# GODDARD SCHOOL OF BRYANT

# PRELIMINARY DRAINAGE REPORT

***Date:*** **03-03-2026**

***Located in:*** **Bryant, Arkansas**

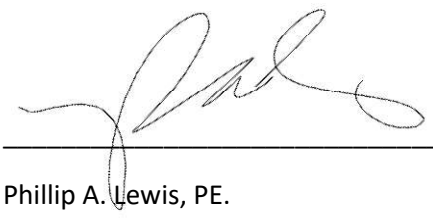
***Prepared for:***
**City of Bryant, Arkansas**

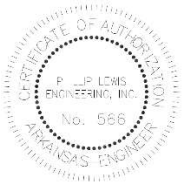
**Prepared by:**

PHILLIP LEWIS ENGINEERING
Structural + Civil Consultants
23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

# *CERTIFICATION*

I hereby state that this Final Drainage has been prepared by me or under my supervision and meets the standard of care and expertise which is usual and customary in this community of professional engineers. The analysis has been prepared utilizing procedures and practices by the City of Bryant and within the standard accepted practices.









DATE: 03-03-2026

Phillip A. Lewis, PE.

# PROJECT LOCATION MAP




# DESCRIPTION OF PROPERTY

The proposed project is for the consruction of the Goddard School of Bryant located on Christy Lane, Alexander, AR. The proposed development is a 9,000 sq. ft. building, parking lot, and outdoor playground.

The intent of this drainage analysis is to reevaluate the previous drainage design and ensure that the completetion of this development still meets the design intent and capacity of the previous constructed onsite detention facility located at the corner of Henry Avenue and Bryant Parkway.

Per previous drainage calculations performed for the construction of the existing pond, the existing ground coverage for the entire development drainage basin consisted of and partially still consists of natural vegetation (3%-8% slope), hydrologic soil group C/D (C = 0.50).

According to FEMA Flood Insurance Rate Map, Panel 05125C0240E, this property lies within Zone X, areas determined to be outside the 0.2% annual chance floodplain. A copy of the map can be found in the appendix.

# DRAINAGE CRITERIA

In accordance with the requirements of the City of Bryant, the proposed developments drainage plan and this drainage report were developed with the criteria established in the Bryant Stormwater Management & Drainage Manual provided on cityofbryant.com.

All drainage calculations were performed using HydroCAD software to determine and analyze the changes in stormrunoff volume, flow rates, and design the outlet release structure.  Hydraflow Express software was used to appropriately design and size all storm sewer inlets, pipes and channels.

Calculations were performed using the Rational Method, using NOAA rainfall data, and the pond volume and outlet structure was analyzed for the 100-year storm event while the outlet structure is expected to match or reduce pre-development flow rates for all storm events: 2-yr, 10-yr, 25-yr, and 100-yr storms.

## DESCRIPTION OF PREVIOUS DETENTION FACILITIES

Phillip Lewis Engineering has evaluated the previously supplied drainage analysis and made site investigations to fully understand the current drainage situation.

The previous drainage analysis studied the pre vs. post scenarios as a single 8.5 acre node. Post development was studied as one node routing through the detention pond that is now constructed on the site. Due to the nature of how construction phasing has evolved, some areas were not routed to this detention pond. Some of these areas ultimately discharge to locations that bypass the detention basin. Additionally, we believe that the current pond actually was intended to capture approximately 10 acres, which ecompasses the Goddard facility, Christy Lane, Summerwood Offices, and Genwealth Financial Services.

This drainage study is intended to account for these descrepencies and ensure that the detention basin is throttling appropriately for the current and proposed increases in runoff. Additionally, within this design, the intent is to capture open pipe discharges (intended for pond capture) and route them correctly through adequate storm sewer.

## PROPOSED DRAINAGE SYSTEM

This develompent is designed to capture the majority of runoff within the parking lot curb and gutter, collecting stormwater with standard curb inlets and downspout collector pipes. New storm sewer onsite will connect to an existing storm junction box on Christy Lane, utimaley discharging into the existing detention pond. The detention pond will remain in place as constructed. This drainage analysis will provide supporting evidence to validate the previously constructed detention basin’s functionality.

The detention pond was designed to detain stromwater volumes based off the 100-yr storm events with a concrete overflow spillway to release water if a rainfall event were to exceed the 100-yr storm event. The outlet control structures are detailed within this report.

Overall Pre-development and Post-development runoff/discharge rates are compared below:

| Storm Event | Pre-development Discharge (cfs) | Post-development Discharge (cfs) |
|---|---|---|
| 2-yr | 13.31 | 11.94 |
| 5-yr | 15.93 | 13.75 |
| 10-yr | 17.95 | 15.03 |
| 25-yr | 20.67 | 16.53 |
| 100-yr | 24.60 | 18.73 |

Overall pre development and post development discharge rates are displayed in the following hydrographs. A final discharge link has been added to show one comparable discharge number.

# PRE DEVELOPMENT HYDROGRAPH

## Summary for Subcatchment PRE: Pre-Development Discharge

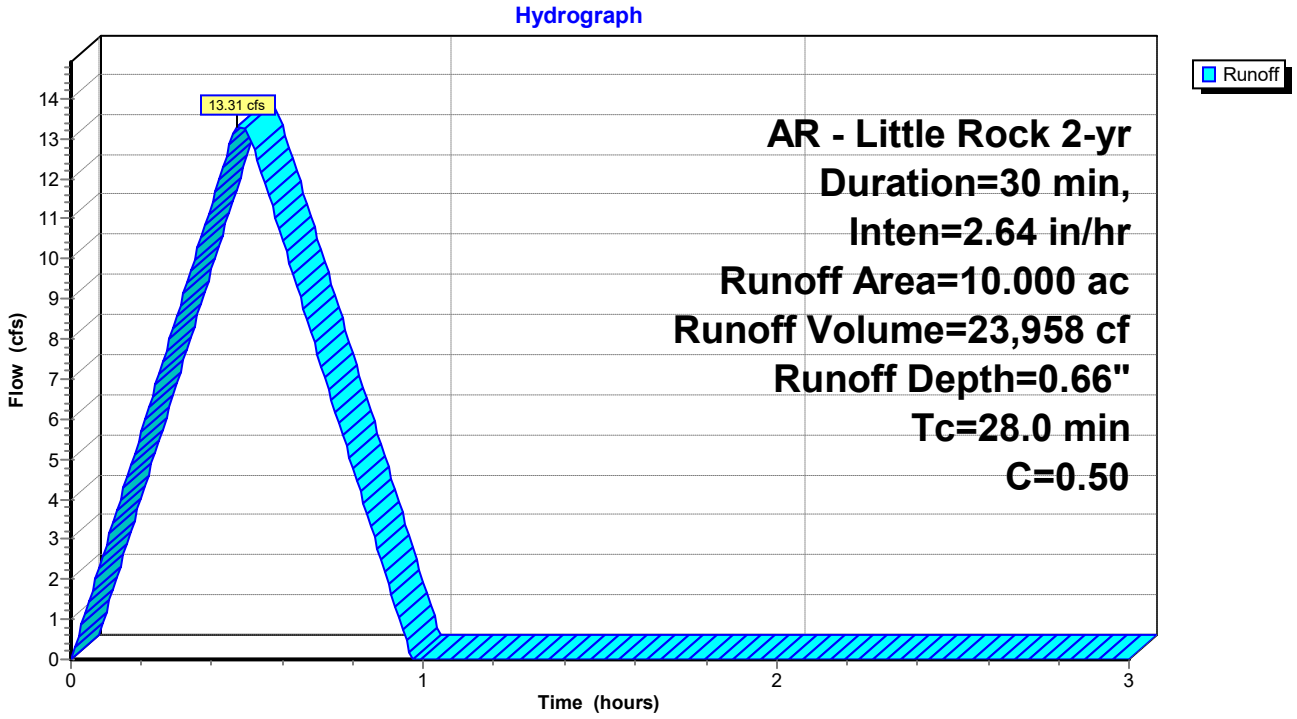
Runoff = 13.31 cfs @ 0.47 hrs, Volume= 23,958 cf, Depth= 0.66"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (ac) | C | Description |
|---|---|---|
| 10.000 | 0.50 | Undeveloped |
| 10.000 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 28.0 | | | | | **Direct Entry,** |

## Subcatchment PRE: Pre-Development Discharge



## Summary for Subcatchment PRE: Pre-Development Discharge

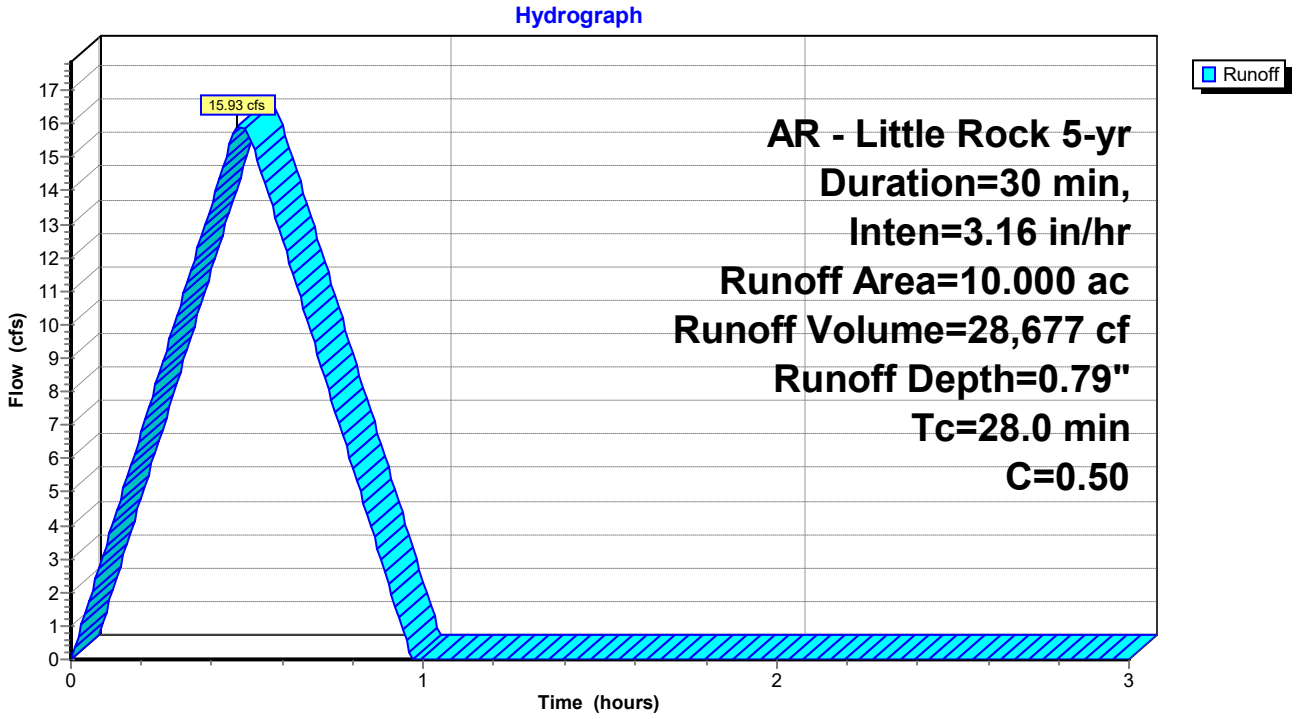
Runoff = 15.93 cfs @ 0.47 hrs, Volume= 28,677 cf, Depth= 0.79"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (ac) | C | Description |
|---|---|---|
| 10.000 | 0.50 | Undeveloped |
| 10.000 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 28.0 | | | | | **Direct Entry,** |

## Subcatchment PRE: Pre-Development Discharge



## Summary for Subcatchment PRE: Pre-Development Discharge

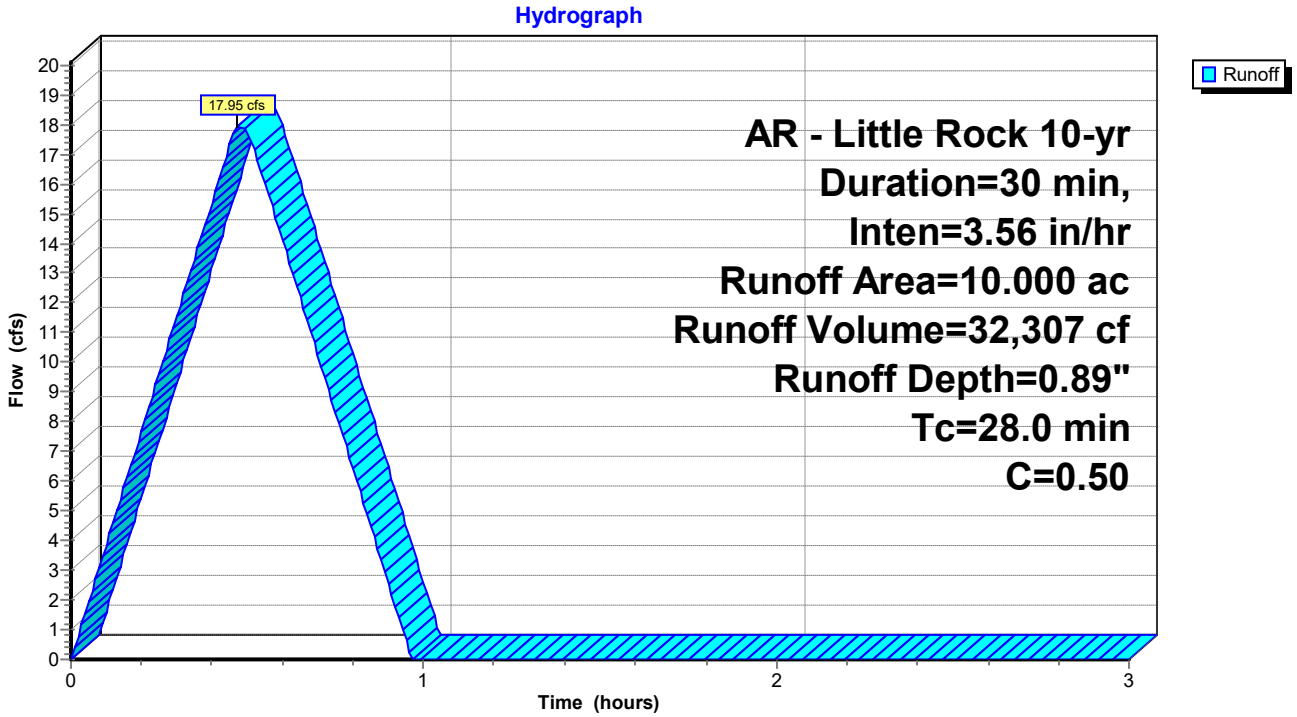
Runoff = 17.95 cfs @ 0.47 hrs, Volume= 32,307 cf, Depth= 0.89"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (ac) | C | Description |
|---|---|---|
| 10.000 | 0.50 | Undeveloped |
| 10.000 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 28.0 | | | | | **Direct Entry,** |

## Subcatchment PRE: Pre-Development Discharge



## Summary for Subcatchment PRE: Pre-Development Discharge

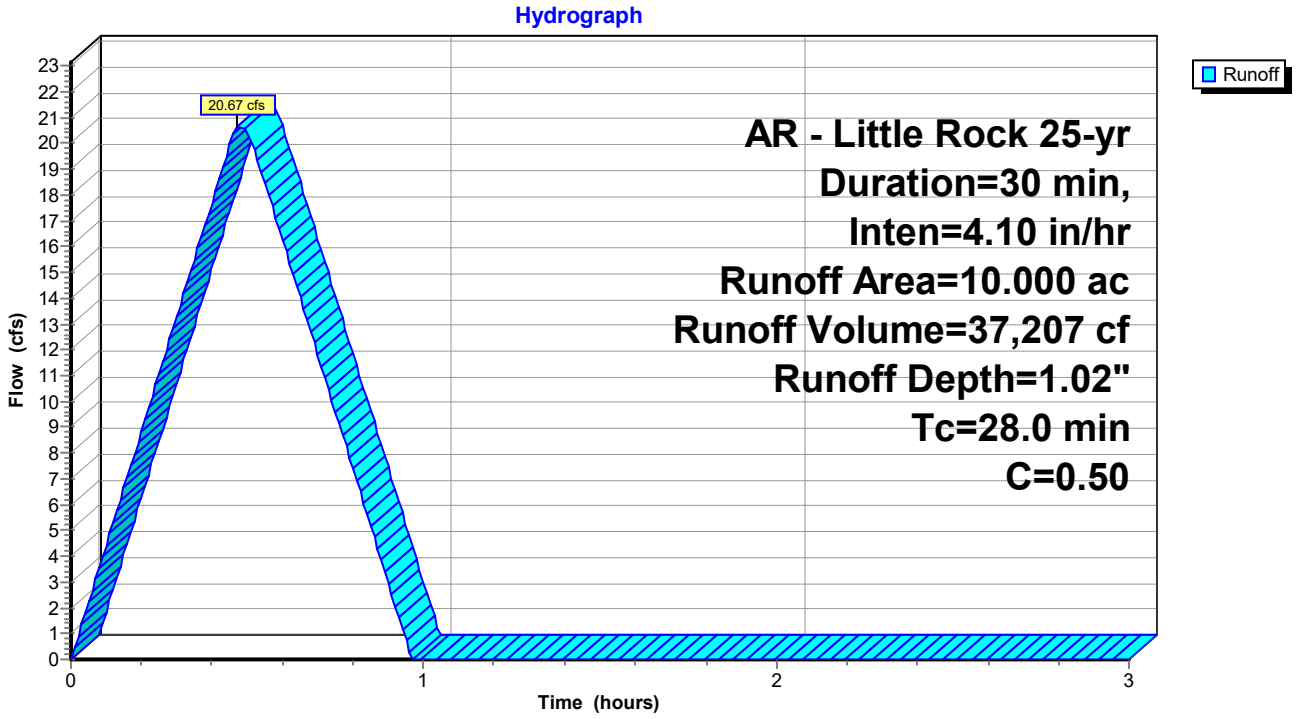
Runoff = 20.67 cfs @ 0.47 hrs, Volume= 37,207 cf, Depth= 1.02"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (ac) | C | Description |
|---|---|---|
| 10.000 | 0.50 | Undeveloped |
| 10.000 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 28.0 | | | | | **Direct Entry,** |

## Subcatchment PRE: Pre-Development Discharge



## Summary for Subcatchment PRE: Pre-Development Discharge

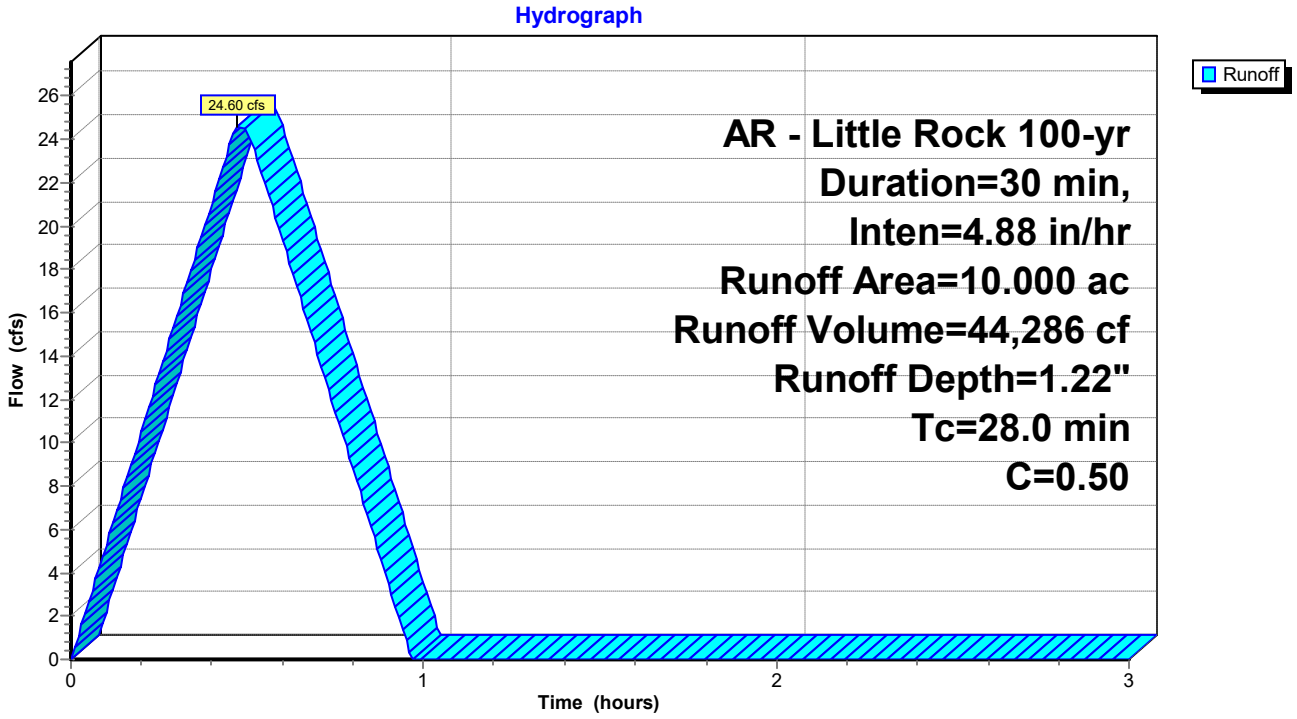
Runoff = 24.60 cfs @ 0.47 hrs, Volume= 44,286 cf, Depth= 1.22"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

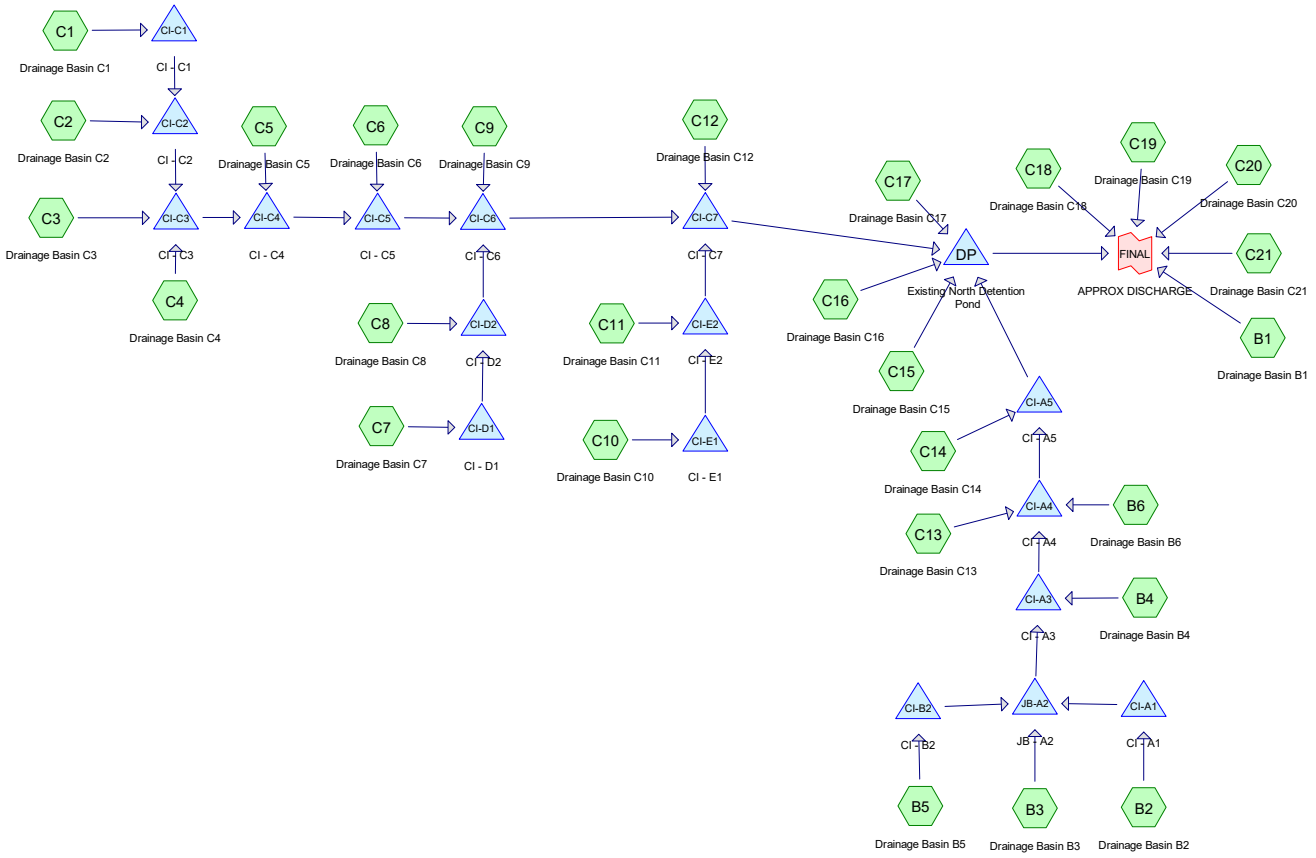
| Area (ac) | C | Description |
|---|---|---|
| 10.000 | 0.50 | Undeveloped |
| 10.000 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 28.0 | | | | | **Direct Entry,** |

## Subcatchment PRE: Pre-Development Discharge



# POST DEVELOPMENT HYDROGRAPHS




Subcat Reach Pond Link

**Routing Diagram for Goddard**

Prepared by Phillip Lewis Engineering, Printed 3/11/2026

HydroCAD® 10.20-5c s/n 12520 © 2023 HydroCAD Software Solutions LLC

## Summary for Subcatchment B1: Drainage Basin B1

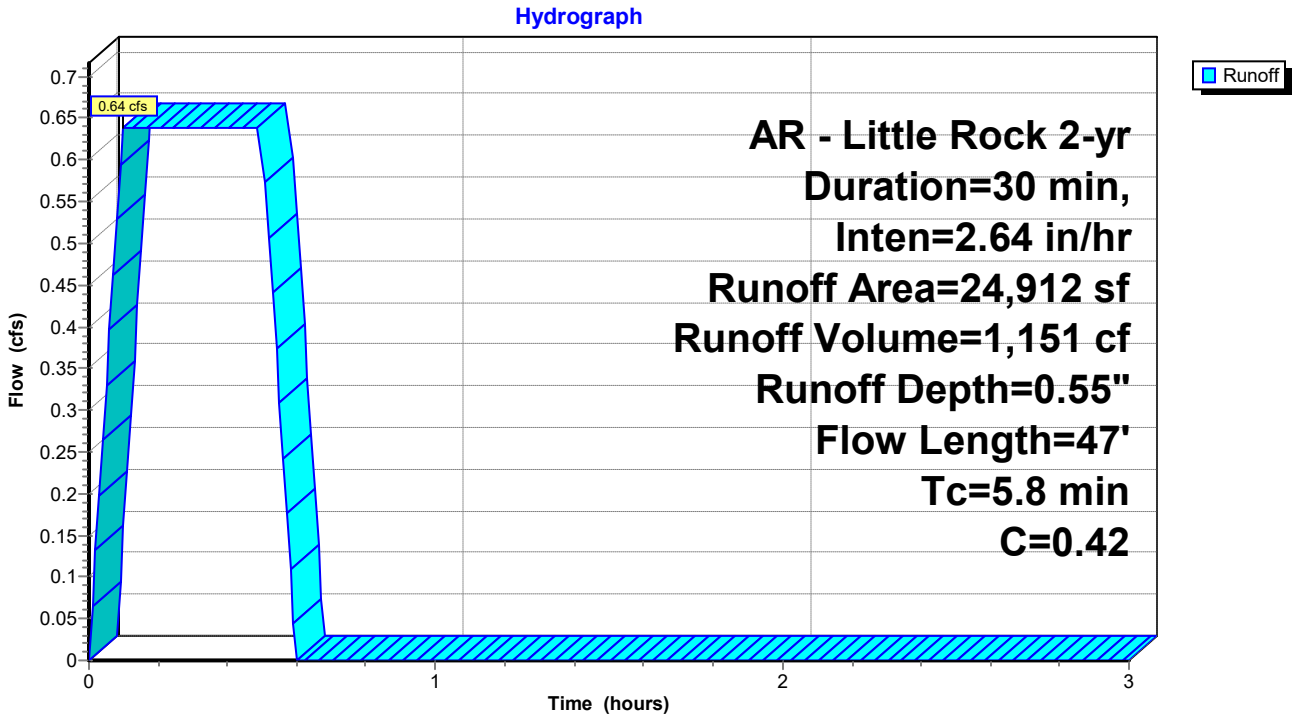
Runoff = 0.64 cfs @ 0.10 hrs, Volume= 1,151 cf, Depth= 0.55"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,091 | 0.40 | Sod Yard |
| 821 | 0.95 | Paving, Sidewalks |
| 24,912 | 0.42 | Weighted Average |
| 24,091 | | 96.70% Pervious Area |
| 821 | | 3.30% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.3 | 9 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 38 | 0.2040 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 5.8 | 47 | Total | | | |

## Subcatchment B1: Drainage Basin B1



## Summary for Subcatchment B2: Drainage Basin B2

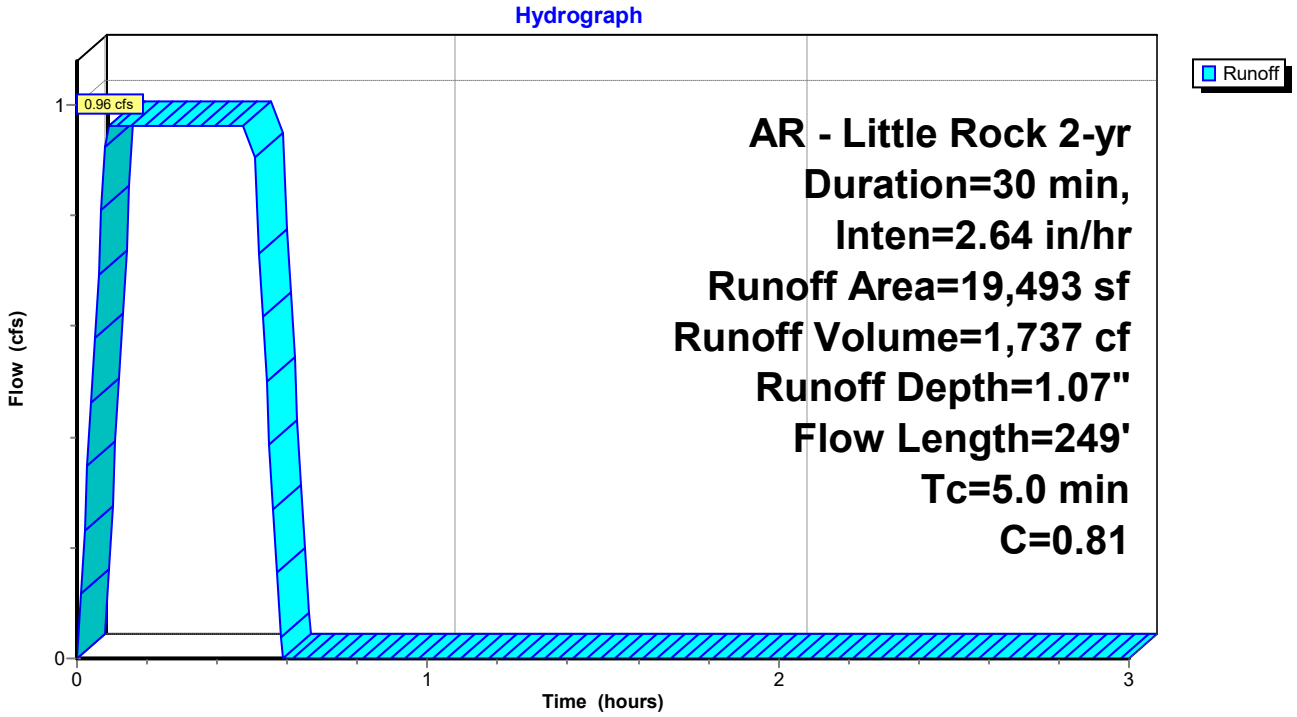
Runoff = 0.96 cfs @ 0.09 hrs, Volume= 1,737 cf, Depth= 1.07"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,903 | 0.40 | Sod Yard |
| 14,590 | 0.95 | Paving, Sidewalks |
| 19,493 | 0.81 | Weighted Average |
| 4,903 | | 25.15% Pervious Area |
| 14,590 | | 74.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 28 | 0.0450 | 1.69 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 72 | 0.0250 | 3.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 51 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 16 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 8 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 7 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 3.2 | | | | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 249 | Total | | | |

## Subcatchment B2: Drainage Basin B2



## Summary for Subcatchment B3: Drainage Basin B3

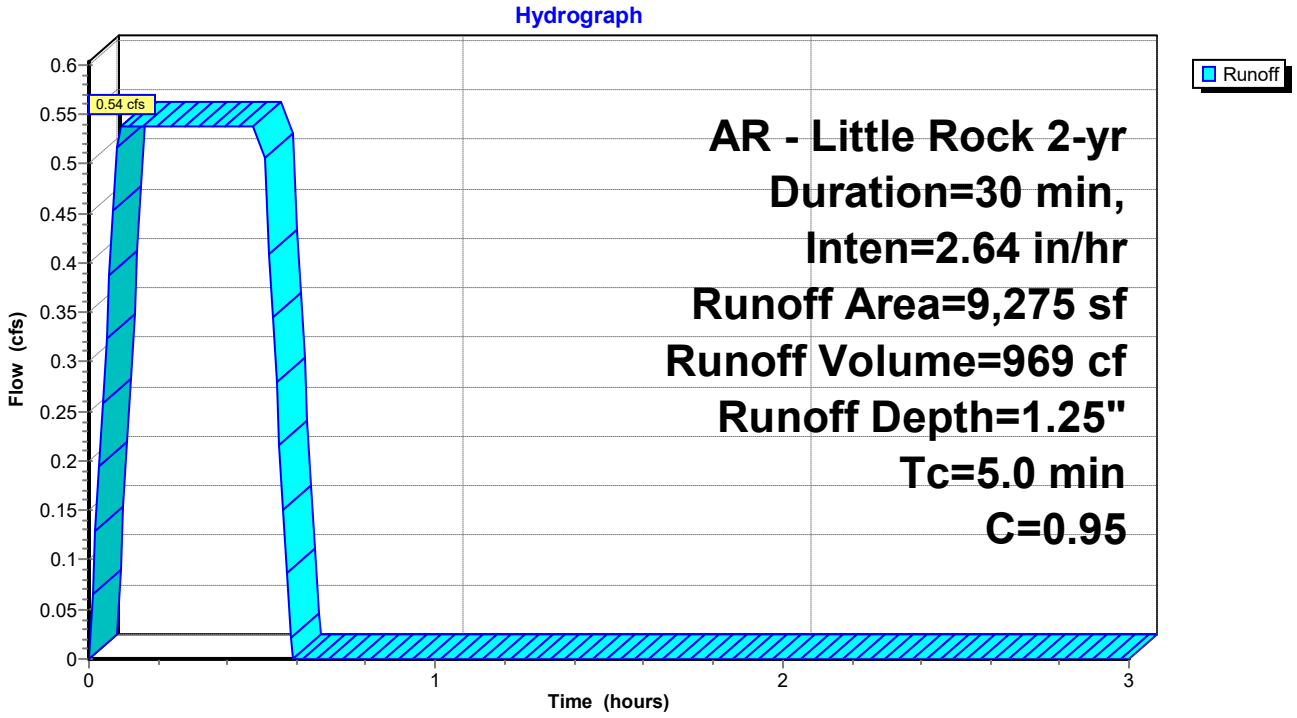
Runoff = 0.54 cfs @ 0.09 hrs, Volume= 969 cf, Depth= 1.25"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 9,275 | 0.95 | Roof |
| 9,275 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | | | | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment B3: Drainage Basin B3



## Summary for Subcatchment B4: Drainage Basin B4

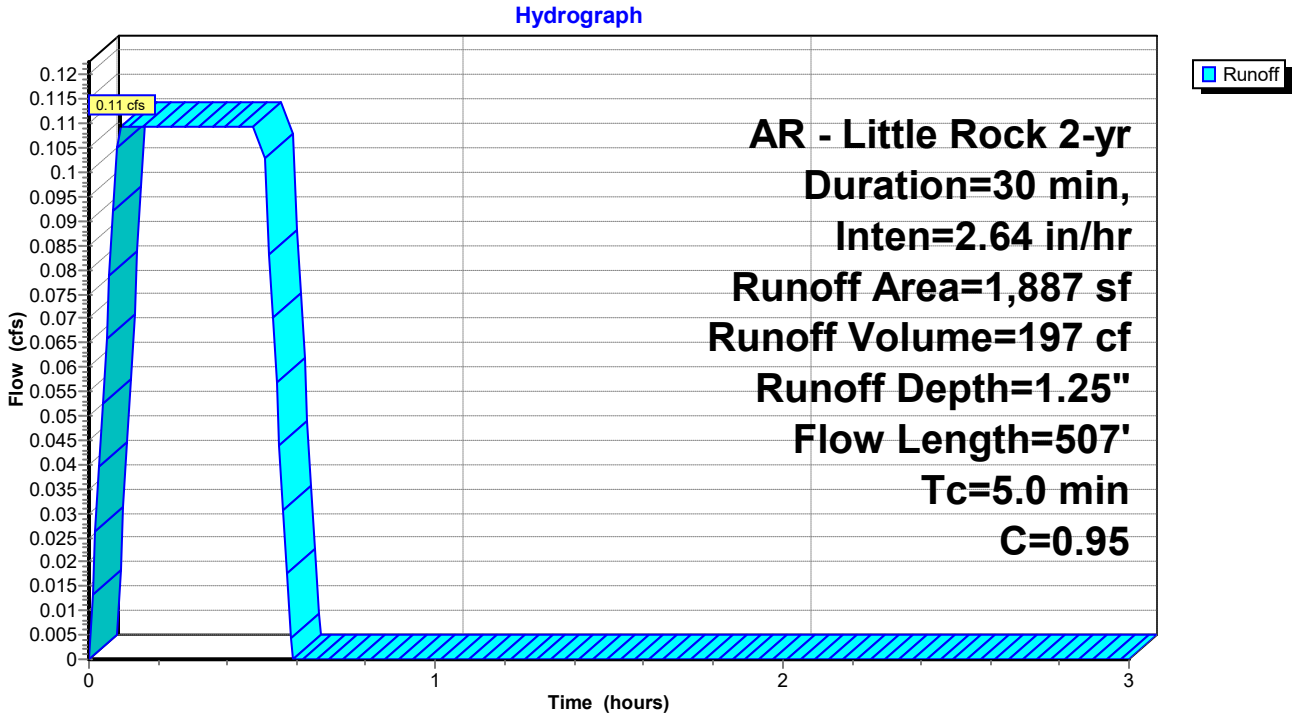
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 197 cf, Depth= 1.25"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,887 | 0.95 | Paving, Sidewalks |
| 1,887 | 0.95 | Weighted Average |
| 1,887 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 30 | 0.0240 | 1.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 13 | 0.0860 | 5.95 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 507 | Total | | | |

## Subcatchment B4: Drainage Basin B4



## Summary for Subcatchment B5: Drainage Basin B5

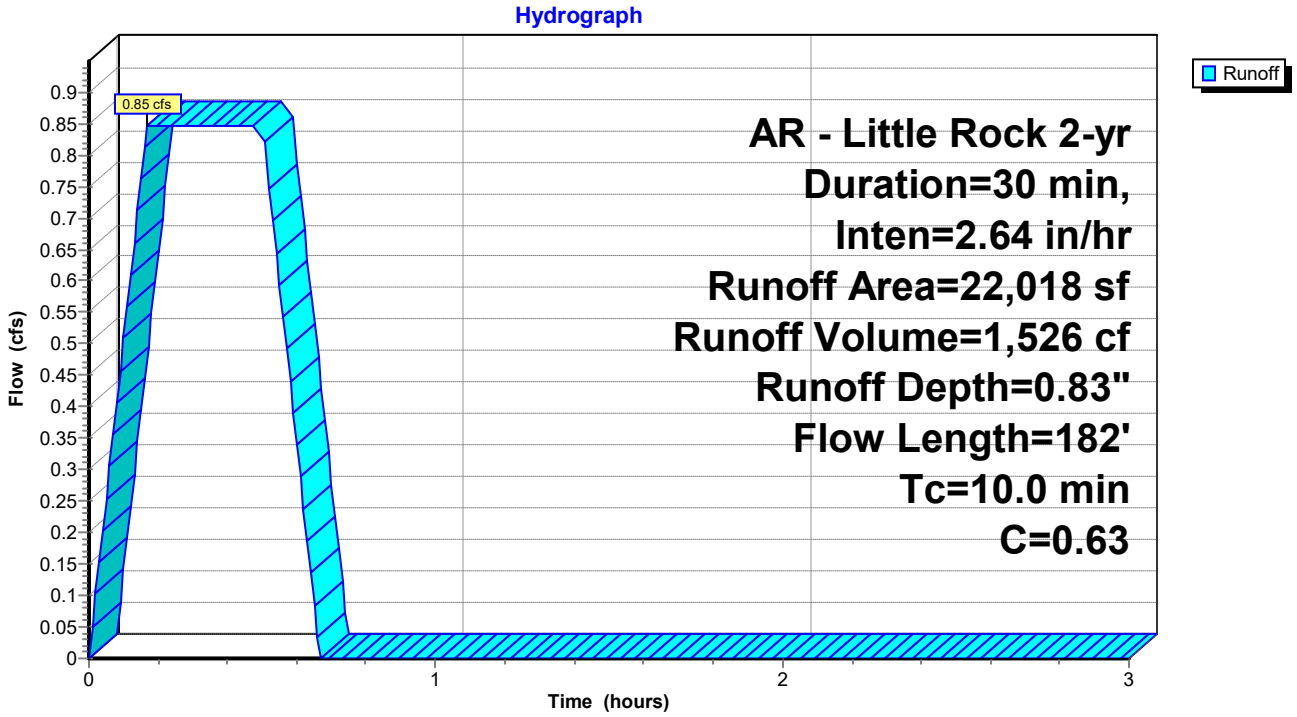
Runoff = 0.85 cfs @ 0.17 hrs, Volume= 1,526 cf, Depth= 0.83"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,753 | 0.40 | Sod Yard |
| 9,265 | 0.95 | Paving, Sidewalks |
| 22,018 | 0.63 | Weighted Average |
| 12,753 | | 57.92% Pervious Area |
| 9,265 | | 42.08% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.2 | 10 | 0.0150 | 0.89 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 9.1 | 93 | 0.0150 | 0.17 | | **Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19" |
| 0.4 | 40 | 0.0110 | 1.57 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 33 | 0.0190 | 2.07 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 6 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 10.0 | 182 | Total | | | |

## Subcatchment B5: Drainage Basin B5



## Summary for Subcatchment B6: Drainage Basin B6

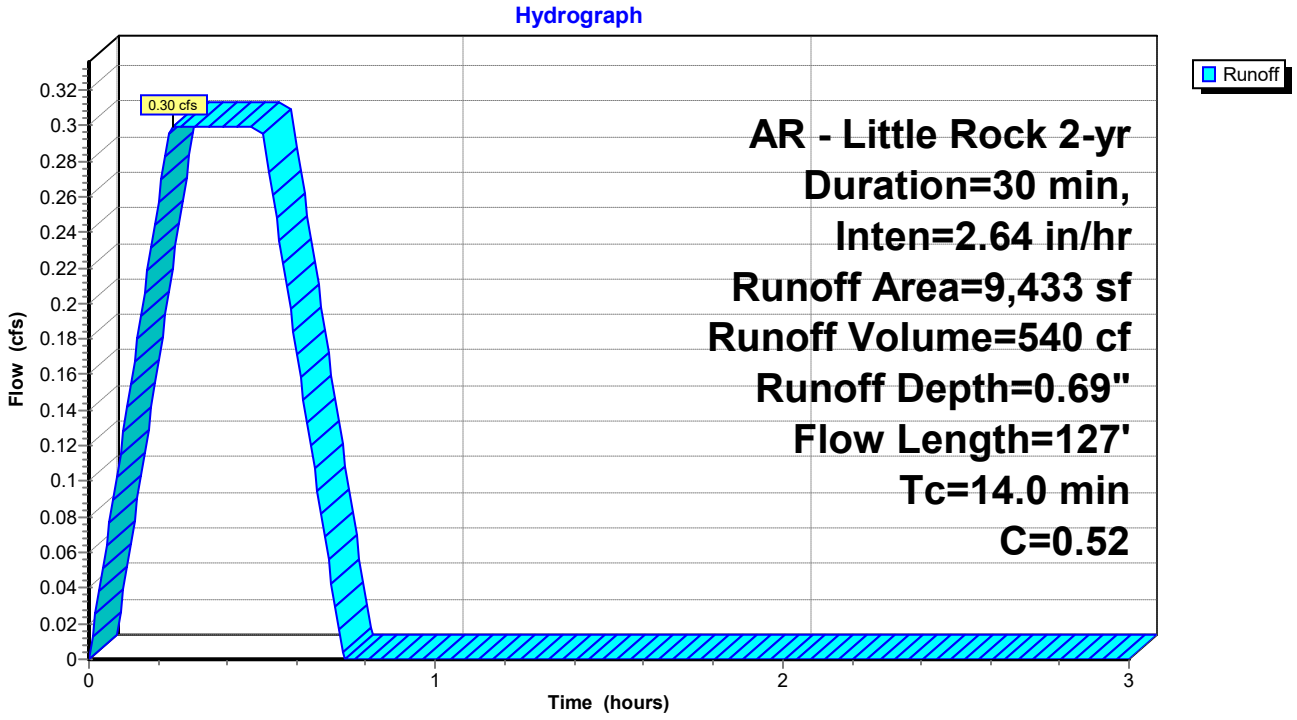
Runoff = 0.30 cfs @ 0.24 hrs, Volume= 540 cf, Depth= 0.69"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,346 | 0.40 | Sod Yard |
| 2,087 | 0.95 | Paving, Sidewalks |
| 9,433 | 0.52 | Weighted Average |
| 7,346 | | 77.88% Pervious Area |
| 2,087 | | 22.12% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 10.4 | 79 | 0.0570 | 0.13 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 21 | 0.0620 | 0.10 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.0 | 9 | 0.0620 | 3.73 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 18 | 0.1080 | 4.93 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 14.0 | 127 | Total | | | |

## Subcatchment B6: Drainage Basin B6



## Summary for Subcatchment C1: Drainage Basin C1

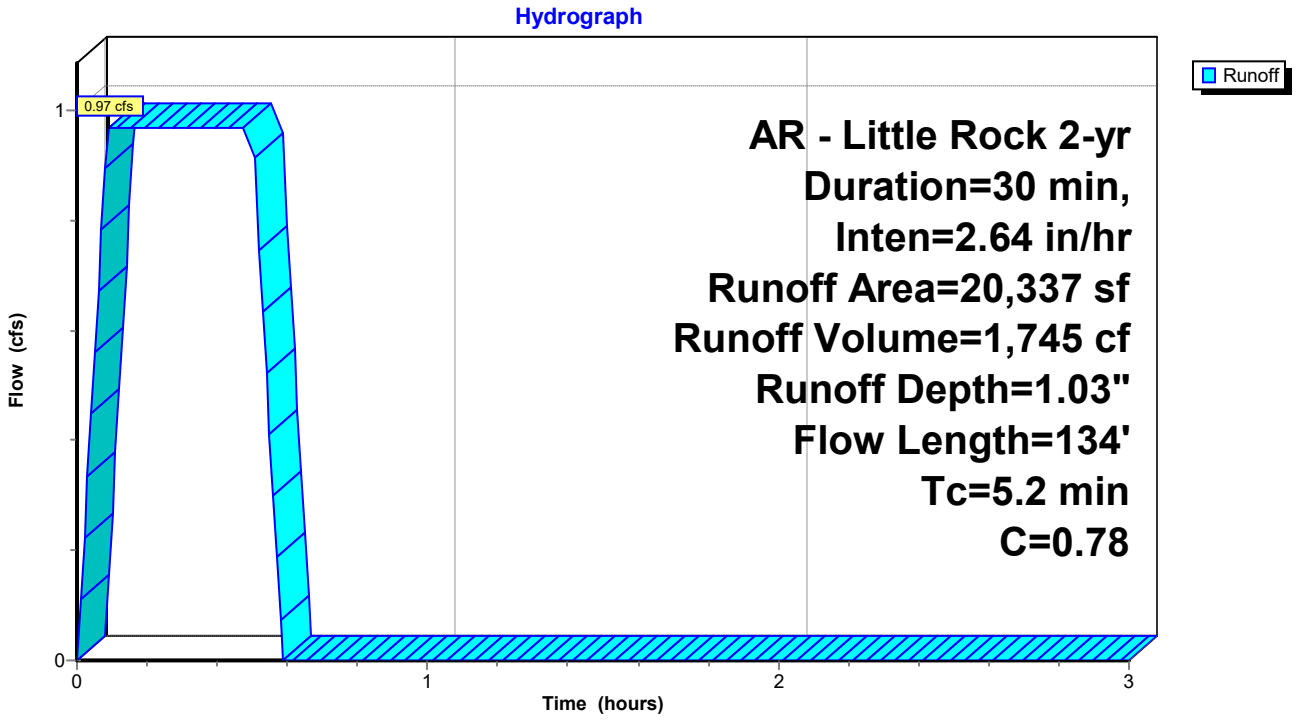
Runoff = 0.97 cfs @ 0.09 hrs, Volume= 1,745 cf, Depth= 1.03"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,135 | 0.40 | Sod Yard |
| 14,202 | 0.95 | Paving, Sidewalks |
| 20,337 | 0.78 | Weighted Average |
| 6,135 | | 30.17% Pervious Area |
| 14,202 | | 69.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 32 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.4 | 102 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 5.2 | 134 | Total | | | |

## Subcatchment C1: Drainage Basin C1



## Summary for Subcatchment C10: Drainage Basin C10

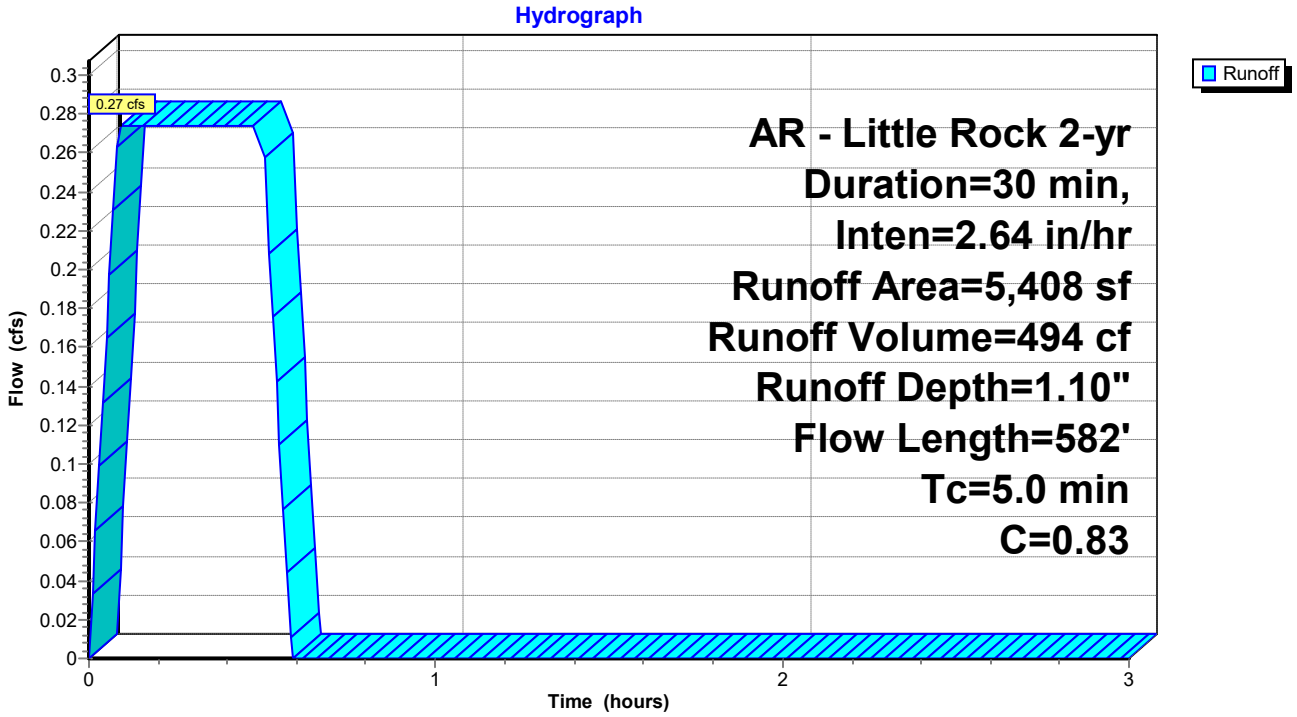
Runoff = 0.27 cfs @ 0.09 hrs, Volume= 494 cf, Depth= 1.10"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,225 | 0.40 | Sod Yard |
| 4,183 | 0.95 | Paving, Sidewalks |
| 5,408 | 0.83 | Weighted Average |
| 1,225 | | 22.65% Pervious Area |
| 4,183 | | 77.35% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 29 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 36 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 48 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 13 | 0.0350 | 3.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.9 | 415 | | 1.77 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 582 | Total | | | |

## Subcatchment C10: Drainage Basin C10



## Summary for Subcatchment C11: Drainage Basin C11

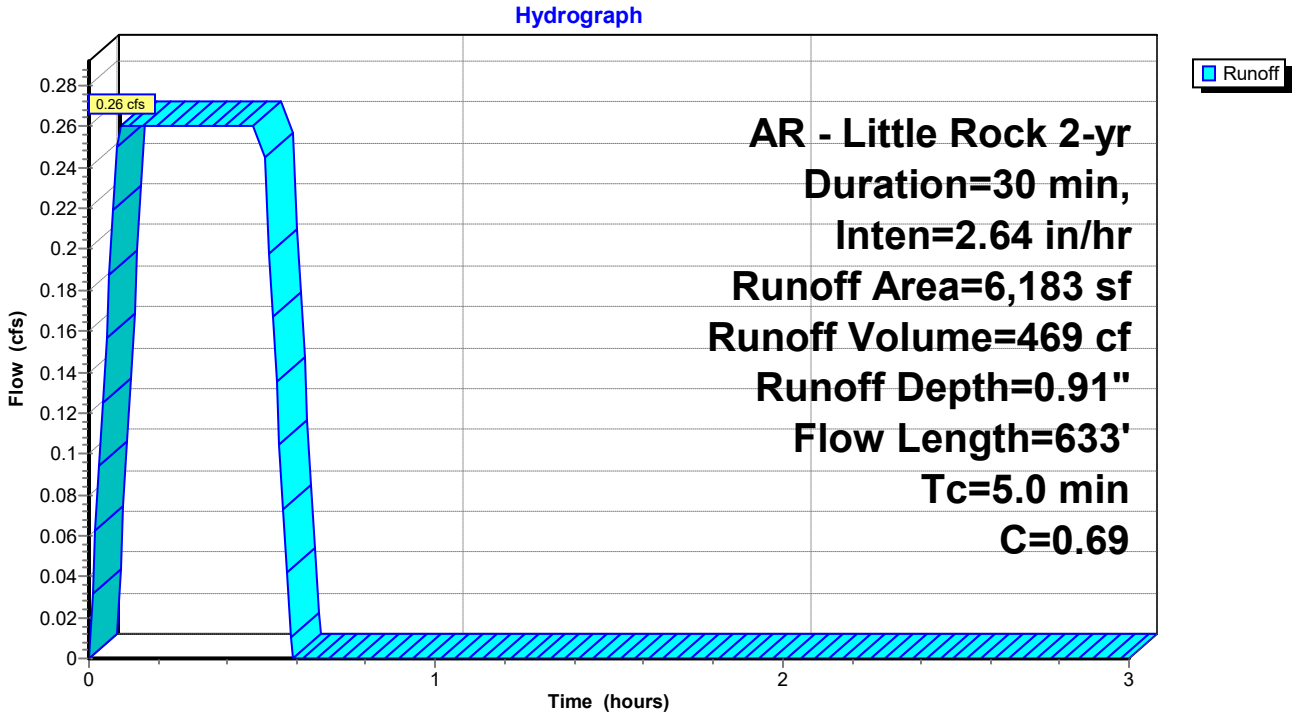
Runoff = 0.26 cfs @ 0.09 hrs, Volume= 469 cf, Depth= 0.91"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,876 | 0.40 | Sod Yard |
| 3,307 | 0.95 | Paving, Sidewalks |
| 6,183 | 0.69 | Weighted Average |
| 2,876 | | 46.51% Pervious Area |
| 3,307 | | 53.49% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 25 | 0.0200 | 1.19 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 33 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 37 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 633 | Total | | | |

## Subcatchment C11: Drainage Basin C11



## Summary for Subcatchment C12: Drainage Basin C12

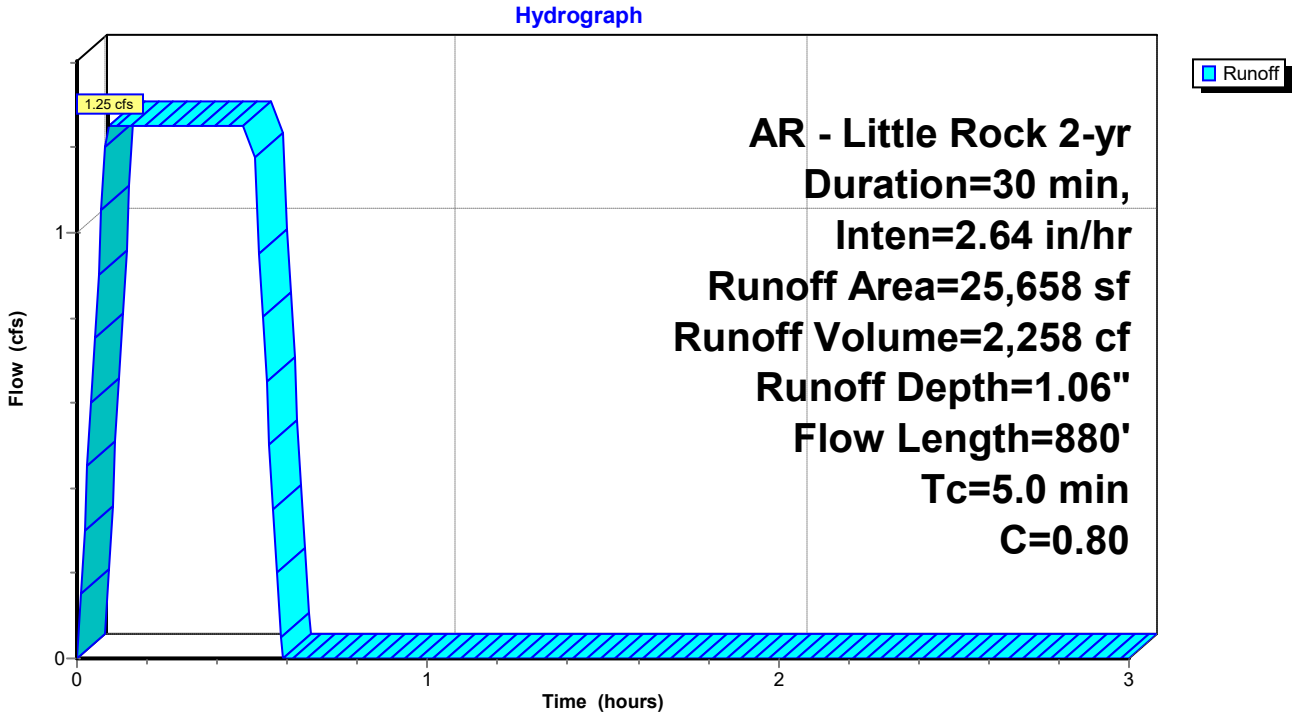
Runoff = 1.25 cfs @ 0.09 hrs, Volume= 2,258 cf, Depth= 1.06"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,218 | 0.40 | Sod Yard |
| 18,440 | 0.95 | Paving, Sidewalks |
| 25,658 | 0.80 | Weighted Average |
| 7,218 | | 28.13% Pervious Area |
| 18,440 | | 71.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 24 | 0.0360 | 1.50 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0190 | 0.85 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 21 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.9 | 49 | 0.0020 | 0.91 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.4 | 96 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 94 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 25 | 0.0450 | 4.31 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 39 | 0.0490 | 4.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0460 | 4.35 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 11 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0440 | 4.26 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.3 | 415 | | 3.01 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 880 | Total | | | |

## Subcatchment C12: Drainage Basin C12



## Summary for Subcatchment C13: Drainage Basin C13

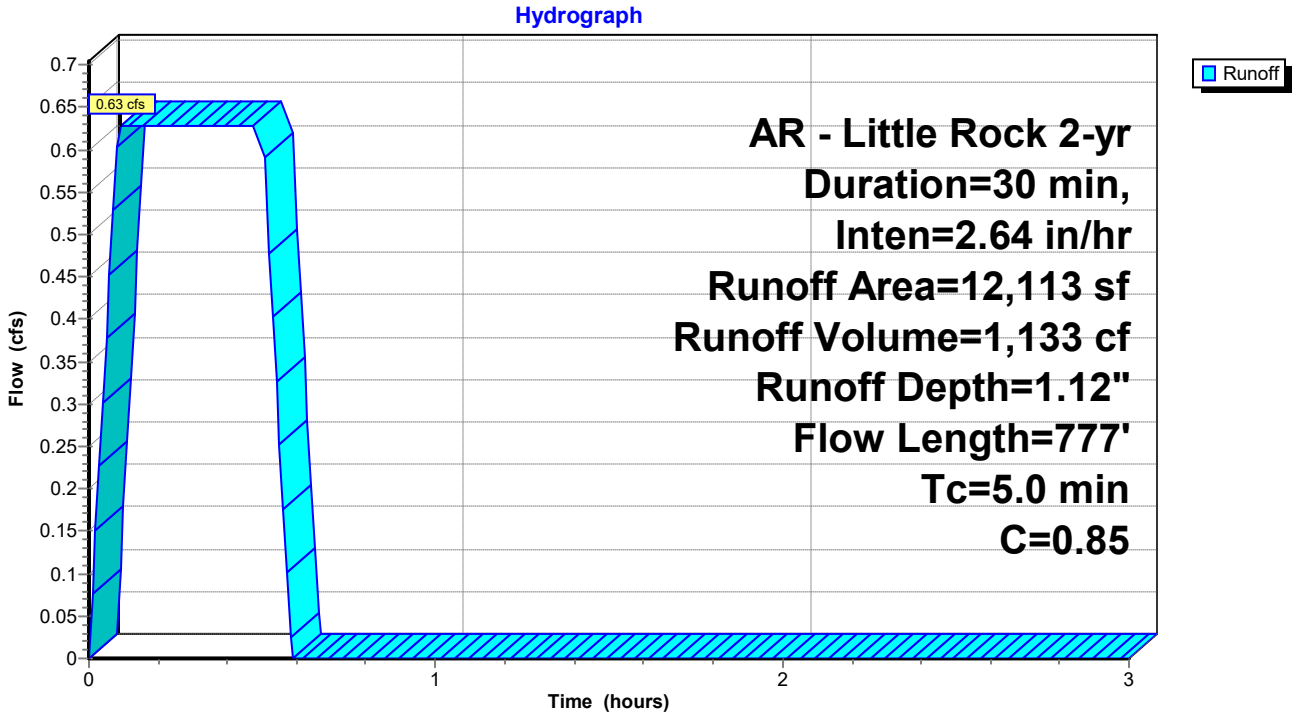
Runoff = 0.63 cfs @ 0.09 hrs, Volume= 1,133 cf, Depth= 1.12"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,240 | 0.40 | Sod Yard |
| 9,873 | 0.95 | Paving, Sidewalks |
| 12,113 | 0.85 | Weighted Average |
| 2,240 | | 18.49% Pervious Area |
| 9,873 | | 81.51% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 75 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 42 | 0.0730 | 5.48 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 74 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 32 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.6 | 415 | | 1.92 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 777 | Total | | | |

## Subcatchment C13: Drainage Basin C13



## Summary for Subcatchment C14: Drainage Basin C14

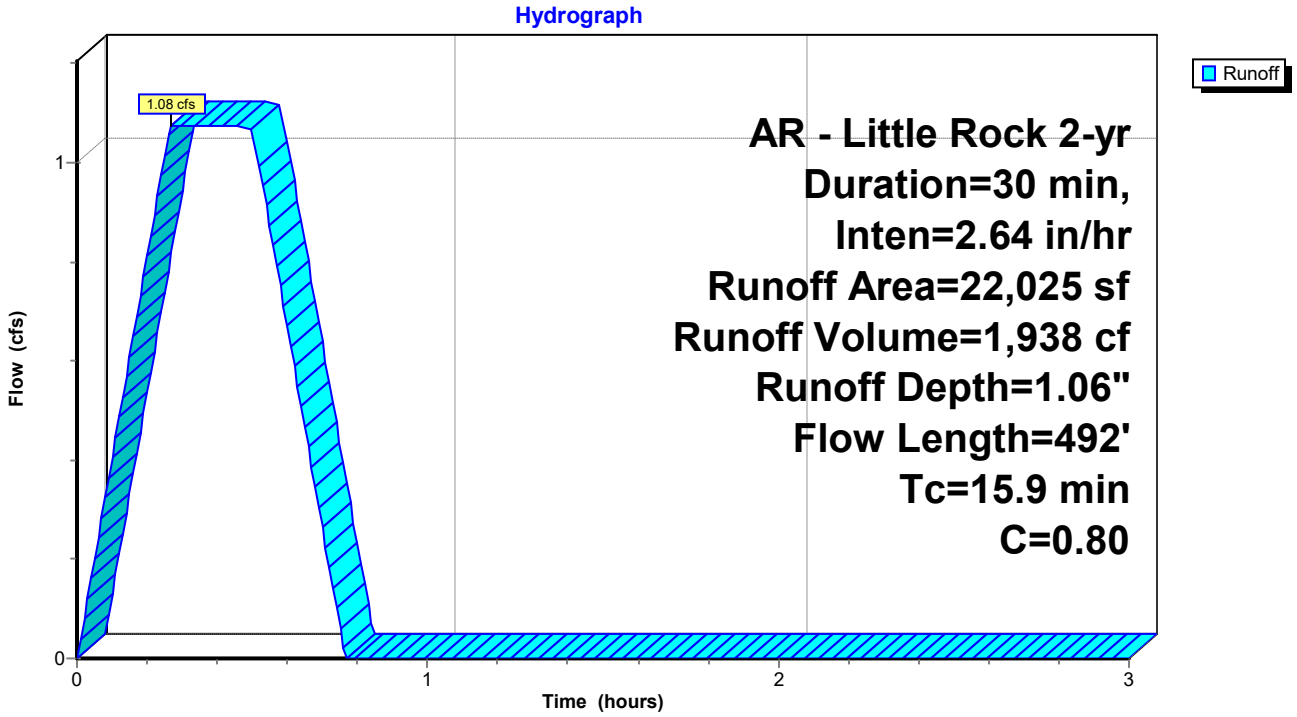
Runoff = 1.08 cfs @ 0.27 hrs, Volume= 1,938 cf, Depth= 1.06"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,127 | 0.40 | Sod Yard |
| 15,898 | 0.95 | Paving, Sidewalks |
| 22,025 | 0.80 | Weighted Average |
| 6,127 | | 27.82% Pervious Area |
| 15,898 | | 72.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.5 | 5 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 9.2 | 45 | 0.0250 | 0.08 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.8 | 41 | 0.1940 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 6 | 0.0100 | 0.68 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 51 | 0.0870 | 5.99 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0310 | 3.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 20 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 34 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 58 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 49 | 0.0840 | 5.88 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 15.9 | 492 | Total | | | |

## Subcatchment C14: Drainage Basin C14



## Summary for Subcatchment C15: Drainage Basin C15

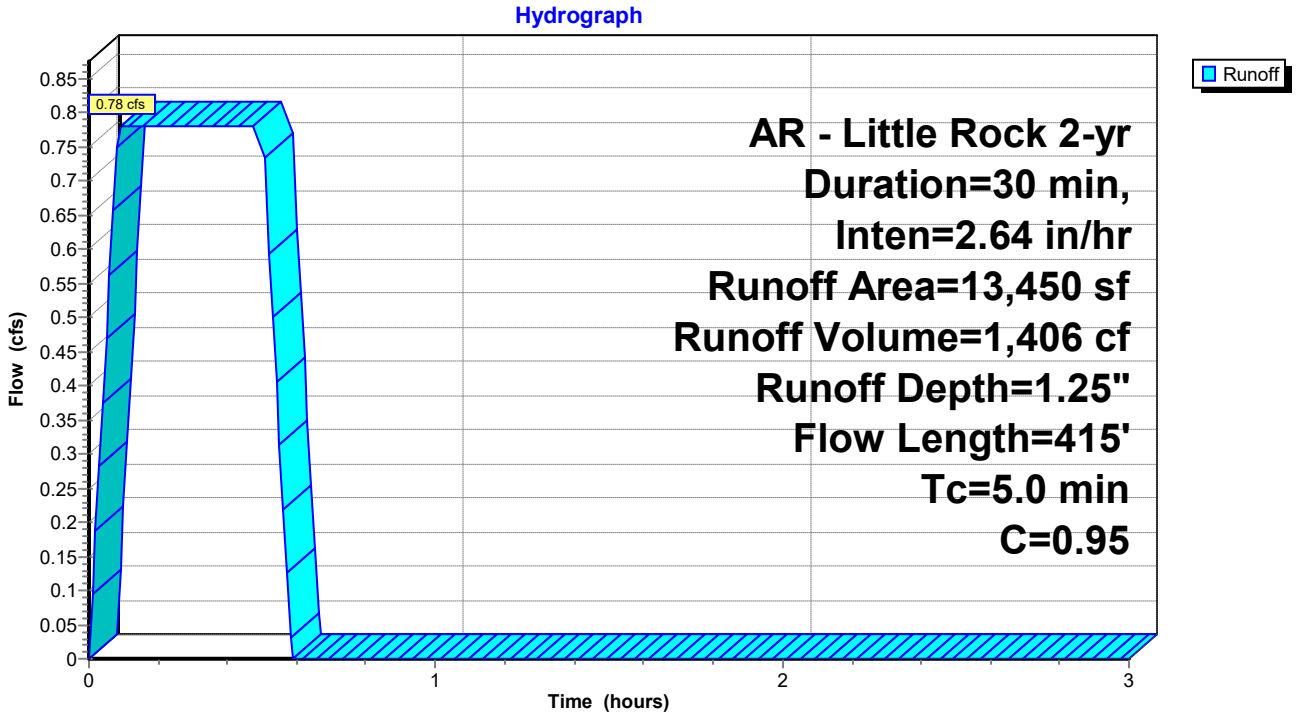
Runoff = 0.78 cfs @ 0.09 hrs, Volume= 1,406 cf, Depth= 1.25"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 13,450 | 0.95 | Paving, Sidewalks |
| 13,450 | 0.95 | Weighted Average |
| 13,450 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Overland Concentrated Flow (Min)** |

## Subcatchment C15: Drainage Basin C15



## Summary for Subcatchment C16: Drainage Basin C16

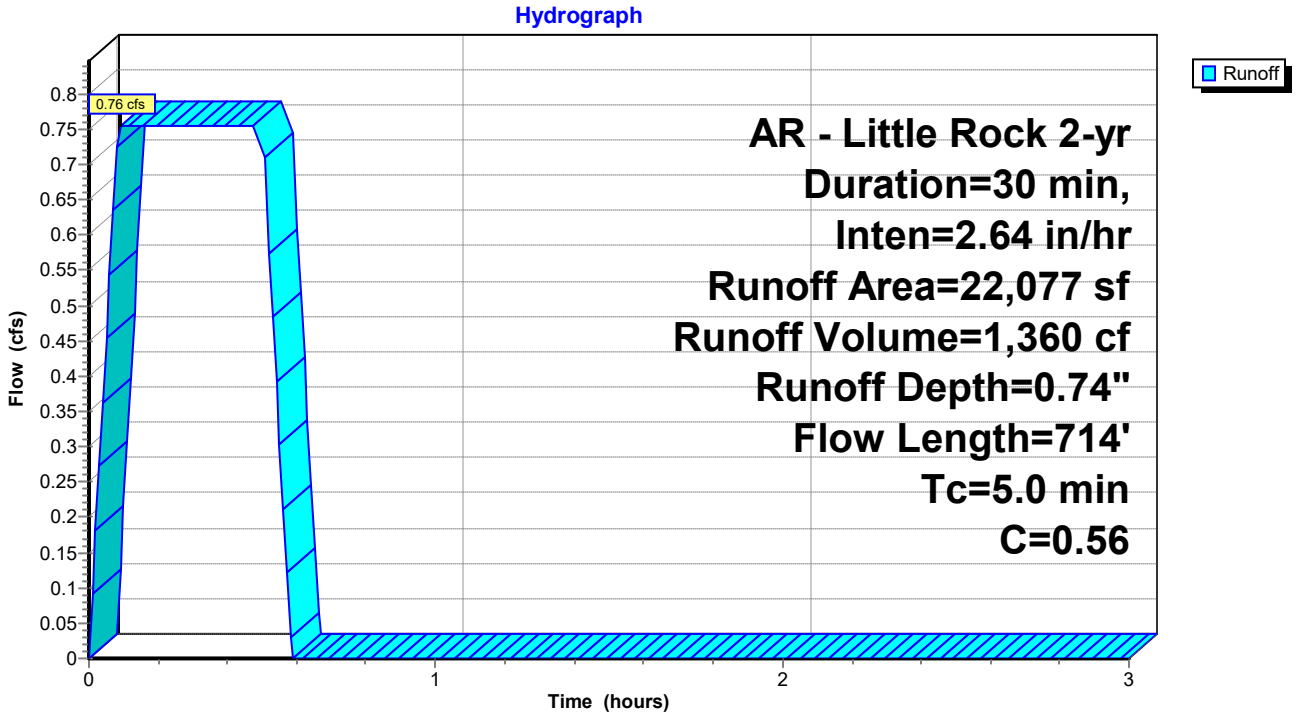
Runoff = 0.76 cfs @ 0.09 hrs, Volume= 1,360 cf, Depth= 0.74"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,465 | 0.40 | Sod Yard |
| 6,612 | 0.95 | Paving, Sidewalks |
| 22,077 | 0.56 | Weighted Average |
| 15,465 | | 70.05% Pervious Area |
| 6,612 | | 29.95% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 26 | 0.0190 | 1.18 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0100 | 0.66 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 51 | 0.0500 | 1.98 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 12 | 0.1540 | 2.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 50 | 0.1330 | 7.40 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 50 | 0.1170 | 6.94 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 59 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 3.3 | 415 | | 2.10 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 714 | Total | | | |

## Subcatchment C16: Drainage Basin C16



## Summary for Subcatchment C17: Drainage Basin C17

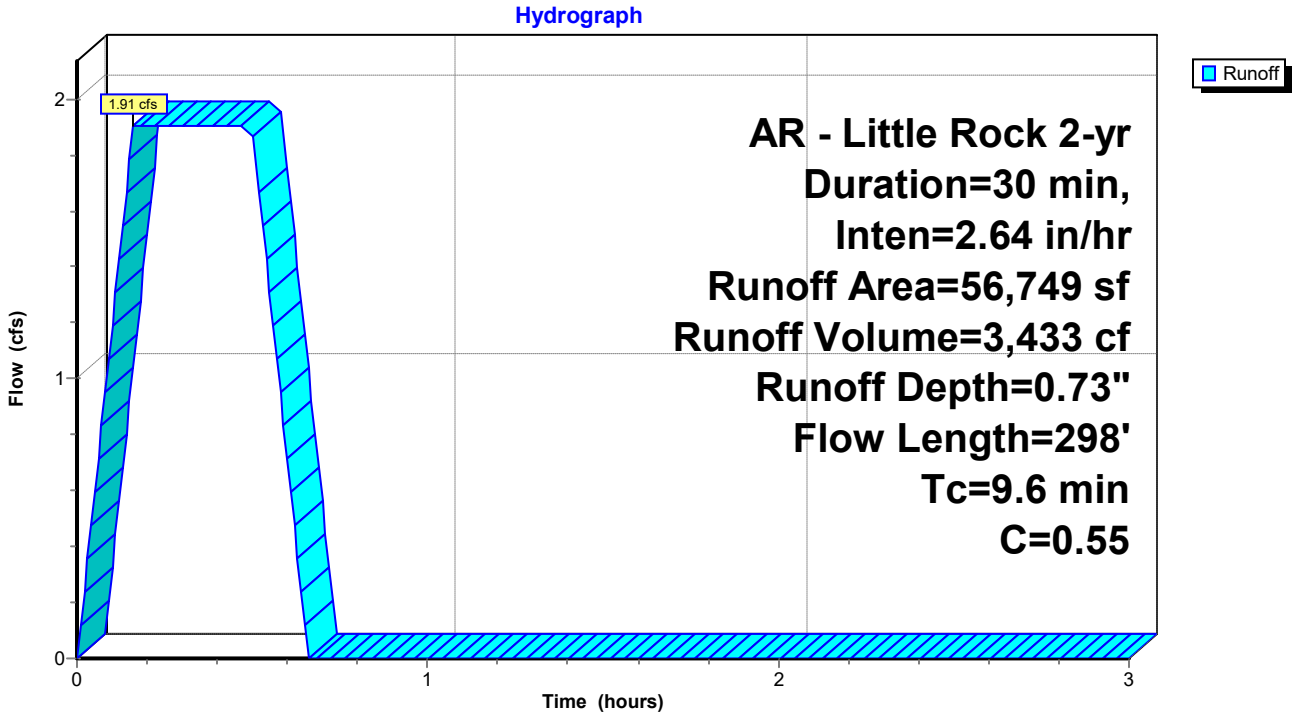
Runoff = 1.91 cfs @ 0.16 hrs, Volume= 3,433 cf, Depth= 0.73"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 40,914 | 0.40 | Sod Yard |
| 15,835 | 0.95 | Paving, Sidewalks |
| 56,749 | 0.55 | Weighted Average |
| 40,914 | | 72.10% Pervious Area |
| 15,835 | | 27.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 43 | 0.0410 | 0.15 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.9 | 43 | 0.0690 | 0.19 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 41 | 0.0980 | 4.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 61 | 0.0730 | 4.05 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0570 | 3.58 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 64 | 0.0450 | 3.18 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 9.6 | 298 | Total | | | |

## Subcatchment C17: Drainage Basin C17



## Summary for Subcatchment C18: Drainage Basin C18

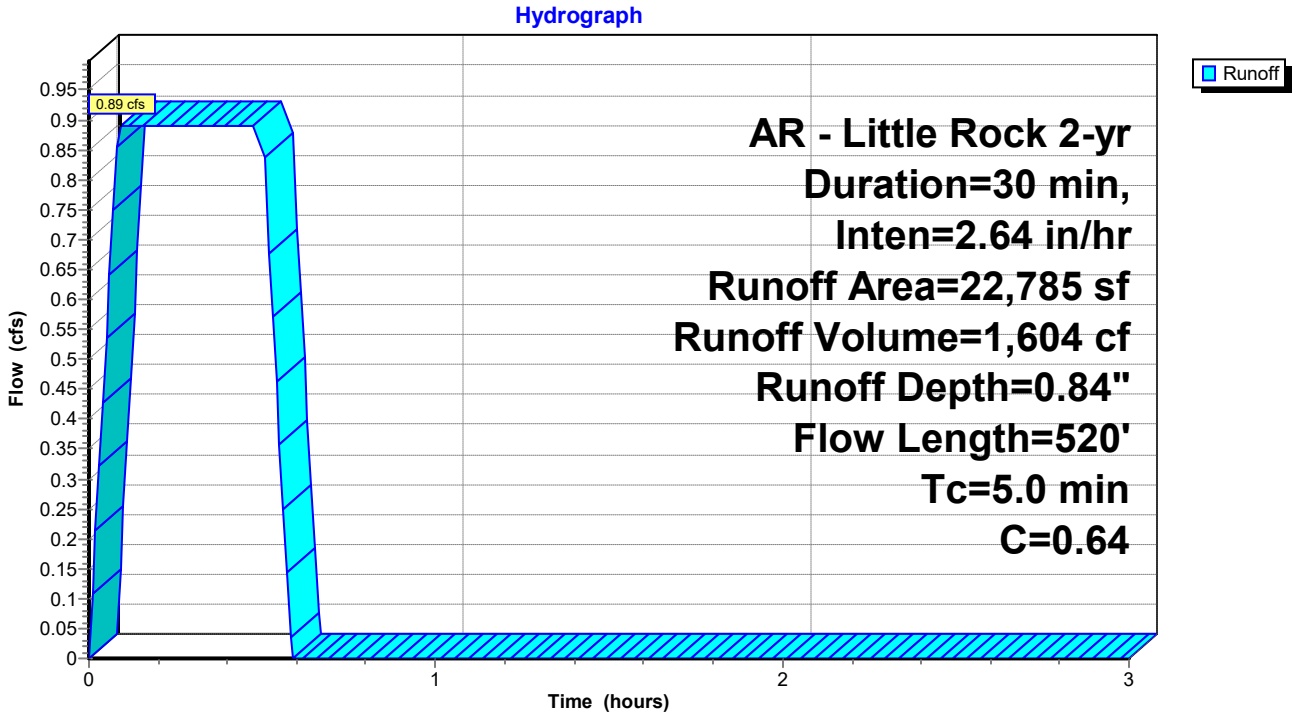
Runoff = 0.89 cfs @ 0.09 hrs, Volume= 1,604 cf, Depth= 0.84"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,812 | 0.40 | Sod Yard |
| 9,973 | 0.95 | Paving, Sidewalks |
| 22,785 | 0.64 | Weighted Average |
| 12,812 | | 56.23% Pervious Area |
| 9,973 | | 43.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2980 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.3 | 8 | 0.0100 | 0.04 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 80 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.4 | 415 | | 17.29 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 520 | Total | | | |

## Subcatchment C18: Drainage Basin C18



## Summary for Subcatchment C19: Drainage Basin C19

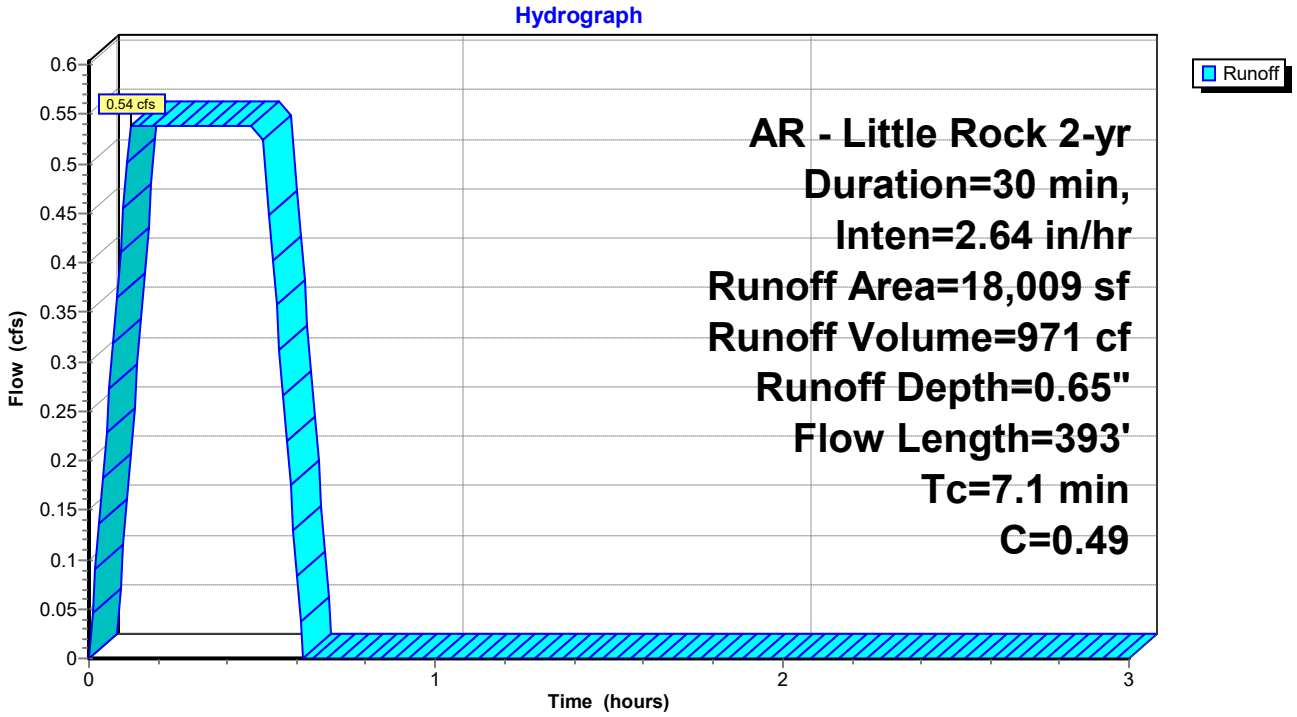
Runoff = 0.54 cfs @ 0.12 hrs, Volume= 971 cf, Depth= 0.65"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,129 | 0.40 | Sod Yard |
| 2,880 | 0.95 | Paving, Sidewalks |
| 18,009 | 0.49 | Weighted Average |
| 15,129 | | 84.01% Pervious Area |
| 2,880 | | 15.99% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 34 | 0.1110 | 0.21 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 3.3 | 66 | 0.2450 | 0.34 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 0.0 | 9 | 0.2450 | 7.42 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.5 | 106 | 0.0610 | 3.70 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0800 | 4.24 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.1 | 41 | 0.0960 | 4.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 66 | 0.0680 | 3.91 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.0 | 19 | 0.1070 | 6.64 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 7.1 | 393 | Total | | | |

## Subcatchment C19: Drainage Basin C19



## Summary for Subcatchment C2: Drainage Basin C2

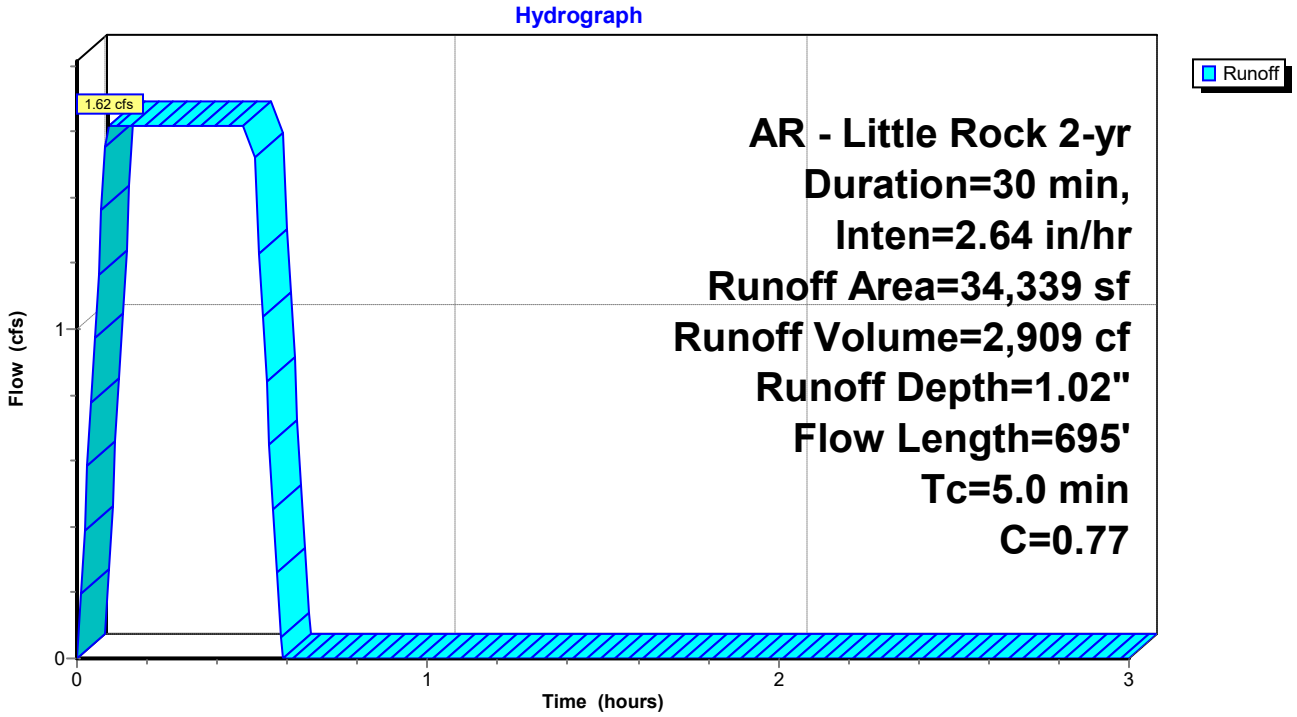
Runoff = 1.62 cfs @ 0.09 hrs, Volume= 2,909 cf, Depth= 1.02"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 11,376 | 0.40 | Sod Yard |
| 22,963 | 0.95 | Roof, Paving, Sidewalks |
| 34,339 | 0.77 | Weighted Average |
| 11,376 | | 33.13% Pervious Area |
| 22,963 | | 66.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 20 | 0.0200 | 1.14 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 74 | 0.0240 | 3.14 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 21 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.6 | 148 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.5 | 415 | | 1.98 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 695 | Total | | | |

## Subcatchment C2: Drainage Basin C2



## Summary for Subcatchment C20: Drainage Basin C20

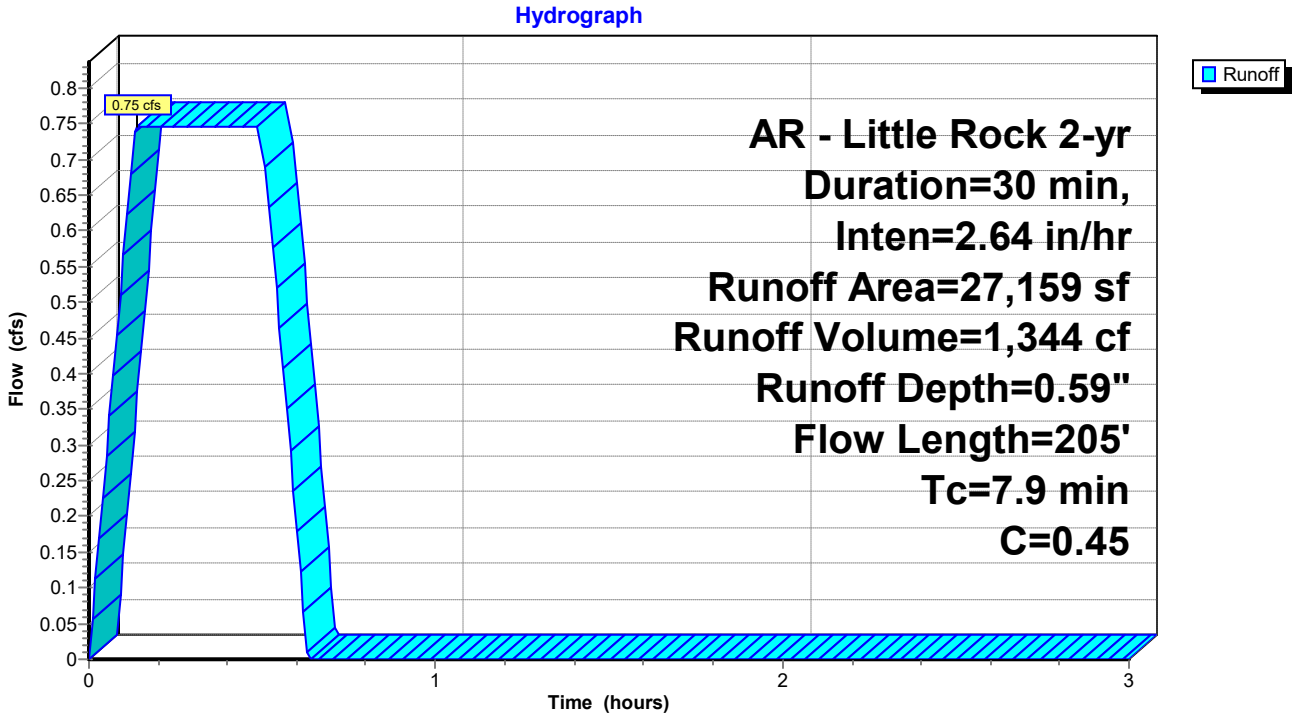
Runoff = 0.75 cfs @ 0.14 hrs, Volume= 1,344 cf, Depth= 0.59"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,838 | 0.40 | Sod Yard |
| 2,321 | 0.95 | Paving, Sidewalks |
| 27,159 | 0.45 | Weighted Average |
| 24,838 | | 91.45% Pervious Area |
| 2,321 | | 8.55% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 45 | 0.1430 | 0.25 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 4.5 | 55 | 0.0780 | 0.20 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 37 | 0.0780 | 4.19 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 68 | 0.0710 | 4.00 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 7.9 | 205 | Total | | | |

## Subcatchment C20: Drainage Basin C20



## Summary for Subcatchment C21: Drainage Basin C21

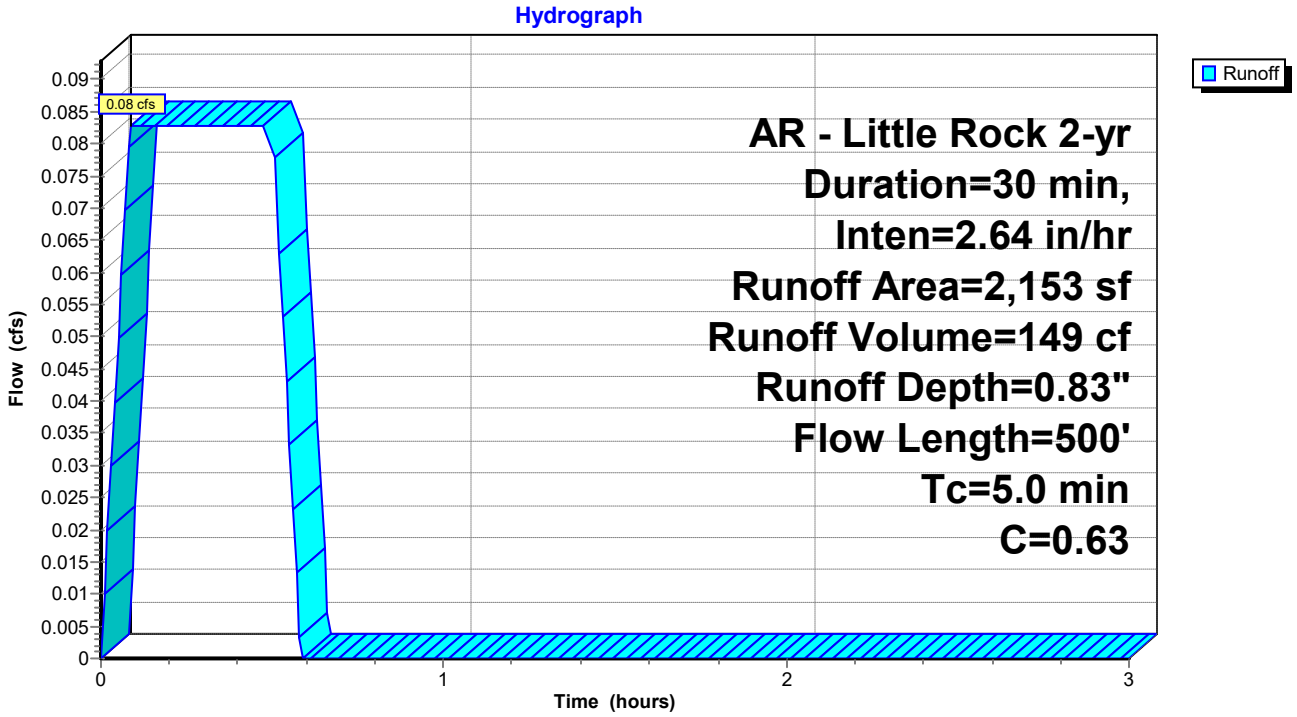
Runoff = 0.08 cfs @ 0.09 hrs, Volume= 149 cf, Depth= 0.83"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,234 | 0.40 | Sod Yard |
| 919 | 0.95 | Paving, Sidewalks |
| 2,153 | 0.63 | Weighted Average |
| 1,234 | | 57.32% Pervious Area |
| 919 | | 42.68% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 2 | 0.2500 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.3 | 33 | 0.0520 | 1.85 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.8 | 24 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 26 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.5 | 415 | | 13.83 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 500 | Total | | | |

