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Lora Bay Development - Phase 4B

STORMWATER MANAGEMENT REPORT

NG Lora Bay Limited

Document Control

File:

121361

Date:

August
23, 2023

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Issue	Date	Description
1	August 4, 2022	Final Report
2	August 23, 2023	Updated Final Report

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1 Introduction

Tatham Engineering Limited has been retained by NG Lora Bay Limited to prepare a Stormwater Management (SWM) Report in support of the proposed Draft Plan of Subdivision for Phase 4B of the Lora Bay Development.

1.1 OBJECTIVE

The primary objective of this report is to analyze the potential impacts of the development on the local drainage systems and to develop a stormwater management plan in accordance with all relevant Municipal, County and Provincial guidelines to mitigate potential adverse impacts of the development to the downstream drainage systems.

A previous version of this report was submitted prior to publication of the Town's 2023 Engineering Standards. This version of the report has been updated to reflect the 2023 standards. With respect to this report, the most notable update within the Engineering standards is the revised IDF curves which have been updated with a 10% increase to account for climate change impacts.

1.2 BACKGROUND AND GUIDANCE DOCUMENTS

The proposed SWM Plan was developed recognizing the pertinent guidelines on municipal design, water resources and the environment, and relevant background documents, including the following:

- *Stormwater Management Practices Planning and Design Manual*. Ministry of Environment [now Ministry of Environment, Conservation and Parks (MECP)] (2003);
- *Stormwater Management for Raven Golf at Lora Bay*. Henderson, Paddon & Associates Ltd. (June 2004);
- *Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation Ontario Regulation 151/06*. Grey Sauble Conservation Authority (January 13, 2010);
- *Technical Guidelines for Stormwater Management Submissions*. Central Lake Ontario Conservation Authority (CLOCA) (March 12, 2010);
- *Procedure for Laboratory Testing of Oil-Grit Separators*, Toronto and Region Conservation Authority (TRCA) (June 2014);
- *Stormwater Management & Functional Servicing Report – Addendum No.1 Lora Bay Phase 4*. C.F. Crozier & Associates Inc. (August 2018);



- *Lora Bay Drainage Peer Review*. Tatham Engineering Limited (July 24, 2019);
- *Lora Bay Development – SWM Pond No. 1 Stormwater Management Report*. Tatham Engineering Limited (April, 2022); and
- *The Blue Mountains Engineering Standards*. Town of The Blue Mountains (May, 2023).

1.3 LORA BAY PHASES 1 TO 4: STORMWATER MANAGEMENT

Phase 4B is a continuation of the Lora Bay Development in accordance with the Master Development Agreement executed in 2005; as such, the development of Phase 4B has been provisioned for in the design of the previous phases.

Construction of Phases 1 through 4 is complete from a servicing perspective. A wet pond stormwater management facility (SWMF) known as SWM Pond No.1 was constructed south of Sunset Boulevard and east of the continuation of the 11th Concession road allowance between Holes 2 and 3 of the Golf Club at Lora Bay to service the development from a stormwater perspective. This pond was designed to provide water quantity and quality control for the development, including Phase 4B, as part of the report titled *Stormwater Management for Raven Golf at Lora Bay* prepared by Henderson, Paddon & Associates Limited.

The stormwater servicing infrastructure in Phase 4 was designed to receive drainage from Phase 4B and convey it to SWM Pond. No. 1. The Phase 4 storm sewers were designed to convey minor flows (up to and including the 1:5-year design storm) from Phases 4 and 4B, and the major system was designed to convey flows up to and including the 1:100-year design storm. The major storm system consists of the Phase 4 roads, and ditches around the exterior of Phase 4 and along the north limit of Phase 3 to SWM Pond No. 1. For complete details of the Phase 4 design refer to the *Stormwater Management & Functional Servicing Report – Addendum No. 1, Lora Bay Phase 4* prepared by C.F. Crozier & Associates Inc, otherwise a summary is provided in Section 2.5 of this report.

A condition of ECA No. 9869-BSNQR4 for Phase 4 required the Owner to submit an ECA application for SWM Pond No. 1 within 18 months of the issuance of the Phase 4 ECA Approval. The condition required the application to include a stormwater management report that addresses the water quality and quantity controls for the entire catchment area discharging to SWM Pond No. 1. To address this requirement, Tatham prepared the *Lora Bay Development – SWM Pond No. 1 Stormwater Management Report* and submitted this report to the MECP with the ECA Application for SWM Pond No. 1 on April 5, 2022. This report also identified drainage improvements required to Boulder Channel and the outlet channel downstream of SWM Pond No. 1. These improvements are currently under construction. These improvements are not required in support of Phase 4B.



2 Site Description

2.1 LOCATION AND TOPOGRAPHY

The property is located directly east of West Ridge Drive, north of the Georgian Trail and southwest of Holes 16 and 17 of the Golf Club at Lora Bay. The site is legally described as Part of Block 1 within Plan 16M-8, Town of The Blue Mountains, County of Grey. The site location is illustrated on Figure 1.

The site is comprised of approximately 6.5 ha of heavily forested, gently sloping land. Drainage from the site is split with surface water runoff flowing north or northeast onto the existing golf course.

The soils on the property are classified as imperfectly drained silty clay (southwest) or poorly drained clay loam (northeast) based on the Soil Survey of Grey County. A geotechnical investigation will be completed and prepared in support of detailed design.

2.2 EXISTING AND SURROUNDING LAND USES

The site is currently zoned 'Development' in accordance with the Town of The Blue Mountains Comprehensive Zoning By-law and is classified as Residential Recreational land use in accordance with the Official Plan. Land uses adjacent to the site are as follows:

- Georgian Trail (south): an existing hard packed, granular trail blended within the natural forested environment within a previous rail line allowance;
- The Golf Club at Lora Bay (north and east): Holes 16 and 17;
- Lora Bay Development - Phase 4 (north of West Ridge Drive dead end): residential subdivision currently under building construction;
- future West Ridge Drive extension (west): an undeveloped road allowance, extending from the dead end of West Ridge Drive to the Georgian Trail; and
- future development lands (south of the Georgian Trail and west of the future West Ridge Drive Extension): future residential subdivisions.



3 Lora Bay Phase 4B Development

The Draft Plan of Subdivision for Phase 4B includes 45 single detached dwelling units with minimum lot frontages of 15.2 m and minimum lot areas of approximately 500 m² and 13 rowhouse dwelling units with minimum lot frontages of 7.6 m and minimum lot areas of approximately 250 m². The West Ridge Drive (Street 'A') road allowance will be developed from its current dead end at the limit of Phase 4, through Phase 4B to the Georgian Trail where it will be temporarily dead ended with a pedestrian linkage at the Georgian Trail until such time as the road is extended into a future development phase. Street 'B' will be a looped road allowance providing access to the majority of the proposed residential development from its intersection with Street 'A' approximately 50 m north of the Georgian Trail. Street 'B' will be temporarily dead ended approximately 45 m west of its intersection with Street 'A' until such time as the road is extended into a future development phase. All proposed road allowances will be 20 m wide.

A 12.0 m wide Servicing Block at the northwest limit of Phase 4B and a 17.0 m wide Servicing Easement traversing the golf club lands will be provided for sanitary sewer and storm sewer. A second 15.0 m Servicing Block at the south limit of Phase 4B between the single detached lots and Park Block will be provided for storm sewer and sanitary sewer connections to future development phases.



4 Existing Drainage Conditions

This section of the report describes the existing drainage conditions within the Phase 4B lands, external lands to the south that drain into the Phase 4B lands, and areas of interest downstream of the Phase 4B lands.

The existing topography, ground cover, land use and drainage patterns of the Phase 4B lands and surrounding areas were established through site visitation and interpretation of the available topographic maps and aerial photographs. An Existing Overall Drainage Plan (Drawing ODP-1) has been prepared to illustrate the existing drainage conditions within the Phase 4B lands and surrounding area and should be referenced when reviewing this section of the report.

4.1 OVERALL WATERSHED DESCRIPTION

Phase 4B of the Lora Bay Development is located within a watershed with an area of approximately 302 ha that drains to the existing wet pond SWMF known as SWM Pond No. 1. This watershed consists of a large portion of the existing Lora Bay Development lands accessed by West Ridge Drive and East Ridge Drive, future Lora Bay development lands west of the existing Golf Club at Lora Bay, future development lands south of the Georgian Trail and external lands south of Highway 26. The watershed is illustrated on the Existing Overall Drainage Plan enclosed for reference.

A Visual OTTHYMO (VO) hydrologic model was created to quantify the peak flows throughout the watershed and the performance of SWM Pond No. 1 under existing conditions. The rainfall intensity-duration-frequency (IDF) parameters were derived as specified in the Town's engineering standards by using values from the MTO's IDF curve lookup tool and applying a 10% increase. The IDF parameters were applied to the 4-hour Chicago design storm distribution and the 6-hour, 12-hour and 24-hour SCS design storm distribution. All storm distributions were analysed in the model to establish the 1:2-year through 1:100-year design storm peak flows. The Regional (Timmins) Storm and the 4-hour, 25 mm (Quality) Storm were also modeled. The VO model results are summarized in Appendix A for reference.

4.2 PHASE 4B EXISTING CONDITIONS

Phase 4B currently consists of undeveloped wooded lands. The existing Phase 4B lands and the lands encompassing Holes 16 and 17 (formerly Holes 7 and 8) of the golf course are represented by Catchment 105 illustrated on the existing Overall Drainage Plan enclosed. This catchment has an area of approximately 12.8 ha and drains to drainage ditches constructed along the south limit of Phase 4 and the east limit of Hole 17. It has also been determined that drainage from



approximately 4.5 ha of this catchment drains to the ditch constructed along the north limit of the golf course practice facility. Drainage collected by these ditches is conveyed to the drainage systems constructed as part of Phases 3 and 4 and ultimately to SWM Pond No. 1.

External lands to the south which drain into the Phase 4B lands are represented by catchments 1003, 1004 and 1073 which are described as:

- Catchment 1003 has an area of approximately 14.7 ha of cultivated, pasture and forested lands and drains northeast to the Highway 26 south roadside ditch. Drainage collected by this ditch is conveyed under Highway 26 by a concrete box culvert that discharges to Catchment 1073.
- Catchment 1004 has an area of approximately 11.0 ha of cultivated, pasture and forested lands and drains northeast to the Highway 26 south roadside ditch. Drainage collected by this ditch is conveyed under Highway 26 by a concrete box culvert that discharges to Catchment 1073.
- Catchment 1073 has an area of approximately 19.1 ha of wooded and swamp lands and drains northeast to the Georgian Trail south trailside ditch. Drainage collected by this ditch is conveyed under the trail by several culverts that discharge onto the Phase 4B lands and ultimately to the ditch along the east limit of Hole 17 (formerly Hole 8).

It was determined through a field visit following the high-intensity rainfall event on June 15th, 2022, that high flows reaching the Georgian Trail south trailside ditch will exceed the capacity of the ditch and overtop the trail, then flow through the Phase 4B lands primarily via the channel downstream of the twin 300 mm HDPE culvert crossing. It was also determined that the majority of this flow is collected by the Hole 17 ditch and conveyed to the downstream drainage system. It is noted the VO hydrologic model does not account for flow overtopping the trail as described above. Flows in the Georgian Trail south ditch are assumed to be conveyed to Boulder Channel in the VO hydrologic model. All drainage from the existing Phase 4B lands, and external drainage that enters the Phase 4B lands ultimately drains to SWM Pond No. 1.

4.3 DOWNSTREAM DRAINAGE SYSTEM

Under existing conditions, all drainage from the Phase 4B lands is collected by the drainage systems constructed as part of Phases 3 and 4 and conveyed to SWM Pond No. 1. The Phase 4 stormwater infrastructure consists of storm sewers within the Phase 4 roads which convey minor storm flows, and ditches around the boundary of Phase 4 which intercept external drainage and convey it around Phase 4. The Phase 4 storm sewer and ditches discharge to a ditch constructed along the north property line of Phase 3 which conveys flow to SWM Pond No. 1. For complete details of the Phase 4 stormwater system refer to the *Servicing and Stormwater Management*



Implementation Report – Addendum No.1, Lora Bay Phase 4 prepared by Crozier, otherwise a summary of the Phase 4 stormwater infrastructure is provided below:

- The Phase 4 storm sewers were sized to receive minor flows (up to and including the peak flow generated by the 1:5-year design storm) from Phase 4B post-development. The design allows for a peak flow of 0.849 m³/s from Phase 4B. The Phase 4 storm sewer discharges to the ditch referred to as the Block 41 Ditch;
- A ditch constructed along the rear of Lots 19 to 30 of Phase 4 referred to as the North Ditch collects drainage from the rear of the lots as well as external drainage from the golf course and future development lands to the west of Phase 4 and discharges to the ditch referred to as the West Ridge Drive Ditch. The North Ditch was designed to convey a peak flow of 2.05 m³/s;
- A ditch constructed along the rear of Lots 20 to 26 of Phase 4 referred to as the South Ditch collects drainage from Catchment 105 and discharges to the ditch referred to as the Block 40 Ditch. The South Ditch was designed to convey a peak flow of 2.40 m³/s;
- A ditch constructed within Block 40 referred to as the Block 40 Ditch receives drainage from the South Ditch and the Hole 17 Ditch and discharges to a double 600 mm x 1200 mm ditch inlet maintenance hole connected to the West Ridge Drive storm sewer. The Block 40 Ditch was designed to convey a peak flow of 2.40 m³/s. The ditch inlet maintenance hole and storm sewer were designed to convey the 1:25-year peak flow of 1.86 m³/s without overtopping West Ridge Drive. A sag in West Ridge Drive was designed to convey runoff overtopping the road at a maximum depth of 0.14 m;
- A ditch constructed in Block 41 referred to as the Block 41 Ditch receives drainage from the Phase 4 storm sewer and the Block 40 ditch and discharges to the ditch referred to as the West Ridge Drive Ditch. The Block 41 Ditch was designed to convey a peak flow of 4.34 m³/s; and
- A ditch constructed along the north limit of Phase 3 referred to as the West Ridge Drive Ditch receives drainage from the North Ditch and the Block 41 Ditch and discharges to the overland flow channel north of Block 71 in Phase 3 which conveys flow to SWM Pond No. 1. The West Ridge Drive ditch was designed to convey a peak flow of 6.05 m³/s.

There is also a ditch referred to as the Hole 17 Ditch which was constructed along the east limit of Hole 17 (formerly Hole 8) of the golf course to intercept flows prior to reaching the houses along Landry Lane. This ditch was not designed as part of Phase 4, but its capacity has been estimated to be 3.85 m³/s with 0.30 m of freeboard based on a survey of the ditch.



5 Stormwater Management Plan

The proposed SWM plan for the site will collect drainage from Phase 4B and the external lands surrounding it and convey it to the existing downstream drainage systems designed and constructed to convey this drainage to SWM Pond No. 1 as part of previous phases of development.

A Proposed Overall Drainage Plan (Drawing ODP-2) has been prepared and should be referenced when reviewing this section of the report. A system of storm sewers and catch basins constructed within Phase 4B will be used to manage runoff generated by minor storms up to the 1:5-year design storm. The Phase 4B storm sewer system will convey stormwater to West Ridge Drive and the existing Phase 4 storm sewer system. Major storm flows will be conveyed through the Phase 4B road network and a proposed servicing easement to the existing downstream drainage system (South Ditch).

5.1 DESIGN CRITERIA

Based on previous reports and analysis of the background information collected, the following design criteria were established to be satisfied by the proposed SWM Plan:

1. The proposed SWM Plan must provide water quantity control such that the proposed development does not adversely impact the drainage system downstream of SWM Pond No. 1.
2. The Proposed SWM Plan must achieve the required Level 1 “Enhanced” water quality treatment to Provincial standards in the form of 80% total suspended solids removal for the site effluent, as all runoff enters Georgian Bay, a cold-water fishery.
3. The proposed SWM Plan must provide safe conveyance of the Regulatory Storm peak flows from the Phase 4B and external lands through or around Phase 4B to the downstream drainage system.

5.2 PROPOSED DRAINAGE CONDITIONS

A Visual OTTHYMO model has been created to quantify the peak flows throughout the watershed and the performance of SWM Pond No. 1 under proposed conditions. The rainfall intensity-duration-frequency (IDF) parameters were derived as specified in the Town’s engineering standards by using values from the MTO’s IDF curve lookup tool and applying a 10% increase. The IDF parameters were applied to the 4-hour Chicago design storm distribution and the 6-hour, 12-hour and 24-hour SCS design storm distribution. All storm distributions were analysed in the model to establish the 1:2-year through 1:100-year design storm peak flows. The Regional



(Timmins) Storm and the 4-hour, 25 mm (Quality) Storm were also modeled. The VO model results are summarized in Appendix B for reference. The following sections describe the proposed drainage conditions in Phase 4B.

5.2.1 Internal Drainage

The Phase 4B internal drainage system consists of storm sewer, roads, overland flow routes, and drainage swales. The storm sewer will capture and convey runoff produced by minor storm events up to and including the 1:5-year design storm. The storm sewer will be routed through a servicing easement across Hole 16 (formerly Hole 7) of the golf course and connected to the existing Phase 4 storm sewer at CBMH#1A. Storm sewer will also be installed in Street 'B' and the West Ridge Drive extension (Street 'A') and connected to the existing Phase 4 storm sewer at CBMH#1A. Where possible, the Phase 4B development will be graded to direct drainage from the lots towards the Phase 4B roads where it will be collected by storm sewers. A detailed storm sewer design sheet is included in Appendix C and preliminary storm sewer servicing is illustrated on the Conceptual Servicing Plan (Drawing CSP-1) enclosed for reference.

Major storm flows will be conveyed overland through Phase 4B within the roadway and drainage swales to the proposed servicing block at the northwest corner of the site. Flows will pass through the servicing block via an overland flow route to Hole 16 (formerly Hole 7) and the Phase 4 South Ditch. A drainage swale is proposed along the side of Lot 1 and the rear of Lots 33 to 30 along the northwest limit of Phase 4B. This swale is designed to convey major storm peak flows to a ditch inlet maintenance hole within the proposed servicing block which will capture the rear yard runoff in the storm sewer. The rear yards of Lots 19 to 29 along the north and northeast limits of Phase 4B will discharge towards Holes 16 and 17 as occurs under existing conditions. Since the Phase 4B development will intercept flows from the existing area south of Hole 17 and the external area south of the Georgian Trail, the drainage area freely discharging towards Holes 16 and 17 will be reduced. Detailed overland flow calculations are included in Appendix C for reference.

5.2.2 External Drainage

As discussed, the Georgian Trail south ditch does not have sufficient capacity to convey flows from the lands between the Georgian Trail and Highway 26 south of Phase 4B. Under existing conditions flow exceeding the capacity of the ditch overtops the Georgian Trail and flows through the Phase 4B lands towards Hole 17 via the channel north of the twin 300 mm HDPE culvert crossing. To resolve this issue and protect Phase 4B from flooding, it is proposed to raise the rear of lots 4 through 19 with site grading to direct flow eastwards towards a proposed ditch downstream of the twin 300 mm HDPE culvert crossing. This ditch will be improved to safely convey flow overtopping the trail towards Hole 17 and the Hole 17 Ditch where flows are



currently directed. A ditch inlet connected to the Phase 4B storm sewer system will be provided in the proposed ditch to capture minor flows crossing the trail via the existing culvert crossings. There are 4 existing 300 mm diameter culverts crossing the trail upstream of the proposed ditch inlet location. HY-8 culvert capacity calculations for a typical 300 mm culvert crossing are included in Appendix C for reference.

5.3 STORMWATER QUANTITY CONTROL

Stormwater quantity control for the Phase 4B development will be provided by SWM Pond No. 1 located along Holes 11 and 12 (formerly 2 and 3) of the golf course. The function of SWM Pond No. 1 under proposed conditions is described in the following sections.

5.3.1 SWM Pond No. 1 Improvements

An analysis of SWM Pond No. 1 was previously completed by Tatham Engineering to determine the operating conditions of the pond and provide recommendations for improvements. The analysis revealed that under existing conditions water would spill east towards Sunset Boulevard during the 1:10-year design storm. Tatham Engineering recommended improvements that included constructing an overflow weir to direct flow towards the outlet channel. These recommended improvements were constructed in 2021.

Further improvements to the outlet of this SWM pond are currently being designed with the aim of reducing the level of attenuation provided by the pond (given the proximity of the pond to Georgian Bay), thereby reducing the water levels in the pond. For the purpose of this report, the impact of Phase 4B on the operating conditions of SWM Pond No. 1 has been assessed with the current pond outlet configuration.

5.3.2 SWM Pond No. 1 Operating Conditions

Analysis of SWM Pond No. 1 was conducted for existing and proposed conditions to determine the impact of the Phase 4B development on the operating conditions of the pond and the discharge peak flow to the outlet channel downstream. Both the existing and proposed conditions analyses were conducted assuming the latest recommended improvements to the SWM Pond No. 1 outlet have not been completed as the design of these improvements is still underway. The VO hydrologic models created for the overall watershed were used to analyze and compare the performance of the pond under existing and proposed conditions. The existing and proposed peak flows discharging from SWM Pond No. 1 are summarized in Table 1. Pre development VO results are included in Appendix A and post development detailed VO results are included in Appendix B for reference.



Table 1: SWM Pond No. 1 Discharge Summary

STORM	EXISTING PEAK FLOW (m ³ /s)			
	4-hr CHI	6-hr SCS	12-hr SCS	24-hr SCS
25 mm	0.19	-	-	-
1:2-year	0.88	1.08	1.53	2.17
1:5-year	1.72	2.32	3.33	4.45
1:10-year	2.64	3.44	5.40	8.80
1:25-year	3.94	6.12	9.68	12.29
1:50-year	5.65	9.01	12.05	15.15
1:100-year	7.98	11.68	14.60	17.04
Timmins	18.67			
STORM	PROPOSED PEAK FLOWS (m ³ /s)			
	4-hr CHI	6-hr SCS	12-hr SCS	24-hr SCS
25 mm	0.22 (18.2%)			
1:2-year	0.93 (6.5%)	1.12 (3.5%)	1.61 (5.3%)	2.26 (4.3%)
1:5-year	1.8 (5%)	2.42 (4.1%)	3.44 (3.2%)	4.73 (6.3%)
1:10-year	2.74 (3.8%)	3.55 (3%)	5.63 (4.3%)	8.95 (1.8%)
1:25-year	4.05 (2.9%)	6.36 (3.9%)	9.83 (1.5%)	12.3 (0.1%)
1:50-year	5.87 (3.9%)	9.22 (2.3%)	12.1 (0.4%)	15.09 (-0.4%)
1:100-year	8.23 (3.2%)	11.85 (1.5%)	14.57 (-0.2%)	16.97 (-0.4%)
Timmins	18.66 (-0.1%)			

(+7.2%) - indicates percent change from existing condition.

The results summarized in Table 1 show the Phase 4B development will cause a minor increase to discharges from SWM Pond No. 1 under most design storms. The culvert crossing at Sunset Boulevard downstream of the pond has a capacity of approximately 5.5 m³/s per the *Lora Bay*



Development - SWM Pond No. 1 Stormwater Management Report prepared by Tatham Engineering. The Phase 4B development and resulting minor increase to peak flows from SWM Pond No. 1 will not impact the performance or overtopping frequency of the conveyance system downstream of the pond.

A summary of the operating conditions of SWM Pond No. 1 under proposed conditions is provided in Table 2; detailed stage-storage-discharge tables are included in Appendix D for reference.



Table 2: SWM Pond No. 1 Operating Conditions Summary

STORM	4-hr CHI DISTRIBUTION			6-hr SCS DISTRIBUTION		
	STAGE (m)	DISCHARGE (m ³ /s)	STORAGE (m)	STAGE (m)	DISCHARGE (m ³ /s)	STORAGE (m ³)
25 mm	185.45	0.22	10,403	-	-	-
1:2-year	185.80	0.93	17,204	185.86	1.12	20,334
1:5-year	186.04	1.80	26,610	186.17	2.42	30,694
1:10-year	186.23	2.74	32,712	186.37	3.55	37,512
1:25-year	186.45	4.05	40,279	186.59	6.36	45,270
1:50-year	186.56	5.87	44,484	186.67	9.22	48,224
1:100-year	186.64	8.23	47,274	186.73	11.85	50,453
STORM	12-hr SCS DISTRIBUTION			24-hr SCS DISTRIBUTION		
	STAGE (m)	DISCHARGE (m ³ /s)	STORAGE (m)	STAGE (m)	DISCHARGE (m ³ /s)	STORAGE (m ³)
1:2-year	185.99	1.61	25,258	186.15	2.26	29,685
1:5-year	186.35	3.44	36,877	186.51	4.73	42,665
1:10-year	186.55	5.63	44,100	186.67	8.95	47,967
1:25-year	186.68	9.83	48,808	186.74	12.30	50,784
1:50-year	186.73	12.10	50,636	186.79	15.09	52,849
1:100-year	186.78	14.57	52,459	186.83	16.97	54,163
Timmins	-	-	-	186.86	18.66	55,324

5.4 STORMWATER QUALITY CONTROL

Stormwater quality control for the development site will be provided by SWM Pond No. 1 located along Holes 11 and 12 of the golf course. The pond will provide water quality treatment in accordance with the MECP Guidelines for Enhanced Level water quality protection. Table 3.2 of the MECP SWM Manual provides sizing criteria for Enhanced Level protection based on the imperviousness and total size of the contributing drainage area.



Under existing conditions, SWM Pond No. 1 has a drainage area of 302 ha with an imperviousness of 8.5%. After the development of Phase 4B, the pond will have a drainage area of 302 ha with an imperviousness of 9.6%. To satisfy the MECP Guidelines for Enhanced Level water quality protection, the pond is required to provide a permanent pool volume of 10,553 m³ and an extended detention volume of 12,060 m³.

According to the *Raven Golf Course SWM Report* prepared by Henderson Paddon, SWM Pond No. 1 was designed to have a permanent pool volume of 22,400 m³, an extended detention volume of 31,900 m³ and a total volume of 60,762 m³. However, based on the available as constructed topographic survey data, SWM Pond No. 1 has the following estimated volumes.

- 1) A permanent pool volume of approximately 43,740 m³;
- 2) An extended detention volume of 7,340 m³ between the permanent pool water level and secondary outlet sill elevation; and
- 3) A total active storage volume of 42,130 m³ at the emergency spillway sill elevation.

Although the extended detention volume is less than that required by the MECP guidelines, an analysis of the travel time and particle settling time under the 25 mm storm peak flow has determined the existing pond provides a total suspended solids removal rate of 80%. It is estimated the travel time from the inlet to the outlet of the pond is 32.6 hours under the 25 mm storm peak flow. Based on this travel time, the pond can settle 92% of particles from the particle size distribution outlined in Appendix E of the *CLOCA Technical Guidelines for Stormwater Management Submissions*, and 83% of particles from the particle size distribution specified in the *Procedure for Laboratory Testing of Oil Grit Separators* prepared by the TRCA. As such, SWM Pond No. 1 provides the requisite level of water quality control. Detailed water quality calculations are included in Appendix D for reference.

5.5 STORMWATER CONVEYANCE

Drainage from Phase 4B will be conveyed to SWM Pond No. 1 by existing infrastructure constructed during previous phases of the Lora Bay development. Section 4.3 of this report describes the key components of the downstream conveyance system and their designed capacities. The ditches downstream of Phase 4B were designed with 0.30 m of freeboard; however, the design did not account for flow from the external lands west of Phase 4 and south of the Georgian Trail. Results from the VO model were used to determine if the downstream infrastructure has sufficient capacity to convey the runoff from previous phases of development, Phase 4B, and the external lands downstream to SWM Pond No. 1. The design capacities, proposed maximum peak flows, and available freeboard for the downstream conveyance system are summarized in Table 3. Conveyance capacity calculations are included in Appendix C and the VO model results are included in Appendix B for reference.



Table 3: Downstream Infrastructure Conveyance Capacity Summary

DESCRIPTION OF INFRASTRUCTURE	ORIGINAL DESIGN CAPACITY ¹ (m ³ /s)	PROPOSED 1:100-YEAR PEAK FLOW (m ³ /s)	FREEBOARD UNDER PROPOSED MAX. PEAK FLOW (m)	MAX. CAPACITY WITH NO FREEBOARD
Phase 4 Storm Sewer (at Phase 4B connection)	0.85 ²	0.71 ²	-	-
North Ditch	2.21	3.26	0.19	5.71
South Ditch	2.42	3.20	0.23	7.02
Hole 17 Ditch ³	3.85	1.03	0.73	7.33
Block 40 Ditch	2.40	3.20	0.22	6.25
Block 41 Ditch	4.34	5.35	0.59	11.04
West Ridge Drive Ditch	6.05	7.09	0.22	10.87

Notes 1: Original Design Capacity allows for 0.30 m of freeboard.
 2: Storm sewer capacity and proposed peak flow are for 1:5-year storm.
 3: Hole 17 Ditch not included in Phase 4 design. Capacity estimated from survey.

As shown, the ditches downstream of Phase 4B have capacity to convey the proposed 1:100-year design storm peak flows with 0.19 m of freeboard or greater. It is noted the proposed 1:100-year peak flows shown in Table 3 do not include flow spilling over the Georgian Trail which would increase flows in the Hole 17, Block 40, Block 41, and West Ridge Drive ditches. However, as shown in Table 3, these ditches have the capacity to convey an additional 3.05 m³/s of flow if no freeboard is provided. Additionally, the proposed Phase 4B storm sewer system will intercept some of this spill flow reducing the total amount of flow reaching these ditches. As previously discussed, the Phase 4B site grading will be raised along the rear of the lots backing onto the Georgian Trail to prevent flow overtopping the trail from spilling through Phase 4B. Flow will be directed east to a proposed ditch through the park block which will capture the overtopping flow and convey it towards Hole 17 and the Hole 17 Ditch as occurs under existing conditions.

There is a known deficiency downstream of Phase 4B at the ditch inlet maintenance hole downstream of the Block 40 Ditch which acts as the inlet to a storm sewer crossing West Ridge Drive. This ditch inlet maintenance hole has been observed to have insufficient inlet capacity during recent significant runoff events. It is recommended that the configuration of this inlet be adjusted to improve the inlet capacity and reduce the likelihood of flow across West Ridge Drive.



The inlet is currently under review and recommended improvements, if any, will be resolved at detailed design.

A future phase of the Lora Bay Development south of the Georgian Trail is planned to include improvements to the Georgian Trail south ditch which will eliminate overtopping of the trail and direct flows to a proposed future SWM facility. These future improvements will significantly reduce the quantity of external runoff entering the Phase 3 through 4B drainage systems.



6 Siltation and Erosion Control

Siltation and erosion control will be implemented for all Phase 4B construction activities, including topsoil stripping, material stockpiling, building construction and grading operations. The basic principles that will be applied to minimize erosion and sedimentation and resultant negative environmental impacts include:

1. minimize disturbance activities where possible;
2. expose the smallest possible land area to erosion for the shortest possible time;
3. institute erosion control measures as required immediately;
4. implement sediment control measures before the outset of construction activities;
5. carry out regular inspections of erosion/sediment control measures and repair or maintain as necessary; and
6. carry out regular inspections and required maintenance of the downstream stormwater drainage systems as required.

The proposed grading, servicing and building construction should be carried out in such a manner that a minimum amount of erosion occurs and such that sedimentation facilities control any erosion that does occur. Additional erosion, sediment, and pollution control measures should include the following:

1. placement of temporary swales and check dams to control runoff and lower velocities promoting settling of solids;
2. erection of silt control fence below any grading operations to control sediment movement;
3. provision of stone mud mats at construction vehicle entrances to minimize off-site tracking of material; and
4. revegetate disturbed areas to enhance long-term siltation and erosion control.



7 Summary

The SWM plan proposed for Lora Bay Phase 4B satisfies the established criteria and Lora Bay Phase 4B can proceed without adversely impacting the local drainage systems. The water quality and quantity controls for Phase 4B will be provided via SWM Pond No. 1. Minor storm flows will be collected and conveyed by the Phase 4B storm sewer system to the existing Phase 4 storm sewer along West Ridge Drive. Major flows will be safely conveyed overland through Phase 4B via the roadway, overland flow routes, and drainage swales to the downstream conveyance system and ultimately to SWM Pond No. 1. External flows from south of the Georgian Trail will be directed around Phase 4 to the Hole 17 Ditch as occurs under existing conditions. No further improvements to the existing storm sewer system, drainage ditches, or SWM Pond No. 1 are required to accommodate the proposed Phase 4B development.

Siltation and erosion control strategies will be implemented during site servicing and building construction to reduce the transportation of sediment from the site, improve stormwater quality and mitigate any environmental impacts during construction activities.

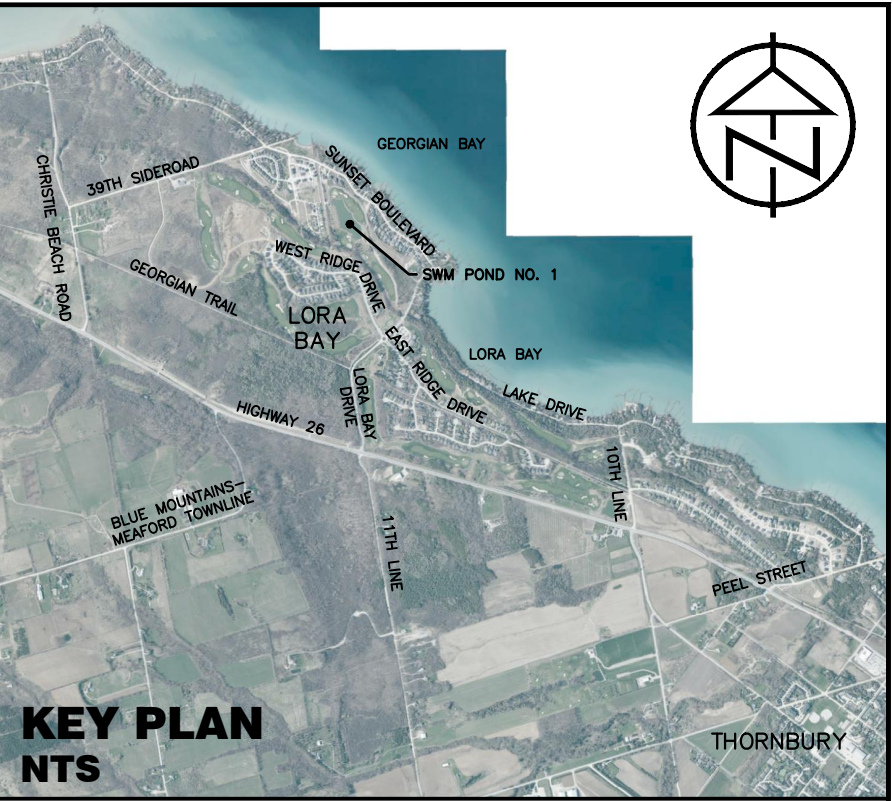




LORA BAY DEVELOPMENT - PHASE 4B

Figure 1: Site Location





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DRAWING REFERENCES

BENCHMARKS

No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP
1.	FIRST SUBMISSION	AUG 2022	

LORA BAY DEVELOPMENT: PHASE 4B
TOWN OF THE BLUE MOUNTAINS

EXISTING OVERALL
DRAINAGE PLAN

LEGEND:

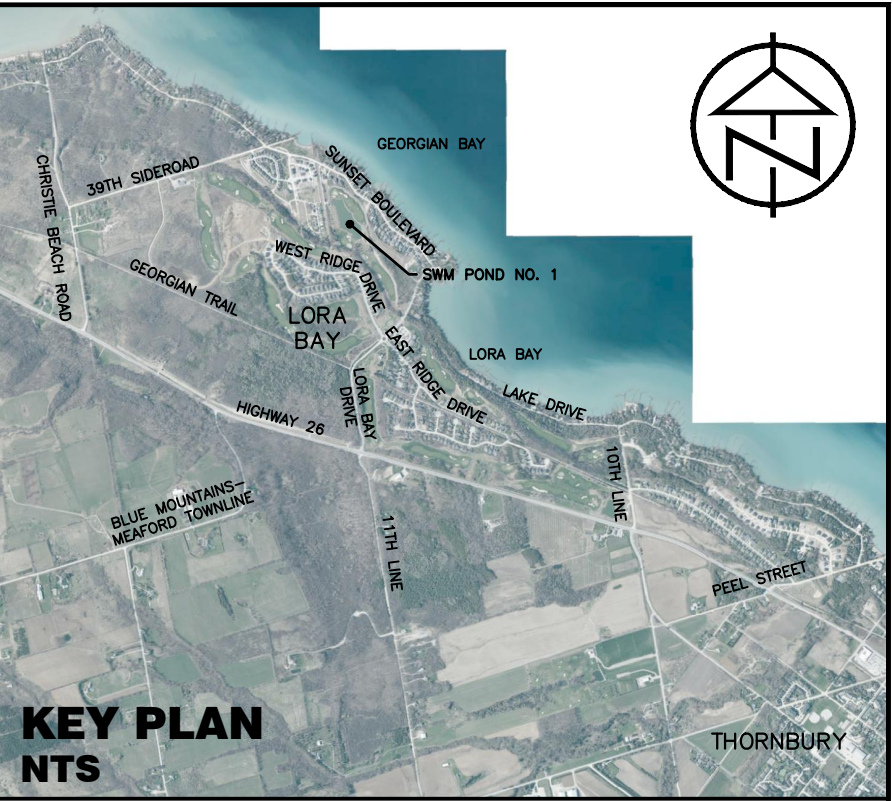
- WATERCOURSE
- CULVERT
- MAJOR OVERLAND FLOW DIRECTION
- DRAINAGE CATCHMENT BOUNDARY
- EXISTING DITCH
- CATCHMENT ID
- DRAINAGE AREA (ha)
- CN VALUE/ % IMPERVIOUS

TATHAM
ENGINEERING


DESIGN: JM
DRAWN: JM
CHECK: DRT

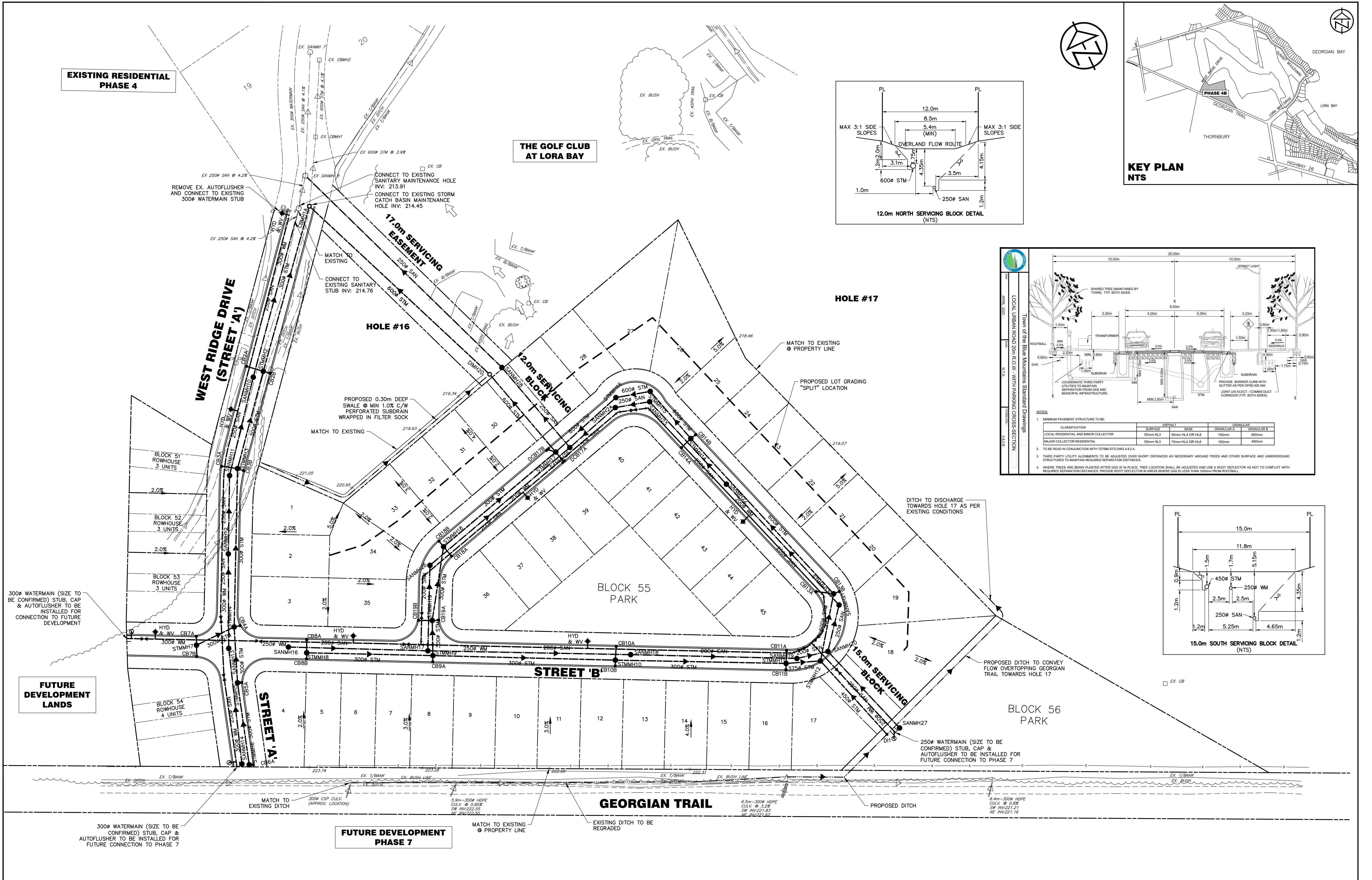
FILE: 121361
DATE: AUG 2022
SCALE: 1:5,000


ODP-1



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			1.	FIRST SUBMISSION	AUG 2022									
											PROPOSED OVERALL DRAINAGE PLAN	DESIGN: JM	FILE: 121361	ODP-2
												DRAWN: JM	DATE: AUG 2022	
												CHECK: DRT	SCALE: 1:5,000	



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			1.	FIRST SUBMISSION	AUG 2022					
							CONCEPTUAL SERVICING PLAN	DESIGN: JM/LC	FILE: 121361	CSP-1
								DRAWN: JM/LC	DATE: AUG 2022	
								CHECK: JPA	SCALE: 1:750	

Appendix A: Existing Conditions Hydrologic Analysis

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1001
Catchment Area (ha):	50.05
Impervious %:	2%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ls			Vsc								
Soil Series		Listowel			Vincent								
Hydrologic Soils Group		BC			C								
Soil Texture		Silt Loam			Silty Clay Loam								
Runoff Coefficient Type		2			3								
Area (ha)		11.76			38.29								
Percentage of Catchment		23%			77%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.30	100	0.95	0.50	100	0.95						
Gravel	3		89	0.33	0.10	89	0.44						
Woodland	10	11.46	67	0.30	26.59	73	0.42						
Pasture/Lawns	5		74	0.35	7.83	79	0.45						
Meadows	8		71	0.33		76	0.44						
Cultivated	7		78	0.45	3.27	82	0.60						
Waterbody	12		50	0.05		50	0.05						
Average CN		67.84			75.39								
Average C		0.32			0.45								
Average IA		9.80			8.60								

Time to Peak Calculations

Max. Catchment Elev. (m):	326.00
Min. Catchment Elev. (m):	224.00
Catchment Length (m):	1540
Catchment Slope (%):	6.62%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	40.67

Summary

Catchment CN:	73.6
Catchment C:	0.42
Catchment IA (mm):	8.88
Time of Concentration (hrs):	0.68
Catchment Time to Peak (hrs):	0.45
Catchment Time Step (mins):	5.42

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1002
Catchment Area (ha):	43.20
Impervious %:	3%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Vsc											
Soil Series		Vincent											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		43.20											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	1.15	100	0.95									
Gravel	3		89	0.44									
Woodland	10	7.75	73	0.42									
Pasture/Lawns	5	32.70	79	0.45									
Meadows	8	1.60	76	0.44									
Cultivated	7		82	0.60									
Waterbody	12		50	0.05									
Average CN		78.37											
Average C		0.46											
Average IA		5.93											

Time to Peak Calculations

Max. Catchment Elev. (m):	344.00
Min. Catchment Elev. (m):	236.00
Catchment Length (m):	1375
Catchment Slope (%):	7.85%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	35.61

Summary

Catchment CN:	78.4
Catchment C:	0.46
Catchment IA (mm):	5.93
Time of Concentration (hrs):	0.59
Catchment Time to Peak (hrs):	0.40
Catchment Time Step (mins):	4.75

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Name	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1003
Catchment Area (ha):	14.65
Impervious %:	2%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Vsc											
Soil Series		Vincent											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		14.65											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.23	100	0.95									
Gravel	3		89	0.54									
Woodland	10	11.05	73	0.52									
Pasture/Lawns	5	1.95	79	0.55									
Meadows	8		76	0.54									
Cultivated	7	1.42	82	0.70									
Waterbody	12		50	0.05									
Average CN		75.09											
Average C		0.55											
Average IA		8.92											

Time to Peak Calculations

Max. Catchment Elev. (m):	330.00
Min. Catchment Elev. (m):	235.00
Catchment Length (m):	565
Catchment Slope (%):	16.81%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	14.00

Summary

Catchment CN:	75.1
Catchment C:	0.55
Catchment IA (mm):	8.92
Time of Concentration (hrs):	0.23
Catchment Time to Peak (hrs):	0.16
Catchment Time Step (mins):	1.87

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

Name	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1004
Catchment Area (ha):	10.95
Impervious %:	2%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Vsc											
Soil Series		Vincent											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		10.95											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.17	100	0.95									
Gravel	3		89	0.54									
Woodland	10	4.25	73	0.52									
Pasture/Lawns	5	2.92	79	0.55									
Meadows	8		76	0.54									
Cultivated	7	3.61	82	0.70									
Waterbody	12		50	0.05									
Average CN		77.99											
Average C		0.59											
Average IA		7.55											

Time to Peak Calculations

Max. Catchment Elev. (m):	328.00
Min. Catchment Elev. (m):	234.00
Catchment Length (m):	530
Catchment Slope (%):	17.74%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	13.38

Summary

Catchment CN:	78.0
Catchment C:	0.59
Catchment IA (mm):	7.55
Time of Concentration (hrs):	0.22
Catchment Time to Peak (hrs):	0.15
Catchment Time Step (mins):	1.78

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1012
Catchment Area (ha):	0.42
Impervious %:	

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		0.42											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95									
Gravel	3		89	0.38									
Woodland	10		73	0.35									
Pasture/Lawns	5		79	0.40									
Meadows	8	0.42	76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		76.00											
Average C		0.38											
Average IA		8.00											

Time to Peak Calculations

Max. Catchment Elev. (m):	182.00
Min. Catchment Elev. (m):	181.00
Catchment Length (m):	29
Catchment Slope (%):	3.45%
Method:	Airport Method
Time of Concentration (mins):	8.46

Summary

Catchment CN:	76.0
Catchment C:	0.38
Catchment IA (mm):	8.00
Time of Concentration (hrs):	0.14
Catchment Time to Peak (hrs):	0.09
Catchment Time Step (mins):	1.13

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1014
Catchment Area (ha):	0.38
Impervious %:	

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		0.38											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95									
Gravel	3		89	0.38									
Woodland	10		73	0.35									
Pasture/Lawns	5		79	0.40									
Meadows	8	0.38	76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		76.00											
Average C		0.38											
Average IA		8.00											

Time to Peak Calculations

Max. Catchment Elev. (m):	190.00
Min. Catchment Elev. (m):	185.00
Catchment Length (m):	240
Catchment Slope (%):	2.08%
Method: Airport Method	
Time of Concentration (mins):	28.74

Summary

Catchment CN:	76.0
Catchment C:	0.38
Catchment IA (mm):	8.00
Time of Concentration (hrs):	0.48
Catchment Time to Peak (hrs):	0.32
Catchment Time Step (mins):	3.83

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	105
Catchment Area (ha):	12.80
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol	Bc				Ksc				BrsI						
Soil Series	Brookston				Kemble				Brighton						
Hydrologic Soils Group	C				C				AB						
Soil Texture	Clay Loam				Silty Clay Loam				Sand Loam						
Runoff Coefficient Type	3				3				1						
Area (ha)	6.58				3.40				2.82						
Percentage of Catchment	51%				27%				22%						
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C		
Impervious	2		100	0.95		100	0.95		100	0.95					
Gravel	3		89	0.38	0.03	89	0.38	0.01	89	0.09					
Woodland	10	3.70	73	0.35	3.37	73	0.35	1.37	46	0.08					
Pasture/Lawns	5	2.88	79	0.40		79	0.40	1.44	59	0.10					
Meadows	8		76	0.38		76	0.38		51	0.09					
Cultivated	7		82	0.55		82	0.55		68	0.22					
Waterbody	12		50	0.05		50	0.05		50	0.05					
Average CN	75.63				73.14				52.79						
Average C	0.37				0.35				0.09						
Average IA	7.81				9.94				7.42						

Time to Peak Calculations

Max. Catchment Elev. (m):	223.00
Min. Catchment Elev. (m):	211.00
Catchment Length (m):	480
Catchment Slope (%):	2.50%
Method: Airport Method	
Time of Concentration (mins):	42.01

Summary

Catchment CN:	69.9
Catchment C:	0.30
Catchment IA (mm):	8.29
Time of Concentration (hrs):	0.70
Catchment Time to Peak (hrs):	0.47
Catchment Time Step (mins):	5.60

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1061
Catchment Area (ha):	8.33
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Brsl			Vsc								
Soil Series		Brighton			Vincent								
Hydrologic Soils Group		AB			C								
Soil Texture		Sand Loam			Silty Clay Loam								
Runoff Coefficient Type		1			3								
Area (ha)		5.99			2.34								
Percentage of Catchment		72%			28%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.01	100	0.95	0.07	100	0.95						
Gravel	3		89	0.09		89	0.38						
Woodland	10	2.93	46	0.08		73	0.35						
Pasture/Lawns	5	3.05	59	0.10	2.27	79	0.40						
Meadows	8		51	0.09		76	0.38						
Cultivated	7		68	0.22		82	0.55						
Waterbody	12		50	0.05		50	0.05						
Average CN		52.71			79.63								
Average C		0.09			0.42								
Average IA		7.44			4.91								

Time to Peak Calculations

Max. Catchment Elev. (m):	220.00
Min. Catchment Elev. (m):	206.00
Catchment Length (m):	470
Catchment Slope (%):	2.98%
Method:	Airport Method
Time of Concentration (mins):	45.21

Summary

Catchment CN:	60.3
Catchment C:	0.18
Catchment IA (mm):	6.73
Time of Concentration (hrs):	0.75
Catchment Time to Peak (hrs):	0.50
Catchment Time Step (mins):	6.03

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1062
Catchment Area (ha):	5.26
Impervious %:	3%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		BrsI											
Soil Series		Brighton											
Hydrologic Soils Group		AB											
Soil Texture		Sand Loam											
Runoff Coefficient Type		1											
Area (ha)		5.26											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.16	100	0.95	0.15								
Gravel	3		89	0.09									
Woodland	10	1.81	46	0.08	0.91								
Pasture/Lawns	5	3.29	59	0.10	1.95								
Meadows	8		51	0.09									
Cultivated	7		68	0.22									
Waterbody	12		50	0.05									
Average CN		55.77											
Average C		0.12											
Average IA		6.63											

Time to Peak Calculations

Max. Catchment Elev. (m):	219.00
Min. Catchment Elev. (m):	208.00
Catchment Length (m):	450
Catchment Slope (%):	2.44%
Method:	Airport Method
Time of Concentration (mins):	50.51

Summary

Catchment CN:	55.8
Catchment C:	0.12
Catchment IA (mm):	6.63
Time of Concentration (hrs):	0.84
Catchment Time to Peak (hrs):	0.56
Catchment Time Step (mins):	6.74

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1063
Catchment Area (ha):	8.13
Impervious %:	4%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Brsl			Ls								
Soil Series		Brighton			Listowel								
Hydrologic Soils Group		AB			BC								
Soil Texture		Sand Loam			Silt Loam								
Runoff Coefficient Type		1			2								
Area (ha)		5.12			3.01								
Percentage of Catchment		63%			37%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.15	100	0.95	0.15	100	0.95						
Gravel	3		89	0.09		89	0.27						
Woodland	10	1.49	46	0.08	0.91	67	0.25						
Pasture/Lawns	5	3.48	59	0.10	1.95	74	0.28						
Meadows	8		51	0.09		71	0.27						
Cultivated	7		68	0.22		78	0.35						
Waterbody	12		50	0.05		50	0.05						
Average CN		56.42			73.18								
Average C		0.12			0.30								
Average IA		6.37			6.36								

Time to Peak Calculations

Max. Catchment Elev. (m):	224.00
Min. Catchment Elev. (m):	210.00
Catchment Length (m):	580
Catchment Slope (%):	2.41%
Method:	Airport Method
Time of Concentration (mins):	53.55

Summary

Catchment CN:	62.6
Catchment C:	0.19
Catchment IA (mm):	6.37
Time of Concentration (hrs):	0.89
Catchment Time to Peak (hrs):	0.60
Catchment Time Step (mins):	7.14

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1071
Catchment Area (ha):	23.31
Impervious %:	3%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol	Ksc				Ls			BrsI			Vsc		
Soil Series	Kemble				Listowel			Brighton			Vincent		
Hydrologic Soils Group	C				BC			AB			C		
Soil Texture	Silty Clay Loam				Silt Loam			Sand Loam			Silty Clay Loam		
Runoff Coefficient Type	3				2			1			3		
Area (ha)	4.15				14.47			4.32			0.37		
Percentage of Catchment	18%				62%			19%			2%		
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.05	100	0.95	0.25	100	0.95	0.04	100	0.95	0.05	100	0.95
Gravel	3	0.05	89	0.38	0.15	89	0.27	0.03	89	0.09	0.05	89	0.38
Woodland	10	3.93	73	0.35	13.62	67	0.25	4.25	46	0.08		73	0.35
Pasture/Lawns	5	0.12	79	0.40	0.45	74	0.28		59	0.10	0.27	79	0.40
Meadows	8		76	0.38		71	0.27		51	0.09		76	0.38
Cultivated	7		82	0.55		78	0.35		68	0.22		82	0.55
Waterbody	12		50	0.05		50	0.05		50	0.05		50	0.05
Average CN	73.69				68.02			46.80			83.19		
Average C	0.36				0.26			0.09			0.47		
Average IA	9.67				9.63			9.88			4.32		

Time to Peak Calculations

Max. Catchment Elev. (m):	233.00
Min. Catchment Elev. (m):	218.00
Catchment Length (m):	850
Catchment Slope (%):	1.76%
Method:	Airport Method
Time of Concentration (mins):	66.89

Summary

Catchment CN:	65.3
Catchment C:	0.25
Catchment IA (mm):	9.60
Time of Concentration (hrs):	1.11
Catchment Time to Peak (hrs):	0.74
Catchment Time Step (mins):	8.92

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1072
Catchment Area (ha):	12.53
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol	Ksc				Ls			BrsI			Vsc		
Soil Series	Kemble				Listowel			Brighton			Vincent		
Hydrologic Soils Group	C				BC			AB			C		
Soil Texture	Silty Clay Loam				Silt Loam			Sand Loam			Silty Clay Loam		
Runoff Coefficient Type	3				2			1			3		
Area (ha)	10.48				0.12			1.93			0.83		
Percentage of Catchment	84%				1%			15%			7%		
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95		100	0.95		100	0.95	0.08	100	0.95
Gravel	3		89	0.38		89	0.27	0.01	89	0.09	0.08	89	0.38
Woodland	10	9.63	73	0.35	0.12	67	0.25	1.92	46	0.08		73	0.35
Pasture/Lawns	5	0.85	79	0.40		74	0.28		59	0.10	0.67	79	0.40
Meadows	8		76	0.38		71	0.27		51	0.09		76	0.38
Cultivated	7		82	0.55		78	0.35		68	0.22		82	0.55
Waterbody	12		50	0.05		50	0.05		50	0.05		50	0.05
Average CN	73.49				67.00			46.22			81.99		
Average C	0.35				0.25			0.08			0.45		
Average IA	9.59				10.00			9.96			4.52		

Time to Peak Calculations

Max. Catchment Elev. (m):	235.00
Min. Catchment Elev. (m):	220.00
Catchment Length (m):	600
Catchment Slope (%):	2.50%
Method:	Airport Method
Time of Concentration (mins):	44.81

Summary

Catchment CN:	74.7
Catchment C:	0.34
Catchment IA (mm):	9.95
Time of Concentration (hrs):	0.75
Catchment Time to Peak (hrs):	0.50
Catchment Time Step (mins):	5.97

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1073
Catchment Area (ha):	19.10
Impervious %:	2%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc			Vsc								
Soil Series		Kemble			Vincent								
Hydrologic Soils Group		C			C								
Soil Texture		Silty Clay Loam			Silty Clay Loam								
Runoff Coefficient Type		3			3								
Area (ha)		18.51			0.59								
Percentage of Catchment		97%			3%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.08	100	0.95	0.18	100	0.95						
Gravel	3	0.04	89	0.38	0.18	89	0.38						
Woodland	10	16.92	73	0.35		73	0.35						
Pasture/Lawns	5		79	0.40	0.23	79	0.40						
Meadows	8		76	0.38		76	0.38						
Cultivated	7		82	0.55		82	0.55						
Waterbody	12	1.47	50	0.05		50	0.05						
Average CN		71.32			88.46								
Average C		0.33			0.56								
Average IA		10.11			3.47								

Time to Peak Calculations

Max. Catchment Elev. (m):	234.00
Min. Catchment Elev. (m):	222.50
Catchment Length (m):	510
Catchment Slope (%):	2.25%
Method:	Airport Method
Time of Concentration (mins):	43.01

Summary

Catchment CN:	71.9
Catchment C:	0.34
Catchment IA (mm):	9.90
Time of Concentration (hrs):	0.72
Catchment Time to Peak (hrs):	0.48
Catchment Time Step (mins):	5.73

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1074
Catchment Area (ha):	6.00
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		6.00											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.06	100	0.95									
Gravel	3	0.03	89	0.38									
Woodland	10	4.95	73	0.35									
Pasture/Lawns	5		79	0.40									
Meadows	8	0.96	76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		73.83											
Average C		0.36											
Average IA		9.57											

Time to Peak Calculations

Max. Catchment Elev. (m):	233.50
Min. Catchment Elev. (m):	223.50
Catchment Length (m):	410
Catchment Slope (%):	2.44%
Method:	Airport Method
Time of Concentration (mins):	36.39

Summary

Catchment CN:	73.8
Catchment C:	0.36
Catchment IA (mm):	9.57
Time of Concentration (hrs):	0.61
Catchment Time to Peak (hrs):	0.40
Catchment Time Step (mins):	4.85

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1075
Catchment Area (ha):	5.30
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		5.30											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.05	100	0.95									
Gravel	3		89	0.38									
Woodland	10		73	0.35									
Pasture/Lawns	5		79	0.40									
Meadows	8	5.25	76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		76.23											
Average C		0.38											
Average IA		7.94											

Time to Peak Calculations

Max. Catchment Elev. (m):	233.50
Min. Catchment Elev. (m):	225.00
Catchment Length (m):	370
Catchment Slope (%):	2.30%
Method: Airport Method	
Time of Concentration (mins):	34.29

Summary

Catchment CN:	76.2
Catchment C:	0.38
Catchment IA (mm):	7.94
Time of Concentration (hrs):	0.57
Catchment Time to Peak (hrs):	0.38
Catchment Time Step (mins):	4.57

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1081
Catchment Area (ha):	18.64
Impervious %:	0%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc			Bc								
Soil Series		Kemble			Brookston								
Hydrologic Soils Group		C			C								
Soil Texture		Silty Clay Loam			Clay Loam								
Runoff Coefficient Type		3			3								
Area (ha)		4.48			14.16								
Percentage of Catchment		24%			76%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95		100	0.95						
Gravel	3	0.06	89	0.38	0.15	89	0.38						
Woodland	10	2.23	73	0.35	7.00	73	0.35						
Pasture/Lawns	5		79	0.40		79	0.40						
Meadows	8	2.25	76	0.38	7.01	76	0.38						
Cultivated	7		82	0.55		82	0.55						
Waterbody	12		50	0.05		50	0.05						
Average CN		75.70			74.65								
Average C		0.37			0.36								
Average IA		9.04			8.94								

Time to Peak Calculations

Max. Catchment Elev. (m):	223.50
Min. Catchment Elev. (m):	210.00
Catchment Length (m):	675
Catchment Slope (%):	2.00%
Method:	Airport Method
Time of Concentration (mins):	49.60

Summary

Catchment CN:	74.9
Catchment C:	0.36
Catchment IA (mm):	8.96
Time of Concentration (hrs):	0.83
Catchment Time to Peak (hrs):	0.55
Catchment Time Step (mins):	6.61

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1082
Catchment Area (ha):	4.21
Impervious %:	0%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		4.21											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95									
Gravel	3	0.27	89	0.38									
Woodland	10	3.54	73	0.35									
Pasture/Lawns	5	0.40	79	0.40									
Meadows	8		76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		74.60											
Average C		0.36											
Average IA		9.08											

Time to Peak Calculations

Max. Catchment Elev. (m):	223.00
Min. Catchment Elev. (m):	219.00
Catchment Length (m):	420
Catchment Slope (%):	0.95%
Method:	Airport Method
Time of Concentration (mins):	50.49

Summary

Catchment CN:	74.6
Catchment C:	0.36
Catchment IA (mm):	9.08
Time of Concentration (hrs):	0.84
Catchment Time to Peak (hrs):	0.56
Catchment Time Step (mins):	6.73

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	901
Catchment Area (ha):	6.80
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		6.80											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	1.65	100	0.95									
Gravel	3		89	0.44									
Woodland	10		73	0.42									
Pasture/Lawns	5	5.15	79	0.45									
Meadows	8		76	0.44									
Cultivated	7		82	0.60									
Waterbody	12		50	0.05									
Average CN		84.10											
Average C		0.57											
Average IA		4.27											

Time to Peak Calculations

Max. Catchment Elev. (m):	201.00
Min. Catchment Elev. (m):	185.00
Catchment Length (m):	165
Catchment Slope (%):	9.70%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	4.93

Summary

Catchment CN:	84.1
Catchment C:	0.57
Catchment IA (mm):	4.27
Time of Concentration (hrs):	0.08
Catchment Time to Peak (hrs):	0.05
Catchment Time Step (mins):	0.66

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	902
Catchment Area (ha):	4.38
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		4.38											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.04	100	0.95									
Gravel	3		89	0.38									
Woodland	10	0.57	73	0.35									
Pasture/Lawns	5	3.77	79	0.40									
Meadows	8		76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		78.41											
Average C		0.40											
Average IA		5.62											

Time to Peak Calculations

Max. Catchment Elev. (m):	191.00
Min. Catchment Elev. (m):	188.00
Catchment Length (m):	400
Catchment Slope (%):	0.75%
Method:	Airport Method
Time of Concentration (mins):	50.29

Summary

Catchment CN:	78.4
Catchment C:	0.40
Catchment IA (mm):	5.62
Time of Concentration (hrs):	0.84
Catchment Time to Peak (hrs):	0.56
Catchment Time Step (mins):	6.71

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	903
Catchment Area (ha):	3.03
Impervious %:	1%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc			Vsc								
Soil Series		Kemble			Vincent								
Hydrologic Soils Group		C			C								
Soil Texture		Silty Clay Loam			Silty Clay Loam								
Runoff Coefficient Type		3			3								
Area (ha)		1.68			1.35								
Percentage of Catchment		55%			45%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95	0.01	100	0.95						
Gravel	3		89	0.44		89	0.44						
Woodland	10	0.75	73	0.42		73	0.42						
Pasture/Lawns	5	0.93	79	0.45	1.34	79	0.45						
Meadows	8		76	0.44		76	0.44						
Cultivated	7		82	0.60		82	0.60						
Waterbody	12		50	0.05		50	0.05						
Average CN		76.32			79.16								
Average C		0.44			0.45								
Average IA		7.23			4.98								

Time to Peak Calculations

Max. Catchment Elev. (m):	202.00
Min. Catchment Elev. (m):	190.00
Catchment Length (m):	200
Catchment Slope (%):	6.00%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	7.13

Summary

Catchment CN:	77.6
Catchment C:	0.44
Catchment IA (mm):	6.23
Time of Concentration (hrs):	0.12
Catchment Time to Peak (hrs):	0.08
Catchment Time Step (mins):	0.95

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	904
Catchment Area (ha):	9.08
Impervious %:	13%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Bc											
Soil Series		Brookston											
Hydrologic Soils Group		C											
Soil Texture		Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		9.08											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	1.19	100	0.95									
Gravel	3		89	0.38									
Woodland	10		73	0.35									
Pasture/Lawns	5	7.89	79	0.40									
Meadows	8		76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		81.75											
Average C		0.47											
Average IA		4.61											

Time to Peak Calculations

Max. Catchment Elev. (m):	212.00
Min. Catchment Elev. (m):	206.00
Catchment Length (m):	800
Catchment Slope (%):	0.75%
Method:	Bransby-Williams Formula
Time of Concentration (mins):	38.74

Summary

Catchment CN:	81.8
Catchment C:	0.47
Catchment IA (mm):	4.61
Time of Concentration (hrs):	0.65
Catchment Time to Peak (hrs):	0.43
Catchment Time Step (mins):	5.17

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1011
Catchment Area (ha):	3.26
Impervious %:	56%
Pervious Area (ha):	1.42

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol		Ksc							
Soil Series		Kemble							
Hydrologic Soils Group		C							
Soil Texture		Silty Clay Loam							
Runoff Coefficient Type		3							
Area (ha)		1.42							
Percentage of Catchment		100%							
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		73						
Pasture/Lawns	5	1.42	79						
Meadows	8		76						
Cultivated	7		82						
Waterbody	12		50						
Average CN		79.00							
Average IA		5.00							

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
--

Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1013
Catchment Area (ha):	2.49
Impervious %:	59%
Pervious Area (ha):	1.03

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol		Ksc							
Soil Series		Kemble							
Hydrologic Soils Group		C							
Soil Texture		Silty Clay Loam							
Runoff Coefficient Type		3							
Area (ha)		1.03							
Percentage of Catchment		100%							
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		73						
Pasture/Lawns	5	1.03	79						
Meadows	8		76						
Cultivated	7		82						
Waterbody	12		50						
Average CN		79.00							
Average IA		5.00							

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
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Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1021
Catchment Area (ha):	16.01
Impervious %:	50%
Pervious Area (ha):	8.01

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol	Brsl								
Soil Series	Brighton								
Hydrologic Soils Group	AB								
Soil Texture	Sand Loam								
Runoff Coefficient Type	1								
Area (ha)	8.01								
Percentage of Catchment	100%								
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		46						
Pasture/Lawns	5	8.01	59						
Meadows	8		51						
Cultivated	7		68						
Waterbody	12		50						
Average CN	59.00								
Average IA	5.00								

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
--

Summary

Catchment CN:	59.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1031
Catchment Area (ha):	12.60
Impervious %:	50%
Pervious Area (ha):	6.30

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol	Bc			Vsc					
Soil Series	Brookston			Vincent					
Hydrologic Soils Group	C			C					
Soil Texture	Clay Loam			Silty Clay Loam					
Runoff Coefficient Type	3			3					
Area (ha)	2.35			3.95					
Percentage of Catchment	37%			63%					
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100		100				
Gravel	3		89		89				
Woodland	10		73		73				
Pasture/Lawns	5	2.35	79	3.95	79				
Meadows	8		76		76				
Cultivated	7		82		82				
Waterbody	12		50		50				
Average CN	79.00			79.00					
Average IA	5.00			5.00					

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
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Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1032
Catchment Area (ha):	1.68
Impervious %:	50%
Pervious Area (ha):	0.84

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol		Vsc							
Soil Series		Vincent							
Hydrologic Soils Group		C							
Soil Texture		Silty Clay Loam							
Runoff Coefficient Type		3							
Area (ha)		0.84							
Percentage of Catchment		100%							
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		73						
Pasture/Lawns	5	0.84	79						
Meadows	8		76						
Cultivated	7		82						
Waterbody	12		50						
Average CN		79.00							
Average IA		5.00							

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
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Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1041
Catchment Area (ha):	6.41
Impervious %:	50%
Pervious Area (ha):	3.21

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol		Bc							
Soil Series		Brookston							
Hydrologic Soils Group		C							
Soil Texture		Clay Loam							
Runoff Coefficient Type		3							
Area (ha)		3.21							
Percentage of Catchment		100%							
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		73						
Pasture/Lawns	5	3.21	79						
Meadows	8		76						
Cultivated	7		82						
Waterbody	12		50						
Average CN		79.00							
Average IA		5.00							

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
--

Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay Development	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	Dec 12 2020
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	1042
Catchment Area (ha):	2.09
Impervious %:	50%
Pervious Area (ha):	1.05

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol		Bc							
Soil Series		Brookston							
Hydrologic Soils Group		C							
Soil Texture		Clay Loam							
Runoff Coefficient Type		3							
Area (ha)		1.05							
Percentage of Catchment		100%							
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100						
Gravel	3		89						
Woodland	10		73						
Pasture/Lawns	5	1.05	79						
Meadows	8		76						
Cultivated	7		82						
Waterbody	12		50						
Average CN		79.00							
Average IA		5.00							

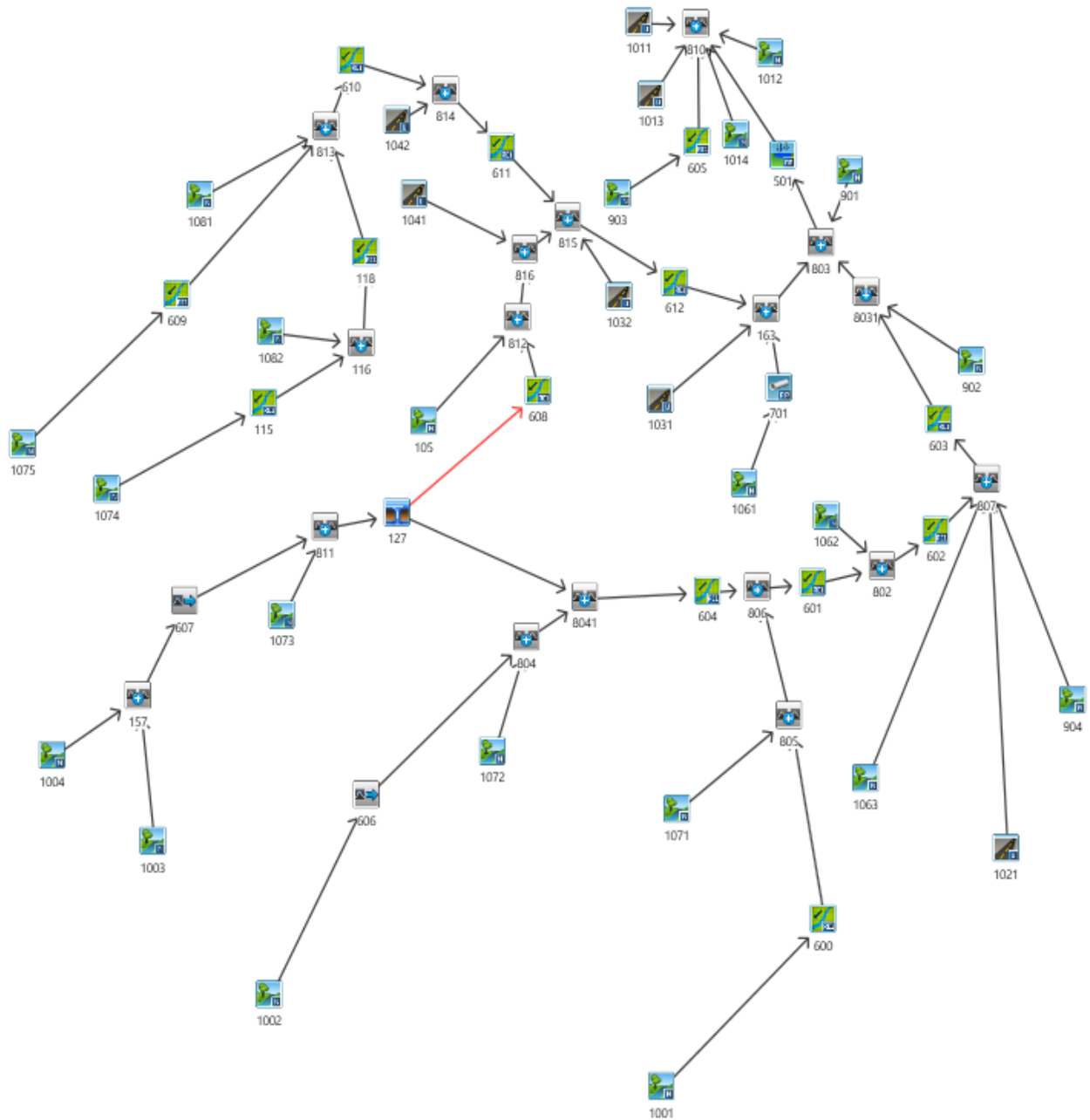
Notes

CN and IA values have been calculated for the pervious area of the catchment only.
--

Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00

PROJECT	Lora Bay Development - Phase 4B	FILE	121361
		DATE	7/14/2023
SUBJECT	VO Schematic - Existing Conditions	NAME	JB
		PAGE	



ADDHYD



ROUTE RESERVOIR



DUHYD



SHIFTHYD



NASHYD



STANDHYD

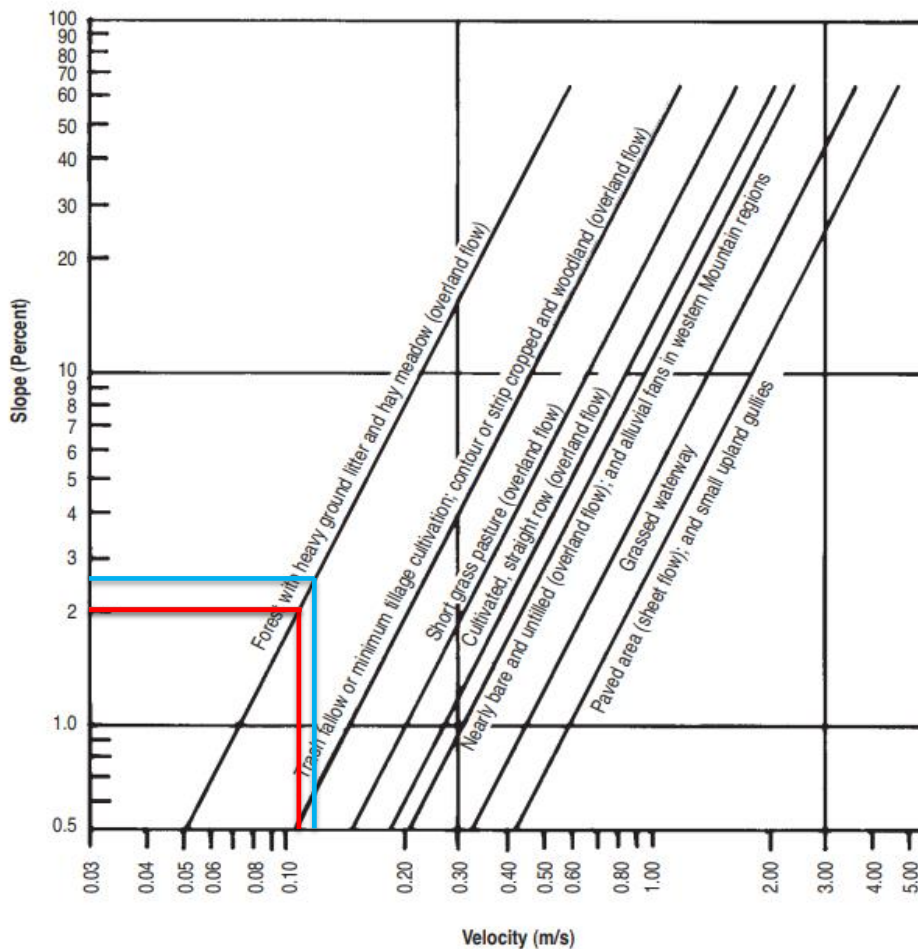


ROUTE PIPE



ROUTE CHANNEL

Catchment	607	606
Length (m)	500	570
h_1 (m)	234	234.5
h_2 (m)	223	220
Δh (m)	11	14.5
Slope (%)	2.20%	2.54%
Land Area	Forest	Forest
v (m/s)	0.11	0.12
T_c (min)	75.76	79.17



Source: Visual Otthymo Reference Manual

=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
V V I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\66
70b87-b6bf-4686-a80b-20391b083542\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\66
70b87-b6bf-4686-a80b-20391b083542\sc

DATE: 07/17/2023

TIME: 12:03:30

USER:

COMMENTS: _____

| d533886e-8ca3-4520-bb52-a2bcf4a17f81\6d9871f5
| Ptotal=132.00 mm | Comments: 100yr 24hr 15min SCS

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.25	0.00	6.50	2.38	12.75	19.01	19.00	2.38
0.50	1.45	6.75	2.38	13.00	9.77	19.25	2.38
0.75	1.45	7.00	2.38	13.25	9.77	19.50	2.38
1.00	1.45	7.25	2.38	13.50	7.13	19.75	2.38
1.25	1.45	7.50	2.90	13.75	7.13	20.00	2.38
1.50	1.45	7.75	2.90	14.00	5.54	20.25	2.38
1.75	1.45	8.00	2.90	14.25	5.54	20.50	1.58
2.00	1.45	8.25	2.90	14.50	3.96	20.75	1.58
2.25	1.45	8.50	3.43	14.75	3.96	21.00	1.58
2.50	1.72	8.75	3.43	15.00	3.96	21.25	1.58
2.75	1.72	9.00	3.70	15.25	3.96	21.50	1.58
3.00	1.72	9.25	3.70	15.50	3.96	21.75	1.58
3.25	1.72	9.50	4.22	15.75	3.96	22.00	1.58
3.50	1.72	9.75	4.22	16.00	3.96	22.25	1.58
3.75	1.72	10.00	4.75	16.25	3.96	22.50	1.58
4.00	1.72	10.25	4.75	16.50	2.38	22.75	1.58
4.25	1.72	10.50	6.07	16.75	2.38	23.00	1.58
4.50	2.11	10.75	6.07	17.00	2.38	23.25	1.58
4.75	2.11	11.00	8.18	17.25	2.38	23.50	1.58
5.00	2.11	11.25	8.18	17.50	2.38	23.75	1.58
5.25	2.11	11.50	12.67	17.75	2.38	24.00	1.58
5.50	2.11	11.75	12.67	18.00	2.38	24.25	1.58
5.75	2.11	12.00	39.07	18.25	2.38		
6.00	2.11	12.25	161.57	18.50	2.38		
6.25	2.11	12.50	19.01	18.75	2.38		

| CALIB |
| NASHYD (1002) | Area (ha)= 43.20 Curve Number (CN)= 78.4
| ID= 1 DT= 5.0 min | Ia (mm)= 5.93 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.40

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

** SIMULATION : 100yr 24hr 15min SCS **

| READ STORM | Filename: C:\Users\JBirchard\AppData
| | ata\Local\Temp\

----- 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 6.167 2.11 12.250 161.57 18.33 2.38
0.167 0.00 6.250 2.11 12.333 19.03 18.42 2.38
0.250 0.00 6.333 2.38 12.417 19.01 18.50 2.38
0.333 1.45 6.417 2.38 12.500 19.01 18.58 2.38
0.417 1.45 6.500 2.38 12.583 19.01 18.67 2.38

0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58

4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 4.125

PEAK FLOW (cms)= 5.679 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 81.060
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.614

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

SHIFT HYD(0606)				
IN= 2----> OUT= 1				
SHIFT= 79.2 min				

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID= 2 (1002):	43.20	5.68	12.50	81.06
SHIFT ID= 1 (0606):	43.20	5.68	13.75	81.06

CALIB			
NASHYD (1072)			
ID= 1 DT= 5.0 min			

	Area	(ha)=	12.53
	Ia	(mm)=	9.95
	U.H. Tp(hrs)=		0.50
	Curve Number (CN)=		74.7
	# of Linear Res.(N)=		3.00

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58

4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.957

PEAK FLOW (cms)= 1.233 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 71.586
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.542

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

ADD HYD (0804)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1072):	12.53	1.233	12.67	71.59
+ ID2= 2 (0606):	43.20	5.679	13.75	81.06
=====				
ID = 3 (0804):	55.73	6.051	13.75	78.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB

| NASHYD (1073) | Area (ha)= 19.10 Curve Number (CN)= 71.9
| ID= 1 DT= 5.0 min | Ia (mm)= 9.90 # of Linear Res.(N)= 3.00
----- U.H. Tp(hrs)= 0.48

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

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58

3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.520

PEAK FLOW (cms)= 1.809 (i)

TIME TO PEAK (hrs)= 12.583

RUNOFF VOLUME (mm)= 67.343

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.510

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

CALIB	
NASHYD (1004)	Area (ha)= 10.95 Curve Number (CN)= 78.0
ID= 1 DT= 5.0 min	Ia (mm)= 7.55 # of Linear Res.(N)= 3.00
-----	U.H. Tp(hrs)= 0.15

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58

3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 2.788

PEAK FLOW (cms)= 2.700 (i)

TIME TO PEAK (hrs)= 12.250

RUNOFF VOLUME (mm)= 78.528

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.595

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

CALIB			
NASHYD (1003)			
ID= 1 DT= 5.0 min			

Area (ha)=	14.65	Curve Number (CN)=	75.1
Ia (mm)=	8.92	# of Linear Res.(N)=	3.00
U.H. Tp(hrs)=	0.16		

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58

3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 3.497

PEAK FLOW (cms)= 3.186 (i)

TIME TO PEAK (hrs)= 12.250

RUNOFF VOLUME (mm)= 72.749

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.551

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

ADD HYD (0157)				
1 + 2 = 3				

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1003):	14.65	3.186	12.25	72.75
+ ID2= 2 (1004):	10.95	2.700	12.25	78.53
=====				
ID = 3 (0157):	25.60	5.885	12.25	75.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| SHIFT HYD(0607)|
| IN= 2---> OUT= 1 |
SHIFT= 75.8 min
ID= 2 (0157): 25.60 5.89 12.25 75.22
SHIFT ID= 1 (0607): 25.60 5.89 13.50 75.22

| ADD HYD (0811)|
1 + 2 = 3
ID1= 1 (1073): 19.10 1.809 12.58 67.34
+ ID2= 2 (0607): 25.60 5.885 13.50 75.22
=====

ID = 3 (0811): 44.70 6.587 13.50 71.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| DUHYD (0127)|
| Inlet Cap.= 0.400|
| #of Inlets= 1|
Total(cms)= 0.4
TOTAL HYD.(ID= 1): 44.70 6.59 13.50 71.85
=====

MAJOR SYS.(ID= 2): 23.70 6.19 13.50 71.85
MINOR SYS.(ID= 3): 21.00 0.40 12.00 71.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (8041)|
1 + 2 = 3
ID1= 1 (0127): 23.70 6.187 13.50 71.85
+ ID2= 2 (0804): 55.73 6.051 13.75 78.93
=====

