Tribal Partners Canada Inc.

12035 Dixie Road - Caledon

Stormwater Management Report

March 11, 2021

Confidential

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Project No.: 20M-01429-00
Date: March 11, 2021

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Revision History

FIRST ISSUE

2021.03.11	Site Plan Application			
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Prepared by

March 11, 2021

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1 INTRODUCTION

1.1 Scope

WSP Canada Inc. (WSP) has been retained by Tribal Partners Canada Inc. (Client) to prepare a stormwater management (SWM) report in support of the proposed development at 12035 Dixie Road in the Town of Caledon, Ontario.

The proposed development consists of four large warehouse buildings with surface parking and loading areas. A realigned natural drainage channel surrounds the north of the site and conveys runoff from 65.68 ha south external development (410 Prologis site) flowing from west to east. A future block located on the southeast corner of the site will not be developed in this application but shall be assumed as an impervious block for conservative consideration. Agricultural land on the northwest corner of the site remains undeveloped and drains to Kilamanagh Creek. A SWM wet pond is proposed at the eastern edge of the site to provide water quality, water quantity and erosion control for runoff from the development site. The SWM pond will discharge to the realigned channel, which ultimately flows to the culvert at Mayfield Road.

The subject development will have two offsite discharge points: Kilamanagh Creek and the Mayfield Road culvert. The drainage areas to the Mayfield Road culvert will be divided into two portions, of which one is the realigned natural channel corridor, the other is the development site (hereinafter as the “Site”). This document sets out preliminary design specifications for each of the SWM facilities throughout the development area. These requirements are discussed further in the subsequent ‘Design Criteria’ section of this report.

The development of the SWM strategy has been guided by the Ministry of Environment, Conservation and Parks (MECP), formerly MOE Stormwater Management Planning and Design (SWMPD) Manual (March 2003), Toronto and Region Conservation Authority (TRCA) Stormwater Management Criteria (August 2012) and the Region of Peel Public Works Stormwater Design Criteria and Procedural Manual (June 2019).

This SWM report presents the detailed design information for the SWM wet facilities and should be read in conjunction with the WSP Functional Servicing Report prepared by WSP under separate cover.

1.2 Site Location

The subject site is located at 12035 Dixie Road in the Town of Caledon, Ontario. It is bounded by Dixie Road and existing building to the southwest, Mayfield Road to the southeast, a garden supply center and agricultural lands to the northwest, and undeveloped agricultural lands to the northeast. The site location is shown in **Figure 1**.

1.3 Background Documents

The following documents have been reviewed in preparing this SWM report:

- "*Stormwater Management Planning and Design (SWMPD) Manual*", Ontario Ministry of Environment, Conservation and Parks (MECP, formerly MOE), March 2003
- "*Low Impact Development Stormwater Management Planning and Design Guide, Version 1.0*", Credit Valley Conservation (CVC) and Toronto and Region Conservation Authority (TRCA), 2010
- *"Stormwater Management Criteria"*, Toronto and Region Conservation Authority (TRCA), August 2012
- *"Final Report Humber River Hydrology Update"*, Civica, June 2015
- *"12035 Dixie Road Proposed Geotechnical Investigation"*, MTE Consultants, January 2021
- "*Guidance for Development Activities in Redside Dace Protected Habitat*", Ministry of Natural Resources and Forestry, March 2016
- "*Stormwater Management Report for Prologis Park 410 & Dixie Road*", WSP Canada Inc., March 2019
- "*12035 Dixie Road Proposed Industrial Development Draft Geotechnical Investigation*". MTE. March 10, 2021

CLIENT

TRIBAL PARTNERS CANADA INC.

TITLE

12035 DIXIE ROAD

SITE LOCATION

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Date MARCH 2021	Proj. No. 20M-01429-00
Scale AS SHOWN	Figure No. 1

FIGURE 1.dwg - 12035 Dixie Rd - Site Location C:\Users\baileyb\BIM 360\WSP Canada projects (AMER)\Land Development Ontario\Project Files\20M-01429 - 12035 Dixie Road\MUNISWM\CAD\FIGURES\ Mar 04, 2021 - 11:17am

1.4 Design Criteria

12035 Dixie Road is located within the TRCA's Humber River Watershed and the following stormwater management design criteria have been identified in conformity with the various background documents listed in **Section 1.3**.

Water Quality Control:

Provide Enhanced (Level 1) water quality protection; 80% long-term TSS removal.

Water Quantity Control:

Limit the post-development peak discharges to the corresponding pre-development levels, using TRCA's unit flows for the West Humber River Watershed for all storms up to and including the 100-year storm. In addition, the proposed water quantity control SWM facilities should have the capacity to convey the regional event.

Water Balance:

Desktop screening using the MECP's Source Protection Information Atlas indicates the site is not located in a Source Protection Area. As per the TRCA's Water Balance Tool results, it is also not located in a Significant Groundwater Recharge area. Best efforts will be implemented to maintain pre-development recharge under post development conditions.

The Site is adjacent to environmentally protected areas; as such a feature-based water balance is required to maintain existing flows to tributaries in the proposed condition. This portion of the stormwater management strategy will be the responsibility of another consultant and a report detailing the feature-based water balance will be submitted under separate cover. Note that the results of the feature-based water balance study may impact the overall stormwater management strategy which will be refined through further investigation and detailed design.

Erosion Control:

As per the TRCA SWM Criteria (2012), the minimum erosion control requirement is retention of the first 5 mm of every rainfall event. For sites with a SWM Pond, extended detention of the 25 mm event for a period of 48 hours is required.

The Stormwater Management Report for Prologis Park 410 & Dixie Road (Prologis SWM Report) has been reviewed during the design stage. It is noted that the Prologis site is located upstream to the west of the Site, has a stricter erosion requirement being set out by previous studies (e.g. IBI FSR & SWM report on

February 2012). As the Prologis site is draining to the same realigned natural channel as the Site, the same erosion control level shall be provided for environmental protection.

Therefore, the erosion control required is to provide the minimum erosion control storage equivalent to 2/3 of the 2-year storage required to limit the post-development peak discharge to the corresponding 2-year pre-development peak flow (using the TRCA unit peak flows for the West Humber River Watershed), with the maximum erosion control discharge at 15% of the 2-year pre-development peak flow, using TRCA's unit flows for the West Humber River Watershed.

2 PRE-DEVELOPMENT CONDITIONS

2.1 General

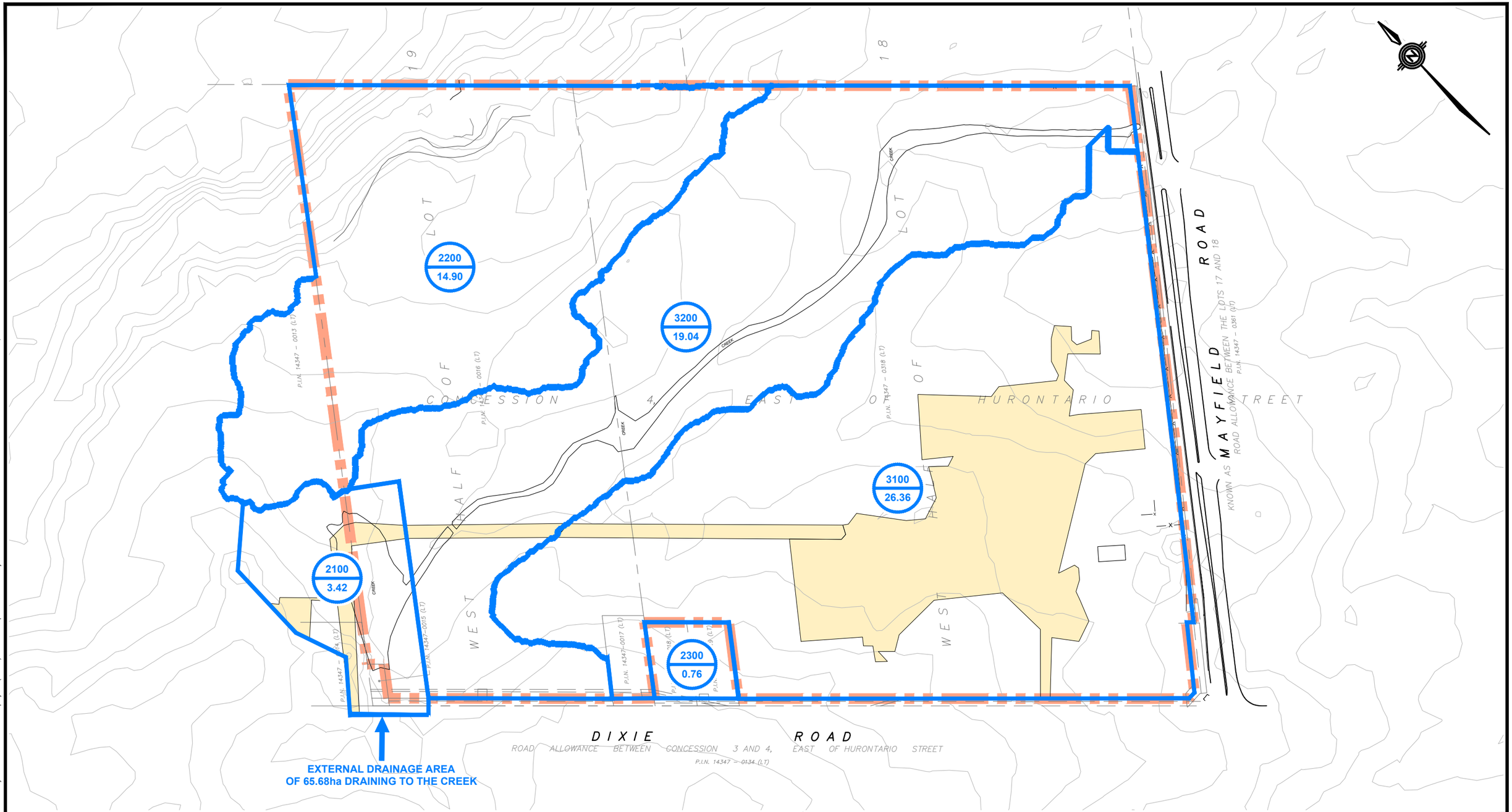
Current land use of the Site is agricultural lands and includes industrial and agricultural buildings, and two watercourses: Kilamanagh Creek and Tributary 2, both tributaries of the West Humber River. The property boundary is 60.33 ha. Minor external drainage areas drain through the property boundary from the northwest and southwest. Therefore, the total existing drainage area of the Site is 64.49 ha. In addition, a large subdivision of 65.68 ha (external subdivision) drains its controlled flows to the Tributary 2 from the west corner via a culvert at Dixie Road.

The Site has two offsite discharge points: Kilamanagh Creek and Mayfield Road Culvert (Tributary 2). The majority of the site is draining east to the Mayfield Road culvert through the on-site natural channel, and the remainder of the property drains north as overland flow to Kilamanagh Creek, external of the property boundary. The Site is divided into five catchments as shown in the **Table 2-1**. The analysis of external subdivision will be excluded from this study and can be found in the Prologis Park SWM Report (WSP, 2019). The controlled flows from the external subdivision are obtained from Prologist SWM Report and used for allowable release rates calculation in this study. **Figure 2** shows the existing site conditions.

Table 2-1: Existing Drainage Catchments

Catchment ID	Area (ha)	Imperviousness (%)	Discharge Point
2100	3.42	17.0	Culvert at Mayfield Road
2200	14.90	0.0	Kilamanagh Creek
2300	0.76	0.0	Culvert at Mayfield Road
3100	26.36	25.2	Culvert at Mayfield Road
3200	19.04	1.3	Culvert at Mayfield Road
Total	**64.49**	**11.6**	

*External subdivision of 64.49 ha is excluded from this table.



LEGEND

- PROPERTY BOUNDARY
- CATCHMENT BOUNDARY
- IMPERVIOUS
- 3100 / 26.36 — CATCHMENT ID. / DRAINAGE AREA (ha)

0 50 100 150 200m

CLIENT	TRIBAL PARTNERS CANADA INC.
TITLE	12035 DIXIE ROAD
	EXISTING CONDITIONS

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2.2 Allowable Flow Rates

This site is located within the TRCA's Humber River Watershed, as such, the post-development peak discharges must be controlled to the pre-development levels using TRCA's unit flow rates for all storms up to and including the 100-year storm. In addition, each of the proposed SWM facilities should be designed to convey the post-development flow rates for the Regional event.

As discussed in **Section 2.1**, the external subdivision will flow through the Site via the natural channel under existing conditions. As such, the controlled flows from the external subdivision are included in the allowable flow rates' calculations. The 6-hour and 12-hour AES storms with 2-year through 100-year return periods from Appendix 14 of the Humber Hydrology Update were used to determine the controlled flow rates from the external subdivision.

Table 2-2 and **Table 2-3** presents a summary of the allowable flow rates for the site.

Table 2-2: Allowable Peak Flow Rates (6-hour AES Storm)

Return Period	Allowable Peak Flow Rates at Different Outlets (m^3/s)			
	Culvert at Mayfield Road			Kilamanagh Creek
	External Subdivision* (65.68 ha)	Site** (64.49 ha)	Total	
2-year	0.362	0.332	**0.694**	**0.113**
5-year	0.594	0.505	**1.099**	**0.172**
10-year	0.764	0.625	**1.389**	**0.212**
25-year	0.987	0.786	**1.773**	**0.267**
50-year	1.161	0.914	**2.075**	**0.312**
100-year	1.336	1.035	**2.371**	**0.352**

* The discharged flow rates of external subdivision of 65.68 ha are obtained from the VO model under the 6-hour AES Storm Distribution.

** The Site flow rates are calculated based on TRCA's unit flows for the West Humber River Watershed Sub-Basin 36 (Equation F).

Table 2-3: Allowable Peak Flow Rates (6-hour AES Storm)

Return Period	Allowable Peak Flow Rates at Respective Outlets (m^3/s)			
	Culvert at Mayfield Road			Kilamanagh Creek
	External Subdivision* (65.68 ha)	Site** (64.49 ha)	Total	
2-year	0.380	0.332	**0.712**	**0.113**
5-year	0.589	0.505	**1.094**	**0.172**
10-year	0.738	0.625	**1.363**	**0.212**
25-year	0.933	0.786	**1.719**	**0.267**
50-year	1.083	0.914	**1.997**	**0.312**
100-year	1.234	1.035	**2.269**	**0.352**

* The discharged flow rates of external subdivision of 65.68 ha are obtained from the VO model under the 12-hour AES Storm Distribution.

** The Site flow rates are calculated based on TRCA's unit flows for the West Humber River Watershed Sub-Basin 36 (Equation F).

3 HYDROLOGIC MODELLING OF PROPOSED CONDITIONS

3.1 Overview

A standard event-oriented modelling approach, the Visual OTTHYMO Model Version 6.0 (VO6), was used to estimate the required storage volume for quality, erosion and quantity control, to size the outlet structures, and to confirm the performance of the SWM wet ponds.

3.2 Low Impact Development Strategies

Low impact development (LID) strategies will be implemented on-site to mitigate impacts of increased runoff and to promote the infiltration to maintain the pre-development recharge level. LID strategies seek to minimize runoff and mimic pre-development hydrology. Ultimately, LIDs strive to reduce volume and intensity of stormwater runoff under proposed conditions.

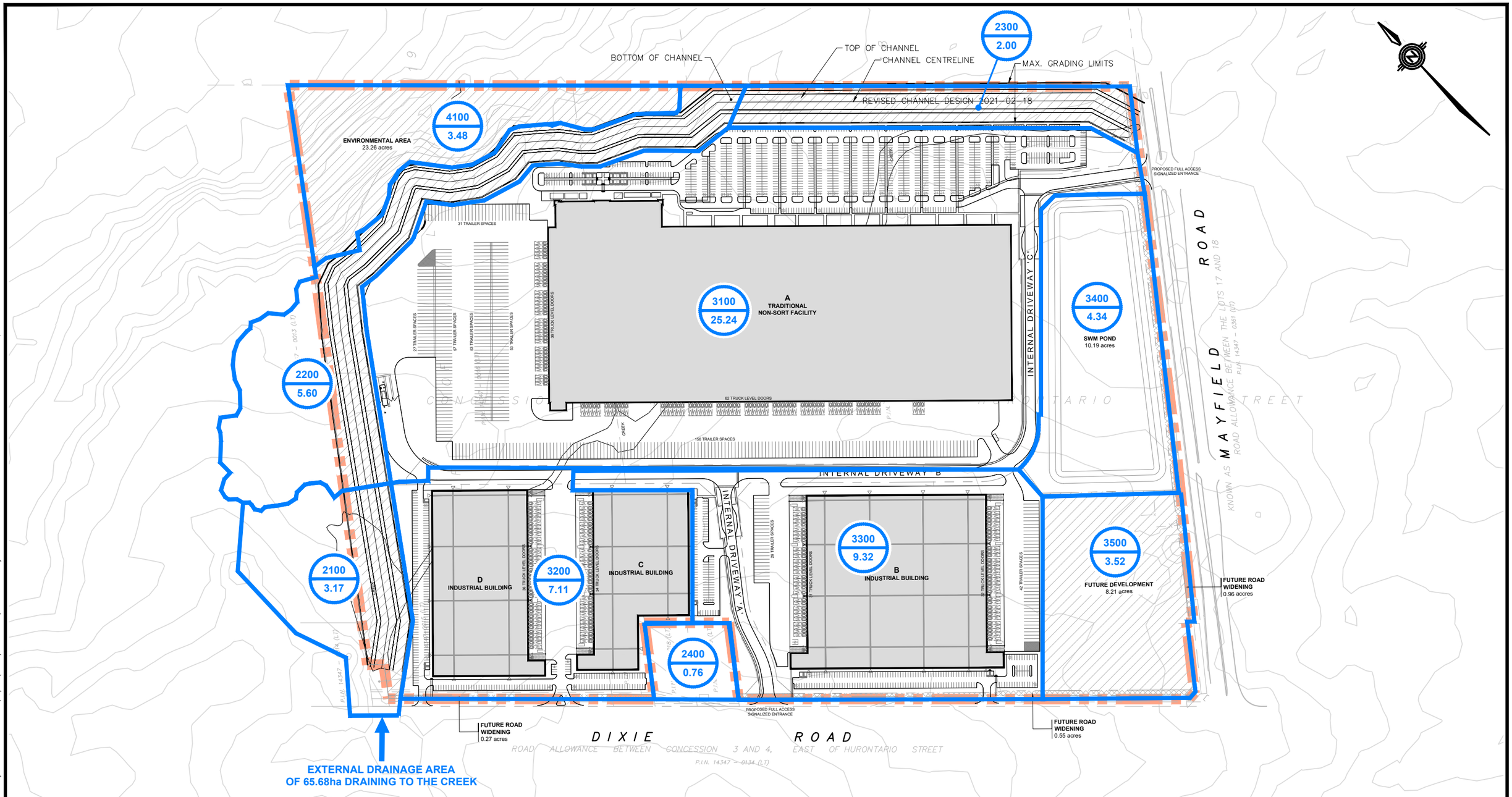
Infiltration galleries will be proposed as part of the site's stormwater management strategy. Infiltration galleries will be sized to meet water balance requirements for Catchments 3100, 3200, 3300, 3400 and 3500; best practices will be implemented to maintain post to pre-development infiltration.

3.3 Rainfall Data

The 6-hour and 12-hour AES storms with 2-year through 100-year return periods have been used in the Visual OTTHYMO modelling. The 12-hour Hazel Hurricane is used in the hydrologic modelling for Regional Storm.

3.4 Proposed Drainage Plan

The subject site and its external areas are represented by 10 catchments, as shown in **Figure 3**.



LEGEND

- PROPERTY BOUNDARY
- CATCHMENT BOUNDARY
- 2100 / 3.17 — CATCHMENT ID. / DRAINAGE AREA (ha)

0 50 100 150 200m

CLIENT	TRIBAL PARTNERS CANADA INC.
TITLE	12035 DIXIE ROAD
	PROPOSED CONDITIONS

wsp

Checked A.M.	Drawn AutoCAD/B.K.B.
Date MARCH 2021	Proj. No. 20M-01429-00
Scale AS SHOWN	Figure No. 3

FIGURE 3.dwg - 12035 Dixie Rd - Proposed Conditions C:\Users\tailleyb\BIM 360\WSP Canada projects (AMER)\Land Development Ontario\Project Files\20M-01429 - 12035 Dixie Road\MUNI\SWM\CAD\FIGURES\ Mar 11, 2021 - 9:21am

The areas identified as realigned natural channel areas (Catchment 2100, 2200 and 2300) will not be developed and will remain as pervious areas in the proposed conditions. Catchment 2400 is an external private property and will be omitted from the stormwater management strategy as it is considered to be outside of the development boundary; the flows originating from catchment 2400 is conveyed by a swale to the SWM wet pond for quantity control to maintain its existing drainage pattern. The other SWM control measures of catchment 2400 shall be proposed on-site level when it is developed. The proposed development is within catchments 3100, 3200, 3300, 3400 and 3500, consisting of four warehouse buildings with extensive surface parking lots, a SWM wet pond and a future park. The above nine catchments associated with the 65.68 ha external subdivision are all draining to the Mayfield Road culvert.

Catchment 4100 remains undeveloped and maintains its existing drainage pattern draining to Kilamanagh Creek.

Regarding the site's existing flows to the retained and realigned natural features, these flows will be maintained in proposed conditions; the feature-based water balance analysis will be submitted under separate cover by the hydrogeological consultant.

Catchments 3100, 3200, 3300, 3400 and 3500 are the catchments within the property line that will be developed. These catchments are serviced by a SWM wet pond to provide the erosion, water quality and water quantity control. The majority of the impervious roof areas in these five catchments will be directed into the infiltration chambers under the parking lots to recharge the groundwater for site-wide water balance analysis. The runoff from 2.54 ha impervious roof area of Building A in catchment 3100 will be directed to Kilamanagh Creek to maintain surface flows of the creek that originate on the site and benefit the site-wide water balance. However, the entire roof area of Building A is still counted as a contribution drainage area to the wet pond in the event of any blockage situation at the flow spreader.

The realigned natural channel catchments 2100, 2200 and 2300 are uncontrolled areas that are currently outside the post-development area but within the property boundary. These areas are undeveloped natural lands, considered to be fully pervious. As such, these areas will not be included in the SWM analysis. For more details on the realigned natural design, see the Functional Servicing Report and Channel Design Report prepared by WSP under separate cover.

As the external subdivision is upstream of the Site, the Visual OTTHYMO (VO) model of the external subdivision is utilized as a base model to build an expanded hydrological model for the Site.

Flows from catchments 3100, 3200, 3300, 3400 and 3500 with imperviousness greater than 20% are modelled using the STANDHYD command in the VO model. The remaining catchments with imperviousness less than 20% are modelled using NASHYD command in the VO model.

The time of concentration (TC) for the catchments (2100, 2200, 2300, 2400 and 4100) are calculated using Upland Method, where the time to peak (TP) is determined using the equation TP = 2/3 * TC. A value of 87 for the SCS curve number (CN) from the TRCA hydrologic model shall be used to model the infiltration potential of the native soil. A typical IA of 5 mm and 1 mm is assigned to the pervious and impervious areas, respectively.

A weighted imperviousness is calculated for the development blocks (3100, 3200, 3300, 3400 and 3500) based on various land use in the current site plan. Note that the permanent pool of the proposed SWM wet ponds is considered impervious area while the perimeter area above the permanent pool elevation is considered pervious area. The length of impervious area is derived from the VO6 model, which is calculated based on A=1.5×L2.

The model parameters for the post-development catchments are summarized in **Table 3-1**. Refer to **Appendix A** for detailed calculations.

Table 3-1: Catchment Parameters under Proposed Development Conditions

Catchment	Area (ha)	IMP (%)	CN	IA (mm)	Tp (hr)	Command
2100	3.11	18.7	87	5.0	0.14	NasHyd
2200	5.60	0.0	87	5.0	0.44	NasHyd
2300	2.00	0.0	87	5.0	0.43	NasHyd
2400	0.76	0.0	87	5.0	0.04	NasHyd
3100	25.24	85.9	87	5.0	-	StandHyd
3200	7.11	88.3	87	5.0	-	StandHyd
3300	9.32	78.8	87	5.0	-	StandHyd
3400	4.34	77.6	87	5.0	-	StandHyd
3500	3.52	100.0	87	5.0	-	StandHyd
4100	3.48	0.0	87	5.0	0.04	NasHyd
Total	**64.48**	**66.3**	**-**	**-**	**-**	**-**

The subject property will be serviced by a conventional storm sewer system designed in accordance with the Town's standards. The storm sewers will be sized using a 5-year return frequency and the current Town's IDF curves. All runoff from the development areas will be conveyed to the proposed SWM facilities. The collected runoff will be treated for water quality and quantity control with extended detention for erosion control in the wet pond. The water balance will be maintained by infiltration galleries.

A design for an overland flow route has been provided throughout the development blocks to safely convey major storm system flows in excess of the minor system up to the Regional event into the SWM wet pond.

3.5 Hydrologic Modelling Results

The VO6 model was created to establish the required quantity control volumes for 2-year up to 100-year events. For the catchments with a pond facility (catchments 3100 through 3500), the required volume for erosion control is 2/3 of the quantity control volume for the 2-year event. The required erosion control volume for the wet pond is 10,775 m^3. This extended detention volume shall be released at 15% of the 2-year pre-development flow rates. Refer to **Appendix A** Section 4.1.3 for details.

The post-development conditions are simulated using the VO6 hydrologic model by incorporating the following components in the SWM wet ponds:

- Erosion Control by providing adequate extended detention volume with orifice plates / tubes
- Water Quantity Control by the proposed SWM facilities for events up to 100-year storm as well as regional storm, through detailed design of the proposed SWM wet ponds

Refer to **Section 5.0** for the detailed design of the SWM wet pond.

3.5.1 Target Flow Rates vs. Controlled Flow Rates

Table 3-2 and **Table 3-3** provide a comparison of the post-development peak flow rates vs the allowable flow rates at different offsite discharge points. As shown in **Table 3-2**, with the proposed SWM wet pond, the post-development peak flow rates at Mayfield Road Culvert will be controlled to the allowable release rates for all design storms including 2-year up to 100-year storm events. As shown in **Table 3-3**, the post-development peak flow rates at Kilamanagh Creek are decreased due to the reduction of the contributing drainage area.

Table 3-2: Post-development Peak Flow Rates vs Allowable Peak Flow Rates at Mayfield Culvert

Return Period	6 hr AES Storm		12 hr AES Storm	
	Target Peak Flow Rate (m^3/s)	Post-Development Peak Flow Rate (m^3/s)	Target Peak Flow Rate (m^3/s)	Post-Development Peak Flow Rate (m^3/s)
2-year	0.694	0.546	0.712	0.569
5-year	1.099	0.942	1.094	0.925
10-year	1.389	1.250	1.363	1.194
25-year	1.773	1.669	1.719	1.557
50-year	2.075	2.002	1.997	1.841
100-year	2.371	2.345	2.269	2.139

Table 3-3: Post-development Peak Flow Rates vs Allowable Peak Flow Rates at Kilamanagh Creek

Return Period	Target Peak Flow Rate (m^3/s)	Kilamanagh Creek Post-Development Peak Flow Rate (m^3/s)	
		6 hr AES Storm	12 hr AES Storm
2-year	0.113	0.106	0.069
5-year	0.172	0.167	0.102
10-year	0.212	0.209	0.125
25-year	0.267	0.263	0.154
50-year	0.312	0.304	0.175
100-year	0.352	0.344	0.196

4 WATER BALANCE

4.1 Overview

As indicated in **Section 1.4**, best efforts will be implemented to maintain pre-development recharge rates in post-development conditions for the developed catchments.

Section 4.5.8 of the MECP's Stormwater Management Planning & Design Manual (hereafter MECP Manual) provides guidance on the design of the infiltration chamber. The information provided in the Geotechnical Investigation prepared by MTE Consultants (January 2021, hereafter MTE's Geotech-Investigation) is used in the preliminary feasibility evaluation and configuration of the infiltration chamber.

MTE's Geotech-Investigation indicates that the native soils on site are clayey silt, silt and sandy silt fill. Groundwater levels were measured in monitoring wells at depths of 4.2 to 10.3 m BGS. The infiltration gallery depth is approximately 0.35 m with a void ratio / stone porosity of 0.40, plus a minimum 0.15 m cover to the bottom of pavement. Table 4.9 of the MECP Manual states that a minimum 1.0 m clearance is required between the bottom of the infiltration chamber and the water table. The bottom of the infiltration gallery system would be well above the average water table based on the geotechnical investigations to date. It is recommended that a hydrogeological study is done for the overall development area to determine the site-specific infiltration rates and propose the specific design infiltration rates that include the safety factor according to the TRCA / CVC LID guidelines (2010). The estimated infiltration rate is not available at the preparation of this report. The drawdown time calculation will be provided in a future submission. The water balance calculation can be found in **Appendix A**.

The method used for analysis is based on the examples provided in Section 3.2.3 of the MECP Manual. For each type of surface proposed on the site, the relationship between rainfall, evapotranspiration, runoff and infiltration is determined, and the results are then weighted based on area coverage to calculate the site-wide water balance relationship.

General assumptions used in the calculations include:

- The average annual precipitation volume in Caledon is 871 mm (based on The TRSPA Water Balance Tool).
- The average annual recharge volume in Caledon is 267 mm (based on The TRSPA Water Balance Tool).

– The impervious area can accept 1.0 mm rainfall for subsequent evaporation due to shallow depression.

4.2 Pre-development Conditions

The water balance analysis is focusing on the development area (Catchment 3100 ~ 3500) of 49.53 ha. The development area has an imperviousness of 13.9%. The development area is used for agricultural purpose under pre-development conditions.

The annual precipitation for the site is 871 mm, which is obtained from TRSPA Water Balance Tool. For surficial soil of sandy silt fill with moderately rooted crops, with total precipitation of 871 mm, 267 mm will be recharged into the ground, and 417 mm will return to the atmosphere via evapotranspiration (ET), leaving 187 mm as runoff.

Under pre-development conditions, of the total average annual precipitation, infiltration accounts for approximately 26.4%, evapotranspiration (ET) accounts for approximately 47.9%, and approximately 25.7% appears as runoff. The annual infiltration volume for 49.53 ha area is 113,839 m^3.

4.3 Post-Development Conditions without Mitigation Measures

Under proposed conditions, the site imperviousness increases from 13.9% to 85.2%. Of the total 49.53 ha area, 42.20 ha shall be impervious surface, and 7.33 ha is pervious area.

Water balance analysis for post-development conditions is carried out by defining the relationship for different type of surfaces and then weighted by the percentage of surface coverage to obtain the site-wide water balance relationship.

It is assumed that the impervious area will accept 1 mm rainfall for subsequent evaporation prior to runoff generation due to the shallow depressions. Capturing 1 mm rainfall corresponds to a 10.0% of annual precipitation as per stormwater management convention. The remaining 90.0% of annual precipitation will leave the site as runoff. Thus, out of 871 mm annual precipitation, 87.1 mm returns to atmosphere as evaporation (ET), 783.9 mm runs off, and none infiltrates.

The proposed pervious area is mainly urban lawns. The MECP Table 3.1 Hydrologic Cycle Component Values for Silt Loam is used to obtain the ratio (536 mm / 940 mm) of

evapotranspiration over total precipitation. As such, 496.7 mm of annual precipitation is accounted for evapotranspiration.

Infiltration factors are used to determine the fraction of water surplus that infiltrates into the ground and the fraction runs off the site. The infiltration factor for the site is 0.70, by summing a factor for topography (0.20), soil (0.40), and surface cover (0.10). Thus, 262.0 mm out of 374.3 mm water surplus infiltrates into the ground and 112.3 mm runs off the site.

Of the total average annual rainfall, infiltration accounts for approximately 4.5%, evapotranspiration (ET) accounts for approximately 17.0%, and there is approximately 78.6% runoff. The annual infiltration volume for 49.53 ha area is 19,209 m^3 and there is 94,631 m^3 infiltration deficit which should be mitigated with on-site Low Impact Development (LID) measures.

4.4 On-Site Mitigation Measures

LID measures are proposed across the site to mitigate infiltration deficit by directing clean roof runoff to subsurface infiltration galleries. Feasibility of the infiltration measures are evaluated in terms of soil infiltration rate, groundwater table depth, and bedrock depth, as guided by the MECP's design manual.

The proposed LID measures include infiltration at the base of underground chamber systems and placement of minimum 300 mm deep absorbent topsoil at all at-grade pervious areas.

The following assumptions are applied in the analysis:

1. All pervious absorbent topsoil area (73,339 m^2) within the site development area will have an initial abstraction of 25 mm
2. All impervious at-grade area (247,435 m^2) shall accept 1 mm rainfall prior to runoff generation due to shallow depressions
3. Capturing 5.5 mm runoff from most impervious roof area (149,146 m^2) shall be directed to the underground chamber for infiltration
4. 2.54 ha impervious roof area of Building A will be directed to Kilamanagh Creek for flow balancing and recharge. This is a flow compensation to Kilamanagh Creek, as its existing drainage area was cut off. 11.45 ha with 0.20 runoff coefficient in the post-development, which is equivalent to 2.54 ha at 0.90 runoff coefficient.

4.5 Post-Development Conditions with Mitigation Measures

The post-development site-wide water balance relationship is determined by weighting the relationship for various surface types with corresponding percentage of land use coverage. Under post-development conditions with mitigation measures, of the total average annual rainfall, infiltration accounts for approximately 27.0%, evapotranspiration (ET) accounts for approximately 15.5%, and there is approximately 57.6% runoff. The total annual infiltration volume for the subject property is 116,355 m^3. Therefore, the pre-development infiltration volume has been exceeded. The runoff volume will increase due to the decrease of evapotranspiration.

The water balance analysis results for the entire 49.53 ha development are summarized in **Table 4-1**. It demonstrates that with the proposed mitigation measures, the pre-development infiltration volumes are maintained. Overall runoff increases by 305.3% with no mitigation, reduced to about 223.6% with proposed mitigation measures. Detailed calculations for the water balance analysis can be found in **Appendix A**.

Table 4-1: Water Balance Analysis Summary for the Development Area of 49.53 ha

Hydrologic Cycle Components	Pre-Development Conditions		Post-Development Conditions without Mitigation Measures		Post-Development Conditions with Mitigation Measures	
	Annual Depth (mm)	% of Annual Precipitation	Annual Depth (mm)	% of Annual Precipitation	Annual Depth (mm)	% of Annual Precipitation
Infiltration (I)	229.8	**26.4%**	38.8	**4.5%**	234.9	**27.0%**
Evapotranspiration (ET)	417.0	**47.9%**	147.7	**17.0%**	134.8	**15.5%**
Runoff (RO)	224.2	**25.7%**	684.5	**78.6%**	501.3	**57.6%**
Precipitation (P)	871.0	**100.0%**	871.0	**100.0%**	871.0	**100.0%**

5 SWM WET POND DESIGN

5.1 Overview

The SWM wet pond shall be designed to provide quality (Enhanced Level Protection), erosion (Extended Detention) and quantity control for development area (Catchment 3100 ~ 3500 and Catchment 2400) for the 2- through 100-year events as directed by the TRCA Humber River Hydrology Report. The pond will also have the capacity to safely convey the regional event to the realigned natural channel.

Under the proposed development scenario, the runoff from the drainage area of 50.29 ha with an imperviousness of 83.9% will be directed to the wet pond.

5.2 Storage Requirements

The proposed SWM wet pond shall provide quality, erosion and quantity control for runoff for catchments 3100 through 3500 and catchment 3400 which is 50.29 ha. The required storage volume was determined by following the MECP's SWMPD manual.

5.2.1 Water Quality Control

The SWM wet pond shall provide an Enhanced Level of Protection for its drainage area of 50.29 ha at an imperviousness of 83.9%. The proposed roof area is draining to the infiltration chamber for water balance control, then overflows to the pond during large storm events.

Based on Table 3.2 in the 2003 MECP's SWMPD manual and a lumped imperviousness of 83.9%, a wet pond will require 284.2 m^3/ha of storage volume to provide an "Enhanced Level of Protection" or 80% TSS removal, of which 40 m^3/ha will be extended detention storage. The remaining 208.2 m^3/ha will be permanent pool storage. Based on a contributing drainage area of 50.29 ha, these objectives translate to a volume of 12,482 m^3, of which 10,470 m^3 is the permanent pool volume and 2,012 m^3 is the extended detention storage.

Note that the extended detention volume required for the quality control (2,012 m^3) is less than that for erosion control (10,775 m^3) and shall be combined with the latter to be controlled with an orifice plate / tube.

5.2.2 Erosion Control

The target discharge rate for erosion control shall be 15% of the 2-year pre-development peak flow rate, i.e. 0.023 m^3/s. The required storage for erosion control is approximately 10,775 m^3 or 2/3 of the storage required to limit the 2-year peak discharge to the corresponding pre-development level. Refer to **Table 5-1** for the details.

Note that the extended detention volume for water quality control is smaller than that for the erosion control and shall be combined with the larger volume to be release at the maximum allowable release rate for erosion control.

5.2.3 Water Quantity Control

Hydrologic modelling was carried out for the 6-hour and 12-hour AES storms to determine the required storage volume for quantity control up to and including the 100-year event. As shown in **Table 5-1**, the storage volume required for water quantity control is approximately 33,037 m^3 to limit the 100-year peak to allowable discharge rates and convey the regional storm.

Table 5-1: Quantity Control Storage Requirements for SWM Wet Pond

Return Period	Allowable Peak Flow Rates (m^3/s)	Required Active Storage (m^3)		
		6 hr AES	12 hr AES	Minimum
Erosion Control	0.023	---	---	10,775
2-year	0.150	14,454	16,162	16,162
5-year	0.250	19,633	26,261	26,261
10-year	0.400	22,969	24,429	24,429
25-year	0.550	26,886	27,831	27,831
50-year	0.650	29,644	30,369	30,369
100-year	0.750	32,484	33,037	33,037

5.3 Pond Grading

The layout of SWM wet pond is shown in Drawing SWP. The wet pond is designed to provide the required permanent pool and active storage volumes, and to conform to the grading of the site. A summary of required storage volumes and provided storage for water quality, erosion control and quantity control are provided in **Table 5-2**.

Table 5-2: Storage Summary for Wet Pond

		Required Storage (m^3)	Storage Provided (m^3)
Permanent Pool Storage	Water Quality	**10,470**	**52,097**
Active Storage**	Water Quality*	2,012	**11,690**
	Erosion Control	**10,775**	
	Water Quantity (100-year)	**33,037**	**37,607**
	Water Quantity (Regional)***	**-**	**59,087**
	Total****		**120,743**

* Extended detention storage for water quality and erosion control will be combined.

** Extended detention storage is part of the active storage for water quantity control up to 100-year event.

*** Storage above the design high water level for 100-year storm shall be used for Regional Storm control.

**** A 0.30 m freeboard is provided above the design high water level for Regional Storm.

The SWM wet pond will provide 52,097 m^3 of total permanent pool storage at the elevation 254.0 m. The permanent pool storage is provided with a depth of 1.50 m at the forebay and 2.5 m depth at the main cell.

An extended detention volume of 11,690 m^3 is provided at the elevation 254.40 m, with a maximum depth of 0.40 m above the permanent pool elevation. A total of 59,087 m^3 active storage is available for quantity control up to 100-year event and regional storm. A 0.30 m freeboard is provided above the top of pond level for flood protection from the Regional Storm and an emergency spillway shall be incorporated at the northeast berm of the pond's main cell to safely convey the inflow from the 100-year event or regional storm, whichever is larger.

5.4 Sediment Forebay

The SWM wet pond has two inlets to convey the minor system flow to the wet pond – a 1500 mm Ø concrete pipe at the southwest end of the wet pond from MH1 to HW1B, and a 1350 mm Ø concrete pipe at the southwest end of the wet pond from MH26 to HW1A. The 1500 mm Ø concrete pipe conveys the minor flow from catchment 3100 to the wet pond, while the 1350 Ø concrete pipe conveys the minor flows from catchment 3200, 3300 and 2400 to the wet pond. The major system flow from catchment 3100, 3200, 3300 and 2400 shall be conveyed to the pond via a 9.0 m wide overland flow

route at the southwest side of the wet pond. Both major and minor flows from catchment 3400 and 3500 will drain as sheet flow to the wet pond.

A sediment forebay is required at the inlet of the wet pond to settle out the majority of the sediment load within an area that can be conveniently accessed for maintenance. The forebay for the proposed wet pond is sized according to the guidelines given in the *Stormwater Management Planning and Design Manual* (SWMPDM, MECP, 2003). The forebay length is determined based on calculations of the dispersion and settling lengths, as shown in Section 4.6 of Appendix A.

5.5 Outlet Structure

The proposed outlet structures for the SWM wet pond consist of the following components:

- **Low Flow Control for Extended Detention**

  A 200 mm Ø reverse slope pipe configured with a 130 mm Ø orifice plate (invert = 254.00 m) is proposed to achieve the target flow rate of 0.023 m^3/s with an extended detention volume of 11,690 m^3 at 254.40 m.

- **Flow Control up to 100-year Storm Event**

  A 0.70 m length sharp-crested weir (lid elevation = 254.40 m) is proposed to convey the 100-year flow to the control manhole or DICB.

- **Outlet Pipe**

  Flow from the above control structures shall discharge to a control manhole which will pipe the flow to the realigned channel to the east of the pond; see servicing drawings in the Functional Servicing Report for more details.

- **Emergency Spillway**

  In case of blockage to the outlet structure, a 35.0 m wide emergency overflow spillway (lid elevation = 256.00 m) is proposed for the wet pond to safely convey the peak flow rate from the 100-year event which is greater than the peak flow rate from the regional storm.

Table 5-3 shows the stage – storage relationship for the proposed wet pond. The detailed calculations are included in **Appendix A**.

Table 5-3: Stage – Storage Relationships for the SWM Wet Pond

Description	Elevation (m)	Total Volume (m^3)	Active Storage (m^3)
Bottom of Pond	251.50	0	-
	253.40	35,925	-
Permanent Pool	254.00	52,097	-
Extended Detention	254.40	63,787	11,690
	255.30	89,704	37,607
	256.00	111,184	59,087
Top of Pond	256.30	120,743	68,646

5.6 Operation Performance

The Hydrologic model was simulated for the 6-hour and 12-hour AES storms to determine the operation performance of the SWM wet pond with the proposed outlet structure. The modelling results are summarized in **Table 5-4**. Detailed hydrologic modelling (VO6) outputs are included in **Appendix B**.

Table 5-4: Quantity Control Performance of the SWM Wet Pond

Return Period	Inflow Rate (m^3/s)	Outflow Rate (m^3/s)	Utilized Storage (m^3)	Water Elevation (m)
6-hour AES Storm				
2-year	3.984	0.069	15,070	254.52
5-year	5.496	0.162	19,800	254.69
10-year	6.491	0.238	22,958	254.80
25-year	7.774	0.357	26,871	254.93
50-year	8.757	0.451	29,690	255.03
100-year	9.727	0.556	32,494	255.12
12-hour AES Storm				
2-year	2.432	0.095	16,865	254.59
5-year	3.218	0.200	21,370	254.74
10-year	3.749	0.279	24,319	254.84
25-year	4.424	0.389	27,861	254.96
50-year	4.918	0.480	30,464	255.05
100-year	5.443	0.578	33,072	255.14
Hurricane Hazel				
Regional	7.292	5.227	62,937	256.12

5.7 Erosion Protection Measures for North Pond

Concerns on erosion potential may arise due to high flow velocity at the location of interest, such as storm sewer outlets, overland flow channels, and emergency spillways, etc. This section provides the technical support for the erosion protection measures specified in the engineering drawings for these locations.

Table 5-5 presents the proposed erosion protection measures at locations of interest. Detailed erosion protection calculations are included in Section 4.7 of **Appendix A**.

Generally, cable concrete is proposed where the maximum velocity exceeds 3.0 m/s and rip rap is proposed where the maximum velocity is less than 3.0 m/s.

Table 5-5: Erosion Protection Measures for the Wet Pond

Locations	Erosion Protection Measures	Median Size D_{50} (mm)	Thickness of Layer (mm)	Refer to Engineering Drawing
Overland Flow Channel to Wet Pond	Cable Concrete, CC 35	---	---	SWP
Storm Sewer Outlet @ HW1A (Pond Inlet 1350 mm Ø pipe)	Rip Rap	200	400	SWP
Storm Sewer Outlet @ HW1B (Pond Inlet 1500 mm Ø)	Rip Rap	300	600	SWP
Storm Sewer Outlet @ HW3 (Pond Outlet 675 mm Ø)	Rip Rap	100	200	SWP
Emergency Spillway for Wet Pond	Rip Rap	100	200	SWP

6 EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

The following erosion and sediment controls are proposed for implementation during construction to minimize erosion potential and soil migration from the site to adjacent lands and/or receiving waters:

- Install silt fence at the downslope side of disturbed areas and snow fence (if necessary) along the perimeter of the development site, prior to the start of construction.
- Install stone mud mats at all construction entrances.
- Stockpile topsoil at designated locations and at least 30 m away from the top bank of the watercourse. Stockpiles will be contained by silt fences on the downslope side.
- Accumulated silt shall be removed from all sediment control devices as required during construction and disposed of in locations approved by the Town of Caledon and TRCA.
- All exposed soils are to be stabilized and vegetated as soon as possible using seed and mulch application on 100 mm of topsoil, as directed by the Engineer.
- All catch basins are to be fitted with sediment control devices as directed by the Engineer and in accordance with the Town of Caledon's standard requirements.
- Half bulkhead to be installed in storm manholes immediately upstream from outfall structures and removed after all building construction and landscaping activity has been completed.
- Additional erosion / sediment controls may be required on-site as determined by the Engineer.
- No construction activity / machinery shall intrude beyond the silt / snow fence or property limit. All construction vehicles shall enter and leave the site via designated entrances.
- All regraded areas that are not occupied by dwellings, roads, sidewalks, driveways, park, and other services shall be covered by 100 mm topsoil and sodded / seeded immediately after completion of final grading operations, as directed by the Engineer.
- All temporary erosion and sediment controls must be installed prior to the commencement of site grading, must be inspected on a regular basis and after

every rainfall event, and must be cleaned and maintained as required to prevent the migration of sediment from the site.

- All sediment and erosion control facilities are to remain in place until finalization of construction activity.
- All temporary erosion and sediment controls must be removed after construction and once the site has been stabilized to the Town of Caledon’s satisfaction. All areas disturbed by erosion / sediment control devices are to be restored with 100 mm topsoil and sodded / seeded after construction.
- The Contractor shall keep public roadways free of debris during construction. Any material tracked from the site shall be promptly removed from roadways at the Contractor's expense.
- All material and workmanship shall conform to the current OPSD and standards endorsed by the Town of Caledon, the TRCA and other regulatory agencies.
- The Contractor is responsible to locate and protect all existing utilities and municipal services, and to make arrangement with utility companies prior to construction.
- All excavations shall be in accordance with the Ontario "Occupational Health and Safety Act", and other federal and provincial regulations related to construction projects.

7 CONCLUSIONS

The detailed design of the proposed SWM ponds and infiltration galleries at 12035 Dixie Road has been completed in order to meet the requirements set out in the **Section 1.4** of this report. The designs include the following features:

Water Balance

Site based water balance will be met by installing infiltration galleries for all impervious roof areas. A best practices approach has been used to maintain the pre-development infiltration in post-development conditions to the extent practicable.

Existing flows to the environmental protection areas will be maintained in the proposed condition; however, this is part of the feature-based water balance strategy. Note that the feature-based water balance will be the responsibility of the hydrogeological consultant and is not discussed in detail in this report.

Water Quality

Sufficient permanent pool and extended detention volumes are provided in the SWM Pond in order to meet the requirements for Enhanced Level protection as per the MECP's *Stormwater Management Planning and Design Manual*.

Extended Detention (Erosion Control)

The most stringent erosion storage requirement has been provided in the wet pond. The extended detention volume provides 2/3 of the storage volume required to limit the 2-year peak discharge flow to the corresponding pre-development level. Reversed slope pipe configurated with diameter plate is proposed as flow control to achieve the target flow rate to a peak discharge rate of 15% of the 2-year pre-development flow rate.

Water Quantity Control (2 ~ 100-year Events)

Sufficient storage is provided in the SWM wet pond to detain runoff and control discharge rates down to the allowable rates set out in the Humber River Hydrology Update for the 2 to 100-year storm.

Water Quantity Control (Regional)

In addition to the 2 to 100-year discharge requirements, additional active storage with the emergency spillway is provided in the wet pond to safety convey the Regional storm event to the realigned nature channel.

APPENDIX

A

Stormwater Management Calculations

	Project	12035 Dixie Road	No.	20M-01429	
	By	Xinjie Ou	Date	2021-03-15	Page
	Checked	Alyssa Mohino-Barrie	Checked	2021-03-15	1
Subject	SWM Design Criteria				

1.0 Introduction

The 12035 Dixie Road (The "Site" hereinafter) is bounded by Dixie Road and existing building to the south west, Mayfield Road to the south east, a garden supply center and agricultural lands to the northwest, and undeveloped agricultural lands to the northeast. There is an existing creek that runs through the Site. The Site is located in the Town of Caledon and Region of Peel, and falls within the jurisdiction of Toronto Region Conservation Authority (TRCA).

1.1 Design Criteria & SWM Strategies

SWM Design Criteria have been established based on TRCA Stormwater Management Criteria, August 2012.
One SWM Wet Ponds has been proposed to achieve the SWM quality, erosion, and quantity control.

1.1.1 Water Quality Controls

The proposed Wet Pond must provide water quality control at Enhanced Protection Level, equivalent to 80% TSS removal.
Storage requirements for permanent pool and extended detention for quality treatment shall follow Table 3.2 in "Stormwater Management Planning and Design Manual" (MOE, 2003)

1.1.2 Quantity Control

Limit the post-development peak discharges to the corresponding pre-development levels, using TRCA"s unit flows for the West Humber River Watershed Sub-Basin 36 (Equation F) for all storms up to and including the 100-year storm. Refer to Humber River Hydrology Update Final Report (TRCA, June 2015).

1.1.3 Erosion Control

Provide the minimum erosion control storage equivalent to 2/3 of the 2-year storage required to limit the post-development peak discharge to the corresponding 2-year pre-development peak flow (using the TRCA unit peak flows for the West Humber River Watershed), with the maximum erosion control discharge at 15% of the 2-year predevelopment peak flow, using TRCA"s unit flows for the West Humber River Watershed.

1.2 Design Storm

25 mm rainfall event for erosion control.
6 hour AES storm for Quantity Control for 2-year up to 100-year events.
12 hour AES storm for Quantity Control for 2-year up to 100-year events.
Regional Storm (12 hour Hazel Hurricane) for Quantity Control for regional storm.

2.0 Existing Drainage

The 12035 Dixie Road (The "Site" hereinafter) is bounded by Dixie Road and existing building to the south west, Mayfield Road to the south east, a garden supply center and agricultural lands to the northwest, and undeveloped agricultural lands to the northeast. There is an existing creek that runs through the Site from west to east. The Site is located in the Town of Caledon and Region of Peel, and falls within the jurisdiction of Toronto Region Conservation Authority (TRCA).

2.1 Existing Catchment Parameters

The subject development and its external area are delineated into five (5) sub-catchments and summarized in following table. An external area of 65.68 ha draining from the west corner of the site to the existing creek is excluded from the table.

Sub-Catchment	Area (ha)	IMP (%)	Land Use	Release To
2100	3.42	17.0	Agricultural Area and Residential Development	Culvert at Mayfield Road
2200	14.90	0.0	Agricultural Area	Kilamanagh Creek
2300	0.76	0.0	Agricultural Area	Culvert at Mayfield Road
3100	26.36	25.2	Industrial Development	Culvert at Mayfield Road
3200	19.04	1.3	Agricultural Area	Culvert at Mayfield Road
Total	64.49	11.6		

2.2 Allowable Release Rates

6 Hour AES Storm

Storm Event	Allowable Flow Rates Different Outlets (m^3/s)			
	Culvert at Mayfield Road			Kilamanagh Creek
	External *	Site **	Total	
2-yr	0.362	0.332	**0.694**	0.113
5-yr	0.594	0.505	**1.099**	0.172
10-yr	0.764	0.625	**1.389**	0.212
25-yr	0.987	0.786	**1.773**	0.267
50-yr	1.161	0.914	**2.075**	0.312
100-yr	1.336	1.035	**2.371**	0.352

** The release flow rates of external drainage area of 65.68 ha are obtained from the VO model under the 6 hour AES Storm Distribution.*

***The Site flow rates are calculated based on TRCA's unit flows for the West Humber River Watershed Sub-Basin 36 (Equation F)*

12 Hour AES Storm

Storm Event	Allowable Flow Rates Different Outlets (m^3/s)			
	Culvert at Mayfield Road			Kilamanagh Creek
	External *	Site **	Total	
2-yr	0.380	0.332	**0.712**	0.113
5-yr	0.589	0.505	**1.094**	0.172
10-yr	0.738	0.625	**1.363**	0.212
25-yr	0.933	0.786	**1.719**	0.267
50-yr	1.083	0.914	**1.997**	0.312
100-yr	1.234	1.035	**2.269**	0.352

** The release flow rates of external drainage area of 65.68 ha are obtained from the VO model under the 12 hour AES Storm Distribution.*

***The Site flow rates are calculated based on TRCAs unit flows for the West Humber River Watershed Sub-Basin 36 (Equation F)*

3.0 Proposed Development

The proposed development consists of a four warehouse buildings with extensive surface parking, a pond block, proposed channel blocks, future park area and two uncontrolled surfaces.
A SWM wet pond is proposed at the eastern edge of the site to provide quality, erosion and quantity control for runoff from the development site.

3.1 Proposed Catchment Parameters

3.1.1 Proposed Catchment Parameters

The subject development and its external area are delineated into ten (10) sub-catchments. An external area of 65.68 ha draining from the west corner of the site to the proposed creek is excluded from the table but will be included in the hydrological model. The detail analysis for this 65.68 ha external drainage refers to Prologis Park 410 Stormwater Management Report by WSP, April 2019. The hydrologic parameters used in Visual OTTHYMO model are summarized in following table.

Sub-Catchment	Area (ha)	IMP (%)	CN	IA (mm)	Tp (hours)	Command	Land Use
2100	3.11	18.7	87	5.0	0.14	NasHyd	Grassed Waterway & Residential Area
2200	5.60	0.0	87	5.0	0.44	NasHyd	Agricultural Area & Grassed Waterway
2300	2.00	0.0	87	5.0	0.43	NasHyd	Grassed Waterway
2400	0.76	0.0	87	5.0	0.04	NasHyd	Agricultural Area
3100	25.24	85.9	87	5.0	-	StandHyd	Industrial Development
3200	7.11	88.3	87	5.0	-	StandHyd	Industrial Development
3300	9.32	78.8	87	5.0	-	StandHyd	Industrial Development
3400	4.34	77.6	87	5.0	-	StandHyd	Pond Block
3500	3.52	100.0	87	5.0	-	StandHyd	Future Industrial Development
4100	3.48	0.0	87	5.0	0.04	NasHyd	Agricutural Area
Total	64.48	66.3	-	-	-	-	-

** Permanent pool is considered impervious area.*

3.1.2 SCS CN Numbers

CN = 87 *From TRCA Hydrologic Model*

3.1.3 Initial Abstraction (IA)

Initial Abstraction for various land use are as either taken from TRCA's hydrologic model or confirmed by TRCA.

Land use	IA (mm)	Comments
Agricultural Area	5.0	Typical value for pervious area
Urban Lawn	5.0	Typical value for pervious area
Impervious Surface	1.0	Typical value for impervious area

3.1.4 Time of Concentration (T_C) and Time to Peak (T_P) for rural catchment (1000 and 1100)

Time of concentration (tc) was calculated using Upland Method, then time to peak (tp) was determined using Equation tp=2/3*Tc.
With Upland Method, the average overland flow velocity is determined for a catchment based on the catchment slope and ground type. Once the velocity has been determined, then the time of concentration is determined by dividing the catchment length by the overland flow velocity.

The velocity can be either read from a figure for Velocity vs. Slope or calculated from the following equation:

$$V = K\sqrt{S}$$

Where, V is average velocity;
S is slope in percentage (%); and
K (m/s) is an intercept Coefficient as shown in following table.

Flow Type	K
Overland Flow: Forest with Heavy Litter; Hay Meadow	0.8
Overland Flow: Woodland; Fallow or Minimum Tillage Cultivation, Contour or Strip Crop	1.5
Overland Flow: Pasture	2.1
Overland Flow: Cultivated Straight Row	2.7
Overland Flow: Nearly Bare Soil, Untilled	3.1
Grassed Waterway	4.6

Catchment	Flow Pattern & Ground Cover	L (m)	E_1 (m)	E_2 (m)	Sw	V (m/s)	Tc (min)	Tp hr)
2100	Overland, Pasture	215	263.0	259.5	1.63	0.29	12.2	0.14
2200	Overland, Pasture	581	260.5	254.0	1.12	0.24	39.8	0.44
2300	Overland, Pasture	438	257.0	254.0	0.68	0.19	38.4	0.43
2400	Overland, Pasture	82.6	262.0	260.0	2.42	0.36	3.8	0.04
4100	Overland, Pasture	118.6	260.0	253.0	5.90	0.56	3.5	0.04

4.0. Wet Pond Design

4.1 Design Criteria and Required Storage

4.1.1 Water Quality Controls

The proposed wet pond must provide water quality control at Enhanced Protection Level

Refer to Table 3.2 in "Stormwater Management Planning and Design Manual" (MOE, 2003)

Protection Level	SWMP Type	Storage Volume (m^3/ha) for Impervious Level			
		35%	55%	70%	85%
Enhanced 80% long-term S.S. removal	Infiltration	25	30	35	40
	Wetlands	80	105	120	140
	Hybrid Wet Pond/Wetland	110	150	175	195
	Wet Pond	140	190	225	250

Total Drainage Area	50.29	ha		(Catchment 2400 & 3100~3500)	
Imperviousness	83.9	%			
SWMP Type	Wet Pond				
Enhanced Level Protection:	80	% TSS Removal			
Storage Volume per ha	248.2	m^3/ha	or	12,482	m^3
Extended Detention Volume	40.0	m^3/ha	or	2,012	m^3
Permanent Pool Storage	208.2	m^3/ha	or	**10,470**	m^3

4.1.2 Erosion Control

Erosion control criteria was set out in the IBI's report as follows:

> The extended detention volume shall be 2/3 of the storage volume required to limit the 2-year peak discharge to the corresponding pre-development level. The extended detention volume shall be controlled to a peak discharge rate of 15% of the 2-year pre-development flow rate.

Refer to Section 1.1.3.

4.1.3 Quantity Control Target

The target flow rate and estimated required storage volume for quantity control.

Storm Event	Target Flow Rate * (m^3/s)	Minimum Storage Requirement (from VO Model) (m^3)		Minimum Design Storage Requirement (m^3)
		6 hour AES	12 hour AES	
Erosion Control	0.023	---	---	10,775
2-Yr	0.150	14,454	16,162	16,162
5-Yr	0.250	19,633	26,261	26,261
10-Yr	0.400	22,969	24,429	24,429
25-Yr	0.550	26,886	27,831	27,831
50-Yr	0.650	29,644	30,369	30,369
100-Yr	0.750	32,484	33,037	33,037

* The target flow rates for the wet pond are obtained from the VO model by iteration, which ensures the flows at Mayfield culvert are smaller than the allowable flow rates.

4.2 Pond Grading

Pond grading was carried out to provide required storage for water quality, erosion and water quantity controls.
The Stage - Storage Relationships for the wet pond are as follows.

Description	Elevation (m)	Surface Area (m^2)	Total Volume (m^3)	Active Volume (m^3)
Bottom of Pond	251.50	15,433	0	---
	252.50	20,620	16,315	---
	253.40	22,956	35,925	---
Permanent Pool (PP)	254.00	30,952	52,097	0
Extended Detention	254.40	27,496	63,787	11,690
	254.60	28,254	69,362	17,265
	255.30	29,867	89,704	37,607
	255.60	30,567	98,769	46,672
Top of Pond	256.00	31,507	111,184	59,087
Freeboard	256.30	32,219	120,743	68,646

4.3 Outlet Structure Design

Outlet Structure for the wet pond consists of:

1. Reverse Slope Pipe configured with orifice plate for Erosion Control.
2. Sharp-Crested Weir for Quantity Control up to 100-year event.
3. Emergency Spillway for safely conveying any storm that larger than 100-year event.

4.3.1 Low Flow Outlet for Erosion Control

A 200 mm reverse slope pipe is proposed to drain water from the deep portion of the pond.

A 130 mm orifice plate is proposed to achieve the target flow rate for the extended detention volume

Orifice Discharge Equation is used to calculate the release rate from the 95 mm orifice plate:

$$Q = CA\sqrt{2gh}$$

Where,	Q = Orifice Plate Flow Rate (m^3/s)	0.021	m^3/s
	C = Flow Coefficient for Orifice Plate	0.63	
	d = Diameter of orifice (mm)	130	mm
	A = Cross-section Area of Orifice Plate (m^2)	0.0133	m^2
	g = Gravity Acceleration (m/s^2)	9.81	m/s^2
	h = Water Head above Centerline of Orifice Plate (m)	0.335	m
	Invert of Orifice Plate is set at permanent pool level	254.00	m
	Extended Detention	254.40	m

4.3.2 High Flow Outlet for Quantity Control up to 100-year Event

A 0.70 m length sharp-crested weir is proposed to convey the 100-year flow to the control manhole.

Weir Bottom Lid Elevation is set at	254.40	m

Sharp-Crested Weir Equation is used to estimate the flow through the high flow outlet.

$$Q = CLH^{1.5}$$

Where,	Q = Sharp-Crested Weir Flow Rate (m^3/s)	0.71	
	C = Flow Coefficient for Sharp-Crested Weir	1.84	
	L = Weir Length (m)	0.45	m
	H = Water Depth (m) = Water Surface Elevation - 254.4 m	0.90	m

4.3.3 Emergency Spillway

In case that all orifice tubes be blocked, an emergency spillway shall be proposed to convey the peak inflow rate from regional or 100-year event, whichever is greater.

6 hr AES 100-year inflow rate=	9.73	m^3/s
Regional inflow rate=	7.29	m^3/s

Weir Bottom Lid Elevation is set at	256.00	m

Broad-Crested Weir Equation is used to estimate the flow through the emergency spillway.

$$Q = CLH^{3/2}$$

Where,	Q = Broad-Crested Weir Flow Rate (m^3/s)	9.78	m^3/s
	C = Flow Coefficient	1.70	
	L = Weir Length (m)	35.0	m
	H = Water Depth (m) = Top of Pond - 255.20 m	0.30	m

4.4 Stage - Storage - Discharge Relationships for Wet Pond

Elevation (m)	Flow Control for Extended Detention Orifice Plate #1 C = 0.63 Dia. = 130 Inv. = 254.00		Flow Control for Up to 100-Year Event Sharp Crest Weir C = 1.84 L = 0.45 Lid. = 254.40		Emergency Spillway Broad Crest Weir C = 1.70 L = 35.0 Lid. = 256.00		Total Flow (m^3/s)	Active Storage (m^3)
	Depth (m)	Flow (m^3/s)	Depth (m)	Flow (m^3/s)	Depth (m)	Flow (m^3/s)		
254.00	0.00	0.000	0.000	0.000	0.000	0.000	**0.000**	**0**
254.20	0.13	0.014	0.000	0.000	0.000	0.000	**0.014**	**5,845**
254.40	0.33	0.021	0.000	0.000	0.000	0.000	**0.021**	**11,690**
254.60	0.53	0.027	0.200	0.074	0.000	0.000	**0.101**	**17,265**
254.80	0.73	0.032	0.400	0.209	0.000	0.000	**0.241**	**23,077**
255.00	0.93	0.036	0.600	0.385	0.000	0.000	**0.421**	**28,889**
255.30	1.23	0.041	0.900	0.707	0.000	0.000	**0.748**	**37,607**
255.60	1.53	0.046	1.200	1.088	0.000	0.000	**1.134**	**46,672**
255.80	1.73	0.049	1.400	1.372	0.000	0.000	**1.420**	**52,879**
256.00	1.93	0.052	1.600	1.676	0.000	0.000	**1.727**	**59,087**
256.20	2.13	0.054	1.800	2.000	0.200	5.322	**7.376**	**65,294**
256.30	2.23	0.055	1.900	2.169	0.300	9.777	**12.001**	**68,398**

4.5 Pond Performance

Visual OTTHYMO model was simulated for 12 hour AES storm, 6 hour AES Storm and Regional Storm.
The results are summarized as follows.

4.5.1 Wet Pond Performance _ 6 Hour AES Storm

Storm Event	Q_{in} (m^3/s)	Q_{out} (m^3/s)	V (m^3)	WSE (m)
2-Yr	3.984	0.069	15,070	254.52
5-Yr	5.496	0.162	19,800	254.69
10-Yr	6.491	0.238	22,958	254.80
25-Yr	7.774	0.357	26,871	254.93
50-Yr	8.757	0.451	29,690	255.03
100-Yr	9.727	0.556	32,494	255.12

4.5.2 Wet Pond Performance _ 12 Hour AES Storm

Storm Event	Q_{in} (m^3/s)	Q_{out} (m^3/s)	V (m^3)	WSE (m)
2-Yr	2.432	0.095	16,865	254.59
5-Yr	3.218	0.200	21,370	254.74
10-Yr	3.749	0.279	24,319	254.84
25-Yr	4.424	0.389	27,861	254.96
50-Yr	4.918	0.480	30,464	255.05
100-Yr	5.443	0.578	33,072	255.14

4.5.3 Pond H21 Performance _ Regional Event

Storm Event	Q_{in} (m^3/s)	Q_{out} (m^3/s)	V (m^3)	WSE (m)
Regional Event	7.292	5.227	62,937	256.12

4.5.4 Target Flow Rates vs Controlled Flow Rates at Mayfeild Culvert

Storm Event	6 hr AES		12 hr AES	
	Target Peak Flow Rate (m^3/s)	Post-Development Peak Flow Rate (m^3/s)	Target Peak Flow Rate (m^3/s)	Post-Development Peak Flow Rate (m^3/s)
2-Yr	0.694	0.546	0.712	0.569
5-Yr	1.099	0.942	1.094	0.925
10-Yr	1.389	1.250	1.363	1.194
25-Yr	1.773	1.669	1.719	1.557
50-Yr	2.075	2.002	1.997	1.841
100-Yr	2.371	2.345	2.269	2.139

4.5.5 Target Flow Rates vs Controlled Flow Rates at Kilamanagh Creek

Storm Event	Target Peak Flow Rate (m^3/s)	Kilamanagh Creek Post-Development Peak Flow Rate (m3/s)	
		6 hr AES Storm	12 hr AES Storm
2-Yr	0.113	0.106	0.069
5-Yr	0.172	0.167	0.102
10-Yr	0.212	0.209	0.125
25-Yr	0.267	0.263	0.154
50-Yr	0.312	0.304	0.175
100-Yr	0.352	0.344	0.196

4.6 Forebay Configuration

A sediment forebay is one of the deeper areas of the pond which facilitates maintenance and improves pollutant removal by trapping larger particles near the inlet of the pond.
The sediment forebay design guidelines are presented in section 4.6.2 of the <Stormwater Management Practice Planning and Design Manual> (MOE, 2003) on page 4.55 to 4.57.

