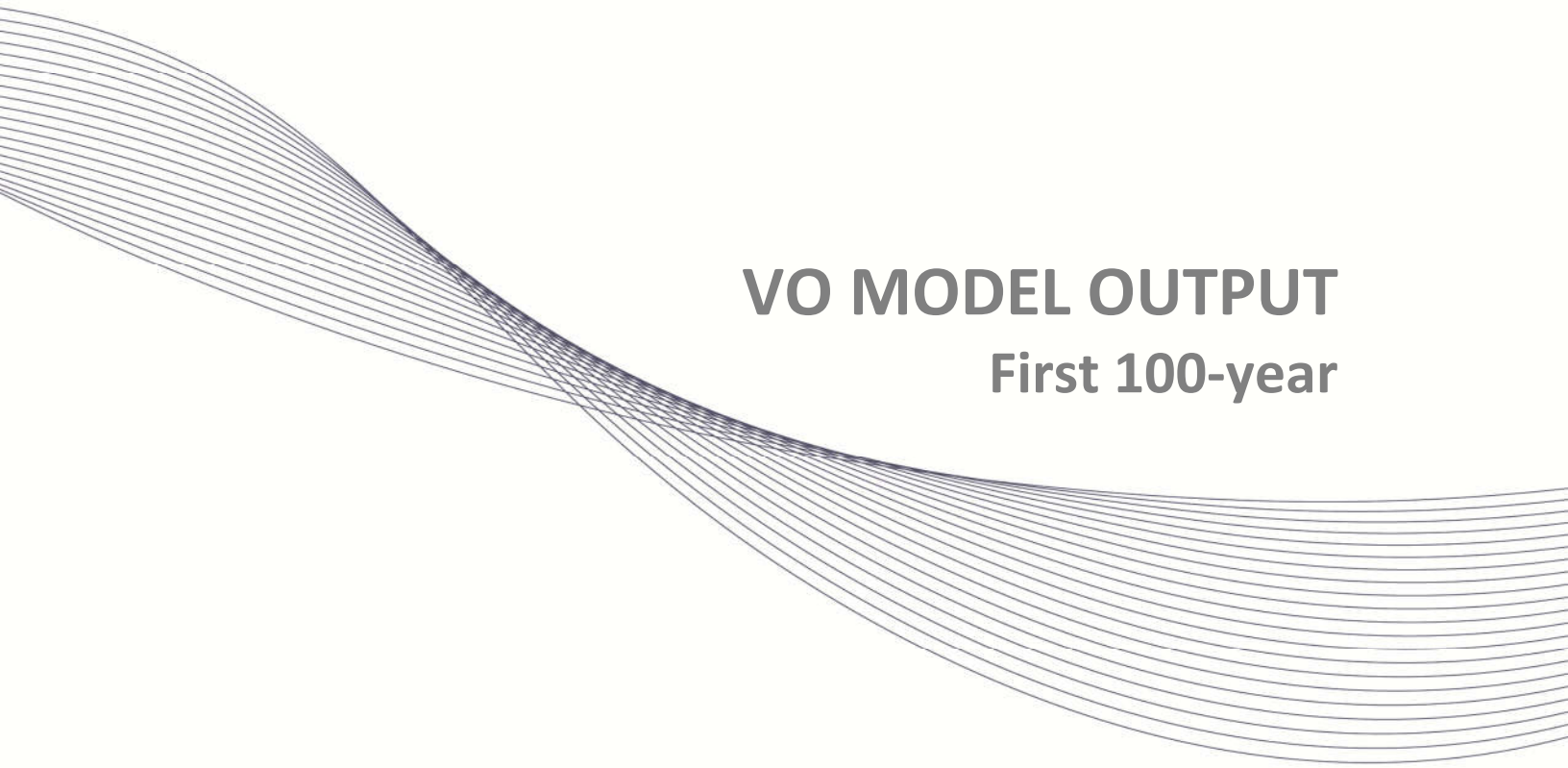
Proposed Condition VO Model Schematic

May, 2020



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VO MODEL OUTPUT

First 100-year

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COLE ENGINEERING

Experience Enhancing Excellence

2017-0701 The Manors of Belfountain

1st 100-Year 12 Hour SCS Design Storm

Proposed Condition Model Output

May, 2020

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       V    V   I    SSSSS  U   U    A    L              (v 5.1.2004)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M M M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


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DATE: 03/11/2020                          TIME: 02:20:57

USER:


COMMENTS: _____________________________________________________


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  ***********************************************
  ** SIMULATION : 100 Year 12 Hour AES (Bloor,  **
  ***********************************************


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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| NASHYD  (  3015)|   Area     (ha)=   3.95   Curve Number    (CN)= 38.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 322.60   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.24

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

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    Unit Hyd Qpeak  (cms)=   0.629

    PEAK FLOW       (cms)=   0.000 (i)
    TIME TO PEAK    (hrs)=   0.000
    RUNOFF VOLUME    (mm)=   0.000
    TOTAL RAINFALL   (mm)=  88.540
    RUNOFF COEFFICIENT   =   0.000

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89

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0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (3012)	Area (ha)= 8.73	Curve Number (CN)= 38.0	
ID= 1 DT= 5.0 min	Ia (mm)= 37.10	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.60		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.556

PEAK FLOW (cms)= 0.042 (i)
TIME TO PEAK (hrs)= 6.250
RUNOFF VOLUME (mm)= 5.680
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.064

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1512)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3012):	8.73	0.042	6.25	5.68
+ ID2= 2 (3015):	3.95	0.000	0.00	0.00
ID = 3 (1512):	12.68	0.042	6.25	3.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0308)	Area (ha)= 20.94	Curve Number (CN)= 82.0	
ID= 1 DT= 5.0 min	Ia (mm)= 116.70	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.67		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89

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2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.194

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0128)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1512):	12.68	0.042	6.25	3.91
	+ ID2= 2 (0308):	20.94	0.000	0.00	0.00
	ID = 3 (0128):	33.62	0.042	6.25	1.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (3013)	Area (ha)= 4.32	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 65.80	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.36		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.458

PEAK FLOW (cms)= 0.006 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 1.552
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.018

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0138)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0128):	33.62	0.042	6.25	1.47
	+ ID2= 2 (3013):	4.32	0.006	7.33	1.55
	ID = 3 (0138):	37.94	0.045	6.42	1.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89

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2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0309)	Area (ha)= 3.50	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 53.50	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.352

PEAK FLOW (cms)= 0.011 (i)
TIME TO PEAK (hrs)= 6.417
RUNOFF VOLUME (mm)= 3.553
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.040

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0098)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0138):	37.94	0.045	6.42	1.48
	+ ID2= 2 (0309):	3.50	0.011	6.42	3.55
	ID = 3 (0098):	41.44	0.056	6.42	1.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (3014)	Area (ha)= 1.67	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 385.30	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.33		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89

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2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.193

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | NASHYD (3011) | ID= 1 DT= 5.0 min | Area (ha)= 7.97 Curve Number (CN)= 45.0 | Ia (mm)= 68.80 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.41

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.742

PEAK FLOW (cms)= 0.008 (i)
TIME TO PEAK (hrs)= 7.417
RUNOFF VOLUME (mm)= 1.180
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.013

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1411) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3011):	7.97	0.008	7.42	1.18
+ ID2= 2 (3014):	1.67	0.000	0.00	0.00
ID = 3 (1411):	9.64	0.008	7.42	0.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0811) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1411):	9.64	0.008	7.42	0.98
+ ID2= 2 (0098):	41.44	0.056	6.42	1.66
ID = 3 (0811):	51.08	0.059	6.42	1.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| NASHYD   (  0306)|   Area     (ha)=   9.67   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 110.50   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

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    Unit Hyd Qpeak  (cms)=   0.754

    PEAK FLOW       (cms)=   0.000 (i)
    TIME TO PEAK    (hrs)=   0.000
    RUNOFF VOLUME    (mm)=   0.000
    TOTAL RAINFALL   (mm)=  88.540
    RUNOFF COEFFICIENT   =   0.000

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------
| ADD HYD  (  0116)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0306):      9.67   0.000     0.00     0.00
     + ID2= 2 (  0811):     51.08   0.059     6.42     1.53
       ==========================================================
       ID = 3 (  0116):     60.75   0.059     6.42     1.29

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
--------------------
|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

```
--------------------
| CALIB            |
| NASHYD   (  3010)|   Area     (ha)=   7.10   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 171.40   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

```
    Unit Hyd Qpeak  (cms)=   0.695
```

TOWN OF CALEDON
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Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

```
     PEAK FLOW       (cms)=   0.000 (i)
     TIME TO PEAK    (hrs)=   0.000
     RUNOFF VOLUME    (mm)=   0.000
     TOTAL RAINFALL   (mm)=  88.540
     RUNOFF COEFFICIENT   =   0.000

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
| ADD HYD  (  0106)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 1 (  0116):    60.75   0.059     6.42     1.29
     + ID2= 2 (  3010):     7.10   0.000     0.00     0.00
       ================================================
       ID = 3 (  0106):    67.85   0.059     6.42     1.15

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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| CALIB            |
| NASHYD   (  0307)|   Area     (ha)=   6.99   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 123.70   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.33

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
               0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
               0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
               0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
               0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
               0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
               0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
               0.667    0.89 | 3.750   15.05 | 6.833    6.20 |  9.92    0.89
               0.750    0.89 | 3.833   15.05 | 6.917    6.20 | 10.00    0.89
               0.833    0.89 | 3.917   15.05 | 7.000    6.20 | 10.08    0.89
               0.917    0.89 | 4.000   15.05 | 7.083    6.20 | 10.17    0.89
               1.000    0.89 | 4.083   15.05 | 7.167    6.20 | 10.25    0.89
               1.083    0.89 | 4.167   15.05 | 7.250    6.20 | 10.33    0.89
               1.167    0.89 | 4.250   15.05 | 7.333    3.54 | 10.42    0.89
               1.250    0.89 | 4.333   40.71 | 7.417    3.54 | 10.50    0.89
               1.333    0.89 | 4.417   40.71 | 7.500    3.54 | 10.58    0.89
               1.417    0.89 | 4.500   40.71 | 7.583    3.54 | 10.67    0.89
               1.500    0.89 | 4.583   40.71 | 7.667    3.54 | 10.75    0.89
               1.583    0.89 | 4.667   40.71 | 7.750    3.54 | 10.83    0.89
               1.667    0.89 | 4.750   40.71 | 7.833    3.54 | 10.92    0.89
               1.750    0.89 | 4.833   40.71 | 7.917    3.54 | 11.00    0.89
               1.833    0.89 | 4.917   40.71 | 8.000    3.54 | 11.08    0.89
               1.917    0.89 | 5.000   40.71 | 8.083    3.54 | 11.17    0.89
               2.000    0.89 | 5.083   40.71 | 8.167    3.54 | 11.25    0.89
               2.083    0.89 | 5.167   40.71 | 8.250    3.54 | 11.33    0.89
               2.167    0.89 | 5.250   40.71 | 8.333    1.77 | 11.42    0.89
               2.250    0.89 | 5.333   11.51 | 8.417    1.77 | 11.50    0.89
               2.333    5.31 | 5.417   11.51 | 8.500    1.77 | 11.58    0.89
               2.417    5.31 | 5.500   11.51 | 8.583    1.77 | 11.67    0.89
               2.500    5.31 | 5.583   11.51 | 8.667    1.77 | 11.75    0.89
               2.583    5.31 | 5.667   11.51 | 8.750    1.77 | 11.83    0.89
               2.667    5.31 | 5.750   11.51 | 8.833    1.77 | 11.92    0.89
               2.750    5.31 | 5.833   11.51 | 8.917    1.77 | 12.00    0.89
               2.833    5.31 | 5.917   11.51 | 9.000    1.77 | 12.08    0.89
               2.917    5.31 | 6.000   11.51 | 9.083    1.77 | 12.17    0.89
               3.000    5.31 | 6.083   11.51 | 9.167    1.77 | 12.25    0.89
               3.083    5.31 | 6.167   11.51 | 9.250    1.77 |

     Unit Hyd Qpeak  (cms)=   0.809

     PEAK FLOW       (cms)=   0.000 (i)
     TIME TO PEAK    (hrs)=   0.000
     RUNOFF VOLUME    (mm)=   0.000
     TOTAL RAINFALL   (mm)=  88.540
     RUNOFF COEFFICIENT   =   0.000

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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-------------------
| CALIB            |
| NASHYD   (  0301)|   Area     (ha)=  11.94   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=  13.40   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.58