ID = 3 (8041): 79.43 10.895 13.58 76.82

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0604)

| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->
Distance Elevation Manning
0.00 2.00 0.0800
8.00 1.50 0.0800 /0.5000
11.25 0.50 0.5000 Main Channel
11.75 0.50 0.5000 Main Channel
15.00 1.50 0.5000 /0.0800 Main Channel
23.00 2.00 0.0800

<----- TRAVEL TIME TABLE ----->
DEPTH ELEV VOLUME FLOW RATE VELOCITY TRAV.TIME
(m) (m) (cu.m.) (cms) (m/s) (min)
0.08 0.58 .119E+02 0.0 0.08 43.46
0.16 0.66 .320E+02 0.0 0.14 23.92
0.24 0.74 .601E+02 0.1 0.20 16.93
0.32 0.82 .964E+02 0.1 0.25 13.32
0.39 0.89 .141E+03 0.2 0.30 11.10
0.47 0.97 .193E+03 0.3 0.35 9.59
0.55 1.05 .254E+03 0.5 0.39 8.49
0.63 1.13 .322E+03 0.7 0.44 7.65
0.71 1.21 .399E+03 1.0 0.48 6.99
0.79 1.29 .484E+03 1.3 0.52 6.45
0.87 1.37 .577E+03 1.6 0.56 6.00
0.95 1.45 .678E+03 2.0 0.59 5.63
1.03 1.53 .789E+03 2.5 0.64 5.23
1.11 1.61 .933E+03 3.2 0.69 4.85
1.18 1.68 .112E+04 4.1 0.73 4.57
1.26 1.76 .134E+04 5.2 0.77 4.32
1.34 1.84 .160E+04 6.5 0.81 4.09
1.42 1.92 .191E+04 8.2 0.86 3.88
1.50 2.00 .225E+04 10.2 0.91 3.67

**** WARNING: TRAVEL TIME TABLE EXCEEDED

<---- hydrograph ----> <-pipe / channel->
AREA QPEAK TPEAK R.V. MAX DEPTH MAX VEL
(ha) (cms) (hrs) (mm) (m) (m/s)
INFLOW : ID= 2 (8041) 79.43 10.90 13.58 76.82 1.49 0.90
OUTFLOW: ID= 1 (0604) 79.43 10.94 13.67 76.82 1.50 0.91

| CALIB |
| NASHYD (1001)| Area (ha)= 50.05 Curve Number (CN)= 73.6
| ID= 1 DT= 5.0 min | Ia (mm)= 8.88 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.68

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58

3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 2.811

PEAK FLOW (cms)= 3.881 (i)

TIME TO PEAK (hrs)= 12.833

RUNOFF VOLUME (mm)= 70.758

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.536

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

 | ROUTE CHN(0600)|
 | IN= 2----> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->
 Distance Elevation Manning
 7.91 218.58 0.0450
 9.07 218.37 0.0300 /0.0300 Main Channel
 10.93 217.44 0.0300 Main Channel

11.49	217.16	0.0300	Main Channel
11.63	217.09	0.0300	Main Channel
11.82	216.99	0.0300	Main Channel
12.45	216.98	0.0300	Main Channel
12.51	216.99	0.0300	Main Channel
13.08	217.05	0.0300	Main Channel
13.37	217.23	0.0300	Main Channel
13.48	217.25	0.0300	Main Channel
13.51	217.26	0.0300	Main Channel
15.95	218.40	0.0300	Main Channel
16.27	218.50	0.0300 / 0.0450	Main Channel
17.44	218.44	0.0450	
17.58	218.44	0.0450	
19.40	218.39	0.0450	
19.42	218.40	0.0450	
20.00	218.42	0.0450	
20.68	218.50	0.0450	

CALIB			
NASHYD (1071)			
ID= 1 DT= 5.0 min			

Area	(ha)=	23.31	Curve Number (CN)= 65.3
Ia	(mm)=	9.60	# of Linear Res.(N)= 3.00
U.H. Tp	(hrs)=	0.74	

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

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	217.06	.427E+02	0.0	0.53	18.20
0.15	217.13	.109E+03	0.2	0.86	11.12
0.23	217.21	.188E+03	0.4	1.11	8.66
0.30	217.29	.282E+03	0.6	1.28	7.48
0.38	217.36	.391E+03	1.0	1.46	6.58
0.45	217.44	.513E+03	1.4	1.62	5.93
0.54	217.52	.660E+03	2.1	1.82	5.26
0.62	217.60	.823E+03	2.9	2.00	4.79
0.70	217.68	.100E+04	3.8	2.16	4.44
0.78	217.76	.120E+04	4.8	2.30	4.16
0.86	217.85	.141E+04	6.0	2.44	3.93
0.95	217.93	.163E+04	7.3	2.57	3.73
1.03	218.01	.188E+04	8.8	2.69	3.56
1.11	218.09	.213E+04	10.4	2.81	3.41
1.19	218.17	.241E+04	12.2	2.92	3.28
1.27	218.25	.270E+04	14.2	3.03	3.16
1.35	218.34	.300E+04	16.4	3.13	3.06
1.44	218.42	.334E+04	18.8	3.23	2.97
1.52	218.50	.384E+04	21.4	3.20	2.99

<---- hydrograph ---->

<-pipe / channel->

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (1001)	50.05	3.88	12.83	70.76	0.71	2.17
OUTFLOW: ID= 1 (0600)	50.05	3.87	12.92	70.76	0.71	2.17

---- 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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58

3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.203

PEAK FLOW (cms)= 1.368 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 58.210
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.441

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

1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1071):	23.31	1.368	12.92	58.21
+ ID2= 2 (0600):	50.05	3.866	12.92	70.76
ID = 3 (0805):	73.36	5.234	12.92	66.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0806)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0604):	79.43	10.941	13.67	76.82
+ ID2= 2 (0805):	73.36	5.234	12.92	66.77
ID = 3 (0806):	152.79	14.246	13.67	71.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0601)
IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	218.60	0.0450	
7.91	218.58	0.0450 /0.0300	Main Channel
10.93	217.44	0.0300	Main Channel
11.49	217.16	0.0300	Main Channel
11.63	217.09	0.0300	Main Channel
11.82	216.99	0.0300	Main Channel
12.45	216.98	0.0300	Main Channel
12.51	216.99	0.0300	Main Channel
13.08	217.05	0.0300	Main Channel
13.37	217.23	0.0300	Main Channel
13.48	217.25	0.0300	Main Channel
13.51	217.26	0.0300	Main Channel
15.95	218.40	0.0300	Main Channel
16.27	218.50	0.0300 /0.0450	Main Channel
17.44	218.44	0.0450	
17.58	218.44	0.0450	
19.40	218.39	0.0450	
19.42	218.40	0.0450	
20.00	218.42	0.0450	
20.68	218.50	0.0450	

| ADD HYD (0805)|

<----- TRAVEL TIME TABLE ----->
DEPTH ELEV VOLUME FLOW RATE VELOCITY TRAV.TIME

(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	217.06	.156E+02	0.1	0.88	3.96
0.15	217.13	.401E+02	0.3	1.44	2.42
0.23	217.21	.690E+02	0.6	1.85	1.89
0.30	217.29	.103E+03	1.1	2.15	1.63
0.38	217.36	.143E+03	1.7	2.44	1.43
0.46	217.44	.188E+03	2.4	2.71	1.29
0.53	217.51	.238E+03	3.3	2.93	1.19
0.61	217.59	.294E+03	4.4	3.15	1.11
0.68	217.67	.356E+03	5.7	3.35	1.04
0.76	217.74	.423E+03	7.2	3.55	0.98
0.84	217.82	.497E+03	8.9	3.75	0.93
0.91	217.89	.576E+03	10.8	3.94	0.89
0.99	217.97	.661E+03	13.0	4.12	0.85
1.06	218.05	.752E+03	15.4	4.30	0.81
1.14	218.12	.849E+03	18.1	4.48	0.78
1.22	218.20	.951E+03	21.1	4.65	0.75
1.29	218.27	.106E+04	24.3	4.82	0.73
1.37	218.35	.117E+04	27.9	4.99	0.70
1.44	218.43	.130E+04	31.7	5.12	0.68

			<---- hydrograph ---->			<-pipe / channel->		
			AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
			(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0806)			152.79	14.25	13.67	71.99	1.03	4.22
OUTFLOW: ID= 1 (0601)			152.79	14.22	13.67	71.99	1.03	4.21

CALIB			
NASHYD (1062)		Area (ha)=	5.26
ID= 1 DT= 5.0 min		Ia (mm)=	6.63
-----		U.H. Tp(hrs)=	0.56
		Curve Number (CN)=	55.8
		# of Linear Res.(N)=	3.00

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38

0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58

4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.359

PEAK FLOW (cms)= 0.305 (i)
 TIME TO PEAK (hrs)= 12.750
 RUNOFF VOLUME (mm)= 48.128
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.365

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

ADD HYD (0802)					
1 + 2 = 3					

	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (1062):	5.26	0.305	12.75	48.13	
+ ID2= 2 (0601):	152.79	14.220	13.67	71.99	
=====					
ID = 3 (0802):	158.05	14.353	13.67	71.20	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0602)	
IN= 2---> OUT= 1	

Routing time step (min)'= 5.00	

<----- DATA FOR SECTION (1.1) ----->				
Distance	Elevation	Manning		
0.00	2.00	0.0800		
8.00	1.50	0.0800 /0.0300	Main Channel	
11.00	0.00	0.0300 /0.0300	Main Channel	
12.00	0.00	0.0300	Main Channel	
15.00	1.50	0.0300 /0.0800	Main Channel	

23.00 2.00 0.0800					
<----- TRAVEL TIME TABLE ----->					
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.11	0.11	.255E+02	0.2	1.85	1.80
0.21	0.21	.598E+02	0.8	2.73	1.22
0.32	0.32	.103E+03	1.7	3.39	0.98
0.42	0.42	.155E+03	3.1	3.95	0.84
0.53	0.53	.216E+03	4.8	4.44	0.75
0.63	0.63	.286E+03	7.0	4.89	0.68
0.74	0.74	.365E+03	9.7	5.31	0.63
0.84	0.84	.452E+03	12.9	5.71	0.58
0.95	0.95	.548E+03	16.7	6.09	0.55
1.05	1.05	.654E+03	21.1	6.45	0.52
1.16	1.16	.768E+03	26.1	6.80	0.49
1.26	1.26	.891E+03	31.8	7.14	0.47
1.37	1.37	.102E+04	38.2	7.48	0.45
1.47	1.47	.116E+04	45.4	7.80	0.43
1.58	1.58	.133E+04	54.7	8.23	0.41
1.68	1.68	.157E+04	65.6	8.38	0.40
1.79	1.79	.187E+04	77.8	8.31	0.40
1.89	1.89	.225E+04	91.5	8.13	0.41
2.00	2.00	.270E+04	106.7	7.91	0.42

<---- hydrograph ----> <-pipe / channel->						
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0802)	158.05	14.35	13.67	71.20	0.88	5.85
OUTFLOW: ID= 1 (0602)	158.05	14.32	13.67	71.20	0.88	5.84

CALIB			
NASHYD (1063)			
ID= 1 DT= 5.0 min			

Area	(ha)=	8.13	Curve Number (CN)= 62.6
Ia	(mm)=	6.37	# of Linear Res.(N)= 3.00
U.H. Tp	(hrs)=	0.60	

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38

0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58

4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.518

PEAK FLOW (cms)= 0.539 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 56.898
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.431

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

| CALIB |
| NASHYD (0904) | Area (ha)= 9.08 Curve Number (CN)= 81.8
| ID= 1 DT= 5.0 min | Ia (mm)= 4.55 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.43

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38

0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58

4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.807

PEAK FLOW (cms)= 1.227 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 88.289
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.669

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

| CALIB |
| STANDHYD (1021) | Area (ha)= 16.01
| ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	8.01	8.01
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	326.70	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38

0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58

4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)=	161.57	118.38
over (min)	5.00	15.00
Storage Coeff. (min)=	4.29 (ii)	10.89 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.09

TOTALS

PEAK FLOW (cms)=	2.46	1.68	3.907 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	131.00	62.23	86.30
TOTAL RAINFALL (mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT =	0.99	0.47	0.65

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 59.0 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 (0807)				
1 + 2 = 3				

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1021):	16.01	3.907	12.25	86.30
+ ID2= 2 (1063):	8.13	0.539	12.75	56.90
=====				
ID = 3 (0807):	24.14	4.137	12.25	76.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0807)|
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0807):  24.14  4.137   12.25   76.40
+ ID2= 2 ( 0602): 158.05 14.325   13.67   71.20
=====
ID = 1 ( 0807): 182.19 14.846   13.67   71.89
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0807)|
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0807): 182.19 14.846   13.67   71.89
+ ID2= 2 ( 0904):  9.08  1.227   12.50   88.29
=====
ID = 3 ( 0807): 191.27 15.130   13.67   72.67
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ROUTE CHN( 0603)|
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00
-----
```

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.0300	Main Channel
11.00	0.00	0.0300 /0.0300	Main Channel
12.00	0.00	0.0300	Main Channel
15.00	1.50	0.0300 /0.0800	Main Channel
23.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.11	0.11	.510E+02	0.1	0.61	10.96
0.21	0.21	.120E+03	0.3	0.90	7.43
0.32	0.32	.206E+03	0.6	1.11	5.98
0.42	0.42	.310E+03	1.0	1.30	5.14
0.53	0.53	.432E+03	1.6	1.46	4.57
0.63	0.63	.572E+03	2.3	1.61	4.15
0.74	0.74	.729E+03	3.2	1.74	3.82

0.84	0.84	.904E+03	4.2	1.88	3.55
0.95	0.95	.110E+04	5.5	2.00	3.33
1.05	1.05	.131E+04	6.9	2.12	3.14
1.16	1.16	.154E+04	8.6	2.24	2.98
1.26	1.26	.178E+04	10.5	2.35	2.84
1.37	1.37	.205E+04	12.6	2.46	2.71
1.47	1.47	.233E+04	14.9	2.56	2.60
1.58	1.58	.266E+04	18.0	2.71	2.46
1.68	1.68	.313E+04	21.6	2.76	2.42
1.79	1.79	.375E+04	25.6	2.73	2.44
1.89	1.89	.450E+04	30.1	2.67	2.50
2.00	2.00	.540E+04	35.1	2.60	2.56

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	MAX DEPTH (m)	MAX VEL (m/s)
INFLOW : ID= 2 (0807)	191.27	15.13	13.67	72.67	1.48	2.57
OUTFLOW: ID= 1 (0603)	191.27	14.85	13.67	72.67	1.47	2.56

```
-----
| CALIB
| NASHYD ( 0902)|
| ID= 1 DT= 5.0 min |
-----
Area (ha)= 4.38 Curve Number (CN)= 78.4
Ia (mm)= 5.62 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.56
```

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

---- 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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38

1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58

5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.299

PEAK FLOW (cms)= 0.450 (i)
 TIME TO PEAK (hrs)= 12.667
 RUNOFF VOLUME (mm)= 81.337
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.616

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

ADD HYD (8031)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0603):		191.27	14.854	13.67	72.67
+ ID2= 2 (0902):		4.38	0.450	12.67	81.34
=====					
ID = 3 (8031):		195.65	15.036	13.67	72.86

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB		Area	(ha)=	8.33	Curve Number (CN)= 60.3
NASHYD (1061)		Ia	(mm)=	6.73	# of Linear Res.(N)= 3.00
ID= 1 DT= 5.0 min		U.H. Tp(hrs)=	0.50		

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38

0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58

4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.636

PEAK FLOW (cms)= 0.590 (i)
 TIME TO PEAK (hrs)= 12.667
 RUNOFF VOLUME (mm)= 53.648
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.406

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

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| ROUTEPIPE( 0701)| PIPE Number   = 1.00
| IN= 2---> OUT= 1 | Diameter (mm)= 525.00
| DT= 5.0 min      | Length (m)= 435.00
-----
|                     | Slope (m/m)= 0.010
|                     | Manning n   = 0.013

```

**** WARNING: MINIMUM PIPE SIZE REQUIRED = 591.19 (mm)FOR FREE FLOW.
 THIS SIZE WAS USED IN THE ROUTING.
 THE CAPACITY OF THIS PIPE = 0.59 (cms)

<----- TRAVEL TIME TABLE ----->				
DEPTH (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME min
0.03	.241E+01	0.0	0.57	12.69
0.06	.670E+01	0.0	0.89	8.13
0.09	.121E+02	0.0	1.15	6.32
0.12	.183E+02	0.1	1.36	5.31
0.16	.251E+02	0.1	1.55	4.67
0.19	.323E+02	0.1	1.72	4.22
0.22	.399E+02	0.2	1.86	3.89
0.25	.478E+02	0.2	1.99	3.64

0.28	.557E+02	0.3	2.10	3.45
0.31	.637E+02	0.3	2.20	3.30
0.34	.717E+02	0.4	2.28	3.18
0.37	.795E+02	0.4	2.35	3.09
0.40	.871E+02	0.5	2.40	3.02
0.44	.943E+02	0.5	2.43	2.98
0.47	.101E+03	0.6	2.45	2.96
0.50	.107E+03	0.6	2.45	2.96
0.53	.113E+03	0.6	2.42	2.99
0.56	.117E+03	0.6	2.36	3.07
0.59	.119E+03	0.6	2.15	3.37

	<---- hydrograph ---->	<-pipe / channel->				
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (1061)	8.33	0.59	12.67	53.65	0.49	2.45
OUTFLOW: ID= 1 (0701)	8.33	0.59	12.67	53.65	0.48	2.45

| ROUTE CHN(0608) |
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
10.00	1.50	0.0800 /0.0300	Main Channel
20.00	0.50	0.0300	Main Channel
21.00	0.50	0.0300	Main Channel
31.00	1.50	0.0300 /0.0800	Main Channel
41.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.653E+02	0.1	0.75	10.70
0.15	0.65	.187E+03	0.4	1.10	7.27
0.23	0.73	.366E+03	1.1	1.39	5.76
0.31	0.81	.602E+03	2.1	1.65	4.86
0.38	0.88	.895E+03	3.5	1.88	4.25
0.46	0.96	.124E+04	5.5	2.10	3.80
0.54	1.04	.165E+04	8.0	2.31	3.46
0.62	1.12	.211E+04	11.1	2.51	3.18
0.69	1.19	.263E+04	14.8	2.71	2.96
0.77	1.27	.321E+04	19.3	2.89	2.77
0.85	1.35	.384E+04	24.6	3.07	2.61
0.92	1.42	.453E+04	30.6	3.24	2.47
1.00	1.50	.528E+04	37.6	3.41	2.34
1.08	1.58	.619E+04	48.1	3.73	2.15

1.17	1.67	.723E+04	59.7	3.97	2.02
1.25	1.75	.840E+04	72.6	4.15	1.93
1.33	1.83	.971E+04	86.7	4.29	1.87
1.42	1.92	.111E+05	102.0	4.39	1.82
1.50	2.00	.127E+05	118.7	4.48	1.79

	<---- hydrograph ---->	<-pipe / channel->				
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0127)	21.00	0.40	12.00	71.85	0.15	1.06
OUTFLOW: ID= 1 (0608)	21.00	0.40	12.25	71.85	0.15	1.05

| CALIB |
| NASHYD (0105) | Area (ha)= 12.80 Curve Number (CN)= 69.9
| ID= 1 DT= 5.0 min | Ia (mm)= 8.29 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.47

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

----- TRANSFORMED HYETOGRAPH -----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38

2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.040

PEAK FLOW (cms)= 1.193 (i)
 TIME TO PEAK (hrs)= 12.583
 RUNOFF VOLUME (mm)= 65.655
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.497

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

ADD HYD (0812)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0105):	12.80	1.193	12.58	65.65
+ ID2= 2 (0608):	21.00	0.400	12.25	71.85
ID = 3 (0812):	33.80	1.593	12.58	69.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	Area (ha)=	6.41	
STANDHYD (1041)	Total Imp(%)=	50.00	Dir. Conn.(%)= 35.00
ID= 1 DT= 5.0 min			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.20	3.20
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	206.72	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38

0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58

4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)=	161.57	171.59
over (min)	5.00	10.00
Storage Coeff. (min)=	3.26 (ii)	8.95 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.27	0.12

TOTALS

PEAK FLOW (cms)=	1.00	1.15	2.151 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.00	91.19	105.13
TOTAL RAINFALL (mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT =	0.99	0.69	0.80

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

(i) CN PROCEDURE SELECTED FOR PVIOUS LOSSES:
CN* = 79.0 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 (0816)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1041):	6.41	2.151	12.25	105.13
+ ID2= 2 (0812):	33.80	1.593	12.58	69.51
ID = 3 (0816):	40.21	3.193	12.25	75.19

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (1075)	Area (ha)=	5.30	Curve Number (CN)= 76.2
ID= 1 DT= 5.0 min	Ia (mm)=	7.94	# of Linear Res.(N)= 3.00
-----	U.H. Tp(hrs)=	0.38	

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58

3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.533

PEAK FLOW (cms)= 0.676 (i)

TIME TO PEAK (hrs)= 12.500

RUNOFF VOLUME (mm)= 75.659

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.573

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

ROUTE CHN(0609)	
IN= 2----> OUT= 1	Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
10.00	1.50	0.0800 /0.0350	Main Channel
20.00	0.50	0.0350	Main Channel
21.00	0.50	0.0350	Main Channel
31.00	1.50	0.0350 /0.0800	Main Channel
41.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.789E+02	0.1	0.60	16.07
0.15	0.65	.227E+03	0.3	0.89	10.92
0.23	0.73	.443E+03	0.9	1.12	8.65
0.31	0.81	.728E+03	1.7	1.32	7.30
0.38	0.88	.108E+04	2.8	1.51	6.39
0.46	0.96	.150E+04	4.4	1.69	5.71
0.54	1.04	.199E+04	6.4	1.86	5.20
0.62	1.12	.255E+04	8.9	2.02	4.78
0.69	1.19	.318E+04	11.9	2.18	4.44
0.77	1.27	.388E+04	15.5	2.32	4.16
0.85	1.35	.464E+04	19.8	2.47	3.92
0.92	1.42	.548E+04	24.6	2.61	3.71
1.00	1.50	.638E+04	30.2	2.75	3.52
1.08	1.58	.748E+04	38.7	3.00	3.22
1.17	1.67	.873E+04	48.1	3.19	3.03
1.25	1.75	.101E+05	58.4	3.34	2.89
1.33	1.83	.117E+05	69.9	3.45	2.80
1.42	1.92	.135E+05	82.4	3.55	2.73
1.50	2.00	.154E+05	95.9	3.62	2.67

<---- hydrograph ---->

<-pipe / channel->

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (1075)	5.30	0.68	12.50	75.66	0.20	1.02
OUTFLOW: ID= 1 (0609)	5.30	0.62	12.67	75.66	0.19	1.00

CALIB						
NASHYD (1081)	Area (ha)=	18.64	Curve Number (CN)=	74.9		
ID= 1 DT= 5.0 min	Ia (mm)=	8.96	# of Linear Res.(N)=	3.00		
	U.H. Tp(hrs)=	0.55				

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58

4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.294

PEAK FLOW (cms)= 1.738 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 72.725
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.551

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

| CALIB |
| NASHVD (1074) | Area (ha)= 6.00 Curve Number (CN)= 73.8
| ID= 1 DT= 5.0 min | Ia (mm)= 9.57 # of Linear Res.(N)= 3.00
|-----| U.H. Tp(hrs)= 0.40

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58

4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.573

PEAK FLOW (cms)= 0.685 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 70.494
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.534

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

| ROUTE CHN(0115) |
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	2.00	0.0800	
10.00	1.50	0.0800 /0.0350	Main Channel
20.00	0.50	0.0350	Main Channel
21.00	0.50	0.0350	Main Channel
31.00	1.50	0.0350 /0.0800	Main Channel
41.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->
DEPTH ELEV VOLUME FLOW RATE VELOCITY TRAV.TIME

(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.599E+02	0.1	0.38	19.07
0.15	0.65	.172E+03	0.2	0.57	12.95
0.23	0.73	.336E+03	0.5	0.71	10.26
0.31	0.81	.552E+03	1.1	0.85	8.66
0.38	0.88	.820E+03	1.8	0.97	7.57
0.46	0.96	.114E+04	2.8	1.08	6.78
0.54	1.04	.151E+04	4.1	1.19	6.16
0.62	1.12	.194E+04	5.7	1.29	5.67
0.69	1.19	.241E+04	7.6	1.39	5.27
0.77	1.27	.294E+04	9.9	1.49	4.93
0.85	1.35	.352E+04	12.6	1.58	4.64
0.92	1.42	.416E+04	15.8	1.67	4.39
1.00	1.50	.484E+04	19.3	1.76	4.18
1.08	1.58	.567E+04	24.7	1.92	3.82
1.17	1.67	.662E+04	30.7	2.04	3.59
1.25	1.75	.770E+04	37.4	2.14	3.43
1.33	1.83	.890E+04	44.7	2.21	3.32
1.42	1.92	.102E+05	52.7	2.27	3.23
1.50	2.00	.117E+05	61.4	2.32	3.17

<---- hydrograph ----> <-pipe / channel->
AREA QPEAK TPEAK R.V. MAX DEPTH MAX VEL
(ha) (cms) (hrs) (mm) (m) (m/s)
INFLOW : ID= 2 (1074) 6.00 0.68 12.50 70.49 0.25 0.75
OUTFLOW: ID= 1 (0115) 6.00 0.63 12.67 70.49 0.24 0.73

| CALIB |
| NASHYD (1082) | Area (ha)= 4.21 Curve Number (CN)= 74.6
| ID= 1 DT= 5.0 min | Ia (mm)= 9.08 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.56

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38

0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58

4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.287

PEAK FLOW (cms)= 0.384 (i)
 TIME TO PEAK (hrs)= 12.667
 RUNOFF VOLUME (mm)= 72.152
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.547

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

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-----
| ADD HYD ( 0116) |
| 1 + 2 = 3 |
-----
          AREA    QPEAK    TPEAK    R.V.
          (ha)    (cms)    (hrs)    (mm)
ID1= 1 ( 1082):    4.21    0.384    12.67    72.15
+ ID2= 2 ( 0115):    6.00    0.635    12.67    70.49
=====
ID = 3 ( 0116):    10.21    1.018    12.67    71.18

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| ROUTE CHN( 0118) |
| IN= 2--> OUT= 1 | Routing time step (min)'= 5.00
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<----- DATA FOR SECTION ( 1.1) ----->
Distance    Elevation    Manning
    0.00        2.00    0.0350    Main Channel
    1.50        1.50    0.0350    Main Channel
    3.00        2.00    0.0350    Main Channel

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<----- TRAVEL TIME TABLE ----->

DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.03	1.53	.831E+00	0.0	0.25	26.39
0.05	1.55	.332E+01	0.0	0.40	16.62
0.08	1.58	.748E+01	0.0	0.53	12.69
0.11	1.61	.133E+02	0.0	0.64	10.47
0.13	1.63	.208E+02	0.0	0.74	9.02
0.16	1.66	.299E+02	0.1	0.83	7.99
0.18	1.68	.407E+02	0.1	0.92	7.21
0.21	1.71	.532E+02	0.1	1.01	6.60
0.24	1.74	.673E+02	0.2	1.09	6.10
0.26	1.76	.831E+02	0.2	1.17	5.69
0.29	1.79	.101E+03	0.3	1.25	5.34
0.32	1.82	.120E+03	0.4	1.32	5.03
0.34	1.84	.140E+03	0.5	1.40	4.77
0.37	1.87	.163E+03	0.6	1.47	4.54
0.39	1.89	.187E+03	0.7	1.54	4.34
0.42	1.92	.213E+03	0.9	1.60	4.16
0.45	1.95	.240E+03	1.0	1.67	3.99
0.47	1.97	.269E+03	1.2	1.74	3.84
0.50	2.00	.300E+03	1.3	1.80	3.71

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	MAX DEPTH (m)	MAX VEL (m/s)
INFLOW : ID= 2 (0116)	10.21	1.02	12.67	71.18	0.45	1.68
OUTFLOW: ID= 1 (0118)	10.21	1.01	12.75	71.17	0.45	1.67

ADD HYD (0813)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				
ID1= 1 (1081):	18.64	1.738	12.67	72.73
+ ID2= 2 (0118):	10.21	1.013	12.75	71.17
ID = 3 (0813):	28.85	2.741	12.75	72.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0813)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1				
ID1= 3 (0813):	28.85	2.741	12.75	72.18
+ ID2= 2 (0609):	5.30	0.621	12.67	75.66

=====

ID = 1 (0813): 34.15 3.362 12.67 72.72

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ROUTE CHN(0610)|

| IN= 2--> OUT= 1 | Routing time step (min)'= 5.00

Distance	Elevation	Manning	
0.00	2.00	0.0300	Main Channel
1.50	1.50	0.0300	Main Channel
3.00	2.00	0.0300	Main Channel

DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.03	1.53	.831E+00	0.0	0.18	37.17
0.05	1.55	.332E+01	0.0	0.28	23.41
0.08	1.58	.748E+01	0.0	0.37	17.87
0.11	1.61	.133E+02	0.0	0.45	14.75
0.13	1.63	.208E+02	0.0	0.52	12.71
0.16	1.66	.299E+02	0.0	0.59	11.26
0.18	1.68	.407E+02	0.1	0.66	10.16
0.21	1.71	.532E+02	0.1	0.72	9.29
0.24	1.74	.673E+02	0.1	0.78	8.59
0.26	1.76	.831E+02	0.2	0.83	8.01
0.29	1.79	.101E+03	0.2	0.89	7.51
0.32	1.82	.120E+03	0.3	0.94	7.09
0.34	1.84	.140E+03	0.3	0.99	6.72
0.37	1.87	.163E+03	0.4	1.04	6.40
0.39	1.89	.187E+03	0.5	1.09	6.11
0.42	1.92	.213E+03	0.6	1.14	5.85
0.45	1.95	.240E+03	0.7	1.19	5.62
0.47	1.97	.269E+03	0.8	1.23	5.41
0.50	2.00	.300E+03	1.0	1.28	5.22

**** WARNING: TRAVEL TIME TABLE EXCEEDED

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	MAX DEPTH (m)	MAX VEL (m/s)
INFLOW : ID= 2 (0813)	34.15	3.36	12.67	72.72	0.49	1.27
OUTFLOW: ID= 1 (0610)	34.15	3.27	12.83	72.71	0.50	1.28

| CALIB |

| STANDHYD (1042) | Area (ha)= 2.09
| ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 1.04 1.04
Dep. Storage (mm)= 1.00 5.00
Average Slope (%)= 1.00 2.00
Length (m)= 118.04 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 6.167 2.11 12.250 161.57 18.33 2.38
0.167 0.00 6.250 2.11 12.333 19.03 18.42 2.38
0.250 0.00 6.333 2.38 12.417 19.01 18.50 2.38
0.333 1.45 6.417 2.38 12.500 19.01 18.58 2.38
0.417 1.45 6.500 2.38 12.583 19.01 18.67 2.38
0.500 1.45 6.583 2.38 12.667 19.01 18.75 2.38
0.583 1.45 6.667 2.38 12.750 19.01 18.83 2.38
0.667 1.45 6.750 2.38 12.833 9.77 18.92 2.38
0.750 1.45 6.833 2.38 12.917 9.77 19.00 2.38
0.833 1.45 6.917 2.38 13.000 9.77 19.08 2.38
0.917 1.45 7.000 2.38 13.083 9.77 19.17 2.38
1.000 1.45 7.083 2.38 13.167 9.77 19.25 2.38
1.083 1.45 7.167 2.38 13.250 9.77 19.33 2.38
1.167 1.45 7.250 2.38 13.333 7.13 19.42 2.38
1.250 1.45 7.333 2.90 13.417 7.13 19.50 2.38
1.333 1.45 7.417 2.90 13.500 7.13 19.58 2.38
1.417 1.45 7.500 2.90 13.583 7.13 19.67 2.38
1.500 1.45 7.583 2.90 13.667 7.13 19.75 2.38
1.583 1.45 7.667 2.90 13.750 7.13 19.83 2.38
1.667 1.45 7.750 2.90 13.833 5.54 19.92 2.38
1.750 1.45 7.833 2.90 13.917 5.54 20.00 2.38
1.833 1.45 7.917 2.90 14.000 5.54 20.08 2.38
1.917 1.45 8.000 2.90 14.083 5.54 20.17 2.38
2.000 1.45 8.083 2.90 14.167 5.54 20.25 2.38
2.083 1.45 8.167 2.90 14.250 5.54 20.33 1.58
2.167 1.45 8.250 2.90 14.333 3.96 20.42 1.58
2.250 1.45 8.333 3.43 14.417 3.96 20.50 1.58
2.333 1.72 8.417 3.43 14.500 3.96 20.58 1.58
2.417 1.72 8.500 3.43 14.583 3.96 20.67 1.58
2.500 1.72 8.583 3.43 14.667 3.96 20.75 1.58
2.583 1.72 8.667 3.43 14.750 3.96 20.83 1.58
2.667 1.72 8.750 3.43 14.833 3.96 20.92 1.58
2.750 1.72 8.833 3.70 14.917 3.96 21.00 1.58
2.833 1.72 8.917 3.70 15.000 3.96 21.08 1.58

2.917 1.72 9.000 3.70 15.083 3.96 21.17 1.58
3.000 1.72 9.083 3.70 15.167 3.96 21.25 1.58
3.083 1.72 9.167 3.70 15.250 3.96 21.33 1.58
3.167 1.72 9.250 3.70 15.333 3.96 21.42 1.58
3.250 1.72 9.333 4.22 15.417 3.96 21.50 1.58
3.333 1.72 9.417 4.22 15.500 3.96 21.58 1.58
3.417 1.72 9.500 4.22 15.583 3.96 21.67 1.58
3.500 1.72 9.583 4.22 15.667 3.96 21.75 1.58
3.583 1.72 9.667 4.22 15.750 3.96 21.83 1.58
3.667 1.72 9.750 4.22 15.833 3.96 21.92 1.58
3.750 1.72 9.833 4.75 15.917 3.96 22.00 1.58
3.833 1.72 9.917 4.75 16.000 3.96 22.08 1.58
3.917 1.72 10.000 4.75 16.083 3.96 22.17 1.58
4.000 1.72 10.083 4.75 16.167 3.96 22.25 1.58
4.083 1.72 10.167 4.75 16.250 3.96 22.33 1.58
4.167 1.72 10.250 4.75 16.333 2.38 22.42 1.58
4.250 1.72 10.333 6.07 16.417 2.38 22.50 1.58
4.333 2.11 10.417 6.07 16.500 2.38 22.58 1.58
4.417 2.11 10.500 6.07 16.583 2.38 22.67 1.58
4.500 2.11 10.583 6.07 16.667 2.38 22.75 1.58
4.583 2.11 10.667 6.07 16.750 2.38 22.83 1.58
4.667 2.11 10.750 6.07 16.833 2.38 22.92 1.58
4.750 2.11 10.833 8.18 16.917 2.38 23.00 1.58
4.833 2.11 10.917 8.18 17.000 2.38 23.08 1.58
4.917 2.11 11.000 8.18 17.083 2.38 23.17 1.58
5.000 2.11 11.083 8.18 17.167 2.38 23.25 1.58
5.083 2.11 11.167 8.18 17.250 2.38 23.33 1.58
5.167 2.11 11.250 8.18 17.333 2.38 23.42 1.58
5.250 2.11 11.333 12.67 17.417 2.38 23.50 1.58
5.333 2.11 11.417 12.67 17.500 2.38 23.58 1.58
5.417 2.11 11.500 12.67 17.583 2.38 23.67 1.58
5.500 2.11 11.583 12.67 17.667 2.38 23.75 1.58
5.583 2.11 11.667 12.67 17.750 2.38 23.83 1.58
5.667 2.11 11.750 12.67 17.833 2.38 23.92 1.58
5.750 2.11 11.833 39.07 17.917 2.38 24.00 1.58
5.833 2.11 11.917 39.07 18.000 2.38 24.08 1.58
5.917 2.11 12.000 39.07 18.083 2.38 24.17 1.58
6.000 2.11 12.083 161.55 18.167 2.38 24.25 1.58
6.083 2.11 12.167 161.57 18.250 2.38

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 2.33 (ii) 8.02 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.30 0.13

TOTALS
PEAK FLOW (cms)= 0.33 0.39 0.719 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19 105.12
TOTAL RAINFALL (mm)= 132.00 132.00 132.00

RUNOFF COEFFICIENT = 0.99 0.69 0.80

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 ( 0814) |
| 1 + 2 = 3 |
|-----|
| ID1= 1 ( 1042): | AREA QPEAK TPEAK R.V. |
|                   | (ha) (cms) (hrs) (mm) |
| + ID2= 2 ( 0610): | 34.15 3.272 12.83 72.71 |
|-----|
| ID = 3 ( 0814): | 36.24 3.374 12.75 74.58 |
|-----|
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ROUTE CHN( 0611) |
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00
|-----|
```

```
<----- DATA FOR SECTION ( 1.1) ----->
Distance Elevation Manning
0.00 2.00 0.0300 Main Channel
1.50 1.50 0.0300 Main Channel
3.00 2.00 0.0300 Main Channel
```

```
<----- TRAVEL TIME TABLE ----->
DEPTH ELEV VOLUME FLOW RATE VELOCITY TRAV.TIME
(m) (m) (cu.m.) (cms) (m/s) (min)
0.03 1.53 .102E+01 0.0 0.18 45.53
0.05 1.55 .407E+01 0.0 0.28 28.68
0.08 1.58 .916E+01 0.0 0.37 21.89
0.11 1.61 .163E+02 0.0 0.45 18.07
0.13 1.63 .255E+02 0.0 0.52 15.57
0.16 1.66 .366E+02 0.0 0.59 13.79
0.18 1.68 .499E+02 0.1 0.66 12.44
0.21 1.71 .652E+02 0.1 0.72 11.38
0.24 1.74 .825E+02 0.1 0.78 10.52
0.26 1.76 .102E+03 0.2 0.83 9.81
0.29 1.79 .123E+03 0.2 0.89 9.20
0.32 1.82 .147E+03 0.3 0.94 8.69
0.34 1.84 .172E+03 0.3 0.99 8.23
0.37 1.87 .200E+03 0.4 1.04 7.84
```

0.39	1.89	.229E+03	0.5	1.09	7.49
0.42	1.92	.261E+03	0.6	1.14	7.17
0.45	1.95	.294E+03	0.7	1.19	6.89
0.47	1.97	.330E+03	0.8	1.23	6.63
0.50	2.00	.367E+03	1.0	1.28	6.39

**** WARNING: TRAVEL TIME TABLE EXCEEDED

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0814)	36.24	3.37	12.75	74.58	0.49	1.27
OUTFLOW: ID= 1 (0611)	36.24	3.26	12.92	74.58	0.50	1.28

```
-----
| CALIB |
| STANDHYD ( 1032) |
| ID= 1 DT= 5.0 min |
|-----|
Area (ha)= 1.68
Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00
```

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.84	0.84
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	105.83	40.00
Mannings n =	0.013	0.250

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

```
----- TRANSFORMED HYETOGRAPH -----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
0.083 0.00 | 6.167 2.11 | 12.250 161.57 | 18.33 2.38
0.167 0.00 | 6.250 2.11 | 12.333 19.03 | 18.42 2.38
0.250 0.00 | 6.333 2.38 | 12.417 19.01 | 18.50 2.38
0.333 1.45 | 6.417 2.38 | 12.500 19.01 | 18.58 2.38
0.417 1.45 | 6.500 2.38 | 12.583 19.01 | 18.67 2.38
0.500 1.45 | 6.583 2.38 | 12.667 19.01 | 18.75 2.38
0.583 1.45 | 6.667 2.38 | 12.750 19.01 | 18.83 2.38
0.667 1.45 | 6.750 2.38 | 12.833 9.77 | 18.92 2.38
0.750 1.45 | 6.833 2.38 | 12.917 9.77 | 19.00 2.38
0.833 1.45 | 6.917 2.38 | 13.000 9.77 | 19.08 2.38
0.917 1.45 | 7.000 2.38 | 13.083 9.77 | 19.17 2.38
1.000 1.45 | 7.083 2.38 | 13.167 9.77 | 19.25 2.38
1.083 1.45 | 7.167 2.38 | 13.250 9.77 | 19.33 2.38
1.167 1.45 | 7.250 2.38 | 13.333 7.13 | 19.42 2.38
1.250 1.45 | 7.333 2.90 | 13.417 7.13 | 19.50 2.38
1.333 1.45 | 7.417 2.90 | 13.500 7.13 | 19.58 2.38
```

1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58

5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)=	161.57	171.59
over (min)	5.00	10.00
Storage Coeff. (min)=	2.18 (ii)	7.87 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.31	0.13

TOTALS

PEAK FLOW (cms)=	0.26	0.32	0.580 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.00	91.19	105.12
TOTAL RAINFALL (mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT =	0.99	0.69	0.80

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1032):	1.68	0.580	12.25	105.12
+ ID2= 2 (0611):	36.24	3.265	12.92	74.58
ID = 3 (0815):	37.92	3.320	12.92	75.93

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0815):	37.92	3.320	12.92	75.93
+ ID2= 2 (0816):	40.21	3.193	12.25	75.19
ID = 1 (0815):	78.13	5.049	12.75	75.55

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0612)
IN= 2---> OUT= 1 Routing time step (min)'= 5.00

----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0300	Main Channel
3.00	0.50	0.0300	Main Channel
6.00	2.00	0.0300	Main Channel

----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.623E+01	0.0	0.58	14.49
0.16	0.66	.249E+02	0.0	0.91	9.13
0.24	0.74	.561E+02	0.1	1.20	6.97
0.32	0.82	.997E+02	0.3	1.45	5.75
0.39	0.89	.156E+03	0.5	1.68	4.96
0.47	0.97	.224E+03	0.9	1.90	4.39
0.55	1.05	.305E+03	1.3	2.10	3.96
0.63	1.13	.399E+03	1.8	2.30	3.62
0.71	1.21	.505E+03	2.5	2.49	3.35
0.79	1.29	.623E+03	3.3	2.67	3.12
0.87	1.37	.754E+03	4.3	2.84	2.93
0.95	1.45	.898E+03	5.4	3.01	2.76
1.03	1.53	.105E+04	6.7	3.18	2.62
1.11	1.61	.122E+04	8.2	3.34	2.49
1.18	1.68	.140E+04	9.8	3.50	2.38
1.26	1.76	.160E+04	11.7	3.65	2.28
1.34	1.84	.180E+04	13.7	3.80	2.19
1.42	1.92	.202E+04	16.0	3.95	2.11
1.50	2.00	.225E+04	18.4	4.10	2.03

----- hydrograph ----->

----- pipe / channel ----->

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0815)	78.13	5.05	12.75	75.55	0.92	2.96
OUTFLOW: ID= 1 (0612)	78.13	5.05	12.83	75.55	0.92	2.96

CALIB
STANDHYD (1031)
ID= 1 DT= 5.0 min
Area (ha)= 12.60
Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	6.30	6.30
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	289.83	40.00
Mannings n =	0.013	0.250

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

----- TRANSFORMED HYETOGRAPH ----->

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58

3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 3.99 (ii) 9.68 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.24 0.11

PEAK FLOW (cms)= 1.94 2.20
TIME TO PEAK (hrs)= 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19
TOTAL RAINFALL (mm)= 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.69

TOTALS
4.139 (iii)
12.25
105.13
132.00
0.80

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0163)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1031):	12.60	4.139	12.25	105.13
+ ID2= 2 (0612):	78.13	5.051	12.83	75.55
ID = 3 (0163):	90.73	8.708	12.25	79.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0163)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0163):	90.73	8.708	12.25	79.65
+ ID2= 2 (0701):	8.33	0.587	12.67	53.65
ID = 1 (0163):	99.06	8.943	12.25	77.47

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	Area	(ha)=	6.80	Curve Number (CN)=	84.1
NASHYD (0901)	Ia	(mm)=	4.27	# of Linear Res.(N)=	3.00
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=		0.05		

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38

0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58

4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 5.195

PEAK FLOW (cms)= 1.967 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 70.827
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.537

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

ADD HYD (0803)				
1 + 2 = 3				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0163):	99.06	8.943	12.25	77.47
+ ID2= 2 (8031):	195.65	15.036	13.67	72.86
=====				
ID = 3 (0803):	294.71	18.202	13.67	74.41

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0803)				
3 + 2 = 1				
	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0803):	294.71	18.202	13.67	74.41
+ ID2= 2 (0901):	6.80	1.967	12.25	70.83
=====				
ID = 1 (0803):	301.51	18.294	13.67	74.33

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

RESERVOIR(0501)
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	2.0620	2.8424
0.0620	0.4182	2.5540	3.1588
0.0880	0.5899	3.1070	3.4969
0.1080	0.7645	3.7230	3.8520
0.1570	0.9422	4.4030	4.2134
0.2750	1.1227	6.6740	4.5779
0.4430	1.3069	10.5020	4.9455
0.9300	1.7165	15.5270	5.3170
1.2520	2.2613	20.9830	5.6925
1.6280	2.5409	27.3630	6.0715

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0803)	301.510	18.294	13.67	74.33
OUTFLOW: ID= 1 (0501)	301.510	17.037	13.83	74.32

PEAK FLOW REDUCTION [Qout/Qin](%)= 93.13
TIME SHIFT OF PEAK FLOW (min)= 10.00
MAXIMUM STORAGE USED (ha.m.)= 5.4326

CALIB
NASHYD (0903)
ID= 1 DT= 5.0 min

Area (ha)= 3.03 Curve Number (CN)= 77.6
Ia (mm)= 6.24 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.08

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

---- 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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38

0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58

5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.447

PEAK FLOW (cms)= 0.916 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 74.945
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.568

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

| ROUTE CHN(0605)|
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.5000	
11.25	0.50	0.5000	Main Channel
11.75	0.50	0.5000	Main Channel
15.00	1.50	0.5000 /0.0800	Main Channel
23.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.164E+02	0.0	0.08	57.32
0.16	0.66	.440E+02	0.0	0.15	31.54
0.24	0.74	.827E+02	0.1	0.21	22.33
0.32	0.82	.133E+03	0.1	0.26	17.56
0.39	0.89	.194E+03	0.2	0.31	14.64
0.47	0.97	.266E+03	0.4	0.36	12.65
0.55	1.05	.349E+03	0.5	0.41	11.20
0.63	1.13	.443E+03	0.7	0.45	10.10

0.71	1.21	.549E+03	1.0	0.50	9.22
0.79	1.29	.666E+03	1.3	0.54	8.51
0.87	1.37	.793E+03	1.7	0.58	7.92
0.95	1.45	.932E+03	2.1	0.62	7.42
1.03	1.53	.108E+04	2.6	0.66	6.89
1.11	1.61	.128E+04	3.3	0.72	6.39
1.18	1.68	.154E+04	4.2	0.76	6.03
1.26	1.76	.184E+04	5.4	0.80	5.70
1.34	1.84	.220E+04	6.8	0.85	5.40
1.42	1.92	.262E+04	8.5	0.90	5.11
1.50	2.00	.309E+04	10.7	0.95	4.84

<---- hydrograph ----> <-pipe / channel->
AREA QPEAK TPEAK R.V. MAX DEPTH MAX VEL
(ha) (cms) (hrs) (mm) (m) (m/s)
INFLOW : ID= 2 (0903) 3.03 0.92 12.25 74.95 0.69 0.48
OUTFLOW: ID= 1 (0605) 3.03 0.64 12.33 74.84 0.60 0.43

| CALIB |
| NASHYD (1014) | Area (ha)= 0.38 Curve Number (CN)= 76.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.32

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38

1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58

5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.045

PEAK FLOW (cms)= 0.056 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 77.814
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.589

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

| CALIB |
| NASHYD (1012) | Area (ha)= 0.42 Curve Number (CN)= 76.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
|-----| U.H. Tp(hrs)= 0.09

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

----- TRANSFORMED HYETOGRAPH -----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38

1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58

5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.123 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 74.900
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.567

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

| CALIB |
| STANDHYD (1013) | Area (ha)= 2.49
| ID= 1 DT= 5.0 min | Total Imp(%)= 58.60 Dir. Conn.(%)= 43.00
|-----|

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.46	1.03
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	128.84	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38

1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58

5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 184.48
over (min) 5.00 10.00
Storage Coeff. (min)= 2.45 (ii) 7.98 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.30 0.13

TOTALS

PEAK FLOW (cms)= 0.48 0.42 0.896 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 92.88 109.27
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.70 0.83

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (1011) | Area (ha)= 3.26
| ID= 1 DT= 5.0 min | Total Imp(%)= 56.40 Dir. Conn.(%)= 40.30

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.42
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	147.42	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38

0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58

4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)=	161.57	183.21
over (min)	5.00	10.00
Storage Coeff. (min)=	2.66 (ii)	8.20 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.29	0.13

TOTALS

PEAK FLOW (cms)=	0.59	0.56	1.152 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.00	92.72	108.15
TOTAL RAINFALL (mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT =	0.99	0.70	0.82

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0810)				
1 + 2 = 3				

ID1= 1 (1011):	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
	3.26	1.152	12.25	108.15
+ ID2= 2 (1012):	0.42	0.123	12.25	74.90
=====				
ID = 3 (0810):	3.68	1.275	12.25	104.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0810)|
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
      ID1= 3 ( 0810):    3.68    1.275    12.25    104.35
      + ID2= 2 ( 1013):    2.49    0.896    12.25    109.27
      =====
      ID = 1 ( 0810):    6.17    2.171    12.25    106.34
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0810)|
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
      ID1= 1 ( 0810):    6.17    2.171    12.25    106.34
      + ID2= 2 ( 1014):    0.38    0.056    12.42    77.81
      =====
      ID = 3 ( 0810):    6.55    2.212    12.25    104.68
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0810)|
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
      ID1= 3 ( 0810):    6.55    2.212    12.25    104.68
      + ID2= 2 ( 0501):   301.51   17.037    13.83    74.32
      =====
      ID = 1 ( 0810):   308.06   17.145    13.83    74.97
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0810)|
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
      ID1= 1 ( 0810):   308.06   17.145    13.83    74.97
      + ID2= 2 ( 0605):    3.03    0.640    12.33    74.84
      =====
      ID = 3 ( 0810):   311.09   17.194    13.83    74.97
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

FINISH
=====

=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
V V I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\524
c9a70-4716-40a2-984a-109d3f837acc\sc

Summary filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\524
c9a70-4716-40a2-984a-109d3f837acc\sc

DATE: 07/17/2023

TIME: 12:02:09

USER:

COMMENTS: _____

** SIMULATION : A - CHIC25MM **

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

START @ 0.00 hrs

READ STORM 6.0

[Ptot= 24.97 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1002 1 5.0 43.20 0.39 2.42 4.07 0.16 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]

*
SHIFT[2: 1002] 0606 1 5.0 43.20 0.39 3.67 4.07 n/a 0.000
[SHIFT= 79.2 min]

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1072 1 5.0 12.53 0.05 2.58 2.23 0.09 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]

*
ADD [1072+ 0606] 0804 3 5.0 55.73 0.42 3.67 3.66 n/a 0.000

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1073 1 5.0 19.10 0.07 2.58 1.99 0.08 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1004 1 5.0 10.95 0.15 2.08 3.39 0.14 0.000
[CN=78.0]

```

*      [ N = 3.0:Tp 0.15]
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM
*
** CALIB NASHYD          1003  1  5.0   14.65   0.13  2.08   2.56 0.10   0.000
*      [CN=75.1          ]
*      [ N = 3.0:Tp 0.16]
*
*      ADD [ 1003+ 1004] 0157  3  5.0   25.60   0.28  2.08   2.91 n/a   0.000
*
*      SHIFT[ 2: 0157] 0607  1  5.0   25.60   0.28  3.33   2.91 n/a   0.000
*      [SHIFT= 75.8 min]
*
*      ADD [ 1073+ 0607] 0811  3  5.0   44.70   0.32  3.33   2.52 n/a   0.000
*
*      DUHYD          0127  1  5.0   44.70   0.32  3.33   2.52 n/a   0.000
*      MAJOR SYSTEM: 0127  2  5.0    0.00   0.00  0.00   0.00 n/a   0.000
*      MINOR SYSTEM: 0127  3  5.0   44.70   0.32  3.33   2.52 n/a   0.000
*
*      ADD [ 0127+ 0804] 8041  3  5.0   55.73   0.42  3.67   3.66 n/a   0.000
*
*      CHANNEL[ 2: 8041] 0604  1  5.0   55.73   0.40  3.75   3.65 n/a   0.000
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
** CALIB NASHYD          1001  1  5.0   50.05   0.18  2.83   2.42 0.10   0.000
*      [CN=73.6          ]
*      [ N = 3.0:Tp 0.68]
*
*      CHANNEL[ 2: 1001] 0600  1  5.0   50.05   0.17  2.92   2.42 n/a   0.000
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM

```

```

*
** CALIB NASHYD          1071  1  5.0   23.31   0.05  2.92   1.57 0.06   0.000
*      [CN=65.3          ]
*      [ N = 3.0:Tp 0.74]
*
*      ADD [ 1071+ 0600] 0805  3  5.0   73.36   0.22  2.92   2.15 n/a   0.000
*
*      ADD [ 0604+ 0805] 0806  3  5.0  129.09   0.55  3.75   2.80 n/a   0.000
*
*      CHANNEL[ 2: 0806] 0601  1  5.0  129.09   0.56  3.75   2.80 n/a   0.000
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
** CALIB NASHYD          1062  1  5.0    5.26   0.01  2.58   1.53 0.06   0.000
*      [CN=55.8          ]
*      [ N = 3.0:Tp 0.56]
*
*      ADD [ 1062+ 0601] 0802  3  5.0  134.35   0.56  3.75   2.75 n/a   0.000
*
*      CHANNEL[ 2: 0802] 0602  1  5.0  134.35   0.56  3.75   2.75 n/a   0.000
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
** CALIB NASHYD          1063  1  5.0    8.13   0.03  2.67   2.03 0.08   0.000
*      [CN=62.6          ]
*      [ N = 3.0:Tp 0.60]
*
*      READ STORM                      6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
** CALIB NASHYD          0904  1  5.0    9.08   0.11  2.42   5.42 0.22   0.000
*      [CN=81.8          ]
*      [ N = 3.0:Tp 0.43]

```

```

*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
* CALIB STANDHYD          1021  1  5.0   16.01   0.78  1.92  10.24 0.41   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1021+ 1063] 0807  3  5.0   24.14   0.78  1.92   7.47 n/a   0.000
*
* ADD [ 0807+ 0602] 0807  1  5.0  158.49   0.78  1.92   3.47 n/a   0.000
*
* ADD [ 0807+ 0904] 0807  3  5.0  167.57   0.80  1.92   3.57 n/a   0.000
*
* CHANNEL[ 2: 0807] 0603  1  5.0  167.57   0.68  2.00   3.57 n/a   0.000
*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
** CALIB NASHYD          0902  1  5.0    4.38   0.03  2.58   4.19 0.17   0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 0603+ 0902] 8031  3  5.0  171.95   0.69  2.00   3.59 n/a   0.000
*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
** CALIB NASHYD          1061  1  5.0    8.33   0.03  2.58   1.79 0.07   0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0    8.33   0.03  2.67   1.79 n/a   0.000
*
* CHANNEL[ 2: 0127] 0608  1  5.0   44.70   0.27  3.42   2.52 n/a   0.000
*

```

```

  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
** CALIB NASHYD          0105  1  5.0   12.80   0.05  2.50   2.21 0.09   0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.47]
*
* ADD [ 0105+ 0608] 0812  3  5.0   57.50   0.29  3.42   2.45 n/a   0.000
*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
* CALIB STANDHYD          1041  1  5.0    6.41   0.35  1.92  12.36 0.49   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0812] 0816  3  5.0   63.91   0.36  1.92   3.44 n/a   0.000
*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
* CALIB NASHYD          1075  1  5.0    5.30   0.04  2.42   3.01 0.12   0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30   0.03  2.67   3.01 n/a   0.000
*
  READ STORM                      6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

*
* CALIB NASHYD          1081  1  5.0   18.64   0.08  2.67   2.53 0.10   0.000

```



```

      [CN=74.9      ]
      [ N = 3.0:Tp 0.55]
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB NASHYD      1074 1 5.0    6.00    0.03 2.42    2.25 0.09    0.000
  [CN=73.8      ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115 1 5.0    6.00    0.02 2.75    2.24 n/a    0.000
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB NASHYD      1082 1 5.0    4.21    0.02 2.67    2.47 0.10    0.000
  [CN=74.6      ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116 3 5.0   10.21    0.04 2.75    2.34 n/a    0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0   10.21    0.04 2.83    2.33 n/a    0.000
*
* ADD [ 1081+ 0118] 0813 3 5.0   28.85    0.12 2.75    2.46 n/a    0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0   34.15    0.15 2.75    2.55 n/a    0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0   34.15    0.14 2.83    2.55 n/a    0.000
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD    1042 1 5.0    2.09    0.12 1.92   12.35 0.49    0.000
  [I%=35.0:S%= 2.00]
*

```

```

      ADD [ 1042+ 0610] 0814 3 5.0   36.24    0.16 2.83    3.11 n/a    0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0   36.24    0.15 2.92    3.11 n/a    0.000
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD    1032 1 5.0    1.68    0.10 1.92   12.35 0.49    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0   37.92    0.16 2.92    3.51 n/a    0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0  101.83    0.52 1.92    3.47 n/a    0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0  101.83    0.45 2.00    3.47 n/a    0.000
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD    1031 1 5.0   12.60    0.65 1.92   12.36 0.49    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0  114.43    1.00 1.92    4.45 n/a    0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0  122.76    1.00 1.92    4.27 n/a    0.000
*
  READ STORM          6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB NASHYD      0901 1 5.0    6.80    0.25 1.92    4.76 0.19    0.000
  [CN=84.1      ]
  [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0  294.71    1.64 2.00    3.87 n/a    0.000
*

```

```

*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 1.80 2.00 3.89 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 0.19 5.42 3.89 n/a 0.000
*
      READ STORM 6.0
      [ Ptot= 24.97 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
      remark: CHIC25MM

*
* CALIB NASHYD 0903 1 5.0 3.03 0.06 2.00 3.60 0.14 0.000
[CN=77.6 ]
[ N = 3.0:Tp 0.08]
*
CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.02 2.17 3.49 n/a 0.000
*
      READ STORM 6.0
      [ Ptot= 24.97 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
      remark: CHIC25MM

*
* CALIB NASHYD 1014 1 5.0 0.38 0.00 2.25 3.98 0.16 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.32]
*
      READ STORM 6.0
      [ Ptot= 24.97 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
      remark: CHIC25MM

*
* CALIB NASHYD 1012 1 5.0 0.42 0.01 2.00 3.83 0.15 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.09]
*
      READ STORM 6.0
      [ Ptot= 24.97 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
      remark: CHIC25MM

```

```

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.18 1.92 13.99 0.56 0.000
[I%=43.0:S%= 2.00]
*
      READ STORM 6.0
      [ Ptot= 24.97 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\3dd6a93-23f2-4841-8b6b-2
      remark: CHIC25MM

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.22 1.92 13.50 0.54 0.000
[I%=40.3:S%= 2.00]
*
      ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.22 1.92 12.40 n/a 0.000
*
      ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.40 1.92 13.04 n/a 0.000
*
      ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.40 1.92 12.51 n/a 0.000
*
      ADD [ 0810+ 0501] 0810 1 5.0 308.06 0.42 1.92 4.07 n/a 0.000
*
      ADD [ 0810+ 0605] 0810 3 5.0 311.09 0.42 1.92 4.06 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat
Output filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\62c
12831-aec6-4677-ae83-6997fc9e9968\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\62c
12831-aec6-4677-ae83-6997fc9e9968\sc

DATE: 07/17/2023

TIME: 12:02:09

USER:

COMMENTS: _____

** SIMULATION : B - 2yr 4hr 10min Chicago **

W/E COMMAND	HYD ID	DT min	AREA ha	Qpeak ' cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs ----- CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=78.4 [N = 3.0:Tp 0.40]	1002	1	5.0	43.20	0.64	1.83	8.74 0.25	0.000
* SHIFT[2: 1002] [SHIFT= 79.2 min]	0606	1	5.0	43.20	0.64	3.08	8.74 n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=74.7 [N = 3.0:Tp 0.50]	1072	1	5.0	12.53	0.10	2.08	5.81 0.16	0.000
* ADD [1072+ 0606]	0804	3	5.0	55.73	0.70	3.08	8.08 n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=71.9 [N = 3.0:Tp 0.48]	1073	1	5.0	19.10	0.14	2.00	5.22 0.15	0.000
*								

CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=78.0 [N = 3.0:Tp 0.15]	1004	1	5.0	10.95	0.24	1.42	7.76 0.22	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=75.1 [N = 3.0:Tp 0.16]	1003	1	5.0	14.65	0.24	1.50	6.31 0.18	0.000
* ADD [1003+ 1004]	0157	3	5.0	25.60	0.47	1.50	6.93 n/a	0.000
* SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1	5.0	25.60	0.47	2.75	6.93 n/a	0.000
* ADD [1073+ 0607]	0811	3	5.0	44.70	0.57	2.75	6.20 n/a	0.000
* DUHYD MAJOR SYSTEM: MINOR SYSTEM:	0127 0127 0127	1 2 3	5.0 5.0 5.0	44.70 2.50 42.20	0.57 0.17 0.40	2.75 2.75 2.58	6.20 6.20 6.20	n/a n/a n/a
* ADD [0127+ 0804]	8041	3	5.0	58.23	0.71	2.92	8.00 n/a	0.000
* CHANNEL[2: 8041]	0604	1	5.0	58.23	0.70	3.08	8.00 n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=73.6 [N = 3.0:Tp 0.68]	1001	1	5.0	50.05	0.35	2.33	5.98 0.17	0.000
* CHANNEL[2: 1001]	0600	1	5.0	50.05	0.34	2.42	5.98 n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=65.3 [N = 3.0:Tp 0.74]	1071	1	5.0	23.31	0.10	2.50	4.14 0.12	0.000
* ADD [1071+ 0600]	0805	3	5.0	73.36	0.45	2.42	5.40 n/a	0.000
* ADD [0604+ 0805]	0806	3	5.0	131.59	1.08	3.00	6.55 n/a	0.000
* CHANNEL[2: 0806]	0601	1	5.0	131.59	1.08	3.00	6.55 n/a	0.000

*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
**	CALIB NASHYD	1062	1	5.0	5.26	0.02	2.08	3.60	0.10	0.000
	[CN=55.8									
	[N = 3.0:Tp 0.56]									
*	ADD [1062+ 0601]	0802	3	5.0	136.85	1.10	3.00	6.43	n/a	0.000
*	CHANNEL[2: 0802]	0602	1	5.0	136.85	1.10	3.00	6.43	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
**	CALIB NASHYD	1063	1	5.0	8.13	0.05	2.17	4.66	0.13	0.000
	[CN=62.6									
	[N = 3.0:Tp 0.60]									
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
**	CALIB NASHYD	0904	1	5.0	9.08	0.17	1.83	10.90	0.31	0.000
	[CN=81.8									
	[N = 3.0:Tp 0.43]									
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
*	CALIB STANDHYD	1021	1	5.0	16.01	1.10	1.33	15.91	0.45	0.000
	[I%=35.0:S%= 2.00]									
*	ADD [1021+ 1063]	0807	3	5.0	24.14	1.10	1.33	12.13	n/a	0.000
*	ADD [0807+ 0602]	0807	1	5.0	160.99	1.23	3.00	7.29	n/a	0.000
*	ADD [0807+ 0904]	0807	3	5.0	170.07	1.30	3.00	7.48	n/a	0.000
*	CHANNEL[2: 0807]	0603	1	5.0	170.07	1.29	3.08	7.48	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
**	CALIB NASHYD	0902	1	5.0	4.38	0.05	2.08	8.90	0.25	0.000
	[CN=78.4									
	[N = 3.0:Tp 0.56]									
*	ADD [0603+ 0902]	8031	3	5.0	174.45	1.32	3.08	7.52	n/a	0.000
*	CHIC STORM	10.0								

	[Ptot= 35.41 mm]									
**	CALIB NASHYD	1061	1	5.0	8.33	0.05	2.00	4.20	0.12	0.000
	[CN=60.3									
	[N = 3.0:Tp 0.50]									
*	PIPE [2: 1061]	0701	1	5.0	8.33	0.05	2.08	4.20	n/a	0.000
*	CHANNEL[2: 0127]	0608	1	5.0	42.20	0.40	2.92	6.20	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
**	CALIB NASHYD	0105	1	5.0	12.80	0.10	2.00	5.39	0.15	0.000
	[CN=69.9									
	[N = 3.0:Tp 0.47]									
*	ADD [0105+ 0608]	0812	3	5.0	55.00	0.46	2.92	6.01	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
*	CALIB STANDHYD	1041	1	5.0	6.41	0.50	1.33	19.80	0.56	0.000
	[I%=35.0:S%= 2.00]									
*	ADD [1041+ 0812]	0816	3	5.0	61.41	0.51	1.33	7.45	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
*	CALIB NASHYD	1075	1	5.0	5.30	0.06	1.83	7.06	0.20	0.000
	[CN=76.2									
	[N = 3.0:Tp 0.38]									
*	CHANNEL[2: 1075]	0609	1	5.0	5.30	0.05	2.08	7.06	n/a	0.000
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
*	CALIB NASHYD	1081	1	5.0	18.64	0.15	2.08	6.27	0.18	0.000
	[CN=74.9									
	[N = 3.0:Tp 0.55]									
*	CHIC STORM	10.0								
	[Ptot= 35.41 mm]									
*	CALIB NASHYD	1074	1	5.0	6.00	0.05	1.92	5.76	0.16	0.000
	[CN=73.8									
	[N = 3.0:Tp 0.40]									
*										


```

*   ADD [ 1011+ 1012] 0810 3 5.0   3.68   0.31 1.33 19.78 n/a  0.000
*
*   ADD [ 0810+ 1013] 0810 1 5.0   6.17   0.56 1.33 20.64 n/a  0.000
*
*   ADD [ 0810+ 1014] 0810 3 5.0   6.55   0.56 1.33 19.93 n/a  0.000
*
*   ADD [ 0810+ 0501] 0810 1 5.0  308.06   0.88 4.50  8.23 n/a  0.000
*
*   ADD [ 0810+ 0605] 0810 3 5.0  311.09   0.89 4.42  8.22 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUUU A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  M  M  O  O
000  T    T  H  H  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
 C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\055
 b98f2-2c21-44bf-a48e-0e24c21e4758\sc
 Summary filename:
 C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\055
 b98f2-2c21-44bf-a48e-0e24c21e4758\sc

DATE: 07/17/2023

TIME: 12:02:09

USER:

COMMENTS: _____

```

*****
** SIMULATION : C - 5yr 4hr 10min Chicago **
*****

```

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

CHIC STORM	10.0							
[Ptot= 46.85 mm]								
* ** CALIB NASHYD	1002	1	5.0	43.20	1.18	1.75	15.10	0.32 0.000
[CN=78.4]								
[N = 3.0:Tp 0.40]								
* SHIFT[2: 1002]	0606	1	5.0	43.20	1.18	3.00	15.10	n/a 0.000
[SHIFT= 79.2 min]								
* CHIC STORM	10.0							
[Ptot= 46.85 mm]								
* ** CALIB NASHYD	1072	1	5.0	12.53	0.20	2.00	11.08	0.24 0.000
[CN=74.7]								
[N = 3.0:Tp 0.50]								
* ADD [1072+ 0606]	0804	3	5.0	55.73	1.29	3.00	14.19	n/a 0.000
* CHIC STORM	10.0							
[Ptot= 46.85 mm]								
* ** CALIB NASHYD	1073	1	5.0	19.10	0.28	2.00	10.02	0.21 0.000
[CN=71.9]								
[N = 3.0:Tp 0.48]								
* CHIC STORM	10.0							
[Ptot= 46.85 mm]								
* ** CALIB NASHYD	1004	1	5.0	10.95	0.49	1.42	13.84	0.30 0.000
[CN=78.0]								
[N = 3.0:Tp 0.15]								
* CHIC STORM	10.0							
[Ptot= 46.85 mm]								
* ** CALIB NASHYD	1003	1	5.0	14.65	0.49	1.50	11.73	0.25 0.000
[CN=75.1]								
[N = 3.0:Tp 0.16]								
* ADD [1003+ 1004]	0157	3	5.0	25.60	0.97	1.42	12.63	n/a 0.000

*	SHIFT[2: 0157]	0607	1	5.0	25.60	0.97	2.67	12.63	n/a	0.000
	[SHIFT= 75.8 min]									
*	ADD [1073+ 0607]	0811	3	5.0	44.70	1.17	2.67	11.52	n/a	0.000
*	DUHYD	0127	1	5.0	44.70	1.17	2.67	11.52	n/a	0.000
	MAJOR SYSTEM:	0127	2	5.0	9.86	0.77	2.67	11.52	n/a	0.000
	MINOR SYSTEM:	0127	3	5.0	34.84	0.40	2.50	11.52	n/a	0.000
*	ADD [0127+ 0804]	8041	3	5.0	65.59	1.72	2.83	13.79	n/a	0.000
*	CHANNEL[2: 8041]	0604	1	5.0	65.59	1.67	2.92	13.79	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	1001	1	5.0	50.05	0.68	2.25	11.17	0.24	0.000
	[CN=73.6]									
	[N = 3.0:Tp 0.68]									
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	0.67	2.33	11.17	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	1071	1	5.0	23.31	0.21	2.42	8.06	0.17	0.000
	[CN=65.3]									
	[N = 3.0:Tp 0.74]									
*	ADD [1071+ 0600]	0805	3	5.0	73.36	0.89	2.33	10.18	n/a	0.000
*	ADD [0604+ 0805]	0806	3	5.0	138.95	2.43	2.92	11.88	n/a	0.000
*	CHANNEL[2: 0806]	0601	1	5.0	138.95	2.44	2.92	11.88	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	1062	1	5.0	5.26	0.05	2.08	6.70	0.14	0.000
	[CN=55.8]									
	[N = 3.0:Tp 0.56]									
*	ADD [1062+ 0601]	0802	3	5.0	144.21	2.47	2.92	11.69	n/a	0.000
*	CHANNEL[2: 0802]	0602	1	5.0	144.21	2.47	2.92	11.69	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									

** CALIB NASHYD	1063	1	5.0	8.13	0.09	2.08	8.52	0.18	0.000	
[CN=62.6]										
[N = 3.0:Tp 0.60]										
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	0904	1	5.0	9.08	0.29	1.83	18.11	0.39	0.000
[CN=81.8]										
[N = 3.0:Tp 0.43]										
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	CALIB STANDHYD	1021	1	5.0	16.01	1.55	1.33	22.77	0.49	0.000
	[I%=35.0:S%= 2.00]									
*	ADD [1021+ 1063]	0807	3	5.0	24.14	1.56	1.33	17.97	n/a	0.000
*	ADD [0807+ 0602]	0807	1	5.0	168.35	2.68	2.92	12.59	n/a	0.000
*	ADD [0807+ 0904]	0807	3	5.0	177.43	2.79	2.92	12.88	n/a	0.000
*	CHANNEL[2: 0807]	0603	1	5.0	177.43	2.76	3.00	12.88	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	0902	1	5.0	4.38	0.10	2.00	15.29	0.33	0.000
	[CN=78.4]									
	[N = 3.0:Tp 0.56]									
*	ADD [0603+ 0902]	8031	3	5.0	181.81	2.81	3.00	12.93	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	1061	1	5.0	8.33	0.09	2.00	7.76	0.17	0.000
	[CN=60.3]									
	[N = 3.0:Tp 0.50]									
*	PIPE [2: 1061]	0701	1	5.0	8.33	0.09	2.00	7.76	n/a	0.000
*	CHANNEL[2: 0127]	0608	1	5.0	34.84	0.40	2.83	11.52	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 46.85 mm]									
*	** CALIB NASHYD	0105	1	5.0	12.80	0.20	1.92	10.05	0.21	0.000
	[CN=69.9]									

*	[N = 3.0:Tp 0.47]									
*	ADD [0105+ 0608]	0812	3	5.0	47.64	0.52	2.75	11.12	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB STANDHYD	1041	1	5.0	6.41	0.74	1.33	28.71	0.61	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1041+ 0812]	0816	3	5.0	54.05	0.78	1.33	13.21	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB NASHYD	1075	1	5.0	5.30	0.12	1.75	12.80	0.27	0.000
*	[CN=76.2]									
*	[N = 3.0:Tp 0.38]									
*	CHANNEL[2: 1075]	0609	1	5.0	5.30	0.10	2.08	12.80	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB NASHYD	1081	1	5.0	18.64	0.30	2.08	11.67	0.25	0.000
*	[CN=74.9]									
*	[N = 3.0:Tp 0.55]									
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB NASHYD	1074	1	5.0	6.00	0.11	1.83	10.90	0.23	0.000
*	[CN=73.8]									
*	[N = 3.0:Tp 0.40]									
*	CHANNEL[2: 1074]	0115	1	5.0	6.00	0.09	2.17	10.90	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB NASHYD	1082	1	5.0	4.21	0.07	2.08	11.48	0.25	0.000
*	[CN=74.6]									
*	[N = 3.0:Tp 0.56]									
*	ADD [1082+ 0115]	0116	3	5.0	10.21	0.16	2.08	11.14	n/a	0.000
*	CHANNEL[2: 0116]	0118	1	5.0	10.21	0.16	2.17	11.14	n/a	0.000
*	ADD [1081+ 0118]	0813	3	5.0	28.85	0.45	2.08	11.48	n/a	0.000

*	ADD [0813+ 0609]	0813	1	5.0	34.15	0.56	2.08	11.69	n/a	0.000
*	CHANNEL[2: 0813]	0610	1	5.0	34.15	0.55	2.17	11.68	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB STANDHYD	1042	1	5.0	2.09	0.25	1.33	28.71	0.61	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1042+ 0610]	0814	3	5.0	36.24	0.59	2.17	12.67	n/a	0.000
*	CHANNEL[2: 0814]	0611	1	5.0	36.24	0.58	2.25	12.66	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB STANDHYD	1032	1	5.0	1.68	0.20	1.33	28.71	0.61	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1032+ 0611]	0815	3	5.0	37.92	0.61	2.25	13.37	n/a	0.000
*	ADD [0815+ 0816]	0815	1	5.0	91.97	1.19	2.08	13.28	n/a	0.000
*	CHANNEL[2: 0815]	0612	1	5.0	91.97	1.19	2.17	13.27	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB STANDHYD	1031	1	5.0	12.60	1.40	1.33	28.71	0.61	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1031+ 0612]	0163	3	5.0	104.57	2.26	1.33	15.13	n/a	0.000
*	ADD [0163+ 0701]	0163	1	5.0	112.90	2.26	1.33	14.59	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 46.85 mm]									
*	CALIB NASHYD	0901	1	5.0	6.80	0.69	1.33	15.27	0.33	0.000
*	[CN=84.1]									
*	[N = 3.0:Tp 0.05]									
*	ADD [0163+ 8031]	0803	3	5.0	294.71	4.06	2.92	13.57	n/a	0.000
*	ADD [0803+ 0901]	0803	1	5.0	301.51	4.21	1.33	13.61	n/a	0.000
**	Reservoir									
*	OUTFLOW:	0501	1	5.0	301.51	1.72	4.25	13.60	n/a	0.000


```

CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      0903 1 5.0   3.03   0.21  1.33  13.66 0.29   0.000
[CN=77.6           ]
[ N = 3.0:Tp 0.08]
*
CHANNEL[ 2: 0903]   0605 1 5.0   3.03   0.09  1.50  13.55 n/a   0.000
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      1014 1 5.0   0.38   0.01  1.67  14.34 0.31   0.000
[CN=76.0           ]
[ N = 3.0:Tp 0.32]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      1012 1 5.0   0.42   0.03  1.33  13.81 0.29   0.000
[CN=76.0           ]
[ N = 3.0:Tp 0.09]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB STANDHYD    1013 1 5.0   2.49   0.35  1.33  31.25 0.67   0.000
[I%=43.0:S%= 2.00]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB STANDHYD    1011 1 5.0   3.26   0.44  1.33  30.52 0.65   0.000
[I%=40.3:S%= 2.00]
*
ADD [ 1011+ 1012]   0810 3 5.0   3.68   0.47  1.33  28.61 n/a   0.000
*
ADD [ 0810+ 1013]   0810 1 5.0   6.17   0.82  1.33  29.68 n/a   0.000
*
ADD [ 0810+ 1014]   0810 3 5.0   6.55   0.82  1.33  28.79 n/a   0.000
*
ADD [ 0810+ 0501]   0810 1 5.0  308.06  1.73  4.17  13.92 n/a   0.000
*
ADD [ 0810+ 0605]   0810 3 5.0  311.09  1.74  4.00  13.92 n/a   0.000
*
=====
=====
V   V   I   SSSSS U   U   A   L           (v 6.1.2001)

```

```

V   V   I   SS   U   U   A   A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
W   I   SSSSS UUUUU A   A   LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
0 0  T   T   T   H   H   Y   Y   MM MM 0 0
0 0  T   T   T   H   H   Y   M   M   0 0
000  T   T   T   H   H   Y   M   M   000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\1bb
e31b5-0293-49ff-abe9-7b2f054dd580\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\1bb
e31b5-0293-49ff-abe9-7b2f054dd580\sc

DATE: 07/17/2023 TIME: 12:02:10

USER:

COMMENTS: _____

```

*****
** SIMULATION : D - 10yr 4hr 10min Chicago **
*****

```

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

START @ 0.00 hrs

```

-----
CHIC STORM          10.0
[ Ptot= 54.67 mm ]

```

```

*
** CALIB NASHYD      1002 1 5.0   43.20   1.60  1.75  20.01 0.37   0.000
[CN=78.4           ]
[ N = 3.0:Tp 0.40]

```

*	SHIFT[2: 1002]	0606	1	5.0	43.20	1.60	3.00	20.01	n/a	0.000
*	[SHIFT= 79.2 min]									
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1072	1	5.0	12.53	0.29	2.00	15.30	0.28	0.000
*	[CN=74.7]									
*	[N = 3.0:Tp 0.50]									
*	ADD [1072+ 0606]	0804	3	5.0	55.73	1.75	3.00	18.95	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1073	1	5.0	19.10	0.40	1.92	13.92	0.25	0.000
*	[CN=71.9]									
*	[N = 3.0:Tp 0.48]									
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1004	1	5.0	10.95	0.68	1.42	18.59	0.34	0.000
*	[CN=78.0]									
*	[N = 3.0:Tp 0.15]									
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1003	1	5.0	14.65	0.71	1.42	16.03	0.29	0.000
*	[CN=75.1]									
*	[N = 3.0:Tp 0.16]									
*	ADD [1003+ 1004]	0157	3	5.0	25.60	1.39	1.42	17.13	n/a	0.000
*	SHIFT[2: 0157]	0607	1	5.0	25.60	1.39	2.67	17.13	n/a	0.000
*	[SHIFT= 75.8 min]									
*	ADD [1073+ 0607]	0811	3	5.0	44.70	1.65	2.67	15.76	n/a	0.000
*	DUHYD	0127	1	5.0	44.70	1.65	2.67	15.76	n/a	0.000
*	MAJOR SYSTEM:	0127	2	5.0	13.94	1.25	2.67	15.76	n/a	0.000
*	MINOR SYSTEM:	0127	3	5.0	30.76	0.40	1.92	15.76	n/a	0.000
*	ADD [0127+ 0804]	8041	3	5.0	69.67	2.50	2.83	18.31	n/a	0.000
*	CHANNEL[2: 8041]	0604	1	5.0	69.67	2.46	2.92	18.31	n/a	0.000
*	CHIC STORM			10.0						

*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1001	1	5.0	50.05	0.95	2.25	15.32	0.28	0.000
*	[CN=73.6]									
*	[N = 3.0:Tp 0.68]									
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	0.95	2.33	15.32	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1071	1	5.0	23.31	0.30	2.33	11.28	0.21	0.000
*	[CN=65.3]									
*	[N = 3.0:Tp 0.74]									
*	ADD [1071+ 0600]	0805	3	5.0	73.36	1.25	2.33	14.04	n/a	0.000
*	ADD [0604+ 0805]	0806	3	5.0	143.03	3.52	2.83	16.12	n/a	0.000
*	CHANNEL[2: 0806]	0601	1	5.0	143.03	3.51	2.83	16.12	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1062	1	5.0	5.26	0.07	2.00	9.26	0.17	0.000
*	[CN=55.8]									
*	[N = 3.0:Tp 0.56]									
*	ADD [1062+ 0601]	0802	3	5.0	148.29	3.56	2.83	15.87	n/a	0.000
*	CHANNEL[2: 0802]	0602	1	5.0	148.29	3.56	2.83	15.87	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	1063	1	5.0	8.13	0.13	2.08	11.66	0.21	0.000
*	[CN=62.6]									
*	[N = 3.0:Tp 0.60]									
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
**	CALIB NASHYD	0904	1	5.0	9.08	0.39	1.83	23.56	0.43	0.000
*	[CN=81.8]									
*	[N = 3.0:Tp 0.43]									
*	CHIC STORM			10.0						
*	[Ptot= 54.67 mm]									
*	CALIB STANDHYD	1021	1	5.0	16.01	1.85	1.33	27.78	0.51	0.000


```

*      [ Ptot= 54.67 mm ]
*
* CALIB STANDHYD      1032  1  5.0    1.68    0.25  1.33  35.12 0.64  0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    37.92    0.86  2.17  17.88 n/a  0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    87.89    1.67  2.08  17.80 n/a  0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    87.89    1.67  2.08  17.80 n/a  0.000
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB STANDHYD      1031  1  5.0    12.60    1.71  1.33  35.13 0.64  0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163  3  5.0   100.49    2.77  1.33  19.97 n/a  0.000
*
* ADD [ 0163+ 0701] 0163  1  5.0   108.82    2.78  1.33  19.26 n/a  0.000
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB NASHYD        0901  1  5.0     6.80    0.90  1.33  19.69 0.36  0.000
* [CN=84.1          ]
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803  3  5.0   294.71    5.55  2.92  17.96 n/a  0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    5.61  2.92  18.00 n/a  0.000
*
* ** Reservoir
* OUTFLOW:            0501  1  5.0   301.51    2.64  4.08  17.99 n/a  0.000
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB NASHYD        0903  1  5.0     3.03    0.29  1.33  18.18 0.33  0.000
* [CN=77.6          ]
* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0     3.03    0.14  1.50  18.07 n/a  0.000
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB NASHYD        1014  1  5.0     0.38    0.02  1.67  18.99 0.35  0.000
* [CN=76.0          ]
* [ N = 3.0:Tp 0.32]

```

```

*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB NASHYD        1012  1  5.0     0.42    0.04  1.33  18.28 0.33  0.000
* [CN=76.0          ]
* [ N = 3.0:Tp 0.09]
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB STANDHYD      1013  1  5.0     2.49    0.43  1.33  37.91 0.69  0.000
* [I%=43.0:S%= 2.00]
*
* CHIC STORM          10.0
* [ Ptot= 54.67 mm ]
*
* CALIB STANDHYD      1011  1  5.0     3.26    0.53  1.33  37.12 0.68  0.000
* [I%=40.3:S%= 2.00]
*
* ADD [ 1011+ 1012] 0810  3  5.0     3.68    0.56  1.33  34.97 n/a  0.000
*
* ADD [ 0810+ 1013] 0810  1  5.0     6.17    0.99  1.33  36.16 n/a  0.000
*
* ADD [ 0810+ 1014] 0810  3  5.0     6.55    1.00  1.33  35.16 n/a  0.000
*
* ADD [ 0810+ 0501] 0810  1  5.0   308.06    2.69  4.00  18.36 n/a  0.000
*
* ADD [ 0810+ 0605] 0810  3  5.0   311.09    2.71  4.00  18.35 n/a  0.000
*
=====
=====