4.6.1 Settling Calculation

$$D_{ist} = \sqrt{\frac{rQ_p}{V_s}}$$ Equation 4.5 of MOE Manual

Where,	D_{ist} =	Forebay length (m)	8.7	m
	r =	Length -to-Width ratio of forebay	1.0	
	Q_p =	Erosion control flows	0.023	m^3/s
	V_s =	Setting velocity	0.0003	m/s

4.6.2 Dispersion Length

The dispersion length refers to the length of fluid required to slow a jet discharge. It is recommended that the forebay length is such that a fluid jet will disperse to a velocity of ≤ 0.50 m/s at the forebay berm.

$$D_{ist} = \frac{8Q}{dV_f}$$ Equation 4.6 of MOE Manual

Where,	D_{ist} =	Dispersion Length	58.6	m
	Q =	Inlet flow rate from design storm (5-year 6hr AES)	5.50	m^3/s
	d =	Depth of permanent pool in the forebay	1.50	m
	V_f =	Desired velocity in the forebay	0.50	m/s

4.6.3 Minimum Forebay Bottom Width

$$W_{idth} = \frac{D_{ist}}{8}$$ Equation 4.7 of MOE Manual

Where,	W_{idth} =	Minimum Forebay Deep Zone Bottom Width	7.3	
	D_{ist} =	Larger of Settling Length and Dispersion Length	58.6	m

4.6.4 Forebay Configuration

Description	Required	Provided
Depth (m)	1.5	1.5
Settling Length (m)	8.7	84.0
Dispersion Length (m)	58.6	
Minimum Bottom Width of Forebay Deep Zone (m)	7.3	40.0

4.6.5 Average Flow Velocity in the forebay

A check should be made using the entire forebay cross-sectional area to ensure that the average velocity in the forebay is less than, or equal to , 0.15 m/s which is empirically recognized as the maximum permissible velocity before which erosion will occur in a channel.

$$V_{avg} = Q/A$$

Where,	V_{avg} =	Average velocity in the forebay	0.14	m/s
	Q =	Inlet flow rate from design storm (100-year 6 hr AES)	9.73	m^3/s
	A =	Entire forebay cross-sectional area	68.25	m^2
	d =	Depth of permanent pool in the forebay	1.50	m
	W_B =	Forebay Deep Zone Bottom Width	40.00	m
	W_t =	Forebay Deep Zone Top Width at Permanent Pool Elevation	51.00	m

4.7 Erosion Protection

Erosion analysis was carried out to design appropriate erosion protection measure for overland flow routes, pond emergency spillway, and storm sewer outlets.

4.7.1 Overland Flow Route to Wet Pond

An overland flow channel is proposed to convey the major flow from the development Site (Catchment 2400 & Catchment 3100 ~3500) to Wet Pond.

4.7.1.1 Major Flow Calculation

	Catchment	Q_{100} (m^3/s)	Q_{Minor} (m^3/s)*	Q_{Major} (m^3/s)
Pond Drainage	2400, 3100~3400	9.01	5.07	**3.94**

** Minor flow from wet pond drainage area is 5-year flow. Refer to VO model Output.*

4.7.1.2 Flow Velocity _ Manning's Equation

Manning's Equation is used to calculate the flow velocity within overland flow channel

BW (m)	D (m)	Z	A (m^2)	P (m)	R (m)	n	S (%)	Q (m^3/s)	V (m/s)
9.0	0.113	3.0	1.051	9.712	0.108	0.035	33.3	3.94	3.75

4.7.1.3 Erosion Protection Measures

Cable Concrete (CC 35) can withstand a flow velocity of 4.2 m/s

Cable concrete	CC 35
Bed Slope	3:1 or 33.3%
Maximum Allowable Velocity	4.2 m^3/s

4.7.2 STM Inlet of Wet Pond

A 1500Ø Concrete sewer conveys the minor flow from catchment 3100 to the wet pond

4.7.2.1 Minor Flow Calculation

	Catchment	Q_{100} (m^3/s)	Q_{Minor} (m^3/s)*	Q_{major} (m^3/s)
Pond Drainage	3200, 3300, 2400	4.89	**2.78**	2.11

** Minor flow from pond drainage area is 5-year flow. Refer to VO model Output.*

Storm Sewer	Dia. (mm)	$Q_{cap.}$ (m^3/s)	Q_{Minor} (m^3/s)	Flow Regime
From MH1 to HW1B	1500	5.00	2.78	Partial Full Flow

4.7.2.2 Flow Velocity _ Manning's Equation

Manning's Equation is used to calculate the flow velocity within the storm sewer

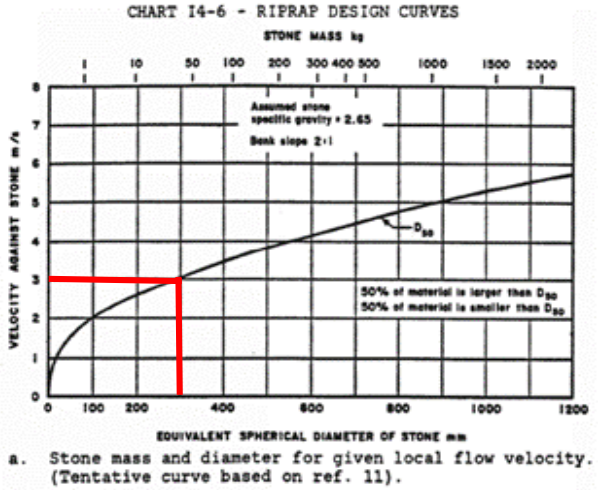
Dia (mm)	D (m)	Θ	A (m^2)	P (m)	R (m)	n	S (%)	Q (m^3/s)	V (m/s)
1500	0.799	3.27	0.957	2.455	0.390	0.013	0.50	2.78	2.90

4.7.2.3 Erosion Protection Measures

Rip Rap is proposed as erosion protection measures for the storm sewer outlet.

Location	Rip Rap D_{50} (mm)	Thickness of Rip Rap Layer (mm)	Flow Velocity (m/s)
HW1B	300	600	3.0

V= 3.0 m/s



a. Stone mass and diameter for given local flow velocity. (Tentative curve based on ref. 11).

Diameter (D_{50}) = 300 mm

4.7.3 STM Inlet of Wet Pond

A 1350Ø Concrete sewer conveys the minor flow from catchment 3200, 3300 and 2400 to the wet pond

4.7.3.1 Minor Flow Calculation

	Catchment	Q_{100} (m^3/s)	Q_{Minor} (m^3/s)*	Q_{major} (m^3/s)
Pond Drainage	3200, 3300 & 2400	3.28	**1.83**	1.45

** Minor flow from pond drainage area is 5-year flow. Refer to VO model Output.*

Storm Sewer	Dia. (mm)	$Q_{cap.}$ (m^3/s)	Q_{Minor} (m^3/s)	Flow Regime
From MH26 to HW1A	1350	3.07	1.83	Partial Full Flow

4.7.3.2 Flow Velocity _ Manning's Equation

Manning's Equation is used to calculate the flow velocity within the storm sewer

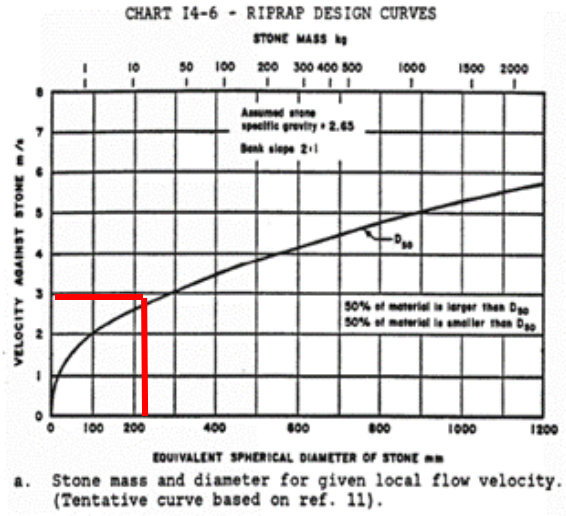
Dia (mm)	D (m)	Θ	A (m^2)	P (m)	R (m)	n	S (%)	Q (m^3/s)	V (m/s)
1350	0.751	3.37	0.819	2.274	0.360	0.013	0.33	1.83	2.24

4.7.3.3 Erosion Protection Measures

Rip Rap is proposed as erosion protection measures for the storm sewer outlet.

Location	Rip Rap D_{50} (mm)	Thickness of Rip Rap Layer (mm)	Flow Velocity (m/s)
HW1A	200	400	2.5

V= 2.5 m/s



a. Stone mass and diameter for given local flow velocity. (Tentative curve based on ref. 11).

Diameter (D_{50}) = 200 mm

4.7.4 STM Outlet from Wet Pond

A 675Ø Concrete sewer conveys the controlled flow from the wet pond to the realigned channel.

4.7.4.1 Major Flow Calculation

Refer to table under Section 4.4 of this Appendix for maximum controlled flow from during 100 yr event

Storm Sewer	Nominal Dia. (mm)	Q_{cap} (m^3/s)	$Q_{Controlled}$ (m^3/s)	Flow Regime
From MH B1 to HW3	675	0.59	0.58	Partial Full Flow

4.7.4.2 Flow Velocity _ Manning's Equation

Manning's Equation is used to calculate the flow velocity within the storm sewer

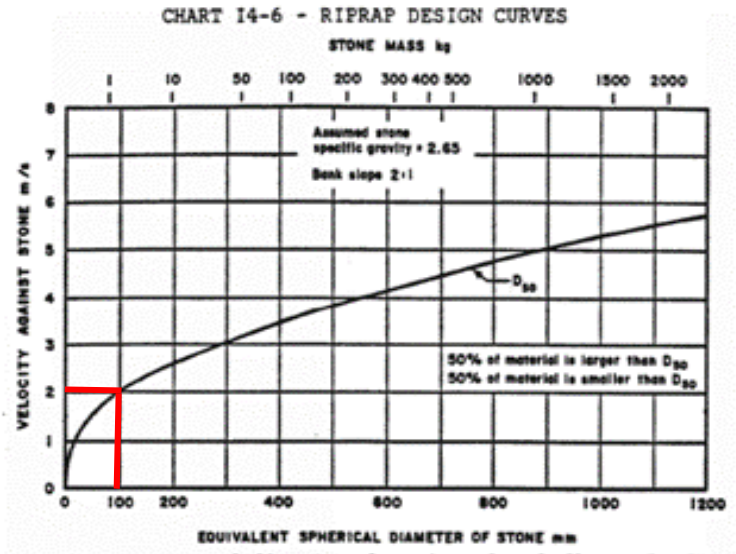
Act. Dia (mm)	D (m)	ϴ	A (m^2)	P (m)	R (m)	n	S (%)	Q (m^3/s)	V (m/s)
675	0.539	4.42	0.306	1.491	0.205	0.013	0.50	0.58	1.89

4.7.4.3 Erosion Protection Measures

Rip Rap is proposed as erosion protection measures for the storm sewer outlet by others.

Location	Rip Rap D_{50} (mm)	Thickness of Rip Rap Layer (mm)	Flow Velocity (m/s)
HW3	100	200	2.0

V= 2.0 m/s



a. Stone mass and diameter for given local flow velocity. (Tentative curve based on ref. 11).

Diameter (D_{50}) = 100 mm

4.7.5 Emergency Spillway of Wet Pond

Emergency spillway is proposed to convey the incoming 100-year (uncontrolled) flow from the wet pond to the realigned channel.

4.7.5.1 Major Flow Calculation

Refer to Table under Section 4.5 of this Appendix, or VO Model Output.

Location	$Q_{in\ 100yr}$ (m^3/s)
Emergency Spillway for Wet Pond	9.73

4.7.5.2 Flow Velocity _ Manning's Equation

Manning's Equation is used to calculate the flow velocity within the storm sewer

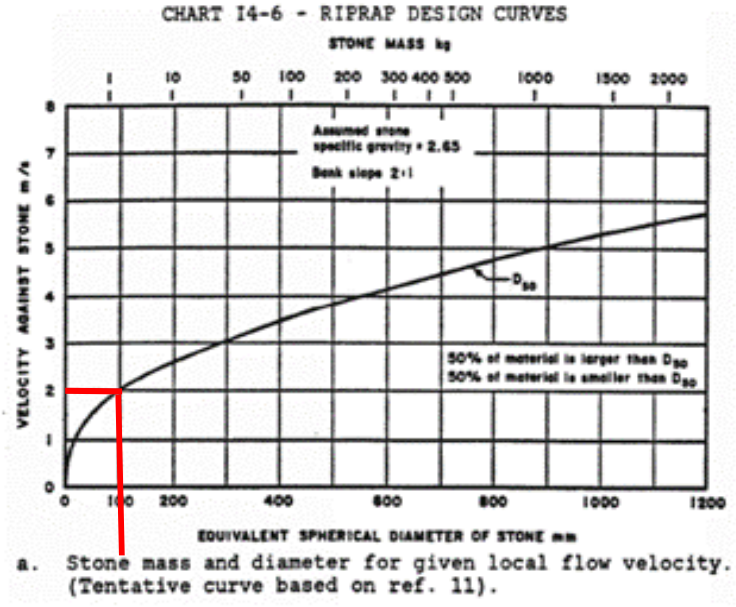
BW (m)	D (m)	Z	A (m^2)	P (m)	R (m)	n	S (%)	Q (m^3/s)	V (m/s)
17.0	0.293	4.0	5.322	19.415	0.274	0.035	2.3	9.73	1.83

2.2.7.5.3 Erosion Protection Measures

Rip Rap is proposed as erosion protection measures for the storm sewer outlet by others.

Location	Rip Rap D_{50} (mm)	Thickness of Rip Rap Layer (mm)	Flow Velocity (m/s)
Emergency Spillway for Wet Pond	100	200	2.0

V= 2.0 m/s



a. Stone mass and diameter for given local flow velocity. (Tentative curve based on ref. 11).

Diameter (D_{50}) = 100 mm

5.0 Water Balance - Development Area of 49.53 ha (Catchment 3100~3500)

5.1. Design Criteria and SWM Strategies

The site is not located in a Source Water Protection vulnerable area nor in a Significant Ground Water Recharge Area.

The implementation of best management practices is recommended to maintain pre-development recharge.

It is proposed best effort to conserve the hydrologic cycle.

LID measures such as an infiltration gallery is proposed to retain runoff to maximize water recharge

5.2 Pre-development Catchment Water Balance Analysis

The TRCA's online water balance tool (TRSPA Water Balance Tool) gives the approximate recharge amount of the site location (see below).

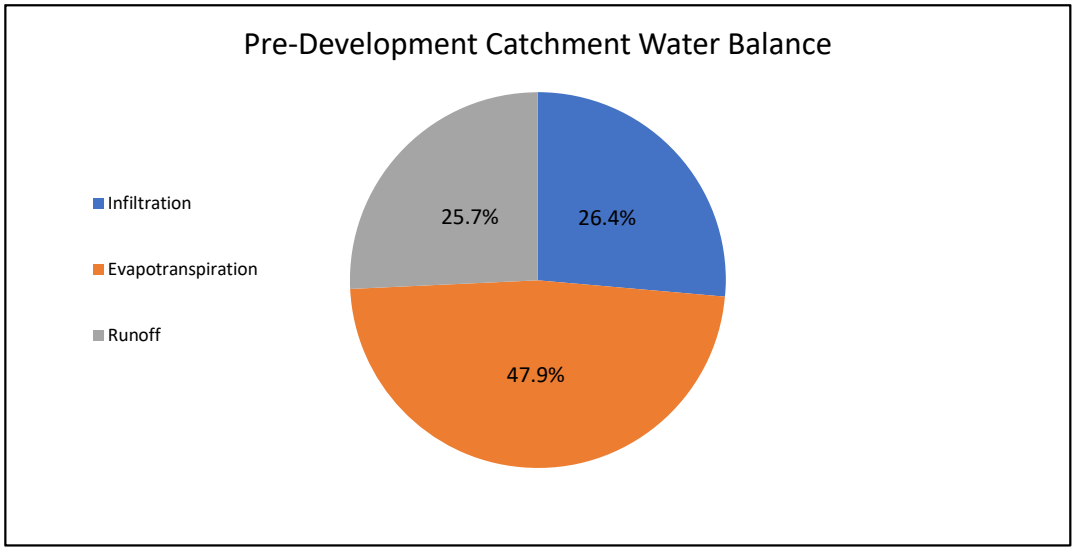
Annual Water Balance Average Function

TRCA tool

	(%)	(mm)
Infiltration	30.7	267.0
Evapotranspiration	47.9	417.0
Runoff	21.5	187.0
Precipitation	100.0	871.0

Pre-development Catchment Water Balance Relationship

Water Budget (mm/hr)	Impervious Area	Pervious Area	Site - Wide	
	mm	mm	mm	%
% Land-Use Coverage	13.9%	86.1%	100.0%	
Infiltration	0.0	267.0	229.8	26.4%
Evapotranspiration	417.0	417.0	417.0	47.9%
Runoff	454.0	187.0	224.2	25.7%
Precipitation	871.0	871.0	871.0	100.0%



5.3. Post-development Catchment Water Balance Analysis _ without Mitigation Measures

Water balance analysis for post-development conditions without mitigation measures is carried out to evaluate the impacts due to the proposed development. It follows the procedure illustrated in the pre-development water balance analysis.

As per available borehole information (BH120-21) done by MTE on November 2020, the soil on site consists of Sandy Silt Till. The soil infiltration factors are there as determined as below table per 2003 MECP SWM Planning & Design Manual Table 3.1.

Infiltration Factor	Value	Remark
Topography	0.20	Rolling Land, average slope 2.8 m to 3.8 m/km
Soil	0.40	Sandy Silt Till
Vegetative Cover	0.10	Urban Lawn
Total	0.70	

5.3.1 Water Balance Relationship for the Impervious Area

42.20 ha or 85.2%

	(%)	(mm)	Comments/Assumptions:
Infiltration	0.0	0.0	...
Evapotranspiration	10.0	87.1	*1 mm depression, refer to Figure 1a in City of Toronto WWFMGs.*
Runoff	90.0	783.9	...
Precipitation	100.0	871.0	

5.3.2 Water Balance Relationship for the Pervious Area

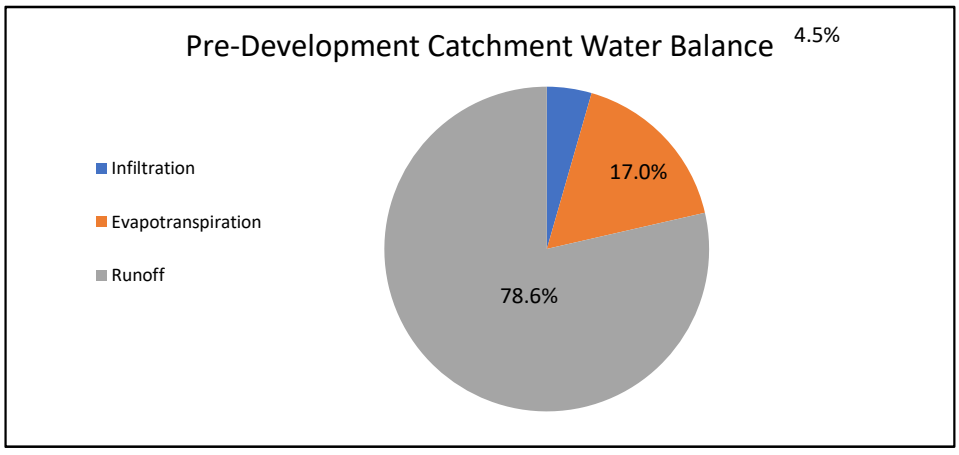
Under proposed conditions, the catchment pervious area is grassed area.

7.33 ha or 14.8%

	(%)	(mm)	
Infiltration	30.1	262.0	*(Precipitation - Evapotranspiration) * infiltration factor in MECP guideline Table 3.1*
Evapotranspiration	57.0	496.7	*Ratio from MECP guideline Table 3.1, Urban Lawns/Silt Loam*
Runoff	12.9	112.3	
Precipitation	100.0	871.0	

5.3.3 Catchment Water Balance Relationship _ Post-development without Mitigation Measures

	Impervious Area	Pervious Area	Site - Wide	
	mm	mm	mm	%
% Land-Use Coverage	85.2%	14.8%	100.0%	
Infiltration	0.0	262.0	38.8	4.5%
Evapotranspiration	87.1	496.7	147.7	17.0%
Runoff	783.9	112.3	684.5	78.6%
Precipitation	871.0	871.0	871.0	100.0%



5.4. Post-development Catchment Water Balance Analysis

Under proposed development conditions, the current pervious area will be mainly impervious area.

Therefore, LID measures shall be incorporated into the site plan to make best effort for groundwater recharge.

5.4.1 Water Retention Strategies

The proposed LID measures include infiltration at the base of underground chamber system, and placement of minimum 300 mm deep absorbent soil at at-grade pervious areas.

The following assumptions are applied in the analysis.

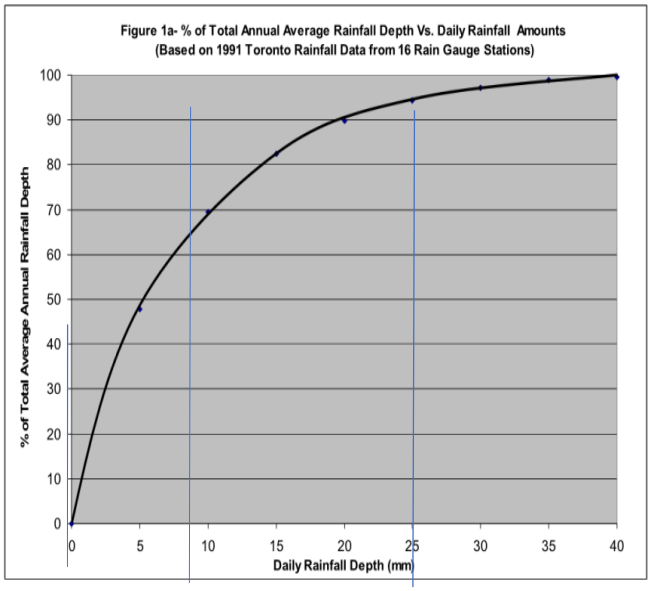
1) All pervious area within the site development area will have an initial abstraction of 25 mm.

2) All impervious area shall accept 1 mm rainfall prior to runoff generation due to shallow depressions.

3) 5.5 mm runoff from all impervious roof area shall be directed to the underground chamber for infiltration

4) 2.54 ha impervious roof area of Building A will be directed to north creek for water balance purpose. This is a flow compensation to north creek, as its existing drainage area was cut off 11.45 ha with 0.2 runoff coefficient in the post-development, which is equivalent to 2.54 ha at 0.9 runoff coefficient.

Figure 1a in City of Toronto WWFMGs presents the relationship of the % of the total annual rainfall depth vs. the daily rainfall amounts. This relationship will be used to conduct the water balance analysis for the subject site from an annual basis.



5.4.2 Define Individual Plan per Land Use

Total At-grade Area	247,435	m^2	50%
Roof Area to Chamber System	149,146	m^2	30%
Roof Area to North Creek	25,400	m^2	5%
Total Landscaped Area	73,339	m^2	15%
Total Site Area	**495,321**	**m^2**	**100%**

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	Checked:	Alyssa Mohino-Barrie	Checked:	2021-03-15	19

Subject: Water Recharge Analysis _ Pre-Development Conditions

1) At Grade Impervious Area

24.74 ha or 50.0%

	(%)	(mm)	Comments/Assumptions:
Infiltration	0.0	0.0	*No infiltration for at-grade areas*
Evapotranspiration	10.0	87.1	*1 mm depression*
Runoff	90.0	783.9	…
Precipitation	100.0	871.0	

2) Runoff from Impervious Roof Area to be retained through Infiltration Base

The provided Infiltration Storage 969.4 m^3 *consider 0.35m height of chamber*

Surface	Area (m^2)	Rainfall Depth (mm)	Initial Abstraction (mm)	Runoff Depth (mm)	Retention Volume (m^3)
Total Catchment Area	149,146	6.5	1.0	5.5	969.4

	(%)	(mm)	Comments/Assumptions:
Infiltration	51.1	445.3	*5.5 mm infiltration through the stone base of chamber system*
Evapotranspiration	10.0	87.1	*1 mm abstraction of total rainfall depth assumed to evaporate*
Runoff	38.9	338.6	…
Precipitation	100.0	871.0	

3) Runoff from Impervious Roof Area to be sent to North Creek

25,400.0 m^3 or 5.1%

	(%)	(mm)	Comments/Assumptions:
Infiltration	90.0	783.9	*All the runoff from 2.54 ha roof area of Building A will be sent to North Creek*
Evapotranspiration	10.0	87.1	*1 mm abstraction of total rainfall depth assumed to evaporate*
Runoff	0.0	0.0	…
Precipitation	100.0	871.0	

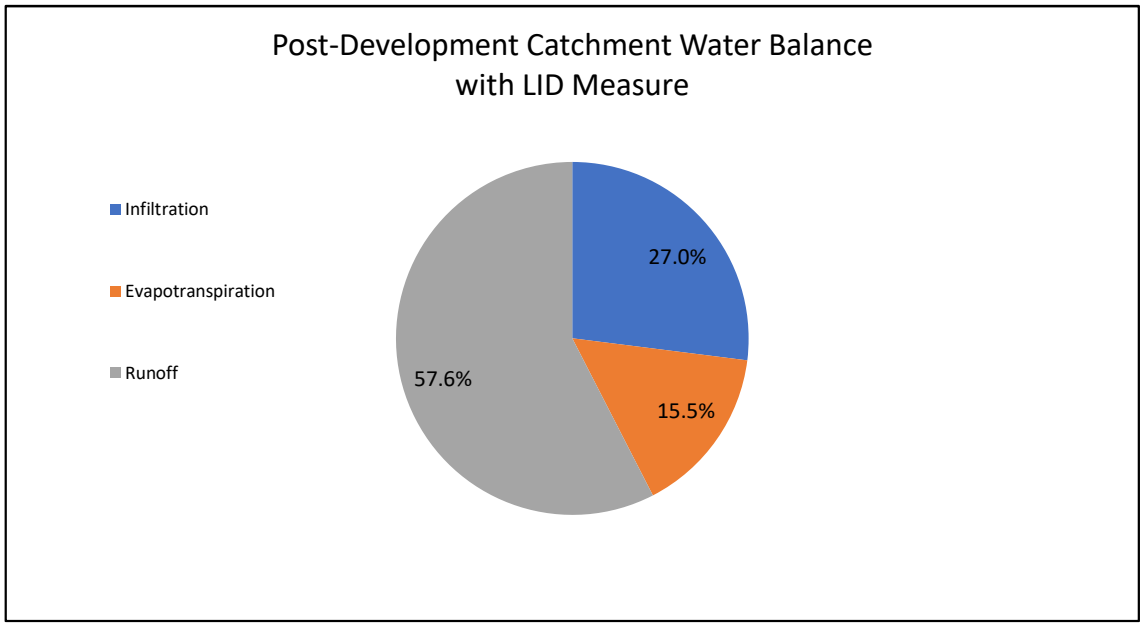
4) Runoff from Pervious Area to be retained through Absorbent Soil

Surface	Area (m^2)	Rainfall Depth (mm)	Initial Abstraction (mm)	Runoff Depth (mm)	Retention Volume (m^3)
Roof Area	73,339	25.0	25.0	0.0	0.0

	(%)	(mm)	Comments/Assumptions:
Infiltration	47.0	409.4	*25 mm retention through the absorbent soil will be splited into Infiltration and evapotranspiration*
Evapotranspiration	47.0	409.4	
Runoff	6.0	52.3	…
Precipitation	100.0	871.0	

5.4.3 Catchment Water Balance Relationship _ Post-development Conditions with Mitigation Measures

	At-Grade Impervious	Impervious Roof to Infiltration Galleris	Impervious Roof to Infiltration Galleris	Pervious Area	Catchment Water Balance Relationship	
	mm	mm	mm	mm		
% Land-Use Coverage	50.0%	30.1%	5.1%	14.8%	100.0%	
Infiltration	0.0	445.3	783.9	409.4	234.9	27.0%
Evapotranspiration	87.1	87.1	87.1	409.4	134.8	15.5%
Runoff	783.9	338.6	0.0	52.3	501.3	57.6%
Precipitation	871.0	871.0	871.0	871.0	871.0	100.0%



5.5. Post-development vs Pre-Development Water Balance

Hydrologic Cycle Components	Pre-Development Conditions		Post-Development Conditions without Mitigation Measures		Post-Development Conditions with Mitigation Measures	
	mm	%	mm	%	mm	%
Infiltration	229.8	***26.4%***	38.8	**4.5%**	234.9	***27.0%***
Evapotranspiration	417.0	***47.9%***	147.7	**17.0%**	134.8	***15.5%***
Runoff	224.2	***25.7%***	684.5	**78.6%**	501.3	***57.6%***
Precipitation	871.0	***100.0%***	871.0	**100.0%**	871.0	***100.0%***

The comparison of water balance reveals that the water recharge under post-development with LID measure will be greater than the pre-development level, though the runoff volume will increase due to the decrease of evapotranspiration. Therefore, the best effort for the water balance has been made through infiltrating 820 m^3 runoff.

5.6.0 Required Footprint for Infiltrating the Runoff from Each Building Roof Area

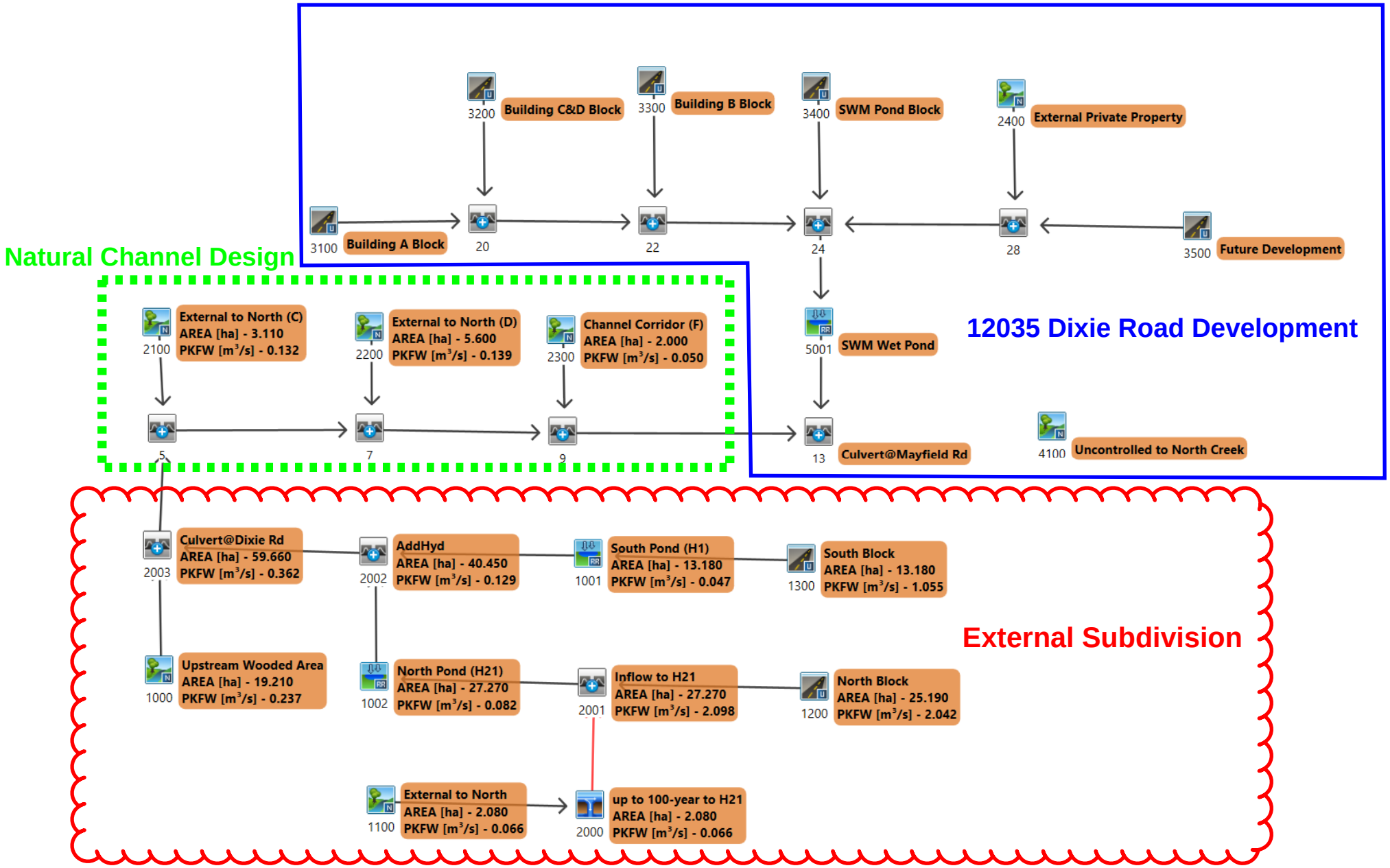
Building	Roof Area to Infiltration Galleries		Required Volume	Required Footprint *
	m^2	%	m^3	m^2
Building A	73651	49.4%	478.7	3419.5
Building B	36383	24.4%	236.5	1689.2
Building C	17623	11.8%	114.6	818.2
Building D	21489	14.4%	139.7	997.7
Total	**149146**	**100.0%**	**969.4**	**6924.6**

* Assuming 0.35 depth and 0.4 void for the infiltration chamber.

The drawdown time calculation will be provided in the future submission when more hydrogeological information is available.

APPENDIX

B Hydrologic Modelling Output



Visual OTTHYMO Model (6.0) Schematic --- Post-development Conditions

```
**********************************
** SIMULATION:Run 01 2yr 6hr AES **
**********************************

--------------------
|    READ STORM    |    Filename: C:\Users\Oux\AppData\
|                  |              Local\Temp\
|                  |              a94bb59f-5044-498d-abed-caf1943a5048\ddb076d2
| Ptotal= 36.00 mm |    Comments: 2yr/6hr
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	12.24	3.75	5.04	5.50	0.72
0.50	0.72	2.25	12.24	4.00	2.88	5.75	0.72
0.75	0.72	2.50	33.12	4.25	2.88	6.00	0.72
1.00	0.72	2.75	33.12	4.50	1.44	6.25	0.72
1.25	0.72	3.00	9.36	4.75	1.44		
1.50	4.32	3.25	9.36	5.00	0.72		
1.75	4.32	3.50	5.04	5.25	0.72		

```
--------------------
| CALIB            |
| NASHYD  (  1000) |   Area    (ha)=  19.21   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   7.70   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.07

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

```
    Unit Hyd Qpeak  (cms)=   0.686

    PEAK FLOW       (cms)=   0.237 (i)
    TIME TO PEAK    (hrs)=   4.033
    RUNOFF VOLUME    (mm)=  12.088
    TOTAL RAINFALL   (mm)=  36.000
    RUNOFF COEFFICIENT   =   0.336

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

--------------------
| CALIB            |
| NASHYD  (  1100) |   Area    (ha)=   2.08   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.29

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

```
    Unit Hyd Qpeak  (cms)=   0.274

    PEAK FLOW       (cms)=   0.066 (i)
    TIME TO PEAK    (hrs)=   2.900
    RUNOFF VOLUME    (mm)=  13.936
    TOTAL RAINFALL   (mm)=  36.000
    RUNOFF COEFFICIENT   =   0.387

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

--------------------
| DUHYD   (  2000) |
| Inlet Cap.= 0.949|
| #of Inlets=    1 |

| Total(cms)=   0.9|      AREA     QPEAK     TPEAK     R.V.
|------------------|       (ha)     (cms)     (hrs)     (mm)
    TOTAL HYD.(ID= 1):    2.08      0.07      2.90    13.94
    ================================================
    MAJOR SYS.(ID= 2):    0.00      0.00      0.00     0.00
    MINOR SYS.(ID= 3):    2.08      0.07      2.90    13.94

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------
| CALIB            |
| STANDHYD (  1200)|   Area    (ha)=  25.19
|ID= 1 DT= 2.0 min |   Total Imp(%)=  88.60   Dir. Conn.(%)=  88.60
--------------------

                        IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=     22.32          2.87
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope     (%)=      1.00          2.00
    Length            (m)=    409.80         40.00
    Mannings n            =     0.013         0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

```
    Max.Eff.Inten.(mm/hr)=      33.12         17.42
              over (min)        10.00         16.00
    Storage Coeff.  (min)=     9.27 (ii)    14.10 (ii)
    Unit Hyd. Tpeak (min)=     10.00         16.00
    Unit Hyd. peak  (cms)=      0.12          0.08
                                              *TOTALS*
    PEAK FLOW       (cms)=      1.95          0.10          2.042 (iii)
    TIME TO PEAK    (hrs)=      2.73          2.87           2.77

    RUNOFF VOLUME    (mm)=     35.00         13.94          32.60
    TOTAL RAINFALL   (mm)=     36.00         36.00          36.00
    RUNOFF COEFFICIENT   =      0.97          0.39           0.91

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN* =  87.0    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  (  2001)|
|   1 +  2 =  3    |          AREA     QPEAK     TPEAK     R.V.
--------------------           (ha)     (cms)     (hrs)     (mm)
       ID1= 1 (  1200):    25.19    2.042     2.77     32.60
     + ID2= 2 (  2000):     2.08    0.066     2.90     13.94
       ================================================
       ID = 3 (  2001):    27.27    2.098     2.77     31.18

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------
| RESERVOIR(  1002)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |     OUTFLOW    STORAGE    |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)    |   (cms)     (ha.m.)
                          0.0000    0.0000     |  0.2130     1.6215
                          0.0900    0.8290     |  0.2480     1.8230
                          0.1380    1.1410     |  0.2810     2.0230
                          0.1700    1.3535     |  0.0000     0.0000

                                AREA     QPEAK     TPEAK      R.V.
                                (ha)     (cms)     (hrs)      (mm)
   INFLOW : ID= 2 (  2001)     27.270    2.098     2.77       31.18
   OUTFLOW: ID= 1 (  1002)     27.270    0.082     4.93       28.59

                PEAK   FLOW   REDUCTION [Qout/Qin](%)=  3.91
                TIME SHIFT OF PEAK FLOW          (min)=130.00
                MAXIMUM  STORAGE   USED        (ha.m.)=  0.7557

--------------------
| CALIB            |
| STANDHYD (  1300)|   Area    (ha)=  13.18
|ID= 1 DT= 2.0 min |   Total Imp(%)=  83.40   Dir. Conn.(%)=  83.40
--------------------

                        IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=     10.99          2.19
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope     (%)=      1.00          2.00
    Length            (m)=    296.42         40.00
    Mannings n            =     0.013         0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72

0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

Max.Eff.Inten.(mm/hr)=	33.12	17.42	
over (min)	8.00	14.00	
Storage Coeff. (min)=	7.63 (ii)	13.39 (ii)	
Unit Hyd. Tpeak (min)=	8.00	14.00	
Unit Hyd. peak (cms)=	0.15	0.08	
			TOTALS
PEAK FLOW (cms)=	0.99	0.08	1.055 (iii)
TIME TO PEAK (hrs)=	2.73	2.87	2.73
RUNOFF VOLUME (mm)=	35.00	13.94	31.50
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.39	0.88

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)		OVERFLOW IS OFF			
IN= 2---> OUT= 1					
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	1.055	2.73	31.50
OUTFLOW: ID= 1 (1001)	13.180	0.047	4.83	29.87

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.45
TIME SHIFT OF PEAK FLOW (min)=126.00
MAXIMUM STORAGE USED (ha.m.)= 0.3637

ADD HYD (2002)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (1001):	13.18	0.047	4.83	29.87
	+ ID2= 2 (1002):	27.27	0.082	4.93	28.59
	ID = 3 (2002):	40.45	0.129	4.90	29.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (1000):	19.21	0.237	4.03	12.09
	+ ID2= 2 (2002):	40.45	0.129	4.90	29.01
	ID = 3 (2003):	59.66	0.362	4.10	23.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2100)	Area (ha)=	3.11	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.14	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 MIN. TIME STEP.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.132 (i)
TIME TO PEAK (hrs)= 2.767
RUNOFF VOLUME (mm)= 13.934
TOTAL RAINFALL (mm)= 36.000
RUNOFF COEFFICIENT = 0.387

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

ADD HYD (0005)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2003):	59.66	0.362	4.10	23.56
	+ ID2= 2 (2100):	3.11	0.132	2.77	13.93
	ID = 3 (0005):	62.77	0.381	3.93	23.08

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2200)	Area (ha)=	5.60	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.44	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 MIN. TIME STEP.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 13.937
TOTAL RAINFALL (mm)= 36.000
RUNOFF COEFFICIENT = 0.387

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

ADD HYD (0007)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2200):	5.60	0.139	3.10	13.94
	+ ID2= 2 (0005):	62.77	0.381	3.93	23.08
	ID = 3 (0007):	68.37	0.465	3.73	22.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area (ha)=	2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 MIN. TIME STEP.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.033	0.00	1.600	4.32	3.167	9.36	4.73	1.44
0.067	0.00	1.633	4.32	3.200	9.36	4.77	1.08
0.100	0.00	1.667	4.32	3.233	9.36	4.80	0.72
0.133	0.00	1.700	4.32	3.267	7.20	4.83	0.72
0.167	0.00	1.733	4.32	3.300	5.04	4.87	0.72
0.200	0.00	1.767	8.28	3.333	5.04	4.90	0.72
0.233	0.00	1.800	12.24	3.367	5.04	4.93	0.72
0.267	0.36	1.833	12.24	3.400	5.04	4.97	0.72
0.300	0.72	1.867	12.24	3.433	5.04	5.00	0.72
0.333	0.72	1.900	12.24	3.467	5.04	5.03	0.72
0.367	0.72	1.933	12.24	3.500	5.04	5.07	0.72
0.400	0.72	1.967	12.24	3.533	5.04	5.10	0.72
0.433	0.72	2.000	12.24	3.567	5.04	5.13	0.72
0.467	0.72	2.033	12.24	3.600	5.04	5.17	0.72
0.500	0.72	2.067	12.24	3.633	5.04	5.20	0.72
0.533	0.72	2.100	12.24	3.667	5.04	5.23	0.72
0.567	0.72	2.133	12.24	3.700	5.04	5.27	0.72
0.600	0.72	2.167	12.24	3.733	5.04	5.30	0.72
0.633	0.72	2.200	12.24	3.767	3.96	5.33	0.72
0.667	0.72	2.233	12.24	3.800	2.88	5.37	0.72
0.700	0.72	2.267	22.68	3.833	2.88	5.40	0.72
0.733	0.72	2.300	33.12	3.867	2.88	5.43	0.72
0.767	0.72	2.333	33.12	3.900	2.88	5.47	0.72
0.800	0.72	2.367	33.12	3.933	2.88	5.50	0.72
0.833	0.72	2.400	33.12	3.967	2.88	5.53	0.72
0.867	0.72	2.433	33.12	4.000	2.88	5.57	0.72
0.900	0.72	2.467	33.12	4.033	2.88	5.60	0.72
0.933	0.72	2.500	33.12	4.067	2.88	5.63	0.72
0.967	0.72	2.533	33.12	4.100	2.88	5.67	0.72
1.000	0.72	2.567	33.12	4.133	2.88	5.70	0.72
1.033	0.72	2.600	33.12	4.167	2.88	5.73	0.72
1.067	0.72	2.633	33.12	4.200	2.88	5.77	0.72
1.100	0.72	2.667	33.12	4.233	2.88	5.80	0.72
1.133	0.72	2.700	33.12	4.267	2.16	5.83	0.72
1.167	0.72	2.733	33.12	4.300	1.44	5.87	0.72
1.200	0.72	2.767	21.24	4.333	1.44	5.90	0.72
1.233	0.72	2.800	9.36	4.367	1.44	5.93	0.72
1.267	2.52	2.833	9.36	4.400	1.44	5.97	0.72
1.300	4.32	2.867	9.36	4.433	1.44	6.00	0.72
1.333	4.32	2.900	9.36	4.467	1.44	6.03	0.72
1.367	4.32	2.933	9.36	4.500	1.44	6.07	0.72
1.400	4.32	2.967	9.36	4.533	1.44	6.10	0.72
1.433	4.32	3.000	9.36	4.567	1.44	6.13	0.72
1.467	4.32	3.033	9.36	4.600	1.44	6.17	0.72
1.500	4.32	3.067	9.36	4.633	1.44	6.20	0.72
1.533	4.32	3.100	9.36	4.667	1.44	6.23	0.72
1.567	4.32	3.133	9.36	4.700	1.44	6.27	0.36

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 13.936
TOTAL RAINFALL (mm)= 36.000
RUNOFF COEFFICIENT = 0.387

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

ADD HYD (0009)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2300):	2.00	0.050	3.10	13.94
	+ ID2= 2 (0007):	68.37	0.465	3.73	22.33
	ID = 3 (0009):	70.37	0.504	3.40	22.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2400)|	Area (ha)= 0.76	Curve Number (CN)= 87.0			
ID= 1 DT= 5.0 min |	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.04				

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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW	(cms)=	0.023 (i)
TIME TO PEAK	(hrs)=	2.750
RUNOFF VOLUME	(mm)=	8.317
TOTAL RAINFALL	(mm)=	36.000
RUNOFF COEFFICIENT	=	0.231

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

CALIB			
STANDHYD (3500)|	Area (ha)= 3.52		
ID= 1 DT= 5.0 min |	Total Imp(%)= 99.90	Dir. Conn.(%)= 99.90	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.52	0.00
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.19	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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=		33.12	17.73	
over (min)		5.00	10.00	
Storage Coeff. (min)=		5.13 (ii)	5.83 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.21	0.15	
				TOTALS
PEAK FLOW	(cms)=	0.32	0.00	0.323 (iii)
TIME TO PEAK	(hrs)=	2.75	2.75	2.75
RUNOFF VOLUME	(mm)=	35.00	13.94	34.98
TOTAL RAINFALL	(mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT	=	0.97	0.39	0.97

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)|				
1 + 2 = 3 |	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.023	2.75	8.32
+ ID2= 2 (3500):	3.52	0.323	2.75	34.98
ID = 3 (0028):	4.28	0.346	2.75	30.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3100)|	Area (ha)= 25.24			
ID= 1 DT= 5.0 min |	Total Imp(%)= 85.90	Dir. Conn.(%)= 85.90		

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=		33.12	16.89	
over (min)		10.00	25.00	
Storage Coeff. (min)=		9.27 (ii)	23.65 (ii)	
Unit Hyd. Tpeak (min)=		10.00	25.00	
Unit Hyd. peak (cms)=		0.12	0.05	
				TOTALS
PEAK FLOW	(cms)=	1.92	0.09	1.991 (iii)
TIME TO PEAK	(hrs)=	2.75	3.00	2.75
RUNOFF VOLUME	(mm)=	35.00	13.94	32.03
TOTAL RAINFALL	(mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT	=	0.97	0.39	0.89

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:

CN* = 87.0 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.

CALIB				
STANDHYD (3200)|	Area (ha)= 7.11			
ID= 1 DT= 5.0 min |	Total Imp(%)= 88.30	Dir. Conn.(%)= 88.30		

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=		33.12	17.73	
over (min)		5.00	15.00	
Storage Coeff. (min)=		6.34 (ii)	11.23 (ii)	
Unit Hyd. Tpeak (min)=		5.00	15.00	
Unit Hyd. peak (cms)=		0.19	0.09	
				TOTALS
PEAK FLOW	(cms)=	0.57	0.03	0.604 (iii)
TIME TO PEAK	(hrs)=	2.75	2.83	2.75
RUNOFF VOLUME	(mm)=	35.00	13.94	32.53
TOTAL RAINFALL	(mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT	=	0.97	0.39	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)|				
1 + 2 = 3 |	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):	25.24	1.991	2.75	32.03
+ ID2= 2 (3200):	7.11	0.604	2.75	32.53
ID = 3 (0020):	32.35	2.595	2.75	32.14

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3300)|	Area (ha)= 9.32			
ID= 1 DT= 5.0 min |	Total Imp(%)= 78.80	Dir. Conn.(%)= 78.80		

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.34	1.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	249.27	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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=		33.12	16.89	
over (min)		5.00	25.00	
Storage Coeff. (min)=		6.88 (ii)	21.25 (ii)	
Unit Hyd. Tpeak (min)=		5.00	25.00	
Unit Hyd. peak (cms)=		0.18	0.05	
				TOTALS
PEAK FLOW	(cms)=	0.67	0.06	0.710 (iii)
TIME TO PEAK	(hrs)=	2.75	3.00	2.75
RUNOFF VOLUME	(mm)=	35.00	13.94	30.53
TOTAL RAINFALL	(mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT	=	0.97	0.39	0.85

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)|				
1 + 2 = 3 |	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):	32.35	2.595	2.75	32.14
+ ID2= 2 (3300):	9.32	0.710	2.75	30.53
ID = 3 (0022):	41.67	3.305	2.75	31.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3400)|	Area (ha)= 4.34			
ID= 1 DT= 5.0 min |	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60		

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.37	0.97
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	170.10	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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72

0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Max.Eff.Inten.(mm/hr)=	33.12	16.89	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.47 (ii)	19.84 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.20	0.06	
			TOTALS
PEAK FLOW (cms)=	0.31	0.03	0.333 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	35.00	13.94	30.28
TOTAL RAINFALL (mm)=	36.00	36.00	36.00
RUNOFF COEFFICIENT =	0.97	0.39	0.84

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0022):	41.67	3.305	2.75	31.78
+ ID2= 2 (0028):	4.28	0.346	2.75	30.24
ID = 3 (0024):	45.95	3.651	2.75	31.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0024):	45.95	3.651	2.75	31.64
+ ID2= 2 (3400):	4.34	0.333	2.75	30.28
ID = 1 (0024):	50.29	3.984	2.75	31.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW	STORAGE	OUTFLOW	STORAGE
	(cms)	(ha.m.)	(cms)	(ha.m.)
	0.0000	0.0000	0.7480	3.7607
	0.0140	0.5845	1.1340	4.6672
	0.0210	1.1690	1.4200	5.2879
	0.1010	1.7265	1.7270	5.9087
	0.2410	2.3077	7.3760	6.5294
	0.4210	2.8889	12.0010	6.8398

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0024)	50.290	3.984	2.75	31.52
OUTFLOW: ID= 1 (5001)	50.290	0.069	6.33	23.49

PEAK FLOW REDUCTION [Qout/Qin](%)= 1.74
TIME SHIFT OF PEAK FLOW (min)=215.00
MAXIMUM STORAGE USED (ha.m.)= 1.5070

ADD HYD (0013)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (5001):	50.29	0.069	6.33	23.49
+ ID2= 2 (0009):	70.37	0.504	3.40	22.09
ID = 3 (0013):	120.66	0.546	3.73	18.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (4100)	Area (ha)=	3.48	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.04	

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	1.667	4.32	3.250	9.36	4.83	0.72
0.167	0.00	1.750	4.32	3.333	5.04	4.92	0.72
0.250	0.00	1.833	12.24	3.417	5.04	5.00	0.72
0.333	0.72	1.917	12.24	3.500	5.04	5.08	0.72
0.417	0.72	2.000	12.24	3.583	5.04	5.17	0.72
0.500	0.72	2.083	12.24	3.667	5.04	5.25	0.72
0.583	0.72	2.167	12.24	3.750	5.04	5.33	0.72
0.667	0.72	2.250	12.24	3.833	2.88	5.42	0.72
0.750	0.72	2.333	33.12	3.917	2.88	5.50	0.72
0.833	0.72	2.417	33.12	4.000	2.88	5.58	0.72
0.917	0.72	2.500	33.12	4.083	2.88	5.67	0.72
1.000	0.72	2.583	33.12	4.167	2.88	5.75	0.72
1.083	0.72	2.667	33.12	4.250	2.88	5.83	0.72
1.167	0.72	2.750	33.12	4.333	1.44	5.92	0.72
1.250	0.72	2.833	9.36	4.417	1.44	6.00	0.72
1.333	4.32	2.917	9.36	4.500	1.44	6.08	0.72
1.417	4.32	3.000	9.36	4.583	1.44	6.17	0.72
1.500	4.32	3.083	9.36	4.667	1.44	6.25	0.72
1.583	4.32	3.167	9.36	4.750	1.44		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 8.317
TOTAL RAINFALL (mm)= 36.000
RUNOFF COEFFICIENT = 0.231

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

****
** SIMULATION:Run 02 5yr 6hr AES **
****

READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\09e79ff9
Ptotal= 47.81 mm	Comments: 5yr/6hr

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	16.25	3.75	6.69	5.50	0.96
0.50	0.96	2.25	16.25	4.00	3.82	5.75	0.96
0.75	0.96	2.50	43.98	4.25	3.82	6.00	0.96
1.00	0.96	2.75	43.98	4.50	1.91	6.25	0.96
1.25	0.96	3.00	12.43	4.75	1.91		
1.50	5.74	3.25	12.43	5.00	0.96		
1.75	5.74	3.50	6.69	5.25	0.96		

CALIB			
NASHYD (1000)	Area (ha)=	19.21	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	7.70	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	1.07	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.409 (i)
TIME TO PEAK (hrs)= 3.967
RUNOFF VOLUME (mm)= 20.609
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.431

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

CALIB			
NASHYD (1100)	Area (ha)=	2.08	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.29	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 2.900
RUNOFF VOLUME (mm)= 22.691
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.475

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

DUHYD (2000)					
Inlet Cap.= 0.949					
#of Inlets= 1					
Total(cms)= 0.9	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
TOTAL HYD.(ID= 1):	2.08	0.11	2.90	22.69	
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00	
MINOR SYS.(ID= 3):	2.08	0.11	2.90	22.69	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (1200)	Area (ha)=	25.19	
ID= 1 DT= 2.0 min	Total Imp(%)=	88.60	Dir. Conn.(%)= 88.60

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96

0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Max.Eff.Inten.(mm/hr)=	43.98	27.71	
over (min)	8.00	14.00	
Storage Coeff. (min)=	8.27 (ii)	12.59 (ii)	
Unit Hyd. Tpeak (min)=	8.00	14.00	
Unit Hyd. peak (cms)=	0.14	0.09	
			TOTALS
PEAK FLOW (cms)=	2.64	0.17	2.798 (iii)
TIME TO PEAK (hrs)=	2.73	2.83	2.73
RUNOFF VOLUME (mm)=	46.81	22.69	44.06
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.47	0.92

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1200):		25.19	2.798	2.73	44.06
+ ID2= 2 (2000):		2.08	0.109	2.90	22.69
ID = 3 (2001):		27.27	2.887	2.73	42.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW	STORAGE	OUTFLOW	STORAGE
	(cms)	(ha.m.)	(cms)	(ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (2001)	27.270	2.887	2.73	42.43
OUTFLOW: ID= 1 (1002)	27.270	0.120	4.87	38.96

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.16
TIME SHIFT OF PEAK FLOW (min)=128.00
MAXIMUM STORAGE USED (ha.m.)= 1.0246

CALIB					
STANDHYD (1300)	Area	(ha)=	13.18		
ID= 1 DT= 2.0 min	Total Imp(%)=	83.40	Dir. Conn.(%)=	83.40	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Max.Eff.Inten.(mm/hr)=	43.98	27.71	
over (min)	6.00	12.00	
Storage Coeff. (min)=	6.81 (ii)	11.95 (ii)	
Unit Hyd. Tpeak (min)=	6.00	12.00	
Unit Hyd. peak (cms)=	0.17	0.09	

			TOTALS
PEAK FLOW (cms)=	1.33	0.13	1.449 (iii)
TIME TO PEAK (hrs)=	2.73	2.80	2.73
RUNOFF VOLUME (mm)=	46.81	22.69	42.81
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.47	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW	STORAGE	OUTFLOW	STORAGE
	(cms)	(ha.m.)	(cms)	(ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (1300)	13.180	1.449	2.73	42.81
OUTFLOW: ID= 1 (1001)	13.180	0.072	4.67	40.67

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.97
TIME SHIFT OF PEAK FLOW (min)=116.00
MAXIMUM STORAGE USED (ha.m.)= 0.4900

ADD HYD (2002)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1001):		13.18	0.072	4.67	40.67
+ ID2= 2 (1002):		27.27	0.120	4.87	38.96
ID = 3 (2002):		40.45	0.192	4.83	39.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1000):		19.21	0.409	3.97	20.61
+ ID2= 2 (2002):		40.45	0.192	4.83	39.52
ID = 3 (2003):		59.66	0.594	4.03	33.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2100)	Area	(ha)=	3.11	Curve Number (CN)=	87.0
ID= 1 DT= 2.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.14		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW	(cms)=	0.215 (i)
TIME TO PEAK	(hrs)=	2.767
RUNOFF VOLUME	(mm)=	22.687
TOTAL RAINFALL	(mm)=	47.810
RUNOFF COEFFICIENT	=	0.475

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

ADD HYD (0005)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2003):		59.66	0.594	4.03	33.43
+ ID2= 2 (2100):		3.11	0.215	2.77	22.69
ID = 3 (0005):		62.77	0.627	3.87	32.90

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2200)	Area	(ha)=	5.60	Curve Number (CN)=	87.0
ID= 1 DT= 2.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.44		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96

0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.231 (i)
TIME TO PEAK (hrs)= 3.100
RUNOFF VOLUME (mm)= 22.692
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.475

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

ADD HYD (0007)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.231	3.10	22.69
+ ID2= 2 (0005):	62.77	0.627	3.87	32.90
ID = 3 (0007):	68.37	0.762	3.63	32.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area (ha)=	2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	5.74	3.167	12.43	4.73	1.91
0.067	0.00	1.633	5.74	3.200	12.43	4.77	1.44
0.100	0.00	1.667	5.74	3.233	12.43	4.80	0.96
0.133	0.00	1.700	5.74	3.267	9.56	4.83	0.96
0.167	0.00	1.733	5.74	3.300	6.69	4.87	0.96
0.200	0.00	1.767	10.99	3.333	6.69	4.90	0.96
0.233	0.00	1.800	16.25	3.367	6.69	4.93	0.96
0.267	0.48	1.833	16.25	3.400	6.69	4.97	0.96
0.300	0.96	1.867	16.25	3.433	6.69	5.00	0.96
0.333	0.96	1.900	16.25	3.467	6.69	5.03	0.96
0.367	0.96	1.933	16.25	3.500	6.69	5.07	0.96
0.400	0.96	1.967	16.25	3.533	6.69	5.10	0.96
0.433	0.96	2.000	16.25	3.567	6.69	5.13	0.96
0.467	0.96	2.033	16.25	3.600	6.69	5.17	0.96
0.500	0.96	2.067	16.25	3.633	6.69	5.20	0.96
0.533	0.96	2.100	16.25	3.667	6.69	5.23	0.96
0.567	0.96	2.133	16.25	3.700	6.69	5.27	0.96
0.600	0.96	2.167	16.25	3.733	6.69	5.30	0.96
0.633	0.96	2.200	16.25	3.767	5.26	5.33	0.96
0.667	0.96	2.233	16.25	3.800	3.82	5.37	0.96
0.700	0.96	2.267	30.11	3.833	3.82	5.40	0.96
0.733	0.96	2.300	43.98	3.867	3.82	5.43	0.96
0.767	0.96	2.333	43.98	3.900	3.82	5.47	0.96
0.800	0.96	2.367	43.98	3.933	3.82	5.50	0.96
0.833	0.96	2.400	43.98	3.967	3.82	5.53	0.96
0.867	0.96	2.433	43.98	4.000	3.82	5.57	0.96
0.900	0.96	2.467	43.98	4.033	3.82	5.60	0.96
0.933	0.96	2.500	43.98	4.067	3.82	5.63	0.96
0.967	0.96	2.533	43.98	4.100	3.82	5.67	0.96
1.000	0.96	2.567	43.98	4.133	3.82	5.70	0.96
1.033	0.96	2.600	43.98	4.167	3.82	5.73	0.96
1.067	0.96	2.633	43.98	4.200	3.82	5.77	0.96
1.100	0.96	2.667	43.98	4.233	3.82	5.80	0.96
1.133	0.96	2.700	43.98	4.267	2.87	5.83	0.96
1.167	0.96	2.733	43.98	4.300	1.91	5.87	0.96
1.200	0.96	2.767	28.21	4.333	1.91	5.90	0.96
1.233	0.96	2.800	12.43	4.367	1.91	5.93	0.96
1.267	3.35	2.833	12.43	4.400	1.91	5.97	0.96
1.300	5.74	2.867	12.43	4.433	1.91	6.00	0.96
1.333	5.74	2.900	12.43	4.467	1.91	6.03	0.96
1.367	5.74	2.933	12.43	4.500	1.91	6.07	0.96
1.400	5.74	2.967	12.43	4.533	1.91	6.10	0.96
1.433	5.74	3.000	12.43	4.567	1.91	6.13	0.96
1.467	5.74	3.033	12.43	4.600	1.91	6.17	0.96
1.500	5.74	3.067	12.43	4.633	1.91	6.20	0.96
1.533	5.74	3.100	12.43	4.667	1.91	6.23	0.96
1.567	5.74	3.133	12.43	4.700	1.91	6.27	0.48

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.084 (i)
TIME TO PEAK (hrs)= 3.067
RUNOFF VOLUME (mm)= 22.691
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.475

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

ADD HYD (0009)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.084	3.07	22.69
+ ID2= 2 (0007):	68.37	0.762	3.63	32.06
ID = 3 (0009):	70.37	0.829	3.40	31.80

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2400)	Area (ha)=	0.76	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.04	

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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 13.542
TOTAL RAINFALL (mm)= 47.810
RUNOFF COEFFICIENT = 0.283

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

CALIB			
STANDHYD (3500)	Area (ha)=	3.52	
ID= 1 DT= 5.0 min	Total Imp(%)=	99.90	Dir. Conn.(%)= 99.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.52	0.00
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.19	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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	28.08		
over (min)	5.00	10.00		
Storage Coeff. (min)=	4.58 (ii)	5.20 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.23	0.16		
			TOTALS	
PEAK FLOW (cms)=	0.43	0.00	0.429 (iii)	
TIME TO PEAK (hrs)=	2.75	2.75	2.75	
RUNOFF VOLUME (mm)=	46.81	22.69	46.79	
TOTAL RAINFALL (mm)=	47.81	47.81	47.81	
RUNOFF COEFFICIENT =	0.98	0.47	0.98	

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.036	2.75	13.54
+ ID2= 2 (3500):	3.52	0.429	2.75	46.79
ID = 3 (0028):	4.28	0.466	2.75	40.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (3100)	Area (ha)=	25.24	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.90	Dir. Conn.(%)= 85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	28.08		
over (min)	10.00	15.00		
Storage Coeff. (min)=	8.28 (ii)	13.03 (ii)		
Unit Hyd. Tpeak (min)=	10.00	15.00		
Unit Hyd. peak (cms)=	0.13	0.08		
			TOTALS	
PEAK FLOW (cms)=	2.58	0.21	2.781 (iii)	
TIME TO PEAK (hrs)=	2.75	2.83	2.75	
RUNOFF VOLUME (mm)=	46.81	22.69	43.41	
TOTAL RAINFALL (mm)=	47.81	47.81	47.81	
RUNOFF COEFFICIENT =	0.98	0.47	0.91	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB			
STANDHYD (3200)	Area (ha)=	7.11	
ID= 1 DT= 5.0 min	Total Imp(%)=	88.30	Dir. Conn.(%)= 88.30

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96

0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	28.08	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.66 (ii)	10.03 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.20	0.10	
			TOTALS
PEAK FLOW (cms)=	0.76	0.05	0.815 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	46.81	22.69	43.99
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.47	0.92

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):	25.24	2.781	2.75	43.41
+ ID2= 2 (3200):	7.11	0.815	2.75	43.99
ID = 3 (0020):	32.35	3.596	2.75	43.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3300)	Area (ha)=	9.32		
ID= 1 DT= 5.0 min	Total Imp(%)=	78.80	Dir. Conn.(%)=	78.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.34	1.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	249.27	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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	27.04	
over (min)	5.00	20.00	
Storage Coeff. (min)=	6.14 (ii)	18.05 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.19	0.06	
			TOTALS
PEAK FLOW (cms)=	0.89	0.10	0.980 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	46.81	22.69	41.70
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.47	0.87

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):	32.35	3.596	2.75	43.54
+ ID2= 2 (3300):	9.32	0.980	2.75	41.70
ID = 3 (0022):	41.67	4.576	2.75	43.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3400)	Area (ha)=	4.34		
ID= 1 DT= 5.0 min	Total Imp(%)=	77.60	Dir. Conn.(%)=	77.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.37	0.97
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	170.10	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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Max.Eff.Inten.(mm/hr)=	43.98	27.04	
over (min)	5.00	20.00	
Storage Coeff. (min)=	4.88 (ii)	16.79 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.22	0.06	
			TOTALS
PEAK FLOW (cms)=	0.41	0.05	0.455 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	46.81	22.69	41.41
TOTAL RAINFALL (mm)=	47.81	47.81	47.81
RUNOFF COEFFICIENT =	0.98	0.47	0.87

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0022):	41.67	4.576	2.75	43.12
+ ID2= 2 (0028):	4.28	0.466	2.75	40.88
ID = 3 (0024):	45.95	5.041	2.75	42.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	45.95	5.041	2.75	42.92
+ ID2= 2 (3400):	4.34	0.455	2.75	41.41
ID = 1 (0024):	50.29	5.496	2.75	42.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	7.7480	3.7607
	0.0140	0.5845	1.1340	4.6672
	0.0210	1.1690	1.4200	5.2879
	0.1010	1.7265	1.7270	5.9087
	0.2410	2.3077	7.3760	6.5294
	0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	5.496	2.75	42.79
OUTFLOW: ID= 1 (5001)	50.290	0.162	5.00	33.85

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.95
TIME SHIFT OF PEAK FLOW (min)=135.00
MAXIMUM STORAGE USED (ha.m.)= 1.9800

ADD HYD (0013)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):	50.29	0.162	5.00	33.85
+ ID2= 2 (0009):	70.37	0.829	3.40	31.80
ID = 3 (0013):	120.66	0.942	3.73	28.15

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (4100)	Area (ha)=	3.48	Curve Number (CN)=	87.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.04		

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	1.667	5.74	3.250	12.43	4.83	0.96
0.167	0.00	1.750	5.74	3.333	6.69	4.92	0.96
0.250	0.00	1.833	16.25	3.417	6.69	5.00	0.96
0.333	0.96	1.917	16.25	3.500	6.69	5.08	0.96
0.417	0.96	2.000	16.25	3.583	6.69	5.17	0.96
0.500	0.96	2.083	16.25	3.667	6.69	5.25	0.96
0.583	0.96	2.167	16.25	3.750	6.69	5.33	0.96
0.667	0.96	2.250	16.25	3.833	3.82	5.42	0.96
0.750	0.96	2.333	43.98	3.917	3.82	5.50	0.96
0.833	0.96	2.417	43.98	4.000	3.82	5.58	0.96
0.917	0.96	2.500	43.98	4.083	3.82	5.67	0.96
1.000	0.96	2.583	43.98	4.167	3.82	5.75	0.96
1.083	0.96	2.667	43.98	4.250	3.82	5.83	0.96
1.167	0.96	2.750	43.98	4.333	1.91	5.92	0.96
1.250	0.96	2.833	12.43	4.417	1.91	6.00	0.96
1.333	5.74	2.917	12.43	4.500	1.91	6.08	0.96
1.417	5.74	3.000	12.43	4.583	1.91	6.17	0.96
1.500	5.74	3.083	12.43	4.667	1.91	6.25	0.96
1.583	5.74	3.167	12.43	4.750	1.91		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW	(cms)=	0.167 (i)
TIME TO PEAK	(hrs)=	2.750
RUNOFF VOLUME	(mm)=	13.542
TOTAL RAINFALL	(mm)=	47.810
RUNOFF COEFFICIENT	=	0.283

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

****
** SIMULATION:Run 03 10yr 6hr AES **
****

READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\0fa41964
Ptotal= 55.69 mm	Comments: 10yr/6hr

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	18.94	3.75	7.80	5.50	1.11
0.50	1.11	2.25	18.94	4.00	4.46	5.75	1.11
0.75	1.11	2.50	51.24	4.25	4.46	6.00	1.11
1.00	1.11	2.75	51.24	4.50	2.23	6.25	1.11
1.25	1.11	3.00	14.48	4.75	2.23		
1.50	6.68	3.25	14.48	5.00	1.11		
1.75	6.68	3.50	7.80	5.25	1.11		

CALIB				
NASHYD (1000)	Area (ha)=	19.21	Curve Number (CN)=	87.0
ID= 1 DT= 2.0 min	Ia (mm)=	7.70	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	1.07		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.733	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.767	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.800	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.833	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.867	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.900	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.933	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.967	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.000	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.033	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.067	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.100	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.133	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.167	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.200	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.233	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.267	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.300	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.333	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.367	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.400	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.433	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.467	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.500	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.533	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.567	1.11

0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.536 (i)
TIME TO PEAK (hrs)= 3.933
RUNOFF VOLUME (mm)= 26.797
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.481

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

CALIB NASHYD (1100) ID= 1 DT= 2.0 min	Area (ha)= 2.08 Curve Number (CN)= 87.0 Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 U.H. Tp(hrs)= 0.29

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.140 (i)
TIME TO PEAK (hrs)= 2.900
RUNOFF VOLUME (mm)= 28.986
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.520

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

DUHYD (2000) Inlet Cap.= 0.949 #of Inlets= 1 Total(cms)= 0.9	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.14	2.90	28.99
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.14	2.90	28.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB STANDHYD (1200) ID= 1 DT= 2.0 min	Area (ha)= 25.19 Total Imp(%)= 88.60 Dir. Conn.(%)= 88.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	22.32	2.87
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	409.80	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Max.Eff.Inten.(mm/hr)=	51.24	34.91	
over (min)	8.00	12.00	
Storage Coeff. (min)=	7.78 (ii)	11.84 (ii)	
Unit Hyd. Tpeak (min)=	8.00	12.00	
Unit Hyd. peak (cms)=	0.14	0.10	
			TOTALS
PEAK FLOW (cms)=	3.10	0.22	3.308 (iii)
TIME TO PEAK (hrs)=	2.73	2.80	2.73
RUNOFF VOLUME (mm)=	54.69	28.99	51.76
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	3.308	2.73	51.76
+ ID2= 2 (2000):	2.08	0.140	2.90	28.99
ID = 3 (2001):	27.27	3.425	2.73	50.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002) IN= 2---> OUT= 1 DT= 2.0 min	OVERFLOW IS OFF			
	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6235
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	3.425	2.73	50.02
OUTFLOW: ID= 1 (1002)	27.270	0.148	4.87	46.02

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.31
TIME SHIFT OF PEAK FLOW (min)=128.00
MAXIMUM STORAGE USED (ha.m.)= 1.2042

CALIB STANDHYD (1300) ID= 1 DT= 2.0 min	Area (ha)= 13.18 Total Imp(%)= 83.40 Dir. Conn.(%)= 83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Max.Eff.Inten.(mm/hr)=	51.24	34.91	
over (min)	6.00	12.00	
Storage Coeff. (min)=	6.41 (ii)	11.24 (ii)	
Unit Hyd. Tpeak (min)=	6.00	12.00	
Unit Hyd. peak (cms)=	0.18	0.10	
			TOTALS
PEAK FLOW (cms)=	1.55	0.17	1.712 (iii)
TIME TO PEAK (hrs)=	2.73	2.80	2.73
RUNOFF VOLUME (mm)=	54.69	28.99	50.42
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.91

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001) IN= 2---> OUT= 1 DT= 2.0 min	OVERFLOW IS OFF			
	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	1.712	2.73	50.42
OUTFLOW: ID= 1 (1001)	13.180	0.089	4.57	47.98

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.20
TIME SHIFT OF PEAK FLOW (min)=110.00
MAXIMUM STORAGE USED (ha.m.)= 0.5747

ADD HYD (2002)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1001):		13.18	0.089	4.57	47.98
+ ID2= 2 (1002):		27.27	0.148	4.87	46.02
ID = 3 (2002):		40.45	0.236	4.80	46.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1000):		19.21	0.536	3.93	26.80
+ ID2= 2 (2002):		40.45	0.236	4.80	46.66
ID = 3 (2003):		59.66	0.764	4.00	40.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2100)	Area	(ha)= 3.11	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.14		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.274 (i)
TIME TO PEAK (hrs)= 2.767
RUNOFF VOLUME (mm)= 28.980
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.520

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

ADD HYD (0005)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2003):		59.66	0.764	4.00	40.26
+ ID2= 2 (2100):		3.11	0.274	2.77	28.98
ID = 3 (0005):		62.77	0.806	3.83	39.70

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2200)	Area	(ha)= 5.60	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.44		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.298 (i)
TIME TO PEAK (hrs)= 3.067
RUNOFF VOLUME (mm)= 28.986
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.520

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

ADD HYD (0007)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2200):		5.60	0.298	3.07	28.99
+ ID2= 2 (0005):		62.77	0.806	3.83	39.70
ID = 3 (0007):		68.37	0.982	3.53	38.83

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area	(ha)= 2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	6.68	3.167	14.48	4.73	2.23
0.067	0.00	1.633	6.68	3.200	14.48	4.77	1.67
0.100	0.00	1.667	6.68	3.233	14.48	4.80	1.11
0.133	0.00	1.700	6.68	3.267	11.14	4.83	1.11
0.167	0.00	1.733	6.68	3.300	7.80	4.87	1.11
0.200	0.00	1.767	12.81	3.333	7.80	4.90	1.11
0.233	0.00	1.800	18.94	3.367	7.80	4.93	1.11
0.267	0.56	1.833	18.94	3.400	7.80	4.97	1.11
0.300	1.11	1.867	18.94	3.433	7.80	5.00	1.11
0.333	1.11	1.900	18.94	3.467	7.80	5.03	1.11
0.367	1.11	1.933	18.94	3.500	7.80	5.07	1.11
0.400	1.11	1.967	18.94	3.533	7.80	5.10	1.11
0.433	1.11	2.000	18.94	3.567	7.80	5.13	1.11
0.467	1.11	2.033	18.94	3.600	7.80	5.17	1.11
0.500	1.11	2.067	18.94	3.633	7.80	5.20	1.11
0.533	1.11	2.100	18.94	3.667	7.80	5.23	1.11
0.567	1.11	2.133	18.94	3.700	7.80	5.27	1.11
0.600	1.11	2.167	18.94	3.733	7.80	5.30	1.11
0.633	1.11	2.200	18.94	3.767	6.13	5.33	1.11
0.667	1.11	2.233	18.94	3.800	4.46	5.37	1.11
0.700	1.11	2.267	35.09	3.833	4.46	5.40	1.11
0.733	1.11	2.300	51.24	3.867	4.46	5.43	1.11
0.767	1.11	2.333	51.24	3.900	4.46	5.47	1.11
0.800	1.11	2.367	51.24	3.933	4.46	5.50	1.11
0.833	1.11	2.400	51.24	3.967	4.46	5.53	1.11
0.867	1.11	2.433	51.24	4.000	4.46	5.57	1.11
0.900	1.11	2.467	51.24	4.033	4.46	5.60	1.11
0.933	1.11	2.500	51.24	4.067	4.46	5.63	1.11
0.967	1.11	2.533	51.24	4.100	4.46	5.67	1.11
1.000	1.11	2.567	51.24	4.133	4.46	5.70	1.11
1.033	1.11	2.600	51.24	4.167	4.46	5.73	1.11
1.067	1.11	2.633	51.24	4.200	4.46	5.77	1.11
1.100	1.11	2.667	51.24	4.233	4.46	5.80	1.11
1.133	1.11	2.700	51.24	4.267	3.35	5.83	1.11
1.167	1.11	2.733	51.24	4.300	2.23	5.87	1.11
1.200	1.11	2.767	32.86	4.333	2.23	5.90	1.11
1.233	1.11	2.800	14.48	4.367	2.23	5.93	1.11
1.267	3.90	2.833	14.48	4.400	2.23	5.97	1.11
1.300	6.68	2.867	14.48	4.433	2.23	6.00	1.11
1.333	6.68	2.900	14.48	4.467	2.23	6.03	1.11
1.367	6.68	2.933	14.48	4.500	2.23	6.07	1.11
1.400	6.68	2.967	14.48	4.533	2.23	6.10	1.11
1.433	6.68	3.000	14.48	4.567	2.23	6.13	1.11
1.467	6.68	3.033	14.48	4.600	2.23	6.17	1.11
1.500	6.68	3.067	14.48	4.633	2.23	6.20	1.11
1.533	6.68	3.100	14.48	4.667	2.23	6.23	1.11
1.567	6.68	3.133	14.48	4.700	2.23	6.27	0.56

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.108 (i)
TIME TO PEAK (hrs)= 3.067
RUNOFF VOLUME (mm)= 28.986
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.520

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

ADD HYD (0009)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2300):		2.00	0.108	3.07	28.99
+ ID2= 2 (0007):		68.37	0.982	3.53	38.83
ID = 3 (0009):		70.37	1.071	3.37	38.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2400)	Area	(ha)= 0.76	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.04		

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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.046 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 17.299
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.311

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

CALIB			
STANDHYD (3500)	Area	(ha)= 3.52	
ID= 1 DT= 5.0 min	Total Imp(%)= 99.90	Dir. Conn.(%)= 99.90	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.52	0.00
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	153.19	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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	35.32	
over (min)	5.00	5.00	
Storage Coeff. (min)=	4.31 (ii)	4.89 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.23	0.22	
			TOTALS
PEAK FLOW (cms)=	0.50	0.00	0.501 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	54.69	28.99	54.66
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.98

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2400):	0.76	0.046	2.75	17.30
	+ ID2= 2 (3500):	3.52	0.501	2.75	54.66
	ID = 3 (0028):	4.28	0.546	2.75	48.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	STANDHYD (3100)		Area (ha)= 25.24	Total Imp(%)= 85.90	Dir. Conn.(%)= 85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	35.32	
over (min)	5.00	10.00	
Storage Coeff. (min)=	5.32 (ii)	9.43 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.21	0.12	
			TOTALS
PEAK FLOW (cms)=	0.89	0.07	0.962 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	54.69	28.99	51.68
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (3100):	25.24	3.284	2.75	51.07
	+ ID2= 2 (3200):	7.11	0.962	2.75	51.68
	ID = 3 (0020):	32.35	4.247	2.75	51.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	STANDHYD (3300)		Area (ha)= 9.32	Total Imp(%)= 78.80	Dir. Conn.(%)= 78.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.34	1.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	249.27	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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	34.18	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.77 (ii)	16.62 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.20	0.06	
			TOTALS
PEAK FLOW (cms)=	1.04	0.13	1.159 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	54.69	28.99	49.24
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.88

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0020):	32.35	4.247	2.75	51.20
	+ ID2= 2 (3300):	9.32	1.159	2.75	49.24
	ID = 3 (0022):	41.67	5.406	2.75	50.76

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	35.32	
over (min)	5.00	5.00	
Storage Coeff. (min)=	4.59 (ii)	15.43 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.23	0.07	
			TOTALS
PEAK FLOW (cms)=	0.48	0.07	0.539 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	54.69	28.99	48.93
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.88

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0022):	41.67	5.406	2.75	50.76
	+ ID2= 2 (0028):	4.28	0.546	2.75	48.03
	ID = 3 (0024):	45.95	5.952	2.75	50.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	STANDHYD (3400)		Area (ha)= 4.34	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.37	0.97
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	170.10	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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Max.Eff.Inten.(mm/hr)=	51.24	34.18	
over (min)	5.00	20.00	
Storage Coeff. (min)=	4.59 (ii)	15.43 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.23	0.07	
			TOTALS
PEAK FLOW (cms)=	0.48	0.07	0.539 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	54.69	28.99	48.93
TOTAL RAINFALL (mm)=	55.69	55.69	55.69
RUNOFF COEFFICIENT =	0.98	0.52	0.88

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0022):	41.67	5.406	2.75	50.76
	+ ID2= 2 (0028):	4.28	0.546	2.75	48.03
	ID = 3 (0024):	45.95	5.952	2.75	50.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	45.95	5.952	2.75	50.51
	+ ID2= 2 (3400):	4.34	0.539	2.75	48.93
	ID = 1 (0024):	50.29	6.491	2.75	50.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.7480	3.7607
0.0140	0.5845	1.1340	4.6672
0.0210	1.1690	1.4200	5.2879
0.1010	1.7265	1.7270	5.9087
0.2410	2.3077	7.3760	6.5294
0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	6.491	2.75	50.37
OUTFLOW: ID= 1 (5001)	50.290	0.238	4.83	41.11

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.67
TIME SHIFT OF PEAK FLOW (min)=125.00
MAXIMUM STORAGE USED (ha.m.)= 2.2958

ADD HYD (0013)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (5001):	50.29	0.238	4.83	41.11
	+ ID2= 2 (0009):	70.37	1.071	3.37	38.55
	ID = 3 (0013):	120.66	1.250	3.53	35.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (4100)	Area (ha)= 3.48 Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.04

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	1.667	6.68	3.250	14.48	4.83	1.11
0.167	0.00	1.750	6.68	3.333	7.80	4.92	1.11
0.250	0.00	1.833	18.94	3.417	7.80	5.00	1.11
0.333	1.11	1.917	18.94	3.500	7.80	5.08	1.11
0.417	1.11	2.000	18.94	3.583	7.80	5.17	1.11
0.500	1.11	2.083	18.94	3.667	7.80	5.25	1.11
0.583	1.11	2.167	18.94	3.750	7.80	5.33	1.11
0.667	1.11	2.250	18.94	3.833	4.46	5.42	1.11
0.750	1.11	2.333	51.24	3.917	4.46	5.50	1.11
0.833	1.11	2.417	51.24	4.000	4.46	5.58	1.11
0.917	1.11	2.500	51.24	4.083	4.46	5.67	1.11
1.000	1.11	2.583	51.24	4.167	4.46	5.75	1.11
1.083	1.11	2.667	51.24	4.250	4.46	5.83	1.11
1.167	1.11	2.750	51.24	4.333	2.23	5.92	1.11
1.250	1.11	2.833	14.48	4.417	2.23	6.00	1.11
1.333	6.68	2.917	14.48	4.500	2.23	6.08	1.11
1.417	6.68	3.000	14.48	4.583	2.23	6.17	1.11
1.500	6.68	3.083	14.48	4.667	2.23	6.25	1.11
1.583	6.68	3.167	14.48	4.750	2.23		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.209 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 17.299
TOTAL RAINFALL (mm)= 55.690
RUNOFF COEFFICIENT = 0.311

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

****
** SIMULATION:Run 04 25yr 6hr AES **
****

READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\2c56e068
Ptotal= 65.59 mm	Comments: 25yr/6hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	22.30	3.75	9.18	5.50	1.31
0.50	1.31	2.25	22.30	4.00	5.25	5.75	1.31
0.75	1.31	2.50	60.35	4.25	5.25	6.00	1.31
1.00	1.31	2.75	60.35	4.50	2.62	6.25	1.31
1.25	1.31	3.00	17.06	4.75	2.62		
1.50	7.87	3.25	17.06	5.00	1.31		
1.75	7.87	3.50	9.18	5.25	1.31		

CALIB	
NASHYD (1000)	Area (ha)= 19.21 Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)= 7.70 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.07

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.703 (i)
TIME TO PEAK (hrs)= 3.900
RUNOFF VOLUME (mm)= 34.966
TOTAL RAINFALL (mm)= 65.590
RUNOFF COEFFICIENT = 0.533

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

CALIB	
NASHYD (1100)	Area (ha)= 2.08 Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.29

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.181 (i)
TIME TO PEAK (hrs)= 2.900
RUNOFF VOLUME (mm)= 37.253
TOTAL RAINFALL (mm)= 65.590
RUNOFF COEFFICIENT = 0.568

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

DUHYD (2000)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
Inlet Cap.= 0.949					
#of Inlets= 1					
Total(cms)= 0.9	TOTAL HYD.(ID= 1):	2.08	0.18	2.90	37.25
	MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
	MINOR SYS.(ID= 3):	2.08	0.18	2.90	37.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (1200)	Area (ha)= 25.19
ID= 1 DT= 2.0 min	Total Imp(%)= 88.60 Dir. Conn.(%)= 88.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	22.32	2.87
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	409.80	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

			TOTALS
Max.Eff.Inten.(mm/hr)=	60.35	44.18	
over (min)	8.00	12.00	
Storage Coeff. (min)=	7.29 (ii)	11.09 (ii)	
Unit Hyd. Tpeak (min)=	8.00	12.00	
Unit Hyd. peak (cms)=	0.15	0.10	
PEAK FLOW (cms)=	3.67	0.29	3.945 (iii)
TIME TO PEAK (hrs)=	2.73	2.80	2.73
RUNOFF VOLUME (mm)=	64.59	37.25	61.47
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.57	0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1200):	25.19	3.945	2.73	61.47
	+ ID2= 2 (2000):	2.08	0.181	2.90	37.25
	ID = 3 (2001):	27.27	4.098	2.73	59.63

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	4.098	2.73	59.63
OUTFLOW: ID= 1 (1002)	27.270	0.182	4.83	54.98

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.45
TIME SHIFT OF PEAK FLOW (min)=126.00
MAXIMUM STORAGE USED (ha.m.)= 1.4306

CALIB					
STANDHYD (1300)	Area	(ha)=	13.18		
ID= 1 DT= 2.0 min	Total Imp(%)=		83.40	Dir. Conn.(%)=	83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

Max.Eff.Inten.(mm/hr)=		60.35	44.18	
	over (min)	6.00	12.00	
Storage Coeff. (min)=		6.00 (ii)	10.53 (ii)	
Unit Hyd. Tpeak (min)=		6.00	12.00	
Unit Hyd. peak (cms)=		0.19	0.10	
				TOTALS
PEAK FLOW	(cms)=	1.83	0.23	2.044 (iii)
TIME TO PEAK	(hrs)=	2.73	2.80	2.73
RUNOFF VOLUME	(mm)=	64.59	37.25	60.05
TOTAL RAINFALL	(mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT	=	0.98	0.57	0.92

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	2.044	2.73	60.05
OUTFLOW: ID= 1 (1001)	13.180	0.112	4.50	57.26

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.48
TIME SHIFT OF PEAK FLOW (min)=106.00
MAXIMUM STORAGE USED (ha.m.)= 0.6809

ADD HYD (2002)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1001):	13.18	0.112	4.50	57.26
	+ ID2= 2 (1002):	27.27	0.182	4.83	54.98
	ID = 3 (2002):	40.45	0.294	4.73	55.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (1000):	19.21	0.703	3.90	34.97
	+ ID2= 2 (2002):	40.45	0.294	4.73	55.73
	ID = 3 (2003):	59.66	0.987	3.97	49.04

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2100)	Area	(ha)=	3.11	Curve Number	(CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.14		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.350 (i)
TIME TO PEAK (hrs)= 2.767
RUNOFF VOLUME (mm)= 37.246
TOTAL RAINFALL (mm)= 65.590
RUNOFF COEFFICIENT = 0.568

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

ADD HYD (0005)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (2003):	59.66	0.987	3.97	49.04
	+ ID2= 2 (2100):	3.11	0.350	2.77	37.25
	ID = 3 (0005):	62.77	1.042	3.83	48.46

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2200)	Area	(ha)=	5.60	Curve Number	(CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.44		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.385 (i)
TIME TO PEAK (hrs)= 3.067
RUNOFF VOLUME (mm)= 37.254
TOTAL RAINFALL (mm)= 65.590
RUNOFF COEFFICIENT = 0.568

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

ADD HYD (0007)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (2200):	5.60	0.385	3.07	37.25
	+ ID2= 2 (0005):	62.77	1.042	3.83	48.46
	ID = 3 (0007):	68.37	1.272	3.43	47.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB                |
| NASHYD   (  2300)|   Area    (ha)=   2.00   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.43

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
0.033	0.00	1.600	7.87	3.167	17.06	4.73	2.62
0.067	0.00	1.633	7.87	3.200	17.06	4.77	1.97
0.100	0.00	1.667	7.87	3.233	17.06	4.80	1.31
0.133	0.00	1.700	7.87	3.267	13.12	4.83	1.31
0.167	0.00	1.733	7.87	3.300	9.18	4.87	1.31
0.200	0.00	1.767	15.08	3.333	9.18	4.90	1.31
0.233	0.00	1.800	22.30	3.367	9.18	4.93	1.31
0.267	0.66	1.833	22.30	3.400	9.18	4.97	1.31
0.300	1.31	1.867	22.30	3.433	9.18	5.00	1.31
0.333	1.31	1.900	22.30	3.467	9.18	5.03	1.31
0.367	1.31	1.933	22.30	3.500	9.18	5.07	1.31
0.400	1.31	1.967	22.30	3.533	9.18	5.10	1.31
0.433	1.31	2.000	22.30	3.567	9.18	5.13	1.31
0.467	1.31	2.033	22.30	3.600	9.18	5.17	1.31
0.500	1.31	2.067	22.30	3.633	9.18	5.20	1.31
0.533	1.31	2.100	22.30	3.667	9.18	5.23	1.31
0.567	1.31	2.133	22.30	3.700	9.18	5.27	1.31
0.600	1.31	2.167	22.30	3.733	9.18	5.30	1.31
0.633	1.31	2.200	22.30	3.767	7.22	5.33	1.31
0.667	1.31	2.233	22.30	3.800	5.25	5.37	1.31
0.700	1.31	2.267	41.32	3.833	5.25	5.40	1.31
0.733	1.31	2.300	60.35	3.867	5.25	5.43	1.31
0.767	1.31	2.333	60.35	3.900	5.25	5.47	1.31
0.800	1.31	2.367	60.35	3.933	5.25	5.50	1.31
0.833	1.31	2.400	60.35	3.967	5.25	5.53	1.31
0.867	1.31	2.433	60.35	4.000	5.25	5.57	1.31
0.900	1.31	2.467	60.35	4.033	5.25	5.60	1.31
0.933	1.31	2.500	60.35	4.067	5.25	5.63	1.31
0.967	1.31	2.533	60.35	4.100	5.25	5.67	1.31
1.000	1.31	2.567	60.35	4.133	5.25	5.70	1.31
1.033	1.31	2.600	60.35	4.167	5.25	5.73	1.31
1.067	1.31	2.633	60.35	4.200	5.25	5.77	1.31
1.100	1.31	2.667	60.35	4.233	5.25	5.80	1.31
1.133	1.31	2.700	60.35	4.267	3.94	5.83	1.31
1.167	1.31	2.733	60.35	4.300	2.62	5.87	1.31
1.200	1.31	2.767	38.71	4.333	2.62	5.90	1.31
1.233	1.31	2.800	17.06	4.367	2.62	5.93	1.31
1.267	4.59	2.833	17.06	4.400	2.62	5.97	1.31
1.300	7.87	2.867	17.06	4.433	2.62	6.00	1.31
1.333	7.87	2.900	17.06	4.467	2.62	6.03	1.31
1.367	7.87	2.933	17.06	4.500	2.62	6.07	1.31
1.400	7.87	2.967	17.06	4.533	2.62	6.10	1.31
1.433	7.87	3.000	17.06	4.567	2.62	6.13	1.31
1.467	7.87	3.033	17.06	4.600	2.62	6.17	1.31
1.500	7.87	3.067	17.06	4.633	2.62	6.20	1.31
1.533	7.87	3.100	17.06	4.667	2.62	6.23	1.31
1.567	7.87	3.133	17.06	4.700	2.62	6.27	0.66