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
               0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
               0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
               0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
               0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
               0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
               0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
```

TOWN OF CALEDON
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Jun 23, 2020

0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.786

PEAK FLOW (cms)= 0.185 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 14.642
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.165

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0071)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0301):		11.94	0.185	5.58	14.64
+ ID2= 2 (0307):		6.99	0.000	0.00	0.00
ID = 3 (0071):		18.93	0.185	5.58	9.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0061)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0106):		67.85	0.059	6.42	1.15
+ ID2= 2 (0071):		18.93	0.185	5.58	9.24
ID = 3 (0061):		86.78	0.229	5.67	2.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
NASHYD (0302)	Area (ha)= 6.75 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 179.90 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.48

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.537

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0304)	Area (ha)= 0.25	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 77.30	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.09	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.106

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 8.250
RUNOFF VOLUME (mm)= 0.377
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.004

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0042)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0302):	6.75	0.000	0.00	0.00
	+ ID2= 2 (0304):	0.25	0.000	8.25	0.38
	ID = 3 (0042):	7.00	0.000	8.25	0.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0241)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0042):	7.00	0.000	8.25	0.01
	+ ID2= 2 (0061):	86.78	0.229	5.67	2.91
	ID = 3 (0241):	93.78	0.229	5.67	2.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0305)	Area (ha)= 7.09	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 157.60	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.47	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89

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0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89	
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89	
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89	
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89	
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89	
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89	
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89	
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89	
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89	
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89	
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89	
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89	
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89	
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89	
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89	
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89	
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89	
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89	
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89	
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89	
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89	
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89	
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89	
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89	
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89	
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89	
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89	
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89	
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89	
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89	
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89	
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89	
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89	
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89	
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89	
3.083	5.31	6.167	11.51	9.250	1.77			

Unit Hyd Qpeak (cms)= 0.576

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
NASHYD (0303)	Area (ha)= 2.52 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 336.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.37

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.260

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0053)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0303):	2.52	0.000	0.00	0.00
	+ ID2= 2 (0305):	7.09	0.000	0.00	0.00
	ID = 3 (0053):	9.61	0.000	0.00	0.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0031)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3					

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      ID1= 1 (  0241):    93.78   0.229     5.67     2.70
    + ID2= 2 (  0053):     9.61   0.000     0.00     0.00
      ================================================
      ID = 3 (  0031):   103.39   0.229     5.67     2.45

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    0.00 |  3.50   15.05 |   6.75    6.20 | 10.00    0.89
               0.50    0.89 |  3.75   15.05 |   7.00    6.20 | 10.25    0.89
               0.75    0.89 |  4.00   15.05 |   7.25    6.20 | 10.50    0.89
               1.00    0.89 |  4.25   15.05 |   7.50    3.54 | 10.75    0.89
               1.25    0.89 |  4.50   40.71 |   7.75    3.54 | 11.00    0.89
               1.50    0.89 |  4.75   40.71 |   8.00    3.54 | 11.25    0.89
               1.75    0.89 |  5.00   40.71 |   8.25    3.54 | 11.50    0.89
               2.00    0.89 |  5.25   40.71 |   8.50    1.77 | 11.75    0.89
               2.25    0.89 |  5.50   11.51 |   8.75    1.77 | 12.00    0.89
               2.50    5.31 |  5.75   11.51 |   9.00    1.77 | 12.25    0.89
               2.75    5.31 |  6.00   11.51 |   9.25    1.77 |
               3.00    5.31 |  6.25   11.51 |   9.50    0.89 |
               3.25    5.31 |  6.50    6.20 |   9.75    0.89 |

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| CALIB            |
| NASHYD   (  4017)|   Area     (ha)=   4.23   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=  52.50   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.68

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    0.00 | 3.167    5.31 |  6.250   11.51 |  9.33    0.89
              0.167    0.00 | 3.250    5.31 |  6.333    6.20 |  9.42    0.89
              0.250    0.00 | 3.333   15.05 |  6.417    6.20 |  9.50    0.89
              0.333    0.89 | 3.417   15.05 |  6.500    6.20 |  9.58    0.89
              0.417    0.89 | 3.500   15.05 |  6.583    6.20 |  9.67    0.89
              0.500    0.89 | 3.583   15.05 |  6.667    6.20 |  9.75    0.89
              0.583    0.89 | 3.667   15.05 |  6.750    6.20 |  9.83    0.89
              0.667    0.89 | 3.750   15.05 |  6.833    6.20 |  9.92    0.89
              0.750    0.89 | 3.833   15.05 |  6.917    6.20 | 10.00    0.89
              0.833    0.89 | 3.917   15.05 |  7.000    6.20 | 10.08    0.89
              0.917    0.89 | 4.000   15.05 |  7.083    6.20 | 10.17    0.89
              1.000    0.89 | 4.083   15.05 |  7.167    6.20 | 10.25    0.89
              1.083    0.89 | 4.167   15.05 |  7.250    6.20 | 10.33    0.89
              1.167    0.89 | 4.250   15.05 |  7.333    3.54 | 10.42    0.89
              1.250    0.89 | 4.333   40.71 |  7.417    3.54 | 10.50    0.89
              1.333    0.89 | 4.417   40.71 |  7.500    3.54 | 10.58    0.89
              1.417    0.89 | 4.500   40.71 |  7.583    3.54 | 10.67    0.89
              1.500    0.89 | 4.583   40.71 |  7.667    3.54 | 10.75    0.89
              1.583    0.89 | 4.667   40.71 |  7.750    3.54 | 10.83    0.89
              1.667    0.89 | 4.750   40.71 |  7.833    3.54 | 10.92    0.89
              1.750    0.89 | 4.833   40.71 |  7.917    3.54 | 11.00    0.89
              1.833    0.89 | 4.917   40.71 |  8.000    3.54 | 11.08    0.89
              1.917    0.89 | 5.000   40.71 |  8.083    3.54 | 11.17    0.89
              2.000    0.89 | 5.083   40.71 |  8.167    3.54 | 11.25    0.89
              2.083    0.89 | 5.167   40.71 |  8.250    3.54 | 11.33    0.89
              2.167    0.89 | 5.250   40.71 |  8.333    1.77 | 11.42    0.89
              2.250    0.89 | 5.333   11.51 |  8.417    1.77 | 11.50    0.89
              2.333    5.31 | 5.417   11.51 |  8.500    1.77 | 11.58    0.89
              2.417    5.31 | 5.500   11.51 |  8.583    1.77 | 11.67    0.89
              2.500    5.31 | 5.583   11.51 |  8.667    1.77 | 11.75    0.89
              2.583    5.31 | 5.667   11.51 |  8.750    1.77 | 11.83    0.89
              2.667    5.31 | 5.750   11.51 |  8.833    1.77 | 11.92    0.89
              2.750    5.31 | 5.833   11.51 |  8.917    1.77 | 12.00    0.89
              2.833    5.31 | 5.917   11.51 |  9.000    1.77 | 12.08    0.89
              2.917    5.31 | 6.000   11.51 |  9.083    1.77 | 12.17    0.89
              3.000    5.31 | 6.083   11.51 |  9.167    1.77 | 12.25    0.89
              3.083    5.31 | 6.167   11.51 |  9.250    1.77 |

    Unit Hyd Qpeak  (cms)=   0.238

    PEAK FLOW       (cms)=   0.012 (i)
    TIME TO PEAK    (hrs)=   6.833
    RUNOFF VOLUME    (mm)=   3.748
    TOTAL RAINFALL   (mm)=  88.540
    RUNOFF COEFFICIENT   =   0.042

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    0.00 |  3.50   15.05 |   6.75    6.20 | 10.00    0.89
               0.50    0.89 |  3.75   15.05 |   7.00    6.20 | 10.25    0.89
               0.75    0.89 |  4.00   15.05 |   7.25    6.20 | 10.50    0.89
               1.00    0.89 |  4.25   15.05 |   7.50    3.54 | 10.75    0.89
               1.25    0.89 |  4.50   40.71 |   7.75    3.54 | 11.00    0.89
               1.50    0.89 |  4.75   40.71 |   8.00    3.54 | 11.25    0.89
               1.75    0.89 |  5.00   40.71 |   8.25    3.54 | 11.50    0.89
               2.00    0.89 |  5.25   40.71 |   8.50    1.77 | 11.75    0.89
               2.25    0.89 |  5.50   11.51 |   8.75    1.77 | 12.00    0.89
               2.50    5.31 |  5.75   11.51 |   9.00    1.77 | 12.25    0.89
               2.75    5.31 |  6.00   11.51 |   9.25    1.77 |
               3.00    5.31 |  6.25   11.51 |   9.50    0.89 |
               3.25    5.31 |  6.50    6.20 |   9.75    0.89 |

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| CALIB            |
| NASHYD   (  4016)|   Area     (ha)=  35.55   Curve Number    (CN)= 30.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=  45.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.74

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    0.00 | 3.167    5.31 |  6.250   11.51 |  9.33    0.89
              0.167    0.00 | 3.250    5.31 |  6.333    6.20 |  9.42    0.89
              0.250    0.00 | 3.333   15.05 |  6.417    6.20 |  9.50    0.89
              0.333    0.89 | 3.417   15.05 |  6.500    6.20 |  9.58    0.89
              0.417    0.89 | 3.500   15.05 |  6.583    6.20 |  9.67    0.89
              0.500    0.89 | 3.583   15.05 |  6.667    6.20 |  9.75    0.89
              0.583    0.89 | 3.667   15.05 |  6.750    6.20 |  9.83    0.89
              0.667    0.89 | 3.750   15.05 |  6.833    6.20 |  9.92    0.89
              0.750    0.89 | 3.833   15.05 |  6.917    6.20 | 10.00    0.89
              0.833    0.89 | 3.917   15.05 |  7.000    6.20 | 10.08    0.89
              0.917    0.89 | 4.000   15.05 |  7.083    6.20 | 10.17    0.89
              1.000    0.89 | 4.083   15.05 |  7.167    6.20 | 10.25    0.89
              1.083    0.89 | 4.167   15.05 |  7.250    6.20 | 10.33    0.89
              1.167    0.89 | 4.250   15.05 |  7.333    3.54 | 10.42    0.89
              1.250    0.89 | 4.333   40.71 |  7.417    3.54 | 10.50    0.89
              1.333    0.89 | 4.417   40.71 |  7.500    3.54 | 10.58    0.89
              1.417    0.89 | 4.500   40.71 |  7.583    3.54 | 10.67    0.89
              1.500    0.89 | 4.583   40.71 |  7.667    3.54 | 10.75    0.89
              1.583    0.89 | 4.667   40.71 |  7.750    3.54 | 10.83    0.89
              1.667    0.89 | 4.750   40.71 |  7.833    3.54 | 10.92    0.89
              1.750    0.89 | 4.833   40.71 |  7.917    3.54 | 11.00    0.89
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1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.835

PEAK FLOW (cms)= 0.079 (i)
TIME TO PEAK (hrs)= 6.667
RUNOFF VOLUME (mm)= 2.980
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.034

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1716)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (4016):	35.55	0.079	6.67	2.98
	+ ID2= 2 (4017):	4.23	0.012	6.83	3.75
	ID = 3 (1716):	39.78	0.090	6.67	3.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4015)	Area (ha)= 3.11	Curve Number (CN)= 30.0	
ID= 1 DT= 5.0 min	Ia (mm)= 49.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.35		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.339

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 6.333
RUNOFF VOLUME (mm)= 2.472
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.028

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1516)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1716):	39.78	0.090	6.67	3.06
	+ ID2= 2 (4015):	3.11	0.007	6.33	2.47
	ID = 3 (1516):	42.89	0.096	6.67	3.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89

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1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4014)	Area	(ha)= 1.67	Curve Number (CN)= 62.0
ID= 1 DT= 5.0 min	Ia	(mm)= 103.30	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.23		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.277

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1416)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1516):	42.89	0.096	6.67	3.02
+ ID2= 2 (4014):	1.67	0.000	0.00	0.00
ID = 3 (1416):	44.56	0.096	6.67	2.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4013)	Area	(ha)= 19.43	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)= 22.50	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.90		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89

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2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.825

PEAK FLOW (cms)= 0.180 (i)
TIME TO PEAK (hrs)= 6.333
RUNOFF VOLUME (mm)= 11.584
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.131

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1613)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
1 + 2 = 3	ID1= 1 (1416):	44.56	0.096	6.67	2.91
	+ ID2= 2 (4013):	19.43	0.180	6.33	11.58
	ID = 3 (1613):	63.99	0.273	6.42	5.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4010)	Area (ha)= 4.17	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 4.60	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.42	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.379

PEAK FLOW (cms)= 0.094 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 17.864
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1310)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
1 + 2 = 3	ID1= 1 (1613):	63.99	0.273	6.42	5.54
	+ ID2= 2 (4010):	4.17	0.094	5.42	17.86
	ID = 3 (1310):	68.16	0.320	6.33	6.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89

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2.75	5.31	6.00	11.51	9.25	1.77
3.00	5.31	6.25	11.51	9.50	0.89
3.25	5.31	6.50	6.20	9.75	0.89

CALIB			
NASHYD (4011)	Area (ha)=	5.81	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)=	241.30	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.37	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.600

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0408)	Area (ha)=	18.85	Curve Number (CN)= 62.0
ID= 1 DT= 5.0 min	Ia (mm)=	93.40	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.50	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.440

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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ADD HYD (0118)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (4011):		5.81	0.000	0.00	0.00
+ ID2= 2 (0408):		18.85	0.000	0.00	0.00
ID = 3 (0118):		24.66	0.000	0.00	0.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB				
NASHYD (0406)| ID= 1 DT= 5.0 min	Area (ha)= 5.46	Curve Number (CN)= 62.0		
	Ia (mm)= 133.70	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.42			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.497

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0068)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0118):		24.66	0.000	0.00	0.00
+ ID2= 2 (0406):		5.46	0.000	0.00	0.00
ID = 3 (0068):		30.12	0.000	0.00	0.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1310):		68.16	0.320	6.33	6.29
+ ID2= 2 (0068):		30.12	0.000	0.00	0.00
ID = 3 (0810):		98.28	0.320	6.33	4.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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CALIB	
NASHYD (0407)	Area (ha)= 1.40 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 1.30 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.26

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.206

PEAK FLOW (cms)= 0.039 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 19.124
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.216

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0107)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0407):	1.40	0.039	5.25	19.12
	+ ID2= 2 (0810):	98.28	0.320	6.33	4.37
	ID = 3 (0107):	99.68	0.335	6.33	4.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD

	ata\Local\Temp\
	cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
NASHYD (4012)	Area (ha)= 4.62 Curve Number (CN)= 38.0
ID= 1 DT= 5.0 min	Ia (mm)= 201.30 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.34

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.519

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000

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RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
NASHYD (0409)	Area (ha)= 6.58 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 173.90 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.38

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.661

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0129)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (4012):	4.62	0.000	0.00	0.00
+ ID2= 2 (0409):	6.58	0.000	0.00	0.00
ID = 3 (0129):	11.20	0.000	0.00	0.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
NASHYD (0403)	Area (ha)= 8.35 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 72.90 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.24

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89

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0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.329

PEAK FLOW (cms)= 0.005 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 0.749
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.008

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0093)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0129):		11.20	0.000	0.00	0.00
+ ID2= 2 (0403):		8.35	0.005	7.33	0.75
ID = 3 (0093):		19.55	0.005	7.33	0.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0073)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0107):		99.68	0.335	6.33	4.57
+ ID2= 2 (0093):		19.55	0.005	7.33	0.32
ID = 3 (0073):		119.23	0.336	6.33	3.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0405)	Area (ha)= 1.24	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 119.40	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.237

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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ADD HYD (0573)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0405):		1.24	0.000	0.00	0.00
+ ID2= 2 (0073):		119.23	0.336	6.33	3.88
ID = 3 (0573):		120.47	0.336	6.33	3.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0404)	Area	(ha)=	1.91	Curve Number	(CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)=	99.90	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.25		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.292

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0043)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0404):		1.91	0.000	0.00	0.00
+ ID2= 2 (0573):		120.47	0.336	6.33	3.84
ID = 3 (0043):		122.38	0.336	6.33	3.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0401)	Area	(ha)=	9.13	Curve Number	(CN)= 62.0
ID= 1 DT= 5.0 min	Ia	(mm)=	1.90	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.62		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89

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0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.562

PEAK FLOW (cms)= 0.301 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 30.977
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.350

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0341)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0401):	9.13	0.301	5.58	30.98
	+ ID2= 2 (0043):	122.38	0.336	6.33	3.78
	ID = 3 (0341):	131.51	0.607	5.67	5.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | NASHYD (0402) | ID= 1 DT= 5.0 min
Area (ha)= 2.67 Curve Number (CN)= 45.0
Ia (mm)= 176.80 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.329

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0021)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0341):	131.51	0.607	5.67	5.66
	+ ID2= 2 (0402):	2.67	0.000	0.00	0.00

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ID = 3 (0021):	134.18	0.607	5.67	5.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (3004)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0021):	134.18	0.607	5.67	5.55
+ ID2= 2 (0031):	103.39	0.229	5.67	2.45
ID = 3 (3004):	237.57	0.836	5.67	4.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0102)	Area (ha)=	6.53	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)=	93.10	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.49	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.509

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0101)	Area (ha)=	9.26	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)=	143.90	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.34	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89

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0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.040

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0012)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0101):		9.26	0.000	0.00	0.00
+ ID2= 2 (0102):		6.53	0.000	0.00	0.00
ID = 3 (0012):		15.79	0.000	0.00	0.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0999)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0012):		15.79	0.000	0.00	0.00
+ ID2= 2 (3004):		237.57	0.836	5.67	4.20
ID = 3 (0999):		253.36	0.836	5.67	3.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0140) | Area (ha)= 4.20
ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.10	2.10
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	167.33	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	4.98 (ii)	23.55 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.22	0.05	
			TOTALS

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PEAK FLOW	(cms)=	0.24	0.04	0.275 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	51.32
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0141) | Area (ha)= 3.55
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.64	2.91
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.84	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.74 (ii)	22.36 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.22	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.05	0.06	0.108 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0142) | Area (ha)= 0.42
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.34
Dep. Storage	(mm)=	1.00	1.50

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Average Slope	(%)=	1.00	2.00
Length	(m)=	52.92	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
	over (min)	5.00	25.00	
Storage Coeff.	(min)=	2.50 (ii)	21.06 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.29	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.015 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.11
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29

Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0143)	Area (ha)= 0.28
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.05	0.23
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	43.20	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

TOWN OF CALEDON
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Jun 23, 2020

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Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.21 (ii)	20.77 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.00	0.010 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.10
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0144) | Area (ha)= 0.38
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.07	0.31
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.33	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.42 (ii)	20.99 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.013 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.11
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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PLANNING
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Jun 23, 2020

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| CALIB            |
| STANDHYD (  0145)|   Area     (ha)=   0.17
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.03         0.14
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     33.67        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

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     Max.Eff.Inten.(mm/hr)=     40.71        10.16
               over (min)        5.00        20.00
     Storage Coeff.  (min)=     1.90 (ii)   19.52 (ii)
     Unit Hyd. Tpeak (min)=     5.00        20.00
     Unit Hyd. peak  (cms)=     0.32         0.06
                                                    *TOTALS*
     PEAK FLOW       (cms)=     0.00         0.00        0.005 (iii)
     TIME TO PEAK    (hrs)=     5.08         5.33         5.25
     RUNOFF VOLUME    (mm)=    87.54        16.04        24.55
     TOTAL RAINFALL   (mm)=    88.54        88.54        88.54
     RUNOFF COEFFICIENT   =     0.99         0.18         0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0     Ia = Dep. Storage   (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
      (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| STANDHYD (  0146)|   Area     (ha)=   0.74
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.13         0.61
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     70.24        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89

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2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

			TOTALS
Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.96 (ii)	20.58 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0177)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0145):	0.17	0.005	5.25	24.55
+ ID2= 2 (0146):	0.74	0.023	5.25	24.61
ID = 3 (0177):	0.91	0.028	5.25	24.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0167)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0144):	0.38	0.013	5.25	28.11
+ ID2= 2 (0177):	0.91	0.028	5.25	24.60
ID = 3 (0167):	1.29	0.042	5.25	25.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM
Ptotal= 88.54 mm

Filename: C:\Users\j1ysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0147) | Area (ha)= 0.53
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.10	0.43
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	59.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

			TOTALS
Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.68 (ii)	20.30 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.29	0.05	
PEAK FLOW (cms)=	0.01	0.01	0.016 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.60
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%

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YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB STANDHYD (0149)	Area (ha)= 0.46
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.38
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	55.38	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
	over (min)	5.00	25.00	
Storage Coeff.	(min)=	2.57 (ii)	21.13 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.29	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.016 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.12
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0174)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0147):	0.53	0.016	5.25	24.60
	+ ID2= 2 (0149):	0.46	0.016	5.25	28.12
	ID = 3 (0174):	0.99	0.033	5.25	26.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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CALIB	
STANDHYD (0161)	Area (ha)= 0.20
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.16
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	36.51	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
	over (min)	5.00	25.00	
Storage Coeff.	(min)=	2.00 (ii)	20.56 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.31	0.05	
PEAK FLOW	(cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.08
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0168)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0161):	0.20	0.007	5.25	28.08
	+ ID2= 2 (0174):	0.99	0.033	5.25	26.24
	ID = 3 (0168):	1.19	0.040	5.25	26.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0148)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89

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1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.76 (ii)	20.32 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.32	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0160) | Area (ha)= 0.21
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.03 (ii)	20.59 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.31	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.08
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0173)
1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm)

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      ID1= 1 (  0148):     0.13   0.005     5.25    28.03
    + ID2= 2 (  0160):     0.21   0.007     5.25    28.08
      ==================================================
      ID = 3 (  0173):     0.34   0.012     5.25    28.06

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0150)	Area (ha)= 2.33
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.42	1.91
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	124.63	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.18 (ii)	21.80 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.24	0.05	
PEAK FLOW	(cms)=	0.03	0.04	0.071 (iii)
TIME TO PEAK	(hrs)=	5.17	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0151)	Area (ha)= 0.35
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.06	0.29
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	48.30	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.36 (ii)	20.93 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.012 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.11
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0175) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0150):	2.33	0.071	5.25	24.62
+ ID2= 2 (0151):	0.35	0.012	5.25	28.11
ID = 3 (0175):	2.68	0.084	5.25	25.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\j1ysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
STANDHYD (0155) | ID= 1 DT= 5.0 min	Area (ha)= 0.11	Total Imp(%)= 18.00	Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.09
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	27.08	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89

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2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.67 (ii)	20.23 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.32	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.004 (iii)
TIME TO PEAK (hrs)=	4.58	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0169)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0155):	0.11	0.004	5.25	28.03
	+ ID2= 2 (0175):	2.68	0.084	5.25	25.07
	ID = 3 (0169):	2.79	0.088	5.25	25.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB		
STANDHYD (0153)	Area (ha)=	1.66
ID= 1 DT= 5.0 min	Total Imp(%)=	18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.30	1.36
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	105.20	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	3.77 (ii)	21.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.25	0.05	
			TOTALS
PEAK FLOW (cms)=	0.02	0.03	0.051 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.62
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TOWN OF CALEDON
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0154) | Area (ha)= 0.59
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.11	0.48
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	62.72	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		2.77 (ii)	20.39 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.28	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.018 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.60
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0170)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0153):		1.66	0.051	5.25	24.62
+ ID2= 2 (0154):		0.59	0.018	5.25	24.60
ID = 3 (0170):		2.25	0.069	5.25	24.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM
Ptotal= 88.54 mm
Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0156) | Area (ha)= 1.16
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.21	0.95
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	87.94	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)	3.39 (ii)	21.01 (ii)
Unit Hyd. Tpeak	(min)	5.00	25.00
Unit Hyd. peak	(cms)	0.26	0.05

				TOTALS
PEAK FLOW	(cms)	0.02	0.02	0.036 (iii)
TIME TO PEAK	(hrs)	5.08	5.42	5.25
RUNOFF VOLUME	(mm)	87.54	16.04	24.61
TOTAL RAINFALL	(mm)	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0159)	Area (ha)= 0.12
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.10
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	28.28	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)	40.71	8.92
over	(min)	5.00	25.00
Storage Coeff.	(min)	1.72 (ii)	20.28 (ii)
Unit Hyd. Tpeak	(min)	5.00	25.00
Unit Hyd. peak	(cms)	0.32	0.05

				TOTALS
PEAK FLOW	(cms)	0.00	0.00	0.004 (iii)
TIME TO PEAK	(hrs)	4.58	5.42	5.25

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

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RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0171)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0156):	1.16	0.036	5.25	24.61
+ ID2= 2 (0159):	0.12	0.004	5.25	28.03
ID = 3 (0171):	1.28	0.040	5.25	24.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0157)
ID= 1 DT= 5.0 min | Area (ha)= 0.24 | Total Imp(%)= 18.00 | Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.20
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	40.00	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=	40.71	8.92		
over (min)	5.00	25.00		
Storage Coeff. (min)=	2.11 (ii)	20.67 (ii)		
Unit Hyd. Tpeak (min)=	5.00	25.00		
Unit Hyd. peak (cms)=	0.31	0.05		
PEAK FLOW (cms)=	0.00	0.00		0.009 (iii)
TIME TO PEAK (hrs)=	5.08	5.42		5.25
RUNOFF VOLUME (mm)=	87.54	15.11		28.10
TOTAL RAINFALL (mm)=	88.54	88.54		88.54
RUNOFF COEFFICIENT =	0.99	0.17		0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		

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3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0158)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff. (min)=		1.76 (ii)	20.32 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.32	0.05	
PEAK FLOW	(cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.03
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0172)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0157):	0.24	0.009	5.25	28.10
	+ ID2= 2 (0158):	0.13	0.005	5.25	28.03
	ID = 3 (0172):	0.37	0.013	5.25	28.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0141):	3.55	0.108	5.25	24.62
	+ ID2= 2 (0142):	0.42	0.015	5.25	28.11
	ID = 3 (0136):	3.97	0.123	5.25	24.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0136):	3.97	0.123	5.25	24.99
	+ ID2= 2 (0143):	0.28	0.010	5.25	28.10
	ID = 1 (0136):	4.25	0.133	5.25	25.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0136):	4.25	0.133	5.25	25.19
	+ ID2= 2 (0167):	1.29	0.042	5.25	25.63
	ID = 3 (0136):	5.54	0.175	5.25	25.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0136):	5.54	0.175	5.25	25.30
	+ ID2= 2 (0168):	1.19	0.040	5.25	26.55
	ID = 1 (0136):	6.73	0.214	5.25	25.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

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1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	6.73	0.214	5.25	25.52
+ ID2= 2 (0169):	2.79	0.088	5.25	25.19
ID = 3 (0136):	9.52	0.302	5.25	25.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	9.52	0.302	5.25	25.42
+ ID2= 2 (0170):	2.25	0.069	5.25	24.61
ID = 1 (0136):	11.77	0.371	5.25	25.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	11.77	0.371	5.25	25.27
+ ID2= 2 (0171):	1.28	0.040	5.25	24.93
ID = 3 (0136):	13.05	0.411	5.25	25.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	13.05	0.411	5.25	25.23
+ ID2= 2 (0172):	0.37	0.013	5.25	28.07
ID = 1 (0136):	13.42	0.424	5.25	25.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.42	0.424	5.25	25.31
+ ID2= 2 (0173):	0.34	0.012	5.25	28.06
ID = 3 (0136):	13.76	0.436	5.25	25.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0178)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.76	0.436	5.25	25.38
+ ID2= 2 (0140):	4.20	0.275	5.25	51.32
ID = 3 (0178):	17.96	0.711	5.25	31.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0139)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0178):	17.96	0.711	5.25	31.45
+ ID2= 2 (0999):	253.36	0.836	5.67	3.94
ID = 3 (0139):	271.32	1.342	5.25	5.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

BLOCK 81 Pond (Large)

RESERVOIR(9999)
IN= 2---> OUT= 1
DT= 5.0 min

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.3380	0.8400
0.3370	0.2558	1.0000	0.8410

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0139)	271.320	1.342	5.25	5.76
OUTFLOW: ID= 1 (9999)	271.320	0.338	8.58	5.76

PEAK FLOW REDUCTION [Qout/Qin](%)= 25.18
TIME SHIFT OF PEAK FLOW (min)=200.00
MAXIMUM STORAGE USED (ha.m.)= 0.8305

READ STORM
Ptotal= 88.54 mm

Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0096)
ID= 1 DT= 5.0 min

Area (ha)= 0.62
Total Imp(%)= 62.00 Dir. Conn.(%)= 62.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.38	0.24
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	64.29	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89

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0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.81 (ii)	21.37 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.04	0.00	0.048 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	60.00
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0110) | Area (ha)= 0.73
ID= 1 DT= 5.0 min | Total Imp(%)= 62.00 Dir. Conn.(%)= 62.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.45	0.28
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	69.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.95 (ii)	21.51 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.05	0.01	0.056 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	60.00
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0111)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0110):		0.73	0.056	5.25	60.00
+ ID2= 2 (0096):		0.62	0.048	5.25	60.00
ID = 3 (0111):		1.35	0.104	5.25	60.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0112)	Area (ha)= 2.00
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.36	1.64
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	115.47	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		3.99 (ii)	21.61 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.24	0.05	
PEAK FLOW	(cms)=	0.03	0.04	0.061 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0114)	Area (ha)= 0.21

TOWN OF CALEDON
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RECEIVED

Jun 23, 2020

COLE ENGINEERING

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|ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff. (min)=		2.03 (ii)	20.59 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.31	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.08
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0192)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0112):	2.00	0.061	5.25	24.62
	+ ID2= 2 (0114):	0.21	0.007	5.25	28.08
	ID = 3 (0192):	2.21	0.069	5.25	24.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
STANDHYD (0115)	Area (ha)= 0.91		
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00	Dir. Conn.(%)= 12.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.16	0.75
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	77.89	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89

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1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	3.15 (ii)	20.77 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.27	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.02	0.028 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB STANDHYD (0117)	Area (ha)= 2.08
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.37	1.71
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	117.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	4.04 (ii)	21.66 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.24	0.05	
			TOTALS
PEAK FLOW (cms)=	0.03	0.04	0.064 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.62
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0191)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0115):		0.91	0.028	5.25	24.61
+ ID2= 2 (0117):		2.08	0.064	5.25	24.62

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      ================================================
      ID = 3 (  0191):     2.99   0.092     5.25    24.62

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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| CALIB            |
| STANDHYD (  0119)|   Area     (ha)=   1.27
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.23         1.04
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      92.01        40.00
     Mannings n             =    0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
              0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
              0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
              0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
              0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
              0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
              0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
              0.667    0.89 | 3.750   15.05 | 6.833    6.20 |  9.92    0.89
              0.750    0.89 | 3.833   15.05 | 6.917    6.20 | 10.00    0.89
              0.833    0.89 | 3.917   15.05 | 7.000    6.20 | 10.08    0.89
              0.917    0.89 | 4.000   15.05 | 7.083    6.20 | 10.17    0.89
              1.000    0.89 | 4.083   15.05 | 7.167    6.20 | 10.25    0.89
              1.083    0.89 | 4.167   15.05 | 7.250    6.20 | 10.33    0.89
              1.167    0.89 | 4.250   15.05 | 7.333    3.54 | 10.42    0.89
              1.250    0.89 | 4.333   40.71 | 7.417    3.54 | 10.50    0.89
              1.333    0.89 | 4.417   40.71 | 7.500    3.54 | 10.58    0.89
              1.417    0.89 | 4.500   40.71 | 7.583    3.54 | 10.67    0.89
              1.500    0.89 | 4.583   40.71 | 7.667    3.54 | 10.75    0.89
              1.583    0.89 | 4.667   40.71 | 7.750    3.54 | 10.83    0.89
              1.667    0.89 | 4.750   40.71 | 7.833    3.54 | 10.92    0.89
              1.750    0.89 | 4.833   40.71 | 7.917    3.54 | 11.00    0.89
              1.833    0.89 | 4.917   40.71 | 8.000    3.54 | 11.08    0.89
              1.917    0.89 | 5.000   40.71 | 8.083    3.54 | 11.17    0.89
              2.000    0.89 | 5.083   40.71 | 8.167    3.54 | 11.25    0.89
              2.083    0.89 | 5.167   40.71 | 8.250    3.54 | 11.33    0.89
              2.167    0.89 | 5.250   40.71 | 8.333    1.77 | 11.42    0.89
              2.250    0.89 | 5.333   11.51 | 8.417    1.77 | 11.50    0.89
              2.333    5.31 | 5.417   11.51 | 8.500    1.77 | 11.58    0.89
              2.417    5.31 | 5.500   11.51 | 8.583    1.77 | 11.67    0.89
              2.500    5.31 | 5.583   11.51 | 8.667    1.77 | 11.75    0.89
              2.583    5.31 | 5.667   11.51 | 8.750    1.77 | 11.83    0.89
              2.667    5.31 | 5.750   11.51 | 8.833    1.77 | 11.92    0.89
              2.750    5.31 | 5.833   11.51 | 8.917    1.77 | 12.00    0.89
              2.833    5.31 | 5.917   11.51 | 9.000    1.77 | 12.08    0.89
              2.917    5.31 | 6.000   11.51 | 9.083    1.77 | 12.17    0.89
              3.000    5.31 | 6.083   11.51 | 9.167    1.77 | 12.25    0.89
              3.083    5.31 | 6.167   11.51 | 9.250    1.77 |

     Max.Eff.Inten.(mm/hr)=      40.71        10.16
               over (min)         5.00        25.00
     Storage Coeff.  (min)=       3.48 (ii)   21.10 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.26         0.05
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.02       0.039 (iii)
     TIME TO PEAK    (hrs)=       5.08         5.42        5.25
     RUNOFF VOLUME    (mm)=      87.54        16.04       24.61
     TOTAL RAINFALL   (mm)=      88.54        88.54       88.54
     RUNOFF COEFFICIENT   =       0.99         0.18        0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0     Ia = Dep. Storage   (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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| CALIB            |
| STANDHYD (  0124)|   Area     (ha)=   0.67
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.12         0.55
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      66.83        40.00
     Mannings n             =    0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.87 (ii)	21.44 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.024 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.13
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0188)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0119):	1.27	0.039	5.25	24.61
+ ID2= 2 (0124):	0.67	0.024	5.25	28.13
ID = 3 (0188):	1.94	0.063	5.25	25.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0120)	Area (ha)= 0.23
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.19
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	39.16	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89

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2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.09 (ii)	20.65 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.31	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.008 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.10
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0123) | Area (ha)= 0.65
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.12	0.53
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	65.83	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.85 (ii)	21.41 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.13
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0162)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0120):		0.23	0.008	5.25	28.10
+ ID2= 2 (0123):		0.65	0.023	5.25	28.13
ID = 3 (0162):		0.88	0.031	5.25	28.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0121)	Area (ha)= 2.87
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.52	2.35
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	138.32	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		4.45 (ii)	22.07 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.23	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.04	0.05	0.088 (iii)
TIME TO PEAK	(hrs)=	5.17	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD
	ata\Local\Temp\
	cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0176)	Area (ha)= 0.09
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.07
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	24.49	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89

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1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.57 (ii)	20.13 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.003 (iii)
TIME TO PEAK (hrs)=	4.58	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	27.32
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.31

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0190)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0121):	2.87	0.088	5.25	24.62
+ ID2= 2 (0176):	0.09	0.003	5.25	27.32
ID = 3 (0190):	2.96	0.091	5.25	24.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Ptotal= 88.54 mm

Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0122) | Area (ha)= 0.76
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.14	0.62
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	71.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.98 (ii)	20.60 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54

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RUNOFF COEFFICIENT = 0.99 0.18 0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

| CALIB | STANDHYD (0125) | ID= 1 DT= 5.0 min | Area (ha)= 0.43 | Total Imp(%)= 18.00 | Dir. Conn.(%)= 18.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.08	0.35
Dep. Storage (mm)=	1.00	1.50
Average Slope (%)=	1.00	2.00
Length (m)=	53.54	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

			TOTALS
Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.52 (ii)	21.08 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.29	0.05	
PEAK FLOW (cms)=	0.01	0.01	0.015 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.11
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0189)	1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
		ID1= 1 (0122):	0.76	0.023	5.25	24.61
		+ ID2= 2 (0125):	0.43	0.015	5.25	28.11
		ID = 3 (0189):	1.19	0.039	5.25	25.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)	1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
		ID1= 1 (0162):	0.88	0.031	5.25	28.12
		+ ID2= 2 (0188):	1.94	0.063	5.25	25.83
		ID = 3 (0113):	2.82	0.094	5.25	26.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)	3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
		ID1= 3 (0113):	2.82	0.094	5.25	26.54
		+ ID2= 2 (0189):	1.19	0.039	5.25	25.87
		ID = 1 (0113):	4.01	0.133	5.25	26.34

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0113):	4.01	0.133	5.25	26.34
+	ID2= 2 (0190):	2.96	0.091	5.25	24.70
	ID = 3 (0113):	6.97	0.223	5.25	25.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0113):	6.97	0.223	5.25	25.65
+	ID2= 2 (0191):	2.99	0.092	5.25	24.62
	ID = 1 (0113):	9.96	0.315	5.25	25.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0113):	9.96	0.315	5.25	25.34
+	ID2= 2 (0192):	2.21	0.069	5.25	24.95
	ID = 3 (0113):	12.17	0.384	5.25	25.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0130) | Area (ha)= 3.07
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.55	2.52
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	143.06	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.54 (ii)	22.16 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.23	0.05	
PEAK FLOW	(cms)=	0.04	0.05	0.094 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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TOWN OF CALEDON
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Jun 23, 2020

COLE ENGINEERING

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| Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

| CALIB
| STANDHYD (0131)| Area (ha)= 1.00
|ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.50	0.50
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	81.65	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff.	(min)=	3.24 (ii)	21.80 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.27	0.05	
PEAK FLOW	(cms)=	0.06	0.01	0.066 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	51.31
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
| Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

| CALIB
| STANDHYD (0133)| Area (ha)= 1.24
|ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.22	1.02
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	90.92	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89

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1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)=	3.46 (ii)	21.08 (ii)
Unit Hyd. Tpeak	(min)=	5.00	25.00
Unit Hyd. peak	(cms)=	0.26	0.05

				TOTALS
PEAK FLOW	(cms)=	0.02	0.02	0.038 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.61
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\cbeb971d-e61d-420f-87b5-dc3388852b6c\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB

STANDHYD (0134) | Area (ha)= 3.36
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.60	2.76
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	149.67	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)=	4.66 (ii)	22.28 (ii)
Unit Hyd. Tpeak	(min)=	5.00	25.00
Unit Hyd. peak	(cms)=	0.22	0.05

				TOTALS
PEAK FLOW	(cms)=	0.05	0.06	0.102 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

ADD HYD (0135)			AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3			(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0133):			1.24	0.038	5.25	24.61
+ ID2= 2 (0134):			3.36	0.102	5.25	24.62
ID = 3 (0135):			4.60	0.141	5.25	24.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)			AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3			(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0111):			1.35	0.104	5.25	60.00
+ ID2= 2 (0113):			12.17	0.384	5.25	25.27
ID = 3 (0099):			13.52	0.488	5.25	28.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)			AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1			(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0099):			13.52	0.488	5.25	28.73
+ ID2= 2 (0130):			3.07	0.094	5.25	24.62
ID = 1 (0099):			16.59	0.581	5.25	27.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)			AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3			(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0099):			16.59	0.581	5.25	27.97
+ ID2= 2 (0131):			1.00	0.066	5.25	51.31
ID = 3 (0099):			17.59	0.647	5.25	29.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)			AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1			(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0099):			17.59	0.647	5.25	29.30
+ ID2= 2 (0135):			4.60	0.141	5.25	24.62
ID = 1 (0099):			22.19	0.788	5.25	28.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0094)			OUTFLOW	STORAGE		OUTFLOW	STORAGE
IN= 2---> OUT= 1			(cms)	(ha.m.)		(cms)	(ha.m.)
DT= 5.0 min			0.0000	0.0000		0.0570	0.5000
			0.0560	0.0452		0.5000	0.5010

BLOCK 82 Pond (Small)

		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0099)		22.190	0.788	5.25	28.33
OUTFLOW: ID= 1 (0094)		22.190	0.057	8.92	28.32

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.23
TIME SHIFT OF PEAK FLOW (min)=220.00
MAXIMUM STORAGE USED (ha.m.)= 0.4731

FINISH

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TOWN OF CALEDON
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Jun 23, 2020

VO MODEL OUTPUT

Second 100-year

TOWN OF CALEDON
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RECEIVED

Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

2017-0701 The Manors of Belfountain

2nd 100-Year 12 Hour SCS Design Storm

Proposed Condition Model Output

May, 2020

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================================================================================================
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       V    V   I    SSSSS  U   U    A    L              (v 5.1.2004)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M M M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                    *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 5.1\VO2\voin.dat
  Output  filename: C:\Users\jlysecki\AppData\Local\Civica\VH5\30ec8a68-987a-4897-92f2-
8b8b25ba79bf\9aa8c80c-55a8-465b-b1de-054e98a56ad1\sce
  Summary filename: C:\Users\jlysecki\AppData\Local\Civica\VH5\30ec8a68-987a-4897-92f2-
8b8b25ba79bf\9aa8c80c-55a8-465b-b1de-054e98a56ad1\sce


DATE: 03/11/2020                          TIME: 02:22:28

USER:


COMMENTS: _____________________________________________________


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  ***********************************************
  ** SIMULATION : 100 Year 12 Hour AES (Bloor,  **
  ***********************************************


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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
               0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
               0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
               1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
               1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
               1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
               1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
               2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
               2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
               2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
               2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
               3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
               3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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| CALIB            |
| NASHYD   (  3015)|   Area     (ha)=   3.95   Curve Number    (CN)= 38.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.24

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
               0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
               0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
               0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
               0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
               0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
               0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
               0.667    0.89 | 3.750   15.05 | 6.833    6.20 |  9.92    0.89
               0.750    0.89 | 3.833   15.05 | 6.917    6.20 | 10.00    0.89
               0.833    0.89 | 3.917   15.05 | 7.000    6.20 | 10.08    0.89
               0.917    0.89 | 4.000   15.05 | 7.083    6.20 | 10.17    0.89
               1.000    0.89 | 4.083   15.05 | 7.167    6.20 | 10.25    0.89
               1.083    0.89 | 4.167   15.05 | 7.250    6.20 | 10.33    0.89
               1.167    0.89 | 4.250   15.05 | 7.333    3.54 | 10.42    0.89
               1.250    0.89 | 4.333   40.71 | 7.417    3.54 | 10.50    0.89
               1.333    0.89 | 4.417   40.71 | 7.500    3.54 | 10.58    0.89
               1.417    0.89 | 4.500   40.71 | 7.583    3.54 | 10.67    0.89
               1.500    0.89 | 4.583   40.71 | 7.667    3.54 | 10.75    0.89
               1.583    0.89 | 4.667   40.71 | 7.750    3.54 | 10.83    0.89
               1.667    0.89 | 4.750   40.71 | 7.833    3.54 | 10.92    0.89
               1.750    0.89 | 4.833   40.71 | 7.917    3.54 | 11.00    0.89
               1.833    0.89 | 4.917   40.71 | 8.000    3.54 | 11.08    0.89
               1.917    0.89 | 5.000   40.71 | 8.083    3.54 | 11.17    0.89
               2.000    0.89 | 5.083   40.71 | 8.167    3.54 | 11.25    0.89
               2.083    0.89 | 5.167   40.71 | 8.250    3.54 | 11.33    0.89
               2.167    0.89 | 5.250   40.71 | 8.333    1.77 | 11.42    0.89
               2.250    0.89 | 5.333   11.51 | 8.417    1.77 | 11.50    0.89
               2.333    5.31 | 5.417   11.51 | 8.500    1.77 | 11.58    0.89
               2.417    5.31 | 5.500   11.51 | 8.583    1.77 | 11.67    0.89
               2.500    5.31 | 5.583   11.51 | 8.667    1.77 | 11.75    0.89
               2.583    5.31 | 5.667   11.51 | 8.750    1.77 | 11.83    0.89
               2.667    5.31 | 5.750   11.51 | 8.833    1.77 | 11.92    0.89
               2.750    5.31 | 5.833   11.51 | 8.917    1.77 | 12.00    0.89
               2.833    5.31 | 5.917   11.51 | 9.000    1.77 | 12.08    0.89
               2.917    5.31 | 6.000   11.51 | 9.083    1.77 | 12.17    0.89
               3.000    5.31 | 6.083   11.51 | 9.167    1.77 | 12.25    0.89
               3.083    5.31 | 6.167   11.51 | 9.250    1.77 |

     Unit Hyd Qpeak  (cms)=   0.629

     PEAK FLOW       (cms)=   0.082 (i)
     TIME TO PEAK    (hrs)=   5.250
     RUNOFF VOLUME    (mm)=  14.002
     TOTAL RAINFALL   (mm)=  88.540
     RUNOFF COEFFICIENT   =   0.158

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
```