## Subcatchment C21: Drainage Basin C21



## Summary for Subcatchment C3: Drainage Basin C3

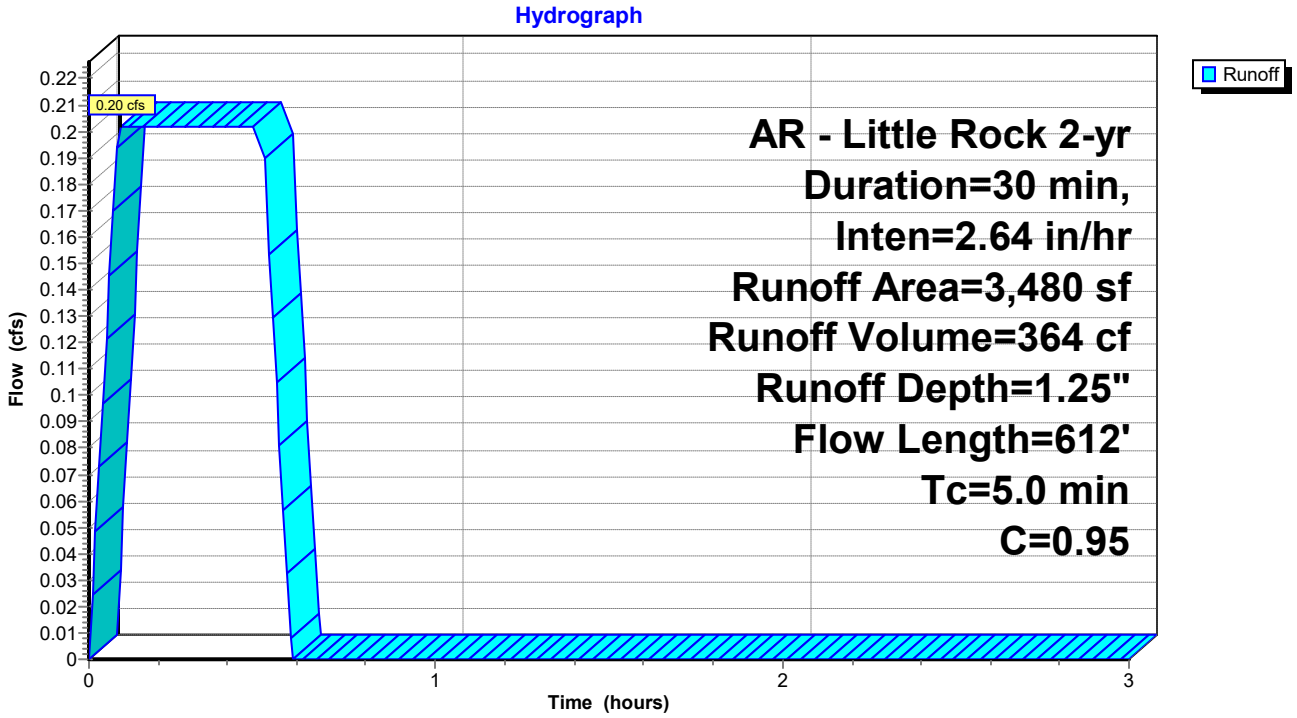
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 364 cf, Depth= 1.25"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 3,480 | 0.95 | Paving, Sidewalks |
| 3,480 | 0.95 | Weighted Average |
| 3,480 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 10 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.6 | 147 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 612 | Total | | | |

## Subcatchment C3: Drainage Basin C3



## Summary for Subcatchment C4: Drainage Basin C4

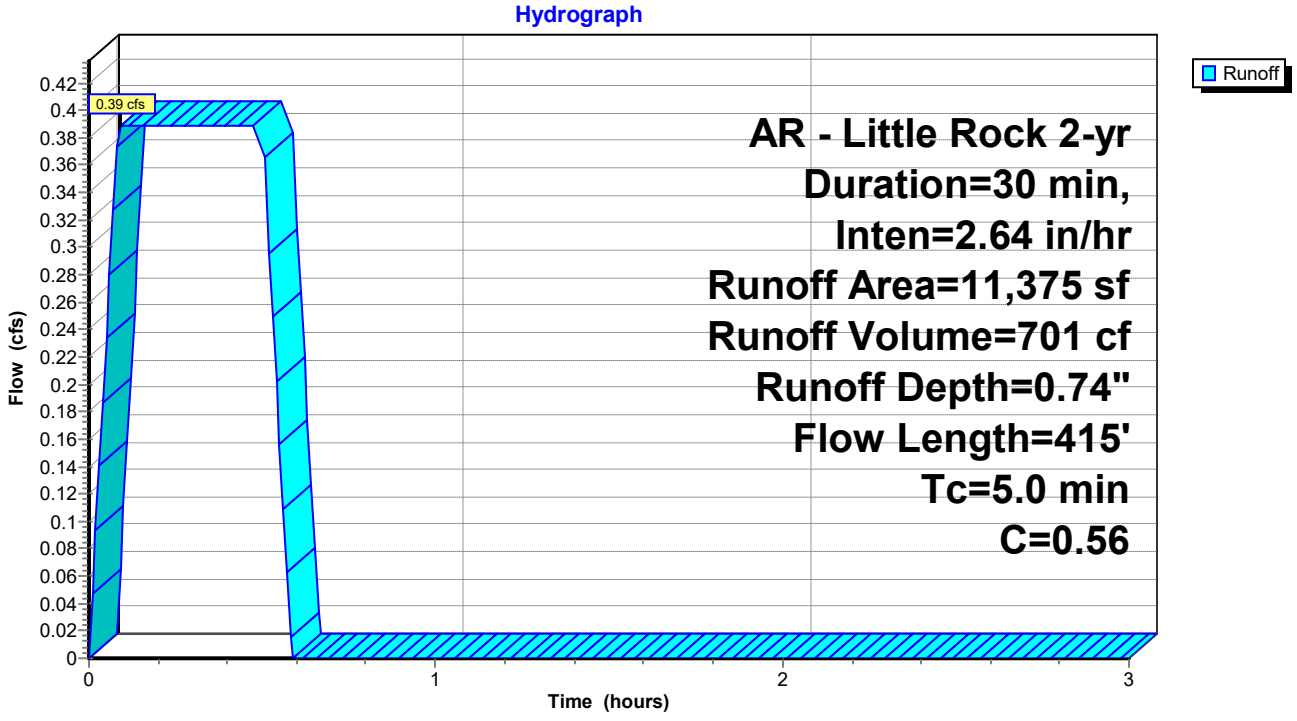
Runoff = 0.39 cfs @ 0.09 hrs, Volume= 701 cf, Depth= 0.74"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 8,130 | 0.40 | Sod Yard |
| 3,245 | 0.95 | Paving, Sidewalks |
| 11,375 | 0.56 | Weighted Average |
| 8,130 | | 71.47% Pervious Area |
| 3,245 | | 28.53% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment C4: Drainage Basin C4



## Summary for Subcatchment C5: Drainage Basin C5

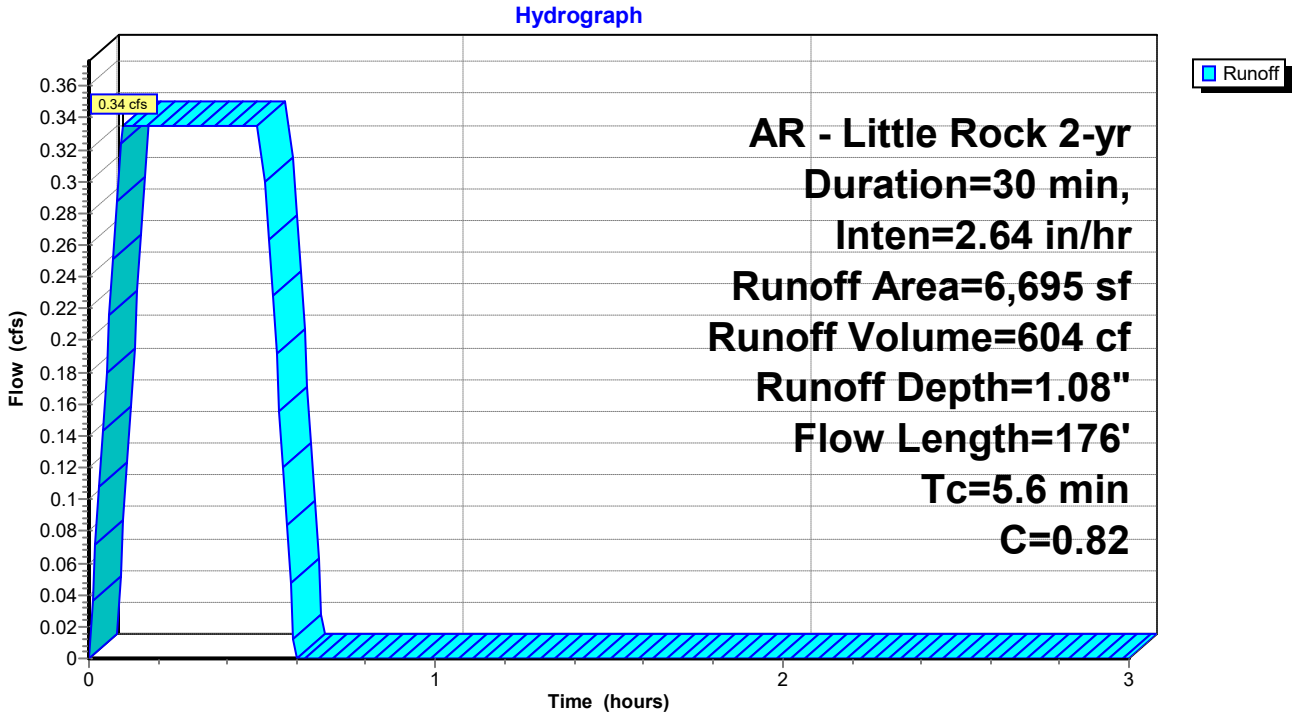
Runoff = 0.34 cfs @ 0.10 hrs, Volume= 604 cf, Depth= 1.08"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,634 | 0.40 | Sod Yard |
| 5,061 | 0.95 | Paving, Sidewalks |
| 6,695 | 0.82 | Weighted Average |
| 1,634 | | 24.41% Pervious Area |
| 5,061 | | 75.59% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2990 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.9 | 8 | 0.0070 | 0.03 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 58 | 0.0080 | 1.82 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 14 | 0.0280 | 3.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0940 | 6.22 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 30 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 5.6 | 176 | Total | | | |

## Subcatchment C5: Drainage Basin C5



## Summary for Subcatchment C6: Drainage Basin C6

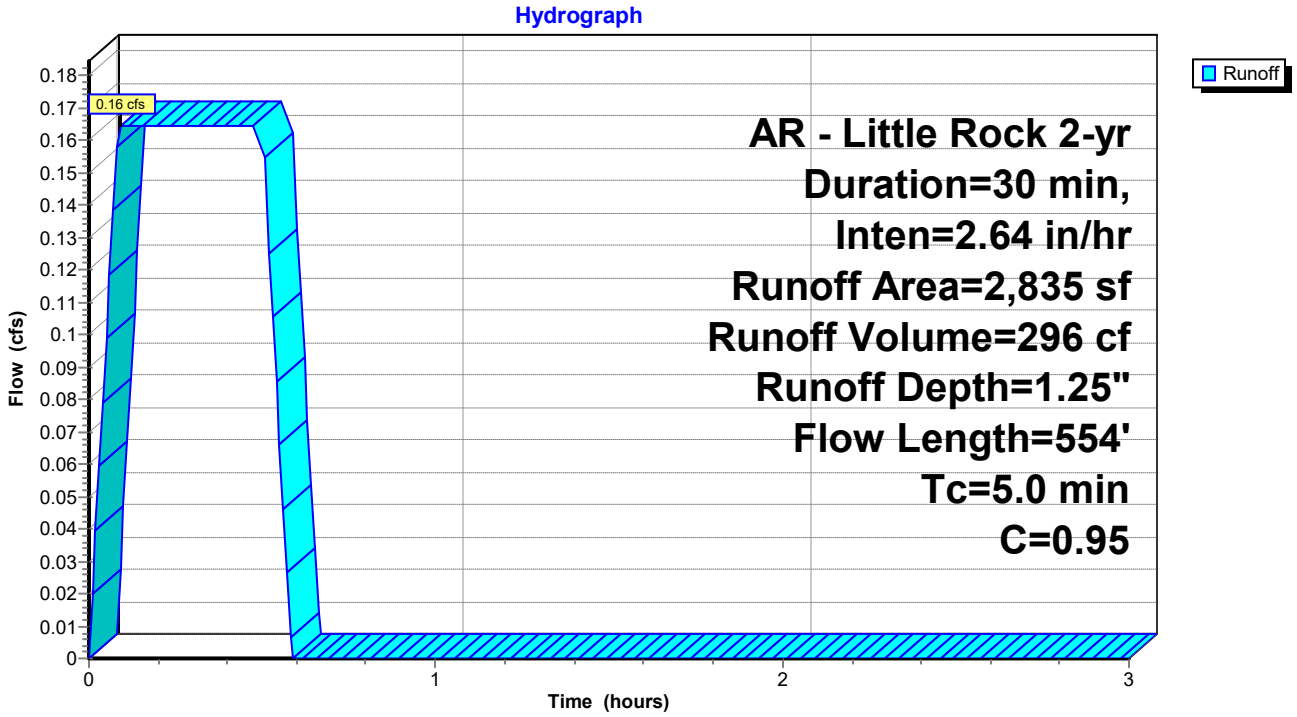
Runoff = 0.16 cfs @ 0.09 hrs, Volume= 296 cf, Depth= 1.25"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 2,835 | 0.95 | Paving, Sidewalks |
| 2,835 | 0.95 | Weighted Average |
| 2,835 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 19 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0360 | 3.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 27 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.1 | 415 | | 1.69 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 554 | Total | | | |

## Subcatchment C6: Drainage Basin C6



## Summary for Subcatchment C7: Drainage Basin C7

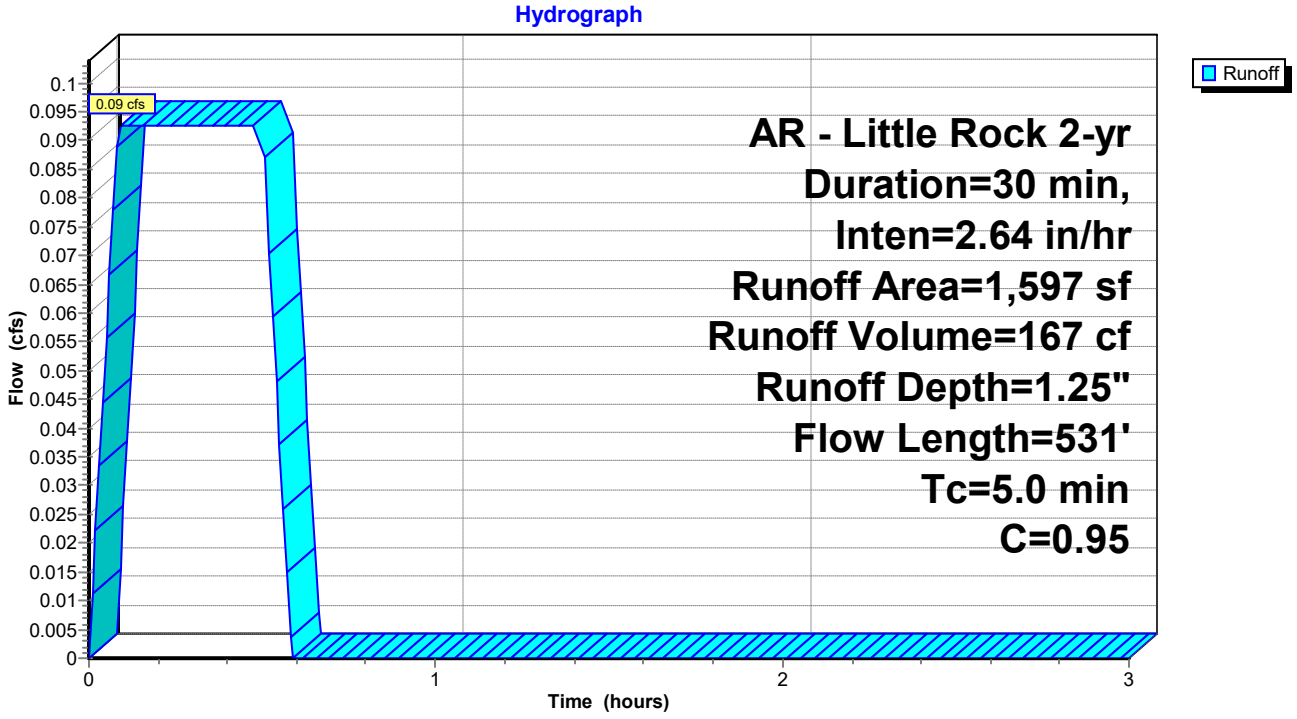
Runoff = 0.09 cfs @ 0.09 hrs, Volume= 167 cf, Depth= 1.25"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,597 | 0.95 | Paving, Sidewalks |
| 1,597 | 0.95 | Weighted Average |
| 1,597 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 16 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 81 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.3 | 415 | | 1.61 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 531 | Total | | | |

## Subcatchment C7: Drainage Basin C7



## Summary for Subcatchment C8: Drainage Basin C8

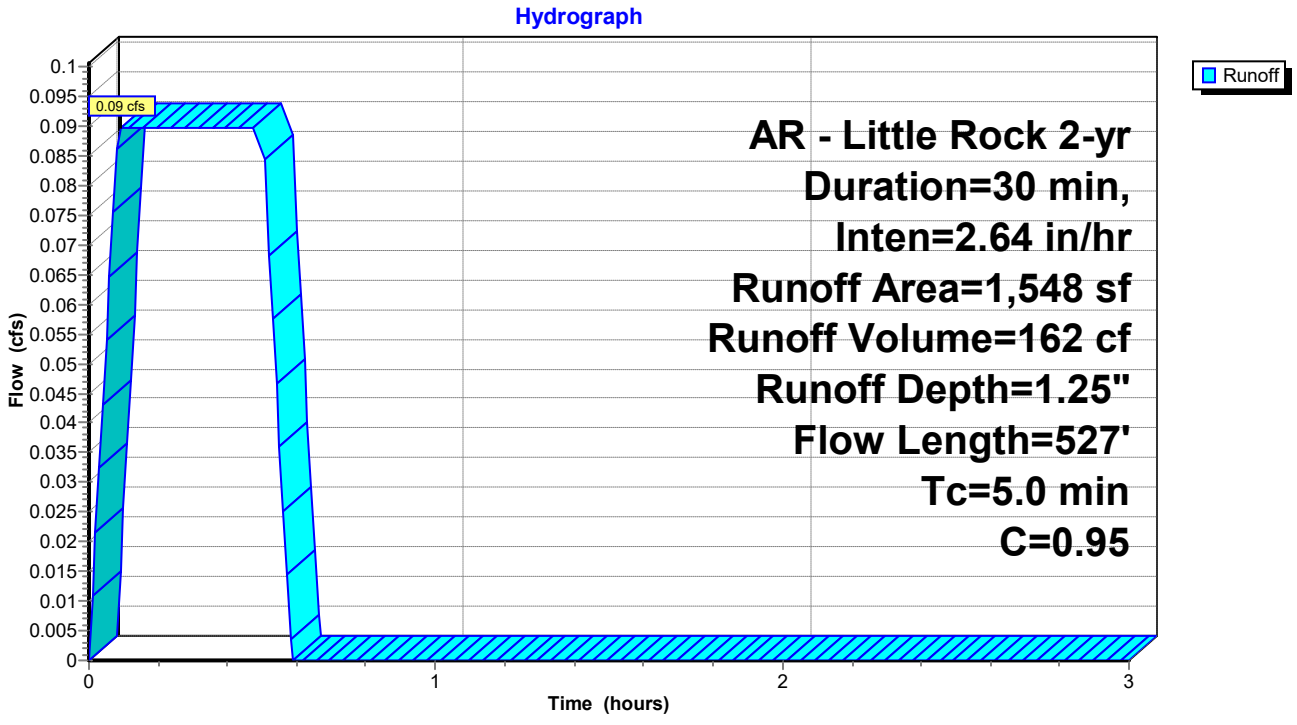
Runoff = 0.09 cfs @ 0.09 hrs, Volume= 162 cf, Depth= 1.25"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,548 | 0.95 | Paving, Sidewalks |
| 1,548 | 0.95 | Weighted Average |
| 1,548 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 94 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 4.4 | 415 | | 1.57 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 527 | Total | | | |

## Subcatchment C8: Drainage Basin C8



## Summary for Subcatchment C9: Drainage Basin C9

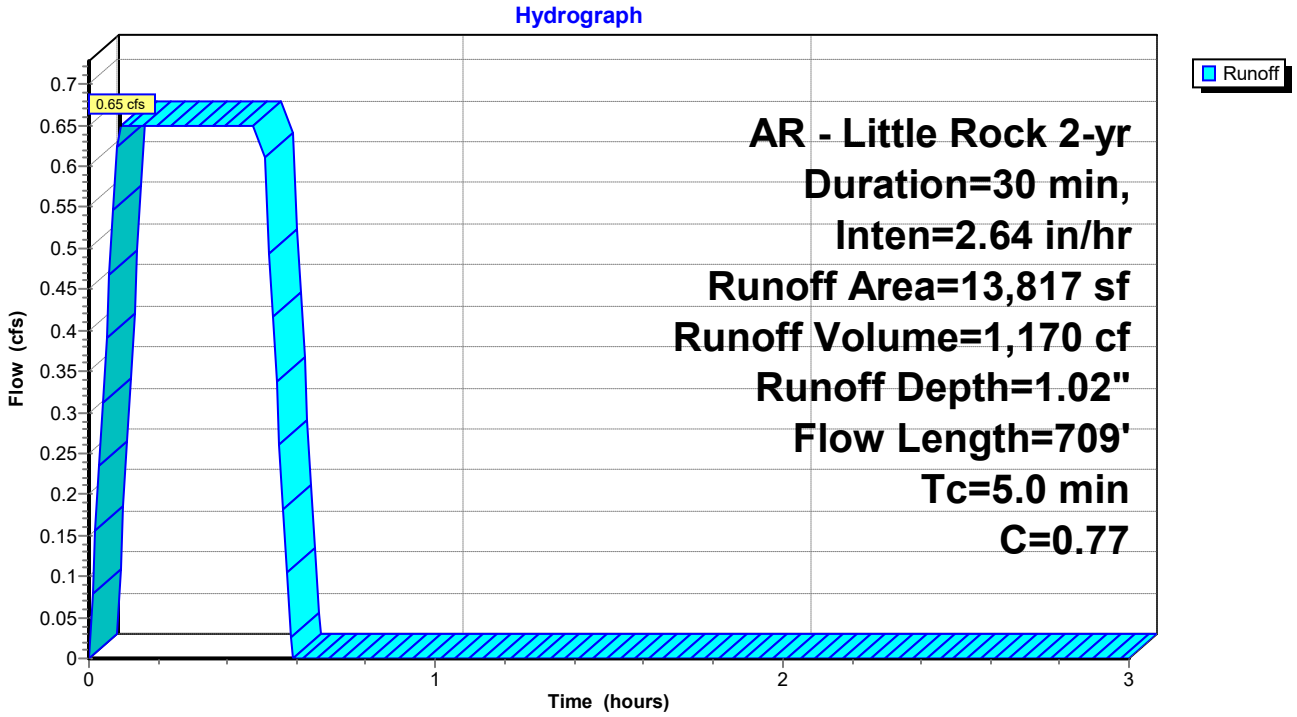
Runoff = 0.65 cfs @ 0.09 hrs, Volume= 1,170 cf, Depth= 1.02"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,456 | 0.40 | Sod Yard |
| 9,361 | 0.95 | Paving, Sidewalks |
| 13,817 | 0.77 | Weighted Average |
| 4,456 | | 32.25% Pervious Area |
| 9,361 | | 67.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.2 | 100 | 0.0140 | 1.36 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 13 | 0.0150 | 2.49 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 7 | 0.0050 | 1.44 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 8 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 41 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 41 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 61 | 0.0520 | 4.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 2.9 | 415 | | 2.39 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 709 | Total | | | |

## Subcatchment C9: Drainage Basin C9

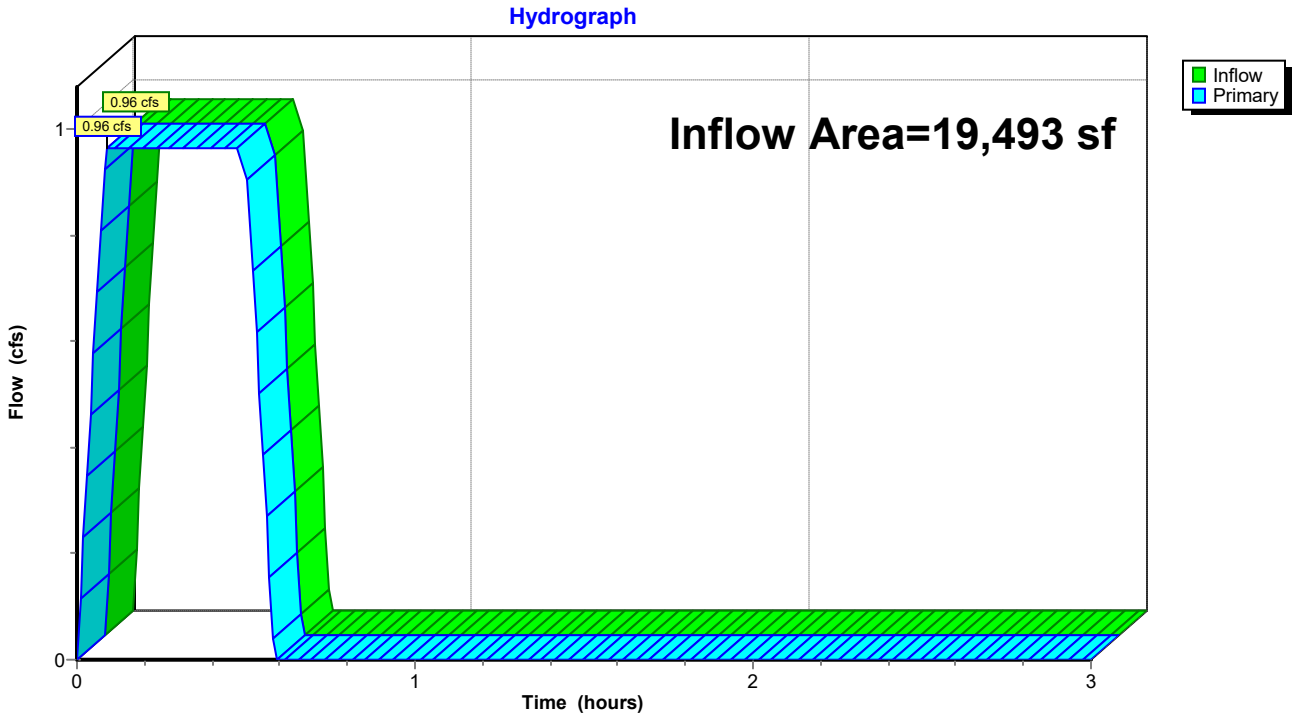


## Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.85% Impervious, Inflow Depth = 1.07" for 2-yr event
Inflow = 0.96 cfs @ 0.09 hrs, Volume= 1,737 cf
Primary = 0.96 cfs @ 0.09 hrs, Volume= 1,737 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A1: CI - A1

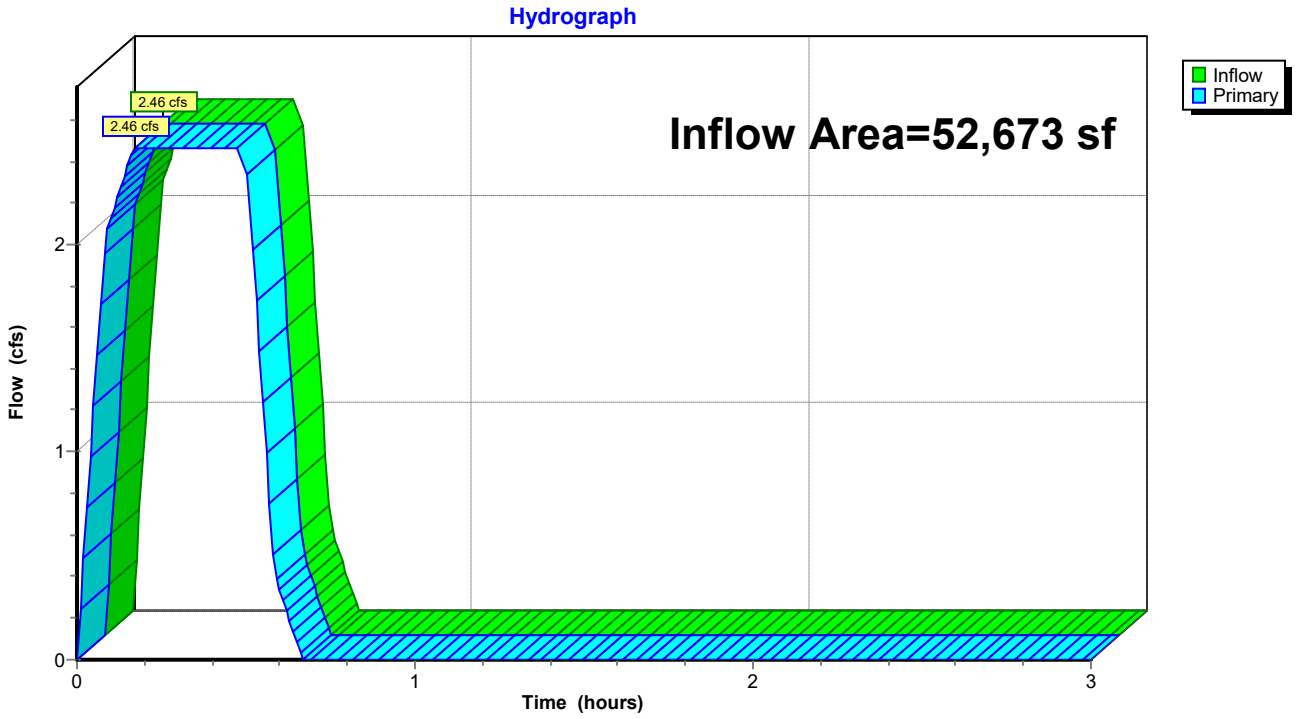


## Summary for Pond CI-A3: CI - A3

Inflow Area = 52,673 sf, 66.48% Impervious, Inflow Depth = 1.01" for 2-yr event
Inflow = 2.46 cfs @ 0.17 hrs, Volume= 4,429 cf
Primary = 2.46 cfs @ 0.17 hrs, Volume= 4,429 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A3: CI - A3

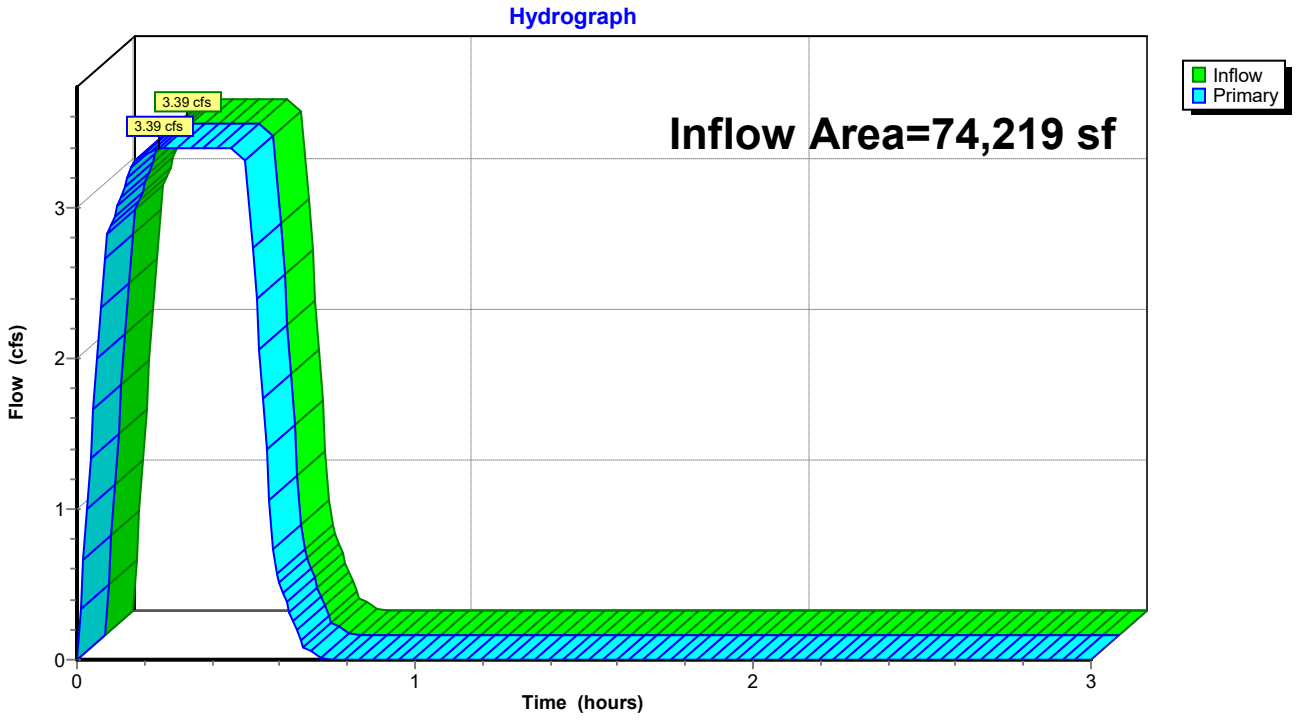


## Summary for Pond CI-A4: CI - A4

Inflow Area = 74,219 sf, 63.30% Impervious, Inflow Depth = 0.99" for 2-yr event
Inflow = 3.39 cfs @ 0.24 hrs, Volume= 6,101 cf
Primary = 3.39 cfs @ 0.24 hrs, Volume= 6,101 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A4: CI - A4

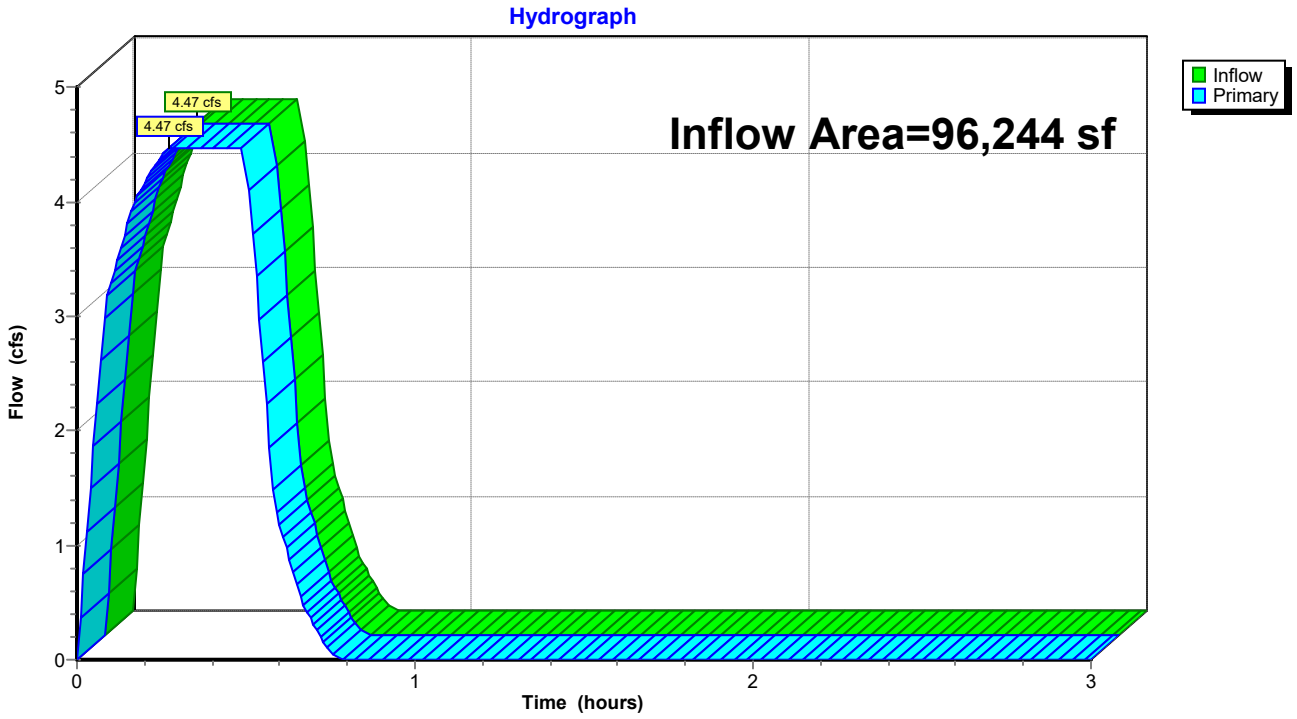


## Summary for Pond CI-A5: CI - A5

Inflow Area = 96,244 sf, 65.33% Impervious, Inflow Depth = 1.00" for 2-yr event
Inflow = 4.47 cfs @ 0.27 hrs, Volume= 8,039 cf
Primary = 4.47 cfs @ 0.27 hrs, Volume= 8,039 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A5: CI - A5

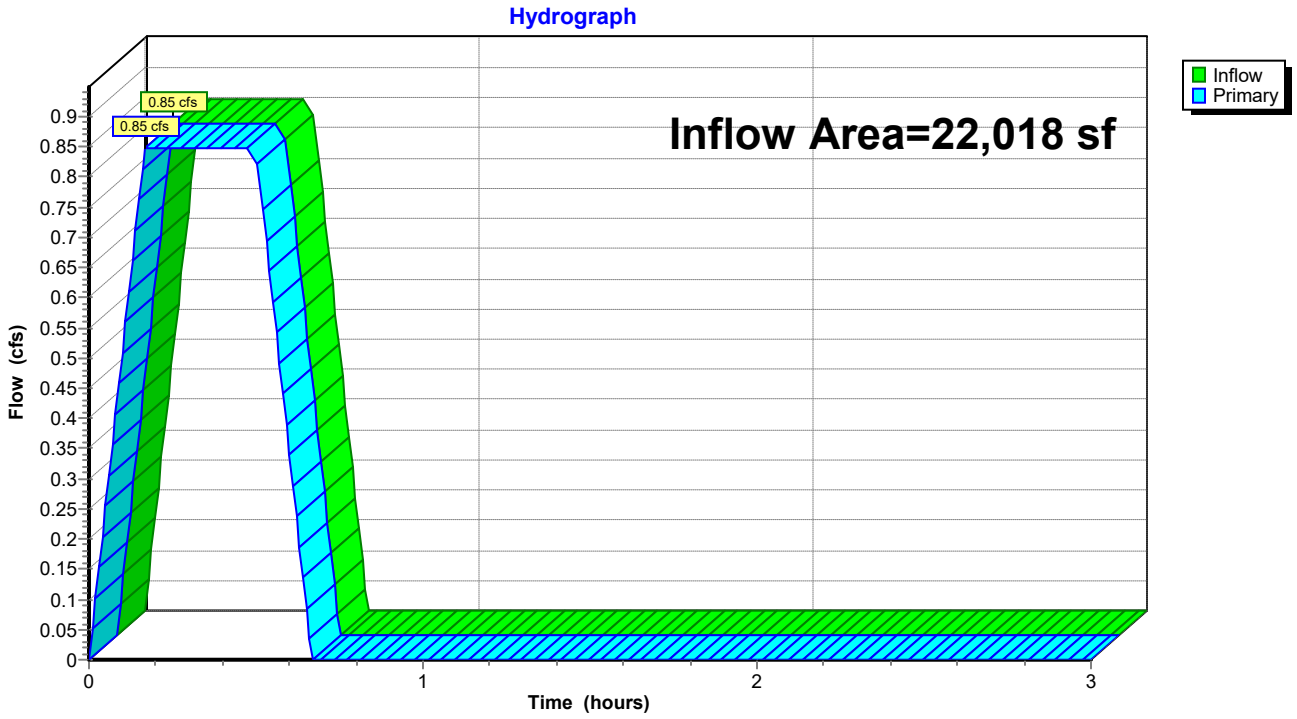


## Summary for Pond CI-B2: CI - B2

Inflow Area = 22,018 sf, 42.08% Impervious, Inflow Depth = 0.83" for 2-yr event
Inflow = 0.85 cfs @ 0.17 hrs, Volume= 1,526 cf
Primary = 0.85 cfs @ 0.17 hrs, Volume= 1,526 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-B2: CI - B2

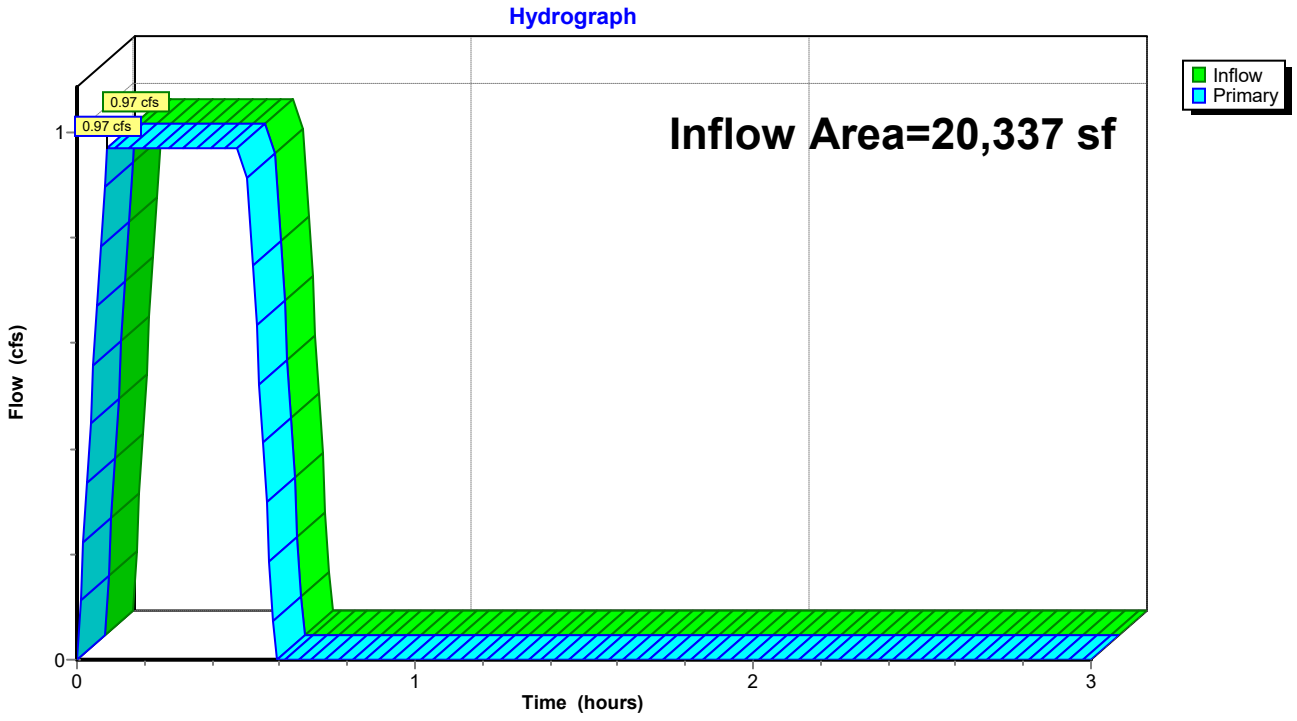


## Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.03" for 2-yr event
Inflow = 0.97 cfs @ 0.09 hrs, Volume= 1,745 cf
Primary = 0.97 cfs @ 0.09 hrs, Volume= 1,745 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C1: CI - C1

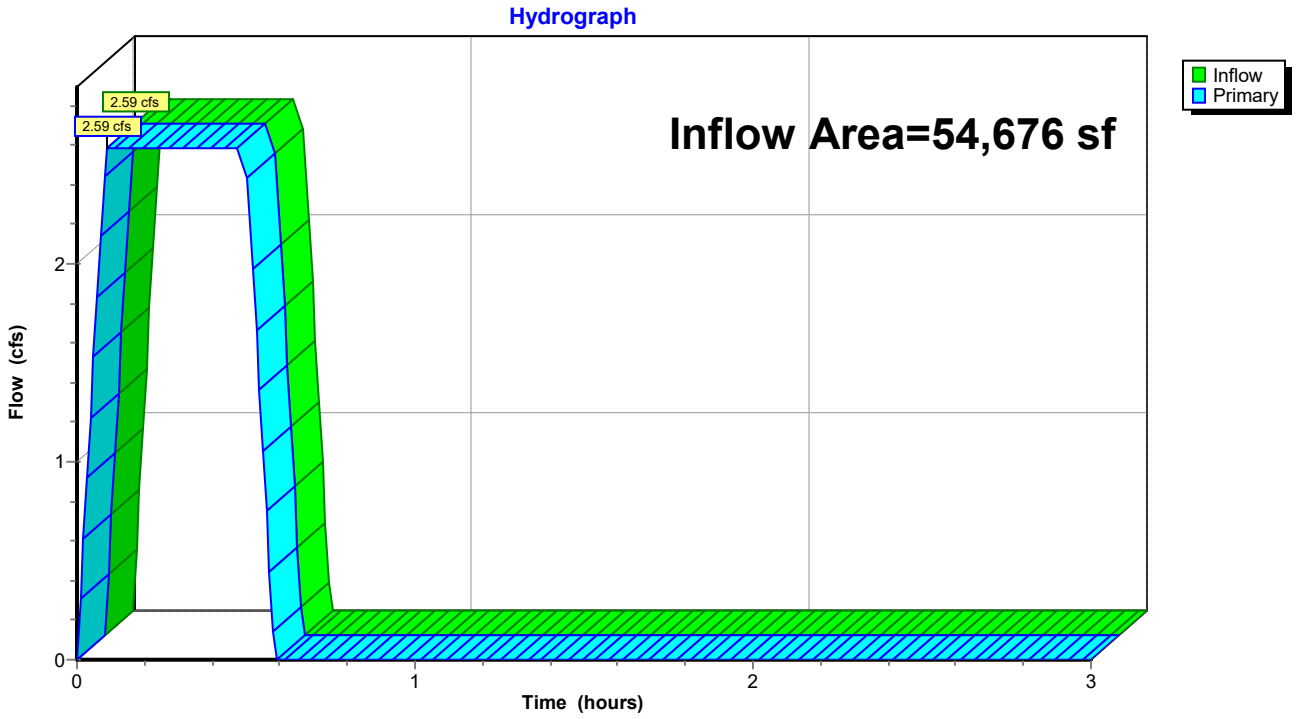


## Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.02" for 2-yr event
Inflow = 2.59 cfs @ 0.09 hrs, Volume= 4,653 cf
Primary = 2.59 cfs @ 0.09 hrs, Volume= 4,653 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C2: CI - C2

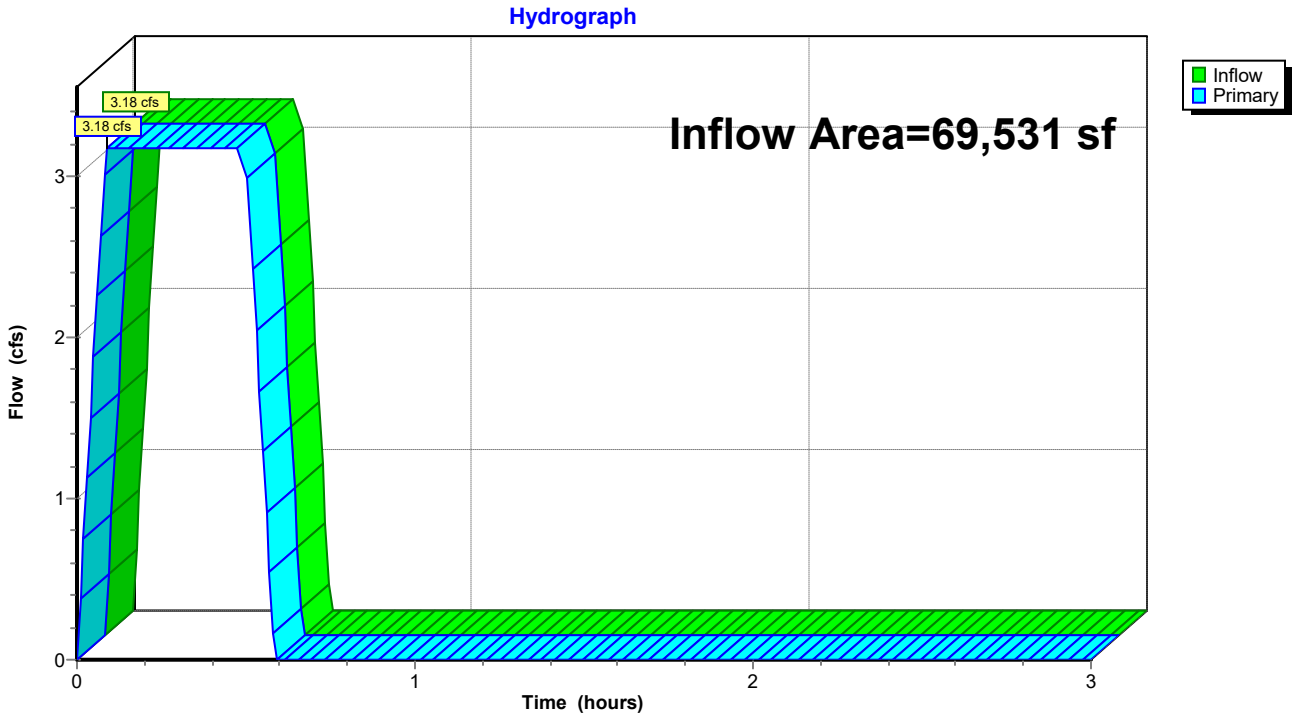


## Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 0.99" for 2-yr event
Inflow = 3.18 cfs @ 0.09 hrs, Volume= 5,718 cf
Primary = 3.18 cfs @ 0.09 hrs, Volume= 5,718 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C3: CI - C3

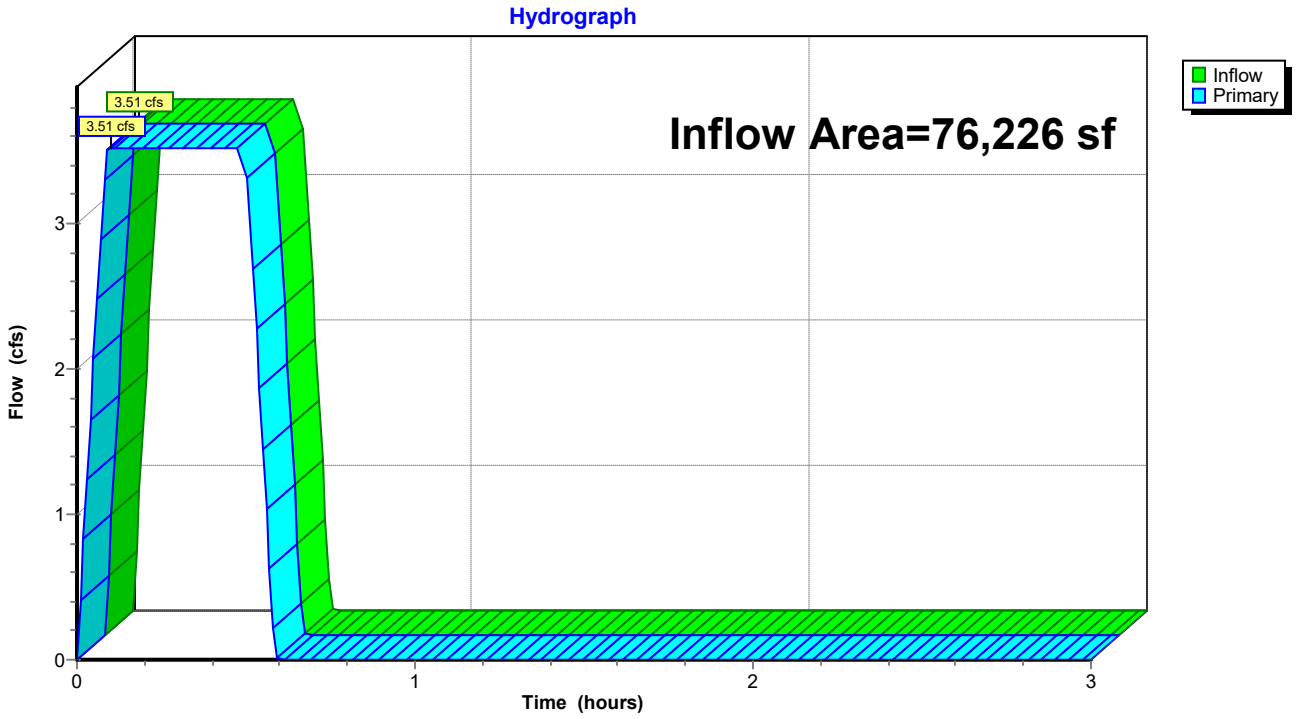


## Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.00" for 2-yr event
Inflow = 3.51 cfs @ 0.10 hrs, Volume= 6,322 cf
Primary = 3.51 cfs @ 0.10 hrs, Volume= 6,322 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C4: CI - C4

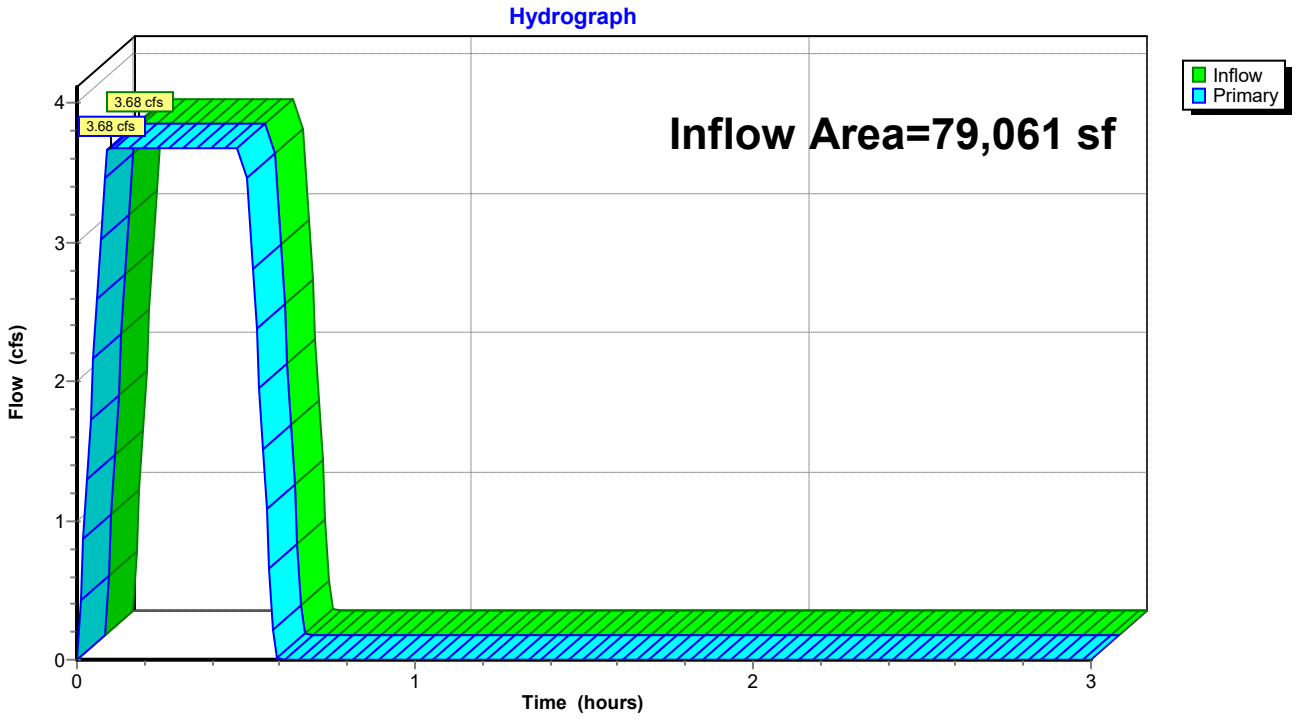


## Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.00" for 2-yr event
Inflow = 3.68 cfs @ 0.10 hrs, Volume= 6,618 cf
Primary = 3.68 cfs @ 0.10 hrs, Volume= 6,618 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C5: CI - C5

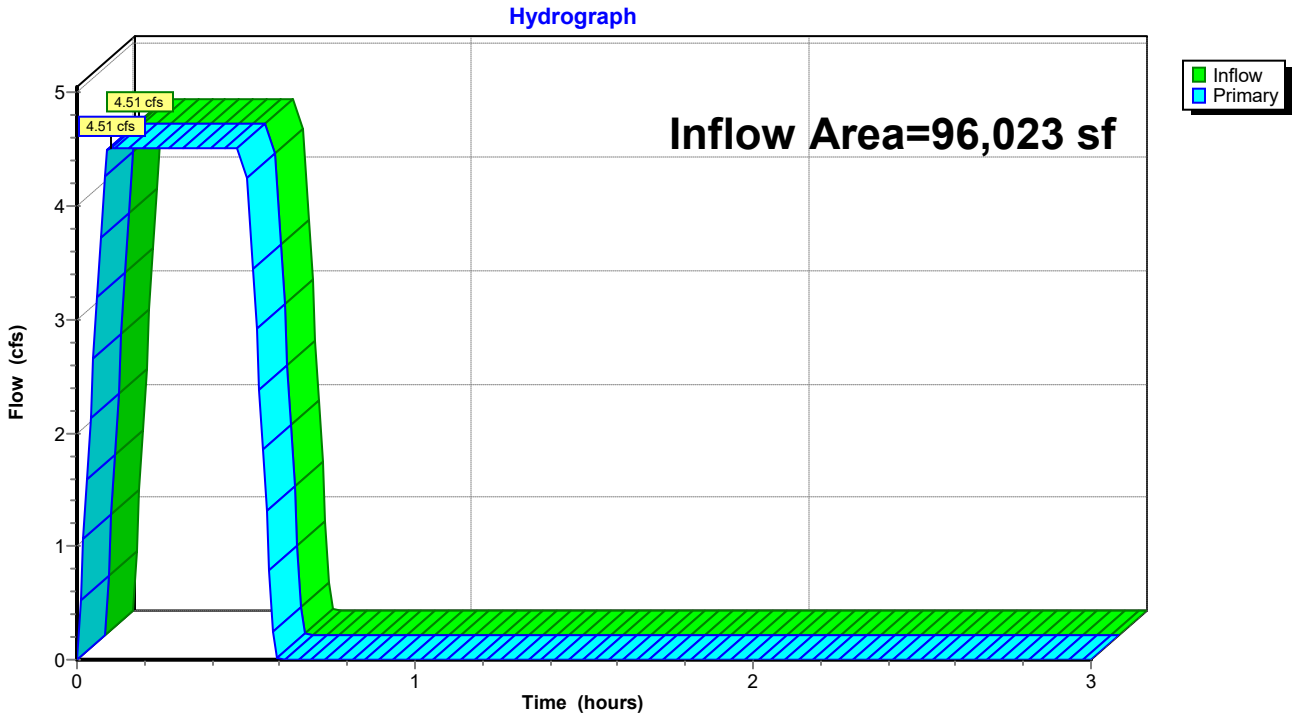


## Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.01" for 2-yr event
Inflow = 4.51 cfs @ 0.10 hrs, Volume= 8,117 cf
Primary = 4.51 cfs @ 0.10 hrs, Volume= 8,117 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C6: CI - C6

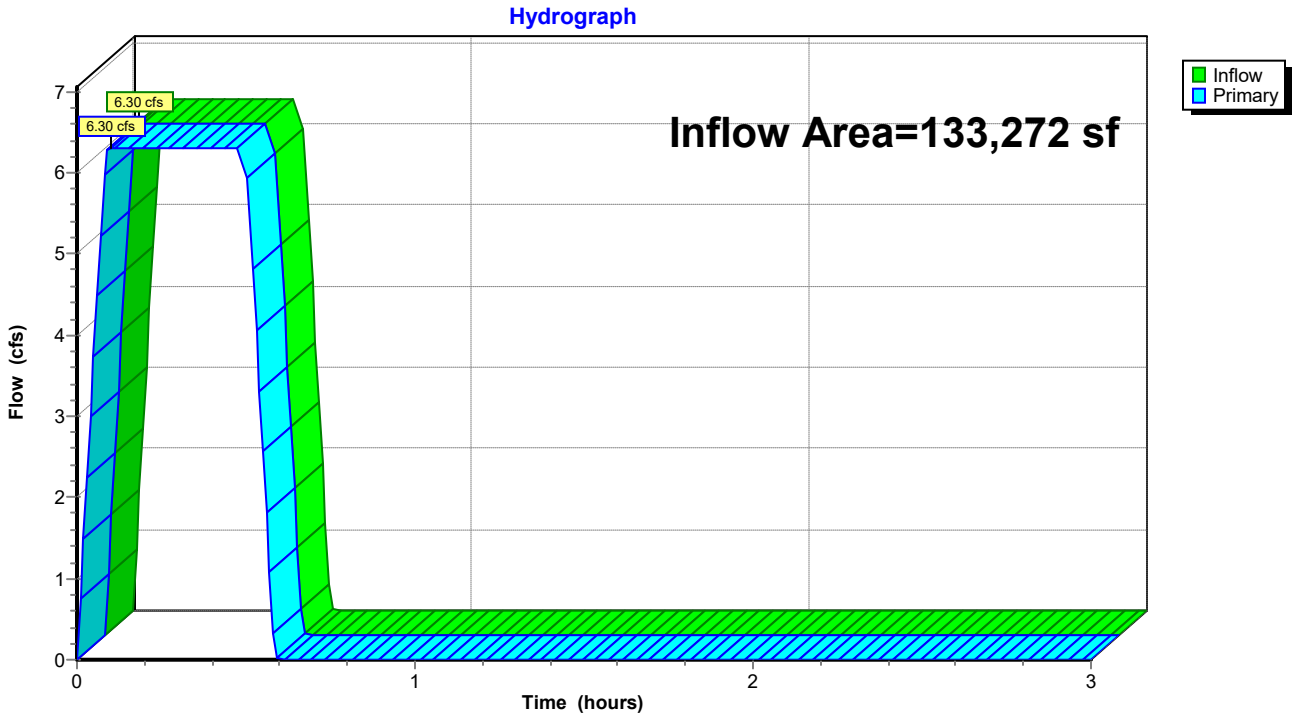


## Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.02" for 2-yr event
Inflow = 6.30 cfs @ 0.10 hrs, Volume= 11,338 cf
Primary = 6.30 cfs @ 0.10 hrs, Volume= 11,338 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C7: CI - C7

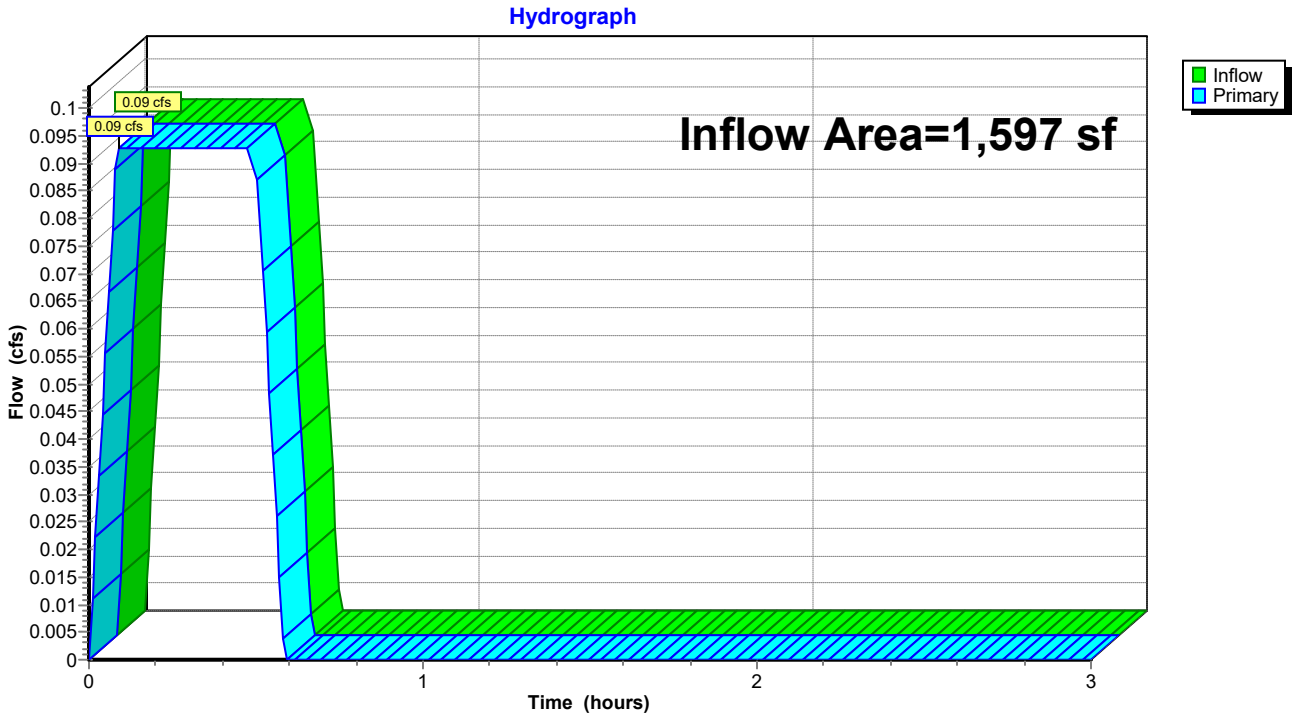


## Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.25" for 2-yr event
Inflow = 0.09 cfs @ 0.09 hrs, Volume= 167 cf
Primary = 0.09 cfs @ 0.09 hrs, Volume= 167 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D1: CI - D1

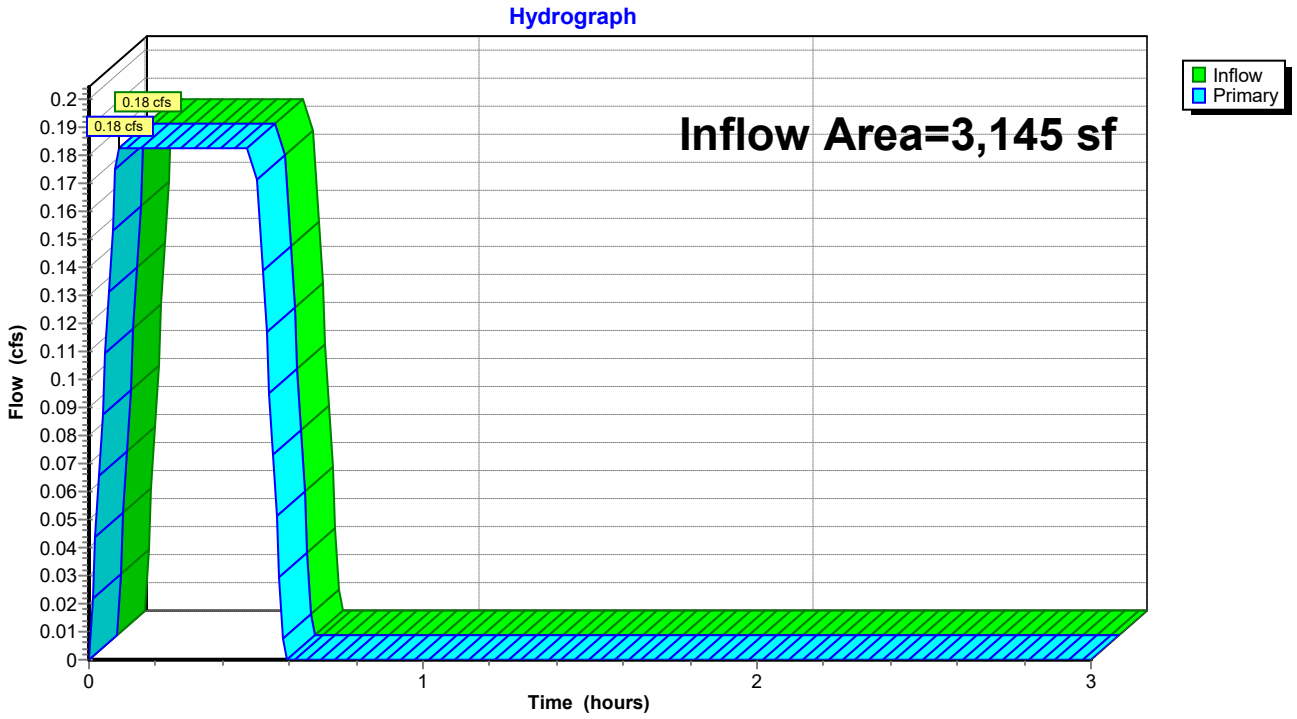


## Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.25" for 2-yr event
Inflow = 0.18 cfs @ 0.09 hrs, Volume= 329 cf
Primary = 0.18 cfs @ 0.09 hrs, Volume= 329 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D2: CI - D2

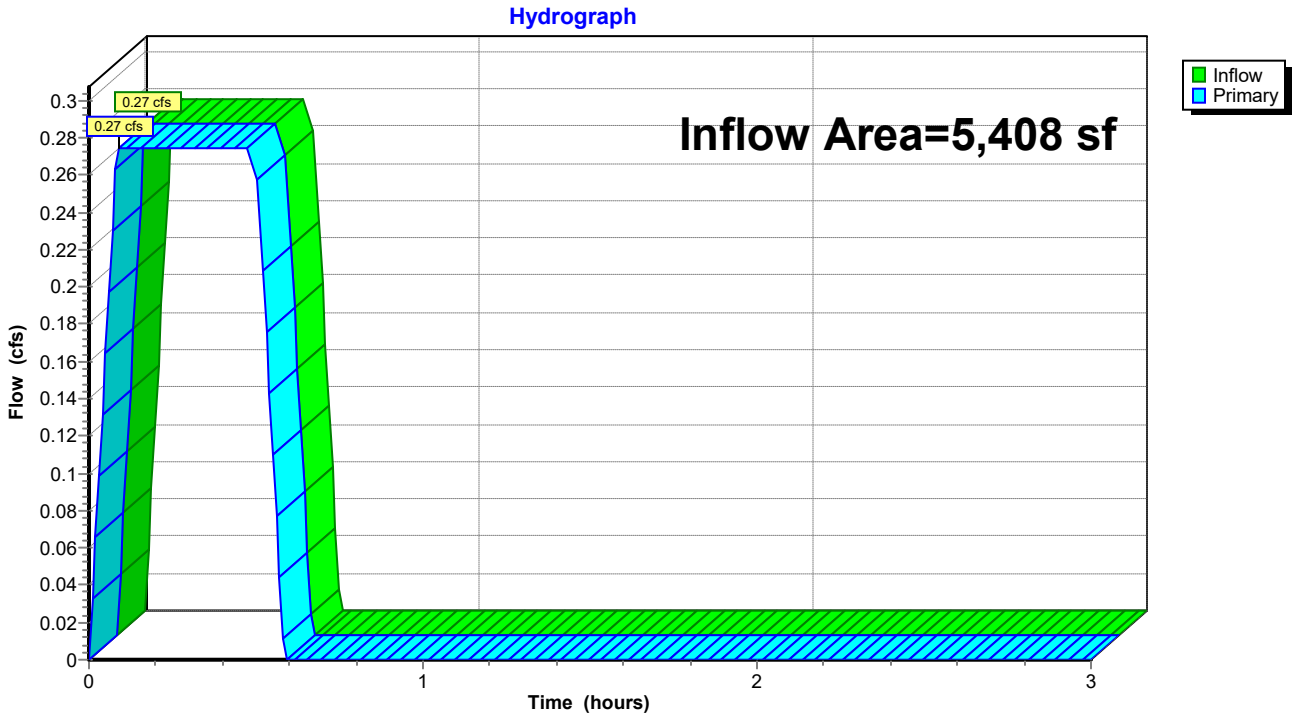


## Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.10" for 2-yr event
Inflow = 0.27 cfs @ 0.09 hrs, Volume= 494 cf
Primary = 0.27 cfs @ 0.09 hrs, Volume= 494 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E1: CI - E1

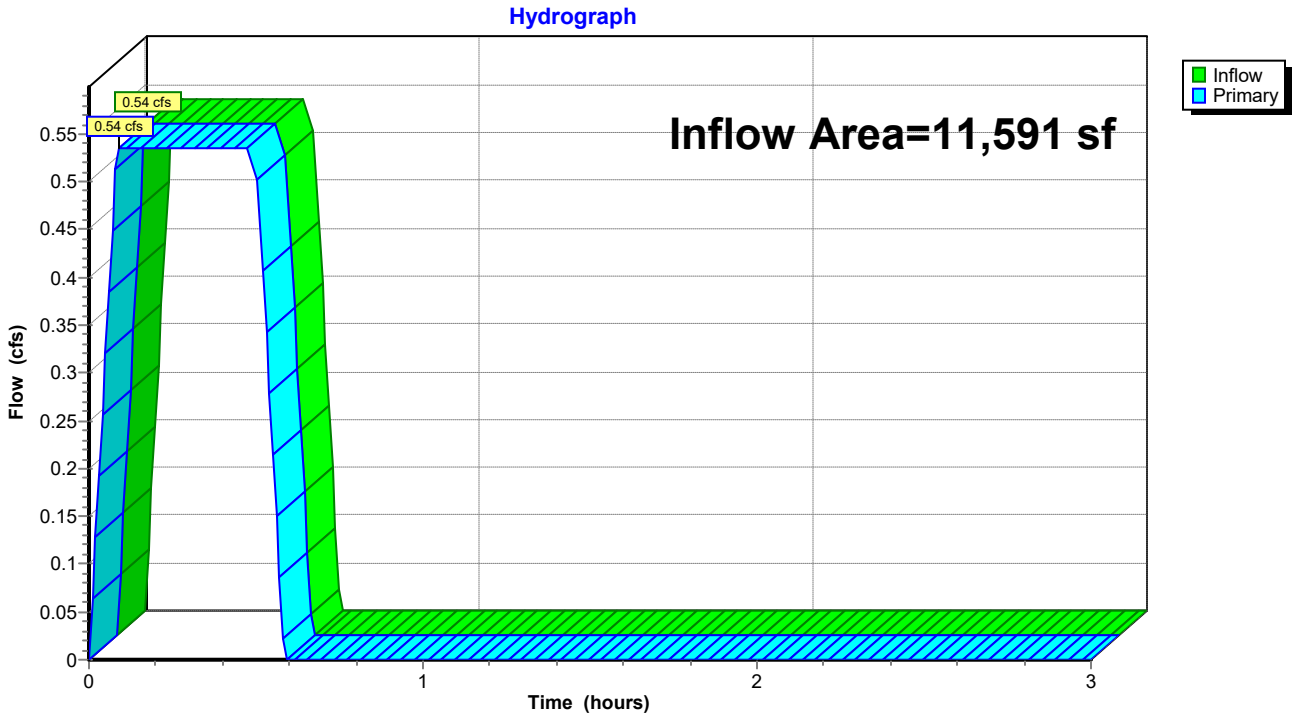


## Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.00" for 2-yr event
Inflow = 0.54 cfs @ 0.09 hrs, Volume= 963 cf
Primary = 0.54 cfs @ 0.09 hrs, Volume= 963 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E2: CI - E2



## Summary for Pond DP: Existing North Detention Pond

Inflow Area = 321,792 sf, 58.73% Impervious, Inflow Depth = 0.95" for 2-yr event
Inflow = 14.21 cfs @ 0.27 hrs, Volume= 25,576 cf
Outflow = 9.16 cfs @ 0.54 hrs, Volume= 25,576 cf, Atten= 36%, Lag= 15.9 min
Primary = 9.16 cfs @ 0.54 hrs, Volume= 25,576 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 382.77' @ 0.54 hrs Storage= 12,374 cf

Plug-Flow detention time= 17.0 min calculated for 25,576 cf (100% of inflow)
Center-of-Mass det. time= 16.9 min ( 35.3 - 18.5 )

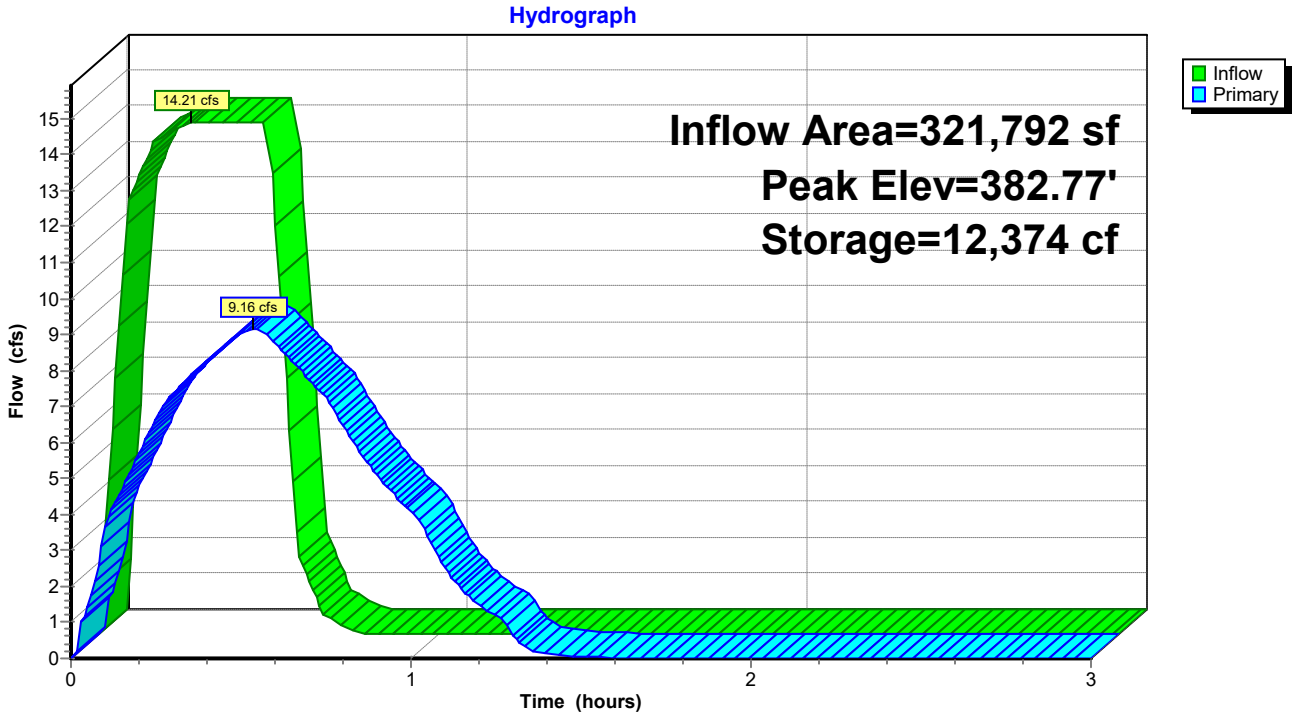
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 381.17' | 72,742 cf | **Custom Stage Data** Listed below |

| Elevation (feet) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|
| 381.17 | 0 | 0 |
| 381.50 | 200 | 200 |
| 382.00 | 1,825 | 2,025 |
| 382.50 | 5,265 | 7,290 |
| 383.00 | 9,300 | 16,590 |
| 383.50 | 13,733 | 30,323 |
| 384.00 | 18,578 | 48,901 |
| 384.50 | 23,841 | 72,742 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 384.16' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #2 | Primary | 381.17' | **1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=9.15 cfs @ 0.54 hrs HW=382.77' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 9.15 cfs @ 4.14 fps)

## Pond DP: Existing North Detention Pond

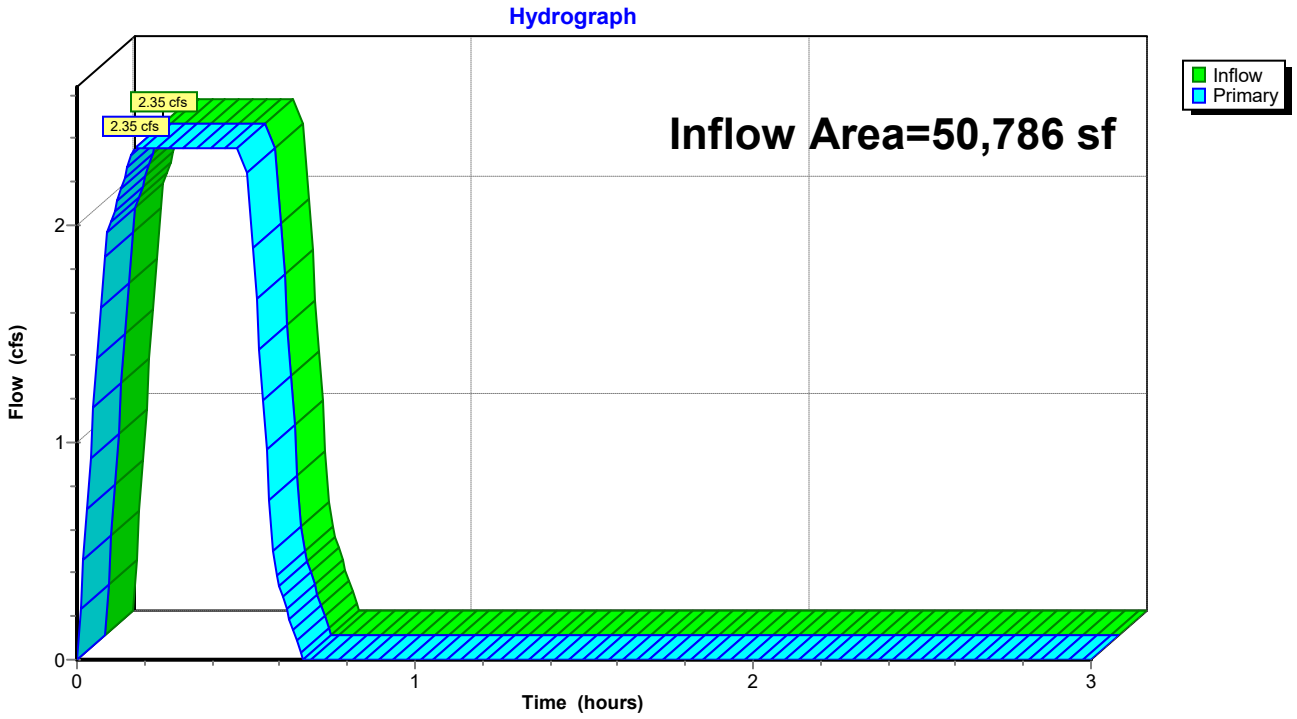


## Summary for Pond JB-A2: JB - A2

Inflow Area = 50,786 sf, 65.23% Impervious, Inflow Depth = 1.00" for 2-yr event
Inflow = 2.35 cfs @ 0.17 hrs, Volume= 4,232 cf
Primary = 2.35 cfs @ 0.17 hrs, Volume= 4,232 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond JB-A2: JB - A2

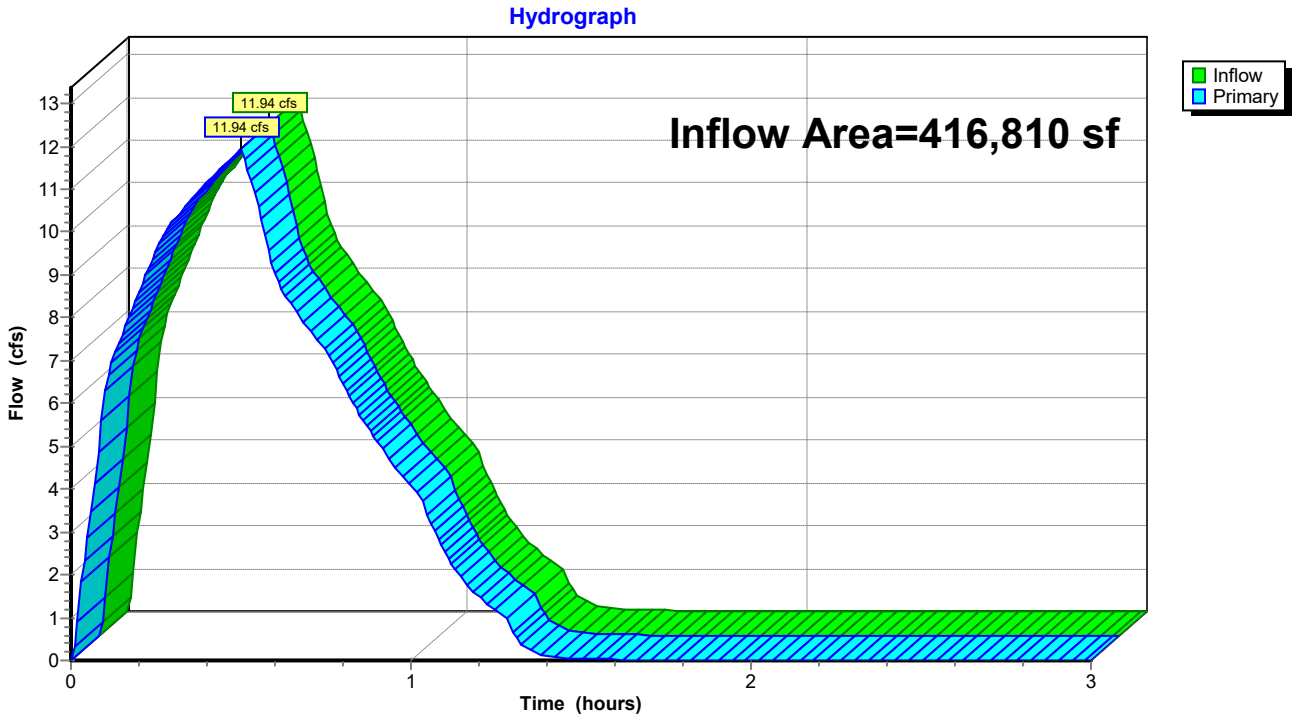


## Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 416,810 sf, 49.40% Impervious, Inflow Depth = 0.89" for 2-yr event
Inflow = 11.94 cfs @ 0.50 hrs, Volume= 30,795 cf
Primary = 11.94 cfs @ 0.50 hrs, Volume= 30,795 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

## Link FINAL: APPROX DISCHARGE



## Summary for Subcatchment B1: Drainage Basin B1

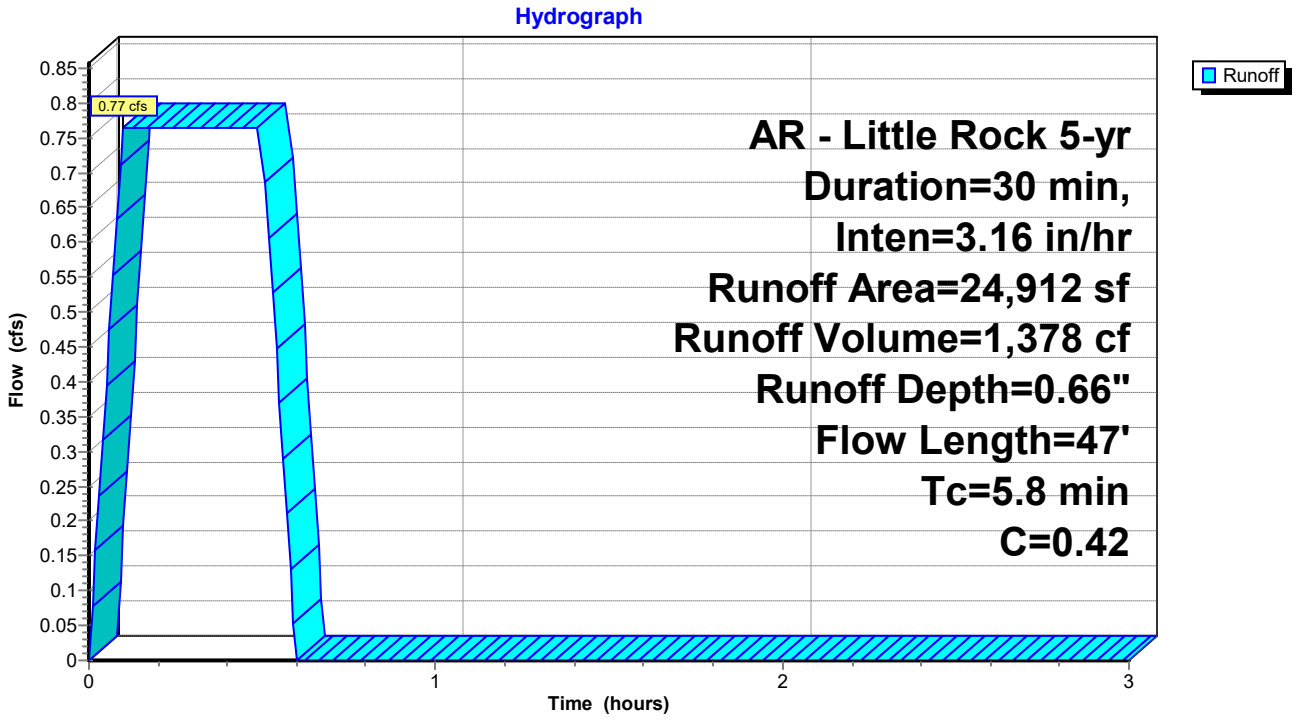
Runoff = 0.77 cfs @ 0.10 hrs, Volume= 1,378 cf, Depth= 0.66"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,091 | 0.40 | Sod Yard |
| 821 | 0.95 | Paving, Sidewalks |
| 24,912 | 0.42 | Weighted Average |
| 24,091 | | 96.70% Pervious Area |
| 821 | | 3.30% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.3 | 9 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 38 | 0.2040 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 5.8 | 47 | Total | | | |

## Subcatchment B1: Drainage Basin B1



## Summary for Subcatchment B2: Drainage Basin B2

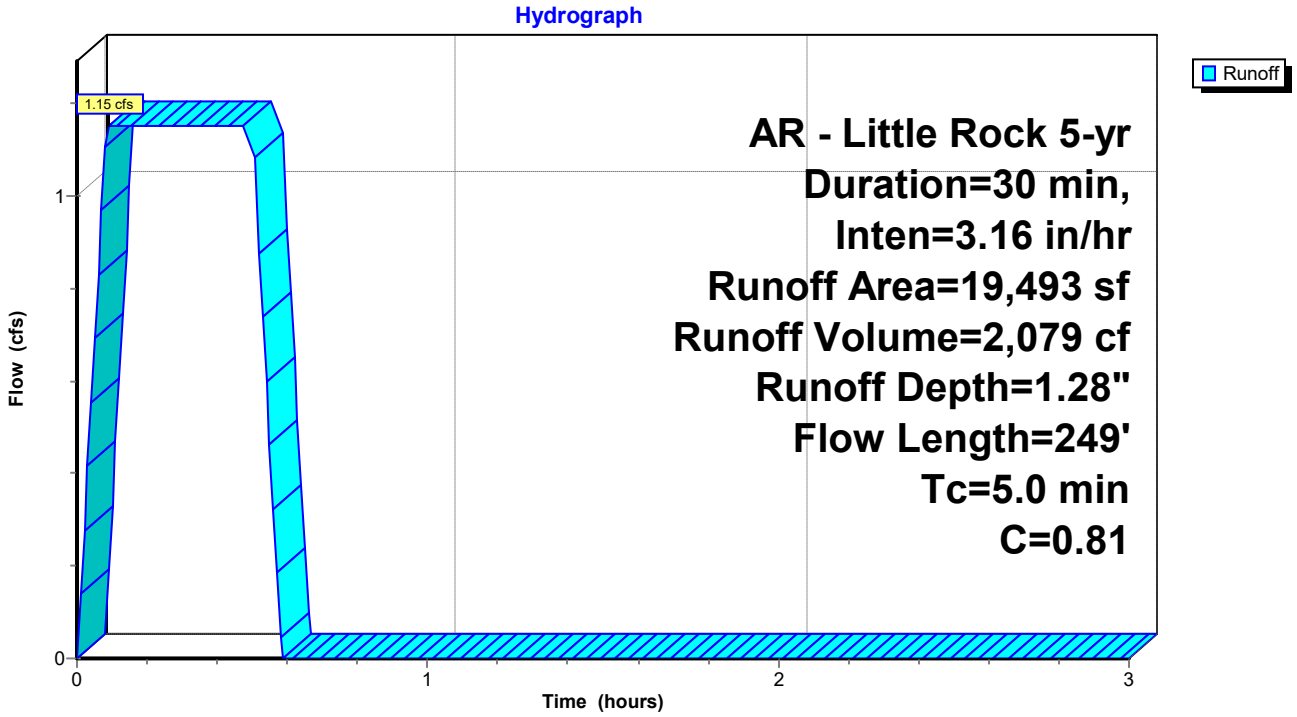
Runoff = 1.15 cfs @ 0.09 hrs, Volume= 2,079 cf, Depth= 1.28"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,903 | 0.40 | Sod Yard |
| 14,590 | 0.95 | Paving, Sidewalks |
| 19,493 | 0.81 | Weighted Average |
| 4,903 | | 25.15% Pervious Area |
| 14,590 | | 74.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 28 | 0.0450 | 1.69 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 72 | 0.0250 | 3.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 51 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 16 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 8 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 7 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 3.2 | | | | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 249 | Total | | | |