```
    Unit Hyd Qpeak  (cms)=   0.178

    PEAK FLOW       (cms)=   0.139 (i)
    TIME TO PEAK    (hrs)=   3.033
    RUNOFF VOLUME    (mm)=  37.253
    TOTAL RAINFALL   (mm)=  65.590
    RUNOFF COEFFICIENT   =   0.568

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

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--------------------
| ADD HYD  (  0009)|
|  1 +  2 =  3     |
-------------------          AREA    QPEAK    TPEAK     R.V.
                             (ha)    (cms)    (hrs)     (mm)
      ID1= 1 (  2300):     2.00   0.139     3.03    37.25
    + ID2= 2 (  0007):    68.37   1.272     3.43    47.54
      ================================================
      ID = 3 (  0009):    70.37   1.388     3.37    47.25

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  2400)|   Area    (ha)=   0.76   Curve Number   (CN)= 87.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.04

        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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

```
    Unit Hyd Qpeak  (cms)=   0.726

    PEAK FLOW       (cms)=   0.057 (i)
    TIME TO PEAK    (hrs)=   2.750
    RUNOFF VOLUME    (mm)=  22.232
    TOTAL RAINFALL   (mm)=  65.590
    RUNOFF COEFFICIENT   =   0.339

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

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  3500)|   Area    (ha)=   3.52
|ID= 1 DT= 5.0 min |   Total Imp(%)=  99.90   Dir. Conn.(%)=  99.90
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=      3.52          0.00
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope    (%)=      1.00          2.00
    Length           (m)=    153.19         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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

```
    Max.Eff.Inten.(mm/hr)=     60.35        44.61
              over (min)        5.00         5.00
    Storage Coeff.  (min)=    4.04 (ii)    4.58 (ii)
    Unit Hyd. Tpeak (min)=    5.00         5.00
    Unit Hyd. peak  (cms)=    0.24         0.23
```

```
                                                          *TOTALS*
    PEAK FLOW       (cms)=       0.59          0.00          0.590 (iii)
    TIME TO PEAK    (hrs)=       2.75          2.75          2.75
    RUNOFF VOLUME    (mm)=      64.59         37.25         64.56
    TOTAL RAINFALL   (mm)=      65.59         65.59         65.59
    RUNOFF COEFFICIENT   =       0.98          0.57          0.98

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

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN* = 87.0    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  (  0028)|
|  1 +  2 =  3     |
-------------------          AREA    QPEAK    TPEAK     R.V.
                             (ha)    (cms)    (hrs)     (mm)
      ID1= 1 (  2400):     0.76   0.057     2.75    22.23
    + ID2= 2 (  3500):     3.52   0.590     2.75    64.56
      ================================================
      ID = 3 (  0028):     4.28   0.647     2.75    57.05

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  3100)|   Area    (ha)=  25.24
|ID= 1 DT= 5.0 min |   Total Imp(%)=  85.90   Dir. Conn.(%)=  85.90
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=     21.68          3.56
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope    (%)=      1.00          2.00
    Length           (m)=    410.20         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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

```
    Max.Eff.Inten.(mm/hr)=     60.35        44.61
              over (min)        5.00        15.00
    Storage Coeff.  (min)=    7.29 (ii)   11.48 (ii)
    Unit Hyd. Tpeak (min)=    5.00        15.00
    Unit Hyd. peak  (cms)=    0.17         0.09
                                                          *TOTALS*
    PEAK FLOW       (cms)=       3.60          0.35          3.943 (iii)
    TIME TO PEAK    (hrs)=       2.75          2.83          2.75
    RUNOFF VOLUME    (mm)=      64.59         37.25         60.74
    TOTAL RAINFALL   (mm)=      65.59         65.59         65.59
    RUNOFF COEFFICIENT   =       0.98          0.57          0.93

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN* = 87.0    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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--------------------
| CALIB            |
| STANDHYD (  3200)|   Area    (ha)=   7.11
|ID= 1 DT= 5.0 min |   Total Imp(%)=  88.30   Dir. Conn.(%)=  88.30
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=      6.28          0.83
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope    (%)=      1.00          2.00
    Length           (m)=    217.72         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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

```
    Max.Eff.Inten.(mm/hr)=     60.35        44.61
              over (min)        5.00        10.00
    Storage Coeff.  (min)=    4.99 (ii)    8.84 (ii)
    Unit Hyd. Tpeak (min)=    5.00        10.00
    Unit Hyd. peak  (cms)=    0.22         0.12
                                                          *TOTALS*
    PEAK FLOW       (cms)=       1.05          0.09          1.143 (iii)
    TIME TO PEAK    (hrs)=       2.75          2.75          2.75
    RUNOFF VOLUME    (mm)=      64.59         37.25         61.39
    TOTAL RAINFALL   (mm)=      65.59         65.59         65.59
    RUNOFF COEFFICIENT   =       0.98          0.57          0.94

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

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
          CN* = 87.0    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  (  0020)|
|  1 +  2 =  3     |
-------------------          AREA    QPEAK    TPEAK     R.V.
                             (ha)    (cms)    (hrs)     (mm)
      ID1= 1 (  3100):     25.24   3.943     2.75    60.74
    + ID2= 2 (  3200):      7.11   1.143     2.75    61.39
      ================================================
      ID = 3 (  0020):     32.35   5.086     2.75    60.88

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  3300)|   Area    (ha)=   9.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.80   Dir. Conn.(%)=  78.80
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=      7.34          1.98
    Dep. Storage     (mm)=      1.00          5.00
    Average Slope    (%)=      1.00          2.00
    Length           (m)=    249.27         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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	44.61	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.41 (ii)	15.16 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.20	0.07	
			TOTALS
PEAK FLOW (cms)=	1.23	0.17	1.388 (iii)
TIME TO PEAK (hrs)=	2.75	2.92	2.75
RUNOFF VOLUME (mm)=	64.59	37.25	58.79
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.57	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)	1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):		32.35	5.086	2.75	60.88
+ ID2= 2 (3300):		9.32	1.388	2.75	58.79
ID = 3 (0022):		41.67	6.474	2.75	60.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	STANDHYD (3400)	ID= 1 DT= 5.0 min	Area (ha)= 4.34	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Max.Eff.Inten.(mm/hr)=	60.35	44.61	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.30 (ii)	14.05 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.23	0.08	
			TOTALS
PEAK FLOW (cms)=	0.56	0.09	0.653 (iii)
TIME TO PEAK (hrs)=	2.75	2.83	2.75
RUNOFF VOLUME (mm)=	64.59	37.25	58.46
TOTAL RAINFALL (mm)=	65.59	65.59	65.59
RUNOFF COEFFICIENT =	0.98	0.57	0.89

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)	1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0022):		41.67	6.474	2.75	60.41
+ ID2= 2 (0028):		4.28	0.647	2.75	57.05
ID = 3 (0024):		45.95	7.121	2.75	60.10

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)	3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):		45.95	7.121	2.75	60.10
+ ID2= 2 (3400):		4.34	0.653	2.75	58.46
ID = 1 (0024):		50.29	7.774	2.75	59.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	IN= 2---> OUT= 1	DT= 5.0 min	OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.7480	3.7607
0.0140	0.5845	1.1340	4.6672
0.0210	1.1690	1.4200	5.2879
0.1010	1.7265	1.7270	5.9087
0.2410	2.3077	7.3760	6.5294
0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	7.774	2.75	59.96
OUTFLOW: ID= 1 (5001)	50.290	0.357	4.75	50.42

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.59
TIME SHIFT OF PEAK FLOW (min)=120.00
MAXIMUM STORAGE USED (ha.m.)= 2.6817

ADD HYD (0013)	1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
ID1= 1 (5001):		50.29	0.357	4.75	50.42
+ ID2= 2 (0009):		70.37	1.388	3.37	47.25
ID = 3 (0013):		120.66	1.669	3.50	43.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	NASHYD (4100)	ID= 1 DT= 5.0 min	Area (ha)= 3.48	Ia (mm)= 5.00	Curve Number (CN)= 87.0	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.04

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	1.667	7.87	3.250	17.06	4.83	1.31
0.167	0.00	1.750	7.87	3.333	9.18	4.92	1.31
0.250	0.00	1.833	22.30	3.417	9.18	5.00	1.31
0.333	1.31	1.917	22.30	3.500	9.18	5.08	1.31
0.417	1.31	2.000	22.30	3.583	9.18	5.17	1.31
0.500	1.31	2.083	22.30	3.667	9.18	5.25	1.31
0.583	1.31	2.167	22.30	3.750	9.18	5.33	1.31
0.667	1.31	2.250	22.30	3.833	5.25	5.42	1.31
0.750	1.31	2.333	60.35	3.917	5.25	5.50	1.31
0.833	1.31	2.417	60.35	4.000	5.25	5.58	1.31
0.917	1.31	2.500	60.35	4.083	5.25	5.67	1.31
1.000	1.31	2.583	60.35	4.167	5.25	5.75	1.31
1.083	1.31	2.667	60.35	4.250	5.25	5.83	1.31
1.167	1.31	2.750	60.35	4.333	2.62	5.92	1.31
1.250	1.31	2.833	17.06	4.417	2.62	6.00	1.31
1.333	7.87	2.917	17.06	4.500	2.62	6.08	1.31
1.417	7.87	3.000	17.06	4.583	2.62	6.17	1.31
1.500	7.87	3.083	17.06	4.667	2.62	6.25	1.31
1.583	7.87	3.167	17.06	4.750	2.62		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)=	0.263 (i)
TIME TO PEAK (hrs)=	2.750
RUNOFF VOLUME (mm)=	22.232
TOTAL RAINFALL (mm)=	65.590
RUNOFF COEFFICIENT =	0.339

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

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************************************
** SIMULATION:Run 05 50yr 6hr AES **
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READ STORM	Ptotal= 73.00 mm	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\31d353b4	Comments: 50yr/6hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	24.82	3.75	10.22	5.50	1.46
0.50	1.46	2.25	24.82	4.00	5.84	5.75	1.46
0.75	1.46	2.50	67.16	4.25	5.84	6.00	1.46
1.00	1.46	2.75	67.16	4.50	2.92	6.25	1.46
1.25	1.46	3.00	18.98	4.75	2.92		
1.50	8.76	3.25	18.98	5.00	1.46		
1.75	8.76	3.50	10.22	5.25	1.46		

CALIB	NASHYD (1000)	ID= 1 DT= 2.0 min	Area (ha)= 19.21	Ia (mm)= 7.70	Curve Number (CN)= 87.0	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 1.07

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)=	0.832 (i)
TIME TO PEAK (hrs)=	3.900
RUNOFF VOLUME (mm)=	41.297
TOTAL RAINFALL (mm)=	73.000
RUNOFF COEFFICIENT =	0.566

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

CALIB	NASHYD (1100)	ID= 1 DT= 2.0 min	Area (ha)= 2.08	Ia (mm)= 5.00	Curve Number (CN)= 87.0	# of Linear Res.(N)= 3.00	U.H. Tp(hrs)= 0.29

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46

0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.212 (i)
TIME TO PEAK (hrs)= 2.867
RUNOFF VOLUME (mm)= 43.641
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.598

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

DUHYD (2000)
Inlet Cap.= 0.949
#of Inlets= 1
Total(cms)= 0.9

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.21	2.87	43.64
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.21	2.87	43.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (1200)
ID= 1 DT= 2.0 min | Area (ha)= 25.19
Total Imp(%)= 88.60 Dir. Conn.(%)= 88.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	22.32	2.87
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	409.80	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Max.Eff.Inten.(mm/hr)= 67.16 51.20
over (min) 6.00 12.00
Storage Coeff. (min)= 6.98 (ii) 10.63 (ii)
Unit Hyd. Tpeak (min)= 6.00 12.00
Unit Hyd. peak (cms)= 0.17 0.10

			TOTALS
PEAK FLOW	(cms)=	4.10	0.34 4.435 (iii)
TIME TO PEAK	(hrs)=	2.73	2.80 2.73
RUNOFF VOLUME	(mm)=	72.00	43.64 68.77
TOTAL RAINFALL	(mm)=	73.00	73.00 73.00
RUNOFF COEFFICIENT	=	0.99	0.60 0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):		25.19	4.435	2.73	68.77
+ ID2= 2 (2000):		2.08	0.212	2.87	43.64
ID = 3 (2001):		27.27	4.617	2.73	66.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)
IN= 2---> OUT= 1
DT= 2.0 min

OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.2130	1.6215
0.0900	0.8290	0.2480	1.8230
0.1380	1.1410	0.2810	2.0230
0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	4.617	2.73	66.85
OUTFLOW: ID= 1 (1002)	27.270	0.210	4.80	61.76

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.54
TIME SHIFT OF PEAK FLOW (min)=124.00
MAXIMUM STORAGE USED (ha.m.)= 1.6002

CALIB
STANDHYD (1300)
ID= 1 DT= 2.0 min | Area (ha)= 13.18
Total Imp(%)= 83.40 Dir. Conn.(%)= 83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Max.Eff.Inten.(mm/hr)= 67.16 51.20
over (min) 6.00 12.00
Storage Coeff. (min)= 5.75 (ii) 10.09 (ii)
Unit Hyd. Tpeak (min)= 6.00 12.00
Unit Hyd. peak (cms)= 0.19 0.11

			TOTALS
PEAK FLOW	(cms)=	2.04	0.27 2.293 (iii)
TIME TO PEAK	(hrs)=	2.73	2.80 2.73
RUNOFF VOLUME	(mm)=	72.00	43.64 67.29
TOTAL RAINFALL	(mm)=	73.00	73.00 73.00
RUNOFF COEFFICIENT	=	0.99	0.60 0.92

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)
IN= 2---> OUT= 1
DT= 2.0 min

OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1120	0.6810
0.0470	0.3640	0.1300	0.7605
0.0720	0.4900	0.1470	0.8395
0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	2.293	2.73	67.29
OUTFLOW: ID= 1 (1001)	13.180	0.130	4.47	64.26

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.67
TIME SHIFT OF PEAK FLOW (min)=104.00
MAXIMUM STORAGE USED (ha.m.)= 0.7604

ADD HYD (2002)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1001):		13.18	0.130	4.47	64.26
+ ID2= 2 (1002):		27.27	0.210	4.80	61.76
ID = 3 (2002):		40.45	0.339	4.63	62.57

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)
1 + 2 = 3

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1000):		19.21	0.832	3.90	41.30
+ ID2= 2 (2002):		40.45	0.339	4.63	62.57
ID = 3 (2003):		59.66	1.161	3.93	55.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (2100) Area (ha)= 3.11 Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.14

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46

0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.408 (i)
TIME TO PEAK (hrs)= 2.767
RUNOFF VOLUME (mm)= 43.632
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.598

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

ADD HYD (0005)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2003):	59.66	1.161	3.93	55.72
+ ID2= 2 (2100):	3.11	0.408	2.77	43.63
ID = 3 (0005):	62.77	1.226	3.83	55.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (2200) ID= 1 DT= 2.0 min | Area (ha)= 5.60 Curve Number (CN)= 87.0 | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.44

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.164 (i)
TIME TO PEAK (hrs)= 3.033
RUNOFF VOLUME (mm)= 43.641
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.598

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

ADD HYD (0009)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.164	3.03	43.64
+ ID2= 2 (0007):	68.37	1.498	3.43	54.18
ID = 3 (0009):	70.37	1.635	3.33	53.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (2400) ID= 1 DT= 5.0 min | Area (ha)= 0.76 Curve Number (CN)= 87.0 | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.04

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	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.066 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 26.044
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.357

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

CALIB STANDHYD (3500) ID= 1 DT= 5.0 min | Area (ha)= 3.52 | Total Imp(%)= 99.90 Dir. Conn.(%)= 99.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.52	0.00
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	153.19	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	1.667	8.76	3.250	18.98	4.83	1.46
0.167	0.00	1.750	8.76	3.333	10.22	4.92	1.46
0.250	0.00	1.833	24.82	3.417	10.22	5.00	1.46
0.333	1.46	1.917	24.82	3.500	10.22	5.08	1.46
0.417	1.46	2.000	24.82	3.583	10.22	5.17	1.46
0.500	1.46	2.083	24.82	3.667	10.22	5.25	1.46
0.583	1.46	2.167	24.82	3.750	10.22	5.33	1.46
0.667	1.46	2.250	24.82	3.833	5.84	5.42	1.46
0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

			TOTALS
Max.Eff.Inten.(mm/hr)=	67.16	51.65	
over (min)	5.00	5.00	
Storage Coeff. (min)=	3.87 (ii)	4.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	5.00	
Unit Hyd. peak (cms)=	0.25	0.23	
PEAK FLOW (cms)=	0.66	0.00	0.656 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	72.00	43.64	71.97
TOTAL RAINFALL (mm)=	73.00	73.00	73.00
RUNOFF COEFFICIENT =	0.99	0.60	0.99

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.066	2.75	26.04
+ ID2= 2 (3500):	3.52	0.656	2.75	71.97
ID = 3 (0028):	4.28	0.723	2.75	63.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0007)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.453	3.07	43.64
+ ID2= 2 (0005):	62.77	1.226	3.83	55.12
ID = 3 (0007):	68.37	1.498	3.43	54.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (2300) ID= 1 DT= 2.0 min | Area (ha)= 2.00 Curve Number (CN)= 87.0 | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46
0.600	1.46	2.167	24.82	3.733	10.22	5.30	1.46
0.633	1.46	2.200	24.82	3.767	8.03	5.33	1.46
0.667	1.46	2.233	24.82	3.800	5.84	5.37	1.46
0.700	1.46	2.267	45.99	3.833	5.84	5.40	1.46
0.733	1.46	2.300	67.16	3.867	5.84	5.43	1.46
0.767	1.46	2.333	67.16	3.900	5.84	5.47	1.46
0.800	1.46	2.367	67.16	3.933	5.84	5.50	1.46
0.833	1.46	2.400	67.16	3.967	5.84	5.53	1.46
0.867	1.46	2.433	67.16	4.000	5.84	5.57	1.46
0.900	1.46	2.467	67.16	4.033	5.84	5.60	1.46
0.933	1.46	2.500	67.16	4.067	5.84	5.63	1.46
0.967	1.46	2.533	67.16	4.100	5.84	5.67	1.46
1.000	1.46	2.567	67.16	4.133	5.84	5.70	1.46
1.033	1.46	2.600	67.16	4.167	5.84	5.73	1.46
1.067	1.46	2.633	67.16	4.200	5.84	5.77	1.46
1.100	1.46	2.667	67.16	4.233	5.84	5.80	1.46
1.133	1.46	2.700	67.16	4.267	4.38	5.83	1.46
1.167	1.46	2.733	67.16	4.300	2.92	5.87	1.46
1.200	1.46	2.767	43.07	4.333	2.92	5.90	1.46
1.233	1.46	2.800	18.98	4.367	2.92	5.93	1.46
1.267	5.11	2.833	18.98	4.400	2.92	5.97	1.46
1.300	8.76	2.867	18.98	4.433	2.92	6.00	1.46
1.333	8.76	2.900	18.98	4.467	2.92	6.03	1.46
1.367	8.76	2.933	18.98	4.500	2.92	6.07	1.46
1.400	8.76	2.967	18.98	4.533	2.92	6.10	1.46
1.433	8.76	3.000	18.98	4.567	2.92	6.13	1.46
1.467	8.76	3.033	18.98	4.600	2.92	6.17	1.46
1.500	8.76	3.067	18.98	4.633	2.92	6.20	1.46
1.533	8.76	3.100	18.98	4.667	2.92	6.23	1.46
1.567	8.76	3.133	18.98	4.700	2.92	6.27	0.73

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.453 (i)
TIME TO PEAK (hrs)= 3.067
RUNOFF VOLUME (mm)= 43.641
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.598

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

ADD HYD (0007)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.453	3.07	43.64
+ ID2= 2 (0005):	62.77	1.226	3.83	55.12
ID = 3 (0007):	68.37	1.498	3.43	54.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (2300) ID= 1 DT= 2.0 min | Area (ha)= 2.00 Curve Number (CN)= 87.0 | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	8.76	3.167	18.98	4.73	2.92
0.067	0.00	1.633	8.76	3.200	18.98	4.77	2.19
0.100	0.00	1.667	8.76	3.233	18.98	4.80	1.46
0.133	0.00	1.700	8.76	3.267	14.60	4.83	1.46
0.167	0.00	1.733	8.76	3.300	10.22	4.87	1.46
0.200	0.00	1.767	16.79	3.333	10.22	4.90	1.46
0.233	0.00	1.800	24.82	3.367	10.22	4.93	1.46
0.267	0.73	1.833	24.82	3.400	10.22	4.97	1.46
0.300	1.46	1.867	24.82	3.433	10.22	5.00	1.46
0.333	1.46	1.900	24.82	3.467	10.22	5.03	1.46
0.367	1.46	1.933	24.82	3.500	10.22	5.07	1.46
0.400	1.46	1.967	24.82	3.533	10.22	5.10	1.46
0.433	1.46	2.000	24.82	3.567	10.22	5.13	1.46
0.467	1.46	2.033	24.82	3.600	10.22	5.17	1.46
0.500	1.46	2.067	24.82	3.633	10.22	5.20	1.46
0.533	1.46	2.100	24.82	3.667	10.22	5.23	1.46
0.567	1.46	2.133	24.82	3.700	10.22	5.27	1.46

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| CALIB             |
| STANDHYD (  3100)|   Area    (ha)=  25.24
|ID= 1 DT= 5.0 min |   Total Imp(%)=  85.90   Dir. Conn.(%)=  85.90
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                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      21.68         3.56
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     410.20        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 | 1.667    8.76 | 3.250   18.98 |  4.83    1.46
     0.167    0.00 | 1.750    8.76 | 3.333   10.22 |  4.92    1.46
     0.250    0.00 | 1.833   24.82 | 3.417   10.22 |  5.00    1.46
     0.333    1.46 | 1.917   24.82 | 3.500   10.22 |  5.08    1.46
     0.417    1.46 | 2.000   24.82 | 3.583   10.22 |  5.17    1.46
     0.500    1.46 | 2.083   24.82 | 3.667   10.22 |  5.25    1.46
     0.583    1.46 | 2.167   24.82 | 3.750   10.22 |  5.33    1.46
     0.667    1.46 | 2.250   24.82 | 3.833    5.84 |  5.42    1.46
     0.750    1.46 | 2.333   67.16 | 3.917    5.84 |  5.50    1.46
     0.833    1.46 | 2.417   67.16 | 4.000    5.84 |  5.58    1.46
     0.917    1.46 | 2.500   67.16 | 4.083    5.84 |  5.67    1.46
     1.000    1.46 | 2.583   67.16 | 4.167    5.84 |  5.75    1.46
     1.083    1.46 | 2.667   67.16 | 4.250    5.84 |  5.83    1.46
     1.167    1.46 | 2.750   67.16 | 4.333    2.92 |  5.92    1.46
     1.250    1.46 | 2.833   18.98 | 4.417    2.92 |  6.00    1.46
     1.333    8.76 | 2.917   18.98 | 4.500    2.92 |  6.08    1.46
     1.417    8.76 | 3.000   18.98 | 4.583    2.92 |  6.17    1.46
     1.500    8.76 | 3.083   18.98 | 4.667    2.92 |  6.25    1.46
     1.583    8.76 | 3.167   18.98 | 4.750    2.92 |

     Max.Eff.Inten.(mm/hr)=      67.16         51.65
          over (min)             5.00         15.00
     Storage Coeff.  (min)=       6.99 (ii)    11.00 (ii)
     Unit Hyd. Tpeak (min)=       5.00         15.00
     Unit Hyd. peak  (cms)=       0.17          0.09
                                                *TOTALS*
     PEAK FLOW       (cms)=       4.01          0.42          4.421 (iii)
     TIME TO PEAK    (hrs)=       2.75          2.83          2.75
     RUNOFF VOLUME    (mm)=      72.00         43.64         68.00
     TOTAL RAINFALL   (mm)=      73.00         73.00         73.00
     RUNOFF COEFFICIENT   =       0.99          0.60          0.93

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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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| CALIB             |
| STANDHYD (  3200)|   Area    (ha)=   7.11
|ID= 1 DT= 5.0 min |   Total Imp(%)=  88.30   Dir. Conn.(%)=  88.30
-------------------

                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       6.28         0.83
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     217.72        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 | 1.667    8.76 | 3.250   18.98 |  4.83    1.46
     0.167    0.00 | 1.750    8.76 | 3.333   10.22 |  4.92    1.46
     0.250    0.00 | 1.833   24.82 | 3.417   10.22 |  5.00    1.46
     0.333    1.46 | 1.917   24.82 | 3.500   10.22 |  5.08    1.46
     0.417    1.46 | 2.000   24.82 | 3.583   10.22 |  5.17    1.46
     0.500    1.46 | 2.083   24.82 | 3.667   10.22 |  5.25    1.46
     0.583    1.46 | 2.167   24.82 | 3.750   10.22 |  5.33    1.46
     0.667    1.46 | 2.250   24.82 | 3.833    5.84 |  5.42    1.46
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     0.750    1.46 | 2.333   67.16 | 3.917    5.84 |  5.50    1.46
     0.833    1.46 | 2.417   67.16 | 4.000    5.84 |  5.58    1.46
     0.917    1.46 | 2.500   67.16 | 4.083    5.84 |  5.67    1.46
     1.000    1.46 | 2.583   67.16 | 4.167    5.84 |  5.75    1.46
     1.083    1.46 | 2.667   67.16 | 4.250    5.84 |  5.83    1.46
     1.167    1.46 | 2.750   67.16 | 4.333    2.92 |  5.92    1.46
     1.250    1.46 | 2.833   18.98 | 4.417    2.92 |  6.00    1.46
     1.333    8.76 | 2.917   18.98 | 4.500    2.92 |  6.08    1.46
     1.417    8.76 | 3.000   18.98 | 4.583    2.92 |  6.17    1.46
     1.500    8.76 | 3.083   18.98 | 4.667    2.92 |  6.25    1.46
     1.583    8.76 | 3.167   18.98 | 4.750    2.92 |

     Max.Eff.Inten.(mm/hr)=      67.16         51.65
          over (min)             5.00         10.00
     Storage Coeff.  (min)=       4.78 (ii)     8.47 (ii)
     Unit Hyd. Tpeak (min)=       5.00         10.00
     Unit Hyd. peak  (cms)=       0.22          0.12
                                                *TOTALS*
     PEAK FLOW       (cms)=       1.17          0.11          1.278 (iii)
     TIME TO PEAK    (hrs)=       2.75          2.75          2.75
     RUNOFF VOLUME    (mm)=      72.00         43.64         68.68
     TOTAL RAINFALL   (mm)=      73.00         73.00         73.00
     RUNOFF COEFFICIENT   =       0.99          0.60          0.94

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

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0020)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  3100):     25.24    4.421     2.75    68.00
     + ID2= 2 (  3200):      7.11    1.278     2.75    68.68
       ================================================
       ID = 3 (  0020):     32.35    5.699     2.75    68.15

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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-------------------
| CALIB             |
| STANDHYD (  3300)|   Area    (ha)=   9.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.80   Dir. Conn.(%)=  78.80
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                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       7.34         1.98
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     249.27        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 | 1.667    8.76 | 3.250   18.98 |  4.83    1.46
     0.167    0.00 | 1.750    8.76 | 3.333   10.22 |  4.92    1.46
     0.250    0.00 | 1.833   24.82 | 3.417   10.22 |  5.00    1.46
     0.333    1.46 | 1.917   24.82 | 3.500   10.22 |  5.08    1.46
     0.417    1.46 | 2.000   24.82 | 3.583   10.22 |  5.17    1.46
     0.500    1.46 | 2.083   24.82 | 3.667   10.22 |  5.25    1.46
     0.583    1.46 | 2.167   24.82 | 3.750   10.22 |  5.33    1.46
     0.667    1.46 | 2.250   24.82 | 3.833    5.84 |  5.42    1.46
     0.750    1.46 | 2.333   67.16 | 3.917    5.84 |  5.50    1.46
     0.833    1.46 | 2.417   67.16 | 4.000    5.84 |  5.58    1.46
     0.917    1.46 | 2.500   67.16 | 4.083    5.84 |  5.67    1.46
     1.000    1.46 | 2.583   67.16 | 4.167    5.84 |  5.75    1.46
     1.083    1.46 | 2.667   67.16 | 4.250    5.84 |  5.83    1.46
     1.167    1.46 | 2.750   67.16 | 4.333    2.92 |  5.92    1.46
     1.250    1.46 | 2.833   18.98 | 4.417    2.92 |  6.00    1.46
     1.333    8.76 | 2.917   18.98 | 4.500    2.92 |  6.08    1.46
     1.417    8.76 | 3.000   18.98 | 4.583    2.92 |  6.17    1.46
     1.500    8.76 | 3.083   18.98 | 4.667    2.92 |  6.25    1.46
     1.583    8.76 | 3.167   18.98 | 4.750    2.92 |

     Max.Eff.Inten.(mm/hr)=      67.16         51.65
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          over (min)             5.00         15.00
     Storage Coeff.  (min)=       5.18 (ii)    10.08 (ii)
     Unit Hyd. Tpeak (min)=       5.00         15.00
     Unit Hyd. peak  (cms)=       0.21          0.10
                                                *TOTALS*
     PEAK FLOW       (cms)=       1.37          0.23          1.601 (iii)
     TIME TO PEAK    (hrs)=       2.75          2.83          2.75
     RUNOFF VOLUME    (mm)=      72.00         43.64         65.99
     TOTAL RAINFALL   (mm)=      73.00         73.00         73.00
     RUNOFF COEFFICIENT   =       0.99          0.60          0.90

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0022)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0020):     32.35    5.699     2.75    68.15
     + ID2= 2 (  3300):      9.32    1.601     2.75    65.99
       ================================================
       ID = 3 (  0022):     41.67    7.300     2.75    67.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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-------------------
| CALIB             |
| STANDHYD (  3400)|   Area    (ha)=   4.34
|ID= 1 DT= 5.0 min |   Total Imp(%)=  77.60   Dir. Conn.(%)=  77.60
-------------------

                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       3.37         0.97
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     170.10        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 | 1.667    8.76 | 3.250   18.98 |  4.83    1.46
     0.167    0.00 | 1.750    8.76 | 3.333   10.22 |  4.92    1.46
     0.250    0.00 | 1.833   24.82 | 3.417   10.22 |  5.00    1.46
     0.333    1.46 | 1.917   24.82 | 3.500   10.22 |  5.08    1.46
     0.417    1.46 | 2.000   24.82 | 3.583   10.22 |  5.17    1.46
     0.500    1.46 | 2.083   24.82 | 3.667   10.22 |  5.25    1.46
     0.583    1.46 | 2.167   24.82 | 3.750   10.22 |  5.33    1.46
     0.667    1.46 | 2.250   24.82 | 3.833    5.84 |  5.42    1.46
     0.750    1.46 | 2.333   67.16 | 3.917    5.84 |  5.50    1.46
     0.833    1.46 | 2.417   67.16 | 4.000    5.84 |  5.58    1.46
     0.917    1.46 | 2.500   67.16 | 4.083    5.84 |  5.67    1.46
     1.000    1.46 | 2.583   67.16 | 4.167    5.84 |  5.75    1.46
     1.083    1.46 | 2.667   67.16 | 4.250    5.84 |  5.83    1.46
     1.167    1.46 | 2.750   67.16 | 4.333    2.92 |  5.92    1.46
     1.250    1.46 | 2.833   18.98 | 4.417    2.92 |  6.00    1.46
     1.333    8.76 | 2.917   18.98 | 4.500    2.92 |  6.08    1.46
     1.417    8.76 | 3.000   18.98 | 4.583    2.92 |  6.17    1.46
     1.500    8.76 | 3.083   18.98 | 4.667    2.92 |  6.25    1.46
     1.583    8.76 | 3.167   18.98 | 4.750    2.92 |

     Max.Eff.Inten.(mm/hr)=      67.16         51.65
          over (min)             5.00         15.00
     Storage Coeff.  (min)=       4.12 (ii)    13.31 (ii)
     Unit Hyd. Tpeak (min)=       5.00         15.00
     Unit Hyd. peak  (cms)=       0.24          0.08
                                                *TOTALS*
     PEAK FLOW       (cms)=       0.63          0.11          0.734 (iii)
     TIME TO PEAK    (hrs)=       2.75          2.83          2.75
     RUNOFF VOLUME    (mm)=      72.00         43.64         65.65
     TOTAL RAINFALL   (mm)=      73.00         73.00         73.00
     RUNOFF COEFFICIENT   =       0.99          0.60          0.90

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

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
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           CN*  =  87.0    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  (  0024)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0022):     41.67    7.300     2.75    67.67
     + ID2= 2 (  0028):      4.28    0.723     2.75    63.82
       ================================================
       ID = 3 (  0024):     45.95    8.023     2.75    67.31

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

-------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):     45.95    8.023     2.75    67.31
     + ID2= 2 (  3400):      4.34    0.734     2.75    65.65
       ================================================
       ID = 1 (  0024):     50.29    8.757     2.75    67.16

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  5001)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)   |    (cms)     (ha.m.)
                         0.0000      0.0000   |   0.7480      3.7607
                         0.0140      0.5845   |   1.1340      4.6672
                         0.0210      1.1690   |   1.4200      5.2879
                         0.1010      1.7265   |   1.7270      5.9087
                         0.2410      2.3077   |   7.3760      6.5294
                         0.4210      2.8889   |  12.0010      6.8398

                              AREA     QPEAK     TPEAK      R.V.
                              (ha)     (cms)     (hrs)      (mm)
     INFLOW : ID= 2 (  0024)     50.290     8.757     2.75      67.16
     OUTFLOW: ID= 1 (  5001)     50.290     0.451     4.50      57.47

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)=  5.15
                    TIME SHIFT OF PEAK FLOW       (min)=105.00
                    MAXIMUM  STORAGE   USED      (ha.m.)=  2.9690

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0013)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  5001):     50.29    0.451     4.50    57.47
     + ID2= 2 (  0009):     70.37    1.635     3.33    53.88
       ================================================
       ID = 3 (  0013):    120.66    2.002     3.43    50.65

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| NASHYD  (  4100)|   Area    (ha)=   3.48   Curve Number    (CN)= 87.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.04