```

```

V   V   I   SSSS  U   U   A   L               (v 6.1.2001)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U  AAAAA L
V   V   I   SS    U   U  A   A  L
W   I   SSSS  UUUUU A   A  LLLLL

```

```

000  TTTT  TTTT  H   H  Y   Y  M   M  000  TM
O   O   T   T   H   H  Y   Y  MM  MM  O   O
O   O   T   T   H   H  Y   Y  M   M  O   O
000  T   T   H   H  Y   Y  M   M  000

```

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***** S U M M A R Y O U T P U T *****

```
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\caa
e5a0b-19e5-44b4-a79d-66d755899b87\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\caa
e5a0b-19e5-44b4-a79d-66d755899b87\sc
```

USER:

```
*****
** SIMULATION : E - 25yr 4hr 10min Chicago **
*****
```

W/E COMMAND		HVD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs -----									
* CHIC STORM [Ptot= 64.35 mm]			10.0						
** CALIB NASHYD [CN=78.4] [N = 3.0:Tp 0.40]		1002	1 5.0	43.20	2.18	1.75	26.57	0.41	0.000
* SHIFT [2: 1002] [SHIFT= 79.2 min]		0606	1 5.0	43.20	2.18	3.00	26.57	n/a	0.000
* CHIC STORM [Ptot= 64.35 mm]			10.0						
** CALIB NASHYD [CN=74.7] [N = 3.0:Tp 0.50]		1072	1 5.0	12.53	0.41	1.92	21.07	0.33	0.000
* ADD [1072+ 0606]		0804	3 5.0	55.73	2.38	3.00	25.34	n/a	0.000
* CHIC STORM [Ptot= 64.35 mm]			10.0						

**	CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1	5.0	19.10	0.58	1.92	19.28	0.30	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
**	CALIB NASHYD [CN=78.0] [N = 3.0:Tp 0.15]	1004	1	5.0	10.95	0.96	1.42	24.97	0.39	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
**	CALIB NASHYD [CN=75.1] [N = 3.0:Tp 0.16]	1003	1	5.0	14.65	1.03	1.42	21.90	0.34	0.000
*	ADD [1003+ 1004]	0157	3	5.0	25.60	1.98	1.42	23.21	n/a	0.000
*	SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1	5.0	25.60	1.98	2.67	23.21	n/a	0.000
*	ADD [1073+ 0607]	0811	3	5.0	44.70	2.34	2.67	21.53	n/a	0.000
*	DUHYD	0127	1	5.0	44.70	2.34	2.67	21.53	n/a	0.000
*	MAJOR SYSTEM:	0127	2	5.0	19.80	1.94	2.67	21.53	n/a	0.000
*	MINOR SYSTEM:	0127	3	5.0	24.90	0.40	1.58	21.53	n/a	0.000
*	ADD [0127+ 0804]	8041	3	5.0	75.53	3.63	2.75	24.34	n/a	0.000
*	CHANNEL[2: 8041]	0604	1	5.0	75.53	3.58	2.83	24.34	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
**	CALIB NASHYD [CN=73.6] [N = 3.0:Tp 0.68]	1001	1	5.0	50.05	1.34	2.17	20.99	0.33	0.000
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	1.33	2.25	20.99	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
**	CALIB NASHYD [CN=65.3] [N = 3.0:Tp 0.74]	1071	1	5.0	23.31	0.43	2.33	15.80	0.25	0.000

*	ADD [1071+ 0600]	0805	3	5.0	73.36	1.76	2.25	19.34	n/a	0.000
*	ADD [0604+ 0805]	0806	3	5.0	148.89	5.06	2.83	21.87	n/a	0.000
*	CHANNEL[2: 0806]	0601	1	5.0	148.89	5.07	2.83	21.87	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	** CALIB NASHYD [CN=55.8] [N = 3.0:Tp 0.56]	1062	1	5.0	5.26	0.10	2.00	12.86	0.20	0.000
*	ADD [1062+ 0601]	0802	3	5.0	154.15	5.13	2.83	21.57	n/a	0.000
*	CHANNEL[2: 0802]	0602	1	5.0	154.15	5.15	2.83	21.57	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	** CALIB NASHYD [CN=62.6] [N = 3.0:Tp 0.60]	1063	1	5.0	8.13	0.18	2.08	16.03	0.25	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	** CALIB NASHYD [CN=81.8] [N = 3.0:Tp 0.43]	0904	1	5.0	9.08	0.52	1.75	30.74	0.48	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB STANDHYD [I%=35.0:S%= 2.00]	1021	1	5.0	16.01	2.33	1.33	34.29	0.53	0.000
*	ADD [1021+ 1063]	0807	3	5.0	24.14	2.36	1.33	28.14	n/a	0.000
*	ADD [0807+ 0602]	0807	1	5.0	178.29	5.49	2.83	22.46	n/a	0.000
*	ADD [0807+ 0904]	0807	3	5.0	187.37	5.69	2.83	22.86	n/a	0.000
*	CHANNEL[2: 0807]	0603	1	5.0	187.37	5.64	2.92	22.86	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB NASHYD [CN=78.4]	0902	1	5.0	4.38	0.18	2.00	26.79	0.42	0.000

*	[N = 3.0:Tp 0.56]									
*	ADD [0603+ 0902]	8031	3	5.0	191.75	5.73	2.92	22.95	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB NASHYD [CN=60.3] [N = 3.0:Tp 0.50]	1061	1	5.0	8.33	0.19	1.92	14.76	0.23	0.000
*	PIPE [2: 1061]	0701	1	5.0	8.33	0.19	2.00	14.76	n/a	0.000
*	CHANNEL[2: 10127]	0608	1	5.0	24.90	0.40	2.00	21.53	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB NASHYD [CN=69.9] [N = 3.0:Tp 0.47]	0105	1	5.0	12.80	0.39	1.92	18.99	0.30	0.000
*	ADD [0105+ 0608]	0812	3	5.0	37.70	0.79	1.92	20.67	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB STANDHYD [I%=35.0:S%= 2.00]	1041	1	5.0	6.41	1.12	1.33	43.33	0.67	0.000
*	ADD [1041+ 0812]	0816	3	5.0	44.11	1.21	1.33	23.96	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB NASHYD [CN=76.2] [N = 3.0:Tp 0.38]	1075	1	5.0	5.30	0.24	1.75	23.44	0.36	0.000
*	CHANNEL[2: 1075]	0609	1	5.0	5.30	0.21	2.00	23.43	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					
*	* CALIB NASHYD [CN=74.9] [N = 3.0:Tp 0.55]	1081	1	5.0	18.64	0.60	2.00	21.83	0.34	0.000
*	CHIC STORM [Ptot= 64.35 mm]				10.0					

*	CALIB NASHYD	1074	1	5.0	6.00	0.22	1.83	20.70	0.32	0.000
	[CN=73.8									
	[N = 3.0:Tp 0.40]									
*	CHANNEL[2: 1074]	0115	1	5.0	6.00	0.20	2.00	20.69	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB NASHYD	1082	1	5.0	4.21	0.13	2.00	21.55	0.33	0.000
	[CN=74.6									
	[N = 3.0:Tp 0.56]									
*	ADD [1082+ 0115]	0116	3	5.0	10.21	0.33	2.00	21.04	n/a	0.000
*	CHANNEL[2: 0116]	0118	1	5.0	10.21	0.33	2.08	21.04	n/a	0.000
*	ADD [1081+ 0118]	0813	3	5.0	28.85	0.92	2.00	21.55	n/a	0.000
*	ADD [0813+ 0609]	0813	1	5.0	34.15	1.13	2.00	21.84	n/a	0.000
*	CHANNEL[2: 0813]	0610	1	5.0	34.15	1.10	2.17	21.84	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB STANDHYD	1042	1	5.0	2.09	0.43	1.33	43.33	0.67	0.000
	[I%=35.0:S%= 2.00]									
*	ADD [1042+ 0610]	0814	3	5.0	36.24	1.16	2.08	23.08	n/a	0.000
*	CHANNEL[2: 0814]	0611	1	5.0	36.24	1.14	2.25	23.07	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB STANDHYD	1032	1	5.0	1.68	0.34	1.33	43.33	0.67	0.000
	[I%=35.0:S%= 2.00]									
*	ADD [1032+ 0611]	0815	3	5.0	37.92	1.18	2.25	23.97	n/a	0.000
*	ADD [0815+ 0816]	0815	1	5.0	82.03	2.12	2.08	23.97	n/a	0.000
*	CHANNEL[2: 0815]	0612	1	5.0	82.03	2.12	2.17	23.97	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB STANDHYD	1031	1	5.0	12.60	2.12	1.33	43.33	0.67	0.000

	[I%=35.0:S%= 2.00]									
*	ADD [1031+ 0612]	0163	3	5.0	94.63	3.52	1.33	26.54	n/a	0.000
*	ADD [0163+ 0701]	0163	1	5.0	102.96	3.53	1.33	25.59	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB NASHYD	0901	1	5.0	6.80	1.18	1.33	25.47	0.40	0.000
	[CN=84.1									
	[N = 3.0:Tp 0.05]									
*	ADD [0163+ 8031]	0803	3	5.0	294.71	7.57	2.83	23.87	n/a	0.000
*	ADD [0803+ 0901]	0803	1	5.0	301.51	7.65	2.83	23.91	n/a	0.000
**	Reservoir									
	OUTFLOW:	0501	1	5.0	301.51	3.94	3.92	23.90	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB NASHYD	0903	1	5.0	3.03	0.40	1.33	24.23	0.38	0.000
	[CN=77.6									
	[N = 3.0:Tp 0.08]									
*	CHANNEL[2: 0903]	0605	1	5.0	3.03	0.20	1.50	24.13	n/a	0.000
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB NASHYD	1014	1	5.0	0.38	0.02	1.67	25.23	0.39	0.000
	[CN=76.0									
	[N = 3.0:Tp 0.32]									
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB NASHYD	1012	1	5.0	0.42	0.05	1.33	24.28	0.38	0.000
	[CN=76.0									
	[N = 3.0:Tp 0.09]									
*	CHIC STORM			10.0						
	[Ptot= 64.35 mm]									
*	CALIB STANDHYD	1013	1	5.0	2.49	0.57	1.33	46.38	0.72	0.000
	[I%=43.0:S%= 2.00]									
*	CHIC STORM			10.0						

```

V   V   I   SSSSS   U   U   A   L               (v 6.1.2001)
V   V   I   SS     U   U   A A   L
V   V   I       SS     U   U   AAAAA   L
V   V   I       SS     U   U   A   A   L
    W    I   SSSSS   UUUUU   A   A   LLLLL

    000   TTTTT   TTTTT   H   H   Y   Y   M   M   000   TM
O   O   T       T   H   H   Y   Y   MM MM   O   O
O   O   T       T   H   H   Y   Y   M   M   O   O
000   T       T   H   H   Y   M   M   000

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```
Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat
```

DATE: 07/17/2023 TIME: 12:02:10

USER:

[illegible]


```

** CALIB NASHYD      1003  1  5.0  14.65   1.27  1.42  26.39 0.37   0.000
   [CN=75.1          ]
   [ N = 3.0:Tp 0.16]
*
* ADD [ 1003+ 1004] 0157  3  5.0  25.60   2.44  1.42  27.85 n/a   0.000
*
* SHIFT[ 2: 0157] 0607  1  5.0  25.60   2.44  2.67  27.85 n/a   0.000
  [SHIFT= 75.8 min]
*
* ADD [ 1073+ 0607] 0811  3  5.0  44.70   2.87  2.67  25.96 n/a   0.000
*
* DUHYD      0127  1  5.0  44.70   2.87  2.67  25.96 n/a   0.000
  MAJOR SYSTEM: 0127  2  5.0  23.22   2.47  2.67  25.96 n/a   0.000
  MINOR SYSTEM: 0127  3  5.0  21.48   0.40  1.58  25.96 n/a   0.000
*
* ADD [ 0127+ 0804] 8041  3  5.0  78.95   4.50  2.75  28.94 n/a   0.000
*
* CHANNEL[ 2: 8041] 0604  1  5.0  78.95   4.43  2.83  28.94 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
** CALIB NASHYD      1001  1  5.0  50.05   1.63  2.17  25.35 0.36   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
*
* CHANNEL[ 2: 1001] 0600  1  5.0  50.05   1.63  2.25  25.35 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
** CALIB NASHYD      1071  1  5.0  23.31   0.53  2.33  19.33 0.27   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
* ADD [ 1071+ 0600] 0805  3  5.0  73.36   2.16  2.25  23.43 n/a   0.000
*
* ADD [ 0604+ 0805] 0806  3  5.0  152.31   6.21  2.83  26.29 n/a   0.000
*
* CHANNEL[ 2: 0806] 0601  1  5.0  152.31   6.23  2.83  26.29 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
** CALIB NASHYD      1062  1  5.0   5.26   0.12  2.00  15.71 0.22   0.000
   [CN=55.8          ]
   [ N = 3.0:Tp 0.56]
*
* ADD [ 1062+ 0601] 0802  3  5.0  157.57   6.31  2.83  25.93 n/a   0.000
*

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CHANNEL[ 2: 0802] 0602  1  5.0  157.57   6.33  2.83  25.93 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
** CALIB NASHYD      1063  1  5.0   8.13   0.22  2.08  19.43 0.27   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
** CALIB NASHYD      0904  1  5.0   9.08   0.61  1.75  36.10 0.51   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
* CALIB STANDHYD      1021  1  5.0  16.01   2.65  1.33  39.12 0.55   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1021+ 1063] 0807  3  5.0  24.14   2.68  1.33  32.49 n/a   0.000
*
* ADD [ 0807+ 0602] 0807  1  5.0  181.71   6.72  2.83  26.80 n/a   0.000
*
* ADD [ 0807+ 0904] 0807  3  5.0  190.79   6.95  2.83  27.25 n/a   0.000
*
* CHANNEL[ 2: 0807] 0603  1  5.0  190.79   6.88  2.92  27.25 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
* CALIB NASHYD      0902  1  5.0   4.38   0.21  2.00  31.76 0.45   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.56]
*
* ADD [ 0603+ 0902] 8031  3  5.0  195.17   6.99  2.92  27.35 n/a   0.000
*
* CHIC STORM      10.0
  [ Ptot= 71.25 mm ]
*
* CALIB NASHYD      1061  1  5.0   8.33   0.23  1.92  17.96 0.25   0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0   8.33   0.23  2.00  17.96 n/a   0.000
*
* CHANNEL[ 2: 0127] 0608  1  5.0  21.48   0.40  2.83  25.96 n/a   0.000
*

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*   ADD [ 0803+ 0901] 0803 1 5.0 301.51 9.35 2.83 28.40 n/a 0.000
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 5.65 3.58 28.40 n/a 0.000
*   CHIC STORM 10.0
[ Ptot= 71.25 mm ]
*   CALIB NASHYD 0903 1 5.0 3.03 0.48 1.33 28.82 0.40 0.000
[CN=77.6 ]
[ N = 3.0:Tp 0.08]
*   CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.25 1.50 28.72 n/a 0.000
*   CHIC STORM 10.0
[ Ptot= 71.25 mm ]
*   CALIB NASHYD 1014 1 5.0 0.38 0.03 1.67 29.96 0.42 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.32]
*   CHIC STORM 10.0
[ Ptot= 71.25 mm ]
*   CALIB NASHYD 1012 1 5.0 0.42 0.06 1.33 28.84 0.40 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.09]
*   CHIC STORM 10.0
[ Ptot= 71.25 mm ]
*   CALIB STANDHYD 1013 1 5.0 2.49 0.66 1.33 52.55 0.74 0.000
[I%=43.0:S%= 2.00]
*   CHIC STORM 10.0
[ Ptot= 71.25 mm ]
*   CALIB STANDHYD 1011 1 5.0 3.26 0.82 1.33 51.64 0.72 0.000
[I%=40.3:S%= 2.00]
*   ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.89 1.33 49.04 n/a 0.000
*   ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.54 1.33 50.46 n/a 0.000
*   ADD [ 0810+ 1014] 0810 3 5.0 6.55 1.55 1.33 49.27 n/a 0.000
*   ADD [ 0810+ 0501] 0810 1 5.0 308.06 5.74 3.58 28.84 n/a 0.000
*   ADD [ 0810+ 0605] 0810 3 5.0 311.09 5.77 3.58 28.84 n/a 0.000

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V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

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000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\7c7
830b8-009c-40f7-91e8-cacb9c711478\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\7c7
830b8-009c-40f7-91e8-cacb9c711478\sc

DATE: 07/17/2023 TIME: 12:02:10

USER:

COMMENTS: _____

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*****
** SIMULATION : G - 100yr 4hr 10min Chicago **
*****

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

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10.0

[illegible]

	ADD	[1041+	0812]	0816	3	5.0	37.92	1.81	1.33	33.70	n/a	0.000
*	CHIC STORM [Ptot= 78.20 mm]					10.0						
*	CALIB NASHYD [CN=76.2 [N = 3.0:Tp 0.38]			1075	1	5.0	5.30	0.34	1.75	32.99	0.42	0.000
*	CHANNEL [2: 1075]			0609	1	5.0	5.30	0.31	1.92	32.99	n/a	0.000
*	CHIC STORM [Ptot= 78.20 mm]					10.0						
*	CALIB NASHYD [CN=74.9 [N = 3.0:Tp 0.55]			1081	1	5.0	18.64	0.87	2.00	31.06	0.40	0.000
*	CHIC STORM [Ptot= 78.20 mm]					10.0						
*	CALIB NASHYD [CN=73.8 [N = 3.0:Tp 0.40]			1074	1	5.0	6.00	0.33	1.75	29.66	0.38	0.000
*	CHANNEL [2: 1074]			0115	1	5.0	6.00	0.30	2.00	29.65	n/a	0.000
*	CHIC STORM [Ptot= 78.20 mm]					10.0						
*	CALIB NASHYD [CN=74.6 [N = 3.0:Tp 0.56]			1082	1	5.0	4.21	0.19	2.00	30.70	0.39	0.000
*	ADD [1082+ 0115]			0116	3	5.0	10.21	0.49	2.00	30.08	n/a	0.000
*	CHANNEL [2: 0116]			0118	1	5.0	10.21	0.49	2.08	30.08	n/a	0.000
*	ADD [1081+ 0118]			0813	3	5.0	28.85	1.36	2.00	30.71	n/a	0.000
*	ADD [0813+ 0609]			0813	1	5.0	34.15	1.67	2.00	31.07	n/a	0.000
*	CHANNEL [2: 0813]			0610	1	5.0	34.15	1.63	2.08	31.06	n/a	0.000
*	CHIC STORM [Ptot= 78.20 mm]					10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]			1042	1	5.0	2.09	0.56	1.33	55.47	0.71	0.000

*	ADD [1042+ 0610]	0814	3	5.0	36.24	1.71	2.08	32.47	n/a	0.000
*	CHANNEL[2: 0814]	0611	1	5.0	36.24	1.66	2.25	32.46	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB STANDHYD	1032	1	5.0	1.68	0.45	1.33	55.47	0.71	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1032+ 0611]	0815	3	5.0	37.92	1.72	2.17	33.48	n/a	0.000
*	ADD [0815+ 0816]	0815	1	5.0	75.84	2.85	2.08	33.59	n/a	0.000
*	CHANNEL[2: 0815]	0612	1	5.0	75.84	2.85	2.17	33.59	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB STANDHYD	1031	1	5.0	12.60	2.75	1.33	55.47	0.71	0.000
*	[I%=35.0:S%= 2.00]									
*	ADD [1031+ 0612]	0163	3	5.0	88.44	4.77	1.33	36.71	n/a	0.000
*	ADD [0163+ 0701]	0163	1	5.0	96.77	4.79	1.33	35.39	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB NASHYD	0901	1	5.0	6.80	1.60	1.33	34.19	0.44	0.000
*	[CN=84.1									
*	[N = 3.0:Tp 0.05]									
*	ADD [0163+ 8031]	0803	3	5.0	294.71	10.90	2.83	33.10	n/a	0.000
*	ADD [0803+ 0901]	0803	1	5.0	301.51	11.00	2.83	33.13	n/a	0.000
**	Reservoir									
*	OUTFLOW:	0501	1	5.0	301.51	7.98	3.33	33.12	n/a	0.000
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB NASHYD	0903	1	5.0	3.03	0.57	1.33	33.62	0.43	0.000
*	[CN=77.6									
*	[N = 3.0:Tp 0.08]									
*	CHANNEL[2: 0903]	0605	1	5.0	3.03	0.30	1.50	33.52	n/a	0.000
*	CHIC STORM			10.0						

	[Ptot= 78.20 mm]									
*	CALIB NASHYD	1014	1	5.0	0.38	0.03	1.67	34.92	0.45	0.000
*	[CN=76.0									
*	[N = 3.0:Tp 0.32]									
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB NASHYD	1012	1	5.0	0.42	0.07	1.33	33.61	0.43	0.000
*	[CN=76.0									
*	[N = 3.0:Tp 0.09]									
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB STANDHYD	1013	1	5.0	2.49	0.74	1.33	58.83	0.75	0.000
*	[I%=43.0:S%= 2.00]									
*	CHIC STORM			10.0						
*	[Ptot= 78.20 mm]									
*	CALIB STANDHYD	1011	1	5.0	3.26	0.94	1.33	57.90	0.74	0.000
*	[I%=40.3:S%= 2.00]									
*	ADD [1011+ 1012]	0810	3	5.0	3.68	1.01	1.33	55.12	n/a	0.000
*	ADD [0810+ 1013]	0810	1	5.0	6.17	1.75	1.33	56.62	n/a	0.000
*	ADD [0810+ 1014]	0810	3	5.0	6.55	1.76	1.33	55.36	n/a	0.000
*	ADD [0810+ 0501]	0810	1	5.0	308.06	8.09	3.33	33.59	n/a	0.000
*	ADD [0810+ 0605]	0810	3	5.0	311.09	8.13	3.33	33.59	n/a	0.000
=====										
=====										
	V	V	I	SSSS	U	U	A	L		(v 6.1.2001)
	V	V	I	SS	U	U	A	A	L	
	V	V	I	SS	U	U	AAAA	L		
	V	V	I	SS	U	U	A	A	L	
	VV	I	SSSS	UUUU	A	A	LLLL			
	000	TTTT	TTTT	H	H	Y	Y	M	M	000
	0	0	T	T	H	H	Y	Y	MM	MM
	0	0	T	T	H	H	Y	M	M	0
	000	T	T	H	H	Y	M	M	000	

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voim.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\21e82365-7c0a-47df-abf4-8759b237e335\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\21e82365-7c0a-47df-abf4-8759b237e335\sc

DATE: 07/17/2023 TIME: 12:02:09

USER:

COMMENTS: _____

** SIMULATION : H - TIMMINS **

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

READ STORM	15.0							
[Ptot=193.00 mm]								
fname :								
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8								
remark: TIMMINS								

*
** CALIB NASHYD 1002 1 5.0 43.20 3.93 7.08 136.12 0.71 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]
*
SHIFT[2: 1002] 0606 1 5.0 43.20 3.93 8.33 136.12 n/a 0.000
[SHIFT= 79.2 min]
*
READ STORM 15.0

[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD 1072 1 5.0 12.53 1.00 7.17 124.52 0.65 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*
ADD [1072+ 0606] 0804 3 5.0 55.73 4.57 8.33 133.52 n/a 0.000
*
READ STORM 15.0
[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD 1073 1 5.0 19.10 1.46 7.17 118.72 0.62 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*
READ STORM 15.0
[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.07 7.00 133.00 0.69 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
READ STORM 15.0
[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.37 7.00 125.73 0.65 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.44 7.00 128.84 n/a 0.000

```

*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 2.44 8.25 128.84 n/a 0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811 3 5.0 44.70 3.38 8.25 124.52 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 3.38 8.25 124.52 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 31.60 2.98 8.25 124.52 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 13.10 0.40 2.42 124.52 n/a 0.000
*
ADD [ 0127+ 0804] 0841 3 5.0 87.33 7.51 8.25 130.26 n/a 0.000
*
CHANNEL[ 2: 0841] 0604 1 5.0 87.33 7.44 8.25 130.26 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
** CALIB NASHYD 1001 1 5.0 50.05 3.52 7.33 123.17 0.64 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 3.51 7.42 123.17 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
** CALIB NASHYD 1071 1 5.0 23.31 1.34 7.42 105.65 0.55 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 4.85 7.42 117.60 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 160.69 11.38 8.25 124.48 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 160.69 11.38 8.25 124.48 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-

```

```

90de-4416-b9ea-8
remark: TIMMINS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.28 7.25 89.62 0.46 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 165.95 11.58 8.25 123.37 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 165.95 11.58 8.25 123.37 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.49 7.25 102.93 0.53 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
** CALIB NASHYD 0904 1 5.0 9.08 0.86 7.08 144.96 0.75 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
*
CALIB STANDHYD 1021 1 5.0 16.01 1.45 7.00 138.77 0.72 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.90 7.00 126.70 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 190.09 12.75 8.25 123.80 n/a 0.000

```



```

*
  ADD [ 0807+ 0904] 0807 3 5.0 199.17 13.24 8.25 124.76 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 199.17 13.23 8.33 124.76 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.36 7.17 136.42 0.71 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031 3 5.0 203.55 13.47 8.25 125.01 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD 1061 1 5.0 8.33 0.51 7.17 98.15 0.51 0.000
  [CN=60.3 ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701 1 5.0 8.33 0.51 7.25 98.15 n/a 0.000
*
  CHANNEL[ 2: 0127] 0608 1 5.0 13.10 0.40 2.67 124.52 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB NASHYD 0105 1 5.0 12.80 0.96 7.17 116.01 0.60 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812 3 5.0 25.90 1.36 7.17 120.31 n/a 0.000
*
  READ STORM 15.0

```

```

  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.70 7.00 163.66 0.85 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0812] 0816 3 5.0 32.31 2.02 7.00 128.91 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.47 7.08 129.51 0.67 0.000
  [CN=76.2 ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.45 7.17 129.51 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.45 7.17 125.83 0.65 0.000
  [CN=74.9 ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM 15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\2a72b767-90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.50 7.08 122.96 0.64 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*

```

```

CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.49 7.17 122.95 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD 1082 1 5.0 4.21 0.32 7.25 125.09 0.65 0.000
[CN=74.6 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1082+ 0115] 0116 3 5.0 10.21 0.81 7.17 123.84 n/a 0.000
*
CHANNEL[ 2: 0116] 0118 1 5.0 10.21 0.81 7.25 123.83 n/a 0.000
*
ADD [ 1081+ 0118] 0813 3 5.0 28.85 2.25 7.25 125.13 n/a 0.000
*
ADD [ 0813+ 0609] 0813 1 5.0 34.15 2.70 7.25 125.81 n/a 0.000
*
CHANNEL[ 2: 0813] 0610 1 5.0 34.15 2.68 7.33 125.80 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.23 7.00 163.66 0.85 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1042+ 0610] 0814 3 5.0 36.24 2.82 7.25 127.99 n/a 0.000
*
CHANNEL[ 2: 0814] 0611 1 5.0 36.24 2.79 7.42 127.98 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.18 7.00 163.66 0.85 0.000
[I%=35.0:S%= 2.00]
*

```

```

ADD [ 1032+ 0611] 0815 3 5.0 37.92 2.89 7.33 129.56 n/a 0.000
*
ADD [ 0815+ 0816] 0815 1 5.0 70.23 4.70 7.17 129.26 n/a 0.000
*
CHANNEL[ 2: 0815] 0612 1 5.0 70.23 4.69 7.17 129.26 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB STANDHYD 1031 1 5.0 12.60 1.36 7.00 163.66 0.85 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1031+ 0612] 0163 3 5.0 82.83 5.93 7.00 134.49 n/a 0.000
*
ADD [ 0163+ 0701] 0163 1 5.0 91.16 6.41 7.00 131.17 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD 0901 1 5.0 6.80 0.56 7.00 114.79 0.59 0.000
[CN=84.1 ]
[ N = 3.0:Tp 0.05]
*
ADD [ 0163+ 8031] 0803 3 5.0 294.71 18.53 7.67 126.92 n/a 0.000
*
ADD [ 0803+ 0901] 0803 1 5.0 301.51 18.80 7.67 126.64 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 18.67 7.83 126.64 n/a 0.000
*
READ STORM 15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD 0903 1 5.0 3.03 0.28 7.00 126.52 0.66 0.000
[CN=77.6 ]

```

```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.28 7.00 126.42 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=193.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 7.00 131.74 0.68 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot=193.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.04 7.00 126.80 0.66 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot=193.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.28 7.00 168.29 0.87 0.000
* [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
* [ Ptot=193.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.36 7.00 167.06 0.87 0.000
* [I%=40.3:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.40 7.00 162.46 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.68 7.00 164.82 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.71 7.00 162.90 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 19.02 7.83 127.41 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 19.16 7.83 127.40 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\d96060ae-beae-4846-8da5-b4bb47cdf052\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\d96060ae-beae-4846-8da5-b4bb47cdf052\sc

DATE: 07/17/2023 TIME: 12:02:10

USER:

COMMENTS: _____

```

```

*****
** SIMULATION : I - 2yr 6hr 15min SCS **
*****

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

      START @  0.00 hrs
      -----
      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1002  1  5.0   43.20   0.97  3.58  10.94 0.28   0.000
   [CN=78.4 ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002] 0606  1  5.0   43.20   0.97  4.83  10.94 n/a   0.000
[SHIFT= 79.2 min]
*
      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1072  1  5.0   12.53   0.16  3.75   7.60 0.19   0.000
   [CN=74.7 ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   1.04  4.83  10.19 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1073  1  5.0   19.10   0.22  3.75   6.84 0.17   0.000
   [CN=71.9 ]
   [ N = 3.0:Tp 0.48]
*

```

```

      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1004  1  5.0   10.95   0.42  3.25   9.85 0.25   0.000
   [CN=78.0 ]
   [ N = 3.0:Tp 0.15]
*
      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1003  1  5.0   14.65   0.44  3.33   8.16 0.21   0.000
   [CN=75.1 ]
   [ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   0.85  3.33   8.88 n/a   0.000
*
SHIFT[  2: 0157] 0607  1  5.0   25.60   0.85  4.58   8.88 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   0.96  4.50   8.01 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   0.96  4.50   8.01 n/a   0.000
  MAJOR SYSTEM:    0127  2  5.0    7.37   0.56  4.50   8.01 n/a   0.000
  MINOR SYSTEM:    0127  3  5.0   37.33   0.40  4.42   8.01 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   63.10   1.37  4.58   9.93 n/a   0.000
*
CHANNEL[  2: 8041] 0604  1  5.0   63.10   1.26  4.75   9.93 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 39.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
      remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD              1001  1  5.0   50.05   0.52  4.00   7.75 0.20   0.000
   [CN=73.6 ]
   [ N = 3.0:Tp 0.68]

```

```

*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 0.52 4.08 7.75 n/a 0.000
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.16 4.08 5.46 0.14 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 0.68 4.08 7.02 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 136.46 1.80 4.67 8.36 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 136.46 1.79 4.75 8.36 n/a 0.000
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.04 3.83 4.64 0.12 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 141.72 1.81 4.75 8.23 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 141.72 1.83 4.75 8.23 n/a 0.000
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.07 3.83 5.97 0.15 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0

```

```

[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.24 3.58 13.42 0.34 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 0.99 3.25 18.35 0.46 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.01 3.25 14.18 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 165.86 1.96 4.75 9.09 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 174.94 2.03 4.75 9.32 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 174.94 2.00 4.75 9.32 n/a 0.000
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.08 3.75 11.11 0.28 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031 3 5.0 179.32 2.03 4.75 9.36 n/a 0.000
*
READ STORM 15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```

```

*
** CALIB NASHYD      1061  1  5.0    8.33    0.08  3.75   5.40 0.14   0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
* PIPE   [ 2: 1061]   0701  1  5.0    8.33    0.08  3.83   5.40 n/a   0.000
*
* CHANNEL[ 2: 0127]   0608  1  5.0   37.33    0.40  4.75   8.01 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
** CALIB NASHYD      0105  1  5.0   12.80    0.16  3.75   6.97 0.18   0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.47]
*
* ADD [ 0105+ 0608]   0812  3  5.0   50.13    0.47  4.58   7.74 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
* CALIB STANDHYD     1041  1  5.0    6.41    0.49  3.25  22.98 0.58   0.000
   [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0812]   0816  3  5.0   56.54    0.57  3.25   9.47 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
* CALIB NASHYD      1075  1  5.0    5.30    0.10  3.58   9.03 0.23   0.000
   [CN=76.2          ]
   [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075]   0609  1  5.0    5.30    0.08  3.83   9.03 n/a   0.000

```

```

*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
* CALIB NASHYD      1081  1  5.0   18.64    0.24  3.83   8.11 0.20   0.000
   [CN=74.9          ]
   [ N = 3.0:Tp 0.55]
*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
* CALIB NASHYD      1074  1  5.0    6.00    0.09  3.58   7.50 0.19   0.000
   [CN=73.8          ]
   [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074]   0115  1  5.0    6.00    0.07  3.92   7.50 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 39.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
   remark: 2yr 6hr 15min SCS
*
* CALIB NASHYD      1082  1  5.0    4.21    0.05  3.83   7.96 0.20   0.000
   [CN=74.6          ]
   [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115]   0116  3  5.0   10.21    0.12  3.92   7.69 n/a   0.000
*
* CHANNEL[ 2: 0116]   0118  1  5.0   10.21    0.12  4.00   7.69 n/a   0.000
*
* ADD [ 1081+ 0118]   0813  3  5.0   28.85    0.35  3.92   7.96 n/a   0.000
*
* ADD [ 0813+ 0609]   0813  1  5.0   34.15    0.43  3.92   8.13 n/a   0.000
*
* CHANNEL[ 2: 0813]   0610  1  5.0   34.15    0.43  4.00   8.12 n/a   0.000
*
   READ STORM              15.0

```

```

[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.17  3.25  22.98 0.58    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    36.24    0.46  3.92   8.98 n/a    0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    36.24    0.45  4.08   8.97 n/a    0.000
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD      1032  1  5.0    1.68    0.14  3.25  22.98 0.58    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    37.92    0.47  4.00   9.59 n/a    0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    94.46    0.92  3.83   9.52 n/a    0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    94.46    0.92  3.92   9.52 n/a    0.000
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD      1031  1  5.0    12.60    0.93  3.25  22.98 0.58    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163  3  5.0   107.06    1.65  3.25  11.10 n/a    0.000
*
* ADD [ 0163+ 0701] 0163  1  5.0   115.39    1.67  3.25  10.69 n/a    0.000
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-

```

```

c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB NASHYD          0901  1  5.0    6.80    0.46  3.25  11.43 0.29    0.000
[ CN=84.1
[ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803  3  5.0   294.71    2.99  4.75   9.88 n/a    0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    3.17  3.25   9.92 n/a    0.000
*
** Reservoir
OUTFLOW:          0501  1  5.0   301.51    1.08  6.08   9.91 n/a    0.000
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB NASHYD          0903  1  5.0    3.03    0.17  3.25   9.84 0.25    0.000
[ CN=77.6
[ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03    0.08  3.33   9.73 n/a    0.000
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB NASHYD          1014  1  5.0    0.38    0.01  3.50  10.42 0.26    0.000
[ CN=76.0
[ N = 3.0:Tp 0.32]
*
* READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB NASHYD          1012  1  5.0    0.42    0.02  3.25  10.03 0.25    0.000

```

```

[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.24  3.25  25.27 0.64   0.000
[I%=43.0:S%= 2.00]
*
READ STORM          15.0
[ Ptot= 39.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.30  3.25  24.60 0.62   0.000
[I%=40.3:S%= 2.00]
*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.32  3.25  22.94 n/a   0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    0.56  3.25  23.88 n/a   0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    0.57  3.25  23.10 n/a   0.000
*
ADD [ 0810+ 0501] 0810  1  5.0   308.06    1.10  6.08  10.19 n/a   0.000
*
ADD [ 0810+ 0605] 0810  3  5.0   311.09    1.11  6.00  10.19 n/a   0.000
*
=====
=====

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

Developed and Distributed by Smart City Water Inc

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\6f47bd7d-3e8a-4417-9a1b-09674fedcc94\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\6f47bd7d-3e8a-4417-9a1b-09674fedcc94\sc

DATE: 07/17/2023

TIME: 12:02:10

USER:

COMMENTS: _____

** SIMULATION : J - 5yr 6hr 15min SCS **

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0    43.20    1.67  3.58  18.41 0.35   0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    1.67  4.83  18.41 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0

```



```

[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0   12.53   0.30  3.75  13.91 0.27   0.000
[CN=74.7             ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   1.78  4.83  17.40 n/a   0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0   19.10   0.43  3.67  12.64 0.24   0.000
[CN=71.9             ]
[ N = 3.0:Tp 0.48]
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0   10.95   0.75  3.25  17.04 0.33   0.000
[CN=78.0             ]
[ N = 3.0:Tp 0.15]
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0   14.65   0.81  3.33  14.63 0.28   0.000
[CN=75.1             ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   1.55  3.25  15.66 n/a   0.000

```

```

*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   1.55  4.50  15.66 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   1.77  4.50  14.37 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   1.77  4.50  14.37 n/a   0.000
MAJOR SYSTEM:      0127  2  5.0   13.87   1.37  4.50  14.37 n/a   0.000
MINOR SYSTEM:      0127  3  5.0   30.83   0.40  3.58  14.37 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   69.60   2.76  4.58  16.80 n/a   0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0   69.60   2.65  4.67  16.79 n/a   0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1001  1  5.0   50.05   0.98  3.92  13.96 0.27   0.000
[CN=73.6             ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   0.97  4.00  13.96 n/a   0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD      1071  1  5.0   23.31   0.31  4.00  10.22 0.20   0.000
[CN=65.3             ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805  3  5.0   73.36   1.28  4.00  12.77 n/a   0.000
*
ADD [ 0604+ 0805] 0806  3  5.0  142.96   3.61  4.67  14.73 n/a   0.000
*
CHANNEL[ 2: 0806] 0601  1  5.0  142.96   3.63  4.67  14.73 n/a   0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-

```

0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.07 3.83 8.41 0.16 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

* ADD [1062+ 0601] 0802 3 5.0 148.22 3.66 4.67 14.51 n/a 0.000

* CHANNEL[2: 0802] 0602 1 5.0 148.22 3.67 4.67 14.51 n/a 0.000

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.13 3.83 10.63 0.20 0.000
[CN=62.6]
[N = 3.0:Tp 0.60]

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.40 3.58 21.80 0.42 0.000
[CN=81.8]
[N = 3.0:Tp 0.43]

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 1.43 3.25 26.17 0.50 0.000
[I%=35.0:S%= 2.00]

* ADD [1021+ 1063] 0807 3 5.0 24.14 1.47 3.25 20.94 n/a 0.000

* ADD [0807+ 0602] 0807 1 5.0 172.36 3.87 4.67 15.41 n/a 0.000

*
ADD [0807+ 0904] 0807 3 5.0 181.44 3.99 4.67 15.73 n/a 0.000

* CHANNEL[2: 0807] 0603 1 5.0 181.44 3.93 4.75 15.73 n/a 0.000

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.14 3.75 18.61 0.36 0.000
[CN=78.4]
[N = 3.0:Tp 0.56]

* ADD [0603+ 0902] 8031 3 5.0 185.82 3.99 4.75 15.79 n/a 0.000

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 1061 1 5.0 8.33 0.14 3.75 9.72 0.19 0.000
[CN=60.3]
[N = 3.0:Tp 0.50]

* PIPE [2: 1061] 0701 1 5.0 8.33 0.14 3.75 9.72 n/a 0.000

* CHANNEL[2: 0127] 0608 1 5.0 30.83 0.40 3.83 14.37 n/a 0.000

*
READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 0105 1 5.0 12.80 0.29 3.67 12.58 0.24 0.000
[CN=69.9]
[N = 3.0:Tp 0.47]

* ADD [0105+ 0608] 0812 3 5.0 43.63 0.68 3.75 13.84 n/a 0.000

*
READ STORM 15.0

[Ptot= 52.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.77 3.25 33.07 0.63 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0812] 0816 3 5.0 50.04 0.95 3.25 16.31 n/a 0.000

*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.18 3.50 15.85 0.30 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.15 3.75 15.85 n/a 0.000

*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.44 3.75 14.57 0.28 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]

*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.17 3.58 13.68 0.26 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*

CHANNEL[2: 1074] 0115 1 5.0 6.00 0.14 3.83 13.68 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1082 1 5.0 4.21 0.10 3.83 14.35 0.27 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]

*
* ADD [1082+ 0115] 0116 3 5.0 10.21 0.24 3.83 13.95 n/a 0.000

*
* CHANNEL[2: 0116] 0118 1 5.0 10.21 0.24 3.92 13.95 n/a 0.000

*
* ADD [1081+ 0118] 0813 3 5.0 28.85 0.68 3.83 14.35 n/a 0.000

*
* ADD [0813+ 0609] 0813 1 5.0 34.15 0.83 3.83 14.58 n/a 0.000

*
* CHANNEL[2: 0813] 0610 1 5.0 34.15 0.82 3.92 14.58 n/a 0.000

*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.26 3.25 33.07 0.63 0.000
[I%=35.0:S%= 2.00]

*
* ADD [1042+ 0610] 0814 3 5.0 36.24 0.86 3.92 15.64 n/a 0.000

*
* CHANNEL[2: 0814] 0611 1 5.0 36.24 0.85 4.00 15.64 n/a 0.000

*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.21 3.25 33.07 0.63 0.000
[I%=35.0:S%= 2.00]

*

```

* ADD [ 1032+ 0611] 0815 3 5.0 37.92 0.88 3.92 16.41 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 87.96 1.71 3.75 16.35 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 87.96 1.70 3.83 16.35 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 1.47 3.25 33.07 0.63 0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0 100.56 2.65 3.25 18.45 n/a 0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0 108.89 2.69 3.25 17.78 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 0.72 3.25 18.27 0.35 0.000
  [CN=84.1 ]
  [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0 294.71 5.27 4.75 16.53 n/a 0.000
*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 5.31 4.75 16.57 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 2.32 5.67 16.56 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.28 3.25 16.71 0.32 0.000
  [CN=77.6 ]

```

```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.16 3.33 16.60 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.02 3.42 17.48 0.33 0.000
  [CN=76.0 ]
  [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.04 3.25 16.83 0.32 0.000
  [CN=76.0 ]
  [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.34 3.25 35.79 0.69 0.000
  [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\7f2d2fc9-0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.43 3.25 35.01 0.67 0.000
  [I%=40.3:S%= 2.00]
*

```

```
* ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.47 3.25 32.93 n/a 0.000
*
* ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.81 3.25 34.09 n/a 0.000
*
* ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.82 3.25 33.12 n/a 0.000
*
* ADD [ 0810+ 0501] 0810 1 5.0 308.06 2.35 5.67 16.91 n/a 0.000
*
* ADD [ 0810+ 0605] 0810 3 5.0 311.09 2.36 5.67 16.91 n/a 0.000
*
=====
=====
```

```
V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL
```

```
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\ff5
a7cc1-615b-432e-96e1-4f39ff4c27dc\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\ff5
a7cc1-615b-432e-96e1-4f39ff4c27dc\sc

DATE: 07/17/2023

TIME: 12:02:11

USER:

COMMENTS: _____

```
*****
** SIMULATION : K - 10yr 6hr 15min SCS **
*****
```

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1002 1 5.0 43.20 2.19 3.58 23.97 0.40 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.40]
```

```
*
SHIFT[ 2: 1002] 0606 1 5.0 43.20 2.19 4.83 23.97 n/a 0.000
[SHIFT= 79.2 min]
```

```
*
READ STORM 15.0
[ Ptot= 60.60 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1072 1 5.0 12.53 0.41 3.75 18.77 0.31 0.000
[CN=74.7 ]
[ N = 3.0:Tp 0.50]
```

```
*
ADD [ 1072+ 0606] 0804 3 5.0 55.73 2.35 4.75 22.80 n/a 0.000
```

```
*
READ STORM 15.0
[ Ptot= 60.60 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1073 1 5.0 19.10 0.59 3.67 17.14 0.28 0.000
[CN=71.9 ]
[ N = 3.0:Tp 0.48]
```

*

READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.00 3.25 22.44 0.37 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.09 3.25 19.56 0.32 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.09 3.25 20.79 n/a 0.000

*
SHIFT[2: 0157] 0607 1 5.0 25.60 2.09 4.50 20.79 n/a 0.000
[SHIFT= 75.8 min]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 2.38 4.50 19.23 n/a 0.000

*
DUHYD 0127 1 5.0 44.70 2.38 4.50 19.23 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 18.80 1.98 4.50 19.23 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 25.90 0.40 3.42 19.23 n/a 0.000

*
ADD [0127+ 0804] 8041 3 5.0 74.53 3.82 4.58 21.90 n/a 0.000

*
CHANNEL[2: 8041] 0604 1 5.0 74.53 3.69 4.67 21.90 n/a 0.000

*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 1.33 3.92 18.73 0.31 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
CHANNEL[2: 1001] 0600 1 5.0 50.05 1.32 4.00 18.73 n/a 0.000

*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.43 4.00 13.99 0.23 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
ADD [1071+ 0600] 0805 3 5.0 73.36 1.75 4.00 17.22 n/a 0.000

*
ADD [0604+ 0805] 0806 3 5.0 147.89 4.96 4.67 19.58 n/a 0.000

*
CHANNEL[2: 0806] 0601 1 5.0 147.89 5.00 4.67 19.58 n/a 0.000

*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.10 3.75 11.41 0.19 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

*
ADD [1062+ 0601] 0802 3 5.0 153.15 5.05 4.67 19.30 n/a 0.000

*
CHANNEL[2: 0802] 0602 1 5.0 153.15 5.08 4.67 19.30 n/a 0.000

*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.18 3.83 14.28 0.24 0.000
[CN=62.6]
[N = 3.0:Tp 0.60]

*
READ STORM 15.0

```

[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD          0904  1  5.0    9.08    0.52  3.58  27.91 0.46    0.000
[CN=81.8                ]
[ N = 3.0:Tp 0.43]
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD        1021  1  5.0    16.01    1.73  3.25  31.73 0.52    0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807  3  5.0    24.14    1.79  3.25  25.85 n/a    0.000
*
ADD [ 0807+ 0602] 0807  1  5.0   177.29    5.33  4.67  20.19 n/a    0.000
*
ADD [ 0807+ 0904] 0807  3  5.0   186.37    5.48  4.67  20.57 n/a    0.000
*
CHANNEL[ 2: 0807] 0603  1  5.0   186.37    5.36  4.75  20.57 n/a    0.000
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD          0902  1  5.0     4.38    0.18  3.75  24.19 0.40    0.000
[CN=78.4                ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031  3  5.0   190.75    5.44  4.75  20.65 n/a    0.000
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD          1061  1  5.0     8.33    0.19  3.67  13.12 0.22    0.000
[CN=60.3                ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701  1  5.0     8.33    0.19  3.75  13.12 n/a    0.000
*
CHANNEL[ 2: 0127] 0608  1  5.0   25.90    0.40  4.75  19.23 n/a    0.000
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD          0105  1  5.0    12.80    0.40  3.67  16.92 0.28    0.000
[CN=69.9                ]
[ N = 3.0:Tp 0.47]
*
ADD [ 0105+ 0608] 0812  3  5.0    38.70    0.80  3.67  18.47 n/a    0.000
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD        1041  1  5.0     6.41    0.94  3.25  40.12 0.66    0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0812] 0816  3  5.0    45.11    1.22  3.25  21.55 n/a    0.000
*
READ STORM              15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD          1075  1  5.0     5.30    0.24  3.50  21.01 0.35    0.000
[CN=76.2                ]
[ N = 3.0:Tp 0.38]
*
CHANNEL[ 2: 1075] 0609  1  5.0     5.30    0.21  3.75  21.00 n/a    0.000

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB NASHYD              1081  1  5.0   18.64   0.60  3.75  19.50 0.32   0.000
  [CN=74.9                  ]
  [ N = 3.0:Tp 0.55]
*

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB NASHYD              1074  1  5.0    6.00   0.23  3.58  18.44 0.30   0.000
  [CN=73.8                  ]
  [ N = 3.0:Tp 0.40]
*

```

```

*
  CHANNEL[ 2: 1074]   0115  1  5.0    6.00   0.20  3.75  18.44 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB NASHYD              1082  1  5.0    4.21   0.13  3.75  19.23 0.32   0.000
  [CN=74.6                  ]
  [ N = 3.0:Tp 0.56]
*

```

```

*
  ADD [ 1082+ 0115]   0116  3  5.0   10.21   0.34  3.75  18.76 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0116]   0118  1  5.0   10.21   0.33  3.83  18.76 n/a   0.000
*

```

```

*
  ADD [ 1081+ 0118]   0813  3  5.0   28.85   0.93  3.83  19.24 n/a   0.000
*

```

```

*
  ADD [ 0813+ 0609]   0813  1  5.0   34.15   1.14  3.83  19.51 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0813]   0610  1  5.0   34.15   1.12  3.92  19.51 n/a   0.000
*

```

```

  READ STORM                15.0

```

```

[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB STANDHYD           1042  1  5.0    2.09   0.31  3.25  40.12 0.66   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1042+ 0610]   0814  3  5.0   36.24   1.17  3.92  20.70 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0814]   0611  1  5.0   36.24   1.14  4.00  20.69 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB STANDHYD           1032  1  5.0    1.68   0.25  3.25  40.12 0.66   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1032+ 0611]   0815  3  5.0   37.92   1.18  4.00  21.55 n/a   0.000
*

```

```

*
  ADD [ 0815+ 0816]   0815  1  5.0   83.03   2.11  3.75  21.55 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0815]   0612  1  5.0   83.03   2.11  3.83  21.55 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

```

```

*
* CALIB STANDHYD           1031  1  5.0   12.60   1.81  3.25  40.12 0.66   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1031+ 0612]   0163  3  5.0   95.63   3.33  3.25  23.99 n/a   0.000
*

```

```

*
  ADD [ 0163+ 0701]   0163  1  5.0  103.96   3.38  3.25  23.12 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-

```


a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 0.90 3.25 23.20 0.38 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
ADD [0163+ 8031] 0803 3 5.0 294.71 6.98 4.67 21.52 n/a 0.000
*
ADD [0803+ 0901] 0803 1 5.0 301.51 7.03 4.67 21.56 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 3.44 5.50 21.56 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\ a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.36 3.25 21.83 0.36 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.22 3.33 21.73 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\ a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.02 3.42 22.75 0.38 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\ a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.05 3.25 21.90 0.36 0.000

[CN=76.0]
[N = 3.0:Tp 0.09]
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\ a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.41 3.25 43.08 0.71 0.000
[I%=43.0:S%= 2.00]
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\ a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.52 3.25 42.24 0.70 0.000
[I%=40.3:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 0.57 3.25 39.92 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 0.99 3.25 41.19 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 1.00 3.25 40.12 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 3.48 5.50 21.95 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 3.50 5.50 21.95 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

Developed and Distributed by Smart City Water Inc

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\b66
8f111-787b-4eb7-9469-96e01d3aee1b\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\b66
8f111-787b-4eb7-9469-96e01d3aee1b\sc

DATE: 07/17/2023 TIME: 12:02:11

USER:

COMMENTS: _____

** SIMULATION : L - 25yr 6hr 15min SCS **

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

READ STORM	15.0							
[Ptot= 72.00 mm]								
fname :								
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f								
remark: 25yr 6hr 15min SCS								

*
** CALIB NASHYD 1002 1 5.0 43.20 2.97 3.50 32.08 0.45 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]
*
SHIFT[2: 1002] 0606 1 5.0 43.20 2.97 4.75 32.08 n/a 0.000
[SHIFT= 79.2 min]
*
READ STORM 15.0

[Ptot= 72.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.58 3.67 26.00 0.36 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*
ADD [1072+ 0606] 0804 3 5.0 55.73 3.18 4.75 30.71 n/a 0.000
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.84 3.67 23.90 0.33 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.37 3.25 30.35 0.42 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.52 3.25 26.89 0.37 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.89 3.25 28.37 n/a 0.000

```

*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 2.89 4.50 28.37 n/a 0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811 3 5.0 44.70 3.28 4.50 26.46 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 3.28 4.50 26.46 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 23.79 2.88 4.50 26.46 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 20.91 0.40 3.33 26.46 n/a 0.000
*
ADD [ 0127+ 0804] 8041 3 5.0 79.52 5.37 4.58 29.44 n/a 0.000
*
CHANNEL[ 2: 8041] 0604 1 5.0 79.52 5.19 4.67 29.44 n/a 0.000
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD 1001 1 5.0 50.05 1.86 3.92 25.83 0.36 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 1.85 4.00 25.83 n/a 0.000
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD 1071 1 5.0 23.31 0.61 4.00 19.73 0.27 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 2.47 4.00 23.89 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 152.88 6.93 4.67 26.78 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 152.88 6.99 4.67 26.78 n/a 0.000
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-

```

```

cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.14 3.75 16.03 0.22 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 158.14 7.06 4.67 26.42 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 158.14 7.10 4.67 26.42 n/a 0.000
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.25 3.83 19.81 0.28 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD 0904 1 5.0 9.08 0.69 3.58 36.70 0.51 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 72.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 2.30 3.25 39.65 0.55 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 2.39 3.25 32.97 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 182.28 7.43 4.67 27.29 n/a 0.000

```

```

*
  ADD [ 0807+ 0904] 0807 3 5.0 191.36 7.61 4.67 27.73 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 191.36 7.47 4.67 27.73 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.24 3.75 32.31 0.45 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031 3 5.0 195.74 7.58 4.67 27.84 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.27 3.67 18.32 0.25 0.000
  [CN=60.3 ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701 1 5.0 8.33 0.27 3.75 18.32 n/a 0.000
*
  CHANNEL[ 2: 0127] 0608 1 5.0 20.91 0.40 3.75 26.46 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 0105 1 5.0 12.80 0.56 3.67 23.45 0.33 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812 3 5.0 33.71 0.96 3.67 25.32 n/a 0.000
*
  READ STORM 15.0

```

```

  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.19 3.25 49.99 0.69 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0812] 0816 3 5.0 40.12 1.62 3.25 29.26 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.34 3.50 28.61 0.40 0.000
  [CN=76.2 ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.30 3.67 28.61 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.84 3.75 26.82 0.37 0.000
  [CN=74.9 ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM 15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.32 3.58 25.54 0.35 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*

```

```

* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.29 3.75 25.53 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB NASHYD 1082 1 5.0 4.21 0.19 3.75 26.50 0.37 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116 3 5.0 10.21 0.48 3.75 25.93 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 10.21 0.47 3.83 25.93 n/a 0.000
*
* ADD [ 1081+ 0118] 0813 3 5.0 28.85 1.31 3.75 26.51 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 34.15 1.61 3.75 26.83 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 34.15 1.56 3.92 26.83 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.43 3.25 49.99 0.69 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 36.24 1.62 3.83 28.17 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 36.24 1.58 4.00 28.16 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.35 3.25 49.99 0.69 0.000
* [I%=35.0:S%= 2.00]
*

```

```

* ADD [ 1032+ 0611] 0815 3 5.0 37.92 1.62 4.00 29.13 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 78.04 2.72 3.83 29.19 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 78.04 2.72 3.83 29.19 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 2.29 3.25 49.99 0.69 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0 90.64 4.40 3.25 32.08 n/a 0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0 98.97 4.48 3.25 30.93 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.16 3.25 30.24 0.42 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0 294.71 9.67 4.67 28.87 n/a 0.000
*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 9.73 4.67 28.90 n/a 0.000
*
* ** Reservoir
* OUTFLOW: 0501 1 5.0 301.51 6.12 5.25 28.90 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
* CALIB NASHYD 0903 1 5.0 3.03 0.49 3.25 29.33 0.41 0.000
* [CN=77.6 ]

```

```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.31 3.33 29.23 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 3.42 30.48 0.42 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.06 3.25 29.34 0.41 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.55 3.25 53.22 0.74 0.000
* [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.70 3.25 52.31 0.73 0.000
* [I%=40.3:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.77 3.25 49.69 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.32 3.25 51.12 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 1.34 3.25 49.92 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 6.19 5.17 29.35 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 6.22 5.17 29.34 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82\0a28cd53-7603-4b54-81f1-4ad2d3fa53f4\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82\0a28cd53-7603-4b54-81f1-4ad2d3fa53f4\sc

```

DATE: 07/17/2023 TIME: 12:02:11

USER:

COMMENTS: _____

```

*****
** SIMULATION : M - 50yr 6hr 15min SCS **
*****

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

      START @  0.00 hrs
      -----
      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1002  1  5.0   43.20   3.53  3.50  37.93 0.48   0.000
   [CN=78.4                  ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]  0606  1  5.0   43.20   3.53  4.75  37.93 n/a   0.000
[SHIFT= 79.2 min]
*
      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1072  1  5.0   12.53   0.71  3.67  31.30 0.39   0.000
   [CN=74.7                  ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   3.78  4.75  36.44 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1073  1  5.0   19.10   1.02  3.67  28.88 0.36   0.000
   [CN=71.9                  ]
   [ N = 3.0:Tp 0.48]
*

```

```

      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1004  1  5.0   10.95   1.63  3.25  36.07 0.45   0.000
   [CN=78.0                  ]
   [ N = 3.0:Tp 0.15]
*
      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1003  1  5.0   14.65   1.84  3.25  32.25 0.40   0.000
   [CN=75.1                  ]
   [ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   3.47  3.25  33.88 n/a   0.000
*
SHIFT[  2: 0157]  0607  1  5.0   25.60   3.47  4.50  33.88 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   3.93  4.50  31.74 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   3.93  4.50  31.74 n/a   0.000
  MAJOR SYSTEM:    0127  2  5.0   26.43   3.53  4.50  31.74 n/a   0.000
  MINOR SYSTEM:    0127  3  5.0   18.27   0.40  3.25  31.74 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   82.16   6.49  4.58  34.93 n/a   0.000
*
CHANNEL[  2: 8041] 0604  1  5.0   82.16   6.28  4.67  34.93 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 79.80 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
      remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD              1001  1  5.0   50.05   2.26  3.92  31.04 0.39   0.000
   [CN=73.6                  ]
   [ N = 3.0:Tp 0.68]

```

```

*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 2.24 4.00 31.04 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.75 4.00 24.02 0.30 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 2.99 4.00 28.81 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 155.52 8.37 4.67 32.04 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 155.52 8.44 4.67 32.04 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.17 3.75 19.51 0.24 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 160.78 8.52 4.67 31.63 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 160.78 8.56 4.67 31.63 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.30 3.83 23.94 0.30 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0

```

```

[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.81 3.58 42.97 0.54 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.64 3.25 45.29 0.57 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 2.75 3.25 38.10 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 184.92 8.94 4.67 32.48 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 194.00 9.16 4.67 32.97 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 194.00 9.04 4.67 32.97 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.28 3.75 38.17 0.48 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031 3 5.0 198.38 9.17 4.67 33.08 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```



```

*
* CALIB NASHYD      1061  1  5.0    8.33    0.33  3.67  22.22  0.28   0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
* PIPE   [ 2: 1061]  0701  1  5.0    8.33    0.33  3.75  22.22  n/a   0.000
*
* CHANNEL[ 2: 0127]  0608  1  5.0   18.27    0.40  3.67  31.74  n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB NASHYD      0105  1  5.0   12.80    0.68  3.67  28.27  0.35   0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.47]
*
* ADD [ 0105+ 0608]  0812  3  5.0   31.07    1.08  3.67  30.31  n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB STANDHYD    1041  1  5.0    6.41    1.37  3.25  56.90  0.71   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0812]  0816  3  5.0   37.48    1.90  3.25  34.86  n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB NASHYD      1075  1  5.0    5.30    0.40  3.50  34.15  0.43   0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075]  0609  1  5.0    5.30    0.37  3.67  34.15  n/a   0.000

```

```

*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB NASHYD      1081  1  5.0   18.64    1.02  3.75  32.18  0.40   0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB NASHYD      1074  1  5.0    6.00    0.39  3.58  30.75  0.39   0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074]  0115  1  5.0    6.00    0.35  3.75  30.74  n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS
*
* CALIB NASHYD      1082  1  5.0    4.21    0.22  3.75  31.81  0.40   0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115]  0116  3  5.0   10.21    0.58  3.75  31.18  n/a   0.000
*
* CHANNEL[ 2: 0116]  0118  1  5.0   10.21    0.57  3.83  31.18  n/a   0.000
*
* ADD [ 1081+ 0118]  0813  3  5.0   28.85    1.59  3.75  31.82  n/a   0.000
*
* ADD [ 0813+ 0609]  0813  1  5.0   34.15    1.95  3.75  32.18  n/a   0.000
*
* CHANNEL[ 2: 0813]  0610  1  5.0   34.15    1.90  3.83  32.18  n/a   0.000
*
  READ STORM          15.0

```

```

[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.49  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    36.24    1.98  3.83  33.61 n/a  0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    36.24    1.92  4.00  33.60 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD      1032  1  5.0    1.68    0.40  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    37.92    1.96  3.92  34.63 n/a  0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    75.40    3.21  3.75  34.75 n/a  0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    75.40    3.21  3.83  34.74 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD      1031  1  5.0    12.60    2.63  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163  3  5.0    88.00    5.15  3.25  37.92 n/a  0.000
*
* ADD [ 0163+ 0701] 0163  1  5.0    96.33    5.26  3.25  36.56 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-

```

```

a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          0901  1  5.0    6.80    1.33  3.25  35.23 0.44  0.000
  [CN=84.1
  [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803  3  5.0   294.71   11.50  4.67  34.22 n/a  0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51   11.58  4.67  34.24 n/a  0.000
*
** Reservoir
  OUTFLOW:          0501  1  5.0   301.51    9.01  5.00  34.24 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          0903  1  5.0    3.03    0.57  3.25  34.75 0.44  0.000
  [CN=77.6
  [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03    0.38  3.33  34.65 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          1014  1  5.0    0.38    0.03  3.42  36.08 0.45  0.000
  [CN=76.0
  [ N = 3.0:Tp 0.32]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          1012  1  5.0    0.42    0.08  3.25  34.73 0.44  0.000

```

```

[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.63  3.25  60.29 0.76   0.000
[I%=43.0:S%= 2.00]
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.81  3.25  59.35 0.74   0.000
[I%=40.3:S%= 2.00]
*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.88  3.25  56.54 n/a   0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.51  3.25  58.05 n/a   0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.54  3.25  56.78 n/a   0.000
*
ADD [ 0810+ 0501] 0810  1  5.0   308.06    9.09  5.00  34.71 n/a   0.000
*
ADD [ 0810+ 0605] 0810  3  5.0   311.09    9.13  5.00  34.71 n/a   0.000
*
=====
=====

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

Developed and Distributed by Smart City Water Inc

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\3b2
3173f-eca5-4838-be91-bd4f68eb5b70\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\3b2
3173f-eca5-4838-be91-bd4f68eb5b70\sc

DATE: 07/17/2023

TIME: 12:02:11

USER:

COMMENTS: _____

** SIMULATION : N - 100yr 6hr 15min SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
remark: 100yr 6hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0    43.20    4.11  3.50  43.98 0.50   0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    4.11  4.75  43.98 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0

```

[Ptot= 87.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.84 3.67 36.84 0.42 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*
ADD [1072+ 0606] 0804 3 5.0 55.73 4.41 4.75 42.37 n/a 0.000

*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 1.21 3.67 34.11 0.39 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.90 3.25 42.00 0.48 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 2.17 3.25 37.83 0.43 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 4.08 3.25 39.61 n/a 0.000

*
SHIFT[2: 0157] 0607 1 5.0 25.60 4.08 4.50 39.61 n/a 0.000
[SHIFT= 75.8 min]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 4.61 4.50 37.26 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 4.61 4.50 37.26 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 28.55 4.21 4.50 37.26 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 16.15 0.40 3.25 37.26 n/a 0.000

*
ADD [0127+ 0804] 8041 3 5.0 84.28 7.66 4.58 40.64 n/a 0.000

*
CHANNEL[2: 8041] 0604 1 5.0 84.28 7.42 4.67 40.64 n/a 0.000
*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 2.67 3.92 36.49 0.42 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
CHANNEL[2: 1001] 0600 1 5.0 50.05 2.65 4.00 36.49 n/a 0.000
*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.90 4.00 28.57 0.33 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
ADD [1071+ 0600] 0805 3 5.0 73.36 3.55 4.00 33.97 n/a 0.000

*
ADD [0604+ 0805] 0806 3 5.0 157.64 9.85 4.67 37.54 n/a 0.000

*
CHANNEL[2: 0806] 0601 1 5.0 157.64 9.94 4.67 37.54 n/a 0.000

*
READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-

```

1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD      1062  1  5.0    5.26    0.20  3.75  23.23 0.27  0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 1062+ 0601] 0802  3  5.0   162.90   10.04  4.67  37.07 n/a  0.000
*
  CHANNEL[ 2: 0802] 0602  1  5.0   162.90   10.10  4.67  37.07 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD      1063  1  5.0    8.13    0.36  3.83  28.32 0.32  0.000
  [CN=62.6          ]
  [ N = 3.0:Tp 0.60]
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08    0.93  3.58  49.42 0.56  0.000
  [CN=81.8          ]
  [ N = 3.0:Tp 0.43]
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD     1021  1  5.0   16.01    2.99  3.25  51.08 0.58  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807  3  5.0   24.14    3.12  3.25  43.41 n/a  0.000
*
  ADD [ 0807+ 0602] 0807  1  5.0  187.04   10.53  4.67  37.89 n/a  0.000

```

```

*
  ADD [ 0807+ 0904] 0807  3  5.0  196.12   10.78  4.67  38.43 n/a  0.000
*
  CHANNEL[ 2: 0807] 0603  1  5.0  196.12   10.69  4.67  38.43 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      0902  1  5.0    4.38    0.33  3.75  44.23 0.50  0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031  3  5.0  200.50   10.84  4.67  38.55 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      1061  1  5.0    8.33    0.39  3.67  26.36 0.30  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701  1  5.0    8.33    0.39  3.75  26.36 n/a  0.000
*
  CHANNEL[ 2: 0127] 0608  1  5.0   16.15    0.40  3.67  37.26 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      0105  1  5.0   12.80    0.80  3.67  33.33 0.38  0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812  3  5.0   28.95    1.20  3.67  35.53 n/a  0.000
*
  READ STORM          15.0

```

[Ptot= 87.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.68 3.25 63.91 0.73 0.000
[I%=35.0:S%= 2.00]

*
* ADD [1041+ 0812] 0816 3 5.0 35.36 2.33 3.25 40.67 n/a 0.000

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.47 3.50 39.91 0.46 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]

*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.43 3.67 39.90 n/a 0.000

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.20 3.75 37.76 0.43 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.46 3.58 36.19 0.41 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]

*

CHANNEL[2: 1074] 0115 1 5.0 6.00 0.42 3.75 36.19 n/a 0.000

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD 1082 1 5.0 4.21 0.26 3.75 37.36 0.43 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]

*
* ADD [1082+ 0115] 0116 3 5.0 10.21 0.69 3.75 36.67 n/a 0.000

*
* CHANNEL[2: 0116] 0118 1 5.0 10.21 0.68 3.75 36.67 n/a 0.000

*
* ADD [1081+ 0118] 0813 3 5.0 28.85 1.88 3.75 37.38 n/a 0.000

*
* ADD [0813+ 0609] 0813 1 5.0 34.15 2.31 3.75 37.77 n/a 0.000

*
* CHANNEL[2: 0813] 0610 1 5.0 34.15 2.24 3.83 37.77 n/a 0.000

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.56 3.25 63.91 0.73 0.000
[I%=35.0:S%= 2.00]

*
* ADD [1042+ 0610] 0814 3 5.0 36.24 2.32 3.83 39.27 n/a 0.000

*
* CHANNEL[2: 0814] 0611 1 5.0 36.24 2.24 4.00 39.27 n/a 0.000

*
* READ STORM 15.0
[Ptot= 87.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.45 3.25 63.91 0.73 0.000
[I%=35.0:S%= 2.00]

*

```

*      ADD [ 1032+ 0611] 0815 3 5.0 37.92 2.29 4.00 40.36 n/a 0.000
*
*      ADD [ 0815+ 0816] 0815 1 5.0 73.28 3.62 3.83 40.51 n/a 0.000
*
*      CHANNEL[ 2: 0815] 0612 1 5.0 73.28 3.62 3.83 40.51 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB STANDHYD 1031 1 5.0 12.60 2.98 3.25 63.91 0.73 0.000
*      [I%=35.0:S%= 2.00]
*
*      ADD [ 1031+ 0612] 0163 3 5.0 85.88 6.06 3.25 43.94 n/a 0.000
*
*      ADD [ 0163+ 0701] 0163 1 5.0 94.21 6.19 3.25 42.39 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB NASHYD 0901 1 5.0 6.80 1.51 3.25 40.33 0.46 0.000
*      [CN=84.1 ]
*      [ N = 3.0:Tp 0.05]
*
*      ADD [ 0163+ 8031] 0803 3 5.0 294.71 13.47 4.67 39.78 n/a 0.000
*
*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 13.55 4.67 39.79 n/a 0.000
*
*      ** Reservoir
*      OUTFLOW: 0501 1 5.0 301.51 11.68 4.83 39.79 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB NASHYD 0903 1 5.0 3.03 0.66 3.25 40.37 0.46 0.000
*      [CN=77.6 ]

```

```

*      [ N = 3.0:Tp 0.08]
*
*      CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.45 3.33 40.26 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB NASHYD 1014 1 5.0 0.38 0.04 3.42 41.89 0.48 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.32]
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB NASHYD 1012 1 5.0 0.42 0.09 3.25 40.32 0.46 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.09]
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB STANDHYD 1013 1 5.0 2.49 0.71 3.25 67.45 0.77 0.000
*      [I%=43.0:S%= 2.00]
*
*      READ STORM 15.0
*      [ Ptot= 87.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS
*
*      CALIB STANDHYD 1011 1 5.0 3.26 0.91 3.25 66.47 0.76 0.000
*      [I%=40.3:S%= 2.00]
*

```

* ADD [1011+ 1012] 0810 3 5.0 3.68 1.00 3.25 63.49 n/a 0.000
*
* ADD [0810+ 1013] 0810 1 5.0 6.17 1.71 3.25 65.09 n/a 0.000
*
* ADD [0810+ 1014] 0810 3 5.0 6.55 1.74 3.25 63.74 n/a 0.000
*
* ADD [0810+ 0501] 0810 1 5.0 308.06 11.78 4.83 40.29 n/a 0.000
*
* ADD [0810+ 0605] 0810 3 5.0 311.09 11.83 4.83 40.29 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\4f4
be9c3-8957-431b-9e47-78702c39c68d\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\4f4
be9c3-8957-431b-9e47-78702c39c68d\sc

DATE: 07/17/2023

TIME: 12:02:11

USER:

COMMENTS: _____

** SIMULATION : 0 - 2yr 12hr 15min SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1002 1 5.0 43.20 1.29 6.50 16.53 0.34 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]

*
SHIFT[2: 1002] 0606 1 5.0 43.20 1.29 7.75 16.53 n/a 0.000
[SHIFT= 79.2 min]

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.23 6.67 12.30 0.25 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]

*
ADD [1072+ 0606] 0804 3 5.0 55.73 1.37 7.75 15.58 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.32 6.67 11.15 0.23 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*

READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 0.57 6.25 15.22 0.31 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 0.61 6.25 12.97 0.26 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 1.18 6.25 13.94 n/a 0.000

*
SHIFT[2: 0157] 0607 1 5.0 25.60 1.18 7.50 13.94 n/a 0.000
[SHIFT= 75.8 min]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 1.33 7.50 12.74 n/a 0.000

*
DUHYD 0127 1 5.0 44.70 1.33 7.50 12.74 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 8.88 0.93 7.50 12.74 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 35.82 0.40 7.25 12.74 n/a 0.000

*
ADD [0127+ 0804] 8041 3 5.0 64.61 2.02 7.58 15.19 n/a 0.000

*
CHANNEL[2: 8041] 0604 1 5.0 64.61 1.90 7.67 15.19 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 0.74 6.92 12.37 0.25 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
CHANNEL[2: 1001] 0600 1 5.0 50.05 0.73 7.00 12.37 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.23 7.00 8.98 0.18 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
ADD [1071+ 0600] 0805 3 5.0 73.36 0.96 7.00 11.29 n/a 0.000

*
ADD [0604+ 0805] 0806 3 5.0 137.97 2.60 7.67 13.12 n/a 0.000

*
CHANNEL[2: 0806] 0601 1 5.0 137.97 2.61 7.67 13.12 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.05 6.75 7.43 0.15 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

*
ADD [1062+ 0601] 0802 3 5.0 143.23 2.64 7.67 12.91 n/a 0.000

*
CHANNEL[2: 0802] 0602 1 5.0 143.23 2.64 7.67 12.91 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.10 6.83 9.43 0.19 0.000
[CN=62.6]
[N = 3.0:Tp 0.60]

*
READ STORM 15.0

```

[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD          0904  1  5.0    9.08    0.31  6.58  19.70 0.40    0.000
[CN=81.8                ]
[ N = 3.0:Tp 0.43]
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD        1021  1  5.0    16.01    1.12  6.25  24.25 0.49    0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807  3  5.0    24.14    1.15  6.25  19.26 n/a    0.000
*
ADD [ 0807+ 0602] 0807  1  5.0   167.37    2.78  7.67  13.82 n/a    0.000
*
ADD [ 0807+ 0904] 0807  3  5.0   176.45    2.87  7.67  14.13 n/a    0.000
*
CHANNEL[ 2: 0807] 0603  1  5.0   176.45    2.82  7.75  14.13 n/a    0.000
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD          0902  1  5.0    4.38    0.10  6.75  16.72 0.34    0.000
[CN=78.4                ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031  3  5.0   180.83    2.86  7.75  14.19 n/a    0.000
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

```

```

*
** CALIB NASHYD          1061  1  5.0    8.33    0.11  6.67   8.60 0.17    0.000
[CN=60.3                ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701  1  5.0    8.33    0.10  6.75   8.60 n/a    0.000
*
CHANNEL[ 2: 0127] 0608  1  5.0   35.82    0.40  7.50  12.74 n/a    0.000
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD          0105  1  5.0   12.80    0.22  6.67  11.14 0.23    0.000
[CN=69.9                ]
[ N = 3.0:Tp 0.47]
*
ADD [ 0105+ 0608] 0812  3  5.0   48.62    0.54  6.75  12.32 n/a    0.000
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD        1041  1  5.0    6.41    0.59  6.25  30.61 0.62    0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0812] 0816  3  5.0   55.03    0.75  6.25  14.45 n/a    0.000
*
READ STORM              15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD          1075  1  5.0    5.30    0.14  6.50  14.11 0.29    0.000
[CN=76.2                ]
[ N = 3.0:Tp 0.38]
*
CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.11  6.75  14.11 n/a    0.000

```

```

*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB NASHYD            1081  1  5.0   18.64   0.34  6.75  12.92 0.26   0.000
  [CN=74.9                ]
  [ N = 3.0:Tp 0.55]
*

```

```

*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB NASHYD            1074  1  5.0    6.00   0.13  6.58  12.10 0.25   0.000
  [CN=73.8                ]
  [ N = 3.0:Tp 0.40]
*

```

```

*
  CHANNEL[ 2: 1074]    0115  1  5.0    6.00   0.10  6.83  12.09 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :

```

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB NASHYD            1082  1  5.0    4.21   0.07  6.75  12.71 0.26   0.000
  [CN=74.6                ]
  [ N = 3.0:Tp 0.56]
*

```

```

*
  ADD [ 1082+ 0115]    0116  3  5.0   10.21   0.18  6.83  12.35 n/a   0.000

```

```

*
  CHANNEL[ 2: 0116]    0118  1  5.0   10.21   0.18  6.92  12.35 n/a   0.000

```

```

*
  ADD [ 1081+ 0118]    0813  3  5.0   28.85   0.51  6.83  12.72 n/a   0.000

```

```

*
  ADD [ 0813+ 0609]    0813  1  5.0   34.15   0.62  6.83  12.93 n/a   0.000

```

```

*
  CHANNEL[ 2: 0813]    0610  1  5.0   34.15   0.61  6.92  12.93 n/a   0.000

```

```

*
  READ STORM              15.0

```

```

[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB STANDHYD          1042  1  5.0    2.09   0.20  6.25  30.61 0.62   0.000
  [I%=35.0:S%= 2.00]

```

```

*
  ADD [ 1042+ 0610]    0814  3  5.0   36.24   0.65  6.83  13.95 n/a   0.000

```

```

*
  CHANNEL[ 2: 0814]    0611  1  5.0   36.24   0.64  7.00  13.94 n/a   0.000

```

```

*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB STANDHYD          1032  1  5.0    1.68   0.16  6.25  30.61 0.62   0.000
  [I%=35.0:S%= 2.00]

```

```

*
  ADD [ 1032+ 0611]    0815  3  5.0   37.92   0.66  6.92  14.68 n/a   0.000

```

```

*
  ADD [ 0815+ 0816]    0815  1  5.0   92.95   1.31  6.75  14.54 n/a   0.000

```

```

*
  CHANNEL[ 2: 0815]    0612  1  5.0   92.95   1.31  6.83  14.54 n/a   0.000

```

```

*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

```

```

*
* CALIB STANDHYD          1031  1  5.0   12.60   1.05  6.25  30.61 0.62   0.000
  [I%=35.0:S%= 2.00]

```

```

*
  ADD [ 1031+ 0612]    0163  3  5.0  105.55   1.99  6.25  16.46 n/a   0.000

```

```

*
  ADD [ 0163+ 0701]    0163  1  5.0  113.88   2.02  6.25  15.89 n/a   0.000

```

```

*
  READ STORM              15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-

```

4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 0.55 6.25 16.57 0.34 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
* ADD [0163+ 8031] 0803 3 5.0 294.71 3.90 7.75 14.84 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 3.93 7.75 14.88 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 1.53 8.83 14.88 n/a 0.000
*
* READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.21 6.25 14.97 0.30 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
* CHANNEL[2: 0903] 0605 1 5.0 3.03 0.12 6.33 14.87 n/a 0.000
*
* READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.01 6.42 15.70 0.32 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
* READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.03 6.25 15.11 0.31 0.000

[CN=76.0]
[N = 3.0:Tp 0.09]
*
* READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.27 6.25 33.23 0.68 0.000
[I%=43.0:S%= 2.00]
*
* READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.34 6.25 32.48 0.66 0.000
[I%=40.3:S%= 2.00]
*
* ADD [1011+ 1012] 0810 3 5.0 3.68 0.36 6.25 30.50 n/a 0.000
*
* ADD [0810+ 1013] 0810 1 5.0 6.17 0.63 6.25 31.60 n/a 0.000
*
* ADD [0810+ 1014] 0810 3 5.0 6.55 0.64 6.25 30.68 n/a 0.000
*
* ADD [0810+ 0501] 0810 1 5.0 308.06 1.55 8.83 15.21 n/a 0.000
*
* ADD [0810+ 0605] 0810 3 5.0 311.09 1.56 8.75 15.21 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
V I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\47f1725d-4e72-4d45-81c7-e847eb2ae014\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\47f1725d-4e72-4d45-81c7-e847eb2ae014\sc

DATE: 07/17/2023 TIME: 12:02:11

USER:

COMMENTS: _____

** SIMULATION : P - 5yr 12hr 15min SCS **

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

READ STORM	15.0							
[Ptot= 64.80 mm]								
fname :								
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a								
remark: 5yr 12hr 15min SCS								

*
** CALIB NASHYD 1002 1 5.0 43.20 2.14 6.50 26.89 0.42 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]
*
SHIFT[2: 1002] 0606 1 5.0 43.20 2.14 7.75 26.89 n/a 0.000
[SHIFT= 79.2 min]
*
READ STORM 15.0

[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.41 6.67 21.35 0.33 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*
ADD [1072+ 0606] 0804 3 5.0 55.73 2.28 7.75 25.65 n/a 0.000
*
READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.59 6.67 19.55 0.30 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*
READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 0.97 6.25 25.28 0.39 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.07 6.25 22.19 0.34 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.04 6.25 23.51 n/a 0.000

```

*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 2.04 7.50 23.51 n/a 0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811 3 5.0 44.70 2.30 7.50 21.82 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 2.30 7.50 21.82 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 16.06 1.90 7.50 21.82 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 28.64 0.40 6.33 21.82 n/a 0.000
*
ADD [ 0127+ 0804] 8041 3 5.0 71.79 3.70 7.58 24.79 n/a 0.000
*
CHANNEL[ 2: 8041] 0604 1 5.0 71.79 3.57 7.67 24.79 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD 1001 1 5.0 50.05 1.32 6.92 21.27 0.33 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 1.31 7.00 21.27 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD 1071 1 5.0 23.31 0.42 7.00 16.02 0.25 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 1.73 7.00 19.60 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 145.15 4.76 7.67 22.17 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 145.15 4.80 7.67 22.17 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-

```

```

27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.09 6.75 13.05 0.20 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 150.41 4.85 7.67 21.85 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 150.41 4.88 7.67 21.85 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.18 6.83 16.24 0.25 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD 0904 1 5.0 9.08 0.50 6.58 31.09 0.48 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 1.59 6.25 34.60 0.53 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.65 6.25 28.42 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 174.55 5.10 7.67 22.76 n/a 0.000

```

```

*
  ADD [ 0807+ 0904] 0807 3 5.0 183.63 5.23 7.67 23.17 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 183.63 5.09 7.75 23.17 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.17 6.75 27.11 0.42 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031 3 5.0 188.01 5.16 7.67 23.26 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1061 1 5.0 8.33 0.19 6.67 14.97 0.23 0.000
  [CN=60.3 ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701 1 5.0 8.33 0.19 6.75 14.97 n/a 0.000
*
  CHANNEL[ 2: 0127] 0608 1 5.0 28.64 0.40 6.75 21.82 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 0105 1 5.0 12.80 0.39 6.67 19.25 0.30 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812 3 5.0 41.44 0.79 6.67 21.02 n/a 0.000
*
  READ STORM 15.0

```

```

  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.87 6.25 43.72 0.67 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0812] 0816 3 5.0 47.85 1.21 6.25 24.07 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.24 6.50 23.73 0.37 0.000
  [CN=76.2 ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.21 6.75 23.73 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.60 6.75 22.12 0.34 0.000
  [CN=74.9 ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM 15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.23 6.58 20.98 0.32 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*