## Subcatchment B2: Drainage Basin B2



## Summary for Subcatchment B3: Drainage Basin B3

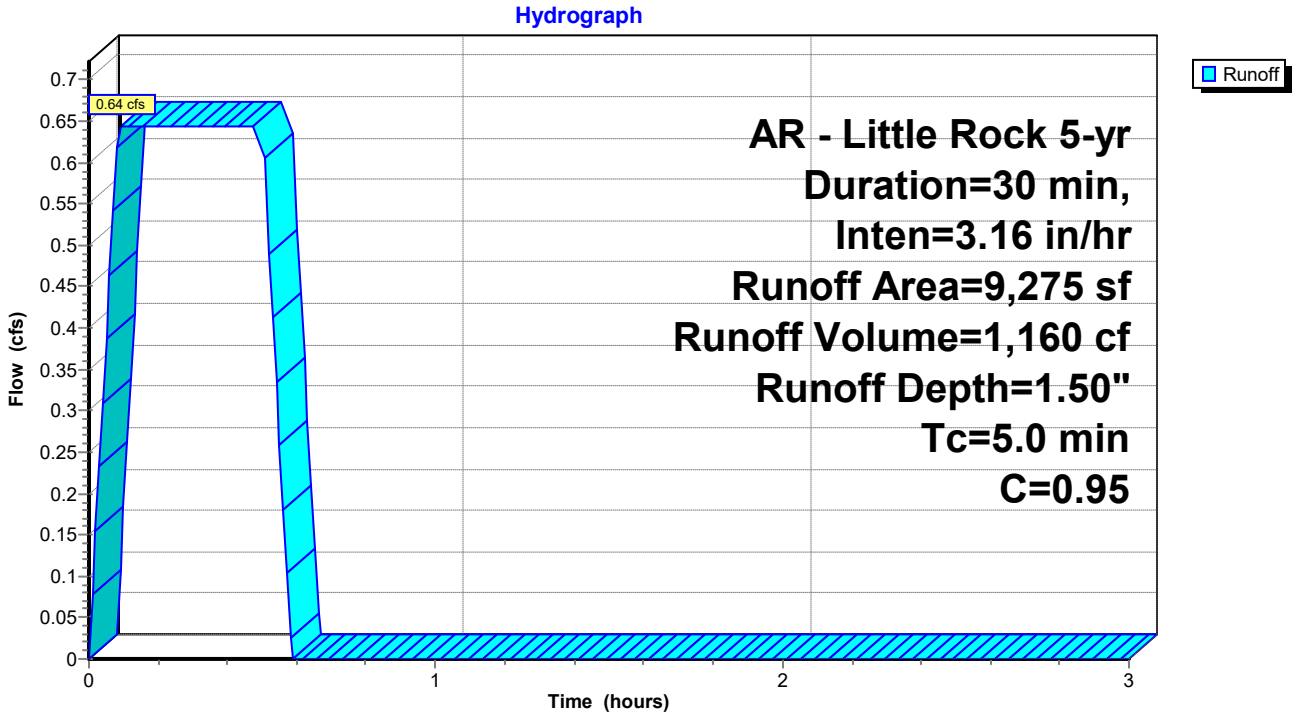
Runoff = 0.64 cfs @ 0.09 hrs, Volume= 1,160 cf, Depth= 1.50"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 9,275 | 0.95 | Roof |
| 9,275 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | | | | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment B3: Drainage Basin B3



## Summary for Subcatchment B4: Drainage Basin B4

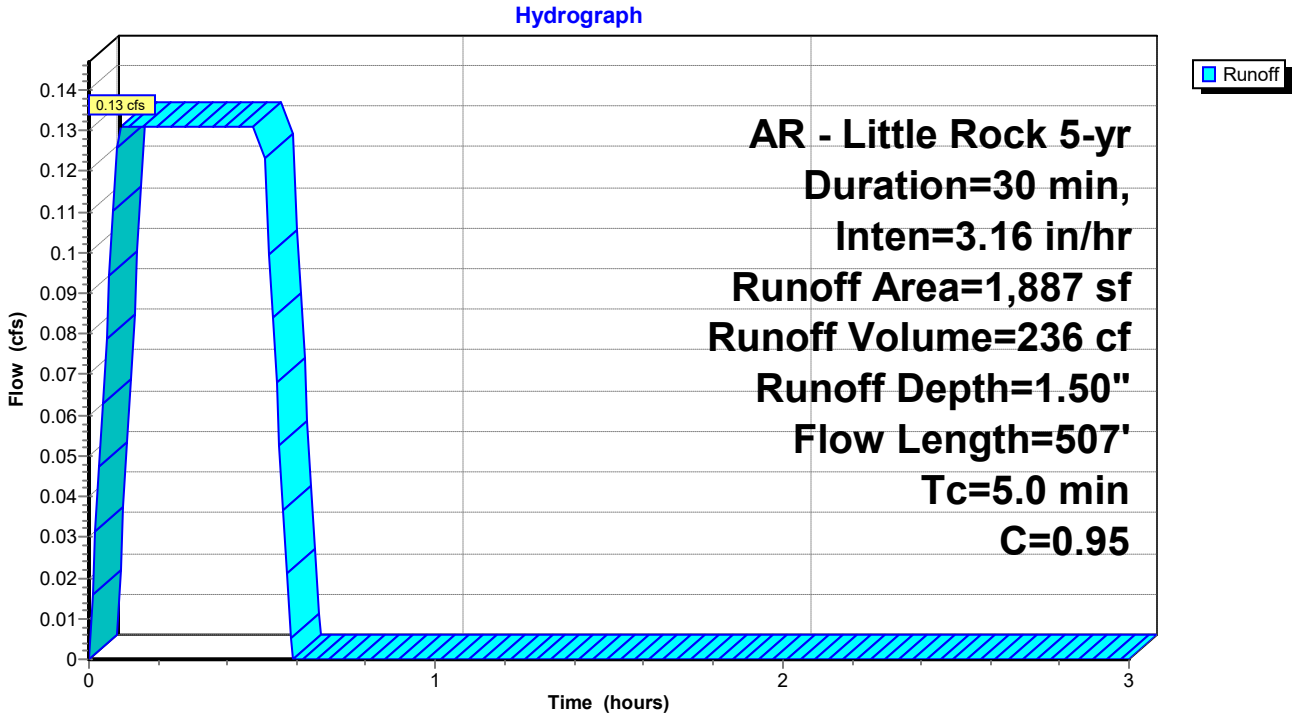
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 236 cf, Depth= 1.50"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,887 | 0.95 | Paving, Sidewalks |
| 1,887 | 0.95 | Weighted Average |
| 1,887 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 30 | 0.0240 | 1.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 13 | 0.0860 | 5.95 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 507 | Total | | | |

## Subcatchment B4: Drainage Basin B4



## Summary for Subcatchment B5: Drainage Basin B5

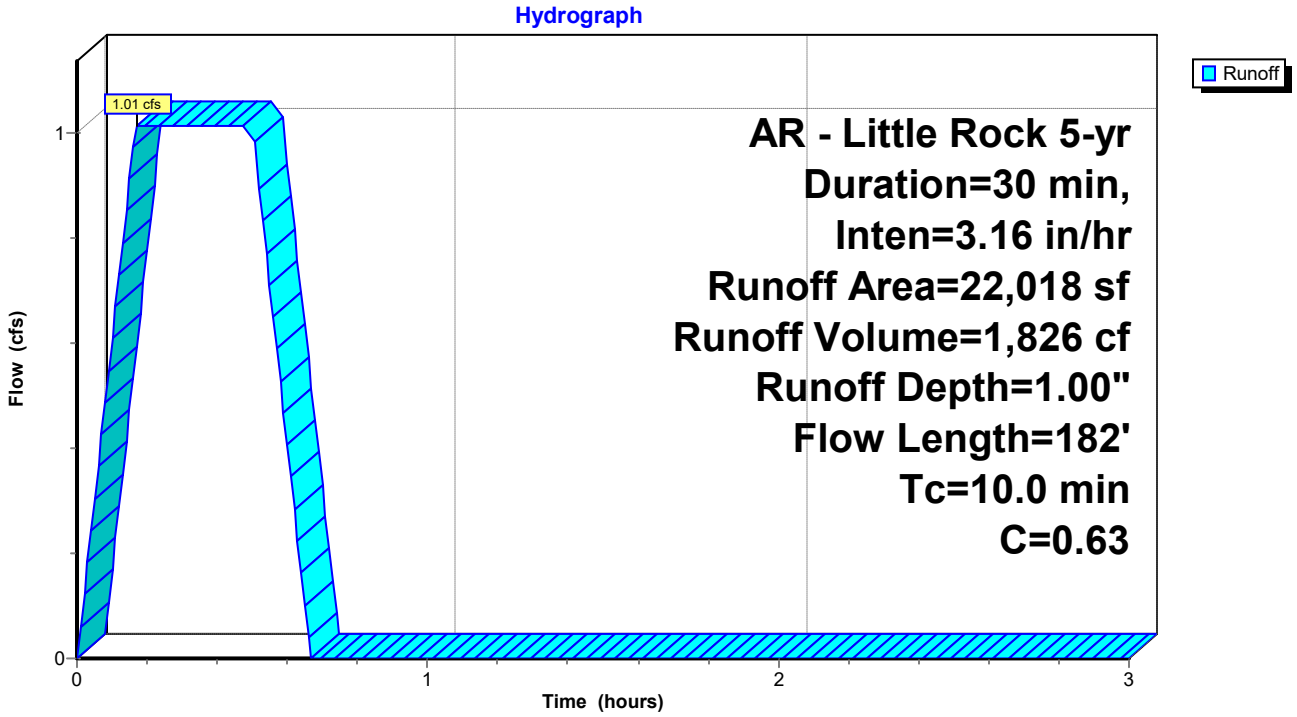
Runoff = 1.01 cfs @ 0.17 hrs, Volume= 1,826 cf, Depth= 1.00"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,753 | 0.40 | Sod Yard |
| 9,265 | 0.95 | Paving, Sidewalks |
| 22,018 | 0.63 | Weighted Average |
| 12,753 | | 57.92% Pervious Area |
| 9,265 | | 42.08% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.2 | 10 | 0.0150 | 0.89 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 9.1 | 93 | 0.0150 | 0.17 | | **Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19" |
| 0.4 | 40 | 0.0110 | 1.57 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 33 | 0.0190 | 2.07 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 6 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 10.0 | 182 | Total | | | |

## Subcatchment B5: Drainage Basin B5



## Summary for Subcatchment B6: Drainage Basin B6

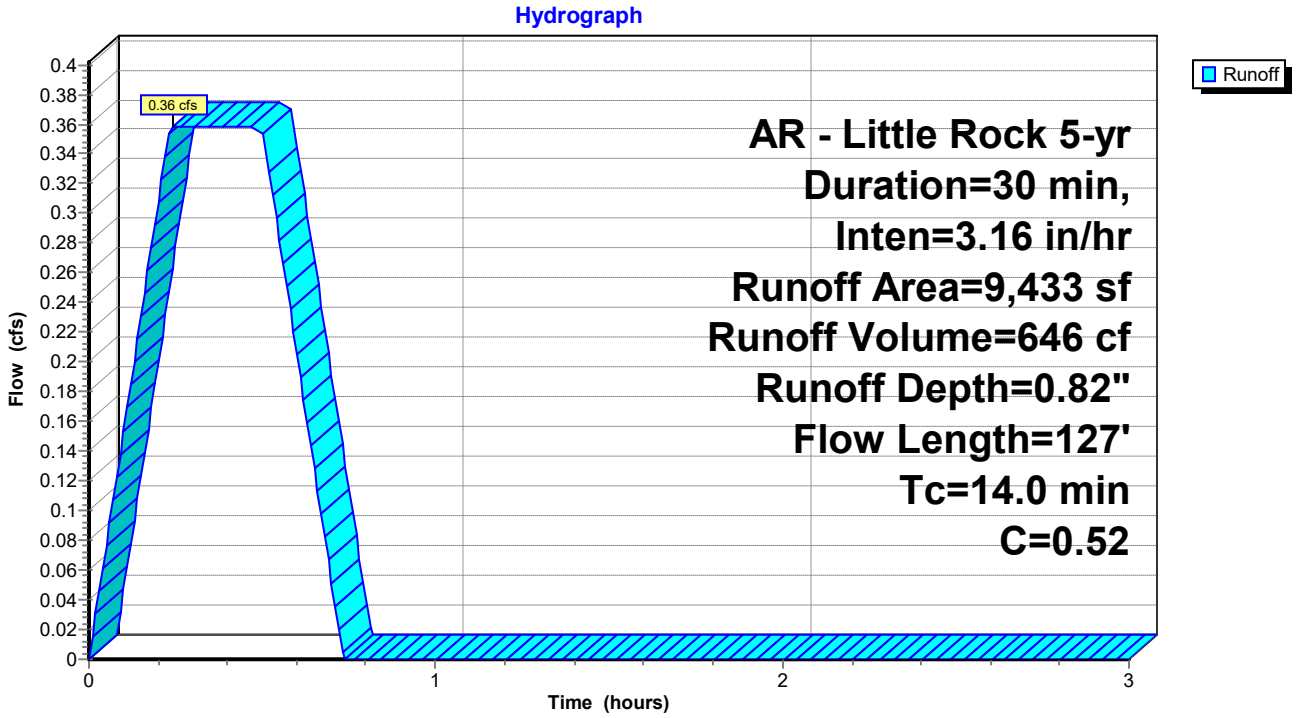
Runoff = 0.36 cfs @ 0.24 hrs, Volume= 646 cf, Depth= 0.82"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,346 | 0.40 | Sod Yard |
| 2,087 | 0.95 | Paving, Sidewalks |
| 9,433 | 0.52 | Weighted Average |
| 7,346 | | 77.88% Pervious Area |
| 2,087 | | 22.12% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 10.4 | 79 | 0.0570 | 0.13 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 21 | 0.0620 | 0.10 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.0 | 9 | 0.0620 | 3.73 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 18 | 0.1080 | 4.93 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 14.0 | 127 | Total | | | |

## Subcatchment B6: Drainage Basin B6



## Summary for Subcatchment C1: Drainage Basin C1

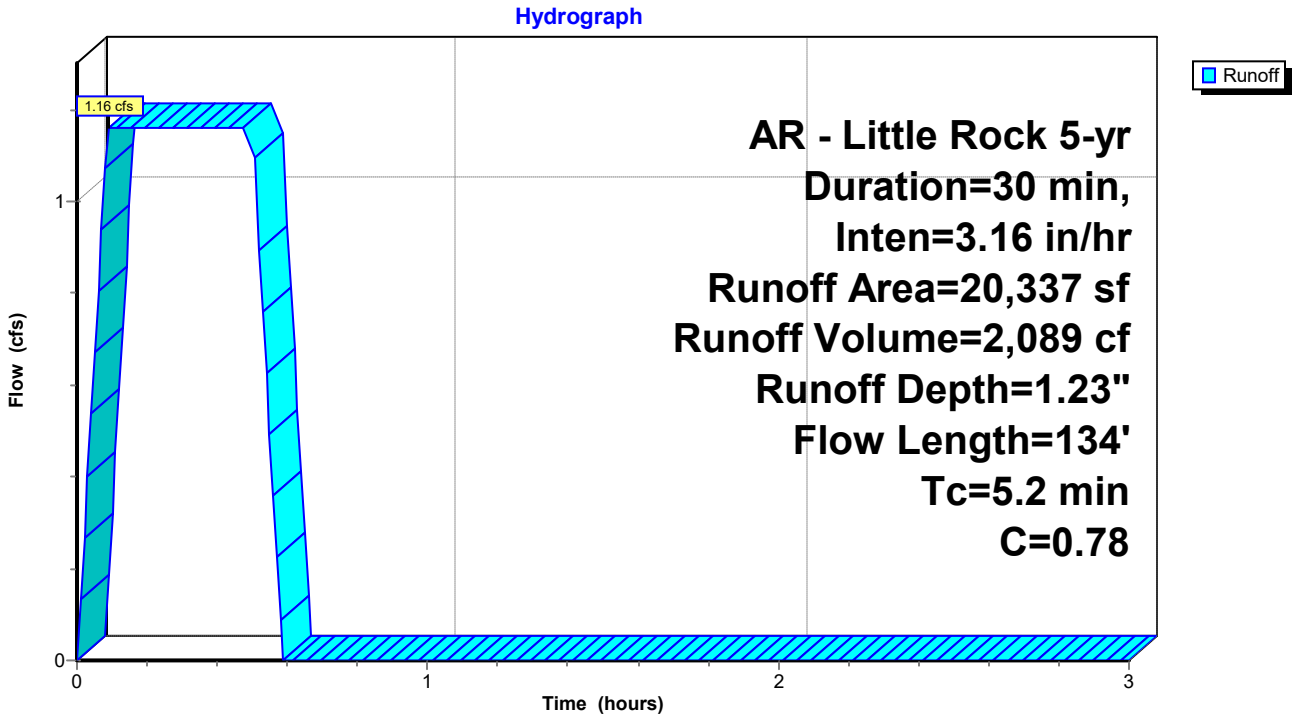
Runoff = 1.16 cfs @ 0.09 hrs, Volume= 2,089 cf, Depth= 1.23"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,135 | 0.40 | Sod Yard |
| 14,202 | 0.95 | Paving, Sidewalks |
| 20,337 | 0.78 | Weighted Average |
| 6,135 | | 30.17% Pervious Area |
| 14,202 | | 69.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 32 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.4 | 102 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 5.2 | 134 | Total | | | |

### Subcatchment C1: Drainage Basin C1



## Summary for Subcatchment C10: Drainage Basin C10

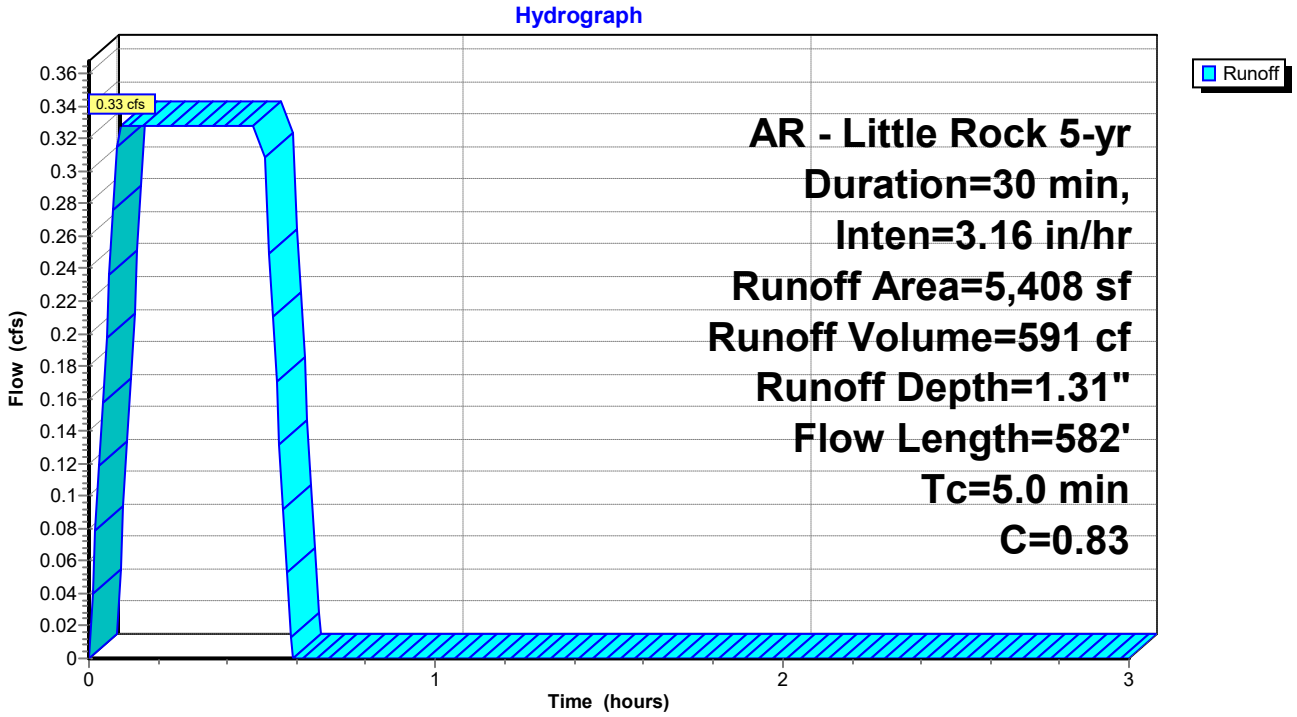
Runoff = 0.33 cfs @ 0.09 hrs, Volume= 591 cf, Depth= 1.31"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,225 | 0.40 | Sod Yard |
| 4,183 | 0.95 | Paving, Sidewalks |
| 5,408 | 0.83 | Weighted Average |
| 1,225 | | 22.65% Pervious Area |
| 4,183 | | 77.35% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 29 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 36 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 48 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 13 | 0.0350 | 3.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.9 | 415 | | 1.77 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 582 | Total | | | |

## Subcatchment C10: Drainage Basin C10



## Summary for Subcatchment C11: Drainage Basin C11

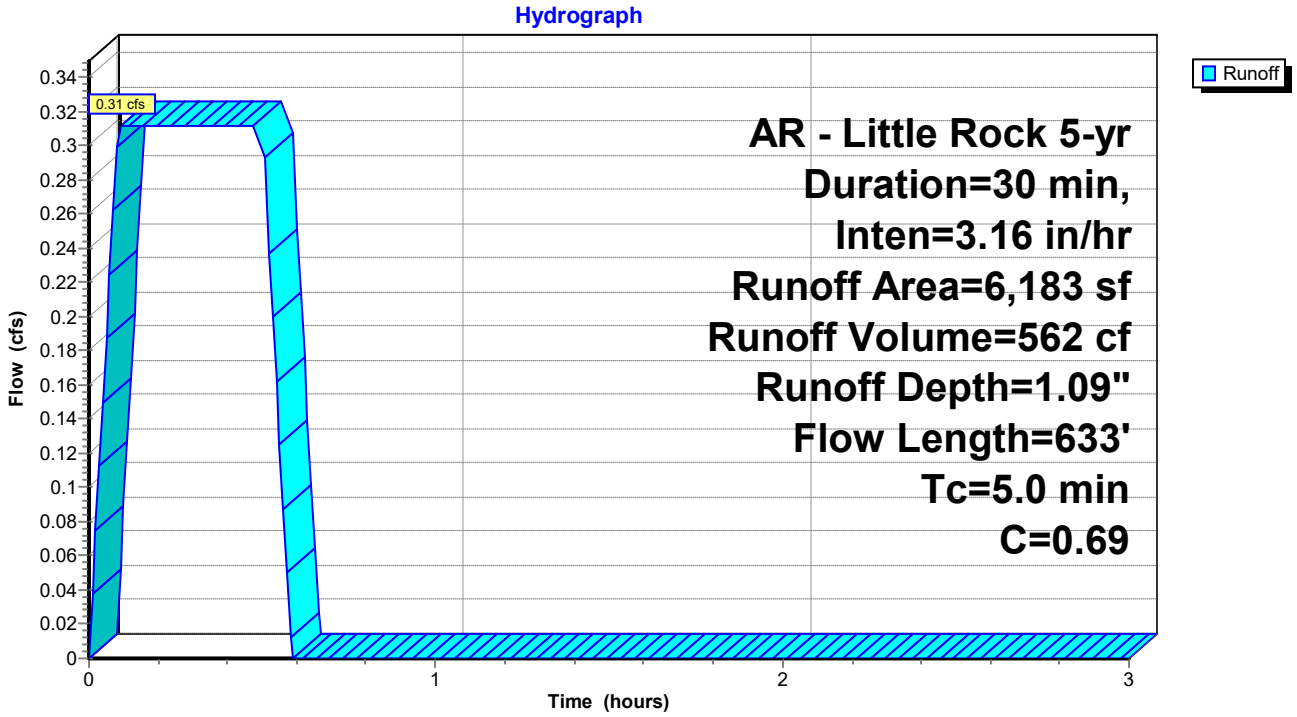
Runoff = 0.31 cfs @ 0.09 hrs, Volume= 562 cf, Depth= 1.09"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,876 | 0.40 | Sod Yard |
| 3,307 | 0.95 | Paving, Sidewalks |
| 6,183 | 0.69 | Weighted Average |
| 2,876 | | 46.51% Pervious Area |
| 3,307 | | 53.49% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 25 | 0.0200 | 1.19 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 33 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 37 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 633 | Total | | | |

## Subcatchment C11: Drainage Basin C11



## Summary for Subcatchment C12: Drainage Basin C12

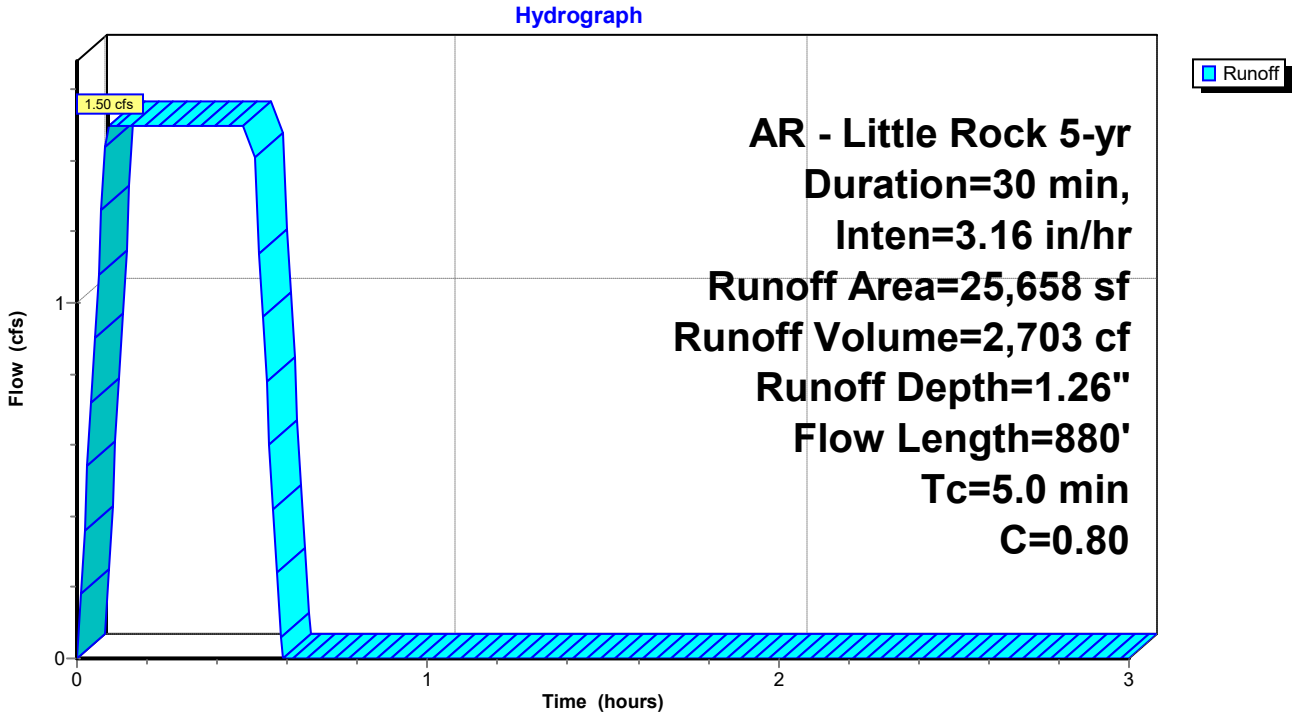
Runoff = 1.50 cfs @ 0.09 hrs, Volume= 2,703 cf, Depth= 1.26"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,218 | 0.40 | Sod Yard |
| 18,440 | 0.95 | Paving, Sidewalks |
| 25,658 | 0.80 | Weighted Average |
| 7,218 | | 28.13% Pervious Area |
| 18,440 | | 71.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 24 | 0.0360 | 1.50 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0190 | 0.85 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 21 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.9 | 49 | 0.0020 | 0.91 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.4 | 96 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 94 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 25 | 0.0450 | 4.31 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 39 | 0.0490 | 4.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0460 | 4.35 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 11 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0440 | 4.26 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.3 | 415 | | 3.01 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 880 | Total | | | |

## Subcatchment C12: Drainage Basin C12



## Summary for Subcatchment C13: Drainage Basin C13

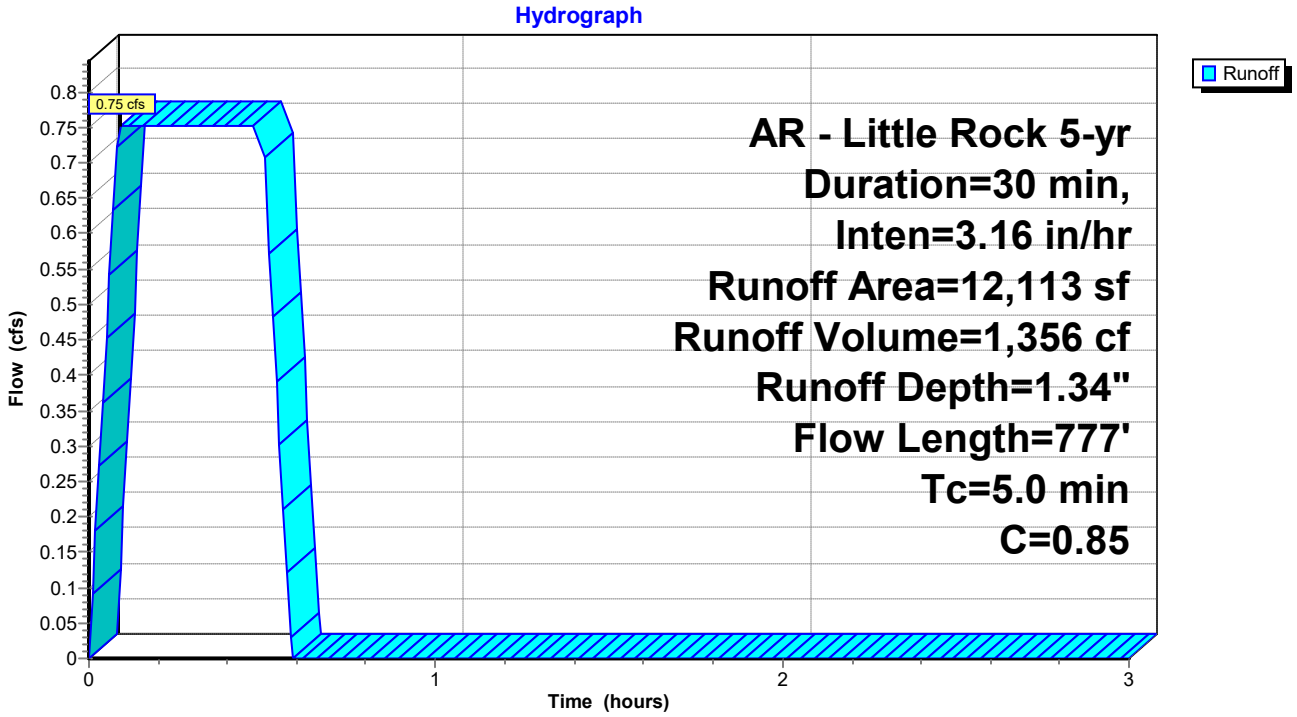
Runoff = 0.75 cfs @ 0.09 hrs, Volume= 1,356 cf, Depth= 1.34"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,240 | 0.40 | Sod Yard |
| 9,873 | 0.95 | Paving, Sidewalks |
| 12,113 | 0.85 | Weighted Average |
| 2,240 | | 18.49% Pervious Area |
| 9,873 | | 81.51% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 75 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 42 | 0.0730 | 5.48 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 74 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 32 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.6 | 415 | | 1.92 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 777 | Total | | | |

## Subcatchment C13: Drainage Basin C13



## Summary for Subcatchment C14: Drainage Basin C14

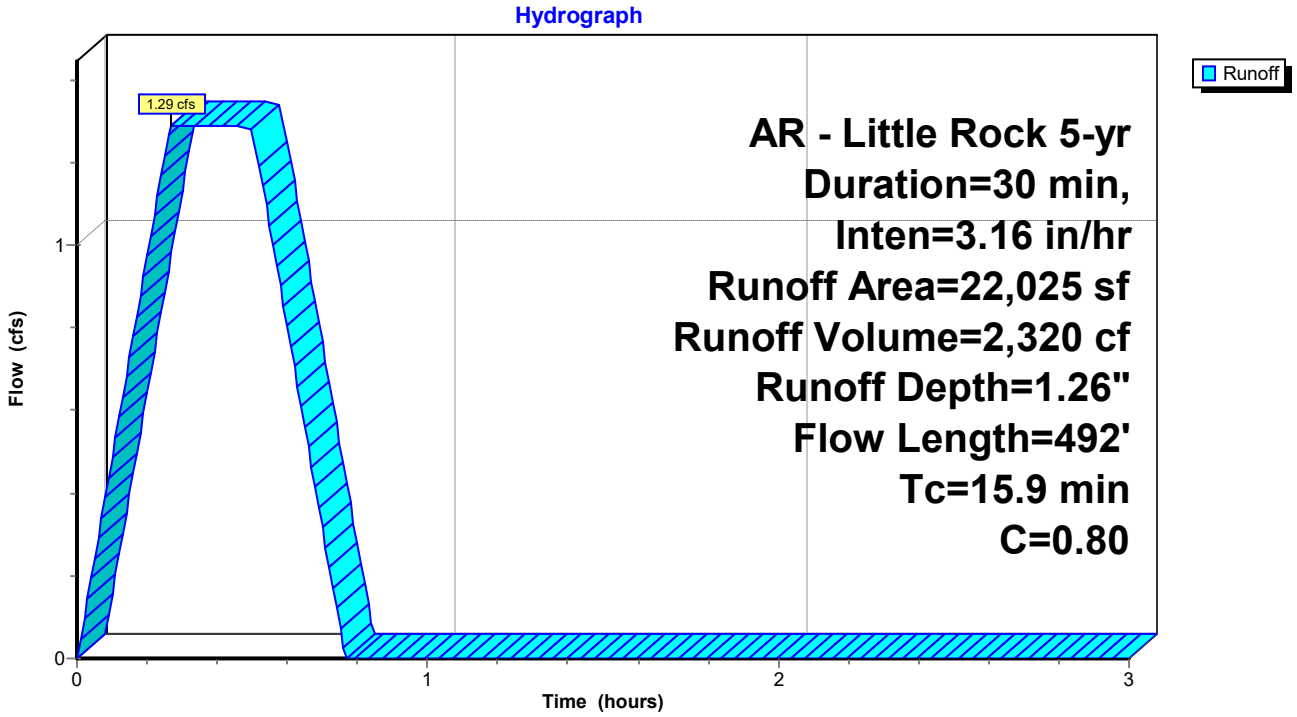
Runoff = 1.29 cfs @ 0.27 hrs, Volume= 2,320 cf, Depth= 1.26"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,127 | 0.40 | Sod Yard |
| 15,898 | 0.95 | Paving, Sidewalks |
| 22,025 | 0.80 | Weighted Average |
| 6,127 | | 27.82% Pervious Area |
| 15,898 | | 72.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.5 | 5 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 9.2 | 45 | 0.0250 | 0.08 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.8 | 41 | 0.1940 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 6 | 0.0100 | 0.68 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 51 | 0.0870 | 5.99 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0310 | 3.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 20 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 34 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 58 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 49 | 0.0840 | 5.88 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 15.9 | 492 | Total | | | |

## Subcatchment C14: Drainage Basin C14



## Summary for Subcatchment C15: Drainage Basin C15

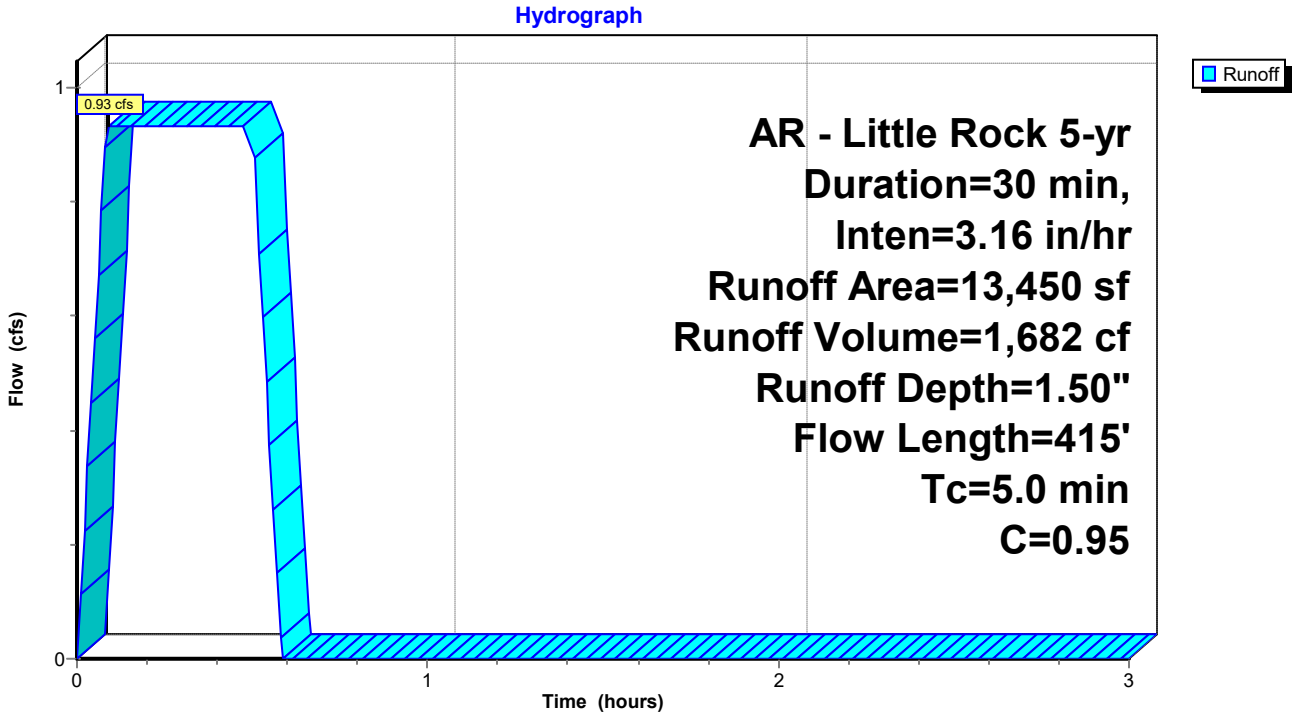
Runoff = 0.93 cfs @ 0.09 hrs, Volume= 1,682 cf, Depth= 1.50"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 13,450 | 0.95 | Paving, Sidewalks |
| 13,450 | 0.95 | Weighted Average |
| 13,450 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Overland Concentrated Flow (Min)** |

## Subcatchment C15: Drainage Basin C15



## Summary for Subcatchment C16: Drainage Basin C16

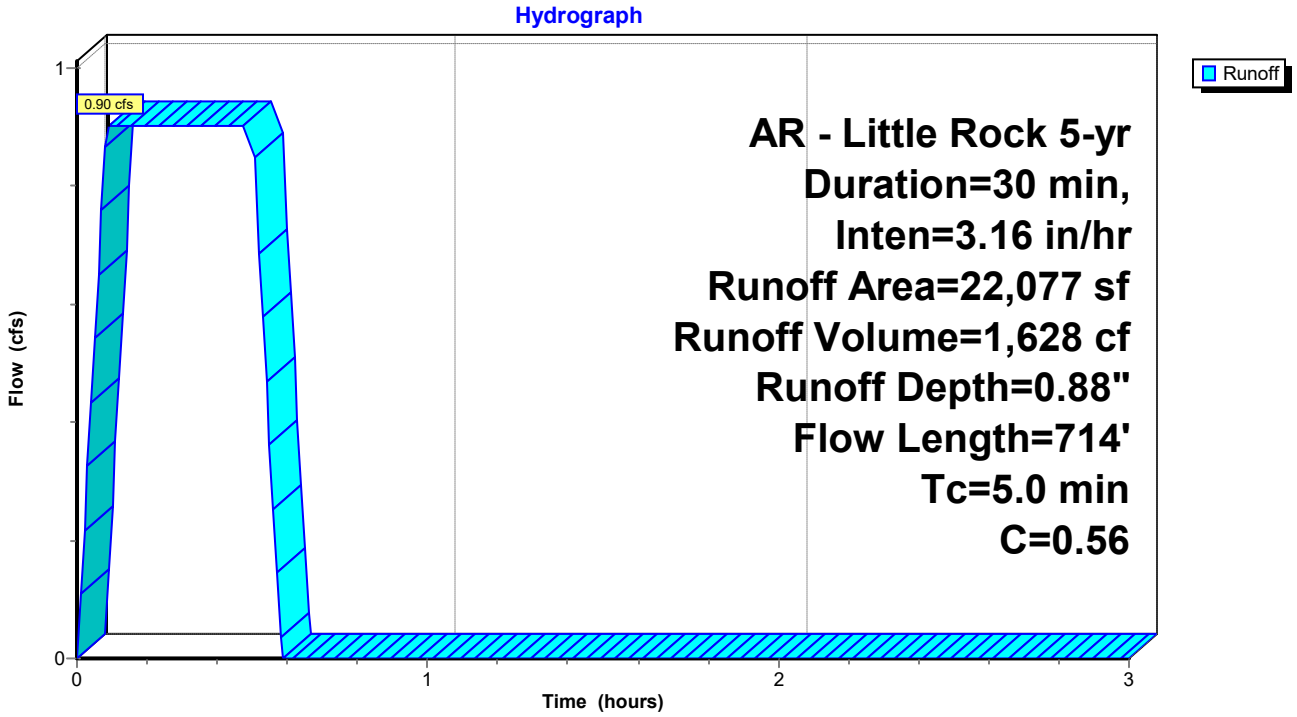
Runoff = 0.90 cfs @ 0.09 hrs, Volume= 1,628 cf, Depth= 0.88"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,465 | 0.40 | Sod Yard |
| 6,612 | 0.95 | Paving, Sidewalks |
| 22,077 | 0.56 | Weighted Average |
| 15,465 | | 70.05% Pervious Area |
| 6,612 | | 29.95% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 26 | 0.0190 | 1.18 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0100 | 0.66 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 51 | 0.0500 | 1.98 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 12 | 0.1540 | 2.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 50 | 0.1330 | 7.40 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 50 | 0.1170 | 6.94 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 59 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 3.3 | 415 | | 2.10 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 714 | Total | | | |

## Subcatchment C16: Drainage Basin C16



## Summary for Subcatchment C17: Drainage Basin C17

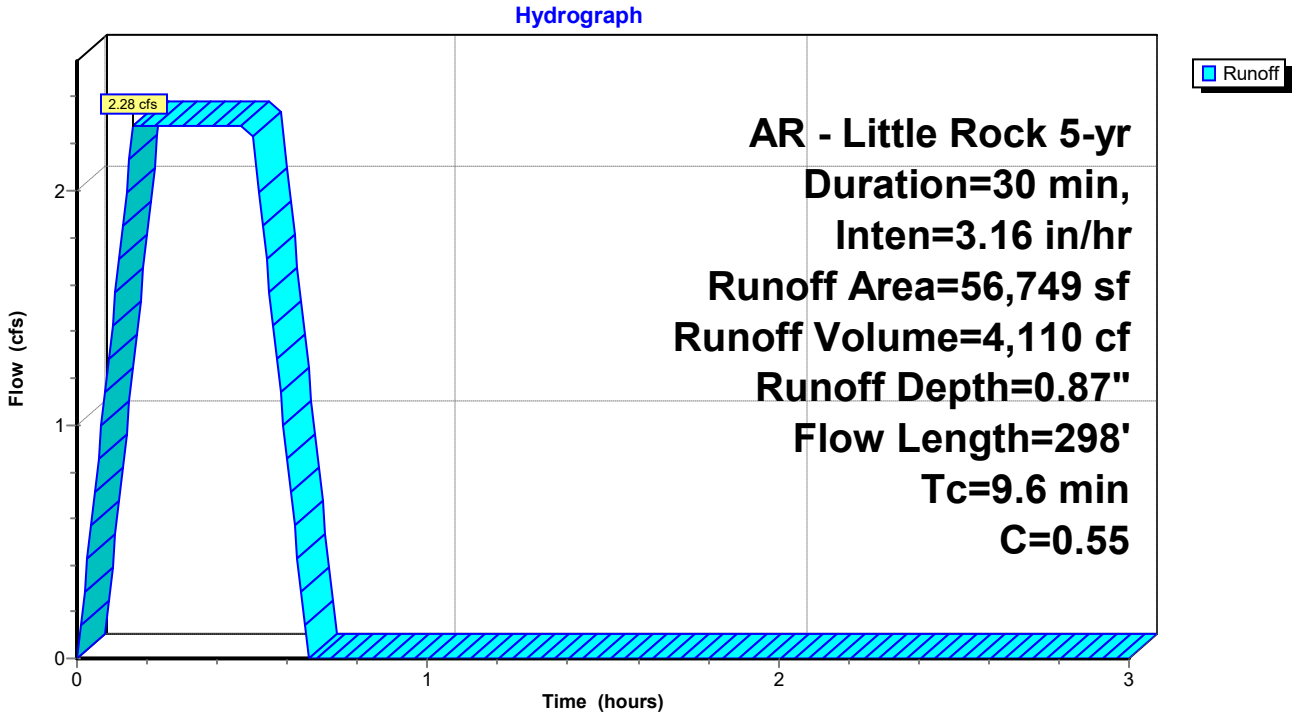
Runoff = 2.28 cfs @ 0.16 hrs, Volume= 4,110 cf, Depth= 0.87"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 40,914 | 0.40 | Sod Yard |
| 15,835 | 0.95 | Paving, Sidewalks |
| 56,749 | 0.55 | Weighted Average |
| 40,914 | | 72.10% Pervious Area |
| 15,835 | | 27.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 43 | 0.0410 | 0.15 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 3.9 | 43 | 0.0690 | 0.19 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 41 | 0.0980 | 4.70 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 61 | 0.0730 | 4.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0570 | 3.58 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 64 | 0.0450 | 3.18 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 9.6 | 298 | Total | | | |

## Subcatchment C17: Drainage Basin C17



## Summary for Subcatchment C18: Drainage Basin C18

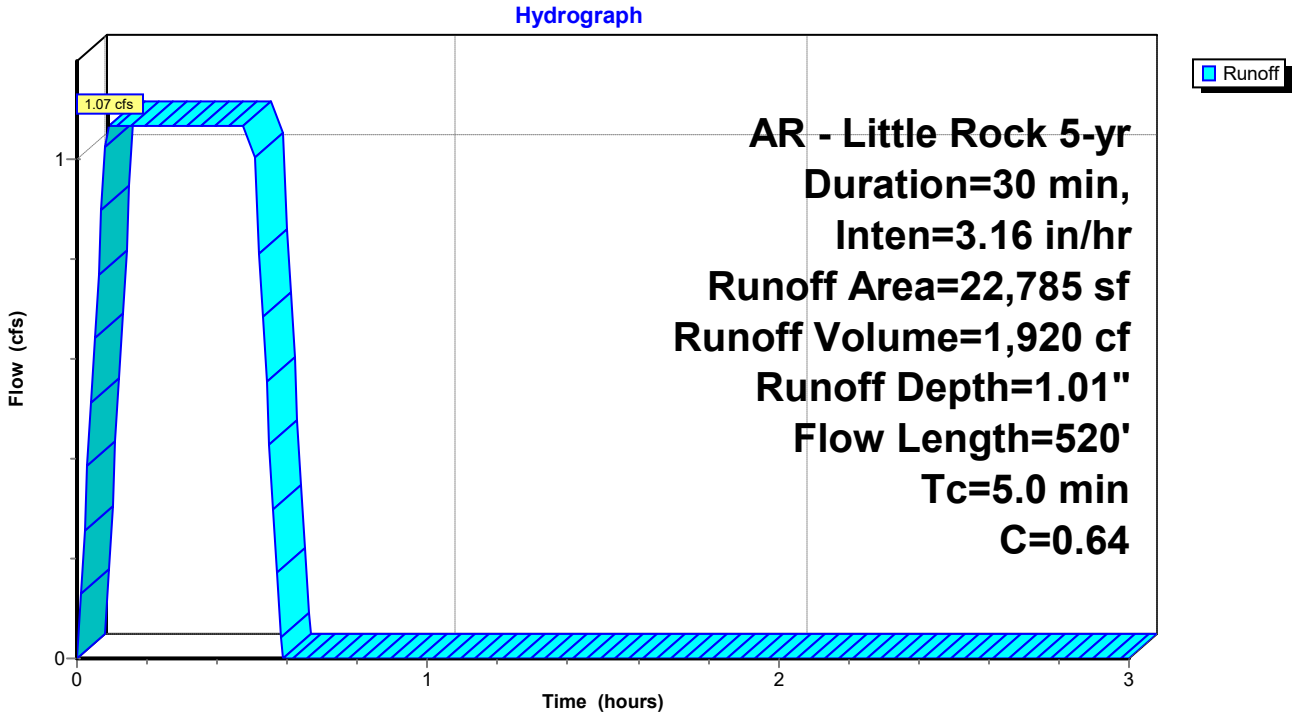
Runoff = 1.07 cfs @ 0.09 hrs, Volume= 1,920 cf, Depth= 1.01"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,812 | 0.40 | Sod Yard |
| 9,973 | 0.95 | Paving, Sidewalks |
| 22,785 | 0.64 | Weighted Average |
| 12,812 | | 56.23% Pervious Area |
| 9,973 | | 43.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2980 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.3 | 8 | 0.0100 | 0.04 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 80 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.4 | 415 | | 17.29 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 520 | Total | | | |

## Subcatchment C18: Drainage Basin C18



## Summary for Subcatchment C19: Drainage Basin C19

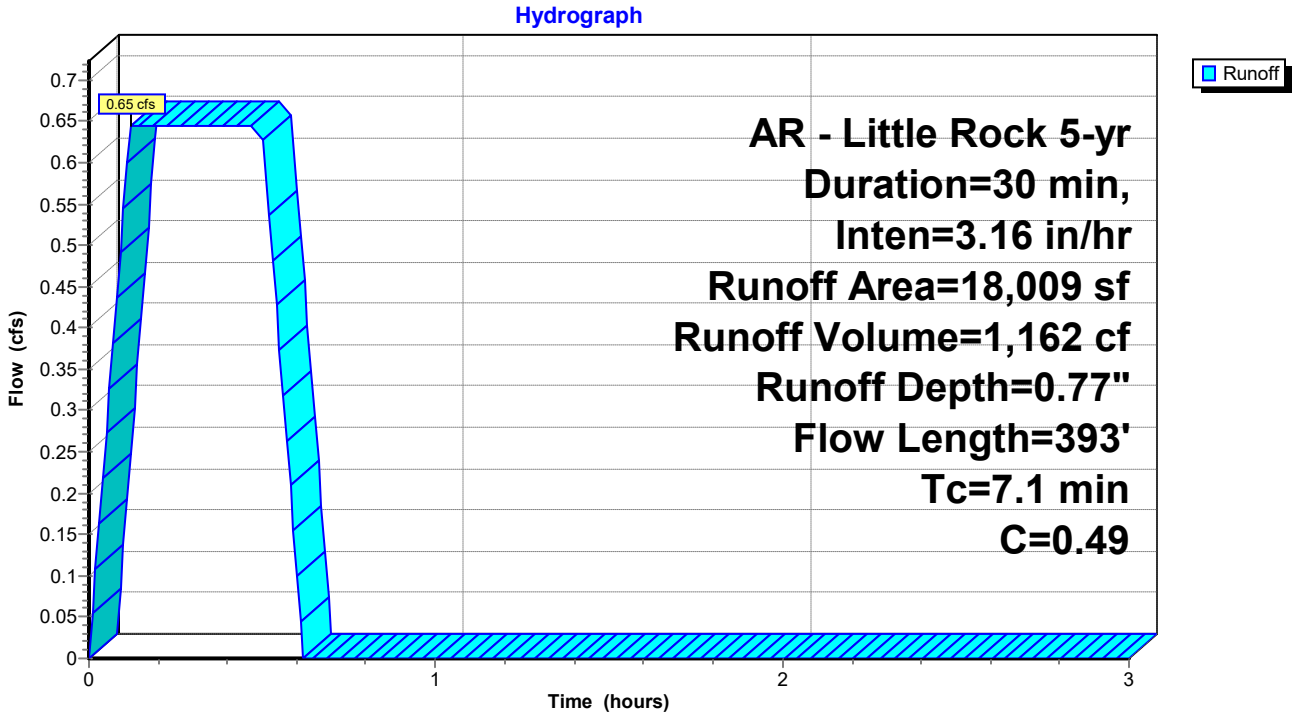
Runoff = 0.65 cfs @ 0.12 hrs, Volume= 1,162 cf, Depth= 0.77"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,129 | 0.40 | Sod Yard |
| 2,880 | 0.95 | Paving, Sidewalks |
| 18,009 | 0.49 | Weighted Average |
| 15,129 | | 84.01% Pervious Area |
| 2,880 | | 15.99% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 34 | 0.1110 | 0.21 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.3 | 66 | 0.2450 | 0.34 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.0 | 9 | 0.2450 | 7.42 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.5 | 106 | 0.0610 | 3.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0800 | 4.24 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 41 | 0.0960 | 4.65 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 66 | 0.0680 | 3.91 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 19 | 0.1070 | 6.64 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 7.1 | 393 | Total | | | |

## Subcatchment C19: Drainage Basin C19



## Summary for Subcatchment C2: Drainage Basin C2

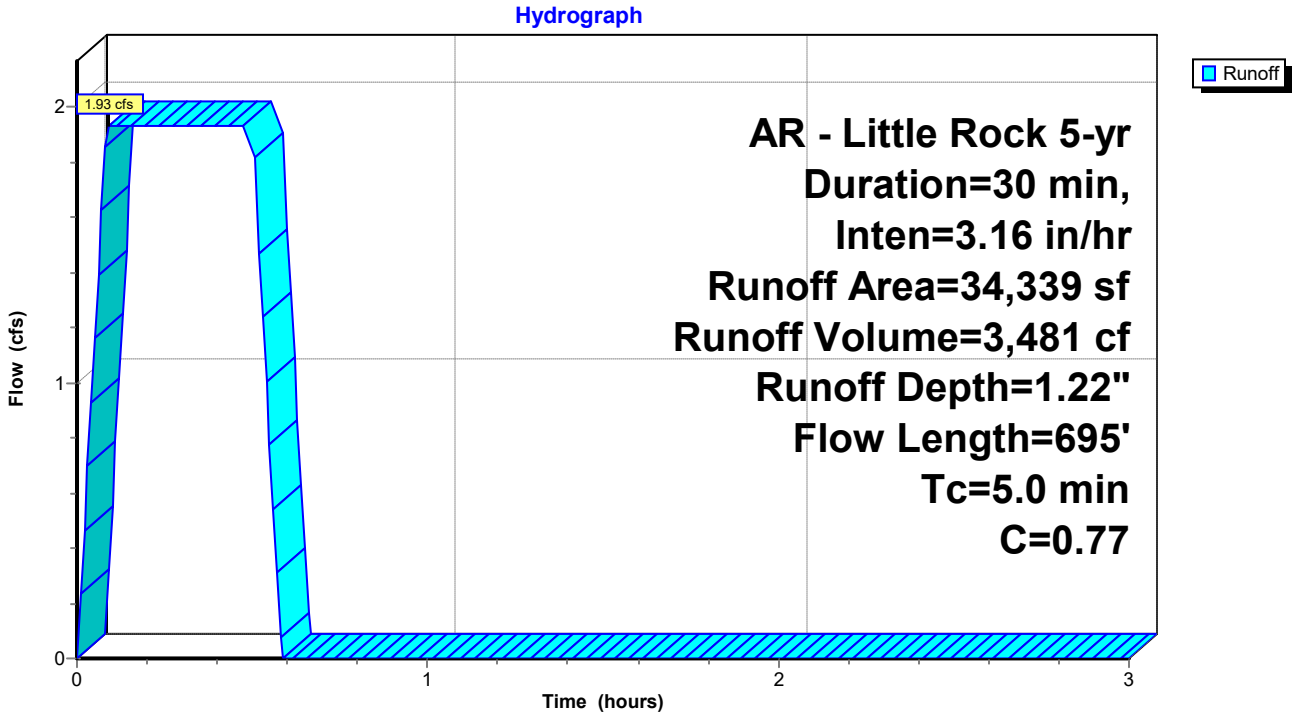
Runoff = 1.93 cfs @ 0.09 hrs, Volume= 3,481 cf, Depth= 1.22"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 11,376 | 0.40 | Sod Yard |
| 22,963 | 0.95 | Roof, Paving, Sidewalks |
| 34,339 | 0.77 | Weighted Average |
| 11,376 | | 33.13% Pervious Area |
| 22,963 | | 66.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 20 | 0.0200 | 1.14 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 74 | 0.0240 | 3.14 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 21 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.6 | 148 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.5 | 415 | | 1.98 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 695 | Total | | | |

## Subcatchment C2: Drainage Basin C2



## Summary for Subcatchment C20: Drainage Basin C20

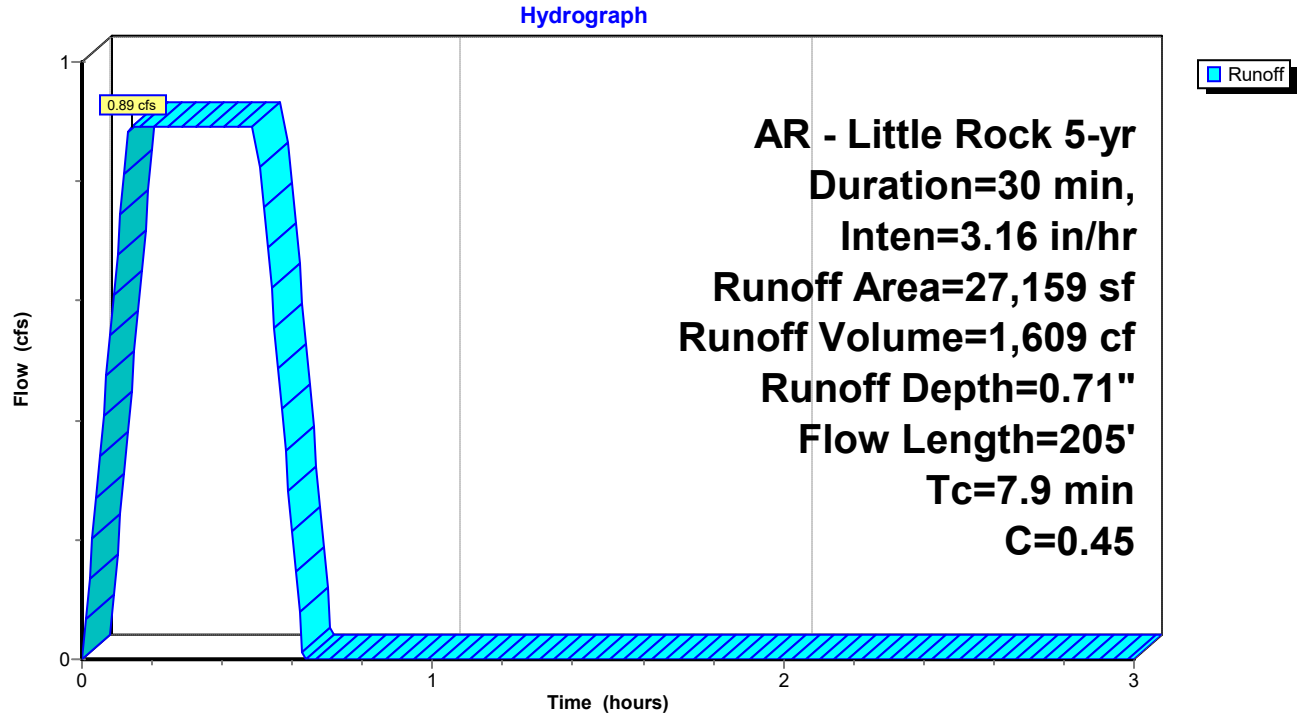
Runoff = 0.89 cfs @ 0.14 hrs, Volume= 1,609 cf, Depth= 0.71"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,838 | 0.40 | Sod Yard |
| 2,321 | 0.95 | Paving, Sidewalks |
| 27,159 | 0.45 | Weighted Average |
| 24,838 | | 91.45% Pervious Area |
| 2,321 | | 8.55% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 45 | 0.1430 | 0.25 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 4.5 | 55 | 0.0780 | 0.20 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 37 | 0.0780 | 4.19 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 68 | 0.0710 | 4.00 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 7.9 | 205 | Total | | | |

## Subcatchment C20: Drainage Basin C20



## Summary for Subcatchment C21: Drainage Basin C21

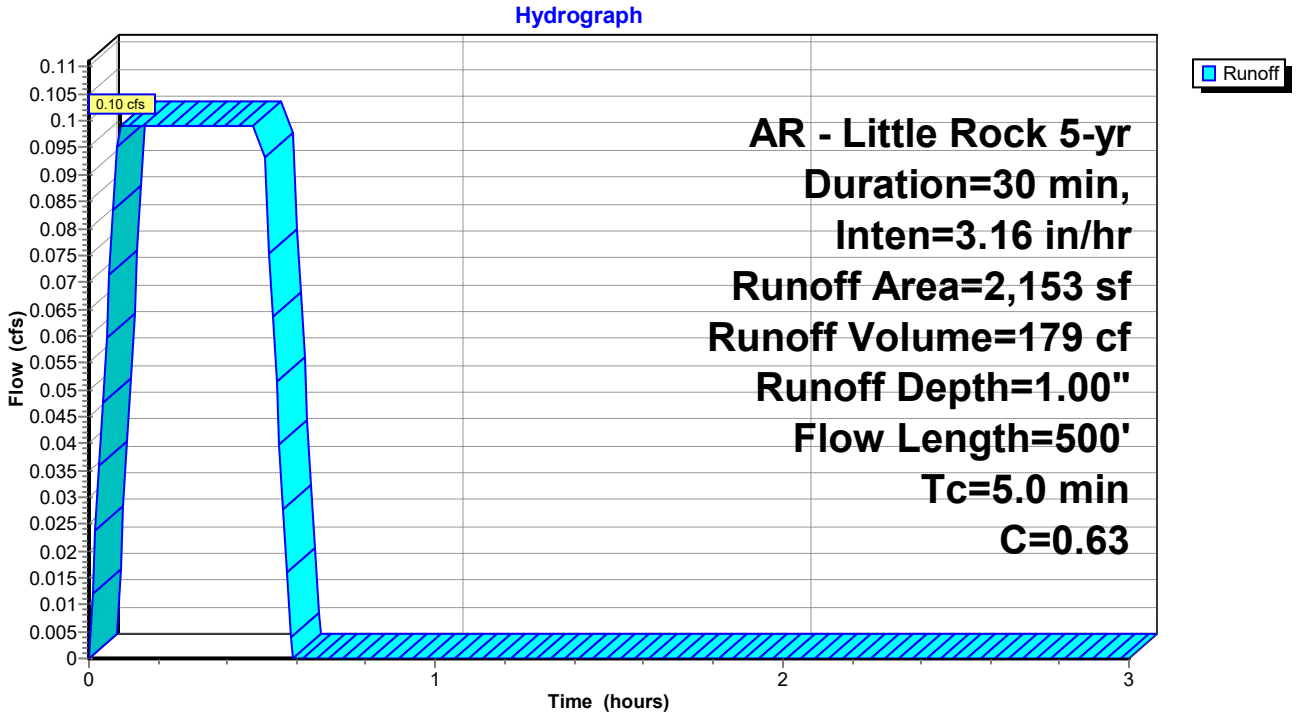
Runoff = 0.10 cfs @ 0.09 hrs, Volume= 179 cf, Depth= 1.00"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,234 | 0.40 | Sod Yard |
| 919 | 0.95 | Paving, Sidewalks |
| 2,153 | 0.63 | Weighted Average |
| 1,234 | | 57.32% Pervious Area |
| 919 | | 42.68% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 2 | 0.2500 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.3 | 33 | 0.0520 | 1.85 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.8 | 24 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 26 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.5 | 415 | | 13.83 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 500 | Total | | | |

## Subcatchment C21: Drainage Basin C21



## Summary for Subcatchment C3: Drainage Basin C3

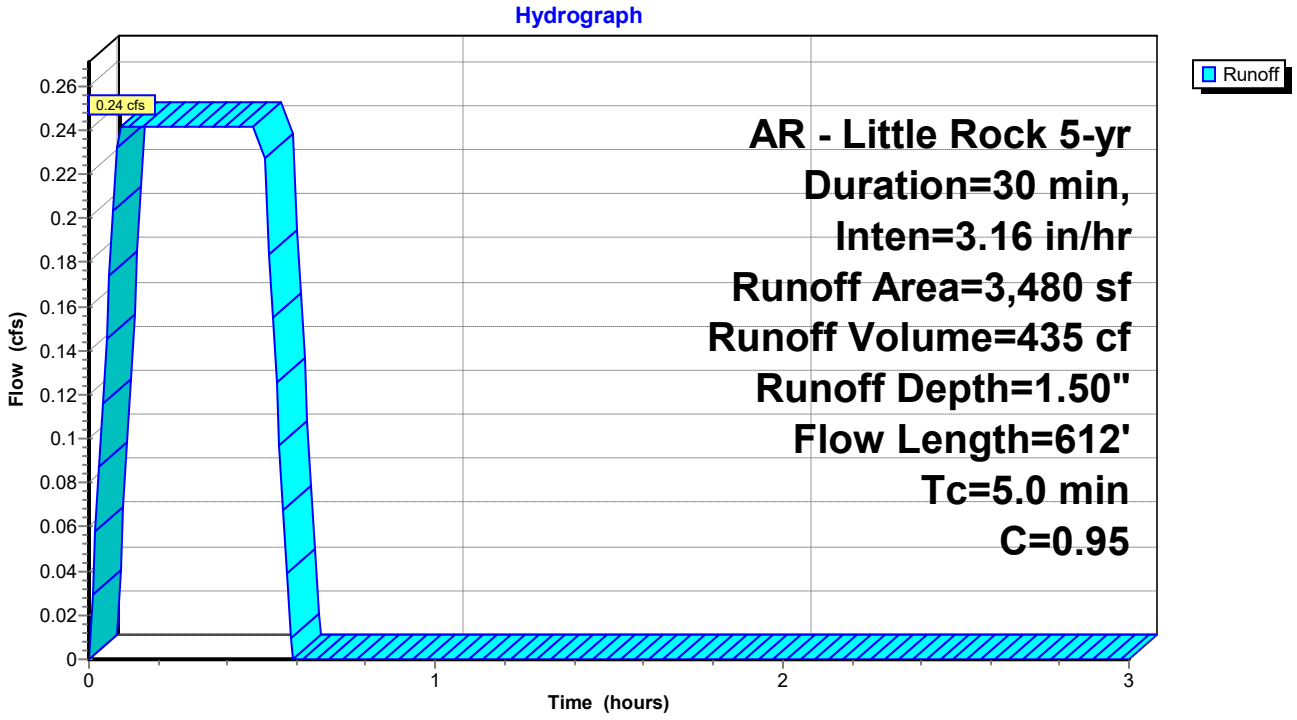
Runoff = 0.24 cfs @ 0.09 hrs, Volume= 435 cf, Depth= 1.50"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 3,480 | 0.95 | Paving, Sidewalks |
| 3,480 | 0.95 | Weighted Average |
| 3,480 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 10 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.6 | 147 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 612 | Total | | | |

## Subcatchment C3: Drainage Basin C3



## Summary for Subcatchment C4: Drainage Basin C4

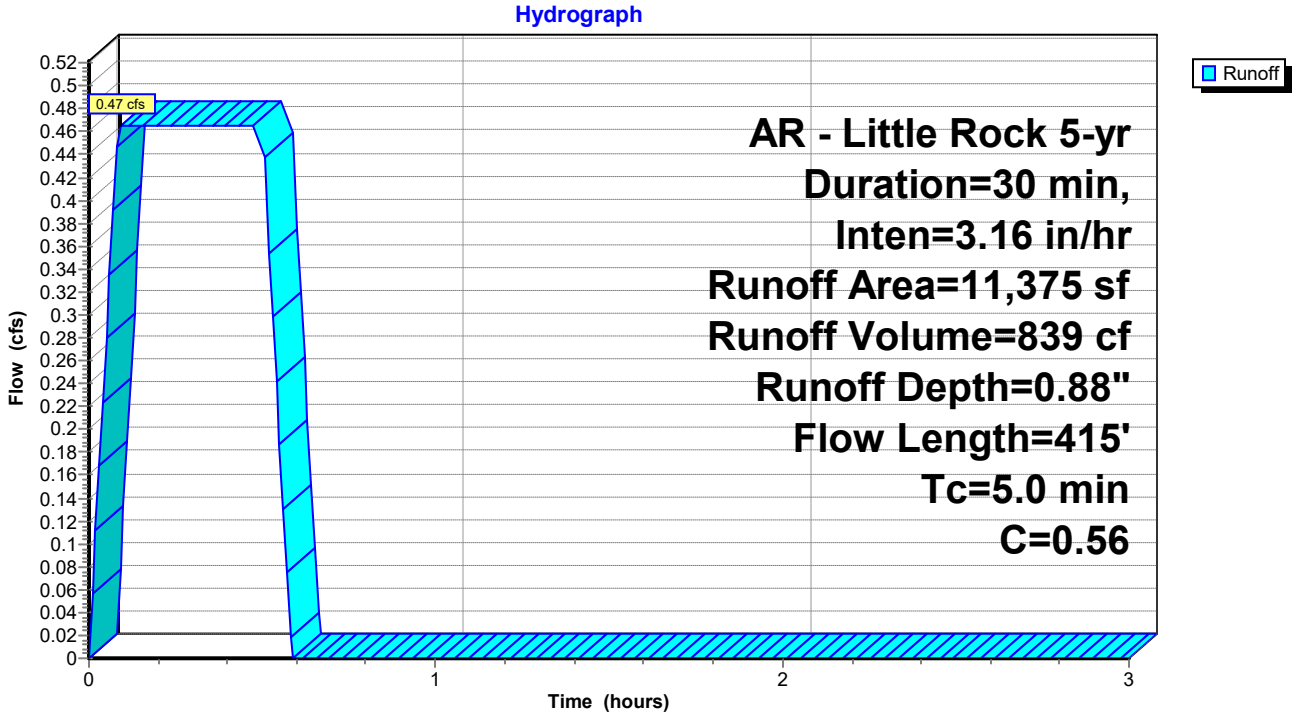
Runoff = 0.47 cfs @ 0.09 hrs, Volume= 839 cf, Depth= 0.88"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 8,130 | 0.40 | Sod Yard |
| 3,245 | 0.95 | Paving, Sidewalks |
| 11,375 | 0.56 | Weighted Average |
| 8,130 | | 71.47% Pervious Area |
| 3,245 | | 28.53% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Concentrated Flow (Min)** |

## Subcatchment C4: Drainage Basin C4



## Summary for Subcatchment C5: Drainage Basin C5

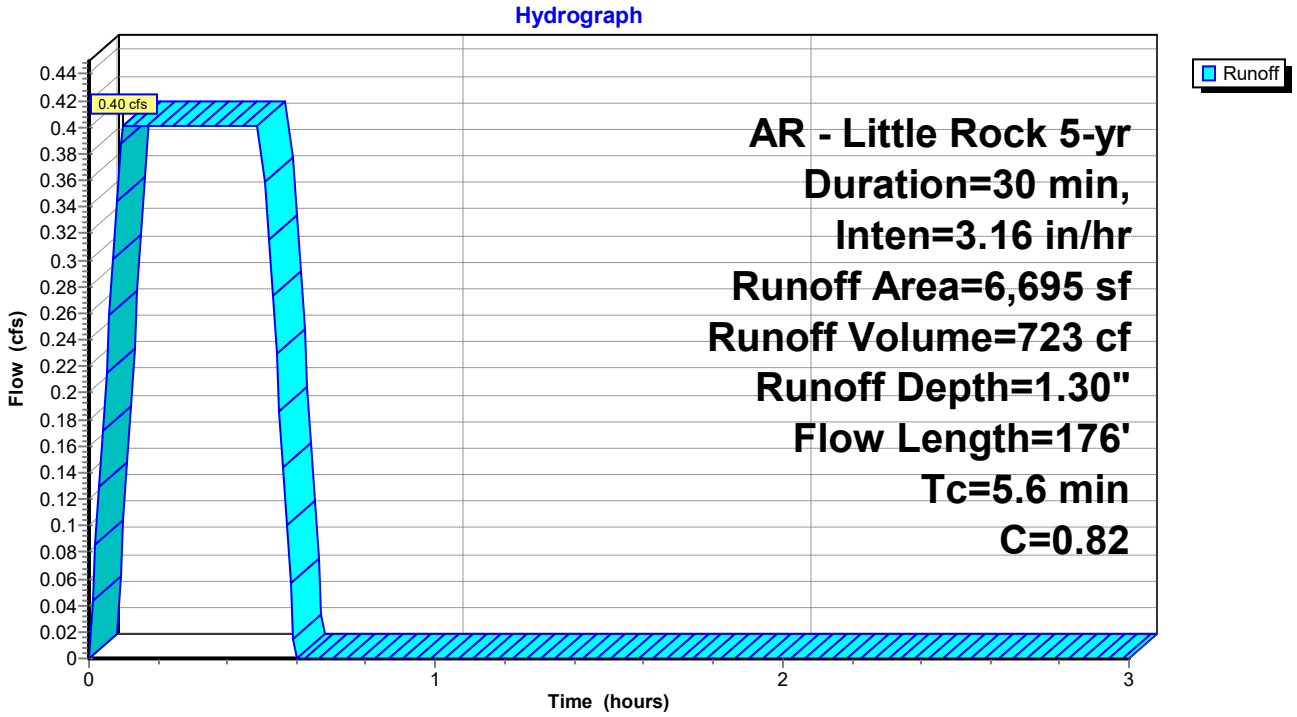
Runoff = 0.40 cfs @ 0.10 hrs, Volume= 723 cf, Depth= 1.30"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,634 | 0.40 | Sod Yard |
| 5,061 | 0.95 | Paving, Sidewalks |
| 6,695 | 0.82 | Weighted Average |
| 1,634 | | 24.41% Pervious Area |
| 5,061 | | 75.59% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2990 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.9 | 8 | 0.0070 | 0.03 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 58 | 0.0080 | 1.82 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 14 | 0.0280 | 3.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0940 | 6.22 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 30 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 5.6 | 176 | Total | | | |

## Subcatchment C5: Drainage Basin C5



## Summary for Subcatchment C6: Drainage Basin C6

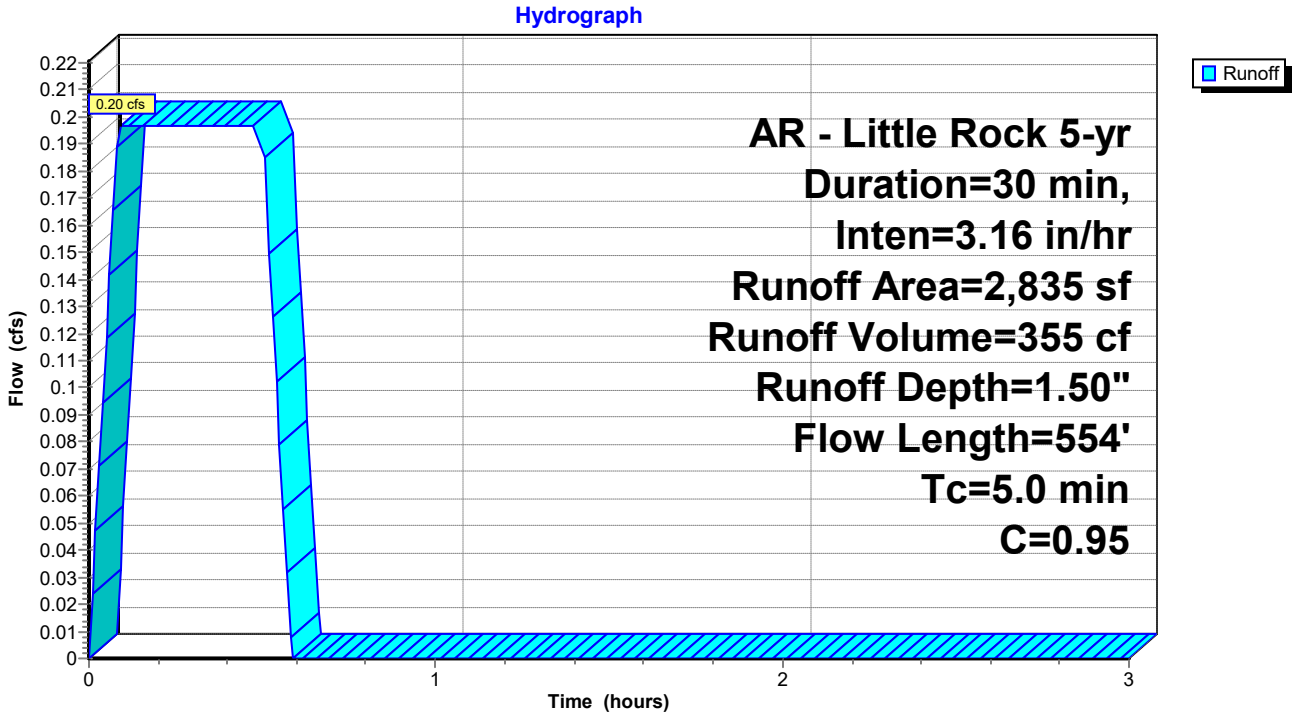
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 355 cf, Depth= 1.50"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 2,835 | 0.95 | Paving, Sidewalks |
| 2,835 | 0.95 | Weighted Average |
| 2,835 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 19 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0360 | 3.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 27 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.1 | 415 | | 1.69 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 554 | Total | | | |

## Subcatchment C6: Drainage Basin C6



## Summary for Subcatchment C7: Drainage Basin C7

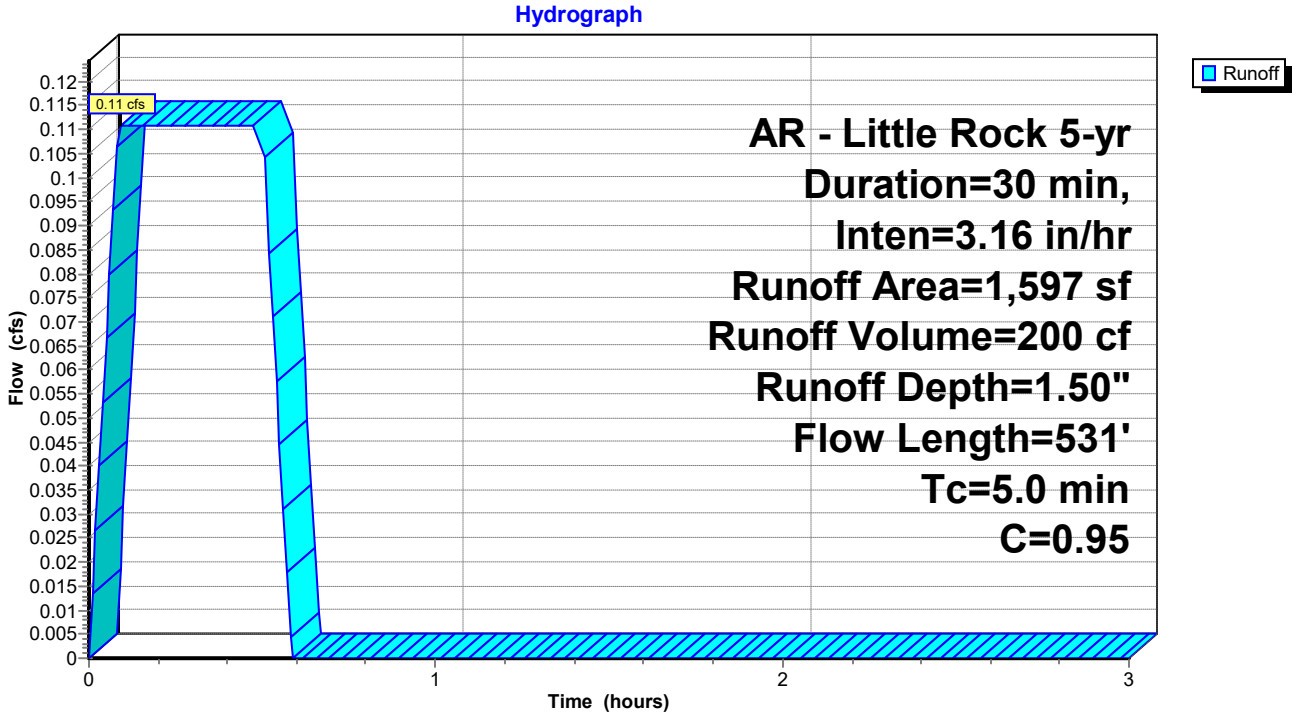
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 200 cf, Depth= 1.50"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,597 | 0.95 | Paving, Sidewalks |
| 1,597 | 0.95 | Weighted Average |
| 1,597 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 16 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 81 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.3 | 415 | | 1.61 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 531 | Total | | | |

## Subcatchment C7: Drainage Basin C7



## Summary for Subcatchment C8: Drainage Basin C8

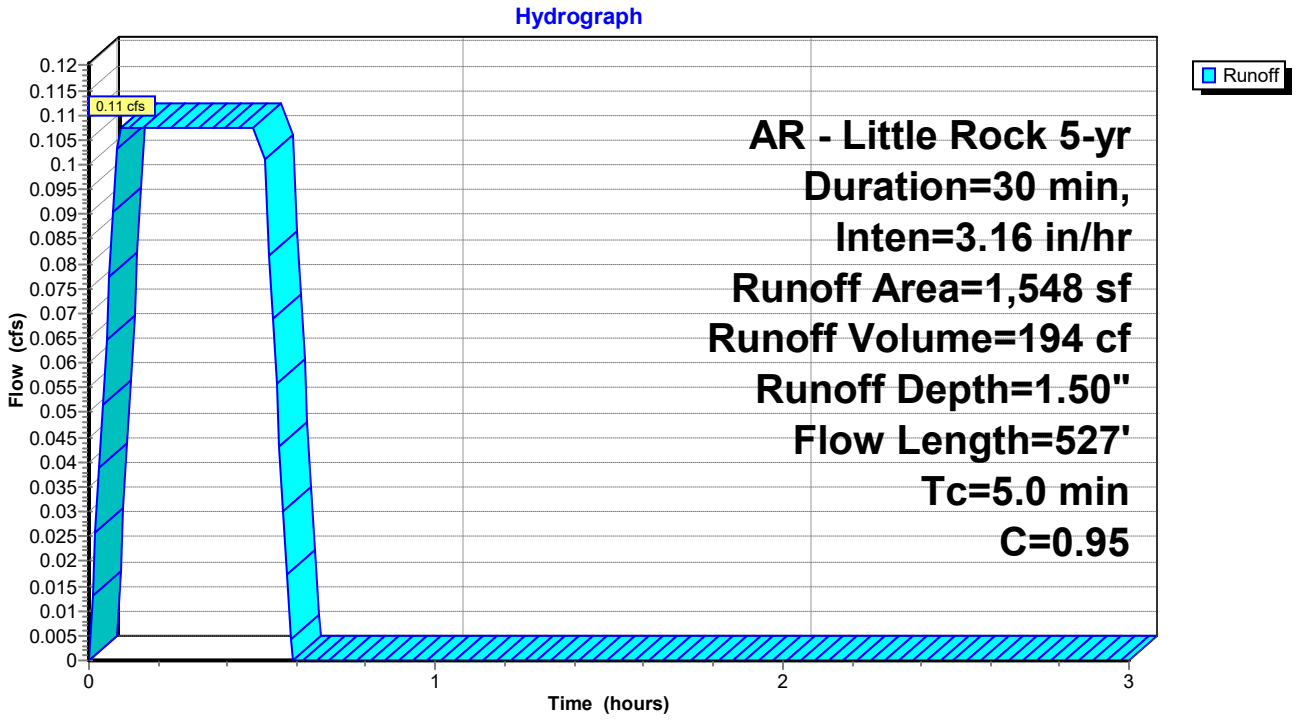
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 194 cf, Depth= 1.50"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,548 | 0.95 | Paving, Sidewalks |
| 1,548 | 0.95 | Weighted Average |
| 1,548 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 94 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 4.4 | 415 | | 1.57 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 527 | Total | | | |

## Subcatchment C8: Drainage Basin C8



## Summary for Subcatchment C9: Drainage Basin C9

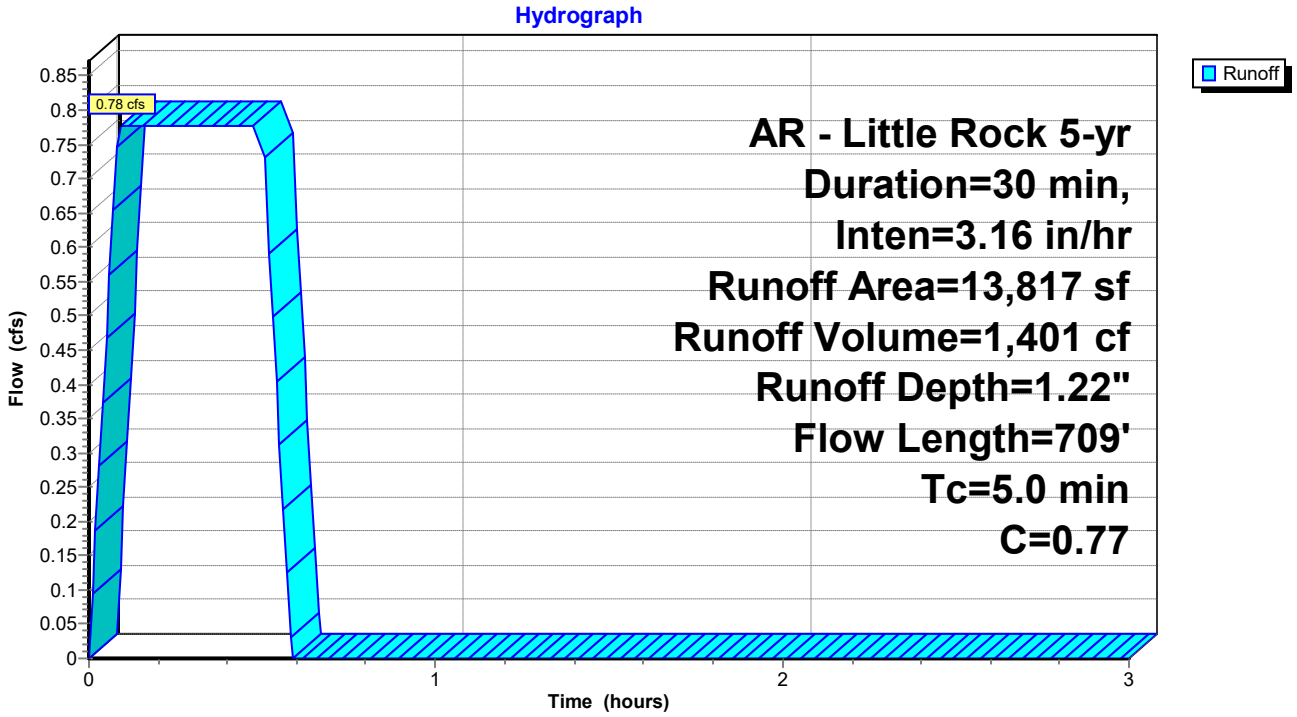
Runoff = 0.78 cfs @ 0.09 hrs, Volume= 1,401 cf, Depth= 1.22"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,456 | 0.40 | Sod Yard |
| 9,361 | 0.95 | Paving, Sidewalks |
| 13,817 | 0.77 | Weighted Average |
| 4,456 | | 32.25% Pervious Area |
| 9,361 | | 67.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.2 | 100 | 0.0140 | 1.36 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 13 | 0.0150 | 2.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 7 | 0.0050 | 1.44 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 8 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 41 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 41 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 61 | 0.0520 | 4.63 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.9 | 415 | | 2.39 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 709 | Total | | | |

## Subcatchment C9: Drainage Basin C9

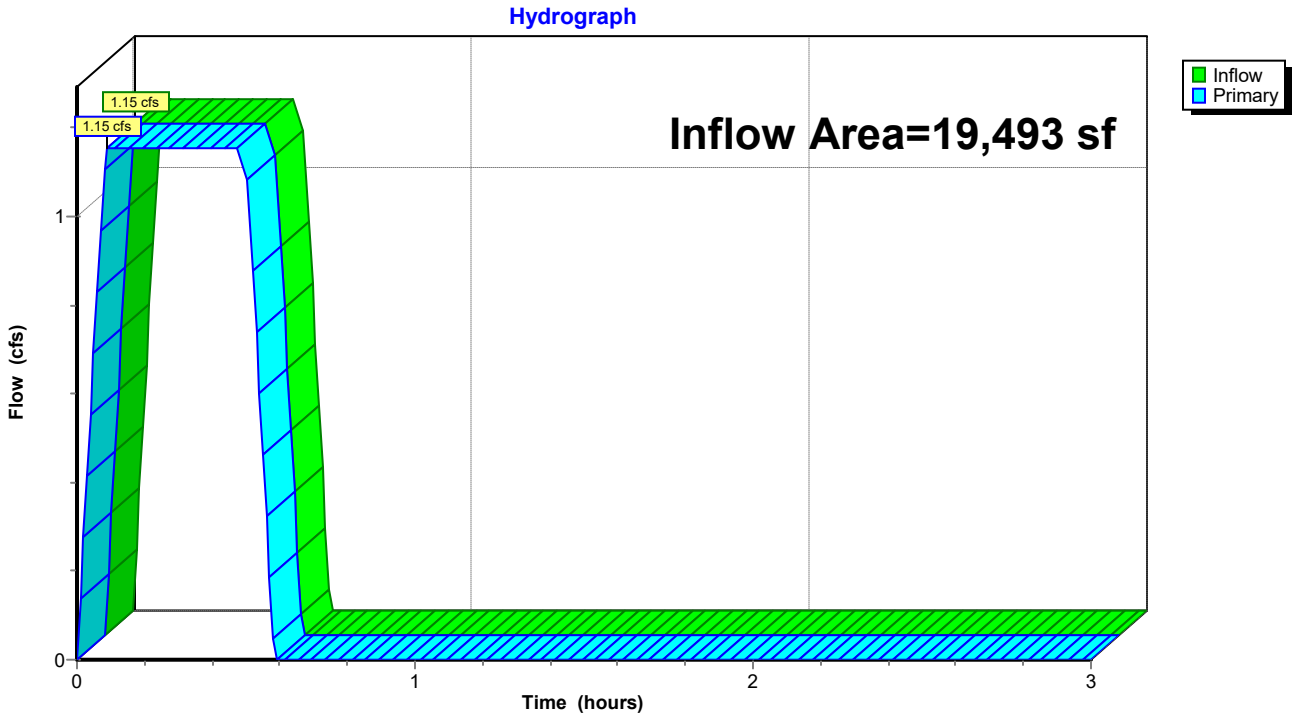


## Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.85% Impervious, Inflow Depth = 1.28" for 5-yr event
Inflow = 1.15 cfs @ 0.09 hrs, Volume= 2,079 cf
Primary = 1.15 cfs @ 0.09 hrs, Volume= 2,079 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A1: CI - A1

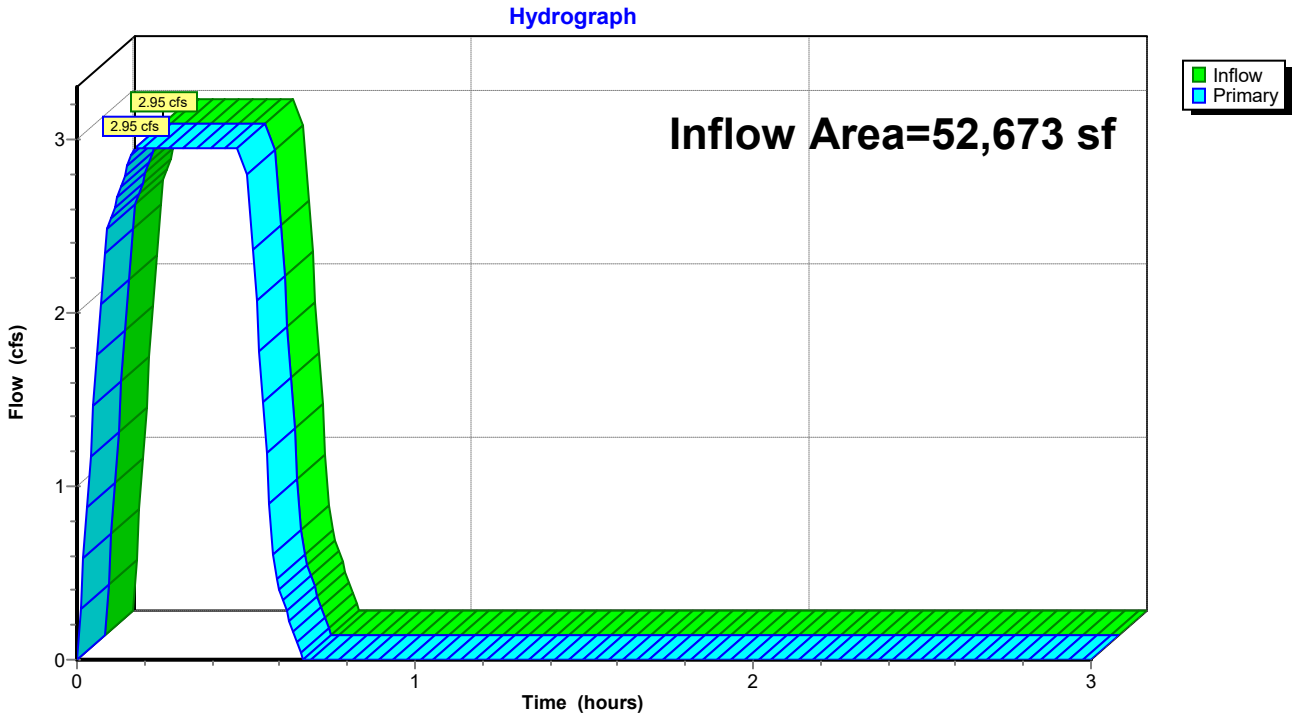


## Summary for Pond CI-A3: CI - A3

Inflow Area = 52,673 sf, 66.48% Impervious, Inflow Depth = 1.21" for 5-yr event
Inflow = 2.95 cfs @ 0.17 hrs, Volume= 5,302 cf
Primary = 2.95 cfs @ 0.17 hrs, Volume= 5,302 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A3: CI - A3