         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 | 1.667    8.76 | 3.250   18.98 |  4.83    1.46
     0.167    0.00 | 1.750    8.76 | 3.333   10.22 |  4.92    1.46
     0.250    0.00 | 1.833   24.82 | 3.417   10.22 |  5.00    1.46
     0.333    1.46 | 1.917   24.82 | 3.500   10.22 |  5.08    1.46
     0.417    1.46 | 2.000   24.82 | 3.583   10.22 |  5.17    1.46
     0.500    1.46 | 2.083   24.82 | 3.667   10.22 |  5.25    1.46
     0.583    1.46 | 2.167   24.82 | 3.750   10.22 |  5.33    1.46
     0.667    1.46 | 2.250   24.82 | 3.833    5.84 |  5.42    1.46
```

0.750	1.46	2.333	67.16	3.917	5.84	5.50	1.46
0.833	1.46	2.417	67.16	4.000	5.84	5.58	1.46
0.917	1.46	2.500	67.16	4.083	5.84	5.67	1.46
1.000	1.46	2.583	67.16	4.167	5.84	5.75	1.46
1.083	1.46	2.667	67.16	4.250	5.84	5.83	1.46
1.167	1.46	2.750	67.16	4.333	2.92	5.92	1.46
1.250	1.46	2.833	18.98	4.417	2.92	6.00	1.46
1.333	8.76	2.917	18.98	4.500	2.92	6.08	1.46
1.417	8.76	3.000	18.98	4.583	2.92	6.17	1.46
1.500	8.76	3.083	18.98	4.667	2.92	6.25	1.46
1.583	8.76	3.167	18.98	4.750	2.92		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.304 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 26.045
TOTAL RAINFALL (mm)= 73.000
RUNOFF COEFFICIENT = 0.357

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

****
** SIMULATION:Run 06 10Oyr 6hr AES **
****

READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\04a4218a
Ptotal= 80.31 mm	Comments: 10Oyr/6hr

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.25	0.00	2.00	27.30	3.75	11.24	5.50	1.61
0.50	1.61	2.25	27.30	4.00	6.42	5.75	1.61
0.75	1.61	2.50	73.88	4.25	6.42	6.00	1.61
1.00	1.61	2.75	73.88	4.50	3.21	6.25	1.61
1.25	1.61	3.00	20.88	4.75	3.21		
1.50	9.64	3.25	20.88	5.00	1.61		
1.75	9.64	3.50	11.24	5.25	1.61		

CALIB					
NASHYD (1000)	Area (ha)= 19.21	Curve Number (CN)= 87.0			
ID= 1 DT= 2.0 min	Ia (mm)= 7.70	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 1.07				

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.963 (i)
TIME TO PEAK (hrs)= 3.867
RUNOFF VOLUME (mm)= 47.685
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.594

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

CALIB					
NASHYD (1100)	Area (ha)= 2.08	Curve Number (CN)= 87.0			
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.29				

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.244 (i)
TIME TO PEAK (hrs)= 2.867
RUNOFF VOLUME (mm)= 50.073
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.624

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

DUHYD (2000)			
Inlet Cap.= 0.949			
#of Inlets= 1			
Total(cms)= 0.9	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.24	2.87	50.07
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.24	2.87	50.07

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (1200)	Area (ha)= 25.19				
ID= 1 DT= 2.0 min	Total Imp(%)= 88.60	Dir. Conn.(%)= 88.60			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Max.Eff.Inten.(mm/hr)=	73.88	58.19		
over (min)	6.00	12.00		
Storage Coeff. (min)=	6.72 (ii)	10.23 (ii)		
Unit Hyd. Tpeak (min)=	6.00	12.00		
Unit Hyd. peak (cms)=	0.17	0.10		
			TOTALS	
PEAK FLOW (cms)=	4.52	0.40	4.908 (iii)	
TIME TO PEAK (hrs)=	2.73	2.80	2.73	
RUNOFF VOLUME (mm)=	79.31	50.07	75.98	
TOTAL RAINFALL (mm)=	80.31	80.31	80.31	
RUNOFF COEFFICIENT =	0.99	0.62	0.95	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	4.908	2.73	75.98
+ ID2= 2 (2000):	2.08	0.244	2.87	50.07
ID = 3 (2001):	27.27	5.119	2.73	74.00

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	5.119	2.73	74.00
OUTFLOW: ID= 1 (1002)	27.270	0.238	4.80	68.49

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.66
TIME SHIFT OF PEAK FLOW (min)=124.00
MAXIMUM STORAGE USED (ha.m.)= 1.7672

CALIB					
STANDHYD (1300)	Area (ha)= 13.18				
ID= 1 DT= 2.0 min	Total Imp(%)= 83.40	Dir. Conn.(%)= 83.40			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	10.99	2.19
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	296.42	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Max.Eff.Inten.(mm/hr)= 73.88 58.19
over (min) 6.00 10.00
Storage Coeff. (min)= 5.53 (ii) 9.71 (ii)
Unit Hyd. Tpeak (min)= 6.00 10.00
Unit Hyd. peak (cms)= 0.20 0.12

			TOTALS
PEAK FLOW	(cms)=	2.24	0.31	2.547 (iii)
TIME TO PEAK	(hrs)=	2.73	2.77	2.73
RUNOFF VOLUME	(mm)=	79.31	50.07	74.46
TOTAL RAINFALL	(mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT	=	0.99	0.62	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 2.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1120	0.6810
0.0470	0.3640	0.1300	0.7605
0.0720	0.4900	0.1470	0.8395
0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	2.547	2.73	74.46
OUTFLOW: ID= 1 (1001)	13.180	0.147	4.43	71.19

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.77
TIME SHIFT OF PEAK FLOW (min)=102.00
MAXIMUM STORAGE USED (ha.m.)= 0.8391

ADD HYD (2002)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (1001):	13.18	0.147	4.43	71.19
	+ ID2= 2 (1002):	27.27	0.238	4.80	68.49
	ID = 3 (2002):	40.45	0.385	4.60	69.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (1000):	19.21	0.963	3.87	47.68
	+ ID2= 2 (2002):	40.45	0.385	4.60	69.37
	ID = 3 (2003):	59.66	1.336	3.93	62.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2100)	Area (ha)=	3.11	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.14	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.466 (i)
TIME TO PEAK (hrs)= 2.767
RUNOFF VOLUME (mm)= 50.064
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.623

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

ADD HYD (0005)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2003):	59.66	1.336	3.93	62.39
	+ ID2= 2 (2100):	3.11	0.466	2.77	50.06
	ID = 3 (0005):	62.77	1.410	3.83	61.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2200)	Area (ha)=	5.60	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.44	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61
1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.521 (i)
TIME TO PEAK (hrs)= 3.033
RUNOFF VOLUME (mm)= 50.074
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.624

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

ADD HYD (0007)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (2200):	5.60	0.521	3.03	50.07
	+ ID2= 2 (0005):	62.77	1.410	3.83	61.78
	ID = 3 (0007):	68.37	1.727	3.40	60.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area (ha)=	2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	1.600	9.64	3.167	20.88	4.73	3.21
0.067	0.00	1.633	9.64	3.200	20.88	4.77	2.41
0.100	0.00	1.667	9.64	3.233	20.88	4.80	1.61
0.133	0.00	1.700	9.64	3.267	16.06	4.83	1.61
0.167	0.00	1.733	9.64	3.300	11.24	4.87	1.61
0.200	0.00	1.767	18.47	3.333	11.24	4.90	1.61
0.233	0.00	1.800	27.30	3.367	11.24	4.93	1.61
0.267	0.81	1.833	27.30	3.400	11.24	4.97	1.61
0.300	1.61	1.867	27.30	3.433	11.24	5.00	1.61
0.333	1.61	1.900	27.30	3.467	11.24	5.03	1.61
0.367	1.61	1.933	27.30	3.500	11.24	5.07	1.61
0.400	1.61	1.967	27.30	3.533	11.24	5.10	1.61
0.433	1.61	2.000	27.30	3.567	11.24	5.13	1.61
0.467	1.61	2.033	27.30	3.600	11.24	5.17	1.61
0.500	1.61	2.067	27.30	3.633	11.24	5.20	1.61
0.533	1.61	2.100	27.30	3.667	11.24	5.23	1.61
0.567	1.61	2.133	27.30	3.700	11.24	5.27	1.61
0.600	1.61	2.167	27.30	3.733	11.24	5.30	1.61
0.633	1.61	2.200	27.30	3.767	8.83	5.33	1.61
0.667	1.61	2.233	27.30	3.800	6.42	5.37	1.61
0.700	1.61	2.267	50.59	3.833	6.42	5.40	1.61
0.733	1.61	2.300	73.88	3.867	6.42	5.43	1.61
0.767	1.61	2.333	73.88	3.900	6.42	5.47	1.61
0.800	1.61	2.367	73.88	3.933	6.42	5.50	1.61
0.833	1.61	2.400	73.88	3.967	6.42	5.53	1.61
0.867	1.61	2.433	73.88	4.000	6.42	5.57	1.61
0.900	1.61	2.467	73.88	4.033	6.42	5.60	1.61
0.933	1.61	2.500	73.88	4.067	6.42	5.63	1.61
0.967	1.61	2.533	73.88	4.100	6.42	5.67	1.61
1.000	1.61	2.567	73.88	4.133	6.42	5.70	1.61
1.033	1.61	2.600	73.88	4.167	6.42	5.73	1.61
1.067	1.61	2.633	73.88	4.200	6.42	5.77	1.61
1.100	1.61	2.667	73.88	4.233	6.42	5.80	1.61
1.133	1.61	2.700	73.88	4.267	4.82	5.83	1.61
1.167	1.61	2.733	73.88	4.300	3.21	5.87	1.61
1.200	1.61	2.767	47.38	4.333	3.21	5.90	1.61
1.233	1.61	2.800	20.88	4.367	3.21	5.93	1.61
1.267	5.63	2.833	20.88	4.400	3.21	5.97	1.61
1.300	9.64	2.867	20.88	4.433	3.21	6.00	1.61
1.333	9.64	2.900	20.88	4.467	3.21	6.03	1.61
1.367	9.64	2.933	20.88	4.500	3.21	6.07	1.61
1.400	9.64	2.967	20.88	4.533	3.21	6.10	1.61
1.433	9.64	3.000	20.88	4.567	3.21	6.13	1.61
1.467	9.64	3.033	20.88	4.600	3.21	6.17	1.61
1.500	9.64	3.067	20.88	4.633	3.21	6.20	1.61

1.533	9.64	3.100	20.88	4.667	3.21	6.23	1.61
1.567	9.64	3.133	20.88	4.700	3.21	6.27	0.81

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.189 (i)
TIME TO PEAK (hrs)= 3.033
RUNOFF VOLUME (mm)= 50.074
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.624

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

ADD HYD (0009)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.189	3.03	50.07
+ ID2= 2 (0007):	68.37	1.727	3.40	60.82
ID = 3 (0009):	70.37	1.885	3.33	60.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (2400) | Area (ha)= 0.76 Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.04

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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.075 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 29.883
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.372

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

CALIB
STANDHYD (3500) | Area (ha)= 3.52
ID= 1 DT= 5.0 min | Total Imp(%)= 99.90 Dir. Conn.(%)= 99.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.52	0.00
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	153.19	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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

		TRANSFORMED		
Max.Eff.Inten.(mm/hr)=	73.88	58.65		
over (min)	5.00	5.00		
Storage Coeff. (min)=	3.72 (ii)	4.23 (ii)		
Unit Hyd. Tpeak (min)=	5.00	5.00		
Unit Hyd. peak (cms)=	0.25	0.24		
			TOTALS	
PEAK FLOW (cms)=	0.72	0.00	0.722 (iii)	
TIME TO PEAK (hrs)=	2.75	2.75	2.75	
RUNOFF VOLUME (mm)=	79.31	50.07	79.28	
TOTAL RAINFALL (mm)=	80.31	80.31	80.31	
RUNOFF COEFFICIENT =	0.99	0.62	0.99	

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.075	2.75	29.88
+ ID2= 2 (3500):	3.52	0.722	2.75	79.28
ID = 3 (0028):	4.28	0.797	2.75	70.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (3100) | Area (ha)= 25.24
ID= 1 DT= 5.0 min | Total Imp(%)= 85.90 Dir. Conn.(%)= 85.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	21.68	3.56
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	410.20	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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

		TRANSFORMED		
Max.Eff.Inten.(mm/hr)=	73.88	58.65		
over (min)	5.00	5.00		
Storage Coeff. (min)=	4.60 (ii)	8.15 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.23	0.13		
			TOTALS	
PEAK FLOW (cms)=	1.29	0.12	1.411 (iii)	
TIME TO PEAK (hrs)=	2.75	2.75	2.75	
RUNOFF VOLUME (mm)=	79.31	50.07	75.89	
TOTAL RAINFALL (mm)=	80.31	80.31	80.31	
RUNOFF COEFFICIENT =	0.99	0.62	0.94	

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):	25.24	4.894	2.75	75.19
+ ID2= 2 (3200):	7.11	1.411	2.75	75.89
ID = 3 (0020):	32.35	6.306	2.75	75.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (3300) | Area (ha)= 9.32
ID= 1 DT= 5.0 min | Total Imp(%)= 78.80 Dir. Conn.(%)= 78.80

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.34	1.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	249.27	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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

		TRANSFORMED		
Max.Eff.Inten.(mm/hr)=	73.88	58.65		
over (min)	5.00	10.00		
Storage Coeff. (min)=	4.99 (ii)	9.70 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.22	0.11		
			TOTALS	
PEAK FLOW (cms)=	1.50	0.29	1.791 (iii)	
TIME TO PEAK (hrs)=	2.75	2.75	2.75	
RUNOFF VOLUME (mm)=	79.31	50.07	73.11	
TOTAL RAINFALL (mm)=	80.31	80.31	80.31	
RUNOFF COEFFICIENT =	0.99	0.62	0.91	

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):	32.35	6.306	2.75	75.34
+ ID2= 2 (3300):	9.32	1.791	2.75	73.11

ID = 3 (0022): 41.67 8.096 2.75 74.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (3400)	Area (ha)= 4.34
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60 Dir. Conn.(%)= 77.60

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

			TOTALS
Max.Eff.Inten.(mm/hr)=	73.88	58.65	
over (min)	5.00	10.00	
Storage Coeff. (min)=	3.97 (ii)	8.81 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.24	0.12	
PEAK FLOW (cms)=	0.69	0.14	0.834 (iii)
TIME TO PEAK (hrs)=	2.75	2.75	2.75
RUNOFF VOLUME (mm)=	79.31	50.07	72.76
TOTAL RAINFALL (mm)=	80.31	80.31	80.31
RUNOFF COEFFICIENT =	0.99	0.62	0.91

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (0022):	41.67	8.096	2.75	74.84
	+ ID2= 2 (0028):	4.28	0.797	2.75	70.51
	ID = 3 (0024):	45.95	8.893	2.75	74.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 3 (0024):	45.95	8.893	2.75	74.44
	+ ID2= 2 (3400):	4.34	0.834	2.75	72.76
	ID = 1 (0024):	50.29	9.727	2.75	74.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.7480	3.7607
	0.0140	0.5845	1.1340	4.6672
	0.0210	1.1690	1.4200	5.2879
	0.1010	1.7265	1.7270	5.9087
	0.2410	2.3077	7.3760	6.5294
	0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	9.727	2.75	74.29
OUTFLOW: ID= 1 (5001)	50.290	0.556	4.42	64.48

PEAK FLOW REDUCTION [Qout/Qin](%)= 5.72
TIME SHIFT OF PEAK FLOW (min)=100.00
MAXIMUM STORAGE USED (ha.m.)= 3.2494

ADD HYD (0013)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	ID1= 1 (5001):	50.29	0.556	4.42	64.48
	+ ID2= 2 (0009):	70.37	1.885	3.33	60.51
	ID = 3 (0013):	120.66	2.345	3.43	57.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB		
NASHYD (4100)	Area (ha)= 3.48	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.04	

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	1.667	9.64	3.250	20.88	4.83	1.61
0.167	0.00	1.750	9.64	3.333	11.24	4.92	1.61
0.250	0.00	1.833	27.30	3.417	11.24	5.00	1.61
0.333	1.61	1.917	27.30	3.500	11.24	5.08	1.61
0.417	1.61	2.000	27.30	3.583	11.24	5.17	1.61
0.500	1.61	2.083	27.30	3.667	11.24	5.25	1.61
0.583	1.61	2.167	27.30	3.750	11.24	5.33	1.61
0.667	1.61	2.250	27.30	3.833	6.42	5.42	1.61
0.750	1.61	2.333	73.88	3.917	6.42	5.50	1.61
0.833	1.61	2.417	73.88	4.000	6.42	5.58	1.61
0.917	1.61	2.500	73.88	4.083	6.42	5.67	1.61
1.000	1.61	2.583	73.88	4.167	6.42	5.75	1.61
1.083	1.61	2.667	73.88	4.250	6.42	5.83	1.61
1.167	1.61	2.750	73.88	4.333	3.21	5.92	1.61
1.250	1.61	2.833	20.88	4.417	3.21	6.00	1.61
1.333	9.64	2.917	20.88	4.500	3.21	6.08	1.61
1.417	9.64	3.000	20.88	4.583	3.21	6.17	1.61
1.500	9.64	3.083	20.88	4.667	3.21	6.25	1.61
1.583	9.64	3.167	20.88	4.750	3.21		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.344 (i)
TIME TO PEAK (hrs)= 2.750
RUNOFF VOLUME (mm)= 29.883
TOTAL RAINFALL (mm)= 80.310
RUNOFF COEFFICIENT = 0.372

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

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** SIMULATION:Run 08 2yr 12hr AES **
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READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\f083d736
Ptotal= 42.00 mm	Comments: 2yr/12hr

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	7.14	6.75	2.94	10.00	0.42
0.50	0.42	3.75	7.14	7.00	2.94	10.25	0.42
0.75	0.42	4.00	7.14	7.25	2.94	10.50	0.42
1.00	0.42	4.25	7.14	7.50	1.68	10.75	0.42
1.25	0.42	4.50	19.32	7.75	1.68	11.00	0.42
1.50	0.42	4.75	19.32	8.00	1.68	11.25	0.42
1.75	0.42	5.00	19.32	8.25	1.68	11.50	0.42
2.00	0.42	5.25	19.32	8.50	0.84	11.75	0.42
2.25	0.42	5.50	5.46	8.75	0.84	12.00	0.42
2.50	2.52	5.75	5.46	9.00	0.84	12.25	0.42
2.75	2.52	6.00	5.46	9.25	0.84		
3.00	2.52	6.25	5.46	9.50	0.42		
3.25	2.52	6.50	2.94	9.75	0.42		

CALIB		
NASHYD (1000)	Area (ha)= 19.21	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)= 7.70	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 1.07	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	2.52	6.167	5.46	9.23	0.84
0.067	0.00	3.133	2.52	6.200	5.46	9.27	0.63
0.100	0.00	3.167	2.52	6.233	5.46	9.30	0.42
0.133	0.00	3.200	2.52	6.267	4.20	9.33	0.42
0.167	0.00	3.233	2.52	6.300	2.94	9.37	0.42
0.200	0.00	3.267	4.83	6.333	2.94	9.40	0.42
0.233	0.00	3.300	7.14	6.367	2.94	9.43	0.42
0.267	0.21	3.333	7.14	6.400	2.94	9.47	0.42
0.300	0.42	3.367	7.14	6.433	2.94	9.50	0.42
0.333	0.42	3.400	7.14	6.467	2.94	9.53	0.42
0.367	0.42	3.433	7.14	6.500	2.94	9.57	0.42
0.400	0.42	3.467	7.14	6.533	2.94	9.60	0.42
0.433	0.42	3.500	7.14	6.567	2.94	9.63	0.42
0.467	0.42	3.533	7.14	6.600	2.94	9.67	0.42
0.500	0.42	3.567	7.14	6.633	2.94	9.70	0.42
0.533	0.42	3.600	7.14	6.667	2.94	9.73	0.42
0.567	0.42	3.633	7.14	6.700	2.94	9.77	0.42
0.600	0.42	3.667	7.14	6.733	2.94	9.80	0.42
0.633	0.42	3.700	7.14	6.767	2.94	9.83	0.42
0.667	0.42	3.733	7.14	6.800	2.94	9.87	0.42
0.700	0.42	3.767	7.14	6.833	2.94	9.90	0.42
0.733	0.42	3.800	7.14	6.867	2.94	9.93	0.42
0.767	0.42	3.833	7.14	6.900	2.94	9.97	0.42
0.800	0.42	3.867	7.14	6.933	2.94	10.00	0.42
0.833	0.42	3.900	7.14	6.967	2.94	10.03	0.42
0.867	0.42	3.933	7.14	7.000	2.94	10.07	0.42
0.900	0.42	3.967	7.14	7.033	2.94	10.10	0.42
0.933	0.42	4.000	7.14	7.067	2.94	10.13	0.42
0.967	0.42	4.033	7.14	7.100	2.94	10.17	0.42
1.000	0.42	4.067	7.14	7.133	2.94	10.20	0.42
1.033	0.42	4.100	7.14	7.167	2.94	10.23	0.42
1.067	0.42	4.133	7.14	7.200	2.94	10.27	0.42
1.100	0.42	4.167	7.14	7.233	2.94	10.30	0.42
1.133	0.42	4.200	7.14	7.267	2.31	10.33	0.42
1.167	0.42	4.233	7.14	7.300	1.68	10.37	0.42
1.200	0.42	4.267	13.23	7.333	1.68	10.40	0.42
1.233	0.42	4.300	19.32	7.367	1.68	10.43	0.42
1.267	0.42	4.333	19.32	7.400	1.68	10.47	0.42
1.300	0.42	4.367	19.32	7.433	1.68	10.50	0.42
1.333	0.42	4.400	19.32	7.467	1.68	10.53	0.42
1.367	0.42	4.433	19.32	7.500	1.68	10.57	0.42
1.400	0.42	4.467	19.32	7.533	1.68	10.60	0.42
1.433	0.42	4.500	19.32	7.567	1.68	10.63	0.42
1.467	0.42	4.533	19.32	7.600	1.68	10.67	0.42
1.500	0.42	4.567	19.32	7.633	1.68	10.70	0.42
1.533	0.42	4.600	19.32	7.667	1.68	10.73	0.42
1.567	0.42	4.633	19.32	7.700	1.68	10.77	0.42
1.600	0.42	4.667	19.32	7.733	1.68	10.80	0.42
1.633	0.42	4.700	19.32	7.767	1.68	10.83	0.42
1.667	0.42	4.733	19.32	7.800	1.68	10.87	0.42
1.700	0.42	4.767	19.32	7.833	1.68	10.90	0.42
1.733	0.42	4.800	19.32	7.867	1.68	10.93	0.42
1.767	0.42	4.833	19.32	7.900	1.68	10.97	0.42
1.800	0.42	4.867	19.32	7.933	1.68	11.00	0.42
1.833	0.42	4.900	19.32	7.967	1.68	11.03	0.42
1.867	0.42	4.933	19.32	8.000	1.68	11.07	0.42
1.900	0.42	4.967	19.32	8.033	1.68	11.10	0.42
1.933	0.42	5.000	19.32	8.067	1.68	11.13	0.42
1.967	0.42	5.033	19.32	8.100	1.68	11.17	0.42
2.000	0.42	5.067	19.32	8.133	1.68	11.20	0.42
2.033	0.42	5.100	19.32	8.167	1.68	11.23	0.42
2.067	0.42	5.133	19.32	8.200	1.68	11.27	0.42
2.100	0.42	5.167	19.32	8.233	1.68	11.30	0.42
2.133	0.42	5.200	19.32	8.267	1.26	11.33	0.42
2.167	0.42	5.233	19.32	8.300	0.84	11.37	0.42
2.200	0.42	5.267	12.39	8.333	0.84	11.40	0.42
2.233	0.42	5.300	5.46	8.367	0.84	11.43	0.42
2.267	1.47	5.333	5.46	8.400	0.84	11.47	0.42
2.300	2.52	5.367	5.46	8.433	0.84	11.50	0.42
2.333	2.52	5.400	5.46	8.467	0.84	11.53	0.42
2.367	2.52	5.433	5.46	8.500	0.84	11.57	0.42
2.400	2.52	5.467	5.46	8.533	0.84	11.60	0.42
2.433	2.52	5.500	5.46	8.567	0.84	11.63	0.42
2.467	2.52	5.533	5.46	8.600	0.84	11.67	0.42
2.500	2.52	5.567	5.46	8.633	0.84	11.70	0.42
2.533	2.52	5.600	5.46	8.667	0.84	11.73	0.42
2.567	2.52	5.633	5.46	8.700	0.84	11.77	0.42
2.600	2.52	5.667	5.46	8.733	0.84	11.80	0.42
2.633	2.52	5.700	5.46	8.767	0.84	11.83	0.42
2.667	2.52	5.733	5.46	8.800	0.84	11.87	0.42
2.700	2.52	5.767	5.46	8.833	0.84	11.90	0.42
2.733	2.52	5.800	5.46	8.867	0.84	11.93	0.42
2.767	2.52	5.833	5.46	8.900	0.84	11.97	0.42
2.800	2.52	5.867	5.46	8.933	0.84	12.00	0.42
2.833	2.52	5.900	5.46	8.967	0.84	12.03	0.42
2.867	2.52	5.933	5.46	9.000	0.84	12.07	0.42
2.900	2.52	5.967	5.46	9.033	0.84	12.10	0.42
2.933	2.52	6.000	5.46	9.067	0.84	12.13	0.42
2.967	2.52	6.033	5.46	9.100	0.84	12.17	0.42
3.000	2.52	6.067	5.46	9.133	0.84	12.20	0.42
3.033	2.52	6.100	5.46	9.167	0.84	12.23	0.42
3.067	2.52	6.133	5.46	9.200	0.84	12.27	0.21

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.249 (i)
TIME TO PEAK (hrs)= 6.367
RUNOFF VOLUME (mm)= 16.283
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.388

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

CALIB		
NASHYD (1100)	Area (ha)= 2.08	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.29	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	2.52	6.167	5.46	9.23	0.84
0.067	0.00	3.133	2.52	6.200	5.46	9.27	0.63
0.100	0.00	3.167	2.52	6.233	5.46	9.30	0.42
0.133	0.00	3.200	2.52	6.267	4.20	9.33	0.42
0.167	0.00	3.233	2.52	6.300	2.94	9.37	0.42
0.200	0.00	3.267	4.83	6.333	2.94	9.40	0.42
0.233	0.00	3.300	7.14	6.367	2.94	9.43	0.42
0.267	0.21	3.333	7.14	6.400	2.94	9.47	0.42
0.300	0.42	3.367	7.14	6.433	2.94	9.50	0.42
0.333	0.42	3.400	7.14	6.467	2.94	9.53	0.42
0.367	0.42	3.433	7.14	6.500	2.94	9.57	0.42
0.400	0.42	3.467	7.14	6.533	2.94	9.60	0.42
0.433	0.42	3.500	7.14	6.567	2.94	9.63	0.42
0.467	0.42	3.533	7.14	6.600	2.94	9.67	0.42
0.500	0.42	3.567	7.14	6.633	2.94	9.70	0.42
0.533	0.42	3.600	7.14	6.667	2.94	9.73	0.42

0.567	0.42	3.633	7.14	6.700	2.94	9.77	0.42
0.600	0.42	3.667	7.14	6.733	2.94	9.80	0.42
0.633	0.42	3.700	7.14	6.767	2.94	9.83	0.42
0.667	0.42	3.733	7.14	6.800	2.94	9.87	0.42
0.700	0.42	3.767	7.14	6.833	2.94	9.90	0.42
0.733	0.42	3.800	7.14	6.867	2.94	9.93	0.42
0.767	0.42	3.833	7.14	6.900	2.94	9.97	0.42
0.800	0.42	3.867	7.14	6.933	2.94	10.00	0.42
0.833	0.42	3.900	7.14	6.967	2.94	10.03	0.42
0.867	0.42	3.933	7.14	7.000	2.94	10.07	0.42
0.900	0.42	3.967	7.14	7.033	2.94	10.10	0.42
0.933	0.42	4.000	7.14	7.067	2.94	10.13	0.42
0.967	0.42	4.033	7.14	7.100	2.94	10.17	0.42
1.000	0.42	4.067	7.14	7.133	2.94	10.20	0.42
1.033	0.42	4.100	7.14	7.167	2.94	10.23	0.42
1.067	0.42	4.133	7.14	7.200	2.94	10.27	0.42
1.100	0.42	4.167	7.14	7.233	2.94	10.30	0.42
1.133	0.42	4.200	7.14	7.267	2.31	10.33	0.42
1.167	0.42	4.233	7.14	7.300	1.68	10.37	0.42
1.200	0.42	4.267	13.23	7.333	1.68	10.40	0.42
1.233	0.42	4.300	19.32	7.367	1.68	10.43	0.42
1.267	0.42	4.333	19.32	7.400	1.68	10.47	0.42
1.300	0.42	4.367	19.32	7.433	1.68	10.50	0.42
1.333	0.42	4.400	19.32	7.467	1.68	10.53	0.42
1.367	0.42	4.433	19.32	7.500	1.68	10.57	0.42
1.400	0.42	4.467	19.32	7.533	1.68	10.60	0.42
1.433	0.42	4.500	19.32	7.567	1.68	10.63	0.42
1.467	0.42	4.533	19.32	7.600	1.68	10.67	0.42
1.500	0.42	4.567	19.32	7.633	1.68	10.70	0.42
1.533	0.42	4.600	19.32	7.667	1.68	10.73	0.42
1.567	0.42	4.633	19.32	7.700	1.68	10.77	0.42
1.600	0.42	4.667	19.32	7.733	1.68	10.80	0.42
1.633	0.42	4.700	19.32	7.767	1.68	10.83	0.42
1.667	0.42	4.733	19.32	7.800	1.68	10.87	0.42
1.700	0.42	4.767	19.32	7.833	1.68	10.90	0.42
1.733	0.42	4.800	19.32	7.867	1.68	10.93	0.42
1.767	0.42	4.833	19.32	7.900	1.68	10.97	0.42
1.800	0.42	4.867	19.32	7.933	1.68	11.00	0.42
1.833	0.42	4.900	19.32	7.967	1.68	11.03	0.42
1.867	0.42	4.933	19.32	8.000	1.68	11.07	0.42
1.900	0.42	4.967	19.32	8.033	1.68	11.10	0.42
1.933	0.42	5.000	19.32	8.067	1.68	11.13	0.42
1.967	0.42	5.033	19.32	8.100	1.68	11.17	0.42
2.000	0.42	5.067	19.32	8.133	1.68	11.20	0.42
2.033	0.42	5.100	19.32	8.167	1.68	11.23	0.42
2.067	0.42	5.133	19.32	8.200	1.68	11.27	0.42
2.100	0.42	5.167	19.32	8.233	1.68	11.30	0.42
2.133	0.42	5.200	19.32	8.267	1.26	11.33	0.42
2.167	0.42	5.233	19.32	8.300	0.84	11.37	0.42
2.200	0.42	5.267	12.39	8.333	0.84	11.40	0.42
2.233	0.42	5.300	5.46	8.367	0.84	11.43	0.42
2.267	1.47	5.333	5.46	8.400	0.84	11.47	0.42
2.300	2.52	5.367	5.46	8.433	0.84	11.50	0.42
2.333	2.52	5.400	5.46	8.467	0.84	11.53	0.42
2.367	2.52	5.433	5.46	8.500	0.84	11.57	0.42
2.400	2.52	5.467	5.46	8.533	0.84	11.60	0.42
2.433	2.52	5.500	5.46	8.567	0.84	11.63	0.42
2.467	2.52	5.533	5.46	8.600	0.84	11.67	0.42
2.500	2.52	5.567	5.46	8.633	0.84	11.70	0.42
2.533	2.52	5.600	5.46	8.667	0.84	11.73	0.42
2.567	2.52	5.633	5.46	8.700	0.84	11.77	0.42
2.600	2.52	5.667	5.46	8.733	0.84	11.80	0.42
2.633	2.52	5.700	5.46	8.767	0.84	11.83	0.42
2.667	2.52	5.733	5.46	8.800	0.84	11.87	0.42
2.700	2.52	5.767	5.46	8.833	0.84	11.90	0.42
2.733	2.52	5.800	5.46	8.867	0.84	11.93	0.42
2.767	2.52	5.833	5.46	8.900	0.84	11.97	0.42
2.800	2.52	5.867	5.46	8.933	0.84	12.00	0.42
2.833	2.52	5.900	5.46	8.967	0.84	12.03	0.42
2.867	2.52	5.933	5.46	9.000	0.84	12.07	0.42
2.900	2.52	5.967	5.46	9.033	0.84	12.10	0.42
2.933	2.52	6.000	5.46	9.067	0.84	12.13	0.42
2.967	2.52	6.033	5.46	9.100	0.84	12.17	0.42
3.000	2.52	6.067	5.46	9.133	0.84	12.20	0.42
3.033	2.52	6.100	5.46	9.167	0.84	12.23	0.42
3.067	2.52	6.133	5.46	9.200	0.84	12.27	0.21

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.058 (i)
TIME TO PEAK (hrs)= 5.333
RUNOFF VOLUME (mm)= 18.264
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.435

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

DUHYD (2000)
Inlet Cap.= 0.949
#of Inlets= 1
Total(cms)= 0.9

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.06	5.33	18.26
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.06	5.33	18.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (1200)
ID= 1 DT= 2.0 min

Area (ha)= 25.19
Total Imp(%)= 88.60 Dir. Conn.(%)= 88.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	22.32	2.87
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	409.80	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	2.52	6.167	5.46	9.23	0.84
0.067	0.00	3.133	2.52	6.200	5.46	9.27	0.63
0.100	0.00	3.167	2.52	6.233	5.46	9.30	0.42
0.133	0.00	3.200	2.52	6.267	4.20	9.33	0.42
0.167	0.00	3.233	2.52	6.300	2.94	9.37	0.42
0.200	0.00	3.267	4.83	6.333	2.94	9.40	0.42
0.233	0.00	3.300	7.14	6.367	2.94	9.43	0.42
0.267	0.21	3.333	7.14	6.400	2.94	9.47	0.42
0.300	0.42	3.367	7.14	6.433	2.94	9.50	0.42
0.333	0.42	3.400	7.14	6.467	2.94	9.53	0.42
0.367	0.42	3.433	7.14	6.500	2.94	9.57	0.42
0.400	0.42	3.467	7.14	6.533	2.94	9.60	0.42
0.433	0.42	3.500	7.14	6.567	2.94	9.63	0.42
0.467	0.42	3.533	7.14	6.600	2.94	9.67	0.42
0.500	0.42	3.567	7.14	6.633	2.94	9.70	0.42
0.533	0.42	3.600	7.14	6.667	2.94	9.73	0.42
0.567	0.42	3.633	7.14	6.700	2.94	9.77	0.42
0.600	0.42	3.667	7.14	6.733	2.94	9.80	0.42
0.633	0.42	3.700	7.14	6.767	2.94	9.83	0.42
0.667	0.42	3.733	7.14	6.800	2.94	9.87	0.42
0.700	0.42	3.767	7.14	6.833	2.94	9.90	0.42
0.733	0.42	3.800	7.14	6.867	2.94	9.93	0.42
0.767	0.42	3.833	7.14	6.900	2.94	9.97	0.42
0.800	0.42	3.867	7.14	6.933	2.94	10.00	0.42
0.833	0.42	3.900	7.14	6.967	2.94	10.03	0.42
0.867	0.42	3.933	7.14	7.000	2.94	10.07	0.42
0.900	0.42	3.967	7.14	7.033	2.94	10.10	0.42
0.933	0.42	4.000	7.14	7.067	2.94	10.13	0.42
0.967	0.42	4.033	7.14	7.100	2.94	10.17	0.42
1.000	0.42	4.067	7.14	7.133	2.94	10.20	0.42
1.033	0.42	4.100	7.14	7.167	2.94	10.23	0.42
1.067	0.42	4.133	7.14	7.200	2.94	10.27	0.42
1.100	0.42	4.167	7.14	7.233	2.94	10.30	0.42
1.133	0.42	4.200	7.14	7.267	2.31	10.33	0.42
1.167	0.42	4.233	7.14	7.300	1.68	10.37	0.42
1.200	0.42	4.267	13.23	7.333	1.68	10.40	0.42
1.233	0.42	4.300	19.32	7.367	1.68	10.43	0.42
1.267	0.42	4.333	19.32	7.400	1.68	10.47	0.42
1.300	0.42	4.367	19.32	7.433	1.68	10.50	0.42
1.333	0.42	4.400	19.32	7.467	1.68	10.53	0.42
1.367	0.42	4.433	19.32	7.500	1.68	10.57	0.42
1.400	0.42	4.467	19.32	7.533	1.68	10.60	0.42
1.433	0.42	4.500	19.32	7.567	1.68	10.63	0.42
1.467	0.42	4.533	19.32	7.600	1.68	10.67	0.42
1.500	0.42	4.567	19.32	7.633	1.68	10.70	0.42
1.533	0.42	4.600	19.32	7.667	1.68	10.73	0.42
1.567	0.42	4.633	19.32	7.700	1.68	10.77	0.42
1.600	0.42	4.667	19.32	7.733	1.68	10.80	0.42
1.633	0.42	4.700	19.32	7.767	1.68	10.83	0.42
1.667	0.42	4.733	19.32	7.800	1.68	10.87	0.42
1.700	0.42	4.767	19.32	7.833	1.68	10.90	0.42
1.733	0.42	4.800	19.32	7.867	1.68	10.93	0.42
1.767	0.42	4.833	19.32	7.900	1.68	10.97	0.42
1.800	0.42	4.867	19.32	7.933	1.68	11.00	0.42
1.833	0.42	4.900	19.32	7.967	1.68	11.03	0.42
1.867	0.42	4.933	19.32	8.000	1.68	11.07	0.42
1.900	0.42	4.967	19.32	8.033	1.68	11.10	0.42
1.933	0.42	5.000	19.32	8.067	1.68	11.13	0.42
1.967	0.42	5.033	19.32	8.100	1.68	11.17	0.42
2.000	0.42	5.067	19.32	8.133	1.68	11.20	0.42
2.033	0.42	5.100	19.32	8.167	1.68	11.23	0.42
2.067	0.42	5.133	19.32	8.200	1.68	11.27	0.42
2.100	0.42	5.167	19.32	8.233	1.68	11.30	0.42
2.133	0.42	5.200	19.32	8.267	1.26	11.33	0.42
2.167	0.42	5.233	19.32	8.300	0.84	11.37	0.42
2.200	0.42	5.267	12.39	8.333	0.84	11.40	0.42
2.233	0.42	5.300	5.46	8.367	0.84	11.43	0.42
2.267	1.47	5.333	5.46	8.400	0.84	11.47	0.42
2.300	2.52	5.367	5.46	8.433	0.84	11.50	0.42
2.333	2.52	5.400	5.46	8.467	0.84	11.53	0.42
2.367	2.52	5.433	5.46	8.500	0.84	11.57	0.42
2.400	2.52	5.467	5.46	8.533	0.84	11.60	0.42
2.433	2.52	5.500	5.46	8.567	0.84	11.63	0.42
2.467	2.52	5.533	5.46	8.600	0.84	11.67	0.42
2.500	2.52	5.567	5.46	8.633	0.84	11.70	0.42
2.533	2.52	5.600	5.46	8.667	0.84	11.73	0.42
2.567	2.52	5.633	5.46	8.700	0.84	11.77	0.42
2.600	2.52	5.667	5.46	8.733	0.84	11.80	0.42
2.633	2.52	5.700	5.46	8.767	0.84	11.83	0.42
2.667	2.52	5.733	5.46	8.800	0.84	11.87	0.42
2.700	2.52	5.767	5.46	8.833	0.84	11.90	0.42
2.733	2.52	5.800	5.46	8.867	0.84	11.93	0.42
2.767	2.52	5.833	5.46	8.900	0.84	11.97	0.42
2.800	2.52	5.867	5.46	8.933	0.84	12.00	0.42
2.833	2.52	5.900	5.46	8.967	0.84	12.03	0.42
2.867	2.52	5.933	5.46	9.000	0.84	12.07	0.42
2.900	2.52	5.967	5.46	9.033	0.84	12.10	0.42
2.933	2.52	6.000	5.46	9.067	0.84	12.13	0.42
2.967	2.52	6.033	5.46	9.100	0.84	12.17	0.42
3.000	2.52	6.067	5.46	9.133	0.84	12.20	0.42
3.033	2.52	6.100	5.46	9.167	0.84	12.23	0.42
3.067	2.52	6.133	5.46	9.200	0.84	12.27	0.21

Max.Eff.Inten.(mm/hr)=	19.32	11.80	
over (min)	12.00	18.00	
Storage Coeff. (min)=	11.49 (ii)	17.49 (ii)	
Unit Hyd. Tpeak (min)=	12.00	18.00	
Unit Hyd. peak (cms)=	0.10	0.06	
			TOTALS
PEAK FLOW (cms)=	1.19	0.08	1.265 (iii)
TIME TO PEAK (hrs)=	5.23	5.33	5.23
RUNOFF VOLUME (mm)=	41.00	18.26	38.41
TOTAL RAINFALL (mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT =	0.98	0.43	0.91

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)	
1 + 2 = 3	

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	1.265	5.23	38.41
+ ID2= 2 (2000):	2.08	0.058	5.33	18.26
ID = 3 (2001):	27.27	1.321	5.23	36.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	
IN= 2---> OUT= 1	
DT= 2.0 min	

OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.2130	1.6215
0.0900	0.8290	0.2480	1.8230
0.1380	1.1410	0.2810	2.0230
0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	1.321	5.23	36.87
OUTFLOW: ID= 1 (1002)	27.270	0.091	8.50	33.49

PEAK FLOW REDUCTION [Qout/Qin](%)= 6.87
TIME SHIFT OF PEAK FLOW (min)=196.00
MAXIMUM STORAGE USED (ha.m.)= 0.8337

CALIB
STANDHYD (1300)
ID= 1 DT= 2.0 min

Area (ha)= 13.18
Total Imp(%)= 83.40 Dir. Conn.(%)= 83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	2.52	6.167	5.46	9.23	0.84
0.067	0.00	3.133	2.52	6.200	5.46	9.27	0.63
0.100	0.00	3.167	2.52	6.233	5.46	9.30	0.42
0.133	0.00	3.200	2.52	6.267	4.20	9.33	0.42
0.167	0.00	3.233	2.52	6.300	2.94	9.37	0.42
0.200	0.00	3.267	4.83	6.333	2.94	9.40	0.42
0.233	0.00	3.300	7.14	6.367	2.94	9.43	0.42
0.267	0.21	3.333	7.14	6.400	2.94	9.47	0.42
0.300	0.42	3.367	7.14	6.433	2.94	9.50	0.42
0.333	0.42	3.400	7.14	6.467	2.94	9.53	0.42
0.367	0.42	3.433	7.14	6.500	2.94	9.57	0.42
0.400	0.42	3.467	7.14	6.533	2.94	9.60	0.42
0.433	0.42	3.500	7.14	6.567	2.94	9.63	0.42
0.467	0.42	3.533	7.14	6.600	2.94	9.67	0.42
0.500	0.42	3.567	7.14	6.633	2.94	9.70	0.42
0.533	0.42	3.600	7.14	6.667	2.94	9.73	0.42
0.567	0.42	3.633	7.14	6.700	2.94	9.77	0.42
0.600	0.42	3.667	7.14	6.733	2.94	9.80	0.42
0.633	0.42	3.700	7.14	6.767	2.94	9.83	0.42
0.667	0.42	3.733	7.14	6.800	2.94	9.87	0.42
0.700	0.42	3.767	7.14	6.833	2.94	9.90	0.42
0.733	0.42	3.800	7.14	6.867	2.94	9.93	0.42
0.767	0.42	3.833	7.14	6.900	2.94	9.97	0.42
0.800	0.42	3.867	7.14	6.933	2.94	10.00	0.42
0.833	0.42	3.900	7.14	6.967	2.94	10.03	0.42
0.867	0.42	3.933	7.14	7.000	2.94	10.07	0.42
0.900	0.42	3.967	7.14	7.033	2.94	10.10	0.42
0.933	0.42	4.000	7.14	7.067	2.94	10.13	0.42
0.967	0.42	4.033	7.14	7.100	2.94	10.17	0.42
1.000	0.42	4.067	7.14	7.133	2.94	10.20	0.42
1.033	0.42	4.100	7.14	7.167	2.94	10.23	0.42
1.067	0.42	4.133	7.14	7.200	2.94	10.27	0.42
1.100	0.42	4.167	7.14	7.233	2.94	10.30	0.42
1.133	0.42	4.200	7.14	7.267	2.31	10.33	0.42
1.167	0.42	4.233	7.14	7.300	1.68	10.37	0.42
1.200	0.42	4.267	13.23	7.333	1.68	10.40	0.42
1.233	0.42	4.300	19.32	7.367	1.68	10.43	0.42
1.267	0.42	4.333	19.32	7.400	1.68	10.47	0.42
1.300	0.42	4.367	19.32	7.433	1.68	10.50	0.42
1.333	0.42	4.400	19.32	7.467	1.68	10.53	0.42
1.367	0.42	4.433	19.32	7.500	1.68	10.57	0.42
1.400	0.42	4.467	19.32	7.533	1.68	10.60	0.42
1.433	0.42	4.500	19.32	7.567	1.68	10.63	0.42
1.467	0.42	4.533	19.32	7.600	1.68	10.67	0.42
1.500	0.42	4.567	19.32	7.633	1.68	10.70	0.42
1.533	0.42	4.600	19.32	7.667	1.68	10.73	0.42
1.567	0.42	4.633	19.32	7.700	1.68	10.77	0.42
1.600	0.42	4.667	19.32	7.733	1.68	10.80	0.42
1.633	0.42	4.700	19.32	7.767	1.68	10.83	0.42
1.667	0.42	4.733	19.32	7.800	1.68	10.87	0.42
1.700	0.42	4.767	19.32	7.833	1.68	10.90	0.42
1.733	0.42	4.800	19.32	7.867	1.68	10.93	0.42
1.767	0.42	4.833	19.32	7.900	1.68	10.97	0.42

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               1.800     0.42 | 4.867    19.32 | 7.933     1.68 | 11.00     0.42
               1.833     0.42 | 4.900    19.32 | 7.967     1.68 | 11.03     0.42
               1.867     0.42 | 4.933    19.32 | 8.000     1.68 | 11.07     0.42
               1.900     0.42 | 4.967    19.32 | 8.033     1.68 | 11.10     0.42
               1.933     0.42 | 5.000    19.32 | 8.067     1.68 | 11.13     0.42
               1.967     0.42 | 5.033    19.32 | 8.100     1.68 | 11.17     0.42
               2.000     0.42 | 5.067    19.32 | 8.133     1.68 | 11.20     0.42
               2.033     0.42 | 5.100    19.32 | 8.167     1.68 | 11.23     0.42
               2.067     0.42 | 5.133    19.32 | 8.200     1.68 | 11.27     0.42
               2.100     0.42 | 5.167    19.32 | 8.233     1.68 | 11.30     0.42
               2.133     0.42 | 5.200    19.32 | 8.267     1.26 | 11.33     0.42
               2.167     0.42 | 5.233    19.32 | 8.300     0.84 | 11.37     0.42
               2.200     0.42 | 5.267    12.39 | 8.333     0.84 | 11.40     0.42
               2.233     0.42 | 5.300     5.46 | 8.367     0.84 | 11.43     0.42
               2.267     1.47 | 5.333     5.46 | 8.400     0.84 | 11.47     0.42
               2.300     2.52 | 5.367     5.46 | 8.433     0.84 | 11.50     0.42
               2.333     2.52 | 5.400     5.46 | 8.467     0.84 | 11.53     0.42
               2.367     2.52 | 5.433     5.46 | 8.500     0.84 | 11.57     0.42
               2.400     2.52 | 5.467     5.46 | 8.533     0.84 | 11.60     0.42
               2.433     2.52 | 5.500     5.46 | 8.567     0.84 | 11.63     0.42
               2.467     2.52 | 5.533     5.46 | 8.600     0.84 | 11.67     0.42
               2.500     2.52 | 5.567     5.46 | 8.633     0.84 | 11.70     0.42
               2.533     2.52 | 5.600     5.46 | 8.667     0.84 | 11.73     0.42
               2.567     2.52 | 5.633     5.46 | 8.700     0.84 | 11.77     0.42
               2.600     2.52 | 5.667     5.46 | 8.733     0.84 | 11.80     0.42
               2.633     2.52 | 5.700     5.46 | 8.767     0.84 | 11.83     0.42
               2.667     2.52 | 5.733     5.46 | 8.800     0.84 | 11.87     0.42
               2.700     2.52 | 5.767     5.46 | 8.833     0.84 | 11.90     0.42
               2.733     2.52 | 5.800     5.46 | 8.867     0.84 | 11.93     0.42
               2.767     2.52 | 5.833     5.46 | 8.900     0.84 | 11.97     0.42
               2.800     2.52 | 5.867     5.46 | 8.933     0.84 | 12.00     0.42
               2.833     2.52 | 5.900     5.46 | 8.967     0.84 | 12.03     0.42
               2.867     2.52 | 5.933     5.46 | 9.000     0.84 | 12.07     0.42
               2.900     2.52 | 5.967     5.46 | 9.033     0.84 | 12.10     0.42
               2.933     2.52 | 6.000     5.46 | 9.067     0.84 | 12.13     0.42
               2.967     2.52 | 6.033     5.46 | 9.100     0.84 | 12.17     0.42
               3.000     2.52 | 6.067     5.46 | 9.133     0.84 | 12.20     0.42
               3.033     2.52 | 6.100     5.46 | 9.167     0.84 | 12.23     0.42
               3.067     2.52 | 6.133     5.46 | 9.200     0.84 | 12.27     0.21

     Max.Eff.Inten.(mm/hr)=       19.32         11.80
                over (min)        10.00         18.00
     Storage Coeff.  (min)=        9.46 (ii)    16.61 (ii)
     Unit Hyd. Tpeak (min)=       10.00         18.00
     Unit Hyd. peak  (cms)=        0.12          0.07
                                                          *TOTALS*
     PEAK FLOW       (cms)=        0.59          0.06         0.647 (iii)
     TIME TO PEAK    (hrs)=        5.23          5.33          5.23
     RUNOFF VOLUME    (mm)=       41.00         18.26         37.23
     TOTAL RAINFALL   (mm)=       42.00         42.00         42.00
     RUNOFF COEFFICIENT   =        0.98          0.43          0.89

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0     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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 --------------------
 | RESERVOIR(  1001)|      OVERFLOW IS OFF
 | IN= 2---> OUT= 1 |
 | DT=  2.0 min     |      OUTFLOW     STORAGE    |  OUTFLOW     STORAGE
 --------------------       (cms)      (ha.m.)    |   (cms)      (ha.m.)
                            0.0000      0.0000    |   0.1120      0.6810
                            0.0470      0.3640    |   0.1300      0.7605
                            0.0720      0.4900    |   0.1470      0.8395
                            0.0890      0.5750    |   0.0000      0.0000

                                 AREA      QPEAK      TPEAK        R.V.
                                 (ha)      (cms)      (hrs)        (mm)
   INFLOW : ID= 2 (  1300)      13.180       0.647       5.23       37.23
   OUTFLOW: ID= 1 (  1001)      13.180       0.053       8.37       35.07

                   PEAK   FLOW   REDUCTION [Qout/Qin](%)=  8.26
                   TIME SHIFT OF PEAK FLOW        (min)=188.00
                   MAXIMUM  STORAGE   USED       (ha.m.)=  0.3962

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 --------------------
 | ADD HYD  (  2002)|
 |   1 +  2 =  3    |           AREA    QPEAK    TPEAK      R.V.
 --------------------           (ha)    (cms)    (hrs)      (mm)
         ID1= 1 (  1001):      13.18   0.053     8.37     35.07
       + ID2= 2 (  1002):      27.27   0.091     8.50     33.49
         ================================================
         ID = 3 (  2002):      40.45   0.144     8.43     34.00

      NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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 | ADD HYD  (  2003)|
 |   1 +  2 =  3    |           AREA    QPEAK    TPEAK      R.V.
 --------------------           (ha)    (cms)    (hrs)      (mm)
         ID1= 1 (  1000):      19.21   0.249     6.37     16.28
       + ID2= 2 (  2002):      40.45   0.144     8.43     34.00
         ================================================
         ID = 3 (  2003):      59.66   0.380     6.47     28.30

      NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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 --------------------
 | CALIB            |
 | NASHYD   (  2100)|   Area    (ha)=   3.11   Curve Number   (CN)= 87.0
 |ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
 --------------------   U.H. Tp(hrs)=   0.14

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
               0.033     0.00 | 3.100     2.52 | 6.167     5.46 |  9.23     0.84
               0.067     0.00 | 3.133     2.52 | 6.200     5.46 |  9.27     0.63
               0.100     0.00 | 3.167     2.52 | 6.233     5.46 |  9.30     0.42
               0.133     0.00 | 3.200     2.52 | 6.267     4.20 |  9.33     0.42
               0.167     0.00 | 3.233     2.52 | 6.300     2.94 |  9.37     0.42
               0.200     0.00 | 3.267     4.83 | 6.333     2.94 |  9.40     0.42
               0.233     0.00 | 3.300     7.14 | 6.367     2.94 |  9.43     0.42
               0.267     0.21 | 3.333     7.14 | 6.400     2.94 |  9.47     0.42
               0.300     0.42 | 3.367     7.14 | 6.433     2.94 |  9.50     0.42
               0.333     0.42 | 3.400     7.14 | 6.467     2.94 |  9.53     0.42
               0.367     0.42 | 3.433     7.14 | 6.500     2.94 |  9.57     0.42
               0.400     0.42 | 3.467     7.14 | 6.533     2.94 |  9.60     0.42
               0.433     0.42 | 3.500     7.14 | 6.567     2.94 |  9.63     0.42
               0.467     0.42 | 3.533     7.14 | 6.600     2.94 |  9.67     0.42
               0.500     0.42 | 3.567     7.14 | 6.633     2.94 |  9.70     0.42
               0.533     0.42 | 3.600     7.14 | 6.667     2.94 |  9.73     0.42
               0.567     0.42 | 3.633     7.14 | 6.700     2.94 |  9.77     0.42
               0.600     0.42 | 3.667     7.14 | 6.733     2.94 |  9.80     0.42
               0.633     0.42 | 3.700     7.14 | 6.767     2.94 |  9.83     0.42
               0.667     0.42 | 3.733     7.14 | 6.800     2.94 |  9.87     0.42
               0.700     0.42 | 3.767     7.14 | 6.833     2.94 |  9.90     0.42
               0.733     0.42 | 3.800     7.14 | 6.867     2.94 |  9.93     0.42
               0.767     0.42 | 3.833     7.14 | 6.900     2.94 |  9.97     0.42
               0.800     0.42 | 3.867     7.14 | 6.933     2.94 | 10.00     0.42
               0.833     0.42 | 3.900     7.14 | 6.967     2.94 | 10.03     0.42
               0.867     0.42 | 3.933     7.14 | 7.000     2.94 | 10.07     0.42
               0.900     0.42 | 3.967     7.14 | 7.033     2.94 | 10.10     0.42
               0.933     0.42 | 4.000     7.14 | 7.067     2.94 | 10.13     0.42
               0.967     0.42 | 4.033     7.14 | 7.100     2.94 | 10.17     0.42
               1.000     0.42 | 4.067     7.14 | 7.133     2.94 | 10.20     0.42
               1.033     0.42 | 4.100     7.14 | 7.167     2.94 | 10.23     0.42
               1.067     0.42 | 4.133     7.14 | 7.200     2.94 | 10.27     0.42
               1.100     0.42 | 4.167     7.14 | 7.233     2.94 | 10.30     0.42
               1.133     0.42 | 4.200     7.14 | 7.267     2.31 | 10.33     0.42
               1.167     0.42 | 4.233     7.14 | 7.300     1.68 | 10.37     0.42
               1.200     0.42 | 4.267    13.23 | 7.333     1.68 | 10.40     0.42
               1.233     0.42 | 4.300    19.32 | 7.367     1.68 | 10.43     0.42
               1.267     0.42 | 4.333    19.32 | 7.400     1.68 | 10.47     0.42
               1.300     0.42 | 4.367    19.32 | 7.433     1.68 | 10.50     0.42
               1.333     0.42 | 4.400    19.32 | 7.467     1.68 | 10.53     0.42
               1.367     0.42 | 4.433    19.32 | 7.500     1.68 | 10.57     0.42
               1.400     0.42 | 4.467    19.32 | 7.533     1.68 | 10.60     0.42
               1.433     0.42 | 4.500    19.32 | 7.567     1.68 | 10.63     0.42
               1.467     0.42 | 4.533    19.32 | 7.600     1.68 | 10.67     0.42
               1.500     0.42 | 4.567    19.32 | 7.633     1.68 | 10.70     0.42
               1.533     0.42 | 4.600    19.32 | 7.667     1.68 | 10.73     0.42
               1.567     0.42 | 4.633    19.32 | 7.700     1.68 | 10.77     0.42
               1.600     0.42 | 4.667    19.32 | 7.733     1.68 | 10.80     0.42
               1.633     0.42 | 4.700    19.32 | 7.767     1.68 | 10.83     0.42
               1.667     0.42 | 4.733    19.32 | 7.800     1.68 | 10.87     0.42
               1.700     0.42 | 4.767    19.32 | 7.833     1.68 | 10.90     0.42
               1.733     0.42 | 4.800    19.32 | 7.867     1.68 | 10.93     0.42
               1.767     0.42 | 4.833    19.32 | 7.900     1.68 | 10.97     0.42
               1.800     0.42 | 4.867    19.32 | 7.933     1.68 | 11.00     0.42
               1.833     0.42 | 4.900    19.32 | 7.967     1.68 | 11.03     0.42
               1.867     0.42 | 4.933    19.32 | 8.000     1.68 | 11.07     0.42
               1.900     0.42 | 4.967    19.32 | 8.033     1.68 | 11.10     0.42
               1.933     0.42 | 5.000    19.32 | 8.067     1.68 | 11.13     0.42
               1.967     0.42 | 5.033    19.32 | 8.100     1.68 | 11.17     0.42
               2.000     0.42 | 5.067    19.32 | 8.133     1.68 | 11.20     0.42
               2.033     0.42 | 5.100    19.32 | 8.167     1.68 | 11.23     0.42
               2.067     0.42 | 5.133    19.32 | 8.200     1.68 | 11.27     0.42
               2.100     0.42 | 5.167    19.32 | 8.233     1.68 | 11.30     0.42
               2.133     0.42 | 5.200    19.32 | 8.267     1.26 | 11.33     0.42
               2.167     0.42 | 5.233    19.32 | 8.300     0.84 | 11.37     0.42
               2.200     0.42 | 5.267    12.39 | 8.333     0.84 | 11.40     0.42
               2.233     0.42 | 5.300     5.46 | 8.367     0.84 | 11.43     0.42
               2.267     1.47 | 5.333     5.46 | 8.400     0.84 | 11.47     0.42
               2.300     2.52 | 5.367     5.46 | 8.433     0.84 | 11.50     0.42
               2.333     2.52 | 5.400     5.46 | 8.467     0.84 | 11.53     0.42
               2.367     2.52 | 5.433     5.46 | 8.500     0.84 | 11.57     0.42
               2.400     2.52 | 5.467     5.46 | 8.533     0.84 | 11.60     0.42
               2.433     2.52 | 5.500     5.46 | 8.567     0.84 | 11.63     0.42
               2.467     2.52 | 5.533     5.46 | 8.600     0.84 | 11.67     0.42
               2.500     2.52 | 5.567     5.46 | 8.633     0.84 | 11.70     0.42
               2.533     2.52 | 5.600     5.46 | 8.667     0.84 | 11.73     0.42
               2.567     2.52 | 5.633     5.46 | 8.700     0.84 | 11.77     0.42
               2.600     2.52 | 5.667     5.46 | 8.733     0.84 | 11.80     0.42
               2.633     2.52 | 5.700     5.46 | 8.767     0.84 | 11.83     0.42
               2.667     2.52 | 5.733     5.46 | 8.800     0.84 | 11.87     0.42
               2.700     2.52 | 5.767     5.46 | 8.833     0.84 | 11.90     0.42
               2.733     2.52 | 5.800     5.46 | 8.867     0.84 | 11.93     0.42
               2.767     2.52 | 5.833     5.46 | 8.900     0.84 | 11.97     0.42
               2.800     2.52 | 5.867     5.46 | 8.933     0.84 | 12.00     0.42
               2.833     2.52 | 5.900     5.46 | 8.967     0.84 | 12.03     0.42
               2.867     2.52 | 5.933     5.46 | 9.000     0.84 | 12.07     0.42
               2.900     2.52 | 5.967     5.46 | 9.033     0.84 | 12.10     0.42
               2.933     2.52 | 6.000     5.46 | 9.067     0.84 | 12.13     0.42
               2.967     2.52 | 6.033     5.46 | 9.100     0.84 | 12.17     0.42
               3.000     2.52 | 6.067     5.46 | 9.133     0.84 | 12.20     0.42
               3.033     2.52 | 6.100     5.46 | 9.167     0.84 | 12.23     0.42
               3.067     2.52 | 6.133     5.46 | 9.200     0.84 | 12.27     0.21

     Unit Hyd Qpeak  (cms)=   0.848

     PEAK FLOW       (cms)=   0.097 (i)
     TIME TO PEAK    (hrs)=   5.267
     RUNOFF VOLUME    (mm)=  18.261
     TOTAL RAINFALL   (mm)=  42.000
     RUNOFF COEFFICIENT   =   0.435

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

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 | ADD HYD  (  0005)|
 |   1 +  2 =  3    |           AREA    QPEAK    TPEAK      R.V.
 --------------------           (ha)    (cms)    (hrs)      (mm)
         ID1= 1 (  2003):      59.66   0.380     6.47     28.30
       + ID2= 2 (  2100):       3.11   0.097     5.27     18.26
         ================================================
         ID = 3 (  0005):      62.77   0.408     6.30     27.80

      NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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 | CALIB            |
 | NASHYD   (  2200)|   Area    (ha)=   5.60   Curve Number   (CN)= 87.0
 |ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
 --------------------   U.H. Tp(hrs)=   0.44

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
               0.033     0.00 | 3.100     2.52 | 6.167     5.46 |  9.23     0.84
               0.067     0.00 | 3.133     2.52 | 6.200     5.46 |  9.27     0.63
               0.100     0.00 | 3.167     2.52 | 6.233     5.46 |  9.30     0.42
               0.133     0.00 | 3.200     2.52 | 6.267     4.20 |  9.33     0.42
               0.167     0.00 | 3.233     2.52 | 6.300     2.94 |  9.37     0.42
               0.200     0.00 | 3.267     4.83 | 6.333     2.94 |  9.40     0.42
               0.233     0.00 | 3.300     7.14 | 6.367     2.94 |  9.43     0.42
               0.267     0.21 | 3.333     7.14 | 6.400     2.94 |  9.47     0.42
               0.300     0.42 | 3.367     7.14 | 6.433     2.94 |  9.50     0.42
               0.333     0.42 | 3.400     7.14 | 6.467     2.94 |  9.53     0.42
               0.367     0.42 | 3.433     7.14 | 6.500     2.94 |  9.57     0.42
               0.400     0.42 | 3.467     7.14 | 6.533     2.94 |  9.60     0.42
               0.433     0.42 | 3.500     7.14 | 6.567     2.94 |  9.63     0.42
               0.467     0.42 | 3.533     7.14 | 6.600     2.94 |  9.67     0.42
               0.500     0.42 | 3.567     7.14 | 6.633     2.94 |  9.70     0.42
               0.533     0.42 | 3.600     7.14 | 6.667     2.94 |  9.73     0.42
               0.567     0.42 | 3.633     7.14 | 6.700     2.94 |  9.77     0.42
               0.600     0.42 | 3.667     7.14 | 6.733     2.94 |  9.80     0.42
               0.633     0.42 | 3.700     7.14 | 6.767     2.94 |  9.83     0.42
               0.667     0.42 | 3.733     7.14 | 6.800     2.94 |  9.87     0.42
               0.700     0.42 | 3.767     7.14 | 6.833     2.94 |  9.90     0.42
               0.733     0.42 | 3.800     7.14 | 6.867     2.94 |  9.93     0.42
               0.767     0.42 | 3.833     7.14 | 6.900     2.94 |  9.97     0.42
               0.800     0.42 | 3.867     7.14 | 6.933     2.94 | 10.00     0.42
               0.833     0.42 | 3.900     7.14 | 6.967     2.94 | 10.03     0.42
               0.867     0.42 | 3.933     7.14 | 7.000     2.94 | 10.07     0.42
               0.900     0.42 | 3.967     7.14 | 7.033     2.94 | 10.10     0.42
               0.933     0.42 | 4.000     7.14 | 7.067     2.94 | 10.13     0.42
               0.967     0.42 | 4.033     7.14 | 7.100     2.94 | 10.17     0.42
               1.000     0.42 | 4.067     7.14 | 7.133     2.94 | 10.20     0.42
               1.033     0.42 | 4.100     7.14 | 7.167     2.94 | 10.23     0.42
               1.067     0.42 | 4.133     7.14 | 7.200     2.94 | 10.27     0.42
               1.100     0.42 | 4.167     7.14 | 7.233     2.94 | 10.30     0.42
               1.133     0.42 | 4.200     7.14 | 7.267     2.31 | 10.33     0.42
               1.167     0.42 | 4.233     7.14 | 7.300     1.68 | 10.37     0.42
               1.200     0.42 | 4.267    13.23 | 7.333     1.68 | 10.40     0.42
               1.233     0.42 | 4.300    19.32 | 7.367     1.68 | 10.43     0.42
               1.267     0.42 | 4.333    19.32 | 7.400     1.68 | 10.47     0.42
               1.300     0.42 | 4.367    19.32 | 7.433     1.68 | 10.50     0.42
               1.333     0.42 | 4.400    19.32 | 7.467     1.68 | 10.53     0.42
               1.367     0.42 | 4.433    19.32 | 7.500     1.68 | 10.57     0.42
               1.400     0.42 | 4.467    19.32 | 7.533     1.68 | 10.60     0.42
               1.433     0.42 | 4.500    19.32 | 7.567     1.68 | 10.63     0.42
               1.467     0.42 | 4.533    19.32 | 7.600     1.68 | 10.67     0.42
               1.500     0.42 | 4.567    19.32 | 7.633     1.68 | 10.70     0.42
               1.533     0.42 | 4.600    19.32 | 7.667     1.68 | 10.73     0.42
               1.567     0.42 | 4.633    19.32 | 7.700     1.68 | 10.77     0.42
               1.600     0.42 | 4.667    19.32 | 7.733     1.68 | 10.80     0.42
               1.633     0.42 | 4.700    19.32 | 7.767     1.68 | 10.83     0.42
               1.667     0.42 | 4.733    19.32 | 7.800     1.68 | 10.87     0.42
               1.700     0.42 | 4.767    19.32 | 7.833     1.68 | 10.90     0.42
               1.733     0.42 | 4.800    19.32 | 7.867     1.68 | 10.93     0.42
               1.767     0.42 | 4.833    19.32 | 7.900     1.68 | 10.97     0.42
               1.800     0.42 | 4.867    19.32 | 7.933     1.68 | 11.00     0.42
               1.833     0.42 | 4.900    19.32 | 7.967     1.68 | 11.03     0.42
               1.867     0.42 | 4.933    19.32 | 8.000     1.68 | 11.07     0.42
               1.900     0.42 | 4.967    19.32 | 8.033     1.68 | 11.10     0.42
               1.933     0.42 | 5.000    19.32 | 8.067     1.68 | 11.13     0.42
               1.967     0.42 | 5.033    19.32 | 8.100     1.68 | 11.17     0.42
               2.000     0.42 | 5.067    19.32 | 8.133     1.68 | 11.20     0.42
               2.033     0.42 | 5.100    19.32 | 8.167     1.68 | 11.23     0.42
               2.067     0.42 | 5.133    19.32 | 8.200     1.68 | 11.27     0.42
               2.100     0.42 | 5.167    19.32 | 8.233     1.68 | 11.30     0.42
               2.133     0.42 | 5.200    19.32 | 8.267     1.26 | 11.33     0.42
               2.167     0.42 | 5.233    19.32 | 8.300     0.84 | 11.37     0.42
               2.200     0.42 | 5.267    12.39 | 8.333     0.84 | 11.40     0.42
               2.233     0.42 | 5.300     5.46 | 8.367     0.84 | 11.43     0.42
               2.267     1.47 | 5.333     5.46 | 8.400     0.84 | 11.47     0.42
               2.300     2.52 | 5.367     5.46 | 8.433     0.84 | 11.50     0.42
               2.333     2.52 | 5.400     5.46 | 8.467     0.84 | 11.53     0.42
               2.367     2.52 | 5.433     5.46 | 8.500     0.84 | 11.57     0.42
               2.400     2.52 | 5.467     5.46 | 8.533     0.84 | 11.60     0.42
               2.433     2.52 | 5.500     5.46 | 8.567     0.84 | 11.63     0.42
               2.467     2.52 | 5.533     5.46 | 8.600     0.84 | 11.67     0.42
               2.500     2.52 | 5.567     5.46 | 8.633     0.84 | 11.70     0.42
               2.533     2.52 | 5.600     5.46 | 8.667     0.84 | 11.73     0.42
               2.567     2.52 | 5.633     5.46 | 8.700     0.84 | 11.77     0.42
               2.600     2.52 | 5.667     5.46 | 8.733     0.84 | 11.80     0.42
               2.633     2.52 | 5.700     5.46 | 8.767     0.84 | 11.83     0.42
               2.667     2.52 | 5.733     5.46 | 8.800     0.84 | 11.87     0.42
               2.700     2.52 | 5.767     5.46 | 8.833     0.84 | 11.90     0.42
               2.733     2.52 | 5.800     5.46 | 8.867     0.84 | 11.93     0.42
               2.767     2.52 | 5.833     5.46 | 8.900     0.84 | 11.97     0.42
               2.800     2.52 | 5.867     5.46 | 8.933     0.84 | 12.00     0.42
               2.833     2.52 | 5.900     5.46 | 8.967     0.84 | 12.03     0.42
               2.867     2.52 | 5.933     5.46 | 9.000     0.84 | 12.07     0.42
               2.900     2.52 | 5.967     5.46 | 9.033     0.84 | 12.10     0.42
               2.933     2.52 | 6.000     5.46 | 9.067     0.84 | 12.13     0.42
               2.967     2.52 | 6.033     5.46 | 9.100     0.84 | 12.17     0.42
               3.000     2.52 | 6.067     5.46 | 9.133     0.84 | 12.20     0.42
               3.033     2.52 | 6.100     5.46 | 9.167     0.84 | 12.23     0.42
               3.067     2.52 | 6.133     5.46 | 9.200     0.84 | 12.27     0.21
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Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.134 (i)
TIME TO PEAK (hrs)= 5.433
RUNOFF VOLUME (mm)= 18.264
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.435

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

ADD HYD (0007)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2200):		5.60	0.134	5.43	18.26
+ ID2= 2 (0005):		62.77	0.408	6.30	27.80
ID = 3 (0007):		68.37	0.481	6.13	27.02

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2300)	Area	(ha)=	2.00	Curve Number	(CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	2.52	6.167	5.46	9.23	0.84
0.067	0.00	3.133	2.52	6.200	5.46	9.27	0.63
0.100	0.00	3.167	2.52	6.233	5.46	9.30	0.42
0.133	0.00	3.200	2.52	6.267	4.20	9.33	0.42
0.167	0.00	3.233	2.52	6.300	2.94	9.37	0.42
0.200	0.00	3.267	4.83	6.333	2.94	9.40	0.42
0.233	0.00	3.300	7.14	6.367	2.94	9.43	0.42
0.267	0.21	3.333	7.14	6.400	2.94	9.47	0.42
0.300	0.42	3.367	7.14	6.433	2.94	9.50	0.42
0.333	0.42	3.400	7.14	6.467	2.94	9.53	0.42
0.367	0.42	3.433	7.14	6.500	2.94	9.57	0.42
0.400	0.42	3.467	7.14	6.533	2.94	9.60	0.42
0.433	0.42	3.500	7.14	6.567	2.94	9.63	0.42
0.467	0.42	3.533	7.14	6.600	2.94	9.67	0.42
0.500	0.42	3.567	7.14	6.633	2.94	9.70	0.42
0.533	0.42	3.600	7.14	6.667	2.94	9.73	0.42
0.567	0.42	3.633	7.14	6.700	2.94	9.77	0.42
0.600	0.42	3.667	7.14	6.733	2.94	9.80	0.42
0.633	0.42	3.700	7.14	6.767	2.94	9.83	0.42
0.667	0.42	3.733	7.14	6.800	2.94	9.87	0.42
0.700	0.42	3.767	7.14	6.833	2.94	9.90	0.42
0.733	0.42	3.800	7.14	6.867	2.94	9.93	0.42
0.767	0.42	3.833	7.14	6.900	2.94	9.97	0.42
0.800	0.42	3.867	7.14	6.933	2.94	10.00	0.42
0.833	0.42	3.900	7.14	6.967	2.94	10.03	0.42
0.867	0.42	3.933	7.14	7.000	2.94	10.07	0.42
0.900	0.42	3.967	7.14	7.033	2.94	10.10	0.42
0.933	0.42	4.000	7.14	7.067	2.94	10.13	0.42
0.967	0.42	4.033	7.14	7.100	2.94	10.17	0.42
1.000	0.42	4.067	7.14	7.133	2.94	10.20	0.42
1.033	0.42	4.100	7.14	7.167	2.94	10.23	0.42
1.067	0.42	4.133	7.14	7.200	2.94	10.27	0.42
1.100	0.42	4.167	7.14	7.233	2.94	10.30	0.42
1.133	0.42	4.200	7.14	7.267	2.31	10.33	0.42
1.167	0.42	4.233	7.14	7.300	1.68	10.37	0.42
1.200	0.42	4.267	13.23	7.333	1.68	10.40	0.42
1.233	0.42	4.300	19.32	7.367	1.68	10.43	0.42
1.267	0.42	4.333	19.32	7.400	1.68	10.47	0.42
1.300	0.42	4.367	19.32	7.433	1.68	10.50	0.42
1.333	0.42	4.400	19.32	7.467	1.68	10.53	0.42
1.367	0.42	4.433	19.32	7.500	1.68	10.57	0.42
1.400	0.42	4.467	19.32	7.533	1.68	10.60	0.42
1.433	0.42	4.500	19.32	7.567	1.68	10.63	0.42
1.467	0.42	4.533	19.32	7.600	1.68	10.67	0.42
1.500	0.42	4.567	19.32	7.633	1.68	10.70	0.42
1.533	0.42	4.600	19.32	7.667	1.68	10.73	0.42
1.567	0.42	4.633	19.32	7.700	1.68	10.77	0.42
1.600	0.42	4.667	19.32	7.733	1.68	10.80	0.42
1.633	0.42	4.700	19.32	7.767	1.68	10.83	0.42
1.667	0.42	4.733	19.32	7.800	1.68	10.87	0.42
1.700	0.42	4.767	19.32	7.833	1.68	10.90	0.42
1.733	0.42	4.800	19.32	7.867	1.68	10.93	0.42
1.767	0.42	4.833	19.32	7.900	1.68	10.97	0.42
1.800	0.42	4.867	19.32	7.933	1.68	11.00	0.42
1.833	0.42	4.900	19.32	7.967	1.68	11.03	0.42
1.867	0.42	4.933	19.32	8.000	1.68	11.07	0.42
1.900	0.42	4.967	19.32	8.033	1.68	11.10	0.42
1.933	0.42	5.000	19.32	8.067	1.68	11.13	0.42
1.967	0.42	5.033	19.32	8.100	1.68	11.17	0.42
2.000	0.42	5.067	19.32	8.133	1.68	11.20	0.42
2.033	0.42	5.100	19.32	8.167	1.68	11.23	0.42
2.067	0.42	5.133	19.32	8.200	1.68	11.27	0.42
2.100	0.42	5.167	19.32	8.233	1.68	11.30	0.42
2.133	0.42	5.200	19.32	8.267	1.26	11.33	0.42
2.167	0.42	5.233	19.32	8.300	0.84	11.37	0.42
2.200	0.42	5.267	12.39	8.333	0.84	11.40	0.42
2.233	0.42	5.300	5.46	8.367	0.84	11.43	0.42
2.267	1.47	5.333	5.46	8.400	0.84	11.47	0.42
2.300	2.52	5.367	5.46	8.433	0.84	11.50	0.42
2.333	2.52	5.400	5.46	8.467	0.84	11.53	0.42
2.367	2.52	5.433	5.46	8.500	0.84	11.57	0.42
2.400	2.52	5.467	5.46	8.533	0.84	11.60	0.42
2.433	2.52	5.500	5.46	8.567	0.84	11.63	0.42
2.467	2.52	5.533	5.46	8.600	0.84	11.67	0.42
2.500	2.52	5.567	5.46	8.633	0.84	11.70	0.42
2.533	2.52	5.600	5.46	8.667	0.84	11.73	0.42
2.567	2.52	5.633	5.46	8.700	0.84	11.77	0.42
2.600	2.52	5.667	5.46	8.733	0.84	11.80	0.42
2.633	2.52	5.700	5.46	8.767	0.84	11.83	0.42
2.667	2.52	5.733	5.46	8.800	0.84	11.87	0.42
2.700	2.52	5.767	5.46	8.833	0.84	11.90	0.42
2.733	2.52	5.800	5.46	8.867	0.84	11.93	0.42
2.767	2.52	5.833	5.46	8.900	0.84	11.97	0.42
2.800	2.52	5.867	5.46	8.933	0.84	12.00	0.42
2.833	2.52	5.900	5.46	8.967	0.84	12.03	0.42
2.867	2.52	5.933	5.46	9.000	0.84	12.07	0.42
2.900	2.52	5.967	5.46	9.033	0.84	12.10	0.42
2.933	2.52	6.000	5.46	9.067	0.84	12.13	0.42
2.967	2.52	6.033	5.46	9.100	0.84	12.17	0.42
3.000	2.52	6.067	5.46	9.133	0.84	12.20	0.42
3.033	2.52	6.100	5.46	9.167	0.84	12.23	0.42
3.067	2.52	6.133	5.46	9.200	0.84	12.27	0.21

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 5.433
RUNOFF VOLUME (mm)= 18.264
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.435

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

ADD HYD (0009)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2300):		2.00	0.048	5.43	18.26
+ ID2= 2 (0007):		68.37	0.481	6.13	27.02
ID = 3 (0009):		70.37	0.514	5.80	26.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2400)	Area	(ha)=	0.76	Curve Number	(CN)= 87.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.04		

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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.015 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 10.900
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.260

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

CALIB					
STANDHYD (3500)	Area	(ha)=	3.52		
ID= 1 DT= 5.0 min	Total Imp(%)=		99.90	Dir. Conn.(%)=	99.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.52	0.00
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.19	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

				TOTALS
Max.Eff.Inten.(mm/hr)=		19.32	11.88	
over (min)		5.00	10.00	
Storage Coeff. (min)=		6.37 (ii)	7.23 (ii)	
Unit Hyd. Tpeak (min)=		5.00	10.00	
Unit Hyd. peak (cms)=		0.18	0.14	
PEAK FLOW	(cms)=	0.19	0.00	0.189 (iii)
TIME TO PEAK	(hrs)=	5.25	5.25	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	40.98
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.98

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2400):		0.76	0.015	5.25	10.90
+ ID2= 2 (3500):		3.52	0.189	5.25	40.98
ID = 3 (0028):		4.28	0.204	5.25	35.64

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (3100)	Area	(ha)=	25.24		
ID= 1 DT= 5.0 min	Total Imp(%)=		85.90	Dir. Conn.(%)=	85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42

1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Max.Eff.Inten.(mm/hr)=		19.32	11.45
over (min)		10.00	30.00
Storage Coeff. (min)=		11.50 (ii)	28.29 (ii)
Unit Hyd. Tpeak (min)=		10.00	30.00
Unit Hyd. peak (cms)=		0.10	0.04
			TOTALS
PEAK FLOW	(cms)=	1.16	0.08	1.232 (iii)
TIME TO PEAK	(hrs)=	5.25	5.50	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	37.79
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB	
STANDHYD (3200)	Area (ha)= 7.11
ID= 1 DT= 5.0 min	Total Imp(%)= 88.30 Dir. Conn.(%)= 88.30

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.28	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	217.72	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Max.Eff.Inten.(mm/hr)=		19.32	11.45
over (min)		10.00	25.00
Storage Coeff. (min)=		7.86 (ii)	24.66 (ii)
Unit Hyd. Tpeak (min)=		10.00	25.00
Unit Hyd. peak (cms)=		0.13	0.05
			TOTALS
PEAK FLOW	(cms)=	0.34	0.02	0.356 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	38.34
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.91

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (3100):	25.24	1.232	5.25	37.79
	+ ID2= 2 (3200):	7.11	0.356	5.25	38.34
	ID = 3 (0020):	32.35	1.588	5.25	37.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (3300)	Area (ha)= 9.32
ID= 1 DT= 5.0 min	Total Imp(%)= 78.80 Dir. Conn.(%)= 78.80

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.34	1.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	249.27	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Max.Eff.Inten.(mm/hr)=		19.32	11.45
over (min)		5.00	25.00
Storage Coeff. (min)=		6.78 (ii)	23.58 (ii)
Unit Hyd. Tpeak (min)=		5.00	25.00
Unit Hyd. peak (cms)=		0.18	0.05
			TOTALS
PEAK FLOW	(cms)=	0.18	0.02	0.203 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	35.90
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.85

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0020):	32.35	1.588	5.25	37.91
	+ ID2= 2 (3300):	9.32	0.437	5.25	36.18
	ID = 3 (0022):	41.67	2.024	5.25	37.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (3400)	Area (ha)= 4.34
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60 Dir. Conn.(%)= 77.60

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Max.Eff.Inten.(mm/hr)=		19.32	11.45
over (min)		10.00	25.00
Storage Coeff. (min)=		8.53 (ii)	25.32 (ii)
Unit Hyd. Tpeak (min)=		10.00	30.00
Unit Hyd. peak (cms)=		0.12	0.04
			TOTALS
PEAK FLOW	(cms)=	0.39	0.05	0.437 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	36.18
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.86

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0020):	32.35	1.588	5.25	37.91
	+ ID2= 2 (3300):	9.32	0.437	5.25	36.18
	ID = 3 (0022):	41.67	2.024	5.25	37.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (3400)	Area (ha)= 4.34
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60 Dir. Conn.(%)= 77.60

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Max.Eff.Inten.(mm/hr)=		19.32	11.45
over (min)		5.00	25.00
Storage Coeff. (min)=		6.78 (ii)	23.58 (ii)
Unit Hyd. Tpeak (min)=		5.00	25.00
Unit Hyd. peak (cms)=		0.18	0.05
			TOTALS
PEAK FLOW	(cms)=	0.18	0.02	0.203 (iii)
TIME TO PEAK	(hrs)=	5.25	5.42	5.25
RUNOFF VOLUME	(mm)=	41.00	18.26	35.90
TOTAL RAINFALL	(mm)=	42.00	42.00	42.00
RUNOFF COEFFICIENT	=	0.98	0.43	0.85

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0022):	41.67	2.024	5.25	37.53
	+ ID2= 2 (0028):	4.28	0.204	5.25	35.64
	ID = 3 (0024):	45.95	2.228	5.25	37.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0024):	45.95	2.228	5.25	37.35
	+ ID2= 2 (3400):	4.34	0.203	5.25	35.90
	ID = 1 (0024):	50.29	2.432	5.25	37.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.7480	3.7607
0.0140	0.5845	1.1340	4.6672
0.0210	1.1690	1.4200	5.2879
0.1010	1.7265	1.7270	5.9087
0.2410	2.3077	7.3760	6.5294
0.4210	2.8889	12.0010	6.8398

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)		50.290	2.432	5.25	37.22
OUTFLOW: ID= 1 (5001)		50.290	0.095	9.33	28.40

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.92
TIME SHIFT OF PEAK FLOW (min)=245.00

MAXIMUM STORAGE USED (ha.m.)= 1.6865

ADD HYD (0013)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):		50.29	0.095	9.33	28.40
+ ID2= 2 (0009):		70.37	0.514	5.80	26.77
ID = 3 (0013):		120.66	0.569	6.27	22.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (4100) | ID= 1 DT= 5.0 min | Area (ha)= 3.48 Curve Number (CN)= 87.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.04

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	2.52	6.250	5.46	9.33	0.42
0.167	0.00	3.250	2.52	6.333	2.94	9.42	0.42
0.250	0.00	3.333	7.14	6.417	2.94	9.50	0.42
0.333	0.42	3.417	7.14	6.500	2.94	9.58	0.42
0.417	0.42	3.500	7.14	6.583	2.94	9.67	0.42
0.500	0.42	3.583	7.14	6.667	2.94	9.75	0.42
0.583	0.42	3.667	7.14	6.750	2.94	9.83	0.42
0.667	0.42	3.750	7.14	6.833	2.94	9.92	0.42
0.750	0.42	3.833	7.14	6.917	2.94	10.00	0.42
0.833	0.42	3.917	7.14	7.000	2.94	10.08	0.42
0.917	0.42	4.000	7.14	7.083	2.94	10.17	0.42
1.000	0.42	4.083	7.14	7.167	2.94	10.25	0.42
1.083	0.42	4.167	7.14	7.250	2.94	10.33	0.42
1.167	0.42	4.250	7.14	7.333	1.68	10.42	0.42
1.250	0.42	4.333	19.32	7.417	1.68	10.50	0.42
1.333	0.42	4.417	19.32	7.500	1.68	10.58	0.42
1.417	0.42	4.500	19.32	7.583	1.68	10.67	0.42
1.500	0.42	4.583	19.32	7.667	1.68	10.75	0.42
1.583	0.42	4.667	19.32	7.750	1.68	10.83	0.42
1.667	0.42	4.750	19.32	7.833	1.68	10.92	0.42
1.750	0.42	4.833	19.32	7.917	1.68	11.00	0.42
1.833	0.42	4.917	19.32	8.000	1.68	11.08	0.42
1.917	0.42	5.000	19.32	8.083	1.68	11.17	0.42
2.000	0.42	5.083	19.32	8.167	1.68	11.25	0.42
2.083	0.42	5.167	19.32	8.250	1.68	11.33	0.42
2.167	0.42	5.250	19.32	8.333	0.84	11.42	0.42
2.250	0.42	5.333	5.46	8.417	0.84	11.50	0.42
2.333	2.52	5.417	5.46	8.500	0.84	11.58	0.42
2.417	2.52	5.500	5.46	8.583	0.84	11.67	0.42
2.500	2.52	5.583	5.46	8.667	0.84	11.75	0.42
2.583	2.52	5.667	5.46	8.750	0.84	11.83	0.42
2.667	2.52	5.750	5.46	8.833	0.84	11.92	0.42
2.750	2.52	5.833	5.46	8.917	0.84	12.00	0.42
2.833	2.52	5.917	5.46	9.000	0.84	12.08	0.42
2.917	2.52	6.000	5.46	9.083	0.84	12.17	0.42
3.000	2.52	6.083	5.46	9.167	0.84	12.25	0.42
3.083	2.52	6.167	5.46	9.250	0.84		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.069 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 10.900
TOTAL RAINFALL (mm)= 42.000
RUNOFF COEFFICIENT = 0.260

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

****
** SIMULATION:Run 09 5yr 12hr AES **
****

READ STORM | Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\fea73900

| Ptotal= 54.38 mm | Comments: 5yr/12hr

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	9.25	6.75	3.81	10.00	0.54
0.50	0.54	3.75	9.25	7.00	3.81	10.25	0.54
0.75	0.54	4.00	9.25	7.25	3.81	10.50	0.54
1.00	0.54	4.25	9.25	7.50	2.18	10.75	0.54
1.25	0.54	4.50	25.02	7.75	2.18	11.00	0.54
1.50	0.54	4.75	25.02	8.00	2.18	11.25	0.54
1.75	0.54	5.00	25.02	8.25	2.18	11.50	0.54
2.00	0.54	5.25	25.02	8.50	1.09	11.75	0.54
2.25	0.54	5.50	7.07	8.75	1.09	12.00	0.54
2.50	3.26	5.75	7.07	9.00	1.09	12.25	0.54
2.75	3.26	6.00	7.07	9.25	1.09		
3.00	3.26	6.25	7.07	9.50	0.54		
3.25	3.26	6.50	3.81	9.75	0.54		

CALIB
NASHYD (1000) | ID= 1 DT= 2.0 min | Area (ha)= 19.21 Curve Number (CN)= 87.0
Ia (mm)= 7.70 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.07

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.26	6.167	7.07	9.23	1.09
0.067	0.00	3.133	3.26	6.200	7.07	9.27	0.81
0.100	0.00	3.167	3.26	6.233	7.07	9.30	0.54
0.133	0.00	3.200	3.26	6.267	5.44	9.33	0.54
0.167	0.00	3.233	3.26	6.300	3.81	9.37	0.54
0.200	0.00	3.267	6.25	6.333	3.81	9.40	0.54
0.233	0.00	3.300	9.25	6.367	3.81	9.43	0.54
0.267	0.27	3.333	9.25	6.400	3.81	9.47	0.54
0.300	0.54	3.367	9.25	6.433	3.81	9.50	0.54
0.333	0.54	3.400	9.25	6.467	3.81	9.53	0.54
0.367	0.54	3.433	9.25	6.500	3.81	9.57	0.54
0.400	0.54	3.467	9.25	6.533	3.81	9.60	0.54
0.433	0.54	3.500	9.25	6.567	3.81	9.63	0.54
0.467	0.54	3.533	9.25	6.600	3.81	9.67	0.54
0.500	0.54	3.567	9.25	6.633	3.81	9.70	0.54
0.533	0.54	3.600	9.25	6.667	3.81	9.73	0.54
0.567	0.54	3.633	9.25	6.700	3.81	9.77	0.54
0.600	0.54	3.667	9.25	6.733	3.81	9.80	0.54
0.633	0.54	3.700	9.25	6.767	3.81	9.83	0.54
0.667	0.54	3.733	9.25	6.800	3.81	9.87	0.54
0.700	0.54	3.767	9.25	6.833	3.81	9.90	0.54
0.733	0.54	3.800	9.25	6.867	3.81	9.93	0.54
0.767	0.54	3.833	9.25	6.900	3.81	9.97	0.54
0.800	0.54	3.867	9.25	6.933	3.81	10.00	0.54
0.833	0.54	3.900	9.25	6.967	3.81	10.03	0.54
0.867	0.54	3.933	9.25	7.000	3.81	10.07	0.54
0.900	0.54	3.967	9.25	7.033	3.81	10.10	0.54
0.933	0.54	4.000	9.25	7.067	3.81	10.13	0.54
0.967	0.54	4.033	9.25	7.100	3.81	10.17	0.54
1.000	0.54	4.067	9.25	7.133	3.81	10.20	0.54
1.033	0.54	4.100	9.25	7.167	3.81	10.23	0.54
1.067	0.54	4.133	9.25	7.200	3.81	10.27	0.54
1.100	0.54	4.167	9.25	7.233	3.81	10.30	0.54
1.133	0.54	4.200	9.25	7.267	3.00	10.33	0.54
1.167	0.54	4.233	9.25	7.300	2.18	10.37	0.54
1.200	0.54	4.267	17.13	7.333	2.18	10.40	0.54
1.233	0.54	4.300	25.02	7.367	2.18	10.43	0.54
1.267	0.54	4.333	25.02	7.400	2.18	10.47	0.54
1.300	0.54	4.367	25.02	7.433	2.18	10.50	0.54
1.333	0.54	4.400	25.02	7.467	2.18	10.53	0.54
1.367	0.54	4.433	25.02	7.500	2.18	10.57	0.54
1.400	0.54	4.467	25.02	7.533	2.18	10.60	0.54
1.433	0.54	4.500	25.02	7.567	2.18	10.63	0.54
1.467	0.54	4.533	25.02	7.600	2.18	10.67	0.54
1.500	0.54	4.567	25.02	7.633	2.18	10.70	0.54
1.533	0.54	4.600	25.02	7.667	2.18	10.73	0.54
1.567	0.54	4.633	25.02	7.700	2.18	10.77	0.54
1.600	0.54	4.667	25.02	7.733	2.18	10.80	0.54
1.633	0.54	4.700	25.02	7.767	2.18	10.83	0.54
1.667	0.54	4.733	25.02	7.800	2.18	10.87	0.54
1.700	0.54	4.767	25.02	7.833	2.18	10.90	0.54
1.733	0.54	4.800	25.02	7.867	2.18	10.93	0.54
1.767	0.54	4.833	25.02	7.900	2.18	10.97	0.54
1.800	0.54	4.867	25.02	7.933	2.18	11.00	0.54
1.833	0.54	4.900	25.02	7.967	2.18	11.03	0.54
1.867	0.54	4.933	25.02	8.000	2.18	11.07	0.54
1.900	0.54	4.967	25.02	8.033	2.18	11.10	0.54
1.933	0.54	5.000	25.02	8.067	2.18	11.13	0.54
1.967	0.54	5.033	25.02	8.100	2.18	11.17	0.54
2.000	0.54	5.067	25.02	8.133	2.18	11.20	0.54
2.033	0.54	5.100	25.02	8.167	2.18	11.23	0.54
2.067	0.54	5.133	25.02	8.200	2.18	11.27	0.54
2.100	0.54	5.167	25.02	8.233	2.18	11.30	0.54
2.133	0.54	5.200	25.02	8.267	1.64	11.33	0.54
2.167	0.54	5.233	25.02	8.300	1.09	11.37	0.54
2.200	0.54	5.267	16.05	8.333	1.09	11.40	0.54
2.233	0.54	5.300	7.07	8.367	1.09	11.43	0.54
2.267	1.90	5.333	7.07	8.400	1.09	11.47	0.54
2.300	3.26	5.367	7.07	8.433	1.09	11.50	0.54
2.333	3.26	5.400	7.07	8.467	1.09	11.53	0.54
2.367	3.26	5.433	7.07	8.500	1.09	11.57	0.54
2.400	3.26	5.467	7.07	8.533	1.09	11.60	0.54
2.433	3.26	5.500	7.07	8.567	1.09	11.63	0.54
2.467	3.26	5.533	7.07	8.600	1.09	11.67	0.54
2.500	3.26	5.567	7.07	8.633	1.09	11.70	0.54
2.533	3.26	5.600	7.07	8.667	1.09	11.73	0.54
2.567	3.26	5.633	7.07	8.700	1.09	11.77	0.54
2.600	3.26	5.667	7.07	8.733	1.09	11.80	0.54
2.633	3.26	5.700	7.07	8.767	1.09	11.83	0.54
2.667	3.26	5.733	7.07	8.800	1.09	11.87	0.54
2.700	3.26	5.767	7.07	8.833	1.09	11.90	0.54
2.733	3.26	5.800	7.07	8.867	1.09	11.93	0.54
2.767	3.26	5.833	7.07	8.900	1.09	11.97	0.54
2.800	3.26	5.867	7.07	8.933	1.09	12.00	0.54
2.833	3.26	5.900	7.07	8.967	1.09	12.03	0.54
2.867	3.26	5.933	7.07	9.000	1.09	12.07	0.54
2.900	3.26	5.967	7.07	9.033	1.09	12.10	0.54
2.933	3.26	6.000	7.07	9.067	1.09	12.13	0.54
2.967	3.26	6.033	7.07	9.100	1.09	12.17	0.54
3.000	3.26	6.067	7.07	9.133	1.09	12.20	0.54
3.033	3.26	6.100	7.07	9.167	1.09	12.23	0.54
3.067	3.26	6.133	7.07	9.200	1.09	12.27	0.27

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.401 (i)
TIME TO PEAK (hrs)= 6.267
RUNOFF VOLUME (mm)= 25.746
TOTAL RAINFALL (mm)= 54.380
RUNOFF COEFFICIENT = 0.473

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

CALIB
NASHYD (1100) | ID= 1 DT= 2.0 min | Area (ha)= 2.08 Curve Number (CN)= 87.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.29

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.26	6.167	7.07	9.23	1.09
0.067	0.00	3.133	3.26	6.200	7.07	9.27	0.81
0.100	0.00	3.167	3.26	6.233	7.07	9.30	0.54
0.133	0.00	3.200	3.26	6.267	5.44	9.33	0.54
0.167	0.00	3.233	3.26	6.300	3.81	9.37	0.54
0.200	0.00	3.267	6.25	6.333	3.81	9.40	0.54
0.233	0.00	3.300	9.25	6.367	3.81	9.43	0.54
0.267	0.27	3.333	9.25	6.400	3.81	9.47	0.54
0.300	0.54	3.367	9.25	6.433	3.81	9.50	0.54
0.333	0.54	3.400	9.25	6.467	3.81	9.53	0.54
0.367	0.54	3.433	9.25	6.500	3.81	9.57	0.54
0.400	0.54	3.467	9.25	6.533	3.81	9.60	0.54
0.433	0.54	3.500	9.25	6.567	3.81	9.63	0.54
0.467	0.54	3.533	9.25	6.600	3.81	9.67	0.54
0.500	0.54	3.567	9.25	6.633	3.81	9.70	0.54
0.533	0.54	3.600	9.25	6.667	3.81	9.73	0.54
0.567	0.54	3.633	9.25	6.700	3.81	9.77	0.54
0.600	0.54	3.667	9.25	6.733	3.81	9.80	0.54
0.633	0.54	3.700	9.25	6.767	3.81	9.83	0.54
0.667	0.54	3.733	9.25	6.800	3.81	9.87	0.54
0.700	0.54	3.767	9.25	6.833	3.81	9.90	0.54
0.733	0.54	3.800	9.25	6.867	3.81	9.93	0.54
0.767	0.54	3.833	9.25	6.900	3.81	9.97	0.54
0.800	0.54	3.867	9.25	6.933	3.81	10.00	0.54
0.833	0.54	3.900	9.25	6.967	3.81	10.03	0.54
0.867	0.54	3.933	9.25	7.000	3.81	10.07	0.54
0.900	0.54	3.967	9.25	7.033	3.81	10.10	0.54
0.933	0.54	4.000	9.25	7.067	3.81	10.13	0.54
0.967	0.54	4.033	9.25	7.100	3.81	10.17	0.54
1.000	0.54	4.067	9.25	7.133	3.81	10.20	0.54
1.033	0.54	4.100	9.25	7.167	3.81	10.23	0.54
1.067	0.54	4.133	9.25	7.200	3.81	10.27	0.54
1.100	0.54	4.167	9.25	7.233	3.81	10.30	0.54
1.133	0.54	4.200	9.25	7.267	3.00	10.33	0.54
1.167	0.54	4.233	9.25	7.300	2.18	10.37	0.54
1.200	0.54	4.267	17.13	7.333	2.18	10.40	0.54
1.233	0.54	4.300	25.02	7.367	2.18	10.43	0.54
1.267	0.54	4.333	25.02	7.400	2.18	10.47	0.54
1.300	0.54	4.367	25.02	7.433	2.18	10.50	0.54
1.333	0.54	4.400	25.02	7.467	2.18	10.53	0.54
1.367	0.54	4.433	25.02	7.500	2.18	10.57	0.54
1.400	0.54	4.467	25.02	7.533	2.18	10.60	0.54
1.433	0.54	4.500	25.02	7.567	2.18	10.63	0.54
1.467	0.54	4.533	25.02	7.600	2.18	10.67	0.54
1.500	0.54	4.567	25.02	7.633	2.18	10.70	0.54
1.533	0.54	4.600	25.02	7.667	2.18	10.73	0.54
1.567	0.54	4.633	25.02	7.700	2.18	10.77	0.54
1.600	0.54	4.667	25.02	7.733	2.18	10.80	0.54
1.633	0.54	4.700	25.02	7.767	2.18	10.83	0.54
1.667	0.54	4.733	25.02	7.800	2.18	10.87	0.54
1.700	0.54	4.767	25.02	7.833	2.18	10.90	0.54
1.733	0.54	4.800	25.02	7.867	2.18	10.93	0.54
1.767	0.54	4.833	25.02	7.900	2.18	10.97	0.54
1.800	0.54	4.867	25.02	7.933	2.18	11.00	0.54
1.833	0.54	4.900	25.02	7.967	2.18	11.03	0.54
1.867	0.54	4.933	25.02	8.000	2.18	11.07	0.54
1.900	0.54	4.967	25.02	8.033	2.18	11.10	0.54
1.933	0.54	5.000	25.02	8.067	2.18	11.13	0.54
1.967	0.54	5.033	25.02	8.100	2.18	11.17	0.54
2.000	0.54	5.067	25.02	8.133	2.18	11.20	0.54
2.033	0.54	5.100	25.02	8.167	2.18	11.23	0.54
2.067	0.54	5.133	25.02	8.200	2.18	11.27	0.54
2.100	0.54	5.167	25.02	8.233	2.18	11.30	0.54
2.133	0.54	5.200	25.02	8.267	1.64	11.33	0.54
2.167	0.54	5.233	25.02	8.300	1.09	11.37	0.54
2.200	0.54	5.267	16.05	8.333	1.09	11.40	0.54
2.233	0.54	5.300	7.07	8.367	1.09	11.43	0.54
2.267	1.90	5.333	7.07	8.400	1.09	11.47	0.54
2.300	3.26	5.367	7.07	8.433	1.09	11.50	0.54
2.333	3.26	5.400	7.07	8.467	1.09	11.53	0.54
2.367	3.26	5.433	7.07	8.500	1.09	11.57	0.54
2.400	3.26	5.467	7.07	8.533	1.09	11.60	0.54
2.433	3.26	5.500	7.07	8.567	1.09	11.63	0.54
2.467	3.26	5.533	7.07	8.600	1.09	11.67	0.54
2.500	3.26	5.567	7.07	8.633	1.09	11.70	0.54
2.533	3.26	5.600	7.07	8.667	1.09	11.73	0.54
2.567	3.26	5.633	7.07	8.700	1.09	11.77	0.54
2.600	3.26	5.667	7.07	8.733	1.09	11.80	0.54
2.633	3.26	5.700	7.07	8.767	1.09	11.83	0.54
2.667	3.26	5.733	7.07	8.800	1.09	11.87	0.54
2.700	3.26	5.767	7.07	8.833	1.09	11.90	0.54
2.733	3.26	5.800	7.07	8.867	1.09	11.93	0.54
2.767	3.26	5.833	7.07	8.900	1.09	11.97	0.54
2.800	3.26	5.867	7.07	8.933	1.09	12.00	0.54
2.833	3.26	5.900	7.07	8.967	1.09	12.03	0.54
2.867	3.26	5.933	7.07	9.000	1.09	12.07	0.54
2.900	3.26	5.967	7.07	9.033	1.09	12.10	0.54
2.933	3.26	6.000	7.07	9.067	1.09	12.13	0.54
2.967	3.26	6.033	7.07	9.100	1.09	12.17	0.54
3.000	3.26	6.067	7.07	9.133	1.09	12.20	0.54
3.033	3.26	6.100	7.07	9.167	1.09	12.23	0.54
3.067	3.26	6.133	7.07	9.200	1.09	12.27	0.27

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.088 (i)
TIME TO PEAK (hrs)= 5.300
RUNOFF VOLUME (mm)= 27.919
TOTAL RAINFALL (mm)= 54.380
RUNOFF COEFFICIENT = 0.513

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

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| DUHYD    (  2000)|
| Inlet Cap.= 0.949|
| #of Inlets=   1  |
| Total(cms)=  0.9|
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	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.09	5.30	27.92
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.09	5.30	27.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB              |
| STANDHYD (  1200)|   Area    (ha)=  25.19
|ID= 1 DT= 2.0 min |   Total Imp(%)=  88.60   Dir. Conn.(%)=  88.60
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.26	6.167	7.07	9.23	1.09
0.067	0.00	3.133	3.26	6.200	7.07	9.27	0.81
0.100	0.00	3.167	3.26	6.233	7.07	9.30	0.54
0.133	0.00	3.200	3.26	6.267	5.44	9.33	0.54
0.167	0.00	3.233	3.26	6.300	3.81	9.37	0.54
0.200	0.00	3.267	6.25	6.333	3.81	9.40	0.54
0.233	0.00	3.300	9.25	6.367	3.81	9.43	0.54
0.267	0.27	3.333	9.25	6.400	3.81	9.47	0.54
0.300	0.54	3.367	9.25	6.433	3.81	9.50	0.54
0.333	0.54	3.400	9.25	6.467	3.81	9.53	0.54
0.367	0.54	3.433	9.25	6.500	3.81	9.57	0.54
0.400	0.54	3.467	9.25	6.533	3.81	9.60	0.54
0.433	0.54	3.500	9.25	6.567	3.81	9.63	0.54
0.467	0.54	3.533	9.25	6.600	3.81	9.67	0.54
0.500	0.54	3.567	9.25	6.633	3.81	9.70	0.54
0.533	0.54	3.600	9.25	6.667	3.81	9.73	0.54
0.567	0.54	3.633	9.25	6.700	3.81	9.77	0.54
0.600	0.54	3.667	9.25	6.733	3.81	9.80	0.54
0.633	0.54	3.700	9.25	6.767	3.81	9.83	0.54
0.667	0.54	3.733	9.25	6.800	3.81	9.87	0.54
0.700	0.54	3.767	9.25	6.833	3.81	9.90	0.54
0.733	0.54	3.800	9.25	6.867	3.81	9.93	0.54
0.767	0.54	3.833	9.25	6.900	3.81	9.97	0.54
0.800	0.54	3.867	9.25	6.933	3.81	10.00	0.54
0.833	0.54	3.900	9.25	6.967	3.81	10.03	0.54
0.867	0.54	3.933	9.25	7.000	3.81	10.07	0.54
0.900	0.54	3.967	9.25	7.033	3.81	10.10	0.54
0.933	0.54	4.000	9.25	7.067	3.81	10.13	0.54
0.967	0.54	4.033	9.25	7.100	3.81	10.17	0.54
1.000	0.54	4.067	9.25	7.133	3.81	10.20	0.54
1.033	0.54	4.100	9.25	7.167	3.81	10.23	0.54
1.067	0.54	4.133	9.25	7.200	3.81	10.27	0.54
1.100	0.54	4.167	9.25	7.233	3.81	10.30	0.54
1.133	0.54	4.200	9.25	7.267	3.00	10.33	0.54
1.167	0.54	4.233	9.25	7.300	2.18	10.37	0.54
1.200	0.54	4.267	17.13	7.333	2.18	10.40	0.54
1.233	0.54	4.300	25.02	7.367	2.18	10.43	0.54
1.267	0.54	4.333	25.02	7.400	2.18	10.47	0.54
1.300	0.54	4.367	25.02	7.433	2.18	10.50	0.54
1.333	0.54	4.400	25.02	7.467	2.18	10.53	0.54
1.367	0.54	4.433	25.02	7.500	2.18	10.57	0.54
1.400	0.54	4.467	25.02	7.533	2.18	10.60	0.54
1.433	0.54	4.500	25.02	7.567	2.18	10.63	0.54
1.467	0.54	4.533	25.02	7.600	2.18	10.67	0.54
1.500	0.54	4.567	25.02	7.633	2.18	10.70	0.54
1.533	0.54	4.600	25.02	7.667	2.18	10.73	0.54
1.567	0.54	4.633	25.02	7.700	2.18	10.77	0.54
1.600	0.54	4.667	25.02	7.733	2.18	10.80	0.54
1.633	0.54	4.700	25.02	7.767	2.18	10.83	0.54
1.667	0.54	4.733	25.02	7.800	2.18	10.87	0.54
1.700	0.54	4.767	25.02	7.833	2.18	10.90	0.54
1.733	0.54	4.800	25.02	7.867	2.18	10.93	0.54
1.767	0.54	4.833	25.02	7.900	2.18	10.97	0.54
1.800	0.54	4.867	25.02	7.933	2.18	11.00	0.54
1.833	0.54	4.900	25.02	7.967	2.18	11.03	0.54
1.867	0.54	4.933	25.02	8.000	2.18	11.07	0.54
1.900	0.54	4.967	25.02	8.033	2.18	11.10	0.54
1.933	0.54	5.000	25.02	8.067	2.18	11.13	0.54
1.967	0.54	5.033	25.02	8.100	2.18	11.17	0.54
2.000	0.54	5.067	25.02	8.133	2.18	11.20	0.54
2.033	0.54	5.100	25.02	8.167	2.18	11.23	0.54
2.067	0.54	5.133	25.02	8.200	2.18	11.27	0.54
2.100	0.54	5.167	25.02	8.233	2.18	11.30	0.54
2.133	0.54	5.200	25.02	8.267	1.64	11.33	0.54
2.167	0.54	5.233	25.02	8.300	1.09	11.37	0.54
2.200	0.54	5.267	16.05	8.333	1.09	11.40	0.54
2.233	0.54	5.300	7.07	8.367	1.09	11.43	0.54
2.267	1.90	5.333	7.07	8.400	1.09	11.47	0.54
2.300	3.26	5.367	7.07	8.433	1.09	11.50	0.54
2.333	3.26	5.400	7.07	8.467	1.09	11.53	0.54
2.367	3.26	5.433	7.07	8.500	1.09	11.57	0.54
2.400	3.26	5.467	7.07	8.533	1.09	11.60	0.54
2.433	3.26	5.500	7.07	8.567	1.09	11.63	0.54
2.467	3.26	5.533	7.07	8.600	1.09	11.67	0.54
2.500	3.26	5.567	7.07	8.633	1.09	11.70	0.54
2.533	3.26	5.600	7.07	8.667	1.09	11.73	0.54
2.567	3.26	5.633	7.07	8.700	1.09	11.77	0.54
2.600	3.26	5.667	7.07	8.733	1.09	11.80	0.54
2.633	3.26	5.700	7.07	8.767	1.09	11.83	0.54
2.667	3.26	5.733	7.07	8.800	1.09	11.87	0.54
2.700	3.26	5.767	7.07	8.833	1.09	11.90	0.54
2.733	3.26	5.800	7.07	8.867	1.09	11.93	0.54
2.767	3.26	5.833	7.07	8.900	1.09	11.97	0.54
2.800	3.26	5.867	7.07	8.933	1.09	12.00	0.54
2.833	3.26	5.900	7.07	8.967	1.09	12.03	0.54
2.867	3.26	5.933	7.07	9.000	1.09	12.07	0.54
2.900	3.26	5.967	7.07	9.033	1.09	12.10	0.54
2.933	3.26	6.000	7.07	9.067	1.09	12.13	0.54
2.967	3.26	6.033	7.07	9.100	1.09	12.17	0.54
3.000	3.26	6.067	7.07	9.133	1.09	12.20	0.54
3.033	3.26	6.100	7.07	9.167	1.09	12.23	0.54
3.067	3.26	6.133	7.07	9.200	1.09	12.27	0.27

			TOTALS
Max.Eff.Inten.(mm/hr)=	25.02	17.46	
over (min)	10.00	16.00	
Storage Coeff. (min)=	10.36 (ii)	15.77 (ii)	
Unit Hyd. Tpeak (min)=	10.00	16.00	
Unit Hyd. peak (cms)=	0.11	0.07	
PEAK FLOW (cms)=	1.55	0.12	1.665 (iii)
TIME TO PEAK (hrs)=	5.23	5.30	5.23
RUNOFF VOLUME (mm)=	53.38	27.92	50.48
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.51	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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  (  2001)|
|   1 +  2 =  3    |
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	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	1.665	5.23	50.48
+ ID2= 2 (2000):	2.08	0.088	5.30	27.92
ID = 3 (2001):	27.27	1.750	5.23	48.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| RESERVOIR(  1002)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |
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OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.2130	1.6215
0.0900	0.8290	0.2480	1.8230
0.1380	1.1410	0.2810	2.0230
0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	1.750	5.23	48.76
OUTFLOW: ID= 1 (1002)	27.270	0.131	8.43	44.41

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.47
TIME SHIFT OF PEAK FLOW (min)=192.00
MAXIMUM STORAGE USED (ha.m.)= 1.0937

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| CALIB              |
| STANDHYD (  1300)|   Area    (ha)=  13.18
|ID= 1 DT= 2.0 min |   Total Imp(%)=  83.40   Dir. Conn.(%)=  83.40
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	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	10.99	2.19
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	296.42	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.26	6.167	7.07	9.23	1.09
0.067	0.00	3.133	3.26	6.200	7.07	9.27	0.81
0.100	0.00	3.167	3.26	6.233	7.07	9.30	0.54
0.133	0.00	3.200	3.26	6.267	5.44	9.33	0.54
0.167	0.00	3.233	3.26	6.300	3.81	9.37	0.54
0.200	0.00	3.267	6.25	6.333	3.81	9.40	0.54
0.233	0.00	3.300	9.25	6.367	3.81	9.43	0.54
0.267	0.27	3.333	9.25	6.400	3.81	9.47	0.54
0.300	0.54	3.367	9.25	6.433	3.81	9.50	0.54
0.333	0.54	3.400	9.25	6.467	3.81	9.53	0.54
0.367	0.54	3.433	9.25	6.500	3.81	9.57	0.54
0.400	0.54	3.467	9.25	6.533	3.81	9.60	0.54
0.433	0.54	3.500	9.25	6.567	3.81	9.63	0.54
0.467	0.54	3.533	9.25	6.600	3.81	9.67	0.54
0.500	0.54	3.567	9.25	6.633	3.81	9.70	0.54
0.533	0.54	3.600	9.25	6.667	3.81	9.73	0.54
0.567	0.54	3.633	9.25	6.700	3.81	9.77	0.54
0.600	0.54	3.667	9.25	6.733	3.81	9.80	0.54
0.633	0.54	3.700	9.25	6.767	3.81	9.83	0.54
0.667	0.54	3.733	9.25	6.800	3.81	9.87	0.54
0.700	0.54	3.767	9.25	6.833	3.81	9.90	0.54
0.733	0.54	3.800	9.25	6.867	3.81	9.93	0.54
0.767	0.54	3.833	9.25	6.900	3.81	9.97	0.54
0.800	0.54	3.867	9.25	6.933	3.81	10.00	0.54
0.833	0.54	3.900	9.25	6.967	3.81	10.03	0.54
0.867	0.54	3.933	9.25	7.000	3.81	10.07	0.54
0.900	0.54	3.967	9.25	7.033	3.81	10.10	0.54
0.933	0.54	4.000	9.25	7.067	3.81	10.13	0.54
0.967	0.54	4.033	9.25	7.100	3.81	10.17	0.54
1.000	0.54	4.067	9.25	7.133	3.81	10.20	0.54
1.033	0.54	4.100	9.25	7.167	3.81	10.23	0.54
1.067	0.54	4.133	9.25	7.200	3.81	10.27	0.54
1.100	0.54	4.167	9.25	7.233	3.81	10.30	0.54
1.133	0.54	4.200	9.25	7.267	3.00	10.33	0.54
1.167	0.54	4.233	9.25	7.300	2.18	10.37	0.54
1.200	0.54	4.267	17.13	7.333	2.18	10.40	0.54
1.233	0.54	4.300	25.02	7.367	2.18	10.43	0.54
1.267	0.54	4.333	25.02	7.400	2.18	10.47	0.54
1.300	0.54	4.367	25.02	7.433	2.18	10.50	0.54
1.333	0.54	4.400	25.02	7.467	2.18	10.53	0.54
1.367	0.54	4.433	25.02	7.500	2.18	10.57	0.54
1.400	0.54	4.467	25.02	7.533	2.18	10.60	0.54
1.433	0.54	4.500	25.02	7.567	2.18	10.63	0.54
1.467	0.54	4.533	25.02	7.600	2.18	10.67	0.54
1.500	0.54	4.567	25.02	7.633	2.18	10.70	0.54
1.533	0.54	4.600	25.02	7.667	2.18	10.73	0.54
1.567	0.54	4.633	25.02	7.700	2.18	10.77	0.54
1.600	0.54	4.667	25.02	7.733	2.18	10.80	0.54
1.633	0.54	4.700	25.02	7.767	2.18	10.83	0.54
1.667	0.54	4.733	25.02	7.800	2.18	10.87	0.54
1.700	0.54	4.767	25.02	7.833	2.18	10.90	0.54
1.733	0.54	4.800	25.02	7.867	2.18	10.93	0.54
1.767	0.54	4.833	25.02	7.900	2.18	10.97	0.54
1.800	0.54	4.867	25.02	7.933	2.18	11.00	0.54
1.833	0.54	4.900	25.02	7.967	2.18	11.03	0.54
1.867	0.54	4.933	25.02	8.000	2.18	11.07	0.54
1.900	0.54	4.967	25.02	8.033	2.18	11.10	0.54
1.933	0.54	5.000	25.02	8.067	2.18	11.13	0.54
1.967	0.54	5.033	25.02	8.100	2.18	11.17	0.54
2.000	0.54	5.067	25.02	8.133	2.18	11.20	0.54
2.033	0.54	5.100	25.02	8.167	2.18	11.23	0.54
2.067	0.54	5.133	25.02	8.200	2.18	11.27	0.54
2.100	0.54	5.167	25.02	8.233	2.18	11.30	0.54
2.133	0.54	5.200	25.02	8.267	1.64	11.33	0.54
2.167	0.54	5.233	25.02	8.300	1.09	11.37	0.54
2.200	0.54	5.267	16.05	8.333	1.09	11.40	0.54
2.233	0.54	5.300	7.07	8.367	1.09	11.43	0.54
2.267	1.90	5.333	7.07	8.400	1.09	11.47	0.54
2.300	3.26	5.367	7.07	8.433	1.09	11.50	0.54
2.333	3.26	5.400	7.07	8.467	1.09	11.53	0.54
2.367	3.26	5.433	7.07	8.500	1.09	11.57	0.54
2.400	3.26	5.467	7.07	8.533	1.09	11.60	0.54
2.433	3.26	5.500	7.07	8.567	1.09	11.63	0.54
2.467	3.26	5.533	7.07	8.600	1.09	11.67	0.54
2.500	3.26	5.567	7.07	8.633	1.09	11.70	0.54
2.533	3.26	5.600	7.07	8.667	1.09	11.73	0.54
2.567	3.26	5.633	7.07	8.700	1.09	11.77	0.54
2.600	3.26	5.667	7.07	8.733	1.09	11.80	0.54
2.633	3.26	5.700	7.07	8.767	1.09	11.83	0.54
2.667	3.26	5.733	7.07	8.800	1.09	11.87	0.54
2.700	3.26	5.767	7.07	8.833	1.09	11.90	0.54
2.733	3.26	5.800	7.07	8.867	1.09	11.93	0.54
2.767	3.26	5.833	7.07	8.900	1.09	11.97	0.54
2.800	3.26	5.867	7.07	8.933	1.09	12.00	0.54
2.833	3.26	5.900	7.07	8.967	1.09	12.03	0.54
2.867	3.26	5.933	7.07	9.000	1.09	12.07	0.54
2.900	3.26	5.967	7.07	9.033	1.09	12.10	0.54
2.933	3.26	6.000	7.07	9.067	1.09	12.13	0.54
2.967	3.26	6.033	7.07	9.100	1.09	12.17	0.54
3.000	3.26	6.067	7.07	9.133	1.09	12.20	0.54
3.033	3.26	6.100	7.07	9.167	1.09	12.23	0.54
3.067	3.26	6.133	7.07	9.200	1.09	12.27	0.27

			TOTALS
Max.Eff.Inten.(mm/hr)=	25.02	17.46	
over (min)	8.00	16.00	
Storage Coeff. (min)=	8.53 (ii)	14.97 (ii)	
Unit Hyd. Tpeak (min)=	8.00	16.00	
Unit Hyd. peak (cms)=	0.14	0.07	
PEAK FLOW (cms)=	0.76	0.09	0.855 (iii)
TIME TO PEAK (hrs)=	5.23	5.30	5.23
RUNOFF VOLUME (mm)=	53.38	27.92	49.15
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.51	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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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| RESERVOIR(  1001)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |
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OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1120	0.6810
0.0470	0.3640	0.1300	0.7605
0.0720	0.4900	0.1470	0.8395
0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	0.855	5.23	49.15
OUTFLOW: ID= 1 (1001)	13.180	0.077	8.23	46.44

PEAK FLOW REDUCTION [Qout/Qin](%)= 9.03
TIME SHIFT OF PEAK FLOW (min)=180.00
MAXIMUM STORAGE USED (ha.m.)= 0.5161

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--------------------
| ADD HYD  (  2002)|
|   1 +  2 =  3    |
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	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1001):	13.18	0.077	8.23	46.44
+ ID2= 2 (1002):	27.27	0.131	8.43	44.41