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Jun 23, 2020

0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (3012)	Area (ha)= 8.73	Curve Number (CN)= 38.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.60		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.556

PEAK FLOW (cms)= 0.128 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 14.015
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1512)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (3012):	8.73	0.128	5.58	14.01
	+ ID2= 2 (3015):	3.95	0.082	5.25	14.00
	ID = 3 (1512):	12.68	0.196	5.33	14.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0308)	Area (ha)= 20.94	Curve Number (CN)= 82.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.67		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89

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2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.194

PEAK FLOW (cms)= 1.127 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 50.100
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.566

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0128)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1512):	12.68	0.196	5.33	14.01
	+ ID2= 2 (0308):	20.94	1.127	5.58	50.10
	ID = 3 (0128):	33.62	1.308	5.58	36.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (3013)	Area (ha)= 4.32	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.36		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.458

PEAK FLOW (cms)= 0.102 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.710
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0138)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0128):	33.62	1.308	5.58	36.49
	+ ID2= 2 (3013):	4.32	0.102	5.33	17.71
	ID = 3 (0138):	37.94	1.399	5.50	34.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89

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2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0309)	Area	(ha)=	3.50	Curve Number	(CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.352

PEAK FLOW (cms)= 0.081 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.711
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0098)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0138):		37.94	1.399	5.50	34.35
+ ID2= 2 (0309):		3.50	0.081	5.33	17.71
ID = 3 (0098):		41.44	1.477	5.50	32.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (3014)	Area	(ha)=	1.67	Curve Number	(CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.33		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89

TOWN OF CALEDON
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RECEIVED

Jun 23, 2020

2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.193

PEAK FLOW (cms)= 0.041 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.709
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | NASHYD (3011) | ID= 1 DT= 5.0 min | Area (ha)= 7.97 Curve Number (CN)= 45.0 | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.41

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.742

PEAK FLOW (cms)= 0.179 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 17.712
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1411) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3011):	7.97	0.179	5.42	17.71
+ ID2= 2 (3014):	1.67	0.041	5.33	17.71
ID = 3 (1411):	9.64	0.219	5.42	17.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0811) | 1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1411):	9.64	0.219	5.42	17.71
+ ID2= 2 (0098):	41.44	1.477	5.50	32.95
ID = 3 (0811):	51.08	1.688	5.50	30.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

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| CALIB            |
| NASHYD   (  0306)|   Area     (ha)=   9.67   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

```
    Unit Hyd Qpeak  (cms)=   0.754

    PEAK FLOW       (cms)=   0.200 (i)
    TIME TO PEAK    (hrs)=   5.500
    RUNOFF VOLUME    (mm)=  17.713
    TOTAL RAINFALL   (mm)=  88.540
    RUNOFF COEFFICIENT   =   0.200

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| ADD HYD  (  0116)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 1 (  0306):      9.67    0.200     5.50    17.71
     + ID2= 2 (  0811):     51.08    1.688     5.50    30.07
       ==========================================================
       ID = 3 (  0116):     60.75    1.888     5.50    28.10

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| NASHYD   (  3010)|   Area     (ha)=   7.10   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

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    Unit Hyd Qpeak  (cms)=   0.695
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TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

PEAK FLOW (cms)= 0.162 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 17.711
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0106)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0116):	60.75	1.888	5.50	28.10
	+ ID2= 2 (3010):	7.10	0.162	5.42	17.71
	ID = 3 (0106):	67.85	2.045	5.50	27.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0307)	Area (ha)= 6.99	Curve Number (CN)= 45.0			
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.33				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.809

PEAK FLOW (cms)= 0.171 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.709
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0301)	Area (ha)= 11.94	Curve Number (CN)= 45.0			
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.58				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.786

PEAK FLOW (cms)= 0.227 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 17.713
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0071)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0301):		11.94	0.227	5.58	17.71
+ ID2= 2 (0307):		6.99	0.171	5.33	17.71
ID = 3 (0071):		18.93	0.385	5.42	17.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0061)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0106):		67.85	2.045	5.50	27.02
+ ID2= 2 (0071):		18.93	0.385	5.42	17.71
ID = 3 (0061):		86.78	2.426	5.50	24.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB				
NASHYD (0302)	Area (ha)= 6.75	Curve Number (CN)= 45.0		
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.48			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.537

PEAK FLOW (cms)= 0.141 (i)
TIME TO PEAK (hrs)= 5.500
RUNOFF VOLUME (mm)= 17.712
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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Jun 23, 2020

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READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0304)	Area	(ha)=	0.25	Curve Number	(CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.09		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.106

PEAK FLOW (cms)= 0.007 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 17.043
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.192

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0042)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0302):	6.75	0.141	5.50	17.71
+ ID2= 2 (0304):	0.25	0.007	5.25	17.04
ID = 3 (0042):	7.00	0.144	5.42	17.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0241)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0042):	7.00	0.144	5.42	17.69
+ ID2= 2 (0061):	86.78	2.426	5.50	24.99
ID = 3 (0241):	93.78	2.569	5.50	24.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (0305)	Area	(ha)=	7.09	Curve Number	(CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.	(N)= 3.00
	U.H. Tp	(hrs)=	0.47		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89

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0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.576

PEAK FLOW (cms)= 0.150 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 17.712
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
NASHYD (0303) | Area (ha)= 2.52 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.37

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.260

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.710
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0053)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0303):	2.52	0.059	5.33	17.71
+ ID2= 2 (0305):	7.09	0.150	5.42	17.71
ID = 3 (0053):	9.61	0.208	5.42	17.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0031)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)

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  ID1= 1 (  0241):    93.78   2.569     5.50    24.44
+ ID2= 2 (  0053):     9.61   0.208     5.42    17.71
  ================================================
  ID = 3 (  0031):   103.39   2.775     5.50    23.82

 NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4017)	Area (ha)= 4.23	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.68		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

```
 Unit Hyd Qpeak  (cms)=   0.238

 PEAK FLOW       (cms)=   0.074 (i)
 TIME TO PEAK    (hrs)=   5.667
 RUNOFF VOLUME    (mm)=  17.713
 TOTAL RAINFALL   (mm)=  88.540
 RUNOFF COEFFICIENT   =   0.200

 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4016)	Area (ha)= 35.55	Curve Number (CN)= 30.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.74		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89

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1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.835

PEAK FLOW (cms)= 0.339 (i)
TIME TO PEAK (hrs)= 5.750
RUNOFF VOLUME (mm)= 10.321
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1716)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (4016):	35.55	0.339	5.75	10.32
	+ ID2= 2 (4017):	4.23	0.074	5.67	17.71
	ID = 3 (1716):	39.78	0.413	5.75	11.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4015)	Area (ha)= 3.11	Curve Number (CN)= 30.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.35		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.339

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 10.318
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1516)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1716):	39.78	0.413	5.75	11.11
	+ ID2= 2 (4015):	3.11	0.043	5.33	10.32
	ID = 3 (1516):	42.89	0.443	5.75	11.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89

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1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4014)	Area (ha)= 1.67	Curve Number (CN)= 62.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.23		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.277

PEAK FLOW (cms)= 0.075 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 29.141
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1416)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1516):	42.89	0.443	5.75	11.05
+ ID2= 2 (4014):	1.67	0.075	5.25	29.14
ID = 3 (1416):	44.56	0.483	5.58	11.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (4013)	Area (ha)= 19.43	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.90		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89

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2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.825

PEAK FLOW (cms)= 0.290 (i)
TIME TO PEAK (hrs)= 6.000
RUNOFF VOLUME (mm)= 17.713
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1613)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1416):	44.56	0.483	5.58	11.73
	+ ID2= 2 (4013):	19.43	0.290	6.00	17.71
	ID = 3 (1613):	63.99	0.758	5.75	13.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB					
NASHYD (4010)	Area	(ha)= 4.17	Curve Number	(CN)= 45.0	
ID= 1 DT= 5.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.42				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.379

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 17.712
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1310)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1613):	63.99	0.758	5.75	13.55
	+ ID2= 2 (4010):	4.17	0.093	5.42	17.71
	ID = 3 (1310):	68.16	0.835	5.67	13.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89

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2.75	5.31	6.00	11.51	9.25	1.77
3.00	5.31	6.25	11.51	9.50	0.89
3.25	5.31	6.50	6.20	9.75	0.89

CALIB			
NASHYD (4011)	Area (ha)=	5.81	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.37	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.600

PEAK FLOW (cms)= 0.136 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.711
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename:	C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments:	100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0408)	Area (ha)=	18.85	Curve Number (CN)= 62.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.50	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.440

PEAK FLOW (cms)= 0.654 (i)
TIME TO PEAK (hrs)= 5.500
RUNOFF VOLUME (mm)= 29.172
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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ADD HYD (0118)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (4011):	5.81	0.136	5.33	17.71
+ ID2= 2 (0408):	18.85	0.654	5.50	29.17
ID = 3 (0118):	24.66	0.787	5.42	26.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0406)| ID= 1 DT= 5.0 min	Area (ha)= 5.46	Curve Number (CN)= 62.0	
	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.42		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.497

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 5.417
RUNOFF VOLUME (mm)= 29.171
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0068)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0118):	24.66	0.787	5.42	26.47
+ ID2= 2 (0406):	5.46	0.205	5.42	29.17
ID = 3 (0068):	30.12	0.991	5.42	26.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1310):	68.16	0.835	5.67	13.80
+ ID2= 2 (0068):	30.12	0.991	5.42	26.96
ID = 3 (0810):	98.28	1.798	5.50	17.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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CALIB											
NASHYD (0407)	Area (ha)= 1.40	Curve Number (CN)= 45.0									
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00									
	U.H. Tp(hrs)= 0.26										

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.206

PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 17.701
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0107)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0407):		1.40	0.036	5.25	17.70
+ ID2= 2 (0810):		98.28	1.798	5.50	17.83
ID = 3 (0107):		99.68	1.827	5.50	17.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD	ata\Local\Temp\	723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)		

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB											
NASHYD (4012)	Area (ha)= 4.62	Curve Number (CN)= 38.0									
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00									
	U.H. Tp(hrs)= 0.34										

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.519

PEAK FLOW (cms)= 0.088 (i)
TIME TO PEAK (hrs)= 5.333

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RUNOFF VOLUME (mm)= 14.011
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0409)	Area (ha)= 6.58	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.38		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.661

PEAK FLOW (cms)= 0.152 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.711
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0129)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (4012):	4.62	0.088	5.33	14.01
+ ID2= 2 (0409):	6.58	0.152	5.33	17.71
ID = 3 (0129):	11.20	0.239	5.33	16.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0403)	Area (ha)= 8.35	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.24		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89

TOWN OF CALEDON
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Jun 23, 2020

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0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.329

PEAK FLOW (cms)= 0.222 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 17.697
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0093)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0129):	11.20	0.239	5.33	16.18
	+ ID2= 2 (0403):	8.35	0.222	5.25	17.70
	ID = 3 (0093):	19.55	0.458	5.33	16.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0073)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0107):	99.68	1.827	5.50	17.83
	+ ID2= 2 (0093):	19.55	0.458	5.33	16.83
	ID = 3 (0073):	119.23	2.248	5.42	17.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
NASHYD (0405)	Area (ha)= 1.24	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.237

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 17.680
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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ADD HYD (0573)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0405):	1.24	0.034	5.25	17.68
	+ ID2= 2 (0073):	119.23	2.248	5.42	17.67
	ID = 3 (0573):	120.47	2.276	5.42	17.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | NASHYD (0404) | ID= 1 DT= 5.0 min | Area (ha)= 1.91 | Ia (mm)= 5.00 | U.H. Tp(hrs)= 0.25 | Curve Number (CN)= 45.0 | # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.292

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 17.699
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0043)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0404):	1.91	0.050	5.25	17.70
	+ ID2= 2 (0573):	120.47	2.276	5.42	17.67
	ID = 3 (0043):	122.38	2.321	5.42	17.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | NASHYD (0401) | ID= 1 DT= 5.0 min | Area (ha)= 9.13 | Ia (mm)= 5.00 | U.H. Tp(hrs)= 0.62 | Curve Number (CN)= 62.0 | # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89

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0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.562

PEAK FLOW (cms)= 0.284 (i)
TIME TO PEAK (hrs)= 5.583
RUNOFF VOLUME (mm)= 29.173
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0341)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0401):		9.13	0.284	5.58	29.17
+ ID2= 2 (0043):		122.38	2.321	5.42	17.67
ID = 3 (0341):		131.51	2.593	5.42	18.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM

Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
NASHYD (0402) | ID= 1 DT= 5.0 min

Area (ha)= 2.67 Curve Number (CN)= 45.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.31

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.329

PEAK FLOW (cms)= 0.066 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.707
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0021)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0341):		131.51	2.593	5.42	18.47
+ ID2= 2 (0402):		2.67	0.066	5.33	17.71

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	ID	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID = 3 (0021):	134.18	2.657	5.42	18.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (3004)
1 + 2 = 3

	ID	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0021):		134.18	2.657	5.42	18.45
+ ID2= 2 (0031):		103.39	2.775	5.50	23.82
	ID = 3 (3004):	237.57	5.430	5.42	20.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\j1ysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
NASHYD (0102) | ID= 1 DT= 5.0 min | Area (ha)= 6.53 | Curve Number (CN)= 45.0 | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.49

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 0.509

PEAK FLOW (cms)= 0.135 (i)
TIME TO PEAK (hrs)= 5.500
RUNOFF VOLUME (mm)= 17.713
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\j1ysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
NASHYD (0101) | ID= 1 DT= 5.0 min | Area (ha)= 9.26 | Curve Number (CN)= 45.0 | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.34

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89

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0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Unit Hyd Qpeak (cms)= 1.040

PEAK FLOW (cms)= 0.224 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 17.709
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0012)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0101):		9.26	0.224	5.33	17.71
+ ID2= 2 (0102):		6.53	0.135	5.50	17.71
ID = 3 (0012):		15.79	0.354	5.42	17.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0999)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0012):		15.79	0.354	5.42	17.71
+ ID2= 2 (3004):		237.57	5.430	5.42	20.79
ID = 3 (0999):		253.36	5.784	5.42	20.59

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0140)	Area (ha)= 4.20
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	2.10	2.10
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	167.33	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	4.98 (ii)	23.55 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.22	0.05	
			TOTALS

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PEAK FLOW	(cms)=	0.24	0.04	0.275 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	51.32
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0141) | Area (ha)= 3.55
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.64	2.91
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.84	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.74 (ii)	22.36 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.22	0.05	
PEAK FLOW	(cms)=	0.05	0.06	0.108 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0142) | Area (ha)= 0.42
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.34
Dep. Storage	(mm)=	1.00	1.50

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Average Slope	(%)=	1.00	2.00
Length	(m)=	52.92	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	2.50 (ii)	21.06 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.29	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.015 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.11
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29

Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0143)	Area (ha)= 0.28
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.05	0.23
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	43.20	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