```

```

* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.20 6.75 20.97 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB NASHYD 1082 1 5.0 4.21 0.13 6.75 21.83 0.34 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116 3 5.0 10.21 0.33 6.75 21.33 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 10.21 0.33 6.83 21.33 n/a 0.000
*
* ADD [ 1081+ 0118] 0813 3 5.0 28.85 0.92 6.75 21.84 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 34.15 1.13 6.75 22.13 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 34.15 1.10 6.83 22.13 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB STANDHYD 1042 1 5.0 2.09 0.29 6.25 43.72 0.67 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 36.24 1.15 6.83 23.38 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 36.24 1.12 7.00 23.37 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB STANDHYD 1032 1 5.0 1.68 0.23 6.25 43.72 0.67 0.000
* [I%=35.0:S%= 2.00]
*

```

```

* ADD [ 1032+ 0611] 0815 3 5.0 37.92 1.16 6.92 24.27 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 85.77 2.09 6.75 24.16 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 85.77 2.08 6.83 24.16 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB STANDHYD 1031 1 5.0 12.60 1.66 6.25 43.72 0.67 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0 98.37 3.21 6.25 26.66 n/a 0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0 106.70 3.27 6.25 25.75 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB NASHYD 0901 1 5.0 6.80 0.83 6.25 25.75 0.40 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0 294.71 6.64 7.67 24.16 n/a 0.000
*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 6.68 7.67 24.20 n/a 0.000
*
* ** Reservoir
* OUTFLOW: 0501 1 5.0 301.51 3.33 8.42 24.19 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ad9e5545-27b0-4020-85ef-a
* remark: 5yr 12hr 15min SCS
*
* * CALIB NASHYD 0903 1 5.0 3.03 0.34 6.25 24.53 0.38 0.000
* [CN=77.6 ]

```



```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.21 6.33 24.43 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.02 6.42 25.53 0.39 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.05 6.25 24.58 0.38 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.38 6.25 46.78 0.72 0.000
* [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
* [ Ptot= 64.80 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.48 6.25 45.92 0.71 0.000
* [I%=40.3:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.53 6.25 43.48 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.91 6.25 44.81 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.92 6.25 43.70 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 3.38 8.42 24.61 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 3.39 8.42 24.60 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

```

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82}\471
d154b-645e-467e-b195-72fd307a3eb4\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82}\471
d154b-645e-467e-b195-72fd307a3eb4\sc

```

DATE: 07/17/2023 TIME: 12:02:12

USER:

COMMENTS: _____

```

*****
** SIMULATION : Q - 10yr 12hr 15min SCS **
*****

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

      START @  0.00 hrs
      -----
      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1002  1  5.0   43.20   2.79  6.50  34.75 0.46   0.000
   [CN=78.4 ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]  0606  1  5.0   43.20   2.79  7.75  34.75 n/a   0.000
[SHIFT= 79.2 min]
*
      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1072  1  5.0   12.53   0.56  6.67  28.41 0.38   0.000
   [CN=74.7 ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   2.98  7.75  33.33 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1073  1  5.0   19.10   0.80  6.67  26.16 0.35   0.000
   [CN=71.9 ]
   [ N = 3.0:Tp 0.48]
*

```

```

      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1004  1  5.0   10.95   1.27  6.25  32.96 0.44   0.000
   [CN=78.0 ]
   [ N = 3.0:Tp 0.15]
*
      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1003  1  5.0   14.65   1.43  6.25  29.33 0.39   0.000
   [CN=75.1 ]
   [ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   2.71  6.25  30.88 n/a   0.000
*
SHIFT[  2: 0157] 0607  1  5.0   25.60   2.71  7.50  30.88 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   3.04  7.50  28.87 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   3.04  7.50  28.87 n/a   0.000
  MAJOR SYSTEM:    0127  2  5.0   19.82   2.64  7.50  28.87 n/a   0.000
  MINOR SYSTEM:    0127  3  5.0   24.88   0.40  6.25  28.87 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   75.55   4.99  7.58  32.16 n/a   0.000
*
CHANNEL[  2: 8041] 0604  1  5.0   75.55   4.81  7.67  32.15 n/a   0.000
*
      READ STORM              15.0
      [ Ptot= 75.60 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
      remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD              1001  1  5.0   50.05   1.77  6.92  28.20 0.37   0.000
   [CN=73.6 ]
   [ N = 3.0:Tp 0.68]

```

```

*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 1.76 6.92 28.20 n/a 0.000
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.58 7.00 21.67 0.29 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 2.34 6.92 26.13 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 148.91 6.38 7.67 29.19 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 148.91 6.45 7.67 29.19 n/a 0.000
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.13 6.75 17.61 0.23 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 154.17 6.51 7.67 28.79 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 154.17 6.55 7.67 28.79 n/a 0.000
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.24 6.83 21.69 0.29 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0

```

```

[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.64 6.58 39.57 0.52 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.06 6.25 42.24 0.56 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 2.16 6.25 35.32 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 178.31 6.82 7.67 29.67 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 187.39 6.97 7.67 30.15 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 187.39 6.87 7.67 30.15 n/a 0.000
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.22 6.75 34.99 0.46 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031 3 5.0 191.77 6.97 7.67 30.26 n/a 0.000
*
READ STORM 15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

```

```

*
** CALIB NASHYD      1061  1  5.0    8.33    0.25  6.67  20.09 0.27  0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
PIPE   [ 2: 1061]   0701  1  5.0    8.33    0.25  6.75  20.09 n/a  0.000
*
CHANNEL[ 2: 0127]   0608  1  5.0   24.88    0.40  6.67  28.87 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
** CALIB NASHYD      0105  1  5.0   12.80    0.53  6.58  25.64 0.34  0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.47]
*
ADD [ 0105+ 0608]   0812  3  5.0   37.68    0.93  6.67  27.77 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
* CALIB STANDHYD     1041  1  5.0    6.41    1.07  6.25  53.16 0.70  0.000
   [I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0812]   0816  3  5.0   44.09    1.58  6.25  31.46 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD      1075  1  5.0    5.30    0.32  6.50  31.14 0.41  0.000
   [CN=76.2          ]
   [ N = 3.0:Tp 0.38]
*
CHANNEL[ 2: 1075]   0609  1  5.0    5.30    0.28  6.67  31.14 n/a  0.000

```

```

*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD      1081  1  5.0   18.64    0.80  6.75  29.26 0.39  0.000
   [CN=74.9          ]
   [ N = 3.0:Tp 0.55]
*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD      1074  1  5.0    6.00    0.31  6.50  27.91 0.37  0.000
   [CN=73.8          ]
   [ N = 3.0:Tp 0.40]
*
CHANNEL[ 2: 1074]   0115  1  5.0    6.00    0.28  6.75  27.90 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD      1082  1  5.0    4.21    0.18  6.75  28.92 0.38  0.000
   [CN=74.6          ]
   [ N = 3.0:Tp 0.56]
*
ADD [ 1082+ 0115]   0116  3  5.0   10.21    0.45  6.75  28.32 n/a  0.000
*
CHANNEL[ 2: 0116]   0118  1  5.0   10.21    0.45  6.83  28.32 n/a  0.000
*
ADD [ 1081+ 0118]   0813  3  5.0   28.85    1.24  6.75  28.93 n/a  0.000
*
ADD [ 0813+ 0609]   0813  1  5.0   34.15    1.52  6.75  29.27 n/a  0.000
*
CHANNEL[ 2: 0813]   0610  1  5.0   34.15    1.48  6.83  29.27 n/a  0.000
*
READ STORM              15.0

```

[Ptot= 75.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.36 6.25 53.16 0.70 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 36.24 1.55 6.83 30.65 n/a 0.000
*
* CHANNEL[2: 0814] 0611 1 5.0 36.24 1.50 6.92 30.64 n/a 0.000
*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.29 6.25 53.16 0.70 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1032+ 0611] 0815 3 5.0 37.92 1.54 6.92 31.64 n/a 0.000
*
* ADD [0815+ 0816] 0815 1 5.0 82.01 2.62 6.75 31.54 n/a 0.000
*
* CHANNEL[2: 0815] 0612 1 5.0 82.01 2.62 6.83 31.54 n/a 0.000
*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 2.05 6.25 53.17 0.70 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1031+ 0612] 0163 3 5.0 94.61 4.10 6.25 34.42 n/a 0.000
*
* ADD [0163+ 0701] 0163 1 5.0 102.94 4.19 6.25 33.26 n/a 0.000
*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-

a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.04 6.25 32.53 0.43 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
* ADD [0163+ 8031] 0803 3 5.0 294.71 8.79 7.67 31.31 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 8.84 7.67 31.34 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 5.39 8.25 31.33 n/a 0.000

*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.44 6.25 31.81 0.42 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
* CHANNEL[2: 0903] 0605 1 5.0 3.03 0.29 6.33 31.71 n/a 0.000
*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 6.42 33.04 0.44 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
* READ STORM 15.0
[Ptot= 75.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.06 6.25 31.80 0.42 0.000

```

[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
READ STORM          15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.46  6.25  56.47 0.75  0.000
[I%=43.0:S%= 2.00]
*
READ STORM          15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.59  6.25  55.55 0.73  0.000
[I%=40.3:S%= 2.00]
*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.65  6.25  52.84 n/a  0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.11  6.25  54.31 n/a  0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.13  6.25  53.07 n/a  0.000
*
ADD [ 0810+ 0501] 0810  1  5.0   308.06    5.47  8.25  31.80 n/a  0.000
*
ADD [ 0810+ 0605] 0810  3  5.0   311.09    5.49  8.25  31.79 n/a  0.000
*
=====
=====

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

Developed and Distributed by Smart City Water Inc

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\71e-f805a-8175-4581-81db-1d0ce7f66cb6\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\71e-f805a-8175-4581-81db-1d0ce7f66cb6\sc

DATE: 07/17/2023

TIME: 12:02:12

USER:

COMMENTS: _____

** SIMULATION : R - 25yr 12hr 15min SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0    43.20    3.63  6.50  44.92 0.51  0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    3.63  7.75  44.92 n/a  0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0

```

[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.75 6.67 37.71 0.42 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*
ADD [1072+ 0606] 0804 3 5.0 55.73 3.87 7.75 43.30 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 1.08 6.67 34.94 0.39 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.66 6.25 42.93 0.48 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.91 6.25 38.71 0.44 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 3.57 6.25 40.51 n/a 0.000

*
SHIFT[2: 0157] 0607 1 5.0 25.60 3.57 7.50 40.51 n/a 0.000
[SHIFT= 75.8 min]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 4.02 7.50 38.13 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 4.02 7.50 38.13 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 23.13 3.62 7.50 38.13 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 21.57 0.40 6.25 38.13 n/a 0.000

*
ADD [0127+ 0804] 8041 3 5.0 78.86 6.67 7.58 41.79 n/a 0.000
*
CHANNEL[2: 8041] 0604 1 5.0 78.86 6.44 7.67 41.78 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 2.36 6.83 37.35 0.42 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
CHANNEL[2: 1001] 0600 1 5.0 50.05 2.36 6.92 37.35 n/a 0.000
*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.79 6.92 29.29 0.33 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
ADD [1071+ 0600] 0805 3 5.0 73.36 3.15 6.92 34.78 n/a 0.000

*
ADD [0604+ 0805] 0806 3 5.0 152.22 8.54 7.58 38.41 n/a 0.000

*
CHANNEL[2: 0806] 0601 1 5.0 152.22 8.60 7.67 38.41 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-

```

f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD      1062  1  5.0    5.26   0.18  6.75  23.83 0.27   0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 1062+ 0601] 0802  3  5.0   157.48   8.68  7.67  37.92 n/a   0.000
*
  CHANNEL[ 2: 0802] 0602  1  5.0   157.48   8.73  7.67  37.92 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD      1063  1  5.0    8.13   0.32  6.75  29.01 0.33   0.000
  [CN=62.6          ]
  [ N = 3.0:Tp 0.60]
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08   0.81  6.58  50.42 0.57   0.000
  [CN=81.8          ]
  [ N = 3.0:Tp 0.43]
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD     1021  1  5.0   16.01   2.56  6.25  51.98 0.59   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807  3  5.0   24.14   2.69  6.25  44.25 n/a   0.000
*
  ADD [ 0807+ 0602] 0807  1  5.0  181.62   9.07  7.67  38.76 n/a   0.000

```

```

*
  ADD [ 0807+ 0904] 0807  3  5.0  190.70   9.27  7.67  39.32 n/a   0.000
*
  CHANNEL[ 2: 0807] 0603  1  5.0  190.70   9.21  7.67  39.32 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD      0902  1  5.0    4.38   0.29  6.75  45.17 0.51   0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031  3  5.0  195.08   9.33  7.67  39.45 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD      1061  1  5.0    8.33   0.34  6.67  27.02 0.30   0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701  1  5.0    8.33   0.34  6.67  27.02 n/a   0.000
*
  CHANNEL[ 2: 0127] 0608  1  5.0   21.57   0.40  6.58  38.13 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
  remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD      0105  1  5.0   12.80   0.71  6.58  34.13 0.38   0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812  3  5.0   34.37   1.11  6.58  36.64 n/a   0.000
*
  READ STORM          15.0

```


[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.32 6.25 65.00 0.73 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0812] 0816 3 5.0 40.78 2.03 6.25 41.10 n/a 0.000

*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.42 6.50 40.81 0.46 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.39 6.67 40.81 n/a 0.000

*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.06 6.75 38.64 0.44 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]
*

*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.41 6.50 37.05 0.42 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*

CHANNEL[2: 1074] 0115 1 5.0 6.00 0.37 6.67 37.05 n/a 0.000
*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1082 1 5.0 4.21 0.24 6.75 38.24 0.43 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]
*

*
* ADD [1082+ 0115] 0116 3 5.0 10.21 0.61 6.75 37.54 n/a 0.000

*
* CHANNEL[2: 0116] 0118 1 5.0 10.21 0.60 6.75 37.54 n/a 0.000

*
* ADD [1081+ 0118] 0813 3 5.0 28.85 1.67 6.75 38.25 n/a 0.000

*
* ADD [0813+ 0609] 0813 1 5.0 34.15 2.04 6.75 38.65 n/a 0.000

*
* CHANNEL[2: 0813] 0610 1 5.0 34.15 1.99 6.83 38.64 n/a 0.000

*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.48 6.25 65.00 0.73 0.000
[I%=35.0:S%= 2.00]
*

*
* ADD [1042+ 0610] 0814 3 5.0 36.24 2.06 6.83 40.16 n/a 0.000

*
* CHANNEL[2: 0814] 0611 1 5.0 36.24 1.99 6.92 40.16 n/a 0.000

*
* READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.39 6.25 65.00 0.73 0.000
[I%=35.0:S%= 2.00]
*

```

*      ADD [ 1032+ 0611] 0815 3 5.0 37.92 2.03 6.92 41.26 n/a 0.000
*
*      ADD [ 0815+ 0816] 0815 1 5.0 78.70 3.30 6.75 41.18 n/a 0.000
*
*      CHANNEL[ 2: 0815] 0612 1 5.0 78.70 3.30 6.83 41.18 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB STANDHYD 1031 1 5.0 12.60 2.55 6.25 65.00 0.73 0.000
*      [I%=35.0:S%= 2.00]
*
*      ADD [ 1031+ 0612] 0163 3 5.0 91.30 5.32 6.25 44.46 n/a 0.000
*
*      ADD [ 0163+ 0701] 0163 1 5.0 99.63 5.44 6.25 43.00 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB NASHYD 0901 1 5.0 6.80 1.29 6.25 41.13 0.46 0.000
*      [CN=84.1 ]
*      [ N = 3.0:Tp 0.05]
*
*      ADD [ 0163+ 8031] 0803 3 5.0 294.71 11.60 7.67 40.65 n/a 0.000
*
*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 11.67 7.67 40.66 n/a 0.000
*
*      ** Reservoir
*      OUTFLOW: 0501 1 5.0 301.51 9.68 7.92 40.66 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB NASHYD 0903 1 5.0 3.03 0.57 6.25 41.25 0.46 0.000
*      [CN=77.6 ]

```

```

*      [ N = 3.0:Tp 0.08]
*
*      CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.38 6.33 41.15 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB NASHYD 1014 1 5.0 0.38 0.04 6.42 42.80 0.48 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.32]
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB NASHYD 1012 1 5.0 0.42 0.08 6.25 41.20 0.46 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.09]
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB STANDHYD 1013 1 5.0 2.49 0.61 6.25 68.56 0.77 0.000
*      [I%=43.0:S%= 2.00]
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS
*
*      CALIB STANDHYD 1011 1 5.0 3.26 0.78 6.25 67.57 0.76 0.000
*      [I%=40.3:S%= 2.00]
*

```

```

*   ADD [ 1011+ 1012] 0810 3 5.0   3.68   0.85  6.25  64.56 n/a  0.000
*
*   ADD [ 0810+ 1013] 0810 1 5.0   6.17   1.46  6.25  66.18 n/a  0.000
*
*   ADD [ 0810+ 1014] 0810 3 5.0   6.55   1.48  6.25  64.82 n/a  0.000
*
*   ADD [ 0810+ 0501] 0810 1 5.0  308.06   9.77  7.92  41.17 n/a  0.000
*
*   ADD [ 0810+ 0605] 0810 3 5.0  311.09   9.81  7.92  41.17 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUUU A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  M  M  O  O
000  T    T  H  H  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\84f680f3-f34d-4598-87cb-c738ae56cf07\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\84f680f3-f34d-4598-87cb-c738ae56cf07\sc

DATE: 07/17/2023

TIME: 12:02:12

USER:

COMMENTS: _____

```

*****
** SIMULATION : S - 50yr 12hr 15min SCS **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0

remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD          1002  1  5.0   43.20   4.19  6.50  51.65 0.53  0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.40]

```

```

*
SHIFT[ 2: 1002] 0606  1  5.0   43.20   4.19  7.75  51.65 n/a  0.000
[SHIFT= 79.2 min]

```

```

*
READ STORM          15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0

remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD          1072  1  5.0   12.53   0.88  6.67  43.93 0.45  0.000
[CN=74.7 ]
[ N = 3.0:Tp 0.50]

```

```

*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   4.47  7.75  49.92 n/a  0.000

```

```

*
READ STORM          15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0

remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD          1073  1  5.0   19.10   1.26  6.67  40.85 0.42  0.000
[CN=71.9 ]
[ N = 3.0:Tp 0.48]

```

READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.92 6.25 49.54 0.51 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 2.22 6.25 44.98 0.46 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 4.15 6.25 46.93 n/a 0.000

*
SHIFT[2: 0157] 0607 1 5.0 25.60 4.15 7.50 46.93 n/a 0.000
[SHIFT= 75.8 min]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 4.66 7.50 44.33 n/a 0.000

*
DUHYD 0127 1 5.0 44.70 4.66 7.50 44.33 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 24.94 4.26 7.50 44.33 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 19.76 0.40 6.17 44.33 n/a 0.000

*
ADD [0127+ 0804] 8041 3 5.0 80.67 7.78 7.58 48.19 n/a 0.000

*
CHANNEL[2: 8041] 0604 1 5.0 80.67 7.51 7.67 48.19 n/a 0.000

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 2.77 6.83 43.47 0.45 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
CHANNEL[2: 1001] 0600 1 5.0 50.05 2.76 6.92 43.47 n/a 0.000

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.94 6.92 34.48 0.35 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
ADD [1071+ 0600] 0805 3 5.0 73.36 3.70 6.92 40.61 n/a 0.000

*
ADD [0604+ 0805] 0806 3 5.0 154.03 10.00 7.58 44.58 n/a 0.000

*
CHANNEL[2: 0806] 0601 1 5.0 154.03 10.02 7.67 44.58 n/a 0.000

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.21 6.75 28.11 0.29 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

*
ADD [1062+ 0601] 0802 3 5.0 159.29 10.11 7.67 44.04 n/a 0.000

*
CHANNEL[2: 0802] 0602 1 5.0 159.29 10.18 7.67 44.04 n/a 0.000

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.37 6.75 34.01 0.35 0.000
[CN=62.6]
[N = 3.0:Tp 0.60]

*
READ STORM 15.0

[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.93 6.58 57.54 0.59 0.000
[CN=81.8]
[N = 3.0:Tp 0.43]
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.89 6.25 58.39 0.60 0.000
[I%=35.0:S%= 2.00]
*
ADD [1021+ 1063] 0807 3 5.0 24.14 3.05 6.25 50.18 n/a 0.000
*
ADD [0807+ 0602] 0807 1 5.0 183.43 10.57 7.67 44.85 n/a 0.000
*
ADD [0807+ 0904] 0807 3 5.0 192.51 10.79 7.67 45.44 n/a 0.000
*
CHANNEL[2: 0807] 0603 1 5.0 192.51 10.77 7.67 45.44 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.33 6.67 51.91 0.53 0.000
[CN=78.4]
[N = 3.0:Tp 0.56]
*
ADD [0603+ 0902] 8031 3 5.0 196.89 10.90 7.67 45.59 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.41 6.67 31.76 0.33 0.000
[CN=60.3]
[N = 3.0:Tp 0.50]

*
PIPE [2: 1061] 0701 1 5.0 8.33 0.40 6.67 31.76 n/a 0.000
*
CHANNEL[2: 0127] 0608 1 5.0 19.76 0.40 7.42 44.33 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 0105 1 5.0 12.80 0.84 6.58 39.86 0.41 0.000
[CN=69.9]
[N = 3.0:Tp 0.47]

*
ADD [0105+ 0608] 0812 3 5.0 32.56 1.24 6.58 42.57 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.49 6.25 72.66 0.75 0.000
[I%=35.0:S%= 2.00]
*
ADD [1041+ 0812] 0816 3 5.0 38.97 2.30 6.25 47.52 n/a 0.000

*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.49 6.50 47.25 0.49 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]

*
CHANNEL[2: 1075] 0609 1 5.0 5.30 0.45 6.67 47.25 n/a 0.000

```

*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD              1081  1  5.0   18.64   1.24  6.75  44.91 0.46   0.000
  [CN=74.9                  ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD              1074  1  5.0    6.00   0.48  6.50  43.18 0.44   0.000
  [CN=73.8                  ]
  [ N = 3.0:Tp 0.40]
*
  CHANNEL[ 2: 1074]   0115  1  5.0    6.00   0.44  6.67  43.18 n/a   0.000
*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD              1082  1  5.0    4.21   0.27  6.75  44.47 0.46   0.000
  [CN=74.6                  ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 1082+ 0115]   0116  3  5.0   10.21   0.71  6.67  43.71 n/a   0.000
*
  CHANNEL[ 2: 0116]   0118  1  5.0   10.21   0.71  6.75  43.71 n/a   0.000
*
  ADD [ 1081+ 0118]   0813  3  5.0   28.85   1.95  6.75  44.49 n/a   0.000
*
  ADD [ 0813+ 0609]   0813  1  5.0   34.15   2.39  6.75  44.92 n/a   0.000
*
  CHANNEL[ 2: 0813]   0610  1  5.0   34.15   2.34  6.83  44.91 n/a   0.000
*
  READ STORM                15.0

```

```

  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD            1042  1  5.0    2.09   0.54  6.25  72.66 0.75   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1042+ 0610]   0814  3  5.0   36.24   2.41  6.83  46.51 n/a   0.000
*
  CHANNEL[ 2: 0814]   0611  1  5.0   36.24   2.34  6.92  46.51 n/a   0.000
*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD            1032  1  5.0    1.68   0.43  6.25  72.66 0.75   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1032+ 0611]   0815  3  5.0   37.92   2.39  6.92  47.66 n/a   0.000
*
  ADD [ 0815+ 0816]   0815  1  5.0   76.89   3.80  6.75  47.59 n/a   0.000
*
  CHANNEL[ 2: 0815]   0612  1  5.0   76.89   3.80  6.83  47.59 n/a   0.000
*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD            1031  1  5.0   12.60   2.87  6.25  72.66 0.75   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1031+ 0612]   0163  3  5.0   89.49   6.08  6.25  51.12 n/a   0.000
*
  ADD [ 0163+ 0701]   0163  1  5.0   97.82   6.23  6.25  49.47 n/a   0.000
*
  READ STORM                15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-

```

ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.46 6.25 46.75 0.48 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
ADD [0163+ 8031] 0803 3 5.0 294.71 13.40 7.67 46.88 n/a 0.000
*
ADD [0803+ 0901] 0803 1 5.0 301.51 13.47 7.67 46.87 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 12.05 7.83 46.87 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.65 6.25 47.51 0.49 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.45 6.33 47.41 n/a 0.000
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.04 6.42 49.29 0.51 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.09 6.25 47.44 0.49 0.000

[CN=76.0]
[N = 3.0:Tp 0.09]
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.68 6.25 76.36 0.79 0.000
[I%=43.0:S%= 2.00]
*
READ STORM 15.0
[Ptot= 97.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.87 6.25 75.34 0.78 0.000
[I%=40.3:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 0.96 6.25 72.15 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 1.64 6.25 73.85 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 1.67 6.25 72.43 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 12.14 7.83 47.41 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 12.18 7.83 47.41 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

Developed and Distributed by Smart City Water Inc

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\3b9
f7dcc-0bb0-4b1d-8818-865e5f15a502\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\3b9
f7dcc-0bb0-4b1d-8818-865e5f15a502\sc

DATE: 07/17/2023 TIME: 12:02:12

USER:

COMMENTS: _____

** SIMULATION : T - 100yr 12hr 15min SCS **

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

READ STORM	15.0								
[Ptot=108.00 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f									
remark: 100yr 12hr 15min SCS									
*									
** CALIB NASHYD	1002	1	5.0	43.20	4.93	6.50	60.55	0.56	0.000
[CN=78.4]									
[N = 3.0:Tp 0.40]									
*									
SHIFT[2: 1002]	0606	1	5.0	43.20	4.93	7.75	60.55	n/a	0.000
[SHIFT= 79.2 min]									
*									
READ STORM	15.0								

[Ptot=108.00 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f									
remark: 100yr 12hr 15min SCS									
*									
** CALIB NASHYD	1072	1	5.0	12.53	1.05	6.67	52.22	0.48	0.000
[CN=74.7]									
[N = 3.0:Tp 0.50]									
*									
ADD [1072+ 0606]	0804	3	5.0	55.73	5.25	7.75	58.68	n/a	0.000
*									
READ STORM	15.0								
[Ptot=108.00 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f									
remark: 100yr 12hr 15min SCS									
*									
** CALIB NASHYD	1073	1	5.0	19.10	1.52	6.58	48.76	0.45	0.000
[CN=71.9]									
[N = 3.0:Tp 0.48]									
*									
READ STORM	15.0								
[Ptot=108.00 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f									
remark: 100yr 12hr 15min SCS									
*									
** CALIB NASHYD	1004	1	5.0	10.95	2.26	6.25	58.29	0.54	0.000
[CN=78.0]									
[N = 3.0:Tp 0.15]									
*									
READ STORM	15.0								
[Ptot=108.00 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f									
remark: 100yr 12hr 15min SCS									
*									
** CALIB NASHYD	1003	1	5.0	14.65	2.64	6.25	53.32	0.49	0.000
[CN=75.1]									
[N = 3.0:Tp 0.16]									
*									
ADD [1003+ 1004]	0157	3	5.0	25.60	4.91	6.25	55.45	n/a	0.000


```

*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 4.91 7.50 55.45 n/a 0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811 3 5.0 44.70 5.52 7.50 52.59 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 5.52 7.50 52.59 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 26.77 5.12 7.50 52.59 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 17.93 0.40 6.08 52.59 n/a 0.000
*
ADD [ 0127+ 0804] 8041 3 5.0 82.50 9.26 7.58 56.70 n/a 0.000
*
CHANNEL[ 2: 8041] 0604 1 5.0 82.50 8.94 7.67 56.70 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
** CALIB NASHYD 1001 1 5.0 50.05 3.31 6.83 51.65 0.48 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 3.30 6.92 51.65 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
** CALIB NASHYD 1071 1 5.0 23.31 1.14 6.92 41.49 0.38 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 4.44 6.92 48.42 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 155.86 11.96 7.58 52.80 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 155.86 11.92 7.67 52.80 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-

```

```

1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.25 6.75 33.96 0.31 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 161.12 12.04 7.67 52.19 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 161.12 12.12 7.67 52.19 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.45 6.75 40.76 0.38 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
** CALIB NASHYD 0904 1 5.0 9.08 1.08 6.50 66.90 0.62 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 3.34 6.25 66.84 0.62 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 3.53 6.25 58.06 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 185.26 12.57 7.67 52.95 n/a 0.000

```

```

*
  ADD [ 0807+ 0904] 0807 3 5.0 194.34 12.83 7.67 53.60 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 194.34 12.85 7.67 53.60 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.39 6.67 60.81 0.56 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031 3 5.0 198.72 13.01 7.67 53.76 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.49 6.67 38.19 0.35 0.000
  [CN=60.3 ]
  [ N = 3.0:Tp 0.56]
*
  PIPE [ 2: 1061] 0701 1 5.0 8.33 0.49 6.67 38.19 n/a 0.000
*
  CHANNEL[ 2: 0127] 0608 1 5.0 17.93 0.40 6.67 52.59 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 0105 1 5.0 12.80 1.00 6.58 47.55 0.44 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812 3 5.0 30.73 1.40 6.58 50.49 n/a 0.000
*
  READ STORM 15.0

```

```

  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.85 6.25 82.62 0.77 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0812] 0816 3 5.0 37.14 2.78 6.25 56.03 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.58 6.50 55.80 0.52 0.000
  [CN=76.2 ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.53 6.67 55.80 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.48 6.67 53.26 0.49 0.000
  [CN=74.9 ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.58 6.50 51.36 0.48 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*

```

```

* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.54 6.67 51.36 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB NASHYD 1082 1 5.0 4.21 0.33 6.75 52.78 0.49 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116 3 5.0 10.21 0.86 6.67 51.94 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 10.21 0.86 6.75 51.94 n/a 0.000
*
* ADD [ 1081+ 0118] 0813 3 5.0 28.85 2.34 6.75 52.79 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 34.15 2.86 6.67 53.26 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 34.15 2.79 6.83 53.26 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.62 6.25 82.62 0.77 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 36.24 2.87 6.75 54.95 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 36.24 2.78 6.92 54.95 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.50 6.25 82.62 0.77 0.000
* [I%=35.0:S%= 2.00]
*

```

```

* ADD [ 1032+ 0611] 0815 3 5.0 37.92 2.83 6.92 56.17 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 75.06 4.38 6.75 56.10 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 75.06 4.38 6.83 56.10 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 3.30 6.25 82.62 0.77 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0 87.66 7.19 6.25 59.91 n/a 0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0 95.99 7.39 6.25 58.03 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.67 6.25 54.10 0.50 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0 294.71 15.86 7.67 55.15 n/a 0.000
*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 15.94 7.67 55.13 n/a 0.000
*
* ** Reservoir
* OUTFLOW: 0501 1 5.0 301.51 14.60 7.75 55.12 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
* remark: 100yr 12hr 15min SCS
*
* CALIB NASHYD 0903 1 5.0 3.03 0.76 6.25 55.80 0.52 0.000
* [CN=77.6 ]

```

```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.53 6.33 55.69 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.05 6.42 57.89 0.54 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.10 6.25 55.72 0.52 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.77 6.25 86.48 0.80 0.000
* [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.99 6.25 85.42 0.79 0.000
* [I%=40.3:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810 3 5.0 3.68 1.10 6.25 82.03 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.87 6.25 83.83 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 1.91 6.25 82.32 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 14.71 7.75 55.70 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 14.75 7.75 55.70 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82\aec
c46af-8023-49a5-a50b-da98316d13f7\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82\aec
c46af-8023-49a5-a50b-da98316d13f7\sc

DATE: 07/17/2023 TIME: 12:02:12

USER:

COMMENTS: _____

```

```

*****
** SIMULATION : U - 2yr 24hr 15min SCS **
*****

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

      START @  0.00 hrs
      -----
      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1002  1  5.0   43.20   1.59 12.50  23.56 0.39   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]    0606  1  5.0   43.20   1.59 13.75  23.56 n/a   0.000
[SHIFT= 79.2 min]
*
      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0   12.53   0.30 12.67  18.41 0.31   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606]   0804  3  5.0   55.73   1.70 13.75  22.41 n/a   0.000
*
      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0   19.10   0.42 12.67  16.80 0.28   0.000
   [CN=71.9          ]
   [ N = 3.0:Tp 0.48]
*

```

```

      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0   10.95   0.74 12.25  22.04 0.37   0.000
   [CN=78.0          ]
   [ N = 3.0:Tp 0.15]
*
      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0   14.65   0.80 12.25  19.20 0.32   0.000
   [CN=75.1          ]
   [ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004]   0157  3  5.0   25.60   1.54 12.25  20.41 n/a   0.000
*
SHIFT[  2: 0157]    0607  1  5.0   25.60   1.54 13.50  20.41 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607]   0811  3  5.0   44.70   1.72 13.50  18.87 n/a   0.000
*
DUHYD      0127  1  5.0   44.70   1.72 13.50  18.87 n/a   0.000
  MAJOR SYSTEM: 0127  2  5.0    9.67   1.32 13.50  18.87 n/a   0.000
  MINOR SYSTEM: 0127  3  5.0   35.03   0.40 12.50  18.87 n/a   0.000
*
ADD [ 0127+ 0804]   8041  3  5.0   65.40   2.65 13.58  21.88 n/a   0.000
*
CHANNEL[  2: 8041]   0604  1  5.0   65.40   2.53 13.67  21.88 n/a   0.000
*
      READ STORM      15.0
      [ Ptot= 60.00 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
      remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD      1001  1  5.0   50.05   0.95 12.92  18.37 0.31   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]

```

```

*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 0.94 13.00 18.37 n/a 0.000
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.30 13.00 13.70 0.23 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 1.24 13.00 16.89 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 138.76 3.40 13.67 19.24 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 138.76 3.42 13.67 19.24 n/a 0.000
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.07 12.75 11.19 0.19 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 144.02 3.46 13.67 18.95 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 144.02 3.47 13.67 18.95 n/a 0.000
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.13 12.75 14.00 0.23 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0

```

```

[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.38 12.58 27.46 0.46 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 1.29 12.25 31.33 0.52 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.33 12.25 25.49 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 168.16 3.64 13.67 19.89 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 177.24 3.74 13.67 20.27 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 177.24 3.65 13.75 20.27 n/a 0.000
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.13 12.75 23.78 0.40 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031 3 5.0 181.62 3.70 13.75 20.36 n/a 0.000
*
READ STORM 15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```

```

*
** CALIB NASHYD      1061  1  5.0    8.33    0.13 12.67  12.87 0.21  0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
PIPE   [ 2: 1061]   0701  1  5.0    8.33    0.13 12.75  12.87 n/a  0.000
*
CHANNEL[ 2: 0127]   0608  1  5.0   35.03    0.40 12.83  18.87 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
** CALIB NASHYD      0105  1  5.0   12.80    0.28 12.67  16.60 0.28  0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.47]
*
ADD [ 0105+ 0608]  0812  3  5.0   47.83    0.68 12.67  18.26 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
* CALIB STANDHYD     1041  1  5.0    6.41    0.70 12.25  39.61 0.66  0.000
   [I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0812]  0816  3  5.0   54.24    0.95 12.25  20.79 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
* CALIB NASHYD      1075  1  5.0    5.30    0.18 12.50  20.62 0.34  0.000
   [CN=76.2          ]
   [ N = 3.0:Tp 0.38]
*
CHANNEL[ 2: 1075]   0609  1  5.0    5.30    0.15 12.75  20.62 n/a  0.000

```

```

*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
* CALIB NASHYD      1081  1  5.0   18.64    0.43 12.75  19.13 0.32  0.000
   [CN=74.9          ]
   [ N = 3.0:Tp 0.55]
*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
* CALIB NASHYD      1074  1  5.0    6.00    0.16 12.58  18.09 0.30  0.000
   [CN=73.8          ]
   [ N = 3.0:Tp 0.40]
*
CHANNEL[ 2: 1074]   0115  1  5.0    6.00    0.14 12.75  18.08 n/a  0.000
*
READ STORM              15.0
   [ Ptot= 60.00 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-
710c-4a1f-b96f-2
   remark: 2yr 24hr 15min SCS
*
* CALIB NASHYD      1082  1  5.0    4.21    0.10 12.75  18.87 0.31  0.000
   [CN=74.6          ]
   [ N = 3.0:Tp 0.56]
*
ADD [ 1082+ 0115]  0116  3  5.0   10.21    0.23 12.75  18.41 n/a  0.000
*
CHANNEL[ 2: 0116]   0118  1  5.0   10.21    0.23 12.83  18.41 n/a  0.000
*
ADD [ 1081+ 0118]  0813  3  5.0   28.85    0.66 12.75  18.87 n/a  0.000
*
ADD [ 0813+ 0609]  0813  1  5.0   34.15    0.80 12.75  19.15 n/a  0.000
*
CHANNEL[ 2: 0813]   0610  1  5.0   34.15    0.80 12.83  19.14 n/a  0.000
*
READ STORM              15.0

```

```

[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.23 12.25  39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    36.24    0.84 12.83  20.32 n/a   0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    36.24    0.82 12.92  20.32 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD      1032  1  5.0    1.68    0.19 12.25  39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    37.92    0.85 12.92  21.17 n/a   0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    92.16    1.66 12.75  20.94 n/a   0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    92.16    1.65 12.83  20.94 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD      1031  1  5.0    12.60    1.33 12.25  39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163  3  5.0   104.76    2.52 12.25  23.19 n/a   0.000
*
* ADD [ 0163+ 0701] 0163  1  5.0   113.09    2.56 12.25  22.43 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-

```

```

710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          0901  1  5.0    6.80    0.67 12.25  22.84 0.38   0.000
  [CN=84.1
  [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803  3  5.0   294.71    4.86 13.75  21.15 n/a   0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    4.89 13.75  21.19 n/a   0.000
*
** Reservoir
  OUTFLOW:          0501  1  5.0   301.51    2.17 14.58  21.19 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          0903  1  5.0    3.03    0.27 12.25  21.46 0.36   0.000
  [CN=77.6
  [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03    0.15 12.33  21.35 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          1014  1  5.0    0.38    0.02 12.42  22.36 0.37   0.000
  [CN=76.0
  [ N = 3.0:Tp 0.32]
*
  READ STORM          15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          1012  1  5.0    0.42    0.04 12.25  21.53 0.36   0.000

```



```

[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.31 12.25  42.55 0.71   0.000
[I%=43.0:S%= 2.00]

```

```

*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.39 12.25  41.72 0.70   0.000
[I%=40.3:S%= 2.00]

```

```

*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.43 12.25  39.41 n/a   0.000

```

```

*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    0.74 12.25  40.68 n/a   0.000

```

```

*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    0.75 12.25  39.61 n/a   0.000

```

```

*
ADD [ 0810+ 0501] 0810  1  5.0   308.06    2.19 14.50  21.58 n/a   0.000

```

```

*
ADD [ 0810+ 0605] 0810  3  5.0   311.09    2.21 14.50  21.58 n/a   0.000

```

```

=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUU  A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

```

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\0171360f-810a-4d88-b4e5-e54d963a87a8\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\0171360f-810a-4d88-b4e5-e54d963a87a8\sc

DATE: 07/17/2023

TIME: 12:02:12

USER:

COMMENTS: _____

```

*****
** SIMULATION : V - 5yr 24hr 15min SCS **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0    43.20    2.58 12.50  37.47 0.47   0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.40]

```

```

*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    2.58 13.75  37.47 n/a   0.000
[SHIFT= 79.2 min]

```

```

*
READ STORM          15.0

```

```

[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1072  1  5.0   12.53   0.52 12.67  30.88 0.39   0.000
[CN=74.7             ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   2.75 13.75  35.99 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1073  1  5.0   19.10   0.74 12.67  28.49 0.36   0.000
[CN=71.9             ]
[ N = 3.0:Tp 0.48]
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1004  1  5.0   10.95   1.21 12.25  35.62 0.45   0.000
[CN=78.0             ]
[ N = 3.0:Tp 0.15]
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1003  1  5.0   14.65   1.36 12.25  31.83 0.40   0.000
[CN=75.1             ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   2.57 12.25  33.45 n/a   0.000

```

```

*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   2.57 13.50  33.45 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   2.88 13.50  31.33 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   2.88 13.50  31.33 n/a   0.000
MAJOR SYSTEM:      0127  2  5.0   15.97   2.48 13.50  31.33 n/a   0.000
MINOR SYSTEM:      0127  3  5.0   28.73   0.40 12.25  31.33 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   71.70   4.63 13.58  34.95 n/a   0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0   71.70   4.45 13.67  34.95 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1001  1  5.0   50.05   1.63 12.83  30.63 0.39   0.000
[CN=73.6             ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   1.62 12.92  30.63 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS
*
** CALIB NASHYD      1071  1  5.0   23.31   0.54 12.92  23.68 0.30   0.000
[CN=65.3             ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805  3  5.0   73.36   2.16 12.92  28.42 n/a   0.000
*
ADD [ 0604+ 0805] 0806  3  5.0  145.06   5.90 13.67  31.65 n/a   0.000
*
CHANNEL[ 2: 0806] 0601  1  5.0  145.06   5.96 13.67  31.65 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-

```

9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      1062  1  5.0    5.26    0.12 12.75  19.24 0.24    0.000
   [CN=55.8          ]
   [ N = 3.0:Tp 0.56]
*
  ADD [ 1062+ 0601] 0802  3  5.0   150.32    6.01 13.67  31.21 n/a    0.000
*
  CHANNEL[ 2: 0802] 0602  1  5.0   150.32    6.05 13.67  31.21 n/a    0.000
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      1063  1  5.0    8.13    0.22 12.75  23.62 0.30    0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      0904  1  5.0    9.08    0.59 12.58  42.48 0.54    0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
* CALIB STANDHYD     1021  1  5.0   16.01    1.96 12.25  44.85 0.57    0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807  3  5.0   24.14    2.05 12.25  37.70 n/a    0.000
*
  ADD [ 0807+ 0602] 0807  1  5.0  174.46    6.30 13.67  32.11 n/a    0.000
```

```
*
  ADD [ 0807+ 0904] 0807  3  5.0  183.54    6.45 13.67  32.62 n/a    0.000
*
  CHANNEL[ 2: 0807] 0603  1  5.0  183.54    6.32 13.67  32.62 n/a    0.000
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      0902  1  5.0    4.38    0.21 12.75  37.71 0.48    0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031  3  5.0  187.92    6.41 13.67  32.74 n/a    0.000
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      1061  1  5.0    8.33    0.23 12.67  21.91 0.28    0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701  1  5.0    8.33    0.23 12.67  21.91 n/a    0.000
*
  CHANNEL[ 2: 0127] 0608  1  5.0   28.73    0.40 12.67  31.33 n/a    0.000
*
  READ STORM          15.0
  [ Ptot= 79.20 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

```
*
** CALIB NASHYD      0105  1  5.0   12.80    0.49 12.58  27.89 0.35    0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812  3  5.0   41.53    0.89 12.58  30.27 n/a    0.000
*
  READ STORM          15.0
```

[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.01 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0812] 0816 3 5.0 47.94 1.52 12.25 33.76 n/a 0.000

*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.29 12.50 33.71 0.43 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]

*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.26 12.67 33.71 n/a 0.000
*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.74 12.75 31.76 0.40 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]

*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.29 12.50 30.34 0.38 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]

*

CHANNEL[2: 1074] 0115 1 5.0 6.00 0.26 12.75 30.33 n/a 0.000

*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1082 1 5.0 4.21 0.16 12.75 31.40 0.40 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]

*
* ADD [1082+ 0115] 0116 3 5.0 10.21 0.42 12.75 30.77 n/a 0.000

*
* CHANNEL[2: 0116] 0118 1 5.0 10.21 0.41 12.83 30.77 n/a 0.000

*
* ADD [1081+ 0118] 0813 3 5.0 28.85 1.15 12.75 31.41 n/a 0.000

*
* ADD [0813+ 0609] 0813 1 5.0 34.15 1.41 12.75 31.76 n/a 0.000

*
* CHANNEL[2: 0813] 0610 1 5.0 34.15 1.37 12.83 31.76 n/a 0.000

*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.34 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]

*
* ADD [1042+ 0610] 0814 3 5.0 36.24 1.42 12.83 33.18 n/a 0.000

*
* CHANNEL[2: 0814] 0611 1 5.0 36.24 1.38 12.92 33.17 n/a 0.000

*
* READ STORM 15.0
[Ptot= 79.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.27 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]

*

```

*      ADD [ 1032+ 0611] 0815 3 5.0 37.92 1.42 12.92 34.20 n/a 0.000
*
*      ADD [ 0815+ 0816] 0815 1 5.0 85.86 2.43 12.75 33.95 n/a 0.000
*
*      CHANNEL[ 2: 0815] 0612 1 5.0 85.86 2.42 12.83 33.95 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB STANDHYD 1031 1 5.0 12.60 1.94 12.25 56.36 0.71 0.000
*      [I%=35.0:S%= 2.00]
*
*      ADD [ 1031+ 0612] 0163 3 5.0 98.46 3.90 12.25 36.82 n/a 0.000
*
*      ADD [ 0163+ 0701] 0163 1 5.0 106.79 3.98 12.25 35.66 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB NASHYD 0901 1 5.0 6.80 1.01 12.25 34.84 0.44 0.000
*      [CN=84.1 ]
*      [ N = 3.0:Tp 0.05]
*
*      ADD [ 0163+ 8031] 0803 3 5.0 294.71 8.10 13.67 33.80 n/a 0.000
*
*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 8.15 13.67 33.82 n/a 0.000
*
*      ** Reservoir
*      OUTFLOW: 0501 1 5.0 301.51 4.45 14.33 33.82 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB NASHYD 0903 1 5.0 3.03 0.43 12.25 34.33 0.43 0.000
*      [CN=77.6 ]

```

```

*      [ N = 3.0:Tp 0.08]
*
*      CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.27 12.33 34.22 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB NASHYD 1014 1 5.0 0.38 0.03 12.42 35.64 0.45 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.32]
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB NASHYD 1012 1 5.0 0.42 0.06 12.25 34.31 0.43 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.09]
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB STANDHYD 1013 1 5.0 2.49 0.44 12.25 59.75 0.75 0.000
*      [I%=43.0:S%= 2.00]
*
*      READ STORM 15.0
*      [ Ptot= 79.20 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
*      CALIB STANDHYD 1011 1 5.0 3.26 0.56 12.25 58.80 0.74 0.000
*      [I%=40.3:S%= 2.00]
*

```

```

*   ADD [ 1011+ 1012] 0810 3 5.0   3.68   0.62 12.25  56.01 n/a  0.000
*
*   ADD [ 0810+ 1013] 0810 1 5.0   6.17   1.06 12.25  57.52 n/a  0.000
*
*   ADD [ 0810+ 1014] 0810 3 5.0   6.55   1.08 12.25  56.25 n/a  0.000
*
*   ADD [ 0810+ 0501] 0810 1 5.0  308.06   4.50 14.25  34.29 n/a  0.000
*
*   ADD [ 0810+ 0605] 0810 3 5.0  311.09   4.52 14.25  34.29 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUUU A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  M  M  O  O
000  T    T  H  H  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\949
daa95-c7cf-4f1e-9a5d-c333b362916d\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\949
daa95-c7cf-4f1e-9a5d-c333b362916d\sc

DATE: 07/17/2023

TIME: 12:02:13

USER:

COMMENTS: _____

```

*****
** SIMULATION : W - 10yr 24hr 15min SCS **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot= 93.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

```

*
** CALIB NASHYD          1002  1  5.0   43.20   3.38 12.50  48.75 0.52  0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.40]

```

```

*
SHIFT[ 2: 1002] 0606  1  5.0   43.20   3.38 13.75  48.75 n/a  0.000
[SHIFT= 79.2 min]

```

```

*
READ STORM          15.0
[ Ptot= 93.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

```

*
** CALIB NASHYD          1072  1  5.0   12.53   0.70 12.67  41.24 0.44  0.000
[CN=74.7 ]
[ N = 3.0:Tp 0.50]

```

```

*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   3.61 13.75  47.06 n/a  0.000

```

```

*
READ STORM          15.0
[ Ptot= 93.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

```

*
** CALIB NASHYD          1073  1  5.0   19.10   1.01 12.58  38.29 0.41  0.000
[CN=71.9 ]
[ N = 3.0:Tp 0.48]

```

*

```

READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1004  1  5.0   10.95   1.60 12.25  46.69 0.50   0.000
[CN=78.0                    ]
[ N = 3.0:Tp 0.15]

*
READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1003  1  5.0   14.65   1.83 12.25  42.26 0.45   0.000
[CN=75.1                    ]
[ N = 3.0:Tp 0.16]

*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   3.43 12.25  44.16 n/a   0.000

*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   3.43 13.50  44.16 n/a   0.000
[SHIFT= 75.8 min]

*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   3.84 13.50  41.65 n/a   0.000

*
DUHYD                    0127  1  5.0   44.70   3.84 13.50  41.65 n/a   0.000
MAJOR SYSTEM:          0127  2  5.0   18.92   3.44 13.50  41.65 n/a   0.000
MINOR SYSTEM:          0127  3  5.0   25.78   0.40 12.25  41.65 n/a   0.000

*
ADD [ 0127+ 0804] 8041  3  5.0   74.65   6.25 13.58  45.69 n/a   0.000

*
CHANNEL[ 2: 8041] 0604  1  5.0   74.65   6.01 13.67  45.68 n/a   0.000

*
READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1001  1  5.0   50.05   2.20 12.83  40.82 0.44   0.000
[CN=73.6                    ]
[ N = 3.0:Tp 0.68]

```

```

*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   2.19 12.92  40.82 n/a   0.000

*
READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1071  1  5.0   23.31   0.74 12.92  32.22 0.34   0.000
[CN=65.3                    ]
[ N = 3.0:Tp 0.74]

*
ADD [ 1071+ 0600] 0805  3  5.0   73.36   2.93 12.92  38.09 n/a   0.000

*
ADD [ 0604+ 0805] 0806  3  5.0  148.01   7.93 13.58  41.92 n/a   0.000

*
CHANNEL[ 2: 0806] 0601  1  5.0  148.01   8.01 13.67  41.92 n/a   0.000

*
READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1062  1  5.0    5.26   0.16 12.75  26.25 0.28   0.000
[CN=55.8                    ]
[ N = 3.0:Tp 0.56]

*
ADD [ 1062+ 0601] 0802  3  5.0  153.27   8.09 13.67  41.38 n/a   0.000

*
CHANNEL[ 2: 0802] 0602  1  5.0  153.27   8.14 13.67  41.38 n/a   0.000

*
READ STORM                15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD            1063  1  5.0    8.13   0.30 12.75  31.84 0.34   0.000
[CN=62.6                    ]
[ N = 3.0:Tp 0.60]

*
READ STORM                15.0

```

```

[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08    0.75 12.58  54.47 0.58   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD    1021  1  5.0    16.01    2.46 12.25  55.63 0.59   0.000
   [I%=35.0:S%= 2.00]
*
   ADD [ 1021+ 1063] 0807  3  5.0    24.14    2.58 12.25  47.62 n/a   0.000
*
   ADD [ 0807+ 0602] 0807  1  5.0   177.41    8.46 13.67  42.23 n/a   0.000
*
   ADD [ 0807+ 0904] 0807  3  5.0   186.49    8.64 13.67  42.83 n/a   0.000
*
   CHANNEL[ 2: 0807] 0603  1  5.0   186.49    8.56 13.67  42.83 n/a   0.000
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD      0902  1  5.0     4.38    0.27 12.67  49.00 0.52   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.56]
*
   ADD [ 0603+ 0902] 8031  3  5.0   190.87    8.68 13.67  42.97 n/a   0.000
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

```

```

*
* CALIB NASHYD      1061  1  5.0     8.33     0.32 12.67  29.70 0.32   0.000
   [CN=60.3          ]
   [ N = 3.0:Tp 0.50]
*
   PIPE [ 2: 1061] 0701  1  5.0     8.33     0.32 12.67  29.70 n/a   0.000
*
   CHANNEL[ 2: 0127] 0608  1  5.0    25.78     0.40 12.58  41.65 n/a   0.000
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD      0105  1  5.0    12.80     0.67 12.58  37.38 0.40   0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.47]
*
   ADD [ 0105+ 0608] 0812  3  5.0    38.58     1.07 12.58  40.23 n/a   0.000
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD    1041  1  5.0     6.41     1.27 12.25  69.36 0.74   0.000
   [I%=35.0:S%= 2.00]
*
   ADD [ 1041+ 0812] 0816  3  5.0    44.99     1.96 12.25  44.38 n/a   0.000
*
   READ STORM      15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD      1075  1  5.0     5.30     0.39 12.50  44.47 0.48   0.000
   [CN=76.2          ]
   [ N = 3.0:Tp 0.38]
*
   CHANNEL[ 2: 1075] 0609  1  5.0     5.30     0.36 12.67  44.46 n/a   0.000

```



```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB NASHYD              1081  1  5.0   18.64   0.99 12.67  42.20 0.45   0.000
  [CN=74.9                  ]
  [ N = 3.0:Tp 0.55]
*

```

```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB NASHYD              1074  1  5.0    6.00   0.39 12.50  40.53 0.43   0.000
  [CN=73.8                  ]
  [ N = 3.0:Tp 0.40]
*

```

```

*
  CHANNEL[ 2: 1074]   0115  1  5.0    6.00   0.35 12.67  40.53 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB NASHYD              1082  1  5.0    4.21   0.22 12.75  41.77 0.45   0.000
  [CN=74.6                  ]
  [ N = 3.0:Tp 0.56]
*

```

```

*
  ADD [ 1082+ 0115]  0116  3  5.0   10.21   0.56 12.67  41.04 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0116]   0118  1  5.0   10.21   0.56 12.75  41.04 n/a   0.000
*

```

```

*
  ADD [ 1081+ 0118]  0813  3  5.0   28.85   1.55 12.75  41.79 n/a   0.000
*

```

```

*
  ADD [ 0813+ 0609]  0813  1  5.0   34.15   1.90 12.75  42.20 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0813]   0610  1  5.0   34.15   1.85 12.83  42.20 n/a   0.000
*

```

```

  READ STORM                15.0

```

```

[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD           1042  1  5.0    2.09   0.46 12.25  69.36 0.74   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1042+ 0610]  0814  3  5.0   36.24   1.91 12.83  43.77 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0814]   0611  1  5.0   36.24   1.85 12.92  43.76 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD           1032  1  5.0    1.68   0.37 12.25  69.36 0.74   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1032+ 0611]  0815  3  5.0   37.92   1.89 12.92  44.90 n/a   0.000
*

```

```

*
  ADD [ 0815+ 0816]  0815  1  5.0   82.91   3.09 12.75  44.62 n/a   0.000
*

```

```

*
  CHANNEL[ 2: 0815]   0612  1  5.0   82.91   3.09 12.83  44.62 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD           1031  1  5.0   12.60   2.43 12.25  69.36 0.74   0.000
  [I%=35.0:S%= 2.00]
*

```

```

*
  ADD [ 1031+ 0612]  0163  3  5.0   95.51   5.10 12.25  47.88 n/a   0.000
*

```

```

*
  ADD [ 0163+ 0701]  0163  1  5.0  103.84   5.22 12.25  46.42 n/a   0.000
*

```

```

*
  READ STORM                15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-

```

2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.26 12.25 44.33 0.47 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
ADD [0163+ 8031] 0803 3 5.0 294.71 10.84 13.67 44.18 n/a 0.000
*
ADD [0803+ 0901] 0803 1 5.0 301.51 10.90 13.67 44.19 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 8.80 13.92 44.18 n/a 0.000
*
READ STORM 15.0
[Ptot= 93.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.55 12.25 44.81 0.48 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.36 12.33 44.70 n/a 0.000
*
READ STORM 15.0
[Ptot= 93.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 12.42 46.49 0.50 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
READ STORM 15.0
[Ptot= 93.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.07 12.25 44.75 0.48 0.000

[CN=76.0]
[N = 3.0:Tp 0.09]
*
READ STORM 15.0
[Ptot= 93.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.59 12.25 73.01 0.78 0.000
[I%=43.0:S%= 2.00]
*
READ STORM 15.0
[Ptot= 93.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.75 12.25 72.00 0.77 0.000
[I%=40.3:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 0.82 12.25 68.89 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 1.41 12.25 70.55 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 1.43 12.25 69.16 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 8.87 13.92 44.71 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 8.90 13.92 44.71 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y Y M M O O
000 T T H H Y Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\013
12be4-fb28-401a-9b3f-e0733b70d72f\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\013
12be4-fb28-401a-9b3f-e0733b70d72f\sc

DATE: 07/17/2023 TIME: 12:02:13

USER:

COMMENTS: _____

** SIMULATION : X - 25yr 24hr 15min SCS **

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

READ STORM	15.0							
[Ptot=108.00 mm]								
fname :								
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a								
remark: 25yr 24hr 15min SCS								

*
** CALIB NASHYD 1002 1 5.0 43.20 4.22 12.50 60.55 0.56 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]
*
SHIFT[2: 1002] 0606 1 5.0 43.20 4.22 13.75 60.55 n/a 0.000
[SHIFT= 79.2 min]
*
READ STORM 15.0

[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.89 12.67 52.22 0.48 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]
*

*
ADD [1072+ 0606] 0804 3 5.0 55.73 4.50 13.75 58.68 n/a 0.000
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 1.30 12.58 48.76 0.45 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*

*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 2.00 12.25 58.29 0.54 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*

*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 2.32 12.25 53.32 0.49 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*

*
ADD [1003+ 1004] 0157 3 5.0 25.60 4.32 12.25 55.45 n/a 0.000

```

*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 4.32 13.50 55.45 n/a 0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811 3 5.0 44.70 4.84 13.50 52.59 n/a 0.000
*
DUHYD 0127 1 5.0 44.70 4.84 13.50 52.59 n/a 0.000
MAJOR SYSTEM: 0127 2 5.0 21.10 4.44 13.50 52.59 n/a 0.000
MINOR SYSTEM: 0127 3 5.0 23.60 0.40 12.17 52.59 n/a 0.000
*
ADD [ 0127+ 0804] 8041 3 5.0 76.83 7.94 13.58 57.00 n/a 0.000
*
CHANNEL[ 2: 8041] 0604 1 5.0 76.83 7.65 13.67 57.00 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
** CALIB NASHYD 1001 1 5.0 50.05 2.81 12.83 51.65 0.48 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 2.80 12.92 51.65 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
** CALIB NASHYD 1071 1 5.0 23.31 0.96 12.92 41.49 0.38 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 3.76 12.92 48.42 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 150.19 10.15 13.58 52.81 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 150.19 10.18 13.67 52.81 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-

```

```

5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.21 12.75 33.96 0.31 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 155.45 10.28 13.67 52.17 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 155.45 10.35 13.67 52.17 n/a 0.000
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.38 12.75 40.76 0.38 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
** CALIB NASHYD 0904 1 5.0 9.08 0.93 12.58 66.90 0.62 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 2.98 12.25 66.84 0.62 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 3.14 12.25 58.06 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 179.59 10.74 13.67 52.96 n/a 0.000

```

```

*
  ADD [ 0807+ 0904] 0807 3 5.0 188.67 10.96 13.67 53.63 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 188.67 10.93 13.67 53.63 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.34 12.67 60.81 0.56 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031 3 5.0 193.05 11.06 13.67 53.80 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.42 12.67 38.19 0.35 0.000
  [CN=60.3 ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701 1 5.0 8.33 0.41 12.67 38.19 n/a 0.000
*
  CHANNEL[ 2: 0127] 0608 1 5.0 23.60 0.40 12.50 52.59 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 0105 1 5.0 12.80 0.86 12.58 47.55 0.44 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812 3 5.0 36.40 1.26 12.58 50.81 n/a 0.000
*
  READ STORM 15.0

```

```

  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.66 12.25 82.62 0.77 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0812] 0816 3 5.0 42.81 2.49 12.25 55.58 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.50 12.50 55.80 0.52 0.000
  [CN=76.2 ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.45 12.67 55.80 n/a 0.000
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.26 12.67 53.26 0.49 0.000
  [CN=74.9 ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM 15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.49 12.50 51.36 0.48 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*

```

```

* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.45 12.67 51.36 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD 1082 1 5.0 4.21 0.28 12.75 52.78 0.49 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116 3 5.0 10.21 0.73 12.67 51.94 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 10.21 0.73 12.75 51.94 n/a 0.000
*
* ADD [ 1081+ 0118] 0813 3 5.0 28.85 1.98 12.75 52.79 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 34.15 2.42 12.67 53.26 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 34.15 2.37 12.83 53.26 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.56 12.25 82.62 0.77 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 36.24 2.44 12.83 54.95 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 36.24 2.37 12.92 54.95 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.45 12.25 82.62 0.76 0.000
* [I%=35.0:S%= 2.00]
*

```

```

* ADD [ 1032+ 0611] 0815 3 5.0 37.92 2.42 12.92 56.17 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 80.73 3.81 12.25 55.86 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 80.73 3.79 12.83 55.86 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 2.93 12.25 82.62 0.77 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163 3 5.0 93.33 6.41 12.25 59.47 n/a 0.000
*
* ADD [ 0163+ 0701] 0163 1 5.0 101.66 6.57 12.25 57.73 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.53 12.25 54.10 0.50 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803 3 5.0 294.71 13.56 13.67 55.15 n/a 0.000
*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 13.63 13.67 55.13 n/a 0.000
*
* ** Reservoir
* OUTFLOW: 0501 1 5.0 301.51 12.29 13.83 55.12 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD 0903 1 5.0 3.03 0.69 12.25 55.80 0.52 0.000
* [CN=77.6 ]

```

```

* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.46 12.33 55.69 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.04 12.42 57.89 0.54 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.09 12.25 55.72 0.52 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.70 12.25 86.48 0.80 0.000
* [I%=43.0:S%= 2.00]
*
* READ STORM 15.0
* [ Ptot=108.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\{a36aa59b-c1b0-4b2e-8f5f-a32a1f4067db}\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.90 12.25 85.42 0.79 0.000
* [I%=40.3:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.99 12.25 82.03 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.69 12.25 83.83 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 1.72 12.25 82.32 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 12.38 13.83 55.70 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 12.42 13.83 55.70 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82}\a47b66e2-0e93-45bb-b534-718b73520753\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\{VH5\05153701-f781-47eb-ab6b-c872b39b8f82}\a47b66e2-0e93-45bb-b534-718b73520753\sc

DATE: 07/17/2023 TIME: 12:02:13

USER:

COMMENTS: _____

```

```

*****
** SIMULATION : Y - 50yr 24hr 15min SCS **
*****

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

      START @  0.00 hrs
      -----
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1002  1  5.0   43.20   5.09 12.50  72.75 0.59   0.000
   [CN=78.4                  ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]  0606  1  5.0   43.20   5.09 13.75  72.75 n/a   0.000
[SHIFT= 79.2 min]
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1072  1  5.0   12.53   1.09 12.67  63.71 0.52   0.000
   [CN=74.7                  ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   5.42 13.75  70.71 n/a   0.000
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1073  1  5.0   19.10   1.60 12.58  59.76 0.49   0.000
   [CN=71.9                  ]
   [ N = 3.0:Tp 0.48]
*

```

```

      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1004  1  5.0   10.95   2.42 12.25  70.32 0.57   0.000
   [CN=78.0                  ]
   [ N = 3.0:Tp 0.15]
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1003  1  5.0   14.65   2.83 12.25  64.85 0.53   0.000
   [CN=75.1                  ]
   [ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   5.25 12.25  67.19 n/a   0.000
*
SHIFT[  2: 0157] 0607  1  5.0   25.60   5.25 13.50  67.19 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   5.88 13.50  64.01 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   5.88 13.50  64.01 n/a   0.000
  MAJOR SYSTEM:    0127  2  5.0   22.79   5.48 13.50  64.01 n/a   0.000
  MINOR SYSTEM:    0127  3  5.0   21.91   0.40 12.08  64.01 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   78.52   9.70 13.58  68.77 n/a   0.000
*
CHANNEL[  2: 8041] 0604  1  5.0   78.52   9.35 13.67  68.77 n/a   0.000
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD              1001  1  5.0   50.05   3.44 12.83  62.98 0.51   0.000
   [CN=73.6                  ]
   [ N = 3.0:Tp 0.68]

```



```

*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 3.43 12.92 62.98 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
** CALIB NASHYD 1071 1 5.0 23.31 1.20 12.92 51.35 0.42 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 4.63 12.92 59.28 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 151.88 12.47 13.58 64.19 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 151.88 12.45 13.67 64.19 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
** CALIB NASHYD 1062 1 5.0 5.26 0.27 12.75 42.28 0.35 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 1062+ 0601] 0802 3 5.0 157.14 12.56 13.67 63.45 n/a 0.000
*
CHANNEL[ 2: 0802] 0602 1 5.0 157.14 12.66 13.67 63.45 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
** CALIB NASHYD 1063 1 5.0 8.13 0.47 12.75 50.27 0.41 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0

```

```

[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
** CALIB NASHYD 0904 1 5.0 9.08 1.11 12.50 79.65 0.65 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 3.53 12.25 78.41 0.64 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 3.73 12.25 68.93 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 181.28 13.13 13.67 64.18 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 190.36 13.39 13.67 64.92 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 190.36 13.40 13.67 64.92 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD 0902 1 5.0 4.38 0.40 12.67 73.02 0.60 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0603+ 0902] 8031 3 5.0 194.74 13.57 13.67 65.10 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

```

```

*
* CALIB NASHYD      1061  1  5.0    8.33    0.52 12.67  47.29 0.39  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
* PIPE   [ 2: 1061]  0701  1  5.0    8.33    0.52 12.67  47.29 n/a  0.000
*
* CHANNEL[ 2: 0127]  0608  1  5.0   21.91    0.40 12.33  64.01 n/a  0.000
*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD      0105  1  5.0   12.80    1.05 12.58  58.26 0.48  0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.47]
*
* ADD [ 0105+ 0608]  0812  3  5.0   34.71    1.45 12.58  61.89 n/a  0.000
*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB STANDHYD    1041  1  5.0    6.41    1.95 12.25  96.07 0.78  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0812]  0816  3  5.0   41.12    2.91 12.25  67.22 n/a  0.000
*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD      1075  1  5.0    5.30    0.60 12.50  67.59 0.55  0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075]  0609  1  5.0    5.30    0.55 12.67  67.59 n/a  0.000

```

```

*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD      1081  1  5.0   18.64    1.54 12.67  64.81 0.53  0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD      1074  1  5.0    6.00    0.61 12.50  62.70 0.51  0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074]  0115  1  5.0    6.00    0.56 12.67  62.70 n/a  0.000
*
  READ STORM      15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS
*
* CALIB NASHYD      1082  1  5.0    4.21    0.34 12.67  64.27 0.53  0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115]  0116  3  5.0   10.21    0.91 12.67  63.35 n/a  0.000
*
* CHANNEL[ 2: 0116]  0118  1  5.0   10.21    0.90 12.75  63.34 n/a  0.000
*
* ADD [ 1081+ 0118]  0813  3  5.0   28.85    2.44 12.75  64.29 n/a  0.000
*
* ADD [ 0813+ 0609]  0813  1  5.0   34.15    2.98 12.67  64.80 n/a  0.000
*
* CHANNEL[ 2: 0813]  0610  1  5.0   34.15    2.90 12.83  64.80 n/a  0.000
*
  READ STORM      15.0

```

```

[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.65 12.25  96.07 0.78    0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    36.24    2.99 12.75  66.60 n/a    0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    36.24    2.89 12.92  66.60 n/a    0.000
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD      1032  1  5.0    1.68    0.53 12.25  96.07 0.78    0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    37.92    2.94 12.92  67.90 n/a    0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    79.04    4.51 12.75  67.55 n/a    0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    79.04    4.51 12.83  67.55 n/a    0.000
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD      1031  1  5.0    12.60    3.45 12.25  96.07 0.78    0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0163  3  5.0    91.64    7.56 12.25  71.47 n/a    0.000
*
* ADD [ 0163+ 0701] 0163  1  5.0    99.97    7.76 12.25  69.46 n/a    0.000
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-

```

```

1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD          0901  1  5.0    6.80    1.79 12.25  64.08 0.52    0.000
* [CN=84.1
* [ N = 3.0:Tp 0.05]
*
* ADD [ 0163+ 8031] 0803  3  5.0   294.71   16.48 13.67  66.58 n/a    0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51   16.56 13.67  66.52 n/a    0.000
*
* ** Reservoir
* OUTFLOW:          0501  1  5.0   301.51   15.15 13.75  66.52 n/a    0.000
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD          0903  1  5.0    3.03    0.82 12.25  67.18 0.55    0.000
* [CN=77.6
* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03    0.57 12.33  67.07 n/a    0.000
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD          1014  1  5.0    0.38    0.05 12.42  69.72 0.57    0.000
* [CN=76.0
* [ N = 3.0:Tp 0.32]
*
* READ STORM          15.0
* [ Ptot=122.40 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD          1012  1  5.0    0.42    0.11 12.25  67.11 0.55    0.000

```

```

[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
READ STORM          15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
* CALIB STANDHYD      1013  1  5.0    2.49    0.82 12.25 100.11 0.82    0.000
[I%=43.0:S%= 2.00]
*
READ STORM          15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS
*
* CALIB STANDHYD      1011  1  5.0    3.26    1.05 12.25  99.01 0.81    0.000
[I%=40.3:S%= 2.00]
*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    1.16 12.25  95.37 n/a    0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.98 12.25  97.29 n/a    0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    2.01 12.25  95.69 n/a    0.000
*
ADD [ 0810+ 0501] 0810  1  5.0   308.06   15.26 13.75  67.14 n/a    0.000
*
ADD [ 0810+ 0605] 0810  3  5.0   311.09   15.31 13.75  67.14 n/a    0.000
*
=====
V   V   I   SSSS  U   U   A   L           (v 6.1.2001)
V   V   I   SS   U   U   A   A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
VV    I   SSSS  UUUU  A   A   LLLLL
*
000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   T   H   H   Y   Y   MM  MM  O   O
O   O   T   T   H   H   Y   M   M   O   O
000  T   T   H   H   Y   M   M   000
Developed and Distributed by Smart City Water Inc

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\f6670b87-b6bf-4686-a80b-20391b083542\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\5153701-f781-47eb-ab6b-c872b39b8f82\f6670b87-b6bf-4686-a80b-20391b083542\sc

DATE: 07/17/2023

TIME: 12:02:13

USER:

COMMENTS: _____

** SIMULATION : Z - 100yr 24hr 15min SCS **

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0    43.20    5.68 12.50  81.06 0.61    0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002] 0606  1  5.0    43.20    5.68 13.75  81.06 n/a    0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0

```

```

[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0   12.53   1.23 12.67  71.59 0.54   0.000
[CN=74.7             ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   6.05 13.75  78.93 n/a   0.000
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0   19.10   1.81 12.58  67.34 0.51   0.000
[CN=71.9             ]
[ N = 3.0:Tp 0.48]
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0   10.95   2.70 12.25  78.53 0.59   0.000
[CN=78.0             ]
[ N = 3.0:Tp 0.15]
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0   14.65   3.19 12.25  72.75 0.55   0.000
[CN=75.1             ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   5.89 12.25  75.22 n/a   0.000

```

```

*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   5.89 13.50  75.22 n/a   0.000
[SHIFT= 75.8 min]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   6.59 13.50  71.85 n/a   0.000
*
DUHYD              0127  1  5.0   44.70   6.59 13.50  71.85 n/a   0.000
MAJOR SYSTEM:      0127  2  5.0   23.70   6.19 13.50  71.85 n/a   0.000
MINOR SYSTEM:      0127  3  5.0   21.00   0.40 12.00  71.85 n/a   0.000
*
ADD [ 0127+ 0804] 8041  3  5.0   79.43  10.90 13.58  76.82 n/a   0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0   79.43  10.94 13.67  76.82 n/a   0.000
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1001  1  5.0   50.05   3.88 12.83  70.76 0.54   0.000
[CN=73.6             ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   3.87 12.92  70.76 n/a   0.000
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1071  1  5.0   23.31   1.37 12.92  58.21 0.44   0.000
[CN=65.3             ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805  3  5.0   73.36   5.23 12.92  66.77 n/a   0.000
*
ADD [ 0604+ 0805] 0806  3  5.0  152.79  14.25 13.67  71.99 n/a   0.000
*
CHANNEL[ 2: 0806] 0601  1  5.0  152.79  14.22 13.67  71.99 n/a   0.000
*
READ STORM          15.0
[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-

```

```

7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          1062  1  5.0    5.26    0.30 12.75  48.13 0.36  0.000
  [CN=55.8              ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 1062+ 0601] 0802  3  5.0   158.05   14.35 13.67  71.20 n/a  0.000
*
  CHANNEL[ 2: 0802] 0602  1  5.0   158.05   14.32 13.67  71.20 n/a  0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          1063  1  5.0    8.13    0.54 12.75  56.90 0.43  0.000
  [CN=62.6              ]
  [ N = 3.0:Tp 0.60]
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          0904  1  5.0    9.08    1.23 12.50  88.29 0.67  0.000
  [CN=81.8              ]
  [ N = 3.0:Tp 0.43]
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD        1021  1  5.0   16.01    3.91 12.25  86.30 0.65  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807  3  5.0   24.14    4.14 12.25  76.40 n/a  0.000
*
  ADD [ 0807+ 0602] 0807  1  5.0  182.19   14.85 13.67  71.89 n/a  0.000

```

```

*
  ADD [ 0807+ 0904] 0807  3  5.0  191.27   15.13 13.67  72.67 n/a  0.000
*
  CHANNEL[ 2: 0807] 0603  1  5.0  191.27   14.85 13.67  72.67 n/a  0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          0902  1  5.0    4.38    0.45 12.67  81.34 0.62  0.000
  [CN=78.4              ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0603+ 0902] 8031  3  5.0  195.65   15.04 13.67  72.86 n/a  0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          1061  1  5.0    8.33    0.59 12.67  53.65 0.41  0.000
  [CN=60.3              ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701  1  5.0    8.33    0.59 12.67  53.65 n/a  0.000
*
  CHANNEL[ 2: 0127] 0608  1  5.0   21.00    0.40 12.25  71.85 n/a  0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          0105  1  5.0   12.80    1.19 12.58  65.65 0.50  0.000
  [CN=69.9              ]
  [ N = 3.0:Tp 0.47]
*
  ADD [ 0105+ 0608] 0812  3  5.0   33.80    1.59 12.58  69.51 n/a  0.000
*
  READ STORM              15.0

```

```

[ Ptot=132.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD      1041  1  5.0    6.41    2.15 12.25 105.13 0.80    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0812] 0816  3  5.0    40.21    3.19 12.25 75.19 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1075  1  5.0    5.30    0.68 12.50 75.66 0.57    0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.62 12.67 75.66 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1081  1  5.0    18.64    1.74 12.67 72.73 0.55    0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
* READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1074  1  5.0    6.00    0.68 12.50 70.49 0.53    0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*

```

```

CHANNEL[ 2: 1074] 0115  1  5.0    6.00    0.63 12.67 70.49 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD      1082  1  5.0    4.21    0.38 12.67 72.15 0.55    0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 1082+ 0115] 0116  3  5.0    10.21    1.02 12.67 71.18 n/a    0.000
*
* CHANNEL[ 2: 0116] 0118  1  5.0    10.21    1.01 12.75 71.17 n/a    0.000
*
* ADD [ 1081+ 0118] 0813  3  5.0    28.85    2.74 12.75 72.18 n/a    0.000
*
* ADD [ 0813+ 0609] 0813  1  5.0    34.15    3.36 12.67 72.72 n/a    0.000
*
* CHANNEL[ 2: 0813] 0610  1  5.0    34.15    3.27 12.83 72.71 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.72 12.25 105.12 0.80    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    36.24    3.37 12.75 74.58 n/a    0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    36.24    3.26 12.92 74.58 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD      1032  1  5.0    1.68    0.58 12.25 105.12 0.80    0.000
  [I%=35.0:S%= 2.00]
*

```

```

*      ADD [ 1032+ 0611] 0815 3 5.0 37.92 3.32 12.92 75.93 n/a 0.000
*
*      ADD [ 0815+ 0816] 0815 1 5.0 78.13 5.05 12.75 75.55 n/a 0.000
*
*      CHANNEL[ 2: 0815] 0612 1 5.0 78.13 5.05 12.83 75.55 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB STANDHYD 1031 1 5.0 12.60 4.14 12.25 105.13 0.80 0.000
*      [I%=35.0:S%= 2.00]
*
*      ADD [ 1031+ 0612] 0163 3 5.0 90.73 8.71 12.25 79.65 n/a 0.000
*
*      ADD [ 0163+ 0701] 0163 1 5.0 99.06 8.94 12.25 77.47 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB NASHYD 0901 1 5.0 6.80 1.97 12.25 70.83 0.54 0.000
*      [CN=84.1 ]
*      [ N = 3.0:Tp 0.05]
*
*      ADD [ 0163+ 8031] 0803 3 5.0 294.71 18.20 13.67 74.41 n/a 0.000
*
*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 18.29 13.67 74.33 n/a 0.000
*
*      ** Reservoir
*      OUTFLOW: 0501 1 5.0 301.51 17.04 13.83 74.32 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB NASHYD 0903 1 5.0 3.03 0.92 12.25 74.95 0.57 0.000
*      [CN=77.6 ]

```

```

*      [ N = 3.0:Tp 0.08]
*
*      CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.64 12.33 74.84 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB NASHYD 1014 1 5.0 0.38 0.06 12.42 77.81 0.59 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.32]
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB NASHYD 1012 1 5.0 0.42 0.12 12.25 74.90 0.57 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.09]
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB STANDHYD 1013 1 5.0 2.49 0.90 12.25 109.27 0.83 0.000
*      [I%=43.0:S%= 2.00]
*
*      READ STORM 15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\36aa59b-c1b0-4b2e-8f5f-a32a1f4067db\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*      CALIB STANDHYD 1011 1 5.0 3.26 1.15 12.25 108.15 0.82 0.000
*      [I%=40.3:S%= 2.00]
*

```