```
       ID = 3 (  2002):    40.45   0.208     8.37    45.07

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD  (  2003)|
|   1 +  2 =  3    |          AREA     QPEAK     TPEAK      R.V.
--------------------            (ha)     (cms)     (hrs)      (mm)
      ID1= 1 (  1000):    19.21   0.401     6.27    25.75
    + ID2= 2 (  2002):    40.45   0.208     8.37    45.07
      ================================================
      ID = 3 (  2003):    59.66   0.589     6.37    38.85

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB              |
| NASHYD  (  2100)|   Area    (ha)=   3.11   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.14

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
 0.033    0.00 |  3.100    3.26 |  6.167    7.07 |  9.23    1.09
 0.067    0.00 |  3.133    3.26 |  6.200    7.07 |  9.27    0.81
 0.100    0.00 |  3.167    3.26 |  6.233    7.07 |  9.30    0.54
 0.133    0.00 |  3.200    3.26 |  6.267    5.44 |  9.33    0.54
 0.167    0.00 |  3.233    3.26 |  6.300    3.81 |  9.37    0.54
 0.200    0.00 |  3.267    6.25 |  6.333    3.81 |  9.40    0.54
 0.233    0.00 |  3.300    9.25 |  6.367    3.81 |  9.43    0.54
 0.267    0.27 |  3.333    9.25 |  6.400    3.81 |  9.47    0.54
 0.300    0.54 |  3.367    9.25 |  6.433    3.81 |  9.50    0.54
 0.333    0.54 |  3.400    9.25 |  6.467    3.81 |  9.53    0.54
 0.367    0.54 |  3.433    9.25 |  6.500    3.81 |  9.57    0.54
 0.400    0.54 |  3.467    9.25 |  6.533    3.81 |  9.60    0.54
 0.433    0.54 |  3.500    9.25 |  6.567    3.81 |  9.63    0.54
 0.467    0.54 |  3.533    9.25 |  6.600    3.81 |  9.67    0.54
 0.500    0.54 |  3.567    9.25 |  6.633    3.81 |  9.70    0.54
 0.533    0.54 |  3.600    9.25 |  6.667    3.81 |  9.73    0.54
 0.567    0.54 |  3.633    9.25 |  6.700    3.81 |  9.77    0.54
 0.600    0.54 |  3.667    9.25 |  6.733    3.81 |  9.80    0.54
 0.633    0.54 |  3.700    9.25 |  6.767    3.81 |  9.83    0.54
 0.667    0.54 |  3.733    9.25 |  6.800    3.81 |  9.87    0.54
 0.700    0.54 |  3.767    9.25 |  6.833    3.81 |  9.90    0.54
 0.733    0.54 |  3.800    9.25 |  6.867    3.81 |  9.93    0.54
 0.767    0.54 |  3.833    9.25 |  6.900    3.81 |  9.97    0.54
 0.800    0.54 |  3.867    9.25 |  6.933    3.81 | 10.00    0.54
 0.833    0.54 |  3.900    9.25 |  6.967    3.81 | 10.03    0.54
 0.867    0.54 |  3.933    9.25 |  7.000    3.81 | 10.07    0.54
 0.900    0.54 |  3.967    9.25 |  7.033    3.81 | 10.10    0.54
 0.933    0.54 |  4.000    9.25 |  7.067    3.81 | 10.13    0.54
 0.967    0.54 |  4.033    9.25 |  7.100    3.81 | 10.17    0.54
 1.000    0.54 |  4.067    9.25 |  7.133    3.81 | 10.20    0.54
 1.033    0.54 |  4.100    9.25 |  7.167    3.81 | 10.23    0.54
 1.067    0.54 |  4.133    9.25 |  7.200    3.81 | 10.27    0.54
 1.100    0.54 |  4.167    9.25 |  7.233    3.81 | 10.30    0.54
 1.133    0.54 |  4.200    9.25 |  7.267    3.00 | 10.33    0.54
 1.167    0.54 |  4.233    9.25 |  7.300    2.18 | 10.37    0.54
 1.200    0.54 |  4.267   17.13 |  7.333    2.18 | 10.40    0.54
 1.233    0.54 |  4.300   25.02 |  7.367    2.18 | 10.43    0.54
 1.267    0.54 |  4.333   25.02 |  7.400    2.18 | 10.47    0.54
 1.300    0.54 |  4.367   25.02 |  7.433    2.18 | 10.50    0.54
 1.333    0.54 |  4.400   25.02 |  7.467    2.18 | 10.53    0.54
 1.367    0.54 |  4.433   25.02 |  7.500    2.18 | 10.57    0.54
 1.400    0.54 |  4.467   25.02 |  7.533    2.18 | 10.60    0.54
 1.433    0.54 |  4.500   25.02 |  7.567    2.18 | 10.63    0.54
 1.467    0.54 |  4.533   25.02 |  7.600    2.18 | 10.67    0.54
 1.500    0.54 |  4.567   25.02 |  7.633    2.18 | 10.70    0.54
 1.533    0.54 |  4.600   25.02 |  7.667    2.18 | 10.73    0.54
 1.567    0.54 |  4.633   25.02 |  7.700    2.18 | 10.77    0.54
 1.600    0.54 |  4.667   25.02 |  7.733    2.18 | 10.80    0.54
 1.633    0.54 |  4.700   25.02 |  7.767    2.18 | 10.83    0.54
 1.667    0.54 |  4.733   25.02 |  7.800    2.18 | 10.87    0.54
 1.700    0.54 |  4.767   25.02 |  7.833    2.18 | 10.90    0.54
 1.733    0.54 |  4.800   25.02 |  7.867    2.18 | 10.93    0.54
 1.767    0.54 |  4.833   25.02 |  7.900    2.18 | 10.97    0.54
 1.800    0.54 |  4.867   25.02 |  7.933    2.18 | 11.00    0.54
 1.833    0.54 |  4.900   25.02 |  7.967    2.18 | 11.03    0.54
 1.867    0.54 |  4.933   25.02 |  8.000    2.18 | 11.07    0.54
 1.900    0.54 |  4.967   25.02 |  8.033    2.18 | 11.10    0.54
 1.933    0.54 |  5.000   25.02 |  8.067    2.18 | 11.13    0.54
 1.967    0.54 |  5.033   25.02 |  8.100    2.18 | 11.17    0.54
 2.000    0.54 |  5.067   25.02 |  8.133    2.18 | 11.20    0.54
 2.033    0.54 |  5.100   25.02 |  8.167    2.18 | 11.23    0.54
 2.067    0.54 |  5.133   25.02 |  8.200    2.18 | 11.27    0.54
 2.100    0.54 |  5.167   25.02 |  8.233    2.18 | 11.30    0.54
 2.133    0.54 |  5.200   25.02 |  8.267    1.64 | 11.33    0.54
 2.167    0.54 |  5.233   25.02 |  8.300    1.09 | 11.37    0.54
 2.200    0.54 |  5.267   16.05 |  8.333    1.09 | 11.40    0.54
 2.233    0.54 |  5.300    7.07 |  8.367    1.09 | 11.43    0.54
 2.267    1.90 |  5.333    7.07 |  8.400    1.09 | 11.47    0.54
 2.300    3.26 |  5.367    7.07 |  8.433    1.09 | 11.50    0.54
 2.333    3.26 |  5.400    7.07 |  8.467    1.09 | 11.53    0.54
 2.367    3.26 |  5.433    7.07 |  8.500    1.09 | 11.57    0.54
 2.400    3.26 |  5.467    7.07 |  8.533    1.09 | 11.60    0.54
 2.433    3.26 |  5.500    7.07 |  8.567    1.09 | 11.63    0.54
 2.467    3.26 |  5.533    7.07 |  8.600    1.09 | 11.67    0.54
 2.500    3.26 |  5.567    7.07 |  8.633    1.09 | 11.70    0.54
 2.533    3.26 |  5.600    7.07 |  8.667    1.09 | 11.73    0.54
 2.567    3.26 |  5.633    7.07 |  8.700    1.09 | 11.77    0.54
 2.600    3.26 |  5.667    7.07 |  8.733    1.09 | 11.80    0.54
 2.633    3.26 |  5.700    7.07 |  8.767    1.09 | 11.83    0.54
 2.667    3.26 |  5.733    7.07 |  8.800    1.09 | 11.87    0.54
 2.700    3.26 |  5.767    7.07 |  8.833    1.09 | 11.90    0.54
 2.733    3.26 |  5.800    7.07 |  8.867    1.09 | 11.93    0.54
 2.767    3.26 |  5.833    7.07 |  8.900    1.09 | 11.97    0.54
 2.800    3.26 |  5.867    7.07 |  8.933    1.09 | 12.00    0.54
 2.833    3.26 |  5.900    7.07 |  8.967    1.09 | 12.03    0.54
 2.867    3.26 |  5.933    7.07 |  9.000    1.09 | 12.07    0.54
 2.900    3.26 |  5.967    7.07 |  9.033    1.09 | 12.10    0.54
 2.933    3.26 |  6.000    7.07 |  9.067    1.09 | 12.13    0.54
 2.967    3.26 |  6.033    7.07 |  9.100    1.09 | 12.17    0.54
 3.000    3.26 |  6.067    7.07 |  9.133    1.09 | 12.20    0.54
 3.033    3.26 |  6.100    7.07 |  9.167    1.09 | 12.23    0.54
 3.067    3.26 |  6.133    7.07 |  9.200    1.09 | 12.27    0.27

    Unit Hyd Qpeak  (cms)=   0.848

    PEAK FLOW       (cms)=   0.145 (i)
    TIME TO PEAK    (hrs)=   5.233
    RUNOFF VOLUME    (mm)=  27.914
    TOTAL RAINFALL   (mm)=  54.380
    RUNOFF COEFFICIENT   =   0.513

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

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--------------------
| ADD HYD  (  0005)|
|   1 +  2 =  3    |          AREA     QPEAK     TPEAK      R.V.
--------------------            (ha)     (cms)     (hrs)      (mm)
      ID1= 1 (  2003):    59.66   0.589     6.37    38.85
    + ID2= 2 (  2100):     3.11   0.145     5.23    27.91
      ================================================
      ID = 3 (  0005):    62.77   0.633     6.27    38.31

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB              |
| NASHYD  (  2200)|   Area    (ha)=   5.60   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.44

        NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
 0.033    0.00 |  3.100    3.26 |  6.167    7.07 |  9.23    1.09
 0.067    0.00 |  3.133    3.26 |  6.200    7.07 |  9.27    0.81
 0.100    0.00 |  3.167    3.26 |  6.233    7.07 |  9.30    0.54
 0.133    0.00 |  3.200    3.26 |  6.267    5.44 |  9.33    0.54
 0.167    0.00 |  3.233    3.26 |  6.300    3.81 |  9.37    0.54
 0.200    0.00 |  3.267    6.25 |  6.333    3.81 |  9.40    0.54
 0.233    0.00 |  3.300    9.25 |  6.367    3.81 |  9.43    0.54
 0.267    0.27 |  3.333    9.25 |  6.400    3.81 |  9.47    0.54
 0.300    0.54 |  3.367    9.25 |  6.433    3.81 |  9.50    0.54
 0.333    0.54 |  3.400    9.25 |  6.467    3.81 |  9.53    0.54
 0.367    0.54 |  3.433    9.25 |  6.500    3.81 |  9.57    0.54
 0.400    0.54 |  3.467    9.25 |  6.533    3.81 |  9.60    0.54
 0.433    0.54 |  3.500    9.25 |  6.567    3.81 |  9.63    0.54
 0.467    0.54 |  3.533    9.25 |  6.600    3.81 |  9.67    0.54
 0.500    0.54 |  3.567    9.25 |  6.633    3.81 |  9.70    0.54
 0.533    0.54 |  3.600    9.25 |  6.667    3.81 |  9.73    0.54
 0.567    0.54 |  3.633    9.25 |  6.700    3.81 |  9.77    0.54
 0.600    0.54 |  3.667    9.25 |  6.733    3.81 |  9.80    0.54
 0.633    0.54 |  3.700    9.25 |  6.767    3.81 |  9.83    0.54
 0.667    0.54 |  3.733    9.25 |  6.800    3.81 |  9.87    0.54
 0.700    0.54 |  3.767    9.25 |  6.833    3.81 |  9.90    0.54
 0.733    0.54 |  3.800    9.25 |  6.867    3.81 |  9.93    0.54
 0.767    0.54 |  3.833    9.25 |  6.900    3.81 |  9.97    0.54
 0.800    0.54 |  3.867    9.25 |  6.933    3.81 | 10.00    0.54
 0.833    0.54 |  3.900    9.25 |  6.967    3.81 | 10.03    0.54
 0.867    0.54 |  3.933    9.25 |  7.000    3.81 | 10.07    0.54
 0.900    0.54 |  3.967    9.25 |  7.033    3.81 | 10.10    0.54
 0.933    0.54 |  4.000    9.25 |  7.067    3.81 | 10.13    0.54
 0.967    0.54 |  4.033    9.25 |  7.100    3.81 | 10.17    0.54
 1.000    0.54 |  4.067    9.25 |  7.133    3.81 | 10.20    0.54
 1.033    0.54 |  4.100    9.25 |  7.167    3.81 | 10.23    0.54
 1.067    0.54 |  4.133    9.25 |  7.200    3.81 | 10.27    0.54
 1.100    0.54 |  4.167    9.25 |  7.233    3.81 | 10.30    0.54
 1.133    0.54 |  4.200    9.25 |  7.267    3.00 | 10.33    0.54
 1.167    0.54 |  4.233    9.25 |  7.300    2.18 | 10.37    0.54
 1.200    0.54 |  4.267   17.13 |  7.333    2.18 | 10.40    0.54
 1.233    0.54 |  4.300   25.02 |  7.367    2.18 | 10.43    0.54
 1.267    0.54 |  4.333   25.02 |  7.400    2.18 | 10.47    0.54
 1.300    0.54 |  4.367   25.02 |  7.433    2.18 | 10.50    0.54
 1.333    0.54 |  4.400   25.02 |  7.467    2.18 | 10.53    0.54
 1.367    0.54 |  4.433   25.02 |  7.500    2.18 | 10.57    0.54
 1.400    0.54 |  4.467   25.02 |  7.533    2.18 | 10.60    0.54
 1.433    0.54 |  4.500   25.02 |  7.567    2.18 | 10.63    0.54
 1.467    0.54 |  4.533   25.02 |  7.600    2.18 | 10.67    0.54
 1.500    0.54 |  4.567   25.02 |  7.633    2.18 | 10.70    0.54
 1.533    0.54 |  4.600   25.02 |  7.667    2.18 | 10.73    0.54
 1.567    0.54 |  4.633   25.02 |  7.700    2.18 | 10.77    0.54
 1.600    0.54 |  4.667   25.02 |  7.733    2.18 | 10.80    0.54
 1.633    0.54 |  4.700   25.02 |  7.767    2.18 | 10.83    0.54
 1.667    0.54 |  4.733   25.02 |  7.800    2.18 | 10.87    0.54
 1.700    0.54 |  4.767   25.02 |  7.833    2.18 | 10.90    0.54
 1.733    0.54 |  4.800   25.02 |  7.867    2.18 | 10.93    0.54
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1.767	0.54	4.833	25.02	7.900	2.18	10.97	0.54
1.800	0.54	4.867	25.02	7.933	2.18	11.00	0.54
1.833	0.54	4.900	25.02	7.967	2.18	11.03	0.54
1.867	0.54	4.933	25.02	8.000	2.18	11.07	0.54
1.900	0.54	4.967	25.02	8.033	2.18	11.10	0.54
1.933	0.54	5.000	25.02	8.067	2.18	11.13	0.54
1.967	0.54	5.033	25.02	8.100	2.18	11.17	0.54
2.000	0.54	5.067	25.02	8.133	2.18	11.20	0.54
2.033	0.54	5.100	25.02	8.167	2.18	11.23	0.54
2.067	0.54	5.133	25.02	8.200	2.18	11.27	0.54
2.100	0.54	5.167	25.02	8.233	2.18	11.30	0.54
2.133	0.54	5.200	25.02	8.267	1.64	11.33	0.54
2.167	0.54	5.233	25.02	8.300	1.09	11.37	0.54
2.200	0.54	5.267	16.05	8.333	1.09	11.40	0.54
2.233	0.54	5.300	7.07	8.367	1.09	11.43	0.54
2.267	1.90	5.333	7.07	8.400	1.09	11.47	0.54
2.300	3.26	5.367	7.07	8.433	1.09	11.50	0.54
2.333	3.26	5.400	7.07	8.467	1.09	11.53	0.54
2.367	3.26	5.433	7.07	8.500	1.09	11.57	0.54
2.400	3.26	5.467	7.07	8.533	1.09	11.60	0.54
2.433	3.26	5.500	7.07	8.567	1.09	11.63	0.54
2.467	3.26	5.533	7.07	8.600	1.09	11.67	0.54
2.500	3.26	5.567	7.07	8.633	1.09	11.70	0.54
2.533	3.26	5.600	7.07	8.667	1.09	11.73	0.54
2.567	3.26	5.633	7.07	8.700	1.09	11.77	0.54
2.600	3.26	5.667	7.07	8.733	1.09	11.80	0.54
2.633	3.26	5.700	7.07	8.767	1.09	11.83	0.54
2.667	3.26	5.733	7.07	8.800	1.09	11.87	0.54
2.700	3.26	5.767	7.07	8.833	1.09	11.90	0.54
2.733	3.26	5.800	7.07	8.867	1.09	11.93	0.54
2.767	3.26	5.833	7.07	8.900	1.09	11.97	0.54
2.800	3.26	5.867	7.07	8.933	1.09	12.00	0.54
2.833	3.26	5.900	7.07	8.967	1.09	12.03	0.54
2.867	3.26	5.933	7.07	9.000	1.09	12.07	0.54
2.900	3.26	5.967	7.07	9.033	1.09	12.10	0.54
2.933	3.26	6.000	7.07	9.067	1.09	12.13	0.54
2.967	3.26	6.033	7.07	9.100	1.09	12.17	0.54
3.000	3.26	6.067	7.07	9.133	1.09	12.20	0.54
3.033	3.26	6.100	7.07	9.167	1.09	12.23	0.54
3.067	3.26	6.133	7.07	9.200	1.09	12.27	0.27

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 27.920
TOTAL RAINFALL (mm)= 54.380
RUNOFF COEFFICIENT = 0.513

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

ADD HYD (0009)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2300):		2.00	0.074	5.40	27.92
+ ID2= 2 (0007):		68.37	0.746	5.97	37.46
ID = 3 (0009):		70.37	0.800	5.73	37.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2400)	Area	(ha)=	0.76	Curve Number	(CN)= 87.0
ID= 1 DT= 5.0 min	Ia	(mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.04		

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

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.022 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 16.662
TOTAL RAINFALL (mm)= 54.380
RUNOFF COEFFICIENT = 0.306

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

CALIB					
STANDHYD (3500)	Area	(ha)=	3.52		
ID= 1 DT= 5.0 min	Total Imp(%)=		99.90	Dir. Conn.(%)=	99.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.52	0.00
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.19	40.00
Mannings n	=	0.013	0.250

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

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54

2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	17.55		
over (min)	5.00	10.00		
Storage Coeff. (min)=	5.74 (ii)	6.52 (ii)		
Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.20	0.14		
			TOTALS	
PEAK FLOW (cms)=	0.24	0.00	0.245 (iii)	
TIME TO PEAK (hrs)=	5.25	5.25	5.25	
RUNOFF VOLUME (mm)=	53.38	27.92	53.35	
TOTAL RAINFALL (mm)=	54.38	54.38	54.38	
RUNOFF COEFFICIENT =	0.98	0.51	0.98	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2400):		0.76	0.022	5.25	16.66
+ ID2= 2 (3500):		3.52	0.245	5.25	53.35
ID = 3 (0028):		4.28	0.267	5.25	46.84

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (3100)	Area	(ha)=	25.24		
ID= 1 DT= 5.0 min	Total Imp(%)=		85.90	Dir. Conn.(%)=	85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	40.00
Mannings n	=	0.013	0.250

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

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54

1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	17.31		
over (min)	10.00	25.00		
Storage Coeff. (min)=	10.37 (ii)	24.61 (ii)		
Unit Hyd. Tpeak (min)=	10.00	25.00		
Unit Hyd. peak (cms)=	0.11	0.05		
			TOTALS	
PEAK FLOW (cms)=	1.50	0.13	1.630 (iii)	
TIME TO PEAK (hrs)=	5.25	5.42	5.25	
RUNOFF VOLUME (mm)=	53.38	27.92	49.79	
TOTAL RAINFALL (mm)=	54.38	54.38	54.38	
RUNOFF COEFFICIENT =	0.98	0.51	0.92	

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB					
STANDHYD (3200)	Area	(ha)=	7.11		
ID= 1 DT= 5.0 min	Total Imp(%)=		88.30	Dir. Conn.(%)=	88.30

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	40.00
Mannings n	=	0.013	0.250

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

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54

2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54		
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54		
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54		
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54		
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54		
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54		
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54		
3.083	3.26	6.167	7.07	9.250	1.09				

Max.Eff.Inten.(mm/hr)=	25.02	17.31	
over (min)	5.00	25.00	
Storage Coeff. (min)=	7.09 (ii)	21.33 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.17	0.05	
			TOTALS
PEAK FLOW (cms)=	0.44	0.03	0.467 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	27.92	50.40
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.51	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):		25.24	1.630	5.25	49.79
+ ID2= 2 (3200):		7.11	0.467	5.25	50.40
ID = 3 (0020):		32.35	2.097	5.25	49.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3300)	Area (ha)= 9.32			
ID= 1 DT= 5.0 min	Total Imp(%)= 78.80	Dir. Conn.(%)= 78.80		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.34	1.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	249.27	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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	3.81	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	17.31	
over (min)	10.00	25.00	
Storage Coeff. (min)=	7.69 (ii)	21.93 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.13	0.05	
			TOTALS
PEAK FLOW (cms)=	0.51	0.08	0.583 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	27.92	47.98
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.51	0.88

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):		32.35	2.097	5.25	49.92
+ ID2= 2 (3300):		9.32	0.583	5.25	47.98
ID = 3 (0022):		41.67	2.681	5.25	49.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3400)	Area (ha)= 4.34			
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54

ADD HYD (0013)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):		50.29	0.200	8.50	39.64
+ ID2= 2 (0009):		70.37	0.800	5.73	37.18
ID = 3 (0013):		120.66	0.925	6.27	33.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (4100)	Area (ha)= 3.48	Curve Number (CN)= 87.0		
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.04			

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Max.Eff.Inten.(mm/hr)=	25.02	17.31	
over (min)	5.00	25.00	
Storage Coeff. (min)=	6.12 (ii)	20.35 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.19	0.05	
			TOTALS
PEAK FLOW (cms)=	0.23	0.04	0.271 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	53.38	27.92	47.67
TOTAL RAINFALL (mm)=	54.38	54.38	54.38
RUNOFF COEFFICIENT =	0.98	0.51	0.88

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0022):		41.67	2.681	5.25	49.49
+ ID2= 2 (0028):		4.28	0.267	5.25	46.84
ID = 3 (0024):		45.95	2.948	5.25	49.24

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):		45.95	2.948	5.25	49.24
+ ID2= 2 (3400):		4.34	0.271	5.25	47.67
ID = 1 (0024):		50.29	3.218	5.25	49.11

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.7480	3.7607
	0.0140	0.5845	1.1340	4.6672
	0.0210	1.1690	1.4200	5.2879
	0.1010	1.7265	1.7270	5.9087
	0.2410	2.3077	7.3760	6.5294
	0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	3.218	5.25	49.11
OUTFLOW: ID= 1 (5001)	50.290	0.200	8.50	39.64

PEAK FLOW REDUCTION [Qout/Qin](%)= 6.21
TIME SHIFT OF PEAK FLOW (min)=195.00
MAXIMUM STORAGE USED (ha.m.)= 2.1370

ADD HYD (0022)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):		32.35	2.097	5.25	49.92
+ ID2= 2 (3300):		9.32	0.583	5.25	47.98
ID = 3 (0022):		41.67	2.681	5.25	49.49

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
STANDHYD (3400)	Area (ha)= 4.34			
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60		

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.37	0.97
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	170.10	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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54

ADD HYD (0013)					
1 + 2 = 3		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):		50.29	0.200	8.50	39.64
+ ID2= 2 (0009):		70.37	0.800	5.73	37.18
ID = 3 (0013):		120.66	0.925	6.27	33.54

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (4100)	Area (ha)= 3.48	Curve Number (CN)= 87.0		
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.04			