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Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.21 (ii)	20.77 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.00	0.010 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.10
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0144) | Area (ha)= 0.38
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.07	0.31
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.33	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.42 (ii)	20.99 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.013 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.11
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| STANDHYD (  0145)|   Area     (ha)=   0.17
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.03         0.14
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     33.67        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

```
     Max.Eff.Inten.(mm/hr)=     40.71        10.16
               over (min)        5.00        20.00
     Storage Coeff.  (min)=     1.90 (ii)   19.52 (ii)
     Unit Hyd. Tpeak (min)=     5.00        20.00
     Unit Hyd. peak  (cms)=     0.32         0.06
                                                  *TOTALS*
     PEAK FLOW       (cms)=     0.00         0.00          0.005 (iii)
     TIME TO PEAK    (hrs)=     5.08         5.33          5.25
     RUNOFF VOLUME    (mm)=    87.54        16.04         24.55
     TOTAL RAINFALL   (mm)=    88.54        88.54         88.54
     RUNOFF COEFFICIENT   =     0.99         0.18          0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0     Ia = Dep. Storage   (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
      (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| STANDHYD (  0146)|   Area     (ha)=   0.74
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.13         0.61
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     70.24        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89

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2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.96 (ii)	20.58 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0177)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0145):	0.17	0.005	5.25	24.55
+ ID2= 2 (0146):	0.74	0.023	5.25	24.61
ID = 3 (0177):	0.91	0.028	5.25	24.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0167)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0144):	0.38	0.013	5.25	28.11
+ ID2= 2 (0177):	0.91	0.028	5.25	24.60
ID = 3 (0167):	1.29	0.042	5.25	25.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Ptotal= 88.54 mm

Filename: C:\Users\j1ysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0147) | ID= 1 DT= 5.0 min

Area (ha)= 0.53
Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.10	0.43
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	59.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)	TIME (hrs)	RAIN (mm/hr)
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.68 (ii)	20.30 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.29	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.016 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.60
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%

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YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0149)	Area (ha)= 0.46
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.38
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	55.38	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
	over (min)	5.00	25.00	
Storage Coeff.	(min)=	2.57 (ii)	21.13 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.29	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.016 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.12
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0174)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0147):	0.53	0.016	5.25	24.60
	+ ID2= 2 (0149):	0.46	0.016	5.25	28.12
	ID = 3 (0174):	0.99	0.033	5.25	26.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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CALIB	
STANDHYD (0161)	Area (ha)= 0.20
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.16
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	36.51	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	8.92	
	over (min)	5.00	25.00	
Storage Coeff.	(min)=	2.00 (ii)	20.56 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.31	0.05	
PEAK FLOW	(cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.08
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0168)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0161):	0.20	0.007	5.25	28.08
	+ ID2= 2 (0174):	0.99	0.033	5.25	26.24
	ID = 3 (0168):	1.19	0.040	5.25	26.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0148)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89

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1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.76 (ii)	20.32 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.32	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0160) | Area (ha)= 0.21
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.03 (ii)	20.59 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.31	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.08
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0173)
1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm)

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020


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  ID1= 1 (  0148):     0.13   0.005     5.25    28.03
+ ID2= 2 (  0160):     0.21   0.007     5.25    28.08
  ================================================
  ID = 3 (  0173):     0.34   0.012     5.25    28.06

 NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| STANDHYD (  0150)|   Area     (ha)=   2.33
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.42	1.91
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	124.63	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.18 (ii)	21.80 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.24	0.05	
PEAK FLOW	(cms)=	0.03	0.04	0.071 (iii)
TIME TO PEAK	(hrs)=	5.17	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

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| CALIB            |
| STANDHYD (  0151)|   Area     (ha)=   0.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.06	0.29
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	48.30	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.36 (ii)	20.93 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.30	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.012 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.11
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0175) | 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0150):	2.33	0.071	5.25	24.62
+ ID2= 2 (0151):	0.35	0.012	5.25	28.11
ID = 3 (0175):	2.68	0.084	5.25	25.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\j1ysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | STANDHYD (0155) ID= 1 DT= 5.0 min | Area (ha)= 0.11 Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.09
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	27.08	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89

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2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.67 (ii)	20.23 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.32	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.004 (iii)
TIME TO PEAK (hrs)=	4.58	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0169)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0155):	0.11	0.004	5.25	28.03
	+ ID2= 2 (0175):	2.68	0.084	5.25	25.07
	ID = 3 (0169):	2.79	0.088	5.25	25.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB			
STANDHYD (0153)	Area (ha)=	1.66	
ID= 1 DT= 5.0 min	Total Imp(%)=	18.00	Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.30	1.36
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	105.20	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	3.77 (ii)	21.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.25	0.05	
			TOTALS
PEAK FLOW (cms)=	0.02	0.03	0.051 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.62
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0154)	Area (ha)= 0.59
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.11	0.48
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	62.72	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		2.77 (ii)	20.39 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.28	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.018 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.60
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0170)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0153):	1.66	0.051	5.25	24.62
+ ID2= 2 (0154):	0.59	0.018	5.25	24.60
ID = 3 (0170):	2.25	0.069	5.25	24.61

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0156)	Area (ha)= 1.16
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.21	0.95
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	87.94	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)	3.39 (ii)	21.01 (ii)
Unit Hyd. Tpeak	(min)	5.00	25.00
Unit Hyd. peak	(cms)	0.26	0.05

				TOTALS
PEAK FLOW	(cms)	0.02	0.02	0.036 (iii)
TIME TO PEAK	(hrs)	5.08	5.42	5.25
RUNOFF VOLUME	(mm)	87.54	16.04	24.61
TOTAL RAINFALL	(mm)	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0159)	Area (ha)= 0.12
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.10
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	28.28	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)	40.71	8.92
over	(min)	5.00	25.00
Storage Coeff.	(min)	1.72 (ii)	20.28 (ii)
Unit Hyd. Tpeak	(min)	5.00	25.00
Unit Hyd. peak	(cms)	0.32	0.05

				TOTALS
PEAK FLOW	(cms)	0.00	0.00	0.004 (iii)
TIME TO PEAK	(hrs)	4.58	5.42	5.25

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RUNOFF VOLUME (mm)=	87.54	15.11	28.03
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0171)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0156):	1.16	0.036	5.25	24.61
	+ ID2= 2 (0159):	0.12	0.004	5.25	28.03
	ID = 3 (0171):	1.28	0.040	5.25	24.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0157) | Area (ha)= 0.24
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.20
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	40.00	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92		
over (min)	5.00	25.00		
Storage Coeff. (min)=	2.11 (ii)	20.67 (ii)		
Unit Hyd. Tpeak (min)=	5.00	25.00		
Unit Hyd. peak (cms)=	0.31	0.05		
			TOTALS	
PEAK FLOW (cms)=	0.00	0.00	0.009 (iii)	
TIME TO PEAK (hrs)=	5.08	5.42	5.25	
RUNOFF VOLUME (mm)=	87.54	15.11	28.10	
TOTAL RAINFALL (mm)=	88.54	88.54	88.54	
RUNOFF COEFFICIENT =	0.99	0.17	0.32	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		

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3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0158)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff. (min)=		1.76 (ii)	20.32 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.32	0.05	
PEAK FLOW	(cms)=	0.00	0.00	0.005 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.03
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0172)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0157):	0.24	0.009	5.25	28.10
	+ ID2= 2 (0158):	0.13	0.005	5.25	28.03
	ID = 3 (0172):	0.37	0.013	5.25	28.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0141):	3.55	0.108	5.25	24.62
	+ ID2= 2 (0142):	0.42	0.015	5.25	28.11
	ID = 3 (0136):	3.97	0.123	5.25	24.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0136):	3.97	0.123	5.25	24.99
	+ ID2= 2 (0143):	0.28	0.010	5.25	28.10
	ID = 1 (0136):	4.25	0.133	5.25	25.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0136):	4.25	0.133	5.25	25.19
	+ ID2= 2 (0167):	1.29	0.042	5.25	25.63
	ID = 3 (0136):	5.54	0.175	5.25	25.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0136):	5.54	0.175	5.25	25.30
	+ ID2= 2 (0168):	1.19	0.040	5.25	26.55
	ID = 1 (0136):	6.73	0.214	5.25	25.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

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1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	6.73	0.214	5.25	25.52
+ ID2= 2 (0169):	2.79	0.088	5.25	25.19
ID = 3 (0136):	9.52	0.302	5.25	25.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	9.52	0.302	5.25	25.42
+ ID2= 2 (0170):	2.25	0.069	5.25	24.61
ID = 1 (0136):	11.77	0.371	5.25	25.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	11.77	0.371	5.25	25.27
+ ID2= 2 (0171):	1.28	0.040	5.25	24.93
ID = 3 (0136):	13.05	0.411	5.25	25.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	13.05	0.411	5.25	25.23
+ ID2= 2 (0172):	0.37	0.013	5.25	28.07
ID = 1 (0136):	13.42	0.424	5.25	25.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.42	0.424	5.25	25.31
+ ID2= 2 (0173):	0.34	0.012	5.25	28.06
ID = 3 (0136):	13.76	0.436	5.25	25.38

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0178)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.76	0.436	5.25	25.38
+ ID2= 2 (0140):	4.20	0.275	5.25	51.32
ID = 3 (0178):	17.96	0.711	5.25	31.45

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0139)

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0178):	17.96	0.711	5.25	31.45
+ ID2= 2 (0999):	253.36	5.784	5.42	20.59
ID = 3 (0139):	271.32	6.222	5.42	21.31

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

BLOCK 81 Pond (Large)

RESERVOIR(9999)
IN= 2---> OUT= 1
DT= 5.0 min

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.3380	8.8593
0.3370	0.2558	1.0000	8.8594

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0139)	271.320	6.222	5.42	21.31
OUTFLOW: ID= 1 (9999)	271.320	0.338	10.42	21.31

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.42
TIME SHIFT OF PEAK FLOW (min)=300.00
MAXIMUM STORAGE USED (ha.m.)= 4.7417

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0096) | Area (ha)= 0.62
ID= 1 DT= 5.0 min | Total Imp(%)= 62.00 Dir. Conn.(%)= 62.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.38	0.24
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	64.29	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89

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0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.81 (ii)	21.37 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.04	0.00	0.048 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	60.00
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\j1ysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0110) | Area (ha)= 0.73
ID= 1 DT= 5.0 min | Total Imp(%)= 62.00 Dir. Conn.(%)= 62.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.45	0.28
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	69.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.95 (ii)	21.51 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.05	0.01	0.056 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	60.00
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020


```
      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN*  =  38.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0111)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 1 (  0110):      0.73   0.056     5.25     60.00
     + ID2= 2 (  0096):      0.62   0.048     5.25     60.00
       ================================================
       ID = 3 (  0111):      1.35   0.104     5.25     60.00

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |   6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |   7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |   7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |   7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |   7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |   8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |   8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |   8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |   8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |   9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |   9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |   9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |   9.75    0.89 |

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| CALIB            |
| STANDHYD (  0112)|   Area     (ha)=   2.00
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.36         1.64
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=    115.47        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
               0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
               0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
               0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
               0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
               0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
               0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
               0.667    0.89 | 3.750   15.05 | 6.833    6.20 |  9.92    0.89
               0.750    0.89 | 3.833   15.05 | 6.917    6.20 | 10.00    0.89
               0.833    0.89 | 3.917   15.05 | 7.000    6.20 | 10.08    0.89
               0.917    0.89 | 4.000   15.05 | 7.083    6.20 | 10.17    0.89
               1.000    0.89 | 4.083   15.05 | 7.167    6.20 | 10.25    0.89
               1.083    0.89 | 4.167   15.05 | 7.250    6.20 | 10.33    0.89
               1.167    0.89 | 4.250   15.05 | 7.333    3.54 | 10.42    0.89
               1.250    0.89 | 4.333   40.71 | 7.417    3.54 | 10.50    0.89
               1.333    0.89 | 4.417   40.71 | 7.500    3.54 | 10.58    0.89
               1.417    0.89 | 4.500   40.71 | 7.583    3.54 | 10.67    0.89
               1.500    0.89 | 4.583   40.71 | 7.667    3.54 | 10.75    0.89
               1.583    0.89 | 4.667   40.71 | 7.750    3.54 | 10.83    0.89
               1.667    0.89 | 4.750   40.71 | 7.833    3.54 | 10.92    0.89
               1.750    0.89 | 4.833   40.71 | 7.917    3.54 | 11.00    0.89
               1.833    0.89 | 4.917   40.71 | 8.000    3.54 | 11.08    0.89
               1.917    0.89 | 5.000   40.71 | 8.083    3.54 | 11.17    0.89
               2.000    0.89 | 5.083   40.71 | 8.167    3.54 | 11.25    0.89
               2.083    0.89 | 5.167   40.71 | 8.250    3.54 | 11.33    0.89
               2.167    0.89 | 5.250   40.71 | 8.333    1.77 | 11.42    0.89
               2.250    0.89 | 5.333   11.51 | 8.417    1.77 | 11.50    0.89
               2.333    5.31 | 5.417   11.51 | 8.500    1.77 | 11.58    0.89
               2.417    5.31 | 5.500   11.51 | 8.583    1.77 | 11.67    0.89
               2.500    5.31 | 5.583   11.51 | 8.667    1.77 | 11.75    0.89
               2.583    5.31 | 5.667   11.51 | 8.750    1.77 | 11.83    0.89
               2.667    5.31 | 5.750   11.51 | 8.833    1.77 | 11.92    0.89
               2.750    5.31 | 5.833   11.51 | 8.917    1.77 | 12.00    0.89
               2.833    5.31 | 5.917   11.51 | 9.000    1.77 | 12.08    0.89
               2.917    5.31 | 6.000   11.51 | 9.083    1.77 | 12.17    0.89
               3.000    5.31 | 6.083   11.51 | 9.167    1.77 | 12.25    0.89
               3.083    5.31 | 6.167   11.51 | 9.250    1.77 |

     Max.Eff.Inten.(mm/hr)=      40.71        10.16
                  over (min)        5.00        25.00
     Storage Coeff.  (min)=       3.99 (ii)   21.61 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.24         0.05
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.04        0.061 (iii)
     TIME TO PEAK    (hrs)=       5.08         5.42         5.25
     RUNOFF VOLUME    (mm)=      87.54        16.04        24.62
     TOTAL RAINFALL   (mm)=      88.54        88.54        88.54
     RUNOFF COEFFICIENT   =       0.99         0.18         0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN*  =  38.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |   6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |   7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |   7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |   7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |   7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |   8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |   8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |   8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |   8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |   9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |   9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |   9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |   9.75    0.89 |

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| CALIB            |
| STANDHYD (  0114)|   Area     (ha)=   0.21
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|ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff. (min)=		2.03 (ii)	20.59 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.31	0.05	
PEAK FLOW	(cms)=	0.00	0.00	0.007 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	28.08
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0192)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0112):		2.00	0.061	5.25	24.62
+ ID2= 2 (0114):		0.21	0.007	5.25	28.08
ID = 3 (0192):		2.21	0.069	5.25	24.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0115)|	Area (ha)= 0.91
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.16	0.75
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	77.89	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89

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1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	3.15 (ii)	20.77 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.27	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.02	0.028 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB STANDHYD (0117)	Area (ha)= 2.08
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.37	1.71
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	117.76	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	4.04 (ii)	21.66 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.24	0.05	
			TOTALS
PEAK FLOW (cms)=	0.03	0.04	0.064 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.62
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0191)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0115):		0.91	0.028	5.25	24.61
+ ID2= 2 (0117):		2.08	0.064	5.25	24.62

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ID = 3 (0191): 2.99 0.092 5.25 24.62

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0119)	Area (ha)= 1.27
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.23	1.04
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	92.01	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		3.48 (ii)	21.10 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.26	0.05	
PEAK FLOW	(cms)=	0.02	0.02	0.039 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.61
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0124)	Area (ha)= 0.67
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.12	0.55
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	66.83	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.87 (ii)	21.44 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.024 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.13
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0188)|	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (0119):	1.27	0.039	5.25	24.61
+ ID2= 2 (0124):	0.67	0.024	5.25	28.13
ID = 3 (0188):	1.94	0.063	5.25	25.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | STANDHYD (0120)\| ID= 1 DT= 5.0 min | Area (ha)= 0.23 Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.19
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	39.16	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89

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2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.09 (ii)	20.65 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.31	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.008 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.10
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0123)	Area (ha)= 0.65
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.12	0.53
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	65.83	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.85 (ii)	21.41 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	28.13
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0162)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0120):	0.23	0.008	5.25	28.10
	+ ID2= 2 (0123):	0.65	0.023	5.25	28.13
	ID = 3 (0162):	0.88	0.031	5.25	28.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN

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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0121)	Area (ha)= 2.87
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.52	2.35
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	138.32	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=		40.71	10.16	
over (min)		5.00	25.00	
Storage Coeff. (min)=		4.45 (ii)	22.07 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.23	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.04	0.05	0.088 (iii)
TIME TO PEAK	(hrs)=	5.17	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm	Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB	
STANDHYD (0176)	Area (ha)= 0.09
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.07
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	24.49	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89

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1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	8.92	
over (min)	5.00	25.00	
Storage Coeff. (min)=	1.57 (ii)	20.13 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.33	0.05	
			TOTALS
PEAK FLOW (cms)=	0.00	0.00	0.003 (iii)
TIME TO PEAK (hrs)=	4.58	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	15.11	27.32
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.17	0.31

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0190)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0121):	2.87	0.088	5.25	24.62
+ ID2= 2 (0176):	0.09	0.003	5.25	27.32
ID = 3 (0190):	2.96	0.091	5.25	24.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB
STANDHYD (0122) | Area (ha)= 0.76
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.14	0.62
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	71.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.(mm/hr)=	40.71	10.16	
over (min)	5.00	25.00	
Storage Coeff. (min)=	2.98 (ii)	20.60 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.28	0.05	
			TOTALS
PEAK FLOW (cms)=	0.01	0.01	0.023 (iii)
TIME TO PEAK (hrs)=	5.08	5.42	5.25
RUNOFF VOLUME (mm)=	87.54	16.04	24.61
TOTAL RAINFALL (mm)=	88.54	88.54	88.54

TOWN OF CALEDON
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     RUNOFF COEFFICIENT   =       0.99         0.18          0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  38.0     Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm |    Comments: 100 Year 12 Hour AES (Bloor, TRCA)
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    0.00 |  3.50   15.05 |  6.75    6.20 | 10.00    0.89
                0.50    0.89 |  3.75   15.05 |  7.00    6.20 | 10.25    0.89
                0.75    0.89 |  4.00   15.05 |  7.25    6.20 | 10.50    0.89
                1.00    0.89 |  4.25   15.05 |  7.50    3.54 | 10.75    0.89
                1.25    0.89 |  4.50   40.71 |  7.75    3.54 | 11.00    0.89
                1.50    0.89 |  4.75   40.71 |  8.00    3.54 | 11.25    0.89
                1.75    0.89 |  5.00   40.71 |  8.25    3.54 | 11.50    0.89
                2.00    0.89 |  5.25   40.71 |  8.50    1.77 | 11.75    0.89
                2.25    0.89 |  5.50   11.51 |  8.75    1.77 | 12.00    0.89
                2.50    5.31 |  5.75   11.51 |  9.00    1.77 | 12.25    0.89
                2.75    5.31 |  6.00   11.51 |  9.25    1.77 |
                3.00    5.31 |  6.25   11.51 |  9.50    0.89 |
                3.25    5.31 |  6.50    6.20 |  9.75    0.89 |

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| CALIB            |
| STANDHYD (  0125)|   Area     (ha)=   0.43
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.08         0.35
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     53.54        40.00
     Mannings n             =   0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 3.167    5.31 | 6.250   11.51 |  9.33    0.89
               0.167    0.00 | 3.250    5.31 | 6.333    6.20 |  9.42    0.89
               0.250    0.00 | 3.333   15.05 | 6.417    6.20 |  9.50    0.89
               0.333    0.89 | 3.417   15.05 | 6.500    6.20 |  9.58    0.89
               0.417    0.89 | 3.500   15.05 | 6.583    6.20 |  9.67    0.89
               0.500    0.89 | 3.583   15.05 | 6.667    6.20 |  9.75    0.89
               0.583    0.89 | 3.667   15.05 | 6.750    6.20 |  9.83    0.89
               0.667    0.89 | 3.750   15.05 | 6.833    6.20 |  9.92    0.89
               0.750    0.89 | 3.833   15.05 | 6.917    6.20 | 10.00    0.89
               0.833    0.89 | 3.917   15.05 | 7.000    6.20 | 10.08    0.89
               0.917    0.89 | 4.000   15.05 | 7.083    6.20 | 10.17    0.89
               1.000    0.89 | 4.083   15.05 | 7.167    6.20 | 10.25    0.89
               1.083    0.89 | 4.167   15.05 | 7.250    6.20 | 10.33    0.89
               1.167    0.89 | 4.250   15.05 | 7.333    3.54 | 10.42    0.89
               1.250    0.89 | 4.333   40.71 | 7.417    3.54 | 10.50    0.89
               1.333    0.89 | 4.417   40.71 | 7.500    3.54 | 10.58    0.89
               1.417    0.89 | 4.500   40.71 | 7.583    3.54 | 10.67    0.89
               1.500    0.89 | 4.583   40.71 | 7.667    3.54 | 10.75    0.89
               1.583    0.89 | 4.667   40.71 | 7.750    3.54 | 10.83    0.89
               1.667    0.89 | 4.750   40.71 | 7.833    3.54 | 10.92    0.89
               1.750    0.89 | 4.833   40.71 | 7.917    3.54 | 11.00    0.89
               1.833    0.89 | 4.917   40.71 | 8.000    3.54 | 11.08    0.89
               1.917    0.89 | 5.000   40.71 | 8.083    3.54 | 11.17    0.89
               2.000    0.89 | 5.083   40.71 | 8.167    3.54 | 11.25    0.89
               2.083    0.89 | 5.167   40.71 | 8.250    3.54 | 11.33    0.89
               2.167    0.89 | 5.250   40.71 | 8.333    1.77 | 11.42    0.89
               2.250    0.89 | 5.333   11.51 | 8.417    1.77 | 11.50    0.89
               2.333    5.31 | 5.417   11.51 | 8.500    1.77 | 11.58    0.89
               2.417    5.31 | 5.500   11.51 | 8.583    1.77 | 11.67    0.89
               2.500    5.31 | 5.583   11.51 | 8.667    1.77 | 11.75    0.89
               2.583    5.31 | 5.667   11.51 | 8.750    1.77 | 11.83    0.89
               2.667    5.31 | 5.750   11.51 | 8.833    1.77 | 11.92    0.89
               2.750    5.31 | 5.833   11.51 | 8.917    1.77 | 12.00    0.89
               2.833    5.31 | 5.917   11.51 | 9.000    1.77 | 12.08    0.89
               2.917    5.31 | 6.000   11.51 | 9.083    1.77 | 12.17    0.89
               3.000    5.31 | 6.083   11.51 | 9.167    1.77 | 12.25    0.89
               3.083    5.31 | 6.167   11.51 | 9.250    1.77 |

     Max.Eff.Inten.(mm/hr)=      40.71         8.92
               over (min)         5.00        25.00
     Storage Coeff.  (min)=       2.52 (ii)   21.08 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.29         0.05
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.01        0.015 (iii)
     TIME TO PEAK    (hrs)=       5.08         5.42         5.25
     RUNOFF VOLUME    (mm)=      87.54        15.11        28.11
     TOTAL RAINFALL   (mm)=      88.54        88.54        88.54
     RUNOFF COEFFICIENT   =       0.99         0.17         0.32

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  38.0     Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
| ADD HYD  (  0189)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0122):     0.76    0.023     5.25    24.61
      + ID2= 2 (  0125):     0.43    0.015     5.25    28.11
        ==================================================
        ID = 3 (  0189):     1.19    0.039     5.25    25.87

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-------------------
| ADD HYD  (  0113)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0162):     0.88    0.031     5.25    28.12
      + ID2= 2 (  0188):     1.94    0.063     5.25    25.83
        ==================================================
        ID = 3 (  0113):     2.82    0.094     5.25    26.54