```
*      ADD [ 1011+ 1012] 0810 3 5.0    3.68    1.28 12.25 104.35 n/a  0.000
*
*      ADD [ 0810+ 1013] 0810 1 5.0    6.17    2.17 12.25 106.34 n/a  0.000
*
*      ADD [ 0810+ 1014] 0810 3 5.0    6.55    2.21 12.25 104.68 n/a  0.000
*
*      ADD [ 0810+ 0501] 0810 1 5.0  308.06  17.14 13.83  74.97 n/a  0.000
*
*      ADD [ 0810+ 0605] 0810 3 5.0  311.09  17.19 13.83  74.97 n/a  0.000
*
```

FINISH

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

Appendix B: Proposed Conditions Hydrologic Analysis

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay Development	121361
----------------------	--------

Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	July 4, 2022
--------------	--------------

Pre-Development Condition

Watershed:	GSCA
Catchment ID:	2082
Catchment Area (ha):	2.98
Impervious %:	0%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Ksc											
Soil Series		Kemble											
Hydrologic Soils Group		C											
Soil Texture		Silty Clay Loam											
Runoff Coefficient Type		3											
Area (ha)		2.98											
Percentage of Catchment		100%											
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2		100	0.95									
Gravel	3	0.19	89	0.38									
Woodland	10	2.51	73	0.35									
Pasture/Lawns	5	0.28	79	0.40									
Meadows	8		76	0.38									
Cultivated	7		82	0.55									
Waterbody	12		50	0.05									
Average CN		74.58											
Average C		0.36											
Average IA		9.08											

Time to Peak Calculations

Max. Catchment Elev. (m):	223.00
Min. Catchment Elev. (m):	219.00
Catchment Length (m):	420
Catchment Slope (%):	0.95%
Method:	Airport Method
Time of Concentration (mins):	50.49

Summary

Catchment CN:	74.6
Catchment C:	0.36
Catchment IA (mm):	9.08
Time of Concentration (hrs):	0.84
Catchment Time to Peak (hrs):	0.56
Catchment Time Step (mins):	6.73

Visual OTTHYMO Model Parameter Calculations (NasHYD)

Project Details

Lora Bay - Phase 6 & 7	121361
------------------------	--------

Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

Name	July 4, 2022
------	--------------

Pre-Development Condition

Watershed:	GSCA
Catchment ID:	9041
Catchment Area (ha):	6.51
Impervious %:	2%

Average Curve Number (CN), Runoff Coefficient (C) and Initial Abstraction (IA)

Soil Symbol		Brsl			Bc								
Soil Series		Brighton			Brookston								
Hydrologic Soils Group		AB			C								
Soil Texture		Sand Loam			Clay Loam								
Runoff Coefficient Type		1			3								
Area (ha)		2.14			4.37								
Percentage of Catchment		33%			67%								
Land Cover Category	IA	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C	A (ha)	CN	C
Impervious	2	0.03	100	0.95	0.07	100	0.95						
Gravel	3		89	0.09		89	0.38						
Woodland	10	0.60	46	0.08	1.55	73	0.35						
Pasture/Lawns	5	1.51	59	0.10	2.75	79	0.40						
Meadows	8		51	0.09		76	0.38						
Cultivated	7		68	0.22		82	0.55						
Waterbody	12		50	0.05		50	0.05						
Average CN		55.93			77.21								
Average C		0.11			0.39								
Average IA		6.36			6.73								

Time to Peak Calculations

Max. Catchment Elev. (m):	218.00
Min. Catchment Elev. (m):	215.00
Catchment Length (m):	260
Catchment Slope (%):	1.15%
Method: Airport Method	
Time of Concentration (mins):	40.24

Summary

Catchment CN:	70.2
Catchment C:	0.30
Catchment IA (mm):	6.61
Time of Concentration (hrs):	0.67
Catchment Time to Peak (hrs):	0.45
Catchment Time Step (mins):	5.37

Visual OTTHYMO Model Parameter Calculations (StandHYD)

Project Details

Lora Bay - Phase 6 & 7	121361
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Data Sources

Detailed Soil Survey Reports for Ontario, GSCA Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (2010), MTO Drainage Management Manual (1997)

Prepared By

J. Macdonald	July 4, 2022
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Pre-Development Condition

Watershed:	GSCA
Catchment ID:	2043
Catchment Area (ha):	7.52
Impervious %:	45%
Pervious Area (ha):	4.14

Average Curve Number (CN) and Initial Abstraction (IA) for Pervious Area

Soil Symbol	Bc			Ksc					
Soil Series	Brookston			Kemble					
Hydrologic Soils Group	C			C					
Soil Texture	Clay Loam			Silty Clay Loam					
Runoff Coefficient Type	3			3					
Area (ha)	1.64			2.50					
Percentage of Catchment	40%			60%					
Land Cover Category	IA	A (ha)	CN	A (ha)	CN	A (ha)	CN	A (ha)	CN
Impervious	2		100		100				
Gravel	3		89		89				
Woodland	10		73		73				
Pasture/Lawns	5	1.64	79	2.50	79				
Meadows	8		76		76				
Cultivated	7		82		82				
Waterbody	12		50		50				
Average CN	79.00			79.00					
Average IA	5.00			5.00					

Notes

CN and IA values have been calculated for the pervious area of the catchment only.
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Summary

Catchment CN:	79.0
Catchment IA (mm):	5.00



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V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
V V I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** D E T A I L E D O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\A75
fe74b-f8d2-46ad-891c-64dabc608b96\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\A75
fe74b-f8d2-46ad-891c-64dabc608b96\sc

DATE: 07/17/2023

TIME: 11:59:42

USER:

COMMENTS: _____

** SIMULATION : 100yr 24hr SCS **

| READ STORM | Filename: C:\Users\JBirchard\AppData\Local\Temp\
|

| 761df4d1-3dd0-49b6-a87e-6b6a99226dc8\6d9871f5
| Ptotal=132.00 mm | Comments: 100yr 24hr 15min SCS
|-----|

TIME	RAIN	TIME	RAIN	' TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.25	0.00	6.50	2.38	12.75	19.01	19.00	2.38
0.50	1.45	6.75	2.38	13.00	9.77	19.25	2.38
0.75	1.45	7.00	2.38	13.25	9.77	19.50	2.38
1.00	1.45	7.25	2.38	13.50	7.13	19.75	2.38
1.25	1.45	7.50	2.90	13.75	7.13	20.00	2.38
1.50	1.45	7.75	2.90	14.00	5.54	20.25	2.38
1.75	1.45	8.00	2.90	14.25	5.54	20.50	1.58
2.00	1.45	8.25	2.90	14.50	3.96	20.75	1.58
2.25	1.45	8.50	3.43	14.75	3.96	21.00	1.58
2.50	1.72	8.75	3.43	15.00	3.96	21.25	1.58
2.75	1.72	9.00	3.70	15.25	3.96	21.50	1.58
3.00	1.72	9.25	3.70	15.50	3.96	21.75	1.58
3.25	1.72	9.50	4.22	15.75	3.96	22.00	1.58
3.50	1.72	9.75	4.22	16.00	3.96	22.25	1.58
3.75	1.72	10.00	4.75	16.25	3.96	22.50	1.58
4.00	1.72	10.25	4.75	16.50	2.38	22.75	1.58
4.25	1.72	10.50	6.07	16.75	2.38	23.00	1.58
4.50	2.11	10.75	6.07	17.00	2.38	23.25	1.58
4.75	2.11	11.00	8.18	17.25	2.38	23.50	1.58
5.00	2.11	11.25	8.18	17.50	2.38	23.75	1.58
5.25	2.11	11.50	12.67	17.75	2.38	24.00	1.58
5.50	2.11	11.75	12.67	18.00	2.38	24.25	1.58
5.75	2.11	12.00	39.07	18.25	2.38		
6.00	2.11	12.25	161.57	18.50	2.38		
6.25	2.11	12.50	19.01	18.75	2.38		

| CALIB |
| NASHYD (1062) | Area (ha)= 5.26 Curve Number (CN)= 55.8
| ID= 1 DT= 5.0 min | Ia (mm)= 6.63 # of Linear Res.(N)= 3.00
|-----| U.H. Tp(hrs)= 0.56

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38

0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58

4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.359

PEAK FLOW (cms)= 0.305 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 48.128
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.365

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

| CALIB |
| NASHYD (1004) | Area (ha)= 10.95 Curve Number (CN)= 78.0
| ID= 1 DT= 5.0 min | Ia (mm)= 7.55 # of Linear Res.(N)= 3.00
|-----| U.H. Tp(hrs)= 0.15

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38

0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58

4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 2.788

PEAK FLOW (cms)= 2.700 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 78.528
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.595

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

| CALIB |
| NASHYD (1003) | Area (ha)= 14.65 Curve Number (CN)= 75.1
| ID= 1 DT= 5.0 min | Ia (mm)= 8.92 # of Linear Res.(N)= 3.00
|-----| U.H. Tp(hrs)= 0.16

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38

1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58

5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 3.497

PEAK FLOW (cms)= 3.186 (i)
 TIME TO PEAK (hrs)= 12.250
 RUNOFF VOLUME (mm)= 72.749
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.551

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

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1003):	14.65	3.186	12.25	72.75
+ ID2= 2 (1004):	10.95	2.700	12.25	78.53
=====				
ID = 3 (0157):	25.60	5.885	12.25	75.22

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID= 2 (0157):	25.60	5.89	12.25	75.22
SHIFT ID= 1 (0607):	25.60	5.89	13.50	75.22

CALIB	Area (ha)=	19.10	Curve Number (CN)=	71.9
NASHYD (1073)	Ia (mm)=	9.90	# of Linear Res.(N)=	3.00
ID= 1 DT= 5.0 min	U.H. Tp(hrs)=	0.48		

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58

3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.520

PEAK FLOW (cms)= 1.809 (i)

TIME TO PEAK (hrs)= 12.583

RUNOFF VOLUME (mm)= 67.343

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.510

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

ADD HYD (0811)				
1 + 2 = 3				

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (1073):	19.10	1.809	12.58	67.34
+ ID2= 2 (0607):	25.60	5.885	13.50	75.22
=====				

ID = 3 (0811): 44.70 6.587 13.50 71.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| DUHYD (0126) |
| Inlet Cap.= 0.400 |
| #of Inlets= 1 |
Total(cms)= 0.4
AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)

TOTAL HYD.(ID= 1): 44.70 6.59 13.50 71.85
=====

MAJOR SYS.(ID= 2): 23.70 6.19 13.50 71.85
MINOR SYS.(ID= 3): 21.00 0.40 12.00 71.85

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| NASHYD (1002) | Area (ha)= 43.20 Curve Number (CN)= 78.4
| ID= 1 DT= 5.0 min | Ia (mm)= 5.93 # of Linear Res.(N)= 3.00

| U.H. Tp(hrs)= 0.40

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 6.167 2.11 12.250 161.57 18.33 2.38
0.167 0.00 6.250 2.11 12.333 19.03 18.42 2.38
0.250 0.00 6.333 2.38 12.417 19.01 18.50 2.38
0.333 1.45 6.417 2.38 12.500 19.01 18.58 2.38
0.417 1.45 6.500 2.38 12.583 19.01 18.67 2.38
0.500 1.45 6.583 2.38 12.667 19.01 18.75 2.38
0.583 1.45 6.667 2.38 12.750 19.01 18.83 2.38
0.667 1.45 6.750 2.38 12.833 9.77 18.92 2.38
0.750 1.45 6.833 2.38 12.917 9.77 19.00 2.38
0.833 1.45 6.917 2.38 13.000 9.77 19.08 2.38
0.917 1.45 7.000 2.38 13.083 9.77 19.17 2.38
1.000 1.45 7.083 2.38 13.167 9.77 19.25 2.38
1.083 1.45 7.167 2.38 13.250 9.77 19.33 2.38
1.167 1.45 7.250 2.38 13.333 7.13 19.42 2.38
1.250 1.45 7.333 2.90 13.417 7.13 19.50 2.38
1.333 1.45 7.417 2.90 13.500 7.13 19.58 2.38
1.417 1.45 7.500 2.90 13.583 7.13 19.67 2.38
1.500 1.45 7.583 2.90 13.667 7.13 19.75 2.38
1.583 1.45 7.667 2.90 13.750 7.13 19.83 2.38
1.667 1.45 7.750 2.90 13.833 5.54 19.92 2.38

1.750 1.45 7.833 2.90 13.917 5.54 20.00 2.38
1.833 1.45 7.917 2.90 14.000 5.54 20.08 2.38
1.917 1.45 8.000 2.90 14.083 5.54 20.17 2.38
2.000 1.45 8.083 2.90 14.167 5.54 20.25 2.38
2.083 1.45 8.167 2.90 14.250 5.54 20.33 1.58
2.167 1.45 8.250 2.90 14.333 3.96 20.42 1.58
2.250 1.45 8.333 3.43 14.417 3.96 20.50 1.58
2.333 1.72 8.417 3.43 14.500 3.96 20.58 1.58
2.417 1.72 8.500 3.43 14.583 3.96 20.67 1.58
2.500 1.72 8.583 3.43 14.667 3.96 20.75 1.58
2.583 1.72 8.667 3.43 14.750 3.96 20.83 1.58
2.667 1.72 8.750 3.43 14.833 3.96 20.92 1.58
2.750 1.72 8.833 3.70 14.917 3.96 21.00 1.58
2.833 1.72 8.917 3.70 15.000 3.96 21.08 1.58
2.917 1.72 9.000 3.70 15.083 3.96 21.17 1.58
3.000 1.72 9.083 3.70 15.167 3.96 21.25 1.58
3.083 1.72 9.167 3.70 15.250 3.96 21.33 1.58
3.167 1.72 9.250 3.70 15.333 3.96 21.42 1.58
3.250 1.72 9.333 4.22 15.417 3.96 21.50 1.58
3.333 1.72 9.417 4.22 15.500 3.96 21.58 1.58
3.417 1.72 9.500 4.22 15.583 3.96 21.67 1.58
3.500 1.72 9.583 4.22 15.667 3.96 21.75 1.58
3.583 1.72 9.667 4.22 15.750 3.96 21.83 1.58
3.667 1.72 9.750 4.22 15.833 3.96 21.92 1.58
3.750 1.72 9.833 4.75 15.917 3.96 22.00 1.58
3.833 1.72 9.917 4.75 16.000 3.96 22.08 1.58
3.917 1.72 10.000 4.75 16.083 3.96 22.17 1.58
4.000 1.72 10.083 4.75 16.167 3.96 22.25 1.58
4.083 1.72 10.167 4.75 16.250 3.96 22.33 1.58
4.167 1.72 10.250 4.75 16.333 2.38 22.42 1.58
4.250 1.72 10.333 6.07 16.417 2.38 22.50 1.58
4.333 2.11 10.417 6.07 16.500 2.38 22.58 1.58
4.417 2.11 10.500 6.07 16.583 2.38 22.67 1.58
4.500 2.11 10.583 6.07 16.667 2.38 22.75 1.58
4.583 2.11 10.667 6.07 16.750 2.38 22.83 1.58
4.667 2.11 10.750 6.07 16.833 2.38 22.92 1.58
4.750 2.11 10.833 8.18 16.917 2.38 23.00 1.58
4.833 2.11 10.917 8.18 17.000 2.38 23.08 1.58
4.917 2.11 11.000 8.18 17.083 2.38 23.17 1.58
5.000 2.11 11.083 8.18 17.167 2.38 23.25 1.58
5.083 2.11 11.167 8.18 17.250 2.38 23.33 1.58
5.167 2.11 11.250 8.18 17.333 2.38 23.42 1.58
5.250 2.11 11.333 12.67 17.417 2.38 23.50 1.58
5.333 2.11 11.417 12.67 17.500 2.38 23.58 1.58
5.417 2.11 11.500 12.67 17.583 2.38 23.67 1.58
5.500 2.11 11.583 12.67 17.667 2.38 23.75 1.58
5.583 2.11 11.667 12.67 17.750 2.38 23.83 1.58
5.667 2.11 11.750 12.67 17.833 2.38 23.92 1.58
5.750 2.11 11.833 39.07 17.917 2.38 24.00 1.58
5.833 2.11 11.917 39.07 18.000 2.38 24.08 1.58

5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 4.125

PEAK FLOW (cms)= 5.679 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 81.060
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.614

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

SHIFT HYD(0606)
IN= 2--> OUT= 1
SHIFT= 79.2 min

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID= 2 (1002):	43.20	5.68	12.50	81.06
SHIFT ID= 1 (0606):	43.20	5.68	13.75	81.06

CALIB
NASHYD (1072)
ID= 1 DT= 5.0 min

Area (ha)= 12.53	Curve Number (CN)= 74.7
Ia (mm)= 9.95	# of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.50	

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38

1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58

5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.5000	
11.25	0.50	0.5000	Main Channel
11.75	0.50	0.5000	Main Channel
15.00	1.50	0.5000 /0.0800	Main Channel
23.00	2.00	0.0800	

Unit Hyd Qpeak (cms)= 0.957

PEAK FLOW (cms)= 1.233 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 71.586
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.542

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

ADD HYD (0804)					
1 + 2 = 3					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (1072):	12.53	1.233	12.67	71.59	
+ ID2= 2 (0606):	43.20	5.679	13.75	81.06	
=====					
ID = 3 (0804):	55.73	6.051	13.75	78.93	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (8041)					
1 + 2 = 3					
	AREA	QPEAK	TPEAK	R.V.	
	(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (0126):	23.70	6.187	13.50	71.85	
+ ID2= 2 (0804):	55.73	6.051	13.75	78.93	
=====					
ID = 3 (8041):	79.43	10.895	13.58	76.82	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0604)
IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

<----- TRAVEL TIME TABLE ----->					
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.119E+02	0.0	0.08	43.46
0.16	0.66	.320E+02	0.0	0.14	23.92
0.24	0.74	.601E+02	0.1	0.20	16.93
0.32	0.82	.964E+02	0.1	0.25	13.32
0.39	0.89	.141E+03	0.2	0.30	11.10
0.47	0.97	.193E+03	0.3	0.35	9.59
0.55	1.05	.254E+03	0.5	0.39	8.49
0.63	1.13	.322E+03	0.7	0.44	7.65
0.71	1.21	.399E+03	1.0	0.48	6.99
0.79	1.29	.484E+03	1.3	0.52	6.45
0.87	1.37	.577E+03	1.6	0.56	6.00
0.95	1.45	.678E+03	2.0	0.59	5.63
1.03	1.53	.789E+03	2.5	0.64	5.23
1.11	1.61	.933E+03	3.2	0.69	4.85
1.18	1.68	.112E+04	4.1	0.73	4.57
1.26	1.76	.134E+04	5.2	0.77	4.32
1.34	1.84	.160E+04	6.5	0.81	4.09
1.42	1.92	.191E+04	8.2	0.86	3.88
1.50	2.00	.225E+04	10.2	0.91	3.67

**** WARNING: TRAVEL TIME TABLE EXCEEDED

<---- hydrograph ---->						
<-pipe / channel->						
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (8041)	79.43	10.90	13.58	76.82	1.49	0.90
OUTFLOW: ID= 1 (0604)	79.43	10.94	13.67	76.82	1.50	0.91

CALIB			
NASHYD (1001)			
Area (ha)=		50.05	Curve Number (CN)= 73.6
ID= 1 DT= 5.0 min		Ia (mm)= 8.88	# of Linear Res.(N)= 3.00
		U.H. Tp(hrs)=	0.68

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58

4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 2.811

PEAK FLOW (cms)= 3.881 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 70.758
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.536

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

| ROUTE CHN(0600)|
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
7.91	218.58	0.0450	
9.07	218.37	0.0300 /0.0300	Main Channel
10.93	217.44	0.0300	Main Channel
11.49	217.16	0.0300	Main Channel
11.63	217.09	0.0300	Main Channel
11.82	216.99	0.0300	Main Channel

12.45	216.98	0.0300	Main Channel
12.51	216.99	0.0300	Main Channel
13.08	217.05	0.0300	Main Channel
13.37	217.23	0.0300	Main Channel
13.48	217.25	0.0300	Main Channel
13.51	217.26	0.0300	Main Channel
15.95	218.40	0.0300	Main Channel
16.27	218.50	0.0300 / 0.0450	Main Channel
17.44	218.44	0.0450	
17.58	218.44	0.0450	
19.40	218.39	0.0450	
19.42	218.40	0.0450	
20.00	218.42	0.0450	
20.68	218.50	0.0450	

|ID= 1 DT= 5.0 min | Ia (mm)= 9.60 # of Linear Res.(N)= 3.00
 ----- U.H. Tp(hrs)= 0.74

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

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	217.06	.427E+02	0.0	0.53	18.20
0.15	217.13	.109E+03	0.2	0.86	11.12
0.23	217.21	.188E+03	0.4	1.11	8.66
0.30	217.29	.282E+03	0.6	1.28	7.48
0.38	217.36	.391E+03	1.0	1.46	6.58
0.45	217.44	.513E+03	1.4	1.62	5.93
0.54	217.52	.660E+03	2.1	1.82	5.26
0.62	217.60	.823E+03	2.9	2.00	4.79
0.70	217.68	.100E+04	3.8	2.16	4.44
0.78	217.76	.120E+04	4.8	2.30	4.16
0.86	217.85	.141E+04	6.0	2.44	3.93
0.95	217.93	.163E+04	7.3	2.57	3.73
1.03	218.01	.188E+04	8.8	2.69	3.56
1.11	218.09	.213E+04	10.4	2.81	3.41
1.19	218.17	.241E+04	12.2	2.92	3.28
1.27	218.25	.270E+04	14.2	3.03	3.16
1.35	218.34	.300E+04	16.4	3.13	3.06
1.44	218.42	.334E+04	18.8	3.23	2.97
1.52	218.50	.384E+04	21.4	3.20	2.99

<---- hydrograph ---->

<-pipe / channel->

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (1001)	50.05	3.88	12.83	70.76	0.71	2.17
OUTFLOW: ID= 1 (0600)	50.05	3.87	12.92	70.76	0.71	2.17

 | CALIB |
 | NASHYD (1071) | Area (ha)= 23.31 Curve Number (CN)= 65.3

3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.203

PEAK FLOW (cms)= 1.368 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 58.210
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.441

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

ADD HYD (0805)							
1 + 2 = 3							

ID1= 1 (1071):	23.31	1.368	12.92	58.21			

+ ID2= 2 (0600): 50.05 3.866 12.92 70.76
=====

ID = 3 (0805): 73.36 5.234 12.92 66.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0806)				
1 + 2 = 3				

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0604):	79.43	10.941	13.67	76.82
+ ID2= 2 (0805):	73.36	5.234	12.92	66.77
=====				
ID = 3 (0806):	152.79	14.246	13.67	71.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ROUTE CHN(0601)|
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->					
Distance	Elevation	Manning			
0.00	218.60	0.0450			
7.91	218.58	0.0450 /0.0300	Main	Channel	
10.93	217.44	0.0300	Main	Channel	
11.49	217.16	0.0300	Main	Channel	
11.63	217.09	0.0300	Main	Channel	
11.82	216.99	0.0300	Main	Channel	
12.45	216.98	0.0300	Main	Channel	
12.51	216.99	0.0300	Main	Channel	
13.08	217.05	0.0300	Main	Channel	
13.37	217.23	0.0300	Main	Channel	
13.48	217.25	0.0300	Main	Channel	
13.51	217.26	0.0300	Main	Channel	
15.95	218.40	0.0300	Main	Channel	
16.27	218.50	0.0300 /0.0450	Main	Channel	
17.44	218.44	0.0450			
17.58	218.44	0.0450			
19.40	218.39	0.0450			
19.42	218.40	0.0450			
20.00	218.42	0.0450			
20.68	218.50	0.0450			

<----- TRAVEL TIME TABLE ----->						
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME	
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)	
0.08	217.06	.156E+02	0.1	0.88	3.96	
0.15	217.13	.401E+02	0.3	1.44	2.42	

0.23	217.21	.690E+02	0.6	1.85	1.89
0.30	217.29	.103E+03	1.1	2.15	1.63
0.38	217.36	.143E+03	1.7	2.44	1.43
0.46	217.44	.188E+03	2.4	2.71	1.29
0.53	217.51	.238E+03	3.3	2.93	1.19
0.61	217.59	.294E+03	4.4	3.15	1.11
0.68	217.67	.356E+03	5.7	3.35	1.04
0.76	217.74	.423E+03	7.2	3.55	0.98
0.84	217.82	.497E+03	8.9	3.75	0.93
0.91	217.89	.576E+03	10.8	3.94	0.89
0.99	217.97	.661E+03	13.0	4.12	0.85
1.06	218.05	.752E+03	15.4	4.30	0.81
1.14	218.12	.849E+03	18.1	4.48	0.78
1.22	218.20	.951E+03	21.1	4.65	0.75
1.29	218.27	.106E+04	24.3	4.82	0.73
1.37	218.35	.117E+04	27.9	4.99	0.70
1.44	218.43	.130E+04	31.7	5.12	0.68

	<---- hydrograph ---->				<-pipe / channel->	
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0806)	152.79	14.25	13.67	71.99	1.03	4.22
OUTFLOW: ID= 1 (0601)	152.79	14.22	13.67	71.99	1.03	4.21

ADD HYD (8021)				
1	2	3	4	5
AREA	QPEAK	TPEAK	R.V.	
(ha)	(cms)	(hrs)	(mm)	
ID1= 1 (1062):	5.26	0.305	12.75	48.13
+ ID2= 2 (0601):	152.79	14.220	13.67	71.99
ID = 3 (8021):	158.05	14.353	13.67	71.20

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0602)	
IN= 2-->	OUT= 1
Routing time step (min)'= 5.00	

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.0300	Main Channel
11.00	0.00	0.0300 /0.0300	Main Channel
12.00	0.00	0.0300	Main Channel
15.00	1.50	0.0300 /0.0800	Main Channel

23.00 2.00 0.0800

<----- TRAVEL TIME TABLE ----->					
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.11	0.11	.255E+02	0.2	1.85	1.80
0.21	0.21	.598E+02	0.8	2.73	1.22
0.32	0.32	.103E+03	1.7	3.39	0.98
0.42	0.42	.155E+03	3.1	3.95	0.84
0.53	0.53	.216E+03	4.8	4.44	0.75
0.63	0.63	.286E+03	7.0	4.89	0.68
0.74	0.74	.365E+03	9.7	5.31	0.63
0.84	0.84	.452E+03	12.9	5.71	0.58
0.95	0.95	.548E+03	16.7	6.09	0.55
1.05	1.05	.654E+03	21.1	6.45	0.52
1.16	1.16	.768E+03	26.1	6.80	0.49
1.26	1.26	.891E+03	31.8	7.14	0.47
1.37	1.37	.102E+04	38.2	7.48	0.45
1.47	1.47	.116E+04	45.4	7.80	0.43
1.58	1.58	.133E+04	54.7	8.23	0.41
1.68	1.68	.157E+04	65.6	8.38	0.40
1.79	1.79	.187E+04	77.8	8.31	0.40
1.89	1.89	.225E+04	91.5	8.13	0.41
2.00	2.00	.270E+04	106.7	7.91	0.42

	<---- hydrograph ---->				<-pipe / channel->	
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (8021)	158.05	14.35	13.67	71.20	0.88	5.85
OUTFLOW: ID= 1 (0602)	158.05	14.32	13.67	71.20	0.88	5.84

CALIB	
NASHYD (1063)	Area (ha)= 8.13
ID= 1 DT= 5.0 min	Ia (mm)= 6.37
	U.H. Tp(hrs)= 0.60

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38

0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58

4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.518

PEAK FLOW (cms)= 0.539 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 56.898
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.431

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

| CALIB |
| NASHYD (0904) | Area (ha)= 9.08 Curve Number (CN)= 81.8
| ID= 1 DT= 5.0 min | Ia (mm)= 4.55 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.43

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38

0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58

4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.807

PEAK FLOW (cms)= 1.227 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 88.289
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.669

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

| CALIB |
| STANDHYD (1021) | Area (ha)= 16.01
| ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	8.01	8.01
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	326.70	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38

0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58

4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)=	161.57	118.38
over (min)	5.00	15.00
Storage Coeff. (min)=	4.29 (ii)	10.89 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.23	0.09

TOTALS

PEAK FLOW (cms)=	2.46	1.68	3.907 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	131.00	62.23	86.30
TOTAL RAINFALL (mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT =	0.99	0.47	0.65

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 59.0 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 (0807)				
1 + 2 = 3				

	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1021):	16.01	3.907	12.25	86.30
+ ID2= 2 (1063):	8.13	0.539	12.75	56.90
=====				
ID = 3 (0807):	24.14	4.137	12.25	76.40

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0807)|
| 3 + 2 = 1 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0807):  24.14  4.137   12.25   76.40
+ ID2= 2 ( 0602): 158.05 14.325   13.67   71.20
=====
ID = 1 ( 0807): 182.19 14.846   13.67   71.89
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0807)|
| 1 + 2 = 3 |
-----
          AREA      QPEAK      TPEAK      R.V.
          (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0807): 182.19 14.846   13.67   71.89
+ ID2= 2 ( 0904):  9.08  1.227   12.50   88.29
=====
ID = 3 ( 0807): 191.27 15.130   13.67   72.67
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ROUTE CHN( 0603)|
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00
-----
```

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.0300	Main Channel
11.00	0.00	0.0300 /0.0300	Main Channel
12.00	0.00	0.0300	Main Channel
15.00	1.50	0.0300 /0.0800	Main Channel
23.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.11	0.11	.510E+02	0.1	0.61	10.96
0.21	0.21	.120E+03	0.3	0.90	7.43
0.32	0.32	.206E+03	0.6	1.11	5.98
0.42	0.42	.310E+03	1.0	1.30	5.14
0.53	0.53	.432E+03	1.6	1.46	4.57
0.63	0.63	.572E+03	2.3	1.61	4.15
0.74	0.74	.729E+03	3.2	1.74	3.82

0.84	0.84	.904E+03	4.2	1.88	3.55
0.95	0.95	.110E+04	5.5	2.00	3.33
1.05	1.05	.131E+04	6.9	2.12	3.14
1.16	1.16	.154E+04	8.6	2.24	2.98
1.26	1.26	.178E+04	10.5	2.35	2.84
1.37	1.37	.205E+04	12.6	2.46	2.71
1.47	1.47	.233E+04	14.9	2.56	2.60
1.58	1.58	.266E+04	18.0	2.71	2.46
1.68	1.68	.313E+04	21.6	2.76	2.42
1.79	1.79	.375E+04	25.6	2.73	2.44
1.89	1.89	.450E+04	30.1	2.67	2.50
2.00	2.00	.540E+04	35.1	2.60	2.56

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)	MAX DEPTH (m)	MAX VEL (m/s)
INFLOW : ID= 2 (0807)	191.27	15.13	13.67	72.67	1.48	2.57
OUTFLOW: ID= 1 (0603)	191.27	14.85	13.67	72.67	1.47	2.56

```
-----
| CALIB
| NASHYD ( 0902)|
| ID= 1 DT= 5.0 min |
-----
Area (ha)= 4.38 Curve Number (CN)= 78.4
Ia (mm)= 5.62 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.72
```

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

---- 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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38

1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58

5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.232

PEAK FLOW (cms)= 0.375 (i)
 TIME TO PEAK (hrs)= 12.833
 RUNOFF VOLUME (mm)= 81.339
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.616

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

```

-----
| ADD HYD ( 8031) |
| 1 + 2 = 3 |
-----
              AREA    QPEAK    TPEAK    R.V.
              (ha)    (cms)    (hrs)    (mm)
ID1= 1 ( 0603): 191.27 14.854 13.67 72.67
+ ID2= 2 ( 0902): 4.38 0.375 12.83 81.34
=====
ID = 3 ( 8031): 195.65 15.087 13.67 72.86

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-----
| CALIB
| NASHYD ( 9041) | Area (ha)= 6.51 Curve Number (CN)= 69.9
| ID= 1 DT= 5.0 min | Ia (mm)= 6.65 # of Linear Res.(N)= 3.00
-----
U.H. Tp(hrs)= 0.46

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

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----- 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 6.167 2.11 12.250 161.57 18.33 2.38
0.167 0.00 6.250 2.11 12.333 19.03 18.42 2.38
0.250 0.00 6.333 2.38 12.417 19.01 18.50 2.38
0.333 1.45 6.417 2.38 12.500 19.01 18.58 2.38
0.417 1.45 6.500 2.38 12.583 19.01 18.67 2.38
0.500 1.45 6.583 2.38 12.667 19.01 18.75 2.38
0.583 1.45 6.667 2.38 12.750 19.01 18.83 2.38

```

0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58

4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.541

PEAK FLOW (cms)= 0.627 (i)
 TIME TO PEAK (hrs)= 12.583
 RUNOFF VOLUME (mm)= 66.936
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.507

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

 | ROUTE CHN(0608) |
 | IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0800	
10.00	1.50	0.0800 /0.0300	Main Channel
20.00	0.50	0.0300	Main Channel
21.00	0.50	0.0300	Main Channel
31.00	1.50	0.0300 /0.0800	Main Channel
41.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.08	0.58	.653E+02	0.1	0.75	10.70
0.15	0.65	.187E+03	0.4	1.10	7.27
0.23	0.73	.366E+03	1.1	1.39	5.76
0.31	0.81	.602E+03	2.1	1.65	4.86
0.38	0.88	.895E+03	3.5	1.88	4.25
0.46	0.96	.124E+04	5.5	2.10	3.80

0.54	1.04	.165E+04	8.0	2.31	3.46
0.62	1.12	.211E+04	11.1	2.51	3.18
0.69	1.19	.263E+04	14.8	2.71	2.96
0.77	1.27	.321E+04	19.3	2.89	2.77
0.85	1.35	.384E+04	24.6	3.07	2.61
0.92	1.42	.453E+04	30.6	3.24	2.47
1.00	1.50	.528E+04	37.6	3.41	2.34
1.08	1.58	.619E+04	48.1	3.73	2.15
1.17	1.67	.723E+04	59.7	3.97	2.02
1.25	1.75	.840E+04	72.6	4.15	1.93
1.33	1.83	.971E+04	86.7	4.29	1.87
1.42	1.92	.111E+05	102.0	4.39	1.82
1.50	2.00	.127E+05	118.7	4.48	1.79

		<---- hydrograph ---->			<-pipe / channel->	
		AREA	QPEAK	TPEAK	R.V.	MAX DEPTH
		(ha)	(cms)	(hrs)	(mm)	(m)
INFLOW : ID= 2 (0126)	21.00	0.40	12.00	71.85	0.15	1.06
OUTFLOW: ID= 1 (0608)	21.00	0.40	12.25	71.85	0.15	1.05

ADD HYD (0129)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0608):	21.00	0.400	12.25	71.85
+ ID2= 2 (9041):	6.51	0.627	12.58	66.94
=====				
ID = 3 (0129):	27.51	1.027	12.58	70.69

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (2043)			
ID= 1 DT= 5.0 min	Area (ha)=	7.52	
	Total Imp(%)=	45.00	Dir. Conn.(%)= 35.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	3.38	4.14
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	223.90	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58

4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 151.83
over (min) 5.00 10.00
Storage Coeff. (min)= 3.42 (ii) 9.39 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.26 0.12

TOTALS
PEAK FLOW (cms)= 1.17 1.29 2.455 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 88.29 103.24
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.67 0.78

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0131) |
1 + 2 = 3
ID1= 1 (0129): AREA (ha) QPEAK (cms) TPEAK (hrs) R.V. (mm)
+ ID2= 2 (2043): 27.51 1.027 12.58 70.69
7.52 2.455 12.25 103.24
=====

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| STANDHYD (1041) | Area (ha)= 6.41
ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

IMPERVIOUS PERVIOUS (i)
Surface Area (ha)= 3.20 3.20
Dep. Storage (mm)= 1.00 5.00
Average Slope (%)= 1.00 2.00
Length (m)= 206.72 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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38

1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58

6.083 2.11 | 12.167 161.57 | 18.250 2.38 |

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 3.26 (ii) 8.95 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.27 0.12

TOTALS

PEAK FLOW (cms)= 1.00 1.15 2.151 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19 105.13
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.69 0.80

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0816) |
1 + 2 = 3
AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
ID1= 1 (1041): 6.41 2.151 12.25 105.13
+ ID2= 2 (0131): 35.03 3.201 12.25 77.68
=====

ID = 3 (0816): 41.44 5.352 12.25 81.92

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB |
| NASHYD (1074) | Area (ha)= 6.00 Curve Number (CN)= 73.8
| ID= 1 DT= 5.0 min | Ia (mm)= 9.57 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.40

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38

0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58

4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.573

PEAK FLOW (cms)= 0.685 (i)
 TIME TO PEAK (hrs)= 12.500
 RUNOFF VOLUME (mm)= 70.494
 TOTAL RAINFALL (mm)= 132.000
 RUNOFF COEFFICIENT = 0.534

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

 | ROUTE CHN(0115)|
 | IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	2.00	0.0800	
10.00	1.50	0.0800 /0.0350	Main Channel
20.00	0.50	0.0350	Main Channel
21.00	0.50	0.0350	Main Channel
31.00	1.50	0.0350 /0.0800	Main Channel
41.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->					
DEPTH (m)	ELEV (m)	VOLUME (cu.m.)	FLOW RATE (cms)	VELOCITY (m/s)	TRAV.TIME (min)
0.08	0.58	.599E+02	0.1	0.38	19.07
0.15	0.65	.172E+03	0.2	0.57	12.95

0.23	0.73	.336E+03	0.5	0.71	10.26
0.31	0.81	.552E+03	1.1	0.85	8.66
0.38	0.88	.820E+03	1.8	0.97	7.57
0.46	0.96	.114E+04	2.8	1.08	6.78
0.54	1.04	.151E+04	4.1	1.19	6.16
0.62	1.12	.194E+04	5.7	1.29	5.67
0.69	1.19	.241E+04	7.6	1.39	5.27
0.77	1.27	.294E+04	9.9	1.49	4.93
0.85	1.35	.352E+04	12.6	1.58	4.64
0.92	1.42	.416E+04	15.8	1.67	4.39
1.00	1.50	.484E+04	19.3	1.76	4.18
1.08	1.58	.567E+04	24.7	1.92	3.82
1.17	1.67	.662E+04	30.7	2.04	3.59
1.25	1.75	.770E+04	37.4	2.14	3.43
1.33	1.83	.890E+04	44.7	2.21	3.32
1.42	1.92	.102E+05	52.7	2.27	3.23
1.50	2.00	.117E+05	61.4	2.32	3.17

		<---- hydrograph ---->		<-pipe / channel->			
		AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
		(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW :	ID= 2 (1074)	6.00	0.68	12.50	70.49	0.25	0.75
OUTFLOW:	ID= 1 (0115)	6.00	0.63	12.67	70.49	0.24	0.73

CALIB			
NASHYD (2082)			
ID= 1 DT= 5.0 min			

Area (ha)=	2.98	Curve Number (CN)=	74.6
Ia (mm)=	9.01	# of Linear Res.(N)=	3.00
U.H. Tp(hrs)=	0.56		

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38

1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58

5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.203

PEAK FLOW (cms)= 0.272 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 72.210
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.547

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

ADD HYD (0116)					
1 + 2 = 3					

		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0115):		6.00	0.635	12.67	70.49
+ ID2= 2 (2082):		2.98	0.272	12.67	72.21
=====					
ID = 3 (0116):		8.98	0.906	12.67	71.06

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ROUTE CHN(0118) |
| IN= 2--> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	2.00	0.0350	Main Channel
1.50	1.50	0.0350	Main Channel
3.00	2.00	0.0350	Main Channel

<----- TRAVEL TIME TABLE ----->					
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.03	1.53	.831E+00	0.0	0.25	26.39

0.05	1.55	.332E+01	0.0	0.40	16.62
0.08	1.58	.748E+01	0.0	0.53	12.69
0.11	1.61	.133E+02	0.0	0.64	10.47
0.13	1.63	.208E+02	0.0	0.74	9.02
0.16	1.66	.299E+02	0.1	0.83	7.99
0.18	1.68	.407E+02	0.1	0.92	7.21
0.21	1.71	.532E+02	0.1	1.01	6.60
0.24	1.74	.673E+02	0.2	1.09	6.10
0.26	1.76	.831E+02	0.2	1.17	5.69
0.29	1.79	.101E+03	0.3	1.25	5.34
0.32	1.82	.120E+03	0.4	1.32	5.03
0.34	1.84	.140E+03	0.5	1.40	4.77
0.37	1.87	.163E+03	0.6	1.47	4.54
0.39	1.89	.187E+03	0.7	1.54	4.34
0.42	1.92	.213E+03	0.9	1.60	4.16
0.45	1.95	.240E+03	1.0	1.67	3.99
0.47	1.97	.269E+03	1.2	1.74	3.84
0.50	2.00	.300E+03	1.3	1.80	3.71

<---- hydrograph ----> <-pipe / channel->					
		AREA	QPEAK	TPEAK	R.V.
		(ha)	(cms)	(hrs)	(mm)
INFLOW : ID= 2 (0116)		8.98	0.91	12.67	71.06
OUTFLOW: ID= 1 (0118)		8.98	0.90	12.75	71.06
					MAX DEPTH (m)
					MAX VEL (m/s)

CALIB			
NASHYD (1075)			
ID= 1 DT= 5.0 min		Area (ha)=	5.30
		Ia (mm)=	7.94
		U.H. Tp(hrs)=	0.38
		Curve Number (CN)=	76.2
		# of Linear Res.(N)=	3.00

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38

0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58

5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.533

PEAK FLOW (cms)= 0.676 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 75.659
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.573

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

| ROUTE CHN(0609) |
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->
Distance Elevation Manning
0.00 2.00 0.0800
10.00 1.50 0.0800 /0.0350 Main Channel
20.00 0.50 0.0350 Main Channel
21.00 0.50 0.0350 Main Channel
31.00 1.50 0.0350 /0.0800 Main Channel
41.00 2.00 0.0800

<----- TRAVEL TIME TABLE ----->
DEPTH ELEV VOLUME FLOW RATE VELOCITY TRAV.TIME
(m) (m) (cu.m.) (cms) (m/s) (min)
0.08 0.58 .789E+02 0.1 0.60 16.07
0.15 0.65 .227E+03 0.3 0.89 10.92
0.23 0.73 .443E+03 0.9 1.12 8.65
0.31 0.81 .728E+03 1.7 1.32 7.30
0.38 0.88 .108E+04 2.8 1.51 6.39
0.46 0.96 .150E+04 4.4 1.69 5.71
0.54 1.04 .199E+04 6.4 1.86 5.20
0.62 1.12 .255E+04 8.9 2.02 4.78
0.69 1.19 .318E+04 11.9 2.18 4.44

0.77	1.27	.388E+04	15.5	2.32	4.16
0.85	1.35	.464E+04	19.8	2.47	3.92
0.92	1.42	.548E+04	24.6	2.61	3.71
1.00	1.50	.638E+04	30.2	2.75	3.52
1.08	1.58	.748E+04	38.7	3.00	3.22
1.17	1.67	.873E+04	48.1	3.19	3.03
1.25	1.75	.101E+05	58.4	3.34	2.89
1.33	1.83	.117E+05	69.9	3.45	2.80
1.42	1.92	.135E+05	82.4	3.55	2.73
1.50	2.00	.154E+05	95.9	3.62	2.67

		<---- hydrograph ---->			<-pipe / channel->	
		AREA	QPEAK	TPEAK	R.V.	MAX DEPTH
		(ha)	(cms)	(hrs)	(mm)	(m)
INFLOW : ID= 2 (1075)		5.30	0.68	12.50	75.66	0.20
OUTFLOW: ID= 1 (0609)		5.30	0.62	12.67	75.66	0.19
						MAX VEL (m/s)

CALIB	
NASHYD (1081)	Area (ha)= 18.64
ID= 1 DT= 5.0 min	Ia (mm)= 8.96
	U.H. Tp(hrs)= 0.55
	Curve Number (CN)= 74.9
	# of Linear Res.(N)= 3.00

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38

1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58

5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 1.294

PEAK FLOW (cms)= 1.738 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 72.725
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.551

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

ADD HYD (0813)	AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1081):	18.64	1.738	12.67	72.73
+ ID2= 2 (0118):	8.98	0.900	12.75	71.06
=====				
ID = 3 (0813):	27.62	2.629	12.67	72.18

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0813)	AREA	QPEAK	TPEAK	R.V.
3 + 2 = 1	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0813):	27.62	2.629	12.67	72.18
+ ID2= 2 (0609):	5.30	0.621	12.67	75.66
=====				
ID = 1 (0813):	32.92	3.251	12.67	72.74

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0610)
IN= 2--> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->			
Distance	Elevation	Manning	
0.00	2.00	0.0300	Main Channel
1.50	1.50	0.0300	Main Channel
3.00	2.00	0.0300	Main Channel

<----- TRAVEL TIME TABLE ----->					
DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.03	1.53	.831E+00	0.0	0.18	37.17
0.05	1.55	.332E+01	0.0	0.28	23.41
0.08	1.58	.748E+01	0.0	0.37	17.87
0.11	1.61	.133E+02	0.0	0.45	14.75
0.13	1.63	.208E+02	0.0	0.52	12.71
0.16	1.66	.299E+02	0.0	0.59	11.26
0.18	1.68	.407E+02	0.1	0.66	10.16
0.21	1.71	.532E+02	0.1	0.72	9.29
0.24	1.74	.673E+02	0.1	0.78	8.59
0.26	1.76	.831E+02	0.2	0.83	8.01
0.29	1.79	.101E+03	0.2	0.89	7.51
0.32	1.82	.120E+03	0.3	0.94	7.09
0.34	1.84	.140E+03	0.3	0.99	6.72
0.37	1.87	.163E+03	0.4	1.04	6.40
0.39	1.89	.187E+03	0.5	1.09	6.11
0.42	1.92	.213E+03	0.6	1.14	5.85
0.45	1.95	.240E+03	0.7	1.19	5.62
0.47	1.97	.269E+03	0.8	1.23	5.41
0.50	2.00	.300E+03	1.0	1.28	5.22

**** WARNING: TRAVEL TIME TABLE EXCEEDED

<---- hydrograph ---->					<-pipe / channel->	
	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0813)	32.92	3.25	12.67	72.74	0.49	1.25
OUTFLOW: ID= 1 (0610)	32.92	3.16	12.83	72.74	0.50	1.28

CALIB	Area (ha)=	2.09
STANDHYD (1042)	Total Imp(%)=	50.00
ID= 1 DT= 5.0 min	Dir. Conn.(%)=	35.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.04	1.04
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	118.04	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58

4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 2.33 (ii) 8.02 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.30 0.13

TOTALS

PEAK FLOW (cms)= 0.33 0.39 0.719 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19 105.12
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.69 0.80

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0814)|

1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1042):	2.09	0.719	12.25	105.12
+ ID2= 2 (0610):	32.92	3.161	12.83	72.74
=====				
ID = 3 (0814):	35.01	3.264	12.75	74.67

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ROUTE CHN(0611)
IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

Distance	Elevation	Manning	
0.00	2.00	0.0300	Main Channel
1.50	1.50	0.0300	Main Channel
3.00	2.00	0.0300	Main Channel

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.03	1.53	.102E+01	0.0	0.18	45.53
0.05	1.55	.407E+01	0.0	0.28	28.68
0.08	1.58	.916E+01	0.0	0.37	21.89
0.11	1.61	.163E+02	0.0	0.45	18.07
0.13	1.63	.255E+02	0.0	0.52	15.57
0.16	1.66	.366E+02	0.0	0.59	13.79
0.18	1.68	.499E+02	0.1	0.66	12.44
0.21	1.71	.652E+02	0.1	0.72	11.38
0.24	1.74	.825E+02	0.1	0.78	10.52
0.26	1.76	.102E+03	0.2	0.83	9.81
0.29	1.79	.123E+03	0.2	0.89	9.20
0.32	1.82	.147E+03	0.3	0.94	8.69
0.34	1.84	.172E+03	0.3	0.99	8.23
0.37	1.87	.200E+03	0.4	1.04	7.84
0.39	1.89	.229E+03	0.5	1.09	7.49
0.42	1.92	.261E+03	0.6	1.14	7.17
0.45	1.95	.294E+03	0.7	1.19	6.89
0.47	1.97	.330E+03	0.8	1.23	6.63
0.50	2.00	.367E+03	1.0	1.28	6.39

**** WARNING: TRAVEL TIME TABLE EXCEEDED

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0814)	35.01	3.26	12.75	74.67	0.49	1.26
OUTFLOW: ID= 1 (0611)	35.01	3.16	12.92	74.67	0.50	1.28

CALIB			
STANDHYD (1032)	Area (ha)=	1.68	
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)= 35.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.84	0.84
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	105.83	40.00
Mannings n =	0.013	0.250

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

---- TRANSFORMED HYETOGRAPH ----

TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58

2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 2.18 (ii) 7.87 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.31 0.13

TOTALS

PEAK FLOW (cms)= 0.26 0.32 0.580 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19 105.12
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.69 0.80

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 ( 0815) |
| 1 + 2 = 3 |
-----
          AREA   QPEAK   TPEAK   R.V.
          (ha)   (cms)   (hrs)   (mm)
ID1= 1 ( 1032):  1.68  0.580  12.25  105.12
+ ID2= 2 ( 0611): 35.01  3.157  12.92  74.67
=====
ID = 3 ( 0815):  36.69  3.212  12.92  76.06

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ADD HYD ( 0815) |
| 3 + 2 = 1 |
-----
          AREA   QPEAK   TPEAK   R.V.
          (ha)   (cms)   (hrs)   (mm)
ID1= 3 ( 0815):  36.69  3.212  12.92  76.06
+ ID2= 2 ( 0816): 41.44  5.352  12.25  81.92
=====
ID = 1 ( 0815):  78.13  7.091  12.25  79.17

```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```

-----
| ROUTE CHN( 0612) |
| IN= 2--> OUT= 1 | Routing time step (min)'= 5.00
-----

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<----- DATA FOR SECTION ( 1.1) ----->
Distance   Elevation   Manning
0.00       2.00        0.0300    Main Channel
3.00       0.50        0.0300    Main Channel
6.00       2.00        0.0300    Main Channel

```

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.623E+01	0.0	0.58	14.49
0.16	0.66	.249E+02	0.0	0.91	9.13
0.24	0.74	.561E+02	0.1	1.20	6.97
0.32	0.82	.997E+02	0.3	1.45	5.75
0.39	0.89	.156E+03	0.5	1.68	4.96
0.47	0.97	.224E+03	0.9	1.90	4.39
0.55	1.05	.305E+03	1.3	2.10	3.96
0.63	1.13	.399E+03	1.8	2.30	3.62
0.71	1.21	.505E+03	2.5	2.49	3.35
0.79	1.29	.623E+03	3.3	2.67	3.12
0.87	1.37	.754E+03	4.3	2.84	2.93
0.95	1.45	.898E+03	5.4	3.01	2.76
1.03	1.53	.105E+04	6.7	3.18	2.62
1.11	1.61	.122E+04	8.2	3.34	2.49
1.18	1.68	.140E+04	9.8	3.50	2.38
1.26	1.76	.160E+04	11.7	3.65	2.28
1.34	1.84	.180E+04	13.7	3.80	2.19
1.42	1.92	.202E+04	16.0	3.95	2.11
1.50	2.00	.225E+04	18.4	4.10	2.03

<---- hydrograph ---->

<-pipe / channel->

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0815)	78.13	7.09	12.25	79.17	1.05	3.22
OUTFLOW: ID= 1 (0612)	78.13	6.69	12.25	79.17	1.02	3.17

CALIB						
NASHYD (0901)	Area (ha)=	6.80	Curve Number (CN)=	84.1		
ID= 1 DT= 5.0 min	Ia (mm)=	4.27	# of Linear Res.(N)=	3.00		
	U.H. Tp(hrs)=	0.05				

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38

0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58

4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 5.195

PEAK FLOW (cms)= 1.967 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 70.827
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.537

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

CALIB			
NASHYD (1061)	Area (ha)=	8.33	Curve Number (CN)= 60.3
ID= 1 DT= 5.0 min	Ia (mm)=	6.73	# of Linear Res.(N)= 3.00

	U.H. Tp(hrs)=	0.50	

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38

0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58

5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.636

PEAK FLOW (cms)= 0.590 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 53.648
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.406

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

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| ROUTEPIPE( 0701) | PIPE Number = 1.00
| IN= 2---> OUT= 1 | Diameter (mm)= 525.00
| DT= 5.0 min | Length (m)= 435.00
| | Slope (m/m)= 0.010
| | Manning n = 0.013

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**** WARNING: MINIMUM PIPE SIZE REQUIRED = 591.19 (mm)FOR FREE FLOW.
THIS SIZE WAS USED IN THE ROUTING.
THE CAPACITY OF THIS PIPE = 0.59 (cms)

<----- TRAVEL TIME TABLE ----->				
DEPTH	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(cu.m.)	(cms)	(m/s)	min
0.03	.241E+01	0.0	0.57	12.69
0.06	.670E+01	0.0	0.89	8.13
0.09	.121E+02	0.0	1.15	6.32
0.12	.183E+02	0.1	1.36	5.31
0.16	.251E+02	0.1	1.55	4.67
0.19	.323E+02	0.1	1.72	4.22
0.22	.399E+02	0.2	1.86	3.89
0.25	.478E+02	0.2	1.99	3.64
0.28	.557E+02	0.3	2.10	3.45
0.31	.637E+02	0.3	2.20	3.30
0.34	.717E+02	0.4	2.28	3.18

0.37	.795E+02	0.4	2.35	3.09
0.40	.871E+02	0.5	2.40	3.02
0.44	.943E+02	0.5	2.43	2.98
0.47	.101E+03	0.6	2.45	2.96
0.50	.107E+03	0.6	2.45	2.96
0.53	.113E+03	0.6	2.42	2.99
0.56	.117E+03	0.6	2.36	3.07
0.59	.119E+03	0.6	2.15	3.37

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (1061)	8.33	0.59	12.67	53.65	0.49	2.45
OUTFLOW: ID= 1 (0701)	8.33	0.59	12.67	53.65	0.48	2.45

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| CALIB |
| STANDHYD ( 1031) | Area (ha)= 12.60
| ID= 1 DT= 5.0 min | Total Imp(%)= 50.00 Dir. Conn.(%)= 35.00

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	IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)= 6.30	6.30
Dep. Storage	(mm)= 1.00	5.00
Average Slope	(%)= 1.00	2.00
Length	(m)= 289.83	40.00
Mannings n	= 0.013	0.250

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

---- TRANSFORMED HYETOGRAPH ----							
TIME	RAIN	TIME	RAIN	TIME	RAIN	TIME	RAIN
hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38

1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58

5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 171.59
over (min) 5.00 10.00
Storage Coeff. (min)= 3.99 (ii) 9.68 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.24 0.11

TOTALS
PEAK FLOW (cms)= 1.94 2.20 4.139 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 91.19 105.13
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.69 0.80

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0803) |
1 + 2 = 3
ID1= 1 (1031): 12.60 4.139 12.25 105.13
+ ID2= 2 (0612): 78.13 6.688 12.25 79.17
=====

ID = 3 (0803): 90.73 10.827 12.25 82.77

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| ADD HYD (0803) |
3 + 2 = 1
ID1= 3 (0803): 90.73 10.827 12.25 82.77
+ ID2= 2 (0701): 8.33 0.587 12.67 53.65
=====

ID = 1 (0803): 99.06 11.062 12.25 80.33

TIME SHIFT OF PEAK FLOW (min)= 95.00
MAXIMUM STORAGE USED (ha.m.)= 5.4060

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0803) |
| 1 + 2 = 3 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 1 ( 0803): 99.06 11.062 12.25 80.33
+ ID2= 2 ( 8031): 195.65 15.087 13.67 72.86
=====
ID = 3 ( 0803): 294.71 18.144 13.67 75.37
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| ADD HYD ( 0803) |
| 3 + 2 = 1 |
-----
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
ID1= 3 ( 0803): 294.71 18.144 13.67 75.37
+ ID2= 2 ( 0901): 6.80 1.967 12.25 70.83
=====
ID = 1 ( 0803): 301.51 19.618 12.25 75.27
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
-----
| RESERVOIR( 0501) |
| IN= 2--> OUT= 1 |
| DT= 5.0 min |
-----
      OVERFLOW IS OFF
      OUTFLOW      STORAGE      OUTFLOW      STORAGE
      (cms)      (ha.m.)      (cms)      (ha.m.)
0.0000 0.0000 | 2.0620 2.8424
0.0620 0.4182 | 2.5540 3.1588
0.0880 0.5899 | 3.1070 3.4969
0.1080 0.7645 | 3.7230 3.8520
0.1570 0.9422 | 4.4030 4.2134
0.2750 1.1227 | 6.6740 4.5779
0.4430 1.3069 | 10.5020 4.9455
0.9300 1.7165 | 15.5270 5.3170
1.2520 2.2613 | 20.9830 5.6925
1.6280 2.5409 | 27.3630 6.0715
      AREA      QPEAK      TPEAK      R.V.
      (ha)      (cms)      (hrs)      (mm)
INFLOW : ID= 2 ( 0803) 301.510 19.618 12.25 75.27
OUTFLOW: ID= 1 ( 0501) 301.510 16.969 13.83 75.26
```

PEAK FLOW REDUCTION [Qout/Qin](%)= 86.50

```
-----
| CALIB |
| NASHYD ( 1014) |
| ID= 1 DT= 5.0 min |
-----
Area (ha)= 0.38 Curve Number (CN)= 76.0
Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.32
```

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 | 6.167 2.11 | 12.250 161.57 | 18.33 2.38
0.167 0.00 | 6.250 2.11 | 12.333 19.03 | 18.42 2.38
0.250 0.00 | 6.333 2.38 | 12.417 19.01 | 18.50 2.38
0.333 1.45 | 6.417 2.38 | 12.500 19.01 | 18.58 2.38
0.417 1.45 | 6.500 2.38 | 12.583 19.01 | 18.67 2.38
0.500 1.45 | 6.583 2.38 | 12.667 19.01 | 18.75 2.38
0.583 1.45 | 6.667 2.38 | 12.750 19.01 | 18.83 2.38
0.667 1.45 | 6.750 2.38 | 12.833 9.77 | 18.92 2.38
0.750 1.45 | 6.833 2.38 | 12.917 9.77 | 19.00 2.38
0.833 1.45 | 6.917 2.38 | 13.000 9.77 | 19.08 2.38
0.917 1.45 | 7.000 2.38 | 13.083 9.77 | 19.17 2.38
1.000 1.45 | 7.083 2.38 | 13.167 9.77 | 19.25 2.38
1.083 1.45 | 7.167 2.38 | 13.250 9.77 | 19.33 2.38
1.167 1.45 | 7.250 2.38 | 13.333 7.13 | 19.42 2.38
1.250 1.45 | 7.333 2.90 | 13.417 7.13 | 19.50 2.38
1.333 1.45 | 7.417 2.90 | 13.500 7.13 | 19.58 2.38
1.417 1.45 | 7.500 2.90 | 13.583 7.13 | 19.67 2.38
1.500 1.45 | 7.583 2.90 | 13.667 7.13 | 19.75 2.38
1.583 1.45 | 7.667 2.90 | 13.750 7.13 | 19.83 2.38
1.667 1.45 | 7.750 2.90 | 13.833 5.54 | 19.92 2.38
1.750 1.45 | 7.833 2.90 | 13.917 5.54 | 20.00 2.38
1.833 1.45 | 7.917 2.90 | 14.000 5.54 | 20.08 2.38
1.917 1.45 | 8.000 2.90 | 14.083 5.54 | 20.17 2.38
2.000 1.45 | 8.083 2.90 | 14.167 5.54 | 20.25 2.38
2.083 1.45 | 8.167 2.90 | 14.250 5.54 | 20.33 1.58
2.167 1.45 | 8.250 2.90 | 14.333 3.96 | 20.42 1.58
2.250 1.45 | 8.333 3.43 | 14.417 3.96 | 20.50 1.58
2.333 1.72 | 8.417 3.43 | 14.500 3.96 | 20.58 1.58
2.417 1.72 | 8.500 3.43 | 14.583 3.96 | 20.67 1.58
2.500 1.72 | 8.583 3.43 | 14.667 3.96 | 20.75 1.58
2.583 1.72 | 8.667 3.43 | 14.750 3.96 | 20.83 1.58
2.667 1.72 | 8.750 3.43 | 14.833 3.96 | 20.92 1.58
2.750 1.72 | 8.833 3.70 | 14.917 3.96 | 21.00 1.58
2.833 1.72 | 8.917 3.70 | 15.000 3.96 | 21.08 1.58
```

2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.045

PEAK FLOW (cms)= 0.056 (i)

TIME TO PEAK (hrs)= 12.417

RUNOFF VOLUME (mm)= 77.814

TOTAL RAINFALL (mm)= 132.000

RUNOFF COEFFICIENT = 0.589

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

CALIB			
NASHYD (1012)			
ID= 1 DT= 5.0 min			

		Area (ha)=	0.42
		Ia (mm)=	5.00
		U.H. Tp(hrs)=	0.09
		Curve Number (CN)=	76.0
		# of Linear Res.(N)=	3.00

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58

3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Unit Hyd Qpeak (cms)= 0.178

PEAK FLOW (cms)= 0.123 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 74.900
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.567

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

| CALIB |

| NASHYD (0903) | Area (ha)= 3.03 Curve Number (CN)= 77.6
| ID= 1 DT= 5.0 min | Ia (mm)= 6.24 # of Linear Res.(N)= 3.00
----- U.H. Tp(hrs)= 0.08

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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58

3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Distance	Elevation	Manning	
0.00	2.00	0.0800	
8.00	1.50	0.0800 /0.5000	
11.25	0.50	0.5000	Main Channel
11.75	0.50	0.5000	Main Channel
15.00	1.50	0.5000 /0.0800	Main Channel
23.00	2.00	0.0800	

<----- TRAVEL TIME TABLE ----->

DEPTH	ELEV	VOLUME	FLOW RATE	VELOCITY	TRAV.TIME
(m)	(m)	(cu.m.)	(cms)	(m/s)	(min)
0.08	0.58	.164E+02	0.0	0.08	57.32
0.16	0.66	.440E+02	0.0	0.15	31.54
0.24	0.74	.827E+02	0.1	0.21	22.33
0.32	0.82	.133E+03	0.1	0.26	17.56
0.39	0.89	.194E+03	0.2	0.31	14.64
0.47	0.97	.266E+03	0.4	0.36	12.65
0.55	1.05	.349E+03	0.5	0.41	11.20
0.63	1.13	.443E+03	0.7	0.45	10.10
0.71	1.21	.549E+03	1.0	0.50	9.22
0.79	1.29	.666E+03	1.3	0.54	8.51
0.87	1.37	.793E+03	1.7	0.58	7.92
0.95	1.45	.932E+03	2.1	0.62	7.42
1.03	1.53	.108E+04	2.6	0.66	6.89
1.11	1.61	.128E+04	3.3	0.72	6.39
1.18	1.68	.154E+04	4.2	0.76	6.03
1.26	1.76	.184E+04	5.4	0.80	5.70
1.34	1.84	.220E+04	6.8	0.85	5.40
1.42	1.92	.262E+04	8.5	0.90	5.11
1.50	2.00	.309E+04	10.7	0.95	4.84

	AREA	QPEAK	TPEAK	R.V.	MAX DEPTH	MAX VEL
	(ha)	(cms)	(hrs)	(mm)	(m)	(m/s)
INFLOW : ID= 2 (0903)	3.03	0.92	12.25	74.95	0.69	0.48
OUTFLOW: ID= 1 (0605)	3.03	0.64	12.33	74.84	0.60	0.43

Unit Hyd Qpeak (cms)= 1.447

PEAK FLOW (cms)= 0.916 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 74.945
TOTAL RAINFALL (mm)= 132.000
RUNOFF COEFFICIENT = 0.568

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

| ROUTE CHN(0605) |
| IN= 2---> OUT= 1 | Routing time step (min)'= 5.00

<----- DATA FOR SECTION (1.1) ----->

CALIB			
STANDHYD (1011)	Area (ha)=	3.26	
ID= 1 DT= 5.0 min	Total Imp(%)=	56.40	Dir. Conn.(%)= 40.30

	IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)= 1.84	1.42
Dep. Storage	(mm)= 1.00	5.00
Average Slope	(%)= 1.00	2.00
Length	(m)= 147.42	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58
2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58

3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 183.21
over (min) 5.00 10.00
Storage Coeff. (min)= 2.66 (ii) 8.20 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.29 0.13

TOTALS
PEAK FLOW (cms)= 0.59 0.56 1.152 (iii)
TIME TO PEAK (hrs)= 12.25 12.25 12.25
RUNOFF VOLUME (mm)= 131.00 92.72 108.15
TOTAL RAINFALL (mm)= 132.00 132.00 132.00
RUNOFF COEFFICIENT = 0.99 0.70 0.82

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

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (1013)
ID= 1 DT= 5.0 min

Area (ha)= 2.49
 Total Imp(%)= 58.60 Dir. Conn.(%)= 43.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.46	1.03
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	128.84	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	6.167	2.11	12.250	161.57	18.33	2.38
0.167	0.00	6.250	2.11	12.333	19.03	18.42	2.38
0.250	0.00	6.333	2.38	12.417	19.01	18.50	2.38
0.333	1.45	6.417	2.38	12.500	19.01	18.58	2.38
0.417	1.45	6.500	2.38	12.583	19.01	18.67	2.38
0.500	1.45	6.583	2.38	12.667	19.01	18.75	2.38
0.583	1.45	6.667	2.38	12.750	19.01	18.83	2.38
0.667	1.45	6.750	2.38	12.833	9.77	18.92	2.38
0.750	1.45	6.833	2.38	12.917	9.77	19.00	2.38
0.833	1.45	6.917	2.38	13.000	9.77	19.08	2.38
0.917	1.45	7.000	2.38	13.083	9.77	19.17	2.38
1.000	1.45	7.083	2.38	13.167	9.77	19.25	2.38
1.083	1.45	7.167	2.38	13.250	9.77	19.33	2.38
1.167	1.45	7.250	2.38	13.333	7.13	19.42	2.38
1.250	1.45	7.333	2.90	13.417	7.13	19.50	2.38
1.333	1.45	7.417	2.90	13.500	7.13	19.58	2.38
1.417	1.45	7.500	2.90	13.583	7.13	19.67	2.38
1.500	1.45	7.583	2.90	13.667	7.13	19.75	2.38
1.583	1.45	7.667	2.90	13.750	7.13	19.83	2.38
1.667	1.45	7.750	2.90	13.833	5.54	19.92	2.38
1.750	1.45	7.833	2.90	13.917	5.54	20.00	2.38
1.833	1.45	7.917	2.90	14.000	5.54	20.08	2.38
1.917	1.45	8.000	2.90	14.083	5.54	20.17	2.38
2.000	1.45	8.083	2.90	14.167	5.54	20.25	2.38
2.083	1.45	8.167	2.90	14.250	5.54	20.33	1.58
2.167	1.45	8.250	2.90	14.333	3.96	20.42	1.58
2.250	1.45	8.333	3.43	14.417	3.96	20.50	1.58
2.333	1.72	8.417	3.43	14.500	3.96	20.58	1.58
2.417	1.72	8.500	3.43	14.583	3.96	20.67	1.58

2.500	1.72	8.583	3.43	14.667	3.96	20.75	1.58
2.583	1.72	8.667	3.43	14.750	3.96	20.83	1.58
2.667	1.72	8.750	3.43	14.833	3.96	20.92	1.58
2.750	1.72	8.833	3.70	14.917	3.96	21.00	1.58
2.833	1.72	8.917	3.70	15.000	3.96	21.08	1.58
2.917	1.72	9.000	3.70	15.083	3.96	21.17	1.58
3.000	1.72	9.083	3.70	15.167	3.96	21.25	1.58
3.083	1.72	9.167	3.70	15.250	3.96	21.33	1.58
3.167	1.72	9.250	3.70	15.333	3.96	21.42	1.58
3.250	1.72	9.333	4.22	15.417	3.96	21.50	1.58
3.333	1.72	9.417	4.22	15.500	3.96	21.58	1.58
3.417	1.72	9.500	4.22	15.583	3.96	21.67	1.58
3.500	1.72	9.583	4.22	15.667	3.96	21.75	1.58
3.583	1.72	9.667	4.22	15.750	3.96	21.83	1.58
3.667	1.72	9.750	4.22	15.833	3.96	21.92	1.58
3.750	1.72	9.833	4.75	15.917	3.96	22.00	1.58
3.833	1.72	9.917	4.75	16.000	3.96	22.08	1.58
3.917	1.72	10.000	4.75	16.083	3.96	22.17	1.58
4.000	1.72	10.083	4.75	16.167	3.96	22.25	1.58
4.083	1.72	10.167	4.75	16.250	3.96	22.33	1.58
4.167	1.72	10.250	4.75	16.333	2.38	22.42	1.58
4.250	1.72	10.333	6.07	16.417	2.38	22.50	1.58
4.333	2.11	10.417	6.07	16.500	2.38	22.58	1.58
4.417	2.11	10.500	6.07	16.583	2.38	22.67	1.58
4.500	2.11	10.583	6.07	16.667	2.38	22.75	1.58
4.583	2.11	10.667	6.07	16.750	2.38	22.83	1.58
4.667	2.11	10.750	6.07	16.833	2.38	22.92	1.58
4.750	2.11	10.833	8.18	16.917	2.38	23.00	1.58
4.833	2.11	10.917	8.18	17.000	2.38	23.08	1.58
4.917	2.11	11.000	8.18	17.083	2.38	23.17	1.58
5.000	2.11	11.083	8.18	17.167	2.38	23.25	1.58
5.083	2.11	11.167	8.18	17.250	2.38	23.33	1.58
5.167	2.11	11.250	8.18	17.333	2.38	23.42	1.58
5.250	2.11	11.333	12.67	17.417	2.38	23.50	1.58
5.333	2.11	11.417	12.67	17.500	2.38	23.58	1.58
5.417	2.11	11.500	12.67	17.583	2.38	23.67	1.58
5.500	2.11	11.583	12.67	17.667	2.38	23.75	1.58
5.583	2.11	11.667	12.67	17.750	2.38	23.83	1.58
5.667	2.11	11.750	12.67	17.833	2.38	23.92	1.58
5.750	2.11	11.833	39.07	17.917	2.38	24.00	1.58
5.833	2.11	11.917	39.07	18.000	2.38	24.08	1.58
5.917	2.11	12.000	39.07	18.083	2.38	24.17	1.58
6.000	2.11	12.083	161.55	18.167	2.38	24.25	1.58
6.083	2.11	12.167	161.57	18.250	2.38		

Max.Eff.Inten.(mm/hr)= 161.57 184.48
 over (min) 5.00 10.00
 Storage Coeff. (min)= 2.45 (ii) 7.98 (ii)
 Unit Hyd. Tpeak (min)= 5.00 10.00
 Unit Hyd. peak (cms)= 0.30 0.13

				TOTALS
PEAK FLOW	(cms)=	0.48	0.42	0.896 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	131.00	92.88	109.27
TOTAL RAINFALL	(mm)=	132.00	132.00	132.00
RUNOFF COEFFICIENT	=	0.99	0.70	0.83

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

- (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 79.0 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 (0810)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (1011):	3.26	1.152	12.25	108.15
+ ID2= 2 (1012):	0.42	0.123	12.25	74.90
=====				
ID = 3 (0810):	3.68	1.275	12.25	104.35

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0810):	3.68	1.275	12.25	104.35
+ ID2= 2 (1013):	2.49	0.896	12.25	109.27
=====				
ID = 1 (0810):	6.17	2.171	12.25	106.34

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0810):	6.17	2.171	12.25	106.34
+ ID2= 2 (1014):	0.38	0.056	12.42	77.81
=====				
ID = 3 (0810):	6.55	2.212	12.25	104.68

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)				
3 + 2 = 1				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 3 (0810):	6.55	2.212	12.25	104.68
+ ID2= 2 (0501):	301.51	16.969	13.83	75.26
=====				
ID = 1 (0810):	308.06	17.077	13.83	75.89

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0810)				
1 + 2 = 3				
	AREA	QPEAK	TPEAK	R.V.
	(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0810):	308.06	17.077	13.83	75.89
+ ID2= 2 (0605):	3.03	0.640	12.33	74.84
=====				
ID = 3 (0810):	311.09	17.127	13.83	75.88

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A A L
V V I SS U U A A L
V V I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voim.dat

Output filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\7d4
464f4-d0b8-4fe6-9caf-979addc8793f\sc

Summary filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\7d4
464f4-d0b8-4fe6-9caf-979addc8793f\sc

DATE: 07/17/2023

TIME: 12:00:37

USER:

COMMENTS: _____

** SIMULATION : A - CHIC25MM **

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

START @ 0.00 hrs

READ STORM 6.0

[Ptot= 24.97 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1062 1 5.0 5.26 0.01 2.58 1.53 0.06 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1004 1 5.0 10.95 0.15 2.08 3.39 0.14 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1003 1 5.0 14.65 0.13 2.08 2.56 0.10 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 0.28 2.08 2.91 n/a 0.000
*
SHIFT[2: 0157] 0607 1 5.0 25.60 0.28 3.33 2.91 n/a 0.000
[SHIFT= 75.8 min]

*
READ STORM 6.0
[Ptot= 24.97 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2

remark: CHIC25MM

*
** CALIB NASHYD 1073 1 5.0 19.10 0.07 2.58 1.99 0.08 0.000
[CN=71.9]


```

*      [ N = 3.0:Tp 0.48]
*
*      ADD [ 1073+ 0607] 0811 3 5.0 44.70 0.32 3.33 2.52 n/a 0.000
*
*      DUHYD 0126 1 5.0 44.70 0.32 3.33 2.52 n/a 0.000
*      MAJOR SYSTEM: 0126 2 5.0 0.00 0.00 0.00 0.00 n/a 0.000
*      MINOR SYSTEM: 0126 3 5.0 44.70 0.32 3.33 2.52 n/a 0.000
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 1002 1 5.0 43.20 0.39 2.42 4.07 0.16 0.000
*      [CN=78.4 ]
*      [ N = 3.0:Tp 0.40]
*
*      SHIFT[ 2: 1002] 0606 1 5.0 43.20 0.39 3.67 4.07 n/a 0.000
*      [SHIFT= 79.2 min]
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 1072 1 5.0 12.53 0.05 2.58 2.23 0.09 0.000
*      [CN=74.7 ]
*      [ N = 3.0:Tp 0.50]
*
*      ADD [ 1072+ 0606] 0804 3 5.0 55.73 0.42 3.67 3.66 n/a 0.000
*
*      ADD [ 0126+ 0804] 8041 3 5.0 55.73 0.42 3.67 3.66 n/a 0.000
*
*      CHANNEL[ 2: 8041] 0604 1 5.0 55.73 0.40 3.75 3.65 n/a 0.000
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 1001 1 5.0 50.05 0.18 2.83 2.42 0.10 0.000

```

```

*      [CN=73.6 ]
*      [ N = 3.0:Tp 0.68]
*
*      CHANNEL[ 2: 1001] 0600 1 5.0 50.05 0.17 2.92 2.42 n/a 0.000
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 1071 1 5.0 23.31 0.05 2.92 1.57 0.06 0.000
*      [CN=65.3 ]
*      [ N = 3.0:Tp 0.74]
*
*      ADD [ 1071+ 0600] 0805 3 5.0 73.36 0.22 2.92 2.15 n/a 0.000
*
*      ADD [ 0604+ 0805] 0806 3 5.0 129.09 0.55 3.75 2.80 n/a 0.000
*
*      CHANNEL[ 2: 0806] 0601 1 5.0 129.09 0.56 3.75 2.80 n/a 0.000
*
*      ADD [ 1062+ 0601] 8021 3 5.0 134.35 0.56 3.75 2.75 n/a 0.000
*
*      CHANNEL[ 2: 8021] 0602 1 5.0 134.35 0.56 3.75 2.75 n/a 0.000
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 1063 1 5.0 8.13 0.03 2.67 2.03 0.08 0.000
*      [CN=62.6 ]
*      [ N = 3.0:Tp 0.60]
*
*      READ STORM 6.0
*      [ Ptot= 24.97 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
*      remark: CHIC25MM
*
*
*      ** CALIB NASHYD 0904 1 5.0 9.08 0.11 2.42 5.42 0.22 0.000
*      [CN=81.8 ]
*      [ N = 3.0:Tp 0.43]

```

```

*
  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD          1021  1  5.0   16.01   0.78  1.92  10.24 0.41   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1021+ 1063] 0807  3  5.0   24.14   0.78  1.92   7.47 n/a   0.000
*
* ADD [ 0807+ 0602] 0807  1  5.0  158.49   0.78  1.92   3.47 n/a   0.000
*
* ADD [ 0807+ 0904] 0807  3  5.0  167.57   0.80  1.92   3.57 n/a   0.000
*
* CHANNEL[ 2: 0807] 0603  1  5.0  167.57   0.68  2.00   3.57 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
** CALIB NASHYD           0902  1  5.0    4.38   0.03  2.83   4.19 0.17   0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.72]
*
* ADD [ 0603+ 0902] 8031  3  5.0  171.95   0.68  2.00   3.59 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
** CALIB NASHYD           9041  1  5.0    6.51   0.03  2.50   2.63 0.11   0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.46]
*
* CHANNEL[ 2: 0126] 0608  1  5.0   44.70   0.27  3.42   2.52 n/a   0.000
*
* ADD [ 0608+ 9041] 0129  3  5.0   51.21   0.28  3.42   2.53 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD          2043  1  5.0    7.52   0.40  1.92  11.98 0.48   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 0129+ 2043] 0131  3  5.0   58.73   0.40  1.92   3.74 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB STANDHYD          1041  1  5.0    6.41   0.35  1.92  12.36 0.49   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131] 0816  3  5.0   65.14   0.76  1.92   4.59 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB NASHYD           1074  1  5.0    6.00   0.03  2.42   2.25 0.09   0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115  1  5.0    6.00   0.02  2.75   2.24 n/a   0.000
*

```

```

  READ STORM                6.0
  [ Ptot= 24.97 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-
23f2-4841-8b6b-2
  remark: CHIC25MM

```

```

*
* CALIB NASHYD           2082  1  5.0    2.98   0.01  2.67   2.49 0.10   0.000
  [CN=74.6          ]

```

```

* [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.03 2.75 2.32 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.03 2.92 2.32 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB NASHYD 1075 1 5.0 5.30 0.04 2.42 3.01 0.12 0.000
* [CN=76.2 ]
* [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.03 2.67 3.01 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB NASHYD 1081 1 5.0 18.64 0.08 2.67 2.53 0.10 0.000
* [CN=74.9 ]
* [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813 3 5.0 27.62 0.11 2.75 2.47 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 32.92 0.14 2.75 2.55 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 32.92 0.14 2.83 2.55 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.12 1.92 12.35 0.49 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 35.01 0.15 2.83 3.14 n/a 0.000

```

```

*
* CHANNEL[ 2: 0814] 0611 1 5.0 35.01 0.15 2.92 3.13 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.10 1.92 12.35 0.49 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0 36.69 0.16 1.92 3.55 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 101.83 0.92 1.92 4.21 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 101.83 0.80 2.00 4.21 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB NASHYD 0901 1 5.0 6.80 0.25 1.92 4.76 0.19 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-23f2-4841-8b6b-2
* remark: CHIC25MM
*
*
* CALIB NASHYD 1061 1 5.0 8.33 0.03 2.58 1.79 0.07 0.000
* [CN=60.3 ]
* [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701 1 5.0 8.33 0.03 2.67 1.79 n/a 0.000
*
* READ STORM 6.0
* [ Ptot= 24.97 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\a3dd6a93-

```

23f2-4841-8b6b-2
remark: CHIC25MM

*
* CALIB STANDHYD 1031 1 5.0 12.60 0.65 1.92 12.36 0.49 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1031+ 0612] 0803 3 5.0 114.43 1.31 1.92 5.11 n/a 0.000
*
* ADD [0803+ 0701] 0803 1 5.0 122.76 1.31 1.92 4.89 n/a 0.000
*
* ADD [0803+ 8031] 0803 3 5.0 294.71 1.99 2.00 4.13 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 2.15 2.00 4.14 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 0.22 5.25 4.14 n/a 0.000
*
* READ STORM 6.0
[Ptot= 24.97 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-23f2-4841-8b6b-2
remark: CHIC25MM

*
* CALIB NASHYD 1014 1 5.0 0.38 0.00 2.25 3.98 0.16 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
* READ STORM 6.0
[Ptot= 24.97 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-23f2-4841-8b6b-2
remark: CHIC25MM

*
* CALIB NASHYD 1012 1 5.0 0.42 0.01 2.00 3.83 0.15 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]
*
* READ STORM 6.0
[Ptot= 24.97 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-23f2-4841-8b6b-2
remark: CHIC25MM

*

* CALIB NASHYD 0903 1 5.0 3.03 0.06 2.00 3.60 0.14 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
* CHANNEL[2: 0903] 0605 1 5.0 3.03 0.02 2.17 3.49 n/a 0.000
*
* READ STORM 6.0
[Ptot= 24.97 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-23f2-4841-8b6b-2
remark: CHIC25MM

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.22 1.92 13.50 0.54 0.000
[I%=40.3:S%= 2.00]
*
* READ STORM 6.0
[Ptot= 24.97 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\3dd6a93-23f2-4841-8b6b-2
remark: CHIC25MM

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.18 1.92 13.99 0.56 0.000
[I%=43.0:S%= 2.00]
*
* ADD [1011+ 1012] 0810 3 5.0 3.68 0.22 1.92 12.40 n/a 0.000
*
* ADD [0810+ 1013] 0810 1 5.0 6.17 0.40 1.92 13.04 n/a 0.000
*
* ADD [0810+ 1014] 0810 3 5.0 6.55 0.40 1.92 12.51 n/a 0.000
*
* ADD [0810+ 0501] 0810 1 5.0 308.06 0.42 1.92 4.32 n/a 0.000
*
* ADD [0810+ 0605] 0810 3 5.0 311.09 0.43 1.92 4.31 n/a 0.000
*
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
V V I SSSS UUUU A A LLLLL

000 TTTTT TTTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O

O O T T H H Y M M O O
000 T T H H Y M M 000
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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\3ba
319a5-e86d-4c9c-b9b6-e4f073340337\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\3ba
319a5-e86d-4c9c-b9b6-e4f073340337\sc

DATE: 07/17/2023 TIME: 12:00:37

USER:

COMMENTS: _____

** SIMULATION : B - 2yr 4 hr Chicago **

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

CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=55.8] [N = 3.0:Tp 0.56]	1062	1 5.0	5.26	0.02	2.08	3.60	0.10	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=78.0] [N = 3.0:Tp 0.15]	1004	1 5.0	10.95	0.24	1.42	7.76	0.22	0.000

* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=75.1] [N = 3.0:Tp 0.16]	1003	1 5.0	14.65	0.24	1.50	6.31	0.18	0.000
* ADD [1003+ 1004]	0157	3 5.0	25.60	0.47	1.50	6.93	n/a	0.000
* SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1 5.0	25.60	0.47	2.75	6.93	n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1 5.0	19.10	0.14	2.00	5.22	0.15	0.000
* ADD [1073+ 0607]	0811	3 5.0	44.70	0.57	2.75	6.20	n/a	0.000
* DUHYD MAJOR SYSTEM: MINOR SYSTEM:	0126 0126 0126	1 5.0 2 5.0 3 5.0	44.70 2.50 42.20	0.57 0.17 0.40	2.75 2.75 2.58	6.20 6.20 6.20	n/a n/a n/a	0.000 0.000 0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=78.4] [N = 3.0:Tp 0.40]	1002	1 5.0	43.20	0.64	1.83	8.74	0.25	0.000
* SHIFT[2: 1002] [SHIFT= 79.2 min]	0606	1 5.0	43.20	0.64	3.08	8.74	n/a	0.000
* CHIC STORM [Ptot= 35.41 mm]	10.0							
* ** CALIB NASHYD [CN=74.7] [N = 3.0:Tp 0.50]	1072	1 5.0	12.53	0.10	2.08	5.81	0.16	0.000
* ADD [1072+ 0606]	0804	3 5.0	55.73	0.70	3.08	8.08	n/a	0.000
* ADD [0126+ 0804]	8041	3 5.0	58.23	0.71	2.92	8.00	n/a	0.000
* CHANNEL[2: 8041]	0604	1 5.0	58.23	0.70	3.08	8.00	n/a	0.000
* CHIC STORM	10.0							

*	ADD [1003+ 1004]	0157	3	5.0	25.60	0.97	1.42	12.63	n/a	0.000
*	SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1	5.0	25.60	0.97	2.67	12.63	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1	5.0	19.10	0.28	2.00	10.02	0.21	0.000
*	ADD [1073+ 0607]	0811	3	5.0	44.70	1.17	2.67	11.52	n/a	0.000
*	DUHYD	0126	1	5.0	44.70	1.17	2.67	11.52	n/a	0.000
	MAJOR SYSTEM:	0126	2	5.0	9.86	0.77	2.67	11.52	n/a	0.000
	MINOR SYSTEM:	0126	3	5.0	34.84	0.40	2.50	11.52	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=78.4] [N = 3.0:Tp 0.40]	1002	1	5.0	43.20	1.18	1.75	15.10	0.32	0.000
*	SHIFT[2: 1002] [SHIFT= 79.2 min]	0606	1	5.0	43.20	1.18	3.00	15.10	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=74.7] [N = 3.0:Tp 0.50]	1072	1	5.0	12.53	0.20	2.00	11.08	0.24	0.000
*	ADD [1072+ 0606]	0804	3	5.0	55.73	1.29	3.00	14.19	n/a	0.000
*	ADD [0126+ 0804]	0841	3	5.0	65.59	1.72	2.83	13.79	n/a	0.000
*	CHANNEL[2: 8041]	0604	1	5.0	65.59	1.67	2.92	13.79	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=73.6] [N = 3.0:Tp 0.68]	1001	1	5.0	50.05	0.68	2.25	11.17	0.24	0.000
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	0.67	2.33	11.17	n/a	0.000

*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=65.3] [N = 3.0:Tp 0.74]	1071	1	5.0	23.31	0.21	2.42	8.06	0.17	0.000
*	ADD [1071+ 0600]	0805	3	5.0	73.36	0.89	2.33	10.18	n/a	0.000
*	ADD [0604+ 0805]	0806	3	5.0	138.95	2.43	2.92	11.88	n/a	0.000
*	CHANNEL[2: 0806]	0601	1	5.0	138.95	2.44	2.92	11.88	n/a	0.000
*	ADD [1062+ 0601]	8021	3	5.0	144.21	2.47	2.92	11.69	n/a	0.000
*	CHANNEL[2: 8021]	0602	1	5.0	144.21	2.47	2.92	11.69	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=62.6] [N = 3.0:Tp 0.60]	1063	1	5.0	8.13	0.09	2.08	8.52	0.18	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD [CN=81.8] [N = 3.0:Tp 0.43]	0904	1	5.0	9.08	0.29	1.83	18.11	0.39	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	1021	1	5.0	16.01	1.55	1.33	22.77	0.49	0.000
*	ADD [1021+ 1063]	0807	3	5.0	24.14	1.56	1.33	17.97	n/a	0.000
*	ADD [0807+ 0602]	0807	1	5.0	168.35	2.68	2.92	12.59	n/a	0.000
*	ADD [0807+ 0904]	0807	3	5.0	177.43	2.79	2.92	12.88	n/a	0.000
*	CHANNEL[2: 0807]	0603	1	5.0	177.43	2.76	3.00	12.88	n/a	0.000
*	CHIC STORM [Ptot= 46.85 mm]			10.0						
*	** CALIB NASHYD	0902	1	5.0	4.38	0.08	2.25	15.29	0.33	0.000


```

[CN=84.1      ]
[ N = 3.0:Tp 0.05]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      1061 1 5.0   8.33   0.09 2.00   7.76 0.17   0.000
[CN=60.3      ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701 1 5.0   8.33   0.09 2.00   7.76 n/a   0.000
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB STANDHYD    1031 1 5.0   12.60   1.40 1.33  28.71 0.61   0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1031+ 0612] 0803 3 5.0  104.57   3.00 1.33  16.45 n/a   0.000
*
ADD [ 0803+ 0701] 0803 1 5.0  112.90   3.00 1.33  15.81 n/a   0.000
*
ADD [ 0803+ 8031] 0803 3 5.0  294.71   4.25 1.33  14.04 n/a   0.000
*
ADD [ 0803+ 0901] 0803 1 5.0  301.51   4.94 1.33  14.06 n/a   0.000
*
** Reservoir
OUTFLOW:          0501 1 5.0  301.51   1.80 4.25  14.06 n/a   0.000
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      1014 1 5.0   0.38   0.01 1.67  14.34 0.31   0.000
[CN=76.0      ]
[ N = 3.0:Tp 0.32]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      1012 1 5.0   0.42   0.03 1.33  13.81 0.29   0.000
[CN=76.0      ]
[ N = 3.0:Tp 0.09]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB NASHYD      0903 1 5.0   3.03   0.21 1.33  13.66 0.29   0.000
[CN=77.6      ]
[ N = 3.0:Tp 0.08]
*