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	3.26	6.250	7.07	9.33	0.54
0.167	0.00	3.250	3.26	6.333	3.81	9.42	0.54
0.250	0.00	3.333	9.25	6.417	3.81	9.50	0.54
0.333	0.54	3.417	9.25	6.500	3.81	9.58	0.54
0.417	0.54	3.500	9.25	6.583	3.81	9.67	0.54
0.500	0.54	3.583	9.25	6.667	3.81	9.75	0.54
0.583	0.54	3.667	9.25	6.750	3.81	9.83	0.54
0.667	0.54	3.750	9.25	6.833	3.81	9.92	0.54
0.750	0.54	3.833	9.25	6.917	3.81	10.00	0.54
0.833	0.54	3.917	9.25	7.000	3.81	10.08	0.54
0.917	0.54	4.000	9.25	7.083	3.81	10.17	0.54
1.000	0.54	4.083	9.25	7.167	3.81	10.25	0.54
1.083	0.54	4.167	9.25	7.250	3.81	10.33	0.54
1.167	0.54	4.250	9.25	7.333	2.18	10.42	0.54
1.250	0.54	4.333	25.02	7.417	2.18	10.50	0.54
1.333	0.54	4.417	25.02	7.500	2.18	10.58	0.54
1.417	0.54	4.500	25.02	7.583	2.18	10.67	0.54
1.500	0.54	4.583	25.02	7.667	2.18	10.75	0.54
1.583	0.54	4.667	25.02	7.750	2.18	10.83	0.54
1.667	0.54	4.750	25.02	7.833	2.18	10.92	0.54
1.750	0.54	4.833	25.02	7.917	2.18	11.00	0.54
1.833	0.54	4.917	25.02	8.000	2.18	11.08	0.54
1.917	0.54	5.000	25.02	8.083	2.18	11.17	0.54
2.000	0.54	5.083	25.02	8.167	2.18	11.25	0.54
2.083	0.54	5.167	25.02	8.250	2.18	11.33	0.54
2.167	0.54	5.250	25.02	8.333	1.09	11.42	0.54
2.250	0.54	5.333	7.07	8.417	1.09	11.50	0.54
2.333	3.26	5.417	7.07	8.500	1.09	11.58	0.54
2.417	3.26	5.500	7.07	8.583	1.09	11.67	0.54
2.500	3.26	5.583	7.07	8.667	1.09	11.75	0.54
2.583	3.26	5.667	7.07	8.750	1.09	11.83	0.54
2.667	3.26	5.750	7.07	8.833	1.09	11.92	0.54
2.750	3.26	5.833	7.07	8.917	1.09	12.00	0.54
2.833	3.26	5.917	7.07	9.000	1.09	12.08	0.54
2.917	3.26	6.000	7.07	9.083	1.09	12.17	0.54
3.000	3.26	6.083	7.07	9.167	1.09	12.25	0.54
3.083	3.26	6.167	7.07	9.250	1.09		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW	(cms)=	0.102 (i)
TIME TO PEAK	(hrs)=	5.250
RUNOFF VOLUME	(mm)=	16.662
TOTAL RAINFALL	(mm)=	54.380
RUNOFF COEFFICIENT	=	0.306

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

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** SIMULATION:Run 10 10yr 12hr AES **
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READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\9e26b55c
Ptotal= 62.71 mm	Comments: 10yr/12hr

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	10.66	6.75	4.39	10.00	0.63
0.50	0.63	3.75	10.66	7.00	4.39	10.25	0.63
0.75	0.63	4.00	10.66	7.25	4.39	10.50	0.63
1.00	0.63	4.25	10.66	7.50	2.51	10.75	0.63
1.25	0.63	4.50	28.84	7.75	2.51	11.00	0.63
1.50	0.63	4.75	28.84	8.00	2.51	11.25	0.63
1.75	0.63	5.00	28.84	8.25	2.51	11.50	0.63
2.00	0.63	5.25	28.84	8.50	1.25	11.75	0.63
2.25	0.63	5.50	8.15	8.75	1.25	12.00	0.63
2.50	3.76	5.75	8.15	9.00	1.25	12.25	0.63
2.75	3.76	6.00	8.15	9.25	1.25		
3.00	3.76	6.25	8.15	9.50	0.63		
3.25	3.76	6.50	4.39	9.75	0.63		

CALIB			
NASHYD (1000)	Area (ha)= 19.21	Curve Number (CN)= 87.0	
ID= 1 DT= 2.0 min	Ia (mm)= 7.70	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 1.07		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.00	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.109 (i)
TIME TO PEAK (hrs)= 5.300
RUNOFF VOLUME (mm)= 34.813
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.555

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

DUHYD (2000)
Inlet Cap.= 0.949
#of Inlets= 1

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.512 (i)
TIME TO PEAK (hrs)= 6.200
RUNOFF VOLUME (mm)= 32.551
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.519

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

CALIB			
NASHYD (1100)	Area (ha)= 2.08	Curve Number (CN)= 87.0	
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.29		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Total(cms)= 0.9	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.11	5.30	34.81
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.11	5.30	34.81

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (1200)	Area (ha)= 25.19		
ID= 1 DT= 2.0 min	Total Imp(%)= 88.60	Dir. Conn.(%)= 88.60	

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63

1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Max.Eff.Inten.(mm/hr)=	28.84	21.37	
over (min)	10.00	16.00	
Storage Coeff. (min)=	9.79 (ii)	14.90 (ii)	
Unit Hyd. Tpeak (min)=	10.00	16.00	
Unit Hyd. peak (cms)=	0.11	0.07	
			TOTALS
PEAK FLOW (cms)=	1.78	0.15	1.933 (iii)
TIME TO PEAK (hrs)=	5.23	5.30	5.23
RUNOFF VOLUME (mm)=	61.71	34.81	58.64
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.56	0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1200):	25.19	1.933	5.23	58.64	
+ ID2= 2 (2000):	2.08	0.109	5.30	34.81	
ID = 3 (2001):	27.27	2.040	5.23	56.83	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	2.040	5.23	56.83
OUTFLOW: ID= 1 (1002)	27.270	0.157	8.40	51.88

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.71
TIME SHIFT OF PEAK FLOW (min)=190.00
MAXIMUM STORAGE USED (ha.m.)= 1.2683

CALIB			
STANDHYD (1300)	Area (ha)=	13.18	
ID= 1 DT= 2.0 min	Total Imp(%)=	83.40	Dir. Conn.(%)= 83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Max.Eff.Inten.(mm/hr)=	28.84	21.37	
over (min)	8.00	16.00	
Storage Coeff. (min)=	8.06 (ii)	14.15 (ii)	
Unit Hyd. Tpeak (min)=	8.00	16.00	
Unit Hyd. peak (cms)=	0.14	0.08	
			TOTALS
PEAK FLOW (cms)=	0.88	0.12	0.995 (iii)
TIME TO PEAK (hrs)=	5.23	5.30	5.23
RUNOFF VOLUME (mm)=	61.71	34.81	57.24
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.56	0.91

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	0.995	5.23	57.24
OUTFLOW: ID= 1 (1001)	13.180	0.094	7.73	54.18

PEAK FLOW REDUCTION [Qout/Qin](%)= 9.43
TIME SHIFT OF PEAK FLOW (min)=150.00
MAXIMUM STORAGE USED (ha.m.)= 0.5970

ADD HYD (2002)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1001):	13.18	0.094	7.73	54.18	
+ ID2= 2 (1002):	27.27	0.157	8.40	51.88	
ID = 3 (2002):	40.45	0.251	8.33	52.63	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1000):	19.21	0.512	6.20	32.55	
+ ID2= 2 (2002):	40.45	0.251	8.33	52.63	
ID = 3 (2003):	59.66	0.738	6.33	46.16	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (2100)	Area (ha)=	3.11	Curve Number (CN)=	87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=	0.14		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63

2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.178 (i)
TIME TO PEAK (hrs)= 5.233
RUNOFF VOLUME (mm)= 34.807
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.555

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

ADD HYD (0005)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2003):		59.66	0.738	6.33	46.16
+ ID2= 2 (2100):		3.11	0.178	5.23	34.81
ID = 3 (0005):		62.77	0.793	6.27	45.60

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2200)	Area	(ha)= 5.60	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.44		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.258 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 34.814
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.555

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

ADD HYD (0007)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2200):		5.60	0.258	5.40	34.81
+ ID2= 2 (0005):		62.77	0.793	6.27	45.60
ID = 3 (0007):		68.37	0.938	5.90	44.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area	(ha)= 2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.43		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	3.76	6.167	8.15	9.23	1.25
0.067	0.00	3.133	3.76	6.200	8.15	9.27	0.94
0.100	0.00	3.167	3.76	6.233	8.15	9.30	0.63
0.133	0.00	3.200	3.76	6.267	6.27	9.33	0.63
0.167	0.00	3.233	3.76	6.300	4.39	9.37	0.63
0.200	0.00	3.267	7.21	6.333	4.39	9.40	0.63
0.233	0.00	3.300	10.66	6.367	4.39	9.43	0.63
0.267	0.32	3.333	10.66	6.400	4.39	9.47	0.63
0.300	0.63	3.367	10.66	6.433	4.39	9.50	0.63
0.333	0.63	3.400	10.66	6.467	4.39	9.53	0.63
0.367	0.63	3.433	10.66	6.500	4.39	9.57	0.63
0.400	0.63	3.467	10.66	6.533	4.39	9.60	0.63
0.433	0.63	3.500	10.66	6.567	4.39	9.63	0.63
0.467	0.63	3.533	10.66	6.600	4.39	9.67	0.63
0.500	0.63	3.567	10.66	6.633	4.39	9.70	0.63
0.533	0.63	3.600	10.66	6.667	4.39	9.73	0.63
0.567	0.63	3.633	10.66	6.700	4.39	9.77	0.63
0.600	0.63	3.667	10.66	6.733	4.39	9.80	0.63
0.633	0.63	3.700	10.66	6.767	4.39	9.83	0.63
0.667	0.63	3.733	10.66	6.800	4.39	9.87	0.63
0.700	0.63	3.767	10.66	6.833	4.39	9.90	0.63
0.733	0.63	3.800	10.66	6.867	4.39	9.93	0.63
0.767	0.63	3.833	10.66	6.900	4.39	9.97	0.63
0.800	0.63	3.867	10.66	6.933	4.39	10.00	0.63
0.833	0.63	3.900	10.66	6.967	4.39	10.03	0.63
0.867	0.63	3.933	10.66	7.000	4.39	10.07	0.63
0.900	0.63	3.967	10.66	7.033	4.39	10.10	0.63
0.933	0.63	4.000	10.66	7.067	4.39	10.13	0.63
0.967	0.63	4.033	10.66	7.100	4.39	10.17	0.63
1.000	0.63	4.067	10.66	7.133	4.39	10.20	0.63
1.033	0.63	4.100	10.66	7.167	4.39	10.23	0.63
1.067	0.63	4.133	10.66	7.200	4.39	10.27	0.63
1.100	0.63	4.167	10.66	7.233	4.39	10.30	0.63
1.133	0.63	4.200	10.66	7.267	3.45	10.33	0.63
1.167	0.63	4.233	10.66	7.300	2.51	10.37	0.63
1.200	0.63	4.267	19.75	7.333	2.51	10.40	0.63
1.233	0.63	4.300	28.84	7.367	2.51	10.43	0.63
1.267	0.63	4.333	28.84	7.400	2.51	10.47	0.63
1.300	0.63	4.367	28.84	7.433	2.51	10.50	0.63
1.333	0.63	4.400	28.84	7.467	2.51	10.53	0.63
1.367	0.63	4.433	28.84	7.500	2.51	10.57	0.63
1.400	0.63	4.467	28.84	7.533	2.51	10.60	0.63
1.433	0.63	4.500	28.84	7.567	2.51	10.63	0.63
1.467	0.63	4.533	28.84	7.600	2.51	10.67	0.63
1.500	0.63	4.567	28.84	7.633	2.51	10.70	0.63
1.533	0.63	4.600	28.84	7.667	2.51	10.73	0.63
1.567	0.63	4.633	28.84	7.700	2.51	10.77	0.63
1.600	0.63	4.667	28.84	7.733	2.51	10.80	0.63
1.633	0.63	4.700	28.84	7.767	2.51	10.83	0.63
1.667	0.63	4.733	28.84	7.800	2.51	10.87	0.63
1.700	0.63	4.767	28.84	7.833	2.51	10.90	0.63
1.733	0.63	4.800	28.84	7.867	2.51	10.93	0.63
1.767	0.63	4.833	28.84	7.900	2.51	10.97	0.63
1.800	0.63	4.867	28.84	7.933	2.51	11.00	0.63
1.833	0.63	4.900	28.84	7.967	2.51	11.03	0.63
1.867	0.63	4.933	28.84	8.000	2.51	11.07	0.63
1.900	0.63	4.967	28.84	8.033	2.51	11.10	0.63
1.933	0.63	5.000	28.84	8.067	2.51	11.13	0.63
1.967	0.63	5.033	28.84	8.100	2.51	11.17	0.63
2.000	0.63	5.067	28.84	8.133	2.51	11.20	0.63
2.033	0.63	5.100	28.84	8.167	2.51	11.23	0.63
2.067	0.63	5.133	28.84	8.200	2.51	11.27	0.63
2.100	0.63	5.167	28.84	8.233	2.51	11.30	0.63
2.133	0.63	5.200	28.84	8.267	1.88	11.33	0.63
2.167	0.63	5.233	28.84	8.300	1.25	11.37	0.63
2.200	0.63	5.267	18.50	8.333	1.25	11.40	0.63
2.233	0.63	5.300	8.15	8.367	1.25	11.43	0.63
2.267	2.19	5.333	8.15	8.400	1.25	11.47	0.63
2.300	3.76	5.367	8.15	8.433	1.25	11.50	0.63
2.333	3.76	5.400	8.15	8.467	1.25	11.53	0.63
2.367	3.76	5.433	8.15	8.500	1.25	11.57	0.63
2.400	3.76	5.467	8.15	8.533	1.25	11.60	0.63
2.433	3.76	5.500	8.15	8.567	1.25	11.63	0.63
2.467	3.76	5.533	8.15	8.600	1.25	11.67	0.63
2.500	3.76	5.567	8.15	8.633	1.25	11.70	0.63
2.533	3.76	5.600	8.15	8.667	1.25	11.73	0.63
2.567	3.76	5.633	8.15	8.700	1.25	11.77	0.63
2.600	3.76	5.667	8.15	8.733	1.25	11.80	0.63
2.633	3.76	5.700	8.15	8.767	1.25	11.83	0.63
2.667	3.76	5.733	8.15	8.800	1.25	11.87	0.63
2.700	3.76	5.767	8.15	8.833	1.25	11.90	0.63
2.733	3.76	5.800	8.15	8.867	1.25	11.93	0.63
2.767	3.76	5.833	8.15	8.900	1.25	11.97	0.63
2.800	3.76	5.867	8.15	8.933	1.25	12.00	0.63
2.833	3.76	5.900	8.15	8.967	1.25	12.03	0.63
2.867	3.76	5.933	8.15	9.000	1.25	12.07	0.63
2.900	3.76	5.967	8.15	9.033	1.25	12.10	0.63
2.933	3.76	6.000	8.15	9.067	1.25	12.13	0.63
2.967	3.76	6.033	8.15	9.100	1.25	12.17	0.63
3.000	3.76	6.067	8.15	9.133	1.25	12.20	0.63
3.033	3.76	6.100	8.15	9.167	1.25	12.23	0.63
3.067	3.76	6.133	8.15	9.200	1.25	12.27	0.31

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.093 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 34.813
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.555

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

ADD HYD (0009)		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (2300):		2.00	0.093	5.40	34.81
+ ID2= 2 (0007):		68.37	0.938	5.90	44.72
ID = 3 (0009):		70.37	1.010	5.70	44.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2400)	Area	(ha)= 0.76	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia	(mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.04		

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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63

1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.027 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 20.776
TOTAL RAINFALL (mm)= 62.710
RUNOFF COEFFICIENT = 0.331

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

CALIB
STANDHYD (3500) | Area (ha)= 3.52
ID= 1 DT= 5.0 min | Total Imp(%)= 99.90 Dir. Conn.(%)= 99.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.52	0.00
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	153.19	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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	21.46
over (min)	5.00	10.00
Storage Coeff. (min)=	5.43 (ii)	6.16 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.20	0.15

			TOTALS
PEAK FLOW	(cms)=	0.28	0.00 0.282 (iii)
TIME TO PEAK	(hrs)=	5.25	5.25 5.25
RUNOFF VOLUME	(mm)=	61.71	34.81 61.68
TOTAL RAINFALL	(mm)=	62.71	62.71 62.71
RUNOFF COEFFICIENT	=	0.98	0.56 0.98

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.027	5.25	20.78
+ ID2= 2 (3500):	3.52	0.282	5.25	61.68
ID = 3 (0028):	4.28	0.309	5.25	54.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (3100) | Area (ha)= 25.24
ID= 1 DT= 5.0 min | Total Imp(%)= 85.90 Dir. Conn.(%)= 85.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	21.68	3.56
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	410.20	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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	21.21
over (min)	5.00	20.00
Storage Coeff. (min)=	6.70 (ii)	19.82 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.18	0.06

			TOTALS
PEAK FLOW	(cms)=	0.50	0.04 0.544 (iii)
TIME TO PEAK	(hrs)=	5.25	5.33 5.25
RUNOFF VOLUME	(mm)=	61.71	34.81 58.56
TOTAL RAINFALL	(mm)=	62.71	62.71 62.71
RUNOFF COEFFICIENT	=	0.98	0.56 0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):	25.24	1.897	5.25	57.92
+ ID2= 2 (3200):	7.11	0.544	5.25	58.56
ID = 3 (0020):	32.35	2.440	5.25	58.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (3200) | Area (ha)= 7.11
ID= 1 DT= 5.0 min | Total Imp(%)= 88.30 Dir. Conn.(%)= 88.30

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.28	0.83
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	217.72	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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	21.21
over (min)	5.00	20.00
Storage Coeff. (min)=	6.70 (ii)	19.82 (ii)
Unit Hyd. Tpeak (min)=	5.00	20.00
Unit Hyd. peak (cms)=	0.18	0.06

			TOTALS
PEAK FLOW	(cms)=	0.50	0.04 0.544 (iii)
TIME TO PEAK	(hrs)=	5.25	5.33 5.25
RUNOFF VOLUME	(mm)=	61.71	34.81 58.56
TOTAL RAINFALL	(mm)=	62.71	62.71 62.71
RUNOFF COEFFICIENT	=	0.98	0.56 0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB
STANDHYD (3300) | Area (ha)= 9.32
ID= 1 DT= 5.0 min | Total Imp(%)= 78.80 Dir. Conn.(%)= 78.80

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	7.34	1.98
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	249.27	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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63

2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	21.21	
over (min)	5.00	25.00	
Storage Coeff. (min)=	7.27 (ii)	20.39 (ii)	
Unit Hyd. Tpeak (min)=	5.00	25.00	
Unit Hyd. peak (cms)=	0.17	0.05	
			TOTALS
PEAK FLOW (cms)=	0.59	0.10	0.682 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	61.71	34.81	56.01
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.56	0.89

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0020):	32.35	2.440	5.25	58.06	
+ ID2= 2 (3300):	9.32	0.682	5.25	56.01	
ID = 3 (0022):	41.67	3.122	5.25	57.60	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (3400)	Area (ha)= 4.34		
ID= 1 DT= 5.0 min	Total Imp(%)= 77.60	Dir. Conn.(%)= 77.60	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	3.37	0.97	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	170.10	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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Max.Eff.Inten.(mm/hr)=	28.84	21.21	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.78 (ii)	18.90 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.20	0.06	
			TOTALS
PEAK FLOW (cms)=	0.27	0.05	0.318 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	61.71	34.81	55.68
TOTAL RAINFALL (mm)=	62.71	62.71	62.71
RUNOFF COEFFICIENT =	0.98	0.56	0.89

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (0022):	41.67	3.122	5.25	57.60	
+ ID2= 2 (0028):	4.28	0.309	5.25	54.42	
ID = 3 (0024):	45.95	3.431	5.25	57.30	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)					
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 3 (0024):	45.95	3.431	5.25	57.30	
+ ID2= 2 (3400):	4.34	0.318	5.25	55.68	
ID = 1 (0024):	50.29	3.749	5.25	57.16	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.7480	3.7607
	0.0140	0.5845	1.1340	4.6672
	0.0210	1.1690	1.4200	5.2879
	0.1010	1.7265	1.7270	5.9087
	0.2410	2.3077	7.3760	6.5294
	0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	3.749	5.25	57.16
OUTFLOW: ID= 1 (5001)	50.290	0.279	8.33	47.44

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.45
TIME SHIFT OF PEAK FLOW (min)=185.00
MAXIMUM STORAGE USED (ha.m.)= 2.4319

ADD HYD (0013)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):	50.29	0.279	8.33	47.44
+ ID2= 2 (0009):	70.37	1.010	5.70	44.44
ID = 3 (0013):	120.66	1.194	6.00	40.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (4100)	Area (ha)= 3.48	Curve Number (CN)= 87.0		
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 0.04			

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	3.76	6.250	8.15	9.33	0.63
0.167	0.00	3.250	3.76	6.333	4.39	9.42	0.63
0.250	0.00	3.333	10.66	6.417	4.39	9.50	0.63
0.333	0.63	3.417	10.66	6.500	4.39	9.58	0.63
0.417	0.63	3.500	10.66	6.583	4.39	9.67	0.63
0.500	0.63	3.583	10.66	6.667	4.39	9.75	0.63
0.583	0.63	3.667	10.66	6.750	4.39	9.83	0.63
0.667	0.63	3.750	10.66	6.833	4.39	9.92	0.63
0.750	0.63	3.833	10.66	6.917	4.39	10.00	0.63
0.833	0.63	3.917	10.66	7.000	4.39	10.08	0.63
0.917	0.63	4.000	10.66	7.083	4.39	10.17	0.63
1.000	0.63	4.083	10.66	7.167	4.39	10.25	0.63
1.083	0.63	4.167	10.66	7.250	4.39	10.33	0.63
1.167	0.63	4.250	10.66	7.333	2.51	10.42	0.63
1.250	0.63	4.333	28.84	7.417	2.51	10.50	0.63
1.333	0.63	4.417	28.84	7.500	2.51	10.58	0.63
1.417	0.63	4.500	28.84	7.583	2.51	10.67	0.63
1.500	0.63	4.583	28.84	7.667	2.51	10.75	0.63
1.583	0.63	4.667	28.84	7.750	2.51	10.83	0.63
1.667	0.63	4.750	28.84	7.833	2.51	10.92	0.63
1.750	0.63	4.833	28.84	7.917	2.51	11.00	0.63
1.833	0.63	4.917	28.84	8.000	2.51	11.08	0.63
1.917	0.63	5.000	28.84	8.083	2.51	11.17	0.63
2.000	0.63	5.083	28.84	8.167	2.51	11.25	0.63
2.083	0.63	5.167	28.84	8.250	2.51	11.33	0.63
2.167	0.63	5.250	28.84	8.333	1.25	11.42	0.63
2.250	0.63	5.333	8.15	8.417	1.25	11.50	0.63
2.333	3.76	5.417	8.15	8.500	1.25	11.58	0.63
2.417	3.76	5.500	8.15	8.583	1.25	11.67	0.63
2.500	3.76	5.583	8.15	8.667	1.25	11.75	0.63
2.583	3.76	5.667	8.15	8.750	1.25	11.83	0.63
2.667	3.76	5.750	8.15	8.833	1.25	11.92	0.63
2.750	3.76	5.833	8.15	8.917	1.25	12.00	0.63
2.833	3.76	5.917	8.15	9.000	1.25	12.08	0.63
2.917	3.76	6.000	8.15	9.083	1.25	12.17	0.63
3.000	3.76	6.083	8.15	9.167	1.25	12.25	0.63
3.083	3.76	6.167	8.15	9.250	1.25		

Unit Hyd Qpeak (cms)=	3.323
PEAK FLOW (cms)=	0.125 (i)
TIME TO PEAK (hrs)=	5.250
RUNOFF VOLUME (mm)=	20.776
TOTAL RAINFALL (mm)=	62.710
RUNOFF COEFFICIENT =	0.331

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

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** SIMULATION:Run 11 25yr 12hr AES **
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READ STORM	Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\cc5407ea
Ptotal= 73.10 mm	Comments: 25yr/12hr

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	12.43	6.75	5.12	10.00	0.73
0.50	0.73	3.75	12.43	7.00	5.12	10.25	0.73
0.75	0.73	4.00	12.43	7.25	5.12	10.50	0.73
1.00	0.73	4.25	12.43	7.50	2.92	10.75	0.73
1.25	0.73	4.50	33.63	7.75	2.92	11.00	0.73
1.50	0.73	4.75	33.63	8.00	2.92	11.25	0.73
1.75	0.73	5.00	33.63	8.25	2.92	11.50	0.73
2.00	0.73	5.25	33.63	8.50	1.46	11.75	0.73
2.25	0.73	5.50	9.50	8.75	1.46	12.00	0.73
2.50	4.39	5.75	9.50	9.00	1.46	12.25	0.73
2.75	4.39	6.00	9.50	9.25	1.46		
3.00	4.39	6.25	9.50	9.50	0.73		
3.25	4.39	6.50	5.12	9.75	0.73		

CALIB				
NASHYD (1000)	Area (ha)= 19.21	Curve Number (CN)= 87.0		
ID= 1 DT= 2.0 min	Ia (mm)= 7.70	# of Linear Res.(N)= 3.00		
	U.H. Tp(hrs)= 1.07			

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.39	6.167	9.50	9.23	1.46
0.067	0.00	3.133	4.39	6.200	9.50	9.27	1.09
0.100	0.00	3.167	4.39	6.233	9.50	9.30	0.73
0.133	0.00	3.200	4.39	6.267	7.31	9.33	0.73
0.167	0.00	3.233	4.39	6.300	5.12	9.37	0.73
0.200	0.00	3.267	8.41	6.333	5.12	9.40	0.73
0.233	0.00	3.300	12.43	6.367	5.12	9.43	0.73
0.267	0.37	3.333	12.43	6.400	5.12	9.47	0.73
0.300	0.73	3.367	12.43	6.433	5.12	9.50	0.73
0.333	0.73	3.400	12.43	6.467	5.12	9.53	0.73
0.367	0.73	3.433	12.43	6.500	5.12	9.57	0.73
0.400	0.73	3.467	12.43	6.533	5.12	9.60	0.73
0.433	0.73	3.500	12.43	6.567	5.12	9.63	0.73
0.467	0.73	3.533	12.43	6.600	5.12	9.67	0.73
0.500	0.73	3.567	12.43	6.633	5.12	9.70	0.73
0.533	0.73	3.600	12.43	6.667	5.12	9.73	0.73
0.567	0.73	3.633	12.43	6.700	5.12	9.77	0.73
0.600	0.73	3.667	12.43	6.733	5.12	9.80	0.73
0.633	0.73	3.700	12.43	6.767	5.12	9.83	0.73
0.667	0.73	3.733	12.43	6.800	5.12	9.87	0.73
0.700	0.73	3.767	12.43	6.833	5.12	9.90	0.73
0.733	0.73	3.800	12.43	6.867	5.12	9.93	0.73
0.767	0.73	3.833	12.43	6.900	5.12	9.97	0.73
0.800	0.73	3.867	12.43	6.933	5.12	10.00	0.73
0.833	0.73	3.900	12.43	6.967	5.12	10.03	0.73
0.867	0.73	3.933	12.43	7.000	5.12	10.07	0.73
0.900	0.73	3.967	12.43	7.033	5.12	10.10	0.73
0.933	0.73	4.000	12.43	7.067	5.12	10.13	0.73
0.967	0.73	4.033	12.43	7.100	5.12	10.17	0.73
1.000	0.73	4.067	12.43	7.133	5.12	10.20	0.73
1.033	0.73	4.100	12.43	7.167	5.12	10.23	0.73
1.067	0.73	4.133	12.43	7.200	5.12	10.27	0.73
1.100	0.73	4.167	12.43	7.233	5.12	10.30	0.73
1.133	0.73	4.200	12.43	7.267	4.02	10.33	0.73
1.167	0.73	4.233	12.43	7.300	2.92	10.37	0.73
1.200	0.73	4.267	23.03	7.333	2.92	10.40	0.73
1.233	0.73	4.300	33.63	7.367	2.92	10.43	0.73
1.267	0.73	4.333	33.63	7.400	2.92	10.47	0.73
1.300	0.73	4.367	33.63	7.433	2.92	10.50	0.73
1.333	0.73	4.400	33.63	7.467	2.92	10.53	0.73
1.367	0.73	4.433	33.63	7.500	2.92	10.57	0.73
1.400	0.73	4.467	33.63	7.533	2.92	10.60	0.73
1.433	0.73	4.500	33.63	7.567	2.92	10.63	0.73
1.467	0.73	4.533	33.63	7.600	2.92	10.67	0.73
1.500	0.73	4.567	33.63	7.633	2.92	10.70	0.73
1.533	0.73	4.600	33.63	7.667	2.92	10.73	0.73
1.567	0.73	4.633	33.63	7.700	2.92	10.77	0.73
1.600	0.73	4.667	33.63	7.733	2.92	10.80	0.73
1.633	0.73	4.700	33.63	7.767	2.92	10.83	0.73
1.667	0.73	4.733	33.63	7.800	2.92	10.87	0.73
1.700	0.73	4.767	33.63	7.833	2.92	10.90	0.73
1.733	0.73	4.800	33.63	7.867	2.92	10.93	0.73
1.767	0.73	4.833	33.63	7.900	2.92	10.97	0.73
1.800	0.73	4.867	33.63	7.933	2.92	11.00	0.73
1.833	0.73	4.900	33.63	7.967	2.92	11.03	0.73
1.867	0.73	4.933	33.63	8.000	2.92	11.07	0.73
1.900	0.73	4.967	33.63	8.033	2.92	11.10	0.73
1.933	0.73	5.000	33.63	8.067	2.92	11.13	0.73
1.967	0.73	5.033	33.63	8.100	2.92	11.17	0.73
2.000	0.73	5.067	33.63	8.133	2.92	11.20	0.73

2.033	0.73	5.100	33.63	8.167	2.92	11.23	0.73
2.067	0.73	5.133	33.63	8.200	2.92	11.27	0.73
2.100	0.73	5.167	33.63	8.233	2.92	11.30	0.73
2.133	0.73	5.200	33.63	8.267	2.19	11.33	0.73
2.167	0.73	5.233	33.63	8.300	1.46	11.37	0.73
2.200	0.73	5.267	21.57	8.333	1.46	11.40	0.73
2.233	0.73	5.300	9.50	8.367	1.46	11.43	0.73
2.267	2.56	5.333	9.50	8.400	1.46	11.47	0.73
2.300	4.39	5.367	9.50	8.433	1.46	11.50	0.73
2.333	4.39	5.400	9.50	8.467	1.46	11.53	0.73
2.367	4.39	5.433	9.50	8.500	1.46	11.57	0.73
2.400	4.39	5.467	9.50	8.533	1.46	11.60	0.73
2.433	4.39	5.500	9.50	8.567	1.46	11.63	0.73
2.467	4.39	5.533	9.50	8.600	1.46	11.67	0.73
2.500	4.39	5.567	9.50	8.633	1.46	11.70	0.73
2.533	4.39	5.600	9.50	8.667	1.46	11.73	0.73
2.567	4.39	5.633	9.50	8.700	1.46	11.77	0.73
2.600	4.39	5.667	9.50	8.733	1.46	11.80	0.73
2.633	4.39	5.700	9.50	8.767	1.46	11.83	0.73
2.667	4.39	5.733	9.50	8.800	1.46	11.87	0.73
2.700	4.39	5.767	9.50	8.833	1.46	11.90	0.73
2.733	4.39	5.800	9.50	8.867	1.46	11.93	0.73
2.767	4.39	5.833	9.50	8.900	1.46	11.97	0.73
2.800	4.39	5.867	9.50	8.933	1.46	12.00	0.73
2.833	4.39	5.900	9.50	8.967	1.46	12.03	0.73
2.867	4.39	5.933	9.50	9.000	1.46	12.07	0.73
2.900	4.39	5.967	9.50	9.033	1.46	12.10	0.73
2.933	4.39	6.000	9.50	9.067	1.46	12.13	0.73
2.967	4.39	6.033	9.50	9.100	1.46	12.17	0.73
3.000	4.39	6.067	9.50	9.133	1.46	12.20	0.73
3.033	4.39	6.100	9.50	9.167	1.46	12.23	0.73
3.067	4.39	6.133	9.50	9.200	1.46	12.27	0.36

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.656 (i)
TIME TO PEAK (hrs)= 6.167
RUNOFF VOLUME (mm)= 41.383
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.566

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

CALIB					
NASHYD (1100)	Area (ha)= 2.08	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.29	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.39	6.167	9.50	9.23	1.46
0.067	0.00	3.133	4.39	6.200	9.50	9.27	1.09
0.100	0.00	3.167	4.39	6.233	9.50	9.30	0.73
0.133	0.00	3.200	4.39	6.267	7.31	9.33	0.73
0.167	0.00	3.233	4.39	6.300	5.12	9.37	0.73
0.200	0.00	3.267	8.41	6.333	5.12	9.40	0.73
0.233	0.00	3.300	12.43	6.367	5.12	9.43	0.73
0.267	0.37	3.333	12.43	6.400	5.12	9.47	0.73
0.300	0.73	3.367	12.43	6.433	5.12	9.50	0.73
0.333	0.73	3.400	12.43	6.467	5.12	9.53	0.73
0.367	0.73	3.433	12.43	6.500	5.12	9.57	0.73
0.400	0.73	3.467	12.43	6.533	5.12	9.60	0.73
0.433	0.73	3.500	12.43	6.567	5.12	9.63	0.73
0.467	0.73	3.533	12.43	6.600	5.12	9.67	0.73
0.500	0.73	3.567	12.43	6.633	5.12	9.70	0.73
0.533	0.73	3.600	12.43	6.667	5.12	9.73	0.73
0.567	0.73	3.633	12.43	6.700	5.12	9.77	0.73
0.600	0.73	3.667	12.43	6.733	5.12	9.80	0.73
0.633	0.73	3.700	12.43	6.767	5.12	9.83	0.73
0.667	0.73	3.733	12.43	6.800	5.12	9.87	0.73
0.700	0.73	3.767	12.43	6.833	5.12	9.90	0.73
0.733	0.73	3.800	12.43	6.867	5.12	9.93	0.73
0.767	0.73	3.833	12.43	6.900	5.12	9.97	0.73
0.800	0.73	3.867	12.43	6.933	5.12	10.00	0.73
0.833	0.73	3.900	12.43	6.967	5.12	10.03	0.73
0.867	0.73	3.933	12.43	7.000	5.12	10.07	0.73
0.900	0.73	3.967	12.43	7.033	5.12	10.10	0.73
0.933	0.73	4.000	12.43	7.067	5.12	10.13	0.73
0.967	0.73	4.033	12.43	7.100	5.12	10.17	0.73
1.000	0.73	4.067	12.43	7.133	5.12	10.20	0.73
1.033	0.73	4.100	12.43	7.167	5.12	10.23	0.73
1.067	0.73	4.133	12.43	7.200	5.12	10.27	0.73
1.100	0.73	4.167	12.43	7.233	5.12	10.30	0.73
1.133	0.73	4.200	12.43	7.267	4.02	10.33	0.73
1.167	0.73	4.233	12.43	7.300	2.92	10.37	0.73
1.200	0.73	4.267	23.03	7.333	2.92	10.40	0.73
1.233	0.73	4.300	33.63	7.367	2.92	10.43	0.73
1.267	0.73	4.333	33.63	7.400	2.92	10.47	0.73
1.300	0.73	4.367	33.63	7.433	2.92	10.50	0.73
1.333	0.73	4.400	33.63	7.467	2.92	10.53	0.73
1.367	0.73	4.433	33.63	7.500	2.92	10.57	0.73
1.400	0.73	4.467	33.63	7.533	2.92	10.60	0.73
1.433	0.73	4.500	33.63	7.567	2.92	10.63	0.73
1.467	0.73	4.533	33.63	7.600	2.92	10.67	0.73
1.500	0.73	4.567	33.63	7.633	2.92	10.70	0.73
1.533	0.73	4.600	33.63	7.667	2.92	10.73	0.73
1.567	0.73	4.633	33.63	7.700	2.92	10.77	0.73
1.600	0.73	4.667	33.63	7.733	2.92	10.80	0.73
1.633	0.73	4.700	33.63	7.767	2.92	10.83	0.73
1.667	0.73	4.733	33.63	7.800	2.92	10.87	0.73
1.700	0.73	4.767	33.63	7.833	2.92	10.90	0.73
1.733	0.73	4.800	33.63	7.867	2.92	10.93	0.73
1.767	0.73	4.833	33.63	7.900	2.92	10.97	0.73
1.800	0.73	4.867	33.63	7.933	2.92	11.00	0.73
1.833	0.73	4.900	33.63	7.967	2.92	11.03	0.73
1.867	0.73	4.933	33.63	8.000	2.92	11.07	0.73
1.900	0.73	4.967	33.63	8.033	2.92	11.10	0.73
1.933	0.73	5.000	33.63	8.067	2.92	11.13	0.73
1.967	0.73	5.033	33.63	8.100	2.92	11.17	0.73
2.000	0.73	5.067	33.63	8.133	2.92	11.20	0.73
2.033	0.73	5.100	33.63	8.167	2.92	11.23	0.73
2.067	0.73	5.133	33.63	8.200	2.92	11.27	0.73
2.100	0.73	5.167	33.63	8.233	2.92	11.30	0.73
2.133	0.73	5.200	33.63	8.267	2.19	11.33	0.73
2.167	0.73	5.233	33.63	8.300	1.46	11.37	0.73
2.200	0.73	5.267	21.57	8.333	1.46	11.40	0.73
2.233	0.73	5.300	9.50	8.367	1.46	11.43	0.73
2.267	2.56	5.333	9.50	8.400	1.46	11.47	0.73
2.300	4.39	5.367	9.50	8.433	1.46	11.50	0.73
2.333	4.39	5.400	9.50	8.467	1.46	11.53	0.73
2.367	4.39	5.433	9.50	8.500	1.46	11.57	0.73
2.400	4.39	5.467	9.50	8.533	1.46	11.60	0.73
2.433	4.39	5.500	9.50	8.567	1.46	11.63	0.73
2.467	4.39	5.533	9.50	8.600	1.46	11.67	0.73
2.500	4.39	5.567	9.50	8.633	1.46	11.70	0.73
2.533	4.39	5.600	9.50	8.667	1.46	11.73	0.73
2.567	4.39	5.633	9.50	8.700	1.46	11.77	0.73
2.600	4.39	5.667	9.50	8.733	1.46	11.80	0.73
2.633	4.39	5.700	9.50	8.767	1.46	11.83	0.73
2.667	4.39	5.733	9.50	8.800	1.46	11.87	0.73
2.700	4.39	5.767	9.50	8.833	1.46	11.90	0.73
2.733	4.39	5.800	9.50	8.867	1.46	11.93	0.73
2.767	4.39	5.833	9.50	8.900	1.46	11.97	0.73
2.800	4.39	5.867	9.50	8.933	1.46	12.00	0.73
2.833	4.39	5.900	9.50	8.967	1.46	12.03	0.73
2.867	4.39	5.933	9.50	9.000	1.46	12.07	0.73
2.900	4.39	5.967	9.50	9.033	1.46	12.10	0.73
2.933	4.39	6.000	9.50	9.067	1.46	12.13	0.73
2.967	4.39	6.033	9.50	9.100	1.46	12.17	0.73
3.000	4.39	6.067	9.50	9.133	1.46	12.20	0.73
3.033	4.39	6.100	9.50	9.167	1.46	12.23	0.73
3.067	4.39	6.133	9.50	9.200	1.46	12.27	0.36

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.136 (i)
TIME TO PEAK (hrs)= 5.300
RUNOFF VOLUME (mm)= 43.728
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.598

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

DUHYD (2000)				
Inlet Cap.= 0.949				
#of Inlets= 1				
Total(cms)= 0.9	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.14	5.30	43.73

MAJOR SYS.(ID= 2): 0.00 0.00 0.00 0.00
MINOR SYS.(ID= 3): 2.08 0.14 5.30 43.73

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (1200)	Area (ha)= 25.19				
ID= 1 DT= 2.0 min	Total Imp(%)= 88.60	Dir. Conn.(%)= 88.60			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.39	6.167	9.50	9.23	1.46
0.067	0.00	3.133	4.39	6.200	9.50	9.27	1.09
0.100	0.00	3.167	4.39	6.233	9.50	9.30	0.73
0.133	0.00	3.200	4.39	6.267	7.31	9.33	0.73
0.167	0.00	3.233	4.39	6.300	5.12	9.37	0.73
0.200	0.00	3.267	8.41	6.333	5.12	9.40	0.73
0.233	0.00	3.300	12.43	6.367	5.12	9.43	0.73
0.267	0.37	3.333	12.43	6.400	5.12	9.47	0.73
0.300	0.73	3.367	12.43	6.433	5.12	9.50	0.73
0.333	0.73	3.400	12.43	6.467	5.12	9.53	0.73
0.367	0.73	3.433	12.43	6.500	5.12	9.57	0.73
0.400	0.73	3.467	12.43	6.533	5.12	9.60	0.73
0.433	0.73	3.500	12.43	6.567	5.12	9.63	0.73
0.467	0.73	3.533	12.43	6.600	5.12	9.67	0.73
0.500	0.73	3.567	12.43	6.633	5.12	9.70	0.73
0.533	0.73	3.600	12.43	6.667	5.12	9.73	0.73
0.567	0.73	3.633	12.43	6.700	5.12	9.77	0.73
0.600	0.73	3.667	12.43	6.733	5.12	9.80	0.73
0.633	0.73	3.700	12.43	6.767	5.12	9.83	0.73
0.667	0.73	3.733	12.43	6.800	5.12	9.87	0.73
0.700	0.73	3.767	12.43	6.833	5.12	9.90	0.73
0.733	0.73	3.800	12.43	6.867	5.12	9.93	0.73
0.767	0.73	3.833	12.43	6.900	5.12	9.97	0.73
0.800	0.73	3.867	12.43	6.933	5.12	10.00	0.73
0.833	0.73	3.900	12.43	6.967	5.12	10.03	0.73
0.867	0.73	3.933	12.43	7.000	5.12	10.07	0.73
0.900	0.73	3.967	12.43	7.033	5.12	10.10	0.73
0.933	0.73	4.000	12.43	7.067	5.12	10.13	0.73
0.967	0.73	4.033	12.43	7.100	5.12	10.17	0.73
1.000	0.73	4.067	12.43	7.133	5.12	10.20	0.73
1.033	0.73	4.100	12.43	7.167	5.12	10.23	0.73
1.067	0.73	4.133	12.43	7.200	5.12	10.27	0.73
1.100	0.73	4.167	12.43	7.233	5.12	10.30	0.73
1.133	0.73	4.200	12.43	7.267	4.02	10.33	0.73
1.167	0.73	4.233	12.43	7.300	2.92	10.37	0.73
1.200	0.73	4.267	23.03	7.333	2.92	10.40	0.73
1.233	0.73	4.300	33.63	7.367	2.92	10.43	0.73
1.267	0.73	4.333	33.63	7.400	2.92	10.47	0.73
1.300	0.73	4.367	33.63	7.433	2.92	10.50	0.73
1.333	0.73	4.400	33.63	7.467	2.92	10.53	0.73
1.367	0.73	4.433	33.63	7.500	2.92	10.57	0.73
1.400	0.73	4.467	33.63	7.533	2.92	10.60	0.73
1.433	0.73	4.500	33.63	7.567	2.92	10.63	0.73
1.467	0.73	4.533	33.63	7.600	2.92	10.67	0.73
1.500	0.73	4.567	33.63	7.633	2.92	10.70	0.73
1.533	0.73	4.600	33.63	7.667	2.92	10.73	0.73
1.567	0.73	4.633	33.63	7.700	2.92	10.77	0.73
1.600	0.73	4.667	33.63	7.733	2.92	10.80	0.73
1.633	0.73	4.700	33.63	7.767	2.92	10.83	0.73
1.667	0.73	4.733	33.63	7.800	2.92	10.87	0.73
1.700	0.73	4.767	33.63	7.833	2.92	10.90	0.73
1.733	0.73	4.800	33.63	7.867	2.92	10.93	0.73
1.767	0.73	4.833	33.63	7.900	2.92	10.97	0.73
1.800	0.73	4.867	33.63	7.933	2.92	11.00	0.73
1.833	0.73	4.900	33.63	7.967	2.92	11.03	0.73
1.867	0.73	4.933	33.63	8.000	2.92	11.07	0.73
1.900	0.73	4.967	33.63	8.033	2.92	11.10	0.73
1.933	0.73	5.000	33.63	8.067	2.92	11.13	0.73
1.967	0.73	5.033	33.63	8.100	2.92	11.17	0.73
2.000	0.73	5.067	33.63	8.133	2.92	11.20	0.73
2.033	0.73	5.100	33.63	8.167	2.92	11.23	0.73
2.067	0.73	5.133	33.63	8.200	2.92	11.27	0.73
2.100	0.73	5.167	33.63	8.233	2.92	11.30	0.73
2.133	0.73	5.200	33.63	8.267	2.19	11.33	0.73
2.167	0.73	5.233	33.63	8.300	1.46	11.37	0.73
2.200	0.73	5.267	21.57	8.333	1.46	11.40	0.73
2.233	0.73	5.300	9.50	8.367	1.46	11.43	0.73
2.267	2.56	5.333	9.50	8.400	1.46	11.47	0.73
2.300	4.39	5.367	9.50	8.433	1.46	11.50	0.73
2.333	4.39	5.400	9.50	8.467	1.46	11.53	0.73
2.367	4.39	5.433	9.50	8.500	1.46	11.57	0.73
2.400	4.39	5.467	9.50	8.533	1.46	11.60	0.73
2.433	4.39	5.500	9.50	8.567	1.46	11.63	0.73
2.467	4.39	5.533	9.50	8.600	1.46	11.67	0.73
2.500	4.39	5.567	9.50	8.633	1.46	11.70	0.73
2.533	4.39	5.600	9.50	8.667	1.46	11.73	0.73
2.567	4.39	5.633	9.50	8.700	1.46	11.77	0.73
2.600	4.39	5.667	9.50	8.733	1.46	11.80	0.73
2.633	4.39	5.700	9.50	8.767	1.46	11.83	0.73
2.667	4.39	5.733	9.50	8.800	1.46	11.87	0.73
2.700	4.39	5.767	9.50	8.833	1.46	11.90	0.73
2.733	4.39	5.800	9.50	8.867	1.46	11.93	0.73
2.767	4.39	5.833	9.50	8.900	1.46	11.97	0.73
2.800	4.39	5.867	9.50	8.933	1.46	12.00	0.73
2.833	4.39	5.900	9.50	8.967	1.46	12.03	0.73
2.867	4.39	5.933	9.50	9.000	1.46	12.07	0.73
2.900	4.39	5.967	9.50	9.033	1.46	12.10	0.73
2.933	4.39	6.000	9.50	9.067	1.46	12.13	0.73
2.967	4.39	6.033	9.50	9.100	1.46	12.17	0.73
3.000	4.39	6.067	9.50	9.133	1.46	12.20	0.73
3.033	4.39	6.100	9.50	9.167	1.46	12.23	0.73
3.067	4.39	6.133	9.50	9.200	1.46	12.27	0.36

Max.Eff.Inten.(mm/hr)=	33.63	26.33	
over (min)	10.00	16.00	
Storage Coeff. (min)=	9.21 (ii)	14.01 (ii)	
Unit Hyd. Tpeak (min)=	10.00	16.00	
Unit Hyd. peak (cms)=	0.12	0.08	
			TOTALS
PEAK FLOW (cms)=	2.08	0.19	2.270 (iii)
TIME TO PEAK (hrs)=	5.23	5.27	5.23
RUNOFF VOLUME (mm)=	72.10	43.73	68.87
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	2.270	5.23	68.87
+ ID2= 2 (2000):	2.08	0.136	5.30	43.73
ID = 3 (2001):	27.27	2.404	5.23	66.95

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	2.404	5.23	66.95
OUTFLOW: ID= 1 (1002)	27.270	0.191	8.37	61.29

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.97
TIME SHIFT OF PEAK FLOW (min)=188.00
MAXIMUM STORAGE USED (ha.m.)= 1.4873

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| CALIB              |
| STANDHYD ( 1300)|   Area     (ha)=  13.18
|ID= 1 DT= 2.0 min |   Total Imp(%)=  83.40   Dir. Conn.(%)=  83.40
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=     10.99         2.19
     Dep. Storage     (mm)=      1.00         5.00
     Average Slope     (%)=      1.00         2.00
     Length            (m)=    296.42        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
                 0.033    0.00 | 3.100    4.39 | 6.167    9.50 |  9.23    1.46
                 0.067    0.00 | 3.133    4.39 | 6.200    9.50 |  9.27    1.09
                 0.100    0.00 | 3.167    4.39 | 6.233    9.50 |  9.30    0.73
                 0.133    0.00 | 3.200    4.39 | 6.267    7.31 |  9.33    0.73
                 0.167    0.00 | 3.233    4.39 | 6.300    5.12 |  9.37    0.73
                 0.200    0.00 | 3.267    8.41 | 6.333    5.12 |  9.40    0.73
                 0.233    0.00 | 3.300   12.43 | 6.367    5.12 |  9.43    0.73
                 0.267    0.37 | 3.333   12.43 | 6.400    5.12 |  9.47    0.73
                 0.300    0.73 | 3.367   12.43 | 6.433    5.12 |  9.50    0.73
                 0.333    0.73 | 3.400   12.43 | 6.467    5.12 |  9.53    0.73
                 0.367    0.73 | 3.433   12.43 | 6.500    5.12 |  9.57    0.73
                 0.400    0.73 | 3.467   12.43 | 6.533    5.12 |  9.60    0.73
                 0.433    0.73 | 3.500   12.43 | 6.567    5.12 |  9.63    0.73
                 0.467    0.73 | 3.533   12.43 | 6.600    5.12 |  9.67    0.73
                 0.500    0.73 | 3.567   12.43 | 6.633    5.12 |  9.70    0.73
                 0.533    0.73 | 3.600   12.43 | 6.667    5.12 |  9.73    0.73
                 0.567    0.73 | 3.633   12.43 | 6.700    5.12 |  9.77    0.73
                 0.600    0.73 | 3.667   12.43 | 6.733    5.12 |  9.80    0.73
                 0.633    0.73 | 3.700   12.43 | 6.767    5.12 |  9.83    0.73
                 0.667    0.73 | 3.733   12.43 | 6.800    5.12 |  9.87    0.73
                 0.700    0.73 | 3.767   12.43 | 6.833    5.12 |  9.90    0.73
                 0.733    0.73 | 3.800   12.43 | 6.867    5.12 |  9.93    0.73
                 0.767    0.73 | 3.833   12.43 | 6.900    5.12 |  9.97    0.73
                 0.800    0.73 | 3.867   12.43 | 6.933    5.12 | 10.00    0.73
                 0.833    0.73 | 3.900   12.43 | 6.967    5.12 | 10.03    0.73
                 0.867    0.73 | 3.933   12.43 | 7.000    5.12 | 10.07    0.73
                 0.900    0.73 | 3.967   12.43 | 7.033    5.12 | 10.10    0.73
                 0.933    0.73 | 4.000   12.43 | 7.067    5.12 | 10.13    0.73
                 0.967    0.73 | 4.033   12.43 | 7.100    5.12 | 10.17    0.73
                 1.000    0.73 | 4.067   12.43 | 7.133    5.12 | 10.20    0.73
                 1.033    0.73 | 4.100   12.43 | 7.167    5.12 | 10.23    0.73
                 1.067    0.73 | 4.133   12.43 | 7.200    5.12 | 10.27    0.73
                 1.100    0.73 | 4.167   12.43 | 7.233    5.12 | 10.30    0.73
                 1.133    0.73 | 4.200   12.43 | 7.267    4.02 | 10.33    0.73
                 1.167    0.73 | 4.233   12.43 | 7.300    2.92 | 10.37    0.73
                 1.200    0.73 | 4.267   23.03 | 7.333    2.92 | 10.40    0.73
                 1.233    0.73 | 4.300   33.63 | 7.367    2.92 | 10.43    0.73
                 1.267    0.73 | 4.333   33.63 | 7.400    2.92 | 10.47    0.73
                 1.300    0.73 | 4.367   33.63 | 7.433    2.92 | 10.50    0.73
                 1.333    0.73 | 4.400   33.63 | 7.467    2.92 | 10.53    0.73
                 1.367    0.73 | 4.433   33.63 | 7.500    2.92 | 10.57    0.73
                 1.400    0.73 | 4.467   33.63 | 7.533    2.92 | 10.60    0.73
                 1.433    0.73 | 4.500   33.63 | 7.567    2.92 | 10.63    0.73
                 1.467    0.73 | 4.533   33.63 | 7.600    2.92 | 10.67    0.73
                 1.500    0.73 | 4.567   33.63 | 7.633    2.92 | 10.70    0.73
                 1.533    0.73 | 4.600   33.63 | 7.667    2.92 | 10.73    0.73
                 1.567    0.73 | 4.633   33.63 | 7.700    2.92 | 10.77    0.73
                 1.600    0.73 | 4.667   33.63 | 7.733    2.92 | 10.80    0.73
                 1.633    0.73 | 4.700   33.63 | 7.767    2.92 | 10.83    0.73
                 1.667    0.73 | 4.733   33.63 | 7.800    2.92 | 10.87    0.73
                 1.700    0.73 | 4.767   33.63 | 7.833    2.92 | 10.90    0.73
                 1.733    0.73 | 4.800   33.63 | 7.867    2.92 | 10.93    0.73
                 1.767    0.73 | 4.833   33.63 | 7.900    2.92 | 10.97    0.73
                 1.800    0.73 | 4.867   33.63 | 7.933    2.92 | 11.00    0.73
                 1.833    0.73 | 4.900   33.63 | 7.967    2.92 | 11.03    0.73
                 1.867    0.73 | 4.933   33.63 | 8.000    2.92 | 11.07    0.73
                 1.900    0.73 | 4.967   33.63 | 8.033    2.92 | 11.10    0.73
                 1.933    0.73 | 5.000   33.63 | 8.067    2.92 | 11.13    0.73
                 1.967    0.73 | 5.033   33.63 | 8.100    2.92 | 11.17    0.73
                 2.000    0.73 | 5.067   33.63 | 8.133    2.92 | 11.20    0.73
                 2.033    0.73 | 5.100   33.63 | 8.167    2.92 | 11.23    0.73
                 2.067    0.73 | 5.133   33.63 | 8.200    2.92 | 11.27    0.73
                 2.100    0.73 | 5.167   33.63 | 8.233    2.92 | 11.30    0.73
                 2.133    0.73 | 5.200   33.63 | 8.267    2.19 | 11.33    0.73
                 2.167    0.73 | 5.233   33.63 | 8.300    1.46 | 11.37    0.73
                 2.200    0.73 | 5.267   21.57 | 8.333    1.46 | 11.40    0.73
                 2.233    0.73 | 5.300    9.50 | 8.367    1.46 | 11.43    0.73
                 2.267    2.56 | 5.333    9.50 | 8.400    1.46 | 11.47    0.73
                 2.300    4.39 | 5.367    9.50 | 8.433    1.46 | 11.50    0.73
                 2.333    4.39 | 5.400    9.50 | 8.467    1.46 | 11.53    0.73
                 2.367    4.39 | 5.433    9.50 | 8.500    1.46 | 11.57    0.73
                 2.400    4.39 | 5.467    9.50 | 8.533    1.46 | 11.60    0.73
                 2.433    4.39 | 5.500    9.50 | 8.567    1.46 | 11.63    0.73
                 2.467    4.39 | 5.533    9.50 | 8.600    1.46 | 11.67    0.73
                 2.500    4.39 | 5.567    9.50 | 8.633    1.46 | 11.70    0.73
                 2.533    4.39 | 5.600    9.50 | 8.667    1.46 | 11.73    0.73
                 2.567    4.39 | 5.633    9.50 | 8.700    1.46 | 11.77    0.73
                 2.600    4.39 | 5.667    9.50 | 8.733    1.46 | 11.80    0.73
                 2.633    4.39 | 5.700    9.50 | 8.767    1.46 | 11.83    0.73
                 2.667    4.39 | 5.733    9.50 | 8.800    1.46 | 11.87    0.73
                 2.700    4.39 | 5.767    9.50 | 8.833    1.46 | 11.90    0.73
                 2.733    4.39 | 5.800    9.50 | 8.867    1.46 | 11.93    0.73
                 2.767    4.39 | 5.833    9.50 | 8.900    1.46 | 11.97    0.73
                 2.800    4.39 | 5.867    9.50 | 8.933    1.46 | 12.00    0.73
                 2.833    4.39 | 5.900    9.50 | 8.967    1.46 | 12.03    0.73
                 2.867    4.39 | 5.933    9.50 | 9.000    1.46 | 12.07    0.73
                 2.900    4.39 | 5.967    9.50 | 9.033    1.46 | 12.10    0.73
                 2.933    4.39 | 6.000    9.50 | 9.067    1.46 | 12.13    0.73
                 2.967    4.39 | 6.033    9.50 | 9.100    1.46 | 12.17    0.73
                 3.000    4.39 | 6.067    9.50 | 9.133    1.46 | 12.20    0.73
                 3.033    4.39 | 6.100    9.50 | 9.167    1.46 | 12.23    0.73
                 3.067    4.39 | 6.133    9.50 | 9.200    1.46 | 12.27    0.36

     Max.Eff.Inten.(mm/hr)=       33.63        26.33
                over (min)         8.00        14.00
     Storage Coeff.  (min)=        7.58 (ii)   13.30 (ii)
     Unit Hyd. Tpeak (min)=        8.00        14.00
     Unit Hyd. peak  (cms)=        0.15         0.08
                                                           *TOTALS*
     PEAK FLOW       (cms)=        1.03         0.15         1.173 (iii)
     TIME TO PEAK    (hrs)=        5.23         5.27          5.23
     RUNOFF VOLUME    (mm)=       72.10        43.73         67.39
     TOTAL RAINFALL   (mm)=       73.10        73.10         73.10
     RUNOFF COEFFICIENT   =        0.99         0.60          0.92

        (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN* =  87.0    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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| RESERVOIR( 1001)|      OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |      OUTFLOW    STORAGE   |   OUTFLOW    STORAGE
--------------------       (cms)     (ha.m.)   |    (cms)     (ha.m.)
                           0.0000     0.0000   |    0.1120     0.6810
                           0.0470     0.3640   |    0.1300     0.7605
                           0.0720     0.4900   |    0.1470     0.8395
                           0.0890     0.5750   |    0.0000     0.0000

                               AREA      QPEAK       TPEAK         R.V.
                               (ha)      (cms)       (hrs)         (mm)
  INFLOW : ID= 2 ( 1300)      13.180      1.173        5.23        67.39
  OUTFLOW: ID= 1 ( 1001)      13.180      0.116        7.60        63.94

                PEAK   FLOW   REDUCTION [Qout/Qin](%)=  9.88
                TIME SHIFT OF PEAK FLOW          (min)=142.00
                MAXIMUM  STORAGE   USED        (ha.m.)=  0.6981

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--------------------
| ADD HYD  ( 2002)|
|  1 + 2 =  3     |          AREA    QPEAK    TPEAK      R.V.
--------------------         (ha)    (cms)    (hrs)      (mm)
         ID1= 1 ( 1001):     13.18    0.116     7.60    63.94
       + ID2= 2 ( 1002):     27.27    0.191     8.37    61.29
         ===============================================
         ID = 3 ( 2002):     40.45    0.307     8.30    62.15

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| ADD HYD  ( 2003)|
|  1 + 2 =  3     |          AREA    QPEAK    TPEAK      R.V.
--------------------         (ha)    (cms)    (hrs)      (mm)
         ID1= 1 ( 1000):     19.21    0.656     6.17    41.38
       + ID2= 2 ( 2002):     40.45    0.307     8.30    62.15
         ===============================================
         ID = 3 ( 2003):     59.66    0.933     6.30    55.46

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB              |
| NASHYD   ( 2100)|   Area     (ha)=    3.11   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia       (mm)=    5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=    0.14

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
                 0.033    0.00 | 3.100    4.39 | 6.167    9.50 |  9.23    1.46
                 0.067    0.00 | 3.133    4.39 | 6.200    9.50 |  9.27    1.09
                 0.100    0.00 | 3.167    4.39 | 6.233    9.50 |  9.30    0.73
                 0.133    0.00 | 3.200    4.39 | 6.267    7.31 |  9.33    0.73
                 0.167    0.00 | 3.233    4.39 | 6.300    5.12 |  9.37    0.73
                 0.200    0.00 | 3.267    8.41 | 6.333    5.12 |  9.40    0.73
                 0.233    0.00 | 3.300   12.43 | 6.367    5.12 |  9.43    0.73
                 0.267    0.37 | 3.333   12.43 | 6.400    5.12 |  9.47    0.73
                 0.300    0.73 | 3.367   12.43 | 6.433    5.12 |  9.50    0.73
                 0.333    0.73 | 3.400   12.43 | 6.467    5.12 |  9.53    0.73
                 0.367    0.73 | 3.433   12.43 | 6.500    5.12 |  9.57    0.73
                 0.400    0.73 | 3.467   12.43 | 6.533    5.12 |  9.60    0.73
                 0.433    0.73 | 3.500   12.43 | 6.567    5.12 |  9.63    0.73
                 0.467    0.73 | 3.533   12.43 | 6.600    5.12 |  9.67    0.73
                 0.500    0.73 | 3.567   12.43 | 6.633    5.12 |  9.70    0.73
                 0.533    0.73 | 3.600   12.43 | 6.667    5.12 |  9.73    0.73
                 0.567    0.73 | 3.633   12.43 | 6.700    5.12 |  9.77    0.73
                 0.600    0.73 | 3.667   12.43 | 6.733    5.12 |  9.80    0.73
                 0.633    0.73 | 3.700   12.43 | 6.767    5.12 |  9.83    0.73
                 0.667    0.73 | 3.733   12.43 | 6.800    5.12 |  9.87    0.73
                 0.700    0.73 | 3.767   12.43 | 6.833    5.12 |  9.90    0.73
                 0.733    0.73 | 3.800   12.43 | 6.867    5.12 |  9.93    0.73
                 0.767    0.73 | 3.833   12.43 | 6.900    5.12 |  9.97    0.73
                 0.800    0.73 | 3.867   12.43 | 6.933    5.12 | 10.00    0.73
                 0.833    0.73 | 3.900   12.43 | 6.967    5.12 | 10.03    0.73
                 0.867    0.73 | 3.933   12.43 | 7.000    5.12 | 10.07    0.73
                 0.900    0.73 | 3.967   12.43 | 7.033    5.12 | 10.10    0.73
                 0.933    0.73 | 4.000   12.43 | 7.067    5.12 | 10.13    0.73
                 0.967    0.73 | 4.033   12.43 | 7.100    5.12 | 10.17    0.73
                 1.000    0.73 | 4.067   12.43 | 7.133    5.12 | 10.20    0.73
                 1.033    0.73 | 4.100   12.43 | 7.167    5.12 | 10.23    0.73
                 1.067    0.73 | 4.133   12.43 | 7.200    5.12 | 10.27    0.73
                 1.100    0.73 | 4.167   12.43 | 7.233    5.12 | 10.30    0.73
                 1.133    0.73 | 4.200   12.43 | 7.267    4.02 | 10.33    0.73
                 1.167    0.73 | 4.233   12.43 | 7.300    2.92 | 10.37    0.73
                 1.200    0.73 | 4.267   23.03 | 7.333    2.92 | 10.40    0.73
                 1.233    0.73 | 4.300   33.63 | 7.367    2.92 | 10.43    0.73
                 1.267    0.73 | 4.333   33.63 | 7.400    2.92 | 10.47    0.73
                 1.300    0.73 | 4.367   33.63 | 7.433    2.92 | 10.50    0.73
                 1.333    0.73 | 4.400   33.63 | 7.467    2.92 | 10.53    0.73
                 1.367    0.73 | 4.433   33.63 | 7.500    2.92 | 10.57    0.73
                 1.400    0.73 | 4.467   33.63 | 7.533    2.92 | 10.60    0.73
                 1.433    0.73 | 4.500   33.63 | 7.567    2.92 | 10.63    0.73
                 1.467    0.73 | 4.533   33.63 | 7.600    2.92 | 10.67    0.73
                 1.500    0.73 | 4.567   33.63 | 7.633    2.92 | 10.70    0.73
                 1.533    0.73 | 4.600   33.63 | 7.667    2.92 | 10.73    0.73
                 1.567    0.73 | 4.633   33.63 | 7.700    2.92 | 10.77    0.73
                 1.600    0.73 | 4.667   33.63 | 7.733    2.92 | 10.80    0.73
                 1.633    0.73 | 4.700   33.63 | 7.767    2.92 | 10.83    0.73
                 1.667    0.73 | 4.733   33.63 | 7.800    2.92 | 10.87    0.73
                 1.700    0.73 | 4.767   33.63 | 7.833    2.92 | 10.90    0.73
                 1.733    0.73 | 4.800   33.63 | 7.867    2.92 | 10.93    0.73
                 1.767    0.73 | 4.833   33.63 | 7.900    2.92 | 10.97    0.73
                 1.800    0.73 | 4.867   33.63 | 7.933    2.92 | 11.00    0.73
                 1.833    0.73 | 4.900   33.63 | 7.967    2.92 | 11.03    0.73
                 1.867    0.73 | 4.933   33.63 | 8.000    2.92 | 11.07    0.73
                 1.900    0.73 | 4.967   33.63 | 8.033    2.92 | 11.10    0.73
                 1.933    0.73 | 5.000   33.63 | 8.067    2.92 | 11.13    0.73
                 1.967    0.73 | 5.033   33.63 | 8.100    2.92 | 11.17    0.73
                 2.000    0.73 | 5.067   33.63 | 8.133    2.92 | 11.20    0.73
                 2.033    0.73 | 5.100   33.63 | 8.167    2.92 | 11.23    0.73
                 2.067    0.73 | 5.133   33.63 | 8.200    2.92 | 11.27    0.73
                 2.100    0.73 | 5.167   33.63 | 8.233    2.92 | 11.30    0.73
                 2.133    0.73 | 5.200   33.63 | 8.267    2.19 | 11.33    0.73
                 2.167    0.73 | 5.233   33.63 | 8.300    1.46 | 11.37    0.73
                 2.200    0.73 | 5.267   21.57 | 8.333    1.46 | 11.40    0.73
                 2.233    0.73 | 5.300    9.50 | 8.367    1.46 | 11.43    0.73
                 2.267    2.56 | 5.333    9.50 | 8.400    1.46 | 11.47    0.73
                 2.300    4.39 | 5.367    9.50 | 8.433    1.46 | 11.50    0.73
                 2.333    4.39 | 5.400    9.50 | 8.467    1.46 | 11.53    0.73
                 2.367    4.39 | 5.433    9.50 | 8.500    1.46 | 11.57    0.73
                 2.400    4.39 | 5.467    9.50 | 8.533    1.46 | 11.60    0.73
                 2.433    4.39 | 5.500    9.50 | 8.567    1.46 | 11.63    0.73
                 2.467    4.39 | 5.533    9.50 | 8.600    1.46 | 11.67    0.73
                 2.500    4.39 | 5.567    9.50 | 8.633    1.46 | 11.70    0.73
                 2.533    4.39 | 5.600    9.50 | 8.667    1.46 | 11.73    0.73
                 2.567    4.39 | 5.633    9.50 | 8.700    1.46 | 11.77    0.73
                 2.600    4.39 | 5.667    9.50 | 8.733    1.46 | 11.80    0.73
                 2.633    4.39 | 5.700    9.50 | 8.767    1.46 | 11.83    0.73
                 2.667    4.39 | 5.733    9.50 | 8.800    1.46 | 11.87    0.73
                 2.700    4.39 | 5.767    9.50 | 8.833    1.46 | 11.90    0.73
                 2.733    4.39 | 5.800    9.50 | 8.867    1.46 | 11.93    0.73
                 2.767    4.39 | 5.833    9.50 | 8.900    1.46 | 11.97    0.73
                 2.800    4.39 | 5.867    9.50 | 8.933    1.46 | 12.00    0.73
                 2.833    4.39 | 5.900    9.50 | 8.967    1.46 | 12.03    0.73
                 2.867    4.39 | 5.933    9.50 | 9.000    1.46 | 12.07    0.73
                 2.900    4.39 | 5.967    9.50 | 9.033    1.46 | 12.10    0.73
                 2.933    4.39 | 6.000    9.50 | 9.067    1.46 | 12.13    0.73
                 2.967    4.39 | 6.033    9.50 | 9.100    1.46 | 12.17    0.73
                 3.000    4.39 | 6.067    9.50 | 9.133    1.46 | 12.20    0.73
                 3.033    4.39 | 6.100    9.50 | 9.167    1.46 | 12.23    0.73
                 3.067    4.39 | 6.133    9.50 | 9.200    1.46 | 12.27    0.36