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-------------------
| ADD HYD  (  0113)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0113):     2.82    0.094     5.25    26.54
      + ID2= 2 (  0189):     1.19    0.039     5.25    25.87
        ==================================================
        ID = 1 (  0113):     4.01    0.133     5.25    26.34
```

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0113):	4.01	0.133	5.25	26.34
+	ID2= 2 (0190):	2.96	0.091	5.25	24.70
	ID = 3 (0113):	6.97	0.223	5.25	25.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
	ID1= 3 (0113):	6.97	0.223	5.25	25.65
+	ID2= 2 (0191):	2.99	0.092	5.25	24.62
	ID = 1 (0113):	9.96	0.315	5.25	25.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0113):	9.96	0.315	5.25	25.34
+	ID2= 2 (0192):	2.21	0.069	5.25	24.95
	ID = 3 (0113):	12.17	0.384	5.25	25.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB | STANDHYD (0130) | ID= 1 DT= 5.0 min | Area (ha)= 3.07 | Total Imp(%)= 18.00 | Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.55	2.52
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	143.06	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.	(mm/hr)=	40.71	10.16	
over	(min)	5.00	25.00	
Storage Coeff.	(min)=	4.54 (ii)	22.16 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.23	0.05	
PEAK FLOW	(cms)=	0.04	0.05	0.094 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29

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PLANNING
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| Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

| CALIB
| STANDHYD (0131)| Area (ha)= 1.00
|ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.50	0.50
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	81.65	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

				TOTALS
Max.Eff.Inten.(mm/hr)=		40.71	8.92	
over (min)		5.00	25.00	
Storage Coeff.	(min)=	3.24 (ii)	21.80 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	25.00	
Unit Hyd. peak	(cms)=	0.27	0.05	
PEAK FLOW	(cms)=	0.06	0.01	0.066 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	15.11	51.31
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.17	0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
| Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

| CALIB
| STANDHYD (0133)| Area (ha)= 1.24
|ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.22	1.02
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	90.92	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89

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1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)=	3.46 (ii)	21.08 (ii)
Unit Hyd. Tpeak	(min)=	5.00	25.00
Unit Hyd. peak	(cms)=	0.26	0.05

				TOTALS
PEAK FLOW	(cms)=	0.02	0.02	0.038 (iii)
TIME TO PEAK	(hrs)=	5.08	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.61
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\723a2d94-0e14-4d09-b549-a1231cb8b993\e6944d29
Ptotal= 88.54 mm | Comments: 100 Year 12 Hour AES (Bloor, TRCA)

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	3.50	15.05	6.75	6.20	10.00	0.89
0.50	0.89	3.75	15.05	7.00	6.20	10.25	0.89
0.75	0.89	4.00	15.05	7.25	6.20	10.50	0.89
1.00	0.89	4.25	15.05	7.50	3.54	10.75	0.89
1.25	0.89	4.50	40.71	7.75	3.54	11.00	0.89
1.50	0.89	4.75	40.71	8.00	3.54	11.25	0.89
1.75	0.89	5.00	40.71	8.25	3.54	11.50	0.89
2.00	0.89	5.25	40.71	8.50	1.77	11.75	0.89
2.25	0.89	5.50	11.51	8.75	1.77	12.00	0.89
2.50	5.31	5.75	11.51	9.00	1.77	12.25	0.89
2.75	5.31	6.00	11.51	9.25	1.77		
3.00	5.31	6.25	11.51	9.50	0.89		
3.25	5.31	6.50	6.20	9.75	0.89		

CALIB

STANDHYD (0134) | Area (ha)= 3.36
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.60	2.76
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	149.67	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	3.167	5.31	6.250	11.51	9.33	0.89
0.167	0.00	3.250	5.31	6.333	6.20	9.42	0.89
0.250	0.00	3.333	15.05	6.417	6.20	9.50	0.89
0.333	0.89	3.417	15.05	6.500	6.20	9.58	0.89
0.417	0.89	3.500	15.05	6.583	6.20	9.67	0.89
0.500	0.89	3.583	15.05	6.667	6.20	9.75	0.89
0.583	0.89	3.667	15.05	6.750	6.20	9.83	0.89
0.667	0.89	3.750	15.05	6.833	6.20	9.92	0.89
0.750	0.89	3.833	15.05	6.917	6.20	10.00	0.89
0.833	0.89	3.917	15.05	7.000	6.20	10.08	0.89
0.917	0.89	4.000	15.05	7.083	6.20	10.17	0.89
1.000	0.89	4.083	15.05	7.167	6.20	10.25	0.89
1.083	0.89	4.167	15.05	7.250	6.20	10.33	0.89
1.167	0.89	4.250	15.05	7.333	3.54	10.42	0.89
1.250	0.89	4.333	40.71	7.417	3.54	10.50	0.89
1.333	0.89	4.417	40.71	7.500	3.54	10.58	0.89
1.417	0.89	4.500	40.71	7.583	3.54	10.67	0.89
1.500	0.89	4.583	40.71	7.667	3.54	10.75	0.89
1.583	0.89	4.667	40.71	7.750	3.54	10.83	0.89
1.667	0.89	4.750	40.71	7.833	3.54	10.92	0.89
1.750	0.89	4.833	40.71	7.917	3.54	11.00	0.89
1.833	0.89	4.917	40.71	8.000	3.54	11.08	0.89
1.917	0.89	5.000	40.71	8.083	3.54	11.17	0.89
2.000	0.89	5.083	40.71	8.167	3.54	11.25	0.89
2.083	0.89	5.167	40.71	8.250	3.54	11.33	0.89
2.167	0.89	5.250	40.71	8.333	1.77	11.42	0.89
2.250	0.89	5.333	11.51	8.417	1.77	11.50	0.89
2.333	5.31	5.417	11.51	8.500	1.77	11.58	0.89
2.417	5.31	5.500	11.51	8.583	1.77	11.67	0.89
2.500	5.31	5.583	11.51	8.667	1.77	11.75	0.89
2.583	5.31	5.667	11.51	8.750	1.77	11.83	0.89
2.667	5.31	5.750	11.51	8.833	1.77	11.92	0.89
2.750	5.31	5.833	11.51	8.917	1.77	12.00	0.89
2.833	5.31	5.917	11.51	9.000	1.77	12.08	0.89
2.917	5.31	6.000	11.51	9.083	1.77	12.17	0.89
3.000	5.31	6.083	11.51	9.167	1.77	12.25	0.89
3.083	5.31	6.167	11.51	9.250	1.77		

Max.Eff.Inten.	(mm/hr)=	40.71	10.16
over	(min)	5.00	25.00
Storage Coeff.	(min)=	4.66 (ii)	22.28 (ii)
Unit Hyd. Tpeak	(min)=	5.00	25.00
Unit Hyd. peak	(cms)=	0.22	0.05

				TOTALS
PEAK FLOW	(cms)=	0.05	0.06	0.102 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	87.54	16.04	24.62
TOTAL RAINFALL	(mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT	=	0.99	0.18	0.28

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
| ADD HYD  (  0135)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 1 (  0133):      1.24   0.038     5.25    24.61
     + ID2= 2 (  0134):      3.36   0.102     5.25    24.62
       ================================================
       ID = 3 (  0135):      4.60   0.141     5.25    24.62

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0099)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 1 (  0111):      1.35   0.104     5.25    60.00
     + ID2= 2 (  0113):     12.17   0.384     5.25    25.27
       ================================================
       ID = 3 (  0099):     13.52   0.488     5.25    28.73

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0099)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 3 (  0099):     13.52   0.488     5.25    28.73
     + ID2= 2 (  0130):      3.07   0.094     5.25    24.62
       ================================================
       ID = 1 (  0099):     16.59   0.581     5.25    27.97

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0099)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 1 (  0099):     16.59   0.581     5.25    27.97
     + ID2= 2 (  0131):      1.00   0.066     5.25    51.31
       ================================================
       ID = 3 (  0099):     17.59   0.647     5.25    29.30

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0099)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 3 (  0099):     17.59   0.647     5.25    29.30
     + ID2= 2 (  0135):      4.60   0.141     5.25    24.62
       ================================================
       ID = 1 (  0099):     22.19   0.788     5.25    28.33

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------
-------------------    BLOCK 82 Pond (Small)

| RESERVOIR(  0094)|
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)   |    (cms)     (ha.m.)
                        0.0000     0.0000    |   0.0570     0.5000
                        0.0560     0.0452    |   0.5000     0.5010

                             AREA     QPEAK     TPEAK       R.V.
                              (ha)      (cms)      (hrs)        (mm)
  INFLOW : ID= 2 (  0099)     22.190      0.788      5.25      28.33
  OUTFLOW: ID= 1 (  0094)     22.190      0.057      8.92      28.32

                PEAK   FLOW   REDUCTION [Qout/Qin](%)=  7.23
                TIME SHIFT OF PEAK FLOW          (min)=220.00
                MAXIMUM  STORAGE   USED        (ha.m.)=  0.4731

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 FINISH
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Jun 23, 2020

VO MODEL OUTPUT

The Regional Storm

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PLANNING
RECEIVED

Jun 23, 2020

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2017-0701 The Manors of Belfountain

Hurricane Hazel Storm
Proposed Condition Model Output
May, 2020

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       V    V   I    SSSSS  U   U    A    L              (v 5.1.2004)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M M M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 5.1\VO2\voin.dat
  Output  filename: C:\Users\jlysecki\AppData\Local\Civica\VH5\30ec8a68-987a-4897-92f2-
8b8b25ba79bf\155057db-bef7-4afc-add5-0830a2a3d27c\sce
  Summary filename: C:\Users\jlysecki\AppData\Local\Civica\VH5\30ec8a68-987a-4897-92f2-
8b8b25ba79bf\155057db-bef7-4afc-add5-0830a2a3d27c\sce


DATE: 03/11/2020                          TIME: 02:23:56

USER:


COMMENTS: _____________________________________________________

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  ***********************************************
  ** SIMULATION : HAZEL - Last 12 hours only    **
  ***********************************************


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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    4.30 |  3.25   12.60 |  6.25   21.10 |  9.25   50.60
               0.50    4.20 |  3.50   12.70 |  6.50   21.00 |  9.50   50.60
               0.75    8.40 |  3.75   12.70 |  6.75   25.30 |  9.75   54.80
               1.00    8.40 |  4.00   12.60 |  7.00   25.30 | 10.00   54.90
               1.25    4.20 |  4.25   16.90 |  7.25   12.70 | 10.25   38.00
               1.50    4.30 |  4.50   16.90 |  7.50   12.60 | 10.50   37.90
               1.75    4.30 |  4.75   16.90 |  7.75   12.60 | 10.75   37.90
               2.00    4.20 |  5.00   16.90 |  8.00   12.70 | 11.00   38.00
               2.25    4.20 |  5.25   12.60 |  8.25   12.70 | 11.25   12.60
               2.50    4.30 |  5.50   12.70 |  8.50   12.60 | 11.50   12.70
               2.75    8.40 |  5.75   12.60 |  8.75   12.60 | 11.75   12.70
               3.00    8.40 |  6.00   12.70 |  9.00   12.70 | 12.00   12.60

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| CALIB            |
| NASHYD  (  3015) |   Area     (ha)=   3.95   Curve Number    (CN)= 38.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 322.60   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.24

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.30 | 3.083   12.60 | 6.083   21.10 |  9.08   50.60
               0.167    4.30 | 3.167   12.60 | 6.167   21.10 |  9.17   50.60
               0.250    4.30 | 3.250   12.60 | 6.250   21.10 |  9.25   50.60
               0.333    4.20 | 3.333   12.70 | 6.333   21.00 |  9.33   50.60
               0.417    4.20 | 3.417   12.70 | 6.417   21.00 |  9.42   50.60
               0.500    4.20 | 3.500   12.70 | 6.500   21.00 |  9.50   50.60
               0.583    8.40 | 3.583   12.70 | 6.583   25.30 |  9.58   54.80
               0.667    8.40 | 3.667   12.70 | 6.667   25.30 |  9.67   54.80
               0.750    8.40 | 3.750   12.70 | 6.750   25.30 |  9.75   54.80
               0.833    8.40 | 3.833   12.60 | 6.833   25.30 |  9.83   54.90
               0.917    8.40 | 3.917   12.60 | 6.917   25.30 |  9.92   54.90
               1.000    8.40 | 4.000   12.60 | 7.000   25.30 | 10.00   54.90
               1.083    4.20 | 4.083   16.90 | 7.083   12.70 | 10.08   38.00
               1.167    4.20 | 4.167   16.90 | 7.167   12.70 | 10.17   38.00
               1.250    4.20 | 4.250   16.90 | 7.250   12.70 | 10.25   38.00
               1.333    4.30 | 4.333   16.90 | 7.333   12.60 | 10.33   37.90
               1.417    4.30 | 4.417   16.90 | 7.417   12.60 | 10.42   37.90
               1.500    4.30 | 4.500   16.90 | 7.500   12.60 | 10.50   37.90
               1.583    4.30 | 4.583   16.90 | 7.583   12.60 | 10.58   37.90
               1.667    4.30 | 4.667   16.90 | 7.667   12.60 | 10.67   37.90
               1.750    4.30 | 4.750   16.90 | 7.750   12.60 | 10.75   37.90
               1.833    4.20 | 4.833   16.90 | 7.833   12.70 | 10.83   38.00
               1.917    4.20 | 4.917   16.90 | 7.917   12.70 | 10.92   38.00
               2.000    4.20 | 5.000   16.90 | 8.000   12.70 | 11.00   38.00
               2.083    4.20 | 5.083   12.60 | 8.083   12.70 | 11.08   12.60
               2.167    4.20 | 5.167   12.60 | 8.167   12.70 | 11.17   12.60
               2.250    4.20 | 5.250   12.60 | 8.250   12.70 | 11.25   12.60
               2.333    4.30 | 5.333   12.70 | 8.333   12.60 | 11.33   12.70
               2.417    4.30 | 5.417   12.70 | 8.417   12.60 | 11.42   12.70
               2.500    4.30 | 5.500   12.70 | 8.500   12.60 | 11.50   12.70
               2.583    8.40 | 5.583   12.60 | 8.583   12.60 | 11.58   12.70
               2.667    8.40 | 5.667   12.60 | 8.667   12.60 | 11.67   12.70
               2.750    8.40 | 5.750   12.60 | 8.750   12.60 | 11.75   12.70
               2.833    8.40 | 5.833   12.70 | 8.833   12.70 | 11.83   12.60
               2.917    8.40 | 5.917   12.70 | 8.917   12.70 | 11.92   12.60
               3.000    8.40 | 6.000   12.70 | 9.000   12.70 | 12.00   12.60

    Unit Hyd Qpeak  (cms)=   0.629

    PEAK FLOW       (cms)=   0.000 (i)
    TIME TO PEAK    (hrs)=   0.000
    RUNOFF VOLUME    (mm)=   0.000
    TOTAL RAINFALL   (mm)= 210.900
    RUNOFF COEFFICIENT   =   0.000

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.25    4.30 |  3.25   12.60 |  6.25   21.10 |  9.25   50.60
               0.50    4.20 |  3.50   12.70 |  6.50   21.00 |  9.50   50.60
               0.75    8.40 |  3.75   12.70 |  6.75   25.30 |  9.75   54.80
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1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB							
NASHYD (3012)	Area	(ha)=	8.73	Curve Number	(CN)=	38.0	
ID= 1 DT= 5.0 min	Ia	(mm)=	37.10	# of Linear Res.(N)=		3.00	
	U.H. Tp(hrs)=		0.60				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.556

PEAK FLOW (cms)= 0.413 (i)
TIME TO PEAK (hrs)= 11.000
RUNOFF VOLUME (mm)= 51.351
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.243

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1512)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	ID1= 1 (3012):	8.73	0.413	11.00	51.35
	+ ID2= 2 (3015):	3.95	0.000	0.00	0.00
	ID = 3 (1512):	12.68	0.413	11.00	35.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB							
NASHYD (0308)	Area	(ha)=	20.94	Curve Number	(CN)=	82.0	
ID= 1 DT= 5.0 min	Ia	(mm)=	116.70	# of Linear Res.(N)=		3.00	
	U.H. Tp(hrs)=		0.67				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70

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2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 1.194

PEAK FLOW (cms)= 1.547 (i)
TIME TO PEAK (hrs)= 11.167
RUNOFF VOLUME (mm)= 59.174
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.281

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0128)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1512):	12.68	0.413	11.00	35.35
	+ ID2= 2 (0308):	20.94	1.547	11.17	59.17
	ID = 3 (0128):	33.62	1.955	11.17	50.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB					
NASHYD (3013)	Area (ha)= 4.32	Curve Number (CN)= 45.0			
ID= 1 DT= 5.0 min	Ia (mm)= 65.80	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.36				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.458

PEAK FLOW (cms)= 0.218 (i)
TIME TO PEAK (hrs)= 10.250
RUNOFF VOLUME (mm)= 46.209
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0138)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0128):	33.62	1.955	11.17	50.19
	+ ID2= 2 (3013):	4.32	0.218	10.25	46.21
	ID = 3 (0138):	37.94	2.159	11.08	49.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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CALIB											
NASHYD (0309)	Area (ha)= 3.50	Curve Number (CN)= 45.0									
ID= 1 DT= 5.0 min	Ia (mm)= 53.50	# of Linear Res.(N)= 3.00									
	U.H. Tp(hrs)= 0.38										

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.352

PEAK FLOW (cms)= 0.193 (i)
TIME TO PEAK (hrs)= 10.250
RUNOFF VOLUME (mm)= 52.947
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.251

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0098)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0138):	37.94	2.159	11.08	49.74
	+ ID2= 2 (0309):	3.50	0.193	10.25	52.95
	ID = 3 (0098):	41.44	2.343	11.08	50.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\	22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only	

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB											
NASHYD (3014)	Area (ha)= 1.67	Curve Number (CN)= 45.0									
ID= 1 DT= 5.0 min	Ia (mm)= 385.30	# of Linear Res.(N)= 3.00									
	U.H. Tp(hrs)= 0.33										

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.193

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.000

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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (3011)	Area	(ha)= 7.97	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)= 68.80	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.41		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.742

PEAK FLOW (cms)= 0.388 (i)
TIME TO PEAK (hrs)= 11.000
RUNOFF VOLUME (mm)= 44.615
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.212

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1411)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (3011):	7.97	0.388	11.00	44.61
+ ID2= 2 (3014):	1.67	0.000	0.00	0.00
ID = 3 (1411):	9.64	0.388	11.00	36.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0811)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (1411):	9.64	0.388	11.00	36.89
+ ID2= 2 (0098):	41.44	2.343	11.08	50.01
ID = 3 (0811):	51.08	2.729	11.08	47.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0306)	Area	(ha)= 9.67	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia	(mm)= 110.50	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.49		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60

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0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.754

PEAK FLOW (cms)= 0.322 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 24.534
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.116

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0116)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0306):		9.67	0.322	11.08	24.53
+ ID2= 2 (0811):		51.08	2.729	11.08	47.53
ID = 3 (0116):		60.75	3.051	11.08	43.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (3010)	Area (ha)= 7.10	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 171.40	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.39		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.695

PEAK FLOW (cms)= 0.057 (i)
TIME TO PEAK (hrs)= 11.333
RUNOFF VOLUME (mm)= 4.458
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.021

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0106)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0116):		60.75	3.051	11.08	43.87
+ ID2= 2 (3010):		7.10	0.057	11.33	4.46
ID = 3 (0106):		67.85	3.100	11.08	39.75

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0307)	Area (ha)= 6.99	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 123.70	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.33	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.809

PEAK FLOW (cms)= 0.214 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 19.117
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.091

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0301)	Area (ha)= 11.94	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 13.40	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.58	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70

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2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.786

PEAK FLOW (cms)= 0.754 (i)
TIME TO PEAK (hrs)= 10.667
RUNOFF VOLUME (mm)= 76.790
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.364

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0071)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0301):		11.94	0.754	10.67	76.79
+ ID2= 2 (0307):		6.99	0.214	11.08	19.12
ID = 3 (0071):		18.93	0.961	11.00	55.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0061)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0106):		67.85	3.100	11.08	39.75
+ ID2= 2 (0071):		18.93	0.961	11.00	55.49
ID = 3 (0061):		86.78	4.058	11.08	43.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0302)	Area (ha)= 6.75	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 179.90	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.48		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.537

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 2.814
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.013

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB             |
| NASHYD   (  0304)|   Area     (ha)=   0.25   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=  77.30   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.09

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

```
    Unit Hyd Qpeak  (cms)=   0.106

    PEAK FLOW       (cms)=   0.013 (i)
    TIME TO PEAK    (hrs)=  10.000
    RUNOFF VOLUME    (mm)=  38.677
    TOTAL RAINFALL   (mm)= 210.900
    RUNOFF COEFFICIENT   =   0.183

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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-------------------
| ADD HYD  (  0042)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0302):     6.75   0.034    12.08     2.81
     + ID2= 2 (  0304):     0.25   0.013    10.00    38.68
       ==========================================================
       ID = 3 (  0042):     7.00   0.038    12.00     4.10

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
-------------------
| ADD HYD  (  0241)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0042):     7.00   0.038    12.00     4.10
     + ID2= 2 (  0061):    86.78   4.058    11.08    43.18
       ==========================================================
       ID = 3 (  0241):    93.78   4.082    11.08    40.26

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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-------------------
| CALIB             |
| NASHYD   (  0305)|   Area     (ha)=   7.09   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 157.60   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.47

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70

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2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.576

PEAK FLOW (cms)= 0.092 (i)
TIME TO PEAK (hrs)= 11.333
RUNOFF VOLUME (mm)= 7.810
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.037

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
NASHYD (0303) | Area (ha)= 2.52 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min | Ia (mm)= 336.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.37

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.260

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0053)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0303):	2.52	0.000	0.00	0.00
+ ID2= 2 (0305):	7.09	0.092	11.33	7.81
ID = 3 (0053):	9.61	0.092	11.33	5.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0031)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0241):	93.78	4.082	11.08	40.26
+ ID2= 2 (0053):	9.61	0.092	11.33	5.76
ID = 3 (0031):	103.39	4.165	11.08	37.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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CALIB					
NASHYD (4017)	Area (ha)= 4.23	Curve Number (CN)= 45.0			
ID= 1 DT= 5.0 min	Ia (mm)= 52.50	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.68				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.238

PEAK FLOW (cms)= 0.217 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 53.515
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.254

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB					
NASHYD (4016)	Area (ha)= 35.55	Curve Number (CN)= 30.0			
ID= 1 DT= 5.0 min	Ia (mm)= 45.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.74				

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 1.835

PEAK FLOW (cms)= 1.199 (i)
TIME TO PEAK (hrs)= 11.167
RUNOFF VOLUME (mm)= 36.282
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.172

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1716)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (4016):	35.55	1.199	11.17	36.28

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+ ID2= 2 (4017):	4.23	0.217	11.08	53.51				
ID = 3 (1716):	39.78	1.415	11.17	38.11				

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB | NASHYD (4015) | ID= 1 DT= 5.0 min | Area (ha)= 3.11 | Ia (mm)= 49.00 | U.H. Tp(hrs)= 0.35 | Curve Number (CN)= 30.0 | # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.339

PEAK FLOW (cms)= 0.112 (i)
TIME TO PEAK (hrs)= 10.250
RUNOFF VOLUME (mm)= 34.730
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.165

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1516)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1716):	39.78	1.415	11.17	38.11
+ ID2= 2 (4015):	3.11	0.112	10.25	34.73
ID = 3 (1516):	42.89	1.522	11.08	37.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB | NASHYD (4014) | ID= 1 DT= 5.0 min | Area (ha)= 1.67 | Ia (mm)= 103.30 | U.H. Tp(hrs)= 0.23 | Curve Number (CN)= 62.0 | # of Linear Res.(N)= 3.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90

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1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.277

PEAK FLOW (cms)= 0.101 (i)
TIME TO PEAK (hrs)= 11.000
RUNOFF VOLUME (mm)= 43.927
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.208

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1416)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1516):	42.89	1.522	11.08	37.87
+ ID2= 2 (4014):	1.67	0.101	11.00	43.93
ID = 3 (1416):	44.56	1.618	11.08	38.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (4013)	Area (ha)= 19.43	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 22.50	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.90		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.825

PEAK FLOW (cms)= 1.084 (i)
TIME TO PEAK (hrs)= 11.167
RUNOFF VOLUME (mm)= 71.153
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.337

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1613)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1416):	44.56	1.618	11.08	38.10
+ ID2= 2 (4013):	19.43	1.084	11.17	71.15
ID = 3 (1613):	63.99	2.696	11.08	48.13

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
NASHYD (4010)	Area (ha)= 4.17 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 4.60 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.42

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.379

PEAK FLOW (cms)= 0.295 (i)
TIME TO PEAK (hrs)= 10.250
RUNOFF VOLUME (mm)= 82.353
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.390

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (1310)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (1613):	63.99	2.696	11.08	48.13
	+ ID2= 2 (4010):	4.17	0.295	10.25	82.35
	ID = 3 (1310):	68.16	2.960	11.08	50.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
NASHYD (4011)	Area (ha)= 5.81 Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 241.30 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.37

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60

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2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.600

PEAK FLOW (cms)= 0.000 (i)
TIME TO PEAK (hrs)= 0.000
RUNOFF VOLUME (mm)= 0.000
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.000

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
NASHYD (0408)	Area (ha)= 18.85 Curve Number (CN)= 62.0
ID= 1 DT= 5.0 min	Ia (mm)= 93.40 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.50