```

```

CHANNEL[ 2: 0903] 0605 1 5.0   3.03   0.09 1.50  13.55 n/a   0.000
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB STANDHYD    1011 1 5.0   3.26   0.44 1.33  30.52 0.65   0.000
[I%=40.3:S%= 2.00]
*
CHIC STORM          10.0
[ Ptot= 46.85 mm ]
*
* CALIB STANDHYD    1013 1 5.0   2.49   0.35 1.33  31.25 0.67   0.000
[I%=43.0:S%= 2.00]
*
ADD [ 1011+ 1012] 0810 3 5.0   3.68   0.47 1.33  28.61 n/a   0.000
*
ADD [ 0810+ 1013] 0810 1 5.0   6.17   0.82 1.33  29.68 n/a   0.000
*
ADD [ 0810+ 1014] 0810 3 5.0   6.55   0.82 1.33  28.79 n/a   0.000
*
ADD [ 0810+ 0501] 0810 1 5.0  308.06   1.82 4.00  14.37 n/a   0.000
*
ADD [ 0810+ 0605] 0810 3 5.0  311.09   1.84 4.00  14.36 n/a   0.000
*
=====
=====

V   V   I   SSSSS U   U   A   L           (v 6.1.2001)
V   V   I   SS    U   U   A A   L
V   V   I   SS    U   U   AAAAA L
V   V   I   SS    U   U   A   A   L
W   I   SSSSS UUUUU A   A   LLLLL

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y   Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M   O   O
000  T   T   H   H   Y   M   M   000

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```

***** S U M M A R Y O U T P U T *****

```

Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\1af

```

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\1af21438-7d64-47b6-b12e-eb8c5cc44f1f\sc

TIME: 12:00:37

USER:

COMMENTS: _____

```
*****
** SIMULATION : D - 10yr 4hr Chicago          **
*****
```

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

CHIC STORM			10.0						
[Ptot= 54.67 mm]									
* ** CALIB NASHYD	1062	1	5.0	5.26	0.07	2.00	9.26	0.17	0.000
[CN=55.8]									
[N = 3.0:Tp 0.56]									
* CHIC STORM			10.0						
[Ptot= 54.67 mm]									
* ** CALIB NASHYD	1004	1	5.0	10.95	0.68	1.42	18.59	0.34	0.000
[CN=78.0]									
[N = 3.0:Tp 0.15]									
* CHIC STORM			10.0						
[Ptot= 54.67 mm]									
* ** CALIB NASHYD	1003	1	5.0	14.65	0.71	1.42	16.03	0.29	0.000
[CN=75.1]									
[N = 3.0:Tp 0.16]									
* ADD [1003+ 1004]	0157	3	5.0	25.60	1.39	1.42	17.13	n/a	0.000
* SHIFT[2: 0157]	0607	1	5.0	25.60	1.39	2.67	17.13	n/a	0.000
[SHIFT= 75.8 min]									
* CHIC STORM			10.0						

*	[Ptot= 54.67 mm]									
**	CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1	5.0	19.10	0.40	1.92	13.92	0.25	0.000
*	ADD [1073+ 0607]	0811	3	5.0	44.70	1.65	2.67	15.76	n/a	0.000
*	DUHYD	0126	1	5.0	44.70	1.65	2.67	15.76	n/a	0.000
	MAJOR SYSTEM:	0126	2	5.0	13.94	1.25	2.67	15.76	n/a	0.000
	MINOR SYSTEM:	0126	3	5.0	30.76	0.40	1.92	15.76	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
**	CALIB NASHYD [CN=78.4] [N = 3.0:Tp 0.40]	1002	1	5.0	43.20	1.60	1.75	20.01	0.37	0.000
*	SHIFT[2: 1002] [SHIFT= 79.2 min]	0606	1	5.0	43.20	1.60	3.00	20.01	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
**	CALIB NASHYD [CN=74.7] [N = 3.0:Tp 0.50]	1072	1	5.0	12.53	0.29	2.00	15.30	0.28	0.000
*	ADD [1072+ 0606]	0804	3	5.0	55.73	1.75	3.00	18.95	n/a	0.000
*	ADD [0126+ 0804]	8041	3	5.0	69.67	2.50	2.83	18.31	n/a	0.000
*	CHANNEL[2: 8041]	0604	1	5.0	69.67	2.46	2.92	18.31	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
**	CALIB NASHYD [CN=73.6] [N = 3.0:Tp 0.68]	1001	1	5.0	50.05	0.95	2.25	15.32	0.28	0.000
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	0.95	2.33	15.32	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
**	CALIB NASHYD [CN=65.3] [N = 3.0:Tp 0.74]	1071	1	5.0	23.31	0.30	2.33	11.28	0.21	0.000

*	CALIB NASHYD [CN=69.9 [N = 3.0:Tp 0.46]	9041	1	5.0	6.51	0.15	1.92	14.65	0.27	0.000
*	CHANNEL[2: 0126]	0608	1	5.0	30.76	0.40	2.75	15.76	n/a	0.000
*	ADD [0608+ 9041]	0129	3	5.0	37.27	0.55	2.00	15.56	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	2043	1	5.0	7.52	1.03	1.33	34.16	0.62	0.000
*	ADD [0129+ 2043]	0131	3	5.0	44.79	1.07	1.33	18.68	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	1041	1	5.0	6.41	0.90	1.33	35.12	0.64	0.000
*	ADD [1041+ 0131]	0816	3	5.0	51.20	1.97	1.33	20.74	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
*	CALIB NASHYD [CN=73.8 [N = 3.0:Tp 0.40]	1074	1	5.0	6.00	0.15	1.83	15.04	0.28	0.000
*	CHANNEL[2: 1074]	0115	1	5.0	6.00	0.13	2.08	15.03	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
*	CALIB NASHYD [CN=74.6 [N = 3.0:Tp 0.56]	2082	1	5.0	2.98	0.07	2.08	15.78	0.29	0.000
*	ADD [0115+ 2082]	0116	3	5.0	8.98	0.20	2.08	15.28	n/a	0.000
*	CHANNEL[2: 0116]	0118	1	5.0	8.98	0.20	2.17	15.28	n/a	0.000
*	CHIC STORM [Ptot= 54.67 mm]			10.0						
*	CALIB NASHYD [CN=76.2 [N = 3.0:Tp 0.46]	1075	1	5.0	5.30	0.17	1.75	17.32	0.32	0.000


```

*
*   CHIC STORM          10.0
*   [ Ptot= 54.67 mm ]
*
*   CALIB STANDHYD      1013  1  5.0    2.49    0.43  1.33  37.91 0.69  0.000
*   [I%=43.0:S%= 2.00]
*
*   ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.56  1.33  34.97 n/a  0.000
*
*   ADD [ 0810+ 1013] 0810  1  5.0    6.17    0.99  1.33  36.16 n/a  0.000
*
*   ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.00  1.33  35.16 n/a  0.000
*
*   ADD [ 0810+ 0501] 0810  1  5.0   308.06    2.79  4.00  18.86 n/a  0.000
*
*   ADD [ 0810+ 0605] 0810  3  5.0   311.09    2.81  4.00  18.85 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
VV    I  SSSSS  UUUUU  A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
0 0  T  T  H  H  Y  Y  MM MM 0 0
0 0  T  T  H  H  Y  M  M 0 0
000  T  T  H  H  Y  M  M 000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voim.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\8c3
63528-deba-4794-af0a-dc2ded7091b1\sc

Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\8c3
63528-deba-4794-af0a-dc2ded7091b1\sc

DATE: 07/17/2023

TIME: 12:00:38

USER:

COMMENTS: _____

```

*****
** SIMULATION : E - 25yr 4hr Chicago **
*****

```

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

CHIC STORM [Ptot= 64.35 mm]	10.0								
** CALIB NASHYD [CN=55.8] [N = 3.0:Tp 0.56]	1062	1 5.0	5.26		0.10	2.00	12.86	0.20	0.000
CHIC STORM [Ptot= 64.35 mm]	10.0								
** CALIB NASHYD [CN=78.0] [N = 3.0:Tp 0.15]	1004	1 5.0	10.95		0.96	1.42	24.97	0.39	0.000
CHIC STORM [Ptot= 64.35 mm]	10.0								
** CALIB NASHYD [CN=75.1] [N = 3.0:Tp 0.16]	1003	1 5.0	14.65		1.03	1.42	21.90	0.34	0.000
ADD [1003+ 1004]	0157	3 5.0	25.60		1.98	1.42	23.21	n/a	0.000
SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1 5.0	25.60		1.98	2.67	23.21	n/a	0.000
CHIC STORM [Ptot= 64.35 mm]	10.0								
** CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1 5.0	19.10		0.58	1.92	19.28	0.30	0.000
ADD [1073+ 0607]	0811	3 5.0	44.70		2.34	2.67	21.53	n/a	0.000

*	ADD [0608+ 9041]	0129	3	5.0	31.41	0.61	1.92	21.20	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	2043	1	5.0	7.52	1.27	1.33	42.20	0.66	0.000
*	ADD [0129+ 2043]	0131	3	5.0	38.93	1.34	1.33	25.26	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	1041	1	5.0	6.41	1.12	1.33	43.33	0.67	0.000
*	ADD [1041+ 0131]	0816	3	5.0	45.34	2.45	1.33	27.81	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB NASHYD [CN=73.8 [N = 3.0:Tp 0.40]	1074	1	5.0	6.00	0.22	1.83	20.70	0.32	0.000
*	CHANNEL[2: 1074]	0115	1	5.0	6.00	0.20	2.00	20.69	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB NASHYD [CN=74.6 [N = 3.0:Tp 0.56]	2082	1	5.0	2.98	0.09	2.00	21.59	0.34	0.000
*	ADD [0115+ 2082]	0116	3	5.0	8.98	0.29	2.00	20.99	n/a	0.000
*	CHANNEL[2: 0116]	0118	1	5.0	8.98	0.29	2.08	20.99	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB NASHYD [CN=76.2 [N = 3.0:Tp 0.38]	1075	1	5.0	5.30	0.24	1.75	23.44	0.36	0.000
*	CHANNEL[2: 1075]	0609	1	5.0	5.30	0.21	2.00	23.43	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						

*	CALIB NASHYD [CN=74.9 [N = 3.0:Tp 0.55]	1081	1	5.0	18.64	0.60	2.00	21.83	0.34	0.000
*	ADD [1081+ 0118]	0813	3	5.0	27.62	0.88	2.00	21.56	n/a	0.000
*	ADD [0813+ 0609]	0813	1	5.0	32.92	1.09	2.00	21.86	n/a	0.000
*	CHANNEL[2: 0813]	0610	1	5.0	32.92	1.07	2.17	21.86	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	1042	1	5.0	2.09	0.43	1.33	43.33	0.67	0.000
*	ADD [1042+ 0610]	0814	3	5.0	35.01	1.13	2.08	23.14	n/a	0.000
*	CHANNEL[2: 0814]	0611	1	5.0	35.01	1.10	2.25	23.13	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB STANDHYD [I%=35.0:S%= 2.00]	1032	1	5.0	1.68	0.34	1.33	43.33	0.67	0.000
*	ADD [1032+ 0611]	0815	3	5.0	36.69	1.14	2.25	24.06	n/a	0.000
*	ADD [0815+ 0816]	0815	1	5.0	82.03	3.05	1.33	26.13	n/a	0.000
*	CHANNEL[2: 0815]	0612	1	5.0	82.03	2.77	1.42	26.13	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB NASHYD [CN=84.1 [N = 3.0:Tp 0.05]	0901	1	5.0	6.80	1.18	1.33	25.47	0.40	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						
*	CALIB NASHYD [CN=60.3 [N = 3.0:Tp 0.50]	1061	1	5.0	8.33	0.19	1.92	14.76	0.23	0.000
*	PIPE [2: 1061]	0701	1	5.0	8.33	0.19	2.00	14.76	n/a	0.000
*	CHIC STORM [Ptot= 64.35 mm]			10.0						

```

*
* CALIB STANDHYD      1031  1  5.0   12.60   2.12  1.33  43.33  0.67   0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0   94.63   4.66  1.33  28.42  n/a   0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0  102.96   4.67  1.33  27.32  n/a   0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0  294.71   7.58  2.83  24.47  n/a   0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0  301.51   7.83  1.33  24.50  n/a   0.000
*
** Reservoir
OUTFLOW:              0501  1  5.0  301.51   4.05  3.83  24.49  n/a   0.000
*
* CHIC STORM          10.0
* [ Ptot= 64.35 mm ]
*
* CALIB NASHYD        1014  1  5.0    0.38   0.02  1.67  25.23  0.39   0.000
* [CN=76.0
* [ N = 3.0:Tp 0.32]
*
* CHIC STORM          10.0
* [ Ptot= 64.35 mm ]
*
* CALIB NASHYD        1012  1  5.0    0.42   0.05  1.33  24.28  0.38   0.000
* [CN=76.0
* [ N = 3.0:Tp 0.09]
*
* CHIC STORM          10.0
* [ Ptot= 64.35 mm ]
*
* CALIB NASHYD        0903  1  5.0    3.03   0.40  1.33  24.23  0.38   0.000
* [CN=77.6
* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03   0.20  1.50  24.13  n/a   0.000
*
* CHIC STORM          10.0
* [ Ptot= 64.35 mm ]
*
* CALIB STANDHYD      1011  1  5.0    3.26   0.72  1.33  45.52  0.71   0.000
* [I%=40.3:S%= 2.00]
*
* CHIC STORM          10.0
* [ Ptot= 64.35 mm ]
*
* CALIB STANDHYD      1013  1  5.0    2.49   0.57  1.33  46.38  0.72   0.000
* [I%=43.0:S%= 2.00]
*

```

```

ADD [ 1011+ 1012] 0810  3  5.0    3.68   0.77  1.33  43.10  n/a   0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17   1.35  1.33  44.42  n/a   0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55   1.35  1.33  43.31  n/a   0.000
*
ADD [ 0810+ 0501] 0810  1  5.0  308.06   4.13  3.83  24.89  n/a   0.000
*
ADD [ 0810+ 0605] 0810  3  5.0  311.09   4.16  3.83  24.88  n/a   0.000
*
=====
=====

```

```

V   V   I   SSSSS  U   U   A   L           (v 6.1.2001)
V   V   I   SS    U   U   A A  L
V   V   I   SS    U   U   A A A A L
V   V   I   SS    U   U   A   A  L
W   I   SSSSS  UUUUU  A   A  LLLLL

```

```

000  TTTT  TTTT  H   H  Y   Y  M   M  000  TM
O   O   T   T   H   H  Y   Y  MM  MM  O   O
O   O   T   T   H   H  Y   M   M  O   O
000  T   T   H   H  Y   M   M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\76f75aef-b8e8-4a45-b523-d7441377dad0\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\76f75aef-b8e8-4a45-b523-d7441377dad0\sc

DATE: 07/17/2023

TIME: 12:00:38

USER:

COMMENTS: _____

 ** SIMULATION : F - 50yr 4hr Chicago **

W/E COMMAND	HYD ID	DT min	AREA ha	' Qpeak cms	Tpeak hrs	R.V. mm	R.C.	Qbase cms
START @ 0.00 hrs								
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=55.8] [N = 3.0:Tp 0.56]	1062	1 5.0	5.26	0.12	2.00	15.71	0.22	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=78.0] [N = 3.0:Tp 0.15]	1004	1 5.0	10.95	1.17	1.42	29.81	0.42	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=75.1] [N = 3.0:Tp 0.16]	1003	1 5.0	14.65	1.27	1.42	26.39	0.37	0.000
ADD [1003+ 1004]	0157	3 5.0	25.60	2.44	1.42	27.85	n/a	0.000
SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1 5.0	25.60	2.44	2.67	27.85	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=71.9] [N = 3.0:Tp 0.48]	1073	1 5.0	19.10	0.71	1.92	23.43	0.33	0.000
ADD [1073+ 0607]	0811	3 5.0	44.70	2.87	2.67	25.96	n/a	0.000
DUHYD	0126	1 5.0	44.70	2.87	2.67	25.96	n/a	0.000
MAJOR SYSTEM:	0126	2 5.0	23.22	2.47	2.67	25.96	n/a	0.000
MINOR SYSTEM:	0126	3 5.0	21.48	0.40	1.58	25.96	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							

** CALIB NASHYD [CN=78.4] [N = 3.0:Tp 0.40]	1002	1 5.0	43.20	2.62	1.75	31.53	0.44	0.000
SHIFT[2: 1002] [SHIFT= 79.2 min]	0606	1 5.0	43.20	2.62	3.00	31.53	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=74.7] [N = 3.0:Tp 0.50]	1072	1 5.0	12.53	0.50	1.92	25.51	0.36	0.000
ADD [1072+ 0606]	0804	3 5.0	55.73	2.86	3.00	30.18	n/a	0.000
ADD [0126+ 0804]	8041	3 5.0	78.95	4.50	2.75	28.94	n/a	0.000
CHANNEL [2: 8041]	0604	1 5.0	78.95	4.43	2.83	28.94	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=73.6] [N = 3.0:Tp 0.68]	1001	1 5.0	50.05	1.63	2.17	25.35	0.36	0.000
CHANNEL [2: 1001]	0600	1 5.0	50.05	1.63	2.25	25.35	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							
** CALIB NASHYD [CN=65.3] [N = 3.0:Tp 0.74]	1071	1 5.0	23.31	0.53	2.33	19.33	0.27	0.000
ADD [1071+ 0600]	0805	3 5.0	73.36	2.16	2.25	23.43	n/a	0.000
ADD [0604+ 0805]	0806	3 5.0	152.31	6.21	2.83	26.29	n/a	0.000
CHANNEL [2: 0806]	0601	1 5.0	152.31	6.23	2.83	26.29	n/a	0.000
ADD [1062+ 0601]	8021	3 5.0	157.57	6.31	2.83	25.93	n/a	0.000
CHANNEL [2: 8021]	0602	1 5.0	157.57	6.33	2.83	25.93	n/a	0.000
CHIC STORM [Ptot= 71.25 mm]	10.0							

**	CALIB NASHYD	1063	1	5.0	8.13	0.22	2.08	19.43	0.27	0.000
	[CN=62.6									
	[N = 3.0:Tp 0.60]									
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
**	CALIB NASHYD	0904	1	5.0	9.08	0.61	1.75	36.10	0.51	0.000
	[CN=81.8									
	[N = 3.0:Tp 0.43]									
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB STANDHYD	1021	1	5.0	16.01	2.65	1.33	39.12	0.55	0.000
	[I%=35.0:S%= 2.00]									
*										
	ADD [1021+ 1063]	0807	3	5.0	24.14	2.68	1.33	32.49	n/a	0.000
*										
	ADD [0807+ 0602]	0807	1	5.0	181.71	6.72	2.83	26.80	n/a	0.000
*										
	ADD [0807+ 0904]	0807	3	5.0	190.79	6.95	2.83	27.25	n/a	0.000
*										
	CHANNEL[2: 0807]	0603	1	5.0	190.79	6.88	2.92	27.25	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	0902	1	5.0	4.38	0.18	2.17	31.76	0.45	0.000
	[CN=78.4									
	[N = 3.0:Tp 0.72]									
*										
	ADD [0603+ 0902]	8031	3	5.0	195.17	7.01	2.92	27.35	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	9041	1	5.0	6.51	0.26	1.83	23.99	0.34	0.000
	[CN=69.9									
	[N = 3.0:Tp 0.46]									
*										
	CHANNEL[2: 0126]	0608	1	5.0	21.48	0.40	2.83	25.96	n/a	0.000
*										
	ADD [0608+ 9041]	0129	3	5.0	27.99	0.66	1.83	25.50	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB STANDHYD	2043	1	5.0	7.52	1.45	1.33	48.10	0.68	0.000
	[I%=35.0:S%= 2.00]									

*										
	ADD [0129+ 2043]	0131	3	5.0	35.51	1.54	1.33	30.29	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB STANDHYD	1041	1	5.0	6.41	1.27	1.33	49.33	0.69	0.000
	[I%=35.0:S%= 2.00]									
*										
	ADD [1041+ 0131]	0816	3	5.0	41.92	2.81	1.33	33.20	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	1074	1	5.0	6.00	0.27	1.75	25.05	0.35	0.000
	[CN=73.8									
	[N = 3.0:Tp 0.40]									
*										
	CHANNEL[2: 1074]	0115	1	5.0	6.00	0.25	2.00	25.05	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	2082	1	5.0	2.98	0.11	2.00	26.05	0.37	0.000
	[CN=74.6									
	[N = 3.0:Tp 0.56]									
*										
	ADD [0115+ 2082]	0116	3	5.0	8.98	0.36	2.00	25.38	n/a	0.000
*										
	CHANNEL[2: 0116]	0118	1	5.0	8.98	0.36	2.08	25.38	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	1075	1	5.0	5.30	0.29	1.75	28.10	0.39	0.000
	[CN=76.2									
	[N = 3.0:Tp 0.38]									
*										
	CHANNEL[2: 1075]	0609	1	5.0	5.30	0.26	1.92	28.09	n/a	0.000
*										
	CHIC STORM			10.0						
	[Ptot= 71.25 mm]									
*										
*	CALIB NASHYD	1081	1	5.0	18.64	0.73	2.00	26.32	0.37	0.000
	[CN=74.9									
	[N = 3.0:Tp 0.55]									
*										
	ADD [1081+ 0118]	0813	3	5.0	27.62	1.09	2.00	26.01	n/a	0.000
*										
	ADD [0813+ 0609]	0813	1	5.0	32.92	1.34	2.00	26.35	n/a	0.000

*
ADD [0810+ 0605] 0810 3 5.0 311.09 5.99 3.58 29.46 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\dc4
9c456-86aa-42f8-acdb-fc3b7338a63f\sc

Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\dc4
9c456-86aa-42f8-acdb-fc3b7338a63f\sc

DATE: 07/17/2023 TIME: 12:00:38

USER:

COMMENTS: _____

** SIMULATION : G - 100yr 4hr Chicago **

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

START @ 0.00 hrs

CHIC STORM 10.0
[Ptot= 78.20 mm]
*
** CALIB NASHYD 1062 1 5.0 5.26 0.14 2.00 18.78 0.24 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]
*
CHIC STORM 10.0
[Ptot= 78.20 mm]
*
** CALIB NASHYD 1004 1 5.0 10.95 1.39 1.42 34.88 0.45 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
CHIC STORM 10.0
[Ptot= 78.20 mm]
*
** CALIB NASHYD 1003 1 5.0 14.65 1.54 1.42 31.13 0.40 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.94 1.42 32.73 n/a 0.000
*
SHIFT[2: 0157] 0607 1 5.0 25.60 2.94 2.67 32.73 n/a 0.000
[SHIFT= 75.8 min]
*
CHIC STORM 10.0
[Ptot= 78.20 mm]
*
** CALIB NASHYD 1073 1 5.0 19.10 0.86 1.92 27.84 0.36 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*
ADD [1073+ 0607] 0811 3 5.0 44.70 3.44 2.67 30.64 n/a 0.000
*
DUHYD 0126 1 5.0 44.70 3.44 2.67 30.64 n/a 0.000
MAJOR SYSTEM: 0126 2 5.0 25.99 3.04 2.67 30.64 n/a 0.000
MINOR SYSTEM: 0126 3 5.0 18.71 0.40 1.50 30.64 n/a 0.000
*
CHIC STORM 10.0
[Ptot= 78.20 mm]
*
** CALIB NASHYD 1002 1 5.0 43.20 3.09 1.75 36.71 0.47 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]
*
SHIFT[2: 1002] 0606 1 5.0 43.20 3.09 3.00 36.71 n/a 0.000
[SHIFT= 79.2 min]

*	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
**	CALIB NASHYD	1072	1	5.0	12.53	0.60	1.92	30.19	0.39	0.000
	[CN=74.7									
	[N = 3.0:Tp 0.50]									
*										
*	ADD [1072+ 0606]	0804	3	5.0	55.73	3.37	3.00	35.25	n/a	0.000
*										
*	ADD [0126+ 0804]	8041	3	5.0	81.72	5.43	2.75	33.78	n/a	0.000
*										
*	CHANNEL[2: 8041]	0604	1	5.0	81.72	5.35	2.83	33.78	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
**	CALIB NASHYD	1001	1	5.0	50.05	1.96	2.17	29.95	0.38	0.000
	[CN=73.6									
	[N = 3.0:Tp 0.68]									
*										
*	CHANNEL[2: 1001]	0600	1	5.0	50.05	1.95	2.25	29.95	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
**	CALIB NASHYD	1071	1	5.0	23.31	0.65	2.25	23.12	0.30	0.000
	[CN=65.3									
	[N = 3.0:Tp 0.74]									
*										
*	ADD [1071+ 0600]	0805	3	5.0	73.36	2.60	2.25	27.78	n/a	0.000
*										
*	ADD [0604+ 0805]	0806	3	5.0	155.08	7.46	2.83	30.94	n/a	0.000
*										
*	CHANNEL[2: 0806]	0601	1	5.0	155.08	7.48	2.83	30.94	n/a	0.000
*										
*	ADD [1062+ 0601]	8021	3	5.0	160.34	7.57	2.83	30.54	n/a	0.000
*										
*	CHANNEL[2: 8021]	0602	1	5.0	160.34	7.60	2.83	30.54	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
**	CALIB NASHYD	1063	1	5.0	8.13	0.26	2.08	23.08	0.30	0.000
	[CN=62.6									
	[N = 3.0:Tp 0.60]									
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										

**	CALIB NASHYD	0904	1	5.0	9.08	0.72	1.75	41.67	0.53	0.000
	[CN=81.8									
	[N = 3.0:Tp 0.43]									
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
*	CALIB STANDHYD	1021	1	5.0	16.01	2.98	1.33	44.12	0.56	0.000
	[I%=35.0:S%= 2.00]									
*										
*	ADD [1021+ 1063]	0807	3	5.0	24.14	3.02	1.33	37.03	n/a	0.000
*										
*	ADD [0807+ 0602]	0807	1	5.0	184.48	8.05	2.83	31.39	n/a	0.000
*										
*	ADD [0807+ 0904]	0807	3	5.0	193.56	8.31	2.83	31.87	n/a	0.000
*										
*	CHANNEL[2: 0807]	0603	1	5.0	193.56	8.25	2.83	31.87	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
*	CALIB NASHYD	0902	1	5.0	4.38	0.21	2.17	36.95	0.47	0.000
	[CN=78.4									
	[N = 3.0:Tp 0.72]									
*										
*	ADD [0603+ 0902]	8031	3	5.0	197.94	8.41	2.83	31.99	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
*	CALIB NASHYD	9041	1	5.0	6.51	0.31	1.83	28.29	0.36	0.000
	[CN=69.9									
	[N = 3.0:Tp 0.46]									
*										
*	CHANNEL[2: 0126]	0608	1	5.0	18.71	0.40	1.92	30.64	n/a	0.000
*										
*	ADD [0608+ 9041]	0129	3	5.0	25.22	0.71	1.83	30.03	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
*	CALIB STANDHYD	2043	1	5.0	7.52	1.64	1.33	54.15	0.69	0.000
	[I%=35.0:S%= 2.00]									
*										
*	ADD [0129+ 2043]	0131	3	5.0	32.74	1.75	1.33	35.57	n/a	0.000
*										
	CHIC STORM	10.0								
	[Ptot= 78.20 mm]									
*										
*	CALIB STANDHYD	1041	1	5.0	6.41	1.66	1.33	55.47	0.71	0.000


```

*
* CHIC STORM 10.0
* [ Ptot= 78.20 mm ]
*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 1.67 34.92 0.45 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* CHIC STORM 10.0
* [ Ptot= 78.20 mm ]
*
* CALIB NASHYD 1012 1 5.0 0.42 0.07 1.33 33.61 0.43 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* CHIC STORM 10.0
* [ Ptot= 78.20 mm ]
*
* CALIB NASHYD 0903 1 5.0 3.03 0.57 1.33 33.62 0.43 0.000
* [CN=77.6 ]
* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.30 1.50 33.52 n/a 0.000
*
* CHIC STORM 10.0
* [ Ptot= 78.20 mm ]
*
* CALIB STANDHYD 1011 1 5.0 3.26 0.94 1.33 57.90 0.74 0.000
* [I%=40.3:S%= 2.00]
*
* CHIC STORM 10.0
* [ Ptot= 78.20 mm ]
*
* CALIB STANDHYD 1013 1 5.0 2.49 0.74 1.33 58.83 0.75 0.000
* [I%=43.0:S%= 2.00]
*
* ADD [ 1011+ 1012] 0810 3 5.0 3.68 1.01 1.33 55.12 n/a 0.000
*
* ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.75 1.33 56.62 n/a 0.000
*
* ADD [ 0810+ 1014] 0810 3 5.0 6.55 1.76 1.33 55.36 n/a 0.000
*
* ADD [ 0810+ 0501] 0810 1 5.0 308.06 8.34 3.33 34.26 n/a 0.000
*
* ADD [ 0810+ 0605] 0810 3 5.0 311.09 8.38 3.33 34.25 n/a 0.000
*
=====
=====

```

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V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLL

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000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\614
5c719-7376-4847-9a19-acbd69bd29dc\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\614
5c719-7376-4847-9a19-acbd69bd29dc\sc

DATE: 07/17/2023 TIME: 12:00:37

USER:

COMMENTS: _____

```

*****
** SIMULATION : H - TIMMINS **
*****

```

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

READ STORM 15.0

[Ptot=193.00 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-90de-4416-b9ea-8

```

remark: TIMMINS

*
** CALIB NASHYD      1062  1  5.0    5.26    0.28  7.25  89.62 0.46    0.000
[CN=55.8              ]
[ N = 3.0:Tp 0.56]
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1004  1  5.0    10.95    1.07  7.00 133.00 0.69    0.000
[CN=78.0              ]
[ N = 3.0:Tp 0.15]
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1003  1  5.0    14.65    1.37  7.00 125.73 0.65    0.000
[CN=75.1              ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0    25.60    2.44  7.00 128.84 n/a    0.000
*
SHIFT[ 2: 0157] 0607  1  5.0    25.60    2.44  8.25 128.84 n/a    0.000
[SHIFT= 75.8 min]
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1073  1  5.0    19.10    1.46  7.17 118.72 0.62    0.000
[CN=71.9              ]
[ N = 3.0:Tp 0.48]
*
ADD [ 1073+ 0607] 0811  3  5.0    44.70    3.38  8.25 124.52 n/a    0.000
*

```

```

DUHYD      0126  1  5.0    44.70    3.38  8.25 124.52 n/a    0.000
MAJOR SYSTEM: 0126  2  5.0    31.60    2.98  8.25 124.52 n/a    0.000
MINOR SYSTEM: 0126  3  5.0    13.10    0.40  2.42 124.52 n/a    0.000
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1002  1  5.0    43.20    3.93  7.08 136.12 0.71    0.000
[CN=78.4              ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    3.93  8.33 136.12 n/a    0.000
[SHIFT= 79.2 min]
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1072  1  5.0    12.53    1.00  7.17 124.52 0.65    0.000
[CN=74.7              ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0    55.73    4.57  8.33 133.52 n/a    0.000
*
ADD [ 0126+ 0804] 8041  3  5.0    87.33    7.51  8.25 130.26 n/a    0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0    87.33    7.44  8.25 130.26 n/a    0.000
*
READ STORM              15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS

*
** CALIB NASHYD      1001  1  5.0    50.05    3.52  7.33 123.17 0.64    0.000
[CN=73.6              ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0    50.05    3.51  7.42 123.17 n/a    0.000

```

```

*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD              1071  1  5.0   23.31   1.34  7.42 105.65 0.55   0.000
  [CN=65.3                    ]
  [ N = 3.0:Tp 0.74]
*
  ADD [ 1071+ 0600] 0805  3  5.0   73.36   4.85  7.42 117.60 n/a   0.000
*
  ADD [ 0604+ 0805] 0806  3  5.0  160.69  11.38  8.25 124.48 n/a   0.000
*
  CHANNEL[ 2: 0806] 0601  1  5.0  160.69  11.38  8.25 124.48 n/a   0.000
*
  ADD [ 1062+ 0601] 8021  3  5.0  165.95  11.58  8.25 123.37 n/a   0.000
*
  CHANNEL[ 2: 8021] 0602  1  5.0  165.95  11.58  8.25 123.37 n/a   0.000
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD              1063  1  5.0    8.13   0.49  7.25 102.93 0.53   0.000
  [CN=62.6                    ]
  [ N = 3.0:Tp 0.60]
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD              0904  1  5.0    9.08   0.86  7.08 144.96 0.75   0.000
  [CN=81.8                    ]
  [ N = 3.0:Tp 0.43]
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :

```

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB STANDHYD              1021  1  5.0   16.01   1.45  7.00 138.77 0.72   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807  3  5.0   24.14   1.90  7.00 126.70 n/a   0.000
*
  ADD [ 0807+ 0602] 0807  1  5.0  190.09  12.75  8.25 123.80 n/a   0.000
*
  ADD [ 0807+ 0904] 0807  3  5.0  199.17  13.24  8.25 124.76 n/a   0.000
*
  CHANNEL[ 2: 0807] 0603  1  5.0  199.17  13.23  8.33 124.76 n/a   0.000
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD              0902  1  5.0    4.38   0.33  7.33 136.43 0.71   0.000
  [CN=78.4                    ]
  [ N = 3.0:Tp 0.72]
*
  ADD [ 0603+ 0902] 8031  3  5.0  203.55  13.49  8.25 125.01 n/a   0.000
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD              9041  1  5.0    6.51   0.49  7.17 117.42 0.61   0.000
  [CN=69.9                    ]
  [ N = 3.0:Tp 0.46]
*
  CHANNEL[ 2: 0126] 0608  1  5.0   13.10   0.40  2.67 124.52 n/a   0.000
*
  ADD [ 0608+ 9041] 0129  3  5.0   19.61   0.89  7.17 122.16 n/a   0.000
*
  READ STORM                15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-

```

```

90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB STANDHYD      2043  1  5.0    7.52    0.80  7.00 161.39 0.84  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 0129+ 2043] 0131  3  5.0    27.13    1.68  7.00 133.03 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB STANDHYD      1041  1  5.0    6.41    0.70  7.00 163.66 0.85  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0131] 0816  3  5.0    33.54    2.38  7.00 138.89 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD        1074  1  5.0    6.00    0.50  7.08 122.96 0.64  0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*
  CHANNEL[ 2: 1074] 0115  1  5.0    6.00    0.49  7.17 122.95 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD        2082  1  5.0    2.98    0.23  7.25 125.16 0.65  0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.72  7.17 123.69 n/a  0.000
*

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  CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.71  7.25 123.68 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD        1075  1  5.0    5.30    0.47  7.08 129.51 0.67  0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.45  7.17 129.51 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
** CALIB NASHYD        1081  1  5.0    18.64    1.45  7.17 125.83 0.65  0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
  ADD [ 1081+ 0118] 0813  3  5.0    27.62    2.16  7.25 125.13 n/a  0.000
*
  ADD [ 0813+ 0609] 0813  1  5.0    32.92    2.61  7.25 125.84 n/a  0.000
*
  CHANNEL[ 2: 0813] 0610  1  5.0    32.92    2.59  7.33 125.84 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=193.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
  remark: TIMMINS

*
* CALIB STANDHYD      1042  1  5.0    2.09    0.23  7.00 163.66 0.85  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1042+ 0610] 0814  3  5.0    35.01    2.73  7.25 128.09 n/a  0.000
*
  CHANNEL[ 2: 0814] 0611  1  5.0    35.01    2.70  7.42 128.09 n/a  0.000
*
  READ STORM          15.0

```

```

[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB STANDHYD      1032  1  5.0    1.68    0.18  7.00 163.66 0.85  0.000
[ I%=35.0:S%= 2.00 ]
*
* ADD [ 1032+ 0611] 0815  3  5.0    36.69    2.81  7.33 129.72 n/a  0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    70.23    4.94  7.00 134.10 n/a  0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    70.23    4.90  7.08 134.10 n/a  0.000
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD      0901  1  5.0     6.80    0.56  7.00 114.79 0.59  0.000
[ CN=84.1          ]
[ N = 3.0:Tp 0.05 ]
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD      1061  1  5.0     8.33    0.51  7.17  98.15 0.51  0.000
[ CN=60.3          ]
[ N = 3.0:Tp 0.50 ]
*
* PIPE [ 2: 1061] 0701  1  5.0     8.33    0.51  7.25  98.15 n/a  0.000
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*

```

```

* CALIB STANDHYD      1031  1  5.0    12.60    1.36  7.00 163.66 0.85  0.000
[ I%=35.0:S%= 2.00 ]
*
* ADD [ 1031+ 0612] 0803  3  5.0    82.83     6.23  7.00 138.59 n/a  0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0    91.16     6.70  7.00 134.90 n/a  0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0   294.71    18.50  7.67 128.07 n/a  0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    18.76  7.67 127.77 n/a  0.000
*
** Reservoir
OUTFLOW:      0501  1  5.0   301.51    18.66  7.83 127.76 n/a  0.000
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD      1014  1  5.0     0.38     0.03  7.00 131.74 0.68  0.000
[ CN=76.0          ]
[ N = 3.0:Tp 0.32 ]
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD      1012  1  5.0     0.42     0.04  7.00 126.80 0.66  0.000
[ CN=76.0          ]
[ N = 3.0:Tp 0.09 ]
*
* READ STORM          15.0
[ Ptot=193.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-
90de-4416-b9ea-8
remark: TIMMINS
*
* CALIB NASHYD      0903  1  5.0     3.03     0.28  7.00 126.52 0.66  0.000
[ CN=77.6          ]
[ N = 3.0:Tp 0.08 ]
*

```

CHANNEL[2: 0903] 0605 1 5.0 3.03 0.28 7.00 126.42 n/a 0.000
*
READ STORM 15.0
[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.36 7.00 167.06 0.87 0.000
[I%=40.3:S%= 2.00]
*
READ STORM 15.0
[Ptot=193.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\2a72b767-90de-4416-b9ea-8
remark: TIMMINS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.28 7.00 168.29 0.87 0.000
[I%=43.0:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 0.40 7.00 162.46 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 0.68 7.00 164.82 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 0.71 7.00 162.90 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 19.01 7.83 128.51 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 19.15 7.83 128.49 n/a 0.000
*
=====

V V I SSSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\49e2520a-cc4d-4efa-a10e-8b189f3357e9\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\49e2520a-cc4d-4efa-a10e-8b189f3357e9\sc

DATE: 07/17/2023 TIME: 12:00:39

USER:

COMMENTS: _____

** SIMULATION : I - 2yr 6hr SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 39.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.04 3.83 4.64 0.12 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]
*

READ STORM 15.0
[Ptot= 39.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5

```

remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0   10.95   0.42  3.25   9.85 0.25   0.000
[CN=78.0             ]
[ N = 3.0:Tp 0.15]
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0   14.65   0.44  3.33   8.16 0.21   0.000
[CN=75.1             ]
[ N = 3.0:Tp 0.16]
*
  ADD [ 1003+ 1004] 0157  3  5.0   25.60   0.85  3.33   8.88 n/a   0.000
*
  SHIFT[  2: 0157] 0607  1  5.0   25.60   0.85  4.58   8.88 n/a   0.000
[SHIFT= 75.8 min]
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0   19.10   0.22  3.75   6.84 0.17   0.000
[CN=71.9             ]
[ N = 3.0:Tp 0.48]
*
  ADD [ 1073+ 0607] 0811  3  5.0   44.70   0.96  4.50   8.01 n/a   0.000
*
  DUHYD               0126  1  5.0   44.70   0.96  4.50   8.01 n/a   0.000
  MAJOR SYSTEM:       0126  2  5.0    7.37   0.56  4.50   8.01 n/a   0.000
  MINOR SYSTEM:       0126  3  5.0   37.33   0.40  4.42   8.01 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*

```

```

** CALIB NASHYD      1002  1  5.0   43.20   0.97  3.58  10.94 0.28   0.000
[CN=78.4             ]
[ N = 3.0:Tp 0.40]
*
  SHIFT[  2: 1002] 0606  1  5.0   43.20   0.97  4.83  10.94 n/a   0.000
[SHIFT= 79.2 min]
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0   12.53   0.16  3.75   7.60 0.19   0.000
[CN=74.7             ]
[ N = 3.0:Tp 0.50]
*
  ADD [ 1072+ 0606] 0804  3  5.0   55.73   1.04  4.83  10.19 n/a   0.000
*
  ADD [ 0126+ 0804] 8041  3  5.0   63.10   1.37  4.58   9.93 n/a   0.000
*
  CHANNEL[  2: 8041] 0604  1  5.0   63.10   1.26  4.75   9.93 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1001  1  5.0   50.05   0.52  4.00   7.75 0.20   0.000
[CN=73.6             ]
[ N = 3.0:Tp 0.68]
*
  CHANNEL[  2: 1001] 0600  1  5.0   50.05   0.52  4.08   7.75 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 39.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
  remark: 2yr 6hr 15min SCS

*
** CALIB NASHYD      1071  1  5.0   23.31   0.16  4.08   5.46 0.14   0.000
[CN=65.3             ]
[ N = 3.0:Tp 0.74]

```

```

*
*   ADD [ 1071+ 0600] 0805 3 5.0 73.36 0.68 4.08 7.02 n/a 0.000
*
*   ADD [ 0604+ 0805] 0806 3 5.0 136.46 1.80 4.67 8.36 n/a 0.000
*
*   CHANNEL[ 2: 0806] 0601 1 5.0 136.46 1.79 4.75 8.36 n/a 0.000
*
*   ADD [ 1062+ 0601] 8021 3 5.0 141.72 1.81 4.75 8.23 n/a 0.000
*
*   CHANNEL[ 2: 8021] 0602 1 5.0 141.72 1.83 4.75 8.23 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
** CALIB NASHYD 1063 1 5.0 8.13 0.07 3.83 5.97 0.15 0.000
*   [CN=62.6 ]
*   [ N = 3.0:Tp 0.60]
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
** CALIB NASHYD 0904 1 5.0 9.08 0.24 3.58 13.42 0.34 0.000
*   [CN=81.8 ]
*   [ N = 3.0:Tp 0.43]
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
*   CALIB STANDHYD 1021 1 5.0 16.01 0.99 3.25 18.35 0.46 0.000
*   [I%=35.0:S%= 2.00]
*
*   ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.01 3.25 14.18 n/a 0.000
*
*   ADD [ 0807+ 0602] 0807 1 5.0 165.86 1.96 4.75 9.09 n/a 0.000
*

```

```

*   ADD [ 0807+ 0904] 0807 3 5.0 174.94 2.03 4.75 9.32 n/a 0.000
*
*   CHANNEL[ 2: 0807] 0603 1 5.0 174.94 2.00 4.75 9.32 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
** CALIB NASHYD 0902 1 5.0 4.38 0.07 4.00 11.11 0.28 0.000
*   [CN=78.4 ]
*   [ N = 3.0:Tp 0.72]
*
*   ADD [ 0603+ 0902] 8031 3 5.0 179.32 2.04 4.75 9.36 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
** CALIB NASHYD 9041 1 5.0 6.51 0.09 3.67 7.63 0.19 0.000
*   [CN=69.9 ]
*   [ N = 3.0:Tp 0.46]
*
*   CHANNEL[ 2: 0126] 0608 1 5.0 37.33 0.40 4.75 8.01 n/a 0.000
*
*   ADD [ 0608+ 9041] 0129 3 5.0 43.84 0.43 4.67 7.95 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
*   remark: 2yr 6hr 15min SCS
*
*
*   CALIB STANDHYD 2043 1 5.0 7.52 0.55 3.25 22.30 0.56 0.000
*   [I%=35.0:S%= 2.00]
*
*   ADD [ 0129+ 2043] 0131 3 5.0 51.36 0.61 3.25 10.05 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot= 39.60 mm ]
*   fname :

```


C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB STANDHYD      1041  1  5.0    6.41    0.49  3.25  22.98 0.58  0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131] 0816  3  5.0    57.77    1.10  3.25  11.49 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB NASHYD        1074  1  5.0    6.00    0.09  3.58  7.50 0.19  0.000
* [CN=73.8          ]
* [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115  1  5.0    6.00    0.07  3.92  7.50 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB NASHYD        2082  1  5.0    2.98    0.04  3.83  7.99 0.20  0.000
* [CN=74.6          ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.11  3.92  7.66 n/a  0.000
*
* CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.11  4.00  7.66 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB NASHYD        1075  1  5.0    5.30    0.10  3.58  9.03 0.23  0.000
* [CN=76.2          ]
```

```

* [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.08  3.83  9.03 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB NASHYD        1081  1  5.0    18.64    0.24  3.83  8.11 0.20  0.000
* [CN=74.9          ]
* [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813  3  5.0    27.62    0.34  3.92  7.96 n/a  0.000
*
* ADD [ 0813+ 0609] 0813  1  5.0    32.92    0.42  3.92  8.13 n/a  0.000
*
* CHANNEL[ 2: 0813] 0610  1  5.0    32.92    0.41  4.00  8.13 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB STANDHYD      1042  1  5.0    2.09    0.17  3.25  22.98 0.58  0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    35.01    0.44  3.92  9.02 n/a  0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    35.01    0.43  4.00  9.01 n/a  0.000
*
* READ STORM          15.0
* [ Ptot= 39.60 mm ]
* fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

```
*
* CALIB STANDHYD      1032  1  5.0    1.68    0.14  3.25  22.98 0.58  0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    36.69    0.46  4.00  9.65 n/a  0.000
*
```

```

*      ADD [ 0815+ 0816] 0815 1 5.0 94.46 1.38 3.25 10.77 n/a 0.000
*
*      CHANNEL[ 2: 0815] 0612 1 5.0 94.46 1.24 3.25 10.77 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB NASHYD 0901 1 5.0 6.80 0.46 3.25 11.43 0.29 0.000
*      [CN=84.1 ]
*      [ N = 3.0:Tp 0.05]
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB NASHYD 1061 1 5.0 8.33 0.08 3.75 5.40 0.14 0.000
*      [CN=60.3 ]
*      [ N = 3.0:Tp 0.50]
*
*      PIPE [ 2: 1061] 0701 1 5.0 8.33 0.08 3.83 5.40 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB STANDHYD 1031 1 5.0 12.60 0.93 3.25 22.98 0.58 0.000
*      [I%=35.0:S%= 2.00]
*
*      ADD [ 1031+ 0612] 0803 3 5.0 107.06 2.17 3.25 12.21 n/a 0.000
*
*      ADD [ 0803+ 0701] 0803 1 5.0 115.39 2.18 3.25 11.72 n/a 0.000
*
*      ADD [ 0803+ 8031] 0803 3 5.0 294.71 3.21 3.25 10.28 n/a 0.000
*
*      ADD [ 0803+ 0901] 0803 1 5.0 301.51 3.67 3.25 10.31 n/a 0.000
*
** Reservoir

```

```

OUTFLOW: 0501 1 5.0 301.51 1.12 6.00 10.30 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB NASHYD 1014 1 5.0 0.38 0.01 3.50 10.42 0.26 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.32]
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB NASHYD 1012 1 5.0 0.42 0.02 3.25 10.03 0.25 0.000
*      [CN=76.0 ]
*      [ N = 3.0:Tp 0.09]
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB NASHYD 0903 1 5.0 3.03 0.17 3.25 9.84 0.25 0.000
*      [CN=77.6 ]
*      [ N = 3.0:Tp 0.08]
*
*      CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.08 3.33 9.73 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 39.60 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-
c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
*      CALIB STANDHYD 1011 1 5.0 3.26 0.30 3.25 24.60 0.62 0.000
*      [I%=40.3:S%= 2.00]

```

*
READ STORM 15.0
[Ptot= 39.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\18c4d386-c8db-48b8-b236-5
remark: 2yr 6hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.24 3.25 25.27 0.64 0.000
[I%=43.0:S%= 2.00]
*
* ADD [1011+ 1012] 0810 3 5.0 3.68 0.32 3.25 22.94 n/a 0.000
*
* ADD [0810+ 1013] 0810 1 5.0 6.17 0.56 3.25 23.88 n/a 0.000
*
* ADD [0810+ 1014] 0810 3 5.0 6.55 0.57 3.25 23.10 n/a 0.000
*
* ADD [0810+ 0501] 0810 1 5.0 308.06 1.14 6.00 10.58 n/a 0.000
*
* ADD [0810+ 0605] 0810 3 5.0 311.09 1.15 6.00 10.57 n/a 0.000
*

=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
0 0 T T H H Y Y MM MM 0 0
0 0 T T H H Y M M 0 0
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\73e8137c-dfba-44bc-80e8-5ebc716833d7\sc
Summary filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\73e8137c-dfba-44bc-80e8-5ebc716833d7\sc

DATE: 07/17/2023

TIME: 12:00:40

USER:

COMMENTS: _____

** SIMULATION : J - 5yr 6hr SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.07 3.83 8.41 0.16 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]
*

READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 0.75 3.25 17.04 0.33 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*

READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b

```

remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1003  1  5.0   14.65   0.81  3.33  14.63 0.28   0.000
[CN=75.1                ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   1.55  3.25  15.66 n/a   0.000
*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   1.55  4.50  15.66 n/a   0.000
[SHIFT= 75.8 min]
*
READ STORM              15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1073  1  5.0   19.10   0.43  3.67  12.64 0.24   0.000
[CN=71.9                ]
[ N = 3.0:Tp 0.48]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   1.77  4.50  14.37 n/a   0.000
*
DUHYD                   0126  1  5.0   44.70   1.77  4.50  14.37 n/a   0.000
MAJOR SYSTEM:           0126  2  5.0   13.87   1.37  4.50  14.37 n/a   0.000
MINOR SYSTEM:           0126  3  5.0   30.83   0.40  3.58  14.37 n/a   0.000
*
READ STORM              15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1002  1  5.0   43.20   1.67  3.58  18.41 0.35   0.000
[CN=78.4                ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0   43.20   1.67  4.83  18.41 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM              15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b

```

```

remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1072  1  5.0   12.53   0.30  3.75  13.91 0.27   0.000
[CN=74.7                ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   1.78  4.83  17.40 n/a   0.000
*
ADD [ 0126+ 0804] 8041  3  5.0   69.60   2.76  4.58  16.80 n/a   0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0   69.60   2.65  4.67  16.79 n/a   0.000
*
READ STORM              15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1001  1  5.0   50.05   0.98  3.92  13.96 0.27   0.000
[CN=73.6                ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   0.97  4.00  13.96 n/a   0.000
*
READ STORM              15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
** CALIB NASHYD          1071  1  5.0   23.31   0.31  4.00  10.22 0.20   0.000
[CN=65.3                ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805  3  5.0   73.36   1.28  4.00  12.77 n/a   0.000
*
ADD [ 0604+ 0805] 0806  3  5.0  142.96   3.61  4.67  14.73 n/a   0.000
*
CHANNEL[ 2: 0806] 0601  1  5.0  142.96   3.63  4.67  14.73 n/a   0.000
*
ADD [ 1062+ 0601] 8021  3  5.0  148.22   3.66  4.67  14.51 n/a   0.000
*
CHANNEL[ 2: 8021] 0602  1  5.0  148.22   3.67  4.67  14.51 n/a   0.000
*
READ STORM              15.0

```

```

[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
** CALIB NASHYD      1063  1  5.0    8.13    0.13  3.83  10.63 0.20  0.000
[CN=62.6            ]
[ N = 3.0:Tp 0.60]
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
** CALIB NASHYD      0904  1  5.0    9.08    0.40  3.58  21.80 0.42  0.000
[CN=81.8            ]
[ N = 3.0:Tp 0.43]
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
* CALIB STANDHYD     1021  1  5.0   16.01    1.43  3.25  26.17 0.50  0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807  3  5.0   24.14    1.47  3.25  20.94 n/a  0.000
*
ADD [ 0807+ 0602] 0807  1  5.0  172.36    3.87  4.67  15.41 n/a  0.000
*
ADD [ 0807+ 0904] 0807  3  5.0  181.44    3.99  4.67  15.73 n/a  0.000
*
CHANNEL[ 2: 0807] 0603  1  5.0  181.44    3.93  4.75  15.73 n/a  0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*

```

```

** CALIB NASHYD      0902  1  5.0    4.38    0.11  4.00  18.61 0.36  0.000
[CN=78.4            ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031  3  5.0  185.82    4.00  4.75  15.79 n/a  0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
** CALIB NASHYD      9041  1  5.0    6.51    0.16  3.67  13.39 0.26  0.000
[CN=69.9            ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608  1  5.0   30.83    0.40  3.83  14.37 n/a  0.000
*
ADD [ 0608+ 9041] 0129  3  5.0   37.34    0.56  3.75  14.20 n/a  0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
* CALIB STANDHYD     2043  1  5.0    7.52    0.87  3.25  32.15 0.62  0.000
[I%=35.0:S%= 2.00]
*
ADD [ 0129+ 2043] 0131  3  5.0   44.86    1.00  3.25  17.21 n/a  0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS
*
* CALIB STANDHYD     1041  1  5.0    6.41    0.77  3.25  33.07 0.63  0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0131] 0816  3  5.0   51.27    1.77  3.25  19.19 n/a  0.000
*
READ STORM          15.0
[ Ptot= 52.20 mm ]

```

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.17 3.58 13.68 0.26 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
* CHANNEL[2: 1074] 0115 1 5.0 6.00 0.14 3.83 13.68 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.07 3.83 14.38 0.28 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]
*
* ADD [0115+ 2082] 0116 3 5.0 8.98 0.21 3.83 13.91 n/a 0.000
*
* CHANNEL[2: 0116] 0118 1 5.0 8.98 0.21 3.92 13.91 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.18 3.50 15.85 0.30 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.15 3.75 15.85 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*

* CALIB NASHYD 1081 1 5.0 18.64 0.44 3.75 14.57 0.28 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]
*
* ADD [1081+ 0118] 0813 3 5.0 27.62 0.65 3.83 14.35 n/a 0.000
*
* ADD [0813+ 0609] 0813 1 5.0 32.92 0.80 3.83 14.59 n/a 0.000
*
* CHANNEL[2: 0813] 0610 1 5.0 32.92 0.79 3.92 14.59 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.26 3.25 33.07 0.63 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 35.01 0.83 3.83 15.69 n/a 0.000
*
* CHANNEL[2: 0814] 0611 1 5.0 35.01 0.82 4.00 15.69 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.21 3.25 33.07 0.63 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1032+ 0611] 0815 3 5.0 36.69 0.85 3.92 16.48 n/a 0.000
*
* ADD [0815+ 0816] 0815 1 5.0 87.96 2.20 3.25 18.06 n/a 0.000
*
* CHANNEL[2: 0815] 0612 1 5.0 87.96 2.00 3.33 18.06 n/a 0.000
*
* READ STORM 15.0
[Ptot= 52.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-0c40-4eed-9159-b
remark: 5yr 6hr 15min SCS

*

```

* CALIB NASHYD      0901  1  5.0    6.80    0.72  3.25  18.27  0.35   0.000
  [CN=84.1          ]
  [ N = 3.0:Tp 0.05]
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD      1061  1  5.0    8.33    0.14  3.75   9.72  0.19   0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061]  0701  1  5.0    8.33    0.14  3.75   9.72  n/a   0.000
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD    1031  1  5.0   12.60    1.47  3.25  33.07  0.63   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1031+ 0612] 0803  3  5.0  100.56    3.44  3.25  19.94  n/a   0.000
*
  ADD [ 0803+ 0701] 0803  1  5.0  108.89    3.47  3.25  19.16  n/a   0.000
*
  ADD [ 0803+ 8031] 0803  3  5.0  294.71    5.29  4.75  17.04  n/a   0.000
*
  ADD [ 0803+ 0901] 0803  1  5.0  301.51    5.77  3.25  17.07  n/a   0.000
*
** Reservoir
  OUTFLOW:      0501  1  5.0  301.51    2.41  5.58  17.06  n/a   0.000
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD      1014  1  5.0    0.38    0.02  3.42  17.48  0.33   0.000
  [CN=76.0          ]

```

```

  [ N = 3.0:Tp 0.32]
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD      1012  1  5.0    0.42    0.04  3.25  16.83  0.32   0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB NASHYD      0903  1  5.0    3.03    0.28  3.25  16.71  0.32   0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL [ 2: 0903] 0605  1  5.0    3.03    0.16  3.33  16.60  n/a   0.000
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD    1011  1  5.0    3.26    0.43  3.25  35.01  0.67   0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM      15.0
  [ Ptot= 52.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\7f2d2fc9-
0c40-4eed-9159-b
  remark: 5yr 6hr 15min SCS

*
* CALIB STANDHYD    1013  1  5.0    2.49    0.34  3.25  35.79  0.69   0.000
  [I%=43.0:S%= 2.00]
*

```

```
* ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.47 3.25 32.93 n/a 0.000
*
* ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.81 3.25 34.09 n/a 0.000
*
* ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.82 3.25 33.12 n/a 0.000
*
* ADD [ 0810+ 0501] 0810 1 5.0 308.06 2.45 5.58 17.40 n/a 0.000
*
* ADD [ 0810+ 0605] 0810 3 5.0 311.09 2.46 5.58 17.39 n/a 0.000
*
=====
=====
```

```
V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL
```

```
000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000
```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\060
1ccb7-37d0-4cef-ab31-5c557accba7c\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\060
1ccb7-37d0-4cef-ab31-5c557accba7c\sc

DATE: 07/17/2023

TIME: 12:00:40

USER:

COMMENTS: _____

```
*****
** SIMULATION : K - 10yr 6hr SCS **
*****
```

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1062 1 5.0 5.26 0.10 3.75 11.41 0.19 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]
```

```
*
READ STORM 15.0
[ Ptot= 60.60 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1004 1 5.0 10.95 1.00 3.25 22.44 0.37 0.000
[CN=78.0 ]
[ N = 3.0:Tp 0.15]
```

```
*
READ STORM 15.0
[ Ptot= 60.60 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```
*
** CALIB NASHYD 1003 1 5.0 14.65 1.09 3.25 19.56 0.32 0.000
[CN=75.1 ]
[ N = 3.0:Tp 0.16]
```

```
*
ADD [ 1003+ 1004] 0157 3 5.0 25.60 2.09 3.25 20.79 n/a 0.000
*
SHIFT[ 2: 0157] 0607 1 5.0 25.60 2.09 4.50 20.79 n/a 0.000
[SHIFT= 75.8 min]
```

```
*
```



```

READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1073  1  5.0   19.10   0.59  3.67  17.14  0.28   0.000
[CN=71.9                    ]
[ N = 3.0:Tp 0.48]
*
* ADD [ 1073+ 0607] 0811  3  5.0   44.70   2.38  4.50  19.23  n/a   0.000
*
* DUHYD                   0126  1  5.0   44.70   2.38  4.50  19.23  n/a   0.000
* MAJOR SYSTEM:         0126  2  5.0   18.80   1.98  4.50  19.23  n/a   0.000
* MINOR SYSTEM:         0126  3  5.0   25.90   0.40  3.42  19.23  n/a   0.000

```

```

*
READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1002  1  5.0   43.20   2.19  3.58  23.97  0.40   0.000
[CN=78.4                    ]
[ N = 3.0:Tp 0.40]
*
* SHIFT[ 2: 1002] 0606  1  5.0   43.20   2.19  4.83  23.97  n/a   0.000
[SHIFT= 79.2 min]

```

```

*
READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1072  1  5.0   12.53   0.41  3.75  18.77  0.31   0.000
[CN=74.7                    ]
[ N = 3.0:Tp 0.50]
*
* ADD [ 1072+ 0606] 0804  3  5.0   55.73   2.35  4.75  22.80  n/a   0.000
*
* ADD [ 0126+ 0804] 8041  3  5.0   74.53   3.82  4.58  21.90  n/a   0.000
*
* CHANNEL[ 2: 8041] 0604  1  5.0   74.53   3.69  4.67  21.90  n/a   0.000

```

```

*
READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1001  1  5.0   50.05   1.33  3.92  18.73  0.31   0.000
[CN=73.6                    ]
[ N = 3.0:Tp 0.68]
*
* CHANNEL[ 2: 1001] 0600  1  5.0   50.05   1.32  4.00  18.73  n/a   0.000

```

```

*
READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1071  1  5.0   23.31   0.43  4.00  13.99  0.23   0.000
[CN=65.3                    ]
[ N = 3.0:Tp 0.74]

```

```

*
* ADD [ 1071+ 0600] 0805  3  5.0   73.36   1.75  4.00  17.22  n/a   0.000
*
* ADD [ 0604+ 0805] 0806  3  5.0  147.89   4.96  4.67  19.58  n/a   0.000
*
* CHANNEL[ 2: 0806] 0601  1  5.0  147.89   5.00  4.67  19.58  n/a   0.000
*
* ADD [ 1062+ 0601] 8021  3  5.0  153.15   5.05  4.67  19.30  n/a   0.000
*
* CHANNEL[ 2: 8021] 0602  1  5.0  153.15   5.08  4.67  19.30  n/a   0.000

```

```

*
READ STORM                15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

```

```

*
** CALIB NASHYD            1063  1  5.0    8.13   0.18  3.83  14.28  0.24   0.000
[CN=62.6                    ]
[ N = 3.0:Tp 0.60]
*
* READ STORM                15.0

```

[Ptot= 60.60 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.52 3.58 27.91 0.46 0.000
[CN=81.8]
[N = 3.0:Tp 0.43]
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 1.73 3.25 31.73 0.52 0.000
[I%=35.0:S%= 2.00]
*
ADD [1021+ 1063] 0807 3 5.0 24.14 1.79 3.25 25.85 n/a 0.000
*
ADD [0807+ 0602] 0807 1 5.0 177.29 5.33 4.67 20.19 n/a 0.000
*
ADD [0807+ 0904] 0807 3 5.0 186.37 5.48 4.67 20.57 n/a 0.000
*
CHANNEL[2: 0807] 0603 1 5.0 186.37 5.36 4.75 20.57 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.15 3.92 24.19 0.40 0.000
[CN=78.4]
[N = 3.0:Tp 0.72]
*
ADD [0603+ 0902] 8031 3 5.0 190.75 5.46 4.75 20.65 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
** CALIB NASHYD 9041 1 5.0 6.51 0.22 3.67 17.82 0.29 0.000
[CN=69.9]
[N = 3.0:Tp 0.46]

*
CHANNEL[2: 0126] 0608 1 5.0 25.90 0.40 4.75 19.23 n/a 0.000
*
ADD [0608+ 9041] 0129 3 5.0 32.41 0.61 3.67 18.95 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 1.06 3.25 39.06 0.64 0.000
[I%=35.0:S%= 2.00]
*
ADD [0129+ 2043] 0131 3 5.0 39.93 1.27 3.25 22.74 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.94 3.25 40.12 0.66 0.000
[I%=35.0:S%= 2.00]
*
ADD [1041+ 0131] 0816 3 5.0 46.34 2.21 3.25 25.14 n/a 0.000
*
READ STORM 15.0
[Ptot= 60.60 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.23 3.58 18.44 0.30 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
CHANNEL[2: 1074] 0115 1 5.0 6.00 0.20 3.75 18.44 n/a 0.000
*

```

READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD                    2082  1  5.0    2.98    0.09  3.75  19.28 0.32  0.000
[CN=74.6 ]
[ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.30  3.75  18.71 n/a  0.000
*
* CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.29  3.83  18.71 n/a  0.000
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD                    1075  1  5.0    5.30    0.24  3.50  21.01 0.35  0.000
[CN=76.2 ]
[ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.21  3.75  21.00 n/a  0.000
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD                    1081  1  5.0   18.64    0.60  3.75  19.50 0.32  0.000
[CN=74.9 ]
[ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813  3  5.0   27.62    0.89  3.83  19.24 n/a  0.000
*
* ADD [ 0813+ 0609] 0813  1  5.0   32.92    1.10  3.83  19.53 n/a  0.000
*
* CHANNEL[ 2: 0813] 0610  1  5.0   32.92    1.08  3.92  19.52 n/a  0.000
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]

```

```

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD                 1042  1  5.0    2.09    0.31  3.25  40.12 0.66  0.000
[I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0   35.01    1.13  3.92  20.75 n/a  0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0   35.01    1.10  4.00  20.75 n/a  0.000
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD                 1032  1  5.0    1.68    0.25  3.25  40.12 0.66  0.000
[I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0   36.69    1.14  4.00  21.63 n/a  0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0   83.03    2.77  3.25  23.59 n/a  0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0   83.03    2.55  3.33  23.59 n/a  0.000
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD                    0901  1  5.0    6.80    0.90  3.25  23.20 0.38  0.000
[CN=84.1 ]
[ N = 3.0:Tp 0.05]
*
READ STORM                      15.0
[ Ptot= 60.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
remark: 10yr 6hr 15min SCS

*

```

```

* CALIB NASHYD      1061  1  5.0    8.33    0.19  3.67  13.12 0.22  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0    8.33    0.19  3.75  13.12 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD    1031  1  5.0    12.60    1.81  3.25  40.12 0.66  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0    95.63    4.29  3.25  25.77 n/a  0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0   103.96    4.34  3.25  24.76 n/a  0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0   294.71    6.98  4.67  22.10 n/a  0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    7.24  3.25  22.12 n/a  0.000
*
** Reservoir
  OUTFLOW:      0501  1  5.0   301.51    3.55  5.50  22.12 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD      1014  1  5.0     0.38    0.02  3.42  22.75 0.38  0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.32]
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD      1012  1  5.0     0.42    0.05  3.25  21.90 0.36  0.000
  [CN=76.0          ]

```

```

  [ N = 3.0:Tp 0.09]
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB NASHYD      0903  1  5.0     3.03     0.36  3.25  21.83 0.36  0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0     3.03     0.22  3.33  21.73 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD    1011  1  5.0     3.26     0.52  3.25  42.24 0.70  0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM      15.0
  [ Ptot= 60.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\937b9f54-
a2ab-4cdb-aeb6-4
  remark: 10yr 6hr 15min SCS

*
* CALIB STANDHYD    1013  1  5.0     2.49     0.41  3.25  43.08 0.71  0.000
  [I%=43.0:S%= 2.00]
*
* ADD [ 1011+ 1012] 0810  3  5.0     3.68     0.57  3.25  39.92 n/a  0.000
*
* ADD [ 0810+ 1013] 0810  1  5.0     6.17     0.99  3.25  41.19 n/a  0.000
*
* ADD [ 0810+ 1014] 0810  3  5.0     6.55     1.00  3.25  40.12 n/a  0.000
*
* ADD [ 0810+ 0501] 0810  1  5.0   308.06     3.59  5.42  22.50 n/a  0.000
*
* ADD [ 0810+ 0605] 0810  3  5.0   311.09     3.61  5.42  22.49 n/a  0.000
*
=====
=====

```

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\502
05a14-c697-477f-9f1c-1ded20e9b9ff\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\502
05a14-c697-477f-9f1c-1ded20e9b9ff\sc

DATE: 07/17/2023 TIME: 12:00:39
USER:
COMMENTS: _____

** SIMULATION : L - 25yr 6hr SCS **

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

READ STORM		15.0							
[Ptot= 72.00 mm]									
fname :									

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.14 3.75 16.03 0.22 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 1.37 3.25 30.35 0.42 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 1.52 3.25 26.89 0.37 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 2.89 3.25 28.37 n/a 0.000
*
SHIFT[2: 0157] 0607 1 5.0 25.60 2.89 4.50 28.37 n/a 0.000
[SHIFT= 75.8 min]
*
READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.84 3.67 23.90 0.33 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]
*

```

*      ADD [ 1073+ 0607] 0811 3 5.0 44.70 3.28 4.50 26.46 n/a 0.000
*
*      DUHYD              0126 1 5.0 44.70 3.28 4.50 26.46 n/a 0.000
*      MAJOR SYSTEM:      0126 2 5.0 23.79 2.88 4.50 26.46 n/a 0.000
*      MINOR SYSTEM:      0126 3 5.0 20.91 0.40 3.33 26.46 n/a 0.000
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          1002 1 5.0 43.20 2.97 3.50 32.08 0.45 0.000
*      [CN=78.4 ]
*      [ N = 3.0:Tp 0.40]
*
*      SHIFT[ 2: 1002] 0606 1 5.0 43.20 2.97 4.75 32.08 n/a 0.000
*      [SHIFT= 79.2 min]
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          1072 1 5.0 12.53 0.58 3.67 26.00 0.36 0.000
*      [CN=74.7 ]
*      [ N = 3.0:Tp 0.50]
*
*      ADD [ 1072+ 0606] 0804 3 5.0 55.73 3.18 4.75 30.71 n/a 0.000
*
*      ADD [ 0126+ 0804] 8041 3 5.0 79.52 5.37 4.58 29.44 n/a 0.000
*
*      CHANNEL[ 2: 8041] 0604 1 5.0 79.52 5.19 4.67 29.44 n/a 0.000
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          1001 1 5.0 50.05 1.86 3.92 25.83 0.36 0.000
*      [CN=73.6 ]
*      [ N = 3.0:Tp 0.68]

```

```

*
*      CHANNEL[ 2: 1001] 0600 1 5.0 50.05 1.85 4.00 25.83 n/a 0.000
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          1071 1 5.0 23.31 0.61 4.00 19.73 0.27 0.000
*      [CN=65.3 ]
*      [ N = 3.0:Tp 0.74]
*
*      ADD [ 1071+ 0600] 0805 3 5.0 73.36 2.47 4.00 23.89 n/a 0.000
*
*      ADD [ 0604+ 0805] 0806 3 5.0 152.88 6.93 4.67 26.78 n/a 0.000
*
*      CHANNEL[ 2: 0806] 0601 1 5.0 152.88 6.99 4.67 26.78 n/a 0.000
*
*      ADD [ 1062+ 0601] 8021 3 5.0 158.14 7.06 4.67 26.42 n/a 0.000
*
*      CHANNEL[ 2: 8021] 0602 1 5.0 158.14 7.10 4.67 26.42 n/a 0.000
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          1063 1 5.0 8.13 0.25 3.83 19.81 0.28 0.000
*      [CN=62.6 ]
*      [ N = 3.0:Tp 0.60]
*
*      READ STORM          15.0
*      [ Ptot= 72.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS
*
** CALIB NASHYD          0904 1 5.0 9.08 0.69 3.58 36.70 0.51 0.000
*      [CN=81.8 ]
*      [ N = 3.0:Tp 0.43]
*
*      READ STORM          15.0

```

[Ptot= 72.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.30 3.25 39.65 0.55 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1021+ 1063] 0807 3 5.0 24.14 2.39 3.25 32.97 n/a 0.000
*
* ADD [0807+ 0602] 0807 1 5.0 182.28 7.43 4.67 27.29 n/a 0.000
*
* ADD [0807+ 0904] 0807 3 5.0 191.36 7.61 4.67 27.73 n/a 0.000
*
* CHANNEL[2: 0807] 0603 1 5.0 191.36 7.47 4.67 27.73 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.20 3.92 32.31 0.45 0.000
[CN=78.4]
[N = 3.0:Tp 0.72]
*
* ADD [0603+ 0902] 8031 3 5.0 195.74 7.60 4.67 27.84 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 9041 1 5.0 6.51 0.30 3.67 24.44 0.34 0.000
[CN=69.9]
[N = 3.0:Tp 0.46]
*
* CHANNEL[2: 0126] 0608 1 5.0 20.91 0.40 3.75 26.46 n/a 0.000
*
* ADD [0608+ 9041] 0129 3 5.0 27.42 0.70 3.67 25.98 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 1.35 3.25 48.75 0.68 0.000
[I%=35.0:S%= 2.00]
*
* ADD [0129+ 2043] 0131 3 5.0 34.94 1.67 3.25 30.88 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.19 3.25 49.99 0.69 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0131] 0816 3 5.0 41.35 2.86 3.25 33.84 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.32 3.58 25.54 0.35 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
* CHANNEL[2: 1074] 0115 1 5.0 6.00 0.29 3.75 25.53 n/a 0.000
*
* READ STORM 15.0
[Ptot= 72.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.13 3.75 26.54 0.37 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]
*

```

* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.42 3.75 25.87 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.42 3.83 25.87 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB NASHYD 1075 1 5.0 5.30 0.34 3.50 28.61 0.40 0.000
* [CN=76.2 ]
* [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.30 3.67 28.61 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB NASHYD 1081 1 5.0 18.64 0.84 3.75 26.82 0.37 0.000
* [CN=74.9 ]
* [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813 3 5.0 27.62 1.25 3.75 26.51 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 32.92 1.55 3.75 26.85 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 32.92 1.51 3.92 26.85 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.43 3.25 49.99 0.69 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 35.01 1.57 3.83 28.23 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 35.01 1.53 4.00 28.22 n/a 0.000

```

```

*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.35 3.25 49.99 0.69 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.56 4.00 29.22 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 78.04 3.68 3.25 31.67 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 78.04 3.41 3.33 31.67 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB NASHYD 0901 1 5.0 6.80 1.16 3.25 30.24 0.42 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS
*
*
* CALIB NASHYD 1061 1 5.0 8.33 0.27 3.67 18.32 0.25 0.000
* [CN=60.3 ]
* [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701 1 5.0 8.33 0.27 3.75 18.32 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 72.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
* remark: 25yr 6hr 15min SCS

```



```

*
* CALIB STANDHYD      1031  1  5.0   12.60   2.29  3.25  49.99  0.69   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0   90.64   5.60  3.25  34.21  n/a   0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0   98.97   5.68  3.25  32.88  n/a   0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0  294.71   9.66  4.67  29.53  n/a   0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0  301.51   9.72  4.67  29.55  n/a   0.000
*
** Reservoir
OUTFLOW:              0501  1  5.0  301.51   6.36  5.17  29.54  n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD        1014  1  5.0    0.38    0.03  3.42  30.48  0.42   0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.32]
*
  READ STORM              15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD        1012  1  5.0    0.42    0.06  3.25  29.34  0.41   0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM              15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB NASHYD        0903  1  5.0    3.03    0.49  3.25  29.33  0.41   0.000
  [CN=77.6          ]

```

```

[ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605  1  5.0    3.03    0.31  3.33  29.23  n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.70  3.25  52.31  0.73   0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM              15.0
  [ Ptot= 72.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\d428ba6d-
cb92-4b17-ade7-f
  remark: 25yr 6hr 15min SCS

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.55  3.25  53.22  0.74   0.000
  [I%=43.0:S%= 2.00]
*
* ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.77  3.25  49.69  n/a   0.000
*
* ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.32  3.25  51.12  n/a   0.000
*
* ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.34  3.25  49.92  n/a   0.000
*
* ADD [ 0810+ 0501] 0810  1  5.0  308.06    6.43  5.17  29.97  n/a   0.000
*
* ADD [ 0810+ 0605] 0810  3  5.0  311.09    6.46  5.17  29.97  n/a   0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
W   I  SSSS  UUUU  A  A  LLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y    M  M  O  O
000  T    T  H  H  Y    M  M  000

```

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

```
Input  filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat
```

```
Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\6bbb
d678c-389b-4a3d-9882-4d55e06293bb\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\6bbb
d678c-389b-4a3d-9882-4d55e06293bb\sc
```

DATE: 07/17/2023 TIME: 12:00:40

USER:

COMMENTS:

```
*****
** SIMULATION : M - 50yr 6hr SCS                               **
*****
```

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

START @ 0.00 hrs

```

READ STORM                      15.0
[ Ptot= 79.80 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
** CALIB NASHYD      1062  1  5.0      5.26      0.17  3.75  19.51 0.24  0.000
   [CN=55.8          ]
   [ N = 3.0:Tp 0.56]

```

```

READ STORM                      15.0
[ Ptot= 79.80 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b

remark: 50yr 6hr 15min SCS

```

** CALIB NASHYD      1004  1  5.0   10.95    1.63  3.25  36.07 0.45   0.000
  [CN=78.0          ]
  [ N = 3.0:Tp 0.15]

```

```
*
READ STORM 15.0
[ Ptot= 79.80 mm ]
fname :
```

```
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-  
a4fe-4779-ba55-b  
    remark: 50yr 6hr 15min SCS
```

```

** CALIB NASHYD      1003  1  5.0   14.65    1.84  3.25  32.25 0.40   0.000
  [CN=75.1          ]
  [ N = 3.0:Tp 0.16]

```

*	ADD [1003+ 1004]	0157	3	5.0	25.60	3.47	3.25	33.88	n/a	0.000
*	SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1	5.0	25.60	3.47	4.50	33.88	n/a	0.000

[illegible]

```
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-  
a4fe-4779-ba55-b  
    remark: 50yr 6hr 15min SCS
```

```
*
** CALIB NASHYD      1073  1  5.0   19.10    1.02  3.67  28.88 0.36   0.000
   [CN=71.9          ]
   [ N = 3.0:TD 0.48]
```

* ADD [1073+ 0607]	0811	3	5.0	44.70	3.93	4.50	31.74	n/a	0.000
* DUHYD	0126	1	5.0	44.70	3.93	4.50	31.74	n/a	0.000
MAJOR SYSTEM:	0126	2	5.0	26.43	3.53	4.50	31.74	n/a	0.000
MINOR SYSTEM:	0126	3	5.0	18.27	0.40	3.25	31.74	n/a	0.000

[illegible]

```
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-  
a4fe-4779-ba55-b  
    remark: 50yr 6hr 15min SCS
```

```

*
** CALIB NASHYD      1002  1  5.0   43.20   3.53  3.50  37.93 0.48   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]    0606  1  5.0   43.20   3.53  4.75  37.93 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
** CALIB NASHYD      1072  1  5.0   12.53   0.71  3.67  31.30 0.39   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606]   0804  3  5.0   55.73   3.78  4.75  36.44 n/a   0.000
*
ADD [ 0126+ 0804]   8041  3  5.0   82.16   6.49  4.58  34.93 n/a   0.000
*
CHANNEL[ 2: 8041]   0604  1  5.0   82.16   6.28  4.67  34.93 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
** CALIB NASHYD      1001  1  5.0   50.05   2.26  3.92  31.04 0.39   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001]   0600  1  5.0   50.05   2.24  4.00  31.04 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
** CALIB NASHYD      1071  1  5.0   23.31   0.75  4.00  24.02 0.30   0.000

```

```

   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600]   0805  3  5.0   73.36   2.99  4.00  28.81 n/a   0.000
*
ADD [ 0604+ 0805]   0806  3  5.0   155.52   8.37  4.67  32.04 n/a   0.000
*
CHANNEL[ 2: 0806]   0601  1  5.0   155.52   8.44  4.67  32.04 n/a   0.000
*
ADD [ 1062+ 0601]   8021  3  5.0   160.78   8.52  4.67  31.63 n/a   0.000
*
CHANNEL[ 2: 8021]   0602  1  5.0   160.78   8.56  4.67  31.63 n/a   0.000
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
** CALIB NASHYD      1063  1  5.0    8.13   0.30  3.83  23.94 0.30   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
** CALIB NASHYD      0904  1  5.0    9.08   0.81  3.58  42.97 0.54   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
READ STORM          15.0
[ Ptot= 79.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS
*
* CALIB STANDHYD      1021  1  5.0   16.01   2.64  3.25  45.29 0.57   0.000
   [I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063]   0807  3  5.0   24.14   2.75  3.25  38.10 n/a   0.000
*

```

```

* ADD [ 0807+ 0602] 0807 1 5.0 184.92 8.94 4.67 32.48 n/a 0.000
*
* ADD [ 0807+ 0904] 0807 3 5.0 194.00 9.16 4.67 32.97 n/a 0.000
*
* CHANNEL[ 2: 0807] 0603 1 5.0 194.00 9.04 4.67 32.97 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.24 3.92 38.17 0.48 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.72]
*
* ADD [ 0603+ 0902] 8031 3 5.0 198.38 9.20 4.67 33.08 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD 9041 1 5.0 6.51 0.36 3.58 29.31 0.37 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.46]
*
* CHANNEL[ 2: 0126] 0608 1 5.0 18.27 0.40 3.67 31.74 n/a 0.000
*
* ADD [ 0608+ 9041] 0129 3 5.0 24.78 0.76 3.67 31.11 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 1.55 3.25 55.55 0.70 0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 0129+ 2043] 0131 3 5.0 32.30 1.95 3.25 36.80 n/a 0.000
*
* READ STORM 15.0

```

```

  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.37 3.25 56.90 0.71 0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131] 0816 3 5.0 38.71 3.31 3.25 40.13 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.39 3.58 30.75 0.39 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.35 3.75 30.74 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.16 3.75 31.86 0.40 0.000
  [CN=74.6 ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.51 3.75 31.11 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.51 3.83 31.11 n/a 0.000
*
* READ STORM 15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*

```

```

* CALIB NASHYD      1075  1  5.0    5.30    0.40  3.50  34.15 0.43  0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075]  0609  1  5.0    5.30    0.37  3.67  34.15 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB NASHYD      1081  1  5.0   18.64    1.02  3.75  32.18 0.40  0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
  ADD [ 1081+ 0118]  0813  3  5.0   27.62    1.52  3.75  31.83 n/a  0.000
*
  ADD [ 0813+ 0609]  0813  1  5.0   32.92    1.89  3.75  32.20 n/a  0.000
*
  CHANNEL[ 2: 0813]  0610  1  5.0   32.92    1.84  3.83  32.20 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB STANDHYD    1042  1  5.0    2.09    0.49  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1042+ 0610]  0814  3  5.0   35.01    1.91  3.83  33.67 n/a  0.000
*
  CHANNEL[ 2: 0814]  0611  1  5.0   35.01    1.85  4.00  33.67 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB STANDHYD    1032  1  5.0    1.68    0.40  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*

```

```

  ADD [ 1032+ 0611]  0815  3  5.0   36.69    1.90  3.92  34.73 n/a  0.000
*
  ADD [ 0815+ 0816]  0815  1  5.0   75.40    4.30  3.25  37.50 n/a  0.000
*
  CHANNEL[ 2: 0815]  0612  1  5.0   75.40    4.01  3.33  37.50 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB NASHYD      0901  1  5.0    6.80    1.33  3.25  35.23 0.44  0.000
  [CN=84.1          ]
  [ N = 3.0:Tp 0.05]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB NASHYD      1061  1  5.0    8.33    0.33  3.67  22.22 0.28  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061]    0701  1  5.0    8.33    0.33  3.75  22.22 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-a4fe-4779-ba55-b
remark: 50yr 6hr 15min SCS

```

*
* CALIB STANDHYD    1031  1  5.0   12.60    2.63  3.25  56.90 0.71  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1031+ 0612]  0803  3  5.0   88.00    6.51  3.25  40.28 n/a  0.000
*
  ADD [ 0803+ 0701]  0803  1  5.0   96.33    6.62  3.25  38.72 n/a  0.000
*
  ADD [ 0803+ 8031]  0803  3  5.0  294.71   11.49  4.67  34.92 n/a  0.000
*
  ADD [ 0803+ 0901]  0803  1  5.0  301.51   11.57  4.67  34.93 n/a  0.000

```

```

*
** Reservoir
OUTFLOW:          0501  1  5.0  301.51   9.22  4.92  34.92  n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          1014  1  5.0    0.38    0.03  3.42  36.08 0.45   0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.32]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          1012  1  5.0    0.42    0.08  3.25  34.73 0.44   0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB NASHYD          0903  1  5.0    3.03    0.57  3.25  34.75 0.44   0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL[ 2: 0903]    0605  1  5.0    3.03    0.38  3.33  34.65 n/a   0.000
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*

```