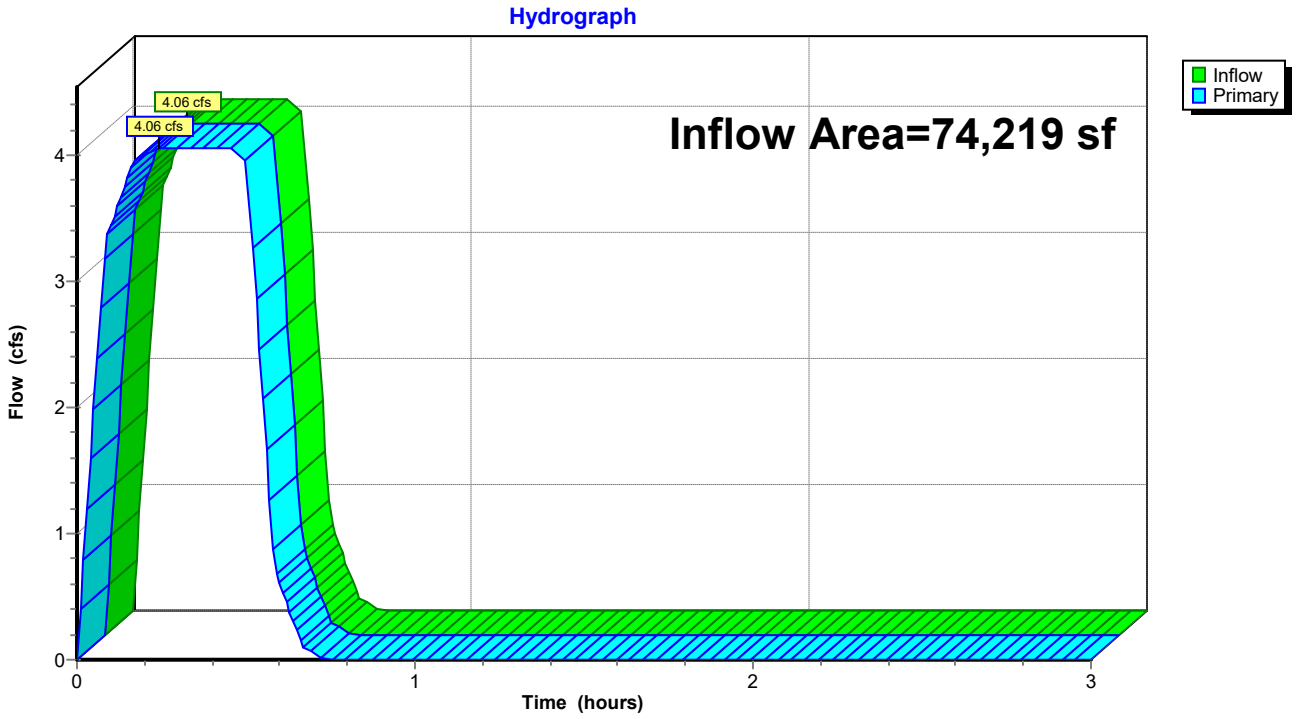


## Summary for Pond CI-A4: CI - A4

Inflow Area = 74,219 sf, 63.30% Impervious, Inflow Depth = 1.18" for 5-yr event
Inflow = 4.06 cfs @ 0.24 hrs, Volume= 7,303 cf
Primary = 4.06 cfs @ 0.24 hrs, Volume= 7,303 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A4: CI - A4

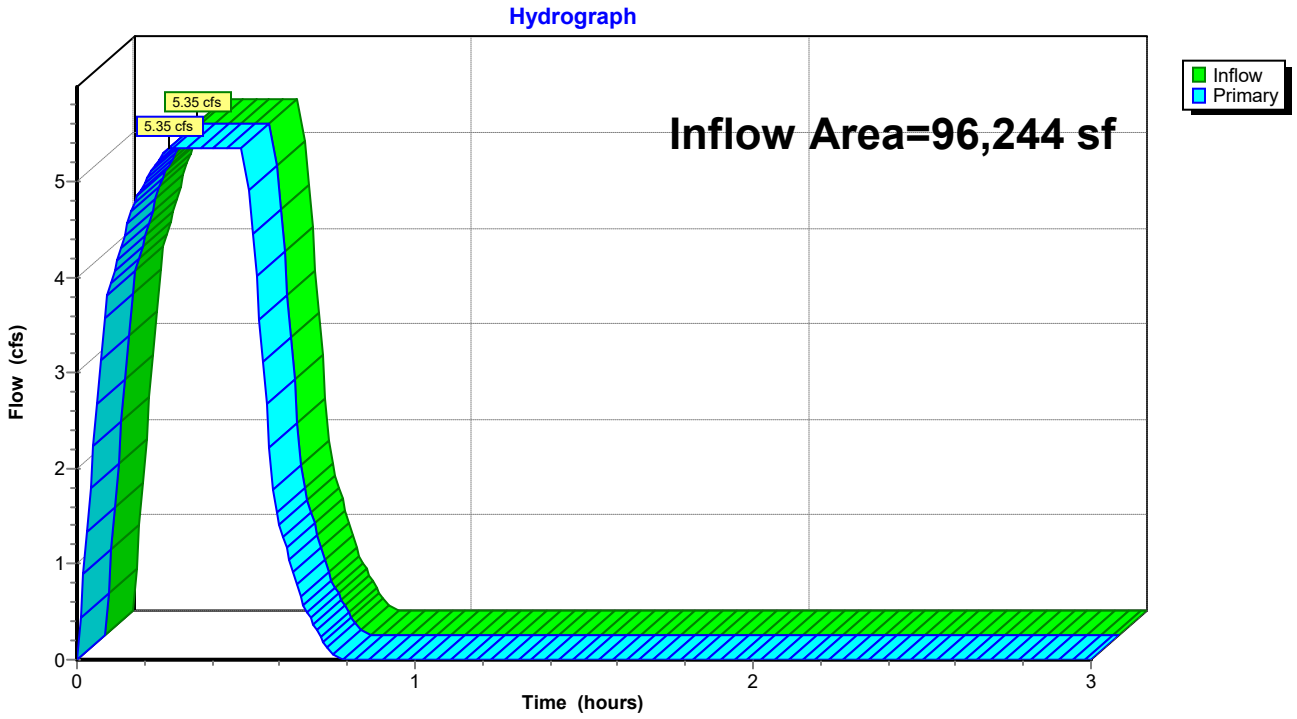


## Summary for Pond CI-A5: CI - A5

Inflow Area = 96,244 sf, 65.33% Impervious, Inflow Depth = 1.20" for 5-yr event
Inflow = 5.35 cfs @ 0.27 hrs, Volume= 9,623 cf
Primary = 5.35 cfs @ 0.27 hrs, Volume= 9,623 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A5: CI - A5

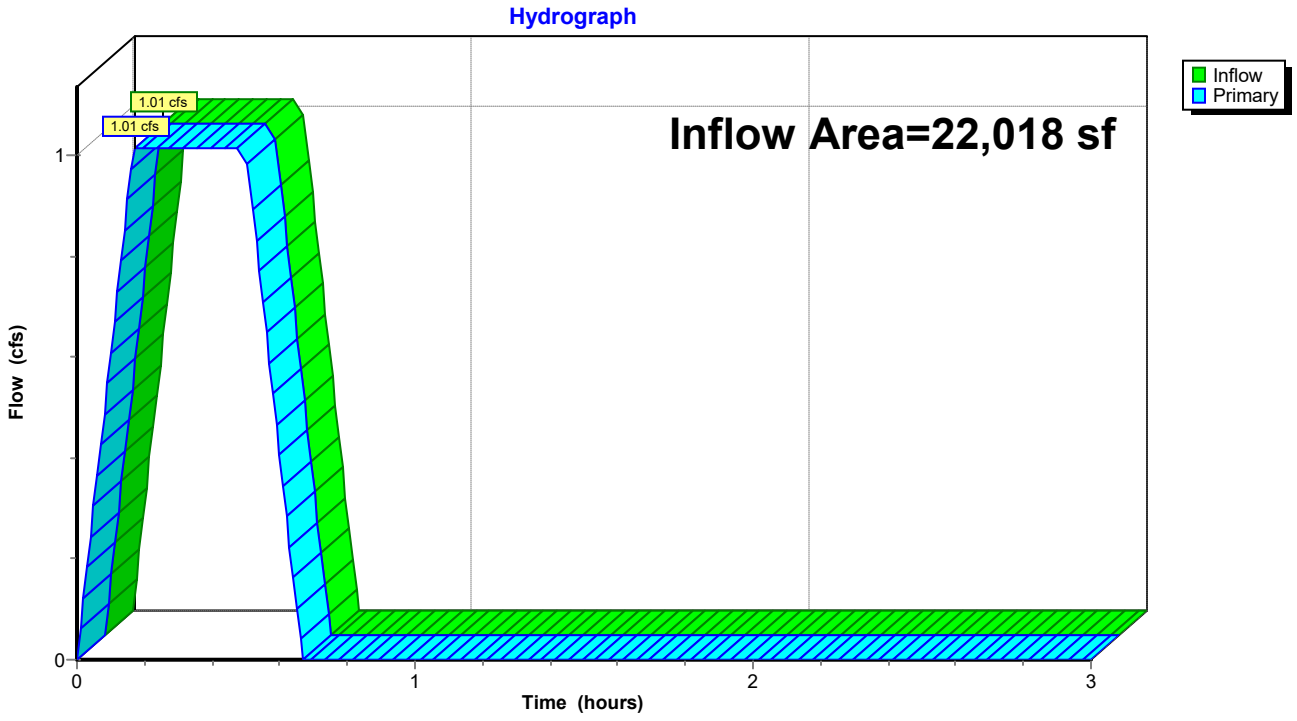


## Summary for Pond CI-B2: CI - B2

Inflow Area = 22,018 sf, 42.08% Impervious, Inflow Depth = 1.00" for 5-yr event
Inflow = 1.01 cfs @ 0.17 hrs, Volume= 1,826 cf
Primary = 1.01 cfs @ 0.17 hrs, Volume= 1,826 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-B2: CI - B2

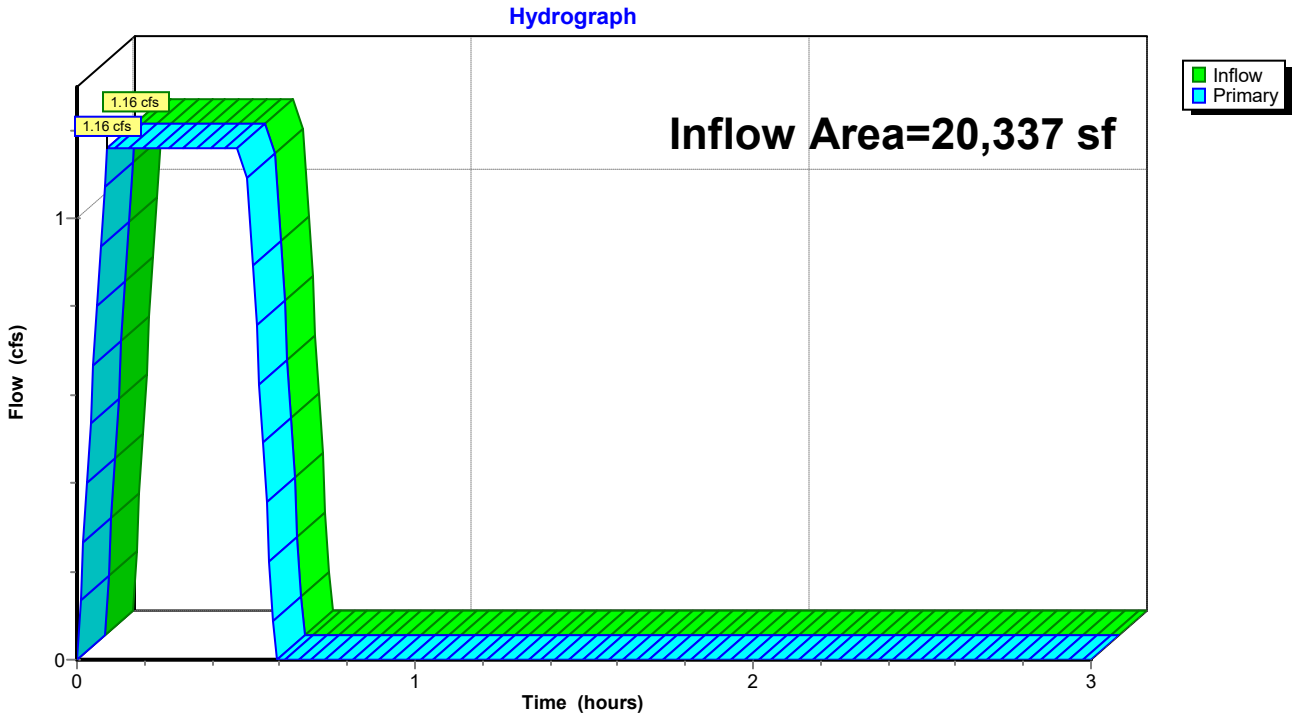


## Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.23" for 5-yr event
Inflow = 1.16 cfs @ 0.09 hrs, Volume= 2,089 cf
Primary = 1.16 cfs @ 0.09 hrs, Volume= 2,089 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C1: CI - C1

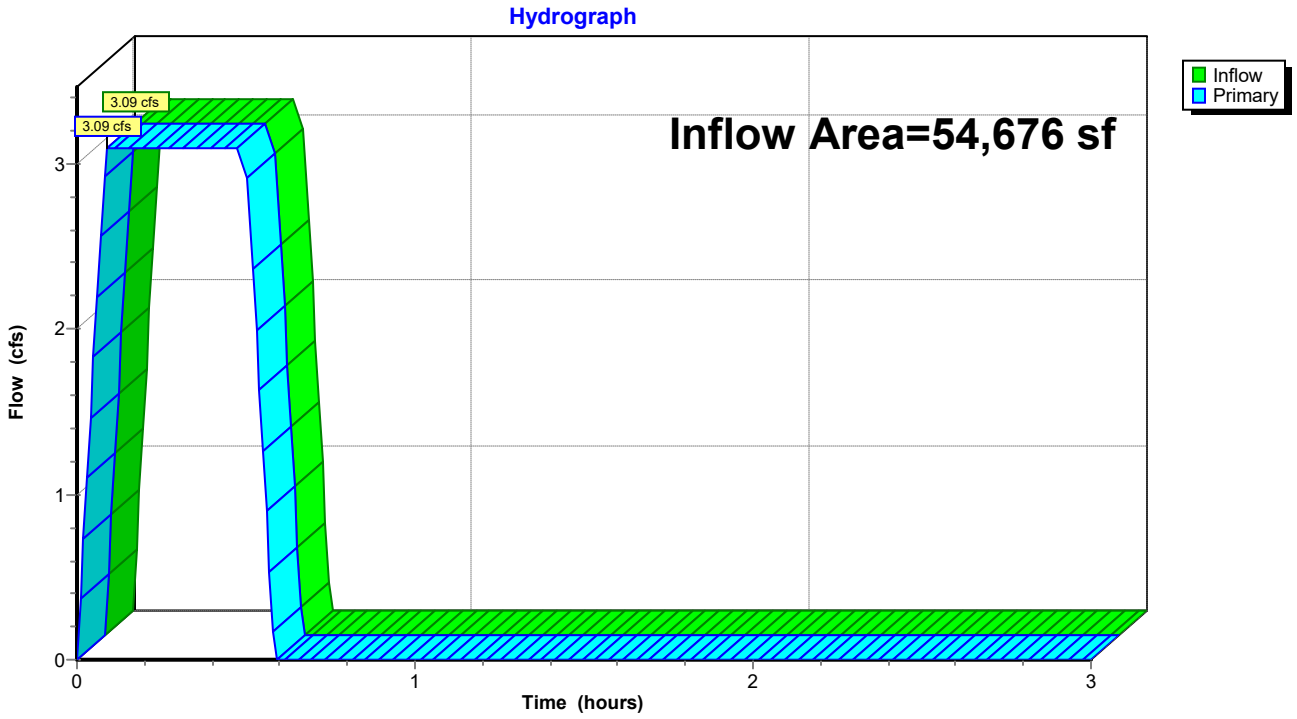


## Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.22" for 5-yr event
Inflow = 3.09 cfs @ 0.09 hrs, Volume= 5,570 cf
Primary = 3.09 cfs @ 0.09 hrs, Volume= 5,570 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C2: CI - C2

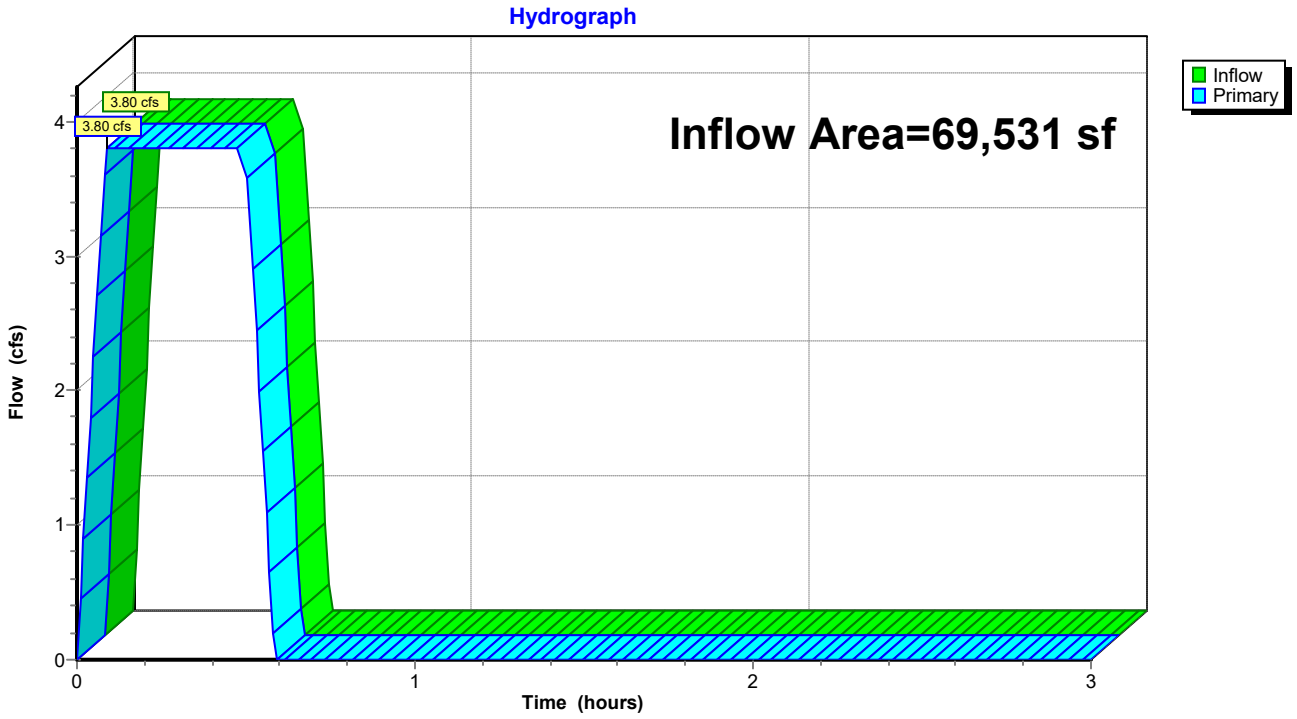


## Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.18" for 5-yr event
Inflow = 3.80 cfs @ 0.09 hrs, Volume= 6,844 cf
Primary = 3.80 cfs @ 0.09 hrs, Volume= 6,844 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C3: CI - C3

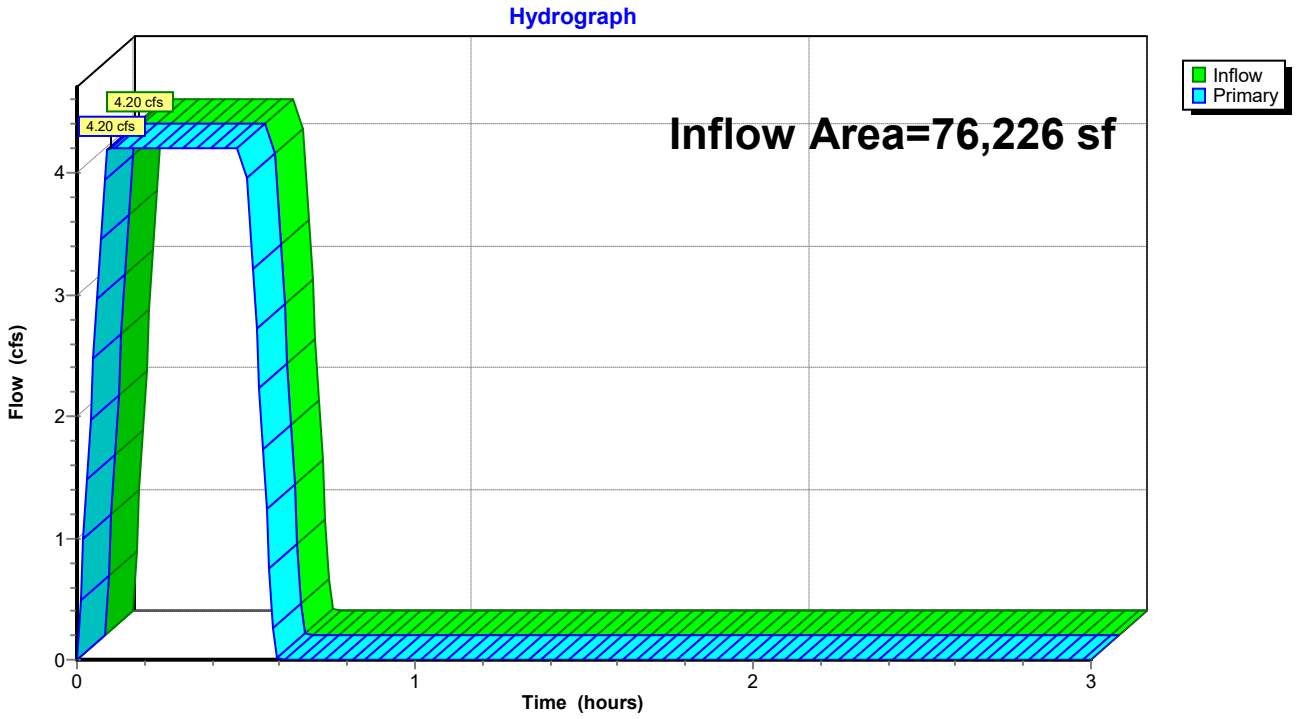


## Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.19" for 5-yr event
Inflow = 4.20 cfs @ 0.10 hrs, Volume= 7,567 cf
Primary = 4.20 cfs @ 0.10 hrs, Volume= 7,567 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C4: CI - C4

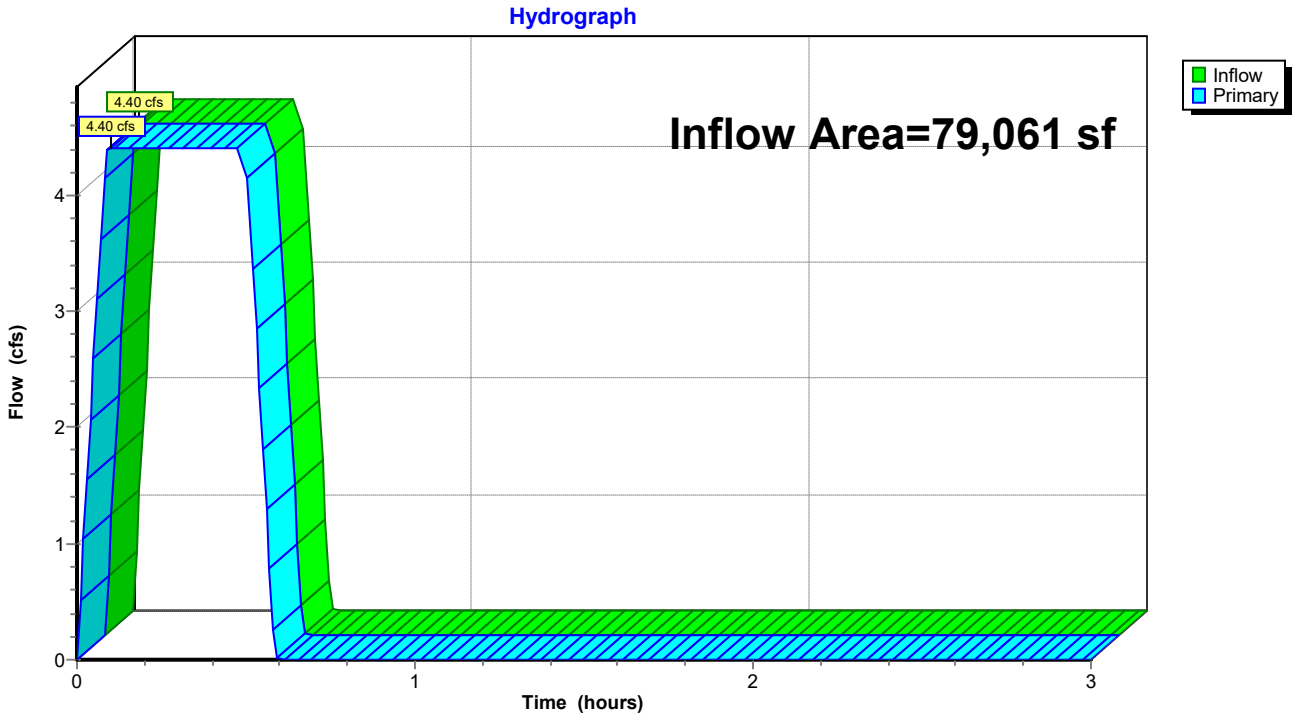


## Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.20" for 5-yr event
Inflow = 4.40 cfs @ 0.10 hrs, Volume= 7,921 cf
Primary = 4.40 cfs @ 0.10 hrs, Volume= 7,921 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C5: CI - C5

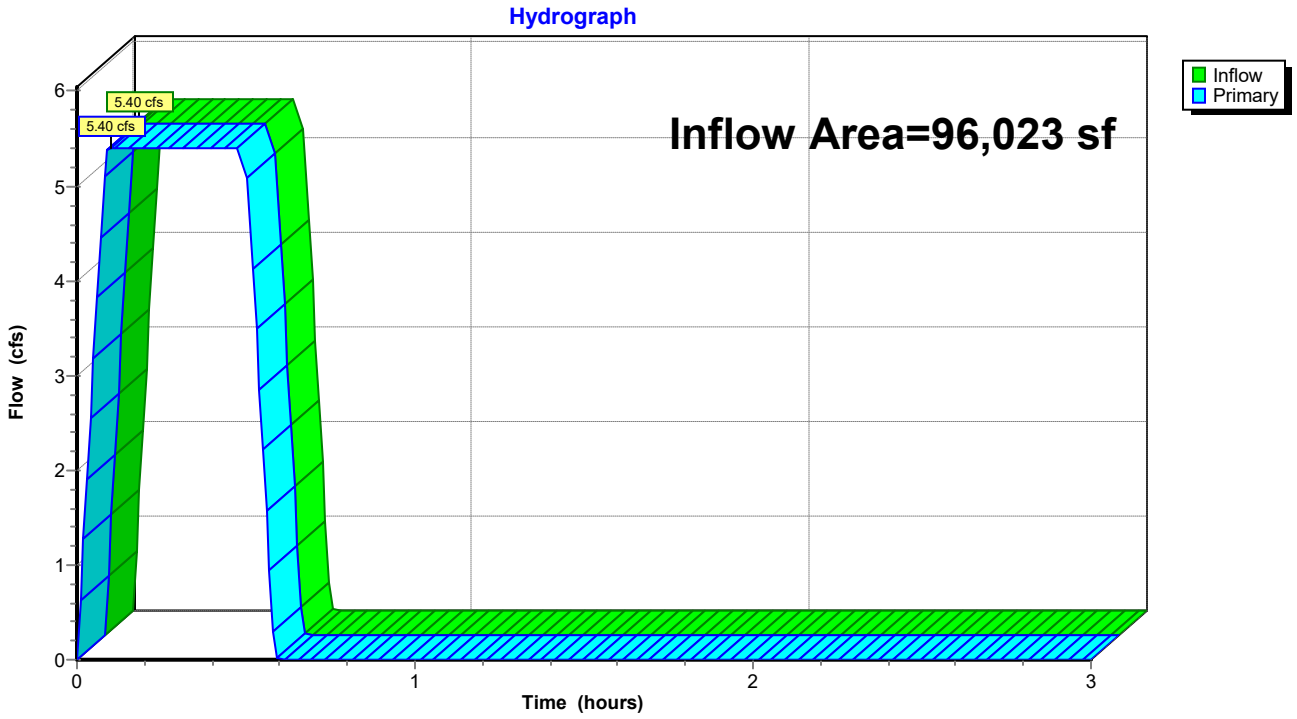


## Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.21" for 5-yr event
Inflow = 5.40 cfs @ 0.10 hrs, Volume= 9,716 cf
Primary = 5.40 cfs @ 0.10 hrs, Volume= 9,716 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C6: CI - C6

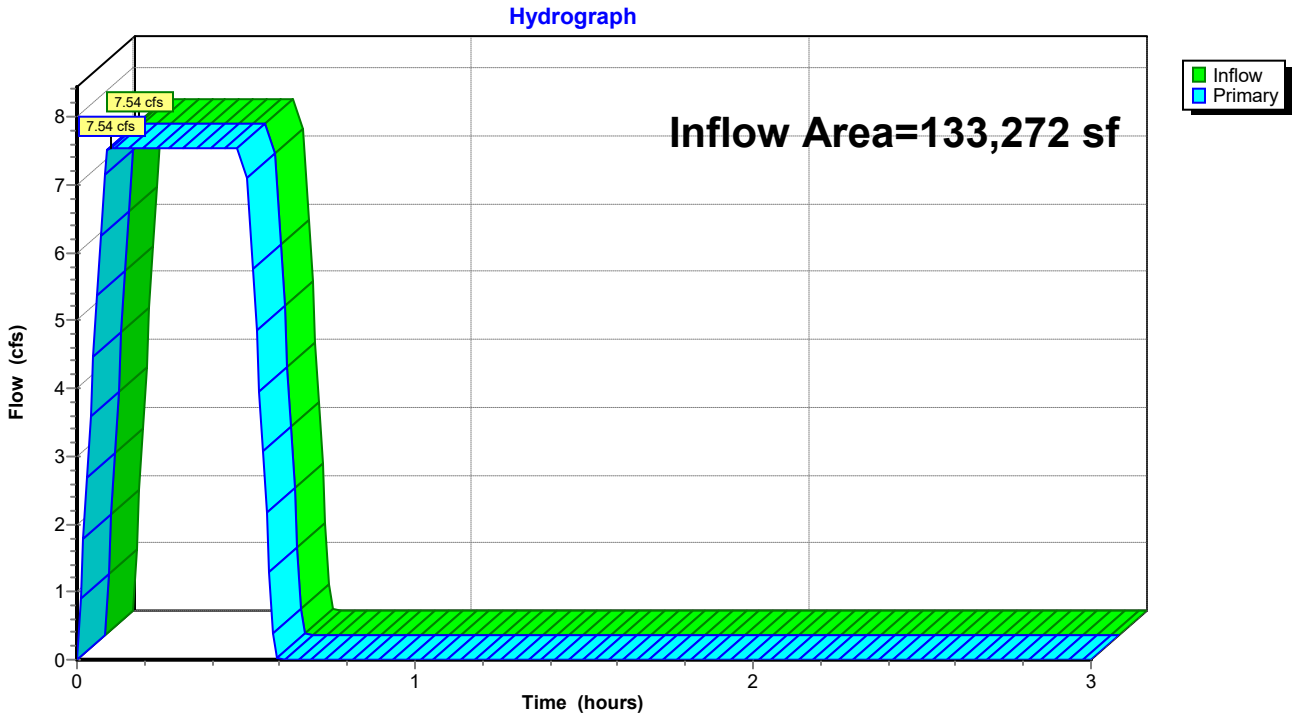


## Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.22" for 5-yr event
Inflow = 7.54 cfs @ 0.10 hrs, Volume= 13,571 cf
Primary = 7.54 cfs @ 0.10 hrs, Volume= 13,571 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C7: CI - C7

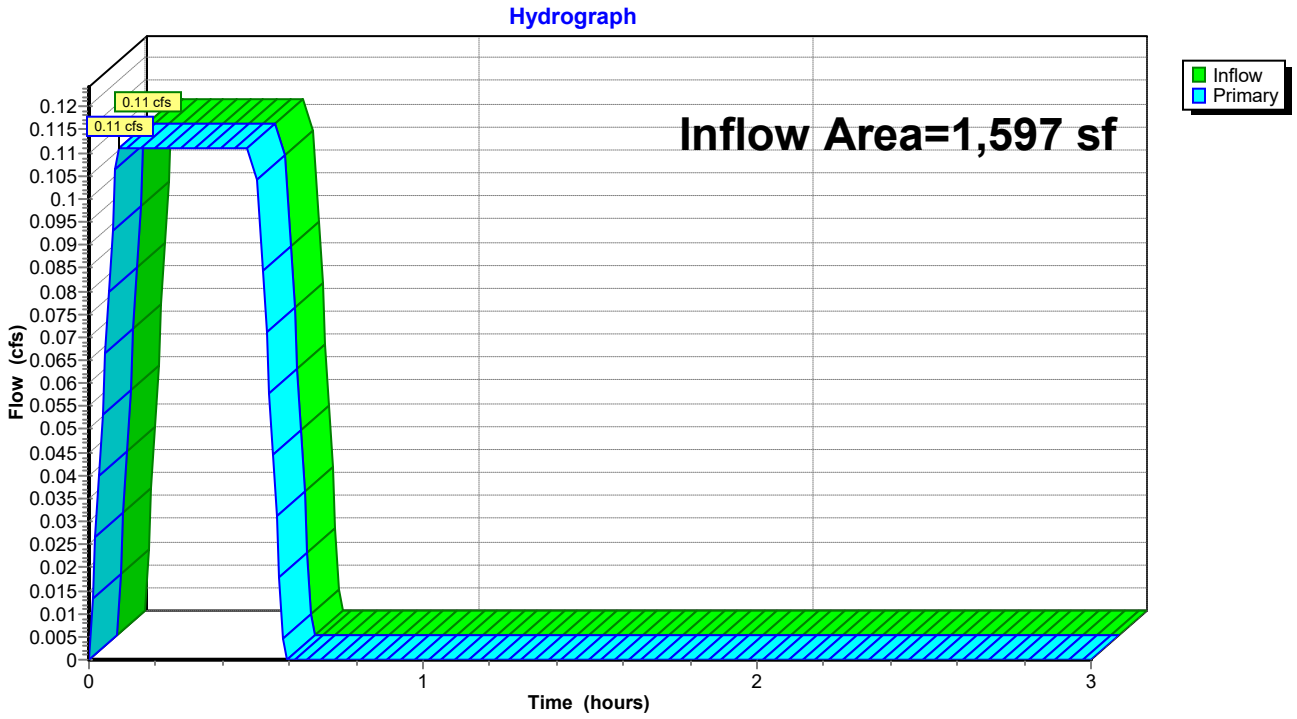


## Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.50" for 5-yr event
Inflow = 0.11 cfs @ 0.09 hrs, Volume= 200 cf
Primary = 0.11 cfs @ 0.09 hrs, Volume= 200 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D1: CI - D1

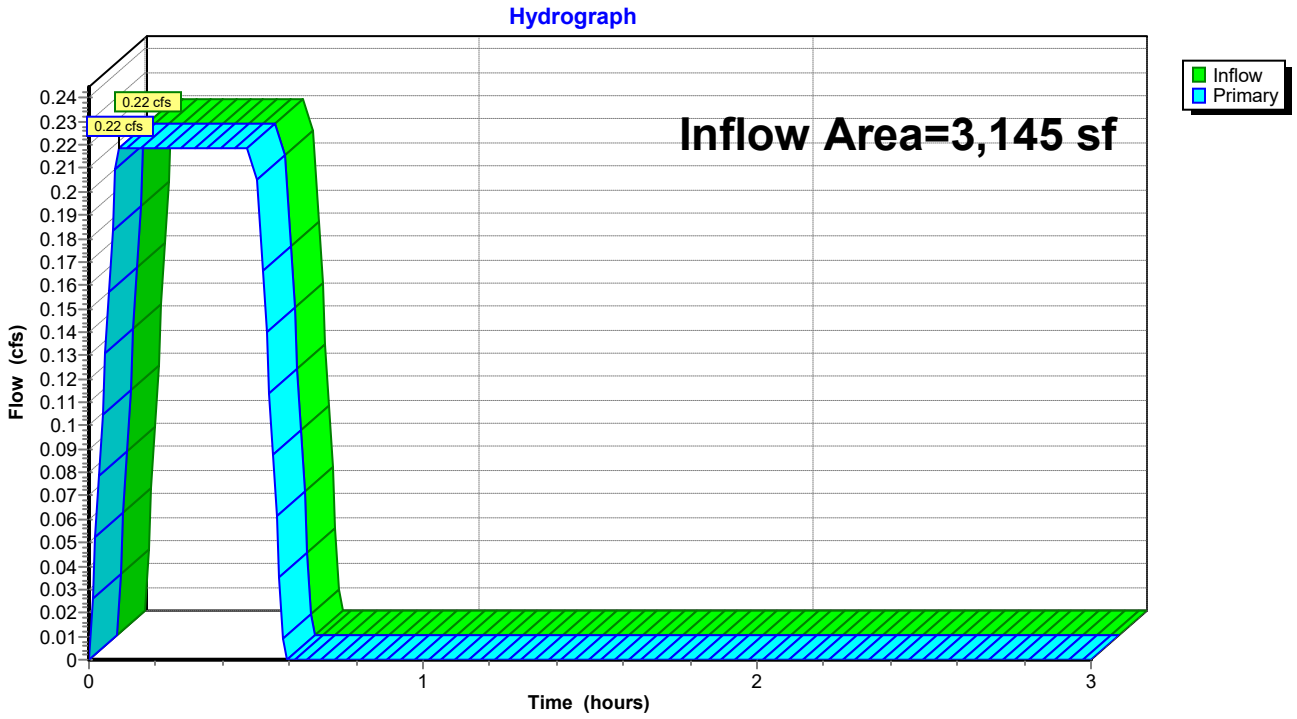


## Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.50" for 5-yr event
Inflow = 0.22 cfs @ 0.09 hrs, Volume= 393 cf
Primary = 0.22 cfs @ 0.09 hrs, Volume= 393 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D2: CI - D2

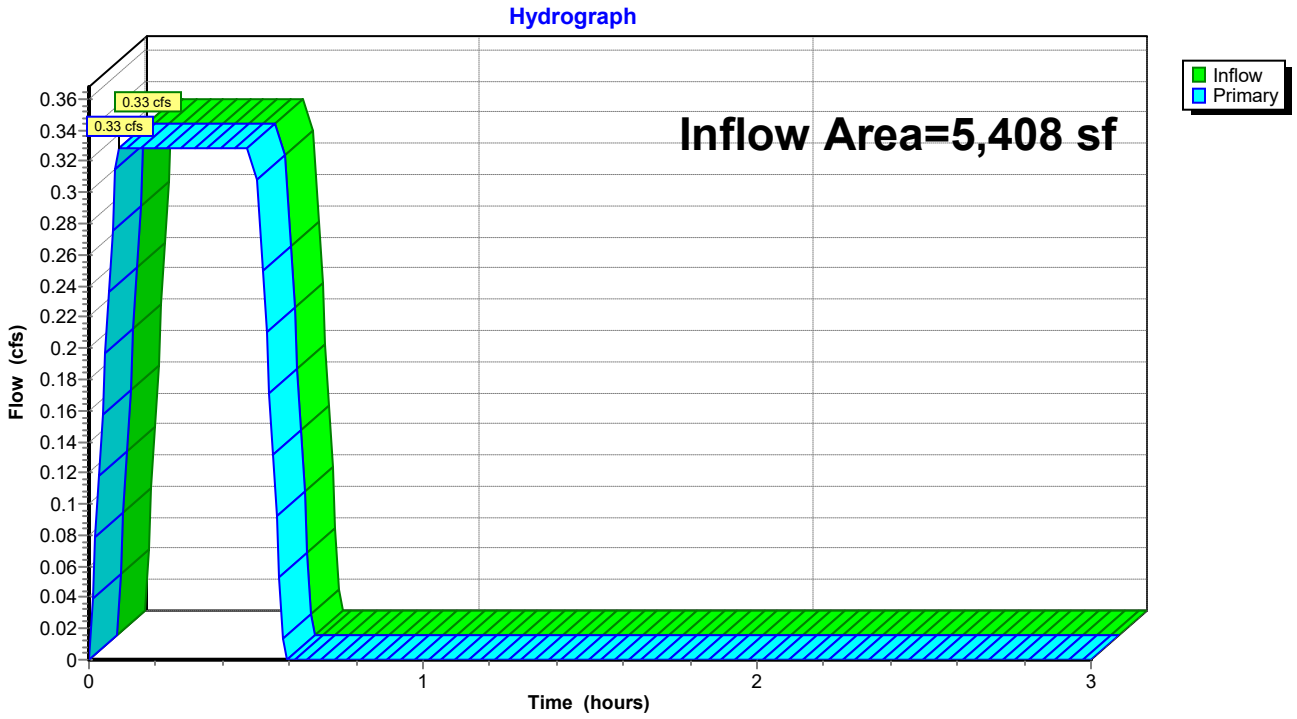


## Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.31" for 5-yr event
Inflow = 0.33 cfs @ 0.09 hrs, Volume= 591 cf
Primary = 0.33 cfs @ 0.09 hrs, Volume= 591 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E1: CI - E1

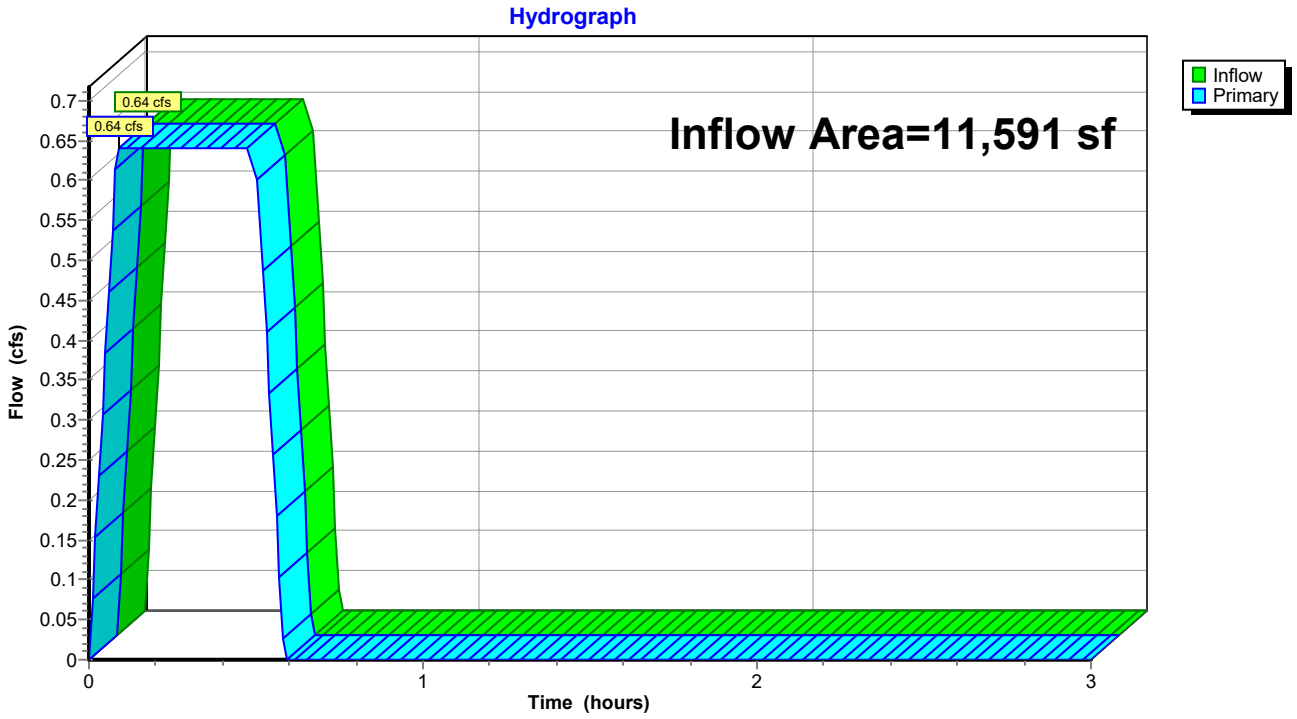


## Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.19" for 5-yr event
Inflow = 0.64 cfs @ 0.09 hrs, Volume= 1,153 cf
Primary = 0.64 cfs @ 0.09 hrs, Volume= 1,153 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E2: CI - E2



## Summary for Pond DP: Existing North Detention Pond

Inflow Area = 321,792 sf, 58.73% Impervious, Inflow Depth = 1.14" for 5-yr event
Inflow = 17.01 cfs @ 0.27 hrs, Volume= 30,614 cf
Outflow = 10.45 cfs @ 0.54 hrs, Volume= 30,614 cf, Atten= 39%, Lag= 16.1 min
Primary = 10.45 cfs @ 0.54 hrs, Volume= 30,614 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 382.95' @ 0.54 hrs Storage= 15,693 cf

Plug-Flow detention time= 18.9 min calculated for 30,614 cf (100% of inflow)
Center-of-Mass det. time= 18.7 min ( 37.2 - 18.5 )

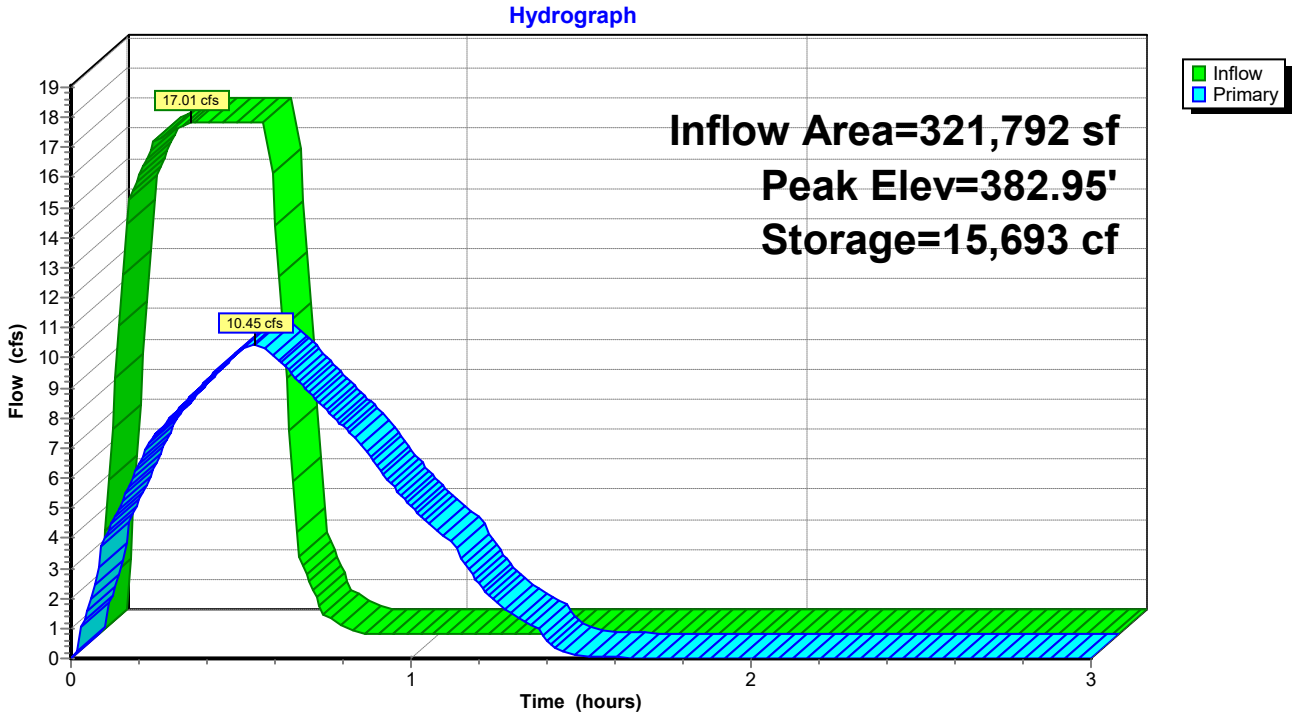
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 381.17' | 72,742 cf | **Custom Stage Data** Listed below |

| Elevation (feet) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|
| 381.17 | 0 | 0 |
| 381.50 | 200 | 200 |
| 382.00 | 1,825 | 2,025 |
| 382.50 | 5,265 | 7,290 |
| 383.00 | 9,300 | 16,590 |
| 383.50 | 13,733 | 30,323 |
| 384.00 | 18,578 | 48,901 |
| 384.50 | 23,841 | 72,742 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 384.16' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #2 | Primary | 381.17' | **1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=10.45 cfs @ 0.54 hrs HW=382.95' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 10.45 cfs @ 4.36 fps)

## Pond DP: Existing North Detention Pond

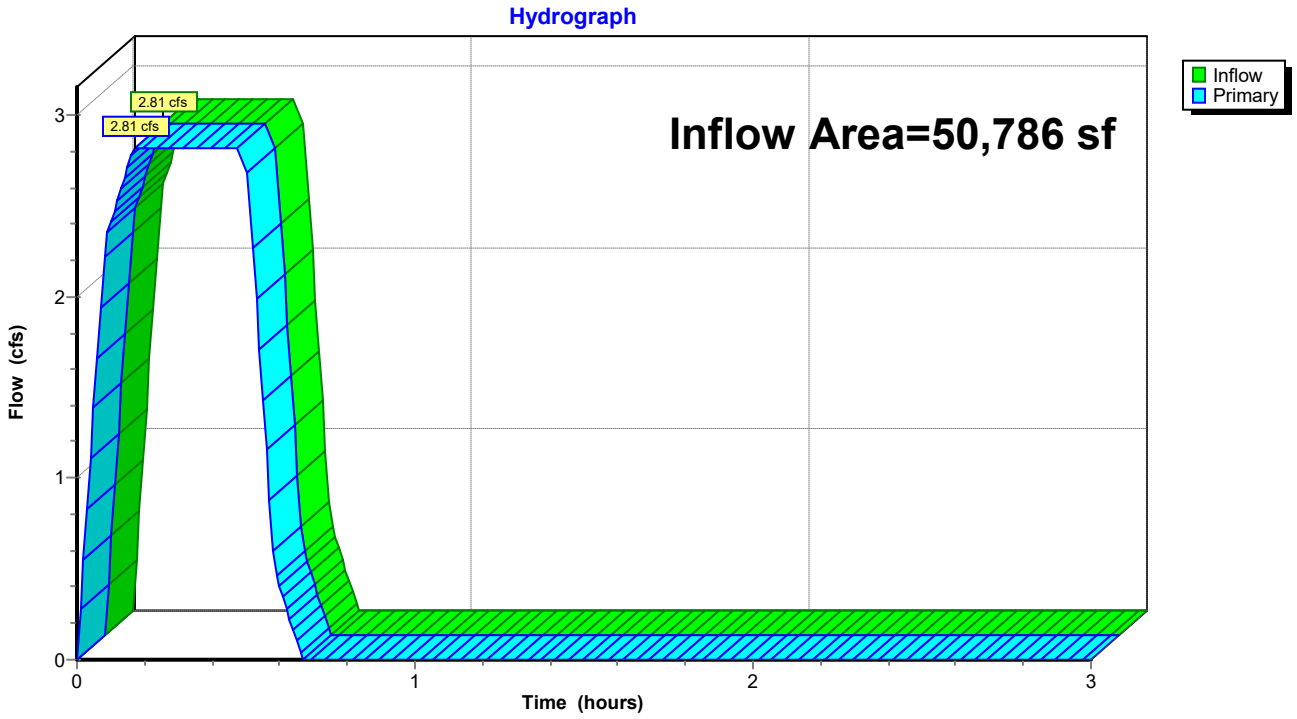


## Summary for Pond JB-A2: JB - A2

Inflow Area = 50,786 sf, 65.23% Impervious, Inflow Depth = 1.20" for 5-yr event
Inflow = 2.81 cfs @ 0.17 hrs, Volume= 5,065 cf
Primary = 2.81 cfs @ 0.17 hrs, Volume= 5,065 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond JB-A2: JB - A2

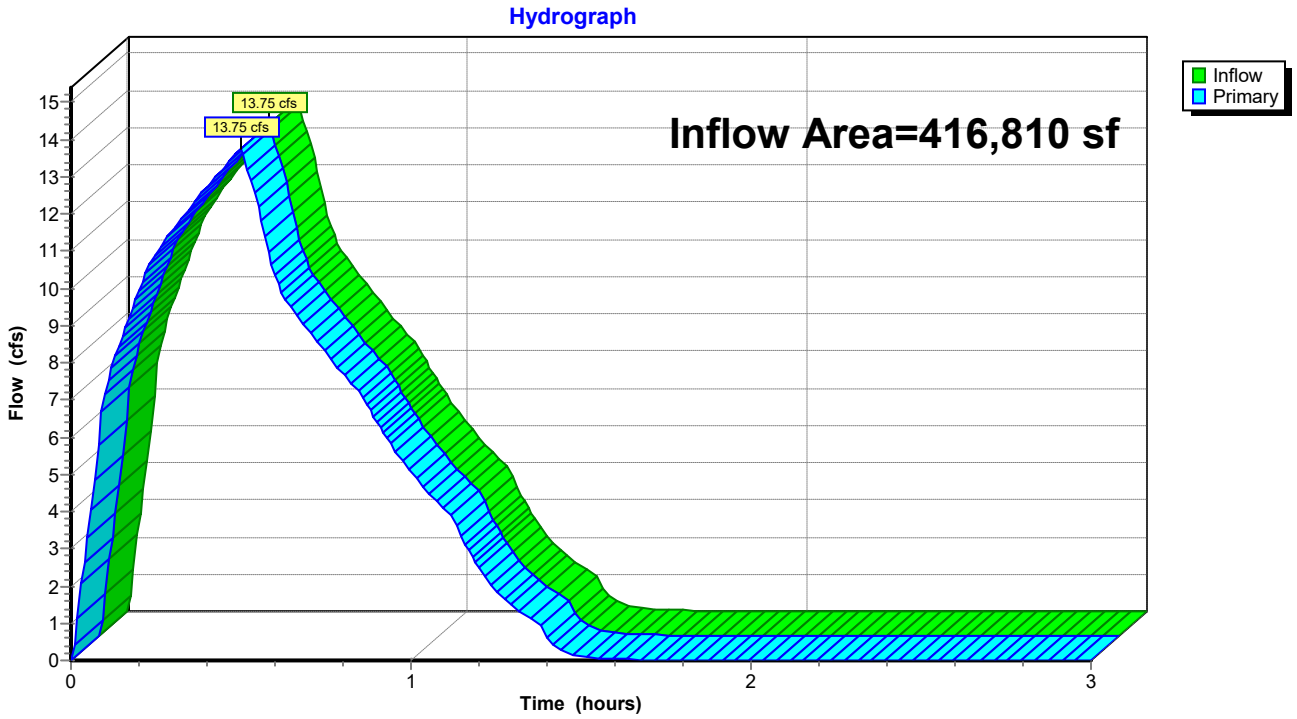


## Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 416,810 sf, 49.40% Impervious, Inflow Depth = 1.06" for 5-yr event
Inflow = 13.75 cfs @ 0.50 hrs, Volume= 36,861 cf
Primary = 13.75 cfs @ 0.50 hrs, Volume= 36,861 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

## Link FINAL: APPROX DISCHARGE



## Summary for Subcatchment B1: Drainage Basin B1

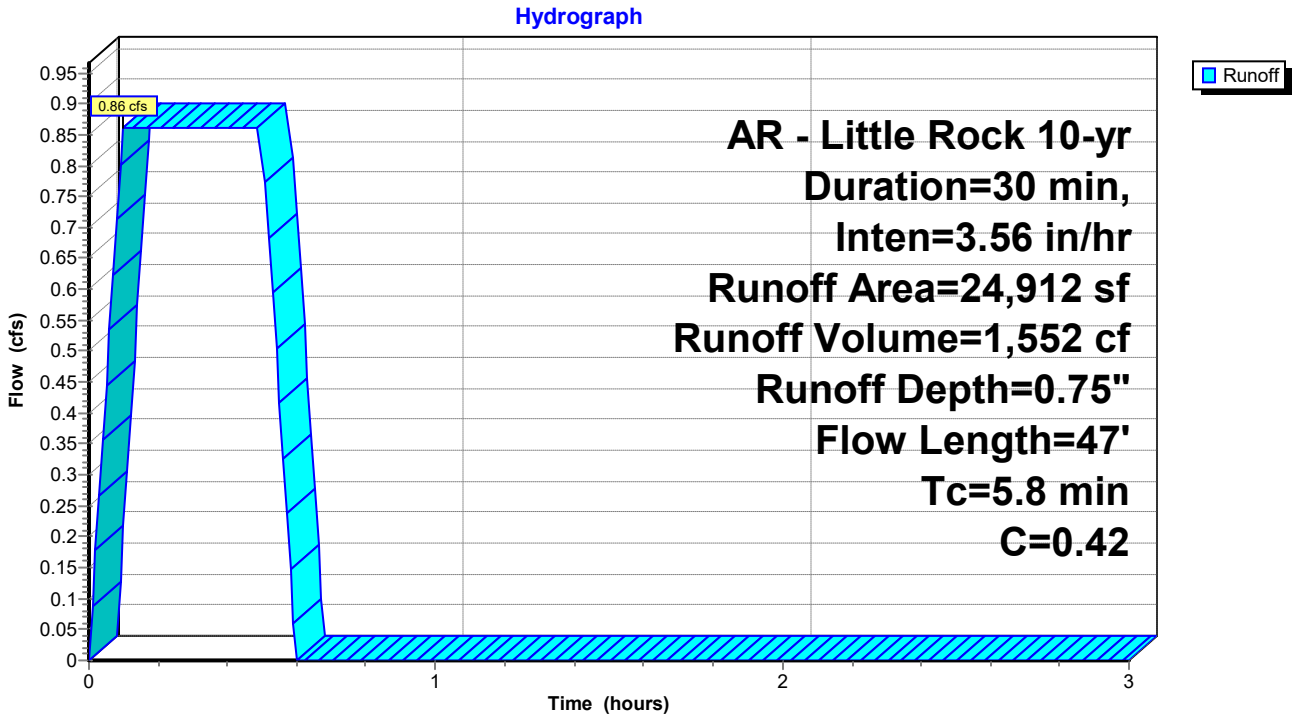
Runoff = 0.86 cfs @ 0.10 hrs, Volume= 1,552 cf, Depth= 0.75"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,091 | 0.40 | Sod Yard |
| 821 | 0.95 | Paving, Sidewalks |
| 24,912 | 0.42 | Weighted Average |
| 24,091 | | 96.70% Pervious Area |
| 821 | | 3.30% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.3 | 9 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 38 | 0.2040 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 5.8 | 47 | Total | | | |

## Subcatchment B1: Drainage Basin B1



## Summary for Subcatchment B2: Drainage Basin B2

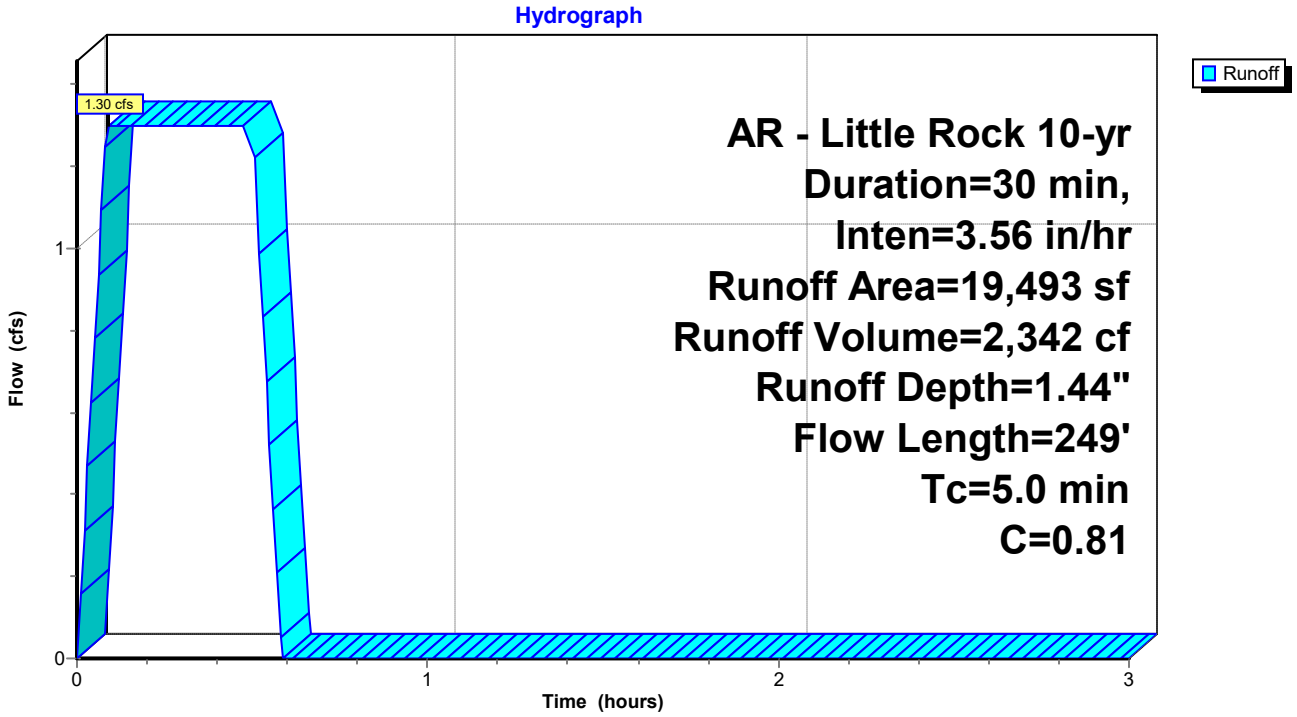
Runoff = 1.30 cfs @ 0.09 hrs, Volume= 2,342 cf, Depth= 1.44"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,903 | 0.40 | Sod Yard |
| 14,590 | 0.95 | Paving, Sidewalks |
| 19,493 | 0.81 | Weighted Average |
| 4,903 | | 25.15% Pervious Area |
| 14,590 | | 74.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 28 | 0.0450 | 1.69 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 72 | 0.0250 | 3.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 51 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 16 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 8 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 7 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 3.2 | | | | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 249 | Total | | | |

## Subcatchment B2: Drainage Basin B2



## Summary for Subcatchment B3: Drainage Basin B3

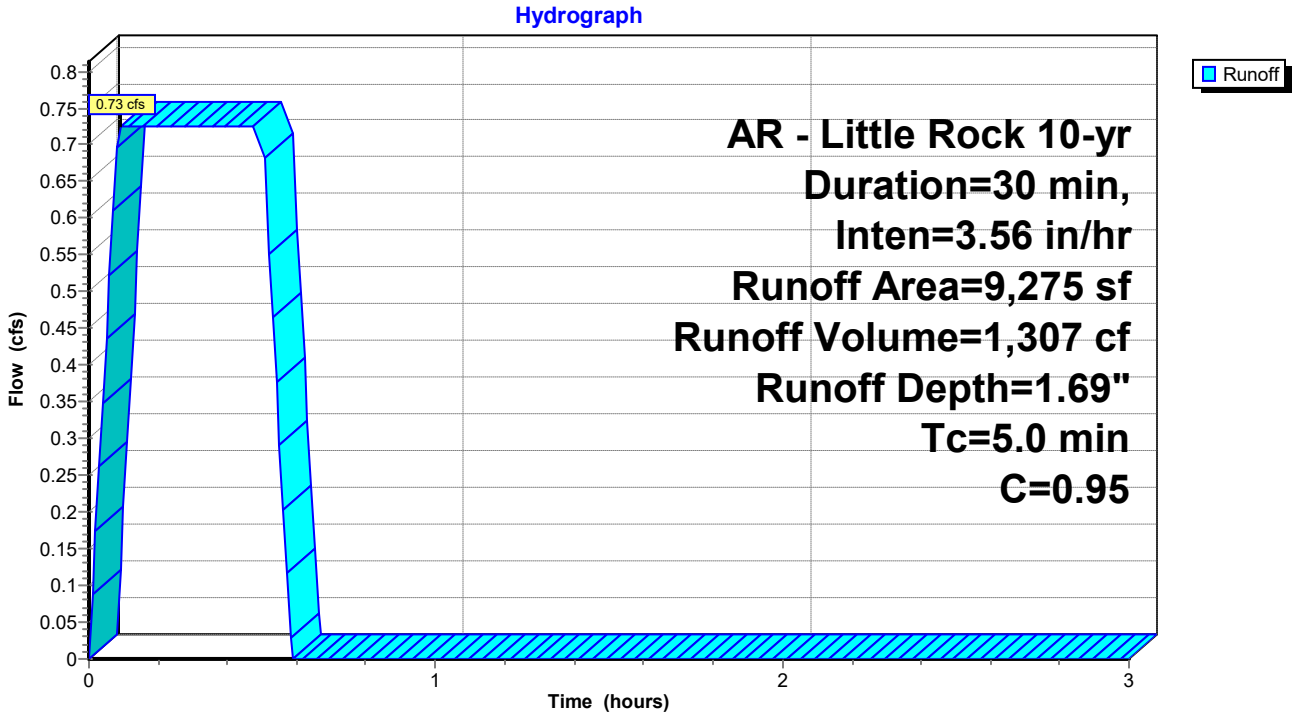
Runoff = 0.73 cfs @ 0.09 hrs, Volume= 1,307 cf, Depth= 1.69"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 9,275 | 0.95 | Roof |
| 9,275 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | | | | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment B3: Drainage Basin B3



## Summary for Subcatchment B4: Drainage Basin B4

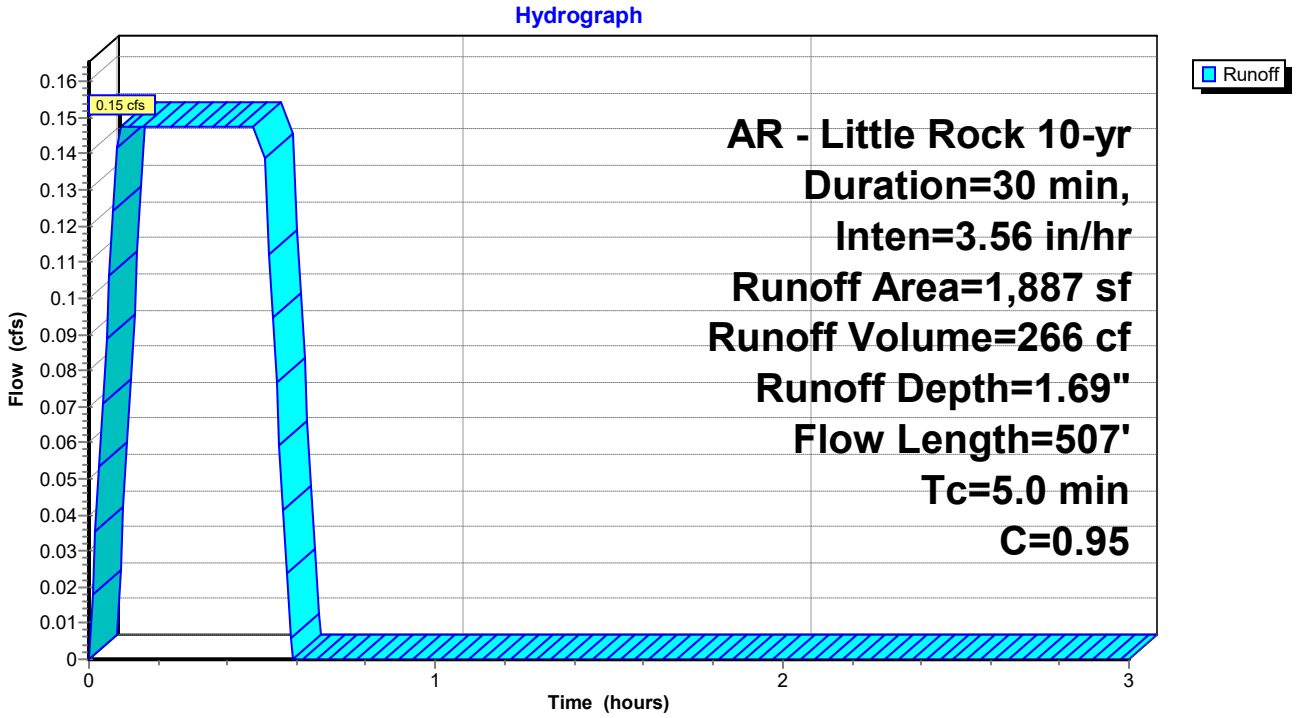
Runoff = 0.15 cfs @ 0.09 hrs, Volume= 266 cf, Depth= 1.69"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,887 | 0.95 | Paving, Sidewalks |
| 1,887 | 0.95 | Weighted Average |
| 1,887 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 30 | 0.0240 | 1.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 13 | 0.0860 | 5.95 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 507 | Total | | | |

## Subcatchment B4: Drainage Basin B4



## Summary for Subcatchment B5: Drainage Basin B5

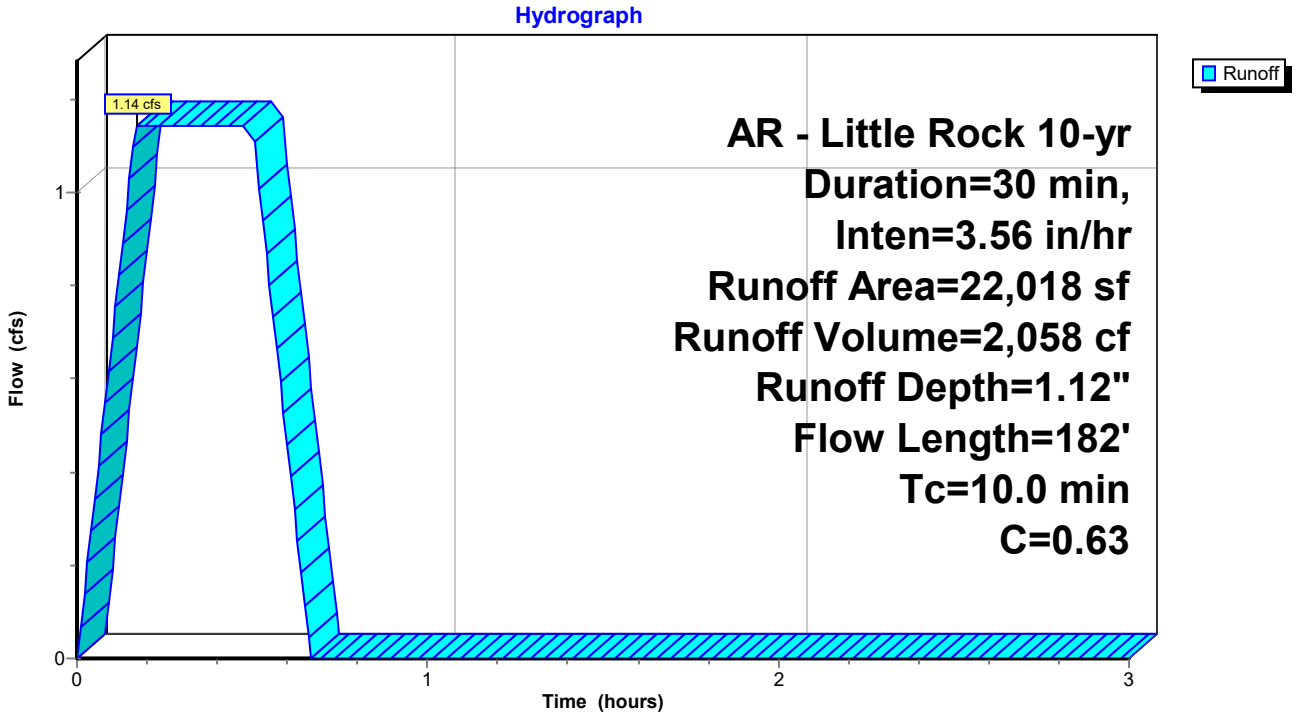
Runoff = 1.14 cfs @ 0.17 hrs, Volume= 2,058 cf, Depth= 1.12"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,753 | 0.40 | Sod Yard |
| 9,265 | 0.95 | Paving, Sidewalks |
| 22,018 | 0.63 | Weighted Average |
| 12,753 | | 57.92% Pervious Area |
| 9,265 | | 42.08% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.2 | 10 | 0.0150 | 0.89 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 9.1 | 93 | 0.0150 | 0.17 | | **Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19" |
| 0.4 | 40 | 0.0110 | 1.57 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 33 | 0.0190 | 2.07 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 6 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 10.0 | 182 | Total | | | |

## Subcatchment B5: Drainage Basin B5



## Summary for Subcatchment B6: Drainage Basin B6

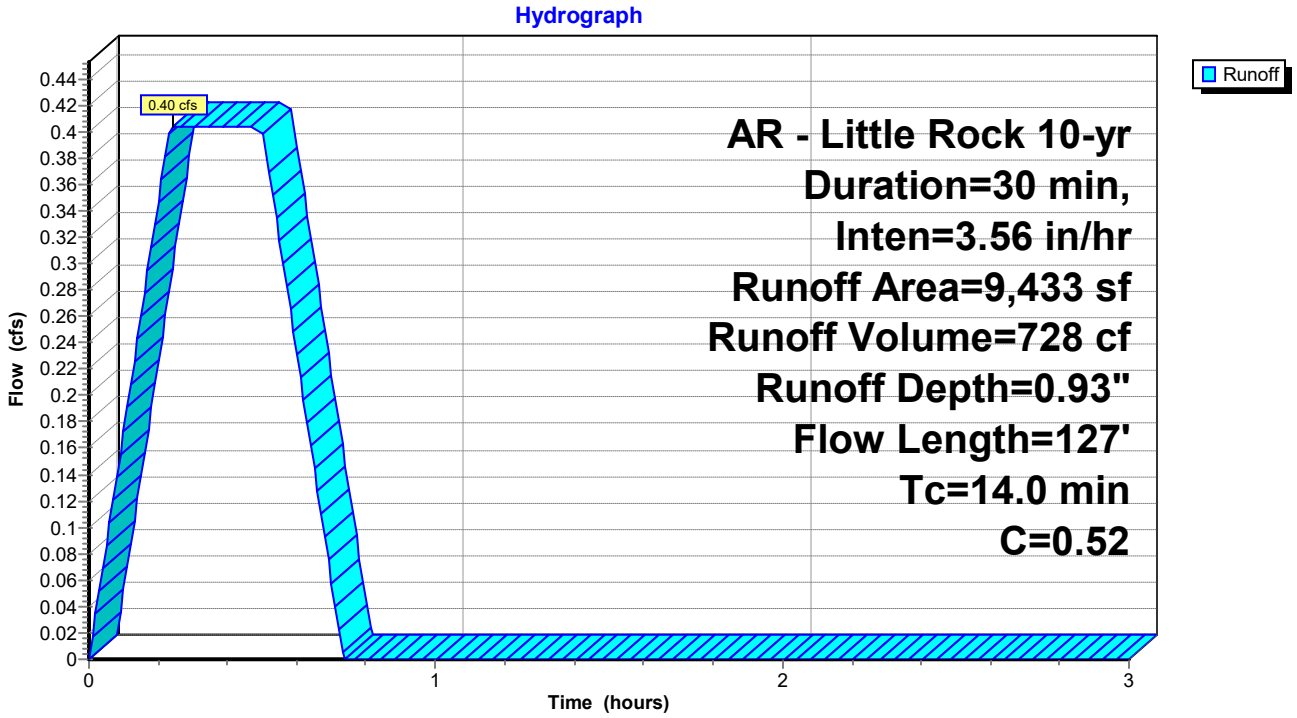
Runoff = 0.40 cfs @ 0.24 hrs, Volume= 728 cf, Depth= 0.93"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,346 | 0.40 | Sod Yard |
| 2,087 | 0.95 | Paving, Sidewalks |
| 9,433 | 0.52 | Weighted Average |
| 7,346 | | 77.88% Pervious Area |
| 2,087 | | 22.12% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 10.4 | 79 | 0.0570 | 0.13 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 21 | 0.0620 | 0.10 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.0 | 9 | 0.0620 | 3.73 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 18 | 0.1080 | 4.93 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 14.0 | 127 | Total | | | |

## Subcatchment B6: Drainage Basin B6



## Summary for Subcatchment C1: Drainage Basin C1

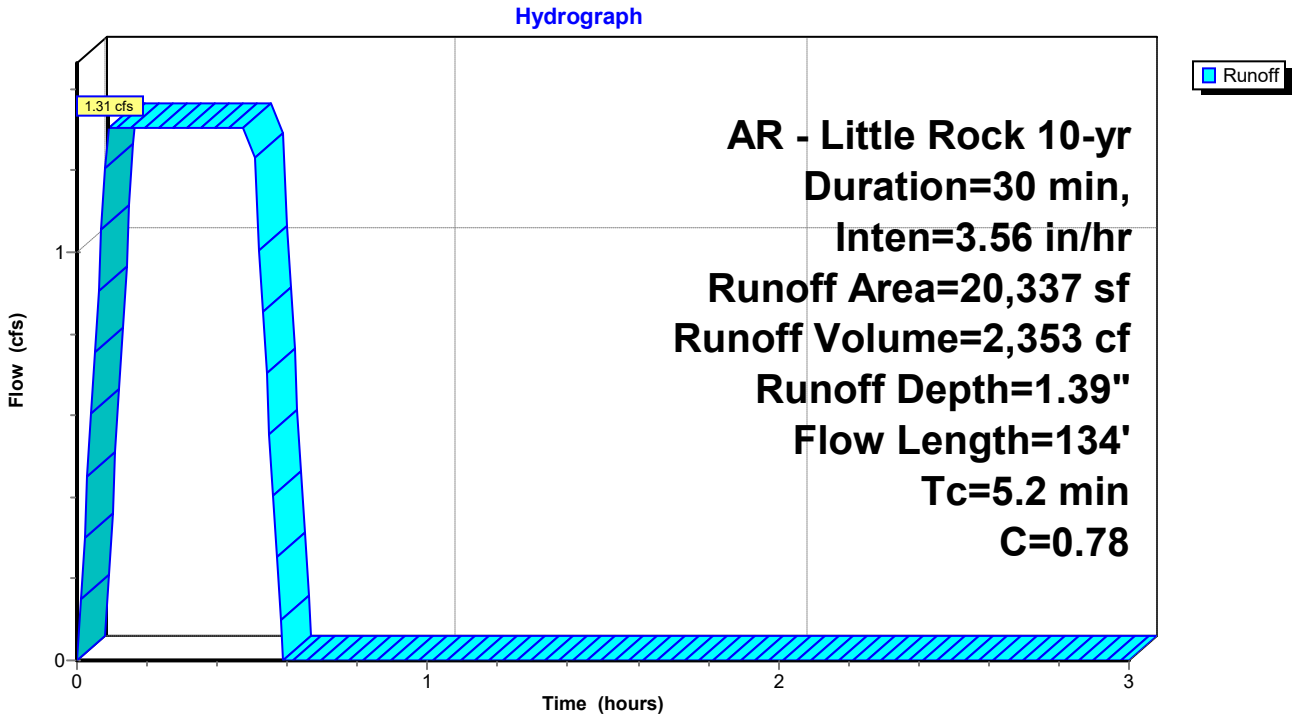
Runoff = 1.31 cfs @ 0.09 hrs, Volume= 2,353 cf, Depth= 1.39"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,135 | 0.40 | Sod Yard |
| 14,202 | 0.95 | Paving, Sidewalks |
| 20,337 | 0.78 | Weighted Average |
| 6,135 | | 30.17% Pervious Area |
| 14,202 | | 69.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 32 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.4 | 102 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 5.2 | 134 | Total | | | |

### Subcatchment C1: Drainage Basin C1



## Summary for Subcatchment C10: Drainage Basin C10

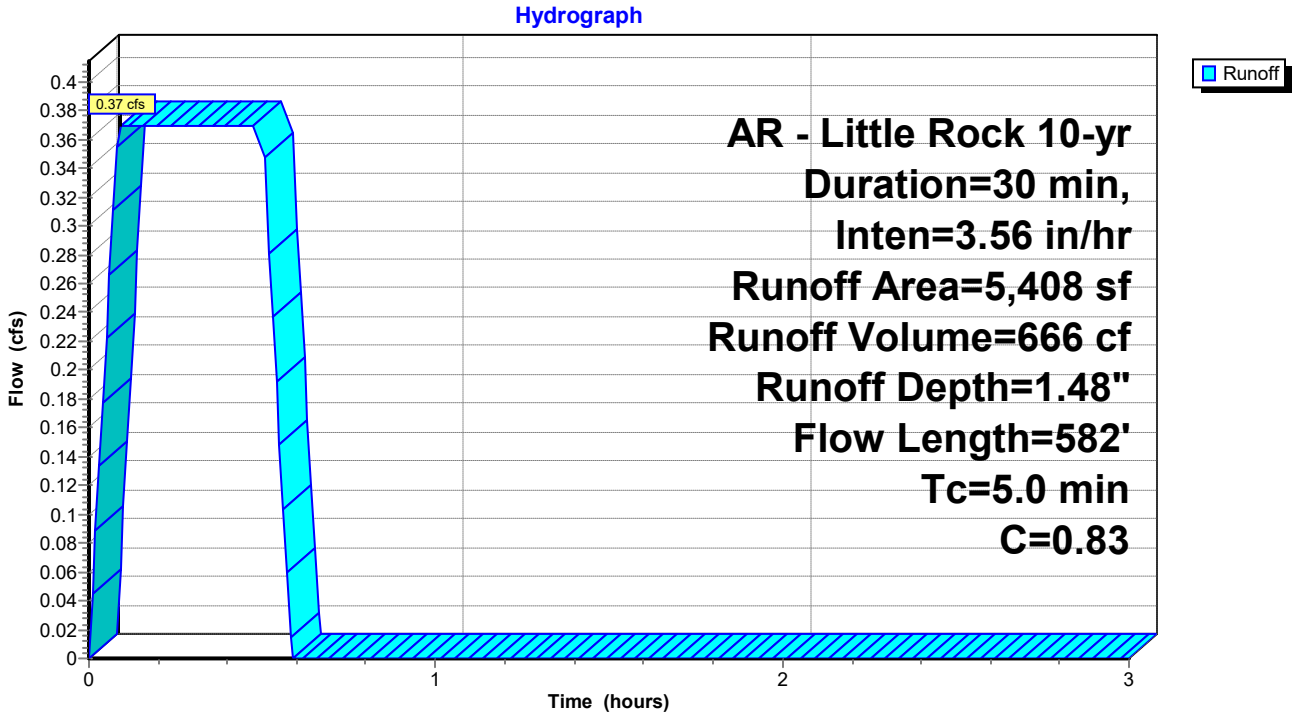
Runoff = 0.37 cfs @ 0.09 hrs, Volume= 666 cf, Depth= 1.48"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,225 | 0.40 | Sod Yard |
| 4,183 | 0.95 | Paving, Sidewalks |
| 5,408 | 0.83 | Weighted Average |
| 1,225 | | 22.65% Pervious Area |
| 4,183 | | 77.35% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 29 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 36 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 48 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 13 | 0.0350 | 3.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.9 | 415 | | 1.77 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 582 | Total | | | |

## Subcatchment C10: Drainage Basin C10



## Summary for Subcatchment C11: Drainage Basin C11

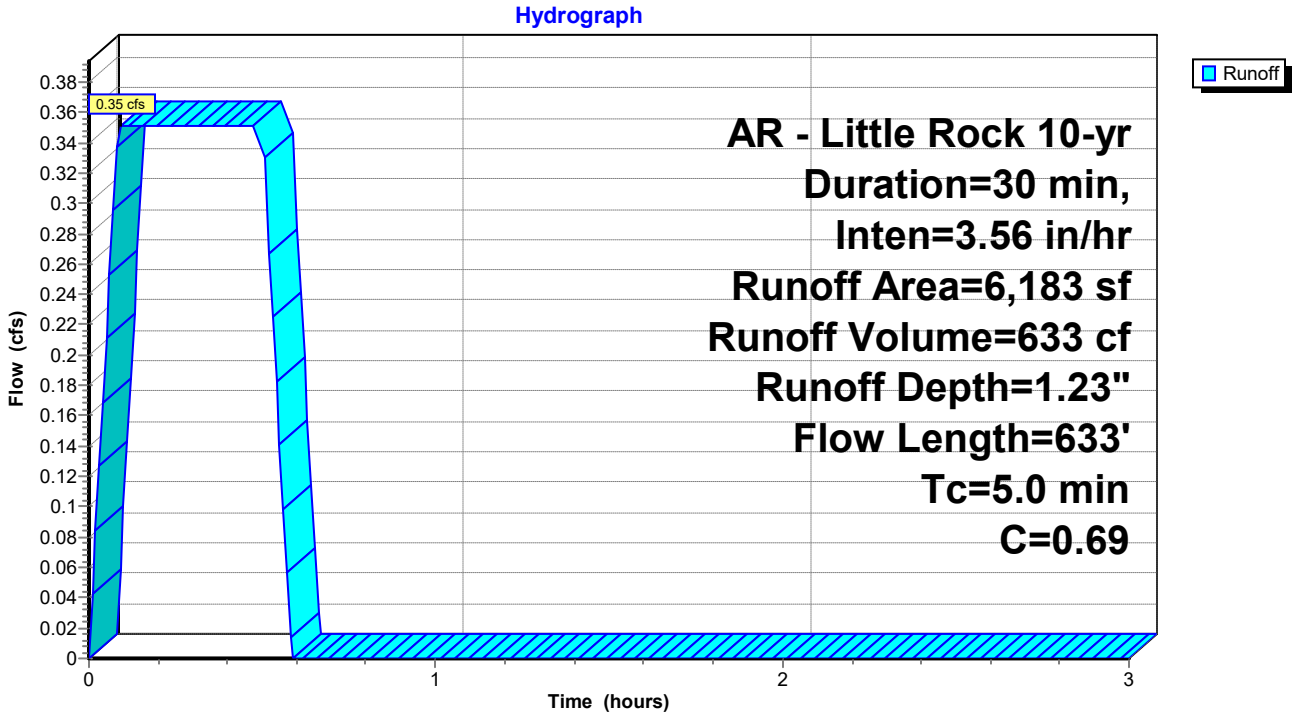
Runoff = 0.35 cfs @ 0.09 hrs, Volume= 633 cf, Depth= 1.23"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,876 | 0.40 | Sod Yard |
| 3,307 | 0.95 | Paving, Sidewalks |
| 6,183 | 0.69 | Weighted Average |
| 2,876 | | 46.51% Pervious Area |
| 3,307 | | 53.49% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 25 | 0.0200 | 1.19 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 33 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 37 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 633 | Total | | | |

## Subcatchment C11: Drainage Basin C11



## Summary for Subcatchment C12: Drainage Basin C12

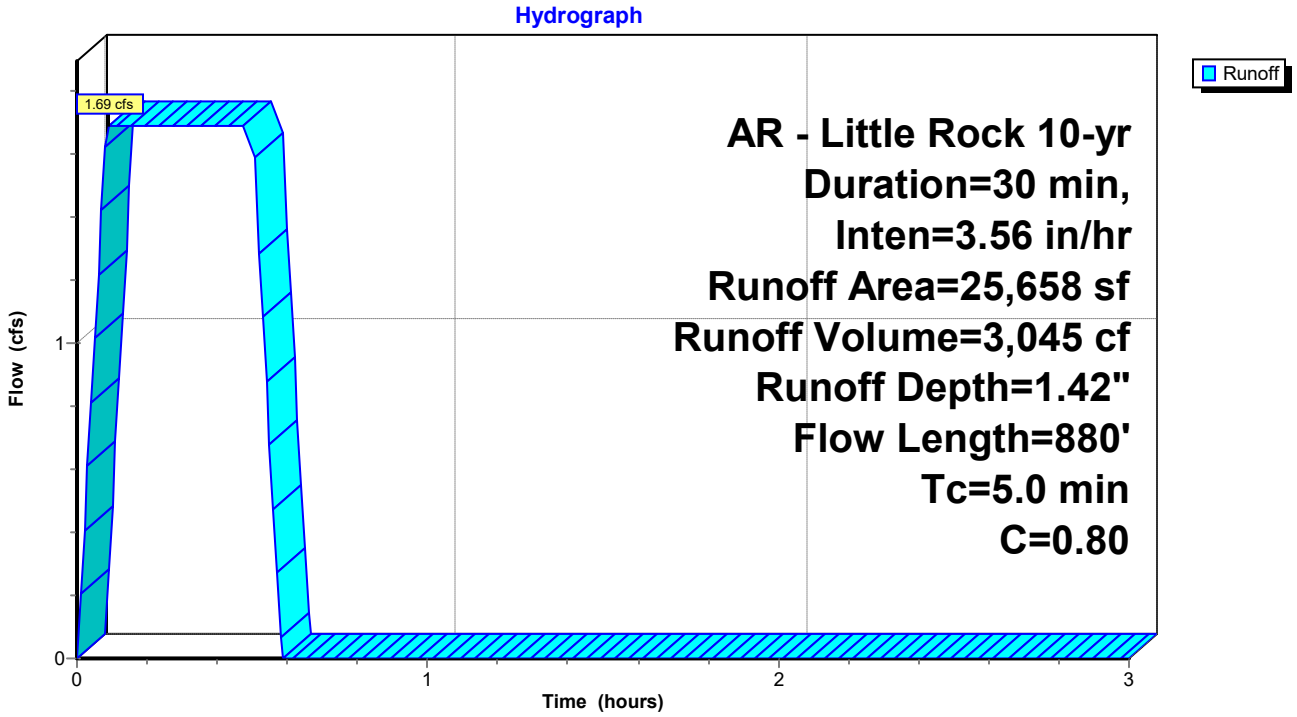
Runoff = 1.69 cfs @ 0.09 hrs, Volume= 3,045 cf, Depth= 1.42"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,218 | 0.40 | Sod Yard |
| 18,440 | 0.95 | Paving, Sidewalks |
| 25,658 | 0.80 | Weighted Average |
| 7,218 | | 28.13% Pervious Area |
| 18,440 | | 71.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 24 | 0.0360 | 1.50 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0190 | 0.85 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 21 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.9 | 49 | 0.0020 | 0.91 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.4 | 96 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 94 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 25 | 0.0450 | 4.31 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 39 | 0.0490 | 4.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0460 | 4.35 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 11 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0440 | 4.26 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.3 | 415 | | 3.01 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 880 | Total | | | |

## Subcatchment C12: Drainage Basin C12



## Summary for Subcatchment C13: Drainage Basin C13

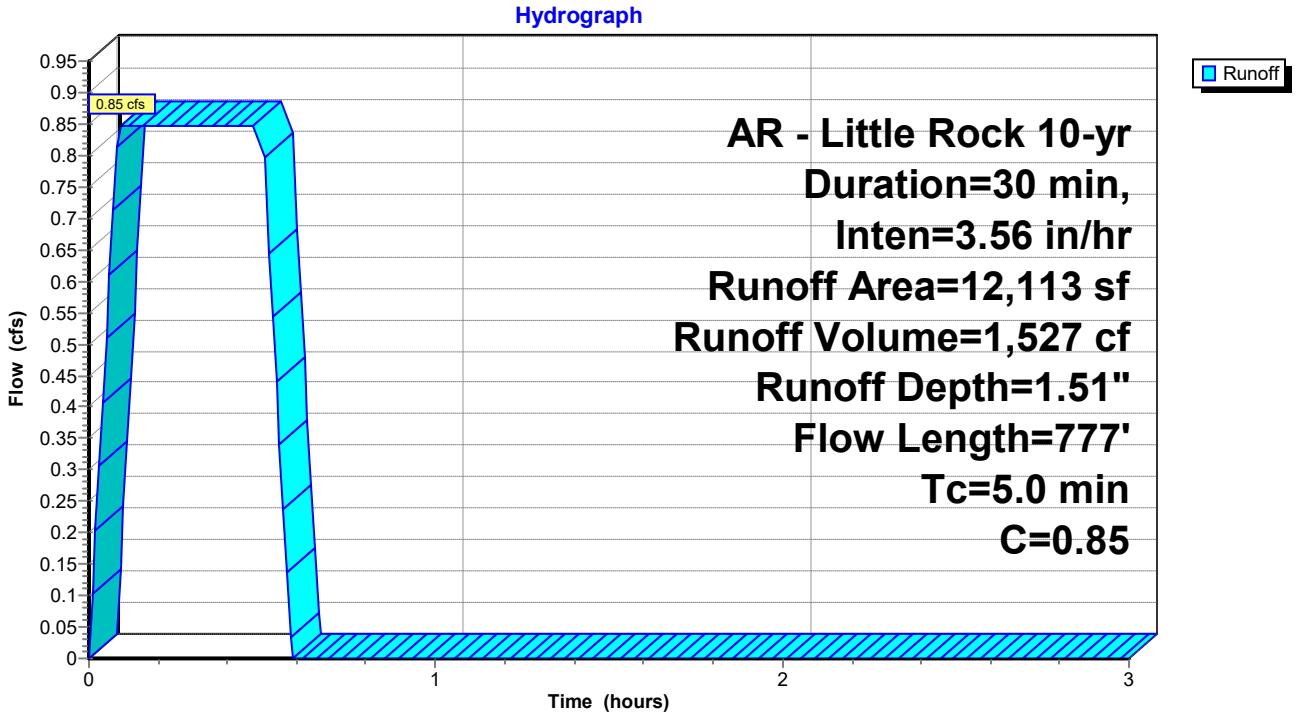
Runoff = 0.85 cfs @ 0.09 hrs, Volume= 1,527 cf, Depth= 1.51"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,240 | 0.40 | Sod Yard |
| 9,873 | 0.95 | Paving, Sidewalks |
| 12,113 | 0.85 | Weighted Average |
| 2,240 | | 18.49% Pervious Area |
| 9,873 | | 81.51% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 75 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 42 | 0.0730 | 5.48 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 74 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 32 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.6 | 415 | | 1.92 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 777 | Total | | | |

## Subcatchment C13: Drainage Basin C13



## Summary for Subcatchment C14: Drainage Basin C14

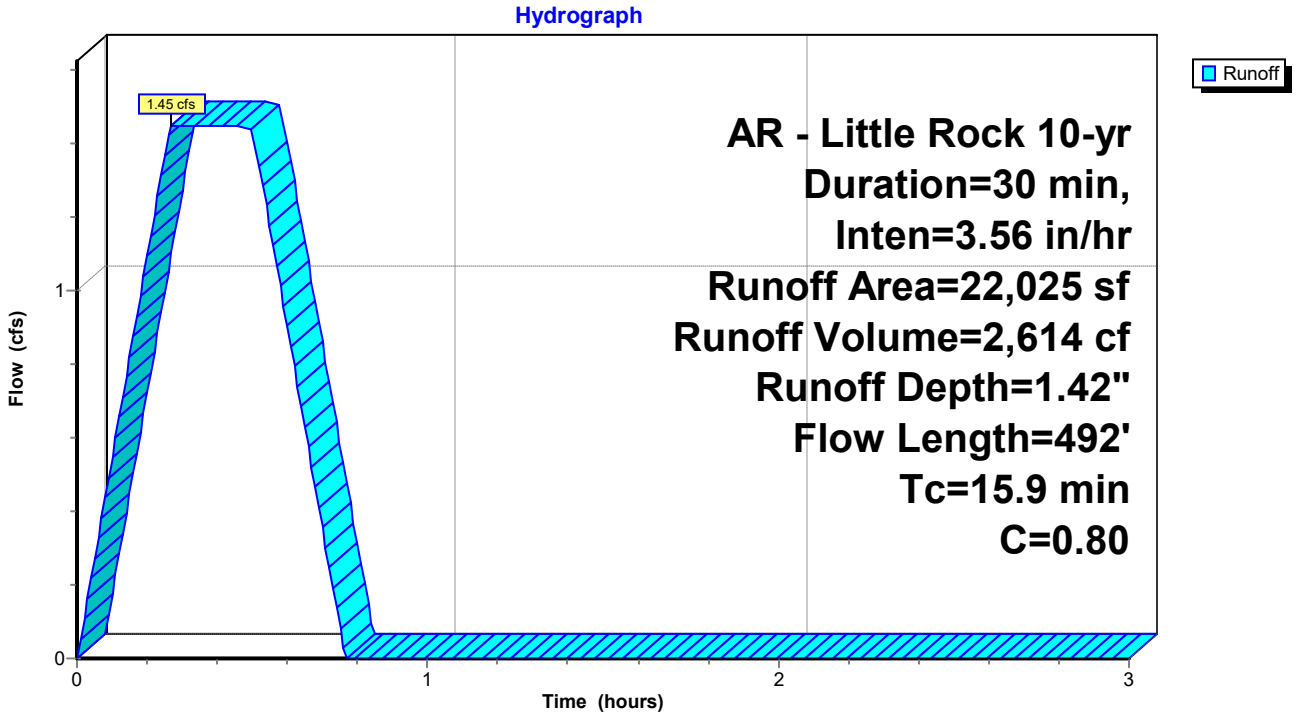
Runoff = 1.45 cfs @ 0.27 hrs, Volume= 2,614 cf, Depth= 1.42"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,127 | 0.40 | Sod Yard |
| 15,898 | 0.95 | Paving, Sidewalks |
| 22,025 | 0.80 | Weighted Average |
| 6,127 | | 27.82% Pervious Area |
| 15,898 | | 72.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.5 | 5 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 9.2 | 45 | 0.0250 | 0.08 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.8 | 41 | 0.1940 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 6 | 0.0100 | 0.68 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 51 | 0.0870 | 5.99 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0310 | 3.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 20 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 34 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 58 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 49 | 0.0840 | 5.88 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 15.9 | 492 | Total | | | |