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 1.440

PEAK FLOW (cms)= 1.149 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 50.537
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.240

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0118)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (4011):	5.81	0.000	0.00	0.00
	+ ID2= 2 (0408):	18.85	1.149	11.08	50.54
	ID = 3 (0118):	24.66	1.149	11.08	38.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
NASHYD (0406)	Area (ha)= 5.46 Curve Number (CN)= 62.0
ID= 1 DT= 5.0 min	Ia (mm)= 133.70 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.42

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.497

PEAK FLOW (cms)= 0.223 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 25.589
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.121

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0068)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0118):	24.66	1.149	11.08	38.63
+	ID2= 2 (0406):	5.46	0.223	11.08	25.59
	ID = 3 (0068):	30.12	1.372	11.08	36.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1310):	68.16	2.960	11.08	50.23
+	ID2= 2 (0068):	30.12	1.372	11.08	36.27
	ID = 3 (0810):	98.28	4.332	11.08	45.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB		
NASHYD (0407)	Area (ha)= 1.40	Curve Number (CN)= 45.0
ID= 1 DT= 5.0 min	Ia (mm)= 1.30	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.26	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.206

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PEAK FLOW (cms)= 0.110 (i)
TIME TO PEAK (hrs)= 10.083
RUNOFF VOLUME (mm)= 84.420
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.400

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0107)|	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0407):	1.40	0.110	10.08	84.42
	+ ID2= 2 (0810):	98.28	4.332	11.08	45.95
	ID = 3 (0107):	99.68	4.418	11.08	46.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB | NASHYD (4012)| ID= 1 DT= 5.0 min | Area (ha)= 4.62 Curve Number (CN)= 38.0 Ia (mm)= 201.30 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.34

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.519

PEAK FLOW (cms)= 0.004 (i)
TIME TO PEAK (hrs)= 12.167
RUNOFF VOLUME (mm)= 0.217
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.001

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB | NASHYD (0409)| ID= 1 DT= 5.0 min | Area (ha)= 6.58 Curve Number (CN)= 45.0 Ia (mm)= 173.90 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.38

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80

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0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.661

PEAK FLOW (cms)= 0.047 (i)
TIME TO PEAK (hrs)= 11.333
RUNOFF VOLUME (mm)= 3.940
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.019

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0129)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (4012):	4.62	0.004	12.17	0.22
+ ID2= 2 (0409):	6.58	0.047	11.33	3.94
ID = 3 (0129):	11.20	0.047	11.33	2.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0403)	Area (ha)= 8.35	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 72.90	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.24		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 1.329

PEAK FLOW (cms)= 0.426 (i)
TIME TO PEAK (hrs)= 10.083
RUNOFF VOLUME (mm)= 42.427
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.201

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0093)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0129):	11.20	0.047	11.33	2.40
+ ID2= 2 (0403):	8.35	0.426	10.08	42.43
ID = 3 (0093):	19.55	0.440	11.00	19.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0073)

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1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0107):	99.68	4.418	11.08	46.49
+ ID2= 2 (0093):	19.55	0.440	11.00	19.50
ID = 3 (0073):	119.23	4.847	11.08	42.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0405)	Area (ha)= 1.24	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 119.40	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.20		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.237

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 11.000
RUNOFF VOLUME (mm)= 20.789
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.099

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0573)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0405):	1.24	0.043	11.00	20.79
+ ID2= 2 (0073):	119.23	4.847	11.08	42.06
ID = 3 (0573):	120.47	4.888	11.08	41.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0404)	Area (ha)= 1.91	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 99.90	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.25		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80

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0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.292

PEAK FLOW (cms)= 0.078 (i)
TIME TO PEAK (hrs)= 11.000
RUNOFF VOLUME (mm)= 29.212
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.139

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0043)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0404):	1.91	0.078	11.00	29.21
+ ID2= 2 (0573):	120.47	4.888	11.08	41.84
ID = 3 (0043):	122.38	4.963	11.08	41.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB / NASHYD (0401) / ID= 1 DT= 5.0 min	Area (ha)= 9.13	Curve Number (CN)= 62.0
	Ia (mm)= 1.90	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.62	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.562

PEAK FLOW (cms)= 0.813 (i)
TIME TO PEAK (hrs)= 10.583
RUNOFF VOLUME (mm)= 119.777
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.568

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0341)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0401):	9.13	0.813	10.58	119.78
+ ID2= 2 (0043):	122.38	4.963	11.08	41.65
ID = 3 (0341):	131.51	5.754	11.00	47.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD

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|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| NASHYD   (  0402)|   Area     (ha)=   2.67   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)= 176.80   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.31

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

```
    Unit Hyd Qpeak  (cms)=   0.329

    PEAK FLOW       (cms)=   0.017 (i)
    TIME TO PEAK    (hrs)=  11.250
    RUNOFF VOLUME    (mm)=   3.374
    TOTAL RAINFALL   (mm)= 210.900
    RUNOFF COEFFICIENT   =   0.016

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0021)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
      ID1= 1 (  0341):   131.51    5.754    11.00    47.07
    + ID2= 2 (  0402):     2.67    0.017    11.25     3.37
      ==========================================================
      ID = 3 (  0021):   134.18    5.768    11.08    46.20

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  3004)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
      ID1= 1 (  0021):   134.18    5.768    11.08    46.20
    + ID2= 2 (  0031):   103.39    4.165    11.08    37.06
      ==========================================================
      ID = 3 (  3004):   237.57    9.933    11.08    42.22

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| NASHYD   (  0102)|   Area     (ha)=   6.53   Curve Number    (CN)= 45.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=  93.10   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80

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0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 0.509

PEAK FLOW (cms)= 0.262 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 32.402
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.154

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
NASHYD (0101)	Area (ha)= 9.26	Curve Number (CN)= 45.0	
ID= 1 DT= 5.0 min	Ia (mm)= 143.90	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.34		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Unit Hyd Qpeak (cms)= 1.040

PEAK FLOW (cms)= 0.200 (i)
TIME TO PEAK (hrs)= 11.083
RUNOFF VOLUME (mm)= 11.890
TOTAL RAINFALL (mm)= 210.900
RUNOFF COEFFICIENT = 0.056

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0012)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0101):	9.26	0.200	11.08	11.89
+ ID2= 2 (0102):	6.53	0.262	11.08	32.40
ID = 3 (0012):	15.79	0.462	11.08	20.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0999)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0012):	15.79	0.462	11.08	20.37
+ ID2= 2 (3004):	237.57	9.933	11.08	42.22
ID = 3 (0999):	253.36	10.395	11.08	40.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0140)|   Area     (ha)=   4.20
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       2.10          2.10
     Dep. Storage     (mm)=       1.00          1.50
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     167.33         40.00
     Mannings n             =     0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

```
     Max.Eff.Inten.(mm/hr)=      54.90        25.50
               over (min)        5.00        20.00
     Storage Coeff.  (min)=      4.42 (ii)   16.61 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.23         0.06
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.32         0.13       0.452 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.08        10.00
     RUNOFF VOLUME    (mm)=    209.90        70.29       140.09
     TOTAL RAINFALL   (mm)=    210.90       210.90       210.90
     RUNOFF COEFFICIENT   =      1.00         0.33         0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0141)|   Area     (ha)=   3.55
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.64          2.91
     Dep. Storage     (mm)=       1.00          1.50
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     153.84         40.00
     Mannings n             =     0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00

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1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

				TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	28.58		
over (min)	5.00	20.00		
Storage Coeff. (min)=	4.20 (ii)	15.85 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.24	0.07		
PEAK FLOW (cms)=	0.06	0.21	0.272 (iii)	
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	73.68	90.03	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.35	0.43	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0142) | Area (ha)= 0.42
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.08	0.34
Dep. Storage (mm)=	1.00	1.50
Average Slope (%)=	1.00	2.00
Length (m)=	52.92	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

				TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	25.50		
over (min)	5.00	15.00		
Storage Coeff. (min)=	2.22 (ii)	14.41 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.30	0.08		
PEAK FLOW (cms)=	0.01	0.02	0.034 (iii)	
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	70.29	95.40	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.33	0.45	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppD

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Jun 23, 2020

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|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0143)|   Area     (ha)=   0.28
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.05         0.23
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     43.20        40.00
     Mannings n             =   0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

```
     Max.Eff.Inten.(mm/hr)=      54.90        25.50
                over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.96 (ii)   14.15 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.08
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.02      0.023 (iii)
     TIME TO PEAK    (hrs)=      10.00        10.08     10.00
     RUNOFF VOLUME    (mm)=     209.90        70.29     95.39
     TOTAL RAINFALL   (mm)=     210.90       210.90    210.90
     RUNOFF COEFFICIENT   =       1.00         0.33      0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN*  =  38.0    Ia = Dep. Storage   (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0144)|   Area     (ha)=   0.38
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
--------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.07         0.31
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     50.33        40.00
     Mannings n             =   0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90

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1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	25.50	
over	(min)	5.00	15.00	
Storage Coeff.	(min)=	2.15 (ii)	14.34 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	15.00	
Unit Hyd. peak	(cms)=	0.31	0.08	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.02	0.031 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.40
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0145) | Area (ha)= 0.17

ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.03	0.14
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	33.67	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	28.58	
over	(min)	5.00	15.00	
Storage Coeff.	(min)=	1.69 (ii)	13.34 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	15.00	
Unit Hyd. peak	(cms)=	0.32	0.08	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.01	0.013 (iii)
TIME TO PEAK	(hrs)=	10.00	10.00	10.00
RUNOFF VOLUME	(mm)=	209.90	73.68	89.99
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0146)|   Area     (ha)=   0.74
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
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		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.13	0.61
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	70.24	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	28.58		
over	(min)	5.00	15.00		
Storage Coeff.	(min)=	2.63 (ii)	14.27 (ii)		
Unit Hyd. Tpeak	(min)=	5.00	15.00		
Unit Hyd. peak	(cms)=	0.29	0.08		
				TOTALS	
PEAK FLOW	(cms)=	0.01	0.04	0.058	(iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME	(mm)=	209.90	73.68	90.02	
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT	=	1.00	0.35	0.43	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0177)|
|  1 +  2 =  3     |
--------------------
```

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0145):	0.17	0.013	10.00	89.99
+ ID2= 2 (0146):	0.74	0.058	10.00	90.02
ID = 3 (0177):	0.91	0.072	10.00	90.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0167)|
|  1 +  2 =  3     |
--------------------
```

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0144):	0.38	0.031	10.00	95.40
+ ID2= 2 (0177):	0.91	0.072	10.00	90.01
ID = 3 (0167):	1.29	0.102	10.00	91.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
--------------------
|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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CALIB	
STANDHYD (0147)	Area (ha)= 0.53
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.10	0.43
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	59.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=		54.90	28.58	
over (min)		5.00	15.00	
Storage Coeff. (min)=		2.38 (ii)	14.02 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.30	0.08	
				TOTALS
PEAK FLOW	(cms)=	0.01	0.03	0.042 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	73.68	90.02
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\j1ysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0149)	Area (ha)= 0.46
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.38
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	55.38	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70

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2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	25.50		
over (min)	5.00	15.00		
Storage Coeff. (min)=	2.28 (ii)	14.47 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.30	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.01	0.02	0.037 (iii)	
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	70.29	95.40	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.33	0.45	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0174)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0147):		0.53	0.042	10.00	90.02
+ ID2= 2 (0149):		0.46	0.037	10.00	95.40
ID = 3 (0174):		0.99	0.079	10.00	92.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0161)	Area (ha)= 0.20
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.16
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	36.51	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	25.50		
over (min)	5.00	15.00		
Storage Coeff. (min)=	1.77 (ii)	13.97 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.32	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.01	0.01	0.016 (iii)	
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	70.29	95.39	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.33	0.45	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0168)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0161):		0.20	0.016	10.00	95.39
+ ID2= 2 (0174):		0.99	0.079	10.00	92.52
ID = 3 (0168):		1.19	0.095	10.00	93.00

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB STANDHYD (0148)	Area (ha)= 0.13
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

				TOTALS
Max.Eff.Inten.	(mm/hr)=	54.90	25.50	
	over (min)	5.00	15.00	
Storage Coeff.	(min)=	1.56 (ii)	13.75 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	15.00	
Unit Hyd. peak	(cms)=	0.33	0.08	
PEAK FLOW	(cms)=	0.00	0.01	0.011 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.35
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB STANDHYD (0160)	Area (ha)= 0.21
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60

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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	25.50	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.80 (ii)	13.99 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.32	0.08	
PEAK FLOW (cms)=	0.01	0.01	0.017 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	70.29	95.38
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0173)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0148):	0.13	0.011	10.00	95.35
	+ ID2= 2 (0160):	0.21	0.017	10.00	95.38
	ID = 3 (0173):	0.34	0.028	10.00	95.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
STANDHYD (0150)	Area (ha)= 2.33		
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00	Dir. Conn.(%)= 12.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.42	1.91
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	124.63	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	20.00	
Storage Coeff. (min)=	3.71 (ii)	15.35 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.25	0.07	

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			TOTALS	
PEAK FLOW	(cms)=	0.04	0.14	0.179 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	73.68	90.03
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0151) | Area (ha)= 0.35
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.06	0.29
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	48.30	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=		54.90	25.50	
over (min)		5.00	15.00	
Storage Coeff. (min)=		2.10 (ii)	14.29 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.31	0.08	
			TOTALS	
PEAK FLOW	(cms)=	0.01	0.02	0.028 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.39
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0175)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0150):	2.33	0.179	10.00	90.03
+ ID2= 2 (0151):	0.35	0.028	10.00	95.39
ID = 3 (0175):	2.68	0.207	10.00	90.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70

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2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
STANDHYD (0155)	Area (ha)=	0.11	
ID= 1 DT= 5.0 min	Total Imp(%)=	18.00	Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.09
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	27.08	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=		54.90	25.50	
over (min)		5.00	15.00	
Storage Coeff. (min)=		1.48 (ii)	13.67 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.33	0.08	
				TOTALS
PEAK FLOW	(cms)=	0.00	0.01	0.009 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.35
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0169)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0155):	0.11	0.009	10.00	95.35
	+ ID2= 2 (0175):	2.68	0.207	10.00	90.73
	ID = 3 (0169):	2.79	0.216	10.00	90.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB			
STANDHYD (0153)	Area (ha)=	1.66	
ID= 1 DT= 5.0 min	Total Imp(%)=	18.00	Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.30	1.36
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	105.20	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00

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1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.35 (ii)	15.00 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.26	0.08	
PEAK FLOW (cms)=	0.03	0.10	0.130 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	73.68	90.02
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD ata\Local\Temp\ 22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0154)	Area (ha)= 0.59
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.11	0.48
Dep. Storage (mm)=	1.00	1.50
Average Slope (%)=	1.00	2.00
Length (m)=	62.72	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.45 (ii)	14.10 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.30	0.08	
PEAK FLOW (cms)=	0.01	0.04	0.046 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	73.68	90.02
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0170)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.

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--------------------          (ha)     (cms)     (hrs)      (mm)
       ID1= 1 (  0153):      1.66    0.130     10.00     90.02
     + ID2= 2 (  0154):      0.59    0.046     10.00     90.02
       ================================================
       ID = 3 (  0170):      2.25    0.176     10.00     90.02

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |  6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |  6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |  6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |  7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |  7.25   12.70 | 10.25   38.00
                1.50    4.30 |  4.50   16.90 |  7.50   12.60 | 10.50   37.90
                1.75    4.30 |  4.75   16.90 |  7.75   12.60 | 10.75   37.90
                2.00    4.20 |  5.00   16.90 |  8.00   12.70 | 11.00   38.00
                2.25    4.20 |  5.25   12.60 |  8.25   12.70 | 11.25   12.60
                2.50    4.30 |  5.50   12.70 |  8.50   12.60 | 11.50   12.70
                2.75    8.40 |  5.75   12.60 |  8.75   12.60 | 11.75   12.70
                3.00    8.40 |  6.00   12.70 |  9.00   12.70 | 12.00   12.60

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| CALIB            |
| STANDHYD (  0156)|   Area     (ha)=   1.16
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.21         0.95
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      87.94        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.30 | 3.083   12.60 | 6.083   21.10 |  9.08   50.60
               0.167    4.30 | 3.167   12.60 | 6.167   21.10 |  9.17   50.60
               0.250    4.30 | 3.250   12.60 | 6.250   21.10 |  9.25   50.60
               0.333    4.20 | 3.333   12.70 | 6.333   21.00 |  9.33   50.60
               0.417    4.20 | 3.417   12.70 | 6.417   21.00 |  9.42   50.60
               0.500    4.20 | 3.500   12.70 | 6.500   21.00 |  9.50   50.60
               0.583    8.40 | 3.583   12.70 | 6.583   25.30 |  9.58   54.80
               0.667    8.40 | 3.667   12.70 | 6.667   25.30 |  9.67   54.80
               0.750    8.40 | 3.750   12.70 | 6.750   25.30 |  9.75   54.80
               0.833    8.40 | 3.833   12.60 | 6.833   25.30 |  9.83   54.90
               0.917    8.40 | 3.917   12.60 | 6.917   25.30 |  9.92   54.90
               1.000    8.40 | 4.000   12.60 | 7.000   25.30 | 10.00   54.90
               1.083    4.20 | 4.083   16.90 | 7.083   12.70 | 10.08   38.00
               1.167    4.20 | 4.167   16.90 | 7.167   12.70 | 10.17   38.00
               1.250    4.20 | 4.250   16.90 | 7.250   12.70 | 10.25   38.00
               1.333    4.30 | 4.333   16.90 | 7.333   12.60 | 10.33   37.90
               1.417    4.30 | 4.417   16.90 | 7.417   12.60 | 10.42   37.90
               1.500    4.30 | 4.500   16.90 | 7.500   12.60 | 10.50   37.90
               1.583    4.30 | 4.583   16.90 | 7.583   12.60 | 10.58   37.90
               1.667    4.30 | 4.667   16.90 | 7.667   12.60 | 10.67   37.90
               1.750    4.30 | 4.750   16.90 | 7.750   12.60 | 10.75   37.90
               1.833    4.20 | 4.833   16.90 | 7.833   12.70 | 10.83   38.00
               1.917    4.20 | 4.917   16.90 | 7.917   12.70 | 10.92   38.00
               2.000    4.20 | 5.000   16.90 | 8.000   12.70 | 11.00   38.00
               2.083    4.20 | 5.083   12.60 | 8.083   12.70 | 11.08   12.60
               2.167    4.20 | 5.167   12.60 | 8.167   12.70 | 11.17   12.60
               2.250    4.20 | 5.250   12.60 | 8.250   12.70 | 11.25   12.60
               2.333    4.30 | 5.333   12.70 | 8.333   12.60 | 11.33   12.70
               2.417    4.30 | 5.417   12.70 | 8.417   12.60 | 11.42   12.70
               2.500    4.30 | 5.500   12.70 | 8.500   12.60 | 11.50   12.70
               2.583    8.40 | 5.583   12.60 | 8.583   12.60 | 11.58   12.70
               2.667    8.40 | 5.667   12.60 | 8.667   12.60 | 11.67   12.70
               2.750    8.40 | 5.750   12.60 | 8.750   12.60 | 11.75   12.70
               2.833    8.40 | 5.833   12.70 | 8.833   12.70 | 11.83   12.60
               2.917    8.40 | 5.917   12.70 | 8.917   12.70 | 11.92   12.60
               3.000    8.40 | 6.000   12.70 | 9.000   12.70 | 12.00   12.60

     Max.Eff.Inten.(mm/hr)=      54.90        28.58
               over (min)        5.00        15.00
     Storage Coeff.  (min)=      3.01 (ii)   14.65 (ii)
     Unit Hyd. Tpeak (min)=      5.00        15.00
     Unit Hyd. peak  (cms)=      0.28         0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=      0.02         0.07        0.091 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.08       10.00
     RUNOFF VOLUME    (mm)=    209.90        73.68       90.02
     TOTAL RAINFALL   (mm)=    210.90       210.90      210.90
     RUNOFF COEFFICIENT   =      1.00         0.35        0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |  6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |  6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |  6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |  7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |  7.25   12.70 | 10.25   38.00
                1.50    4.30 |  4.50   16.90 |  7.50   12.60 | 10.50   37.90
                1.75    4.30 |  4.75   16.90 |  7.75   12.60 | 10.75   37.90
                2.00    4.20 |  5.00   16.90 |  8.00   12.70 | 11.00   38.00
                2.25    4.20 |  5.25   12.60 |  8.25   12.70 | 11.25   12.60
                2.50    4.30 |  5.50   12.70 |  8.50   12.60 | 11.50   12.70
                2.75    8.40 |  5.75   12.60 |  8.75   12.60 | 11.75   12.70
                3.00    8.40 |  6.00   12.70 |  9.00   12.70 | 12.00   12.60

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| CALIB            |
| STANDHYD (  0159)|   Area     (ha)=   0.12
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.02         0.10
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      28.28        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
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hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	25.50	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.52 (ii)	13.71 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.33	0.08	
			TOTALS
PEAK FLOW (cms)=	0.00	0.01	0.010 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	70.29	95.35
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0171)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0156):	1.16	0.091	10.00	90.02
+ ID2= 2 (0159):	0.12	0.010	10.00	95.35
ID = 3 (0171):	1.28	0.101	10.00	90.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0157)	Area (ha)= 0.24
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.20
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	40.00	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

TOWN OF CALEDON
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Max.Eff.Inten.(mm/hr)=	54.90	25.50							
over (min)	5.00	15.00							
Storage Coeff. (min)=	1.87 (ii)	14.07 (ii)							
Unit Hyd. Tpeak (min)=	5.00	15.00							
Unit Hyd. peak (cms)=	0.32	0.08							
			TOTALS						
PEAK FLOW (cms)=	0.01	0.01	0.020 (iii)						
TIME TO PEAK (hrs)=	10.00	10.08	10.00						
RUNOFF VOLUME (mm)=	209.90	70.29	95.38						
TOTAL RAINFALL (mm)=	210.90	210.90	210.90						
RUNOFF COEFFICIENT =	1.00	0.33	0.45						

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0158) | Area (ha)= 0.13
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.02	0.11
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	29.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	25.50							
over (min)	5.00	15.00							
Storage Coeff. (min)=	1.56 (ii)	13.75 (ii)							
Unit Hyd. Tpeak (min)=	5.00	15.00							
Unit Hyd. peak (cms)=	0.33	0.08							
			TOTALS						
PEAK FLOW (cms)=	0.00	0.01	0.011 (iii)						
TIME TO PEAK (hrs)=	10.00	10.08	10.00						
RUNOFF VOLUME (mm)=	209.90	70.29	95.35						
TOTAL RAINFALL (mm)=	210.90	210.90	210.90						
RUNOFF COEFFICIENT =	1.00	0.33	0.45						

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0172)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0157):		0.24	0.020	10.00	95.38
+ ID2= 2 (0158):		0.13	0.011	10.00	95.35
ID = 3 (0172):		0.37	0.030	10.00	95.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0141):		3.55	0.272	10.00	90.03
+ ID2= 2 (0142):		0.42	0.034	10.00	95.40
ID = 3 (0136):		3.97	0.306	10.00	90.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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ADD HYD (0136)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	3.97	0.306	10.00	90.60
+ ID2= 2 (0143):	0.28	0.023	10.00	95.39
ID = 1 (0136):	4.25	0.329	10.00	90.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	4.25	0.329	10.00	90.91
+ ID2= 2 (0167):	1.29	0.102	10.00	91.60
ID = 3 (0136):	5.54	0.431	10.00	91.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	5.54	0.431	10.00	91.07
+ ID2= 2 (0168):	1.19	0.095	10.00	93.00
ID = 1 (0136):	6.73	0.526	10.00	91.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	6.73	0.526	10.00	91.41
+ ID2= 2 (0169):	2.79	0.216	10.00	90.91
ID = 3 (0136):	9.52	0.743	10.00	91.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	9.52	0.743	10.00	91.27
+ ID2= 2 (0170):	2.25	0.176	10.00	90.02
ID = 1 (0136):	11.77	0.919	10.00	91.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	11.77	0.919	10.00	91.03
+ ID2= 2 (0171):	1.28	0.101	10.00	90.52
ID = 3 (0136):	13.05	1.020	10.00	90.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0136):	13.05	1.020	10.00	90.98
+ ID2= 2 (0172):	0.37	0.030	10.00	95.37
ID = 1 (0136):	13.42	1.050	10.00	91.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0136)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.42	1.050	10.00	91.10
+ ID2= 2 (0173):	0.34	0.028	10.00	95.37
ID = 3 (0136):	13.76	1.078	10.00	91.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0178)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0136):	13.76	1.078	10.00	91.20
+ ID2= 2 (0140):	4.20	0.452	10.00	140.09
ID = 3 (0178):	17.96	1.530	10.00	102.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0139)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0178):	17.96	1.530	10.00	102.64
+ ID2= 2 (0999):	253.36	10.395	11.08	40.86
ID = 3 (0139):	271.32	11.549	11.00	44.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

BLOCK 81 Pond (Large)

RESERVOIR(9999)| IN= 2---> OUT= 1	DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
			0.0000	0.0000	0.3380	8.8593
			0.3370	0.2558	1.0000	8.8594

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0139)		271.320	11.549	11.00	44.95
OUTFLOW: ID= 1 (9999)		271.320	8.709	11.83	44.95

PEAK FLOW REDUCTION [Qout/Qin](%)= 75.41
TIME SHIFT OF PEAK FLOW (min)= 50.00
MAXIMUM STORAGE USED (ha.m.)= 8.8816

READ STORM	Filename: C:\Users\jlysecki\AppD

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|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0096)|   Area     (ha)=   0.62
|ID= 1 DT= 5.0 min |   Total Imp(%)=  62.00   Dir. Conn.(%)=  62.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.38         0.24
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      64.29        40.00
     Mannings n             =    0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

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     Max.Eff.Inten.(mm/hr)=      54.90        25.50
               over (min)        5.00        15.00
     Storage Coeff.  (min)=      2.49 (ii)   14.68 (ii)
     Unit Hyd. Tpeak (min)=      5.00        15.00
     Unit Hyd. peak  (cms)=      0.29         0.08
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.06         0.02      0.074 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.08       10.00
     RUNOFF VOLUME    (mm)=    209.90        70.29      156.83
     TOTAL RAINFALL   (mm)=    210.90       210.90      210.90
     RUNOFF COEFFICIENT   =      1.00         0.33        0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
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TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

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| CALIB            |
| STANDHYD (  0110)|   Area     (ha)=   0.73
|ID= 1 DT= 5.0 min |   Total Imp(%)=  62.00   Dir. Conn.(%)=  62.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.45         0.28
     Dep. Storage     (mm)=       1.00         1.50
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      69.76        40.00
     Mannings n             =    0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00

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1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	25.50	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.62 (ii)	14.81 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.29	0.08	
PEAK FLOW (cms)=	0.07	0.02	0.087 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	70.29	156.84
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.33	0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0111)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0110):	0.73	0.087	10.00	156.84
+ ID2= 2 (0096):	0.62	0.074	10.00	156.83
ID = 3 (0111):	1.35	0.161	10.00	156.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0112) | Area (ha)= 2.00
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.36	1.64
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	115.47	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	20.00	
Storage Coeff. (min)=	3.54 (ii)	15.19 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.26	0.07	
PEAK FLOW (cms)=	0.04	0.12	0.154 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	73.68	90.02
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

TOWN OF CALEDON
PLANNING
RECEIVED

Jun 23, 2020

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0114)	Area (ha)= 0.21
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.17
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	37.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	25.50	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.80 (ii)	13.99 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.32	0.08	
PEAK FLOW (cms)=	0.01	0.01	0.017 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	70.29	95.38
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0192)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0112):	2.00	0.154	10.00	90.02
	+ ID2= 2 (0114):	0.21	0.017	10.00	95.38
	ID = 3 (0192):	2.21	0.171	10.00	90.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0115)	Area (ha)= 0.91
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

TOWN OF CALEDON
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Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.16	0.75
Dep. Storage (mm)=	1.00	1.50
Average Slope (%)=	1.00	2.00
Length (m)=	77.89	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

			TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.80 (ii)	14.44 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.28	0.08	
PEAK FLOW (cms)=	0.02	0.05	0.071 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	73.68	90.02
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppD
ata\Local\Temp\
22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0117) | Area (ha)= 2.08
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.37	1.71
Dep. Storage (mm)=	1.00	1.50
Average Slope (%)=	1.00	2.00
Length (m)=	117.76	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

TOWN OF CALEDON
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Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