```

* CALIB STANDHYD          1011  1  5.0    3.26    0.81  3.25  59.35 0.74   0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM          15.0
  [ Ptot= 79.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5e635027-
a4fe-4779-ba55-b
  remark: 50yr 6hr 15min SCS

*
* CALIB STANDHYD          1013  1  5.0    2.49    0.63  3.25  60.29 0.76   0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012]    0810  3  5.0    3.68    0.88  3.25  56.54 n/a   0.000
*
  ADD [ 0810+ 1013]    0810  1  5.0    6.17    1.51  3.25  58.05 n/a   0.000
*
  ADD [ 0810+ 1014]    0810  3  5.0    6.55    1.54  3.25  56.78 n/a   0.000
*
  ADD [ 0810+ 0501]    0810  1  5.0   308.06    9.31  4.92  35.39 n/a   0.000
*
  ADD [ 0810+ 0605]    0810  3  5.0   311.09    9.34  4.92  35.38 n/a   0.000
*
=====
=====

V  V  I  SSSSS  U  U  A  L              (v 6.1.2001)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA  L
V  V  I  SS    U  U  A  A  L
W  I  SSSSS  UUUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

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```

***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voindat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\122

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\12263a41-70d2-49e2-9935-9f8f2c0d5812\sc

DATE: 07/17/2023

TIME: 12:00:38

USER:

COMMENTS: _____

```
*****
** SIMULATION : N - 100yr 6hr SCS                               **
*****
```

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

START @ 0.00 hrs

```

READ STORM                      15.0
[ Ptot= 87.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

```

*
** CALIB NASHYD      1062  1   5.0      5.26      0.20  3.75  23.23  0.27   0.000
   [CN=55.8          ]
   [ N = 3.0:Tp 0.56]

```

[illegible]

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

```

*
** CALIB NASHYD      1004  1  5.0   10.95   1.90  3.25  42.00 0.48   0.000
   [CN=78.0          ]
   [ N = 3.0:Tp 0.15]

```

```

READ STORM                      15.0
[ Ptot= 87.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```

** CALIB NASHYD      1003  1  5.0  14.65    2.17  3.25  37.83 0.43  0.000
  [CN=75.1          ]
  [ N = 3.0:Tp 0.16]

```

*	ADD [1003+ 1004]	0157	3	5.0	25.60	4.08	3.25	39.61	n/a	0.000
*	SHIFT[2: 0157] [SHIFT= 75.8 min]	0607	1	5.0	25.60	4.08	4.50	39.61	n/a	0.000

```

READ STORM                      15.0
[ Ptot= 87.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

```

** CALIB NASHYD      1073  1  5.0   19.10    1.21  3.67  34.11 0.39   0.000
  [CN=71.9          ]
  [ N = 3.0:Tp 0.48]

```

*	ADD [1073+ 0607]	0811	3	5.0	44.70	4.61	4.50	37.26	n/a	0.000
	DUHYD	0126	1	5.0	44.70	4.61	4.50	37.26	n/a	0.000
	MAJOR SYSTEM:	0126	2	5.0	28.55	4.21	4.50	37.26	n/a	0.000
	MINOR SYSTEM:	0126	3	5.0	16.15	0.40	3.25	37.26	n/a	0.000

```

READ STORM                      15.0
[ Ptot= 87.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8
remark: 100yr 6hr 15min SCS

```

*
** CALIB NASHYD      1002  1  5.0  43.20      4.11  3.50  43.98 0.50   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.40]

```

SHIFT[2: 1002] 0606 1 5.0 43.20 4.11 4.75 43.98 n/a 0.000
[SHIFT= 79.2 min]

```

READ STORM                      15.0
[ Ptot= 87.60 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
** CALIB NASHYD      1072  1  5.0   12.53   0.84  3.67  36.84 0.42   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
```

```
*
* ADD [ 1072+ 0606] 0804  3  5.0   55.73   4.41  4.75  42.37 n/a   0.000
```

```
*
* ADD [ 0126+ 0804] 8041  3  5.0   84.28   7.66  4.58  40.64 n/a   0.000
```

```
*
* CHANNEL[ 2: 8041] 0604  1  5.0   84.28   7.42  4.67  40.64 n/a   0.000
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
** CALIB NASHYD      1001  1  5.0   50.05   2.67  3.92  36.49 0.42   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
```

```
*
* CHANNEL[ 2: 1001] 0600  1  5.0   50.05   2.65  4.00  36.49 n/a   0.000
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
** CALIB NASHYD      1071  1  5.0   23.31   0.90  4.00  28.57 0.33   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
```

```
*
* ADD [ 1071+ 0600] 0805  3  5.0   73.36   3.55  4.00  33.97 n/a   0.000
```

```
*
* ADD [ 0604+ 0805] 0806  3  5.0  157.64   9.85  4.67  37.54 n/a   0.000
```

```
*
* CHANNEL[ 2: 0806] 0601  1  5.0  157.64   9.94  4.67  37.54 n/a   0.000
```

```
*
* ADD [ 1062+ 0601] 8021  3  5.0  162.90  10.04  4.67  37.07 n/a   0.000
```

```
*
* CHANNEL[ 2: 8021] 0602  1  5.0  162.90  10.10  4.67  37.07 n/a   0.000
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
** CALIB NASHYD      1063  1  5.0    8.13   0.36  3.83  28.32 0.32   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
** CALIB NASHYD      0904  1  5.0    9.08   0.93  3.58  49.42 0.56   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS

```
*
* CALIB STANDHYD      1021  1  5.0   16.01    2.99  3.25  51.08 0.58   0.000
  [I%=35.0:S%= 2.00]
```

```
*
* ADD [ 1021+ 1063] 0807  3  5.0   24.14    3.12  3.25  43.41 n/a   0.000
```

```
*
* ADD [ 0807+ 0602] 0807  1  5.0  187.04   10.53  4.67  37.89 n/a   0.000
```

```
*
* ADD [ 0807+ 0904] 0807  3  5.0  196.12   10.78  4.67  38.43 n/a   0.000
```

```
*
* CHANNEL[ 2: 0807] 0603  1  5.0  196.12   10.69  4.67  38.43 n/a   0.000
```

```
*
* READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-1661-4236-a290-8

remark: 100yr 6hr 15min SCS


```

*
* CALIB NASHYD      0902  1  5.0    4.38    0.27  3.92  44.23 0.50  0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.72]
*
* ADD [ 0603+ 0902] 8031  3  5.0   200.50   10.87  4.67  38.55 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      9041  1  5.0    6.51    0.43  3.58  34.43 0.39  0.000
  [CN=69.9          ]
  [ N = 3.0:Tp 0.46]
*
* CHANNEL[ 2: 0126] 0608  1  5.0   16.15    0.40  3.67  37.26 n/a  0.000
*
* ADD [ 0608+ 9041] 0129  3  5.0   22.66    0.83  3.58  36.45 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    2043  1  5.0    7.52    1.76  3.25  62.46 0.71  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 0129+ 2043] 0131  3  5.0   30.18    2.23  3.25  42.93 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1041  1  5.0    6.41    1.68  3.25  63.91 0.73  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131] 0816  3  5.0   36.59    3.91  3.25  46.61 n/a  0.000
*

```

```

  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      1074  1  5.0    6.00    0.46  3.58  36.19 0.41  0.000
  [CN=73.8          ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115  1  5.0    6.00    0.42  3.75  36.19 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      2082  1  5.0    2.98    0.19  3.75  37.41 0.43  0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.61  3.75  36.60 n/a  0.000
*
* CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.60  3.75  36.59 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      1075  1  5.0    5.30    0.47  3.50  39.91 0.46  0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.43  3.67  39.90 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

```

```

*
* CALIB NASHYD      1081  1  5.0   18.64   1.20  3.75  37.76 0.43  0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813  3  5.0   27.62   1.81  3.75  37.38 n/a  0.000
*
* ADD [ 0813+ 0609] 0813  1  5.0   32.92   2.23  3.75  37.79 n/a  0.000
*
* CHANNEL[ 2: 0813] 0610  1  5.0   32.92   2.17  3.83  37.79 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1042  1  5.0     2.09   0.56  3.25  63.91 0.73  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0   35.01   2.25  3.83  39.35 n/a  0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0   35.01   2.17  4.00  39.34 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1032  1  5.0     1.68   0.45  3.25  63.91 0.73  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0   36.69   2.21  4.00  40.46 n/a  0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0   73.28   5.03  3.25  43.53 n/a  0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0   73.28   4.62  3.25  43.53 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

```

```

*
* CALIB NASHYD      0901  1  5.0    6.80    1.51  3.25  40.33 0.46  0.000
  [CN=84.1          ]
  [ N = 3.0:Tp 0.05]
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      1061  1  5.0    8.33    0.39  3.67  26.36 0.30  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0    8.33    0.39  3.75  26.36 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1031  1  5.0   12.60    2.98  3.25  63.91 0.73  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0   85.88    7.60  3.25  46.52 n/a  0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0   94.21    7.73  3.25  44.74 n/a  0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0  294.71   13.46  4.67  40.53 n/a  0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0  301.51   13.54  4.67  40.53 n/a  0.000
*
** Reservoir
OUTFLOW:      0501  1  5.0  301.51   11.85  4.83  40.52 n/a  0.000
*
  READ STORM      15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*

```

```

* CALIB NASHYD      1014  1  5.0    0.38    0.04  3.42 41.89 0.48  0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.32]
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      1012  1  5.0    0.42    0.09  3.25 40.32 0.46  0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB NASHYD      0903  1  5.0    3.03    0.66  3.25 40.37 0.46  0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL[ 2: 0903]  0605  1  5.0    3.03    0.45  3.33 40.26 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1011  1  5.0    3.26    0.91  3.25 66.47 0.76  0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM          15.0
  [ Ptot= 87.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6ffcae8e-
1661-4236-a290-8
  remark: 100yr 6hr 15min SCS

*
* CALIB STANDHYD    1013  1  5.0    2.49    0.71  3.25 67.45 0.77  0.000

```

```

[I%=43.0:S%= 2.00]
*
ADD [ 1011+ 1012] 0810  3  5.0    3.68    1.00  3.25 63.49 n/a  0.000
*
ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.71  3.25 65.09 n/a  0.000
*
ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.74  3.25 63.74 n/a  0.000
*
ADD [ 0810+ 0501] 0810  1  5.0   308.06   11.95  4.83 41.01 n/a  0.000
*
ADD [ 0810+ 0605] 0810  3  5.0   311.09   12.00  4.83 41.01 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
W  I  SSSS  UUUUU A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  Y  M  M  O  O
000  T    T  H  H  Y  Y  M  M  000

```

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\VH5\05153701-f781-47eb-ab6b-c872b39b8f82\000
b2244-11b8-4ede-8daa-f18119f0b069\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\VH5\05153701-f781-47eb-ab6b-c872b39b8f82\000
b2244-11b8-4ede-8daa-f18119f0b069\sc

DATE: 07/17/2023

TIME: 12:00:38

USER:

COMMENTS: _____

** SIMULATION : 0 - 2yr 12hr SCS **

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

READ STORM	15.0								
[Ptot= 49.20 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3									
remark: 2yr 12hr 15min SCS									
*									
** CALIB NASHYD	1062	1	5.0		5.26	0.05	6.75	7.43	0.15 0.000
[CN=55.8]									
[N = 3.0:Tp 0.56]									
*									
READ STORM	15.0								
[Ptot= 49.20 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3									
remark: 2yr 12hr 15min SCS									
*									
** CALIB NASHYD	1004	1	5.0		10.95	0.57	6.25	15.22	0.31 0.000
[CN=78.0]									
[N = 3.0:Tp 0.15]									
*									
READ STORM	15.0								
[Ptot= 49.20 mm]									
fname :									
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3									
remark: 2yr 12hr 15min SCS									
*									
** CALIB NASHYD	1003	1	5.0		14.65	0.61	6.25	12.97	0.26 0.000
[CN=75.1]									
[N = 3.0:Tp 0.16]									
*									
ADD [1003+ 1004]	0157	3	5.0		25.60	1.18	6.25	13.94	n/a 0.000
*									
SHIFT[2: 0157]	0607	1	5.0		25.60	1.18	7.50	13.94	n/a 0.000

[SHIFT= 75.8 min]

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.32 6.67 11.15 0.23 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 1.33 7.50 12.74 n/a 0.000

*
DUHYD 0126 1 5.0 44.70 1.33 7.50 12.74 n/a 0.000
MAJOR SYSTEM: 0126 2 5.0 8.88 0.93 7.50 12.74 n/a 0.000
MINOR SYSTEM: 0126 3 5.0 35.82 0.40 7.25 12.74 n/a 0.000

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1002 1 5.0 43.20 1.29 6.50 16.53 0.34 0.000
[CN=78.4]
[N = 3.0:Tp 0.40]

*
SHIFT[2: 1002] 0606 1 5.0 43.20 1.29 7.75 16.53 n/a 0.000
[SHIFT= 79.2 min]

*
READ STORM 15.0
[Ptot= 49.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.23 6.67 12.30 0.25 0.000
[CN=74.7]
[N = 3.0:Tp 0.50]

*
ADD [1072+ 0606] 0804 3 5.0 55.73 1.37 7.75 15.58 n/a 0.000

*
ADD [0126+ 0804] 8041 3 5.0 64.61 2.02 7.58 15.19 n/a 0.000

```

*
CHANNEL[ 2: 8041] 0604 1 5.0 64.61 1.90 7.67 15.19 n/a 0.000
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

**
** CALIB NASHYD 1001 1 5.0 50.05 0.74 6.92 12.37 0.25 0.000
[CN=73.6 ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 0.73 7.00 12.37 n/a 0.000
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.23 7.00 8.98 0.18 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 0.96 7.00 11.29 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 137.97 2.60 7.67 13.12 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 137.97 2.61 7.67 13.12 n/a 0.000
*
ADD [ 1062+ 0601] 8021 3 5.0 143.23 2.64 7.67 12.91 n/a 0.000
*
CHANNEL[ 2: 8021] 0602 1 5.0 143.23 2.64 7.67 12.91 n/a 0.000
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.10 6.83 9.43 0.19 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]

```

```

*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.31 6.58 19.70 0.40 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 1.12 6.25 24.25 0.49 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.15 6.25 19.26 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 167.37 2.78 7.67 13.82 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 176.45 2.87 7.67 14.13 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 176.45 2.82 7.75 14.13 n/a 0.000
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.09 6.92 16.72 0.34 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 180.83 2.87 7.75 14.19 n/a 0.000
*
READ STORM 15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-

```

4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
** CALIB NASHYD 9041 1 5.0 6.51 0.12 6.67 11.92 0.24 0.000
[CN=69.9]
[N = 3.0:Tp 0.46]

* CHANNEL[2: 0126] 0608 1 5.0 35.82 0.40 7.50 12.74 n/a 0.000

* ADD [0608+ 9041] 0129 3 5.0 42.33 0.46 7.42 12.62 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 0.62 6.25 29.74 0.60 0.000
[I%=35.0:S%= 2.00]

* ADD [0129+ 2043] 0131 3 5.0 49.85 0.74 6.25 15.20 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.59 6.25 30.61 0.62 0.000
[I%=35.0:S%= 2.00]

* ADD [1041+ 0131] 0816 3 5.0 56.26 1.34 6.25 16.96 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.13 6.58 12.10 0.25 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]

*

CHANNEL[2: 1074] 0115 1 5.0 6.00 0.10 6.83 12.09 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.05 6.75 12.75 0.26 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]

* ADD [0115+ 2082] 0116 3 5.0 8.98 0.16 6.83 12.31 n/a 0.000

* CHANNEL[2: 0116] 0118 1 5.0 8.98 0.15 6.92 12.31 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.14 6.50 14.11 0.29 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]

* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.11 6.75 14.11 n/a 0.000

* READ STORM 15.0
[Ptot= 49.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.34 6.75 12.92 0.26 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]

* ADD [1081+ 0118] 0813 3 5.0 27.62 0.49 6.83 12.72 n/a 0.000

* ADD [0813+ 0609] 0813 1 5.0 32.92 0.60 6.83 12.94 n/a 0.000

* CHANNEL[2: 0813] 0610 1 5.0 32.92 0.59 6.92 12.94 n/a 0.000

*

```

READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD                1042  1  5.0    2.09    0.20  6.25  30.61 0.62    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    35.01    0.63  6.83  14.00 n/a    0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    35.01    0.62  7.00  13.99 n/a    0.000
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD                1032  1  5.0    1.68    0.16  6.25  30.61 0.62    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    36.69    0.64  6.92  14.75 n/a    0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    92.95    1.69  6.25  16.08 n/a    0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    92.95    1.53  6.33  16.08 n/a    0.000
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD                  0901  1  5.0    6.80    0.55  6.25  16.57 0.34    0.000
[ CN=84.1          ]
[ N = 3.0:Tp 0.05]
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

```

```

*
* CALIB NASHYD                  1061  1  5.0    8.33    0.11  6.67   8.60 0.17    0.000
[ CN=60.3          ]
[ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0    8.33    0.10  6.75   8.60 n/a    0.000
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD                1031  1  5.0    12.60    1.05  6.25  30.61 0.62    0.000
[ I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0   105.55    2.56  6.25  17.82 n/a    0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0   113.88    2.59  6.25  17.14 n/a    0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0   294.71    3.92  7.75  15.33 n/a    0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51    4.39  6.25  15.36 n/a    0.000
*
** Reservoir
OUTFLOW:                        0501  1  5.0   301.51    1.61  8.75  15.35 n/a    0.000
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD                  1014  1  5.0    0.38    0.01  6.42  15.70 0.32    0.000
[ CN=76.0          ]
[ N = 3.0:Tp 0.32]
*
READ STORM                      15.0
[ Ptot= 49.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
remark: 2yr 12hr 15min SCS

*

```

```

* CALIB NASHYD      1012  1  5.0    0.42    0.03  6.25  15.11 0.31  0.000
  [CN=76.0          ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM          15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

*
* CALIB NASHYD      0903  1  5.0    3.03    0.21  6.25  14.97 0.30  0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL[ 2: 0903]  0605  1  5.0    3.03    0.12  6.33  14.87 n/a  0.000
*
  READ STORM          15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD    1011  1  5.0    3.26    0.34  6.25  32.48 0.66  0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM          15.0
  [ Ptot= 49.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\9242591a-
4535-412b-9c20-3
  remark: 2yr 12hr 15min SCS

*
* CALIB STANDHYD    1013  1  5.0    2.49    0.27  6.25  33.23 0.68  0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012]  0810  3  5.0    3.68    0.36  6.25  30.50 n/a  0.000
*
  ADD [ 0810+ 1013]  0810  1  5.0    6.17    0.63  6.25  31.60 n/a  0.000
*
  ADD [ 0810+ 1014]  0810  3  5.0    6.55    0.64  6.25  30.68 n/a  0.000
*
  ADD [ 0810+ 0501]  0810  1  5.0   308.06    1.63  8.75  15.68 n/a  0.000
*
  ADD [ 0810+ 0605]  0810  3  5.0   311.09    1.64  8.75  15.67 n/a  0.000
*

```

```

=====
=====

```

```

V   V   I   SSSSS U   U   A   L           (v 6.1.2001)
V   V   I   SS   U   U   A A   L
V   V   I   SS   U   U   AAAAA L
V   V   I   SS   U   U   A   A   L
W   I   SSSSS UUUUU A   A   LLLLL

```

```

000  TTTT  TTTT  H   H   Y   Y   M   M   000  TM
O   O   T   T   H   H   Y Y   MM MM  O   O
O   O   T   T   H   H   Y   M   M  O   O
000  T   T   H   H   Y   M   M   000

```

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\c95fa35d-c168-4396-b36a-5d59f61a444f\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\c95fa35d-c168-4396-b36a-5d59f61a444f\sc

DATE: 07/17/2023

TIME: 12:00:41

USER:

COMMENTS: _____

```

*****
** SIMULATION : P - 5yr 12hr SCS          **
*****

```

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

```

START @ 0.00 hrs
-----
READ STORM

```

15.0


```

[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1062  1  5.0    5.26    0.09  6.75  13.05 0.20    0.000
[CN=55.8                ]
[ N = 3.0:Tp 0.56]
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1004  1  5.0    10.95    0.97  6.25  25.28 0.39    0.000
[CN=78.0                ]
[ N = 3.0:Tp 0.15]
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1003  1  5.0    14.65    1.07  6.25  22.19 0.34    0.000
[CN=75.1                ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0    25.60    2.04  6.25  23.51 n/a    0.000
*
SHIFT[ 2: 0157] 0607  1  5.0    25.60    2.04  7.50  23.51 n/a    0.000
[SHIFT= 75.8 min]
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1073  1  5.0    19.10    0.59  6.67  19.55 0.30    0.000
[CN=71.9                ]

```

```

[ N = 3.0:Tp 0.48]
*
ADD [ 1073+ 0607] 0811  3  5.0    44.70    2.30  7.50  21.82 n/a    0.000
*
DUHYD                    0126  1  5.0    44.70    2.30  7.50  21.82 n/a    0.000
MAJOR SYSTEM:           0126  2  5.0    16.06    1.90  7.50  21.82 n/a    0.000
MINOR SYSTEM:           0126  3  5.0    28.64    0.40  6.33  21.82 n/a    0.000
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1002  1  5.0    43.20    2.14  6.50  26.89 0.42    0.000
[CN=78.4                ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0    43.20    2.14  7.75  26.89 n/a    0.000
[SHIFT= 79.2 min]
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1072  1  5.0    12.53    0.41  6.67  21.35 0.33    0.000
[CN=74.7                ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0    55.73    2.28  7.75  25.65 n/a    0.000
*
ADD [ 0126+ 0804] 8041  3  5.0    71.79    3.70  7.58  24.79 n/a    0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0    71.79    3.57  7.67  24.79 n/a    0.000
*
READ STORM                15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
** CALIB NASHYD          1001  1  5.0    50.05    1.32  6.92  21.27 0.33    0.000

```

```

[CN=73.6      ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600 1 5.0 50.05 1.31 7.00 21.27 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.42 7.00 16.02 0.25 0.000
[CN=65.3      ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 1.73 7.00 19.60 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 145.15 4.76 7.67 22.17 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 145.15 4.80 7.67 22.17 n/a 0.000
*
ADD [ 1062+ 0601] 8021 3 5.0 150.41 4.85 7.67 21.85 n/a 0.000
*
CHANNEL[ 2: 8021] 0602 1 5.0 150.41 4.88 7.67 21.85 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.18 6.83 16.24 0.25 0.000
[CN=62.6      ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.50 6.58 31.09 0.48 0.000
[CN=81.8      ]
[ N = 3.0:Tp 0.43]

```

```

*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 1.59 6.25 34.60 0.53 0.000
[IX=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.65 6.25 28.42 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 174.55 5.10 7.67 22.76 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 183.63 5.23 7.67 23.17 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 183.63 5.09 7.75 23.17 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 0902 1 5.0 4.38 0.14 6.92 27.12 0.42 0.000
[CN=78.4      ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 188.01 5.18 7.67 23.26 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
** CALIB NASHYD 9041 1 5.0 6.51 0.21 6.58 20.18 0.31 0.000
[CN=69.9      ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608 1 5.0 28.64 0.40 6.75 21.82 n/a 0.000
*
ADD [ 0608+ 9041] 0129 3 5.0 35.15 0.61 6.67 21.52 n/a 0.000
*

```

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 0.98 6.25 42.59 0.66 0.000
[I%=35.0:S%= 2.00]
*
* ADD [0129+ 2043] 0131 3 5.0 42.67 1.24 6.25 25.23 n/a 0.000
*

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 0.87 6.25 43.72 0.67 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0131] 0816 3 5.0 49.08 2.11 6.25 27.64 n/a 0.000
*

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.23 6.58 20.98 0.32 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
* CHANNEL[2: 1074] 0115 1 5.0 6.00 0.20 6.75 20.97 n/a 0.000
*

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.09 6.75 21.88 0.34 0.000
[CN=74.6]

[N = 3.0:Tp 0.56]
*
* ADD [0115+ 2082] 0116 3 5.0 8.98 0.29 6.75 21.27 n/a 0.000
*
* CHANNEL[2: 0116] 0118 1 5.0 8.98 0.29 6.83 21.27 n/a 0.000
*
READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.24 6.50 23.73 0.37 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.21 6.75 23.73 n/a 0.000
*

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.60 6.75 22.12 0.34 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]
*
* ADD [1081+ 0118] 0813 3 5.0 27.62 0.88 6.75 21.84 n/a 0.000
*

*
* ADD [0813+ 0609] 0813 1 5.0 32.92 1.09 6.75 22.15 n/a 0.000
*
* CHANNEL[2: 0813] 0610 1 5.0 32.92 1.06 6.83 22.15 n/a 0.000
*

READ STORM 15.0
[Ptot= 64.80 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.29 6.25 43.72 0.67 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 35.01 1.12 6.83 23.43 n/a 0.000

```

*
CHANNEL[ 2: 0814] 0611 1 5.0 35.01 1.09 6.92 23.43 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.23 6.25 43.72 0.67 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.12 6.92 24.36 n/a 0.000
*
ADD [ 0815+ 0816] 0815 1 5.0 85.77 2.69 6.25 26.24 n/a 0.000
*
CHANNEL[ 2: 0815] 0612 1 5.0 85.77 2.51 6.33 26.24 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 0.83 6.25 25.75 0.40 0.000
[CN=84.1 ]
[ N = 3.0:Tp 0.05]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB NASHYD 1061 1 5.0 8.33 0.19 6.67 14.97 0.23 0.000
[CN=60.3 ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701 1 5.0 8.33 0.19 6.75 14.97 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-

```

```

27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 1.66 6.25 43.72 0.67 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1031+ 0612] 0803 3 5.0 98.37 4.07 6.25 28.48 n/a 0.000
*
ADD [ 0803+ 0701] 0803 1 5.0 106.70 4.14 6.25 27.42 n/a 0.000
*
ADD [ 0803+ 8031] 0803 3 5.0 294.71 6.63 7.67 24.77 n/a 0.000
*
ADD [ 0803+ 0901] 0803 1 5.0 301.51 7.01 6.25 24.79 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 3.44 8.42 24.78 n/a 0.000
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB NASHYD 1014 1 5.0 0.38 0.02 6.42 25.53 0.39 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.32]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*
* CALIB NASHYD 1012 1 5.0 0.42 0.05 6.25 24.58 0.38 0.000
[CN=76.0 ]
[ N = 3.0:Tp 0.09]
*
READ STORM 15.0
[ Ptot= 64.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
remark: 5yr 12hr 15min SCS
*

```

```

* CALIB NASHYD      0903  1  5.0    3.03    0.34  6.25  24.53 0.38    0.000
  [CN=77.6          ]
  [ N = 3.0:Tp 0.08]
*
CHANNEL[ 2: 0903]   0605  1  5.0    3.03    0.21  6.33  24.43 n/a    0.000
*
READ STORM          15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD    1011  1  5.0    3.26    0.48  6.25  45.92 0.71    0.000
  [I%=40.3:S%= 2.00]
*
READ STORM          15.0
  [ Ptot= 64.80 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ad9e5545-
27b0-4020-85ef-a
  remark: 5yr 12hr 15min SCS

*
* CALIB STANDHYD    1013  1  5.0    2.49    0.38  6.25  46.78 0.72    0.000
  [I%=43.0:S%= 2.00]
*
ADD [ 1011+ 1012]   0810  3  5.0    3.68    0.53  6.25  43.48 n/a    0.000
*
ADD [ 0810+ 1013]   0810  1  5.0    6.17    0.91  6.25  44.81 n/a    0.000
*
ADD [ 0810+ 1014]   0810  3  5.0    6.55    0.92  6.25  43.70 n/a    0.000
*
ADD [ 0810+ 0501]   0810  1  5.0   308.06    3.48  8.42  25.19 n/a    0.000
*
ADD [ 0810+ 0605]   0810  3  5.0   311.09    3.50  8.42  25.18 n/a    0.000
*
=====
=====

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
VV   I  SSSS  UUUU  A  A  LLLLL

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O

```

```

O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000
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```

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\45c
3726e-700a-4f00-90dc-dea463c1aa3d\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\45c
3726e-700a-4f00-90dc-dea463c1aa3d\sc

DATE: 07/17/2023

TIME: 12:00:39

USER:

COMMENTS: _____

```

*****
** SIMULATION : Q - 10yr 12hr SCS      **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
  [ Ptot= 75.60 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

```

*
** CALIB NASHYD      1062  1  5.0    5.26    0.13  6.75  17.61 0.23    0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]
*
READ STORM          15.0

```

```

[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1004  1  5.0   10.95   1.27  6.25  32.96 0.44   0.000
[CN=78.0                ]
[ N = 3.0:Tp 0.15]
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1003  1  5.0   14.65   1.43  6.25  29.33 0.39   0.000
[CN=75.1                ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0   25.60   2.71  6.25  30.88 n/a   0.000
*
SHIFT[ 2: 0157] 0607  1  5.0   25.60   2.71  7.50  30.88 n/a   0.000
[SHIFT= 75.8 min]
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1073  1  5.0   19.10   0.80  6.67  26.16 0.35   0.000
[CN=71.9                ]
[ N = 3.0:Tp 0.48]
*
ADD [ 1073+ 0607] 0811  3  5.0   44.70   3.04  7.50  28.87 n/a   0.000
*
DUHYD                   0126  1  5.0   44.70   3.04  7.50  28.87 n/a   0.000
MAJOR SYSTEM:          0126  2  5.0   19.82   2.64  7.50  28.87 n/a   0.000
MINOR SYSTEM:          0126  3  5.0   24.88   0.40  6.25  28.87 n/a   0.000
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-

```

```

a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1002  1  5.0   43.20   2.79  6.50  34.75 0.46   0.000
[CN=78.4                ]
[ N = 3.0:Tp 0.40]
*
SHIFT[ 2: 1002] 0606  1  5.0   43.20   2.79  7.75  34.75 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1072  1  5.0   12.53   0.56  6.67  28.41 0.38   0.000
[CN=74.7                ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0   55.73   2.98  7.75  33.33 n/a   0.000
*
ADD [ 0126+ 0804] 8041  3  5.0   75.55   4.99  7.58  32.16 n/a   0.000
*
CHANNEL[ 2: 8041] 0604  1  5.0   75.55   4.81  7.67  32.15 n/a   0.000
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD          1001  1  5.0   50.05   1.77  6.92  28.20 0.37   0.000
[CN=73.6                ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001] 0600  1  5.0   50.05   1.76  6.92  28.20 n/a   0.000
*
READ STORM              15.0
[ Ptot= 75.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

```

```

*
** CALIB NASHYD      1071  1  5.0   23.31   0.58  7.00  21.67 0.29   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
   ADD [ 1071+ 0600] 0805  3  5.0   73.36   2.34  6.92  26.13 n/a   0.000
*
   ADD [ 0604+ 0805] 0806  3  5.0  148.91   6.38  7.67  29.19 n/a   0.000
*
   CHANNEL[ 2: 0806] 0601  1  5.0  148.91   6.45  7.67  29.19 n/a   0.000
*
   ADD [ 1062+ 0601] 8021  3  5.0  154.17   6.51  7.67  28.79 n/a   0.000
*
   CHANNEL[ 2: 8021] 0602  1  5.0  154.17   6.55  7.67  28.79 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD      1063  1  5.0    8.13   0.24  6.83  21.69 0.29   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08   0.64  6.58  39.57 0.52   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD      1021  1  5.0   16.01   2.06  6.25  42.24 0.56   0.000
   [I%=35.0:S%= 2.00]
*

```

```

   ADD [ 1021+ 1063] 0807  3  5.0   24.14   2.16  6.25  35.32 n/a   0.000
*
   ADD [ 0807+ 0602] 0807  1  5.0  178.31   6.82  7.67  29.67 n/a   0.000
*
   ADD [ 0807+ 0904] 0807  3  5.0  187.39   6.97  7.67  30.15 n/a   0.000
*
   CHANNEL[ 2: 0807] 0603  1  5.0  187.39   6.87  7.67  30.15 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD      0902  1  5.0    4.38   0.19  6.92  34.99 0.46   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.72]
*
   ADD [ 0603+ 0902] 8031  3  5.0  191.77   6.99  7.67  30.26 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
** CALIB NASHYD      9041  1  5.0    6.51   0.28  6.58  26.66 0.35   0.000
   [CN=69.9          ]
   [ N = 3.0:Tp 0.46]
*
   CHANNEL[ 2: 0126] 0608  1  5.0   24.88   0.40  6.67  28.87 n/a   0.000
*
   ADD [ 0608+ 9041] 0129  3  5.0   31.39   0.68  6.58  28.41 n/a   0.000
*
   READ STORM              15.0
   [ Ptot= 75.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
   remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD      2043  1  5.0    7.52   1.21  6.25  51.87 0.69   0.000
   [I%=35.0:S%= 2.00]
*
   ADD [ 0129+ 2043] 0131  3  5.0   38.91   1.60  6.25  32.94 n/a   0.000

```

```

*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD          1041  1  5.0    6.41    1.07  6.25  53.16 0.70  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131] 0816  3  5.0    45.32    2.67  6.25  35.80 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD            1074  1  5.0    6.00    0.31  6.50  27.91 0.37  0.000
  [CN=73.8
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115  1  5.0    6.00    0.28  6.75  27.90 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD            2082  1  5.0    2.98    0.12  6.75  28.97 0.38  0.000
  [CN=74.6
  [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.40  6.75  28.26 n/a  0.000
*
* CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.40  6.83  28.25 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

```

```

*
* CALIB NASHYD            1075  1  5.0    5.30    0.32  6.50  31.14 0.41  0.000
  [CN=76.2
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.28  6.67  31.14 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB NASHYD            1081  1  5.0    18.64    0.80  6.75  29.26 0.39  0.000
  [CN=74.9
  [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813  3  5.0    27.62    1.19  6.75  28.93 n/a  0.000
*
* ADD [ 0813+ 0609] 0813  1  5.0    32.92    1.47  6.75  29.29 n/a  0.000
*
* CHANNEL[ 2: 0813] 0610  1  5.0    32.92    1.43  6.83  29.29 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD          1042  1  5.0    2.09    0.36  6.25  53.16 0.70  0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814  3  5.0    35.01    1.50  6.83  30.71 n/a  0.000
*
* CHANNEL[ 2: 0814] 0611  1  5.0    35.01    1.45  6.92  30.71 n/a  0.000
*
  READ STORM              15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

*
* CALIB STANDHYD          1032  1  5.0    1.68    0.29  6.25  53.16 0.70  0.000

```



```

* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.50 6.92 31.73 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 82.01 3.45 6.25 33.98 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 82.01 3.24 6.33 33.98 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.04 6.25 32.53 0.43 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD 1061 1 5.0 8.33 0.25 6.67 20.09 0.27 0.000
* [CN=60.3 ]
* [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701 1 5.0 8.33 0.25 6.75 20.09 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 2.05 6.25 53.17 0.70 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803 3 5.0 94.61 5.15 6.25 36.54 n/a 0.000
*
* ADD [ 0803+ 0701] 0803 1 5.0 102.94 5.24 6.25 35.21 n/a 0.000
*
* ADD [ 0803+ 8031] 0803 3 5.0 294.71 8.78 7.67 31.99 n/a 0.000

```

```

*
* ADD [ 0803+ 0901] 0803 1 5.0 301.51 9.10 6.25 32.00 n/a 0.000
*
* ** Reservoir
* OUTFLOW: 0501 1 5.0 301.51 5.63 8.17 32.00 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 6.42 33.04 0.44 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.32]
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD 1012 1 5.0 0.42 0.06 6.25 31.80 0.42 0.000
* [CN=76.0 ]
* [ N = 3.0:Tp 0.09]
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS
*
* CALIB NASHYD 0903 1 5.0 3.03 0.44 6.25 31.81 0.42 0.000
* [CN=77.6 ]
* [ N = 3.0:Tp 0.08]
*
* CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.29 6.33 31.71 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 75.60 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
remark: 10yr 12hr 15min SCS

```

```

*
* CALIB STANDHYD      1011  1  5.0    3.26    0.59  6.25  55.55 0.73  0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM          15.0
  [ Ptot= 75.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5ffadeef-
a82e-40f7-aecf-2
  remark: 10yr 12hr 15min SCS

```

```

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.46  6.25  56.47 0.75  0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.65  6.25  52.84 n/a  0.000
*
  ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.11  6.25  54.31 n/a  0.000
*
  ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.13  6.25  53.07 n/a  0.000
*
  ADD [ 0810+ 0501] 0810  1  5.0   308.06    5.70  8.17  32.44 n/a  0.000
*
  ADD [ 0810+ 0605] 0810  3  5.0   311.09    5.73  8.17  32.44 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
W  I  SSSS  UUUU  A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T  T  H  H  Y  Y  MM MM  O  O
O  O  T  T  H  H  Y  M  M  O  O
000  T  T  H  H  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\9dc
0af8d-02ef-406a-8190-6e7a7e0e84a9\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\9dc
0af8d-02ef-406a-8190-6e7a7e0e84a9\sc

DATE: 07/17/2023 TIME: 12:00:40

USER:

COMMENTS: _____

```

*****
** SIMULATION : R - 25yr 12hr SCS **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM          15.0
[ Ptot= 88.80 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

```

*
** CALIB NASHYD      1062  1  5.0    5.26    0.18  6.75  23.83 0.27  0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]

```

```

*
  READ STORM          15.0
  [ Ptot= 88.80 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

```

*
** CALIB NASHYD      1004  1  5.0   10.95    1.66  6.25  42.93 0.48  0.000
  [CN=78.0          ]
  [ N = 3.0:Tp 0.15]

```

```

*
  READ STORM          15.0

```

[Ptot= 88.80 mm]
 fname :
 C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1003  1  5.0   14.65   1.91  6.25  38.71 0.44   0.000
   [CN=75.1          ]
   [ N = 3.0:Tp 0.16]
*
*   ADD [ 1003+ 1004] 0157  3  5.0   25.60   3.57  6.25  40.51 n/a   0.000
*
*   SHIFT[  2: 0157] 0607  1  5.0   25.60   3.57  7.50  40.51 n/a   0.000
   [SHIFT= 75.8 min]
*
*   READ STORM      15.0
   [ Ptot= 88.80 mm ]
   fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1073  1  5.0   19.10   1.08  6.67  34.94 0.39   0.000
   [CN=71.9          ]
   [ N = 3.0:Tp 0.48]
*
*   ADD [ 1073+ 0607] 0811  3  5.0   44.70   4.02  7.50  38.13 n/a   0.000
*
*   DUHYD           0126  1  5.0   44.70   4.02  7.50  38.13 n/a   0.000
   MAJOR SYSTEM:    0126  2  5.0   23.13   3.62  7.50  38.13 n/a   0.000
   MINOR SYSTEM:    0126  3  5.0   21.57   0.40  6.25  38.13 n/a   0.000
*
*   READ STORM      15.0
   [ Ptot= 88.80 mm ]
   fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1002  1  5.0   43.20   3.63  6.50  44.92 0.51   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.40]
*
*   SHIFT[  2: 1002] 0606  1  5.0   43.20   3.63  7.75  44.92 n/a   0.000
   [SHIFT= 79.2 min]
*
*   READ STORM      15.0
```

[Ptot= 88.80 mm]
 fname :
 C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1072  1  5.0   12.53   0.75  6.67  37.71 0.42   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
*
*   ADD [ 1072+ 0606] 0804  3  5.0   55.73   3.87  7.75  43.30 n/a   0.000
*
*   ADD [ 0126+ 0804] 8041  3  5.0   78.86   6.67  7.58  41.79 n/a   0.000
*
*   CHANNEL[  2: 8041] 0604  1  5.0   78.86   6.44  7.67  41.78 n/a   0.000
*
*   READ STORM      15.0
   [ Ptot= 88.80 mm ]
   fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1001  1  5.0   50.05   2.36  6.83  37.35 0.42   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
*
*   CHANNEL[  2: 1001] 0600  1  5.0   50.05   2.36  6.92  37.35 n/a   0.000
*
*   READ STORM      15.0
   [ Ptot= 88.80 mm ]
   fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
 remark: 25yr 12hr 15min SCS

```
*
** CALIB NASHYD      1071  1  5.0   23.31   0.79  6.92  29.29 0.33   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
*   ADD [ 1071+ 0600] 0805  3  5.0   73.36   3.15  6.92  34.78 n/a   0.000
*
*   ADD [ 0604+ 0805] 0806  3  5.0  152.22   8.54  7.58  38.41 n/a   0.000
*
*   CHANNEL[  2: 0806] 0601  1  5.0  152.22   8.60  7.67  38.41 n/a   0.000
*
*   ADD [ 1062+ 0601] 8021  3  5.0  157.48   8.68  7.67  37.92 n/a   0.000
```

```

*
CHANNEL[ 2: 8021] 0602 1 5.0 157.48 8.73 7.67 37.92 n/a 0.000
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.32 6.75 29.01 0.33 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.81 6.58 50.42 0.57 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.56 6.25 51.98 0.59 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 2.69 6.25 44.25 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 181.62 9.07 7.67 38.76 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 190.70 9.27 7.67 39.32 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 190.70 9.21 7.67 39.32 n/a 0.000
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-

```

```

f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.24 6.92 45.17 0.51 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 195.08 9.36 7.67 39.45 n/a 0.000
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 9041 1 5.0 6.51 0.38 6.58 35.23 0.40 0.000
[CN=69.9 ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608 1 5.0 21.57 0.40 6.58 38.13 n/a 0.000
*
ADD [ 0608+ 9041] 0129 3 5.0 28.08 0.78 6.58 37.46 n/a 0.000
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 1.50 6.25 63.54 0.72 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 0129+ 2043] 0131 3 5.0 35.60 2.05 6.25 42.97 n/a 0.000
*
READ STORM 15.0
[ Ptot= 88.80 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.32 6.25 65.00 0.73 0.000
[I%=35.0:S%= 2.00]
*

```

```

*      ADD [ 1041+ 0131] 0816 3 5.0 42.01 3.37 6.25 46.33 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
*
* * CALIB NASHYD 1074 1 5.0 6.00 0.41 6.50 37.05 0.42 0.000
* [CN=73.8 ]
* [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.37 6.67 37.05 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
*
* * CALIB NASHYD 2082 1 5.0 2.98 0.17 6.75 38.29 0.43 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.54 6.75 37.46 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.54 6.75 37.46 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
*
* * CALIB NASHYD 1075 1 5.0 5.30 0.42 6.50 40.81 0.46 0.000
* [CN=76.2 ]
* [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.39 6.67 40.81 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-

```

```

f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
* * CALIB NASHYD 1081 1 5.0 18.64 1.06 6.75 38.64 0.44 0.000
* [CN=74.9 ]
* [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813 3 5.0 27.62 1.60 6.75 38.26 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 32.92 1.98 6.75 38.67 n/a 0.000
*
* CHANNEL[ 2: 0813] 0610 1 5.0 32.92 1.93 6.83 38.66 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
*
* * CALIB STANDHYD 1042 1 5.0 2.09 0.48 6.25 65.00 0.73 0.000
* [IX=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 35.01 1.99 6.83 40.24 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 35.01 1.92 6.92 40.23 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-
f2b6-49ac-9718-b
*      remark: 25yr 12hr 15min SCS
*
*
* * CALIB STANDHYD 1032 1 5.0 1.68 0.39 6.25 65.00 0.73 0.000
* [IX=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.97 6.92 41.36 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 78.70 4.44 6.25 44.01 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 78.70 4.12 6.33 44.01 n/a 0.000
*
*      READ STORM 15.0
*      [ Ptot= 88.80 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-

```

f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.29 6.25 41.13 0.46 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.34 6.67 27.02 0.30 0.000
[CN=60.3]
[N = 3.0:Tp 0.50]

*
PIPE [2: 1061] 0701 1 5.0 8.33 0.34 6.67 27.02 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 2.55 6.25 65.00 0.73 0.000
[I%=35.0:S%= 2.00]

*
ADD [1031+ 0612] 0803 3 5.0 91.30 6.60 6.25 46.91 n/a 0.000

*
ADD [0803+ 0701] 0803 1 5.0 99.63 6.73 6.25 45.25 n/a 0.000

*
ADD [0803+ 8031] 0803 3 5.0 294.71 11.63 7.67 41.41 n/a 0.000

*
ADD [0803+ 0901] 0803 1 5.0 301.51 11.79 6.25 41.40 n/a 0.000

** Reservoir
OUTFLOW: 0501 1 5.0 301.51 9.83 7.92 41.40 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.04 6.42 42.80 0.48 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.08 6.25 41.20 0.46 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.57 6.25 41.25 0.46 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]

*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.38 6.33 41.15 n/a 0.000

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.78 6.25 67.57 0.76 0.000
[I%=40.3:S%= 2.00]

*
READ STORM 15.0
[Ptot= 88.80 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\5370474a-f2b6-49ac-9718-b
remark: 25yr 12hr 15min SCS

```

*
* CALIB STANDHYD      1013  1  5.0    2.49    0.61  6.25  68.56 0.77  0.000
  [I%=43.0:S%= 2.00]
*
* ADD [ 1011+ 1012] 0810  3  5.0    3.68    0.85  6.25  64.56 n/a  0.000
*
* ADD [ 0810+ 1013] 0810  1  5.0    6.17    1.46  6.25  66.18 n/a  0.000
*
* ADD [ 0810+ 1014] 0810  3  5.0    6.55    1.48  6.25  64.82 n/a  0.000
*
* ADD [ 0810+ 0501] 0810  1  5.0   308.06    9.92  7.92  41.90 n/a  0.000
*
* ADD [ 0810+ 0605] 0810  3  5.0   311.09    9.95  7.92  41.89 n/a  0.000
*
=====
=====

```

```

V  V  I  SSSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS    U  U  A  A  L
V  V  I  SS    U  U  AAAAA L
V  V  I  SS    U  U  A  A  L
V  V  I  SSSSS  UUUUU  A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
0 0  T  T  H  H  Y  Y  MM MM 0 0
0 0  T  T  H  H  Y  M  M 0 0
000  T  T  H  H  Y  M  M 000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\602
11d42-c9f8-43cf-bba5-188360dc6c64\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\602
11d42-c9f8-43cf-bba5-188360dc6c64\sc

DATE: 07/17/2023

TIME: 12:00:39

USER:

COMMENTS: _____

```

*****
** SIMULATION : S - 50yr 12hr SCS **
*****

```

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

START @ 0.00 hrs

```

-----
READ STORM      15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD      1062  1  5.0    5.26    0.21  6.75  28.11 0.29  0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]

```

```

*
READ STORM      15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD      1004  1  5.0   10.95    1.92  6.25  49.54 0.51  0.000
  [CN=78.0          ]
  [ N = 3.0:Tp 0.15]

```

```

*
READ STORM      15.0
[ Ptot= 97.20 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

```

*
** CALIB NASHYD      1003  1  5.0   14.65    2.22  6.25  44.98 0.46  0.000
  [CN=75.1          ]
  [ N = 3.0:Tp 0.16]

```

```

*
ADD [ 1003+ 1004] 0157  3  5.0   25.60    4.15  6.25  46.93 n/a  0.000

```

```

*
  SHIFT[  2: 0157] 0607 1 5.0 25.60 4.15 7.50 46.93 n/a 0.000
  [SHIFT= 75.8 min]
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 1.26 6.67 40.85 0.42 0.000
  [CN=71.9 ]
  [ N = 3.0:Tp 0.48]
*
  ADD [ 1073+ 0607] 0811 3 5.0 44.70 4.66 7.50 44.33 n/a 0.000
*
  DUHYD 0126 1 5.0 44.70 4.66 7.50 44.33 n/a 0.000
  MAJOR SYSTEM: 0126 2 5.0 24.94 4.26 7.50 44.33 n/a 0.000
  MINOR SYSTEM: 0126 3 5.0 19.76 0.40 6.17 44.33 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1002 1 5.0 43.20 4.19 6.50 51.65 0.53 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.40]
*
  SHIFT[  2: 1002] 0606 1 5.0 43.20 4.19 7.75 51.65 n/a 0.000
  [SHIFT= 79.2 min]
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1072 1 5.0 12.53 0.88 6.67 43.93 0.45 0.000
  [CN=74.7 ]
  [ N = 3.0:Tp 0.50]
*
  ADD [ 1072+ 0606] 0804 3 5.0 55.73 4.47 7.75 49.92 n/a 0.000

```

```

*
  ADD [ 0126+ 0804] 8041 3 5.0 80.67 7.78 7.58 48.19 n/a 0.000
*
  CHANNEL[ 2: 8041] 0604 1 5.0 80.67 7.51 7.67 48.19 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 2.77 6.83 43.47 0.45 0.000
  [CN=73.6 ]
  [ N = 3.0:Tp 0.68]
*
  CHANNEL[ 2: 1001] 0600 1 5.0 50.05 2.76 6.92 43.47 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.94 6.92 34.48 0.35 0.000
  [CN=65.3 ]
  [ N = 3.0:Tp 0.74]
*
  ADD [ 1071+ 0600] 0805 3 5.0 73.36 3.70 6.92 40.61 n/a 0.000
*
  ADD [ 0604+ 0805] 0806 3 5.0 154.03 10.00 7.58 44.58 n/a 0.000
*
  CHANNEL[ 2: 0806] 0601 1 5.0 154.03 10.02 7.67 44.58 n/a 0.000
*
  ADD [ 1062+ 0601] 8021 3 5.0 159.29 10.11 7.67 44.04 n/a 0.000
*
  CHANNEL[ 2: 8021] 0602 1 5.0 159.29 10.18 7.67 44.04 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.37 6.75 34.01 0.35 0.000

```



```

[CN=62.6      ]
[ N = 3.0:Tp 0.60]
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
** CALIB NASHYD          0904 1 5.0   9.08   0.93  6.58  57.54 0.59   0.000
  [CN=81.8      ]
  [ N = 3.0:Tp 0.43]
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD        1021 1 5.0   16.01   2.89  6.25  58.39 0.60   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807 3 5.0   24.14   3.05  6.25  50.18 n/a   0.000
*
  ADD [ 0807+ 0602] 0807 1 5.0  183.43  10.57  7.67  44.85 n/a   0.000
*
  ADD [ 0807+ 0904] 0807 3 5.0  192.51  10.79  7.67  45.44 n/a   0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0  192.51  10.77  7.67  45.44 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD          0902 1 5.0   4.38   0.28  6.92  51.91 0.53   0.000
  [CN=78.4      ]
  [ N = 3.0:Tp 0.72]
*
  ADD [ 0603+ 0902] 8031 3 5.0  196.89  10.94  7.67  45.59 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]

```

```

  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD          9041 1 5.0   6.51   0.44  6.58  41.01 0.42   0.000
  [CN=69.9      ]
  [ N = 3.0:Tp 0.46]
*
  CHANNEL[ 2: 0126] 0608 1 5.0  19.76   0.40  7.42  44.33 n/a   0.000
*
  ADD [ 0608+ 9041] 0129 3 5.0  26.27   0.84  6.58  43.51 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD        2043 1 5.0   7.52   1.70  6.25  71.10 0.73   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 0129+ 2043] 0131 3 5.0  33.79   2.30  6.25  49.65 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD        1041 1 5.0   6.41   1.49  6.25  72.66 0.75   0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0131] 0816 3 5.0  40.20   3.79  6.25  53.32 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 97.20 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
  remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD          1074 1 5.0   6.00   0.48  6.50  43.18 0.44   0.000
  [CN=73.8      ]

```

```

* [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.44 6.67 43.18 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB NASHYD 2082 1 5.0 2.98 0.19 6.75 44.52 0.46 0.000
* [CN=74.6 ]
* [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.63 6.67 43.63 n/a 0.000
*
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.63 6.75 43.62 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB NASHYD 1075 1 5.0 5.30 0.49 6.50 47.25 0.49 0.000
* [CN=76.2 ]
* [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.45 6.67 47.25 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB NASHYD 1081 1 5.0 18.64 1.24 6.75 44.91 0.46 0.000
* [CN=74.9 ]
* [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118] 0813 3 5.0 27.62 1.87 6.75 44.49 n/a 0.000
*
* ADD [ 0813+ 0609] 0813 1 5.0 32.92 2.31 6.75 44.94 n/a 0.000
*

```

```

CHANNEL[ 2: 0813] 0610 1 5.0 32.92 2.26 6.83 44.93 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.54 6.25 72.66 0.75 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610] 0814 3 5.0 35.01 2.33 6.83 46.59 n/a 0.000
*
* CHANNEL[ 2: 0814] 0611 1 5.0 35.01 2.27 6.92 46.58 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.43 6.25 72.66 0.75 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815 3 5.0 36.69 2.31 6.92 47.78 n/a 0.000
*
* ADD [ 0815+ 0816] 0815 1 5.0 76.89 5.05 6.25 50.67 n/a 0.000
*
* CHANNEL[ 2: 0815] 0612 1 5.0 76.89 4.69 6.33 50.67 n/a 0.000
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-
ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.46 6.25 46.75 0.48 0.000
* [CN=84.1 ]
* [ N = 3.0:Tp 0.05]
*
* READ STORM 15.0
* [ Ptot= 97.20 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-

```

ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.41 6.67 31.76 0.33 0.000
[CN=60.3]
[N = 3.0:Tp 0.50]
*
* PIPE [2: 1061] 0701 1 5.0 8.33 0.40 6.67 31.76 n/a 0.000
*
* READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 2.87 6.25 72.66 0.75 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1031+ 0612] 0803 3 5.0 89.49 7.51 6.25 53.77 n/a 0.000
*
* ADD [0803+ 0701] 0803 1 5.0 97.82 7.67 6.25 51.89 n/a 0.000
*
* ADD [0803+ 8031] 0803 3 5.0 294.71 13.37 7.67 47.68 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 13.56 6.25 47.66 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 12.10 7.83 47.65 n/a 0.000
*
* READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.04 6.42 49.29 0.51 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
* READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.09 6.25 47.44 0.49 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]
*

READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.65 6.25 47.51 0.49 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*

* CHANNEL[2: 0903] 0605 1 5.0 3.03 0.45 6.33 47.41 n/a 0.000
*

READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.87 6.25 75.34 0.78 0.000
[I%=40.3:S%= 2.00]
*

READ STORM 15.0
[Ptot= 97.20 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\b6fabae2-ed3d-4a96-8f67-0
remark: 50yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.68 6.25 76.36 0.79 0.000
[I%=43.0:S%= 2.00]
*

* ADD [1011+ 1012] 0810 3 5.0 3.68 0.96 6.25 72.15 n/a 0.000
*

* ADD [0810+ 1013] 0810 1 5.0 6.17 1.64 6.25 73.85 n/a 0.000
*

* ADD [0810+ 1014] 0810 3 5.0 6.55 1.67 6.25 72.43 n/a 0.000
*

* ADD [0810+ 0501] 0810 1 5.0 308.06 12.20 7.83 48.18 n/a 0.000
*

ADD [0810+ 0605] 0810 3 5.0 311.09 12.24 7.83 48.17 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\77f
39a07-ed70-4cc2-b0e6-cc42e50ecf49\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\77f
39a07-ed70-4cc2-b0e6-cc42e50ecf49\sc

DATE: 07/17/2023 TIME: 12:00:40

USER:

COMMENTS: _____

** SIMULATION : T - 100yr 12hr SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD 1062 1 5.0 5.26 0.25 6.75 33.96 0.31 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 2.26 6.25 58.29 0.54 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 2.64 6.25 53.32 0.49 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]
*
ADD [1003+ 1004] 0157 3 5.0 25.60 4.91 6.25 55.45 n/a 0.000
*
SHIFT[2: 0157] 0607 1 5.0 25.60 4.91 7.50 55.45 n/a 0.000
[SHIFT= 75.8 min]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*

```

** CALIB NASHYD      1073  1  5.0   19.10   1.52  6.58  48.76 0.45   0.000
   [CN=71.9          ]
   [ N = 3.0:Tp 0.48]
*
* ADD [ 1073+ 0607] 0811  3  5.0   44.70   5.52  7.50  52.59 n/a   0.000
*
* DUHYD              0126  1  5.0   44.70   5.52  7.50  52.59 n/a   0.000
*   MAJOR SYSTEM:    0126  2  5.0   26.77   5.12  7.50  52.59 n/a   0.000
*   MINOR SYSTEM:    0126  3  5.0   17.93   0.40  6.08  52.59 n/a   0.000
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD      1002  1  5.0   43.20   4.93  6.50  60.55 0.56   0.000
   [CN=78.4          ]
   [ N = 3.0:Tp 0.40]
*
* SHIFT[ 2: 1002] 0606  1  5.0   43.20   4.93  7.75  60.55 n/a   0.000
*   [SHIFT= 79.2 min]
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0   12.53   1.05  6.67  52.22 0.48   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
*
* ADD [ 1072+ 0606] 0804  3  5.0   55.73   5.25  7.75  58.68 n/a   0.000
*
* ADD [ 0126+ 0804] 8041  3  5.0   82.50   9.26  7.58  56.70 n/a   0.000
*
* CHANNEL[ 2: 8041] 0604  1  5.0   82.50   8.94  7.67  56.70 n/a   0.000
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

```

```

*
** CALIB NASHYD      1001  1  5.0   50.05   3.31  6.83  51.65 0.48   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
*
* CHANNEL[ 2: 1001] 0600  1  5.0   50.05   3.30  6.92  51.65 n/a   0.000
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD      1071  1  5.0   23.31   1.14  6.92  41.49 0.38   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
* ADD [ 1071+ 0600] 0805  3  5.0   73.36   4.44  6.92  48.42 n/a   0.000
*
* ADD [ 0604+ 0805] 0806  3  5.0  155.86  11.96  7.58  52.80 n/a   0.000
*
* CHANNEL[ 2: 0806] 0601  1  5.0  155.86  11.92  7.67  52.80 n/a   0.000
*
* ADD [ 1062+ 0601] 8021  3  5.0  161.12  12.04  7.67  52.19 n/a   0.000
*
* CHANNEL[ 2: 8021] 0602  1  5.0  161.12  12.12  7.67  52.19 n/a   0.000
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD      1063  1  5.0    8.13   0.45  6.75  40.76 0.38   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
* READ STORM          15.0
*   [ Ptot=108.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08   1.08  6.50  66.90 0.62   0.000

```

```

      [CN=81.8      ]
      [ N = 3.0:Tp 0.43]
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD      1021 1 5.0 16.01 3.34 6.25 66.84 0.62 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1021+ 1063] 0807 3 5.0 24.14 3.53 6.25 58.06 n/a 0.000
*
  ADD [ 0807+ 0602] 0807 1 5.0 185.26 12.57 7.67 52.95 n/a 0.000
*
  ADD [ 0807+ 0904] 0807 3 5.0 194.34 12.83 7.67 53.60 n/a 0.000
*
  CHANNEL[ 2: 0807] 0603 1 5.0 194.34 12.85 7.67 53.60 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD        0902 1 5.0 4.38 0.33 6.92 60.81 0.56 0.000
  [CN=78.4      ]
  [ N = 3.0:Tp 0.72]
*
  ADD [ 0603+ 0902] 8031 3 5.0 198.72 13.05 7.67 53.76 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD        9041 1 5.0 6.51 0.53 6.58 48.74 0.45 0.000
  [CN=69.9      ]
  [ N = 3.0:Tp 0.46]
*
  CHANNEL[ 2: 0126] 0608 1 5.0 17.93 0.40 6.67 52.59 n/a 0.000
*

```

```

      ADD [ 0608+ 9041] 0129 3 5.0 24.44 0.93 6.58 51.56 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD      2043 1 5.0 7.52 2.11 6.25 80.95 0.75 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 0129+ 2043] 0131 3 5.0 31.96 2.79 6.25 58.48 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD      1041 1 5.0 6.41 1.85 6.25 82.62 0.77 0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1041+ 0131] 0816 3 5.0 38.37 4.64 6.25 62.51 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD        1074 1 5.0 6.00 0.58 6.50 51.36 0.48 0.000
  [CN=73.8      ]
  [ N = 3.0:Tp 0.40]
*
  CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.54 6.67 51.36 n/a 0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*

```

```

* CALIB NASHYD      2082  1  5.0    2.98    0.23  6.75  52.83 0.49  0.000
  [CN=74.6          ]
  [ N = 3.0:Tp 0.56]
*
  ADD [ 0115+ 2082] 0116  3  5.0    8.98    0.77  6.67  51.85 n/a  0.000
*
  CHANNEL[ 2: 0116] 0118  1  5.0    8.98    0.76  6.75  51.84 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD      1075  1  5.0    5.30    0.58  6.50  55.80 0.52  0.000
  [CN=76.2          ]
  [ N = 3.0:Tp 0.38]
*
  CHANNEL[ 2: 1075] 0609  1  5.0    5.30    0.53  6.67  55.80 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD      1081  1  5.0   18.64    1.48  6.67  53.26 0.49  0.000
  [CN=74.9          ]
  [ N = 3.0:Tp 0.55]
*
  ADD [ 1081+ 0118] 0813  3  5.0   27.62    2.24  6.75  52.80 n/a  0.000
*
  ADD [ 0813+ 0609] 0813  1  5.0   32.92    2.76  6.67  53.28 n/a  0.000
*
  CHANNEL[ 2: 0813] 0610  1  5.0   32.92    2.69  6.83  53.28 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD    1042  1  5.0    2.09    0.62  6.25  82.62 0.77  0.000
  [I%=35.0:S%= 2.00]

```

```

*
  ADD [ 1042+ 0610] 0814  3  5.0   35.01    2.78  6.75  55.03 n/a  0.000
*
  CHANNEL[ 2: 0814] 0611  1  5.0   35.01    2.68  6.92  55.03 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD    1032  1  5.0    1.68    0.50  6.25  82.62 0.77  0.000
  [I%=35.0:S%= 2.00]
*
  ADD [ 1032+ 0611] 0815  3  5.0   36.69    2.74  6.92  56.29 n/a  0.000
*
  ADD [ 0815+ 0816] 0815  1  5.0   75.06    6.08  6.25  59.47 n/a  0.000
*
  CHANNEL[ 2: 0815] 0612  1  5.0   75.06    5.72  6.25  59.47 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD      0901  1  5.0    6.80    1.67  6.25  54.10 0.50  0.000
  [CN=84.1          ]
  [ N = 3.0:Tp 0.05]
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-
1b8f-4863-98dc-f
  remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD      1061  1  5.0    8.33    0.49  6.67  38.19 0.35  0.000
  [CN=60.3          ]
  [ N = 3.0:Tp 0.50]
*
  PIPE [ 2: 1061] 0701  1  5.0    8.33    0.49  6.67  38.19 n/a  0.000
*
  READ STORM          15.0
  [ Ptot=108.00 mm ]

```

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 3.30 6.25 82.62 0.77 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1031+ 0612] 0803 3 5.0 87.66 9.02 6.25 62.80 n/a 0.000
*
* ADD [0803+ 0701] 0803 1 5.0 95.99 9.22 6.25 60.66 n/a 0.000
*
* ADD [0803+ 8031] 0803 3 5.0 294.71 15.81 7.67 56.01 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 16.23 6.25 55.97 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 14.56 7.75 55.96 n/a 0.000
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.05 6.42 57.89 0.54 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.10 6.25 55.72 0.52 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.76 6.25 55.80 0.52 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.53 6.33 55.69 n/a 0.000
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.99 6.25 85.42 0.79 0.000
[I%=40.3:S%= 2.00]
*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\1e4ef505-1b8f-4863-98dc-f
remark: 100yr 12hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.77 6.25 86.48 0.80 0.000
[I%=43.0:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 1.10 6.25 82.03 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 1.87 6.25 83.83 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 1.91 6.25 82.32 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 14.67 7.75 56.52 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 14.72 7.75 56.51 n/a 0.000
*
=====

V V I SSSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U AAAAA L
V V I SS U U A A L
W I SSSSS UUUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fd140-2789-42e6-8478-cbf7bad2c666\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fd140-2789-42e6-8478-cbf7bad2c666\sc

DATE: 07/17/2023 TIME: 12:00:41

USER:

COMMENTS: _____

** SIMULATION : U - 2yr 24hr SCS **

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

READ STORM	15.0							
[Ptot= 60.00 mm]								
fname :								
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2								
remark: 2yr 24hr 15min SCS								

*
** CALIB NASHYD 1062 1 5.0 5.26 0.07 12.75 11.19 0.19 0.000
[CN=55.8]
[N = 3.0:Tp 0.56]

*
READ STORM 15.0
[Ptot= 60.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1004 1 5.0 10.95 0.74 12.25 22.04 0.37 0.000
[CN=78.0]
[N = 3.0:Tp 0.15]

*
READ STORM 15.0
[Ptot= 60.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1003 1 5.0 14.65 0.80 12.25 19.20 0.32 0.000
[CN=75.1]
[N = 3.0:Tp 0.16]

*
ADD [1003+ 1004] 0157 3 5.0 25.60 1.54 12.25 20.41 n/a 0.000
*
SHIFT[2: 0157] 0607 1 5.0 25.60 1.54 13.50 20.41 n/a 0.000
[SHIFT= 75.8 min]

*
READ STORM 15.0
[Ptot= 60.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

*
** CALIB NASHYD 1073 1 5.0 19.10 0.42 12.67 16.80 0.28 0.000
[CN=71.9]
[N = 3.0:Tp 0.48]

*
ADD [1073+ 0607] 0811 3 5.0 44.70 1.72 13.50 18.87 n/a 0.000
*
DUHYD 0126 1 5.0 44.70 1.72 13.50 18.87 n/a 0.000
MAJOR SYSTEM: 0126 2 5.0 9.67 1.32 13.50 18.87 n/a 0.000
MINOR SYSTEM: 0126 3 5.0 35.03 0.40 12.50 18.87 n/a 0.000

*
READ STORM 15.0
[Ptot= 60.00 mm]

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      1002  1  5.0   43.20   1.59 12.50  23.56 0.39   0.000
[CN=78.4            ]
[ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]   0606  1  5.0   43.20   1.59 13.75  23.56 n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      1072  1  5.0   12.53   0.30 12.67  18.41 0.31   0.000
[CN=74.7            ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606]   0804  3  5.0   55.73   1.70 13.75  22.41 n/a   0.000
*
ADD [ 0126+ 0804]   8041  3  5.0   65.40   2.65 13.58  21.88 n/a   0.000
*
CHANNEL[  2: 8041]   0604  1  5.0   65.40   2.53 13.67  21.88 n/a   0.000
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      1001  1  5.0   50.05   0.95 12.92  18.37 0.31   0.000
[CN=73.6            ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[  2: 1001]   0600  1  5.0   50.05   0.94 13.00  18.37 n/a   0.000
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2

remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      1071  1  5.0   23.31   0.30 13.00  13.70 0.23   0.000
[CN=65.3            ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600]   0805  3  5.0   73.36   1.24 13.00  16.89 n/a   0.000
*
ADD [ 0604+ 0805]   0806  3  5.0  138.76   3.40 13.67  19.24 n/a   0.000
*
CHANNEL[  2: 0806]   0601  1  5.0  138.76   3.42 13.67  19.24 n/a   0.000
*
ADD [ 1062+ 0601]   8021  3  5.0  144.02   3.46 13.67  18.95 n/a   0.000
*
CHANNEL[  2: 8021]   0602  1  5.0  144.02   3.47 13.67  18.95 n/a   0.000
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      1063  1  5.0    8.13   0.13 12.75  14.00 0.23   0.000
[CN=62.6            ]
[ N = 3.0:Tp 0.60]
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
** CALIB NASHYD      0904  1  5.0    9.08   0.38 12.58  27.46 0.46   0.000
[CN=81.8            ]
[ N = 3.0:Tp 0.43]
*
READ STORM          15.0
[ Ptot= 60.00 mm ]
fname :
```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
remark: 2yr 24hr 15min SCS

```
*
* CALIB STANDHYD      1021  1  5.0   16.01   1.29 12.25  31.33 0.52   0.000
```

```

* [I%=35.0:S%= 2.00]
* ADD [ 1021+ 1063] 0807 3 5.0 24.14 1.33 12.25 25.49 n/a 0.000
* ADD [ 0807+ 0602] 0807 1 5.0 168.16 3.64 13.67 19.89 n/a 0.000
* ADD [ 0807+ 0904] 0807 3 5.0 177.24 3.74 13.67 20.27 n/a 0.000
* CHANNEL[ 2: 0807] 0603 1 5.0 177.24 3.65 13.75 20.27 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

** CALIB NASHYD 0902 1 5.0 4.38 0.11 12.92 23.78 0.40 0.000
  [CN=78.4 ]
  [ N = 3.0:Tp 0.72]
* ADD [ 0603+ 0902] 8031 3 5.0 181.62 3.72 13.75 20.36 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

* ** CALIB NASHYD 9041 1 5.0 6.51 0.16 12.58 17.49 0.29 0.000
  [CN=69.9 ]
  [ N = 3.0:Tp 0.46]
* CHANNEL[ 2: 0126] 0608 1 5.0 35.03 0.40 12.83 18.87 n/a 0.000
* ADD [ 0608+ 9041] 0129 3 5.0 41.54 0.55 12.67 18.65 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

* CALIB STANDHYD 2043 1 5.0 7.52 0.79 12.25 38.56 0.64 0.000
  [I%=35.0:S%= 2.00]

```

```

* ADD [ 0129+ 2043] 0131 3 5.0 49.06 0.98 12.25 21.71 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

* CALIB STANDHYD 1041 1 5.0 6.41 0.70 12.25 39.61 0.66 0.000
  [I%=35.0:S%= 2.00]
* ADD [ 1041+ 0131] 0816 3 5.0 55.47 1.68 12.25 23.77 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

* CALIB NASHYD 1074 1 5.0 6.00 0.16 12.58 18.09 0.30 0.000
  [CN=73.8 ]
  [ N = 3.0:Tp 0.40]
* CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.14 12.75 18.08 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

* CALIB NASHYD 2082 1 5.0 2.98 0.07 12.75 18.91 0.32 0.000
  [CN=74.6 ]
  [ N = 3.0:Tp 0.56]
* ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.21 12.75 18.36 n/a 0.000
* CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.20 12.83 18.36 n/a 0.000
* READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

```

```

710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          1075  1  5.0    5.30    0.18 12.50   20.62 0.34   0.000
  [CN=76.2              ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075]    0609  1  5.0    5.30    0.15 12.75   20.62 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          1081  1  5.0    18.64    0.43 12.75   19.13 0.32   0.000
  [CN=74.9              ]
  [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118]    0813  3  5.0    27.62    0.63 12.75   18.88 n/a   0.000
*
* ADD [ 0813+ 0609]    0813  1  5.0    32.92    0.78 12.75   19.16 n/a   0.000
*
* CHANNEL[ 2: 0813]    0610  1  5.0    32.92    0.77 12.83   19.16 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD        1042  1  5.0     2.09    0.23 12.25   39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1042+ 0610]    0814  3  5.0    35.01    0.81 12.83   20.38 n/a   0.000
*
* CHANNEL[ 2: 0814]    0611  1  5.0    35.01    0.80 12.92   20.37 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD        1032  1  5.0     1.68    0.19 12.25   39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611]    0815  3  5.0    36.69    0.82 12.92   21.25 n/a   0.000
*
* ADD [ 0815+ 0816]    0815  1  5.0    92.16    2.13 12.25   22.77 n/a   0.000
*
* CHANNEL[ 2: 0815]    0612  1  5.0    92.16    1.96 12.33   22.77 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          0901  1  5.0     6.80    0.67 12.25   22.84 0.38   0.000
  [CN=84.1              ]
  [ N = 3.0:Tp 0.05]
*
* READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD          1061  1  5.0     8.33    0.13 12.67   12.87 0.21   0.000
  [CN=60.3              ]
  [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061]      0701  1  5.0     8.33    0.13 12.75   12.87 n/a   0.000
*
  READ STORM              15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD        1031  1  5.0    12.60    1.33 12.25   39.61 0.66   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612]    0803  3  5.0   104.76    3.21 12.25   24.80 n/a   0.000
*
* ADD [ 0803+ 0701]    0803  1  5.0   113.09    3.25 12.25   23.92 n/a   0.000

```

```

*
  ADD [ 0803+ 8031] 0803 3 5.0 294.71 4.87 13.75 21.72 n/a 0.000
*
  ADD [ 0803+ 0901] 0803 1 5.0 301.51 5.53 12.25 21.75 n/a 0.000
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 2.26 14.50 21.74 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.02 12.42 22.36 0.37 0.000
  [CN=76.0 ]
  [ N = 3.0:Tp 0.32]
*
  READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.04 12.25 21.53 0.36 0.000
  [CN=76.0 ]
  [ N = 3.0:Tp 0.09]
*
  READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.27 12.25 21.46 0.36 0.000
  [CN=77.6 ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.15 12.33 21.35 n/a 0.000
*
  READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-

```

```

710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.39 12.25 41.72 0.70 0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM 15.0
  [ Ptot= 60.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\c2fd0008-
710c-4a1f-b96f-2
  remark: 2yr 24hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.31 12.25 42.55 0.71 0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012] 0810 3 5.0 3.68 0.43 12.25 39.41 n/a 0.000
*
  ADD [ 0810+ 1013] 0810 1 5.0 6.17 0.74 12.25 40.68 n/a 0.000
*
  ADD [ 0810+ 1014] 0810 3 5.0 6.55 0.75 12.25 39.61 n/a 0.000
*
  ADD [ 0810+ 0501] 0810 1 5.0 308.06 2.29 14.50 22.12 n/a 0.000
*
  ADD [ 0810+ 0605] 0810 3 5.0 311.09 2.30 14.50 22.12 n/a 0.000
*
  FINISH

=====

=====

=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y M M O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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```

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voim.dat

Output filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\4c3cc551-1e18-4ad6-9137-2928e4ee6334\sc

Summary filename:

C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\4c3cc551-1e18-4ad6-9137-2928e4ee6334\sc

DATE: 07/17/2023

TIME: 12:00:39

USER:

COMMENTS: _____

** SIMULATION : V- 5yr 24hr SCS **

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

START @ 0.00 hrs

READ STORM 15.0

[Ptot= 79.20 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0

remark: 5yr 24hr 15min SCS

** CALIB NASHYD	1062	1	5.0	5.26	0.12	12.75	19.24	0.24	0.000
[CN=55.8									
[N = 3.0:Tp 0.56]									

*

READ STORM 15.0

[Ptot= 79.20 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0

remark: 5yr 24hr 15min SCS

*

** CALIB NASHYD	1004	1	5.0	10.95	1.21	12.25	35.62	0.45	0.000
[CN=78.0									
[N = 3.0:Tp 0.15]									

*

READ STORM 15.0

[Ptot= 79.20 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0

remark: 5yr 24hr 15min SCS

*

** CALIB NASHYD	1003	1	5.0	14.65	1.36	12.25	31.83	0.40	0.000
[CN=75.1									
[N = 3.0:Tp 0.16]									

*

ADD [1003+ 1004]	0157	3	5.0	25.60	2.57	12.25	33.45	n/a	0.000
-------------------	------	---	-----	-------	------	-------	-------	-----	-------

*

SHIFT[2: 0157]	0607	1	5.0	25.60	2.57	13.50	33.45	n/a	0.000
[SHIFT= 75.8 min]									

*

READ STORM 15.0

[Ptot= 79.20 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0

remark: 5yr 24hr 15min SCS

*

** CALIB NASHYD	1073	1	5.0	19.10	0.74	12.67	28.49	0.36	0.000
[CN=71.9									
[N = 3.0:Tp 0.48]									

*

ADD [1073+ 0607]	0811	3	5.0	44.70	2.88	13.50	31.33	n/a	0.000
-------------------	------	---	-----	-------	------	-------	-------	-----	-------

*

DUHYD	0126	1	5.0	44.70	2.88	13.50	31.33	n/a	0.000
MAJOR SYSTEM:	0126	2	5.0	15.97	2.48	13.50	31.33	n/a	0.000
MINOR SYSTEM:	0126	3	5.0	28.73	0.40	12.25	31.33	n/a	0.000

*

READ STORM 15.0

[Ptot= 79.20 mm]

fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0

remark: 5yr 24hr 15min SCS

*

** CALIB NASHYD	1002	1	5.0	43.20	2.58	12.50	37.47	0.47	0.000
-----------------	------	---	-----	-------	------	-------	-------	------	-------

```

[CN=78.4      ]
[ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002]  0606  1  5.0   43.20    2.58 13.75  37.47  n/a   0.000
[SHIFT= 79.2 min]
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD            1072  1  5.0   12.53    0.52 12.67  30.88 0.39   0.000
[CN=74.7      ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606]  0804  3  5.0   55.73    2.75 13.75  35.99  n/a   0.000
*
ADD [ 0126+ 0804]  8041  3  5.0   71.70    4.63 13.58  34.95  n/a   0.000
*
CHANNEL[ 2: 8041]  0604  1  5.0   71.70    4.45 13.67  34.95  n/a   0.000
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD            1001  1  5.0   50.05    1.63 12.83  30.63 0.39   0.000
[CN=73.6      ]
[ N = 3.0:Tp 0.68]
*
CHANNEL[ 2: 1001]  0600  1  5.0   50.05    1.62 12.92  30.63  n/a   0.000
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD            1071  1  5.0   23.31    0.54 12.92  23.68 0.30   0.000
[CN=65.3      ]
[ N = 3.0:Tp 0.74]
*

```

```

ADD [ 1071+ 0600]  0805  3  5.0   73.36    2.16 12.92  28.42  n/a   0.000
*
ADD [ 0604+ 0805]  0806  3  5.0  145.06    5.90 13.67  31.65  n/a   0.000
*
CHANNEL[ 2: 0806]  0601  1  5.0  145.06    5.96 13.67  31.65  n/a   0.000
*
ADD [ 1062+ 0601]  8021  3  5.0  150.32    6.01 13.67  31.21  n/a   0.000
*
CHANNEL[ 2: 8021]  0602  1  5.0  150.32    6.05 13.67  31.21  n/a   0.000
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD            1063  1  5.0    8.13    0.22 12.75  23.62 0.30   0.000
[CN=62.6      ]
[ N = 3.0:Tp 0.60]
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD            0904  1  5.0    9.08    0.59 12.58  42.48 0.54   0.000
[CN=81.8      ]
[ N = 3.0:Tp 0.43]
*
READ STORM                15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD            1021  1  5.0   16.01    1.96 12.25  44.85 0.57   0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063]  0807  3  5.0   24.14    2.05 12.25  37.70  n/a   0.000
*
ADD [ 0807+ 0602]  0807  1  5.0  174.46    6.30 13.67  32.11  n/a   0.000
*
ADD [ 0807+ 0904]  0807  3  5.0  183.54    6.45 13.67  32.62  n/a   0.000

```

```

*
CHANNEL[ 2: 0807] 0603 1 5.0 183.54 6.32 13.67 32.62 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

**
** CALIB NASHYD 0902 1 5.0 4.38 0.17 12.92 37.71 0.48 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 187.92 6.43 13.67 32.74 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
** CALIB NASHYD 9041 1 5.0 6.51 0.26 12.58 28.93 0.37 0.000
[CN=69.9 ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608 1 5.0 28.73 0.40 12.67 31.33 n/a 0.000
*
ADD [ 0608+ 9041] 0129 3 5.0 35.24 0.66 12.58 30.89 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 1.15 12.25 55.02 0.69 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 0129+ 2043] 0131 3 5.0 42.76 1.54 12.25 35.13 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-

```

```

9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.01 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0131] 0816 3 5.0 49.17 2.56 12.25 37.90 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.29 12.50 30.34 0.38 0.000
[CN=73.8 ]
[ N = 3.0:Tp 0.40]
*
CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.26 12.75 30.33 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.12 12.75 31.44 0.40 0.000
[CN=74.6 ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.37 12.75 30.70 n/a 0.000
*
CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.37 12.83 30.70 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.29 12.50 33.71 0.43 0.000
[CN=76.2 ]
[ N = 3.0:Tp 0.38]

```



```

*
CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.26 12.67 33.71 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 0.74 12.75 31.76 0.40 0.000
[CN=74.9 ]
[ N = 3.0:Tp 0.55]
*
ADD [ 1081+ 0118] 0813 3 5.0 27.62 1.10 12.75 31.41 n/a 0.000
*
ADD [ 0813+ 0609] 0813 1 5.0 32.92 1.36 12.75 31.78 n/a 0.000
*
CHANNEL[ 2: 0813] 0610 1 5.0 32.92 1.33 12.83 31.78 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.34 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1042+ 0610] 0814 3 5.0 35.01 1.38 12.83 33.25 n/a 0.000
*
CHANNEL[ 2: 0814] 0611 1 5.0 35.01 1.35 12.92 33.24 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.27 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.38 12.92 34.30 n/a 0.000
*
ADD [ 0815+ 0816] 0815 1 5.0 85.86 3.30 12.25 36.36 n/a 0.000

```

```

*
CHANNEL[ 2: 0815] 0612 1 5.0 85.86 3.09 12.33 36.36 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.01 12.25 34.84 0.44 0.000
[CN=84.1 ]
[ N = 3.0:Tp 0.05]
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.23 12.67 21.91 0.28 0.000
[CN=60.3 ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701 1 5.0 8.33 0.23 12.67 21.91 n/a 0.000
*
READ STORM 15.0
[ Ptot= 79.20 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-
9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 1.94 12.25 56.36 0.71 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1031+ 0612] 0803 3 5.0 98.46 4.89 12.25 38.92 n/a 0.000
*
ADD [ 0803+ 0701] 0803 1 5.0 106.79 4.97 12.25 37.59 n/a 0.000
*
ADD [ 0803+ 8031] 0803 3 5.0 294.71 8.08 13.67 34.50 n/a 0.000
*
ADD [ 0803+ 0901] 0803 1 5.0 301.51 8.69 12.25 34.51 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 4.73 14.25 34.50 n/a 0.000

```

*
READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 12.42 35.64 0.45 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.06 12.25 34.31 0.43 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]
*
READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB NASHYD 0903 1 5.0 3.03 0.43 12.25 34.33 0.43 0.000
[CN=77.6]
[N = 3.0:Tp 0.08]
*
CHANNEL[2: 0903] 0605 1 5.0 3.03 0.27 12.33 34.22 n/a 0.000
*
READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 0.56 12.25 58.80 0.74 0.000
[I%=40.3:S%= 2.00]
*

READ STORM 15.0
[Ptot= 79.20 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\43c6369a-9c33-436c-9a5f-0
remark: 5yr 24hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.44 12.25 59.75 0.75 0.000
[I%=43.0:S%= 2.00]
*
ADD [1011+ 1012] 0810 3 5.0 3.68 0.62 12.25 56.01 n/a 0.000
*
ADD [0810+ 1013] 0810 1 5.0 6.17 1.06 12.25 57.52 n/a 0.000
*
ADD [0810+ 1014] 0810 3 5.0 6.55 1.08 12.25 56.25 n/a 0.000
*
ADD [0810+ 0501] 0810 1 5.0 308.06 4.79 14.25 34.96 n/a 0.000
*
ADD [0810+ 0605] 0810 3 5.0 311.09 4.81 14.25 34.96 n/a 0.000
*
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
W I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

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

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\V02\voindat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fo833472-3538-4e0c-a887-b85e21b66bd7\sc

Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fo8

DATE: 07/17/2023 TIME: 12:00:41

USER:

COMMENTS: _____