## Subcatchment C14: Drainage Basin C14



## Summary for Subcatchment C15: Drainage Basin C15

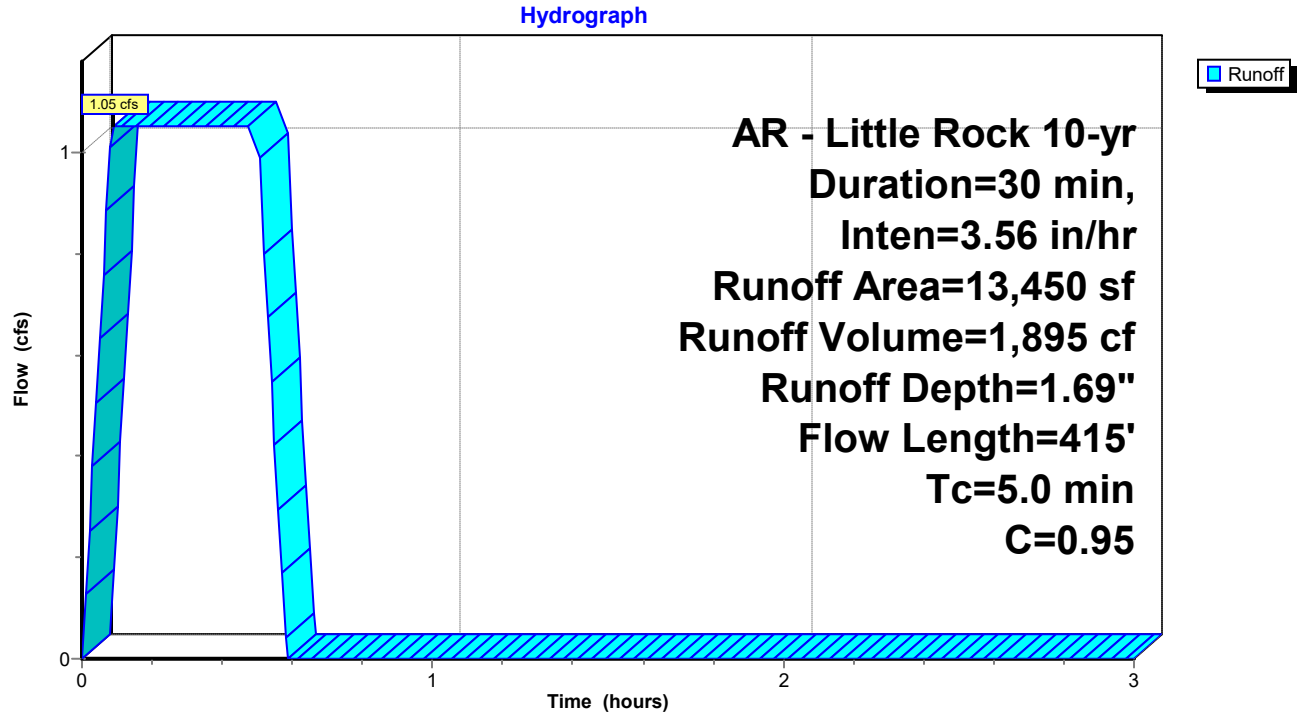
Runoff = 1.05 cfs @ 0.09 hrs, Volume= 1,895 cf, Depth= 1.69"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 13,450 | 0.95 | Paving, Sidewalks |
| 13,450 | 0.95 | Weighted Average |
| 13,450 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Overland Concentrated Flow (Min)** |

## Subcatchment C15: Drainage Basin C15



## Summary for Subcatchment C16: Drainage Basin C16

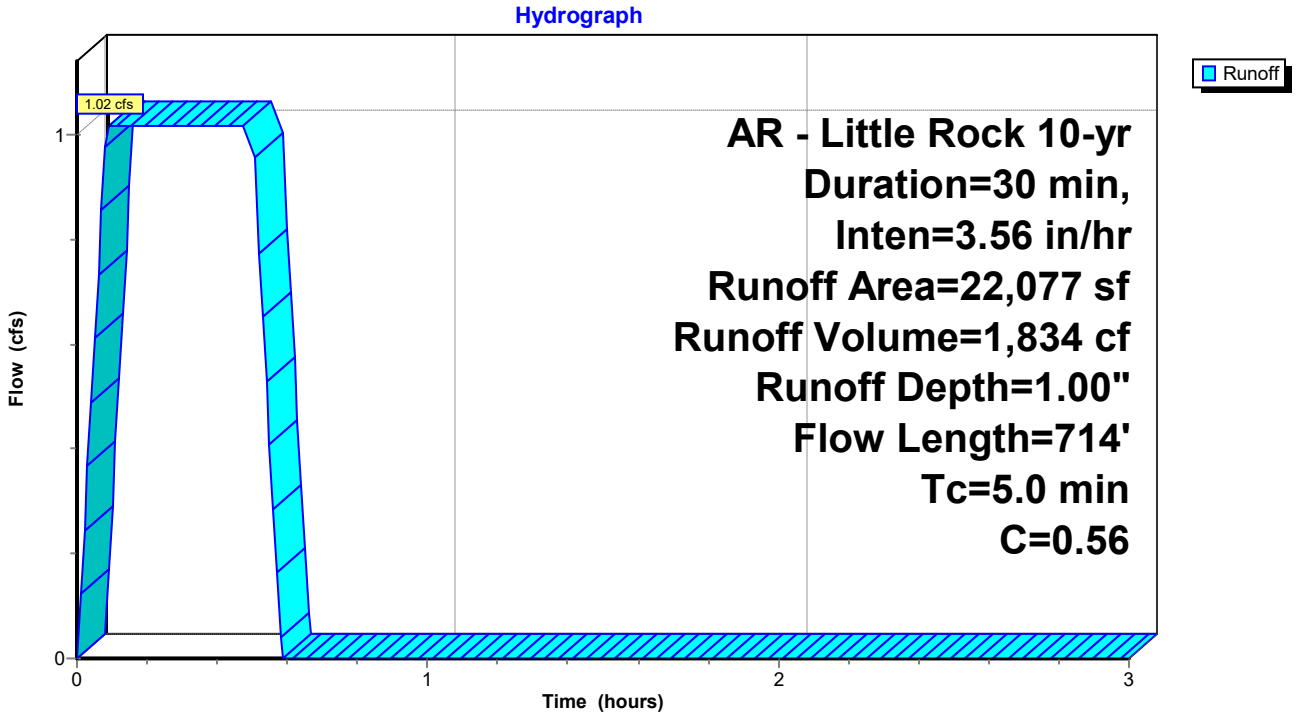
Runoff = 1.02 cfs @ 0.09 hrs, Volume= 1,834 cf, Depth= 1.00"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,465 | 0.40 | Sod Yard |
| 6,612 | 0.95 | Paving, Sidewalks |
| 22,077 | 0.56 | Weighted Average |
| 15,465 | | 70.05% Pervious Area |
| 6,612 | | 29.95% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 26 | 0.0190 | 1.18 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0100 | 0.66 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 51 | 0.0500 | 1.98 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 12 | 0.1540 | 2.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 50 | 0.1330 | 7.40 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 50 | 0.1170 | 6.94 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 59 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 3.3 | 415 | | 2.10 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 714 | Total | | | |

## Subcatchment C16: Drainage Basin C16



## Summary for Subcatchment C17: Drainage Basin C17

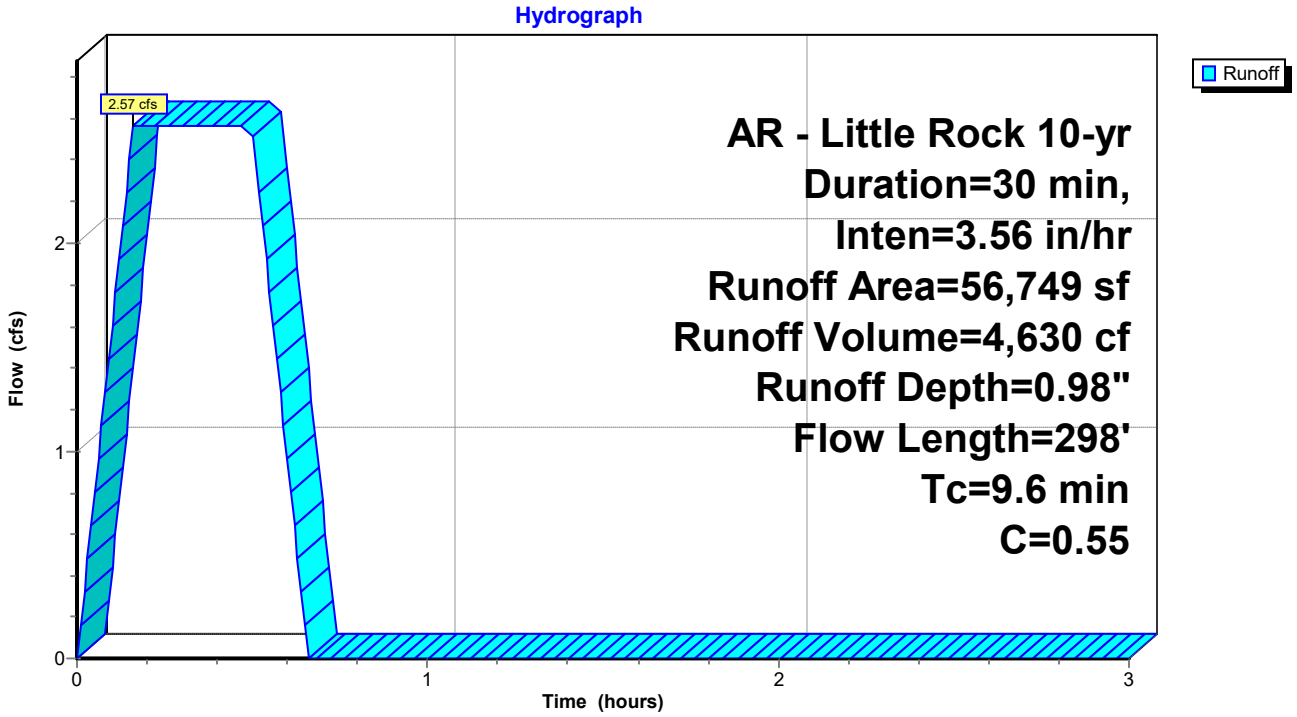
Runoff = 2.57 cfs @ 0.16 hrs, Volume= 4,630 cf, Depth= 0.98"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 40,914 | 0.40 | Sod Yard |
| 15,835 | 0.95 | Paving, Sidewalks |
| 56,749 | 0.55 | Weighted Average |
| 40,914 | | 72.10% Pervious Area |
| 15,835 | | 27.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 43 | 0.0410 | 0.15 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.9 | 43 | 0.0690 | 0.19 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 41 | 0.0980 | 4.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 61 | 0.0730 | 4.05 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0570 | 3.58 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 64 | 0.0450 | 3.18 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 9.6 | 298 | Total | | | |

## Subcatchment C17: Drainage Basin C17



## Summary for Subcatchment C18: Drainage Basin C18

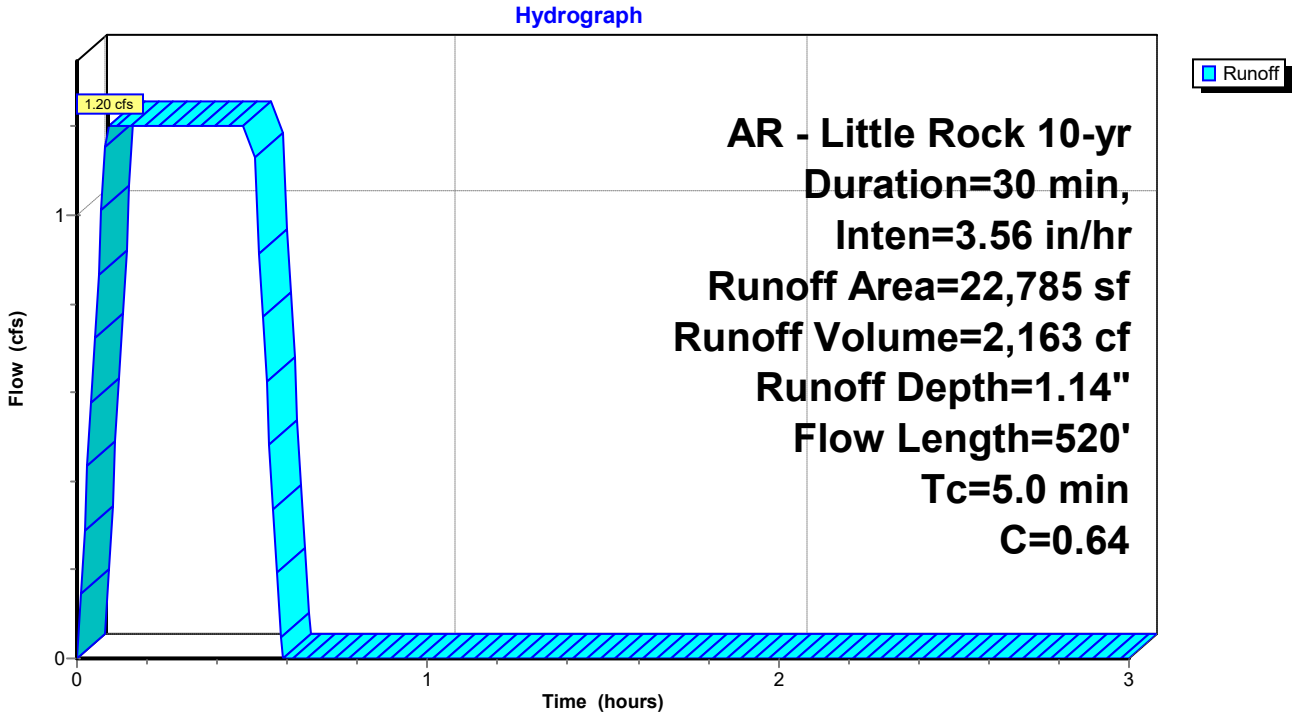
Runoff = 1.20 cfs @ 0.09 hrs, Volume= 2,163 cf, Depth= 1.14"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,812 | 0.40 | Sod Yard |
| 9,973 | 0.95 | Paving, Sidewalks |
| 22,785 | 0.64 | Weighted Average |
| 12,812 | | 56.23% Pervious Area |
| 9,973 | | 43.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2980 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.3 | 8 | 0.0100 | 0.04 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 80 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.4 | 415 | | 17.29 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 520 | Total | | | |

## Subcatchment C18: Drainage Basin C18



## Summary for Subcatchment C19: Drainage Basin C19

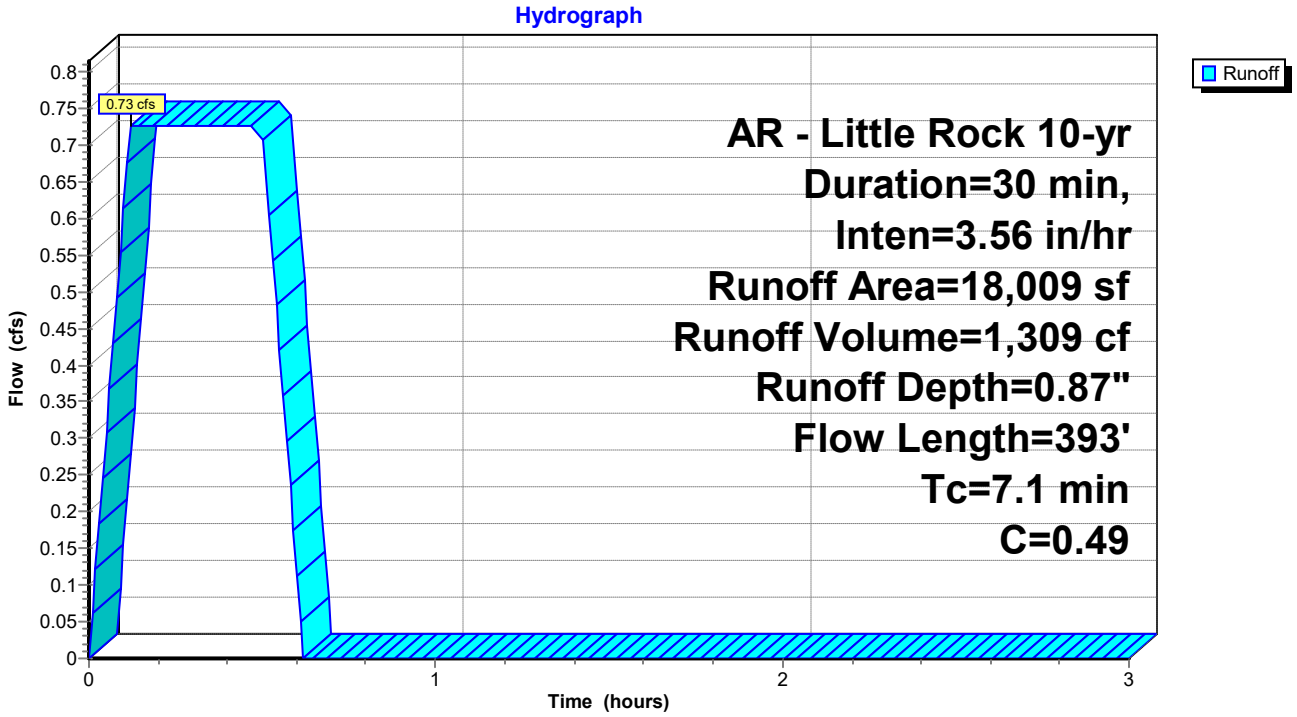
Runoff = 0.73 cfs @ 0.12 hrs, Volume= 1,309 cf, Depth= 0.87"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,129 | 0.40 | Sod Yard |
| 2,880 | 0.95 | Paving, Sidewalks |
| 18,009 | 0.49 | Weighted Average |
| 15,129 | | 84.01% Pervious Area |
| 2,880 | | 15.99% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 34 | 0.1110 | 0.21 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.3 | 66 | 0.2450 | 0.34 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.0 | 9 | 0.2450 | 7.42 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.5 | 106 | 0.0610 | 3.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0800 | 4.24 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 41 | 0.0960 | 4.65 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 66 | 0.0680 | 3.91 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 19 | 0.1070 | 6.64 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 7.1 | 393 | Total | | | |

## Subcatchment C19: Drainage Basin C19



## Summary for Subcatchment C2: Drainage Basin C2

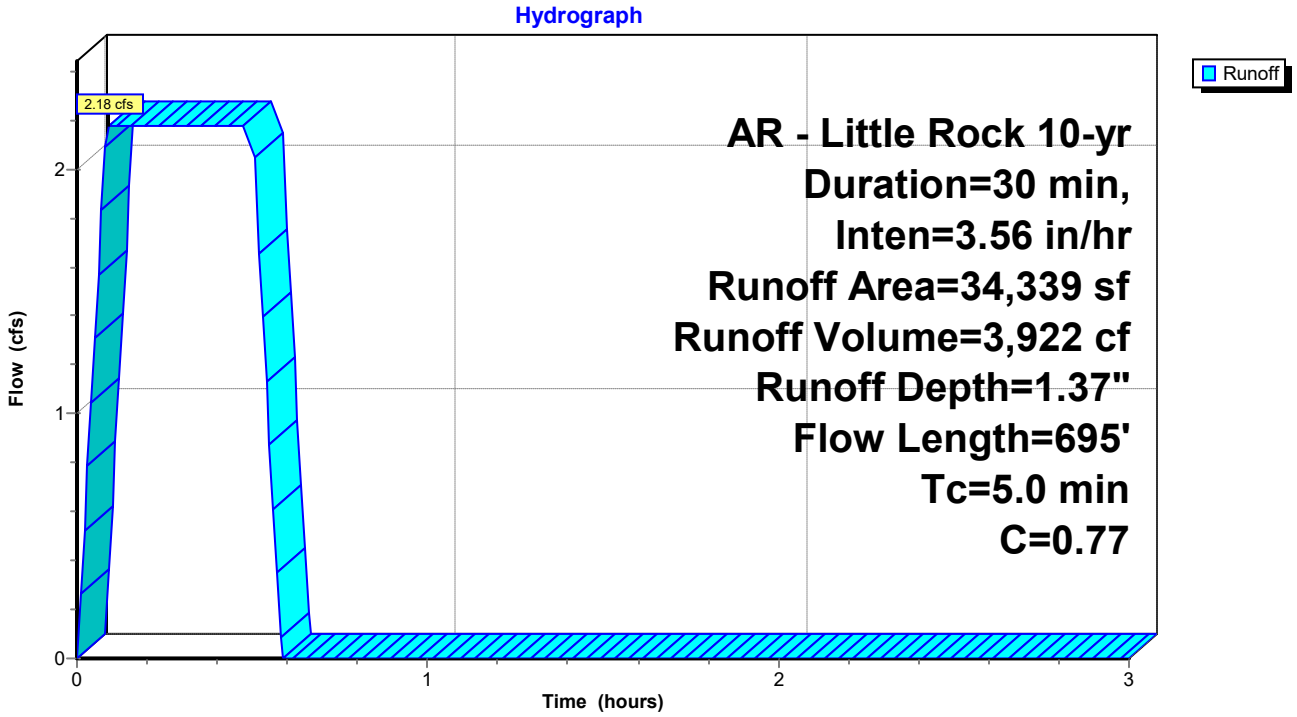
Runoff = 2.18 cfs @ 0.09 hrs, Volume= 3,922 cf, Depth= 1.37"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 11,376 | 0.40 | Sod Yard |
| 22,963 | 0.95 | Roof, Paving, Sidewalks |
| 34,339 | 0.77 | Weighted Average |
| 11,376 | | 33.13% Pervious Area |
| 22,963 | | 66.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 20 | 0.0200 | 1.14 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 74 | 0.0240 | 3.14 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 21 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.6 | 148 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.5 | 415 | | 1.98 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 695 | Total | | | |

## Subcatchment C2: Drainage Basin C2



## Summary for Subcatchment C20: Drainage Basin C20

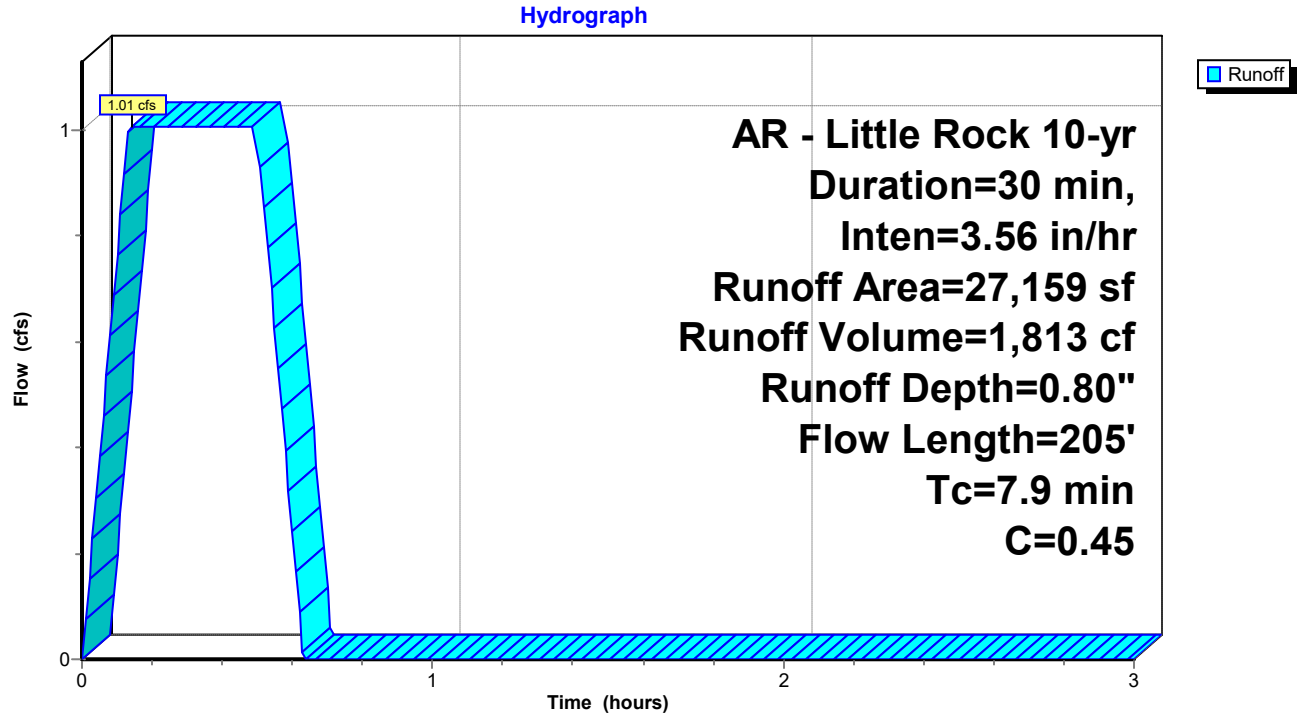
Runoff = 1.01 cfs @ 0.14 hrs, Volume= 1,813 cf, Depth= 0.80"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,838 | 0.40 | Sod Yard |
| 2,321 | 0.95 | Paving, Sidewalks |
| 27,159 | 0.45 | Weighted Average |
| 24,838 | | 91.45% Pervious Area |
| 2,321 | | 8.55% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 45 | 0.1430 | 0.25 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 4.5 | 55 | 0.0780 | 0.20 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 37 | 0.0780 | 4.19 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 68 | 0.0710 | 4.00 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 7.9 | 205 | Total | | | |

## Subcatchment C20: Drainage Basin C20



## Summary for Subcatchment C21: Drainage Basin C21

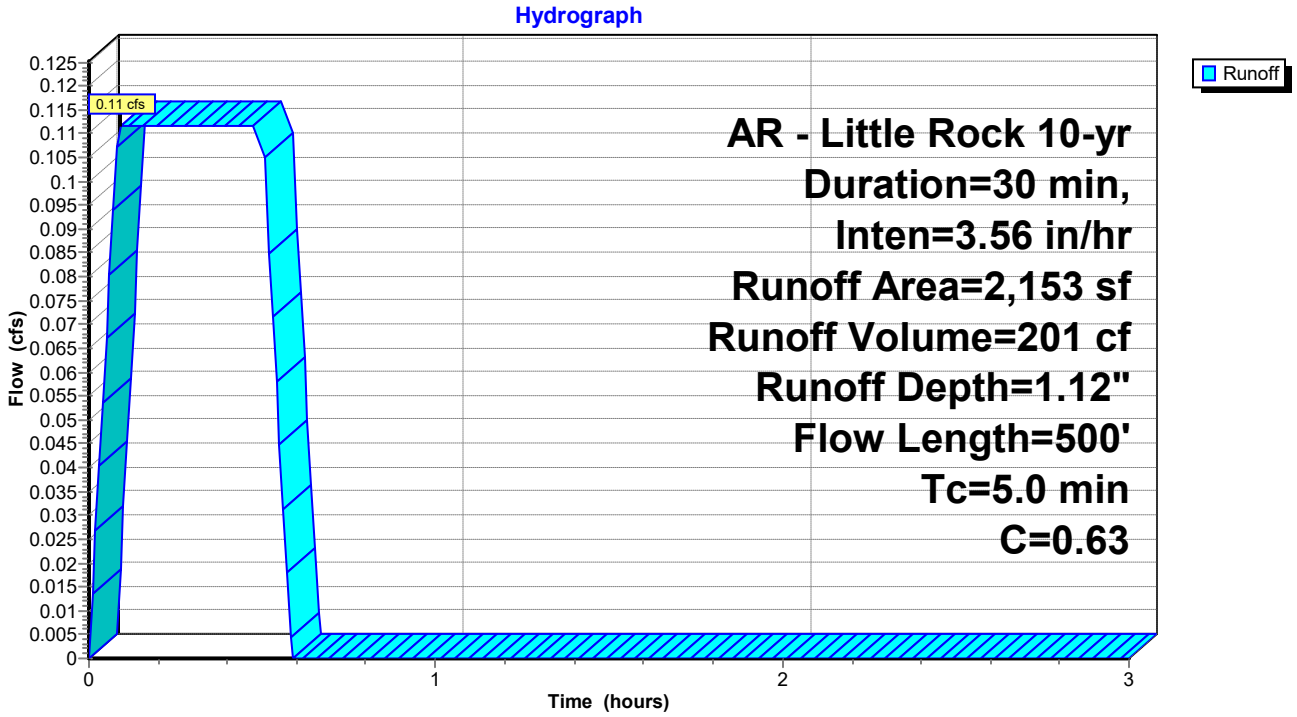
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 201 cf, Depth= 1.12"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,234 | 0.40 | Sod Yard |
| 919 | 0.95 | Paving, Sidewalks |
| 2,153 | 0.63 | Weighted Average |
| 1,234 | | 57.32% Pervious Area |
| 919 | | 42.68% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 2 | 0.2500 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.3 | 33 | 0.0520 | 1.85 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.8 | 24 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 26 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.5 | 415 | | 13.83 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 500 | Total | | | |

## Subcatchment C21: Drainage Basin C21



## Summary for Subcatchment C3: Drainage Basin C3

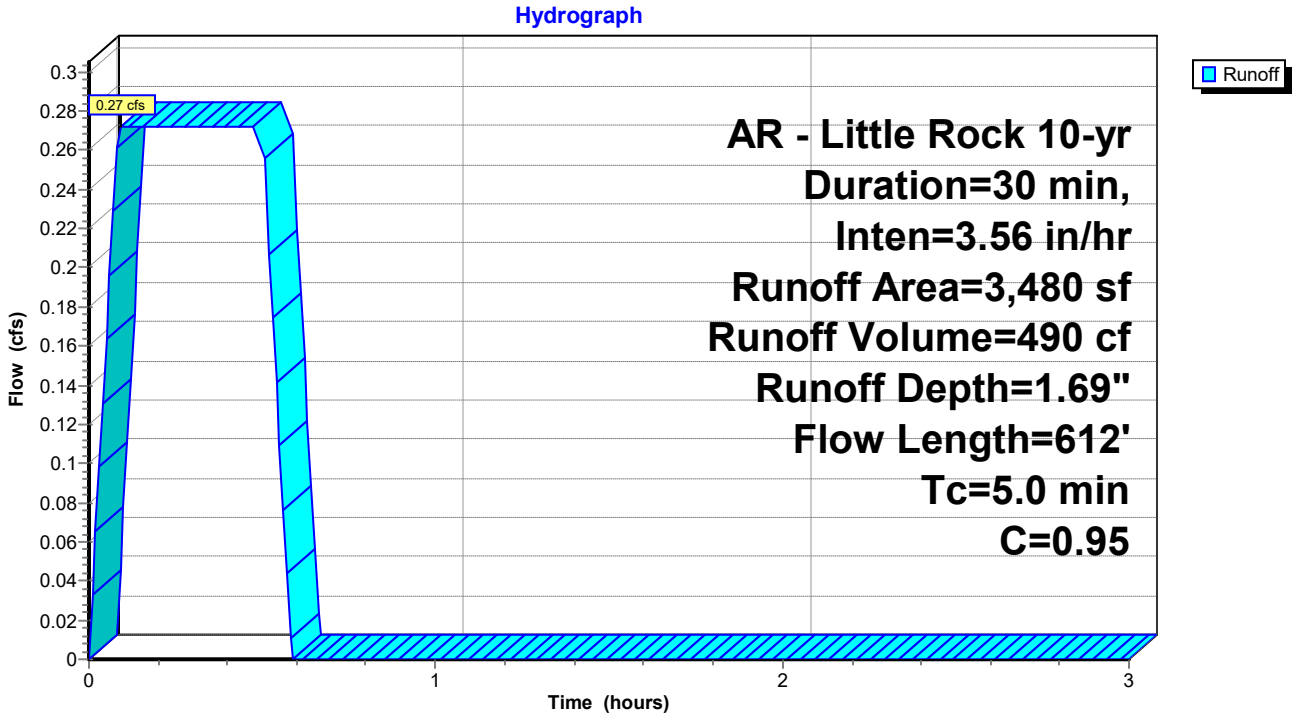
Runoff = 0.27 cfs @ 0.09 hrs, Volume= 490 cf, Depth= 1.69"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 3,480 | 0.95 | Paving, Sidewalks |
| 3,480 | 0.95 | Weighted Average |
| 3,480 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 10 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.6 | 147 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 612 | Total | | | |

## Subcatchment C3: Drainage Basin C3



## Summary for Subcatchment C4: Drainage Basin C4

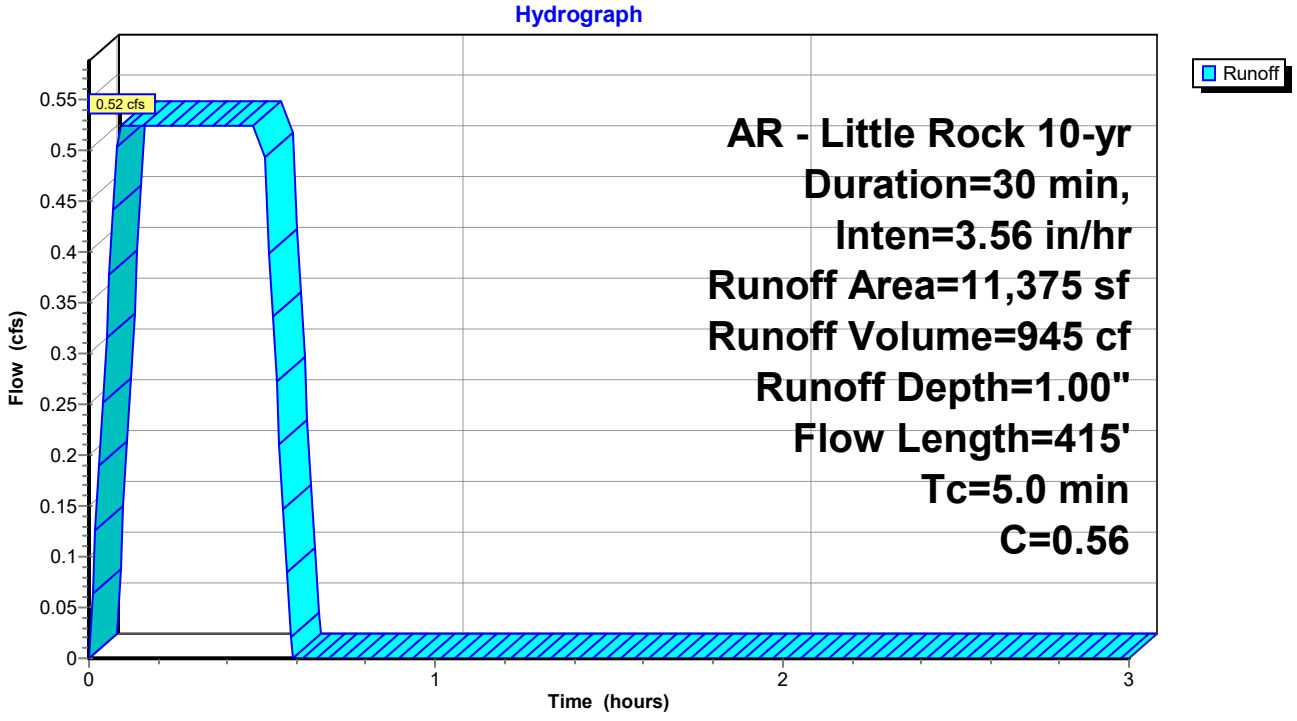
Runoff = 0.52 cfs @ 0.09 hrs, Volume= 945 cf, Depth= 1.00"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 8,130 | 0.40 | Sod Yard |
| 3,245 | 0.95 | Paving, Sidewalks |
| 11,375 | 0.56 | Weighted Average |
| 8,130 | | 71.47% Pervious Area |
| 3,245 | | 28.53% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment C4: Drainage Basin C4



## Summary for Subcatchment C5: Drainage Basin C5

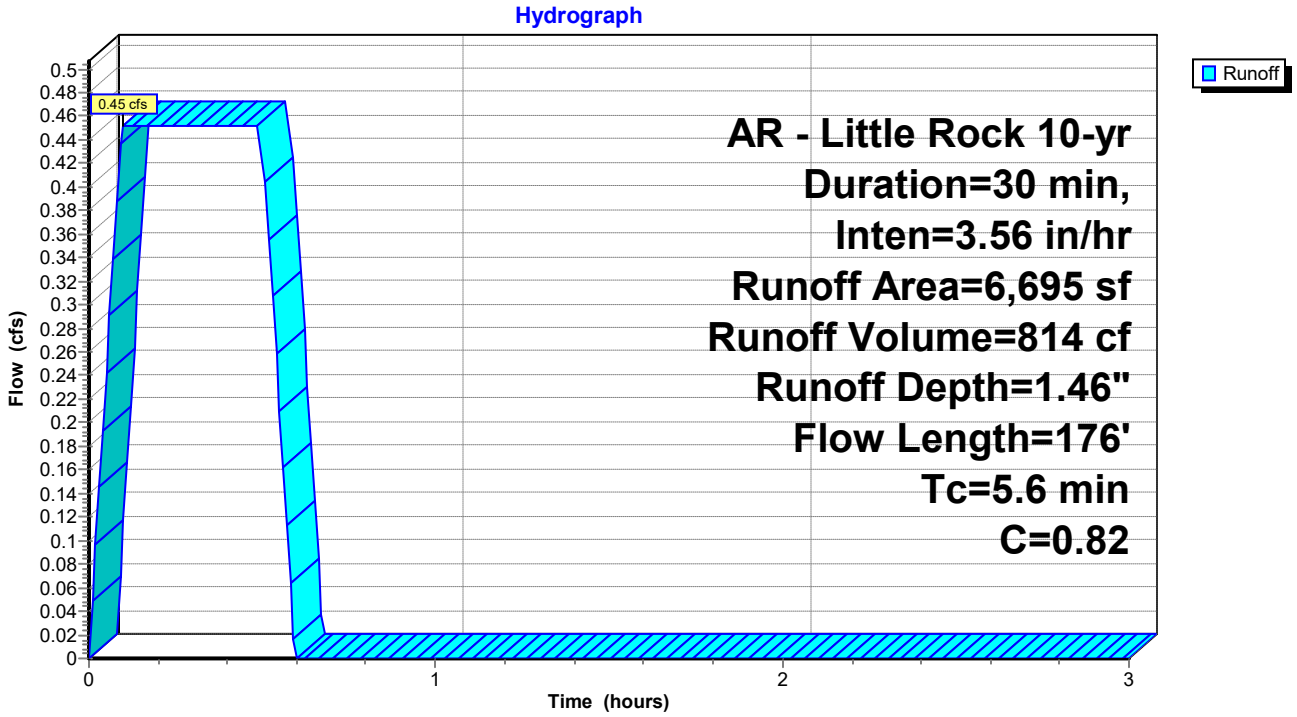
Runoff = 0.45 cfs @ 0.10 hrs, Volume= 814 cf, Depth= 1.46"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,634 | 0.40 | Sod Yard |
| 5,061 | 0.95 | Paving, Sidewalks |
| 6,695 | 0.82 | Weighted Average |
| 1,634 | | 24.41% Pervious Area |
| 5,061 | | 75.59% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2990 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.9 | 8 | 0.0070 | 0.03 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 58 | 0.0080 | 1.82 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 14 | 0.0280 | 3.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0940 | 6.22 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 30 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 5.6 | 176 | Total | | | |

## Subcatchment C5: Drainage Basin C5



## Summary for Subcatchment C6: Drainage Basin C6

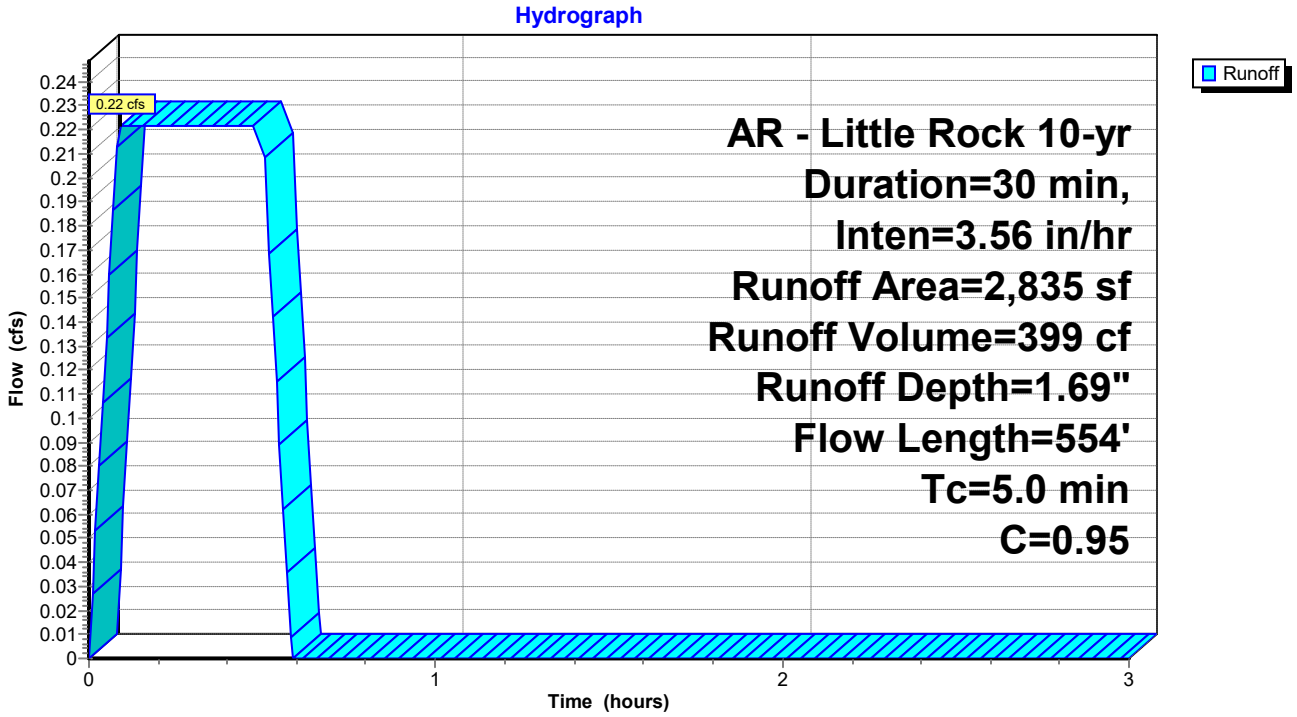
Runoff = 0.22 cfs @ 0.09 hrs, Volume= 399 cf, Depth= 1.69"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 2,835 | 0.95 | Paving, Sidewalks |
| 2,835 | 0.95 | Weighted Average |
| 2,835 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 19 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0360 | 3.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 27 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.1 | 415 | | 1.69 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 554 | Total | | | |

## Subcatchment C6: Drainage Basin C6



## Summary for Subcatchment C7: Drainage Basin C7

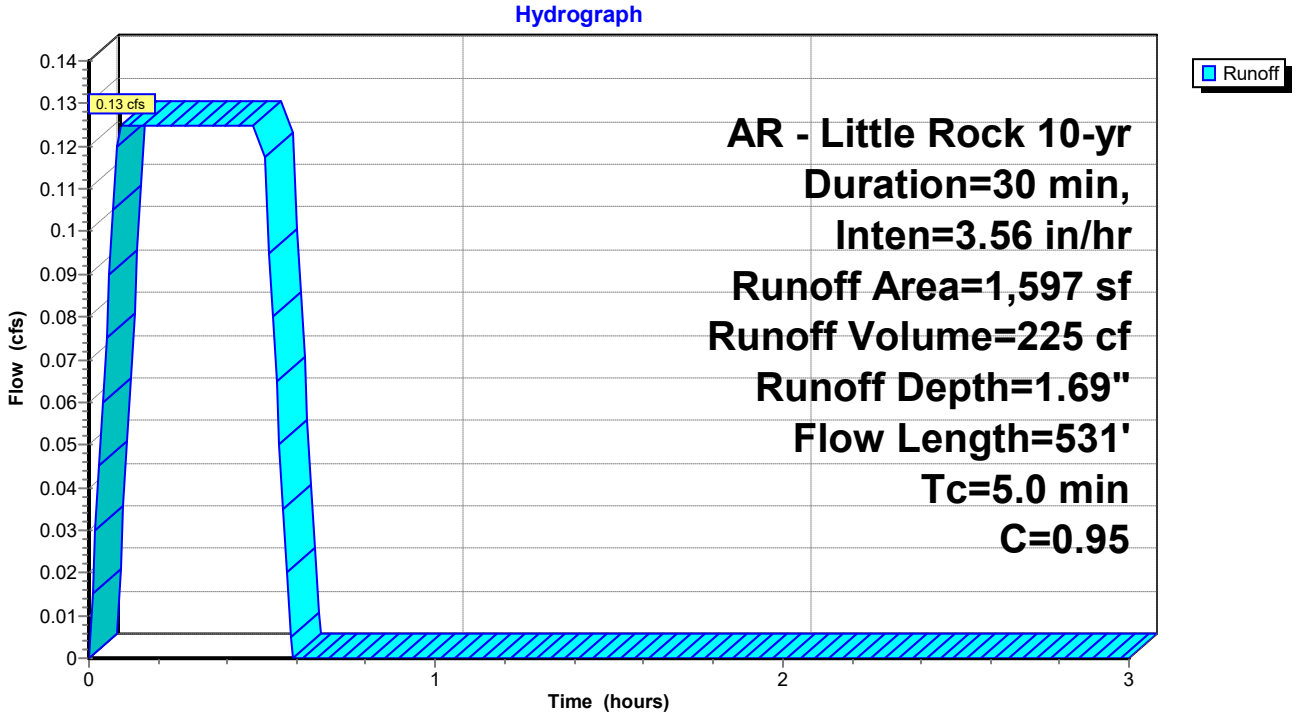
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 225 cf, Depth= 1.69"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,597 | 0.95 | Paving, Sidewalks |
| 1,597 | 0.95 | Weighted Average |
| 1,597 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 16 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 81 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.3 | 415 | | 1.61 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 531 | Total | | | |

## Subcatchment C7: Drainage Basin C7



## Summary for Subcatchment C8: Drainage Basin C8

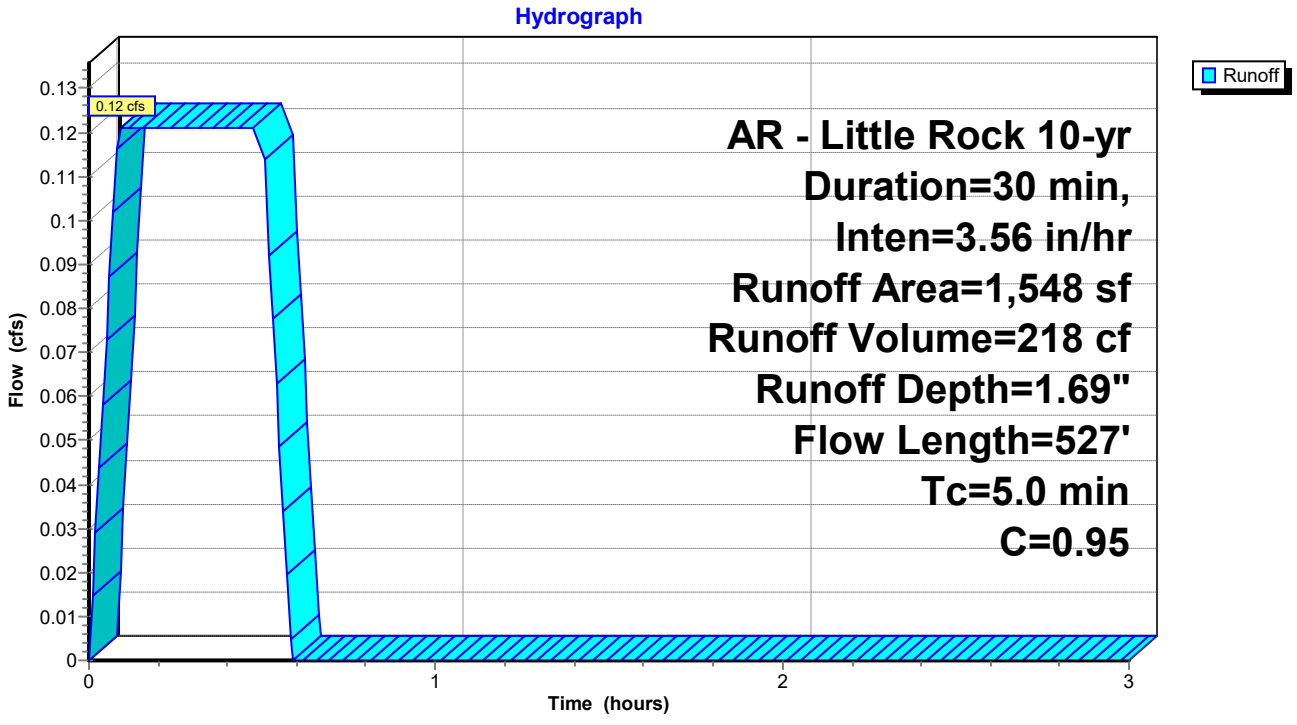
Runoff = 0.12 cfs @ 0.09 hrs, Volume= 218 cf, Depth= 1.69"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,548 | 0.95 | Paving, Sidewalks |
| 1,548 | 0.95 | Weighted Average |
| 1,548 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 94 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 4.4 | 415 | | 1.57 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 527 | Total | | | |

## Subcatchment C8: Drainage Basin C8



## Summary for Subcatchment C9: Drainage Basin C9

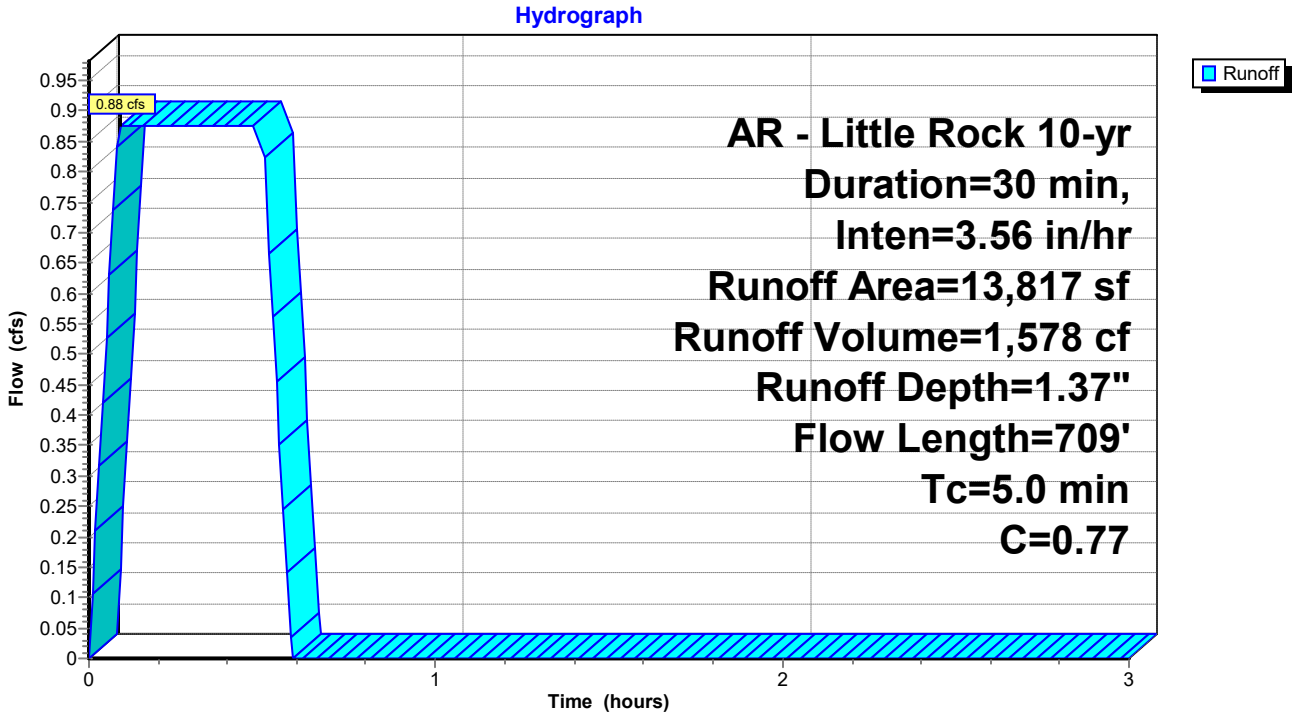
Runoff = 0.88 cfs @ 0.09 hrs, Volume= 1,578 cf, Depth= 1.37"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,456 | 0.40 | Sod Yard |
| 9,361 | 0.95 | Paving, Sidewalks |
| 13,817 | 0.77 | Weighted Average |
| 4,456 | | 32.25% Pervious Area |
| 9,361 | | 67.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.2 | 100 | 0.0140 | 1.36 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 13 | 0.0150 | 2.49 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 7 | 0.0050 | 1.44 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 8 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 41 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 41 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 61 | 0.0520 | 4.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 2.9 | 415 | | 2.39 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 709 | Total | | | |

## Subcatchment C9: Drainage Basin C9

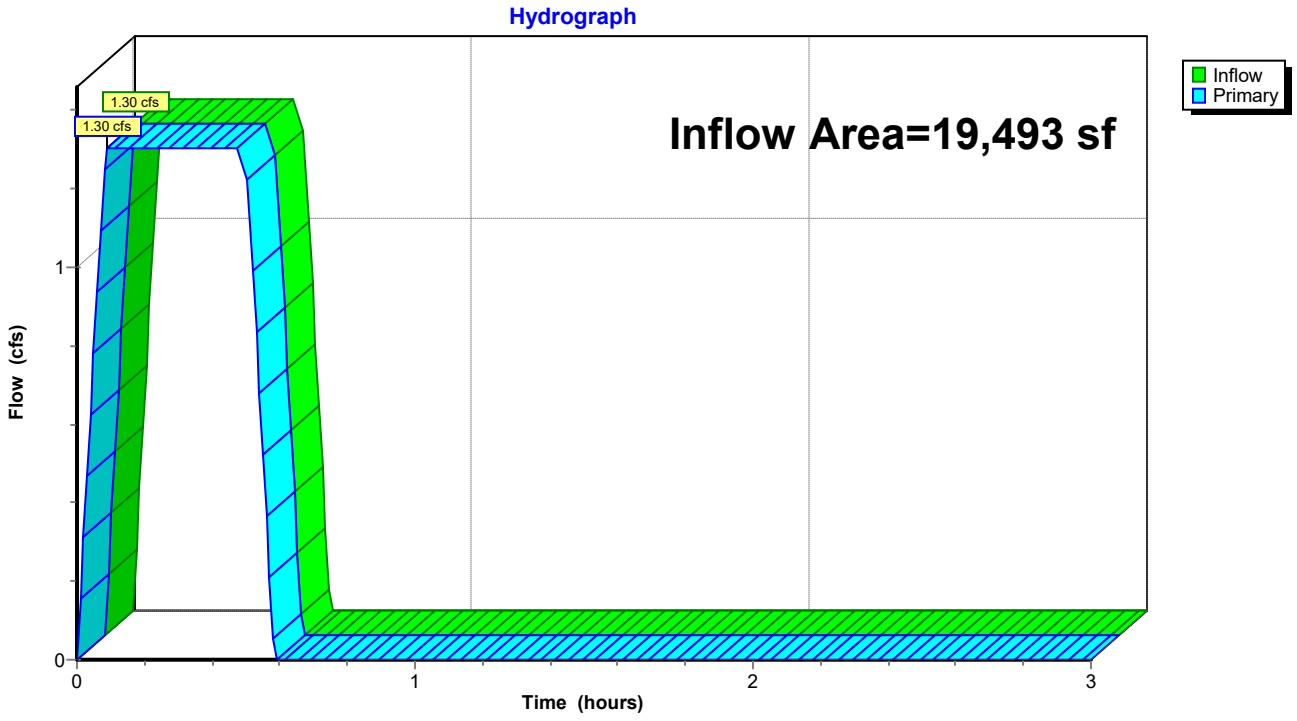


## Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.85% Impervious, Inflow Depth = 1.44" for 10-yr event
Inflow = 1.30 cfs @ 0.09 hrs, Volume= 2,342 cf
Primary = 1.30 cfs @ 0.09 hrs, Volume= 2,342 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A1: CI - A1

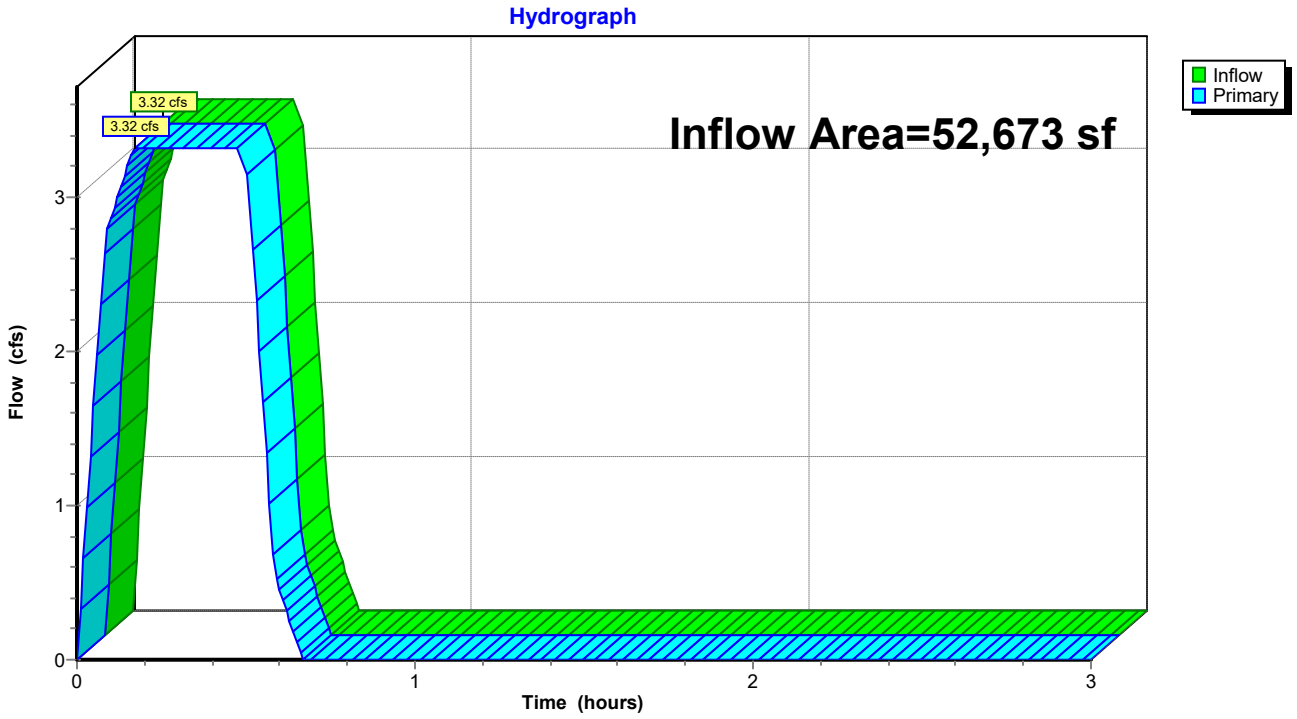


## Summary for Pond CI-A3: CI - A3

Inflow Area = 52,673 sf, 66.48% Impervious, Inflow Depth = 1.36" for 10-yr event
Inflow = 3.32 cfs @ 0.17 hrs, Volume= 5,973 cf
Primary = 3.32 cfs @ 0.17 hrs, Volume= 5,973 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A3: CI - A3

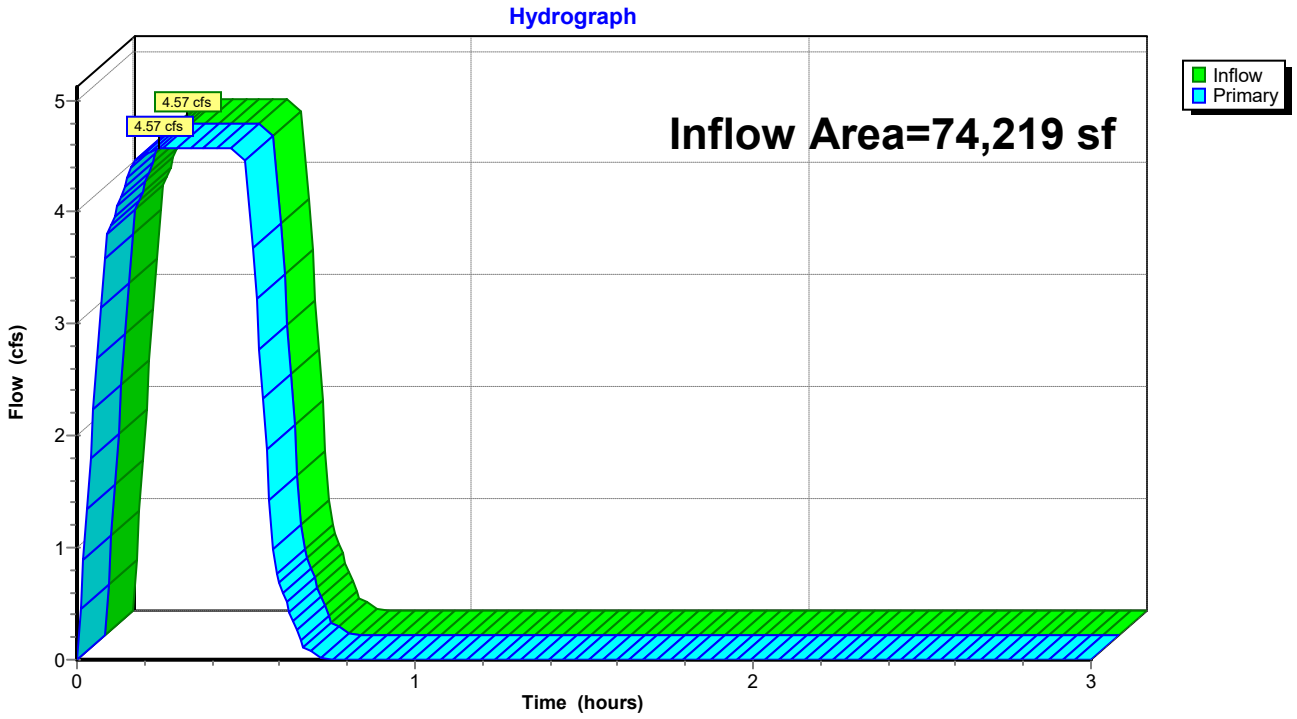


## Summary for Pond CI-A4: CI - A4

Inflow Area = 74,219 sf, 63.30% Impervious, Inflow Depth = 1.33" for 10-yr event
Inflow = 4.57 cfs @ 0.24 hrs, Volume= 8,227 cf
Primary = 4.57 cfs @ 0.24 hrs, Volume= 8,227 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A4: CI - A4

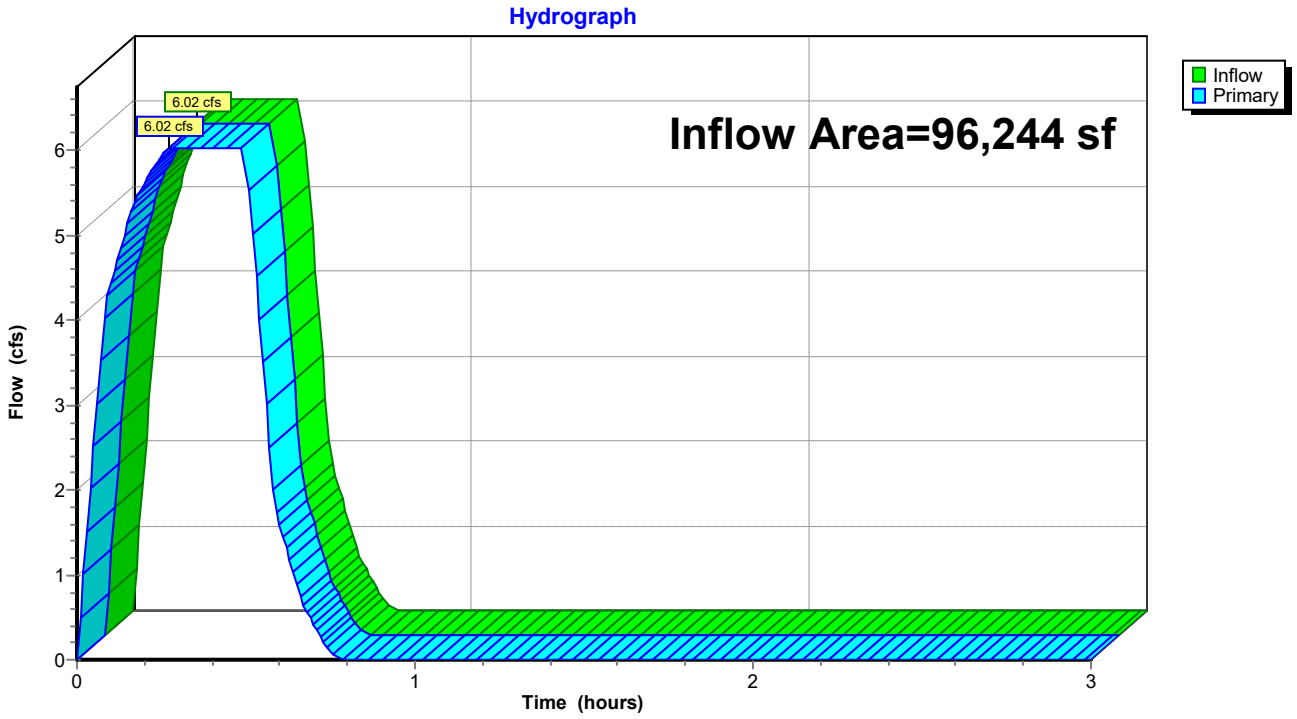


## Summary for Pond CI-A5: CI - A5

Inflow Area = 96,244 sf, 65.33% Impervious, Inflow Depth = 1.35" for 10-yr event
Inflow = 6.02 cfs @ 0.27 hrs, Volume= 10,841 cf
Primary = 6.02 cfs @ 0.27 hrs, Volume= 10,841 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A5: CI - A5

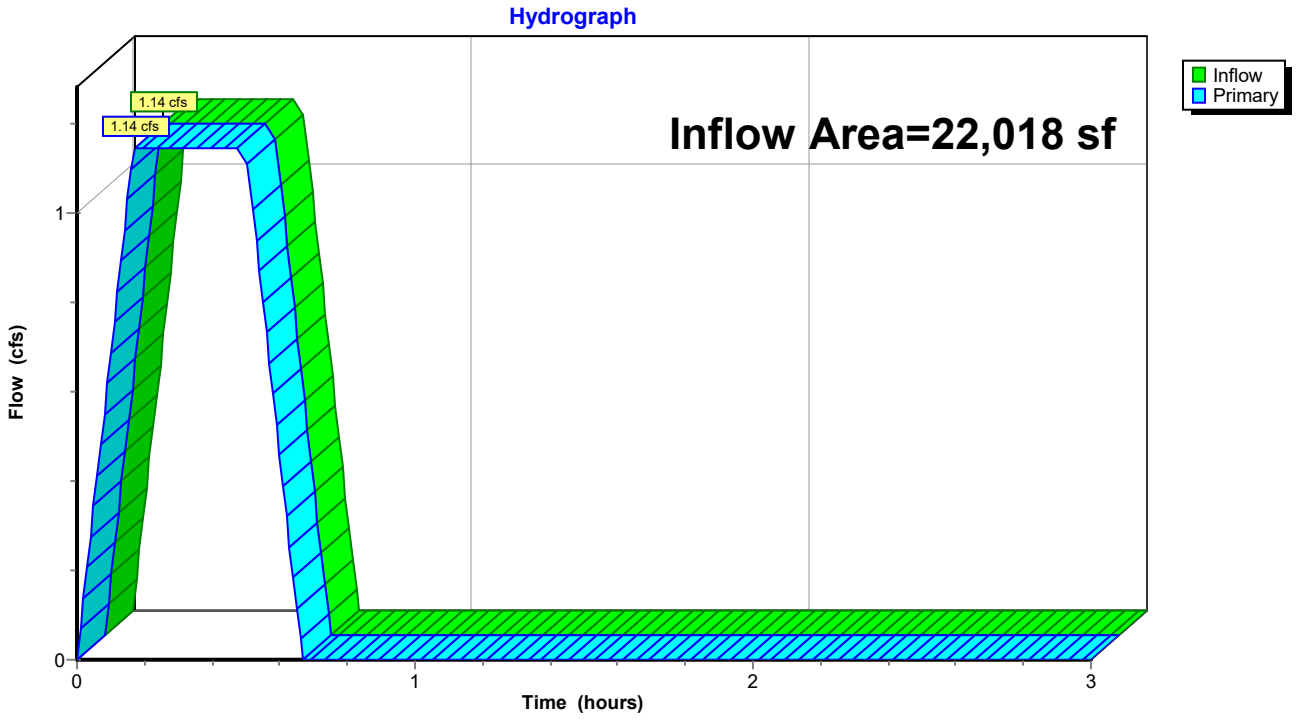


## Summary for Pond CI-B2: CI - B2

Inflow Area = 22,018 sf, 42.08% Impervious, Inflow Depth = 1.12" for 10-yr event
Inflow = 1.14 cfs @ 0.17 hrs, Volume= 2,058 cf
Primary = 1.14 cfs @ 0.17 hrs, Volume= 2,058 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-B2: CI - B2

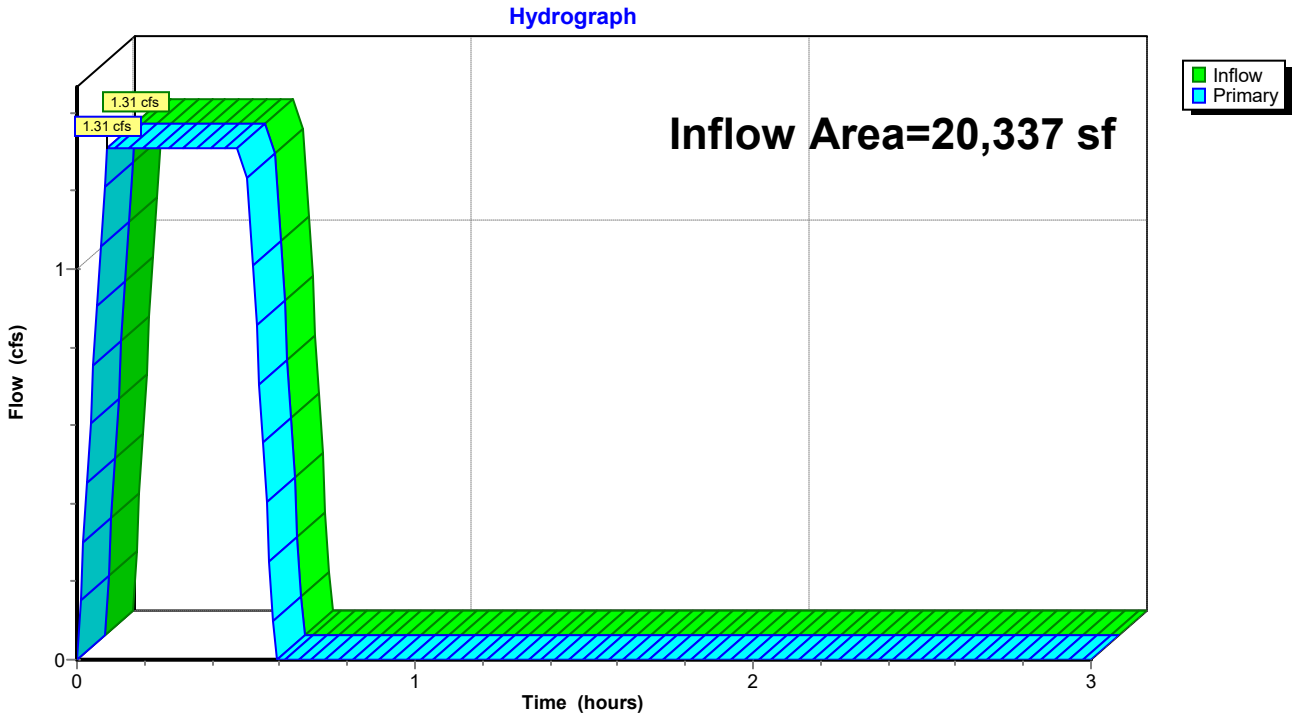


## Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.39" for 10-yr event
Inflow = 1.31 cfs @ 0.09 hrs, Volume= 2,353 cf
Primary = 1.31 cfs @ 0.09 hrs, Volume= 2,353 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C1: CI - C1

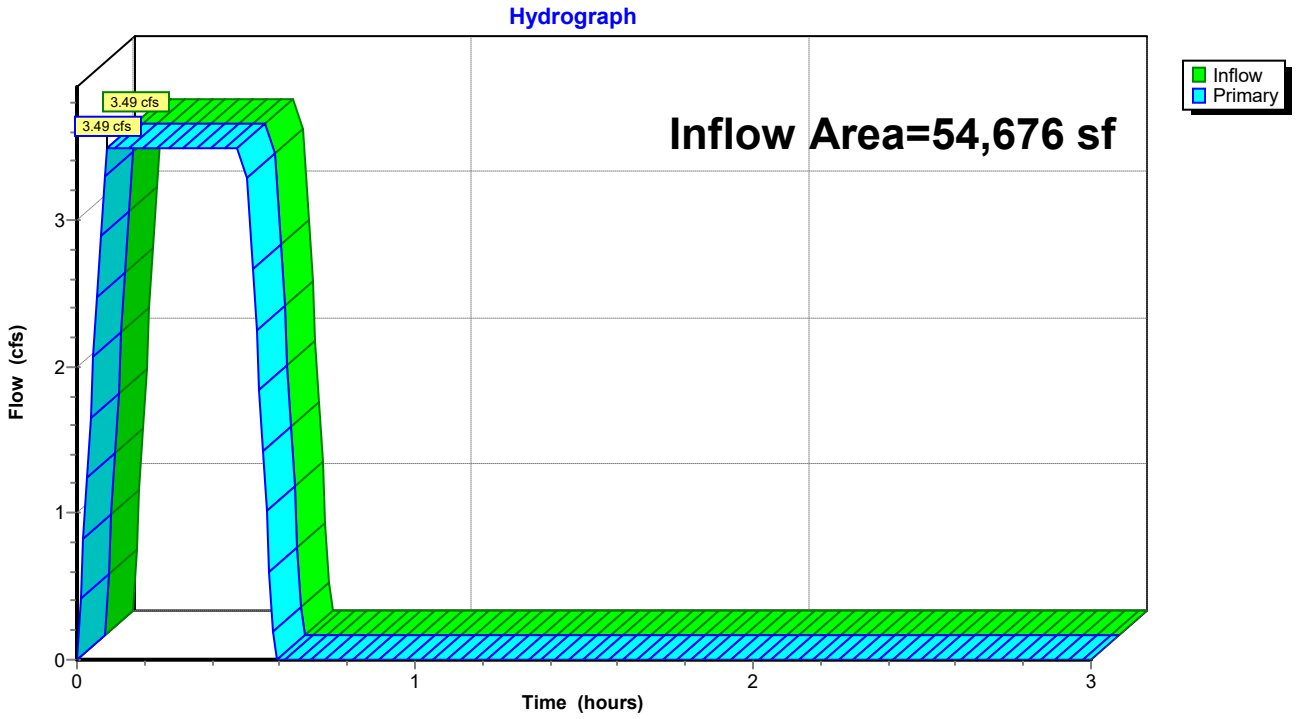


## Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.38" for 10-yr event
Inflow = 3.49 cfs @ 0.09 hrs, Volume= 6,275 cf
Primary = 3.49 cfs @ 0.09 hrs, Volume= 6,275 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C2: CI - C2

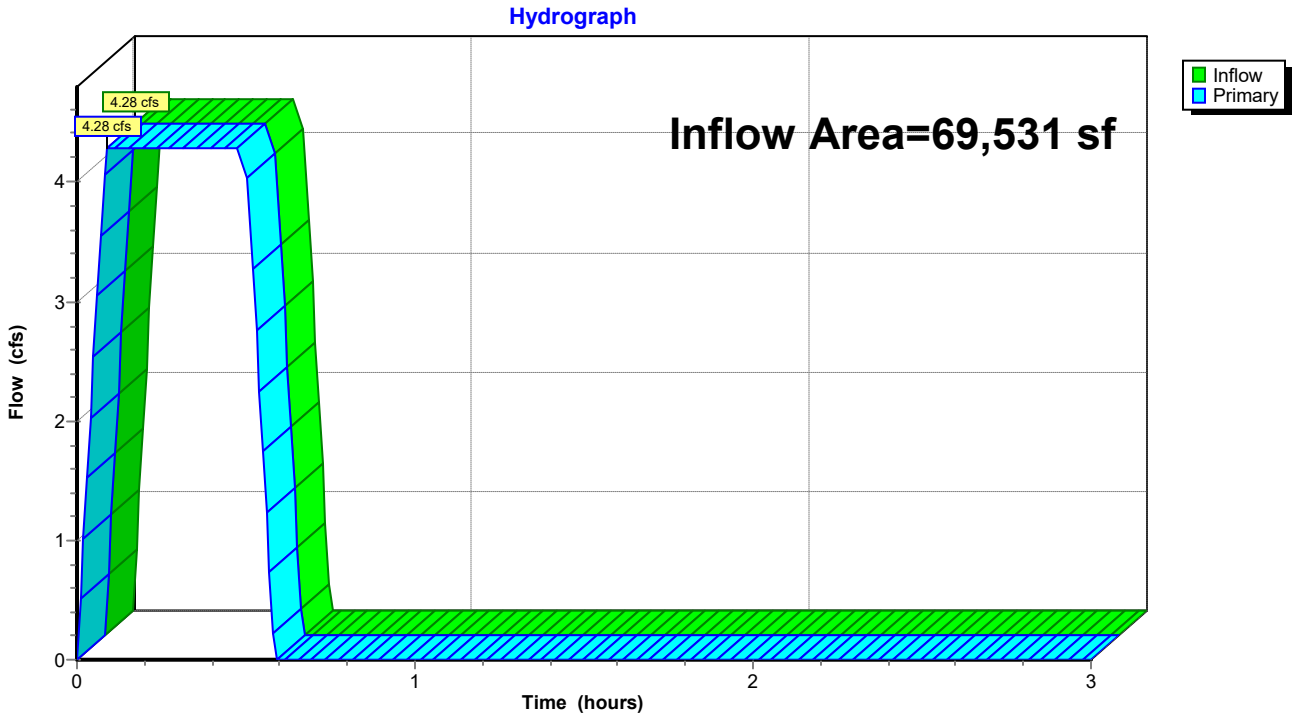


## Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.33" for 10-yr event
Inflow = 4.28 cfs @ 0.09 hrs, Volume= 7,710 cf
Primary = 4.28 cfs @ 0.09 hrs, Volume= 7,710 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C3: CI - C3

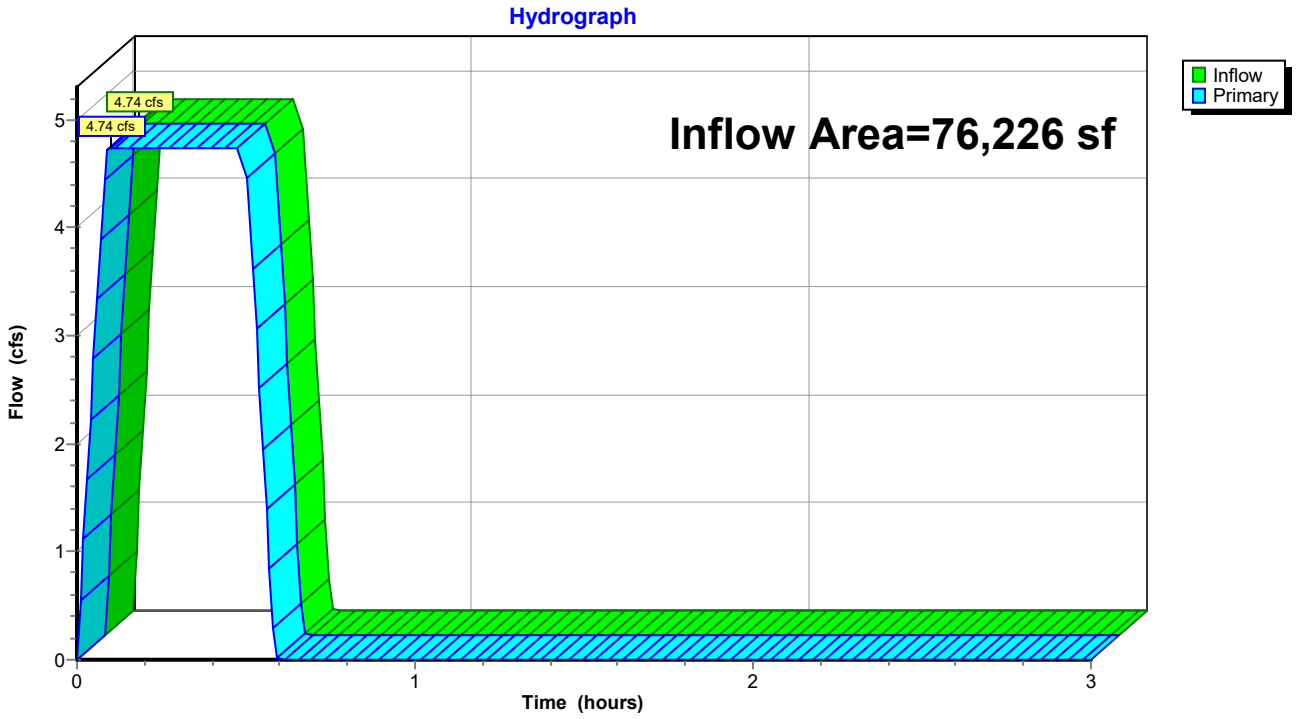


## Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.34" for 10-yr event
Inflow = 4.74 cfs @ 0.10 hrs, Volume= 8,525 cf
Primary = 4.74 cfs @ 0.10 hrs, Volume= 8,525 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C4: CI - C4

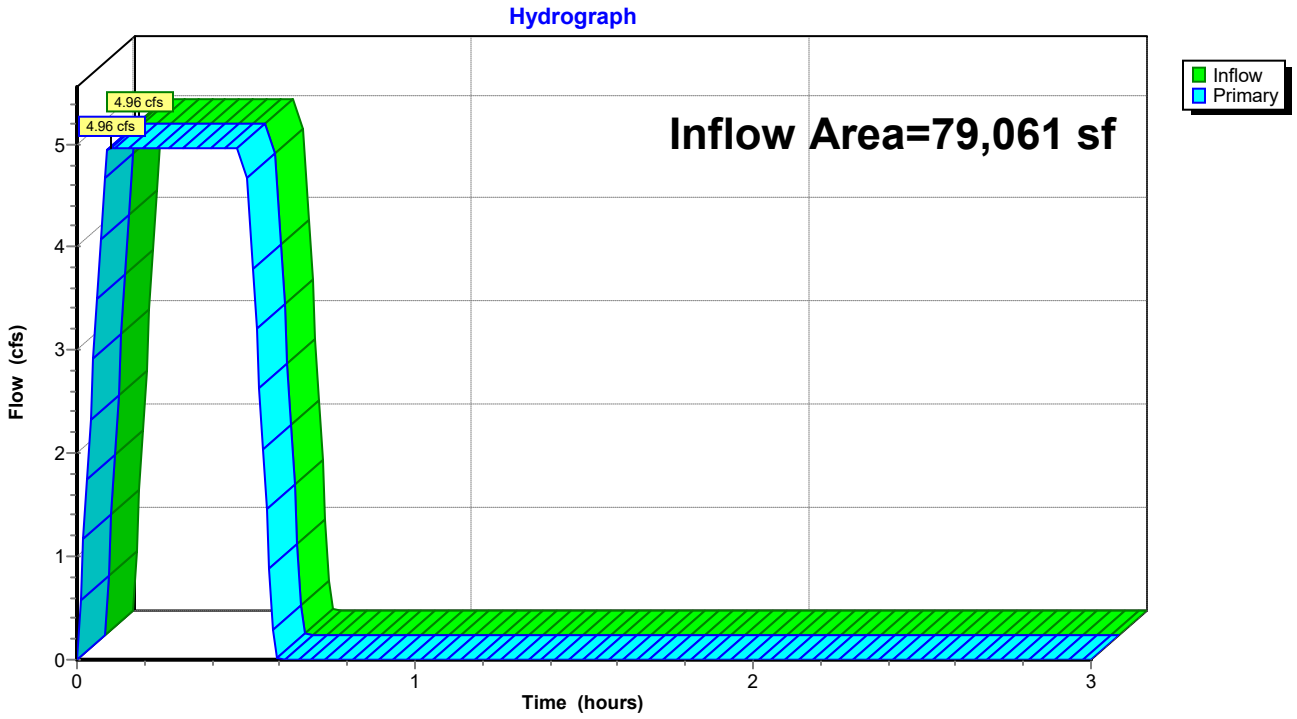


## Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.35" for 10-yr event
Inflow = 4.96 cfs @ 0.10 hrs, Volume= 8,924 cf
Primary = 4.96 cfs @ 0.10 hrs, Volume= 8,924 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C5: CI - C5

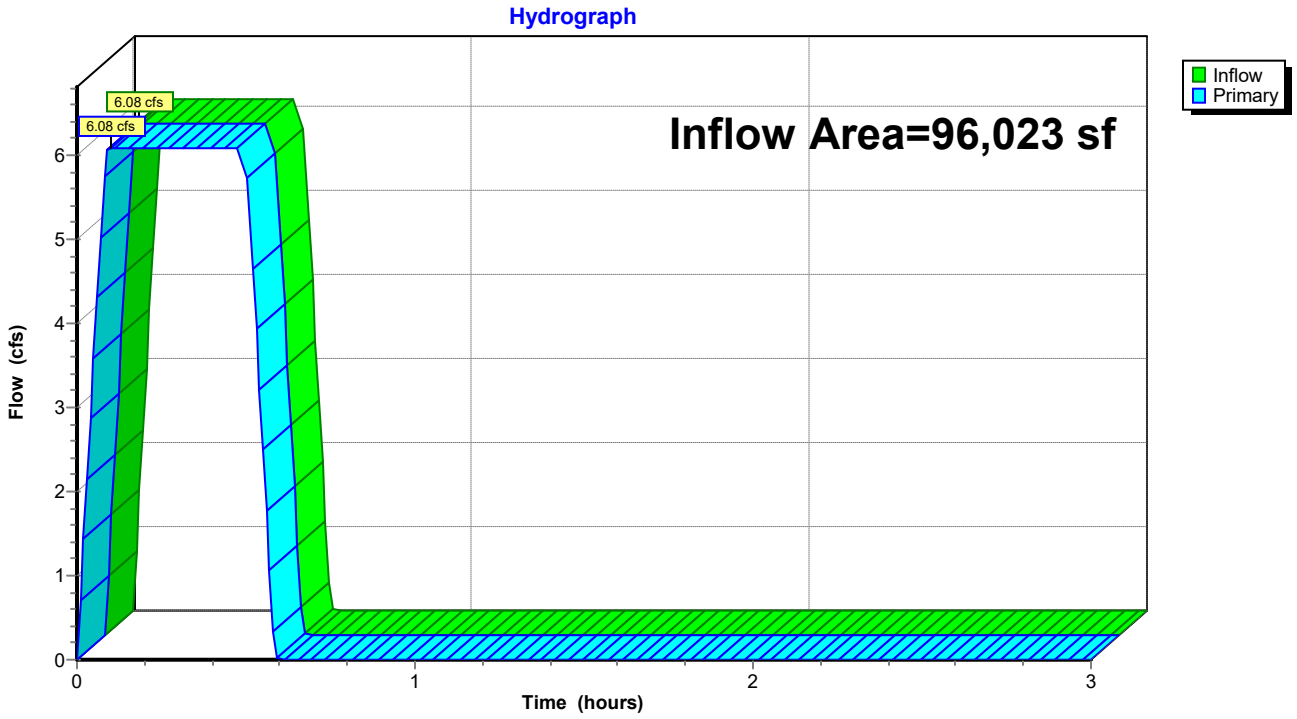


## Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.37" for 10-yr event
Inflow = 6.08 cfs @ 0.10 hrs, Volume= 10,945 cf
Primary = 6.08 cfs @ 0.10 hrs, Volume= 10,945 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C6: CI - C6

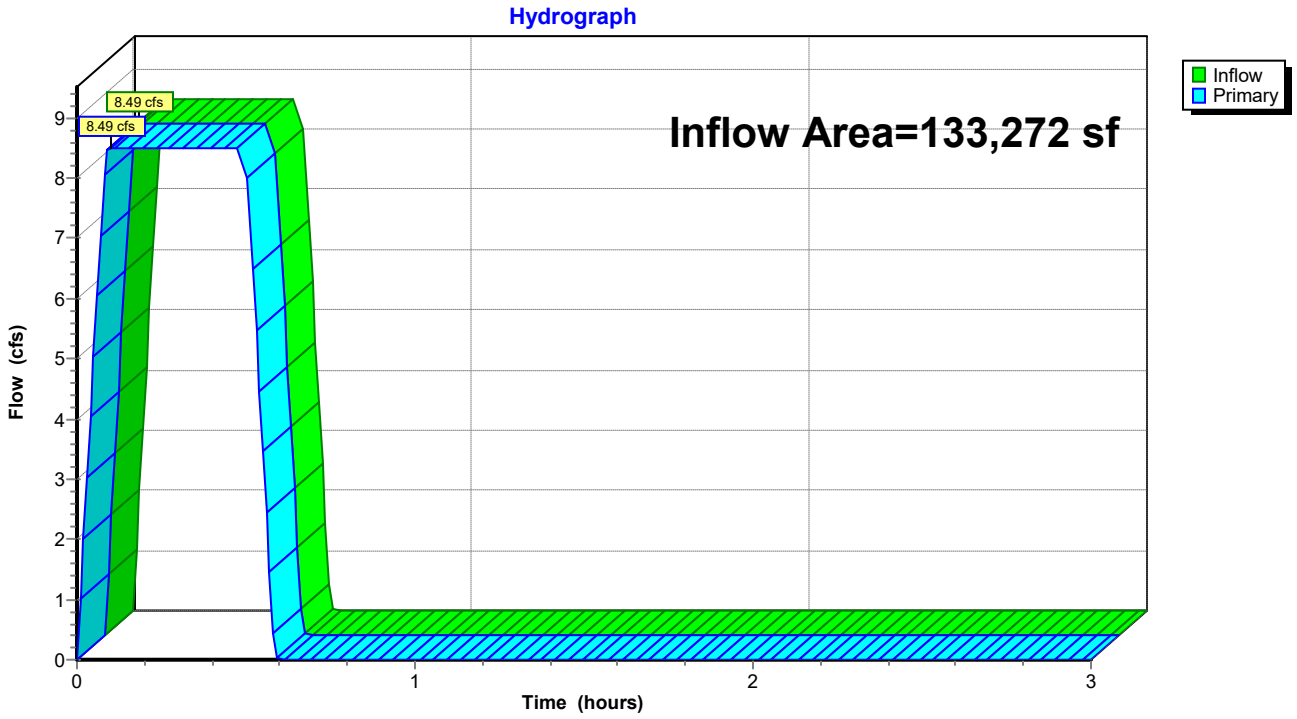


## Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.38" for 10-yr event
Inflow = 8.49 cfs @ 0.10 hrs, Volume= 15,289 cf
Primary = 8.49 cfs @ 0.10 hrs, Volume= 15,289 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C7: CI - C7

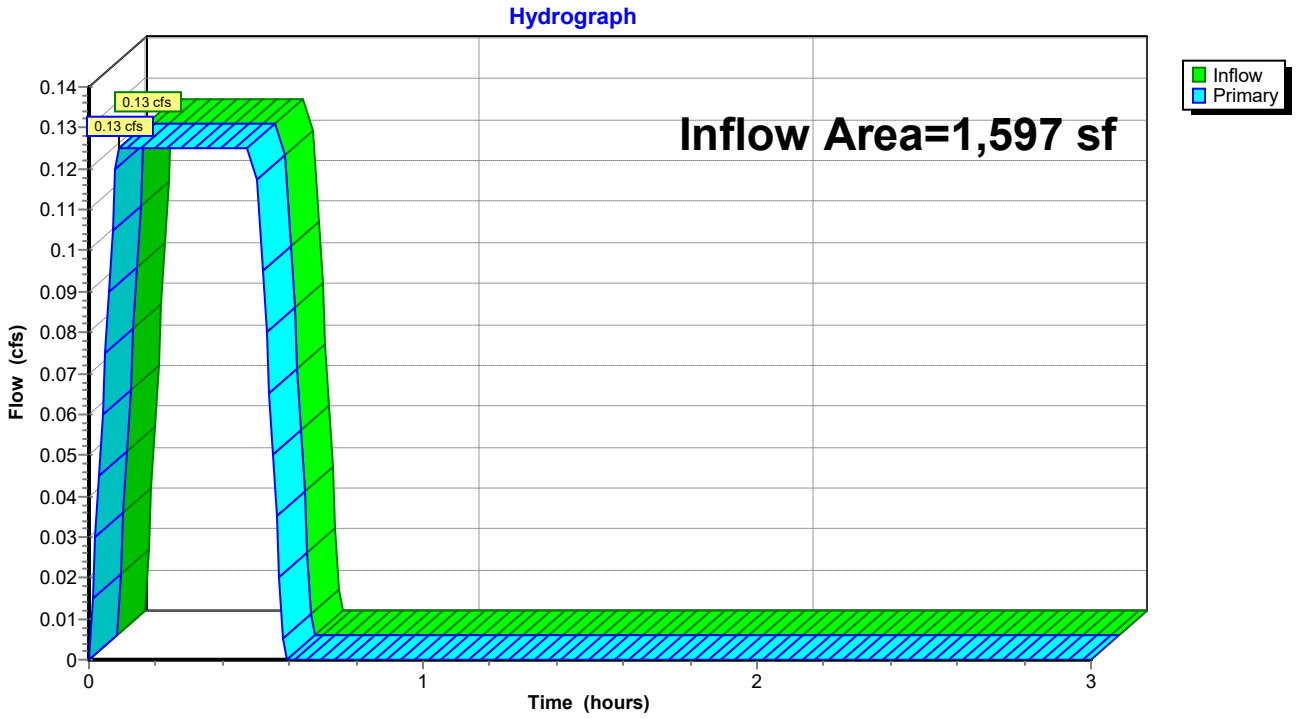


## Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.69" for 10-yr event
Inflow = 0.13 cfs @ 0.09 hrs, Volume= 225 cf
Primary = 0.13 cfs @ 0.09 hrs, Volume= 225 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D1: CI - D1