```
     Max.Eff.Inten.(mm/hr)=      54.90        28.58
                 over (min)       5.00        20.00
     Storage Coeff.  (min)=      3.58 (ii)   15.23 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.26         0.07
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.04         0.12      0.160 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.08        10.00
     RUNOFF VOLUME    (mm)=    209.90        73.68        90.03
     TOTAL RAINFALL   (mm)=    210.90       210.90       210.90
     RUNOFF COEFFICIENT   =      1.00         0.35         0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
| ADD HYD  (  0191)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)     (cms)    (hrs)     (mm)
        ID1= 1 (  0115):     0.91    0.071    10.00    90.02
      + ID2= 2 (  0117):     2.08    0.160    10.00    90.03
        ==========================================================
        ID = 3 (  0191):     2.99    0.231    10.00    90.03

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |   6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |   6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |   6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |   7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |   7.25   12.70 | 10.25   38.00
                1.50    4.30 |  4.50   16.90 |   7.50   12.60 | 10.50   37.90
                1.75    4.30 |  4.75   16.90 |   7.75   12.60 | 10.75   37.90
                2.00    4.20 |  5.00   16.90 |   8.00   12.70 | 11.00   38.00
                2.25    4.20 |  5.25   12.60 |   8.25   12.70 | 11.25   12.60
                2.50    4.30 |  5.50   12.70 |   8.50   12.60 | 11.50   12.70
                2.75    8.40 |  5.75   12.60 |   8.75   12.60 | 11.75   12.70
                3.00    8.40 |  6.00   12.70 |   9.00   12.70 | 12.00   12.60

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| CALIB            |
| STANDHYD (  0119)|   Area     (ha)=   1.27
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.23         1.04
     Dep. Storage     (mm)=      1.00         1.50
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     92.01        40.00
     Mannings n             =   0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
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```
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.30 | 3.083   12.60 | 6.083   21.10 |  9.08   50.60
               0.167    4.30 | 3.167   12.60 | 6.167   21.10 |  9.17   50.60
               0.250    4.30 | 3.250   12.60 | 6.250   21.10 |  9.25   50.60
               0.333    4.20 | 3.333   12.70 | 6.333   21.00 |  9.33   50.60
               0.417    4.20 | 3.417   12.70 | 6.417   21.00 |  9.42   50.60
               0.500    4.20 | 3.500   12.70 | 6.500   21.00 |  9.50   50.60
               0.583    8.40 | 3.583   12.70 | 6.583   25.30 |  9.58   54.80
               0.667    8.40 | 3.667   12.70 | 6.667   25.30 |  9.67   54.80
               0.750    8.40 | 3.750   12.70 | 6.750   25.30 |  9.75   54.80
               0.833    8.40 | 3.833   12.60 | 6.833   25.30 |  9.83   54.90
               0.917    8.40 | 3.917   12.60 | 6.917   25.30 |  9.92   54.90
               1.000    8.40 | 4.000   12.60 | 7.000   25.30 | 10.00   54.90
               1.083    4.20 | 4.083   16.90 | 7.083   12.70 | 10.08   38.00
               1.167    4.20 | 4.167   16.90 | 7.167   12.70 | 10.17   38.00
               1.250    4.20 | 4.250   16.90 | 7.250   12.70 | 10.25   38.00
               1.333    4.30 | 4.333   16.90 | 7.333   12.60 | 10.33   37.90
               1.417    4.30 | 4.417   16.90 | 7.417   12.60 | 10.42   37.90
               1.500    4.30 | 4.500   16.90 | 7.500   12.60 | 10.50   37.90
               1.583    4.30 | 4.583   16.90 | 7.583   12.60 | 10.58   37.90
               1.667    4.30 | 4.667   16.90 | 7.667   12.60 | 10.67   37.90
               1.750    4.30 | 4.750   16.90 | 7.750   12.60 | 10.75   37.90
               1.833    4.20 | 4.833   16.90 | 7.833   12.70 | 10.83   38.00
               1.917    4.20 | 4.917   16.90 | 7.917   12.70 | 10.92   38.00
               2.000    4.20 | 5.000   16.90 | 8.000   12.70 | 11.00   38.00
               2.083    4.20 | 5.083   12.60 | 8.083   12.70 | 11.08   12.60
               2.167    4.20 | 5.167   12.60 | 8.167   12.70 | 11.17   12.60
               2.250    4.20 | 5.250   12.60 | 8.250   12.70 | 11.25   12.60
               2.333    4.30 | 5.333   12.70 | 8.333   12.60 | 11.33   12.70
               2.417    4.30 | 5.417   12.70 | 8.417   12.60 | 11.42   12.70
               2.500    4.30 | 5.500   12.70 | 8.500   12.60 | 11.50   12.70
               2.583    8.40 | 5.583   12.60 | 8.583   12.60 | 11.58   12.70
               2.667    8.40 | 5.667   12.60 | 8.667   12.60 | 11.67   12.70
               2.750    8.40 | 5.750   12.60 | 8.750   12.60 | 11.75   12.70
               2.833    8.40 | 5.833   12.70 | 8.833   12.70 | 11.83   12.60
               2.917    8.40 | 5.917   12.70 | 8.917   12.70 | 11.92   12.60
               3.000    8.40 | 6.000   12.70 | 9.000   12.70 | 12.00   12.60

     Max.Eff.Inten.(mm/hr)=      54.90        28.58
                 over (min)       5.00        15.00
     Storage Coeff.  (min)=      3.09 (ii)   14.74 (ii)
     Unit Hyd. Tpeak (min)=      5.00        15.00
     Unit Hyd. peak  (cms)=      0.27         0.08
                                                    *TOTALS*
     PEAK FLOW       (cms)=      0.02         0.08      0.100 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.08        10.00
     RUNOFF VOLUME    (mm)=    209.90        73.68        90.02
     TOTAL RAINFALL   (mm)=    210.90       210.90       210.90
     RUNOFF COEFFICIENT   =      1.00         0.35         0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |   6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |   6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |   6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |   7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |   7.25   12.70 | 10.25   38.00
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TOWN OF CALEDON
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Jun 23, 2020

1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0124)	Area (ha)= 0.67
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.12	0.55
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	66.83	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	25.50	
over	(min)	5.00	15.00	
Storage Coeff.	(min)=	2.55 (ii)	14.74 (ii)	
Unit Hyd. Tpeak	(min)=	5.00	15.00	
Unit Hyd. peak	(cms)=	0.29	0.08	
				TOTALS
PEAK FLOW	(cms)=	0.02	0.04	0.054 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.41
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0188)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0119):	1.27	0.100	10.00	90.02
	+ ID2= 2 (0124):	0.67	0.054	10.00	95.41
	ID = 3 (0188):	1.94	0.154	10.00	91.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0120)	Area (ha)= 0.23
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.04	0.19
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	39.16	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80

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0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	25.50
over	(min)	5.00	15.00
Storage Coeff.	(min)=	1.85 (ii)	14.04 (ii)
Unit Hyd. Tpeak	(min)=	5.00	15.00
Unit Hyd. peak	(cms)=	0.32	0.08
			TOTALS
PEAK FLOW	(cms)=	0.01	0.01	0.019 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.38
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0123)	Area (ha)= 0.65
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.12	0.53
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	65.83	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.	(mm/hr)=	54.90	25.50
over	(min)	5.00	15.00
Storage Coeff.	(min)=	2.53 (ii)	14.72 (ii)
Unit Hyd. Tpeak	(min)=	5.00	15.00
Unit Hyd. peak	(cms)=	0.29	0.08
			TOTALS
PEAK FLOW	(cms)=	0.02	0.03	0.053 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	95.41
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD  (  0162)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK      R.V.
-------------------           (ha)     (cms)    (hrs)      (mm)
       ID1= 1 (  0120):      0.23    0.019    10.00     95.38
     + ID2= 2 (  0123):      0.65    0.053    10.00     95.41
       ================================================
       ID = 3 (  0162):      0.88    0.071    10.00     95.40

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |   6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |   6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |   6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |   7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |   7.25   12.70 | 10.25   38.00
                1.50    4.30 |  4.50   16.90 |   7.50   12.60 | 10.50   37.90
                1.75    4.30 |  4.75   16.90 |   7.75   12.60 | 10.75   37.90
                2.00    4.20 |  5.00   16.90 |   8.00   12.70 | 11.00   38.00
                2.25    4.20 |  5.25   12.60 |   8.25   12.70 | 11.25   12.60
                2.50    4.30 |  5.50   12.70 |   8.50   12.60 | 11.50   12.70
                2.75    8.40 |  5.75   12.60 |   8.75   12.60 | 11.75   12.70
                3.00    8.40 |  6.00   12.70 |   9.00   12.70 | 12.00   12.60

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| CALIB            |
| STANDHYD (  0121)|   Area     (ha)=   2.87
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
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                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.52          2.35
     Dep. Storage     (mm)=       1.00          1.50
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     138.32         40.00
     Mannings n           =      0.013         0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.30 | 3.083   12.60 | 6.083   21.10 |  9.08   50.60
               0.167    4.30 | 3.167   12.60 | 6.167   21.10 |  9.17   50.60
               0.250    4.30 | 3.250   12.60 | 6.250   21.10 |  9.25   50.60
               0.333    4.20 | 3.333   12.70 | 6.333   21.00 |  9.33   50.60
               0.417    4.20 | 3.417   12.70 | 6.417   21.00 |  9.42   50.60
               0.500    4.20 | 3.500   12.70 | 6.500   21.00 |  9.50   50.60
               0.583    8.40 | 3.583   12.70 | 6.583   25.30 |  9.58   54.80
               0.667    8.40 | 3.667   12.70 | 6.667   25.30 |  9.67   54.80
               0.750    8.40 | 3.750   12.70 | 6.750   25.30 |  9.75   54.80
               0.833    8.40 | 3.833   12.60 | 6.833   25.30 |  9.83   54.90
               0.917    8.40 | 3.917   12.60 | 6.917   25.30 |  9.92   54.90
               1.000    8.40 | 4.000   12.60 | 7.000   25.30 | 10.00   54.90
               1.083    4.20 | 4.083   16.90 | 7.083   12.70 | 10.08   38.00
               1.167    4.20 | 4.167   16.90 | 7.167   12.70 | 10.17   38.00
               1.250    4.20 | 4.250   16.90 | 7.250   12.70 | 10.25   38.00
               1.333    4.30 | 4.333   16.90 | 7.333   12.60 | 10.33   37.90
               1.417    4.30 | 4.417   16.90 | 7.417   12.60 | 10.42   37.90
               1.500    4.30 | 4.500   16.90 | 7.500   12.60 | 10.50   37.90
               1.583    4.30 | 4.583   16.90 | 7.583   12.60 | 10.58   37.90
               1.667    4.30 | 4.667   16.90 | 7.667   12.60 | 10.67   37.90
               1.750    4.30 | 4.750   16.90 | 7.750   12.60 | 10.75   37.90
               1.833    4.20 | 4.833   16.90 | 7.833   12.70 | 10.83   38.00
               1.917    4.20 | 4.917   16.90 | 7.917   12.70 | 10.92   38.00
               2.000    4.20 | 5.000   16.90 | 8.000   12.70 | 11.00   38.00
               2.083    4.20 | 5.083   12.60 | 8.083   12.70 | 11.08   12.60
               2.167    4.20 | 5.167   12.60 | 8.167   12.70 | 11.17   12.60
               2.250    4.20 | 5.250   12.60 | 8.250   12.70 | 11.25   12.60
               2.333    4.30 | 5.333   12.70 | 8.333   12.60 | 11.33   12.70
               2.417    4.30 | 5.417   12.70 | 8.417   12.60 | 11.42   12.70
               2.500    4.30 | 5.500   12.70 | 8.500   12.60 | 11.50   12.70
               2.583    8.40 | 5.583   12.60 | 8.583   12.60 | 11.58   12.70
               2.667    8.40 | 5.667   12.60 | 8.667   12.60 | 11.67   12.70
               2.750    8.40 | 5.750   12.60 | 8.750   12.60 | 11.75   12.70
               2.833    8.40 | 5.833   12.70 | 8.833   12.70 | 11.83   12.60
               2.917    8.40 | 5.917   12.70 | 8.917   12.70 | 11.92   12.60
               3.000    8.40 | 6.000   12.70 | 9.000   12.70 | 12.00   12.60

     Max.Eff.Inten.(mm/hr)=      54.90         28.58
                  over (min)       5.00         20.00
     Storage Coeff.  (min)=       3.94 (ii)    15.59 (ii)
     Unit Hyd. Tpeak (min)=       5.00         20.00
     Unit Hyd. peak  (cms)=       0.24          0.07
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.05          0.17       0.220 (iii)
     TIME TO PEAK    (hrs)=      10.00         10.08      10.00
     RUNOFF VOLUME    (mm)=     209.90         73.68      90.03
     TOTAL RAINFALL   (mm)=     210.90        210.90     210.90
     RUNOFF COEFFICIENT   =       1.00          0.35       0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  38.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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|    READ STORM    |    Filename: C:\Users\jlysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.25    4.30 |  3.25   12.60 |   6.25   21.10 |  9.25   50.60
                0.50    4.20 |  3.50   12.70 |   6.50   21.00 |  9.50   50.60
                0.75    8.40 |  3.75   12.70 |   6.75   25.30 |  9.75   54.80
                1.00    8.40 |  4.00   12.60 |   7.00   25.30 | 10.00   54.90
                1.25    4.20 |  4.25   16.90 |   7.25   12.70 | 10.25   38.00
                1.50    4.30 |  4.50   16.90 |   7.50   12.60 | 10.50   37.90
                1.75    4.30 |  4.75   16.90 |   7.75   12.60 | 10.75   37.90
                2.00    4.20 |  5.00   16.90 |   8.00   12.70 | 11.00   38.00
                2.25    4.20 |  5.25   12.60 |   8.25   12.70 | 11.25   12.60
                2.50    4.30 |  5.50   12.70 |   8.50   12.60 | 11.50   12.70
                2.75    8.40 |  5.75   12.60 |   8.75   12.60 | 11.75   12.70
                3.00    8.40 |  6.00   12.70 |   9.00   12.70 | 12.00   12.60

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| CALIB            |
| STANDHYD (  0176)|   Area     (ha)=   0.09
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  18.00
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                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.02          0.07
     Dep. Storage     (mm)=       1.00          1.50
     Average Slope     (%)=       1.00          2.00
     Length            (m)=      24.49         40.00
     Mannings n           =      0.013         0.250
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TOWN OF CALEDON
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

				TOTALS
Max.Eff.Inten.(mm/hr)=	54.90	25.50		
over (min)	5.00	15.00		
Storage Coeff. (min)=	1.40 (ii)	13.59 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.33	0.08		
PEAK FLOW (cms)=	0.00	0.00	0.007 (iii)	
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	70.29	95.33	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.33	0.45	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0190)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3					
ID1= 1 (0121):		2.87	0.220	10.00	90.03
+ ID2= 2 (0176):		0.09	0.007	10.00	95.33
ID = 3 (0190):		2.96	0.227	10.00	90.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0122)	Area (ha)= 0.76
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.14	0.62
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	71.18	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70

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2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	28.58		
over (min)	5.00	15.00		
Storage Coeff. (min)=	2.65 (ii)	14.30 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.29	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.01	0.05	0.060	(iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	73.68	90.02	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.35	0.43	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppD
	ata\Local\Temp\
	22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB STANDHYD (0125)	Area (ha)= 0.43
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 18.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.08	0.35
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	53.54	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	25.50		
over (min)	5.00	15.00		
Storage Coeff. (min)=	2.23 (ii)	14.42 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.30	0.08		
			TOTALS	
PEAK FLOW (cms)=	0.01	0.02	0.035	(iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00	
RUNOFF VOLUME (mm)=	209.90	70.29	95.40	
TOTAL RAINFALL (mm)=	210.90	210.90	210.90	
RUNOFF COEFFICIENT =	1.00	0.33	0.45	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0189)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0122):	0.76	0.060	10.00	90.02
	+ ID2= 2 (0125):	0.43	0.035	10.00	95.40
	ID = 3 (0189):	1.19	0.095	10.00	91.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0113)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0162):	0.88	0.071	10.00	95.40
	+ ID2= 2 (0188):	1.94	0.154	10.00	91.88

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       ID = 3 (  0113):     2.82   0.225    10.00    92.98

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0113)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 3 (  0113):     2.82   0.225    10.00    92.98
     + ID2= 2 (  0189):     1.19   0.095    10.00    91.96
       ====================================================
       ID = 1 (  0113):     4.01   0.320    10.00    92.68

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0113)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 1 (  0113):     4.01   0.320    10.00    92.68
     + ID2= 2 (  0190):     2.96   0.227    10.00    90.19
       ====================================================
       ID = 3 (  0113):     6.97   0.547    10.00    91.62

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0113)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 3 (  0113):     6.97   0.547    10.00    91.62
     + ID2= 2 (  0191):     2.99   0.231    10.00    90.03
       ====================================================
       ID = 1 (  0113):     9.96   0.779    10.00    91.14

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0113)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)     (cms)    (hrs)     (mm)
       ID1= 1 (  0113):     9.96   0.779    10.00    91.14
     + ID2= 2 (  0192):     2.21   0.171    10.00    90.53
       ====================================================
       ID = 3 (  0113):    12.17   0.950    10.00    91.03

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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|    READ STORM    |    Filename: C:\Users\j1ysecki\AppD
|                  |              ata\Local\Temp\
|                  |              22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
| Ptotal=210.90 mm |    Comments: HAZEL - Last 12 hours only
--------------------
                TIME     RAIN |  TIME     RAIN |'  TIME     RAIN |  TIME     RAIN
                 hrs    mm/hr |   hrs    mm/hr |'   hrs    mm/hr |   hrs    mm/hr
                0.25     4.30 |  3.25    12.60 |   6.25    21.10 |  9.25    50.60
                0.50     4.20 |  3.50    12.70 |   6.50    21.00 |  9.50    50.60
                0.75     8.40 |  3.75    12.70 |   6.75    25.30 |  9.75    54.80
                1.00     8.40 |  4.00    12.60 |   7.00    25.30 | 10.00    54.90
                1.25     4.20 |  4.25    16.90 |   7.25    12.70 | 10.25    38.00
                1.50     4.30 |  4.50    16.90 |   7.50    12.60 | 10.50    37.90
                1.75     4.30 |  4.75    16.90 |   7.75    12.60 | 10.75    37.90
                2.00     4.20 |  5.00    16.90 |   8.00    12.70 | 11.00    38.00
                2.25     4.20 |  5.25    12.60 |   8.25    12.70 | 11.25    12.60
                2.50     4.30 |  5.50    12.70 |   8.50    12.60 | 11.50    12.70
                2.75     8.40 |  5.75    12.60 |   8.75    12.60 | 11.75    12.70
                3.00     8.40 |  6.00    12.70 |   9.00    12.70 | 12.00    12.60

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| CALIB            |
| STANDHYD (  0130)|   Area     (ha)=   3.07
|ID= 1 DT= 5.0 min |   Total Imp(%)=  18.00   Dir. Conn.(%)=  12.00
--------------------