```

*****
** SIMULATION : W - 10yr 24hr SCS **
*****

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

      START @  0.00 hrs
      -----
READ STORM              15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*

** CALIB NASHYD          1062   1   5.0      5.26      0.16 12.75  26.25 0.28      0.000
[CN=55.8                ]
[ N = 3.0:Tp 0.56]

*

READ STORM              15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

*

** CALIB NASHYD          1004   1   5.0      10.95      1.60 12.25  46.69 0.50      0.000
[CN=78.0                ]
[ N = 3.0:Tp 0.15]

*

READ STORM              15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS

```

```

** CALIB NASHYD          1003  1  5.0   14.65    1.83 12.25  42.26 0.45  0.000
   [CN=75.1              ]
   [ N = 3.0:Tp 0.16]
*
* ADD [ 1003+ 1004] 0157  3  5.0   25.60    3.43 12.25  44.16 n/a  0.000
*
* SHIFT[ 2: 0157] 0607  1  5.0   25.60    3.43 13.50  44.16 n/a  0.000
   [SHIFT= 75.8 min]
*
* READ STORM          15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
   remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD          1073  1  5.0   19.10    1.01 12.58  38.29 0.41  0.000
   [CN=71.9              ]
   [ N = 3.0:Tp 0.48]
*
* ADD [ 1073+ 0607] 0811  3  5.0   44.70    3.84 13.50  41.65 n/a  0.000
*
* DUHYD          0126  1  5.0   44.70    3.84 13.50  41.65 n/a  0.000
   MAJOR SYSTEM: 0126  2  5.0   18.92    3.44 13.50  41.65 n/a  0.000
   MINOR SYSTEM: 0126  3  5.0   25.78    0.40 12.25  41.65 n/a  0.000
*
* READ STORM          15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
   remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD          1002  1  5.0   43.20    3.38 12.50  48.75 0.52  0.000
   [CN=78.4              ]
   [ N = 3.0:Tp 0.40]
*
* SHIFT[ 2: 1002] 0606  1  5.0   43.20    3.38 13.75  48.75 n/a  0.000
   [SHIFT= 79.2 min]
*
* READ STORM          15.0
   [ Ptot= 93.60 mm ]
   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
   remark: 10yr 24hr 15min SCS

```

```

*
** CALIB NASHYD      1072  1  5.0   12.53   0.70 12.67  41.24 0.44   0.000
   [CN=74.7          ]
   [ N = 3.0:Tp 0.50]
*
* ADD [ 1072+ 0606] 0804  3  5.0   55.73   3.61 13.75  47.06 n/a   0.000
*
* ADD [ 0126+ 0804] 8041  3  5.0   74.65   6.25 13.58  45.69 n/a   0.000
*
* CHANNEL[ 2: 8041] 0604  1  5.0   74.65   6.01 13.67  45.68 n/a   0.000
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD      1001  1  5.0   50.05   2.20 12.83  40.82 0.44   0.000
   [CN=73.6          ]
   [ N = 3.0:Tp 0.68]
*
* CHANNEL[ 2: 1001] 0600  1  5.0   50.05   2.19 12.92  40.82 n/a   0.000
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD      1071  1  5.0   23.31   0.74 12.92  32.22 0.34   0.000
   [CN=65.3          ]
   [ N = 3.0:Tp 0.74]
*
* ADD [ 1071+ 0600] 0805  3  5.0   73.36   2.93 12.92  38.09 n/a   0.000
*
* ADD [ 0604+ 0805] 0806  3  5.0  148.01   7.93 13.58  41.92 n/a   0.000
*
* CHANNEL[ 2: 0806] 0601  1  5.0  148.01   8.01 13.67  41.92 n/a   0.000
*
* ADD [ 1062+ 0601] 8021  3  5.0  153.27   8.09 13.67  41.38 n/a   0.000
*
* CHANNEL[ 2: 8021] 0602  1  5.0  153.27   8.14 13.67  41.38 n/a   0.000
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]

```

```

  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD      1063  1  5.0    8.13   0.30 12.75  31.84 0.34   0.000
   [CN=62.6          ]
   [ N = 3.0:Tp 0.60]
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
** CALIB NASHYD      0904  1  5.0    9.08   0.75 12.58  54.47 0.58   0.000
   [CN=81.8          ]
   [ N = 3.0:Tp 0.43]
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD      1021  1  5.0   16.01   2.46 12.25  55.63 0.59   0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1021+ 1063] 0807  3  5.0   24.14   2.58 12.25  47.62 n/a   0.000
*
* ADD [ 0807+ 0602] 0807  1  5.0  177.41   8.46 13.67  42.23 n/a   0.000
*
* ADD [ 0807+ 0904] 0807  3  5.0  186.49   8.64 13.67  42.83 n/a   0.000
*
* CHANNEL[ 2: 0807] 0603  1  5.0  186.49   8.56 13.67  42.83 n/a   0.000
*
* READ STORM          15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD      0902  1  5.0    4.38   0.22 12.92  49.00 0.52   0.000

```

```

[CN=78.4      ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 190.87 8.71 13.67 42.97 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 9041 1 5.0 6.51 0.35 12.58 38.51 0.41 0.000
[CN=69.9      ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608 1 5.0 25.78 0.40 12.58 41.65 n/a 0.000
*
ADD [ 0608+ 9041] 0129 3 5.0 32.29 0.76 12.58 41.01 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB STANDHYD 2043 1 5.0 7.52 1.44 12.25 67.85 0.72 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 0129+ 2043] 0131 3 5.0 39.81 1.97 12.25 46.08 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB STANDHYD 1041 1 5.0 6.41 1.27 12.25 69.36 0.74 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1041+ 0131] 0816 3 5.0 46.22 3.24 12.25 49.31 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :

```

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 1074 1 5.0 6.00 0.39 12.50 40.53 0.43 0.000
[CN=73.8      ]
[ N = 3.0:Tp 0.40]
*
CHANNEL[ 2: 1074] 0115 1 5.0 6.00 0.35 12.67 40.53 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 2082 1 5.0 2.98 0.16 12.75 41.83 0.45 0.000
[CN=74.6      ]
[ N = 3.0:Tp 0.56]
*
ADD [ 0115+ 2082] 0116 3 5.0 8.98 0.50 12.67 40.96 n/a 0.000
*
CHANNEL[ 2: 0116] 0118 1 5.0 8.98 0.50 12.75 40.95 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 1075 1 5.0 5.30 0.39 12.50 44.47 0.48 0.000
[CN=76.2      ]
[ N = 3.0:Tp 0.38]
*
CHANNEL[ 2: 1075] 0609 1 5.0 5.30 0.36 12.67 44.46 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 1081 1 5.0 18.64 0.99 12.67 42.20 0.45 0.000

```

```

[CN=74.9      ]
[ N = 3.0:Tp 0.55]
*
ADD [ 1081+ 0118] 0813 3 5.0 27.62 1.49 12.75 41.79 n/a 0.000
*
ADD [ 0813+ 0609] 0813 1 5.0 32.92 1.84 12.75 42.22 n/a 0.000
*
CHANNEL[ 2: 0813] 0610 1 5.0 32.92 1.79 12.83 42.22 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB STANDHYD 1042 1 5.0 2.09 0.46 12.25 69.36 0.74 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1042+ 0610] 0814 3 5.0 35.01 1.85 12.83 43.84 n/a 0.000
*
CHANNEL[ 2: 0814] 0611 1 5.0 35.01 1.80 12.92 43.84 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB STANDHYD 1032 1 5.0 1.68 0.37 12.25 69.36 0.74 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1032+ 0611] 0815 3 5.0 36.69 1.84 12.92 45.00 n/a 0.000
*
ADD [ 0815+ 0816] 0815 1 5.0 82.91 4.31 12.25 47.41 n/a 0.000
*
CHANNEL[ 2: 0815] 0612 1 5.0 82.91 4.00 12.33 47.40 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 0901 1 5.0 6.80 1.26 12.25 44.33 0.47 0.000

```

```

[CN=84.1      ]
[ N = 3.0:Tp 0.05]
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 1061 1 5.0 8.33 0.32 12.67 29.70 0.32 0.000
[CN=60.3      ]
[ N = 3.0:Tp 0.50]
*
PIPE [ 2: 1061] 0701 1 5.0 8.33 0.32 12.67 29.70 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB STANDHYD 1031 1 5.0 12.60 2.43 12.25 69.36 0.74 0.000
[I%=35.0:S%= 2.00]
*
ADD [ 1031+ 0612] 0803 3 5.0 95.51 6.32 12.25 50.30 n/a 0.000
*
ADD [ 0803+ 0701] 0803 1 5.0 103.84 6.44 12.25 48.65 n/a 0.000
*
ADD [ 0803+ 8031] 0803 3 5.0 294.71 10.80 13.67 44.97 n/a 0.000
*
ADD [ 0803+ 0901] 0803 1 5.0 301.51 11.32 12.25 44.95 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 8.95 13.92 44.95 n/a 0.000
*
READ STORM 15.0
[ Ptot= 93.60 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
remark: 10yr 24hr 15min SCS
*
* CALIB NASHYD 1014 1 5.0 0.38 0.03 12.42 46.49 0.50 0.000
[CN=76.0      ]
[ N = 3.0:Tp 0.32]

```

```

*
  READ STORM              15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD            1012  1  5.0    0.42    0.07 12.25  44.75 0.48    0.000
  [CN=76.0                ]
  [ N = 3.0:Tp 0.00]
*
  READ STORM              15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB NASHYD            0903  1  5.0    3.03    0.55 12.25  44.81 0.48    0.000
  [CN=77.6                ]
  [ N = 3.0:Tp 0.00]
*
  CHANNEL[ 2: 0903]      0605  1  5.0    3.03    0.36 12.33  44.70 n/a    0.000
*
  READ STORM              15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD          1011  1  5.0    3.26    0.75 12.25  72.00 0.77    0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM              15.0
  [ Ptot= 93.60 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\4469a0c5-
2afe-4f8c-bda8-2
  remark: 10yr 24hr 15min SCS

*
* CALIB STANDHYD          1013  1  5.0    2.49    0.59 12.25  73.01 0.78    0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012]      0810  3  5.0    3.68    0.82 12.25  68.89 n/a    0.000

```

```

*
  ADD [ 0810+ 1013]      0810  1  5.0    6.17    1.41 12.25  70.55 n/a    0.000
*
  ADD [ 0810+ 1014]      0810  3  5.0    6.55    1.43 12.25  69.16 n/a    0.000
*
  ADD [ 0810+ 0501]      0810  1  5.0   308.06    9.02 13.92  45.46 n/a    0.000
*
  ADD [ 0810+ 0605]      0810  3  5.0   311.09    9.05 13.92  45.46 n/a    0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
W   I  SSSS  UUUUU A  A  LLLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  M  M  O  O
000  T    T  H  H  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\be5
3b32e-eead-4890-9cf6-ae60cf44bf7d\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\be5
3b32e-eead-4890-9cf6-ae60cf44bf7d\sc

DATE: 07/17/2023 TIME: 12:00:41

USER:

COMMENTS: _____

```

** SIMULATION : X - 25yr 24hr SCS          **
*****

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

START @  0.00 hrs
-----
READ STORM              15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1062  1  5.0    5.26    0.21 12.75  33.96 0.31    0.000
[CN=55.8              ]
[ N = 3.0:Tp 0.56]
*
READ STORM              15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0    10.95    2.00 12.25  58.29 0.54    0.000
[CN=78.0              ]
[ N = 3.0:Tp 0.15]
*
READ STORM              15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0    14.65    2.32 12.25  53.32 0.49    0.000
[CN=75.1              ]
[ N = 3.0:Tp 0.16]
*
ADD [ 1003+ 1004] 0157  3  5.0    25.60    4.32 12.25  55.45 n/a    0.000
*
SHIFT[  2: 0157] 0607  1  5.0    25.60    4.32 13.50  55.45 n/a    0.000
[SHIFT= 75.8 min]
*
READ STORM              15.0

```

```

[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0    19.10    1.30 12.58  48.76 0.45    0.000
[CN=71.9              ]
[ N = 3.0:Tp 0.48]
*
ADD [ 1073+ 0607] 0811  3  5.0    44.70    4.84 13.50  52.59 n/a    0.000
*
DUHYD                0126  1  5.0    44.70    4.84 13.50  52.59 n/a    0.000
MAJOR SYSTEM:        0126  2  5.0    21.10    4.44 13.50  52.59 n/a    0.000
MINOR SYSTEM:        0126  3  5.0    23.60    0.40 12.17  52.59 n/a    0.000
*
READ STORM              15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1002  1  5.0    43.20    4.22 12.50  60.55 0.56    0.000
[CN=78.4              ]
[ N = 3.0:Tp 0.40]
*
SHIFT[  2: 1002] 0606  1  5.0    43.20    4.22 13.75  60.55 n/a    0.000
[SHIFT= 79.2 min]
*
READ STORM              15.0
[ Ptot=108.00 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0    12.53    0.89 12.67  52.22 0.48    0.000
[CN=74.7              ]
[ N = 3.0:Tp 0.50]
*
ADD [ 1072+ 0606] 0804  3  5.0    55.73    4.50 13.75  58.68 n/a    0.000
*
ADD [ 0126+ 0804] 8041  3  5.0    76.83    7.94 13.58  57.00 n/a    0.000
*
CHANNEL[  2: 8041] 0604  1  5.0    76.83    7.65 13.67  57.00 n/a    0.000
*

```


READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1001 1 5.0 50.05 2.81 12.83 51.65 0.48 0.000
[CN=73.6]
[N = 3.0:Tp 0.68]

*
* CHANNEL[2: 1001] 0600 1 5.0 50.05 2.80 12.92 51.65 n/a 0.000

READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 0.96 12.92 41.49 0.38 0.000
[CN=65.3]
[N = 3.0:Tp 0.74]

*
* ADD [1071+ 0600] 0805 3 5.0 73.36 3.76 12.92 48.42 n/a 0.000

*
* ADD [0604+ 0805] 0806 3 5.0 150.19 10.15 13.58 52.81 n/a 0.000

*
* CHANNEL[2: 0806] 0601 1 5.0 150.19 10.18 13.67 52.81 n/a 0.000

*
* ADD [1062+ 0601] 8021 3 5.0 155.45 10.28 13.67 52.17 n/a 0.000

*
* CHANNEL[2: 8021] 0602 1 5.0 155.45 10.35 13.67 52.17 n/a 0.000

READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.38 12.75 40.76 0.38 0.000
[CN=62.6]
[N = 3.0:Tp 0.60]

*
READ STORM 15.0
[Ptot=108.00 mm]

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 0.93 12.58 66.90 0.62 0.000
[CN=81.8]
[N = 3.0:Tp 0.43]

*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 2.98 12.25 66.84 0.62 0.000
[I%=35.0:S%= 2.00]

*
* ADD [1021+ 1063] 0807 3 5.0 24.14 3.14 12.25 58.06 n/a 0.000

*
* ADD [0807+ 0602] 0807 1 5.0 179.59 10.74 13.67 52.96 n/a 0.000

*
* ADD [0807+ 0904] 0807 3 5.0 188.67 10.96 13.67 53.63 n/a 0.000

*
* CHANNEL[2: 0807] 0603 1 5.0 188.67 10.93 13.67 53.63 n/a 0.000

READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.28 12.92 60.81 0.56 0.000
[CN=78.4]
[N = 3.0:Tp 0.72]

*
* ADD [0603+ 0902] 8031 3 5.0 193.05 11.10 13.67 53.80 n/a 0.000

*
READ STORM 15.0
[Ptot=108.00 mm]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

```

*
* CALIB NASHYD          9041  1  5.0    6.51    0.45 12.58  48.74 0.45    0.000
  [CN=69.9              ]
  [ N = 3.0:Tp 0.46]
*
* CHANNEL[ 2: 0126]    0608  1  5.0    23.60    0.40 12.50  52.59 n/a    0.000
*
* ADD [ 0608+ 9041]    0129  3  5.0    30.11    0.85 12.58  51.76 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD        2043  1  5.0    7.52    1.74 12.25  80.95 0.75    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 0129+ 2043]    0131  3  5.0    37.63    2.36 12.25  57.59 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB STANDHYD        1041  1  5.0    6.41    1.66 12.25  82.62 0.77    0.000
  [I%=35.0:S%= 2.00]
*
* ADD [ 1041+ 0131]    0816  3  5.0    44.04    4.02 12.25  61.23 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD          1074  1  5.0    6.00    0.49 12.50  51.36 0.48    0.000
  [CN=73.8              ]
  [ N = 3.0:Tp 0.40]
*
* CHANNEL[ 2: 1074]    0115  1  5.0    6.00    0.45 12.67  51.36 n/a    0.000
*
* READ STORM              15.0

```

```

  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD          2082  1  5.0    2.98    0.20 12.75  52.83 0.49    0.000
  [CN=74.6              ]
  [ N = 3.0:Tp 0.56]
*
* ADD [ 0115+ 2082]    0116  3  5.0    8.98    0.65 12.67  51.85 n/a    0.000
*
* CHANNEL[ 2: 0116]    0118  1  5.0    8.98    0.64 12.75  51.84 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD          1075  1  5.0    5.30    0.50 12.50  55.80 0.52    0.000
  [CN=76.2              ]
  [ N = 3.0:Tp 0.38]
*
* CHANNEL[ 2: 1075]    0609  1  5.0    5.30    0.45 12.67  55.80 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS
*
* CALIB NASHYD          1081  1  5.0    18.64    1.26 12.67  53.26 0.49    0.000
  [CN=74.9              ]
  [ N = 3.0:Tp 0.55]
*
* ADD [ 1081+ 0118]    0813  3  5.0    27.62    1.90 12.75  52.80 n/a    0.000
*
* ADD [ 0813+ 0609]    0813  1  5.0    32.92    2.34 12.67  53.28 n/a    0.000
*
* CHANNEL[ 2: 0813]    0610  1  5.0    32.92    2.29 12.83  53.28 n/a    0.000
*
* READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.56 12.25 82.62 0.77 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 35.01 2.36 12.75 55.03 n/a 0.000
*
* CHANNEL[2: 0814] 0611 1 5.0 35.01 2.29 12.92 55.03 n/a 0.000
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.45 12.25 82.62 0.76 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1032+ 0611] 0815 3 5.0 36.69 2.34 12.92 56.29 n/a 0.000
*
* ADD [0815+ 0816] 0815 1 5.0 80.73 5.33 12.25 58.99 n/a 0.000
*
* CHANNEL[2: 0815] 0612 1 5.0 80.73 4.94 12.25 58.99 n/a 0.000
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 0901 1 5.0 6.80 1.53 12.25 54.10 0.50 0.000
[CN=84.1]
[N = 3.0:Tp 0.05]
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1061 1 5.0 8.33 0.42 12.67 38.19 0.35 0.000

[CN=60.3]
[N = 3.0:Tp 0.50]
*
* PIPE [2: 1061] 0701 1 5.0 8.33 0.41 12.67 38.19 n/a 0.000
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD 1031 1 5.0 12.60 2.93 12.25 82.62 0.77 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1031+ 0612] 0803 3 5.0 93.33 7.87 12.25 62.18 n/a 0.000
*
* ADD [0803+ 0701] 0803 1 5.0 101.66 8.02 12.25 60.21 n/a 0.000
*
* ADD [0803+ 8031] 0803 3 5.0 294.71 13.52 13.67 56.01 n/a 0.000
*
* ADD [0803+ 0901] 0803 1 5.0 301.51 14.19 12.25 55.97 n/a 0.000
*
** Reservoir
OUTFLOW: 0501 1 5.0 301.51 12.30 13.83 55.96 n/a 0.000
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1014 1 5.0 0.38 0.04 12.42 57.89 0.54 0.000
[CN=76.0]
[N = 3.0:Tp 0.32]
*
* READ STORM 15.0
[Ptot=108.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-5db8-4520-ade3-a
remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD 1012 1 5.0 0.42 0.09 12.25 55.72 0.52 0.000
[CN=76.0]
[N = 3.0:Tp 0.09]

```

*
  READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB NASHYD            0903  1  5.0    3.03    0.69 12.25  55.80 0.52    0.000
  [CN=77.6                ]
  [ N = 3.0:Tp 0.08]
*
  CHANNEL[ 2: 0903]    0605  1  5.0    3.03    0.46 12.33  55.69 n/a    0.000
*
  READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD          1011  1  5.0    3.26    0.90 12.25  85.42 0.79    0.000
  [I%=40.3:S%= 2.00]
*
  READ STORM              15.0
  [ Ptot=108.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\ecad9ab7-
5db8-4520-ade3-a
  remark: 25yr 24hr 15min SCS

*
* CALIB STANDHYD          1013  1  5.0    2.49    0.70 12.25  86.48 0.80    0.000
  [I%=43.0:S%= 2.00]
*
  ADD [ 1011+ 1012]    0810  3  5.0    3.68    0.99 12.25  82.03 n/a    0.000
*
  ADD [ 0810+ 1013]    0810  1  5.0    6.17    1.69 12.25  83.83 n/a    0.000
*
  ADD [ 0810+ 1014]    0810  3  5.0    6.55    1.72 12.25  82.32 n/a    0.000
*
  ADD [ 0810+ 0501]    0810  1  5.0   308.06   12.39 13.83  56.52 n/a    0.000
*
  ADD [ 0810+ 0605]    0810  3  5.0   311.09   12.43 13.83  56.51 n/a    0.000
*
=====
=====

```

```

V  V  I  SSSS  U  U  A  L          (v 6.1.2001)
V  V  I  SS   U  U  A  A  L
V  V  I  SS   U  U  AAAAA L
V  V  I  SS   U  U  A  A  L
W   I  SSSS  UUUU  A  A  LLLL

```

```

000  TTTT  TTTT  H  H  Y  Y  M  M  000  TM
O  O  T    T  H  H  Y  Y  MM MM  O  O
O  O  T    T  H  H  Y  Y  M  M  O  O
000  T    T  H  H  Y  Y  M  M  000

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fof
15016-ca8b-4856-a2ff-a6d32b42879f\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\fof
15016-ca8b-4856-a2ff-a6d32b42879f\sc

DATE: 07/17/2023 TIME: 12:00:41

USER:

COMMENTS: _____

```

*****
** SIMULATION : Y - 50yr 24hr SCS      **
*****

```

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

START @ 0.00 hrs

```

READ STORM              15.0
[ Ptot=122.40 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-

```

1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1062  1  5.0    5.26    0.27 12.75  42.28 0.35    0.000
  [CN=55.8          ]
  [ N = 3.0:Tp 0.56]
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1004  1  5.0    10.95    2.42 12.25  70.32 0.57    0.000
  [CN=78.0          ]
  [ N = 3.0:Tp 0.15]
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1003  1  5.0    14.65    2.83 12.25  64.85 0.53    0.000
  [CN=75.1          ]
  [ N = 3.0:Tp 0.16]
*
  ADD [ 1003+ 1004] 0157  3  5.0    25.60    5.25 12.25  67.19 n/a    0.000
*
  SHIFT[ 2: 0157] 0607  1  5.0    25.60    5.25 13.50  67.19 n/a    0.000
  [SHIFT= 75.8 min]
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1073  1  5.0    19.10    1.60 12.58  59.76 0.49    0.000
  [CN=71.9          ]
  [ N = 3.0:Tp 0.48]
*
  ADD [ 1073+ 0607] 0811  3  5.0    44.70    5.88 13.50  64.01 n/a    0.000

```

```

*
  DUHYD               0126  1  5.0    44.70    5.88 13.50  64.01 n/a    0.000
  MAJOR SYSTEM:      0126  2  5.0    22.79    5.48 13.50  64.01 n/a    0.000
  MINOR SYSTEM:      0126  3  5.0    21.91    0.40 12.08  64.01 n/a    0.000
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1002  1  5.0    43.20    5.09 12.50  72.75 0.59    0.000
  [CN=78.4          ]
  [ N = 3.0:Tp 0.40]
*
  SHIFT[ 2: 1002] 0606  1  5.0    43.20    5.09 13.75  72.75 n/a    0.000
  [SHIFT= 79.2 min]
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1072  1  5.0    12.53    1.09 12.67  63.71 0.52    0.000
  [CN=74.7          ]
  [ N = 3.0:Tp 0.50]
*
  ADD [ 1072+ 0606] 0804  3  5.0    55.73    5.42 13.75  70.71 n/a    0.000
*
  ADD [ 0126+ 0804] 8041  3  5.0    78.52    9.70 13.58  68.77 n/a    0.000
*
  CHANNEL[ 2: 8041] 0604  1  5.0    78.52    9.35 13.67  68.77 n/a    0.000
*
  READ STORM          15.0
  [ Ptot=122.40 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
  remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD      1001  1  5.0    50.05    3.44 12.83  62.98 0.51    0.000
  [CN=73.6          ]
  [ N = 3.0:Tp 0.68]
*

```

```

CHANNEL[ 2: 1001] 0600 1 5.0 50.05 3.43 12.92 62.98 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD 1071 1 5.0 23.31 1.20 12.92 51.35 0.42 0.000
[CN=65.3 ]
[ N = 3.0:Tp 0.74]
*
ADD [ 1071+ 0600] 0805 3 5.0 73.36 4.63 12.92 59.28 n/a 0.000
*
ADD [ 0604+ 0805] 0806 3 5.0 151.88 12.47 13.58 64.19 n/a 0.000
*
CHANNEL[ 2: 0806] 0601 1 5.0 151.88 12.45 13.67 64.19 n/a 0.000
*
ADD [ 1062+ 0601] 8021 3 5.0 157.14 12.56 13.67 63.45 n/a 0.000
*
CHANNEL[ 2: 8021] 0602 1 5.0 157.14 12.66 13.67 63.45 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD 1063 1 5.0 8.13 0.47 12.75 50.27 0.41 0.000
[CN=62.6 ]
[ N = 3.0:Tp 0.60]
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
** CALIB NASHYD 0904 1 5.0 9.08 1.11 12.50 79.65 0.65 0.000
[CN=81.8 ]
[ N = 3.0:Tp 0.43]
*
READ STORM 15.0
[ Ptot=122.40 mm ]

```

```

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 1021 1 5.0 16.01 3.53 12.25 78.41 0.64 0.000
[ I%=35.0:S%= 2.00]
*
ADD [ 1021+ 1063] 0807 3 5.0 24.14 3.73 12.25 68.93 n/a 0.000
*
ADD [ 0807+ 0602] 0807 1 5.0 181.28 13.13 13.67 64.18 n/a 0.000
*
ADD [ 0807+ 0904] 0807 3 5.0 190.36 13.39 13.67 64.92 n/a 0.000
*
CHANNEL[ 2: 0807] 0603 1 5.0 190.36 13.40 13.67 64.92 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 0902 1 5.0 4.38 0.34 12.92 73.02 0.60 0.000
[CN=78.4 ]
[ N = 3.0:Tp 0.72]
*
ADD [ 0603+ 0902] 8031 3 5.0 194.74 13.61 13.67 65.10 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 9041 1 5.0 6.51 0.56 12.58 59.51 0.49 0.000
[CN=69.9 ]
[ N = 3.0:Tp 0.46]
*
CHANNEL[ 2: 0126] 0608 1 5.0 21.91 0.40 12.33 64.01 n/a 0.000
*
ADD [ 0608+ 9041] 0129 3 5.0 28.42 0.96 12.58 62.98 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 2043 1 5.0 7.52 2.23 12.25 94.27 0.77 0.000
[I%=35.0:S%= 2.00]
*
* ADD [0129+ 2043] 0131 3 5.0 35.94 2.93 12.25 69.53 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 1.95 12.25 96.07 0.78 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0131] 0816 3 5.0 42.35 4.88 12.25 73.55 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.61 12.50 62.70 0.51 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
* CHANNEL[2: 1074] 0115 1 5.0 6.00 0.56 12.67 62.70 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.24 12.67 64.33 0.53 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]
*
* ADD [0115+ 2082] 0116 3 5.0 8.98 0.81 12.67 63.24 n/a 0.000

*
* CHANNEL[2: 0116] 0118 1 5.0 8.98 0.80 12.75 63.24 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.60 12.50 67.59 0.55 0.000
[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.55 12.67 67.59 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.54 12.67 64.81 0.53 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]
*
* ADD [1081+ 0118] 0813 3 5.0 27.62 2.34 12.75 64.30 n/a 0.000
*
* ADD [0813+ 0609] 0813 1 5.0 32.92 2.89 12.67 64.83 n/a 0.000
*
* CHANNEL[2: 0813] 0610 1 5.0 32.92 2.81 12.83 64.82 n/a 0.000
*
* READ STORM 15.0
[Ptot=122.40 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.65 12.25 96.07 0.78 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 35.01 2.89 12.75 66.69 n/a 0.000
*
* CHANNEL[2: 0814] 0611 1 5.0 35.01 2.79 12.92 66.68 n/a 0.000
*

```

      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD              1032  1  5.0    1.68    0.53 12.25  96.07 0.78    0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1032+ 0611] 0815  3  5.0    36.69    2.85 12.92  68.03 n/a    0.000
*
* ADD [ 0815+ 0816] 0815  1  5.0    79.04    6.42 12.25  70.99 n/a    0.000
*
* CHANNEL[ 2: 0815] 0612  1  5.0    79.04    6.04 12.25  70.98 n/a    0.000
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD                0901  1  5.0    6.80    1.79 12.25  64.08 0.52    0.000
* [CN=84.1          ]
* [ N = 3.0:Tp 0.05]
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD                1061  1  5.0    8.33    0.52 12.67  47.29 0.39    0.000
* [CN=60.3          ]
* [ N = 3.0:Tp 0.50]
*
* PIPE [ 2: 1061] 0701  1  5.0    8.33    0.52 12.67  47.29 n/a    0.000
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

```

```

*
* CALIB STANDHYD              1031  1  5.0    12.60    3.45 12.25  96.07 0.78    0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1031+ 0612] 0803  3  5.0    91.64    9.49 12.25  74.43 n/a    0.000
*
* ADD [ 0803+ 0701] 0803  1  5.0    99.97    9.69 12.25  72.17 n/a    0.000
*
* ADD [ 0803+ 8031] 0803  3  5.0   294.71   16.43 13.67  67.50 n/a    0.000
*
* ADD [ 0803+ 0901] 0803  1  5.0   301.51   17.25 12.25  67.42 n/a    0.000
*
** Reservoir
OUTFLOW:                0501  1  5.0   301.51   15.09 13.75  67.42 n/a    0.000
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD                1014  1  5.0    0.38    0.05 12.42  69.72 0.57    0.000
* [CN=76.0          ]
* [ N = 3.0:Tp 0.32]
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD                1012  1  5.0    0.42    0.11 12.25  67.11 0.55    0.000
* [CN=76.0          ]
* [ N = 3.0:Tp 0.09]
*
      READ STORM              15.0
      [ Ptot=122.40 mm ]
      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
      remark: 50yr 24hr 15min SCS

*
* CALIB NASHYD                0903  1  5.0    3.03    0.82 12.25  67.18 0.55    0.000
* [CN=77.6          ]
* [ N = 3.0:Tp 0.08]

```



```

*
CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.57 12.33 67.07 n/a 0.000
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 1011 1 5.0 3.26 1.05 12.25 99.01 0.81 0.000
[I%=40.3:S%= 2.00]
*
READ STORM 15.0
[ Ptot=122.40 mm ]
fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\700b6dbc-
1ae6-44f2-9113-6
remark: 50yr 24hr 15min SCS

*
* CALIB STANDHYD 1013 1 5.0 2.49 0.82 12.25 100.11 0.82 0.000
[I%=43.0:S%= 2.00]
*
ADD [ 1011+ 1012] 0810 3 5.0 3.68 1.16 12.25 95.37 n/a 0.000
*
ADD [ 0810+ 1013] 0810 1 5.0 6.17 1.98 12.25 97.29 n/a 0.000
*
ADD [ 0810+ 1014] 0810 3 5.0 6.55 2.01 12.25 95.69 n/a 0.000
*
ADD [ 0810+ 0501] 0810 1 5.0 308.06 15.20 13.75 68.02 n/a 0.000
*
ADD [ 0810+ 0605] 0810 3 5.0 311.09 15.25 13.75 68.01 n/a 0.000
*
=====
=====

V V I SSSS U U A L (v 6.1.2001)
V V I SS U U A A L
V V I SS U U A A A A L
V V I SS U U A A L
VV I SSSS UUUU A A LLLLL

000 TTTT TTTT H H Y Y M M 000 TM
O O T T H H Y Y MM MM O O
O O T T H H Y M M O O
000 T T H H Y M M 000

Developed and Distributed by Smart City Water Inc

```

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***** S U M M A R Y O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.1\VO2\voin.dat

Output filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\75
fe74b-f8d2-46ad-891c-64dabc608b96\sc
Summary filename:
C:\Users\JBirchard\AppData\Local\Civica\XH5\05153701-f781-47eb-ab6b-c872b39b8f82\75
fe74b-f8d2-46ad-891c-64dabc608b96\sc

DATE: 07/17/2023

TIME: 12:00:40

USER:

COMMENTS: _____

** SIMULATION : Z - 100yr 24hr SCS **

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

START @ 0.00 hrs

READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

```

*
** CALIB NASHYD 1062 1 5.0 5.26 0.30 12.75 48.13 0.36 0.000
[CN=55.8 ]
[ N = 3.0:Tp 0.56]

```

```

*
READ STORM 15.0
[ Ptot=132.00 mm ]
fname :

```

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-

```

7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD          1004  1  5.0   10.95   2.70 12.25  78.53 0.59   0.000
  [CN=78.0                ]
  [ N = 3.0:Tp 0.15]
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD          1003  1  5.0   14.65   3.19 12.25  72.75 0.55   0.000
  [CN=75.1                ]
  [ N = 3.0:Tp 0.16]
*
  ADD [ 1003+ 1004] 0157  3  5.0   25.60   5.89 12.25  75.22 n/a   0.000
*
  SHIFT[ 2: 0157] 0607  1  5.0   25.60   5.89 13.50  75.22 n/a   0.000
  [SHIFT= 75.8 min]
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD          1073  1  5.0   19.10   1.81 12.58  67.34 0.51   0.000
  [CN=71.9                ]
  [ N = 3.0:Tp 0.48]
*
  ADD [ 1073+ 0607] 0811  3  5.0   44.70   6.59 13.50  71.85 n/a   0.000
*
  DUHYD                   0126  1  5.0   44.70   6.59 13.50  71.85 n/a   0.000
  MAJOR SYSTEM:          0126  2  5.0   23.70   6.19 13.50  71.85 n/a   0.000
  MINOR SYSTEM:          0126  3  5.0   21.00   0.40 12.00  71.85 n/a   0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

```

```

*
** CALIB NASHYD          1002  1  5.0   43.20   5.68 12.50  81.06 0.61   0.000
  [CN=78.4                ]
  [ N = 3.0:Tp 0.40]
*
  SHIFT[ 2: 1002] 0606  1  5.0   43.20   5.68 13.75  81.06 n/a   0.000
  [SHIFT= 79.2 min]
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
** CALIB NASHYD          1072  1  5.0   12.53   1.23 12.67  71.59 0.54   0.000
  [CN=74.7                ]
  [ N = 3.0:Tp 0.50]
*
  ADD [ 1072+ 0606] 0804  3  5.0   55.73   6.05 13.75  78.93 n/a   0.000
*
  ADD [ 0126+ 0804] 8041  3  5.0   79.43  10.90 13.58  76.82 n/a   0.000
*
  CHANNEL[ 2: 8041] 0604  1  5.0   79.43  10.94 13.67  76.82 n/a   0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          1001  1  5.0   50.05   3.88 12.83  70.76 0.54   0.000
  [CN=73.6                ]
  [ N = 3.0:Tp 0.68]
*
  CHANNEL[ 2: 1001] 0600  1  5.0   50.05   3.87 12.92  70.76 n/a   0.000
*
  READ STORM              15.0
  [ Ptot=132.00 mm ]
  fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
  remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD          1071  1  5.0   23.31   1.37 12.92  58.21 0.44   0.000
  [CN=65.3                ]

```

```

* [ N = 3.0:Tp 0.74]
*
* ADD [ 1071+ 0600] 0805 3 5.0 73.36 5.23 12.92 66.77 n/a 0.000
*
* ADD [ 0604+ 0805] 0806 3 5.0 152.79 14.25 13.67 71.99 n/a 0.000
*
* CHANNEL[ 2: 0806] 0601 1 5.0 152.79 14.22 13.67 71.99 n/a 0.000
*
* ADD [ 1062+ 0601] 8021 3 5.0 158.05 14.35 13.67 71.20 n/a 0.000
*
* CHANNEL[ 2: 8021] 0602 1 5.0 158.05 14.32 13.67 71.20 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB NASHYD 1063 1 5.0 8.13 0.54 12.75 56.90 0.43 0.000
* [CN=62.6 ]
* [ N = 3.0:Tp 0.60]
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB NASHYD 0904 1 5.0 9.08 1.23 12.50 88.29 0.67 0.000
* [CN=81.8 ]
* [ N = 3.0:Tp 0.43]
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB STANDHYD 1021 1 5.0 16.01 3.91 12.25 86.30 0.65 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 1021+ 1063] 0807 3 5.0 24.14 4.14 12.25 76.40 n/a 0.000
*
* ADD [ 0807+ 0602] 0807 1 5.0 182.19 14.85 13.67 71.89 n/a 0.000

```

```

*
* ADD [ 0807+ 0904] 0807 3 5.0 191.27 15.13 13.67 72.67 n/a 0.000
*
* CHANNEL[ 2: 0807] 0603 1 5.0 191.27 14.85 13.67 72.67 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB NASHYD 0902 1 5.0 4.38 0.37 12.83 81.34 0.62 0.000
* [CN=78.4 ]
* [ N = 3.0:Tp 0.72]
*
* ADD [ 0603+ 0902] 8031 3 5.0 195.65 15.09 13.67 72.86 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB NASHYD 9041 1 5.0 6.51 0.63 12.58 66.94 0.51 0.000
* [CN=69.9 ]
* [ N = 3.0:Tp 0.46]
*
* CHANNEL[ 2: 0126] 0608 1 5.0 21.00 0.40 12.25 71.85 n/a 0.000
*
* ADD [ 0608+ 9041] 0129 3 5.0 27.51 1.03 12.58 70.69 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]
* fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS
*
* CALIB STANDHYD 2043 1 5.0 7.52 2.46 12.25 103.24 0.78 0.000
* [I%=35.0:S%= 2.00]
*
* ADD [ 0129+ 2043] 0131 3 5.0 35.03 3.20 12.25 77.68 n/a 0.000
*
* READ STORM 15.0
* [ Ptot=132.00 mm ]

```

fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD 1041 1 5.0 6.41 2.15 12.25 105.13 0.80 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1041+ 0131] 0816 3 5.0 41.44 5.35 12.25 81.92 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD 1074 1 5.0 6.00 0.68 12.50 70.49 0.53 0.000
[CN=73.8]
[N = 3.0:Tp 0.40]
*
* CHANNEL[2: 1074] 0115 1 5.0 6.00 0.63 12.67 70.49 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD 2082 1 5.0 2.98 0.27 12.67 72.21 0.55 0.000
[CN=74.6]
[N = 3.0:Tp 0.56]
*
* ADD [0115+ 2082] 0116 3 5.0 8.98 0.91 12.67 71.06 n/a 0.000
*
* CHANNEL[2: 0116] 0118 1 5.0 8.98 0.90 12.75 71.06 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD 1075 1 5.0 5.30 0.68 12.50 75.66 0.57 0.000

[CN=76.2]
[N = 3.0:Tp 0.38]
*
* CHANNEL[2: 1075] 0609 1 5.0 5.30 0.62 12.67 75.66 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB NASHYD 1081 1 5.0 18.64 1.74 12.67 72.73 0.55 0.000
[CN=74.9]
[N = 3.0:Tp 0.55]
*
* ADD [1081+ 0118] 0813 3 5.0 27.62 2.63 12.67 72.18 n/a 0.000
*
* ADD [0813+ 0609] 0813 1 5.0 32.92 3.25 12.67 72.74 n/a 0.000
*
* CHANNEL[2: 0813] 0610 1 5.0 32.92 3.16 12.83 72.74 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD 1042 1 5.0 2.09 0.72 12.25 105.12 0.80 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1042+ 0610] 0814 3 5.0 35.01 3.26 12.75 74.67 n/a 0.000
*
* CHANNEL[2: 0814] 0611 1 5.0 35.01 3.16 12.92 74.67 n/a 0.000
*
* READ STORM 15.0
[Ptot=132.00 mm]
fname :

C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-7c05-4c94-80db-3
remark: 100yr 24hr 15min SCS

*
* CALIB STANDHYD 1032 1 5.0 1.68 0.58 12.25 105.12 0.80 0.000
[I%=35.0:S%= 2.00]
*
* ADD [1032+ 0611] 0815 3 5.0 36.69 3.21 12.92 76.06 n/a 0.000

```

*
*   ADD [ 0815+ 0816] 0815 1 5.0 78.13 7.09 12.25 79.17 n/a 0.000
*
*   CHANNEL[ 2: 0815] 0612 1 5.0 78.13 6.69 12.25 79.17 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB NASHYD 0901 1 5.0 6.80 1.97 12.25 70.83 0.54 0.000
*   [CN=84.1 ]
*   [ N = 3.0:Tp 0.05]
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB NASHYD 1061 1 5.0 8.33 0.59 12.67 53.65 0.41 0.000
*   [CN=60.3 ]
*   [ N = 3.0:Tp 0.50]
*
*   PIPE [ 2: 1061] 0701 1 5.0 8.33 0.59 12.67 53.65 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB STANDHYD 1031 1 5.0 12.60 4.14 12.25 105.13 0.80 0.000
*   [I%=35.0:S%= 2.00]
*
*   ADD [ 1031+ 0612] 0803 3 5.0 90.73 10.83 12.25 82.77 n/a 0.000
*
*   ADD [ 0803+ 0701] 0803 1 5.0 99.06 11.06 12.25 80.33 n/a 0.000
*
*   ADD [ 0803+ 8031] 0803 3 5.0 294.71 18.14 13.67 75.37 n/a 0.000
*
*   ADD [ 0803+ 0901] 0803 1 5.0 301.51 19.62 12.25 75.27 n/a 0.000
*

```

```

** Reservoir
*   OUTFLOW: 0501 1 5.0 301.51 16.97 13.83 75.26 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB NASHYD 1014 1 5.0 0.38 0.06 12.42 77.81 0.59 0.000
*   [CN=76.0 ]
*   [ N = 3.0:Tp 0.32]
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB NASHYD 1012 1 5.0 0.42 0.12 12.25 74.90 0.57 0.000
*   [CN=76.0 ]
*   [ N = 3.0:Tp 0.09]
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB NASHYD 0903 1 5.0 3.03 0.92 12.25 74.95 0.57 0.000
*   [CN=77.6 ]
*   [ N = 3.0:Tp 0.08]
*
*   CHANNEL[ 2: 0903] 0605 1 5.0 3.03 0.64 12.33 74.84 n/a 0.000
*
*   READ STORM 15.0
*   [ Ptot=132.00 mm ]
*   fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*   remark: 100yr 24hr 15min SCS
*
*
*   CALIB STANDHYD 1011 1 5.0 3.26 1.15 12.25 108.15 0.82 0.000
*

```

```

*      [I%=40.3:S%= 2.00]
*
*      READ STORM              15.0
*      [ Ptot=132.00 mm ]
*      fname :
C:\Users\JBirchard\AppData\Local\Temp\1f265deb-42f1-4a81-a75a-4618bf258f23\6d9871f5-
7c05-4c94-80db-3
*      remark: 100yr 24hr 15min SCS
*
*
*      * CALIB STANDHYD      1013  1  5.0      2.49      0.90 12.25 109.27 0.83  0.000
*      [I%=43.0:S%= 2.00]
*
*      ADD [ 1011+ 1012] 0810  3  5.0      3.68      1.28 12.25 104.35 n/a  0.000
*
*      ADD [ 0810+ 1013] 0810  1  5.0      6.17      2.17 12.25 106.34 n/a  0.000
*
*      ADD [ 0810+ 1014] 0810  3  5.0      6.55      2.21 12.25 104.68 n/a  0.000
*
*      ADD [ 0810+ 0501] 0810  1  5.0    308.06    17.08 13.83  75.89 n/a  0.000
*
*      ADD [ 0810+ 0605] 0810  3  5.0    311.09    17.13 13.83  75.88 n/a  0.000
*
*

```

Appendix C: Conveyance Capacity Calculations

Project Information

Lora Bay Development - Phase 4B	121361
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Drawing Reference

Conceptual Servicing Plan - CSP1	August 04/22
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Prepared By

John Birchard	August 24-23
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Reviewed By

Jacob Macdonald	August 24-23
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Municipality

Town of The Blue Mountains

Runoff Coefficient Adjustment

Equation	3	
Year	A	B
10	1.00	0.00
25	1.10	0.00
50	1.20	0.00
100	1.25	0.00

Time of Concentration

10 mins

IDF Curve Coefficients

Year	A	B	C
2	23.00	-0.70	-
5	30.50	-0.70	-
10	35.50	-0.70	-
25	41.80	-0.70	-
50	46.40	-0.70	-
100	51.00	-0.70	-

Manning's Coefficient

Material	Value
CSP	0.024
Concrete	0.013
PVC	0.013

Notes

1) Existing West Ridge Drive sewer information from Phase 4 AFC Drawings.
2) At Tc = 10.0 min, external area draining to DI1 is not contributing flow to Phase 4B.

Version Date: August 24, 2023

Version Number: 2

Engineer Stamp

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Street Name	Area ID / Label	Upstream Maintenance Hole	Downstream Maintenance Hole	Area (ha)	5 Year Runoff Coefficient (C)	Design Storm (Year)	Adjusted Runoff Coefficient (C)	Area x Runoff Coefficient	Cumulative Area (ha)	Cumulative Area x Adjusted Runoff Coefficient	Time of Concentration (min)	Rainfall Intensity (mm/hr)	Peak Flow (m ³ /s)	Manning's Roughness Coefficient	Sewer Length (m)	Sewer Slope (%)	Actual Sewer Diameter (mm)	Full Flow Velocity (m/s)	Full Flow Capacity (L/s)	Actual Velocity (m/s)	Travel Time (min)	Calculated Sewer Diameter (mm)	Percentage of Full Flow Capacity (%)	Total Time of Travel (min)
STREET A		STMMH6	STMMH5	-	0.60	5	0.60	0.00	-	-	10.00	106.91	0.000	0.013	41.0	1.5%	300	1.68	0.118	0.00	0.00	0	0.0%	10.00
STREET A		STMMH5	STMMH4	0.21	0.60	5	0.60	0.13	0.21	0.13	10.00	106.91	0.037	0.013	20.0	2.0%	300	1.93	0.137	1.54	0.22	184	27.4%	10.22
STREET A		STMMH7	STMMH4	0.06	0.60	5	0.60	0.04	0.06	0.04	10.00	106.91	0.011	0.013	36.0	2.0%	300	1.93	0.137	1.10	0.55	115	7.8%	10.55
W RIDGE DRIVE		STMMH4	STMMH3	0.06	0.60	5	0.60	0.04	0.33	0.20	10.22	105.32	0.058	0.013	20.0	2.4%	300	2.12	0.150	1.86	0.18	210	38.7%	10.40
W RIDGE DRIVE		STMMH3	STMMH2	0.46	0.60	5	0.60	0.28	0.79	0.47	10.40	104.04	0.137	0.013	45.0	2.4%	300	2.12	0.150	2.12	0.35	290	91.4%	10.75
W RIDGE DRIVE		STMMH2	CBMH1A	0.17	0.60	5	0.60	0.10	0.96	0.58	10.75	101.63	0.163	0.013	42.0	2.4%	375	2.46	0.272	2.43	0.29	309	59.9%	11.04
STREET B		STMMH8	STMMH9	0.15	0.60	5	0.60	0.09	0.15	0.09	10.00	106.91	0.027	0.013	51.0	1.5%	300	1.68	0.118	1.27	0.67	172	22.6%	10.67
STREET B		STMMH9	STMMH19	0.28	0.60	5	0.60	0.17	0.43	0.26	10.67	102.16	0.073	0.013	51.0	1.5%	300	1.68	0.118	1.66	0.51	250	61.8%	11.18
STREET B		STMMH19	STMMH18	0.08	0.60	5	0.60	0.05	0.51	0.31	11.18	98.86	0.084	0.013	18.0	1.7%	300	1.78	0.126	1.78	0.17	258	66.7%	11.35
STREET B		STMMH18	STMMH17	0.27	0.60	5	0.60	0.16	0.78	0.47	11.35	97.84	0.127	0.013	29.0	1.7%	375	2.07	0.229	2.00	0.24	301	55.6%	11.59
STREET B		STMMH9 (2)	STMMH10	-	0.60	5	0.60	0.00	-	-	10.00	106.91	0.000	0.013	77.0	1.7%	300	1.78	0.126	0.00	0.00	0	0.0%	10.00
STREET B		STMMH10	STMMH11	0.46	0.60	5	0.60	0.28	0.46	0.28	10.00	106.91	0.082	0.013	74.0	1.0%	300	1.37	0.097	1.37	0.90	282	84.8%	10.90
STREET B		STMMH11	STMMH12	0.43	0.60	5	0.60	0.26	0.89	0.53	10.90	100.64	0.149	0.013	14.0	0.8%	375	1.42	0.157	1.42	0.16	368	95.2%	11.07
S SERVICING BLOCK		DI1	STMMH12	-		5	0.00	0.00	-	-	10.00	106.91	0.001	0.013	44.0	0.5%	450	1.27	0.202	0.34	2.15	61	0.5%	12.15
STREET B		STMMH12	STMMH13	-	0.60	5	0.60	0.00	0.89	0.53	11.07	99.59	0.149	0.013	31.0	1.0%	600	2.17	0.614	1.67	0.31	352	24.2%	11.37
STREET B		STMMH13	STMMH14	0.46	0.60	5	0.60	0.28	1.35	0.81	11.37	97.69	0.221	0.013	90.0	1.0%	600	2.17	0.614	1.86	0.81	409	36.0%	12.18
STREET B		STMMH14	STMMH15	0.58	0.60	5	0.60	0.35	1.93	1.16	12.18	93.12	0.301	0.013	27.0	1.0%	600	2.17	0.614	2.02	0.22	459	48.9%	12.40
STREET B		STMMH15	STMMH16	-	0.60	5	0.60	0.00	1.93	1.16	12.40	91.95	0.297	0.013	20.0	1.0%	600	2.17	0.614	2.02	0.17	457	48.3%	12.57
STREET B		STMMH16	STMMH17	-	0.60	5	0.60	0.00	1.93	1.16	12.57	91.10	0.294	0.013	23.0	1.0%	600	2.17	0.614	2.01	0.19	455	47.9%	12.76
N SERVICING BLOCK		STMMH17	DIMH20	0.99	0.60	5	0.60	0.59	3.70	2.22	12.76	90.15	0.557	0.013	41.0	1.0%	600	2.17	0.614	2.17	0.31	578	90.7%	13.07
N SERVICING BLOCK		DIMH20	CBMH1A	0.30	0.60	5	0.60	0.18	4.00	2.40	13.07	88.62	0.592	0.013	108.0	1.0%	600	2.17	0.614	2.17	0.83	592	96.4%	13.90
W RIDGE DRIVE (EXISTING)		CBMH1A	CBMH1	0.07	0.60	5	0.60	0.04	5.03	3.02	13.90	84.89	0.713	0.013	29.5	3.9%	600	4.29	1.213	4.23	0.12	491	58.8%	14.02
NW PL SWALE				0.30	0.60	100	0.75	0.23	0.30	0.23	10.00	178.44	0.112											

Project Information

Lora Bay Development - Phase 4B	121361
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Drawing Reference

Conceptual Servicing Plan - CSP1	August 04/22
----------------------------------	--------------

Prepared By

John Birchard	August 24-23
---------------	--------------

Reviewed By

Jacob Macdonald	August 24-23
-----------------	--------------

Municipality

Town of The Blue Mountains

Runoff Coefficient Adjustment

Equation	3	
Year	A	B
10	1.00	0.00
25	1.10	0.00
50	1.20	0.00
100	1.25	0.00

Time of Concentration

75 mins

IDF Curve Coefficients

Year	A	B	C
2	23.00	-0.70	-
5	30.50	-0.70	-
10	35.50	-0.70	-
25	41.80	-0.70	-
50	46.40	-0.70	-
100	51.00	-0.70	-

Manning's Coefficient

Material	Value
CSP	0.024
Concrete	0.013
PVC	0.013

Notes

1) Existing West Ridge Drive sewer information from Phase 4 AFC Drawings.
2) Tc for external area draining to DI1 is approxiamtely 75.0 min

Version Date: August 24, 2023

Version Number: 2

Engineer Stamp

Street Name	Area ID / Label	Upstream Maintenance Hole	Downstream Maintenance Hole	Area (ha)	5 Year Runoff Coefficient (C)	Design Storm (Year)	Adjusted Runoff Coefficient (C)	Area x Runoff Coefficient	Cumulative Area (ha)	Cumulative Area x Adjusted Runoff Coefficient	Time of Concentration (min)	Rainfall Intensity (mm/hr)	Peak Flow (m ³ /s)	Manning's Roughness Coefficient	Sewer Length (m)	Sewer Slope (%)	Actual Sewer Diameter (mm)	Full Flow Velocity (m/s)	Full Flow Capacity (L/s)	Actual Velocity (m/s)	Travel Time (min)	Calculated Sewer Diameter (mm)	Percentage of Full Flow Capacity (%)	Total Time of Travel (min)
STREET A		STMMH6	STMMH5	-	0.60	5	0.60	0.00	-	-	75.00	26.09	0.000	0.009	41.0	1.5%	300	2.42	0.171	0.00	0.00	0	0.0%	75.00
STREET A		STMMH5	STMMH4	0.21	0.60	5	0.60	0.13	0.21	0.13	75.00	26.09	0.009	0.009	20.0	2.0%	300	2.79	0.198	1.38	0.24	95	4.6%	75.24
STREET A		STMMH7	STMMH4	0.06	0.60	5	0.60	0.04	0.06	0.04	75.00	26.09	0.003	0.009	36.0	2.0%	300	2.79	0.198	0.98	0.61	59	1.3%	75.61
W RIDGE DRIVE		STMMH4	STMMH3	0.06	0.60	5	0.60	0.04	0.33	0.20	75.24	26.03	0.014	0.009	20.0	2.4%	300	3.06	0.216	1.67	0.20	108	6.6%	75.44
W RIDGE DRIVE		STMMH3	STMMH2	0.46	0.60	5	0.60	0.28	0.79	0.47	75.44	25.98	0.034	0.009	45.0	2.4%	300	3.06	0.216	2.11	0.36	150	15.8%	75.80
W RIDGE DRIVE		STMMH2	CBMH1A	0.17	0.60	5	0.60	0.10	0.96	0.58	75.80	25.90	0.041	0.009	42.0	2.4%	300	3.06	0.216	2.22	0.32	161	19.1%	76.11
STREET B		STMMH8	STMMH9	0.15	0.60	5	0.60	0.09	0.15	0.09	75.00	26.09	0.007	0.009	51.0	1.5%	300	2.42	0.171	1.13	0.75	88	3.8%	75.75
STREET B		STMMH9	STMMH19	0.28	0.60	5	0.60	0.17	0.43	0.26	75.75	25.91	0.019	0.009	51.0	1.5%	300	2.42	0.171	1.50	0.57	130	10.9%	76.32
STREET B		STMMH19	STMMH18	0.08	0.60	5	0.60	0.05	0.51	0.31	76.32	25.77	0.022	0.009	18.0	1.7%	300	2.58	0.182	1.64	0.18	136	12.0%	76.50
STREET B		STMMH18	STMMH17	0.27	0.60	5	0.60	0.16	0.78	0.47	76.50	25.73	0.033	0.009	29.0	1.7%	300	2.58	0.182	1.84	0.26	159	18.4%	76.76
STREET B		STMMH9 (2)	STMMH10	-	0.60	5	0.60	0.00	-	-	75.00	26.09	0.000	0.009	77.0	1.7%	300	2.58	0.182	0.00	0.00	0	0.0%	75.00
STREET B		STMMH10	STMMH11	0.46	0.60	5	0.60	0.28	0.46	0.28	75.00	26.09	0.020	0.009	74.0	1.0%	300	1.98	0.140	1.32	0.94	145	14.3%	75.94
STREET B		STMMH11	STMMH12	0.43	0.60	5	0.60	0.26	0.89	0.53	75.94	25.86	0.038	0.009	14.0	0.8%	300	1.77	0.125	1.45	0.16	193	30.7%	76.10
S SERVICING BLOCK		DI1	STMMH12	-		5	0.00	0.00	-	-	75.00	26.09	0.320	0.009	44.0	0.5%	450	1.83	0.291	1.83	0.40	466	109.9%	75.40
STREET B		STMMH12	STMMH13	-	0.60	5	0.60	0.00	0.89	0.53	75.40	25.99	0.359	0.013	31.0	1.0%	600	2.17	0.614	2.12	0.24	490	58.4%	75.64
STREET B		STMMH13	STMMH14	0.46	0.60	5	0.60	0.28	1.35	0.81	75.64	25.93	0.378	0.013	90.0	1.0%	600	2.17	0.614	2.15	0.70	500	61.6%	76.34
STREET B		STMMH14	STMMH15	0.58	0.60	5	0.60	0.35	1.93	1.16	76.34	25.77	0.403	0.013	27.0	1.0%	600	2.17	0.614	2.17	0.21	512	65.6%	76.55
STREET B		STMMH15	STMMH16	-	0.60	5	0.60	0.00	1.93	1.16	76.55	25.72	0.403	0.013	20.0	1.0%	600	2.17	0.614	2.17	0.15	512	65.6%	76.70
STREET B		STMMH16	STMMH17	-	0.60	5	0.60	0.00	1.93	1.16	76.70	25.68	0.403	0.013	23.0	1.0%	600	2.17	0.614	2.17	0.18	512	65.6%	76.88
N SERVICING BLOCK		STMMH17	DIMH20	0.99	0.60	5	0.60	0.59	3.70	2.22	76.88	25.64	0.478	0.013	41.0	1.0%	600	2.17	0.614	2.17	0.31	546	77.9%	77.19
N SERVICING BLOCK		DIMH20	CBMH1A	0.30	0.60	5	0.60	0.18	4.00	2.40	77.19	25.57	0.490	0.013	108.0	1.0%	600	2.17	0.614	2.17	0.83	551	79.9%	78.02
W RIDGE DRIVE (EXISTING)		CBMH1A	CBMH1	0.07	0.60	5	0.60	0.04	5.03	3.02	78.02	25.38	0.533	0.013	29.5	3.9%	600	4.29	1.213	3.91	0.13	441	43.9%	78.15
NW PL SWALE				0.30	0.60	100	0.75	0.23	0.30	0.23	75.00	43.63	0.027											

HY-8 Culvert Analysis Report

Typical culvert crossing Georgian Trail south of Phase 5. Analysis to determine full barrel flow capacity.

Table 1 - Summary of Culvert Flows at Crossing: 300 HDPE Culvert

Headwater Elevation (m)	Discharge Names	Total Discharge (cms)	300 HDPE Culvert Discharge (cms)	Roadway Discharge (cms)	Iterations
222.09	1	0.05	0.05	0.00	1
222.21	2	0.10	0.08	0.02	9
222.23	3	0.15	0.09	0.06	4
222.19	Overtopping	0.08	0.08	0.00	Overtopping

Table 2 - Culvert Summary Table: 300 HDPE Culvert

Discharge Names	Total Discharge (cms)	Culvert Discharge (cms)	Headwater Elevation (m)	Inlet Control Depth (m)	Outlet Control Depth (m)	Flow Type	Normal Depth (m)	Critical Depth (m)	Outlet Depth (m)	Tailwater Depth (m)	Outlet Velocity (m/s)	Tailwater Velocity (m/s)
1	0.05	0.05	222.09	0.260	0.135	1-S2n	0.129	0.172	0.137	0.063	1.539	0.669
2	0.10	0.08	222.21	0.378	0.278	5-S2n	0.175	0.223	0.186	0.093	1.742	0.839
3	0.15	0.09	222.23	0.402	0.340	5-S2n	0.183	0.230	0.194	0.117	1.772	0.952

Straight Culvert

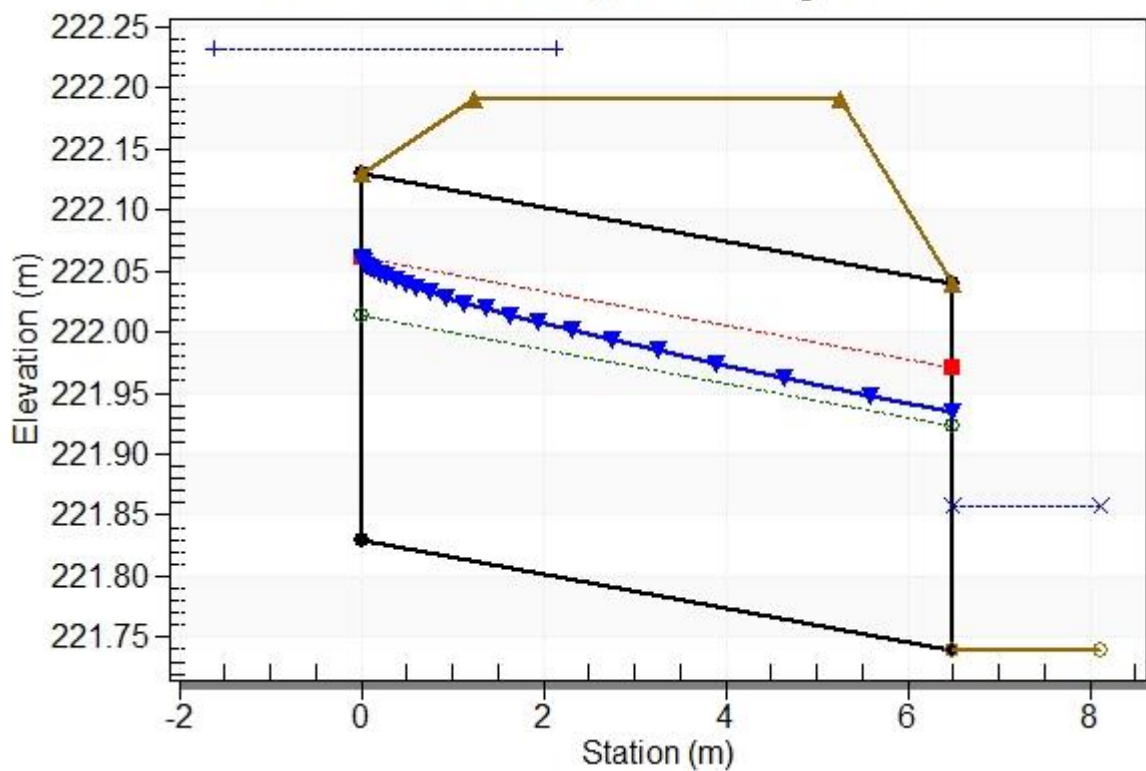
Inlet Elevation (invert): 221.83 m, Outlet Elevation (invert): 221.74 m

Culvert Length: 6.50 m, Culvert Slope: 0.0138

Water Surface Profile Plot for Culvert: 300 HDPE Culvert

Crossing - 300 HDPE Culvert, Design Discharge - 0.15 cms

Culvert - 300 HDPE Culvert, Culvert Discharge - 0.09 cms



Site Data - 300 HDPE Culvert

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 m

Inlet Elevation: 221.83 m

Outlet Station: 6.50 m

Outlet Elevation: 221.74 m

Number of Barrels: 1

Culvert Data Summary - 300 HDPE Culvert

Barrel Shape: Circular

Barrel Diameter: 300.00 mm

Barrel Material: Smooth HDPE

Embedment: 0.00 mm

Barrel Manning's n: 0.0120

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall

Inlet Depression: None

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

North Servicing Block

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.01	m/m	
BOTTOM WIDTH	5.40		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
DEPTH	0.32	m	DEPTH W 0.3m FREEBOARD 0.60
			TOP WIDTH 9.0
AREA	2.036	m ²	
WETTED PERIMETER	7.424	m	
HYDRAULIC RADIUS	0.274	m	
FLOW CAPACITY	2.455	m ³ /s	
DESIGN PEAK FLOW	2.455	m ³ /s	1:100-year peak flow at StandHyd 2043

NW PL Swale

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.01	m/m	
BOTTOM WIDTH	0.00		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
DEPTH	0.30	m	
AREA	0.270	m ²	
WETTED PERIMETER	1.897	m	
HYDRAULIC RADIUS	0.142	m	
FLOW CAPACITY	0.210	m ³ /s	
DESIGN PEAK FLOW	0.118	m ³ /s	Refer to Storm Sewer Design Sheet

ROW capacity calculations using Manning's Equation
with composite channel sections

Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

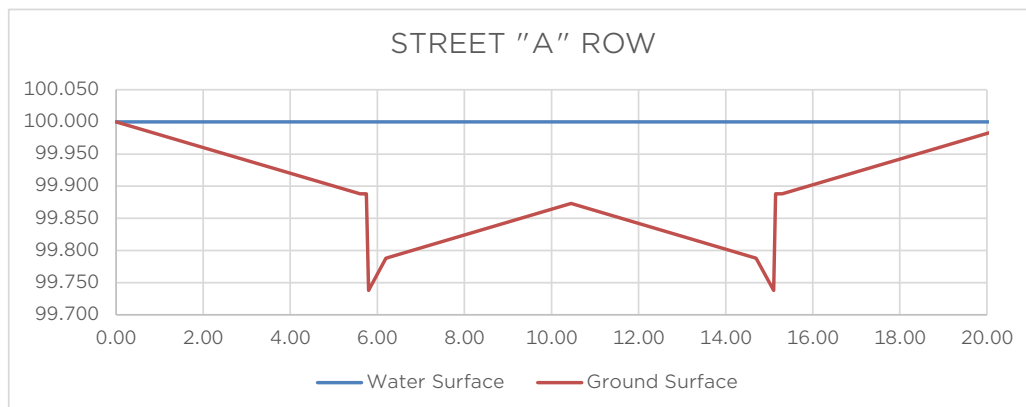
20 m Right of Way @ 0.5%

GEOMETRY

MANNING'S n BOULEVARD	0.035	
MANNING'S n ROADWAY	0.016	
ROW WIDTH	20.9	m
ROAD WIDTH	8.5	m
BOULEVARD SLOPE	0.02	m/m
CURB TOP WIDTH	0.15	m
CURB HEIGHT	0.15	m
GUTTER WIDTH	0.40	m
GUTTER DEPTH	0.050	m
SLOPE	0.005	m/m

STA	ELEV	AREA (m ²)	WET P (m)	R (m)	Q (m ³ /s)	
0.00	100.000					
5.60	99.888	0.3136	5.6011	0.056	0.0927	Left Boulevard
5.75	99.888	0.0168	0.15			
5.80	99.738	0.0093	0.1581			
6.20	99.788	0.0948	0.4031			
10.45	99.873	0.7204	4.2508	9.9242	0.1696	2.278
14.70	99.788	0.7204	4.2508			Roadway
15.10	99.738	0.0948	0.4031			
15.15	99.888	0.0093	0.1581			
15.30	99.888	0.0168	0.15			
20.90	100.000	0.3136	5.6011	0.056	0.0927	Right Boulevard

TOTAL FLOW CAPACITY **2.463** m³/s
DESIGN FLOW 2.455 m³/s 1:100-year peak flow
at StandHyd 2043



Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

North Ditch - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.012	m/m	
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.70	m	0.30 m of freeboard provided
AREA	1.470	m ²	
WETTED PERIMETER	4.427	m	
HYDRAULIC RADIUS	0.332	m	
DESIGN CAPACITY	2.206	m ³ /s	Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105A/C105B

North Ditch - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.012	m/m	
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.81	m	0.19 m of freeboard provided
AREA	1.972	m ²	
WETTED PERIMETER	5.128	m	
HYDRAULIC RADIUS	0.385	m	
PROPOSED PEAK FLOW	3.264	m ³ /s	1:100-year peak flow at AddHyd 814
MAXIMUM CAPACITY	5.711	m ³ /s	0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

South Ditch - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.03	m/m	
BOTTOM WIDTH	0.00		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.61	m	0.30 m of freeboard provided
AREA	1.116	m ²	
WETTED PERIMETER	3.858	m	
HYDRAULIC RADIUS	0.289	m	
DESIGN CAPACITY	2.417	m ³ /s	Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105A

South Ditch - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.03	m/m	
BOTTOM WIDTH	0.00		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.68	m	0.23 m of freeboard provided
AREA	1.378	m ²	
WETTED PERIMETER	4.287	m	
HYDRAULIC RADIUS	0.322	m	
PROPOSED PEAK FLOW	3.201	m ³ /s	1:100-year peak flow at AddHyd 131
MAXIMUM CAPACITY	7.022	m ³ /s	0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

Block 40 Ditch (U/S End) - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035				
SLOPE	0.039	m/m			Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
BOTTOM WIDTH	0.00				
RIGHT SIDE SLOPE	2.0	:1	H:V		
LEFT SIDE SLOPE	2.0	:1	H:V		
FLOW DEPTH	0.68	m			0.30 m of freeboard provided
AREA	0.937	m ²			
WETTED PERIMETER	3.060	m			
HYDRAULIC RADIUS	0.306	m			
DESIGN CAPACITY	2.400	m ³ /s			Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105A

Block 40 Ditch (U/S End) - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035				
SLOPE	0.039	m/m			Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
BOTTOM WIDTH	0.0				
RIGHT SIDE SLOPE	2.0	:1	H:V		
LEFT SIDE SLOPE	2.0	:1	H:V		
FLOW DEPTH	0.76	m			0.22 m of freeboard provided
AREA	1.163	m ²			
WETTED PERIMETER	3.410	m			
HYDRAULIC RADIUS	0.341	m			
PROPOSED PEAK FLOW	3.201	m ³ /s			1:100-year peak flow at AddHyd131
MAXIMUM CAPACITY	6.253	m ³ /s			0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

Block 40 Ditch (D/S End) - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.025	m/m	
BOTTOM WIDTH	3.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.33	m	0.30 m of freeboard provided
AREA	1.311	m ²	
WETTED PERIMETER	5.079	m	
HYDRAULIC RADIUS	0.258	m	
DESIGN CAPACITY	2.400	m ³ /s	Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105A

Block 40 Ditch (D/S End) - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.025	m/m	
BOTTOM WIDTH	3.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.39	m	0.24 m of freeboard provided
AREA	1.601	m ²	
WETTED PERIMETER	5.436	m	
HYDRAULIC RADIUS	0.294	m	
PROPOSED PEAK FLOW	3.201	m ³ /s	1:100-year peak flow at AddHyd 131
MAXIMUM CAPACITY	8.064	m ³ /s	0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

Block 41 Ditch - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.047	m/m	
BOTTOM WIDTH	2.5		
RIGHT SIDE SLOPE	2.0	:1 H:V	
LEFT SIDE SLOPE	2.0	:1 H:V	
FLOW DEPTH	0.44	m	0.66 m of freeboard provided
AREA	1.467	m ²	
WETTED PERIMETER	4.447	m	
HYDRAULIC RADIUS	0.330	m	
DESIGN CAPACITY	4.340	m ³ /s	Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105A

Block 41 Ditch - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.025	m/m	
BOTTOM WIDTH	3.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	0.51	m	0.59 m of freeboard provided
AREA	2.299	m ²	
WETTED PERIMETER	6.214	m	
HYDRAULIC RADIUS	0.370	m	
PROPOSED PEAK FLOW	5.352	m ³ /s	1:100-year peak flow at AddHyd 816
MAXIMUM CAPACITY	11.036	m ³ /s	0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

West Ridge Drive Ditch - Original Design

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.005	m/m	
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	1.20	m	0.30 m of freeboard provided
AREA	4.350	m ²	
WETTED PERIMETER	7.616	m	
HYDRAULIC RADIUS	0.571	m	
DESIGN CAPACITY	6.050	m ³ /s	Refer to <i>Stormwater Management & Functional Servicing Report - Addendum No.1 Lora Bay Phase 4</i> . C.F. Crozier & Associates Inc. (August 2018) - Drawing C105C

West Ridge Drive Ditch - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035		Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.005	m/m	
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	3.0	:1 H:V	
LEFT SIDE SLOPE	3.0	:1 H:V	
FLOW DEPTH	1.28	m	0.22 m of freeboard provided
AREA	4.900	m ²	
WETTED PERIMETER	8.083	m	
HYDRAULIC RADIUS	0.606	m	
PROPOSED PEAK FLOW	7.091	m ³ /s	1:100-year peak flow at AddHyd 815
MAXIMUM CAPACITY	10.869	m ³ /s	0.0 m of freeboard provided

Manning's Equation

Channel capacity calculations using Manning's Equation

$$Q = \frac{1}{n} AR^{2/3} S^{1/2}$$

Hole 8 Ditch - Estimated Capacity

CHANNEL PROPERTIES

MANNING'S COEFF	0.035	m/m	Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.008		
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	2.0	:1 H:V	
LEFT SIDE SLOPE	2.0	:1 H:V	
FLOW DEPTH	1.10	m	0.30 m of freeboard provided
AREA	2.420	m ²	
WETTED PERIMETER	4.919	m	
HYDRAULIC RADIUS	0.492	m	
FLOW CAPACITY	3.854	m ³ /s	

Hole 8 Ditch - Proposed Peak Flow

CHANNEL PROPERTIES

MANNING'S COEFF	0.035	m/m	Grassed Channels and Swales - Kentucky bluegrass length 0.10 - 0.15m, greater than 0.20m flow depth (MTO Drainage Management Manual Design Chart 2.01)
SLOPE	0.008		
BOTTOM WIDTH	0.0		
RIGHT SIDE SLOPE	2.0	:1 H:V	
LEFT SIDE SLOPE	2.0	:1 H:V	
FLOW DEPTH	0.67	m	0.73 m of freeboard provided
AREA	0.898	m ²	
WETTED PERIMETER	2.996	m	
HYDRAULIC RADIUS	0.300	m	
PROPOSED PEAK FLOW	1.027	m ³ /s	(0.24 m ³ upstream of Georgian Trail +0.419 m ³ /s from 4.5 ha of Catchment 105)
MAXIMUM CAPACITY	7.331	m ³ /s	0.0 m of freeboard provided

Appendix D: SWM Pond No. 1 Analysis

SWM Pond No. 1: Stage-Storage-Discharge Table

Elevation (m)	As-Built Outlet Structure Discharge (m ³ /s)	As-Built Overflow Weir Discharge (m ³ /s)	Total Discharge (m ³ /s)	Storage m ³	(1)
180.90	-	-	-	0	
182.00	-	-	-	8,497	
183.00	-	-	-	18,513	
184.00	-	-	-	30,947	
184.85	0.000	0.000	0.000	43,740	
184.90	0.003	0.000	0.003	824	
185.00	0.000	0.000	0.000	2,490	
185.10	0.062	0.000	0.062	4,182	
185.20	0.088	0.000	0.088	5,899	
185.30	0.108	0.000	0.108	7,645	
185.40	0.157	0.000	0.157	9,422	
185.50	0.275	0.000	0.275	11,227	
185.60	0.443	0.000	0.443	13,069	
185.70	0.661	0.000	0.661	14,959	
185.80	0.930	0.000	0.930	17,165	
185.90	1.252	0.000	1.252	22,613	
186.00	1.628	0.000	1.628	25,409	
186.10	2.062	0.000	2.062	28,424	
186.20	2.554	0.000	2.554	31,588	
186.30	3.107	0.000	3.107	34,969	
186.40	3.723	0.000	3.723	38,520	
186.50	4.403	0.000	4.403	42,134	
186.60	5.150	1.524	6.674	45,779	
186.70	5.966	4.536	10.502	49,455	
186.80	6.852	8.676	15.527	53,170	
186.90	7.125	13.859	20.983	56,925	
187.00	7.303	20.061	27.363	60,715	

Notes: (1) Pond dead storage (permanent pool) volume = 43,740 m³

SWM Pond No. 1 (Existing)

Catchment	Area (ha)	% Imp	Area x % Imp
901	6.80	1	6.8
902	4.38	1	4.38
904	9.08	15	136.2
1021	16.01	50	800.5
1031	12.60	50	630
1032	1.68	50	84
1041	6.41	50	320.5
1042	2.09	50	104.5
105	12.80	1	12.8
1061	8.33	1	8.33
1062	5.26	3	15.78
1063	8.13	4	32.52
1071	23.31	3	69.93
1072	12.53	1	12.53
1073	19.10	2	38.2
1074	6.00	1	6
1075	5.30	1	5.3
1081	18.64	0	0
1082	4.21	0	0
1001	50.05	2	100.1
1002	43.20	3	129.6
1003	14.65	2	29.3
1004	10.95	2	21.9
Totals	301.51		2569.17
Percent Impervious			8.5

SWM Pond No. 1 (Phase 4B Developed)

Catchment	Area (ha)	% Imp	Area x % Imp
901	6.80	1	6.8
902	4.38	1	4.38
904	9.08	15	136.2
9041	6.51	2	13.02
1021	16.01	50	800.5
1031	12.60	50	630
1032	1.68	50	84
1041	6.41	50	320.5
1042	2.09	50	104.5
2043	7.52	45	338.4
1061	8.33	1	8.33
1062	5.26	3	15.78
1063	8.13	4	32.52
1071	23.31	3	69.93
1072	12.53	1	12.53
1073	19.10	2	38.2
1074	6.00	1	6
1075	5.30	1	5.3
1081	18.64	0	0
2082	2.98	0	0
1001	50.05	2	100.1
1002	43.20	3	129.6
1003	14.65	2	29.3
1004	10.95	2	21.9
Totals	301.51		2907.79
Percent Impervious			9.6

Water Quality Requirements

Project Details

Lora Bay Development Phase 4B - SWM Pond No. 1	121361
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Prepared By

J. Macdonald	July 4, 2022
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Water Quality Sizing Criteria

Methodology & Data Source	Volumetric water quality criteria as presented in Table 3.2 in Ministry of Environment, Conservation and Parks (MECP) Stormwater Management Planning & Design Manual (SWMPDM) March 2003.
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Contributing Catchments

Catchment ID	Area (ha)	Impervious (%)
ALL	301.51	9.60%
Total	301.51	9.6%

Treatment Method Details

SWM Facility Type	Wet Pond
Target Treatment Level	Enhanced Level
Treatment Percentage	80%

Treatment

Water Quality Storage Requirement	22,613 m ³
Extended Detention Volume (40 m³)	12,060 m ³
Permanent Pool Volume Required	10,553 m ³
25 mm Storm Runoff Depth	4.1 mm
25 mm Storm Runoff Volume	12,362 m ³
Required Extended Detention Volume	12,362 m ³
Erosion Control Storage Required	18,091 m ³

25 mm storm pond discharge (Q) =	0.22 m ³ /s	
Average top width of pond (W) =	70 m	use W/2 for effective flow width
25 mm design storm W.S. =	185.45 m	
Pond outlet invert =	182.50 m	Refer to H.P.A Drawing SWM4 (2004)
Flow velocity through pond =	0.002 m/s	Q/(W/2 * (25mm W.S.- Outlet invert))
Length of pond =	250 m	
Travel time =	32.59 hr	
Settling depth =	2.95 m	25mm W.S.- Outlet Invert

The velocity at which a spherical particle will settle out of suspension (fall to the bottom) is defined by Stokes' Law:

$$V = \frac{2(\rho_p - \rho_f)}{9\mu} g R^2 \quad \text{Eq. 5-1}$$

where

ρ_p = mass density of the sphere (kg/m³)

g = acceleration of gravity (m·s⁻²)

ρ_f = mass density of the fluid (kg/m³)

R = radius of particle (m)

μ = viscosity of the fluid (kg·m⁻¹·s⁻¹)

Stoke's Law is valid for $Re < 0.5$ where $Re = V_s \cdot d / \nu$

density of particles = 2650 kg/m³

density of water = 1000.00 kg/m³

dynamic viscosity of water (μ) = 1.522E-03 N·s/m²

kinematic viscosity of water (ν) = 1.522E-06 m²/s

CLOCA Particle Size Distribution				Stoke's Law Settling Velocity V _s (m/s)	Reynolds Number	Settling Time (hrs)
Particle Size (μm)	Percent Less Than					
	Average Sample	Spring Sample	Summer Sample			
11000	100	100	100	71.5145	516961	-
9000	97.5	99	96	47.8733	283144	-
4000	92.5	95	90	9.4565	24858	-
1000	80	87	73	0.5910	388	-
800	74.5	79	70	0.3783	199	-
300	51.5	63	40	0.0532	10.5	-
250	37	44	30	3.69E-02	6.1	-
100	17	22	12	5.91E-03	0.4	0.14
70	13.5	17	10	2.90E-03	0.1	0.28
35	8.5	10	7	7.24E-04	1.67E-02	1.13
21	7.5	10	5	2.61E-04	3.60E-03	3.14
12	7	9	5	8.51E-05	6.71E-04	9.63
9	7	9	5	4.79E-05	2.83E-04	17.12
6.5	6	8	4	2.50E-05	1.07E-04	32.82
3	4.5	6	3	5.32E-06	1.05E-05	154.05
0.5	4.5	6	3	1.48E-07	4.86E-08	5545.89

% of particles settled	94	92	96
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25 mm storm pond discharge (Q) = 0.22 m³/s
 Average top width of pond (W) = 70 m use W/2 for effective flow width
 25 mm design storm W.S. = 185.45 m
 Pond outlet invert = 182.50 m Refer to H.P.A Drawing SWM4 (2004)
 Flow velocity through pond = 0.002 m/s Q/(W/2 * (25mm W.S.- Outlet invert))
 Length of pond = 250 m
 Travel time = 32.59 hr
 Settling depth = 2.95 m 25mm W.S.- Outlet Invert

The velocity at which a spherical particle will settle out of suspension (fall to the bottom) is defined by Stokes' Law:

$$V = \frac{2(\rho_p - \rho_f)}{9\mu} g R^2 \quad \text{Eq. 5-1}$$

where

ρ_p = mass density of the sphere (kg/m³) g = acceleration of gravity (m·s⁻²)
 ρ_f = mass density of the fluid (kg/m³) R = radius of particle (m)
 μ = viscosity of the fluid (kg·m⁻¹·s⁻¹)

Stoke's Law is valid for Re < 0.5 where Re = V_s*d/v

density of particles = 2650 kg/m³
 density of water = 1000.00 kg/m³
 dynamic viscosity of water (μ) = 1.522E-03 N*s/m²
 kinematic viscosity of water (ν) = 1.522E-06 m²/s

ETV Canada Particle Size Distribution		Stoke's Law Settling Velocity V _s (m/s)	Reynolds Number	Settling Time (hrs)
Particle Size (μm)	Percent Less Than			
1000	100	0.5910	388	-
500	95	0.1478	49	-
250	90	0.0369	6	-
150	75	0.0133	1	-
100	60	0.0059	0.4	0.14
75	50	0.0033	0.2	0.25
50	45	1.48E-03	4.86E-02	0.55
20	35	2.36E-04	3.11E-03	3.47
8	20	3.78E-05	1.99E-04	21.66
5	10	1.48E-05	4.86E-05	55.46
2	5	2.36E-06	3.11E-06	346.62

% of particles settled 83