     Unit Hyd Qpeak  (cms)=    0.848

     PEAK FLOW       (cms)=    0.221 (i)
     TIME TO PEAK    (hrs)=    5.233
     RUNOFF VOLUME    (mm)=   43.719
     TOTAL RAINFALL   (mm)=   73.100
     RUNOFF COEFFICIENT   =    0.598

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

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--------------------
| ADD HYD  ( 0005)|
|  1 + 2 =  3     |          AREA    QPEAK    TPEAK      R.V.
--------------------         (ha)    (cms)    (hrs)      (mm)
         ID1= 1 ( 2003):     59.66    0.933     6.30    55.46
       + ID2= 2 ( 2100):      3.11    0.221     5.23    43.72
         ===============================================
         ID = 3 ( 0005):     62.77    1.001     6.27    54.88

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB              |
| NASHYD   ( 2200)|   Area     (ha)=    5.60   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia       (mm)=    5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=    0.44

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
                 0.033    0.00 | 3.100    4.39 | 6.167    9.50 |  9.23    1.46
                 0.067    0.00 | 3.133    4.39 | 6.200    9.50 |  9.27    1.09
                 0.100    0.00 | 3.167    4.39 | 6.233    9.50 |  9.30    0.73
                 0.133    0.00 | 3.200    4.39 | 6.267    7.31 |  9.33    0.73
                 0.167    0.00 | 3.233    4.39 | 6.300    5.12 |  9.37    0.73
                 0.200    0.00 | 3.267    8.41 | 6.333    5.12 |  9.40    0.73
                 0.233    0.00 | 3.300   12.43 | 6.367    5.12 |  9.43    0.73
                 0.267    0.37 | 3.333   12.43 | 6.400    5.12 |  9.47    0.73
                 0.300    0.73 | 3.367   12.43 | 6.433    5.12 |  9.50    0.73
                 0.333    0.73 | 3.400   12.43 | 6.467    5.12 |  9.53    0.73
                 0.367    0.73 | 3.433   12.43 | 6.500    5.12 |  9.57    0.73
                 0.400    0.73 | 3.467   12.43 | 6.533    5.12 |  9.60    0.73
                 0.433    0.73 | 3.500   12.43 | 6.567    5.12 |  9.63    0.73
                 0.467    0.73 | 3.533   12.43 | 6.600    5.12 |  9.67    0.73
                 0.500    0.73 | 3.567   12.43 | 6.633    5.12 |  9.70    0.73
                 0.533    0.73 | 3.600   12.43 | 6.667    5.12 |  9.73    0.73
                 0.567    0.73 | 3.633   12.43 | 6.700    5.12 |  9.77    0.73
                 0.600    0.73 | 3.667   12.43 | 6.733    5.12 |  9.80    0.73
                 0.633    0.73 | 3.700   12.43 | 6.767    5.12 |  9.83    0.73
                 0.667    0.73 | 3.733   12.43 | 6.800    5.12 |  9.87    0.73
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0.700	0.73	3.767	12.43	6.833	5.12	9.90	0.73
0.733	0.73	3.800	12.43	6.867	5.12	9.93	0.73
0.767	0.73	3.833	12.43	6.900	5.12	9.97	0.73
0.800	0.73	3.867	12.43	6.933	5.12	10.00	0.73
0.833	0.73	3.900	12.43	6.967	5.12	10.03	0.73
0.867	0.73	3.933	12.43	7.000	5.12	10.07	0.73
0.900	0.73	3.967	12.43	7.033	5.12	10.10	0.73
0.933	0.73	4.000	12.43	7.067	5.12	10.13	0.73
0.967	0.73	4.033	12.43	7.100	5.12	10.17	0.73
1.000	0.73	4.067	12.43	7.133	5.12	10.20	0.73
1.033	0.73	4.100	12.43	7.167	5.12	10.23	0.73
1.067	0.73	4.133	12.43	7.200	5.12	10.27	0.73
1.100	0.73	4.167	12.43	7.233	5.12	10.30	0.73
1.133	0.73	4.200	12.43	7.267	4.02	10.33	0.73
1.167	0.73	4.233	12.43	7.300	2.92	10.37	0.73
1.200	0.73	4.267	23.03	7.333	2.92	10.40	0.73
1.233	0.73	4.300	33.63	7.367	2.92	10.43	0.73
1.267	0.73	4.333	33.63	7.400	2.92	10.47	0.73
1.300	0.73	4.367	33.63	7.433	2.92	10.50	0.73
1.333	0.73	4.400	33.63	7.467	2.92	10.53	0.73
1.367	0.73	4.433	33.63	7.500	2.92	10.57	0.73
1.400	0.73	4.467	33.63	7.533	2.92	10.60	0.73
1.433	0.73	4.500	33.63	7.567	2.92	10.63	0.73
1.467	0.73	4.533	33.63	7.600	2.92	10.67	0.73
1.500	0.73	4.567	33.63	7.633	2.92	10.70	0.73
1.533	0.73	4.600	33.63	7.667	2.92	10.73	0.73
1.567	0.73	4.633	33.63	7.700	2.92	10.77	0.73
1.600	0.73	4.667	33.63	7.733	2.92	10.80	0.73
1.633	0.73	4.700	33.63	7.767	2.92	10.83	0.73
1.667	0.73	4.733	33.63	7.800	2.92	10.87	0.73
1.700	0.73	4.767	33.63	7.833	2.92	10.90	0.73
1.733	0.73	4.800	33.63	7.867	2.92	10.93	0.73
1.767	0.73	4.833	33.63	7.900	2.92	10.97	0.73
1.800	0.73	4.867	33.63	7.933	2.92	11.00	0.73
1.833	0.73	4.900	33.63	7.967	2.92	11.03	0.73
1.867	0.73	4.933	33.63	8.000	2.92	11.07	0.73
1.900	0.73	4.967	33.63	8.033	2.92	11.10	0.73
1.933	0.73	5.000	33.63	8.067	2.92	11.13	0.73
1.967	0.73	5.033	33.63	8.100	2.92	11.17	0.73
2.000	0.73	5.067	33.63	8.133	2.92	11.20	0.73
2.033	0.73	5.100	33.63	8.167	2.92	11.23	0.73
2.067	0.73	5.133	33.63	8.200	2.92	11.27	0.73
2.100	0.73	5.167	33.63	8.233	2.92	11.30	0.73
2.133	0.73	5.200	33.63	8.267	2.19	11.33	0.73
2.167	0.73	5.233	33.63	8.300	1.46	11.37	0.73
2.200	0.73	5.267	21.57	8.333	1.46	11.40	0.73
2.233	0.73	5.300	9.50	8.367	1.46	11.43	0.73
2.267	2.56	5.333	9.50	8.400	1.46	11.47	0.73
2.300	4.39	5.367	9.50	8.433	1.46	11.50	0.73
2.333	4.39	5.400	9.50	8.467	1.46	11.53	0.73
2.367	4.39	5.433	9.50	8.500	1.46	11.57	0.73
2.400	4.39	5.467	9.50	8.533	1.46	11.60	0.73
2.433	4.39	5.500	9.50	8.567	1.46	11.63	0.73
2.467	4.39	5.533	9.50	8.600	1.46	11.67	0.73
2.500	4.39	5.567	9.50	8.633	1.46	11.70	0.73
2.533	4.39	5.600	9.50	8.667	1.46	11.73	0.73
2.567	4.39	5.633	9.50	8.700	1.46	11.77	0.73
2.600	4.39	5.667	9.50	8.733	1.46	11.80	0.73
2.633	4.39	5.700	9.50	8.767	1.46	11.83	0.73
2.667	4.39	5.733	9.50	8.800	1.46	11.87	0.73
2.700	4.39	5.767	9.50	8.833	1.46	11.90	0.73
2.733	4.39	5.800	9.50	8.867	1.46	11.93	0.73
2.767	4.39	5.833	9.50	8.900	1.46	11.97	0.73
2.800	4.39	5.867	9.50	8.933	1.46	12.00	0.73
2.833	4.39	5.900	9.50	8.967	1.46	12.03	0.73
2.867	4.39	5.933	9.50	9.000	1.46	12.07	0.73
2.900	4.39	5.967	9.50	9.033	1.46	12.10	0.73
2.933	4.39	6.000	9.50	9.067	1.46	12.13	0.73
2.967	4.39	6.033	9.50	9.100	1.46	12.17	0.73
3.000	4.39	6.067	9.50	9.133	1.46	12.20	0.73
3.033	4.39	6.100	9.50	9.167	1.46	12.23	0.73
3.067	4.39	6.133	9.50	9.200	1.46	12.27	0.36

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.324 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 43.728
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.598

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

2.033	0.73	5.100	33.63	8.167	2.92	11.23	0.73
2.067	0.73	5.133	33.63	8.200	2.92	11.27	0.73
2.100	0.73	5.167	33.63	8.233	2.92	11.30	0.73
2.133	0.73	5.200	33.63	8.267	2.19	11.33	0.73
2.167	0.73	5.233	33.63	8.300	1.46	11.37	0.73
2.200	0.73	5.267	21.57	8.333	1.46	11.40	0.73
2.233	0.73	5.300	9.50	8.367	1.46	11.43	0.73
2.267	2.56	5.333	9.50	8.400	1.46	11.47	0.73
2.300	4.39	5.367	9.50	8.433	1.46	11.50	0.73
2.333	4.39	5.400	9.50	8.467	1.46	11.53	0.73
2.367	4.39	5.433	9.50	8.500	1.46	11.57	0.73
2.400	4.39	5.467	9.50	8.533	1.46	11.60	0.73
2.433	4.39	5.500	9.50	8.567	1.46	11.63	0.73
2.467	4.39	5.533	9.50	8.600	1.46	11.67	0.73
2.500	4.39	5.567	9.50	8.633	1.46	11.70	0.73
2.533	4.39	5.600	9.50	8.667	1.46	11.73	0.73
2.567	4.39	5.633	9.50	8.700	1.46	11.77	0.73
2.600	4.39	5.667	9.50	8.733	1.46	11.80	0.73
2.633	4.39	5.700	9.50	8.767	1.46	11.83	0.73
2.667	4.39	5.733	9.50	8.800	1.46	11.87	0.73
2.700	4.39	5.767	9.50	8.833	1.46	11.90	0.73
2.733	4.39	5.800	9.50	8.867	1.46	11.93	0.73
2.767	4.39	5.833	9.50	8.900	1.46	11.97	0.73
2.800	4.39	5.867	9.50	8.933	1.46	12.00	0.73
2.833	4.39	5.900	9.50	8.967	1.46	12.03	0.73
2.867	4.39	5.933	9.50	9.000	1.46	12.07	0.73
2.900	4.39	5.967	9.50	9.033	1.46	12.10	0.73
2.933	4.39	6.000	9.50	9.067	1.46	12.13	0.73
2.967	4.39	6.033	9.50	9.100	1.46	12.17	0.73
3.000	4.39	6.067	9.50	9.133	1.46	12.20	0.73
3.033	4.39	6.100	9.50	9.167	1.46	12.23	0.73
3.067	4.39	6.133	9.50	9.200	1.46	12.27	0.36

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.117 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 43.728
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.598

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

ADD HYD (0009)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.117	5.40	43.73
+ ID2= 2 (0007):	68.37	1.189	5.83	53.97
ID = 3 (0009):	70.37	1.283	5.63	53.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (2400) | Area (ha)= 0.76 Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.04

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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73

ADD HYD (0007)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.324	5.40	43.73
+ ID2= 2 (0005):	62.77	1.001	6.27	54.88
ID = 3 (0007):	68.37	1.189	5.83	53.97

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (2300) | Area (ha)= 2.00 Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.43

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.39	6.167	9.50	9.23	1.46
0.067	0.00	3.133	4.39	6.200	9.50	9.27	1.09
0.100	0.00	3.167	4.39	6.233	9.50	9.30	0.73
0.133	0.00	3.200	4.39	6.267	7.31	9.33	0.73
0.167	0.00	3.233	4.39	6.300	5.12	9.37	0.73
0.200	0.00	3.267	8.41	6.333	5.12	9.40	0.73
0.233	0.00	3.300	12.43	6.367	5.12	9.43	0.73
0.267	0.37	3.333	12.43	6.400	5.12	9.47	0.73
0.300	0.73	3.367	12.43	6.433	5.12	9.50	0.73
0.333	0.73	3.400	12.43	6.467	5.12	9.53	0.73
0.367	0.73	3.433	12.43	6.500	5.12	9.57	0.73
0.400	0.73	3.467	12.43	6.533	5.12	9.60	0.73
0.433	0.73	3.500	12.43	6.567	5.12	9.63	0.73
0.467	0.73	3.533	12.43	6.600	5.12	9.67	0.73
0.500	0.73	3.567	12.43	6.633	5.12	9.70	0.73
0.533	0.73	3.600	12.43	6.667	5.12	9.73	0.73
0.567	0.73	3.633	12.43	6.700	5.12	9.77	0.73
0.600	0.73	3.667	12.43	6.733	5.12	9.80	0.73
0.633	0.73	3.700	12.43	6.767	5.12	9.83	0.73
0.667	0.73	3.733	12.43	6.800	5.12	9.87	0.73
0.700	0.73	3.767	12.43	6.833	5.12	9.90	0.73
0.733	0.73	3.800	12.43	6.867	5.12	9.93	0.73
0.767	0.73	3.833	12.43	6.900	5.12	9.97	0.73
0.800	0.73	3.867	12.43	6.933	5.12	10.00	0.73
0.833	0.73	3.900	12.43	6.967	5.12	10.03	0.73
0.867	0.73	3.933	12.43	7.000	5.12	10.07	0.73
0.900	0.73	3.967	12.43	7.033	5.12	10.10	0.73
0.933	0.73	4.000	12.43	7.067	5.12	10.13	0.73
0.967	0.73	4.033	12.43	7.100	5.12	10.17	0.73
1.000	0.73	4.067	12.43	7.133	5.12	10.20	0.73
1.033	0.73	4.100	12.43	7.167	5.12	10.23	0.73
1.067	0.73	4.133	12.43	7.200	5.12	10.27	0.73
1.100	0.73	4.167	12.43	7.233	5.12	10.30	0.73
1.133	0.73	4.200	12.43	7.267	4.02	10.33	0.73
1.167	0.73	4.233	12.43	7.300	2.92	10.37	0.73
1.200	0.73	4.267	23.03	7.333	2.92	10.40	0.73
1.233	0.73	4.300	33.63	7.367	2.92	10.43	0.73
1.267	0.73	4.333	33.63	7.400	2.92	10.47	0.73
1.300	0.73	4.367	33.63	7.433	2.92	10.50	0.73
1.333	0.73	4.400	33.63	7.467	2.92	10.53	0.73
1.367	0.73	4.433	33.63	7.500	2.92	10.57	0.73
1.400	0.73	4.467	33.63	7.533	2.92	10.60	0.73
1.433	0.73	4.500	33.63	7.567	2.92	10.63	0.73
1.467	0.73	4.533	33.63	7.600	2.92	10.67	0.73
1.500	0.73	4.567	33.63	7.633	2.92	10.70	0.73
1.533	0.73	4.600	33.63	7.667	2.92	10.73	0.73
1.567	0.73	4.633	33.63	7.700	2.92	10.77	0.73
1.600	0.73	4.667	33.63	7.733	2.92	10.80	0.73
1.633	0.73	4.700	33.63	7.767	2.92	10.83	0.73
1.667	0.73	4.733	33.63	7.800	2.92	10.87	0.73
1.700	0.73	4.767	33.63	7.833	2.92	10.90	0.73
1.733	0.73	4.800	33.63	7.867	2.92	10.93	0.73
1.767	0.73	4.833	33.63	7.900	2.92	10.97	0.73
1.800	0.73	4.867	33.63	7.933	2.92	11.00	0.73
1.833	0.73	4.900	33.63	7.967	2.92	11.03	0.73
1.867	0.73	4.933	33.63	8.000	2.92	11.07	0.73
1.900	0.73	4.967	33.63	8.033	2.92	11.10	0.73
1.933	0.73	5.000	33.63	8.067	2.92	11.13	0.73
1.967	0.73	5.033	33.63	8.100	2.92	11.17	0.73
2.000	0.73	5.067	33.63	8.133	2.92	11.20	0.73

1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 26.096
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.357

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

CALIB
STANDHYD (3500) | Area (ha)= 3.52
ID= 1 DT= 5.0 min | Total Imp(%)= 99.90 Dir. Conn.(%)= 99.90

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.52	0.00
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	153.19	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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73

2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	26.43	
over (min)	5.00	10.00	
Storage Coeff. (min)=	5.10 (ii)	5.79 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.21	0.15	
			TOTALS
PEAK FLOW (cms)=	0.33	0.00	0.329 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	72.10	43.73	72.07
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.99

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.034	5.25	26.10
+ ID2= 2 (3500):	3.52	0.329	5.25	72.07
ID = 3 (0028):	4.28	0.362	5.25	63.91

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (3100)	Area (ha)=	25.24	
ID= 1 DT= 5.0 min	Total Imp(%)=	85.90	Dir. Conn.(%)= 85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	26.16	
over (min)	10.00	25.00	
Storage Coeff. (min)=	9.21 (ii)	21.28 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	2.02	0.21	2.232 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	72.10	43.73	68.10
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB			
STANDHYD (3200)	Area (ha)=	7.11	
ID= 1 DT= 5.0 min	Total Imp(%)=	88.30	Dir. Conn.(%)= 88.30

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	26.16	
over (min)	5.00	20.00	
Storage Coeff. (min)=	6.83 (ii)	18.90 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.18	0.06	
			TOTALS
PEAK FLOW (cms)=	0.69	0.12	0.809 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	72.10	43.73	66.08
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0020)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (3100):	25.24	2.232	5.25	68.10
+ ID2= 2 (3200):	7.11	0.644	5.25	68.78
ID = 3 (0020):	32.35	2.876	5.25	68.25

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (3300)	Area (ha)=	9.32	
ID= 1 DT= 5.0 min	Total Imp(%)=	78.80	Dir. Conn.(%)= 78.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	7.34	1.98
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	249.27	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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	26.16	
over (min)	5.00	20.00	
Storage Coeff. (min)=	6.83 (ii)	18.90 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.18	0.06	
			TOTALS
PEAK FLOW (cms)=	0.69	0.12	0.809 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	72.10	43.73	66.08
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):	32.35	2.876	5.25	68.25
+ ID2= 2 (3300):	9.32	0.809	5.25	66.08
ID = 3 (0022):	41.67	3.685	5.25	67.76

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (3400)	Area (ha)=	4.34	
ID= 1 DT= 5.0 min	Total Imp(%)=	77.60	Dir. Conn.(%)= 77.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.37	0.97
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	170.10	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	4.39	6.250	9.50	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73

2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Max.Eff.Inten.(mm/hr)=	33.63	26.16	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.43 (ii)	17.50 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.20	0.06	
			TOTALS
PEAK FLOW (cms)=	0.31	0.06	0.376 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	72.10	43.73	65.74
TOTAL RAINFALL (mm)=	73.10	73.10	73.10
RUNOFF COEFFICIENT =	0.99	0.60	0.90

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0022):	41.67	3.685	5.25	67.76
+ ID2= 2 (0028):	4.28	0.362	5.25	63.91
ID = 3 (0024):	45.95	4.048	5.25	67.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	45.95	4.048	5.25	67.41
+ ID2= 2 (3400):	4.34	0.376	5.25	65.74
ID = 1 (0024):	50.29	4.424	5.25	67.26

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)
IN= 2---> OUT= 1
DT= 5.0 min

OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.7480	3.7607
0.0140	0.5845	1.1340	4.6672
0.0210	1.1690	1.4200	5.2879
0.1010	1.7265	1.7270	5.9087
0.2410	2.3077	7.3760	6.5294
0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	4.424	5.25	67.26
OUTFLOW: ID= 1 (5001)	50.290	0.389	8.25	57.31

PEAK FLOW REDUCTION [Qout/Qin](%)= 8.80
TIME SHIFT OF PEAK FLOW (min)=180.00
MAXIMUM STORAGE USED (ha.m.)= 2.7861

ADD HYD (0013)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):	50.29	0.389	8.25	57.31
+ ID2= 2 (0009):	70.37	1.283	5.63	53.68
ID = 3 (0013):	120.66	1.557	5.93	50.39

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
NASHYD (4100)
ID= 1 DT= 5.0 min

Area (ha)= 3.48 Curve Number (CN)= 87.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.04

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	4.39	6.250	5.12	9.33	0.73
0.167	0.00	3.250	4.39	6.333	5.12	9.42	0.73
0.250	0.00	3.333	12.43	6.417	5.12	9.50	0.73
0.333	0.73	3.417	12.43	6.500	5.12	9.58	0.73
0.417	0.73	3.500	12.43	6.583	5.12	9.67	0.73
0.500	0.73	3.583	12.43	6.667	5.12	9.75	0.73
0.583	0.73	3.667	12.43	6.750	5.12	9.83	0.73
0.667	0.73	3.750	12.43	6.833	5.12	9.92	0.73
0.750	0.73	3.833	12.43	6.917	5.12	10.00	0.73
0.833	0.73	3.917	12.43	7.000	5.12	10.08	0.73
0.917	0.73	4.000	12.43	7.083	5.12	10.17	0.73
1.000	0.73	4.083	12.43	7.167	5.12	10.25	0.73
1.083	0.73	4.167	12.43	7.250	5.12	10.33	0.73
1.167	0.73	4.250	12.43	7.333	2.92	10.42	0.73
1.250	0.73	4.333	33.63	7.417	2.92	10.50	0.73
1.333	0.73	4.417	33.63	7.500	2.92	10.58	0.73
1.417	0.73	4.500	33.63	7.583	2.92	10.67	0.73
1.500	0.73	4.583	33.63	7.667	2.92	10.75	0.73
1.583	0.73	4.667	33.63	7.750	2.92	10.83	0.73
1.667	0.73	4.750	33.63	7.833	2.92	10.92	0.73
1.750	0.73	4.833	33.63	7.917	2.92	11.00	0.73
1.833	0.73	4.917	33.63	8.000	2.92	11.08	0.73
1.917	0.73	5.000	33.63	8.083	2.92	11.17	0.73
2.000	0.73	5.083	33.63	8.167	2.92	11.25	0.73
2.083	0.73	5.167	33.63	8.250	2.92	11.33	0.73
2.167	0.73	5.250	33.63	8.333	1.46	11.42	0.73
2.250	0.73	5.333	9.50	8.417	1.46	11.50	0.73
2.333	4.39	5.417	9.50	8.500	1.46	11.58	0.73
2.417	4.39	5.500	9.50	8.583	1.46	11.67	0.73
2.500	4.39	5.583	9.50	8.667	1.46	11.75	0.73
2.583	4.39	5.667	9.50	8.750	1.46	11.83	0.73
2.667	4.39	5.750	9.50	8.833	1.46	11.92	0.73
2.750	4.39	5.833	9.50	8.917	1.46	12.00	0.73
2.833	4.39	5.917	9.50	9.000	1.46	12.08	0.73
2.917	4.39	6.000	9.50	9.083	1.46	12.17	0.73
3.000	4.39	6.083	9.50	9.167	1.46	12.25	0.73
3.083	4.39	6.167	9.50	9.250	1.46		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.154 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 26.096
TOTAL RAINFALL (mm)= 73.100
RUNOFF COEFFICIENT = 0.357

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

****
** SIMULATION:Run 12 50yr 12hr AES **
****

READ STORM | Filename: C:\Users\Oux\AppData\Local\Temp\a94bb59f-5044-498d-abed-caf1943a5048\914bc91d
Ptotal= 80.82 mm | Comments: 50yr/12hr

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	13.74	6.75	5.66	10.00	0.81
0.50	0.81	3.75	13.74	7.00	5.66	10.25	0.81
0.75	0.81	4.00	13.74	7.25	5.66	10.50	0.81
1.00	0.81	4.25	13.74	7.50	3.23	10.75	0.81
1.25	0.81	4.50	37.17	7.75	3.23	11.00	0.81
1.50	0.81	4.75	37.17	8.00	3.23	11.25	0.81
1.75	0.81	5.00	37.17	8.25	3.23	11.50	0.81
2.00	0.81	5.25	37.17	8.50	1.62	11.75	0.81

2.25	0.81	5.50	10.50	8.75	1.62	12.00	0.81
2.50	4.85	5.75	10.50	9.00	1.62	12.25	0.81
2.75	4.85	6.00	10.50	9.25	1.62		
3.00	4.85	6.25	10.50	9.50	0.81		
3.25	4.85	6.50	5.66	9.75	0.81		

CALIB
NASHYD (1000)
ID= 1 DT= 2.0 min

Area (ha)= 19.21 Curve Number (CN)= 87.0
Ia (mm)= 7.70 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 1.07

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81

2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	0.81	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.766 (i)
TIME TO PEAK (hrs)= 6.133
RUNOFF VOLUME (mm)= 48.135
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.596

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

CALIB
NASHYD (1100)
ID= 1 DT= 2.0 min

Area (ha)= 2.08 Curve Number (CN)= 87.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.29

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81

1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	0.81	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.157 (i)
TIME TO PEAK (hrs)= 5.300
RUNOFF VOLUME (mm)= 50.527
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.625

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

DUHYD (2000)			
Inlet Cap.= 0.949			
#of Inlets= 1			
Total(cms)= 0.9	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.16	5.30	50.53
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.16	5.30	50.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (1200)	Area (ha)= 25.19
ID= 1 DT= 2.0 min	Total Imp(%)= 88.60 Dir. Conn.(%)= 88.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	22.32	2.87
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	409.80	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	0.81	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

			TOTALS
Max.Eff.Inten.(mm/hr)=	37.17	30.02	
over (min)	8.00	14.00	
Storage Coeff. (min)=	8.85 (ii)	13.46 (ii)	
Unit Hyd. Tpeak (min)=	8.00	14.00	
Unit Hyd. peak (cms)=	0.13	0.08	
PEAK FLOW (cms)=	2.30	0.22	2.522 (iii)
TIME TO PEAK (hrs)=	5.23	5.27	5.23
RUNOFF VOLUME (mm)=	79.82	50.53	76.48
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.63	0.95

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1200):	25.19	2.522	5.23	76.48
+ ID2= 2 (2000):	2.08	0.157	5.30	50.53
ID = 3 (2001):	27.27	2.676	5.23	74.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW :	ID= 2 (2001)	27.270	2.676	5.23	74.50
OUTFLOW:	ID= 1 (1002)	27.270	0.218	8.33	68.34

PEAK FLOW REDUCTION [Qout/Qin](%)= 8.14
TIME SHIFT OF PEAK FLOW (min)=186.00
MAXIMUM STORAGE USED (ha.m.)= 1.6492

CALIB	
STANDHYD (1300)	Area (ha)= 13.18
ID= 1 DT= 2.0 min	Total Imp(%)= 83.40 Dir. Conn.(%)= 83.40

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	10.99	2.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	296.42	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	0.81	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81

2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Max.Eff.Inten.(mm/hr)=	37.17	30.02	
over (min)	8.00	14.00	
Storage Coeff. (min)=	7.28 (ii)	12.78 (ii)	
Unit Hyd. Tpeak (min)=	8.00	14.00	
Unit Hyd. peak (cms)=	0.15	0.09	
			TOTALS
PEAK FLOW (cms)=	1.13	0.17	1.303 (iii)
TIME TO PEAK (hrs)=	5.23	5.27	5.23
RUNOFF VOLUME (mm)=	79.82	50.53	74.96
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.63	0.93

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)		OVERFLOW IS OFF			
IN= 2---> OUT= 1					
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	1.303	5.23	74.96
OUTFLOW: ID= 1 (1001)	13.180	0.133	7.53	71.24

PEAK FLOW REDUCTION [Qout/Qin](%)= 10.18
TIME SHIFT OF PEAK FLOW (min)=138.00
MAXIMUM STORAGE USED (ha.m.)= 0.7727

ADD HYD (2002)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1001):	13.18	0.133	7.53	71.24
+ ID2= 2 (1002):	27.27	0.218	8.33	68.34
ID = 3 (2002):	40.45	0.350	8.27	69.29

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1000):	19.21	0.766	6.13	48.14
+ ID2= 2 (2002):	40.45	0.350	8.27	69.29
ID = 3 (2003):	59.66	1.083	6.27	62.48

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2100)| ID= 1 DT= 2.0 min	Area (ha)= 3.11	Curve Number (CN)= 87.0			
	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.14				

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	2.83	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW	(cms)=	0.252 (i)
TIME TO PEAK	(hrs)=	5.233
RUNOFF VOLUME	(mm)=	50.517
TOTAL RAINFALL	(mm)=	80.820
RUNOFF COEFFICIENT	=	0.625

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

ADD HYD (0005)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2003):	59.66	1.083	6.27	62.48
+ ID2= 2 (2100):	3.11	0.252	5.23	50.52
ID = 3 (0005):	62.77	1.160	6.23	61.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2200)| ID= 1 DT= 2.0 min	Area (ha)= 5.60	Curve Number (CN)= 87.0			
	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.44				

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	2.83	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW	(cms)=	0.374 (i)
TIME TO PEAK	(hrs)=	5.400
RUNOFF VOLUME	(mm)=	50.527
TOTAL RAINFALL	(mm)=	80.820
RUNOFF COEFFICIENT	=	0.625

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

ADD HYD (0007)					
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.	

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                          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  2200):     5.60   0.374     5.40    50.53
     + ID2= 2 (  0005):    62.77   1.160     6.23    61.88
       ==========================================================
       ID = 3 (  0007):    68.37   1.381     5.80    60.95

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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CALIB					
NASHYD (2300)	Area (ha)= 2.00	Curve Number (CN)= 87.0			
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.43				

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 MIN. TIME STEP.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.033	0.00	3.100	4.85	6.167	10.50	9.23	1.62
0.067	0.00	3.133	4.85	6.200	10.50	9.27	1.21
0.100	0.00	3.167	4.85	6.233	10.50	9.30	0.81
0.133	0.00	3.200	4.85	6.267	8.08	9.33	0.81
0.167	0.00	3.233	4.85	6.300	5.66	9.37	0.81
0.200	0.00	3.267	9.29	6.333	5.66	9.40	0.81
0.233	0.00	3.300	13.74	6.367	5.66	9.43	0.81
0.267	0.41	3.333	13.74	6.400	5.66	9.47	0.81
0.300	0.81	3.367	13.74	6.433	5.66	9.50	0.81
0.333	0.81	3.400	13.74	6.467	5.66	9.53	0.81
0.367	0.81	3.433	13.74	6.500	5.66	9.57	0.81
0.400	0.81	3.467	13.74	6.533	5.66	9.60	0.81
0.433	0.81	3.500	13.74	6.567	5.66	9.63	0.81
0.467	0.81	3.533	13.74	6.600	5.66	9.67	0.81
0.500	0.81	3.567	13.74	6.633	5.66	9.70	0.81
0.533	0.81	3.600	13.74	6.667	5.66	9.73	0.81
0.567	0.81	3.633	13.74	6.700	5.66	9.77	0.81
0.600	0.81	3.667	13.74	6.733	5.66	9.80	0.81
0.633	0.81	3.700	13.74	6.767	5.66	9.83	0.81
0.667	0.81	3.733	13.74	6.800	5.66	9.87	0.81
0.700	0.81	3.767	13.74	6.833	5.66	9.90	0.81
0.733	0.81	3.800	13.74	6.867	5.66	9.93	0.81
0.767	0.81	3.833	13.74	6.900	5.66	9.97	0.81
0.800	0.81	3.867	13.74	6.933	5.66	10.00	0.81
0.833	0.81	3.900	13.74	6.967	5.66	10.03	0.81
0.867	0.81	3.933	13.74	7.000	5.66	10.07	0.81
0.900	0.81	3.967	13.74	7.033	5.66	10.10	0.81
0.933	0.81	4.000	13.74	7.067	5.66	10.13	0.81
0.967	0.81	4.033	13.74	7.100	5.66	10.17	0.81
1.000	0.81	4.067	13.74	7.133	5.66	10.20	0.81
1.033	0.81	4.100	13.74	7.167	5.66	10.23	0.81
1.067	0.81	4.133	13.74	7.200	5.66	10.27	0.81
1.100	0.81	4.167	13.74	7.233	5.66	10.30	0.81
1.133	0.81	4.200	13.74	7.267	4.45	10.33	0.81
1.167	0.81	4.233	13.74	7.300	3.23	10.37	0.81
1.200	0.81	4.267	25.45	7.333	3.23	10.40	0.81
1.233	0.81	4.300	37.17	7.367	3.23	10.43	0.81
1.267	0.81	4.333	37.17	7.400	3.23	10.47	0.81
1.300	0.81	4.367	37.17	7.433	3.23	10.50	0.81
1.333	0.81	4.400	37.17	7.467	3.23	10.53	0.81
1.367	0.81	4.433	37.17	7.500	3.23	10.57	0.81
1.400	0.81	4.467	37.17	7.533	3.23	10.60	0.81
1.433	0.81	4.500	37.17	7.567	3.23	10.63	0.81
1.467	0.81	4.533	37.17	7.600	3.23	10.67	0.81
1.500	0.81	4.567	37.17	7.633	3.23	10.70	0.81
1.533	0.81	4.600	37.17	7.667	3.23	10.73	0.81
1.567	0.81	4.633	37.17	7.700	3.23	10.77	0.81
1.600	0.81	4.667	37.17	7.733	3.23	10.80	0.81
1.633	0.81	4.700	37.17	7.767	3.23	10.83	0.81
1.667	0.81	4.733	37.17	7.800	3.23	10.87	0.81
1.700	0.81	4.767	37.17	7.833	3.23	10.90	0.81
1.733	0.81	4.800	37.17	7.867	3.23	10.93	0.81
1.767	0.81	4.833	37.17	7.900	3.23	10.97	0.81
1.800	0.81	4.867	37.17	7.933	3.23	11.00	0.81
1.833	0.81	4.900	37.17	7.967	3.23	11.03	0.81
1.867	0.81	4.933	37.17	8.000	3.23	11.07	0.81
1.900	0.81	4.967	37.17	8.033	3.23	11.10	0.81
1.933	0.81	5.000	37.17	8.067	3.23	11.13	0.81
1.967	0.81	5.033	37.17	8.100	3.23	11.17	0.81
2.000	0.81	5.067	37.17	8.133	3.23	11.20	0.81
2.033	0.81	5.100	37.17	8.167	3.23	11.23	0.81
2.067	0.81	5.133	37.17	8.200	3.23	11.27	0.81
2.100	0.81	5.167	37.17	8.233	3.23	11.30	0.81
2.133	0.81	5.200	37.17	8.267	2.43	11.33	0.81
2.167	0.81	5.233	37.17	8.300	1.62	11.37	0.81
2.200	0.81	5.267	23.84	8.333	1.62	11.40	0.81
2.233	0.81	5.300	10.50	8.367	1.62	11.43	0.81
2.267	2.83	5.333	10.50	8.400	1.62	11.47	0.81
2.300	4.85	5.367	10.50	8.433	1.62	11.50	0.81
2.333	4.85	5.400	10.50	8.467	1.62	11.53	0.81
2.367	4.85	5.433	10.50	8.500	1.62	11.57	0.81
2.400	4.85	5.467	10.50	8.533	1.62	11.60	0.81
2.433	4.85	5.500	10.50	8.567	1.62	11.63	0.81
2.467	4.85	5.533	10.50	8.600	1.62	11.67	0.81
2.500	4.85	5.567	10.50	8.633	1.62	11.70	0.81
2.533	4.85	5.600	10.50	8.667	1.62	11.73	0.81
2.567	4.85	5.633	10.50	8.700	1.62	11.77	0.81
2.600	4.85	5.667	10.50	8.733	1.62	11.80	0.81
2.633	4.85	5.700	10.50	8.767	1.62	11.83	0.81
2.667	4.85	5.733	10.50	8.800	1.62	11.87	0.81
2.700	4.85	5.767	10.50	8.833	1.62	11.90	0.81
2.733	4.85	5.800	10.50	8.867	1.62	11.93	0.81
2.767	4.85	5.833	10.50	8.900	1.62	11.97	0.81
2.800	4.85	5.867	10.50	8.933	1.62	12.00	0.81
2.833	4.85	5.900	10.50	8.967	1.62	12.03	0.81
2.867	4.85	5.933	10.50	9.000	1.62	12.07	0.81
2.900	4.85	5.967	10.50	9.033	1.62	12.10	0.81
2.933	4.85	6.000	10.50	9.067	1.62	12.13	0.81
2.967	4.85	6.033	10.50	9.100	1.62	12.17	0.81
3.000	4.85	6.067	10.50	9.133	1.62	12.20	0.81
3.033	4.85	6.100	10.50	9.167	1.62	12.23	0.81
3.067	4.85	6.133	10.50	9.200	1.62	12.27	0.40

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.135 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 50.527
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.625

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

ADD HYD (0009)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.135	5.40	50.53
+ ID2= 2 (0007):	68.37	1.381	5.80	60.95
ID = 3 (0009):	70.37	1.493	5.57	60.66

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2400)	Area (ha)= 0.76	Curve Number (CN)= 87.0			
ID= 1 DT= 5.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00			
	U.H. Tp(hrs)= 0.04				

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

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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81

STANDHYD (3500)	Area (ha)= 3.52				
ID= 1 DT= 5.0 min	Total Imp(%)= 99.90	Dir. Conn.(%)= 99.90			
	IMPERVIOUS	PERVIOUS (i)			
Surface Area (ha)=	3.52	0.00			
Dep. Storage (mm)=	1.00	5.00			
Average Slope (%)=	1.00	2.00			
Length (m)=	153.19	40.00			
Mannings n =	0.013	0.250			

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

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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 0.726

PEAK FLOW (cms)= 0.038 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 30.154
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.373

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

CALIB					
STANDHYD (3500)	Area (ha)= 3.52				
ID= 1 DT= 5.0 min	Total Imp(%)= 99.90	Dir. Conn.(%)= 99.90			
	IMPERVIOUS	PERVIOUS (i)			
Surface Area (ha)=	3.52	0.00			
Dep. Storage (mm)=	1.00	5.00			
Average Slope (%)=	1.00	2.00			
Length (m)=	153.19	40.00			
Mannings n =	0.013	0.250			