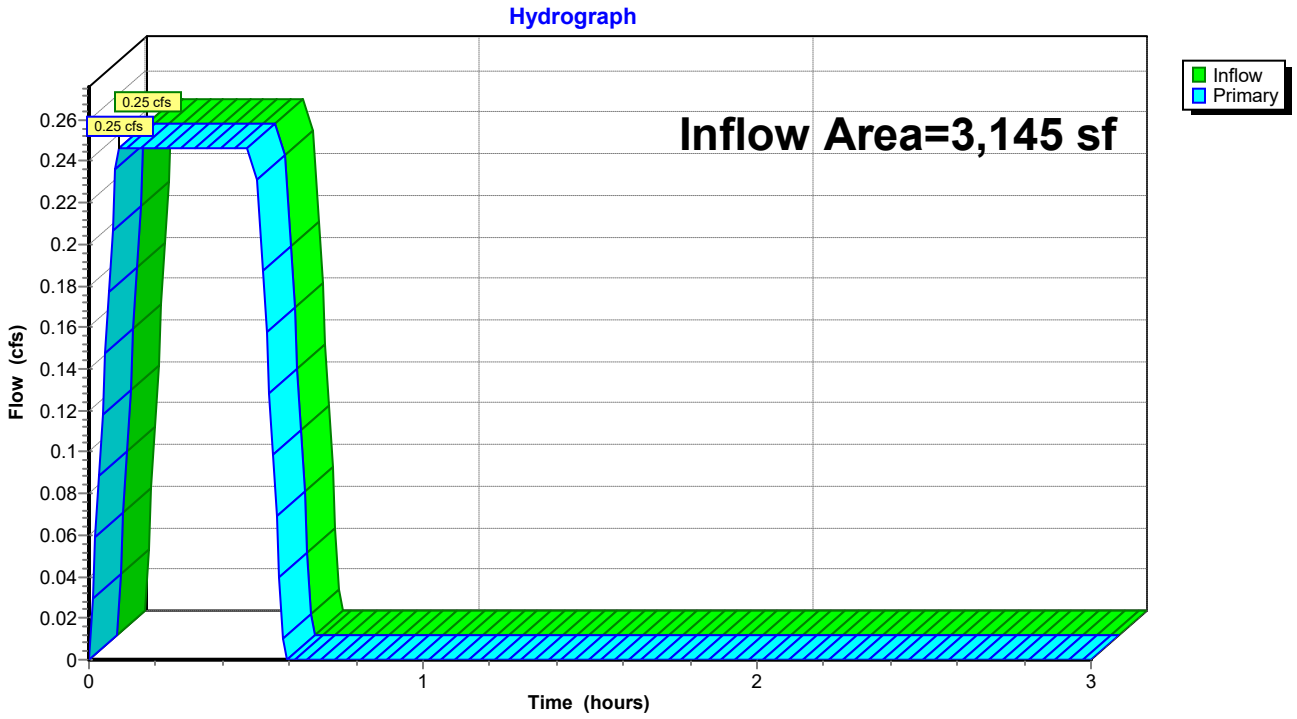


## Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.69" for 10-yr event
Inflow = 0.25 cfs @ 0.09 hrs, Volume= 443 cf
Primary = 0.25 cfs @ 0.09 hrs, Volume= 443 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D2: CI - D2

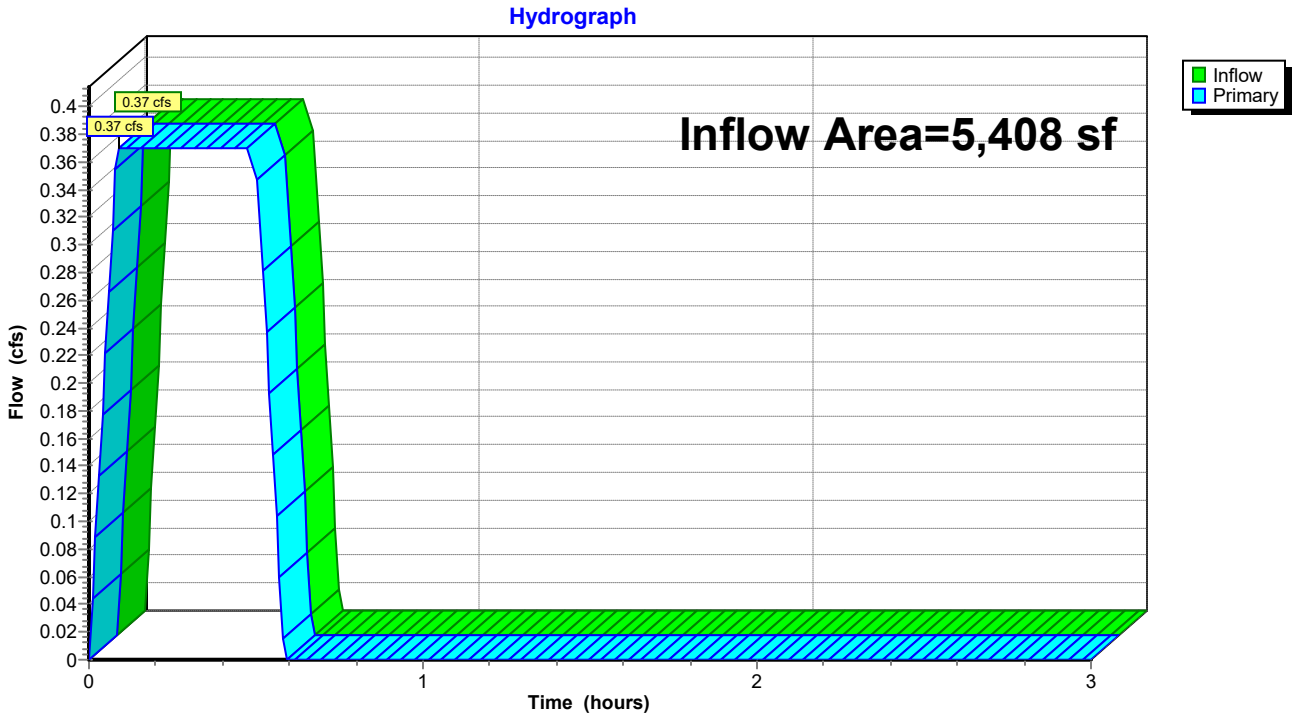


## Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.48" for 10-yr event
Inflow = 0.37 cfs @ 0.09 hrs, Volume= 666 cf
Primary = 0.37 cfs @ 0.09 hrs, Volume= 666 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E1: CI - E1

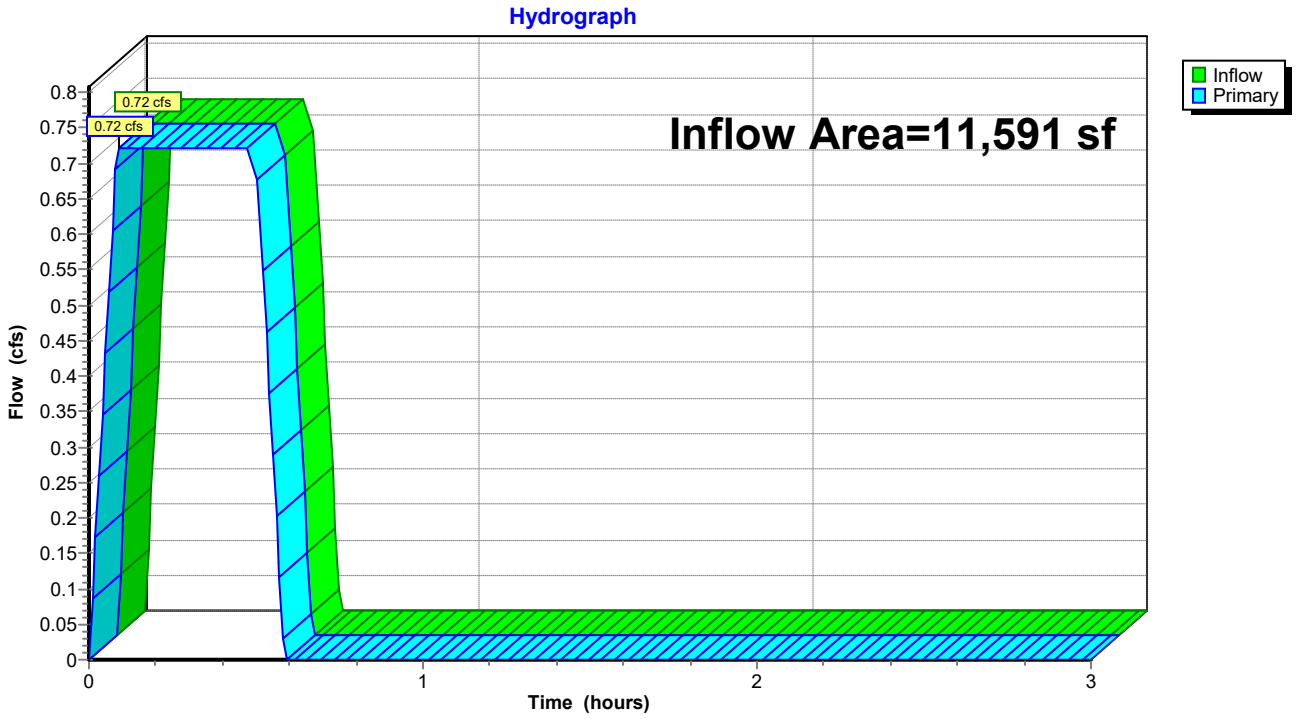


## Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.34" for 10-yr event
Inflow = 0.72 cfs @ 0.09 hrs, Volume= 1,299 cf
Primary = 0.72 cfs @ 0.09 hrs, Volume= 1,299 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E2: CI - E2



## Summary for Pond DP: Existing North Detention Pond

Inflow Area = 321,792 sf, 58.73% Impervious, Inflow Depth = 1.29" for 10-yr event
Inflow = 19.16 cfs @ 0.27 hrs, Volume= 34,489 cf
Outflow = 11.25 cfs @ 0.54 hrs, Volume= 34,489 cf, Atten= 41%, Lag= 16.3 min
Primary = 11.25 cfs @ 0.54 hrs, Volume= 34,489 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 383.06' @ 0.54 hrs Storage= 18,315 cf

Plug-Flow detention time= 20.2 min calculated for 34,489 cf (100% of inflow)
Center-of-Mass det. time= 20.1 min ( 38.6 - 18.5 )

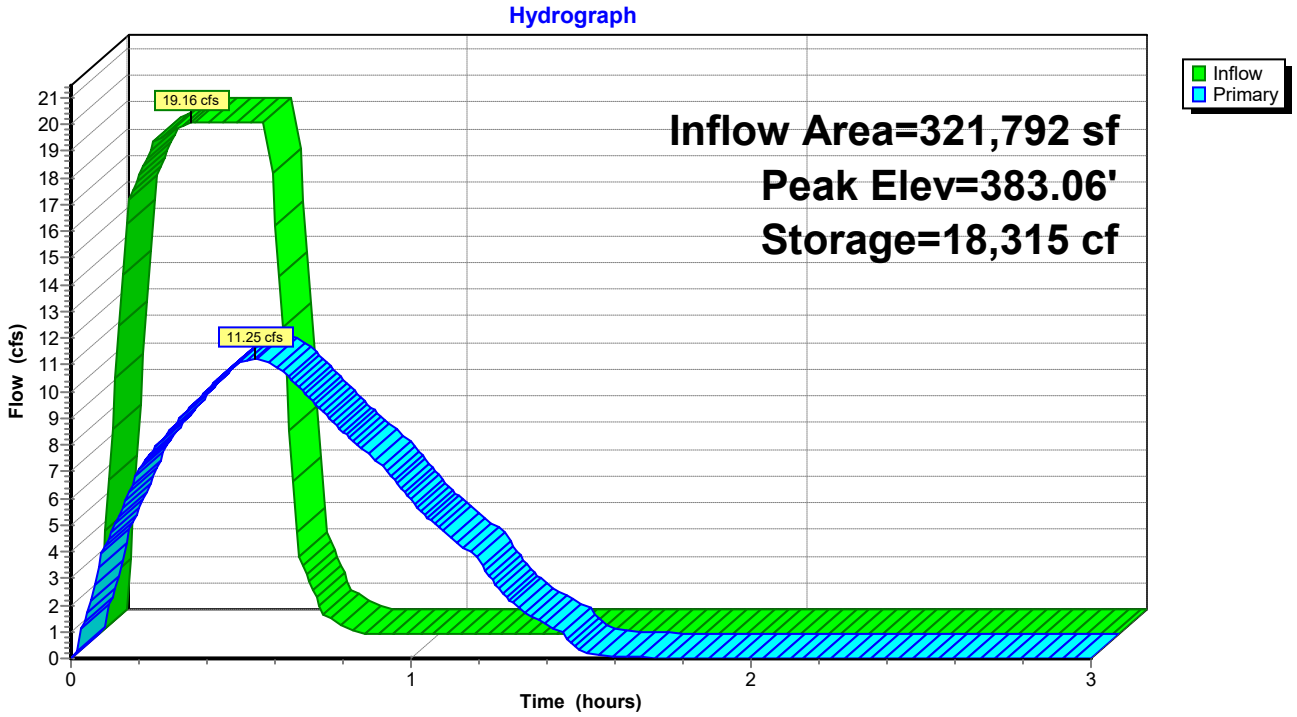
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 381.17' | 72,742 cf | **Custom Stage Data** Listed below |

| Elevation (feet) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|
| 381.17 | 0 | 0 |
| 381.50 | 200 | 200 |
| 382.00 | 1,825 | 2,025 |
| 382.50 | 5,265 | 7,290 |
| 383.00 | 9,300 | 16,590 |
| 383.50 | 13,733 | 30,323 |
| 384.00 | 18,578 | 48,901 |
| 384.50 | 23,841 | 72,742 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 384.16' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #2 | Primary | 381.17' | **1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=11.25 cfs @ 0.54 hrs HW=383.06' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 11.25 cfs @ 4.50 fps)

## Pond DP: Existing North Detention Pond

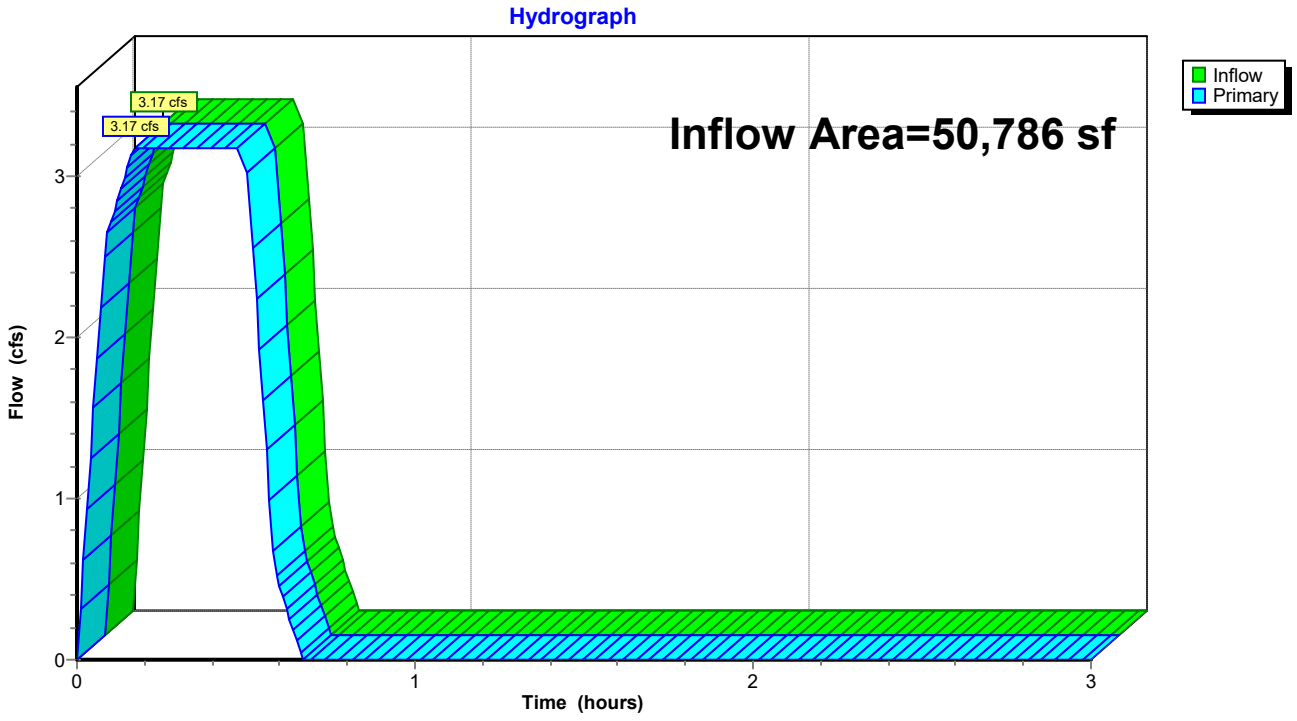


## Summary for Pond JB-A2: JB - A2

Inflow Area = 50,786 sf, 65.23% Impervious, Inflow Depth = 1.35" for 10-yr event
Inflow = 3.17 cfs @ 0.17 hrs, Volume= 5,707 cf
Primary = 3.17 cfs @ 0.17 hrs, Volume= 5,707 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond JB-A2: JB - A2

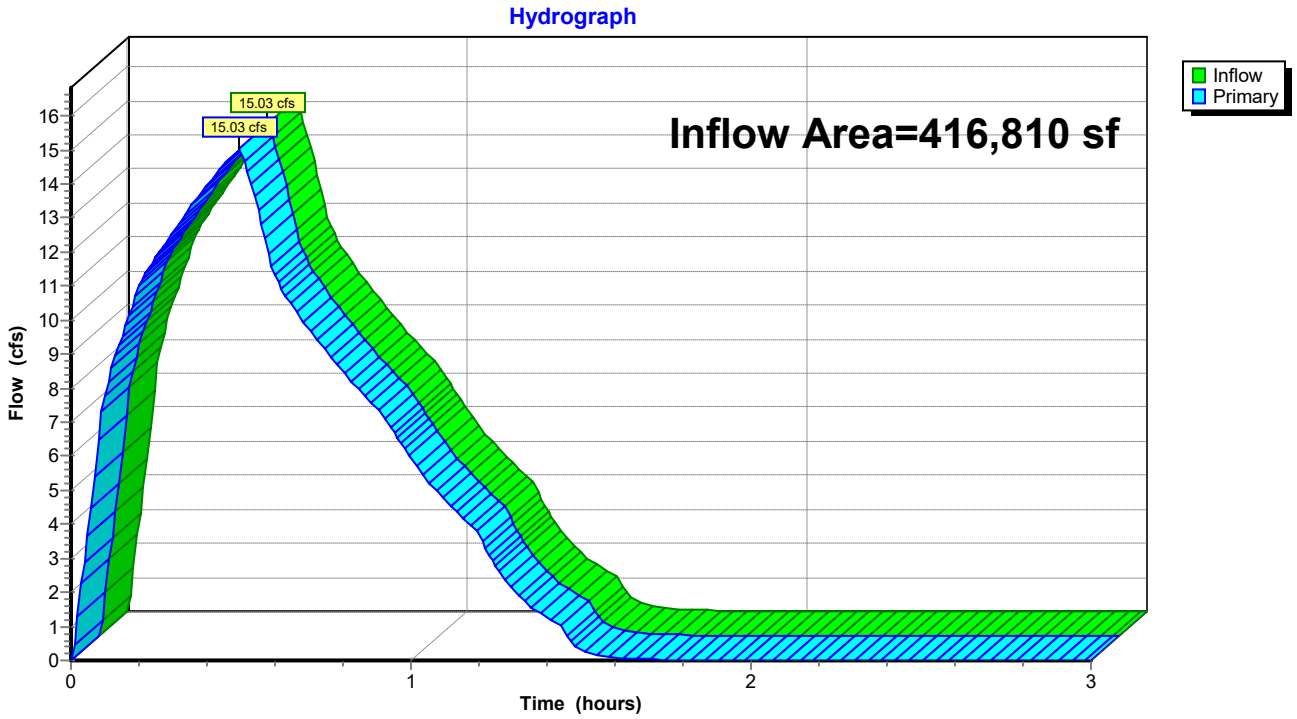


## Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 416,810 sf, 49.40% Impervious, Inflow Depth = 1.20" for 10-yr event
Inflow = 15.03 cfs @ 0.50 hrs, Volume= 41,527 cf
Primary = 15.03 cfs @ 0.50 hrs, Volume= 41,527 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

## Link FINAL: APPROX DISCHARGE



## Summary for Subcatchment B1: Drainage Basin B1

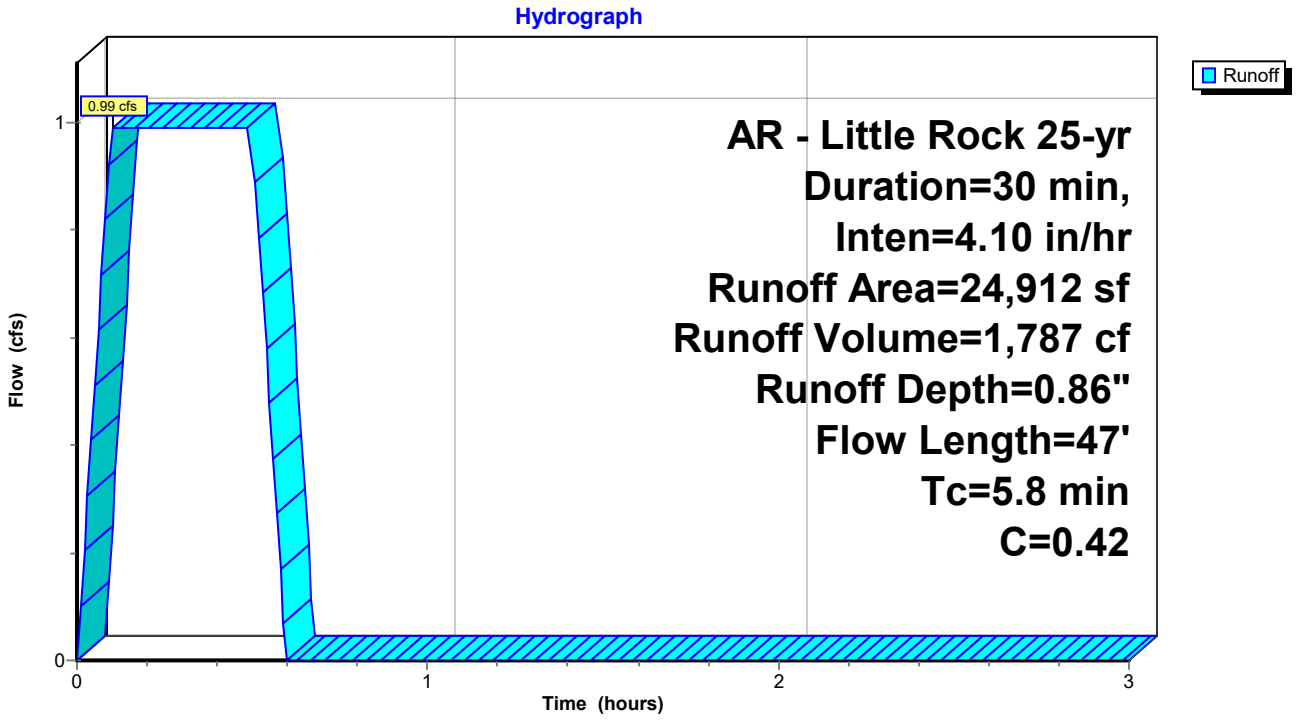
Runoff = 0.99 cfs @ 0.10 hrs, Volume= 1,787 cf, Depth= 0.86"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,091 | 0.40 | Sod Yard |
| 821 | 0.95 | Paving, Sidewalks |
| 24,912 | 0.42 | Weighted Average |
| 24,091 | | 96.70% Pervious Area |
| 821 | | 3.30% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.3 | 9 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 38 | 0.2040 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 5.8 | 47 | Total | | | |

## Subcatchment B1: Drainage Basin B1



## Summary for Subcatchment B2: Drainage Basin B2

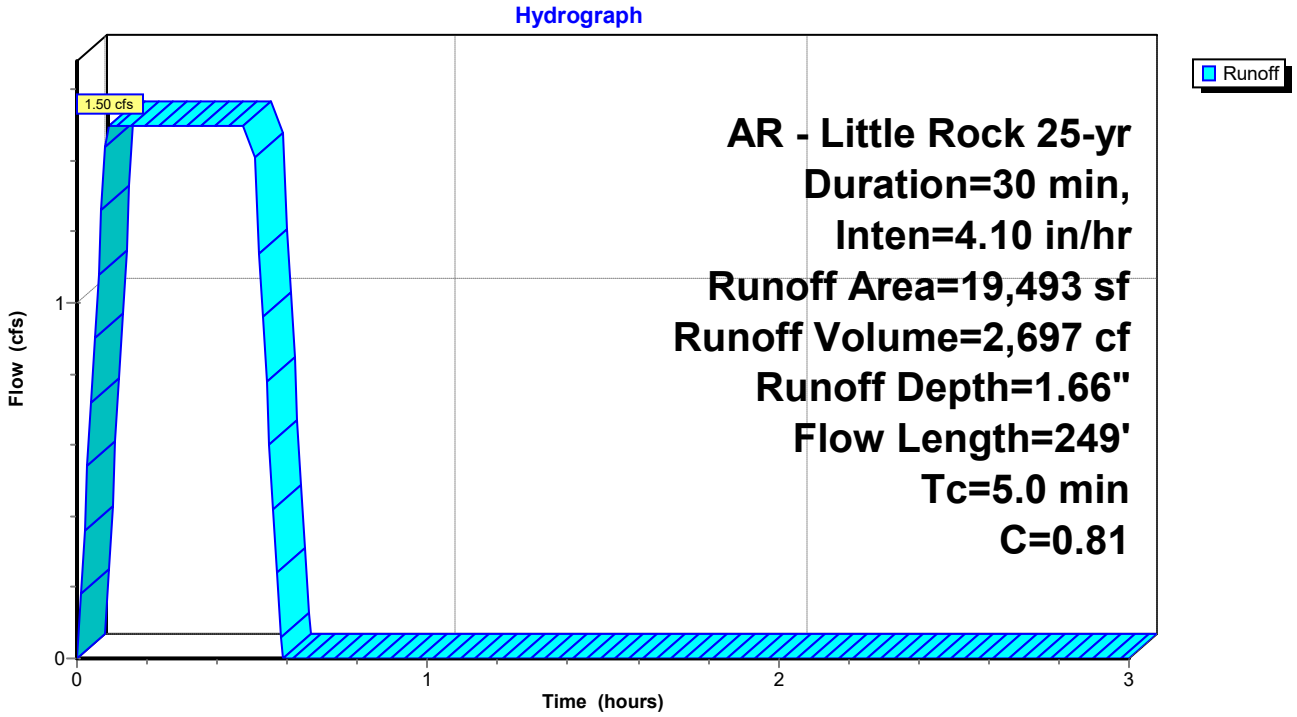
Runoff = 1.50 cfs @ 0.09 hrs, Volume= 2,697 cf, Depth= 1.66"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,903 | 0.40 | Sod Yard |
| 14,590 | 0.95 | Paving, Sidewalks |
| 19,493 | 0.81 | Weighted Average |
| 4,903 | | 25.15% Pervious Area |
| 14,590 | | 74.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 28 | 0.0450 | 1.69 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 72 | 0.0250 | 3.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 51 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 16 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 8 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 7 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 3.2 | | | | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 249 | Total | | | |

## Subcatchment B2: Drainage Basin B2



## Summary for Subcatchment B3: Drainage Basin B3

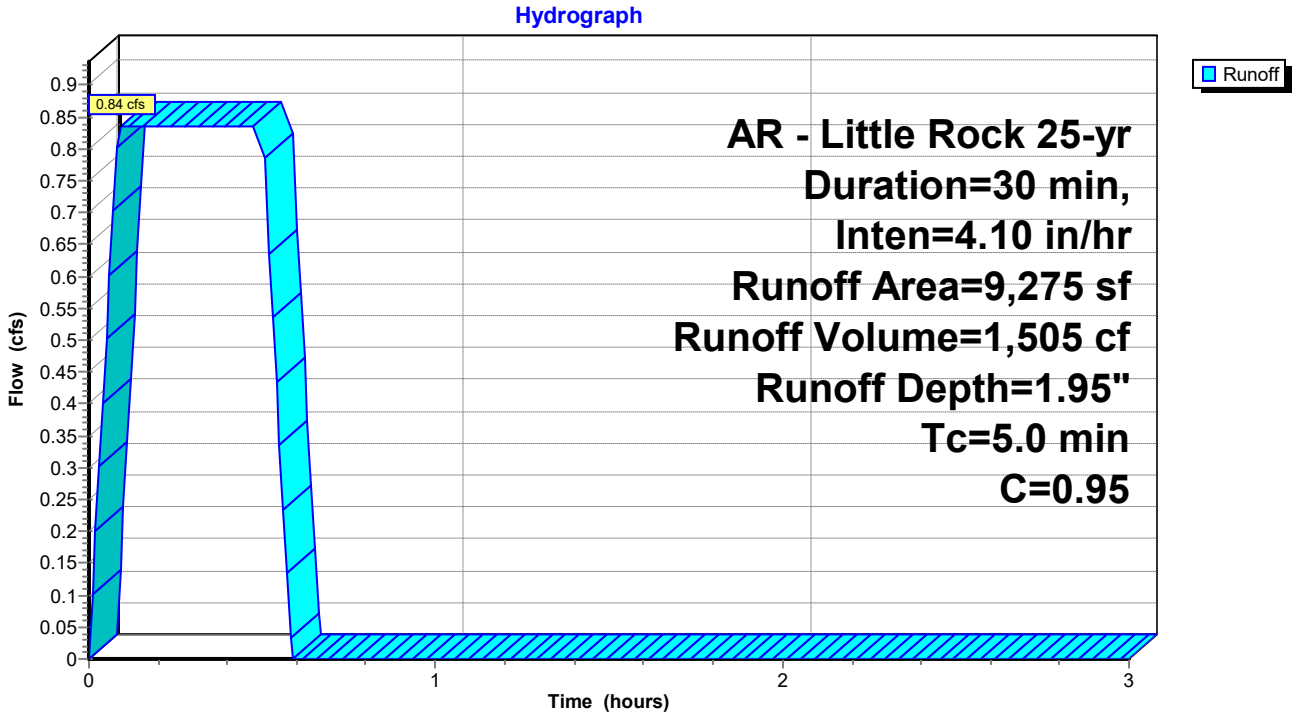
Runoff = 0.84 cfs @ 0.09 hrs, Volume= 1,505 cf, Depth= 1.95"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 9,275 | 0.95 | Roof |
| 9,275 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | | | | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment B3: Drainage Basin B3



## Summary for Subcatchment B4: Drainage Basin B4

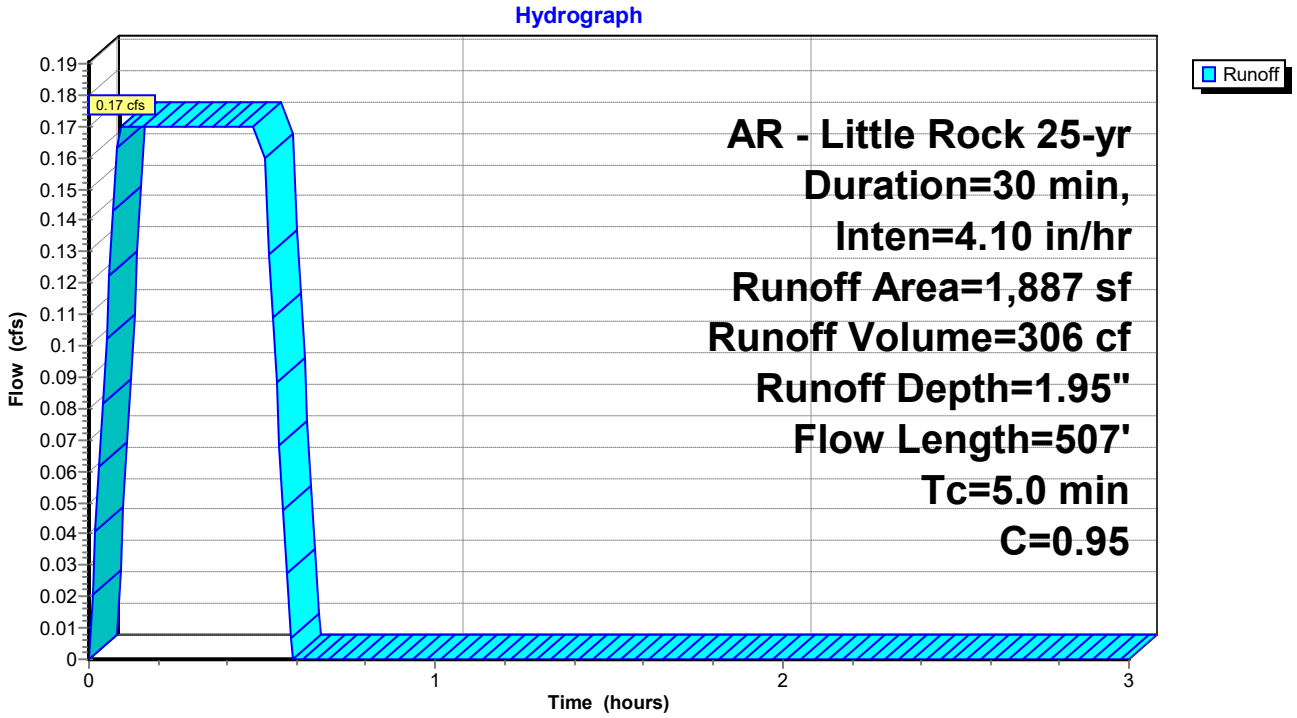
Runoff = 0.17 cfs @ 0.09 hrs, Volume= 306 cf, Depth= 1.95"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,887 | 0.95 | Paving, Sidewalks |
| 1,887 | 0.95 | Weighted Average |
| 1,887 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 30 | 0.0240 | 1.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 13 | 0.0860 | 5.95 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 507 | Total | | | |

## Subcatchment B4: Drainage Basin B4



## Summary for Subcatchment B5: Drainage Basin B5

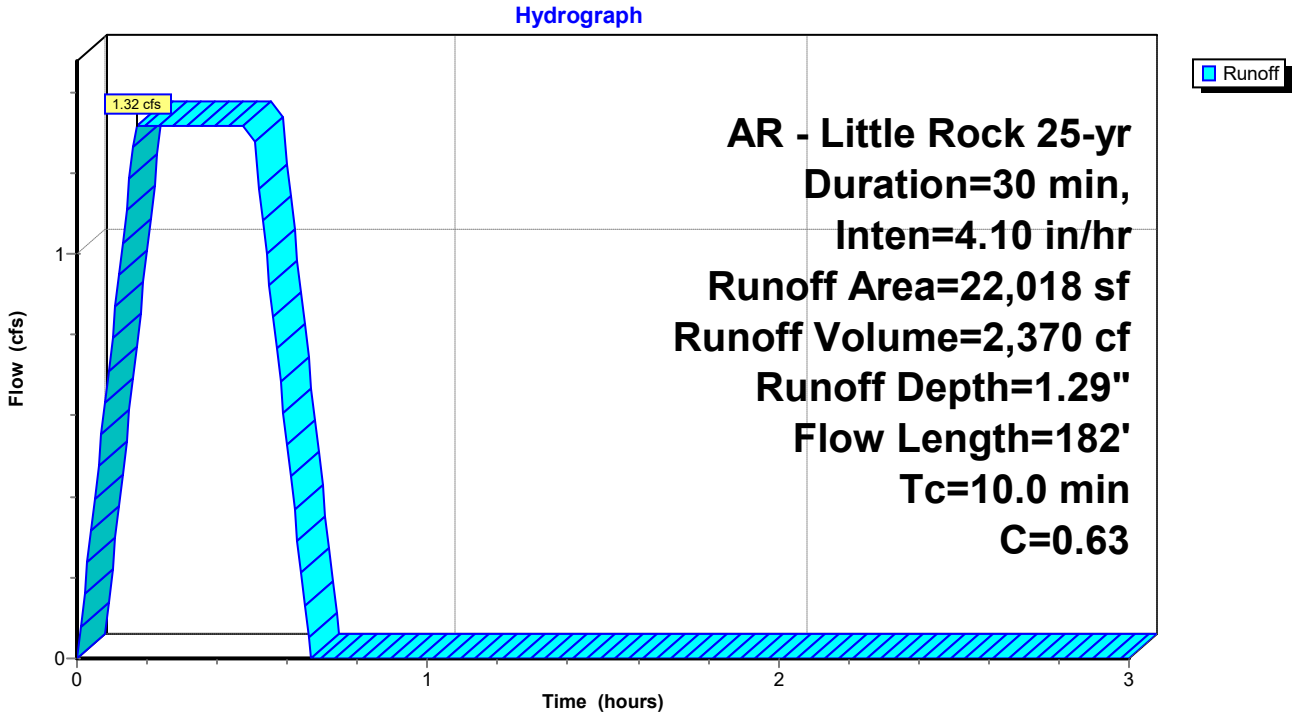
Runoff = 1.32 cfs @ 0.17 hrs, Volume= 2,370 cf, Depth= 1.29"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,753 | 0.40 | Sod Yard |
| 9,265 | 0.95 | Paving, Sidewalks |
| 22,018 | 0.63 | Weighted Average |
| 12,753 | | 57.92% Pervious Area |
| 9,265 | | 42.08% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.2 | 10 | 0.0150 | 0.89 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 9.1 | 93 | 0.0150 | 0.17 | | **Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19" |
| 0.4 | 40 | 0.0110 | 1.57 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 33 | 0.0190 | 2.07 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 6 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 10.0 | 182 | Total | | | |

## Subcatchment B5: Drainage Basin B5



## Summary for Subcatchment B6: Drainage Basin B6

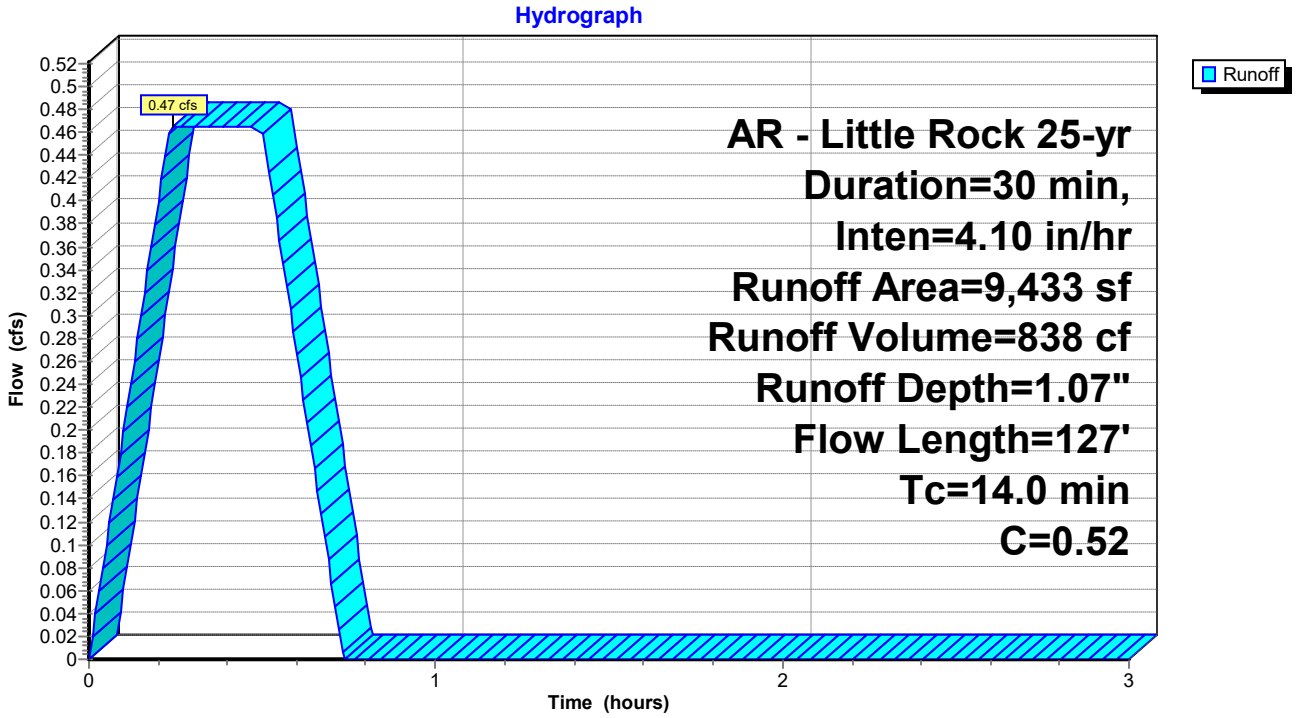
Runoff = 0.47 cfs @ 0.24 hrs, Volume= 838 cf, Depth= 1.07"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,346 | 0.40 | Sod Yard |
| 2,087 | 0.95 | Paving, Sidewalks |
| 9,433 | 0.52 | Weighted Average |
| 7,346 | | 77.88% Pervious Area |
| 2,087 | | 22.12% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 10.4 | 79 | 0.0570 | 0.13 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 21 | 0.0620 | 0.10 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.0 | 9 | 0.0620 | 3.73 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 18 | 0.1080 | 4.93 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 14.0 | 127 | Total | | | |

## Subcatchment B6: Drainage Basin B6



## Summary for Subcatchment C1: Drainage Basin C1

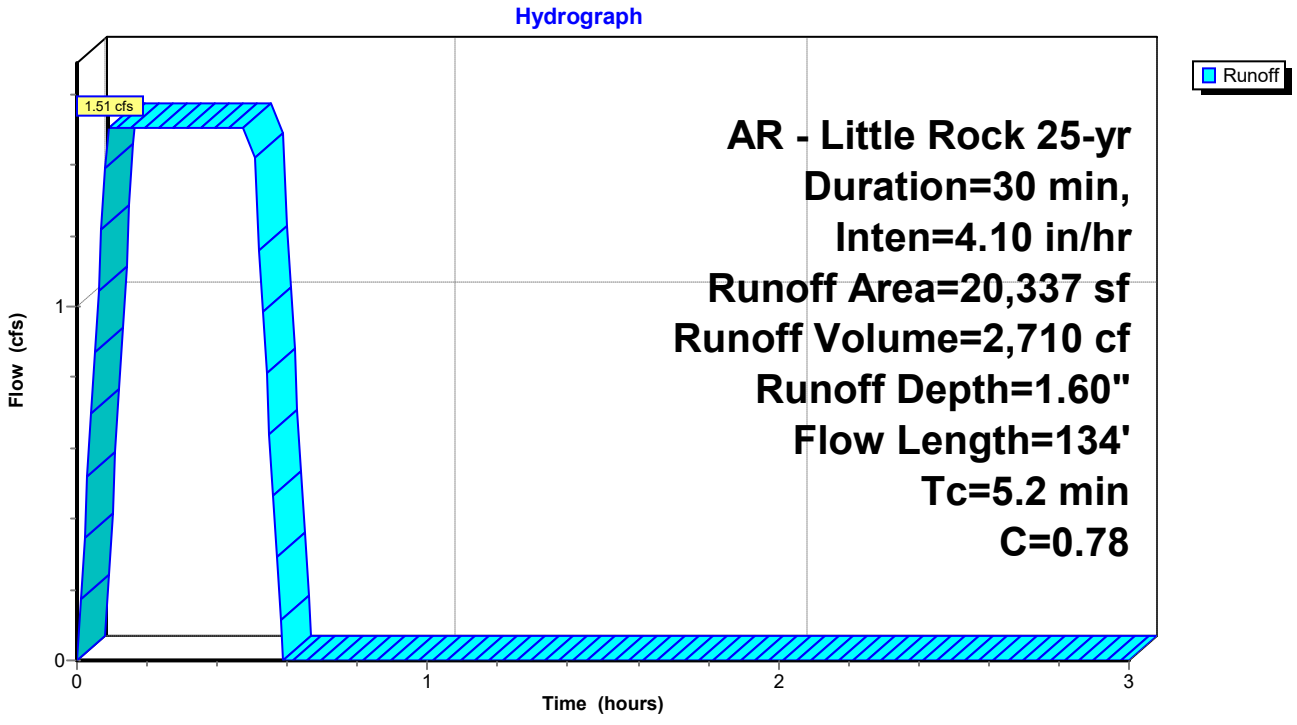
Runoff = 1.51 cfs @ 0.09 hrs, Volume= 2,710 cf, Depth= 1.60"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,135 | 0.40 | Sod Yard |
| 14,202 | 0.95 | Paving, Sidewalks |
| 20,337 | 0.78 | Weighted Average |
| 6,135 | | 30.17% Pervious Area |
| 14,202 | | 69.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 32 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.4 | 102 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 5.2 | 134 | Total | | | |

### Subcatchment C1: Drainage Basin C1



## Summary for Subcatchment C10: Drainage Basin C10

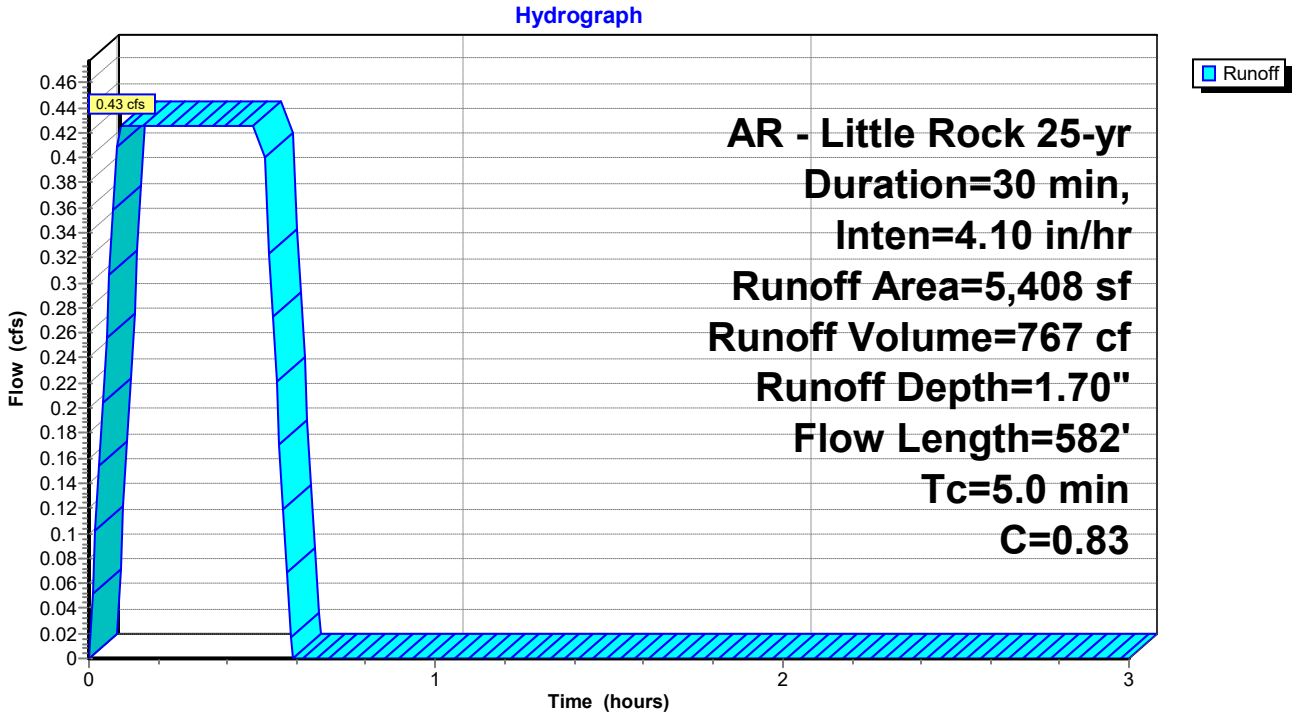
Runoff = 0.43 cfs @ 0.09 hrs, Volume= 767 cf, Depth= 1.70"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,225 | 0.40 | Sod Yard |
| 4,183 | 0.95 | Paving, Sidewalks |
| 5,408 | 0.83 | Weighted Average |
| 1,225 | | 22.65% Pervious Area |
| 4,183 | | 77.35% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 29 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 36 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 48 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 13 | 0.0350 | 3.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.9 | 415 | | 1.77 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 582 | Total | | | |

## Subcatchment C10: Drainage Basin C10



## Summary for Subcatchment C11: Drainage Basin C11

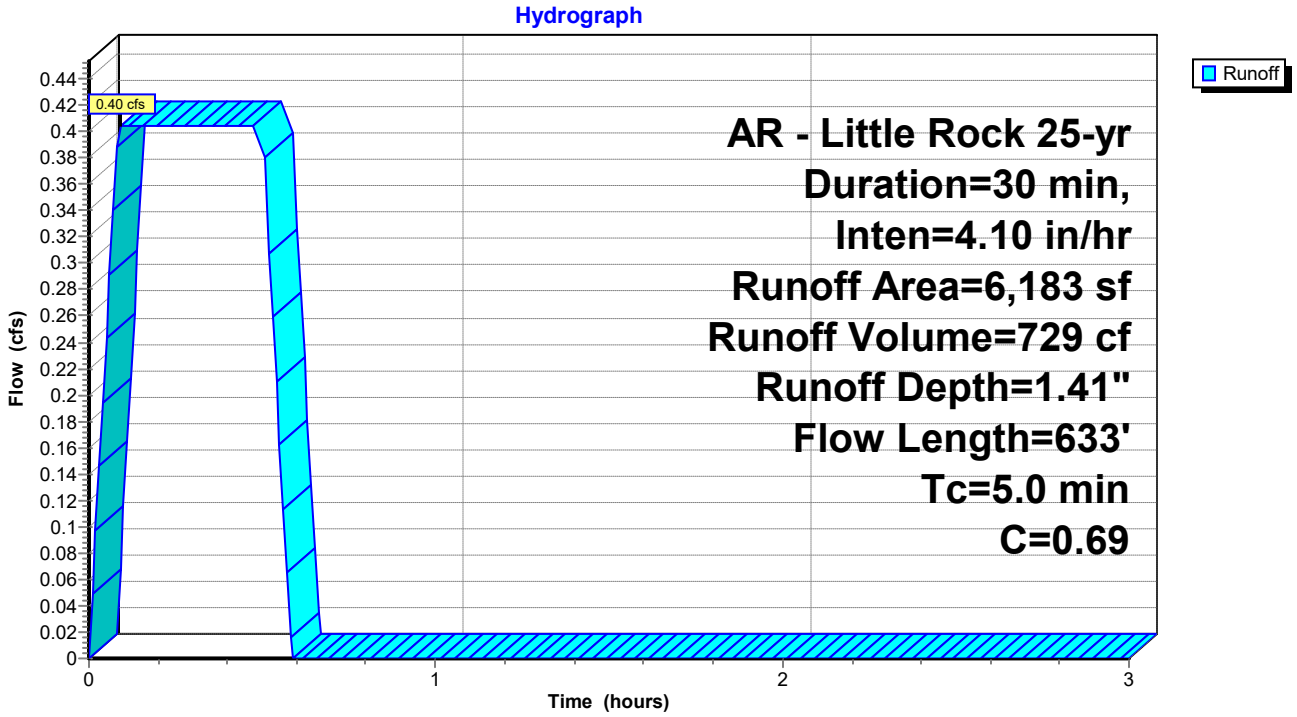
Runoff = 0.40 cfs @ 0.09 hrs, Volume= 729 cf, Depth= 1.41"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,876 | 0.40 | Sod Yard |
| 3,307 | 0.95 | Paving, Sidewalks |
| 6,183 | 0.69 | Weighted Average |
| 2,876 | | 46.51% Pervious Area |
| 3,307 | | 53.49% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 25 | 0.0200 | 1.19 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 33 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 37 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 633 | Total | | | |

## Subcatchment C11: Drainage Basin C11



## Summary for Subcatchment C12: Drainage Basin C12

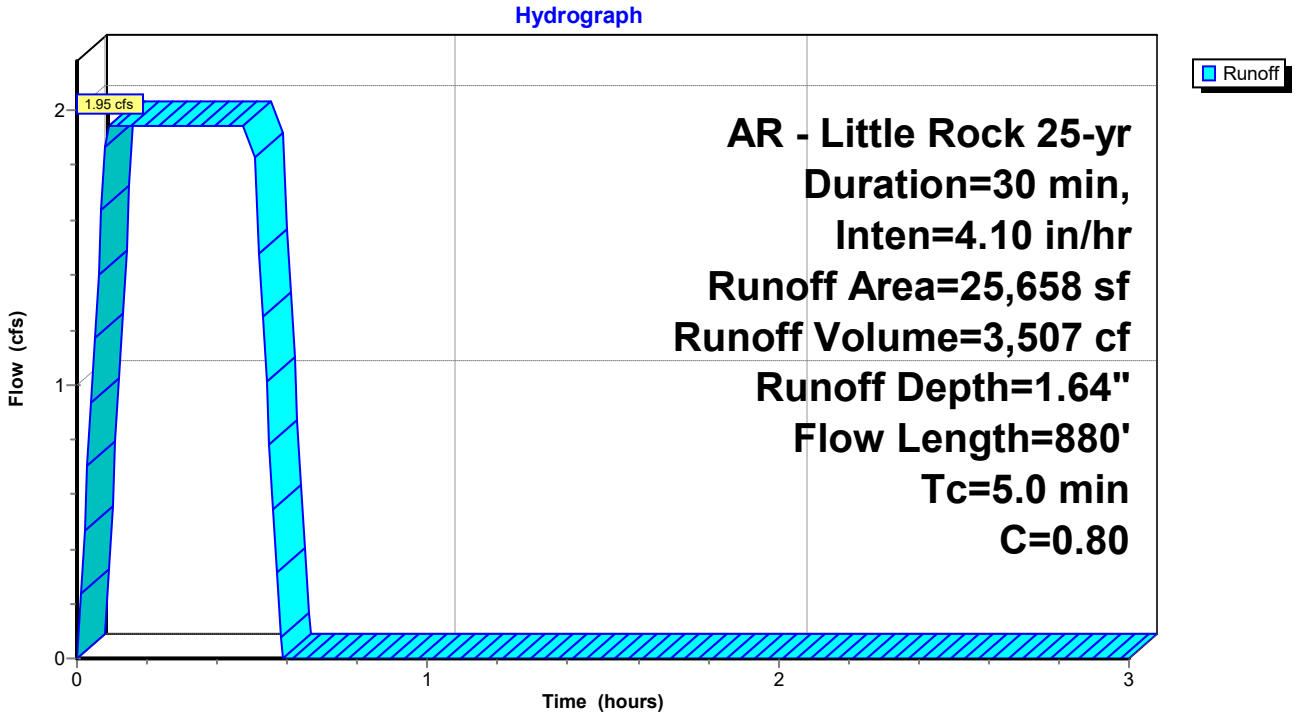
Runoff = 1.95 cfs @ 0.09 hrs, Volume= 3,507 cf, Depth= 1.64"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,218 | 0.40 | Sod Yard |
| 18,440 | 0.95 | Paving, Sidewalks |
| 25,658 | 0.80 | Weighted Average |
| 7,218 | | 28.13% Pervious Area |
| 18,440 | | 71.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 24 | 0.0360 | 1.50 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0190 | 0.85 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 21 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.9 | 49 | 0.0020 | 0.91 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.4 | 96 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 94 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 25 | 0.0450 | 4.31 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 39 | 0.0490 | 4.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0460 | 4.35 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 11 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0440 | 4.26 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.3 | 415 | | 3.01 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 880 | Total | | | |

## Subcatchment C12: Drainage Basin C12



## Summary for Subcatchment C13: Drainage Basin C13

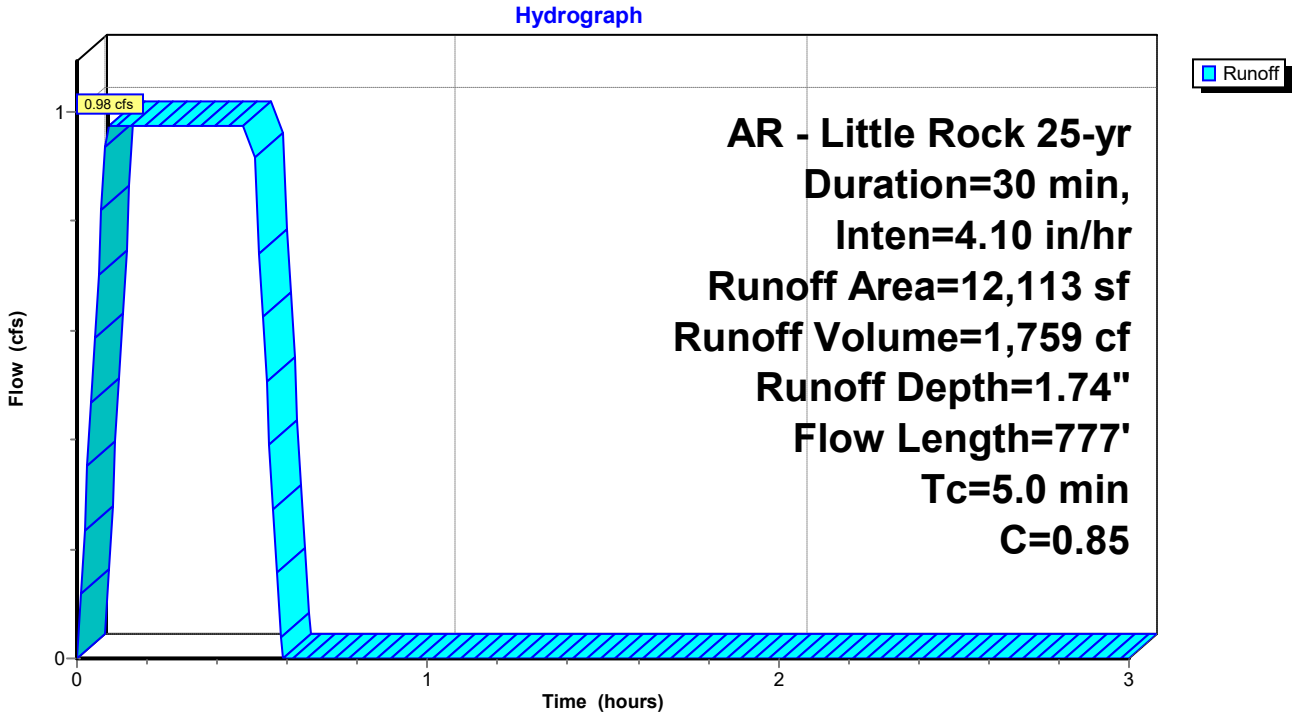
Runoff = 0.98 cfs @ 0.09 hrs, Volume= 1,759 cf, Depth= 1.74"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,240 | 0.40 | Sod Yard |
| 9,873 | 0.95 | Paving, Sidewalks |
| 12,113 | 0.85 | Weighted Average |
| 2,240 | | 18.49% Pervious Area |
| 9,873 | | 81.51% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 75 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 42 | 0.0730 | 5.48 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 74 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 32 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 3.6 | 415 | | 1.92 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 777 | Total | | | |

## Subcatchment C13: Drainage Basin C13



## Summary for Subcatchment C14: Drainage Basin C14

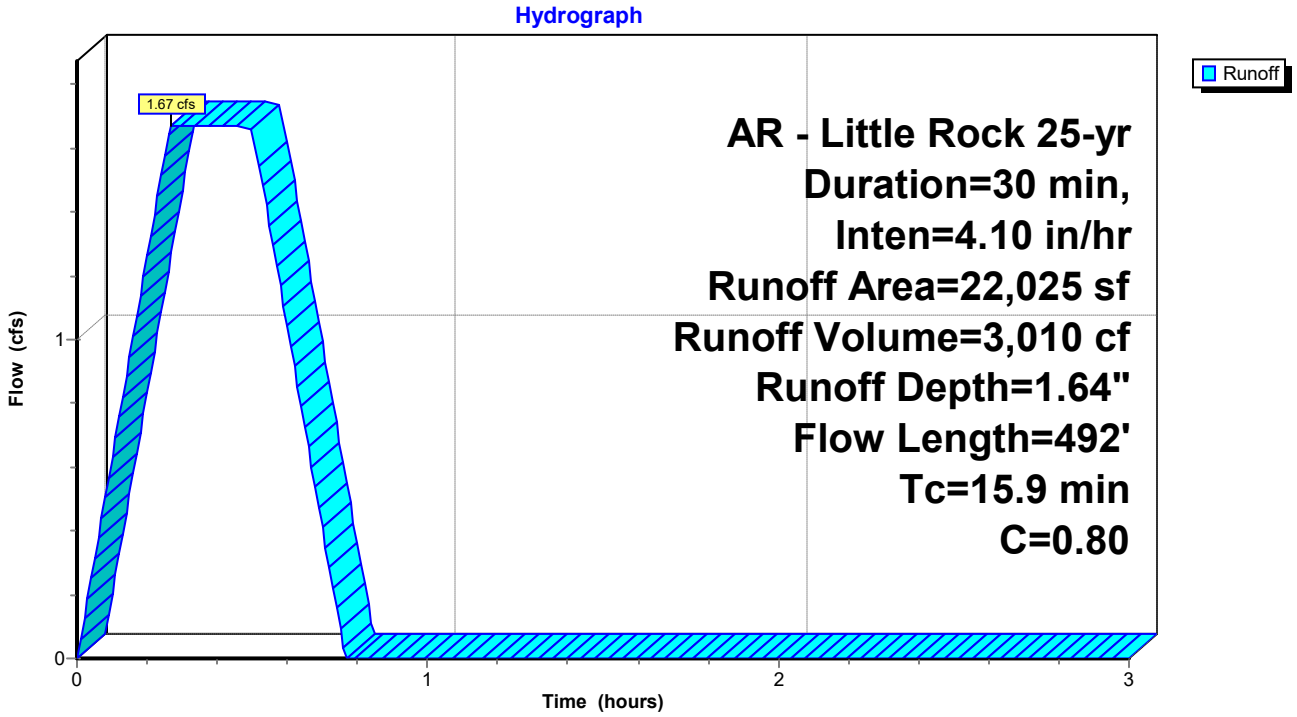
Runoff = 1.67 cfs @ 0.27 hrs, Volume= 3,010 cf, Depth= 1.64"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,127 | 0.40 | Sod Yard |
| 15,898 | 0.95 | Paving, Sidewalks |
| 22,025 | 0.80 | Weighted Average |
| 6,127 | | 27.82% Pervious Area |
| 15,898 | | 72.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.5 | 5 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 9.2 | 45 | 0.0250 | 0.08 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.8 | 41 | 0.1940 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 6 | 0.0100 | 0.68 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 51 | 0.0870 | 5.99 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0310 | 3.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 20 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 34 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 58 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 49 | 0.0840 | 5.88 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 15.9 | 492 | Total | | | |

## Subcatchment C14: Drainage Basin C14



## Summary for Subcatchment C15: Drainage Basin C15

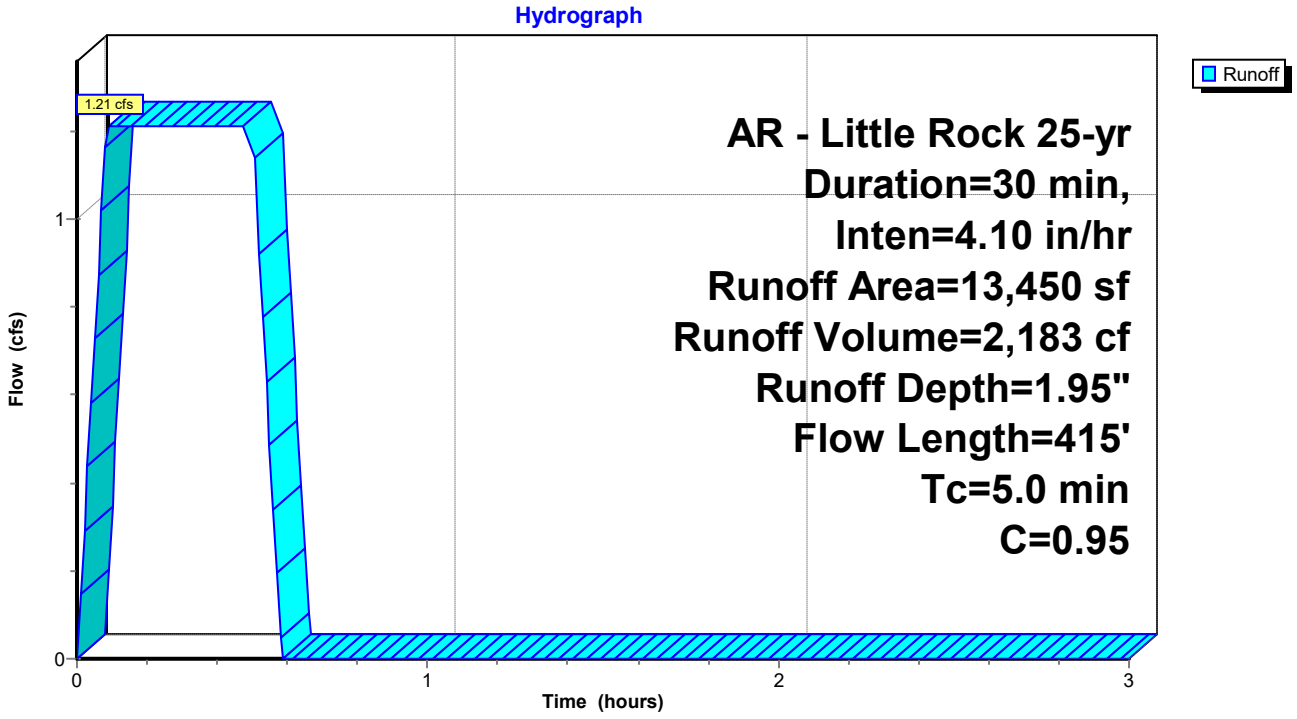
Runoff = 1.21 cfs @ 0.09 hrs, Volume= 2,183 cf, Depth= 1.95"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 13,450 | 0.95 | Paving, Sidewalks |
| 13,450 | 0.95 | Weighted Average |
| 13,450 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Overland Concentrated Flow (Min)** |

### Subcatchment C15: Drainage Basin C15



## Summary for Subcatchment C16: Drainage Basin C16

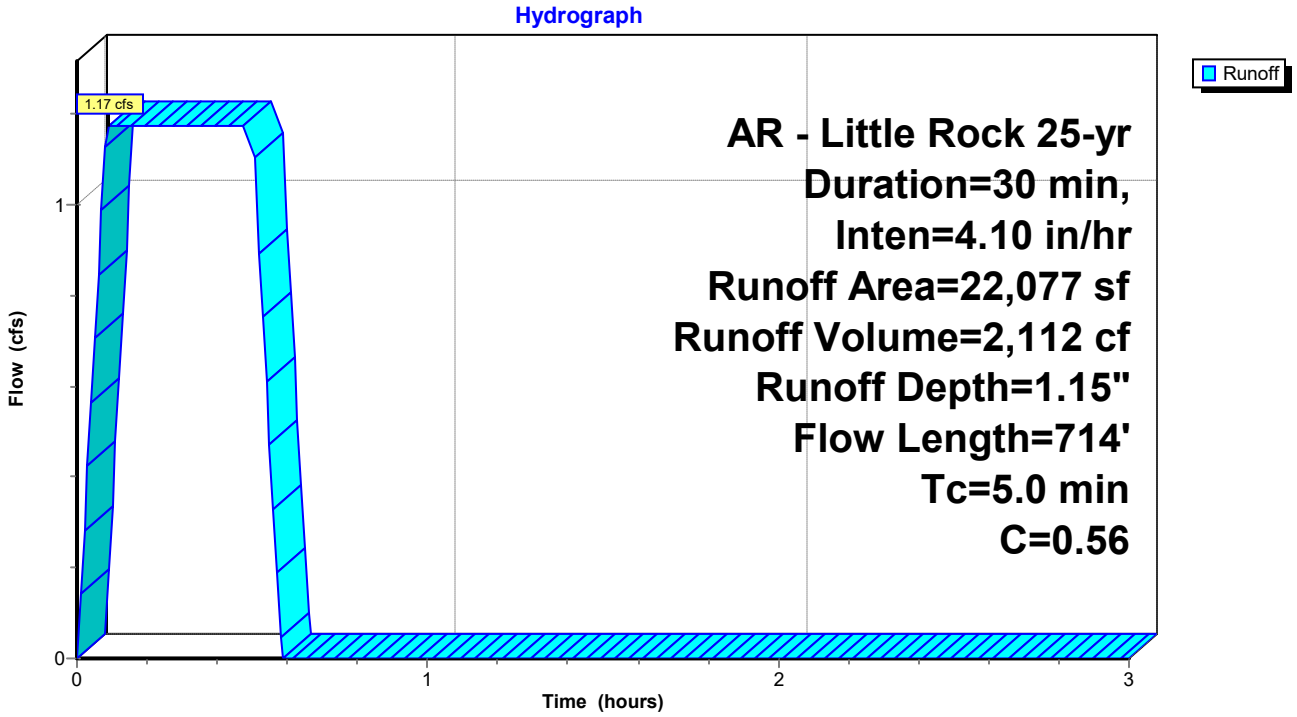
Runoff = 1.17 cfs @ 0.09 hrs, Volume= 2,112 cf, Depth= 1.15"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,465 | 0.40 | Sod Yard |
| 6,612 | 0.95 | Paving, Sidewalks |
| 22,077 | 0.56 | Weighted Average |
| 15,465 | | 70.05% Pervious Area |
| 6,612 | | 29.95% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 26 | 0.0190 | 1.18 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0100 | 0.66 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 51 | 0.0500 | 1.98 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 12 | 0.1540 | 2.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 50 | 0.1330 | 7.40 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 50 | 0.1170 | 6.94 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 59 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 3.3 | 415 | | 2.10 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 714 | Total | | | |

## Subcatchment C16: Drainage Basin C16



## Summary for Subcatchment C17: Drainage Basin C17

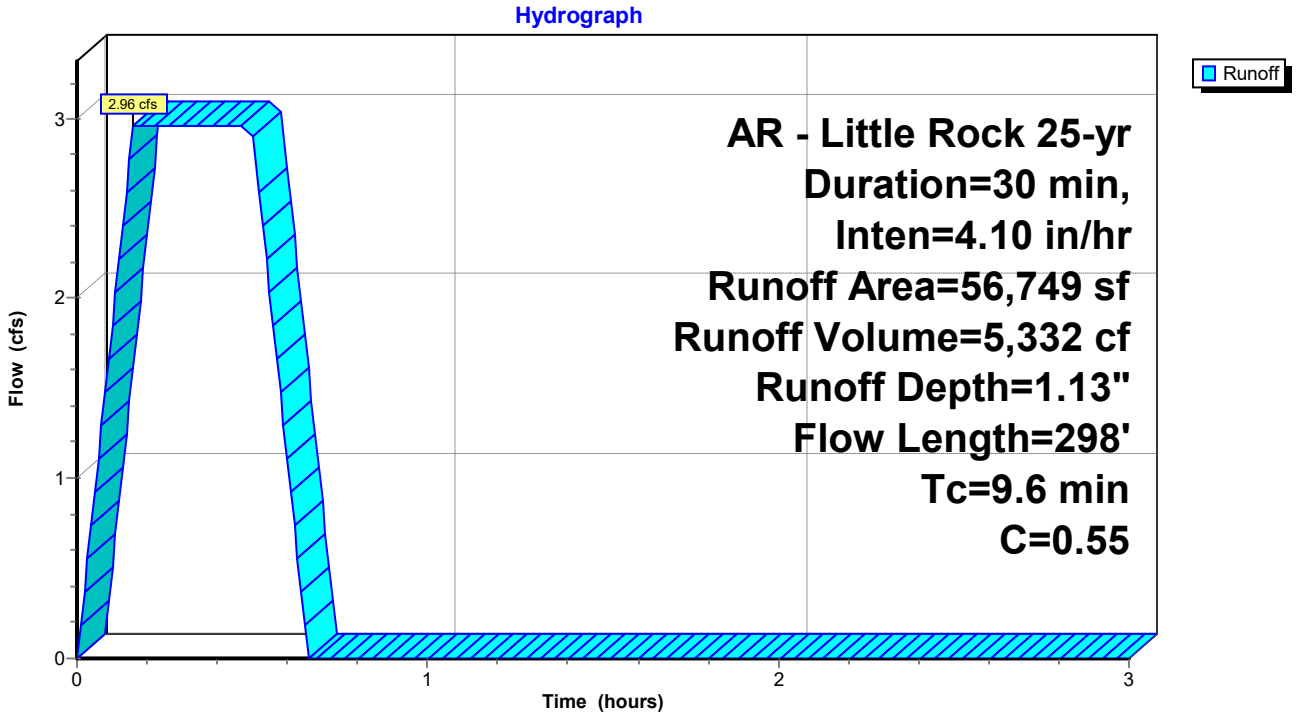
Runoff = 2.96 cfs @ 0.16 hrs, Volume= 5,332 cf, Depth= 1.13"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 40,914 | 0.40 | Sod Yard |
| 15,835 | 0.95 | Paving, Sidewalks |
| 56,749 | 0.55 | Weighted Average |
| 40,914 | | 72.10% Pervious Area |
| 15,835 | | 27.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 43 | 0.0410 | 0.15 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 3.9 | 43 | 0.0690 | 0.19 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 41 | 0.0980 | 4.70 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 61 | 0.0730 | 4.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0570 | 3.58 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 64 | 0.0450 | 3.18 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 9.6 | 298 | Total | | | |

## Subcatchment C17: Drainage Basin C17



## Summary for Subcatchment C18: Drainage Basin C18

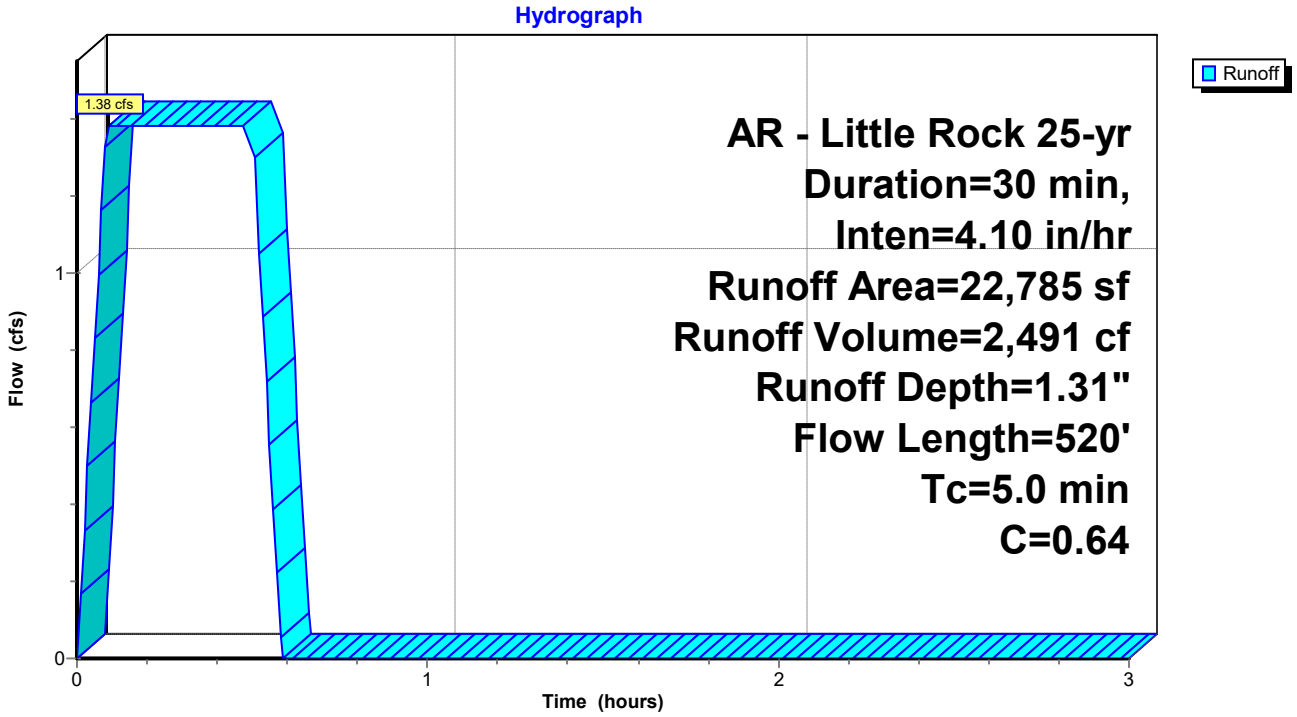
Runoff = 1.38 cfs @ 0.09 hrs, Volume= 2,491 cf, Depth= 1.31"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,812 | 0.40 | Sod Yard |
| 9,973 | 0.95 | Paving, Sidewalks |
| 22,785 | 0.64 | Weighted Average |
| 12,812 | | 56.23% Pervious Area |
| 9,973 | | 43.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2980 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.3 | 8 | 0.0100 | 0.04 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 80 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.4 | 415 | | 17.29 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 520 | Total | | | |

## Subcatchment C18: Drainage Basin C18



## Summary for Subcatchment C19: Drainage Basin C19

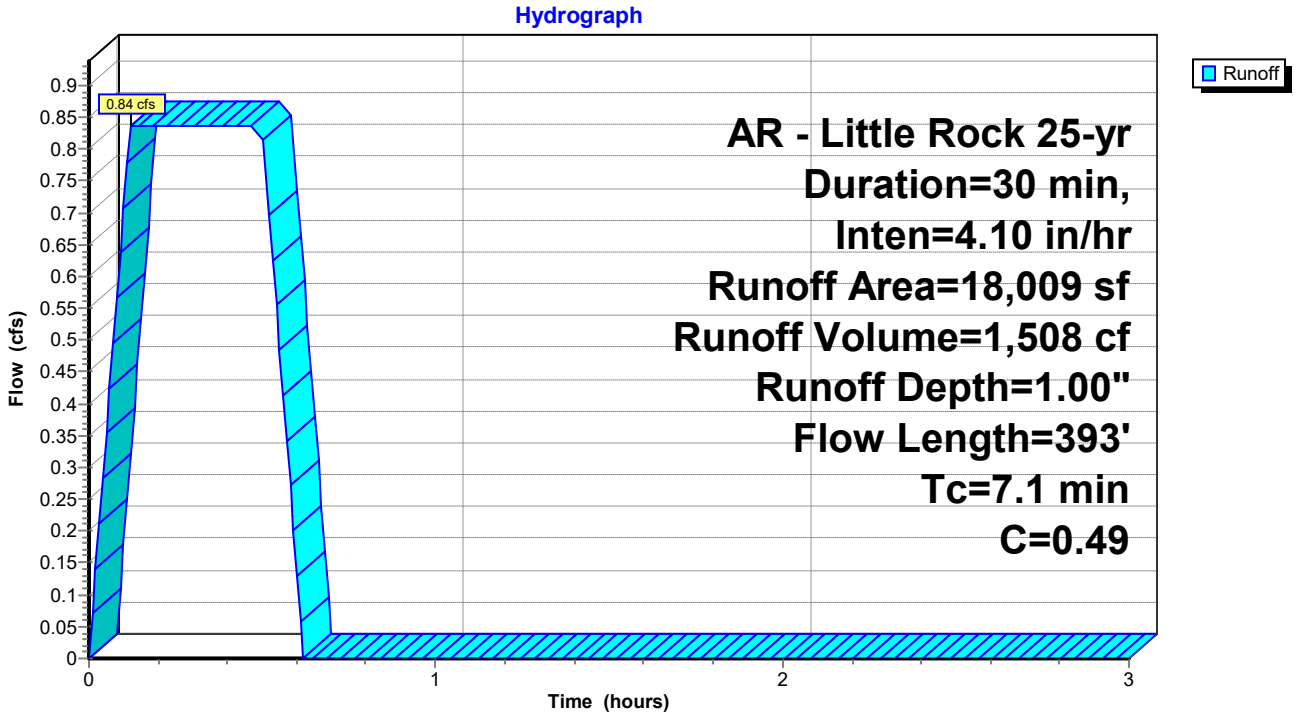
Runoff = 0.84 cfs @ 0.12 hrs, Volume= 1,508 cf, Depth= 1.00"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,129 | 0.40 | Sod Yard |
| 2,880 | 0.95 | Paving, Sidewalks |
| 18,009 | 0.49 | Weighted Average |
| 15,129 | | 84.01% Pervious Area |
| 2,880 | | 15.99% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 34 | 0.1110 | 0.21 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.3 | 66 | 0.2450 | 0.34 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.0 | 9 | 0.2450 | 7.42 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.5 | 106 | 0.0610 | 3.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0800 | 4.24 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 41 | 0.0960 | 4.65 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 66 | 0.0680 | 3.91 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 19 | 0.1070 | 6.64 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 7.1 | 393 | Total | | | |

## Subcatchment C19: Drainage Basin C19



## Summary for Subcatchment C2: Drainage Basin C2

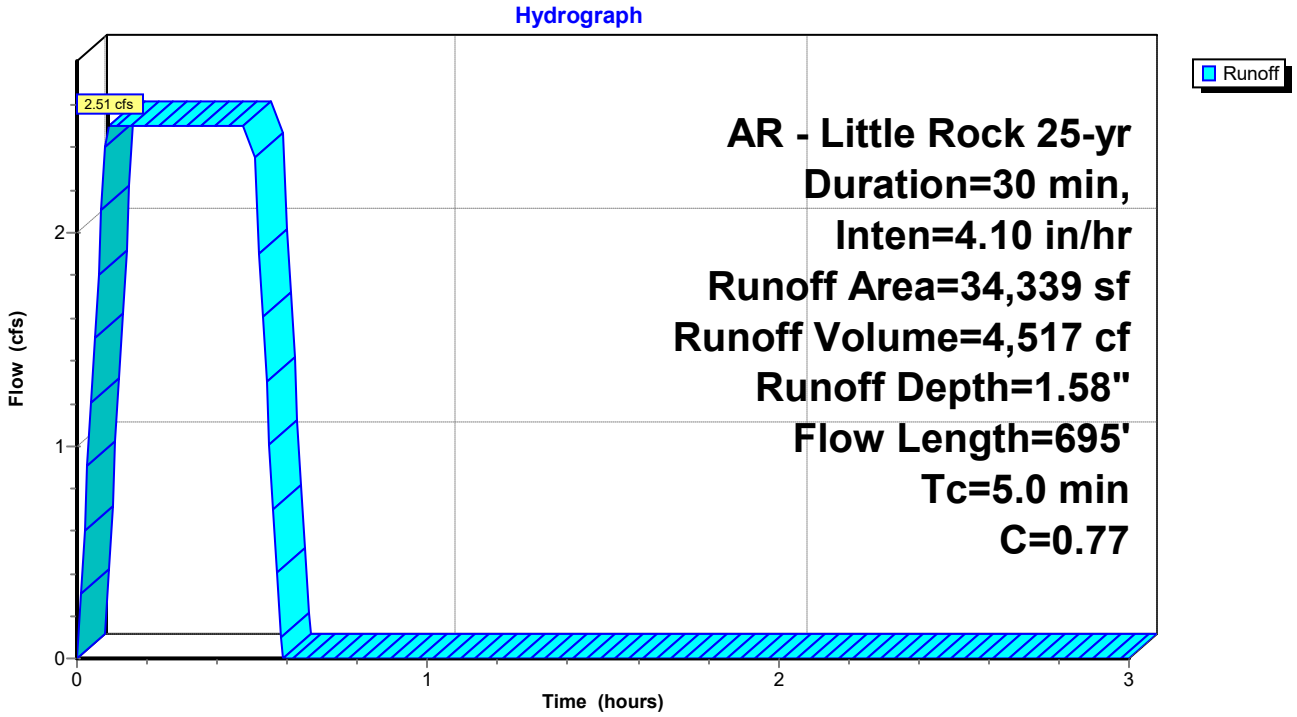
Runoff = 2.51 cfs @ 0.09 hrs, Volume= 4,517 cf, Depth= 1.58"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 11,376 | 0.40 | Sod Yard |
| 22,963 | 0.95 | Roof, Paving, Sidewalks |
| 34,339 | 0.77 | Weighted Average |
| 11,376 | | 33.13% Pervious Area |
| 22,963 | | 66.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 20 | 0.0200 | 1.14 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 74 | 0.0240 | 3.14 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 21 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.6 | 148 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.5 | 415 | | 1.98 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 695 | Total | | | |

## Subcatchment C2: Drainage Basin C2



## Summary for Subcatchment C20: Drainage Basin C20

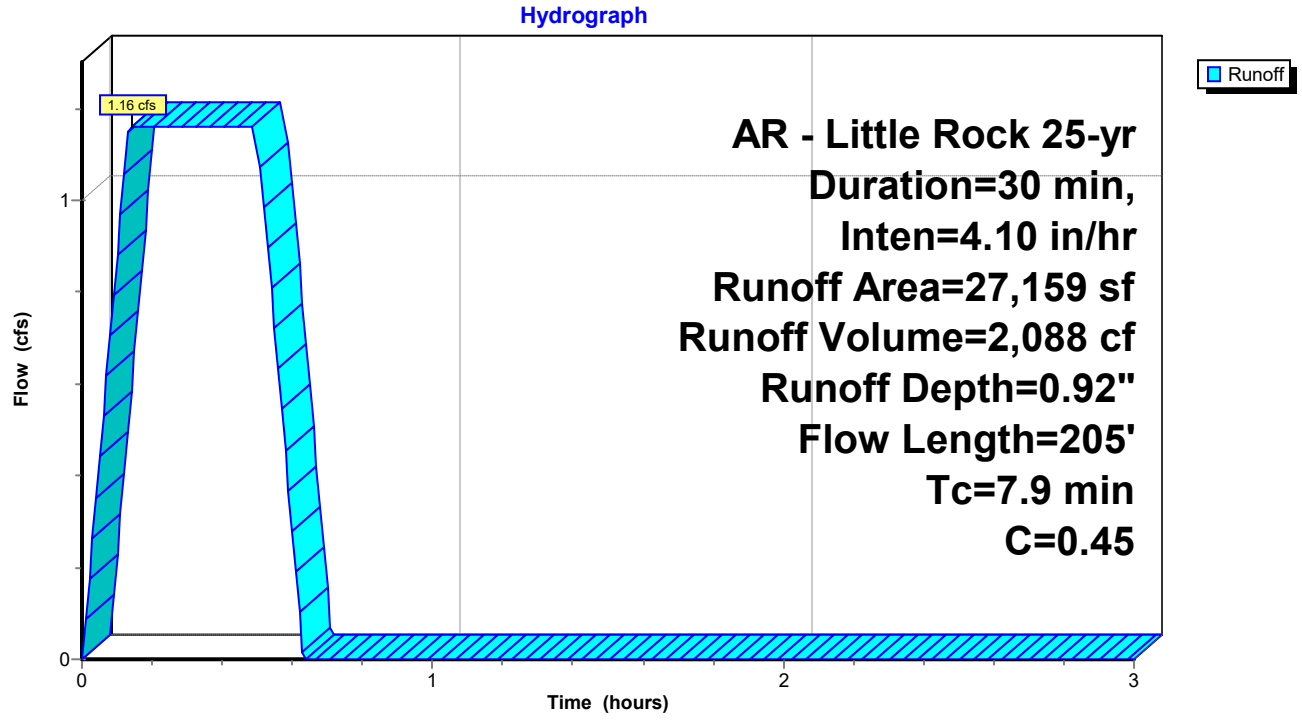
Runoff = 1.16 cfs @ 0.14 hrs, Volume= 2,088 cf, Depth= 0.92"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,838 | 0.40 | Sod Yard |
| 2,321 | 0.95 | Paving, Sidewalks |
| 27,159 | 0.45 | Weighted Average |
| 24,838 | | 91.45% Pervious Area |
| 2,321 | | 8.55% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 45 | 0.1430 | 0.25 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 4.5 | 55 | 0.0780 | 0.20 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 37 | 0.0780 | 4.19 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 68 | 0.0710 | 4.00 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 7.9 | 205 | Total | | | |

## Subcatchment C20: Drainage Basin C20



## Summary for Subcatchment C21: Drainage Basin C21

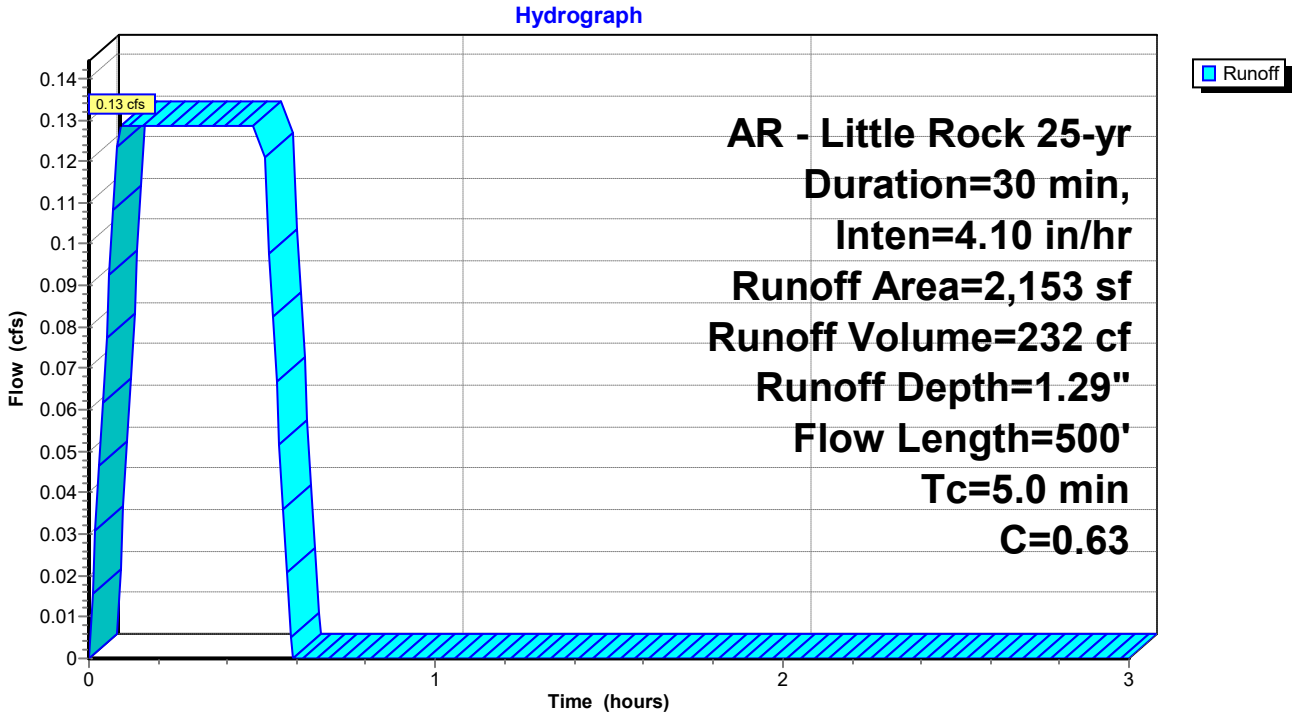
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 232 cf, Depth= 1.29"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,234 | 0.40 | Sod Yard |
| 919 | 0.95 | Paving, Sidewalks |
| 2,153 | 0.63 | Weighted Average |
| 1,234 | | 57.32% Pervious Area |
| 919 | | 42.68% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 2 | 0.2500 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.3 | 33 | 0.0520 | 1.85 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.8 | 24 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 26 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.5 | 415 | | 13.83 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 500 | Total | | | |

## Subcatchment C21: Drainage Basin C21



## Summary for Subcatchment C3: Drainage Basin C3

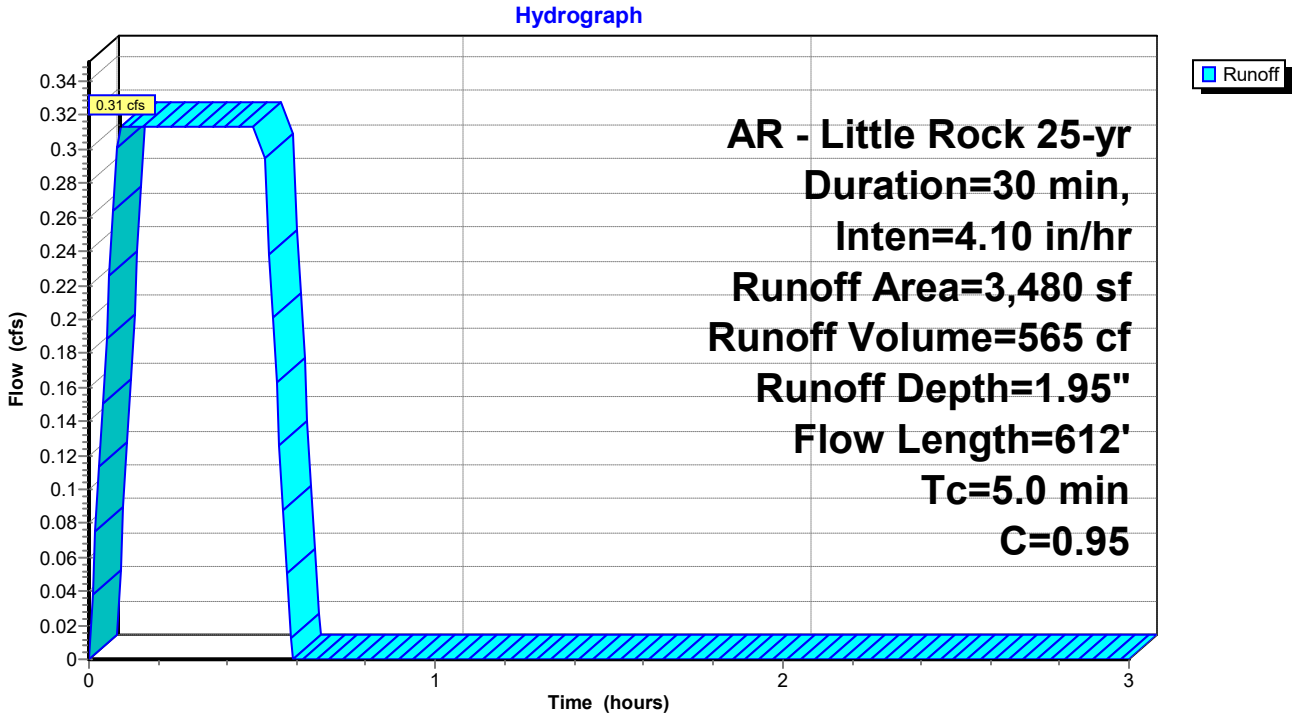
Runoff = 0.31 cfs @ 0.09 hrs, Volume= 565 cf, Depth= 1.95"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 3,480 | 0.95 | Paving, Sidewalks |
| 3,480 | 0.95 | Weighted Average |
| 3,480 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 10 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.6 | 147 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 612 | Total | | | |