                                IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55          2.52
     Dep. Storage     (mm)=       1.00          1.50
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     143.06         40.00
     Mannings n             =     0.013         0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME     RAIN |  TIME     RAIN |'  TIME     RAIN |  TIME     RAIN
                 hrs    mm/hr |   hrs    mm/hr |'   hrs    mm/hr |   hrs    mm/hr
               0.083     4.30 | 3.083    12.60 | 6.083    21.10 |  9.08    50.60
               0.167     4.30 | 3.167    12.60 | 6.167    21.10 |  9.17    50.60
               0.250     4.30 | 3.250    12.60 | 6.250    21.10 |  9.25    50.60
               0.333     4.20 | 3.333    12.70 | 6.333    21.00 |  9.33    50.60
               0.417     4.20 | 3.417    12.70 | 6.417    21.00 |  9.42    50.60
               0.500     4.20 | 3.500    12.70 | 6.500    21.00 |  9.50    50.60
               0.583     8.40 | 3.583    12.70 | 6.583    25.30 |  9.58    54.80
               0.667     8.40 | 3.667    12.70 | 6.667    25.30 |  9.67    54.80
               0.750     8.40 | 3.750    12.70 | 6.750    25.30 |  9.75    54.80
               0.833     8.40 | 3.833    12.60 | 6.833    25.30 |  9.83    54.90
               0.917     8.40 | 3.917    12.60 | 6.917    25.30 |  9.92    54.90
               1.000     8.40 | 4.000    12.60 | 7.000    25.30 | 10.00    54.90
               1.083     4.20 | 4.083    16.90 | 7.083    12.70 | 10.08    38.00
               1.167     4.20 | 4.167    16.90 | 7.167    12.70 | 10.17    38.00
               1.250     4.20 | 4.250    16.90 | 7.250    12.70 | 10.25    38.00
               1.333     4.30 | 4.333    16.90 | 7.333    12.60 | 10.33    37.90
               1.417     4.30 | 4.417    16.90 | 7.417    12.60 | 10.42    37.90
               1.500     4.30 | 4.500    16.90 | 7.500    12.60 | 10.50    37.90
               1.583     4.30 | 4.583    16.90 | 7.583    12.60 | 10.58    37.90
               1.667     4.30 | 4.667    16.90 | 7.667    12.60 | 10.67    37.90
               1.750     4.30 | 4.750    16.90 | 7.750    12.60 | 10.75    37.90
               1.833     4.20 | 4.833    16.90 | 7.833    12.70 | 10.83    38.00
               1.917     4.20 | 4.917    16.90 | 7.917    12.70 | 10.92    38.00
               2.000     4.20 | 5.000    16.90 | 8.000    12.70 | 11.00    38.00
               2.083     4.20 | 5.083    12.60 | 8.083    12.70 | 11.08    12.60
               2.167     4.20 | 5.167    12.60 | 8.167    12.70 | 11.17    12.60
               2.250     4.20 | 5.250    12.60 | 8.250    12.70 | 11.25    12.60
               2.333     4.30 | 5.333    12.70 | 8.333    12.60 | 11.33    12.70
               2.417     4.30 | 5.417    12.70 | 8.417    12.60 | 11.42    12.70
               2.500     4.30 | 5.500    12.70 | 8.500    12.60 | 11.50    12.70
               2.583     8.40 | 5.583    12.60 | 8.583    12.60 | 11.58    12.70
               2.667     8.40 | 5.667    12.60 | 8.667    12.60 | 11.67    12.70
               2.750     8.40 | 5.750    12.60 | 8.750    12.60 | 11.75    12.70
               2.833     8.40 | 5.833    12.70 | 8.833    12.70 | 11.83    12.60
               2.917     8.40 | 5.917    12.70 | 8.917    12.70 | 11.92    12.60
               3.000     8.40 | 6.000    12.70 | 9.000    12.70 | 12.00    12.60

     Max.Eff.Inten.(mm/hr)=      54.90         28.58
               over (min)        5.00         20.00
     Storage Coeff.  (min)=      4.03 (ii)    15.67 (ii)
     Unit Hyd. Tpeak (min)=      5.00         20.00
     Unit Hyd. peak  (cms)=      0.24          0.07
                                                          *TOTALS*
     PEAK FLOW       (cms)=      0.06          0.18        0.235 (iii)
     TIME TO PEAK    (hrs)=     10.00         10.08       10.00
     RUNOFF VOLUME    (mm)=    209.90         73.68       90.03
     TOTAL RAINFALL   (mm)=    210.90        210.90      210.90
     RUNOFF COEFFICIENT   =      1.00          0.35        0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.
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TOWN OF CALEDON
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Jun 23, 2020

COLE ENGINEERING

Experience Enhancing Excellence

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0131)	Area (ha)= 1.00
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.50	0.50
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	81.65	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

				TOTALS
Max.Eff.Inten.(mm/hr)=		54.90	25.50	
over (min)		5.00	20.00	
Storage Coeff. (min)=		2.88 (ii)	15.07 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.28	0.07	
PEAK FLOW	(cms)=	0.08	0.03	0.108 (iii)
TIME TO PEAK	(hrs)=	10.00	10.08	10.00
RUNOFF VOLUME	(mm)=	209.90	70.29	140.09
TOTAL RAINFALL	(mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT	=	1.00	0.33	0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM	Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm	Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB	
STANDHYD (0133)	Area (ha)= 1.24
ID= 1 DT= 5.0 min	Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.22	1.02
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	90.92	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60

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0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	28.58	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.07 (ii)	14.71 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.27	0.08	
			TOTALS
PEAK FLOW (cms)=	0.02	0.07	0.097 (iii)
TIME TO PEAK (hrs)=	10.00	10.08	10.00
RUNOFF VOLUME (mm)=	209.90	73.68	90.02
TOTAL RAINFALL (mm)=	210.90	210.90	210.90
RUNOFF COEFFICIENT =	1.00	0.35	0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

READ STORM | Filename: C:\Users\jlysecki\AppData\Local\Temp\22e9d84e-b43d-4402-9d44-4bc50e2193fc\9fa6c0ba
Ptotal=210.90 mm | Comments: HAZEL - Last 12 hours only

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	4.30	3.25	12.60	6.25	21.10	9.25	50.60
0.50	4.20	3.50	12.70	6.50	21.00	9.50	50.60
0.75	8.40	3.75	12.70	6.75	25.30	9.75	54.80
1.00	8.40	4.00	12.60	7.00	25.30	10.00	54.90
1.25	4.20	4.25	16.90	7.25	12.70	10.25	38.00
1.50	4.30	4.50	16.90	7.50	12.60	10.50	37.90
1.75	4.30	4.75	16.90	7.75	12.60	10.75	37.90
2.00	4.20	5.00	16.90	8.00	12.70	11.00	38.00
2.25	4.20	5.25	12.60	8.25	12.70	11.25	12.60
2.50	4.30	5.50	12.70	8.50	12.60	11.50	12.70
2.75	8.40	5.75	12.60	8.75	12.60	11.75	12.70
3.00	8.40	6.00	12.70	9.00	12.70	12.00	12.60

CALIB
STANDHYD (0134) | Area (ha)= 3.36
ID= 1 DT= 5.0 min | Total Imp(%)= 18.00 Dir. Conn.(%)= 12.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.60	2.76
Dep. Storage	(mm)=	1.00	1.50
Average Slope	(%)=	1.00	2.00
Length	(m)=	149.67	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.30	3.083	12.60	6.083	21.10	9.08	50.60
0.167	4.30	3.167	12.60	6.167	21.10	9.17	50.60
0.250	4.30	3.250	12.60	6.250	21.10	9.25	50.60
0.333	4.20	3.333	12.70	6.333	21.00	9.33	50.60
0.417	4.20	3.417	12.70	6.417	21.00	9.42	50.60
0.500	4.20	3.500	12.70	6.500	21.00	9.50	50.60
0.583	8.40	3.583	12.70	6.583	25.30	9.58	54.80
0.667	8.40	3.667	12.70	6.667	25.30	9.67	54.80
0.750	8.40	3.750	12.70	6.750	25.30	9.75	54.80
0.833	8.40	3.833	12.60	6.833	25.30	9.83	54.90
0.917	8.40	3.917	12.60	6.917	25.30	9.92	54.90
1.000	8.40	4.000	12.60	7.000	25.30	10.00	54.90
1.083	4.20	4.083	16.90	7.083	12.70	10.08	38.00
1.167	4.20	4.167	16.90	7.167	12.70	10.17	38.00
1.250	4.20	4.250	16.90	7.250	12.70	10.25	38.00
1.333	4.30	4.333	16.90	7.333	12.60	10.33	37.90
1.417	4.30	4.417	16.90	7.417	12.60	10.42	37.90
1.500	4.30	4.500	16.90	7.500	12.60	10.50	37.90
1.583	4.30	4.583	16.90	7.583	12.60	10.58	37.90
1.667	4.30	4.667	16.90	7.667	12.60	10.67	37.90
1.750	4.30	4.750	16.90	7.750	12.60	10.75	37.90
1.833	4.20	4.833	16.90	7.833	12.70	10.83	38.00
1.917	4.20	4.917	16.90	7.917	12.70	10.92	38.00
2.000	4.20	5.000	16.90	8.000	12.70	11.00	38.00
2.083	4.20	5.083	12.60	8.083	12.70	11.08	12.60
2.167	4.20	5.167	12.60	8.167	12.70	11.17	12.60
2.250	4.20	5.250	12.60	8.250	12.70	11.25	12.60
2.333	4.30	5.333	12.70	8.333	12.60	11.33	12.70
2.417	4.30	5.417	12.70	8.417	12.60	11.42	12.70
2.500	4.30	5.500	12.70	8.500	12.60	11.50	12.70
2.583	8.40	5.583	12.60	8.583	12.60	11.58	12.70
2.667	8.40	5.667	12.60	8.667	12.60	11.67	12.70
2.750	8.40	5.750	12.60	8.750	12.60	11.75	12.70
2.833	8.40	5.833	12.70	8.833	12.70	11.83	12.60
2.917	8.40	5.917	12.70	8.917	12.70	11.92	12.60
3.000	8.40	6.000	12.70	9.000	12.70	12.00	12.60

Max.Eff.Inten.(mm/hr)=	54.90	28.58		
over (min)	5.00	20.00		
Storage Coeff. (min)=	4.14 (ii)	15.78 (ii)		
Unit Hyd. Tpeak (min)=	5.00	20.00		
Unit Hyd. peak (cms)=	0.24	0.07		
				TOTALS
PEAK FLOW (cms)=	0.06	0.20		0.257 (iii)
TIME TO PEAK (hrs)=	10.00	10.08		10.00
RUNOFF VOLUME (mm)=	209.90	73.68		90.03
TOTAL RAINFALL (mm)=	210.90	210.90		210.90
RUNOFF COEFFICIENT =	1.00	0.35		0.43

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

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(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 38.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0135)|		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0133):		1.24	0.097	10.00	90.02
+ ID2= 2 (0134):		3.36	0.257	10.00	90.03
ID = 3 (0135):		4.60	0.355	10.00	90.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)|		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0111):		1.35	0.161	10.00	156.84
+ ID2= 2 (0113):		12.17	0.950	10.00	91.03
ID = 3 (0099):		13.52	1.111	10.00	97.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)|		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0099):		13.52	1.111	10.00	97.60
+ ID2= 2 (0130):		3.07	0.235	10.00	90.03
ID = 1 (0099):		16.59	1.346	10.00	96.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)|		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0099):		16.59	1.346	10.00	96.20
+ ID2= 2 (0131):		1.00	0.108	10.00	140.09
ID = 3 (0099):		17.59	1.454	10.00	98.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0099)|		AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1		(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0099):		17.59	1.454	10.00	98.70
+ ID2= 2 (0135):		4.60	0.355	10.00	90.03
ID = 1 (0099):		22.19	1.809	10.00	96.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

BLOCK 82 Pond (Small)

RESERVOIR(0094)
IN= 2---> OUT= 1

DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.0570	1.8959
	0.0560	0.0452	0.5000	1.8960

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0099)	22.190	1.809	10.00	96.90
OUTFLOW: ID= 1 (0094)	22.190	0.538	12.17	96.89

PEAK FLOW REDUCTION [Qout/Qin](%)= 29.75
TIME SHIFT OF PEAK FLOW (min)=130.00
MAXIMUM STORAGE USED (ha.m.)= 1.8992

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Worksheet for 18.0m ROW Conveyance- Conveyance above 0.30m only

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Channel Slope	0.50000	%
Normal Depth	0.30	m

Section Definitions

Station (m)	Elevation (m)
0+00.00	0.70
0+01.20	0.30
0+03.50	0.30
0+04.55	0.70
0+05.75	0.77
0+09.00	0.84
0+12.25	0.77
0+13.45	0.70
0+14.50	0.30
0+16.80	0.30
0+18.00	0.70

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00.00, 0.70)	(0+04.55, 0.70)	0.030
(0+04.55, 0.70)	(0+13.45, 0.70)	0.013
(0+13.45, 0.70)	(0+18.00, 0.70)	0.030

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

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Worksheet for 18.0m ROW Conveyance- Conveyance above 0.30m only

Results

Discharge		1.671	m³/s
Elevation Range	0.30 to 0.84 m		
Flow Area		1.89	m²
Wetted Perimeter		8.18	m
Hydraulic Radius		0.23	m
Top Width		7.98	m
Normal Depth		0.30	m
Critical Depth		0.22	m
Critical Slope		0.01610	m/m
Velocity		0.89	m/s
Velocity Head		0.04	m
Specific Energy		0.34	m
Froude Number		0.58	
Flow Type	Subcritical		

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	0.30	m
Critical Depth	0.22	m
Channel Slope	0.50000	%
Critical Slope	0.01610	m/m

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Cross Section for 18.0m ROW Conveyance- Conveyance above 0.30m only

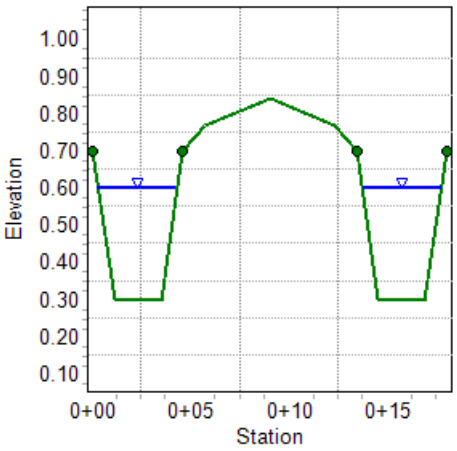
Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Channel Slope	0.50000	%
Normal Depth	0.30	m
Discharge	1.671	m³/s

Cross Section Image



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Worksheet for Block 83 Conveyance Channel

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Channel Slope	0.00500	m/m
Normal Depth	0.50	m

Section Definitions

Station (m)	Elevation (m)
0+00	402.30
0+02	401.80
0+18	401.80
0+20	402.30

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 402.30)	(0+20, 402.30)	0.030

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Discharge	12.56	m³/s
Elevation Range	401.80 to 402.30 m	
Flow Area	9.09	m²
Wetted Perimeter	20.23	m
Hydraulic Radius	0.45	m
Top Width	20.10	m
Normal Depth	0.50	m
Critical Depth	0.38	m
Critical Slope	0.01258	m/m

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Worksheet for Block 83 Conveyance Channel

Results

Velocity		1.38	m/s
Velocity Head		0.10	m
Specific Energy		0.60	m
Froude Number		0.66	
Flow Type	Subcritical		

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	0.50	m
Critical Depth	0.38	m
Channel Slope	0.00500	m/m
Critical Slope	0.01258	m/m

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Cross Section for Block 83 Conveyance Channel

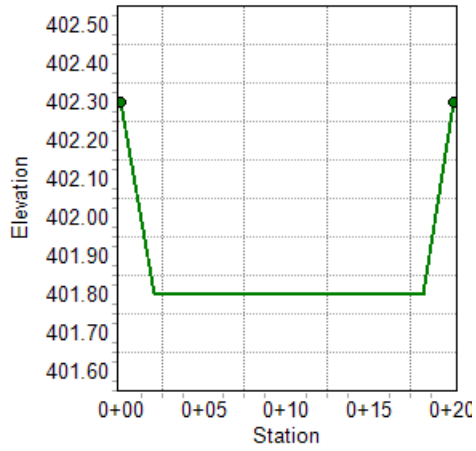
Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Channel Slope	0.00500	m/m
Normal Depth	0.50	m
Discharge	12.56	m³/s

Cross Section Image



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Worksheet for Block 83 Conveyance of 100-yr Emergency Flow

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.00500	m/m
Discharge	6.22	m³/s

Section Definitions

Station (m)	Elevation (m)
0+00	402.30
0+02	401.80
0+18	401.80
0+20	402.30

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 402.30)	(0+20, 402.30)	0.030

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.33	m
Elevation Range	401.80 to 402.30 m	
Flow Area	5.80	m²
Wetted Perimeter	18.88	m
Hydraulic Radius	0.31	m
Top Width	18.80	m
Normal Depth	0.33	m
Critical Depth	0.24	m
Critical Slope	0.01449	m/m

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Worksheet for Block 83 Conveyance of 100-yr Emergency Flow

Results

Velocity		1.07	m/s
Velocity Head		0.06	m
Specific Energy		0.39	m
Froude Number		0.62	
Flow Type	Subcritical		

GVF Input Data

Downstream Depth	0.00	m
Length	0.00	m
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	m
Profile Description		
Profile Headloss	0.00	m
Downstream Velocity	Infinity	m/s
Upstream Velocity	Infinity	m/s
Normal Depth	0.33	m
Critical Depth	0.24	m
Channel Slope	0.00500	m/m
Critical Slope	0.01449	m/m

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Prepared by: Jessica Lysecki, P.Eng.

Roadside Ditch
TSS Removal Calculations

Manors of Belfountain
File No. 2017-0701
Date: May, 2020

Roadside Swales within Site

Average Drainage Area to Swale Segment =	0.52	ha
Average Impervious Level =	18	%
Target TSS Removal =	60	%
Storage Volume for Impervious Level =	20	m³/ha

(As per MOECP Table 3.2 - Water Quality Storage Requirements based on Receiving Waters)

Storage Volume Required =	10.4	m³/ha
Average Lot Frontage =	55.8	m
Swale Bottom Width =	0.50	m
Swale Depth for Quality Treatment =	0.30	m
Swale Side Slopes =	3:1	(H:V)
Swale Cross-Sectional Area =	0.42	m²
Swale Volume for Infiltration =	23.4	m³

Therefore, since the provided swale volume for infiltration exceeds the required volume as defined by the MOECP Stormwater Management Planning & Design Manual (Table 3.2), a TSS Removal Rate of 60% is achieved by the swale

Roadside Swales along Shaws Creek Road

Average Drainage Area to Swale Segment =	1.05	ha
Average Impervious Level =	64	%
Target TSS Removal =	60	%
Storage Volume for Impervious Level =	20	m³/ha

(As per MOECP Table 3.2 - Water Quality Storage Requirements based on Receiving Waters)

Storage Volume Required =	21.0	m³/ha
Total Swale Length =	953	m
Swale Bottom Width =	0.50	m
Swale Depth for Quality Treatment =	0.15	m
Swale Side Slopes =	3:1	(H:V)
Swale Cross-Sectional Area =	0.14	m²
Swale Volume for Infiltration =	135.8	m³

Therefore, since the provided swale volume for infiltration exceeds the required volume as defined by the MOECP Stormwater Management Planning & Design Manual (Table 3.2), a TSS Removal Rate of 60% is achieved by the swale

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Prepared by: Jessica Lysecki, P.Eng.

Treatment Train Calculations

Manors of Belfountain
File No. 2017-0701
Date: March, 2020

Treatment Train Approach:

$$R = A + B - [(A \times B) / 100] \qquad \text{(Equation 4-1)}$$

Where:

R = Total TSS Removal Rate

A = TSS Removal Rate of the First or Upstream BMP

B = TSS Removal Rate of the Second or Downstream BMP

*As per 'New Jersey Stormwater Best Management Practices Manual' Equation 4-1 (February 2004)

TSS Removal:		
Road-side Swale (Rate 1) =	60	%
Oil/Grit Separator (Rate 2) =	50	%

Overall TSS Removal Rate:

R_{inf} = Rate 1 + Rate 2 - [(Rate 1 x Rate 2)/100]

R_{inf} = 80.0 %

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APPENDIX B

Preliminary Septic Tile Bed Calculations

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Prepared by: Seymore Gan

Typical Septic Bed Calculation - PRELIMINARY

Belfountain Subdivision

File No. 2017-0701

Date: July, 2019

A Assumptions

- Preliminary design for planning purposes only
- Peak Daily Design Sanitary Sewage Flow is 6,000 L/day (Estimated)
- Percolation Rate of Native Soils = 15 min/cm (Estimated)
- Stone Layer of Type A Dispersal Bed

B Area of the Stone Layer of Type A Dispersal Bed Calculation using Peak Design Flow, Q = 6,000 L/day (Estimated)

- Minimum sand area = Q/50 = 6,000/50 = 120 m2
- Possible dimensions = 6.0 m (W) x 20.0 m (L) x 0.275 m (H)
- Area = 120 m2

C Area of the Sand Layer of Type A Dispersal Bed is Calculated using the Peak Design Flow, Q = 6,000 L/D and Percolation Rate of the Native Soils, T = 15 min/cm (Estimated)

- Minimum sand area = QT/850 = (6,000 x 15)/850 = 106 m2
- Possible dimensions = 6.0 m (W) x 17.66 m (L) x 0.300 m (H)
- Area = 106 m2

D Established Ontario Building Code setbacks for Class 4 Treatment Units and Distribution Pipes (Tables 8.2.1.6.A and 8.2.1.6.B., respectively)

Setback Description	Minimum Distance Setback (m)
- All tanks to structure	1.5
- All tanks to lake, pond, spring	15
- All tanks to any well	15
- All tanks to property line	3
- Stone layer to structure	5
- Stone layer to lake, pond, spring	15
- Stone layer to watertight casing to 6 m	15
- Stone layer to well without watertight casing	30
- Stone layer to property line	3

Notes

1. This analysis is pre-design only and assumptions are provided for planning purposes only.
2. Peak Daily Design Sanitary Sewage Flow is estimated and to be confirmed at the time of building permit application when the house design and fixture units have been finalized.
3. Each lot to have in-situ testing and gradation analysis to confirm the percolation rates at the time of building permit application.
4. Waterloo Biofilter Tertiary treatment unit or approved equivalent, coupled with an area tile bed is considered in this calculation, and the on-site sewage system is to be confirmed with additional soils tests and confirmation of the groundwater conditions at the time of building permit application.
5. Size of septic tile bed shown on the drawings is approximately 15 m x 20 m = 300 m2 concluding that the dimensions of the sand and total area calculated above is reasonable based on the assumptions referred above.
6. Municipal and Region of Peel approvals are required at the building permit application stage.

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APPENDIX C
Statement of Limiting Conditions and Assumptions

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Statement of Limiting Conditions and Assumptions

1. This Report/Study (the "Work") has been prepared at the request of, and for the exclusive use of, the Owner, and its affiliates (the "Intended Users"). No one other than the Intended Users has the right to use and rely on the Work without first obtaining the written authorization of Cole Engineering Group Ltd. (Cole Engineering) and its Owner.

2. Cole Engineering expressly excludes liability to any party except the Intended Users for any use of, and/or reliance upon, the Work.

3. Cole Engineering notes that the following assumptions were made in completing the Work:

   a) the land use description(s) supplied to us are correct;
   b) the surveys and data supplied to Cole Engineering by the Owner are accurate;
   c) market timing, approval delivery and secondary source information is within the control of Parties other than Cole Engineering; and
   d) there are no encroachments, leases, covenants, binding agreements, restrictions, pledges, charges, liens or special assessments outstanding, or encumbrances which would significantly affect the use or servicing.

   Investigations have not been carried out to verify these assumptions. Cole Engineering deems the sources of data and statistical information contained herein to be reliable, but we extend no guarantee of accuracy in these respects.

4. Cole Engineering accepts no responsibility for legal interpretations, questions of survey, opinion of title, hidden or inconspicuous conditions of the property, toxic wastes or contaminated materials, soil or sub-soil conditions, environmental, engineering or other factual and technical matters disclosed by the Owner, the Client, or any public agency, which by their nature, may change the outcome of the Work. Such factors, beyond the scope of this Work, could affect the findings, conclusions and opinions rendered in the Work. We have made disclosure of related potential problems that have come to our attention. Responsibility for diligence with respect to all matters of fact reported herein rests with the Intended Users.

5. Cole Engineering practices engineering in the general areas of infrastructure and transportation. It is not qualified to and is not providing legal or planning advice in this Work.

6. The legal description of the property and the area of the site were based upon surveys and data supplied to us by the Owner. The plans, photographs, and sketches contained in this report are included solely to aide in visualizing the location of the property, the configuration and boundaries of the site, and the relative position of the improvements on the said lands.

7. We have made investigations from secondary sources as documented in the Work, but we have not checked for compliance with by-laws, codes, agency and governmental regulations, etc., unless specifically noted in the Work.

8. Because conditions, including capacity, allocation, economic, social, and political factors change rapidly and, on occasion, without notice or warning, the findings of the Work expressed herein, are as of the date of the Work and cannot necessarily be relied upon as of any other date without subsequent advice from Cole Engineering.

9. The value of proposed improvements should be applied only with regard to the purpose and function of the Work, as outlined in the body of this Work. Any cost estimates set out in the Work are based on construction averages and subject to change.

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