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

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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

```
     Max.Eff.Inten.(mm/hr)=      37.17         30.13
           over (min)            5.00         10.00
     Storage Coeff.  (min)=      4.90 (ii)     5.56 (ii)
     Unit Hyd. Tpeak (min)=      5.00         10.00
     Unit Hyd. peak  (cms)=      0.22          0.16
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.36          0.00      0.363 (iii)
     TIME TO PEAK    (hrs)=      5.25          5.25      5.25
     RUNOFF VOLUME    (mm)=     79.82         50.53     79.79
     TOTAL RAINFALL   (mm)=     80.82         80.82     80.82
     RUNOFF COEFFICIENT   =      0.99          0.63      0.99

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

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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 (0028)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.038	5.25	30.15
+ ID2= 2 (3500):	3.52	0.363	5.25	79.79
ID = 3 (0028):	4.28	0.402	5.25	70.98

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (3100)	Area (ha)= 25.24				
ID= 1 DT= 5.0 min	Total Imp(%)= 85.90	Dir. Conn.(%)= 85.90			
	IMPERVIOUS	PERVIOUS (i)			
Surface Area (ha)=	21.68	3.56			
Dep. Storage (mm)=	1.00	5.00			
Average Slope (%)=	1.00	2.00			
Length (m)=	410.20	40.00			
Mannings n =	0.013	0.250			

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

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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81

2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	29.86	
over (min)	10.00	25.00	
Storage Coeff. (min)=	8.85 (ii)	20.30 (ii)	
Unit Hyd. Tpeak (min)=	10.00	25.00	
Unit Hyd. peak (cms)=	0.12	0.05	
			TOTALS
PEAK FLOW (cms)=	2.24	0.25	2.481 (iii)
TIME TO PEAK (hrs)=	5.25	5.33	5.25
RUNOFF VOLUME (mm)=	79.82	50.53	75.69
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.63	0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

CALIB
STANDHYD (3200)
ID= 1 DT= 5.0 min

Area (ha)= 7.11
Total Imp(%)= 88.30 Dir. Conn.(%)= 88.30

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	30.13	
over (min)	5.00	15.00	
Storage Coeff. (min)=	6.05 (ii)	10.73 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.19	0.09	
			TOTALS
PEAK FLOW (cms)=	0.65	0.07	0.714 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	79.82	50.53	76.39
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.63	0.95

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0022)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0020):	32.35	3.195	5.25	75.84
+ ID2= 2 (3300):	9.32	0.902	5.25	73.61
ID = 3 (0022):	41.67	4.097	5.25	75.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (3400)
ID= 1 DT= 5.0 min

Area (ha)= 4.34
Total Imp(%)= 77.60 Dir. Conn.(%)= 77.60

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.37	0.97
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	170.10	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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.723	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Max.Eff.Inten.(mm/hr)=	37.17	29.86	
over (min)	5.00	20.00	
Storage Coeff. (min)=	5.22 (ii)	16.67 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.21	0.06	
			TOTALS
PEAK FLOW (cms)=	0.35	0.07	0.419 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	79.82	50.53	73.26
TOTAL RAINFALL (mm)=	80.82	80.82	80.82
RUNOFF COEFFICIENT =	0.99	0.63	0.91

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0024)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0022):	41.67	4.097	5.25	75.34
+ ID2= 2 (0028):	4.28	0.402	5.25	70.98
ID = 3 (0024):	45.95	4.499	5.25	74.94

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0024)
3 + 2 = 1

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0024):	45.95	4.499	5.25	74.94
+ ID2= 2 (3400):	4.34	0.419	5.25	73.26
ID = 1 (0024):	50.29	4.918	5.25	74.79

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(5001)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.7480	3.7607
0.0140	0.5845	1.1340	4.6672
0.0210	1.1690	1.4200	5.2879
0.1010	1.7265	1.7270	5.9087
0.2410	2.3077	7.3760	6.5294
0.4210	2.8889	12.0010	6.8398

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0024)	50.290	4.918	5.25	74.79
OUTFLOW: ID= 1 (5001)	50.290	0.480	7.67	64.71

PEAK FLOW REDUCTION [Qout/Qin](%)= 9.76
TIME SHIFT OF PEAK FLOW (min)=145.00
MAXIMUM STORAGE USED (ha.m.)= 3.0464

ADD HYD (0013)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (5001):	50.29	0.480	7.67	64.71
+ ID2= 2 (0009):	70.37	1.493	5.57	60.66
ID = 3 (0013):	120.66	1.841	5.87	57.50

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB             |
| NASHYD   (  4100)|   Area    (ha)=   3.48   Curve Number   (CN)= 87.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.04
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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	4.85	6.250	10.50	9.33	0.81
0.167	0.00	3.250	4.85	6.333	5.66	9.42	0.81
0.250	0.00	3.333	13.74	6.417	5.66	9.50	0.81
0.333	0.81	3.417	13.74	6.500	5.66	9.58	0.81
0.417	0.81	3.500	13.74	6.583	5.66	9.67	0.81
0.500	0.81	3.583	13.74	6.667	5.66	9.75	0.81
0.583	0.81	3.667	13.74	6.750	5.66	9.83	0.81
0.667	0.81	3.750	13.74	6.833	5.66	9.92	0.81
0.750	0.81	3.833	13.74	6.917	5.66	10.00	0.81
0.833	0.81	3.917	13.74	7.000	5.66	10.08	0.81
0.917	0.81	4.000	13.74	7.083	5.66	10.17	0.81
1.000	0.81	4.083	13.74	7.167	5.66	10.25	0.81
1.083	0.81	4.167	13.74	7.250	5.66	10.33	0.81
1.167	0.81	4.250	13.74	7.333	3.23	10.42	0.81
1.250	0.81	4.333	37.17	7.417	3.23	10.50	0.81
1.333	0.81	4.417	37.17	7.500	3.23	10.58	0.81
1.417	0.81	4.500	37.17	7.583	3.23	10.67	0.81
1.500	0.81	4.583	37.17	7.667	3.23	10.75	0.81
1.583	0.81	4.667	37.17	7.750	3.23	10.83	0.81
1.667	0.81	4.750	37.17	7.833	3.23	10.92	0.81
1.750	0.81	4.833	37.17	7.917	3.23	11.00	0.81
1.833	0.81	4.917	37.17	8.000	3.23	11.08	0.81
1.917	0.81	5.000	37.17	8.083	3.23	11.17	0.81
2.000	0.81	5.083	37.17	8.167	3.23	11.25	0.81
2.083	0.81	5.167	37.17	8.250	3.23	11.33	0.81
2.167	0.81	5.250	37.17	8.333	1.62	11.42	0.81
2.250	0.81	5.333	10.50	8.417	1.62	11.50	0.81
2.333	4.85	5.417	10.50	8.500	1.62	11.58	0.81
2.417	4.85	5.500	10.50	8.583	1.62	11.67	0.81
2.500	4.85	5.583	10.50	8.667	1.62	11.75	0.81
2.583	4.85	5.667	10.50	8.750	1.62	11.83	0.81
2.667	4.85	5.750	10.50	8.833	1.62	11.92	0.81
2.750	4.85	5.833	10.50	8.917	1.62	12.00	0.81
2.833	4.85	5.917	10.50	9.000	1.62	12.08	0.81
2.917	4.85	6.000	10.50	9.083	1.62	12.17	0.81
3.000	4.85	6.083	10.50	9.167	1.62	12.25	0.81
3.083	4.85	6.167	10.50	9.250	1.62		

Unit Hyd Qpeak (cms)= 3.323

PEAK FLOW (cms)= 0.175 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 30.154
TOTAL RAINFALL (mm)= 80.820
RUNOFF COEFFICIENT = 0.373

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

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*****************************************
** SIMULATION:Run 13 100yr 12hr AES **
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|    READ STORM    |    Filename: C:\Users\Oux\AppData\
|                  |              Local\Temp\
|                  |              a94bb59f-5044-498d-abed-caf1943a5048\94a017e0
| Ptotal= 88.54 mm |    Comments: 100yr/12hr
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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   (  1000)|   Area    (ha)=  19.21   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   7.70   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   1.07
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NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	5.31	6.167	11.51	9.23	1.77
0.067	0.00	3.133	5.31	6.200	11.51	9.27	1.33
0.100	0.00	3.167	5.31	6.233	11.51	9.30	0.89
0.133	0.00	3.200	5.31	6.267	8.86	9.33	0.89
0.167	0.00	3.233	5.31	6.300	6.20	9.37	0.89
0.200	0.00	3.267	10.18	6.333	6.20	9.40	0.89
0.233	0.00	3.300	15.05	6.367	6.20	9.43	0.89
0.267	0.45	3.333	15.05	6.400	6.20	9.47	0.89
0.300	0.89	3.367	15.05	6.433	6.20	9.50	0.89
0.333	0.89	3.400	15.05	6.467	6.20	9.53	0.89
0.367	0.89	3.433	15.05	6.500	6.20	9.57	0.89
0.400	0.89	3.467	15.05	6.533	6.20	9.60	0.89
0.433	0.89	3.500	15.05	6.567	6.20	9.63	0.89
0.467	0.89	3.533	15.05	6.600	6.20	9.67	0.89
0.500	0.89	3.567	15.05	6.633	6.20	9.70	0.89
0.533	0.89	3.600	15.05	6.667	6.20	9.73	0.89
0.567	0.89	3.633	15.05	6.700	6.20	9.77	0.89
0.600	0.89	3.667	15.05	6.733	6.20	9.80	0.89
0.633	0.89	3.700	15.05	6.767	6.20	9.83	0.89
0.667	0.89	3.733	15.05	6.800	6.20	9.87	0.89
0.700	0.89	3.767	15.05	6.833	6.20	9.90	0.89
0.733	0.89	3.800	15.05	6.867	6.20	9.93	0.89
0.767	0.89	3.833	15.05	6.900	6.20	9.97	0.89
0.800	0.89	3.867	15.05	6.933	6.20	10.00	0.89
0.833	0.89	3.900	15.05	6.967	6.20	10.03	0.89
0.867	0.89	3.933	15.05	7.000	6.20	10.07	0.89
0.900	0.89	3.967	15.05	7.033	6.20	10.10	0.89
0.933	0.89	4.000	15.05	7.067	6.20	10.13	0.89
0.967	0.89	4.033	15.05	7.100	6.20	10.17	0.89
1.000	0.89	4.067	15.05	7.133	6.20	10.20	0.89
1.033	0.89	4.100	15.05	7.167	6.20	10.23	0.89
1.067	0.89	4.133	15.05	7.200	6.20	10.27	0.89
1.100	0.89	4.167	15.05	7.233	6.20	10.30	0.89
1.133	0.89	4.200	15.05	7.267	4.87	10.33	0.89
1.167	0.89	4.233	15.05	7.300	3.54	10.37	0.89
1.200	0.89	4.267	27.88	7.333	3.54	10.40	0.89
1.233	0.89	4.300	40.71	7.367	3.54	10.43	0.89
1.267	0.89	4.333	40.71	7.400	3.54	10.47	0.89
1.300	0.89	4.367	40.71	7.433	3.54	10.50	0.89
1.333	0.89	4.400	40.71	7.467	3.54	10.53	0.89
1.367	0.89	4.433	40.71	7.500	3.54	10.57	0.89
1.400	0.89	4.467	40.71	7.533	3.54	10.60	0.89
1.433	0.89	4.500	40.71	7.567	3.54	10.63	0.89
1.467	0.89	4.533	40.71	7.600	3.54	10.67	0.89
1.500	0.89	4.567	40.71	7.633	3.54	10.70	0.89
1.533	0.89	4.600	40.71	7.667	3.54	10.73	0.89
1.567	0.89	4.633	40.71	7.700	3.54	10.77	0.89
1.600	0.89	4.667	40.71	7.733	3.54	10.80	0.89
1.633	0.89	4.700	40.71	7.767	3.54	10.83	0.89
1.667	0.89	4.733	40.71	7.800	3.54	10.87	0.89
1.700	0.89	4.767	40.71	7.833	3.54	10.90	0.89
1.733	0.89	4.800	40.71	7.867	3.54	10.93	0.89
1.767	0.89	4.833	40.71	7.900	3.54	10.97	0.89
1.800	0.89	4.867	40.71	7.933	3.54	11.00	0.89
1.833	0.89	4.900	40.71	7.967	3.54	11.03	0.89
1.867	0.89	4.933	40.71	8.000	3.54	11.07	0.89
1.900	0.89	4.967	40.71	8.033	3.54	11.10	0.89
1.933	0.89	5.000	40.71	8.067	3.54	11.13	0.89
1.967	0.89	5.033	40.71	8.100	3.54	11.17	0.89
2.000	0.89	5.067	40.71	8.133	3.54	11.20	0.89
2.033	0.89	5.100	40.71	8.167	3.54	11.23	0.89
2.067	0.89	5.133	40.71	8.200	3.54	11.27	0.89
2.100	0.89	5.167	40.71	8.233	3.54	11.30	0.89
2.133	0.89	5.200	40.71	8.267	2.66	11.33	0.89
2.167	0.89	5.233	40.71	8.300	1.77	11.37	0.89
2.200	0.89	5.267	26.11	8.333	1.77	11.40	0.89
2.233	0.89	5.300	11.51	8.367	1.77	11.43	0.89
2.267	3.10	5.333	11.51	8.400	1.77	11.47	0.89
2.300	5.31	5.367	11.51	8.433	1.77	11.50	0.89
2.333	5.31	5.400	11.51	8.467	1.77	11.53	0.89
2.367	5.31	5.433	11.51	8.500	1.77	11.57	0.89
2.400	5.31	5.467	11.51	8.533	1.77	11.60	0.89
2.433	5.31	5.500	11.51	8.567	1.77	11.63	0.89
2.467	5.31	5.533	11.51	8.600	1.77	11.67	0.89
2.500	5.31	5.567	11.51	8.633	1.77	11.70	0.89
2.533	5.31	5.600	11.51	8.667	1.77	11.73	0.89
2.567	5.31	5.633	11.51	8.700	1.77	11.77	0.89
2.600	5.31	5.667	11.51	8.733	1.77	11.80	0.89
2.633	5.31	5.700	11.51	8.767	1.77	11.83	0.89
2.667	5.31	5.733	11.51	8.800	1.77	11.87	0.89
2.700	5.31	5.767	11.51	8.833	1.77	11.90	0.89
2.733	5.31	5.800	11.51	8.867	1.77	11.93	0.89
2.767	5.31	5.833	11.51	8.900	1.77	11.97	0.89
2.800	5.31	5.867	11.51	8.933	1.77	12.00	0.89
2.833	5.31	5.900	11.51	8.967	1.77	12.03	0.89
2.867	5.31	5.933	11.51	9.000	1.77	12.07	0.89
2.900	5.31	5.967	11.51	9.033	1.77	12.10	0.89
2.933	5.31	6.000	11.51	9.067	1.77	12.13	0.89
2.967	5.31	6.033	11.51	9.100	1.77	12.17	0.89
3.000	5.31	6.067	11.51	9.133	1.77	12.20	0.89
3.033	5.31	6.100	11.51	9.167	1.77	12.23	0.89
3.067	5.31	6.133	11.51	9.200	1.77	12.27	0.44

Unit Hyd Qpeak (cms)= 0.686

PEAK FLOW (cms)= 0.878 (i)
TIME TO PEAK (hrs)= 6.133
RUNOFF VOLUME (mm)= 55.012
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.621

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

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| CALIB             |
| NASHYD   (  1100)|   Area    (ha)=   2.08   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.29
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NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	5.31	6.167	11.51	9.23	1.77
0.067	0.00	3.133	5.31	6.200	11.51	9.27	1.33
0.100	0.00	3.167	5.31	6.233	11.51	9.30	0.89
0.133	0.00	3.200	5.31	6.267	8.86	9.33	0.89
0.167	0.00	3.233	5.31	6.300	6.20	9.37	0.89
0.200	0.00	3.267	10.18	6.333	6.20	9.40	0.89
0.233	0.00	3.300	15.05	6.367	6.20	9.43	0.89
0.267	0.45	3.333	15.05	6.400	6.20	9.47	0.89
0.300	0.89	3.367	15.05	6.433	6.20	9.50	0.89
0.333	0.89	3.400	15.05	6.467	6.20	9.53	0.89
0.367	0.89	3.433	15.05	6.500	6.20	9.57	0.89
0.400	0.89	3.467	15.05	6.533	6.20	9.60	0.89
0.433	0.89	3.500	15.05	6.567	6.20	9.63	0.89
0.467	0.89	3.533	15.05	6.600	6.20	9.67	0.89
0.500	0.89	3.567	15.05	6.633	6.20	9.70	0.89
0.533	0.89	3.600	15.05	6.667	6.20	9.73	0.89
0.567	0.89	3.633	15.05	6.700	6.20	9.77	0.89
0.600	0.89	3.667	15.05	6.733	6.20	9.80	0.89
0.633	0.89	3.700	15.05	6.767	6.20	9.83	0.89
0.667	0.89	3.733	15.05	6.800	6.20	9.87	0.89
0.700	0.89	3.767	15.05	6.833	6.20	9.90	0.89
0.733	0.89	3.800	15.05	6.867	6.20	9.93	0.89
0.767	0.89	3.833	15.05	6.900	6.20	9.97	0.89
0.800	0.89	3.867	15.05	6.933	6.20	10.00	0.89
0.833	0.89	3.900	15.05	6.967	6.20	10.03	0.89
0.867	0.89	3.933	15.05	7.000	6.20	10.07	0.89
0.900	0.89	3.967	15.05	7.033	6.20	10.10	0.89
0.933	0.89	4.000	15.05	7.067	6.20	10.13	0.89
0.967	0.89	4.033	15.05	7.100	6.20	10.17	0.89
1.000	0.89	4.067	15.05	7.133	6.20	10.20	0.89
1.033	0.89	4.100	15.05	7.167	6.20	10.23	0.89
1.067	0.89	4.133	15.05	7.200	6.20	10.27	0.89
1.100	0.89	4.167	15.05	7.233	6.20	10.30	0.89
1.133	0.89	4.200	15.05	7.267	4.87	10.33	0.89
1.167	0.89	4.233	15.05	7.300	3.54	10.37	0.89
1.200	0.89	4.267	27.88	7.333	3.54	10.40	0.89
1.233	0.89	4.300	40.71	7.367	3.54	10.43	0.89
1.267	0.89	4.333	40.71	7.400	3.54	10.47	0.89
1.300	0.89	4.367	40.71	7.433	3.54	10.50	0.89
1.333	0.89	4.400	40.71	7.467	3.54	10.53	0.89
1.367	0.89	4.433	40.71	7.500	3.54	10.57	0.89
1.400	0.89	4.467	40.71	7.533	3.54	10.60	0.89
1.433	0.89	4.500	40.71	7.567	3.54	10.63	0.89
1.467	0.89	4.533	40.71	7.600	3.54	10.67	0.89
1.500	0.89	4.567	40.71	7.633	3.54	10.70	0.89
1.533	0.89	4.600	40.71	7.667	3.54	10.73	0.89
1.567	0.89	4.633	40.71	7.700	3.54	10.77	0.89
1.600	0.89	4.667	40.71	7.733	3.54	10.80	0.89
1.633	0.89	4.700	40.71	7.767	3.54	10.83	0.89
1.667	0.89	4.733	40.71	7.800	3.54	10.87	0.89
1.700	0.89	4.767	40.71	7.833	3.54	10.90	0.89
1.733	0.89	4.800	40.71	7.867	3.54	10.93	0.89
1.767	0.89	4.833	40.71	7.900	3.54	10.97	0.89
1.800	0.89	4.867	40.71	7.933	3.54	11.00	0.89
1.833	0.89	4.900	40.71	7.967	3.54	11.03	0.89
1.867	0.89	4.933	40.71	8.000	3.54	11.07	0.89
1.900	0.89	4.967	40.71	8.033	3.54	11.10	0.89
1.933	0.89	5.000	40.71	8.067	3.54	11.13	0.89
1.967	0.89	5.033	40.71	8.100	3.54	11.17	0.89
2.000	0.89	5.067	40.71	8.133	3.54	11.20	0.89
2.033	0.89	5.100	40.71	8.167	3.54	11.23	0.89
2.067	0.89	5.133	40.71	8.200	3.54	11.27	0.89
2.100	0.89	5.167	40.71	8.233	3.54	11.30	0.89
2.133	0.89	5.200	40.71	8.267	2.66	11.33	0.89
2.167	0.89	5.233	40.71	8.300	1.77	11.37	0.89
2.200	0.89	5.267	26.11	8.333	1.77	11.40	0.89
2.233	0.89	5.300	11.51	8.367	1.77	11.43	0.89
2.267	3.10	5.333	11.51	8.400	1.77	11.47	0.89
2.300	5.31	5.367	11.51	8.433	1.77	11.50	0.89
2.333	5.31	5.400	11.51	8.467	1.77	11.53	0.89
2.367	5.31	5.433	11.51	8.500	1.77	11.57	0.89
2.400	5.31	5.467	11.51	8.533	1.77	11.60	0.89
2.433	5.31	5.500	11.51	8.567	1.77	11.63	0.89
2.467	5.31	5.533	11.51	8.600	1.77	11.67	0.89
2.500	5.31	5.567	11.51	8.633	1.77	11.70	0.89
2.533	5.31	5.600	11.51	8.667	1.77	11.73	0.89
2.567	5.31	5.633	11.51	8.700	1.77	11.77	0.89
2.600	5.31	5.667	11.51	8.733	1.77	11.80	0.89
2.633	5.31	5.700	11.51	8.767	1.77	11.83	0.89
2.667	5.31	5.733	11.51	8.800	1.77	11.87	0.89
2.700	5.31	5.767	11.51	8.833	1.77	11.90	0.89
2.733	5.31	5.800	11.51	8.867	1.77	11.93	0.89
2.767	5.31	5.833	11.51	8.900	1.77	11.97	0.89
2.800	5.31	5.867	11.51	8.933	1.77	12.00	0.89
2.833	5.31	5.900	11.51	8.967	1.77	12.03	0.89
2.867	5.31	5.933	11.51	9.000	1.77	12.07	0.89
2.900	5.31	5.967	11.51	9.033	1.77	12.10	0.89
2.933	5.31	6.000	11.51	9.067	1.77	12.13	0.89
2.967	5.31	6.033	11.51	9.100	1.77	12.17	0.89
3.000	5.31	6.067	11.51	9.133	1.77	12.20	0.89
3.033	5.31	6.100	11.51	9.167	1.77	12.23	0.89
3.067	5.31	6.133	11.51	9.200	1.77	12.27	0.44

Unit Hyd Qpeak (cms)= 0.274

PEAK FLOW (cms)= 0.177 (i)
TIME TO PEAK (hrs)= 5.300
RUNOFF VOLUME (mm)= 57.442
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.649

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

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| DUHYD    (  2000)|
| Inlet Cap.= 0.949|
| #of Inlets=    1|
| Total(cms)=  0.9|
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	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
TOTAL HYD.(ID= 1):	2.08	0.18	5.30	57.44
MAJOR SYS.(ID= 2):	0.00	0.00	0.00	0.00
MINOR SYS.(ID= 3):	2.08	0.18	5.30	57.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB                |
| STANDHYD (  1200)|   Area    (ha)=  25.19
|ID= 1 DT= 2.0 min |   Total Imp(%)=  88.60   Dir. Conn.(%)=  88.60
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                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      22.32         2.87
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     409.80        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
     0.033    0.00 |  3.100    5.31 |  6.167   11.51 |  9.23    1.77
     0.067    0.00 |  3.133    5.31 |  6.200   11.51 |  9.27    1.33
     0.100    0.00 |  3.167    5.31 |  6.233   11.51 |  9.30    0.89
     0.133    0.00 |  3.200    5.31 |  6.267    8.86 |  9.33    0.89
     0.167    0.00 |  3.233    5.31 |  6.300    6.20 |  9.37    0.89
     0.200    0.00 |  3.267   10.18 |  6.333    6.20 |  9.40    0.89
     0.233    0.00 |  3.300   15.05 |  6.367    6.20 |  9.43    0.89
     0.267    0.45 |  3.333   15.05 |  6.400    6.20 |  9.47    0.89
     0.300    0.89 |  3.367   15.05 |  6.433    6.20 |  9.50    0.89
     0.333    0.89 |  3.400   15.05 |  6.467    6.20 |  9.53    0.89
     0.367    0.89 |  3.433   15.05 |  6.500    6.20 |  9.57    0.89
     0.400    0.89 |  3.467   15.05 |  6.533    6.20 |  9.60    0.89
     0.433    0.89 |  3.500   15.05 |  6.567    6.20 |  9.63    0.89
     0.467    0.89 |  3.533   15.05 |  6.600    6.20 |  9.67    0.89
     0.500    0.89 |  3.567   15.05 |  6.633    6.20 |  9.70    0.89
     0.533    0.89 |  3.600   15.05 |  6.667    6.20 |  9.73    0.89
     0.567    0.89 |  3.633   15.05 |  6.700    6.20 |  9.77    0.89
     0.600    0.89 |  3.667   15.05 |  6.733    6.20 |  9.80    0.89
     0.633    0.89 |  3.700   15.05 |  6.767    6.20 |  9.83    0.89
     0.667    0.89 |  3.733   15.05 |  6.800    6.20 |  9.87    0.89
     0.700    0.89 |  3.767   15.05 |  6.833    6.20 |  9.90    0.89
     0.733    0.89 |  3.800   15.05 |  6.867    6.20 |  9.93    0.89
     0.767    0.89 |  3.833   15.05 |  6.900    6.20 |  9.97    0.89
     0.800    0.89 |  3.867   15.05 |  6.933    6.20 | 10.00    0.89
     0.833    0.89 |  3.900   15.05 |  6.967    6.20 | 10.03    0.89
     0.867    0.89 |  3.933   15.05 |  7.000    6.20 | 10.07    0.89
     0.900    0.89 |  3.967   15.05 |  7.033    6.20 | 10.10    0.89
     0.933    0.89 |  4.000   15.05 |  7.067    6.20 | 10.13    0.89
     0.967    0.89 |  4.033   15.05 |  7.100    6.20 | 10.17    0.89
     1.000    0.89 |  4.067   15.05 |  7.133    6.20 | 10.20    0.89
     1.033    0.89 |  4.100   15.05 |  7.167    6.20 | 10.23    0.89
     1.067    0.89 |  4.133   15.05 |  7.200    6.20 | 10.27    0.89
     1.100    0.89 |  4.167   15.05 |  7.233    6.20 | 10.30    0.89
     1.133    0.89 |  4.200   15.05 |  7.267    4.87 | 10.33    0.89
     1.167    0.89 |  4.233   15.05 |  7.300    3.54 | 10.37    0.89
     1.200    0.89 |  4.267   27.88 |  7.333    3.54 | 10.40    0.89
     1.233    0.89 |  4.300   40.71 |  7.367    3.54 | 10.43    0.89
     1.267    0.89 |  4.333   40.71 |  7.400    3.54 | 10.47    0.89
     1.300    0.89 |  4.367   40.71 |  7.433    3.54 | 10.50    0.89
     1.333    0.89 |  4.400   40.71 |  7.467    3.54 | 10.53    0.89
     1.367    0.89 |  4.433   40.71 |  7.500    3.54 | 10.57    0.89
     1.400    0.89 |  4.467   40.71 |  7.533    3.54 | 10.60    0.89
     1.433    0.89 |  4.500   40.71 |  7.567    3.54 | 10.63    0.89
     1.467    0.89 |  4.533   40.71 |  7.600    3.54 | 10.67    0.89
     1.500    0.89 |  4.567   40.71 |  7.633    3.54 | 10.70    0.89
     1.533    0.89 |  4.600   40.71 |  7.667    3.54 | 10.73    0.89
     1.567    0.89 |  4.633   40.71 |  7.700    3.54 | 10.77    0.89
     1.600    0.89 |  4.667   40.71 |  7.733    3.54 | 10.80    0.89
     1.633    0.89 |  4.700   40.71 |  7.767    3.54 | 10.83    0.89
     1.667    0.89 |  4.733   40.71 |  7.800    3.54 | 10.87    0.89
     1.700    0.89 |  4.767   40.71 |  7.833    3.54 | 10.90    0.89
     1.733    0.89 |  4.800   40.71 |  7.867    3.54 | 10.93    0.89
     1.767    0.89 |  4.833   40.71 |  7.900    3.54 | 10.97    0.89
     1.800    0.89 |  4.867   40.71 |  7.933    3.54 | 11.00    0.89
     1.833    0.89 |  4.900   40.71 |  7.967    3.54 | 11.03    0.89
     1.867    0.89 |  4.933   40.71 |  8.000    3.54 | 11.07    0.89
     1.900    0.89 |  4.967   40.71 |  8.033    3.54 | 11.10    0.89
     1.933    0.89 |  5.000   40.71 |  8.067    3.54 | 11.13    0.89
     1.967    0.89 |  5.033   40.71 |  8.100    3.54 | 11.17    0.89
     2.000    0.89 |  5.067   40.71 |  8.133    3.54 | 11.20    0.89
     2.033    0.89 |  5.100   40.71 |  8.167    3.54 | 11.23    0.89
     2.067    0.89 |  5.133   40.71 |  8.200    3.54 | 11.27    0.89
     2.100    0.89 |  5.167   40.71 |  8.233    3.54 | 11.30    0.89
     2.133    0.89 |  5.200   40.71 |  8.267    2.66 | 11.33    0.89
     2.167    0.89 |  5.233   40.71 |  8.300    1.77 | 11.37    0.89
     2.200    0.89 |  5.267   26.11 |  8.333    1.77 | 11.40    0.89
     2.233    0.89 |  5.300   11.51 |  8.367    1.77 | 11.43    0.89
     2.267    3.10 |  5.333   11.51 |  8.400    1.77 | 11.47    0.89
     2.300    5.31 |  5.367   11.51 |  8.433    1.77 | 11.50    0.89
     2.333    5.31 |  5.400   11.51 |  8.467    1.77 | 11.53    0.89
     2.367    5.31 |  5.433   11.51 |  8.500    1.77 | 11.57    0.89
     2.400    5.31 |  5.467   11.51 |  8.533    1.77 | 11.60    0.89
     2.433    5.31 |  5.500   11.51 |  8.567    1.77 | 11.63    0.89
     2.467    5.31 |  5.533   11.51 |  8.600    1.77 | 11.67    0.89
     2.500    5.31 |  5.567   11.51 |  8.633    1.77 | 11.70    0.89
     2.533    5.31 |  5.600   11.51 |  8.667    1.77 | 11.73    0.89
     2.567    5.31 |  5.633   11.51 |  8.700    1.77 | 11.77    0.89
     2.600    5.31 |  5.667   11.51 |  8.733    1.77 | 11.80    0.89
     2.633    5.31 |  5.700   11.51 |  8.767    1.77 | 11.83    0.89
     2.667    5.31 |  5.733   11.51 |  8.800    1.77 | 11.87    0.89
     2.700    5.31 |  5.767   11.51 |  8.833    1.77 | 11.90    0.89
     2.733    5.31 |  5.800   11.51 |  8.867    1.77 | 11.93    0.89
     2.767    5.31 |  5.833   11.51 |  8.900    1.77 | 11.97    0.89
     2.800    5.31 |  5.867   11.51 |  8.933    1.77 | 12.00    0.89
     2.833    5.31 |  5.900   11.51 |  8.967    1.77 | 12.03    0.89
     2.867    5.31 |  5.933   11.51 |  9.000    1.77 | 12.07    0.89
     2.900    5.31 |  5.967   11.51 |  9.033    1.77 | 12.10    0.89
     2.933    5.31 |  6.000   11.51 |  9.067    1.77 | 12.13    0.89
     2.967    5.31 |  6.033   11.51 |  9.100    1.77 | 12.17    0.89
     3.000    5.31 |  6.067   11.51 |  9.133    1.77 | 12.20    0.89
     3.033    5.31 |  6.100   11.51 |  9.167    1.77 | 12.23    0.89
     3.067    5.31 |  6.133   11.51 |  9.200    1.77 | 12.27    0.44

     Max.Eff.Inten.(mm/hr)=      40.71         33.73
               over (min)         8.00         14.00
     Storage Coeff.  (min)=       8.53 (ii)   12.98 (ii)
     Unit Hyd. Tpeak (min)=       8.00         14.00
     Unit Hyd. peak  (cms)=       0.14          0.08
                                                          *TOTALS*
     PEAK FLOW       (cms)=       2.52          0.25        2.771 (iii)
     TIME TO PEAK    (hrs)=       5.23          5.27        5.23
     RUNOFF VOLUME    (mm)=      87.54         57.44       84.11
     TOTAL RAINFALL   (mm)=      88.54         88.54       88.54
     RUNOFF COEFFICIENT   =       0.99          0.65        0.95

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0    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 (  2001)|
|   1 +   2 =   3 |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
         ID1= 1 (  1200):    25.19   2.771     5.23    84.11
       + ID2= 2 (  2000):     2.08   0.177     5.30    57.44
         ==========================================
         ID = 3 (  2001):    27.27   2.946     5.23    82.07

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| RESERVOIR(  1002)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000    |  0.2130     1.6215
                         0.0900     0.8290    |  0.2480     1.8230
                         0.1380     1.1410    |  0.2810     2.0230
                         0.1700     1.3535    |  0.0000     0.0000

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
     INFLOW : ID= 2 (  2001)     27.270     2.946     5.23       82.07
     OUTFLOW: ID= 1 (  1002)     27.270     0.246     8.33       75.45

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)=  8.34
                    TIME SHIFT OF PEAK FLOW         (min)=186.00
                    MAXIMUM  STORAGE   USED        (ha.m.)=  1.8102

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| CALIB                |
| STANDHYD (  1300)|   Area    (ha)=  13.18
|ID= 1 DT= 2.0 min |   Total Imp(%)=  83.40   Dir. Conn.(%)=  83.40
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                        IMPERVIOUS    PERVIOUS (i)

     Surface Area     (ha)=      10.99         2.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     296.42        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   2.0 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
     0.033    0.00 |  3.100    5.31 |  6.167   11.51 |  9.23    1.77
     0.067    0.00 |  3.133    5.31 |  6.200   11.51 |  9.27    1.33
     0.100    0.00 |  3.167    5.31 |  6.233   11.51 |  9.30    0.89
     0.133    0.00 |  3.200    5.31 |  6.267    8.86 |  9.33    0.89
     0.167    0.00 |  3.233    5.31 |  6.300    6.20 |  9.37    0.89
     0.200    0.00 |  3.267   10.18 |  6.333    6.20 |  9.40    0.89
     0.233    0.00 |  3.300   15.05 |  6.367    6.20 |  9.43    0.89
     0.267    0.45 |  3.333   15.05 |  6.400    6.20 |  9.47    0.89
     0.300    0.89 |  3.367   15.05 |  6.433    6.20 |  9.50    0.89
     0.333    0.89 |  3.400   15.05 |  6.467    6.20 |  9.53    0.89
     0.367    0.89 |  3.433   15.05 |  6.500    6.20 |  9.57    0.89
     0.400    0.89 |  3.467   15.05 |  6.533    6.20 |  9.60    0.89
     0.433    0.89 |  3.500   15.05 |  6.567    6.20 |  9.63    0.89
     0.467    0.89 |  3.533   15.05 |  6.600    6.20 |  9.67    0.89
     0.500    0.89 |  3.567   15.05 |  6.633    6.20 |  9.70    0.89
     0.533    0.89 |  3.600   15.05 |  6.667    6.20 |  9.73    0.89
     0.567    0.89 |  3.633   15.05 |  6.700    6.20 |  9.77    0.89
     0.600    0.89 |  3.667   15.05 |  6.733    6.20 |  9.80    0.89
     0.633    0.89 |  3.700   15.05 |  6.767    6.20 |  9.83    0.89
     0.667    0.89 |  3.733   15.05 |  6.800    6.20 |  9.87    0.89
     0.700    0.89 |  3.767   15.05 |  6.833    6.20 |  9.90    0.89
     0.733    0.89 |  3.800   15.05 |  6.867    6.20 |  9.93    0.89
     0.767    0.89 |  3.833   15.05 |  6.900    6.20 |  9.97    0.89
     0.800    0.89 |  3.867   15.05 |  6.933    6.20 | 10.00    0.89
     0.833    0.89 |  3.900   15.05 |  6.967    6.20 | 10.03    0.89
     0.867    0.89 |  3.933   15.05 |  7.000    6.20 | 10.07    0.89
     0.900    0.89 |  3.967   15.05 |  7.033    6.20 | 10.10    0.89
     0.933    0.89 |  4.000   15.05 |  7.067    6.20 | 10.13    0.89
     0.967    0.89 |  4.033   15.05 |  7.100    6.20 | 10.17    0.89
     1.000    0.89 |  4.067   15.05 |  7.133    6.20 | 10.20    0.89
     1.033    0.89 |  4.100   15.05 |  7.167    6.20 | 10.23    0.89
     1.067    0.89 |  4.133   15.05 |  7.200    6.20 | 10.27    0.89
     1.100    0.89 |  4.167   15.05 |  7.233    6.20 | 10.30    0.89
     1.133    0.89 |  4.200   15.05 |  7.267    4.87 | 10.33    0.89
     1.167    0.89 |  4.233   15.05 |  7.300    3.54 | 10.37    0.89
     1.200    0.89 |  4.267   27.88 |  7.333    3.54 | 10.40    0.89
     1.233    0.89 |  4.300   40.71 |  7.367    3.54 | 10.43    0.89
     1.267    0.89 |  4.333   40.71 |  7.400    3.54 | 10.47    0.89
     1.300    0.89 |  4.367   40.71 |  7.433    3.54 | 10.50    0.89
     1.333    0.89 |  4.400   40.71 |  7.467    3.54 | 10.53    0.89
     1.367    0.89 |  4.433   40.71 |  7.500    3.54 | 10.57    0.89
     1.400    0.89 |  4.467   40.71 |  7.533    3.54 | 10.60    0.89
     1.433    0.89 |  4.500   40.71 |  7.567    3.54 | 10.63    0.89
     1.467    0.89 |  4.533   40.71 |  7.600    3.54 | 10.67    0.89
     1.500    0.89 |  4.567   40.71 |  7.633    3.54 | 10.70    0.89
     1.533    0.89 |  4.600   40.71 |  7.667    3.54 | 10.73    0.89
     1.567    0.89 |  4.633   40.71 |  7.700    3.54 | 10.77    0.89
     1.600    0.89 |  4.667   40.71 |  7.733    3.54 | 10.80    0.89
     1.633    0.89 |  4.700   40.71 |  7.767    3.54 | 10.83    0.89
     1.667    0.89 |  4.733   40.71 |  7.800    3.54 | 10.87    0.89
     1.700    0.89 |  4.767   40.71 |  7.833    3.54 | 10.90    0.89
     1.733    0.89 |  4.800   40.71 |  7.867    3.54 | 10.93    0.89
     1.767    0.89 |  4.833   40.71 |  7.900    3.54 | 10.97    0.89
     1.800    0.89 |  4.867   40.71 |  7.933    3.54 | 11.00    0.89
     1.833    0.89 |  4.900   40.71 |  7.967    3.54 | 11.03    0.89
     1.867    0.89 |  4.933   40.71 |  8.000    3.54 | 11.07    0.89
     1.900    0.89 |  4.967   40.71 |  8.033    3.54 | 11.10    0.89
     1.933    0.89 |  5.000   40.71 |  8.067    3.54 | 11.13    0.89
     1.967    0.89 |  5.033   40.71 |  8.100    3.54 | 11.17    0.89
     2.000    0.89 |  5.067   40.71 |  8.133    3.54 | 11.20    0.89
     2.033    0.89 |  5.100   40.71 |  8.167    3.54 | 11.23    0.89
     2.067    0.89 |  5.133   40.71 |  8.200    3.54 | 11.27    0.89
     2.100    0.89 |  5.167   40.71 |  8.233    3.54 | 11.30    0.89
     2.133    0.89 |  5.200   40.71 |  8.267    2.66 | 11.33    0.89
     2.167    0.89 |  5.233   40.71 |  8.300    1.77 | 11.37    0.89
     2.200    0.89 |  5.267   26.11 |  8.333    1.77 | 11.40    0.89
     2.233    0.89 |  5.300   11.51 |  8.367    1.77 | 11.43    0.89
     2.267    3.10 |  5.333   11.51 |  8.400    1.77 | 11.47    0.89
     2.300    5.31 |  5.367   11.51 |  8.433    1.77 | 11.50    0.89
     2.333    5.31 |  5.400   11.51 |  8.467    1.77 | 11.53    0.89
     2.367    5.31 |  5.433   11.51 |  8.500    1.77 | 11.57    0.89
     2.400    5.31 |  5.467   11.51 |  8.533    1.77 | 11.60    0.89
     2.433    5.31 |  5.500   11.51 |  8.567    1.77 | 11.63    0.89
     2.467    5.31 |  5.533   11.51 |  8.600    1.77 | 11.67    0.89
     2.500    5.31 |  5.567   11.51 |  8.633    1.77 | 11.70    0.89
     2.533    5.31 |  5.600   11.51 |  8.667    1.77 | 11.73    0.89
     2.567    5.31 |  5.633   11.51 |  8.700    1.77 | 11.77    0.89
     2.600    5.31 |  5.667   11.51 |  8.733    1.77 | 11.80    0.89
     2.633    5.31 |  5.700   11.51 |  8.767    1.77 | 11.83    0.89
     2.667    5.31 |  5.733   11.51 |  8.800    1.77 | 11.87    0.89
     2.700    5.31 |  5.767   11.51 |  8.833    1.77 | 11.90    0.89
     2.733    5.31 |  5.800   11.51 |  8.867    1.77 | 11.93    0.89
     2.767    5.31 |  5.833   11.51 |  8.900    1.77 | 11.97    0.89
     2.800    5.31 |  5.867   11.51 |  8.933    1.77 | 12.00    0.89
     2.833    5.31 |  5.900   11.51 |  8.967    1.77 | 12.03    0.89
     2.867    5.31 |  5.933   11.51 |  9.000    1.77 | 12.07    0.89
     2.900    5.31 |  5.967   11.51 |  9.033    1.77 | 12.10    0.89
     2.933    5.31 |  6.000   11.51 |  9.067    1.77 | 12.13    0.89
     2.967    5.31 |  6.033   11.51 |  9.100    1.77 | 12.17    0.89
     3.000    5.31 |  6.067   11.51 |  9.133    1.77 | 12.20    0.89
     3.033    5.31 |  6.100   11.51 |  9.167    1.77 | 12.23    0.89
     3.067    5.31 |  6.133   11.51 |  9.200    1.77 | 12.27    0.44

     Max.Eff.Inten.(mm/hr)=      40.71         33.73
               over (min)         8.00         14.00
     Storage Coeff.  (min)=       7.02 (ii)   12.33 (ii)
     Unit Hyd. Tpeak (min)=       8.00         14.00
     Unit Hyd. peak  (cms)=       0.15          0.09
                                                          *TOTALS*
     PEAK FLOW       (cms)=       1.24          0.19        1.434 (iii)
     TIME TO PEAK    (hrs)=       5.23          5.27        5.23
     RUNOFF VOLUME    (mm)=      87.54         57.44       82.54
     TOTAL RAINFALL   (mm)=      88.54         88.54       88.54
     RUNOFF COEFFICIENT   =       0.99          0.65        0.93

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0    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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--------------------
| RESERVOIR(  1001)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  2.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000    |  0.1120     0.6810
                         0.0470     0.3640    |  0.1300     0.7605
                         0.0720     0.4900    |  0.1470     0.8395
                         0.0890     0.5750    |  0.0000     0.0000
     **** WARNING : STORAGE-DISCHARGE TABLE WAS EXCEEDED.

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
     INFLOW : ID= 2 (  1300)     13.180     1.434     5.23       82.54
     OUTFLOW: ID= 1 (  1001)     13.180     0.149     7.53       78.57

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)= 10.38
                    TIME SHIFT OF PEAK FLOW         (min)=138.00
                    MAXIMUM  STORAGE   USED        (ha.m.)=  0.8479

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--------------------
| ADD HYD (  2002)|
|   1 +   2 =   3 |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
         ID1= 1 (  1001):    13.18   0.149     7.53    78.57
       + ID2= 2 (  1002):    27.27   0.246     8.33    75.45
         ==========================================
         ID = 3 (  2002):    40.45   0.394     7.90    76.46

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| ADD HYD (  2003)|
|   1 +   2 =   3 |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
         ID1= 1 (  1000):    19.21   0.878     6.13    55.01
       + ID2= 2 (  2002):    40.45   0.394     7.90    76.46
         ==========================================
         ID = 3 (  2003):    59.66   1.234     6.23    69.56
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2100)	Area (ha)=	3.11	Curve Number (CN)=	87.0	
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.14			

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	5.31	6.167	11.51	9.23	1.77
0.067	0.00	3.133	5.31	6.200	11.51	9.27	1.33
0.100	0.00	3.167	5.31	6.233	11.51	9.30	0.89
0.133	0.00	3.200	5.31	6.267	8.86	9.33	0.89
0.167	0.00	3.233	5.31	6.300	6.20	9.37	0.89
0.200	0.00	3.267	10.18	6.333	6.20	9.40	0.89
0.233	0.00	3.300	15.05	6.367	6.20	9.43	0.89
0.267	0.45	3.333	15.05	6.400	6.20	9.47	0.89
0.300	0.89	3.367	15.05	6.433	6.20	9.50	0.89
0.333	0.89	3.400	15.05	6.467	6.20	9.53	0.89
0.367	0.89	3.433	15.05	6.500	6.20	9.57	0.89
0.400	0.89	3.467	15.05	6.533	6.20	9.60	0.89
0.433	0.89	3.500	15.05	6.567	6.20	9.63	0.89
0.467	0.89	3.533	15.05	6.600	6.20	9.67	0.89
0.500	0.89	3.567	15.05	6.633	6.20	9.70	0.89
0.533	0.89	3.600	15.05	6.667	6.20	9.73	0.89
0.567	0.89	3.633	15.05	6.700	6.20	9.77	0.89
0.600	0.89	3.667	15.05	6.733	6.20	9.80	0.89
0.633	0.89	3.700	15.05	6.767	6.20	9.83	0.89
0.667	0.89	3.733	15.05	6.800	6.20	9.87	0.89
0.700	0.89	3.767	15.05	6.833	6.20	9.90	0.89
0.733	0.89	3.800	15.05	6.867	6.20	9.93	0.89
0.767	0.89	3.833	15.05	6.900	6.20	9.97	0.89
0.800	0.89	3.867	15.05	6.933	6.20	10.00	0.89
0.833	0.89	3.900	15.05	6.967	6.20	10.03	0.89
0.867	0.89	3.933	15.05	7.000	6.20	10.07	0.89
0.900	0.89	3.967	15.05	7.033	6.20	10.10	0.89
0.933	0.89	4.000	15.05	7.067	6.20	10.13	0.89
0.967	0.89	4.033	15.05	7.100	6.20	10.17	0.89
1.000	0.89	4.067	15.05	7.133	6.20	10.20	0.89
1.033	0.89	4.100	15.05	7.167	6.20	10.23	0.89
1.067	0.89	4.133	15.05	7.200	6.20	10.27	0.89
1.100	0.89	4.167	15.05	7.233	6.20	10.30	0.89
1.133	0.89	4.200	15.05	7.267	4.87	10.33	0.89
1.167	0.89	4.233	15.05	7.300	3.54	10.37	0.89
1.200	0.89	4.267	27.88	7.333	3.54	10.40	0.89
1.233	0.89	4.300	40.71	7.367	3.54	10.43	0.89
1.267	0.89	4.333	40.71	7.400	3.54	10.47	0.89
1.300	0.89	4.367	40.71	7.433	3.54	10.50	0.89
1.333	0.89	4.400	40.71	7.467	3.54	10.53	0.89
1.367	0.89	4.433	40.71	7.500	3.54	10.57	0.89
1.400	0.89	4.467	40.71	7.533	3.54	10.60	0.89
1.433	0.89	4.500	40.71	7.567	3.54	10.63	0.89
1.467	0.89	4.533	40.71	7.600	3.54	10.67	0.89
1.500	0.89	4.567	40.71	7.633	3.54	10.70	0.89
1.533	0.89	4.600	40.71	7.667	3.54	10.73	0.89
1.567	0.89	4.633	40.71	7.700	3.54	10.77	0.89
1.600	0.89	4.667	40.71	7.733	3.54	10.80	0.89
1.633	0.89	4.700	40.71	7.767	3.54	10.83	0.89
1.667	0.89	4.733	40.71	7.800	3.54	10.87	0.89
1.700	0.89	4.767	40.71	7.833	3.54	10.90	0.89
1.733	0.89	4.800	40.71	7.867	3.54	10.93	0.89
1.767	0.89	4.833	40.71	7.900	3.54	10.97	0.89
1.800	0.89	4.867	40.71	7.933	3.54	11.00	0.89
1.833	0.89	4.900	40.71	7.967	3.54	11.03	0.89
1.867	0.89	4.933	40.71	8.000	3.54	11.07	0.89
1.900	0.89	4.967	40.71	8.033	3.54	11.10	0.89
1.933	0.89	5.000	40.71	8.067	3.54	11.13	0.89
1.967	0.89	5.033	40.71	8.100	3.54	11.17	0.89
2.000	0.89	5.067	40.71	8.133	3.54	11.20	0.89
2.033	0.89	5.100	40.71	8.167	3.54	11.23	0.89
2.067	0.89	5.133	40.71	8.200	3.54	11.27	0.89
2.100	0.89	5.167	40.71	8.233	3.54	11.30	0.89
2.133	0.89	5.200	40.71	8.267	2.66	11.33	0.89
2.167	0.89	5.233	40.71	8.300	1.77	11.37	0.89
2.200	0.89	5.267	26.11	8.333	1.77	11.40	0.89
2.233	0.89	5.300	11.51	8.367	1.77	11.43	0.89
2.267	3.10	5.333	11.51	8.400	1.77	11.47	0.89
2.300	5.31	5.367	11.51	8.433	1.77	11.50	0.89
2.333	5.31	5.400	11.51	8.467	1.77	11.53	0.89
2.367	5.31	5.433	11.51	8.500	1.77	11.57	0.89
2.400	5.31	5.467	11.51	8.533	1.77	11.60	0.89
2.433	5.31	5.500	11.51	8.567	1.77	11.63	0.89
2.467	5.31	5.533	11.51	8.600	1.77	11.67	0.89
2.500	5.31	5.567	11.51	8.633	1.77	11.70	0.89
2.533	5.31	5.600	11.51	8.667	1.77	11.73	0.89
2.567	5.31	5.633	11.51	8.700	1.77	11.77	0.89
2.600	5.31	5.667	11.51	8.733	1.77	11.80	0.89
2.633	5.31	5.700	11.51	8.767	1.77	11.83	0.89
2.667	5.31	5.733	11.51	8.800	1.77	11.87	0.89
2.700	5.31	5.767	11.51	8.833	1.77	11.90	0.89
2.733	5.31	5.800	11.51	8.867	1.77	11.93	0.89
2.767	5.31	5.833	11.51	8.900	1.77	11.97	0.89
2.800	5.31	5.867	11.51	8.933	1.77	12.00	0.89
2.833	5.31	5.900	11.51	8.967	1.77	12.03	0.89
2.867	5.31	5.933	11.51	9.000	1.77	12.07	0.89
2.900	5.31	5.967	11.51	9.033	1.77	12.10	0.89
2.933	5.31	6.000	11.51	9.067	1.77	12.13	0.89
2.967	5.31	6.033	11.51	9.100	1.77	12.17	0.89
3.000	5.31	6.067	11.51	9.133	1.77	12.20	0.89
3.033	5.31	6.100	11.51	9.167	1.77	12.23	0.89
3.067	5.31	6.133	11.51	9.200	1.77	12.27	0.44

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.425 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 57.442
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.649

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

ADD HYD (0007)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.425	5.40	57.44
+ ID2= 2 (0005):	62.77	1.321	6.23	68.96
ID = 3 (0007):	68.37	1.577	5.77	68.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2300)	Area (ha)=	2.00	Curve Number (CN)=	87.0	
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.43			

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	5.31	6.167	11.51	9.23	1.77
0.067	0.00	3.133	5.31	6.200	11.51	9.27	1.33
0.100	0.00	3.167	5.31	6.233	11.51	9.30	0.89
0.133	0.00	3.200	5.31	6.267	8.86	9.33	0.89
0.167	0.00	3.233	5.31	6.300	6.20	9.37	0.89
0.200	0.00	3.267	10.18	6.333	6.20	9.40	0.89
0.233	0.00	3.300	15.05	6.367	6.20	9.43	0.89
0.267	0.45	3.333	15.05	6.400	6.20	9.47	0.89
0.300	0.89	3.367	15.05	6.433	6.20	9.50	0.89
0.333	0.89	3.400	15.05	6.467	6.20	9.53	0.89
0.367	0.89	3.433	15.05	6.500	6.20	9.57	0.89
0.400	0.89	3.467	15.05	6.533	6.20	9.60	0.89
0.433	0.89	3.500	15.05	6.567	6.20	9.63	0.89
0.467	0.89	3.533	15.05	6.600	6.20	9.67	0.89
0.500	0.89	3.567	15.05	6.633	6.20	9.70	0.89
0.533	0.89	3.600	15.05	6.667	6.20	9.73	0.89
0.567	0.89	3.633	15.05	6.700	6.20	9.77	0.89
0.600	0.89	3.667	15.05	6.733	6.20	9.80	0.89
0.633	0.89	3.700	15.05	6.767	6.20	9.83	0.89
0.667	0.89	3.733	15.05	6.800	6.20	9.87	0.89
0.700	0.89	3.767	15.05	6.833	6.20	9.90	0.89
0.733	0.89	3.800	15.05	6.867	6.20	9.93	0.89
0.767	0.89	3.833	15.05	6.900	6.20	9.97	0.89
0.800	0.89	3.867	15.05	6.933	6.20	10.00	0.89
0.833	0.89	3.900	15.05	6.967	6.20	10.03	0.89
0.867	0.89	3.933	15.05	7.000	6.20	10.07	0.89
0.900	0.89	3.967	15.05	7.033	6.20	10.10	0.89
0.933	0.89	4.000	15.05	7.067	6.20	10.13	0.89
0.967	0.89	4.033	15.05	7.100	6.20	10.17	0.89
1.000	0.89	4.067	15.05	7.133	6.20	10.20	0.89
1.033	0.89	4.100	15.05	7.167	6.20	10.23	0.89
1.067	0.89	4.133	15.05	7.200	6.20	10.27	0.89
1.100	0.89	4.167	15.05	7.233	6.20	10.30	0.89
1.133	0.89	4.200	15.05	7.267	4.87	10.33	0.89
1.167	0.89	4.233	15.05	7.300	3.54	10.37	0.89
1.200	0.89	4.267	27.88	7.333	3.54	10.40	0.89
1.233	0.89	4.300	40.71	7.367	3.54	10.43	0.89
1.267	0.89	4.333	40.71	7.400	3.54	10.47	0.89
1.300	0.89	4.367	40.71	7.433	3.54	10.50	0.89
1.333	0.89	4.400	40.71	7.467	3.54	10.53	0.89
1.367	0.89	4.433	40.71	7.500	3.54	10.57	0.89
1.400	0.89	4.467	40.71	7.533	3.54	10.60	0.89
1.433	0.89	4.500	40.71	7.567	3.54	10.63	0.89
1.467	0.89	4.533	40.71	7.600	3.54	10.67	0.89
1.500	0.89	4.567	40.71	7.633	3.54	10.70	0.89
1.533	0.89	4.600	40.71	7.667	3.54	10.73	0.89
1.567	0.89	4.633	40.71	7.700	3.54	10.77	0.89
1.600	0.89	4.667	40.71	7.733	3.54	10.80	0.89
1.633	0.89	4.700	40.71	7.767	3.54	10.83	0.89
1.667	0.89	4.733	40.71	7.800	3.54	10.87	0.89
1.700	0.89	4.767	40.71	7.833	3.54	10.90	0.89
1.733	0.89	4.800	40.71	7.867	3.54	10.93	0.89
1.767	0.89	4.833	40.71	7.900	3.54	10.97	0.89
1.800	0.89	4.867	40.71	7.933	3.54	11.00	0.89
1.833	0.89	4.900	40.71	7.967	3.54	11.03	0.89
1.867	0.89	4.933	40.71	8.000	3.54	11.07	0.89
1.900	0.89	4.967	40.71	8.033	3.54	11.10	0.89
1.933	0.89	5.000	40.71	8.067	3.54	11.13	0.89
1.967	0.89	5.033	40.71	8.100	3.54	11.17	0.89
2.000	0.89	5.067	40.71	8.133	3.54	11.20	0.89
2.033	0.89	5.100	40.71	8.167	3.54	11.23	0.89
2.067	0.89	5.133	40.71	8.200	3.54	11.27	0.89
2.100	0.89	5.167	40.71	8.233	3.54	11.30	0.89
2.133	0.89	5.200	40.71	8.267	2.66	11.33	0.89
2.167	0.89	5.233	40.71	8.300	1.77	11.37	0.89
2.200	0.89	5.267	26.11	8.333	1.77	11.40	0.89
2.233	0.89	5.300	11.51	8.367	1.77	11.43	0.89
2.267	3.10	5.333	11.51	8.400	1.77	11.47	0.89
2.300	5.31	5.367	11.51	8.433	1.77	11.50	0.89
2.333	5.31	5.400	11.51	8.467	1.77	11.53	0.89
2.367	5.31	5.433	11.51	8.500	1.77	11.57	0.89
2.400	5.31	5.467	11.51	8.533	1.77	11.60	0.89
2.433	5.31	5.500	11.51	8.567	1.77	11.63	0.89
2.467	5.31	5.533	11.51	8.600	1.77	11.67	0.89
2.500	5.31	5.567	11.51	8.633	1.77	11.70	0.89
2.533	5.31	5.600	11.51	8.667	1.77	11.73	0.89
2.567	5.31	5.633	11.51	8.700	1.77	11.77	0.89
2.600	5.31	5.667	11.51	8.733	1.77	11.80	0.89
2.633	5.31	5.700	11.51	8.767	1.77	11.83	0.89
2.667	5.31	5.733	11.51	8.800	1.77	11.87	0.89
2.700	5.31	5.767	11.51	8.833	1.77	11.90	0.89
2.733	5.31	5.800	11.51	8.867	1.77	11.93	0.89
2.767	5.31	5.833	11.51	8.900	1.77	11.97	0.89
2.800	5.31	5.867	11.51	8.933	1.77	12.00	0.89
2.833	5.31	5.900	11.51	8.967	1.77	12.03	0.89
2.867	5.31	5.933	11.51	9.000	1.77	12.07	0.89
2.900	5.31	5.967	11.51	9.033	1.77	12.10	0.89
2.933	5.31	6.000	11.51	9.067	1.77	12.13	0.89
2.967	5.31	6.033	11.51	9.100	1.77	12.17	0.89
3.000	5.31	6.067	11.51	9.133	1.77	12.20	0.89
3.033	5.31	6.100	11.51	9.167	1.77	12.23	0.89
3.067	5.31	6.133	11.51	9.200	1.77	12.27	0.44

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.284 (i)
TIME TO PEAK (hrs)= 5.233
RUNOFF VOLUME (mm)= 57.431
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.649

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

ADD HYD (0005)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2003):	59.66	1.234	6.23	69.56
+ ID2= 2 (2100):	3.11	0.284	5.23	57.43
ID = 3 (0005):	62.77	1.321	6.23	68.96

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
NASHYD (2200)	Area (ha)=	5.60	Curve Number (CN)=	87.0	
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.44			

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	0.00	3.100	5.31	6.167	11.51	9.23	1.77
0.067	0.00	3.133	5.31	6.200	11.51	9.27	1.33
0.100	0.00	3.167	5.31	6.233	11.51	9.30	0.89
0.133	0.00	3.200	5.31	6.267	8.86	9.33	0.89
0.167	0.00	3.233	5.31	6.300	6.20	9.37	0.89
0.200	0.00	3.267	10.18	6.333	6.20	9.40	0.89
0.233	0.00	3.300	15.05	6.367	6.20	9.43	0.89
0.267	0.45	3.333	15.05	6.400	6.20	9.47	0.89
0.300	0.89	3.367	15.05	6.433	6.20	9.50	0.89
0.333	0.89	3.400	15.05	6.467	6.20	9.53	0.89
0.367	0.89	3.433	15.05	6.500	6.20	9.57	0.89
0.400	0.89	3.467	15.05	6.533	6.20	9.60	0.89
0.433	0.89	3.500	15.05	6.567	6.20	9.63	0.89
0.467	0.89	3.533	15.05	6.600	6.20	9.67	0.89
0.500	0.89	3.567	15.05	6.633	6.20	9.70	0.89
0.533	0.89	3.600	15.05	6.667	6.20	9.73	0.89
0.567	0.89	3.633	15.05	6.700	6.20	9.77	0.89
0.600	0.89	3.667	15.05	6.733	6.20	9.80	0.89
0.633	0.89	3.700	15.05	6.767	6.20	9.83	0.89
0.667	0.89	3.733	15.05	6.800	6.20	9.87	0.89
0.700	0.89	3.767	15.05	6.833	6.20	9.90	0.89
0.733	0.89	3.800	15.05	6.867	6.20	9.93	0.89
0.767	0.89	3.833	15.05	6.900	6.20	9.97	0.89
0.800	0.89	3.867	15.05	6.933	6.20	10.00	0.89
0.833	0.89	3.900	15.05	6.967	6.20	10.03	0.89
0.867	0.89	3.933	15.05	7.000	6.20	10.07	0.89
0.900	0.89	3.967	15.05	7.033	6.20	10.10	0.89
0.933	0.89	4.000	15.05	7.067	6.20	10.13	0.89
0.967	0.89	4.033	15.05	7.100	6.20	10.17	0.89
1.000	0.89	4.067	15.05	7.133	6.20	10.20	0.89
1.033	0.89	4.100	15.05	7.167	6.20	10.23	0.89
1.067	0.89	4.133	15.05	7.200	6.20	10.27	0.89
1.100	0.89	4.167	15.05	7.233	6.20	10.30	0.89
1.133	0.89	4.200	15.05	7.267	4.87	10.33	0.89
1.167	0.89	4.233	15.05	7.300	3.54	10.37	0.89
1.200	0.89	4.267	27.88	7.333	3.54	10.40	0.89
1.233	0.89	4.300	40.71	7.367	3.54	10.43	0.89
1.267	0.89	4.333	40.71	7.400	3.54	10.47	0.89
1.300	0.89	4.367	40.71	7.433	3.54	10.50	0.89
1.333	0.89	4.400	40.71	7.467	3.54	10.53	0.89
1.367	0.89	4.433	40.71	7.500	3.54	10.57	0.89
1.400	0.89	4.467	40.71	7.533	3.54	10.60	0.89
1.433	0.89	4.500	40.71	7.567	3.54	10.63	0.89
1.467	0.89	4.533	40.71	7.600	3.54	10.67	0.89
1.500	0.89	4.567	40.71	7.633	3.54	10.70	0.89
1.533	0.89	4.600	40.71	7.667	3.54	10.73	0.89
1.567	0.89	4.633	40.71	7.700	3.54	10.77	0.89
1.600	0.89	4.667	40.71	7.733	3.54	10.80	0.89
1.633	0.89	4.700	40.71	7.767	3.54	10.83	0.89
1.667	0.89	4.733	40.71	7.800	3.54	10.87	0.89
1.700	0.89	4.767	40.71	7.833	3.54	10.90	0.89
1.733	0.89	4.800	40.71	7.867	3.54	10.93	0.89
1.767	0.89	4.833	40.71	7.900	3.54	10.97	0.89
1.800	0.89	4.867	40.71	7.933	3.54	11.00	0.89
1.833	0.89	4.900	40.71	7.967	3.54	11.03	0.89
1.867	0.89	4.933	40.71	8.000	3.54	11.07	0.89
1.900	0.89	4.967	40.71	8.033	3.54	11.10	0.89
1.933	0.89	5.000	40.71	8.067	3.54	11.13	0.89
1.967	0.89	5.033	40.71	8.100	3.54	11.17	0.89
2.000	0.89	5.067	40.71	8.133	3.54	11.20	0.89
2.033	0.89	5.100	40.71	8.167	3.54	11.23	0.89
2.067	0.89	5.133	40.71	8.200	3.54	11.27	0.89
2.100	0.89	5.167	40.71	8.233	3.54	11.30	0.89
2.133	0.89	5.200	40.71	8.267	2.66	11.33	0.89
2.167	0.89	5.233	40.71	8.300	1.77	11.37	0.89
2.200	0.89	5.267	26.11	8.333	1.77	11.40	0.89

ADD HYD (0007)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.425	5.40	57.44
+ ID2= 2 (0005):	62.77	1.321	6.23	68.96
ID = 3 (0007):	68.37	1.577	5.77	68.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
2.233	0.89	5.300	11.51	8.367	1.77	11.43	0.89
2.267	3.10	5.333	11.51	8.400	1.77	11.47	0.89
2.300	5.31	5.367	11.51	8.433	1.77	11.50	0.89
2.333	5.31	5.400	11.51	8.467	1.77	11.53	0.89
2.367	5.31	5.433	11.51	8.500	1.77	11.57	0.89
2.400	5.31	5.467	11.51	8.533	1.77	11.60	0.89
2.433	5.31	5.500	11.51	8.567	1.77	11.63	0.89
2.467	5.31	5.533	11.51	8.600	1.77	11.67	0.89
2.500	5.31	5.567	11.51	8.633	1.77	11.70	0.89
2.533	5.31	5.600	11.51	8.667	1.77	11.73	0.89
2.567	5.31	5.633	11.51	8.700	1.77	11.77	0.89
2.600	5.31	5.667	11.51	8.733	1.77	11.80	0.89
2.633	5.31	5.700	11.51	8.767	1.77	11.83	0.89
2.667	5.31	5.733	11.51	8.800	1.77	11.87	0.89
2.700	5.31	5.767	11.51	8.833	1.77	11.90	0.89
2.733	5.31	5.800	11.51	8.867	1.77	11.93	0.89
2.767	5.31	5.833	11.51	8.900	1.77	11.97	0.89
2.800	5.31	5.867	11.51	8.933	1.77	12.00	0.89
2.833	5.31	5.900	11.51	8.967	1.77	12.03	0.89
2.867	5.31	5.933	11.51	9.000	1.77	12.07	0.89
2.900	5.31	5.967	11.51	9.033	1.77	12.10	0.89
2.933	5.31	6.000	11.51	9.067	1.77	12.13	0.89
2.967	5.31	6.033	11.51	9.100	1.77	12.17	0.89
3.000	5.31	6.067	11.51	9.133	1.77	12.20	0.89
3.033	5.31	6.100	11.51	9.167	1.77	12.23	0.89
3.067	5.31	6.133	11.51	9.200	1.77	12.27	0.44

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.153 (i)
TIME TO PEAK (hrs)= 5.400
RUNOFF VOLUME (mm)= 57.442
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.649

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

ADD HYD (0009) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.153	5.40	57.44
+ ID2= 2 (0007):	68.37	1.577	5.77	68.01
ID = 3 (0009):	70.37	1.708	5.50	67.71

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| NASHYD (2400) |
| ID= 1 DT= 5.0 min |

Area (ha)= 0.76 Curve Number (CN)= 87.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.04

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)= 0.726

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 5.250
RUNOFF VOLUME (mm)= 34.281
TOTAL RAINFALL (mm)= 88.540
RUNOFF COEFFICIENT = 0.387

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

| CALIB |
| STANDHYD (3500) |
| ID= 1 DT= 5.0 min |

Area (ha)= 3.52
Total Imp(%)= 99.90 Dir. Conn.(%)= 99.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	3.52	0.00
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	153.19	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 33.83

			TOTALS
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.73 (ii)	5.37 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.22	0.16	
PEAK FLOW (cms)=	0.40	0.00	0.398 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	87.54	57.44	87.51
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.65	0.99

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (0028) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2400):	0.76	0.043	5.25	34.28
+ ID2= 2 (3500):	3.52	0.398	5.25	87.51
ID = 3 (0028):	4.28	0.441	5.25	78.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| STANDHYD (3100) |
| ID= 1 DT= 5.0 min |

Area (ha)= 25.24
Total Imp(%)= 85.90 Dir. Conn.(%)= 85.90

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	21.68	3.56
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	410.20	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		

			TOTALS
Max.Eff.Inten.(mm/hr)=	40.71	33.83	
over (min)	10.00	15.00	
Storage Coeff. (min)=	8.54 (ii)	13.44 (ii)	
Unit Hyd. Tpeak (min)=	10.00	15.00	
Unit Hyd. peak (cms)=	0.12	0.08	
PEAK FLOW (cms)=	2.45	0.31	2.761 (iii)
TIME TO PEAK (hrs)=	5.25	5.25	5.25
RUNOFF VOLUME (mm)=	87.54	57.44	83.30
TOTAL RAINFALL (mm)=	88.54	88.54	88.54
RUNOFF COEFFICIENT =	0.99	0.65	0.94

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

| CALIB |
| STANDHYD (3200) |
| ID= 1 DT= 5.0 min |

Area (ha)= 7.11
Total Imp(%)= 88.30 Dir. Conn.(%)= 88.30

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	6.28	0.83
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	217.72	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	33.83
over (min)	5.00	15.00
Storage Coeff. (min)=	5.84 (ii)	10.34 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00

```
     Unit Hyd. peak  (cms)=       0.20         0.09
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.71         0.07          0.784 (iii)
     TIME TO PEAK    (hrs)=       5.25         5.25          5.25
     RUNOFF VOLUME    (mm)=      87.54        57.44         84.02
     TOTAL RAINFALL   (mm)=      88.54        88.54         88.54
     RUNOFF COEFFICIENT   =       0.99         0.65          0.95


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0020)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  3100):    25.24   2.761    5.25    83.30
     + ID2= 2 (  3200):     7.11   0.784    5.25    84.02
       ==========================================
       ID = 3 (  0020):    32.35   3.546    5.25    83.45

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  3300)|   Area    (ha)=   9.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.80   Dir. Conn.(%)=  78.80
-------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       7.34         1.98
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     249.27        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        33.56
           over (min)            5.00        20.00
     Storage Coeff.  (min)=      5.03 (ii)   15.96 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.21         0.07
                                                          *TOTALS*
     PEAK FLOW       (cms)=      0.38         0.08          0.463 (iii)
     TIME TO PEAK    (hrs)=      5.25         5.25          5.25
     RUNOFF VOLUME    (mm)=     87.54        57.44         80.80
     TOTAL RAINFALL   (mm)=     88.54        88.54         88.54
     RUNOFF COEFFICIENT   =      0.99         0.65          0.91


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0024)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0022):    41.67   4.540    5.25    82.94
     + ID2= 2 (  0028):     4.28   0.441    5.25    78.06
       ==========================================
       ID = 3 (  0024):    45.95   4.981    5.25    82.49

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |        AREA    QPEAK    TPEAK     R.V.
-------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    45.95   4.981    5.25    82.49
     + ID2= 2 (  3400):     4.34   0.463    5.25    80.80
       ==========================================
       ID = 1 (  0024):    50.29   5.443    5.25    82.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  5001)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE    |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)    |    (cms)     (ha.m.)
                          0.0000     0.0000    |   0.7480      3.7607
                          0.0140     0.5845    |   1.1340      4.6672
                          0.0210     1.1690    |   1.4200      5.2879
                          0.1010     1.7265    |   1.7270      5.9087
                          0.2410     2.3077    |   7.3760      6.5294
                          0.4210     2.8889    |  12.0010      6.8398


                             AREA     QPEAK     TPEAK       R.V.
                             (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0024)     50.290      5.443      5.25      82.34
   OUTFLOW: ID= 1 (  5001)     50.290      0.578      7.50      72.15

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 10.61
                  TIME SHIFT OF PEAK FLOW          (min)=135.00
                  MAXIMUM  STORAGE   USED        (ha.m.)=  3.3072

--------------------------------------------------------------------------------
-------------------
| ADD HYD  (  0013)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  5001):    50.29   0.578    7.50    72.15
     + ID2= 2 (  0009):    70.37   1.708    5.50    67.71
       ==========================================
       ID = 3 (  0013):   120.66   2.139    5.83    64.69

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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-------------------
| CALIB             |
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     Max.Eff.Inten.(mm/hr)=      40.71        33.56
           over (min)            5.00        20.00
     Storage Coeff.  (min)=      6.33 (ii)   17.25 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.19         0.06
                                                          *TOTALS*
     PEAK FLOW       (cms)=      0.83         0.16          0.994 (iii)
     TIME TO PEAK    (hrs)=      5.25         5.25          5.25
     RUNOFF VOLUME    (mm)=     87.54        57.44         81.16
     TOTAL RAINFALL   (mm)=     88.54        88.54         88.54
     RUNOFF COEFFICIENT   =      0.99         0.65          0.92


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0022)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0020):    32.35   3.546    5.25    83.45
     + ID2= 2 (  3300):     9.32   0.994    5.25    81.16
       ==========================================
       ID = 3 (  0022):    41.67   4.540    5.25    82.94

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  3400)|   Area    (ha)=   4.34
|ID= 1 DT= 5.0 min |   Total Imp(%)=  77.60   Dir. Conn.(%)=  77.60
-------------------
                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       3.37         0.97
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     170.10        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

| NASHYD   (  4100)|   Area    (ha)=   3.48   Curve Number    (CN)= 87.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.04

         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)=   3.323

     PEAK FLOW       (cms)=   0.196 (i)
     TIME TO PEAK    (hrs)=   5.250
     RUNOFF VOLUME    (mm)=  34.281
     TOTAL RAINFALL   (mm)=  88.540
     RUNOFF COEFFICIENT   =   0.387

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

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** SIMULATION:Run 14 Regional Storm **
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|     READ STORM    |    Filename: C:\Users\Oux\AppData\
|                   |              Local\Temp\
|                   |              a94bb59f-5044-498d-abed-caf1943a5048\39897f9d
| Ptotal=212.00 mm  |    Comments: HURRICANE HAZEL DESIGN STORM:
-------------------
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.25    6.00 | 3.25   13.00 |  6.25   23.00 |  9.25   53.00
     0.50    6.00 | 3.50   13.00 |  6.50   23.00 |  9.50   53.00
     0.75    6.00 | 3.75   13.00 |  6.75   23.00 |  9.75   53.00
     1.00    6.00 | 4.00   13.00 |  7.00   23.00 | 10.00   53.00
     1.25    4.00 | 4.25   17.00 |  7.25   13.00 | 10.25   38.00
     1.50    4.00 | 4.50   17.00 |  7.50   13.00 | 10.50   38.00
     1.75    4.00 | 4.75   17.00 |  7.75   13.00 | 10.75   38.00
     2.00    4.00 | 5.00   17.00 |  8.00   13.00 | 11.00   38.00
     2.25    6.00 | 5.25   13.00 |  8.25   13.00 | 11.25   13.00
     2.50    6.00 | 5.50   13.00 |  8.50   13.00 | 11.50   13.00
     2.75    6.00 | 5.75   13.00 |  8.75   13.00 | 11.75   13.00
     3.00    6.00 | 6.00   13.00 |  9.00   13.00 | 12.00   13.00
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| CALIB              |
| NASHYD   ( 1000)|   Area    (ha)=  19.21   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   7.70   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.07
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NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Unit Hyd Qpeak (cms)= 0.686

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PEAK FLOW         (cms)=   1.942 (i)
TIME TO PEAK      (hrs)=  11.233
RUNOFF VOLUME      (mm)= 172.291
TOTAL RAINFALL     (mm)= 211.999
RUNOFF COEFFICIENT    =    0.813
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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB              |
| NASHYD   ( 1100)|   Area    (ha)=   2.08   Curve Number   (CN)= 87.0
|ID= 1 DT= 2.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.29
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NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Unit Hyd Qpeak (cms)= 0.274

```
PEAK FLOW         (cms)=   0.286 (i)
TIME TO PEAK      (hrs)=  10.033
RUNOFF VOLUME      (mm)= 174.923
TOTAL RAINFALL     (mm)= 211.999
RUNOFF COEFFICIENT    =    0.825
```

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

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--------------------
| DUHYD     ( 2000)|
| Inlet Cap.= 0.949|
| #of Inlets=     1|
| Total(cms)=   0.9|       AREA      QPEAK      TPEAK      R.V.
--------------------       (ha)      (cms)      (hrs)      (mm)
     TOTAL HYD.(ID= 1):    2.08       0.29      10.03   174.92
     ==============================================
     MAJOR SYS.(ID= 2):    0.00       0.00       0.00     0.00
     MINOR SYS.(ID= 3):    2.08       0.29      10.03   174.92
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| CALIB              |
| STANDHYD ( 1200)|   Area    (ha)=  25.19
|ID= 1 DT= 2.0 min |   Total Imp(%)=  88.60   Dir. Conn.(%)=  88.60
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```

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	22.32	2.87
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	409.80	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00

2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Max.Eff.Inten.(mm/hr)=	53.00	50.87	
over (min)	8.00	12.00	
Storage Coeff. (min)=	7.68 (ii)	11.68 (ii)	
Unit Hyd. Tpeak (min)=	8.00	12.00	
Unit Hyd. peak (cms)=	0.14	0.10	
			TOTALS
PEAK FLOW (cms)=	3.28	0.40	3.685 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	210.99	174.92	206.89
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.83	0.98

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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 (2001)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1200):	25.19	3.685	10.00	206.89	
+ ID2= 2 (2000):	2.08	0.286	10.03	174.92	
ID = 3 (2001):	27.27	3.969	10.00	204.45	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(1002)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.2130	1.6215
	0.0900	0.8290	0.2480	1.8230
	0.1380	1.1410	0.2810	2.0230
	0.1700	1.3535	0.0000	0.0000

**** WARNING : STORAGE-DISCHARGE TABLE WAS EXCEEDED.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (2001)	27.270	3.969	10.00	204.45
OUTFLOW: ID= 1 (1002)	27.270	0.693	12.10	190.07

PEAK FLOW REDUCTION [Qout/Qin](%)= 17.47
TIME SHIFT OF PEAK FLOW (min)=126.00
MAXIMUM STORAGE USED (ha.m.)= 4.5225

CALIB			
STANDHYD (1300)	Area (ha)= 13.18		
ID= 1 DT= 2.0 min	Total Imp(%)= 83.40	Dir. Conn.(%)= 83.40	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	10.99	2.19	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	296.42	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 MIN. TIME STEP.

2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Max.Eff.Inten.(mm/hr)=	53.00	50.87	
over (min)	6.00	12.00	
Storage Coeff. (min)=	6.32 (ii)	11.09 (ii)	
Unit Hyd. Tpeak (min)=	6.00	12.00	
Unit Hyd. peak (cms)=	0.18	0.10	
			TOTALS
PEAK FLOW (cms)=	1.62	0.31	1.924 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	174.92	205.01
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.83	0.97

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 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.

RESERVOIR(1001)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 2.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1120	0.6810
	0.0470	0.3640	0.1300	0.7605
	0.0720	0.4900	0.1470	0.8395
	0.0890	0.5750	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (1300)	13.180	1.924	10.00	205.01
OUTFLOW: ID= 1 (1001)	13.180	0.412	12.07	196.71

PEAK FLOW REDUCTION [Qout/Qin](%)= 21.44
TIME SHIFT OF PEAK FLOW (min)=124.00
MAXIMUM STORAGE USED (ha.m.)= 2.0733

ADD HYD (2002)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1001):	13.18	0.412	12.07	196.71	
+ ID2= 2 (1002):	27.27	0.693	12.10	190.07	
ID = 3 (2002):	40.45	1.106	12.10	192.24	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (2003)					
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	
ID1= 1 (1000):	19.21	1.942	11.23	172.29	
+ ID2= 2 (2002):	40.45	1.106	12.10	192.24	
ID = 3 (2003):	59.66	3.023	11.27	185.81	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2100)	Area (ha)= 3.11	Curve Number (CN)= 87.0	
ID= 1 DT= 2.0 min	Ia (mm)= 5.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.14		

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00

2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Unit Hyd Qpeak (cms)= 0.848

PEAK FLOW (cms)= 0.438 (i)
TIME TO PEAK (hrs)= 10.000
RUNOFF VOLUME (mm)= 174.888
TOTAL RAINFALL (mm)= 211.999
RUNOFF COEFFICIENT = 0.825

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

ADD HYD (0005)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2003):	59.66	3.023	11.27	185.81
+ ID2= 2 (2100):	3.11	0.438	10.00	174.89
ID = 3 (0005):	62.77	3.284	11.03	185.27

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2200)	Area (ha)=	5.60	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.44	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Unit Hyd Qpeak (cms)= 0.486

PEAK FLOW (cms)= 0.716 (i)
TIME TO PEAK (hrs)= 10.200
RUNOFF VOLUME (mm)= 174.924
TOTAL RAINFALL (mm)= 211.999
RUNOFF COEFFICIENT = 0.825

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

ADD HYD (0007)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2200):	5.60	0.716	10.20	174.92
+ ID2= 2 (0005):	62.77	3.284	11.03	185.27
ID = 3 (0007):	68.37	3.884	11.03	184.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2300)	Area (ha)=	2.00	Curve Number (CN)= 87.0
ID= 1 DT= 2.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.43	

NOTE: RAINFALL WAS TRANSFORMED TO 2.0 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
0.033	6.00	3.033	13.00	6.033	23.00	9.03	53.00
0.067	6.00	3.067	13.00	6.067	23.00	9.07	53.00
0.100	6.00	3.100	13.00	6.100	23.00	9.10	53.00
0.133	6.00	3.133	13.00	6.133	23.00	9.13	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.200	6.00	3.200	13.00	6.200	23.00	9.20	53.00
0.233	6.00	3.233	13.00	6.233	23.00	9.23	53.00
0.267	6.00	3.267	13.00	6.267	23.00	9.27	53.00
0.300	6.00	3.300	13.00	6.300	23.00	9.30	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.367	6.00	3.367	13.00	6.367	23.00	9.37	53.00
0.400	6.00	3.400	13.00	6.400	23.00	9.40	53.00
0.433	6.00	3.433	13.00	6.433	23.00	9.43	53.00
0.467	6.00	3.467	13.00	6.467	23.00	9.47	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.533	6.00	3.533	13.00	6.533	23.00	9.53	53.00
0.567	6.00	3.567	13.00	6.567	23.00	9.57	53.00
0.600	6.00	3.600	13.00	6.600	23.00	9.60	53.00
0.633	6.00	3.633	13.00	6.633	23.00	9.63	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.700	6.00	3.700	13.00	6.700	23.00	9.70	53.00
0.733	6.00	3.733	13.00	6.733	23.00	9.73	53.00
0.767	6.00	3.767	13.00	6.767	23.00	9.77	53.00
0.800	6.00	3.800	13.00	6.800	23.00	9.80	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.867	6.00	3.867	13.00	6.867	23.00	9.87	53.00
0.900	6.00	3.900	13.00	6.900	23.00	9.90	53.00
0.933	6.00	3.933	13.00	6.933	23.00	9.93	53.00
0.967	6.00	3.967	13.00	6.967	23.00	9.97	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	52.99
1.033	4.00	4.033	17.00	7.033	13.00	10.03	38.00
1.067	4.00	4.067	17.00	7.067	13.00	10.07	38.00
1.100	4.00	4.100	17.00	7.100	13.00	10.10	38.00
1.133	4.00	4.133	17.00	7.133	13.00	10.13	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.200	4.00	4.200	17.00	7.200	13.00	10.20	38.00
1.233	4.00	4.233	17.00	7.233	13.00	10.23	38.00
1.267	4.00	4.267	17.00	7.267	13.00	10.27	38.00
1.300	4.00	4.300	17.00	7.300	13.00	10.30	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.367	4.00	4.367	17.00	7.367	13.00	10.37	38.00
1.400	4.00	4.400	17.00	7.400	13.00	10.40	38.00
1.433	4.00	4.433	17.00	7.433	13.00	10.43	38.00
1.467	4.00	4.467	17.00	7.467	13.00	10.47	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.533	4.00	4.533	17.00	7.533	13.00	10.53	38.00
1.567	4.00	4.567	17.00	7.567	13.00	10.57	38.00
1.600	4.00	4.600	17.00	7.600	13.00	10.60	38.00
1.633	4.00	4.633	17.00	7.633	13.00	10.63	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.700	4.00	4.700	17.00	7.700	13.00	10.70	38.00
1.733	4.00	4.733	17.00	7.733	13.00	10.73	38.00
1.767	4.00	4.767	17.00	7.767	13.00	10.77	38.00
1.800	4.00	4.800	17.00	7.800	13.00	10.80	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.867	4.00	4.867	17.00	7.867	13.00	10.87	38.00
1.900	4.00	4.900	17.00	7.900	13.00	10.90	38.00
1.933	4.00	4.933	17.00	7.933	13.00	10.93	38.00
1.967	4.00	4.967	17.00	7.967	13.00	10.97	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	37.98
2.033	6.00	5.033	13.00	8.033	13.00	11.03	13.00
2.067	6.00	5.067	13.00	8.067	13.00	11.07	13.00
2.100	6.00	5.100	13.00	8.100	13.00	11.10	13.00
2.133	6.00	5.133	13.00	8.133	13.00	11.13	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.200	6.00	5.200	13.00	8.200	13.00	11.20	13.00
2.233	6.00	5.233	13.00	8.233	13.00	11.23	13.00
2.267	6.00	5.267	13.00	8.267	13.00	11.27	13.00
2.300	6.00	5.300	13.00	8.300	13.00	11.30	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.367	6.00	5.367	13.00	8.367	13.00	11.37	13.00
2.400	6.00	5.400	13.00	8.400	13.00	11.40	13.00
2.433	6.00	5.433	13.00	8.433	13.00	11.43	13.00
2.467	6.00	5.467	13.00	8.467	13.00	11.47	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.533	6.00	5.533	13.00	8.533	13.00	11.53	13.00
2.567	6.00	5.567	13.00	8.567	13.00	11.57	13.00
2.600	6.00	5.600	13.00	8.600	13.00	11.60	13.00
2.633	6.00	5.633	13.00	8.633	13.00	11.63	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.700	6.00	5.700	13.00	8.700	13.00	11.70	13.00
2.733	6.00	5.733	13.00	8.733	13.00	11.73	13.00
2.767	6.00	5.767	13.00	8.767	13.00	11.77	13.00
2.800	6.00	5.800	13.00	8.800	13.00	11.80	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.867	6.00	5.867	13.00	8.867	13.00	11.87	13.00
2.900	6.00	5.900	13.00	8.900	13.00	11.90	13.00
2.933	6.00	5.933	13.00	8.933	13.00	11.93	13.00
2.967	6.00	5.967	13.00	8.967	13.00	11.97	13.00
3.000	6.00	6.000	13.00	9.000	13.01	12.00	12.98

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.257 (i)
TIME TO PEAK (hrs)= 10.200
RUNOFF VOLUME (mm)= 174.924
TOTAL RAINFALL (mm)= 211.999
RUNOFF COEFFICIENT = 0.825

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

ADD HYD (0009)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (2300):	2.00	0.257	10.20	174.92
+ ID2= 2 (0007):	68.37	3.884	11.03	184.43
ID = 3 (0009):	70.37	4.097	11.03	184.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (2400)	Area (ha)=	0.76	Curve Number (CN)= 87.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.04	

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	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 0.726

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      PEAK FLOW       (cms)=   0.064 (i)
      TIME TO PEAK    (hrs)=  10.000
      RUNOFF VOLUME    (mm)= 104.393
      TOTAL RAINFALL   (mm)= 212.000
      RUNOFF COEFFICIENT   =   0.492

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

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| CALIB            |
| STANDHYD (  3500)|   Area    (ha)=   3.52
|ID= 1 DT= 5.0 min |   Total Imp(%)=  99.90   Dir. Conn.(%)=  99.90
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                        IMPERVIOUS    PERVIOUS (i)
      Surface Area     (ha)=       3.52          0.00
      Dep. Storage     (mm)=       1.00          5.00
      Average Slope     (%)=       1.00          2.00
      Length            (m)=     153.19         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

      Max.Eff.Inten.(mm/hr)=      53.00         50.87
                over (min)        5.00          5.00
      Storage Coeff.  (min)=      4.25 (ii)     4.83 (ii)
      Unit Hyd. Tpeak (min)=      5.00          5.00
      Unit Hyd. peak  (cms)=      0.23          0.22
                                                          *TOTALS*
      PEAK FLOW       (cms)=      0.52          0.00          0.518 (iii)
      TIME TO PEAK    (hrs)=     10.00         10.00          10.00
      RUNOFF VOLUME    (mm)=    211.00        174.93         210.96
      TOTAL RAINFALL   (mm)=    212.00        212.00         212.00
      RUNOFF COEFFICIENT   =      1.00          0.83           1.00

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

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0     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  (  0028)|
|  1 +  2 =  3     |          AREA     QPEAK     TPEAK      R.V.
--------------------          (ha)      (cms)     (hrs)      (mm)
        ID1= 1 (  2400):      0.76    0.064     10.00    104.39
      + ID2= 2 (  3500):      3.52    0.518     10.00    210.96
        ==========================================================
        ID = 3 (  0028):      4.28    0.582     10.00    192.04

      NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| STANDHYD (  3100)|   Area    (ha)=  25.24
|ID= 1 DT= 5.0 min |   Total Imp(%)=  85.90   Dir. Conn.(%)=  85.90
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                        IMPERVIOUS    PERVIOUS (i)
      Surface Area     (ha)=      21.68          3.56
      Dep. Storage     (mm)=       1.00          5.00
      Average Slope     (%)=       1.00          2.00
      Length            (m)=     410.20         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

      Max.Eff.Inten.(mm/hr)=      53.00         50.87
                over (min)       10.00         15.00
      Storage Coeff.  (min)=      7.68 (ii)    12.10 (ii)
      Unit Hyd. Tpeak (min)=     10.00         15.00
      Unit Hyd. peak  (cms)=      0.13          0.09
                                                          *TOTALS*
      PEAK FLOW       (cms)=      3.19          0.50          3.686 (iii)
      TIME TO PEAK    (hrs)=     10.00         10.00          10.00
      RUNOFF VOLUME    (mm)=    211.00        174.93         205.91
      TOTAL RAINFALL   (mm)=    212.00        212.00         212.00
      RUNOFF COEFFICIENT   =      1.00          0.83           0.97

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0     Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
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           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB            |
| STANDHYD (  3200)|   Area    (ha)=   7.11
|ID= 1 DT= 5.0 min |   Total Imp(%)=  88.30   Dir. Conn.(%)=  88.30
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                        IMPERVIOUS    PERVIOUS (i)
      Surface Area     (ha)=       6.28          0.83
      Dep. Storage     (mm)=       1.00          5.00
      Average Slope     (%)=       1.00          2.00
      Length            (m)=     217.72         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

      Max.Eff.Inten.(mm/hr)=      53.00         50.87
                over (min)        5.00         10.00
      Storage Coeff.  (min)=      5.25 (ii)     9.31 (ii)
      Unit Hyd. Tpeak (min)=      5.00         10.00
      Unit Hyd. peak  (cms)=      0.21          0.12
                                                          *TOTALS*
      PEAK FLOW       (cms)=      0.92          0.12          1.041 (iii)
      TIME TO PEAK    (hrs)=     10.00         10.00          10.00
      RUNOFF VOLUME    (mm)=    211.00        174.93         206.78
      TOTAL RAINFALL   (mm)=    212.00        212.00         212.00
      RUNOFF COEFFICIENT   =      1.00          0.83           0.98

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0     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  (  0020)|
|  1 +  2 =  3     |          AREA     QPEAK     TPEAK      R.V.
--------------------          (ha)      (cms)     (hrs)      (mm)
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```
        ID1= 1 (  3100):     25.24    3.686     10.00    205.91
      + ID2= 2 (  3200):      7.11    1.041     10.00    206.78
        ==========================================================
        ID = 3 (  0020):     32.35    4.727     10.00    206.10

      NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| STANDHYD (  3300)|   Area    (ha)=   9.32
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.80   Dir. Conn.(%)=  78.80
--------------------

                        IMPERVIOUS    PERVIOUS (i)
      Surface Area     (ha)=       7.34          1.98
      Dep. Storage     (mm)=       1.00          5.00
      Average Slope     (%)=       1.00          2.00
      Length            (m)=     249.27         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

      Max.Eff.Inten.(mm/hr)=      53.00         50.87
                over (min)        5.00         15.00
      Storage Coeff.  (min)=      5.70 (ii)    14.95 (ii)
      Unit Hyd. Tpeak (min)=      5.00         15.00
      Unit Hyd. peak  (cms)=      0.20          0.08
                                                          *TOTALS*
      PEAK FLOW       (cms)=      1.08          0.27          1.353 (iii)
      TIME TO PEAK    (hrs)=     10.00         10.00          10.00
      RUNOFF VOLUME    (mm)=    211.00        174.93         203.35
      TOTAL RAINFALL   (mm)=    212.00        212.00         212.00
      RUNOFF COEFFICIENT   =      1.00          0.83           0.96

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 87.0     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  (  0022)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0020):    32.35   4.727    10.00   206.10
     + ID2= 2 (  3300):     9.32   1.353    10.00   203.35
       ==============================================
       ID = 3 (  0022):    41.67   6.080    10.00   205.49

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

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-------------------
| CALIB
| STANDHYD (  3400)|   Area    (ha)=   4.34
|ID= 1 DT= 5.0 min |   Total Imp(%)=  77.60   Dir. Conn.(%)=  77.60
-------------------

                          IMPERVIOUS     PERVIOUS (i)
     Surface Area     (ha)=      3.37          0.97
     Dep. Storage     (mm)=      1.00          5.00
     Average Slope     (%)=      1.00          2.00
     Length           (m)=    170.10         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
 0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
 0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
 0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
 0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
 0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
 0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
 0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
 0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
 0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
 0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
 1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
 1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
 1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
 1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
 1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
 1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
 1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
 1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
 1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
 1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
 1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
 1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
 2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
 2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
 2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
 2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
 2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
 2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
 2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
 2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
 2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
 2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
 2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
 2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
 3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

     Max.Eff.Inten.(mm/hr)=      53.00         50.87
           over (min)            5.00         15.00
     Storage Coeff.  (min)=      4.53 (ii)    13.78 (ii)
     Unit Hyd. Tpeak (min)=      5.00         15.00
     Unit Hyd. peak  (cms)=      0.23          0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=      0.50          0.13          0.630 (iii)
     TIME TO PEAK    (hrs)=     10.00         10.00         10.00
     RUNOFF VOLUME    (mm)=    211.00        174.93        202.92
     TOTAL RAINFALL   (mm)=    212.00        212.00        212.00
     RUNOFF COEFFICIENT   =      1.00          0.83          0.96

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

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  87.0    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  (  0024)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0022):    41.67   6.080    10.00   205.49
     + ID2= 2 (  0028):     4.28   0.582    10.00   192.04
       ==============================================
       ID = 3 (  0024):    45.95   6.662    10.00   204.24

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

```
-------------------
| ADD HYD  (  0024)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0024):    45.95   6.662    10.00   204.24
     + ID2= 2 (  3400):     4.34   0.630    10.00   202.92
       ==============================================
       ID = 1 (  0024):    50.29   7.292    10.00   204.12

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

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-------------------
| RESERVOIR(  5001)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)   |    (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7480      3.7607
                          0.0140     0.5845   |   1.1340      4.6672
                          0.0210     1.1690   |   1.4200      5.2879
                          0.1010     1.7265   |   1.7270      5.9087
                          0.2410     2.3077   |   7.3760      6.5294
                          0.4210     2.8889   |  12.0010      6.8398

                                 AREA     QPEAK     TPEAK      R.V.
                                  (ha)     (cms)     (hrs)      (mm)
   INFLOW : ID= 2 (  0024)     50.290     7.292     10.00     204.12
   OUTFLOW: ID= 1 (  5001)     50.290     5.227     11.00     193.04

                PEAK   FLOW   REDUCTION [Qout/Qin](%)= 71.68
                TIME SHIFT OF PEAK FLOW       (min)= 60.00
                MAXIMUM  STORAGE   USED      (ha.m.)=  6.2937
```

```
-------------------
| ADD HYD  (  0013)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  5001):    50.29   5.227    11.00   193.04
     + ID2= 2 (  0009):    70.37   4.097    11.03   184.16
       ==============================================
       ID = 3 (  0013):   120.66   9.321    11.00   182.76

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

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-------------------
| CALIB            |
| NASHYD   (  4100)|   Area     (ha)=   3.48   Curve Number    (CN)= 87.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.04

         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    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
 0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
 0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
 0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
 0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
 0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
 0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
 0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
 0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
 0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
 0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
 1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
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 1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
 1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
 1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
 1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
 1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
 1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
 1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
 1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
 1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
 1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
 1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
 2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
 2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
 2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
 2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
 2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
 2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
 2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
 2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
 2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
 2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
 2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
 2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
 3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

     Unit Hyd Qpeak  (cms)=   3.323

     PEAK FLOW       (cms)=   0.294 (i)
     TIME TO PEAK    (hrs)=  10.000
     RUNOFF VOLUME    (mm)= 104.393
     TOTAL RAINFALL   (mm)= 212.000
     RUNOFF COEFFICIENT   =   0.492

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