## Subcatchment C3: Drainage Basin C3



## Summary for Subcatchment C4: Drainage Basin C4

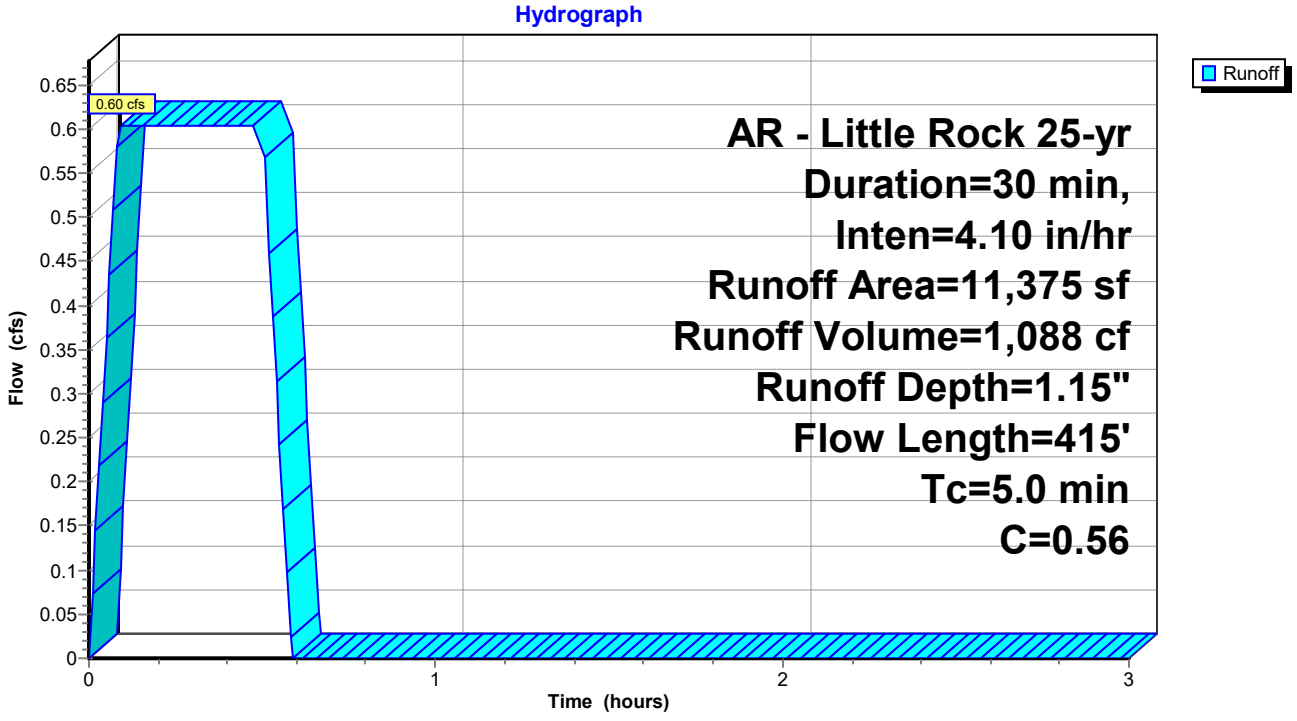
Runoff = 0.60 cfs @ 0.09 hrs, Volume= 1,088 cf, Depth= 1.15"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 8,130 | 0.40 | Sod Yard |
| 3,245 | 0.95 | Paving, Sidewalks |
| 11,375 | 0.56 | Weighted Average |
| 8,130 | | 71.47% Pervious Area |
| 3,245 | | 28.53% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment C4: Drainage Basin C4



## Summary for Subcatchment C5: Drainage Basin C5

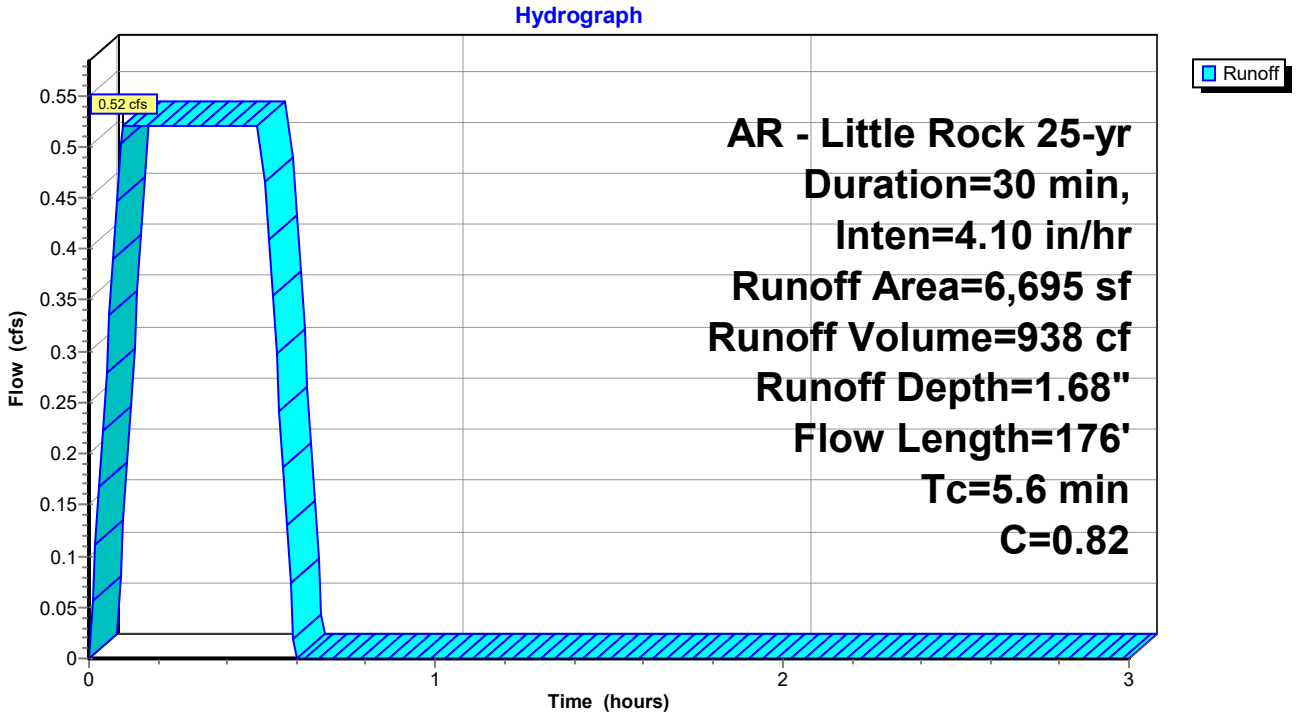
Runoff = 0.52 cfs @ 0.10 hrs, Volume= 938 cf, Depth= 1.68"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,634 | 0.40 | Sod Yard |
| 5,061 | 0.95 | Paving, Sidewalks |
| 6,695 | 0.82 | Weighted Average |
| 1,634 | | 24.41% Pervious Area |
| 5,061 | | 75.59% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2990 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.9 | 8 | 0.0070 | 0.03 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 58 | 0.0080 | 1.82 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 14 | 0.0280 | 3.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0940 | 6.22 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 30 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 5.6 | 176 | Total | | | |

## Subcatchment C5: Drainage Basin C5



## Summary for Subcatchment C6: Drainage Basin C6

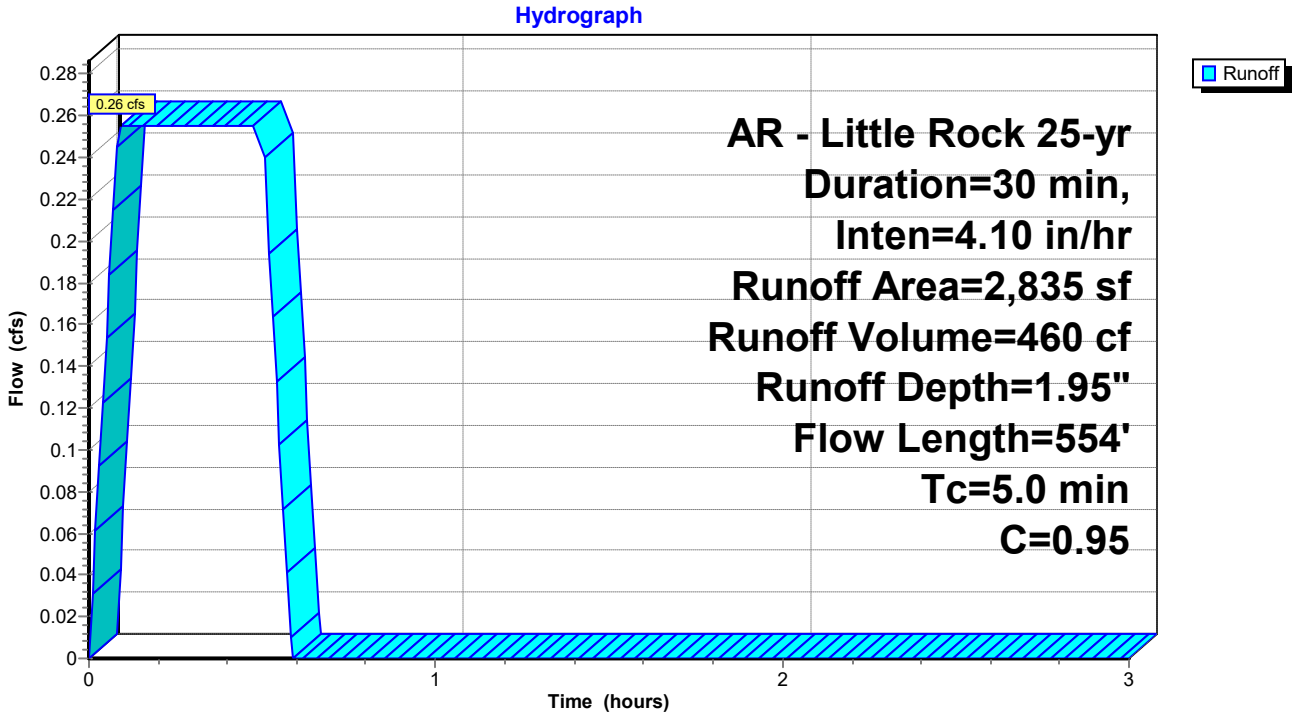
Runoff = 0.26 cfs @ 0.09 hrs, Volume= 460 cf, Depth= 1.95"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 2,835 | 0.95 | Paving, Sidewalks |
| 2,835 | 0.95 | Weighted Average |
| 2,835 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 19 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0360 | 3.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 27 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.1 | 415 | | 1.69 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 554 | Total | | | |

## Subcatchment C6: Drainage Basin C6



## Summary for Subcatchment C7: Drainage Basin C7

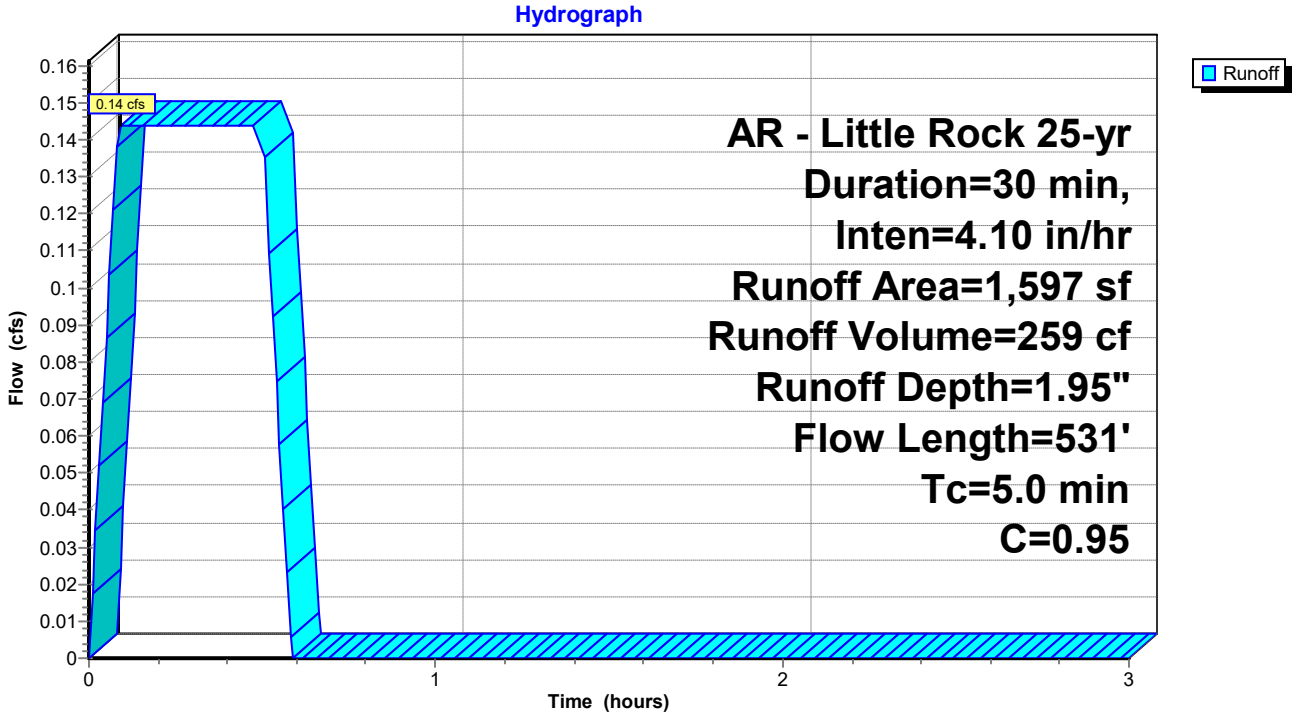
Runoff = 0.14 cfs @ 0.09 hrs, Volume= 259 cf, Depth= 1.95"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,597 | 0.95 | Paving, Sidewalks |
| 1,597 | 0.95 | Weighted Average |
| 1,597 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 16 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 81 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.3 | 415 | | 1.61 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 531 | Total | | | |

## Subcatchment C7: Drainage Basin C7



## Summary for Subcatchment C8: Drainage Basin C8

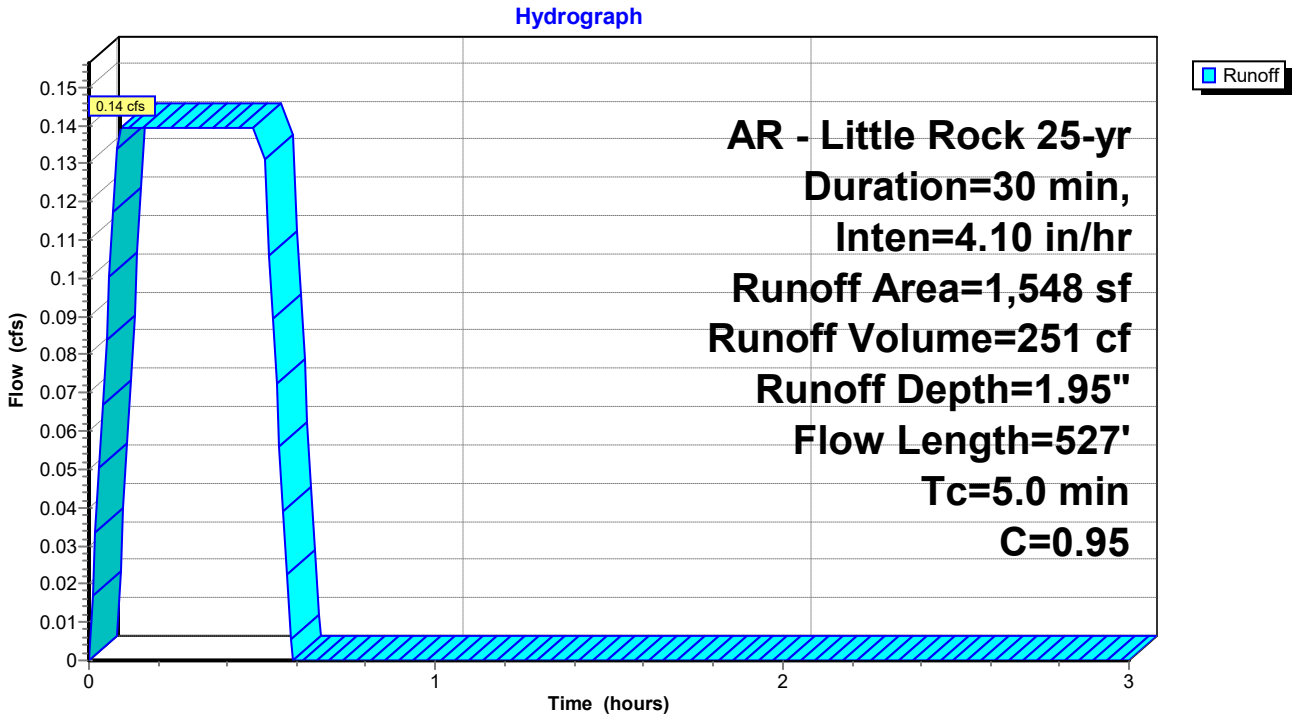
Runoff = 0.14 cfs @ 0.09 hrs, Volume= 251 cf, Depth= 1.95"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,548 | 0.95 | Paving, Sidewalks |
| 1,548 | 0.95 | Weighted Average |
| 1,548 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 94 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 4.4 | 415 | | 1.57 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 527 | Total | | | |

## Subcatchment C8: Drainage Basin C8



## Summary for Subcatchment C9: Drainage Basin C9

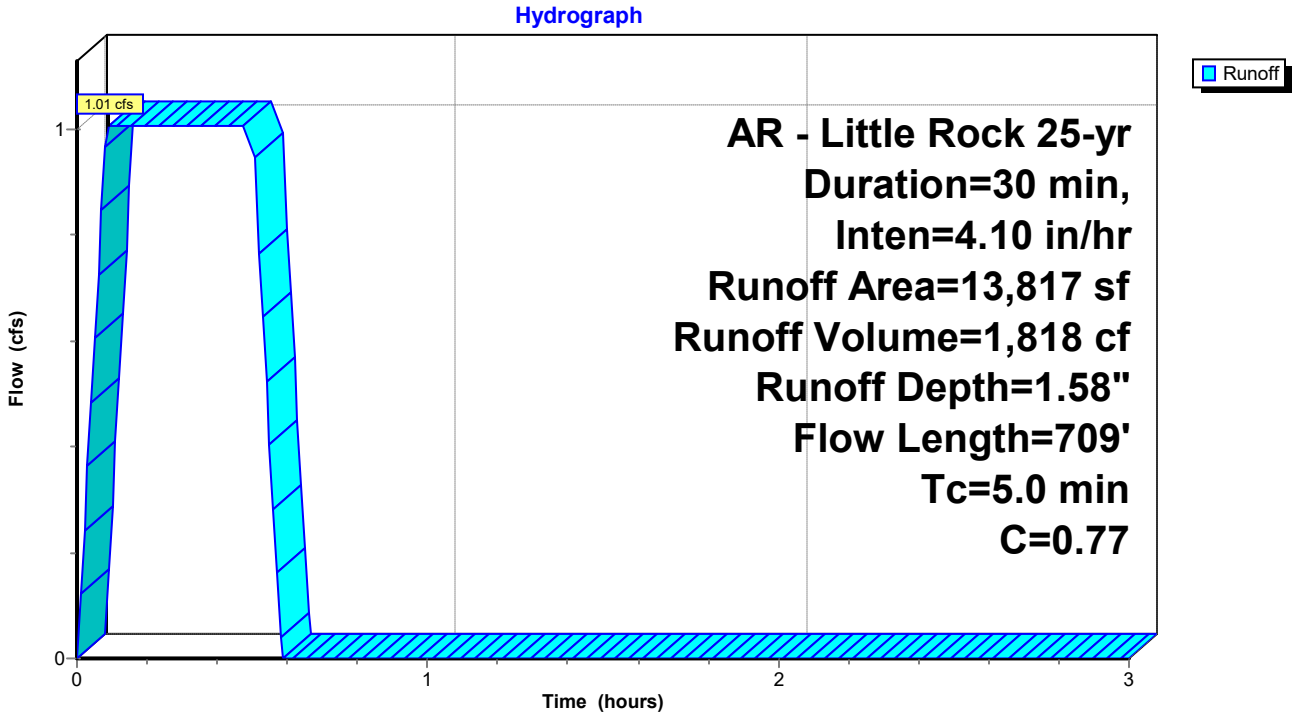
Runoff = 1.01 cfs @ 0.09 hrs, Volume= 1,818 cf, Depth= 1.58"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,456 | 0.40 | Sod Yard |
| 9,361 | 0.95 | Paving, Sidewalks |
| 13,817 | 0.77 | Weighted Average |
| 4,456 | | 32.25% Pervious Area |
| 9,361 | | 67.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.2 | 100 | 0.0140 | 1.36 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 13 | 0.0150 | 2.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 7 | 0.0050 | 1.44 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 8 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 41 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 41 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 61 | 0.0520 | 4.63 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.9 | 415 | | 2.39 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 709 | Total | | | |

## Subcatchment C9: Drainage Basin C9

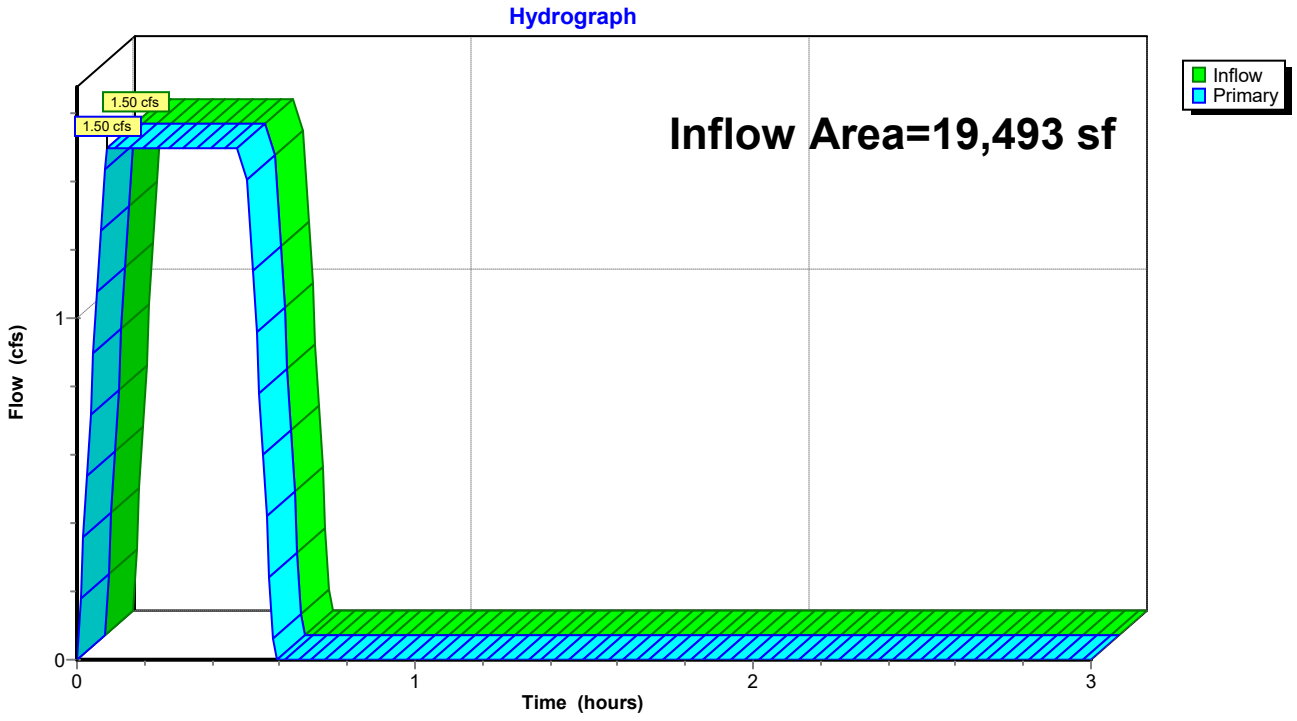


## Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.85% Impervious, Inflow Depth = 1.66" for 25-yr event
Inflow = 1.50 cfs @ 0.09 hrs, Volume= 2,697 cf
Primary = 1.50 cfs @ 0.09 hrs, Volume= 2,697 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A1: CI - A1

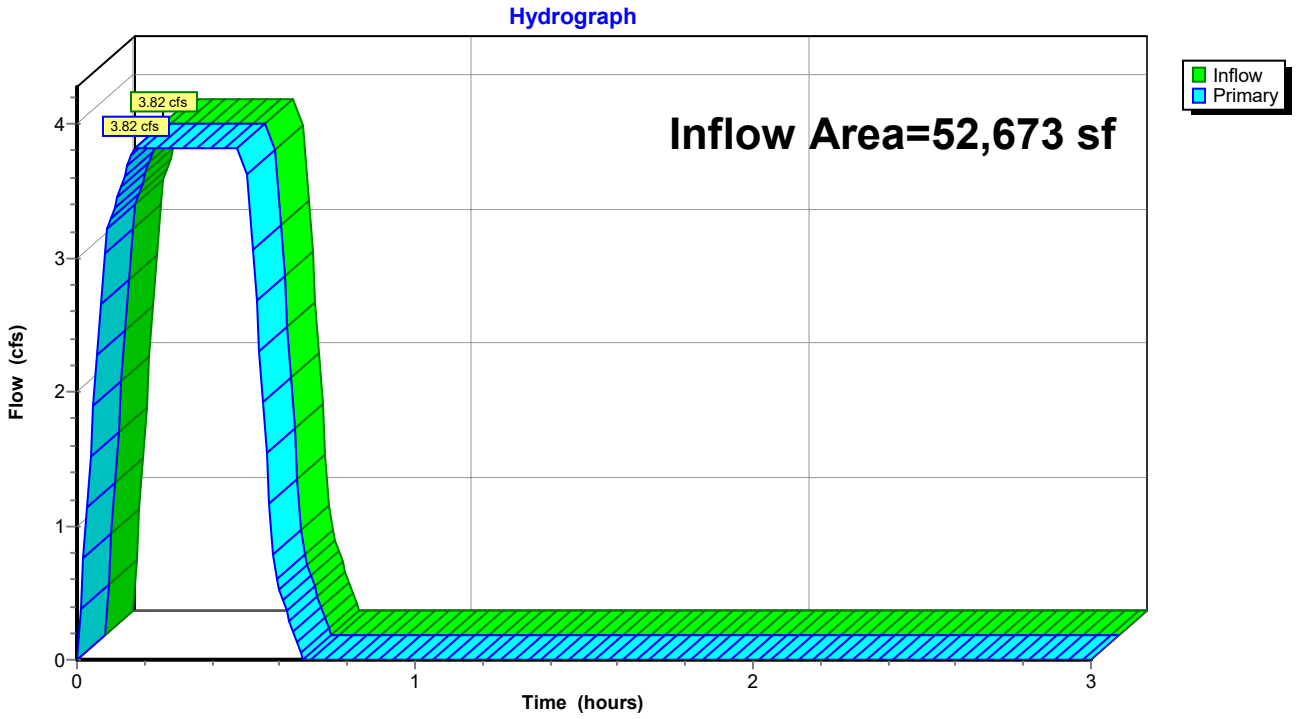


## Summary for Pond CI-A3: CI - A3

Inflow Area = 52,673 sf, 66.48% Impervious, Inflow Depth = 1.57" for 25-yr event
Inflow = 3.82 cfs @ 0.17 hrs, Volume= 6,879 cf
Primary = 3.82 cfs @ 0.17 hrs, Volume= 6,879 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A3: CI - A3

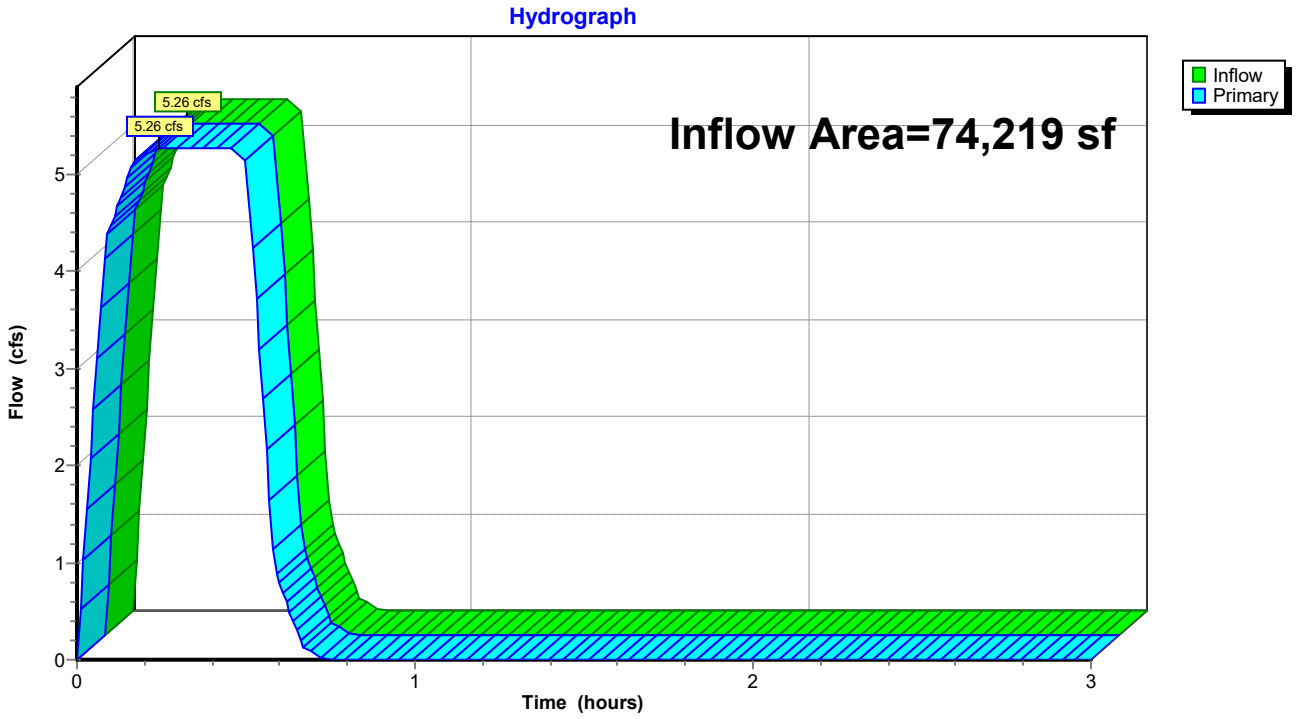


## Summary for Pond CI-A4: CI - A4

Inflow Area = 74,219 sf, 63.30% Impervious, Inflow Depth = 1.53" for 25-yr event
Inflow = 5.26 cfs @ 0.24 hrs, Volume= 9,475 cf
Primary = 5.26 cfs @ 0.24 hrs, Volume= 9,475 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A4: CI - A4

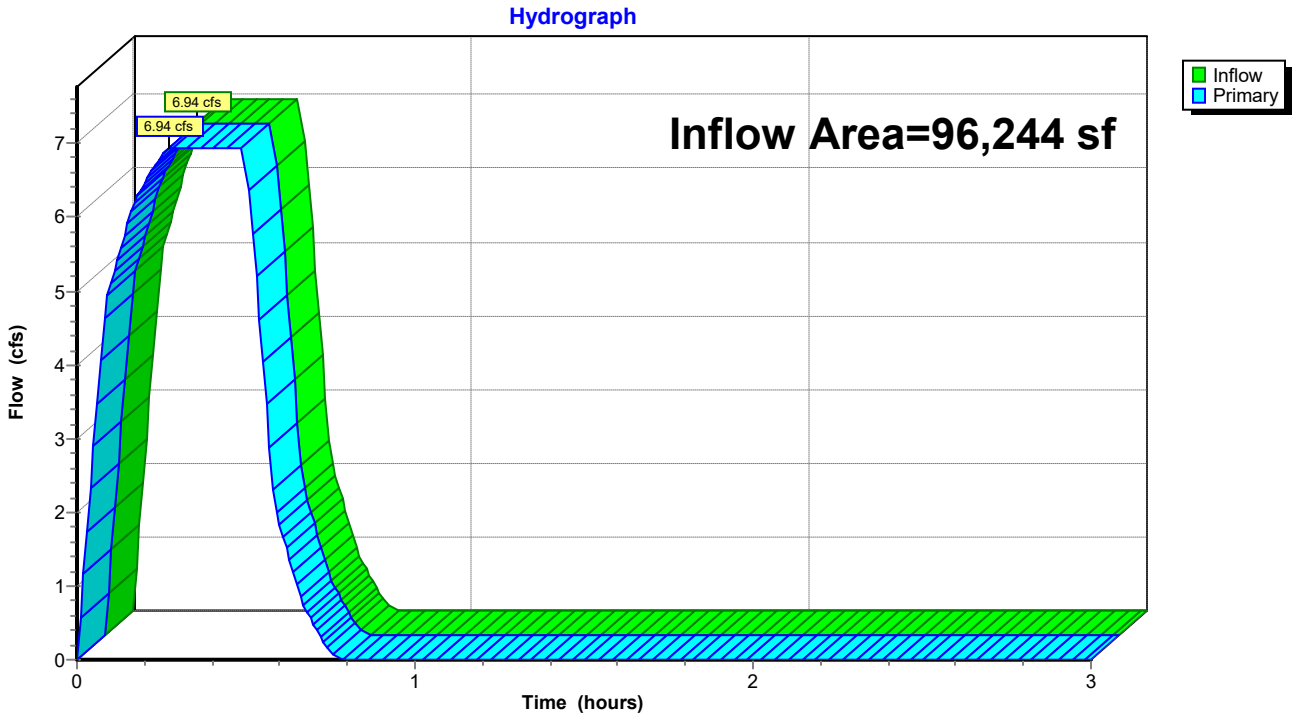


## Summary for Pond CI-A5: CI - A5

Inflow Area = 96,244 sf, 65.33% Impervious, Inflow Depth = 1.56" for 25-yr event
Inflow = 6.94 cfs @ 0.27 hrs, Volume= 12,485 cf
Primary = 6.94 cfs @ 0.27 hrs, Volume= 12,485 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A5: CI - A5

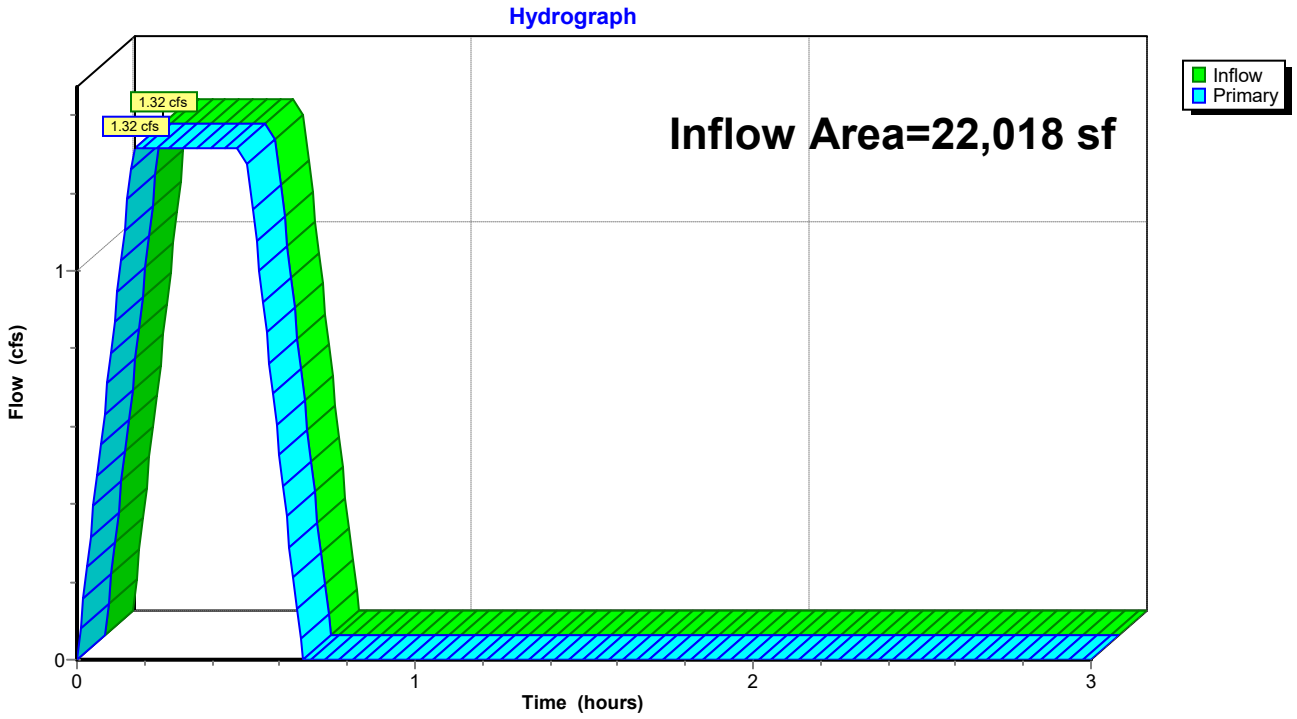


## Summary for Pond CI-B2: CI - B2

Inflow Area = 22,018 sf, 42.08% Impervious, Inflow Depth = 1.29" for 25-yr event
Inflow = 1.32 cfs @ 0.17 hrs, Volume= 2,370 cf
Primary = 1.32 cfs @ 0.17 hrs, Volume= 2,370 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-B2: CI - B2

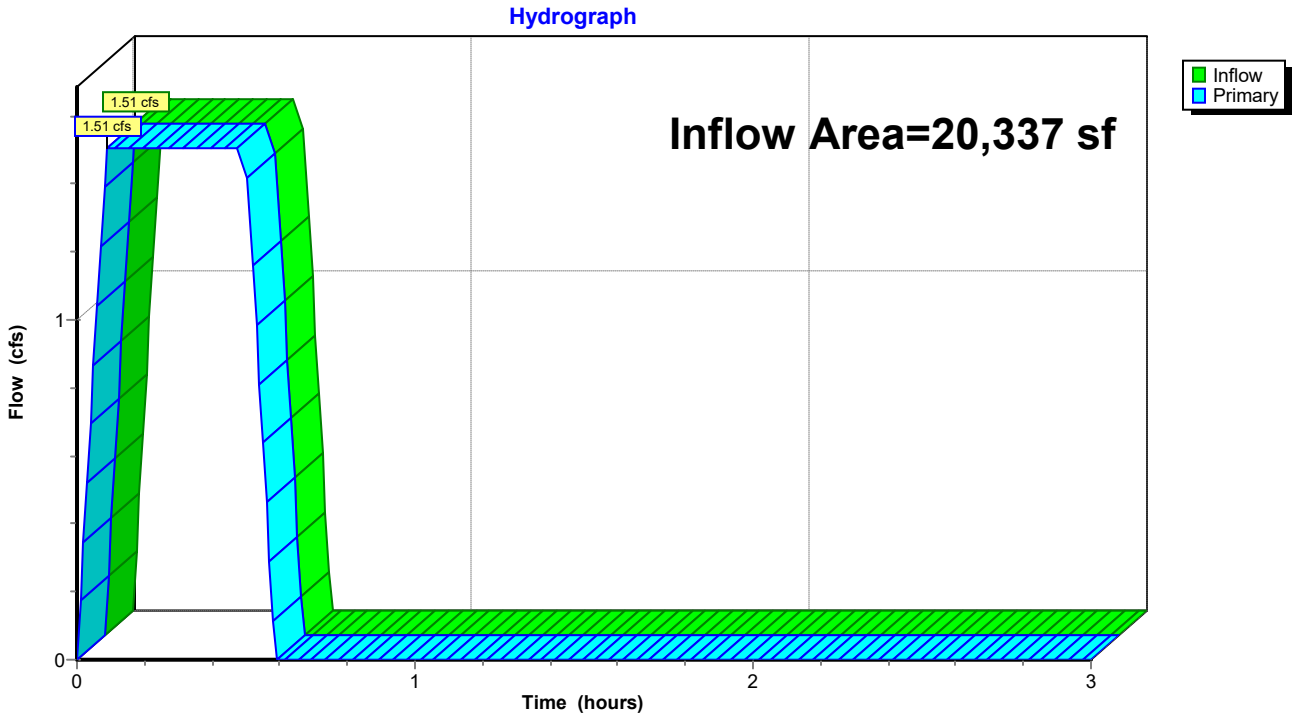


## Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.60" for 25-yr event
Inflow = 1.51 cfs @ 0.09 hrs, Volume= 2,710 cf
Primary = 1.51 cfs @ 0.09 hrs, Volume= 2,710 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C1: CI - C1

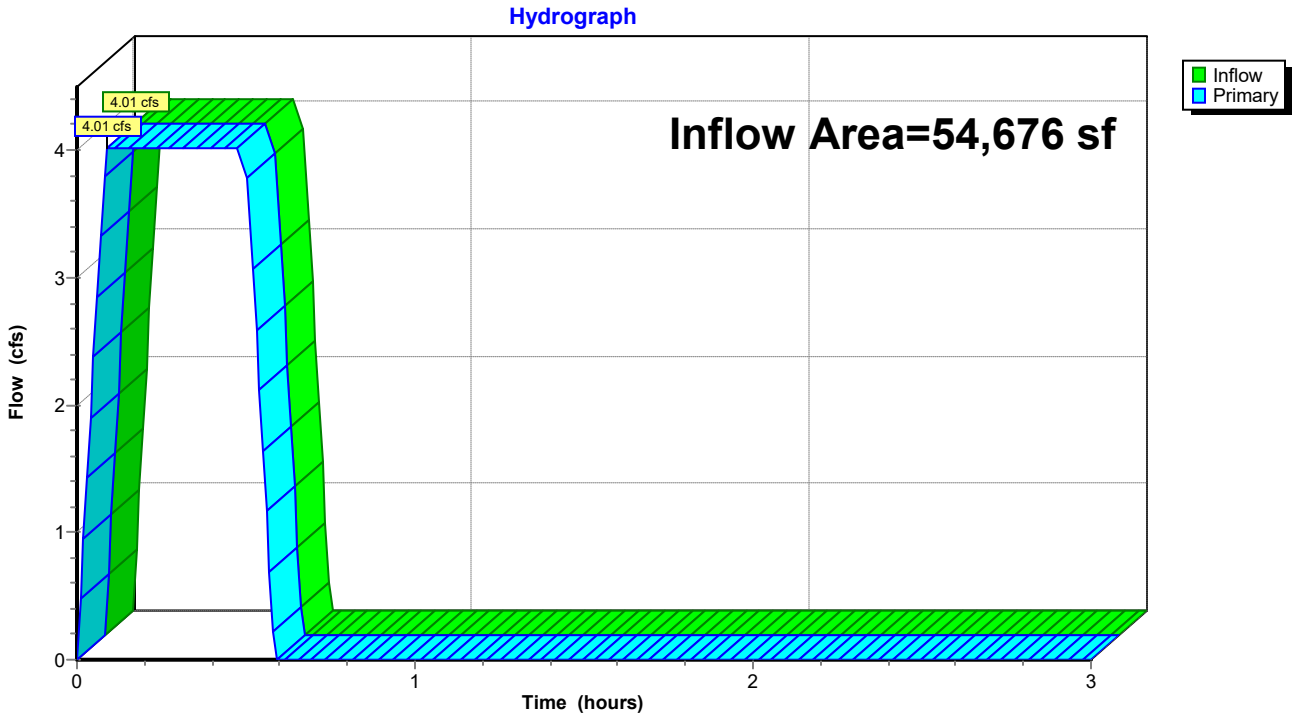


## Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.59" for 25-yr event
Inflow = 4.01 cfs @ 0.09 hrs, Volume= 7,227 cf
Primary = 4.01 cfs @ 0.09 hrs, Volume= 7,227 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C2: CI - C2

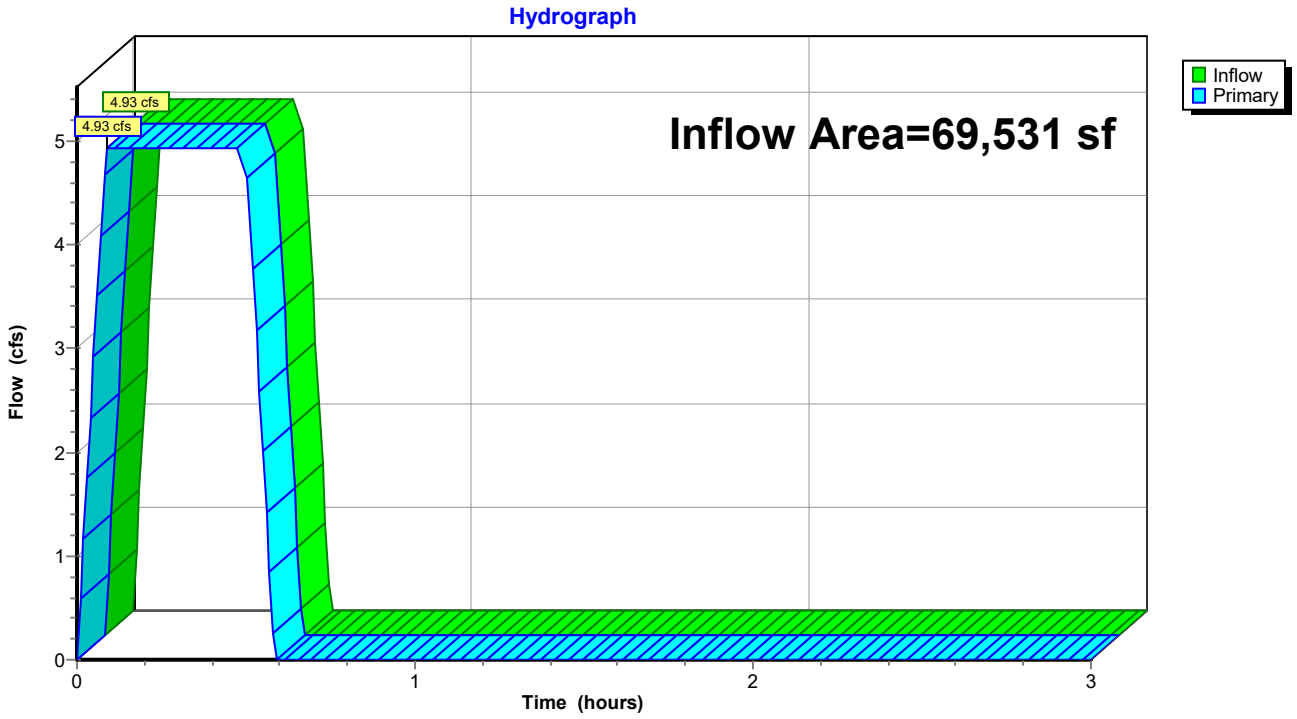


## Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.53" for 25-yr event
Inflow = 4.93 cfs @ 0.09 hrs, Volume= 8,880 cf
Primary = 4.93 cfs @ 0.09 hrs, Volume= 8,880 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C3: CI - C3

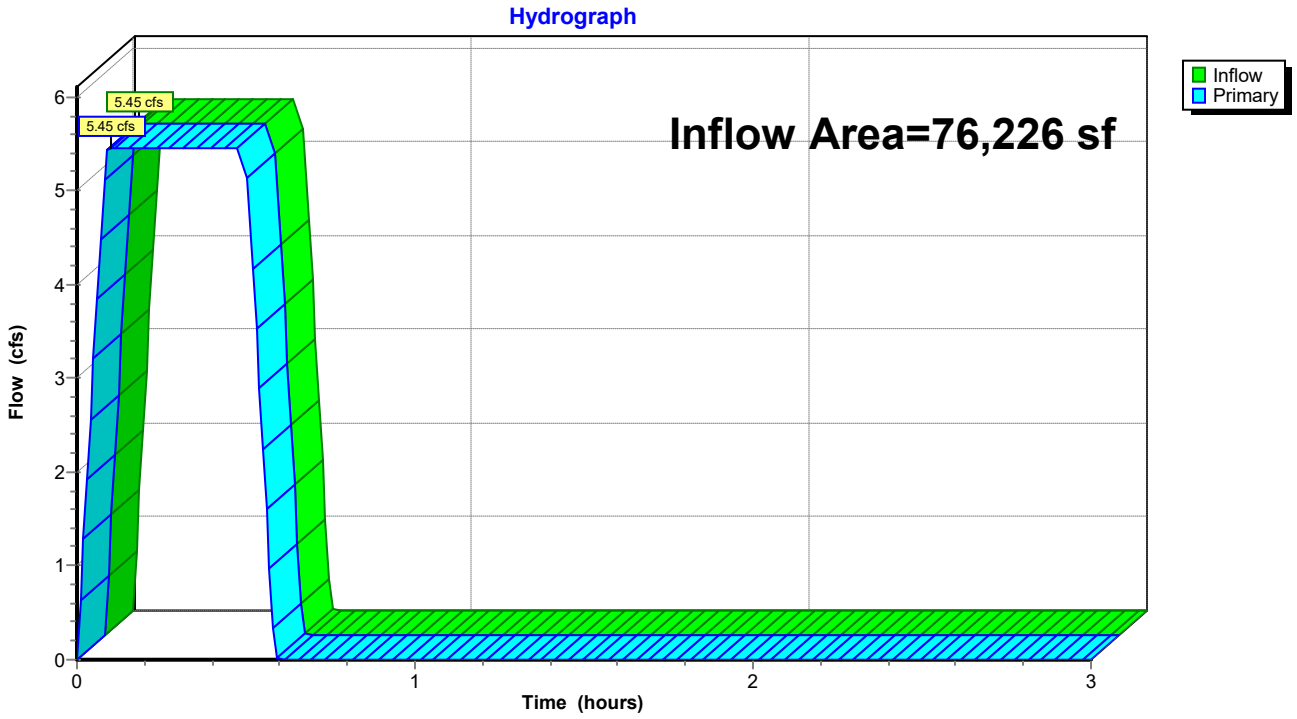


## Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.55" for 25-yr event
Inflow = 5.45 cfs @ 0.10 hrs, Volume= 9,818 cf
Primary = 5.45 cfs @ 0.10 hrs, Volume= 9,818 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C4: CI - C4

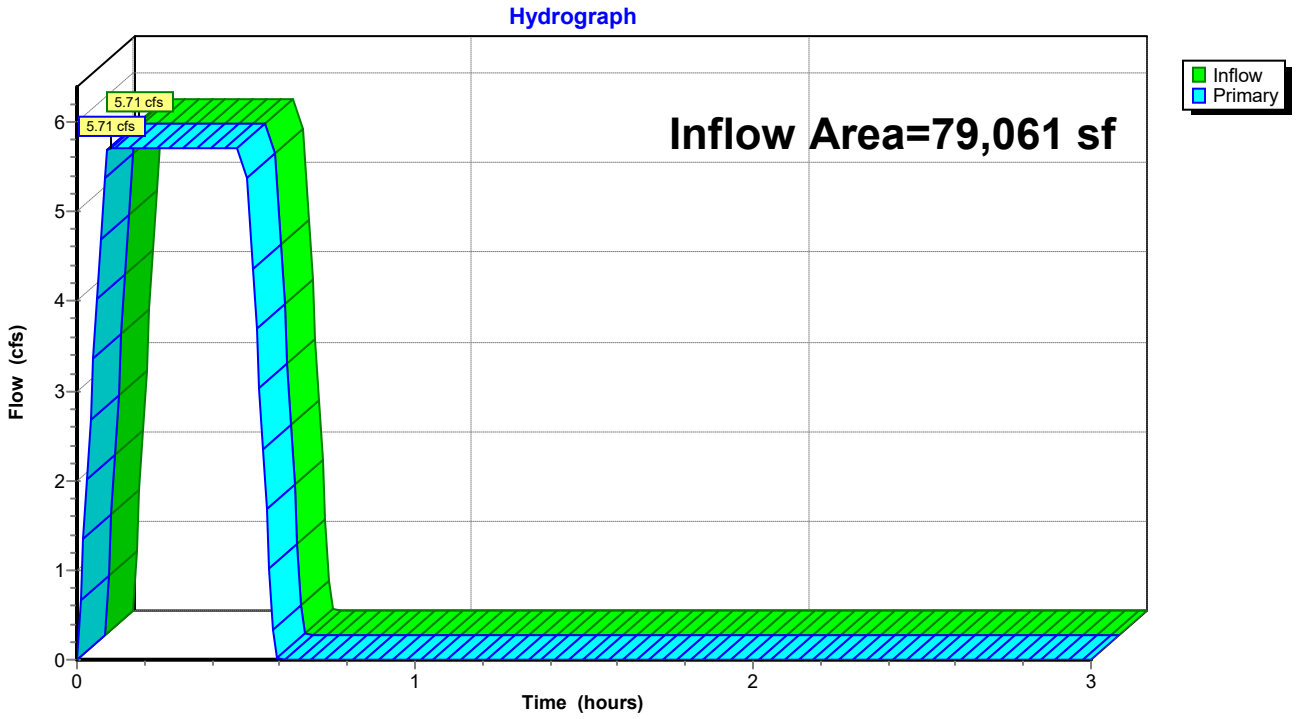


## Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.56" for 25-yr event
Inflow = 5.71 cfs @ 0.10 hrs, Volume= 10,278 cf
Primary = 5.71 cfs @ 0.10 hrs, Volume= 10,278 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C5: CI - C5

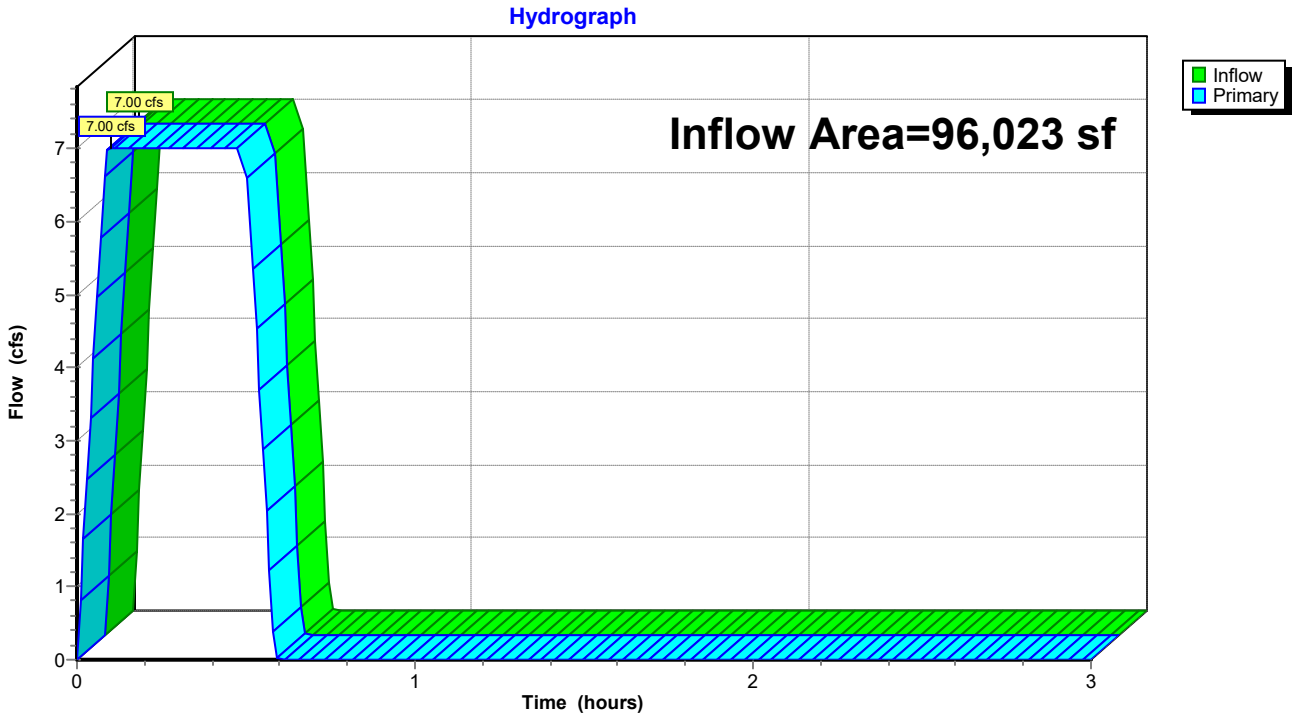


## Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.58" for 25-yr event
Inflow = 7.00 cfs @ 0.10 hrs, Volume= 12,606 cf
Primary = 7.00 cfs @ 0.10 hrs, Volume= 12,606 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C6: CI - C6

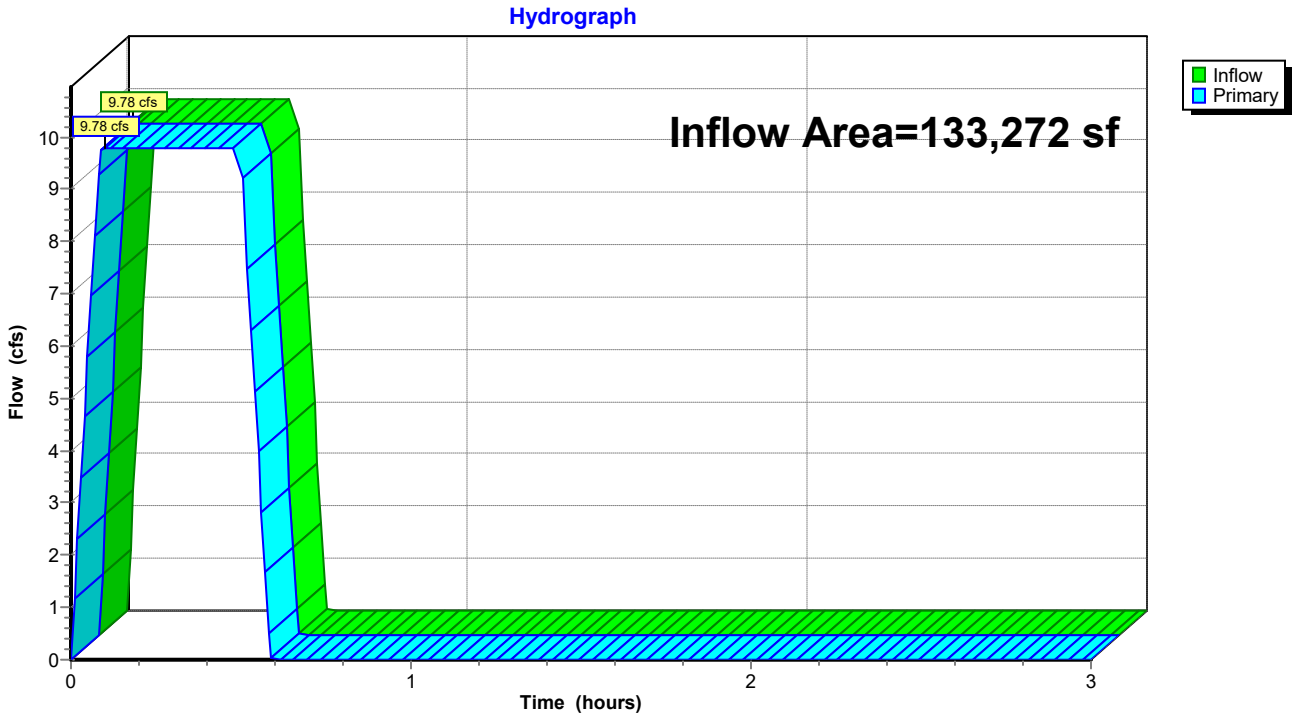


## Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.59" for 25-yr event
Inflow = 9.78 cfs @ 0.10 hrs, Volume= 17,608 cf
Primary = 9.78 cfs @ 0.10 hrs, Volume= 17,608 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C7: CI - C7

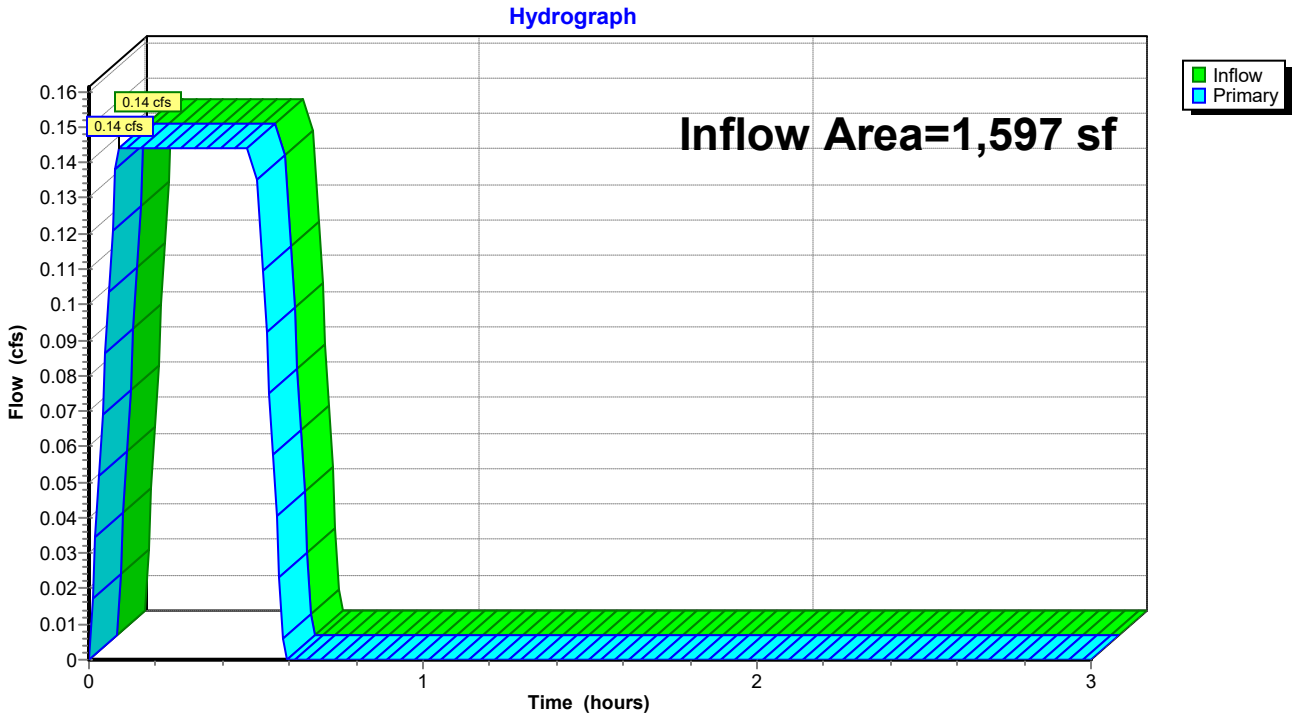


## Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.95" for 25-yr event
Inflow = 0.14 cfs @ 0.09 hrs, Volume= 259 cf
Primary = 0.14 cfs @ 0.09 hrs, Volume= 259 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D1: CI - D1

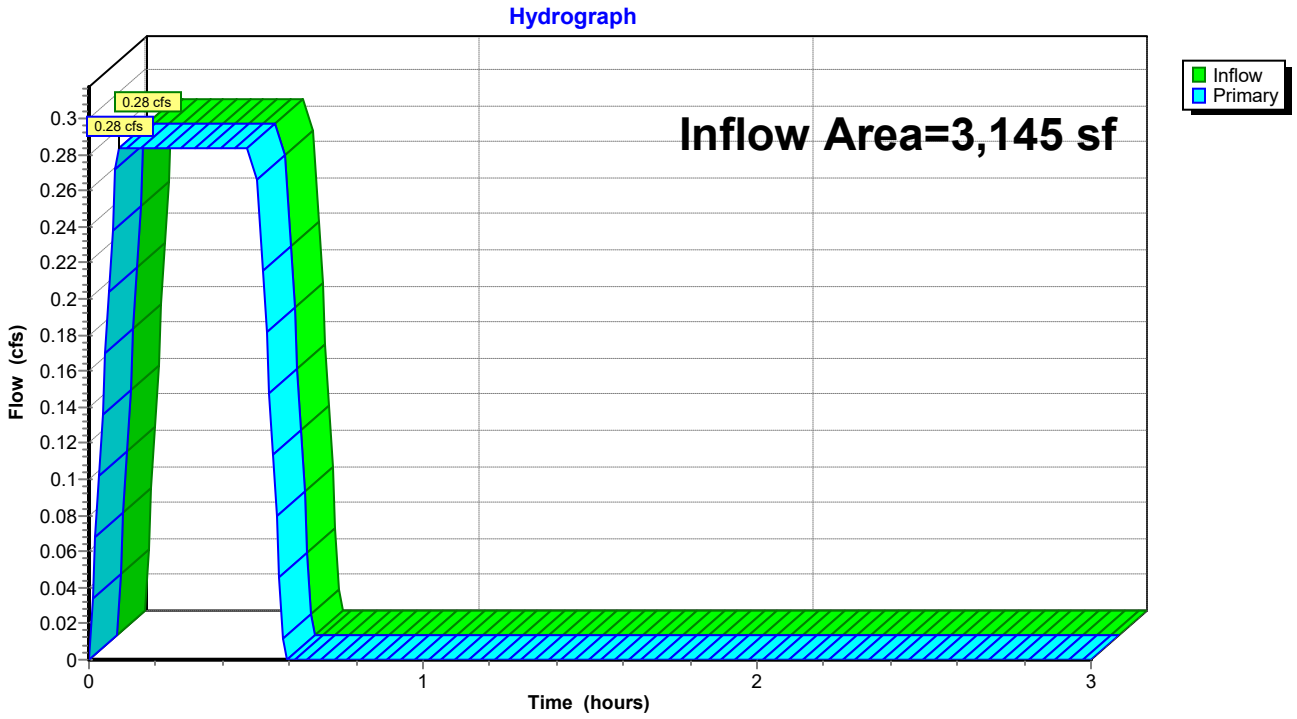


## Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.95" for 25-yr event
Inflow = 0.28 cfs @ 0.09 hrs, Volume= 510 cf
Primary = 0.28 cfs @ 0.09 hrs, Volume= 510 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D2: CI - D2

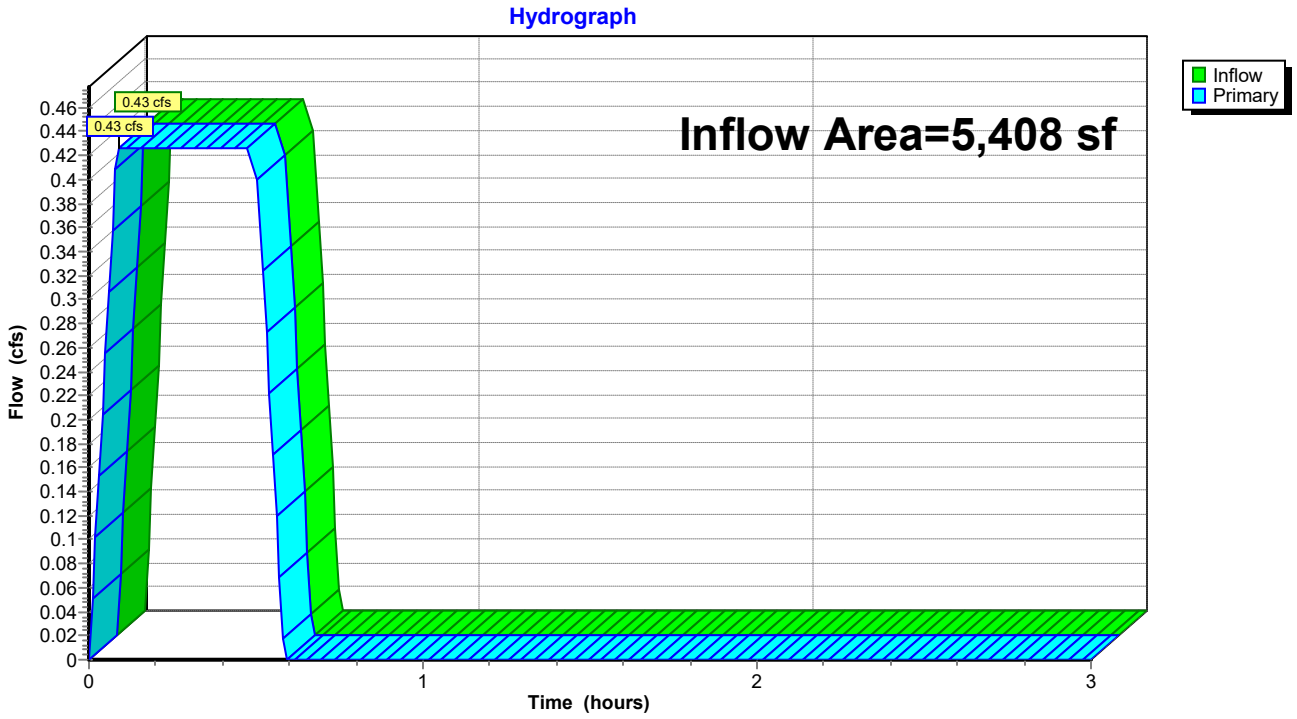


## Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.70" for 25-yr event
Inflow = 0.43 cfs @ 0.09 hrs, Volume= 767 cf
Primary = 0.43 cfs @ 0.09 hrs, Volume= 767 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E1: CI - E1

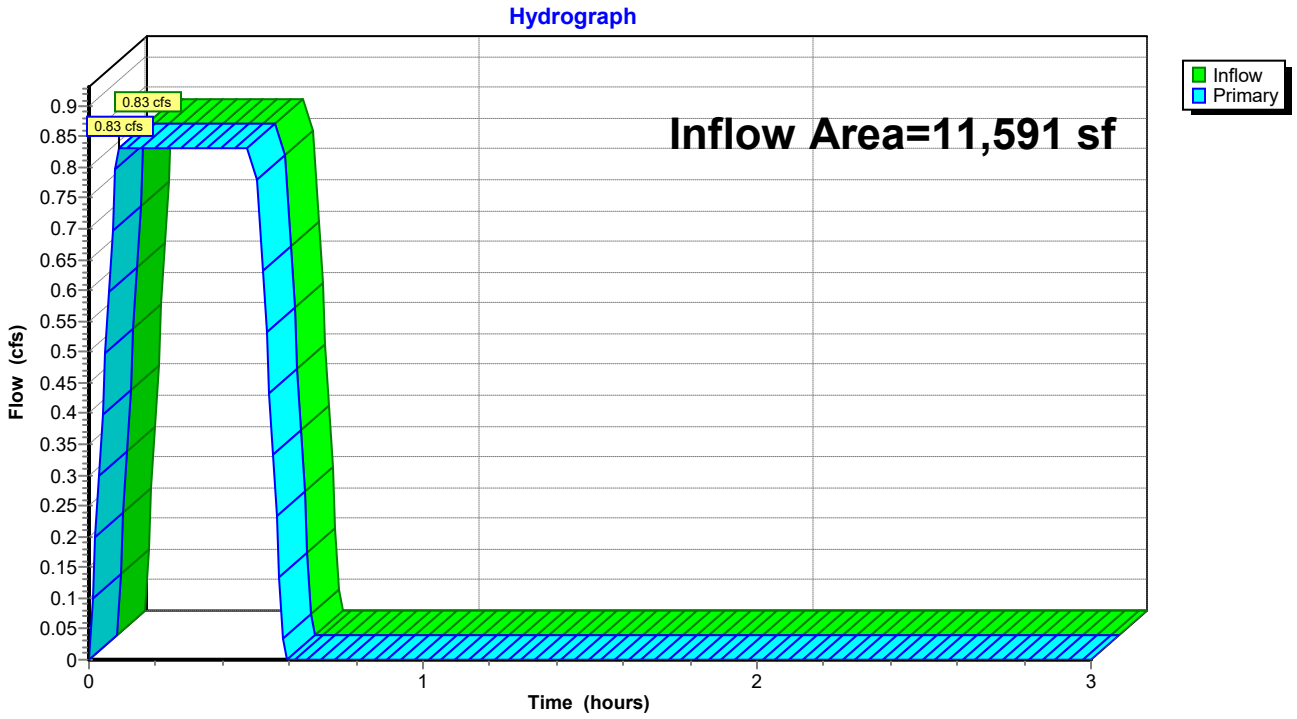


## Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.55" for 25-yr event
Inflow = 0.83 cfs @ 0.09 hrs, Volume= 1,496 cf
Primary = 0.83 cfs @ 0.09 hrs, Volume= 1,496 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E2: CI - E2



## Summary for Pond DP: Existing North Detention Pond

Inflow Area = 321,792 sf, 58.73% Impervious, Inflow Depth = 1.48" for 25-yr event
Inflow = 22.07 cfs @ 0.27 hrs, Volume= 39,720 cf
Outflow = 12.22 cfs @ 0.54 hrs, Volume= 39,720 cf, Atten= 45%, Lag= 16.5 min
Primary = 12.22 cfs @ 0.54 hrs, Volume= 39,720 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 383.20' @ 0.54 hrs Storage= 22,005 cf

Plug-Flow detention time= 22.0 min calculated for 39,720 cf (100% of inflow)
Center-of-Mass det. time= 21.9 min ( 40.4 - 18.5 )

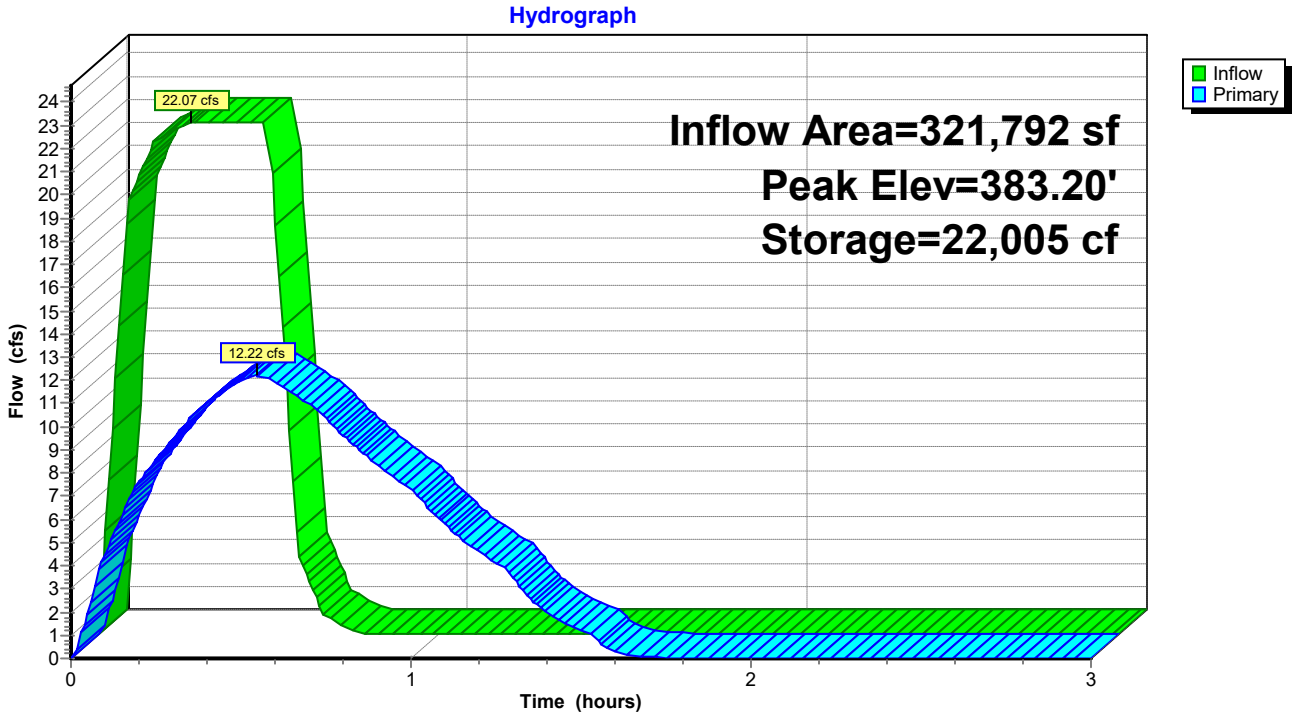
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 381.17' | 72,742 cf | **Custom Stage Data** Listed below |

| Elevation (feet) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|
| 381.17 | 0 | 0 |
| 381.50 | 200 | 200 |
| 382.00 | 1,825 | 2,025 |
| 382.50 | 5,265 | 7,290 |
| 383.00 | 9,300 | 16,590 |
| 383.50 | 13,733 | 30,323 |
| 384.00 | 18,578 | 48,901 |
| 384.50 | 23,841 | 72,742 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 384.16' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #2 | Primary | 381.17' | **1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=12.22 cfs @ 0.54 hrs HW=383.20' (Free Discharge)
**1=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
**2=Sharp-Crested Rectangular Weir** (Weir Controls 12.22 cfs @ 4.66 fps)

## Pond DP: Existing North Detention Pond

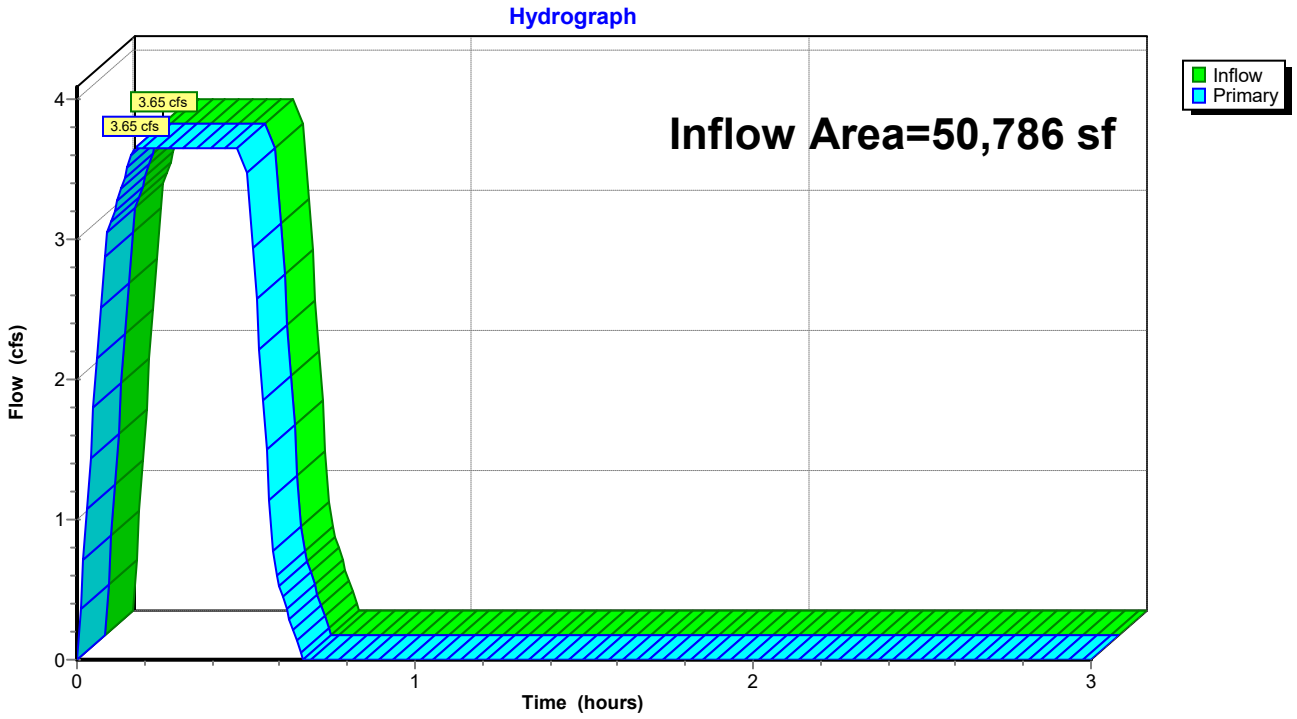


## Summary for Pond JB-A2: JB - A2

Inflow Area = 50,786 sf, 65.23% Impervious, Inflow Depth = 1.55" for 25-yr event
Inflow = 3.65 cfs @ 0.17 hrs, Volume= 6,572 cf
Primary = 3.65 cfs @ 0.17 hrs, Volume= 6,572 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond JB-A2: JB - A2

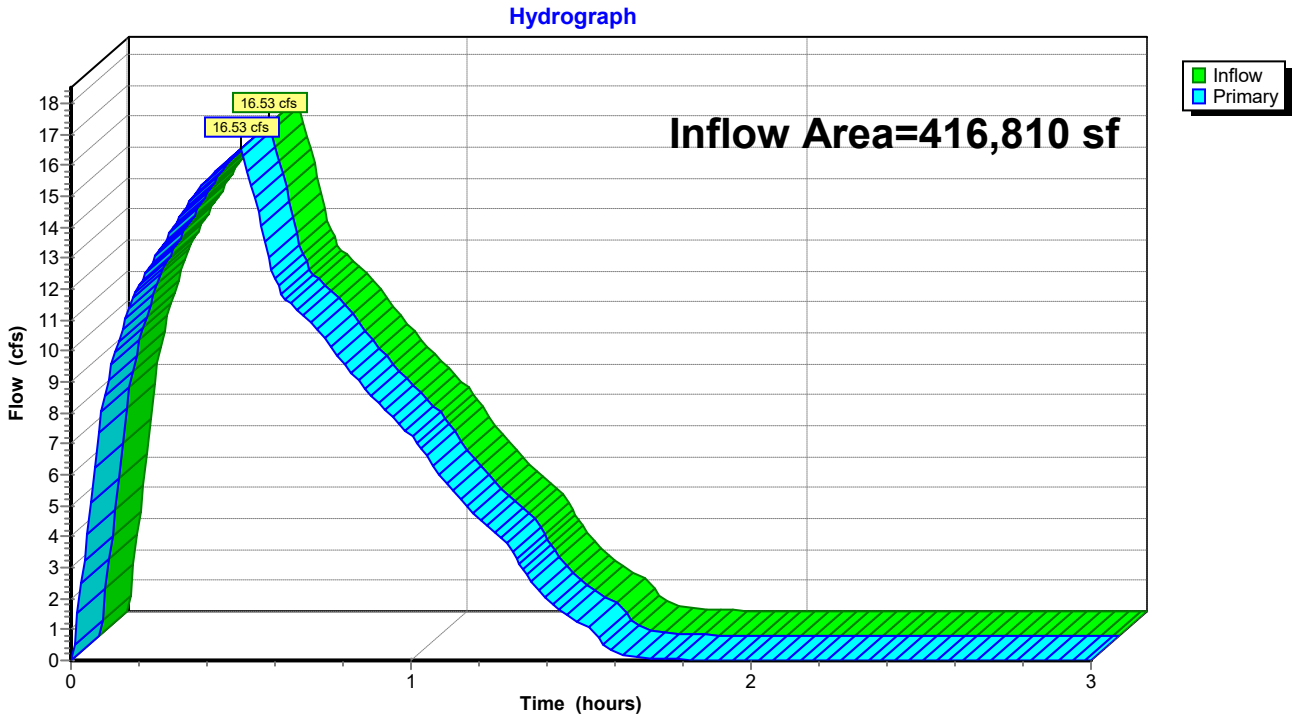


## Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 416,810 sf, 49.40% Impervious, Inflow Depth = 1.38" for 25-yr event
Inflow = 16.53 cfs @ 0.50 hrs, Volume= 47,826 cf
Primary = 16.53 cfs @ 0.50 hrs, Volume= 47,826 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

## Link FINAL: APPROX DISCHARGE



## Summary for Subcatchment B1: Drainage Basin B1

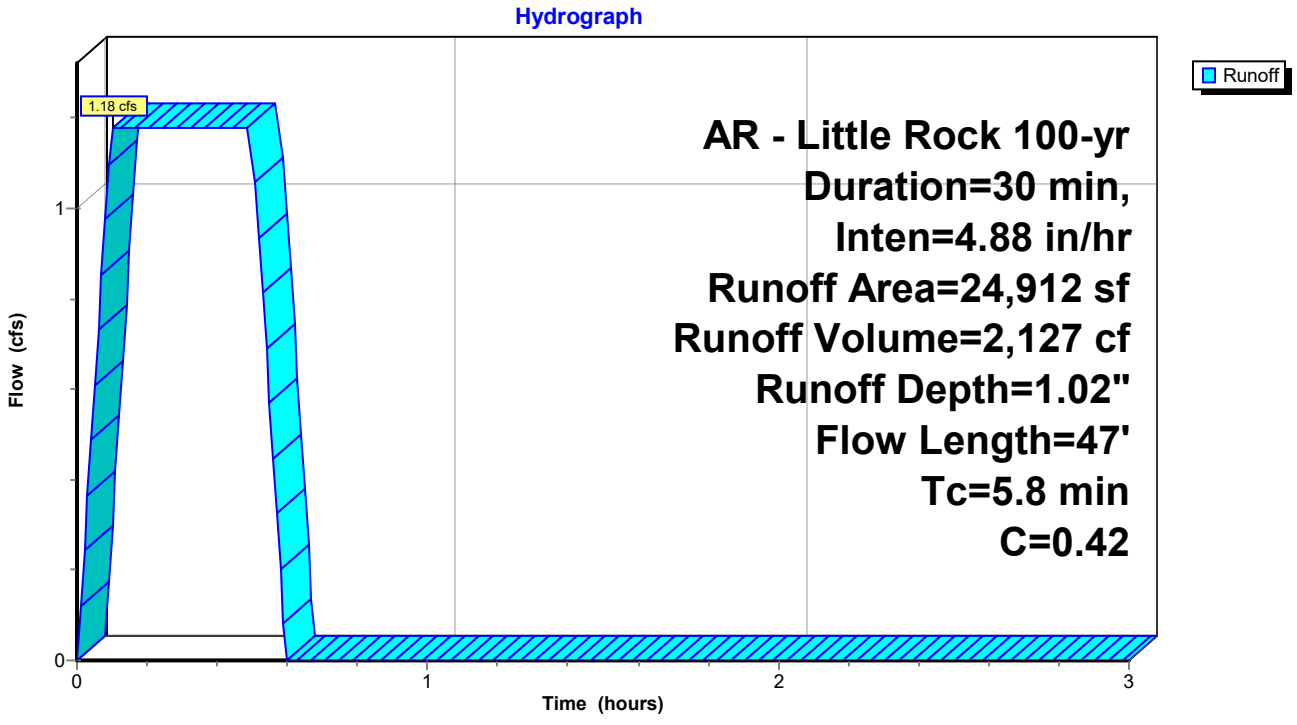
Runoff = 1.18 cfs @ 0.10 hrs, Volume= 2,127 cf, Depth= 1.02"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,091 | 0.40 | Sod Yard |
| 821 | 0.95 | Paving, Sidewalks |
| 24,912 | 0.42 | Weighted Average |
| 24,091 | | 96.70% Pervious Area |
| 821 | | 3.30% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.3 | 9 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 38 | 0.2040 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 5.8 | 47 | Total | | | |

## Subcatchment B1: Drainage Basin B1



## Summary for Subcatchment B2: Drainage Basin B2

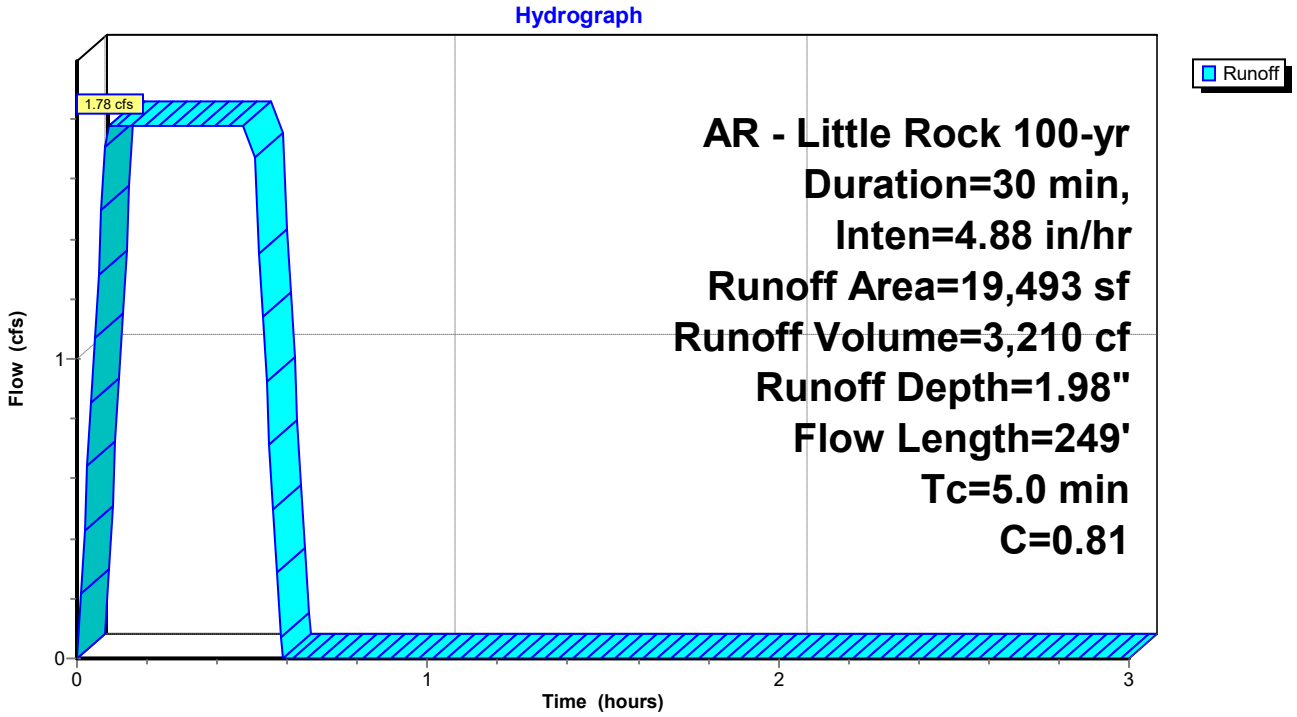
Runoff = 1.78 cfs @ 0.09 hrs, Volume= 3,210 cf, Depth= 1.98"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,903 | 0.40 | Sod Yard |
| 14,590 | 0.95 | Paving, Sidewalks |
| 19,493 | 0.81 | Weighted Average |
| 4,903 | | 25.15% Pervious Area |
| 14,590 | | 74.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 28 | 0.0450 | 1.69 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 72 | 0.0250 | 3.21 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.3 | 51 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 16 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 8 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 7 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.2 | | | | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 249 | Total | | | |

## Subcatchment B2: Drainage Basin B2



## Summary for Subcatchment B3: Drainage Basin B3

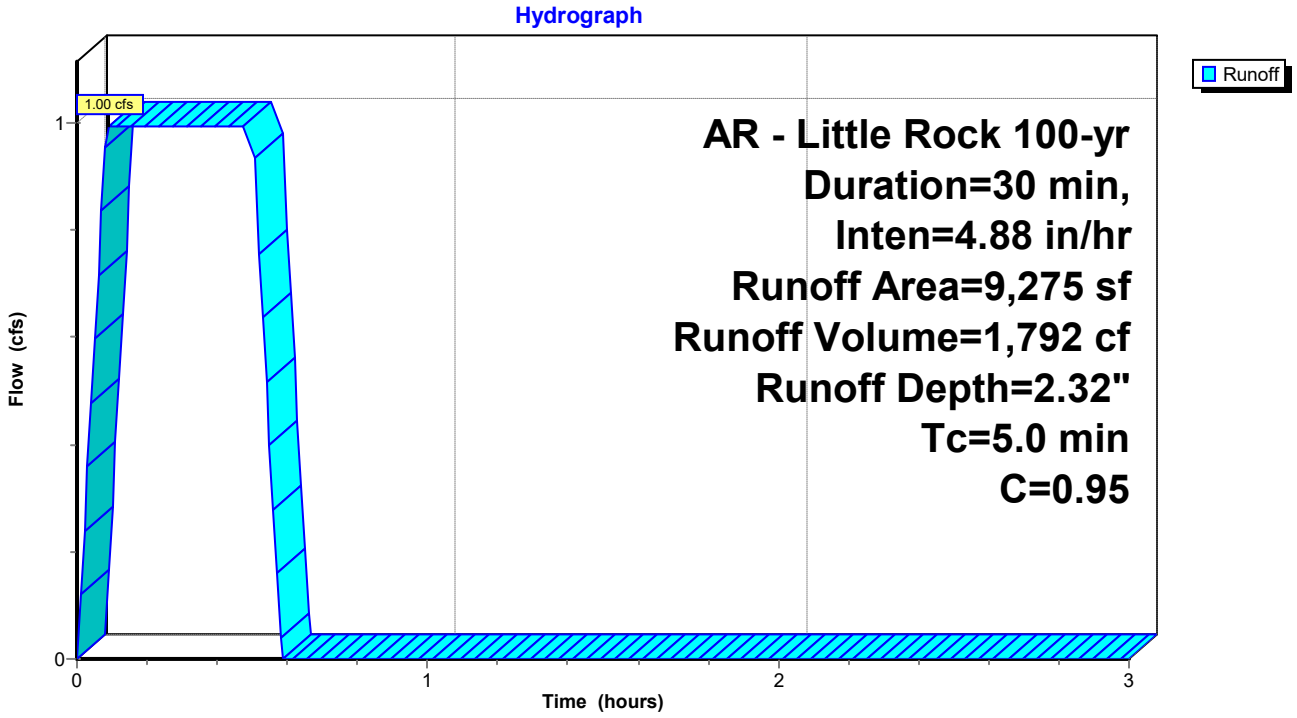
Runoff = 1.00 cfs @ 0.09 hrs, Volume= 1,792 cf, Depth= 2.32"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 9,275 | 0.95 | Roof |
| 9,275 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | | | | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment B3: Drainage Basin B3



## Summary for Subcatchment B4: Drainage Basin B4

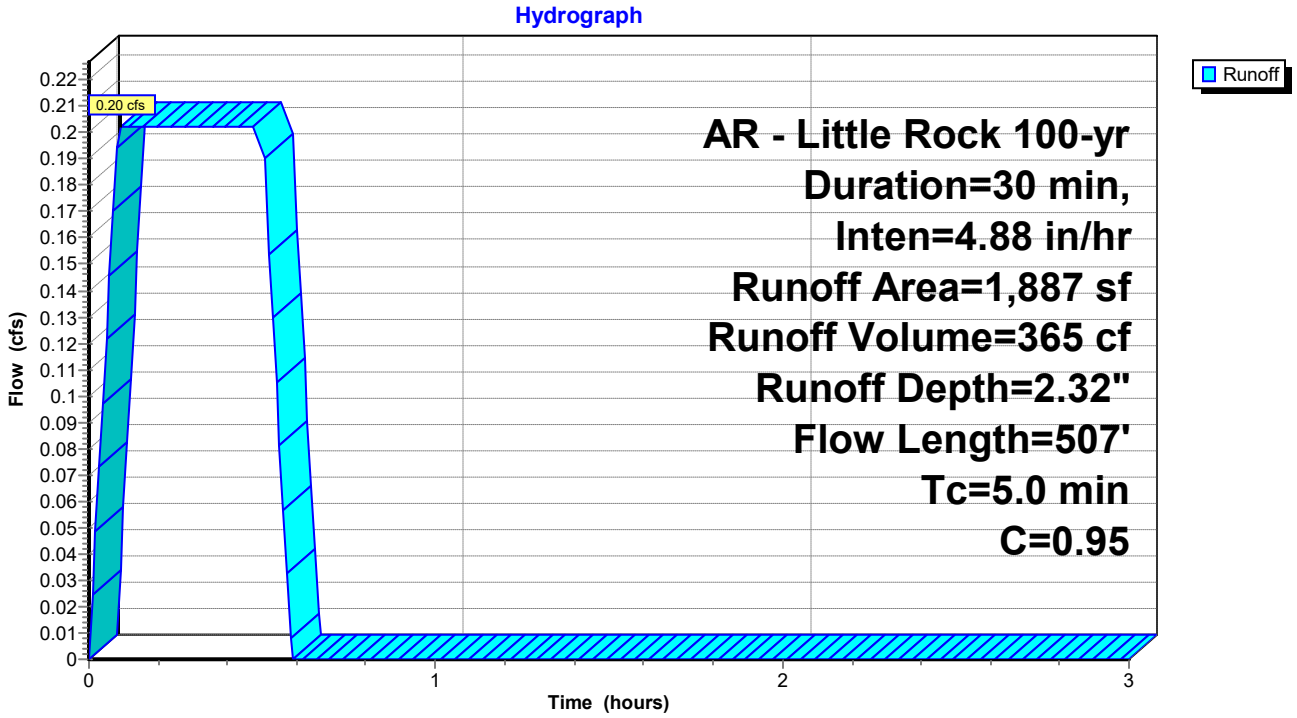
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 365 cf, Depth= 2.32"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,887 | 0.95 | Paving, Sidewalks |
| 1,887 | 0.95 | Weighted Average |
| 1,887 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 31 | 0.0230 | 1.32 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 18 | 0.0250 | 1.22 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 30 | 0.0240 | 1.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 13 | 0.0860 | 5.95 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 507 | Total | | | |

## Subcatchment B4: Drainage Basin B4



## Summary for Subcatchment B5: Drainage Basin B5

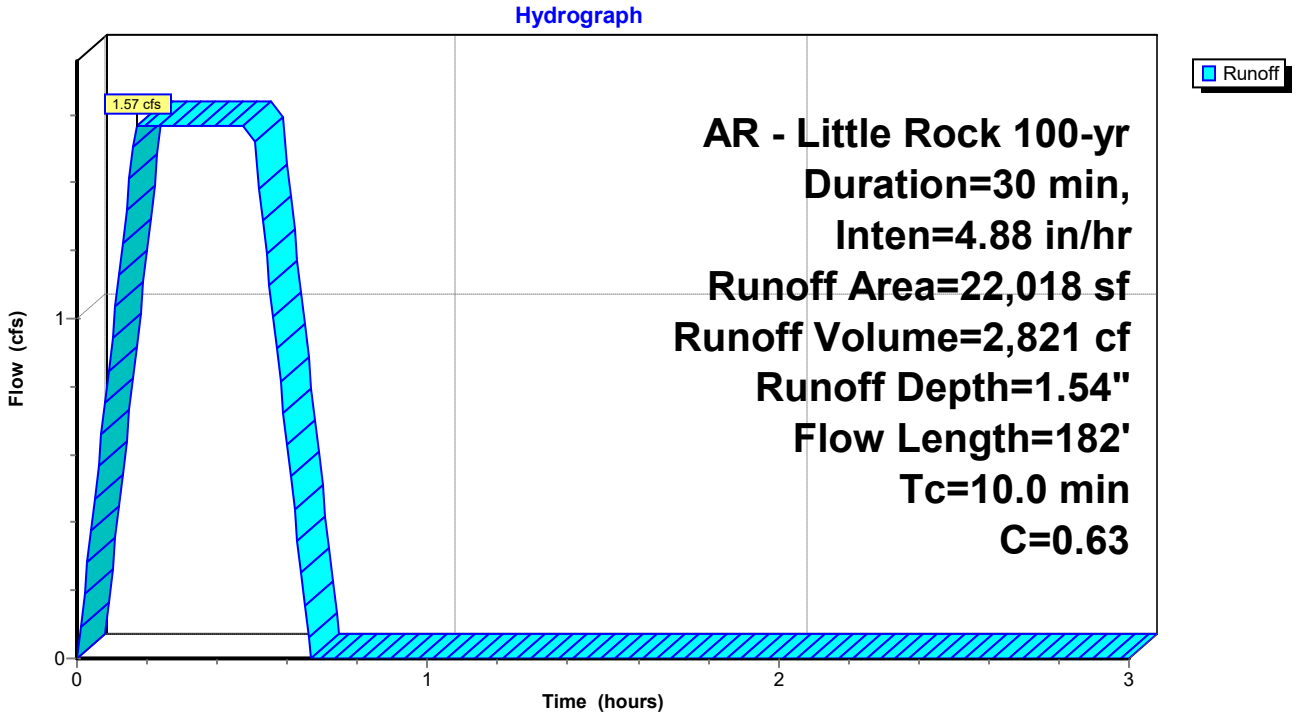
Runoff = 1.57 cfs @ 0.17 hrs, Volume= 2,821 cf, Depth= 1.54"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,753 | 0.40 | Sod Yard |
| 9,265 | 0.95 | Paving, Sidewalks |
| 22,018 | 0.63 | Weighted Average |
| 12,753 | | 57.92% Pervious Area |
| 9,265 | | 42.08% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.2 | 10 | 0.0150 | 0.89 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 9.1 | 93 | 0.0150 | 0.17 | | **Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19" |
| 0.4 | 40 | 0.0110 | 1.57 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 33 | 0.0190 | 2.07 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 6 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 10.0 | 182 | Total | | | |

## Subcatchment B5: Drainage Basin B5



## Summary for Subcatchment B6: Drainage Basin B6

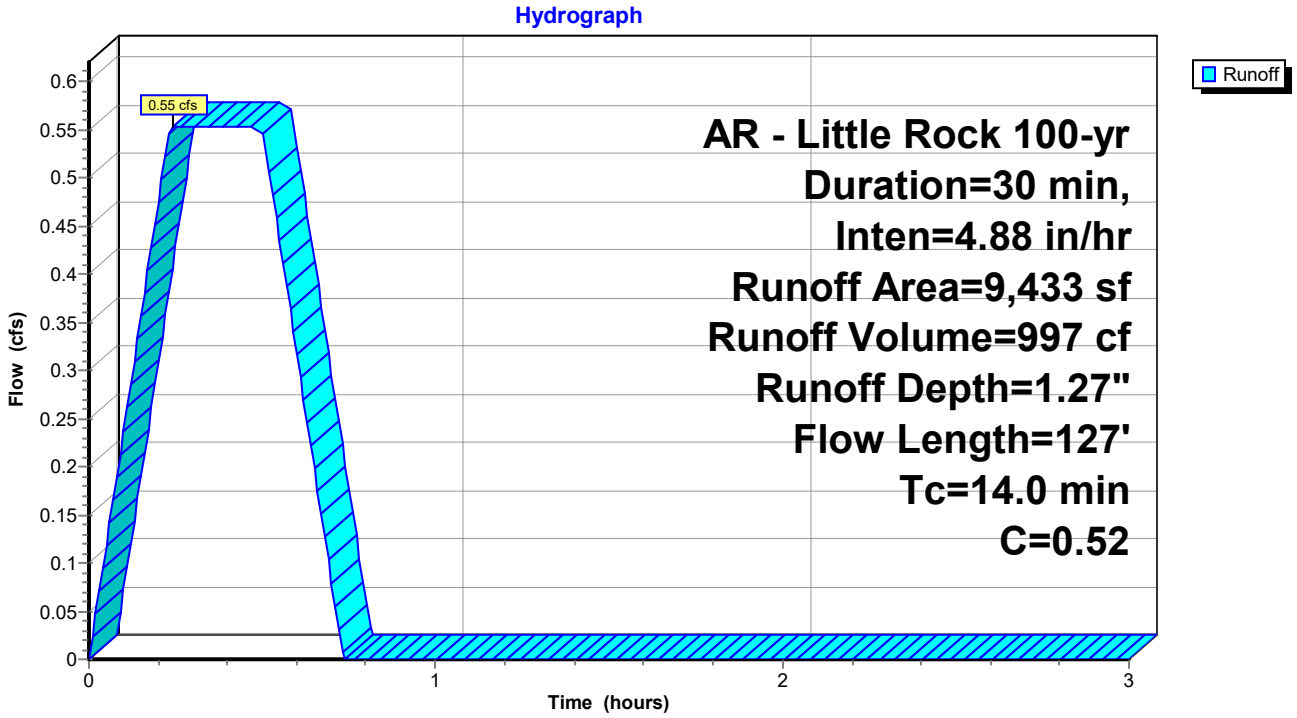
Runoff = 0.55 cfs @ 0.24 hrs, Volume= 997 cf, Depth= 1.27"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,346 | 0.40 | Sod Yard |
| 2,087 | 0.95 | Paving, Sidewalks |
| 9,433 | 0.52 | Weighted Average |
| 7,346 | | 77.88% Pervious Area |
| 2,087 | | 22.12% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 10.4 | 79 | 0.0570 | 0.13 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.5 | 21 | 0.0620 | 0.10 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.0 | 9 | 0.0620 | 3.73 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 18 | 0.1080 | 4.93 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 14.0 | 127 | Total | | | |

## Subcatchment B6: Drainage Basin B6



## Summary for Subcatchment C1: Drainage Basin C1

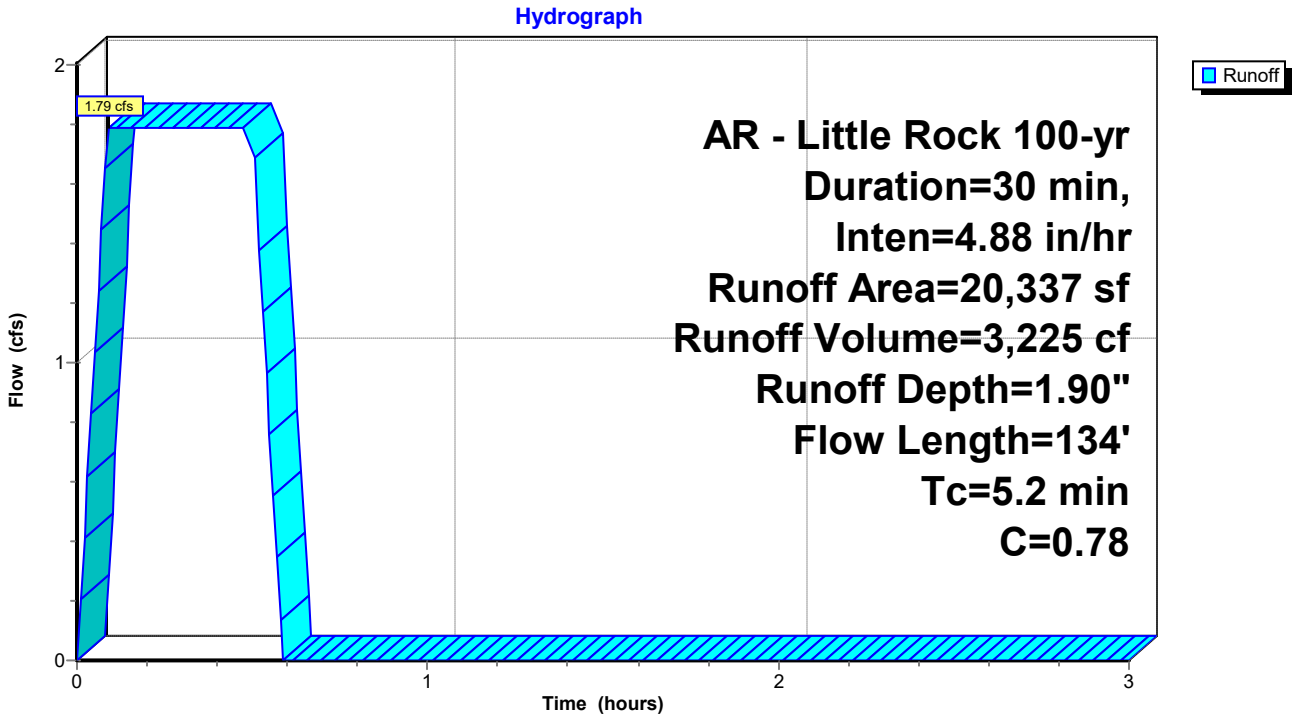
Runoff = 1.79 cfs @ 0.09 hrs, Volume= 3,225 cf, Depth= 1.90"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,135 | 0.40 | Sod Yard |
| 14,202 | 0.95 | Paving, Sidewalks |
| 20,337 | 0.78 | Weighted Average |
| 6,135 | | 30.17% Pervious Area |
| 14,202 | | 69.83% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 32 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.4 | 102 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 5.2 | 134 | Total | | | |

### Subcatchment C1: Drainage Basin C1



## Summary for Subcatchment C10: Drainage Basin C10

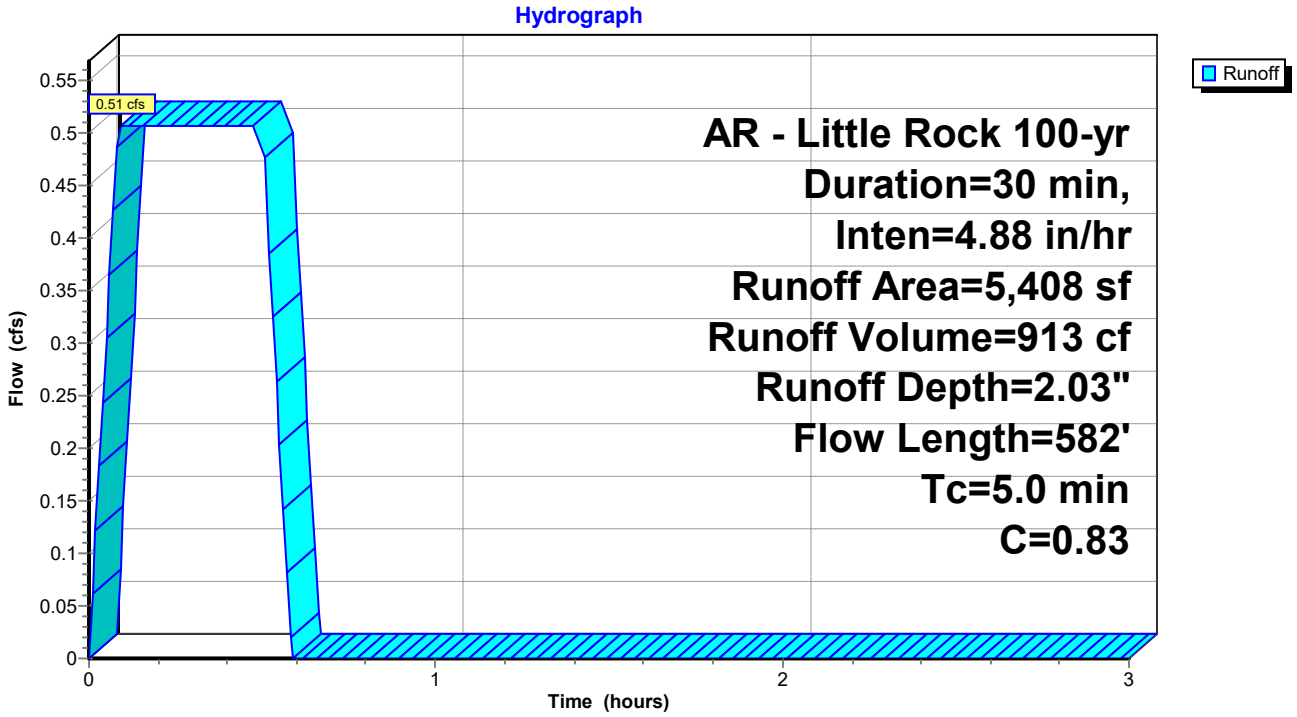
Runoff = 0.51 cfs @ 0.09 hrs, Volume= 913 cf, Depth= 2.03"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,225 | 0.40 | Sod Yard |
| 4,183 | 0.95 | Paving, Sidewalks |
| 5,408 | 0.83 | Weighted Average |
| 1,225 | | 22.65% Pervious Area |
| 4,183 | | 77.35% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 29 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 36 | 0.0320 | 3.63 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 48 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 13 | 0.0350 | 3.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.9 | 415 | | 1.77 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 582 | Total | | | |

## Subcatchment C10: Drainage Basin C10



## Summary for Subcatchment C11: Drainage Basin C11

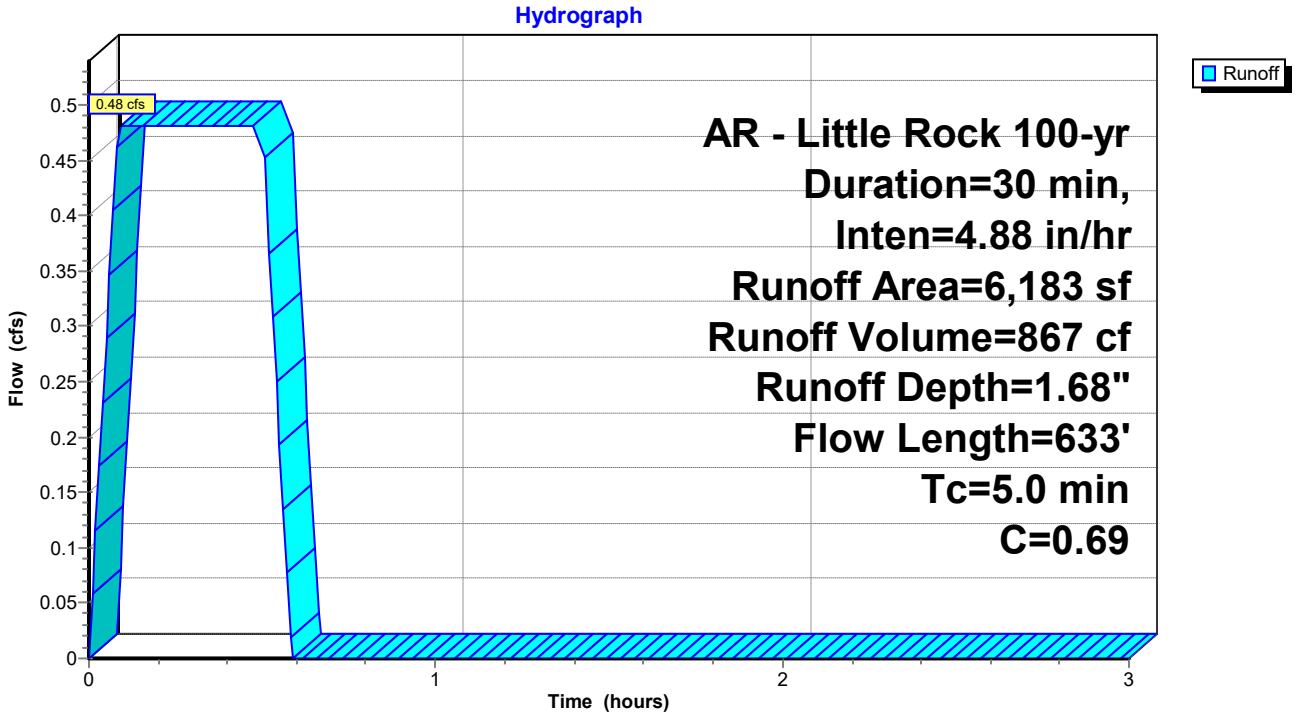
Runoff = 0.48 cfs @ 0.09 hrs, Volume= 867 cf, Depth= 1.68"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,876 | 0.40 | Sod Yard |
| 3,307 | 0.95 | Paving, Sidewalks |
| 6,183 | 0.69 | Weighted Average |
| 2,876 | | 46.51% Pervious Area |
| 3,307 | | 53.49% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 25 | 0.0200 | 1.19 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 33 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 47 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 37 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 633 | Total | | | |

## Subcatchment C11: Drainage Basin C11



## Summary for Subcatchment C12: Drainage Basin C12

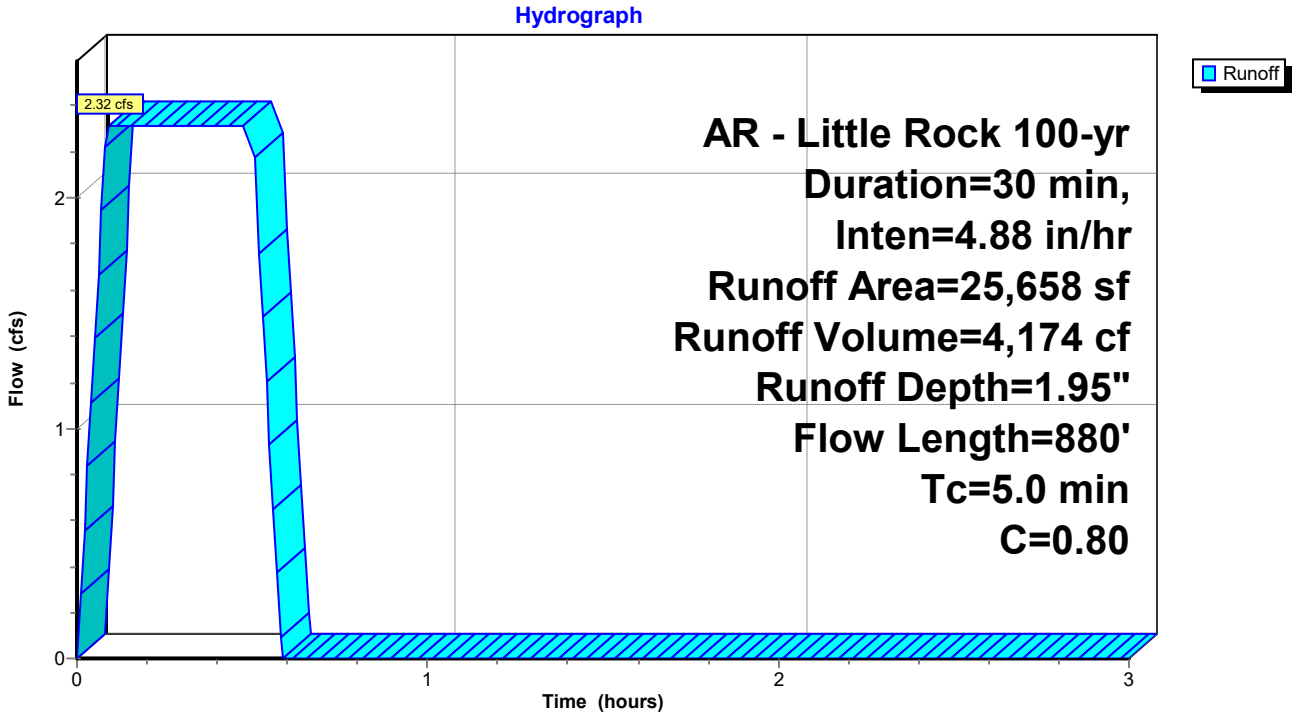
Runoff = 2.32 cfs @ 0.09 hrs, Volume= 4,174 cf, Depth= 1.95"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 7,218 | 0.40 | Sod Yard |
| 18,440 | 0.95 | Paving, Sidewalks |
| 25,658 | 0.80 | Weighted Average |
| 7,218 | | 28.13% Pervious Area |
| 18,440 | | 71.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 24 | 0.0360 | 1.50 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0190 | 0.85 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 21 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.9 | 49 | 0.0020 | 0.91 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.4 | 96 | 0.0330 | 3.69 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 94 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 25 | 0.0450 | 4.31 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 39 | 0.0490 | 4.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0460 | 4.35 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 11 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0440 | 4.26 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.3 | 415 | | 3.01 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 880 | Total | | | |

## Subcatchment C12: Drainage Basin C12



## Summary for Subcatchment C13: Drainage Basin C13

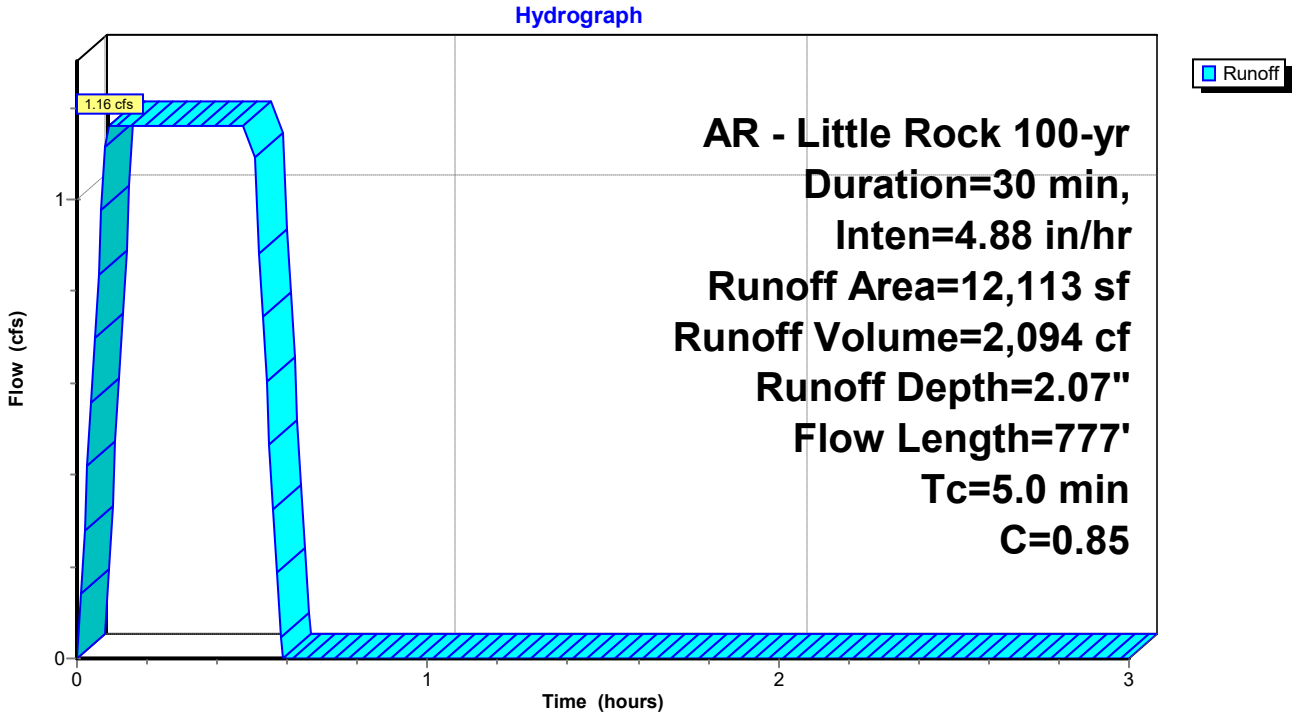
Runoff = 1.16 cfs @ 0.09 hrs, Volume= 2,094 cf, Depth= 2.07"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 2,240 | 0.40 | Sod Yard |
| 9,873 | 0.95 | Paving, Sidewalks |
| 12,113 | 0.85 | Weighted Average |
| 2,240 | | 18.49% Pervious Area |
| 9,873 | | 81.51% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 75 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 29 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 42 | 0.0730 | 5.48 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 74 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 32 | 0.0570 | 4.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.6 | 415 | | 1.92 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 777 | Total | | | |

## Subcatchment C13: Drainage Basin C13



## Summary for Subcatchment C14: Drainage Basin C14

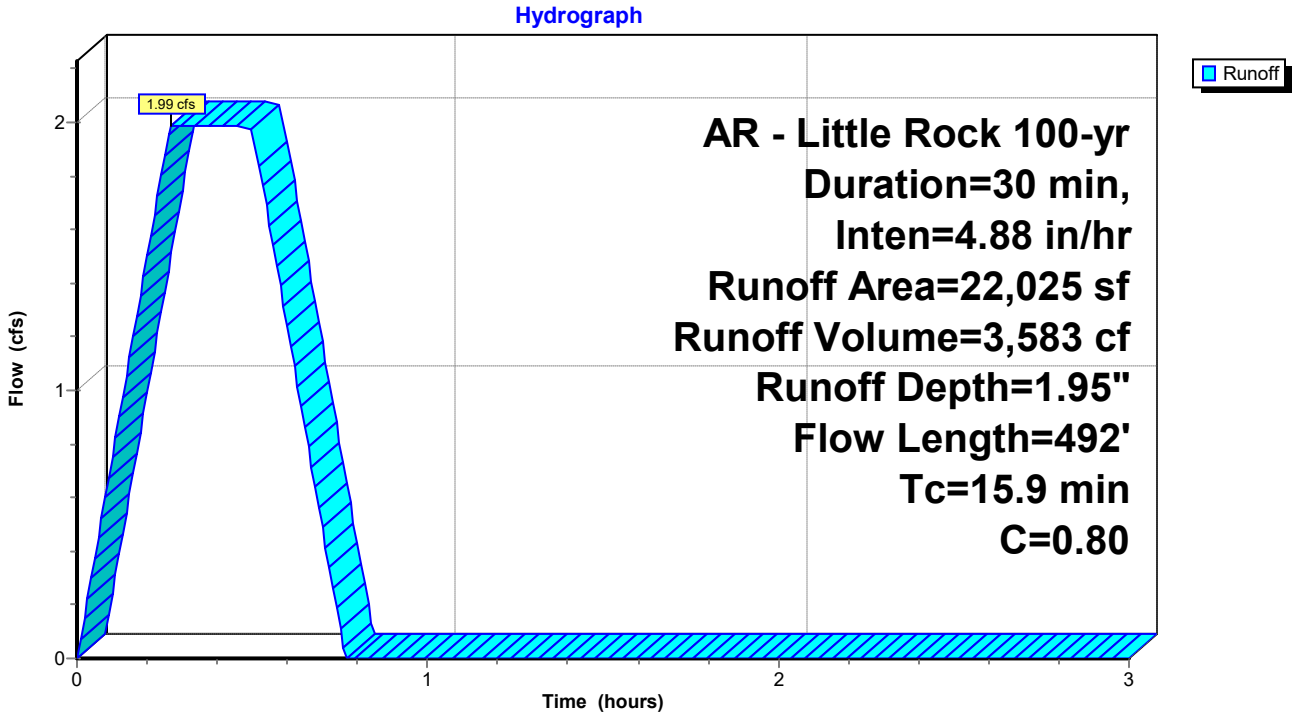
Runoff = 1.99 cfs @ 0.27 hrs, Volume= 3,583 cf, Depth= 1.95"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 6,127 | 0.40 | Sod Yard |
| 15,898 | 0.95 | Paving, Sidewalks |
| 22,025 | 0.80 | Weighted Average |
| 6,127 | | 27.82% Pervious Area |
| 15,898 | | 72.18% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.5 | 5 | 0.0310 | 0.06 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 9.2 | 45 | 0.0250 | 0.08 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 3.8 | 41 | 0.1940 | 0.18 | | **Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 6 | 0.0100 | 0.68 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 51 | 0.0870 | 5.99 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 52 | 0.0310 | 3.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0270 | 3.34 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 20 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 34 | 0.0410 | 4.11 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0470 | 4.40 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 36 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 58 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 49 | 0.0840 | 5.88 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 31 | 0.0690 | 5.33 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 15.9 | 492 | Total | | | |

## Subcatchment C14: Drainage Basin C14



## Summary for Subcatchment C15: Drainage Basin C15

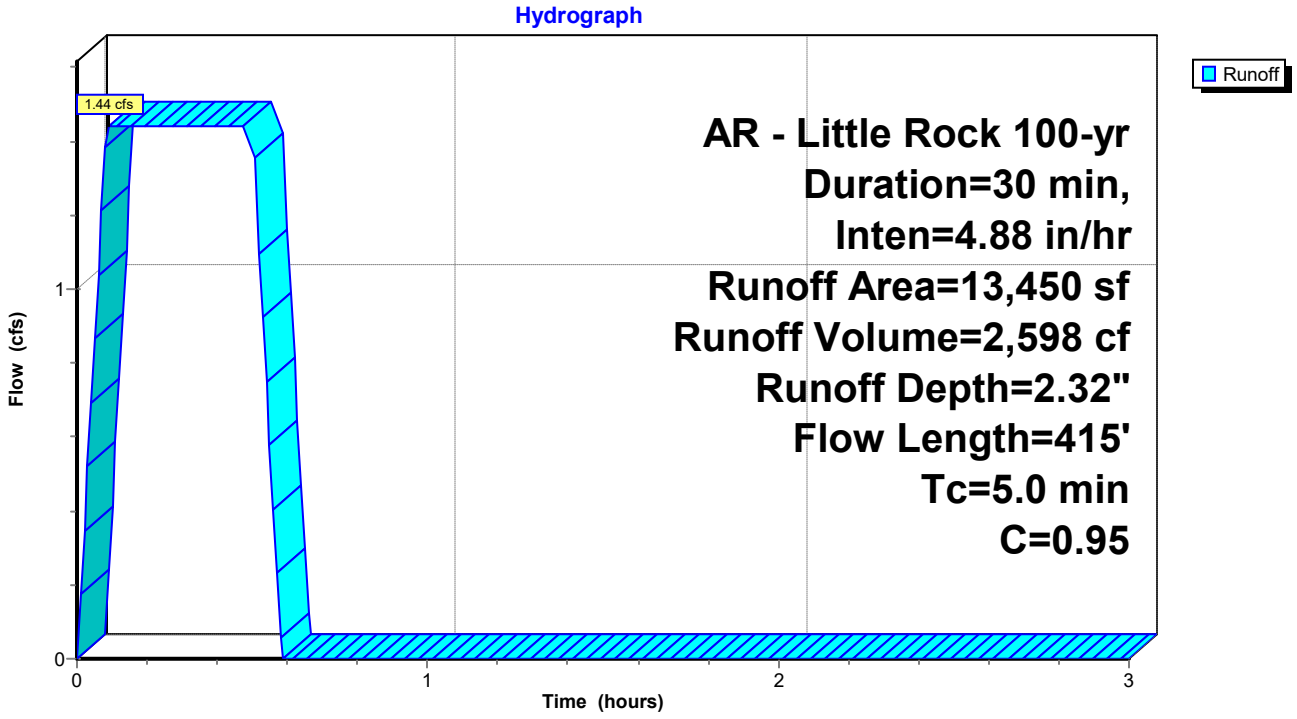
Runoff = 1.44 cfs @ 0.09 hrs, Volume= 2,598 cf, Depth= 2.32"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 13,450 | 0.95 | Paving, Sidewalks |
| 13,450 | 0.95 | Weighted Average |
| 13,450 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Overland Concentrated Flow (Min)** |

## Subcatchment C15: Drainage Basin C15



## Summary for Subcatchment C16: Drainage Basin C16

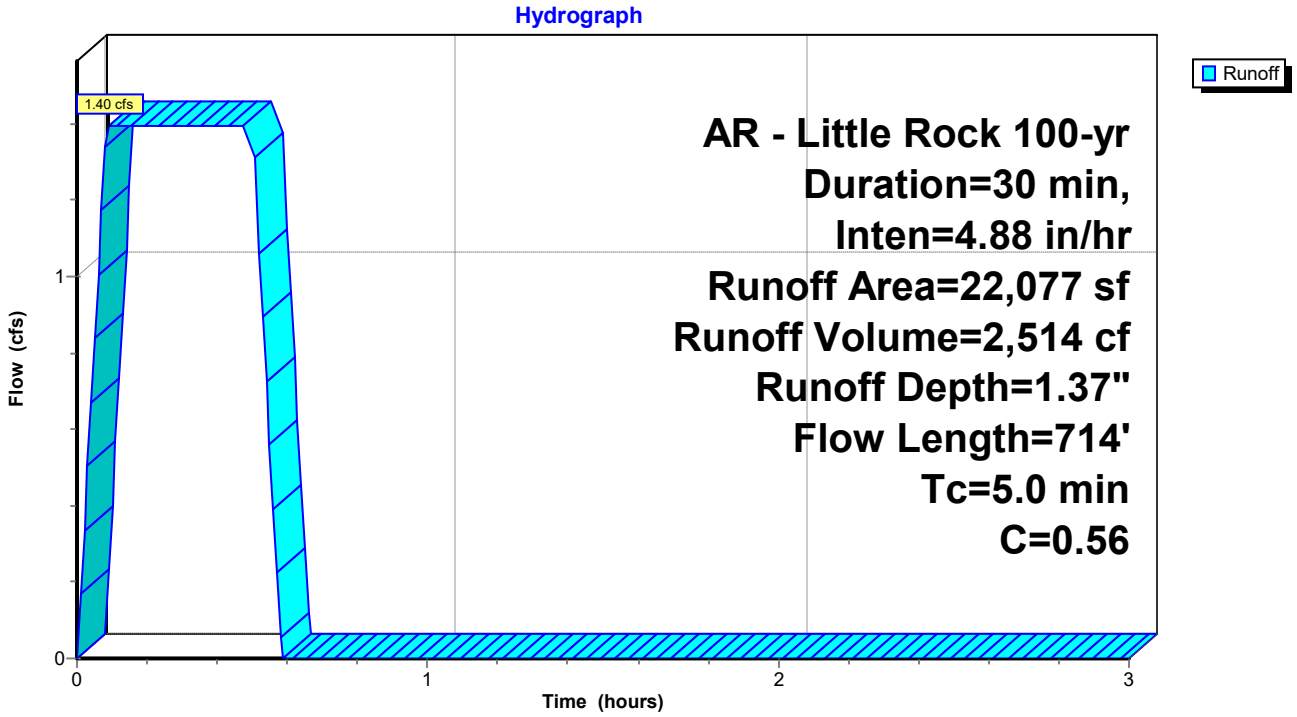
Runoff = 1.40 cfs @ 0.09 hrs, Volume= 2,514 cf, Depth= 1.37"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,465 | 0.40 | Sod Yard |
| 6,612 | 0.95 | Paving, Sidewalks |
| 22,077 | 0.56 | Weighted Average |
| 15,465 | | 70.05% Pervious Area |
| 6,612 | | 29.95% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.4 | 26 | 0.0190 | 1.18 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 5 | 0.0100 | 0.66 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 51 | 0.0500 | 1.98 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 12 | 0.1540 | 2.33 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 50 | 0.1330 | 7.40 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 50 | 0.1170 | 6.94 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 46 | 0.0430 | 4.21 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 59 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 3.3 | 415 | | 2.10 | | **Direct Entry, Overland Concentrated Flow (Min)** |
| 5.0 | 714 | Total | | | |

## Subcatchment C16: Drainage Basin C16



## Summary for Subcatchment C17: Drainage Basin C17

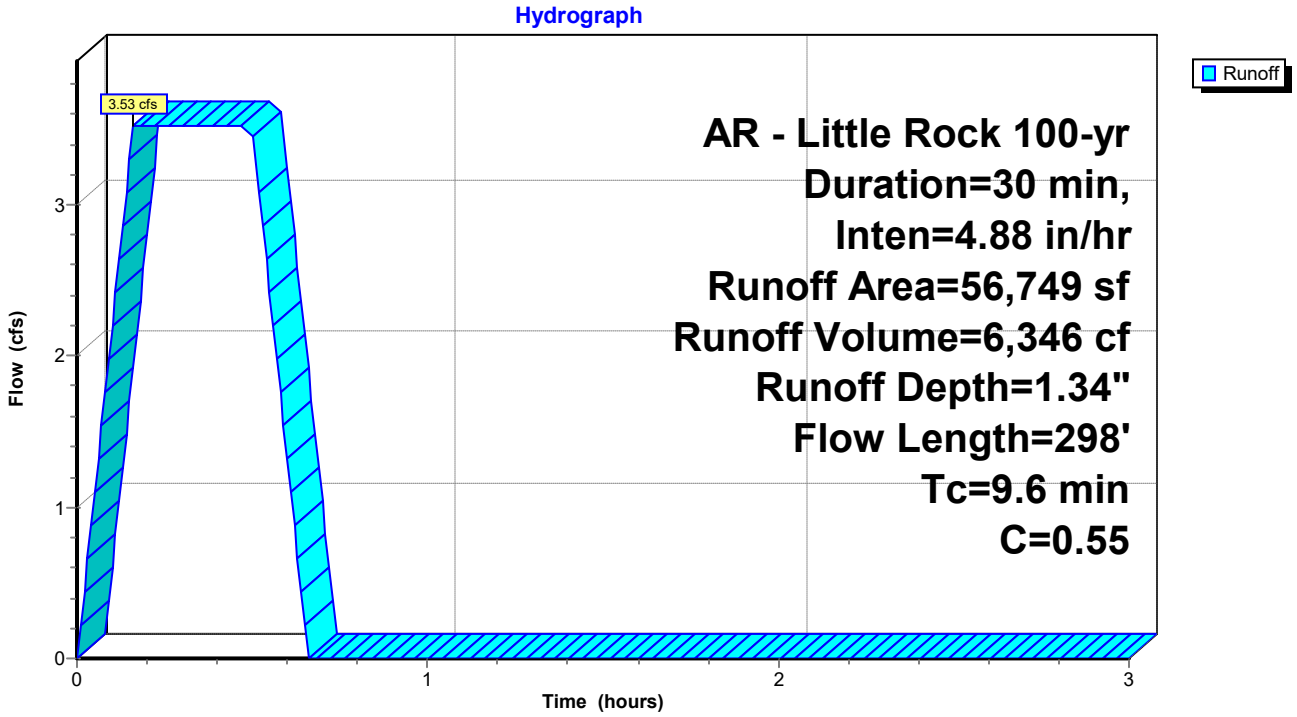
Runoff = 3.53 cfs @ 0.16 hrs, Volume= 6,346 cf, Depth= 1.34"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 40,914 | 0.40 | Sod Yard |
| 15,835 | 0.95 | Paving, Sidewalks |
| 56,749 | 0.55 | Weighted Average |
| 40,914 | | 72.10% Pervious Area |
| 15,835 | | 27.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 4.8 | 43 | 0.0410 | 0.15 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 3.9 | 43 | 0.0690 | 0.19 | | **Sheet Flow, Sheet Flow**<br>Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 41 | 0.0980 | 4.70 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 61 | 0.0730 | 4.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0570 | 3.58 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 0.3 | 64 | 0.0450 | 3.18 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Grassed Waterway Kv= 15.0 fps |
| 9.6 | 298 | Total | | | |

## Subcatchment C17: Drainage Basin C17



## Summary for Subcatchment C18: Drainage Basin C18

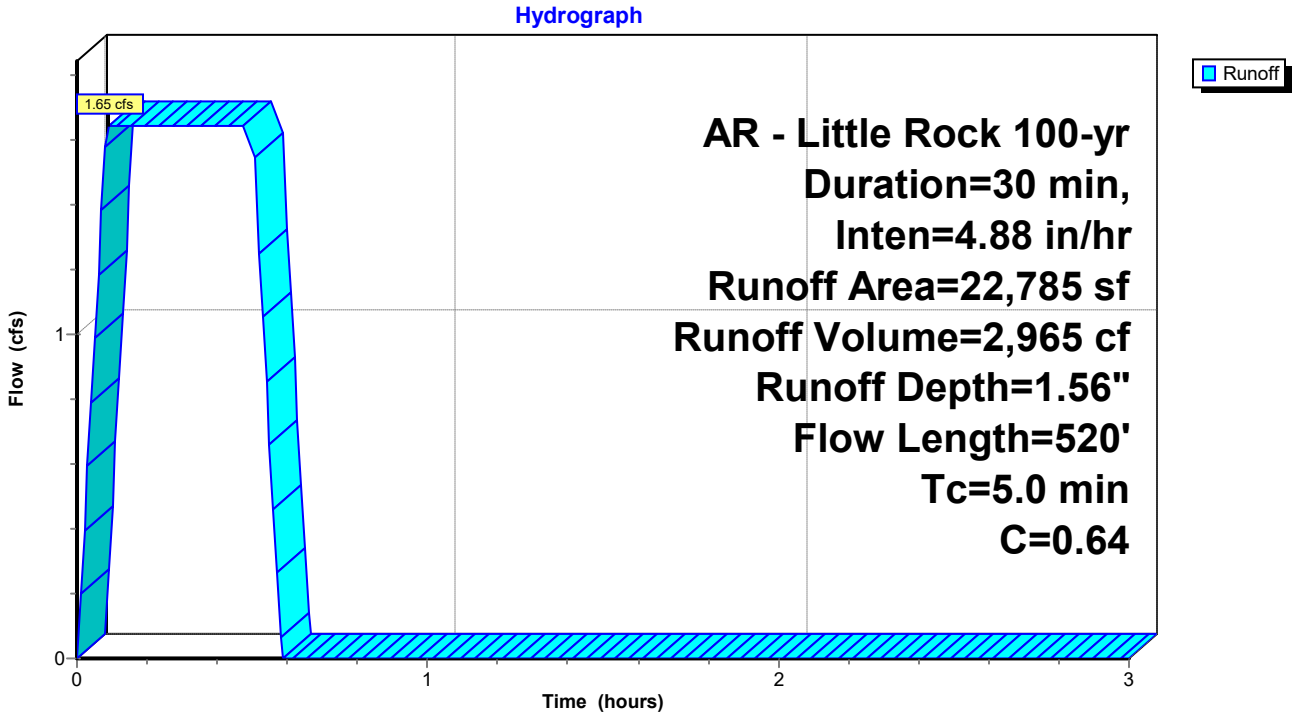
Runoff = 1.65 cfs @ 0.09 hrs, Volume= 2,965 cf, Depth= 1.56"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 12,812 | 0.40 | Sod Yard |
| 9,973 | 0.95 | Paving, Sidewalks |
| 22,785 | 0.64 | Weighted Average |
| 12,812 | | 56.23% Pervious Area |
| 9,973 | | 43.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2980 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.3 | 8 | 0.0100 | 0.04 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 80 | 0.0210 | 2.94 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.4 | 415 | | 17.29 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 520 | Total | | | |

## Subcatchment C18: Drainage Basin C18



## Summary for Subcatchment C19: Drainage Basin C19

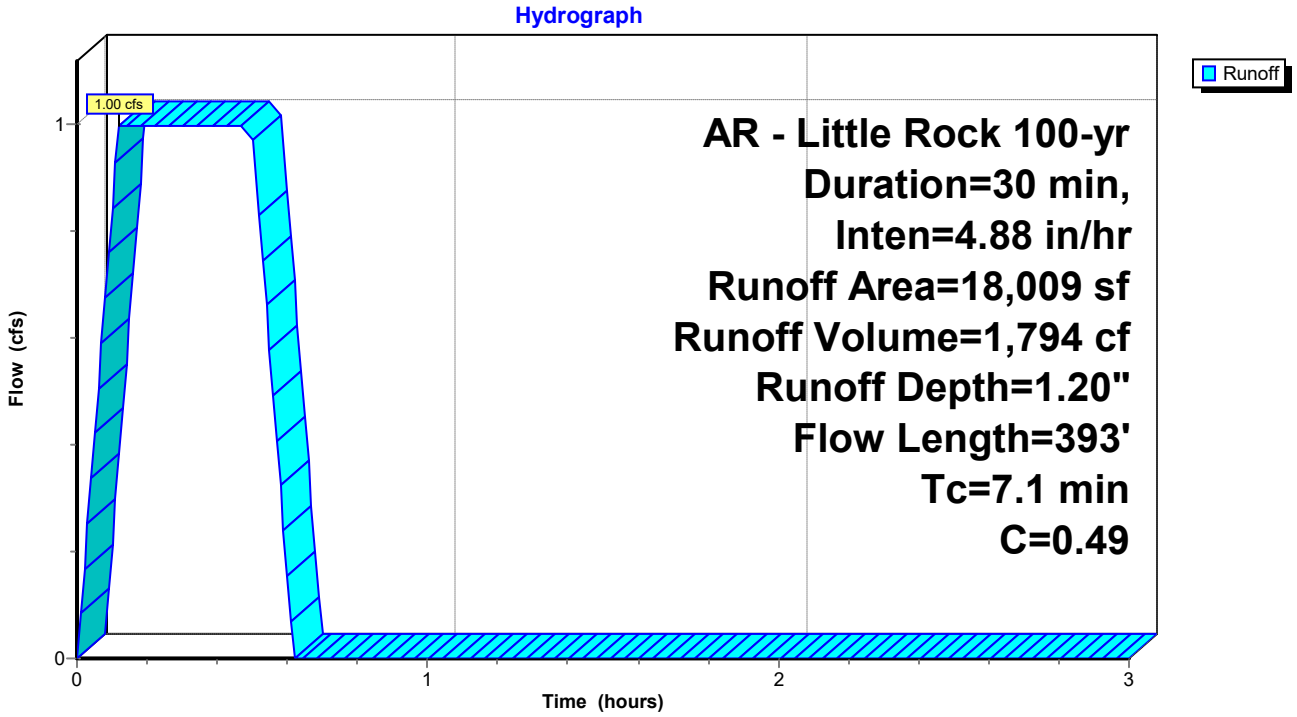
Runoff = 1.00 cfs @ 0.12 hrs, Volume= 1,794 cf, Depth= 1.20"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 15,129 | 0.40 | Sod Yard |
| 2,880 | 0.95 | Paving, Sidewalks |
| 18,009 | 0.49 | Weighted Average |
| 15,129 | | 84.01% Pervious Area |
| 2,880 | | 15.99% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 2.7 | 34 | 0.1110 | 0.21 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 3.3 | 66 | 0.2450 | 0.34 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.0 | 9 | 0.2450 | 7.42 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.5 | 106 | 0.0610 | 3.70 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.2 | 46 | 0.0800 | 4.24 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.1 | 41 | 0.0960 | 4.65 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 66 | 0.0680 | 3.91 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.0 | 19 | 0.1070 | 6.64 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.0 | 6 | 0.0750 | 5.56 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 7.1 | 393 | Total | | | |

## Subcatchment C19: Drainage Basin C19



## Summary for Subcatchment C2: Drainage Basin C2

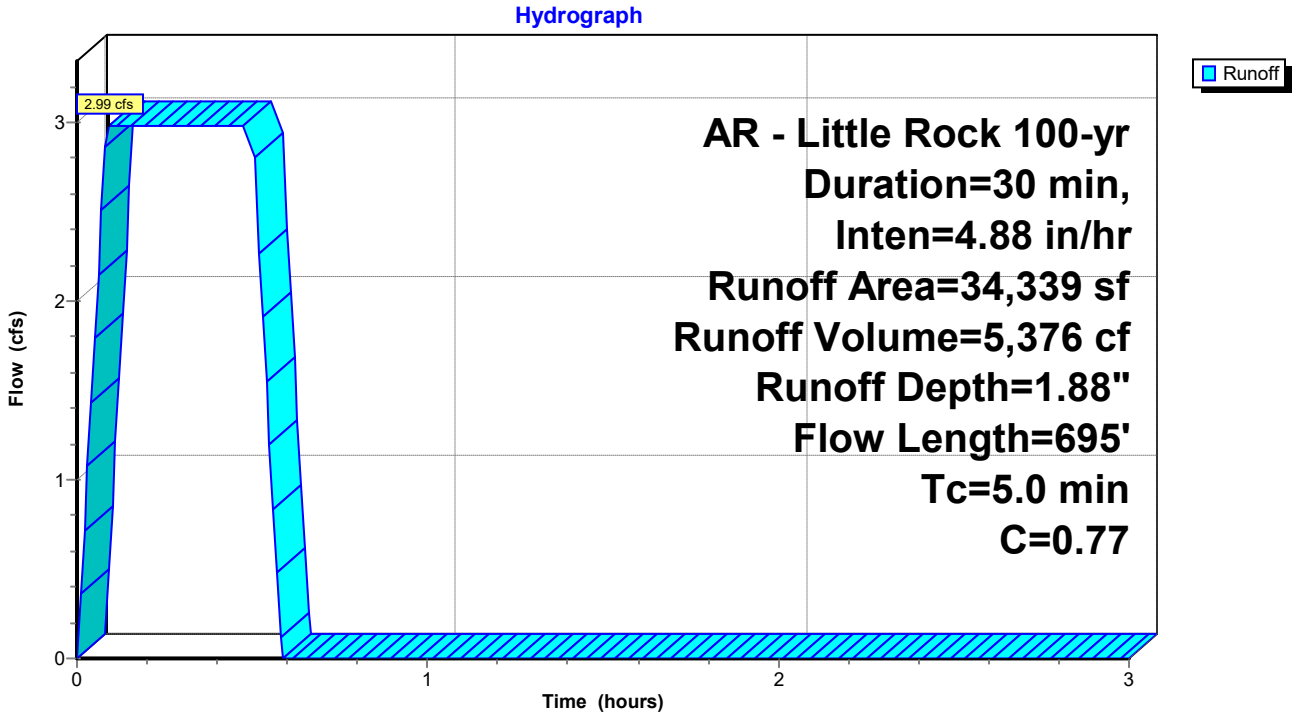
Runoff = 2.99 cfs @ 0.09 hrs, Volume= 5,376 cf, Depth= 1.88"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 11,376 | 0.40 | Sod Yard |
| 22,963 | 0.95 | Roof, Paving, Sidewalks |
| 34,339 | 0.77 | Weighted Average |
| 11,376 | | 33.13% Pervious Area |
| 22,963 | | 66.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 20 | 0.0200 | 1.14 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.4 | 74 | 0.0240 | 3.14 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0710 | 5.41 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 21 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.6 | 148 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 3.5 | 415 | | 1.98 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 695 | Total | | | |

## Subcatchment C2: Drainage Basin C2



## Summary for Subcatchment C20: Drainage Basin C20

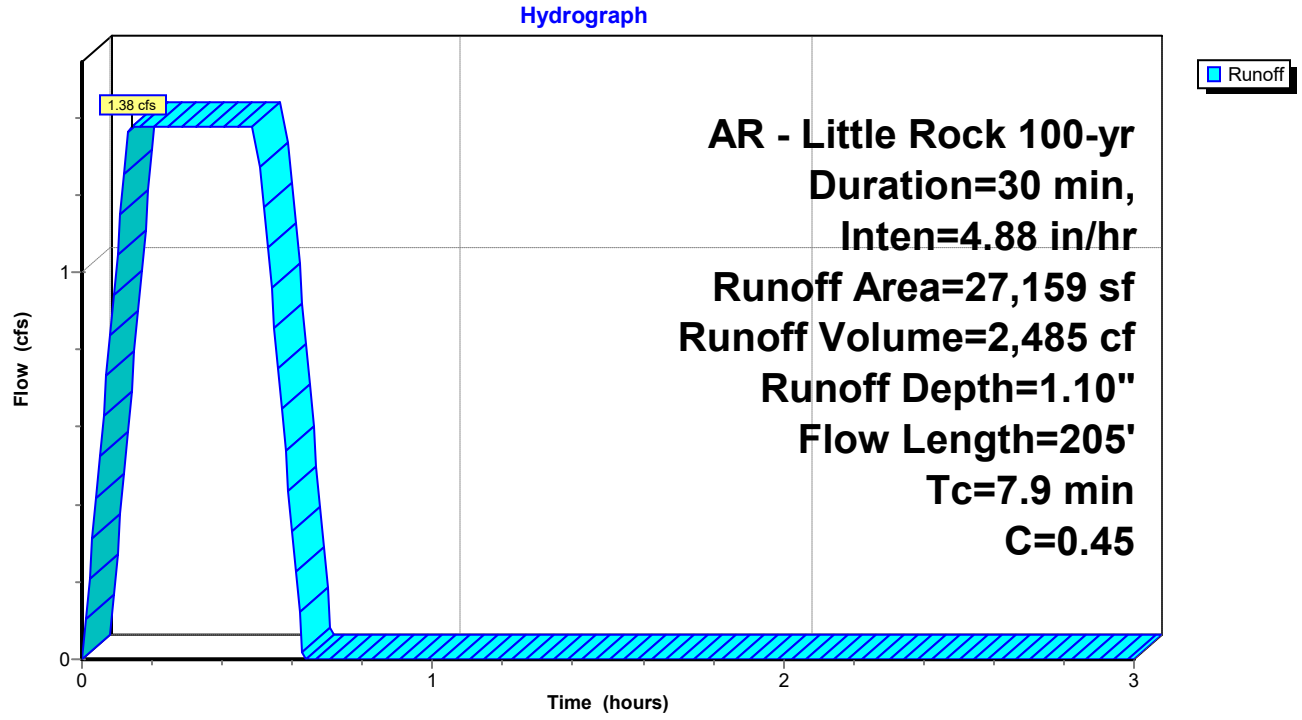
Runoff = 1.38 cfs @ 0.14 hrs, Volume= 2,485 cf, Depth= 1.10"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 24,838 | 0.40 | Sod Yard |
| 2,321 | 0.95 | Paving, Sidewalks |
| 27,159 | 0.45 | Weighted Average |
| 24,838 | | 91.45% Pervious Area |
| 2,321 | | 8.55% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 45 | 0.1430 | 0.25 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 4.5 | 55 | 0.0780 | 0.20 | | **Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19" |
| 0.1 | 37 | 0.0780 | 4.19 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 0.3 | 68 | 0.0710 | 4.00 | | **Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps |
| 7.9 | 205 | Total | | | |

## Subcatchment C20: Drainage Basin C20



## Summary for Subcatchment C21: Drainage Basin C21

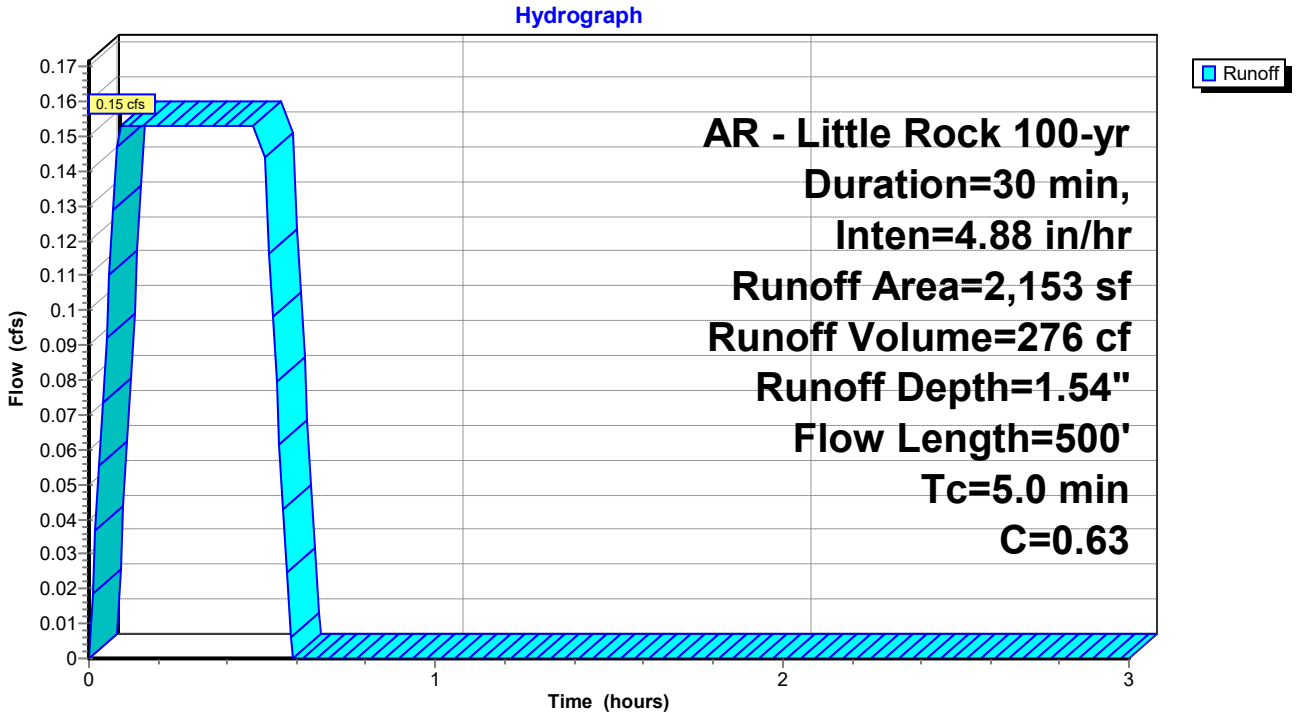
Runoff = 0.15 cfs @ 0.09 hrs, Volume= 276 cf, Depth= 1.54"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,234 | 0.40 | Sod Yard |
| 919 | 0.95 | Paving, Sidewalks |
| 2,153 | 0.63 | Weighted Average |
| 1,234 | | 57.32% Pervious Area |
| 919 | | 42.68% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 2 | 0.2500 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.3 | 33 | 0.0520 | 1.85 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.8 | 24 | 0.0660 | 0.11 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.1 | 26 | 0.0620 | 5.05 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.5 | 415 | | 13.83 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 500 | Total | | | |

## Subcatchment C21: Drainage Basin C21



## Summary for Subcatchment C3: Drainage Basin C3

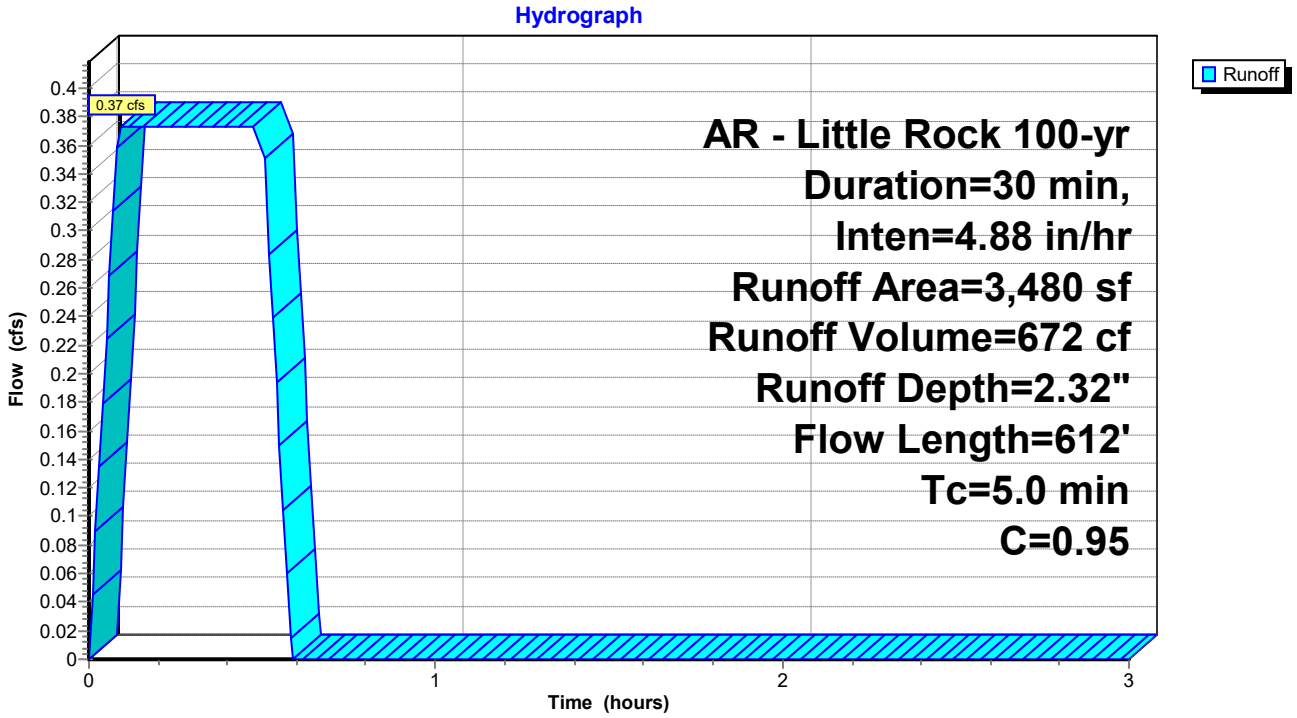
Runoff = 0.37 cfs @ 0.09 hrs, Volume= 672 cf, Depth= 2.32"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 3,480 | 0.95 | Paving, Sidewalks |
| 3,480 | 0.95 | Weighted Average |
| 3,480 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.0 | 10 | 0.0340 | 3.74 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 18 | 0.0390 | 4.01 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.6 | 147 | 0.0380 | 3.96 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.0 | 415 | | 1.73 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 612 | Total | | | |

## Subcatchment C3: Drainage Basin C3



## Summary for Subcatchment C4: Drainage Basin C4

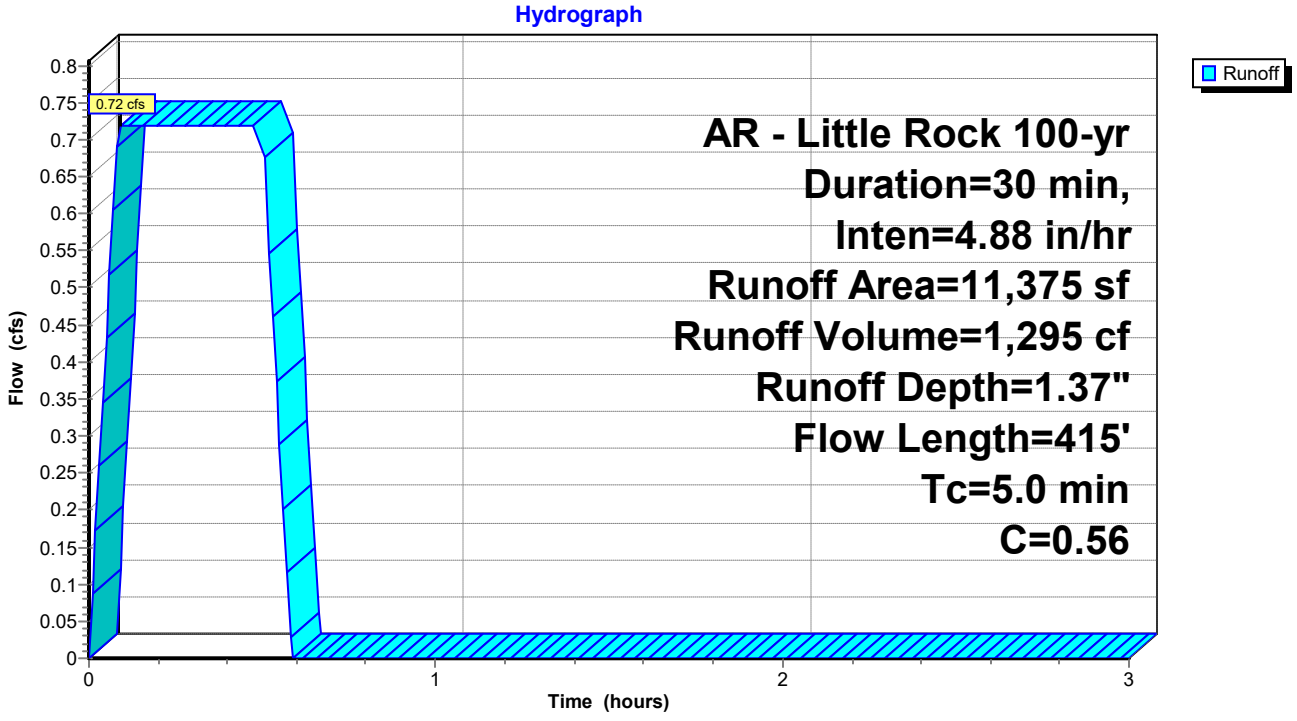
Runoff = 0.72 cfs @ 0.09 hrs, Volume= 1,295 cf, Depth= 1.37"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 8,130 | 0.40 | Sod Yard |
| 3,245 | 0.95 | Paving, Sidewalks |
| 11,375 | 0.56 | Weighted Average |
| 8,130 | | 71.47% Pervious Area |
| 3,245 | | 28.53% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 5.0 | 415 | | 1.38 | | **Direct Entry, Concentrated Flow (Min)** |

### Subcatchment C4: Drainage Basin C4



## Summary for Subcatchment C5: Drainage Basin C5

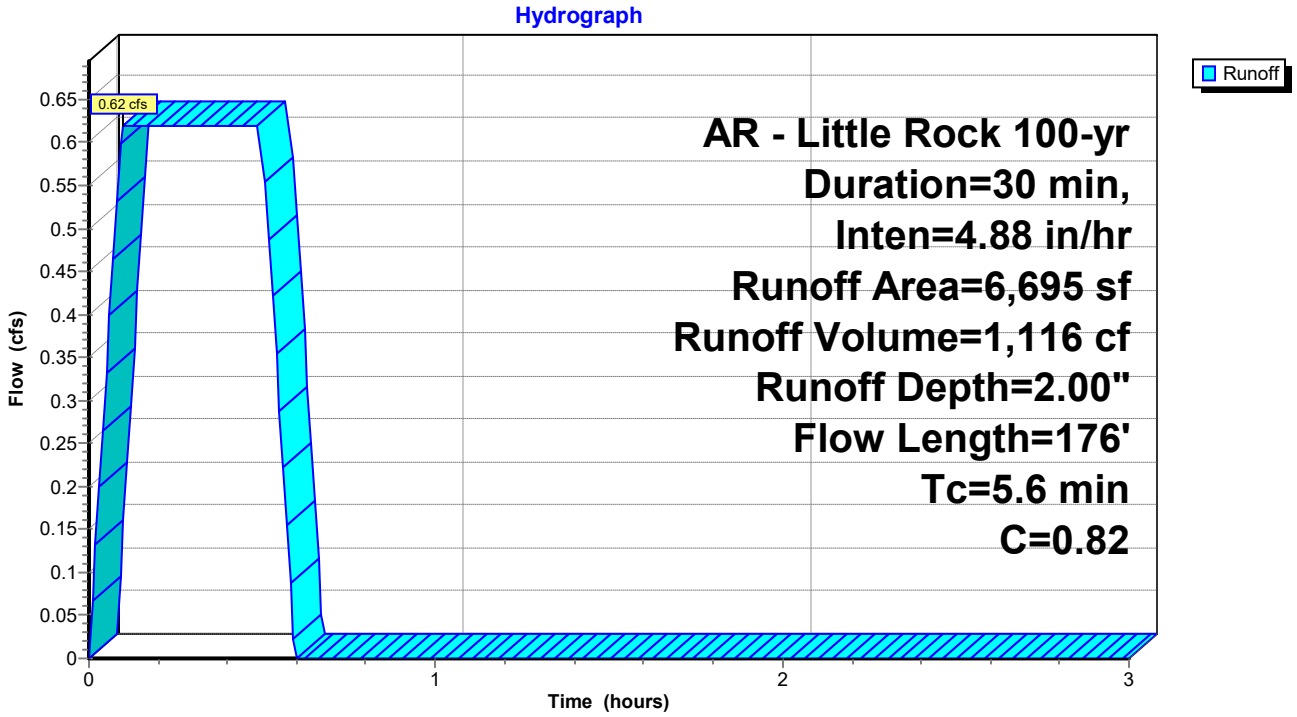
Runoff = 0.62 cfs @ 0.10 hrs, Volume= 1,116 cf, Depth= 2.00"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 1,634 | 0.40 | Sod Yard |
| 5,061 | 0.95 | Paving, Sidewalks |
| 6,695 | 0.82 | Weighted Average |
| 1,634 | | 24.41% Pervious Area |
| 5,061 | | 75.59% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 5 | 0.2990 | 0.14 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.2 | 12 | 0.0130 | 0.87 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 3.9 | 8 | 0.0070 | 0.03 | | **Sheet Flow, Sheet Flow**<br>Grass: Bermuda n= 0.410 P2= 4.19" |
| 0.5 | 58 | 0.0080 | 1.82 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 14 | 0.0280 | 3.40 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0370 | 3.90 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0940 | 6.22 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.0 | 13 | 0.0560 | 4.80 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.2 | 30 | 0.0180 | 2.72 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 5.6 | 176 | Total | | | |

## Subcatchment C5: Drainage Basin C5



## Summary for Subcatchment C6: Drainage Basin C6

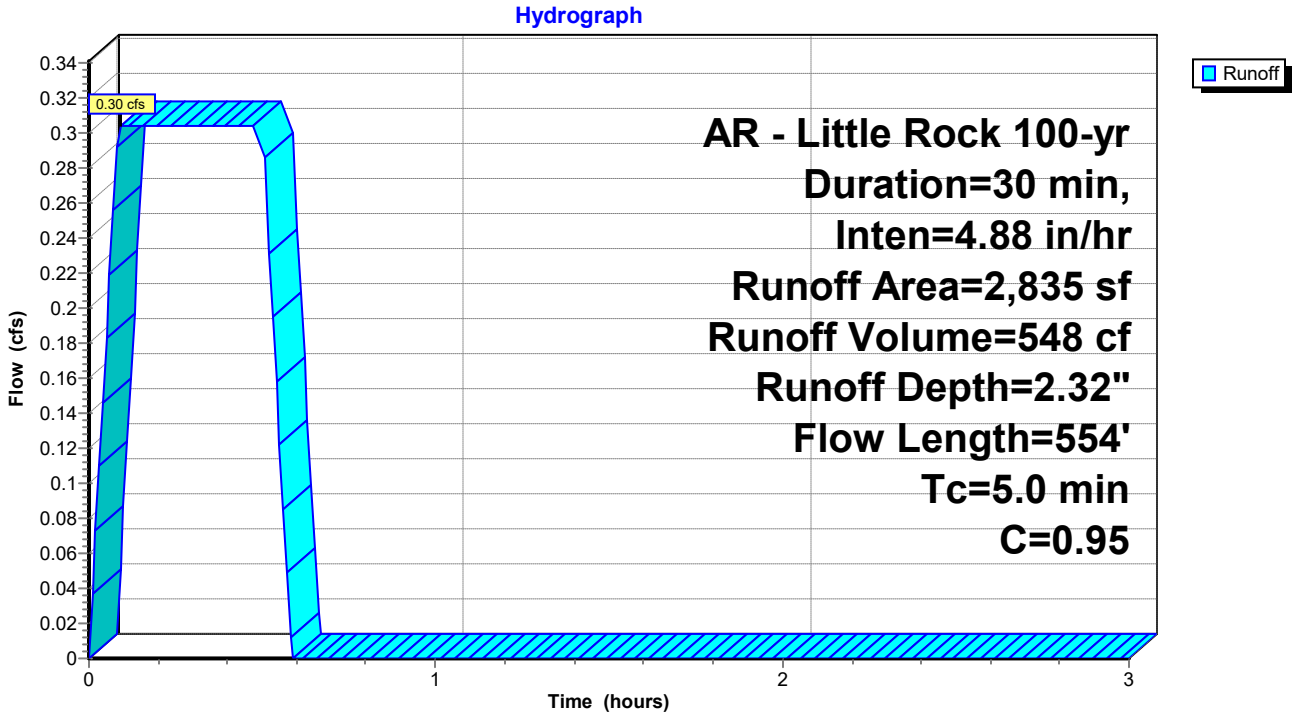
Runoff = 0.30 cfs @ 0.09 hrs, Volume= 548 cf, Depth= 2.32"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 2,835 | 0.95 | Paving, Sidewalks |
| 2,835 | 0.95 | Weighted Average |
| 2,835 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 22 | 0.0200 | 1.16 | | **Sheet Flow, Sheet Flow**<br>Smooth surfaces n= 0.011 P2= 4.19" |
| 0.2 | 19 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 17 | 0.0170 | 2.65 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 26 | 0.0360 | 3.85 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 28 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 0.1 | 27 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Concentrated Flow**<br>Paved Kv= 20.3 fps |
| 4.1 | 415 | | 1.69 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 554 | Total | | | |

## Subcatchment C6: Drainage Basin C6



## Summary for Subcatchment C7: Drainage Basin C7

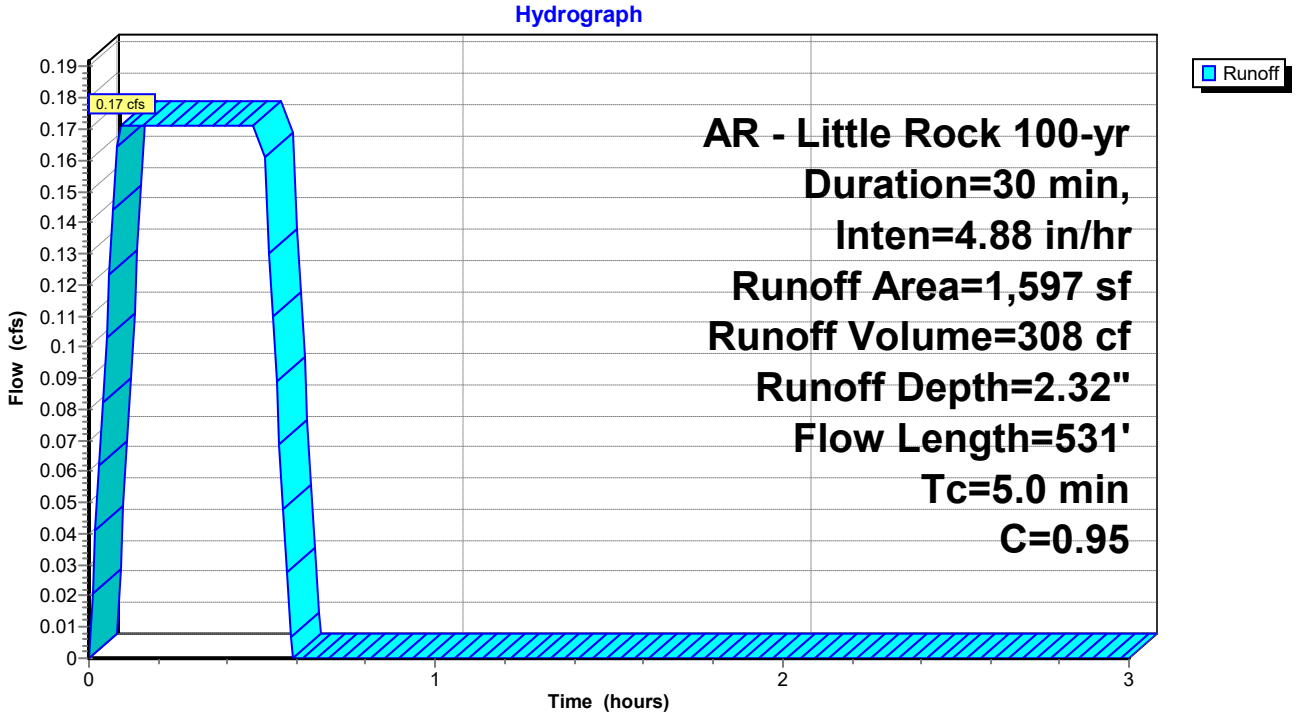
Runoff = 0.17 cfs @ 0.09 hrs, Volume= 308 cf, Depth= 2.32"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,597 | 0.95 | Paving, Sidewalks |
| 1,597 | 0.95 | Weighted Average |
| 1,597 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 19 | 0.0200 | 1.13 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 16 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.3 | 81 | 0.0580 | 4.89 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 4.3 | 415 | | 1.61 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 531 | Total | | | |

## Subcatchment C7: Drainage Basin C7



## Summary for Subcatchment C8: Drainage Basin C8

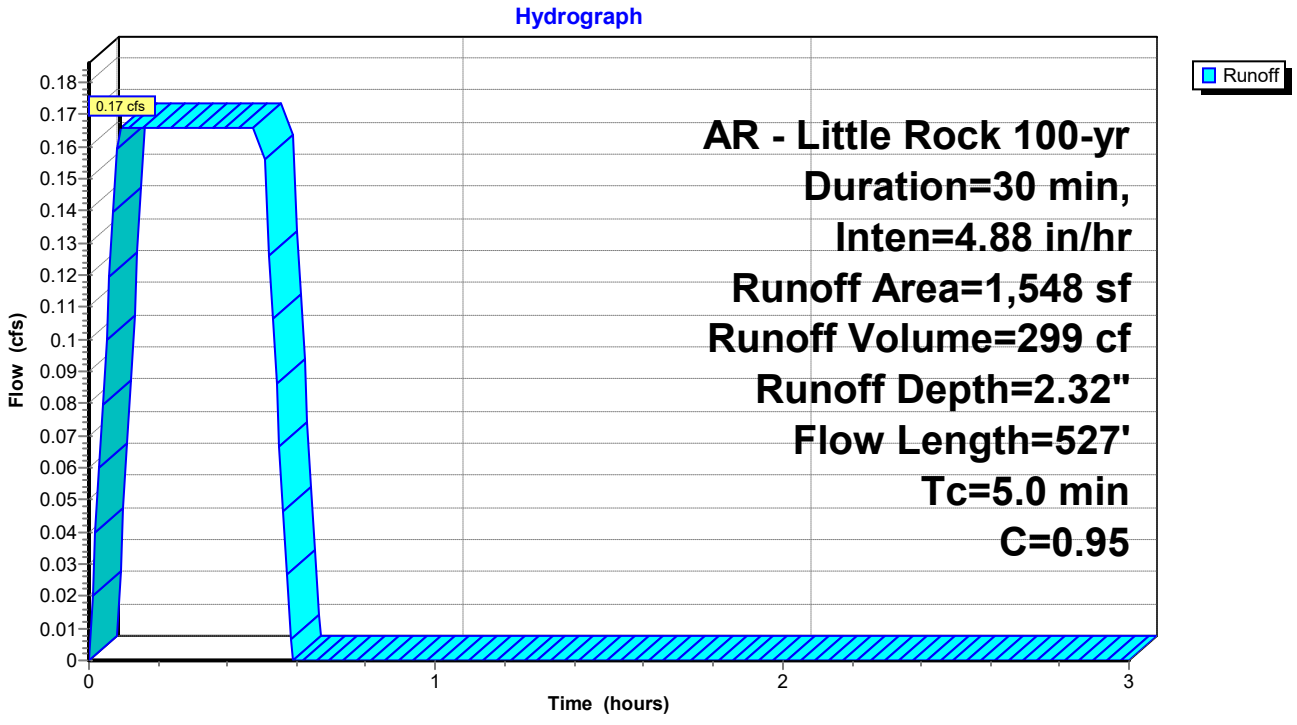
Runoff = 0.17 cfs @ 0.09 hrs, Volume= 299 cf, Depth= 2.32"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 0 | 0.40 | Sod Yard |
| 1,548 | 0.95 | Paving, Sidewalks |
| 1,548 | 0.95 | Weighted Average |
| 1,548 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.3 | 18 | 0.0200 | 1.12 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.3 | 94 | 0.0610 | 5.01 | | **Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps |
| 4.4 | 415 | | 1.57 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 527 | Total | | | |

## Subcatchment C8: Drainage Basin C8



## Summary for Subcatchment C9: Drainage Basin C9

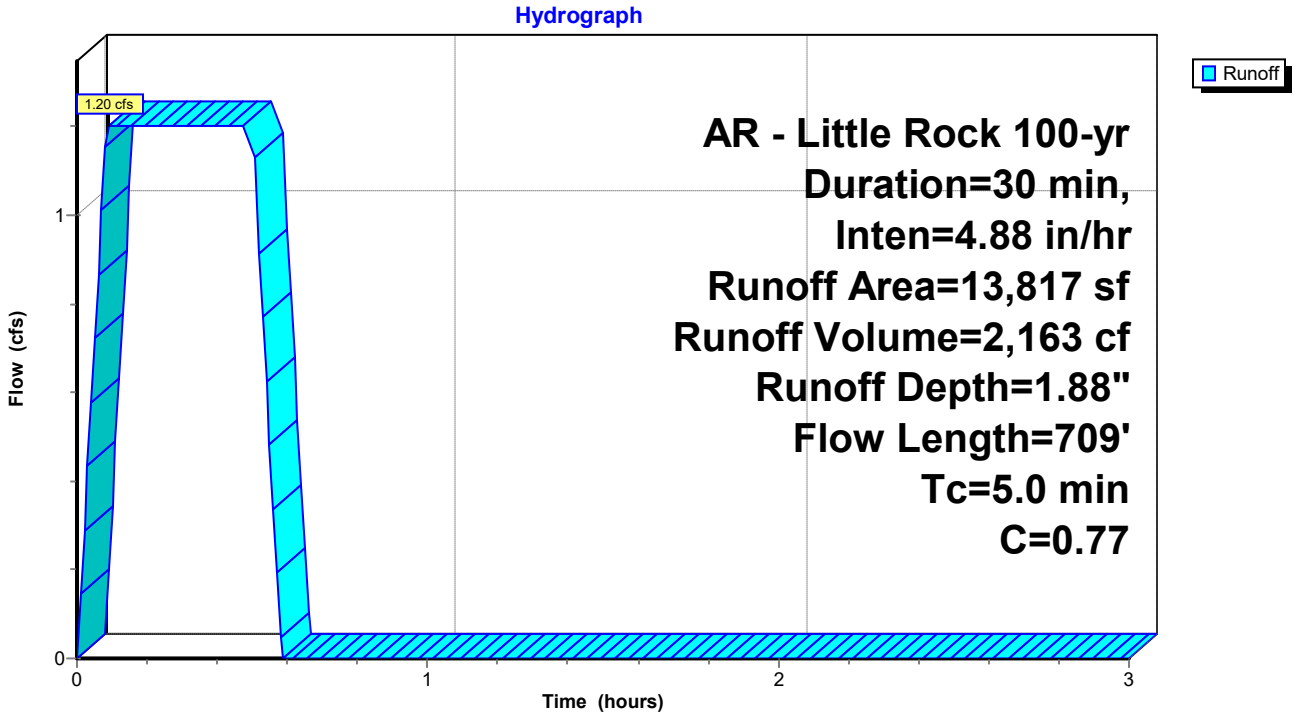
Runoff = 1.20 cfs @ 0.09 hrs, Volume= 2,163 cf, Depth= 1.88"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

| Area (sf) | C | Description |
|---|---|---|
| 4,456 | 0.40 | Sod Yard |
| 9,361 | 0.95 | Paving, Sidewalks |
| 13,817 | 0.77 | Weighted Average |
| 4,456 | | 32.25% Pervious Area |
| 9,361 | | 67.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.2 | 100 | 0.0140 | 1.36 | | **Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19" |
| 0.1 | 13 | 0.0150 | 2.49 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 23 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 7 | 0.0050 | 1.44 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 8 | 0.0100 | 2.03 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 41 | 0.0420 | 4.16 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.1 | 41 | 0.0540 | 4.72 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 0.2 | 61 | 0.0520 | 4.63 | | **Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps |
| 2.9 | 415 | | 2.39 | | **Direct Entry, Concentrated Flow (Min)** |
| 5.0 | 709 | Total | | | |

## Subcatchment C9: Drainage Basin C9

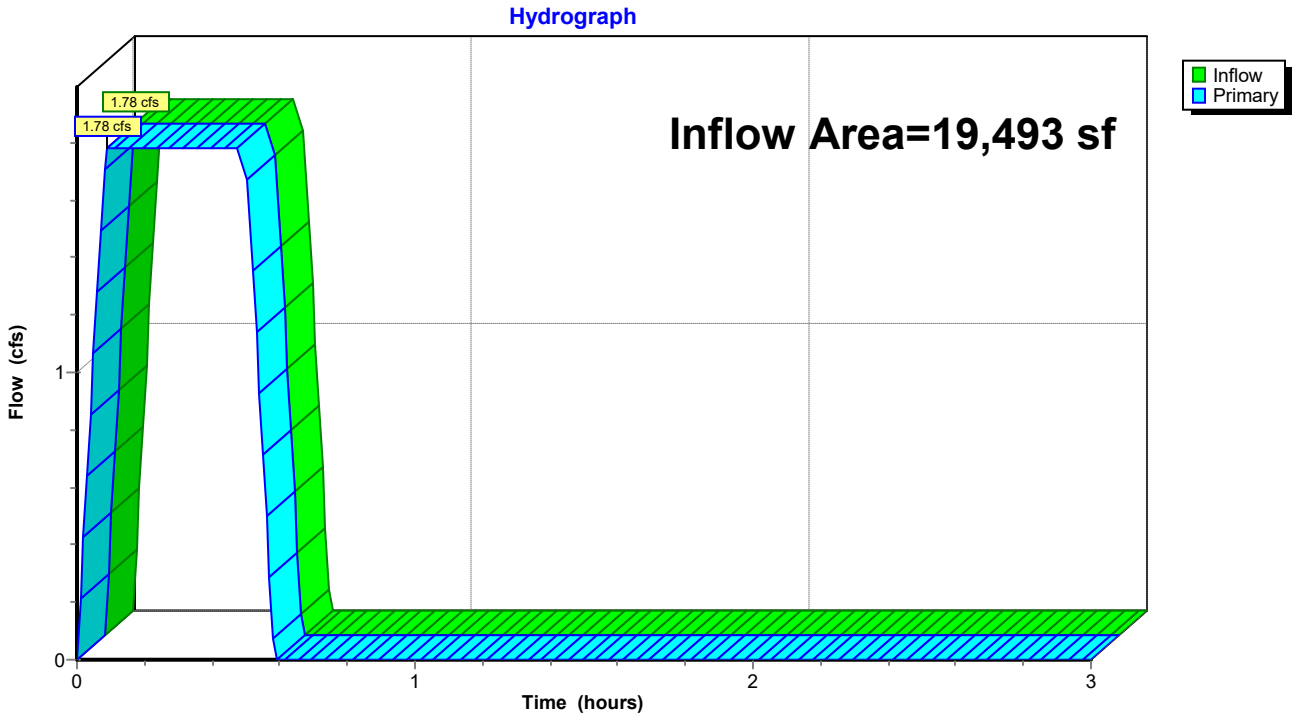


## Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.85% Impervious, Inflow Depth = 1.98" for 100-yr event
Inflow = 1.78 cfs @ 0.09 hrs, Volume= 3,210 cf
Primary = 1.78 cfs @ 0.09 hrs, Volume= 3,210 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A1: CI - A1

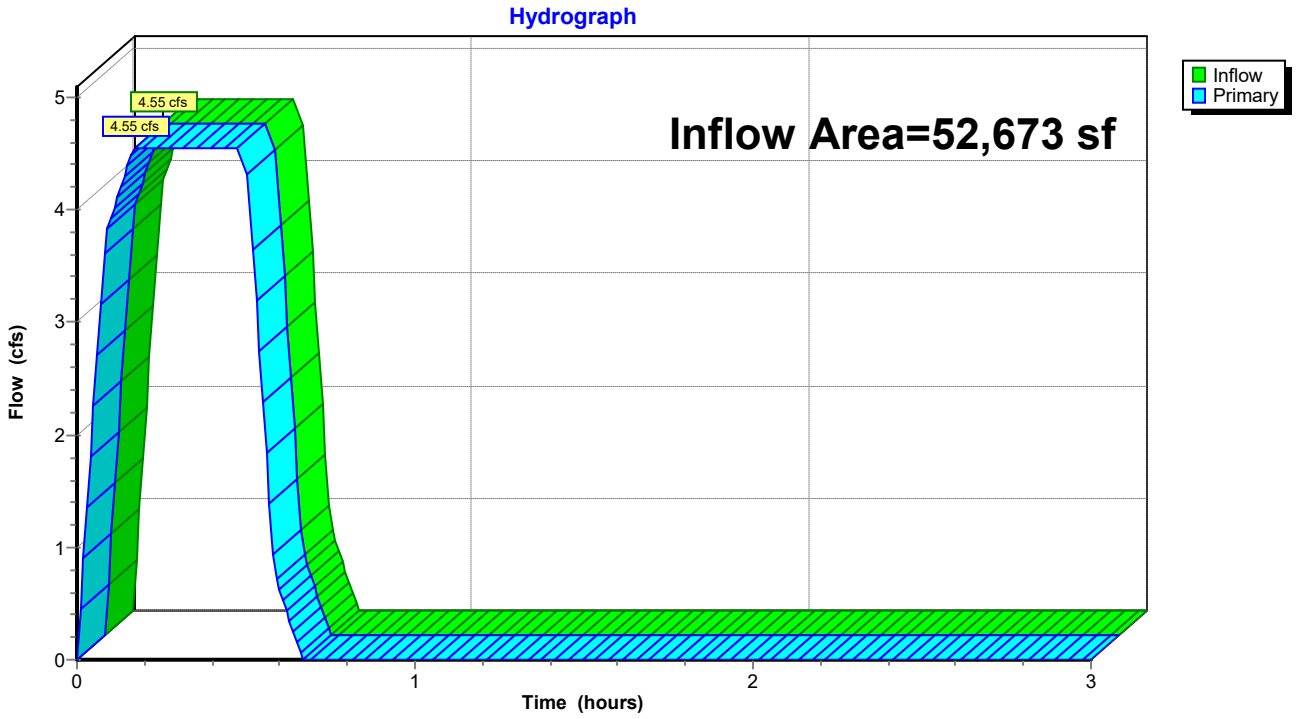


## Summary for Pond CI-A3: CI - A3

Inflow Area = 52,673 sf, 66.48% Impervious, Inflow Depth = 1.87" for 100-yr event
Inflow = 4.55 cfs @ 0.17 hrs, Volume= 8,187 cf
Primary = 4.55 cfs @ 0.17 hrs, Volume= 8,187 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A3: CI - A3

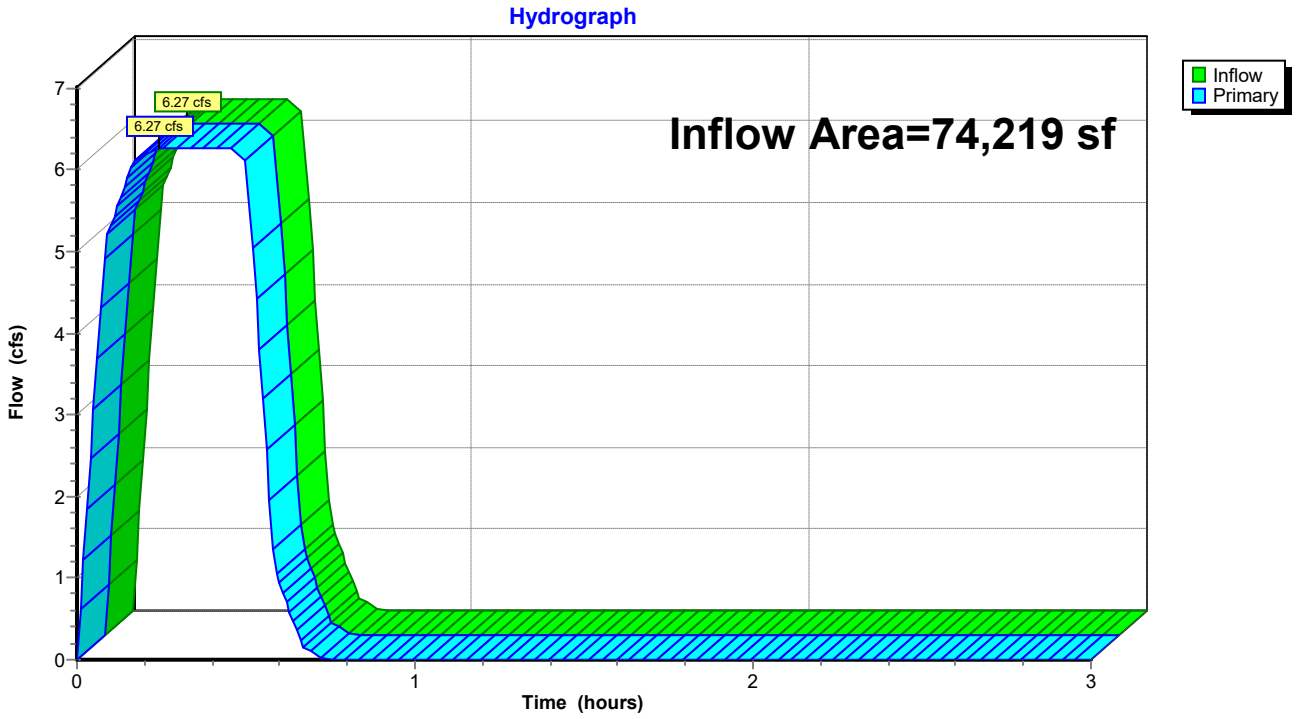


## Summary for Pond CI-A4: CI - A4

Inflow Area = 74,219 sf, 63.30% Impervious, Inflow Depth = 1.82" for 100-yr event
Inflow = 6.27 cfs @ 0.24 hrs, Volume= 11,278 cf
Primary = 6.27 cfs @ 0.24 hrs, Volume= 11,278 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A4: CI - A4

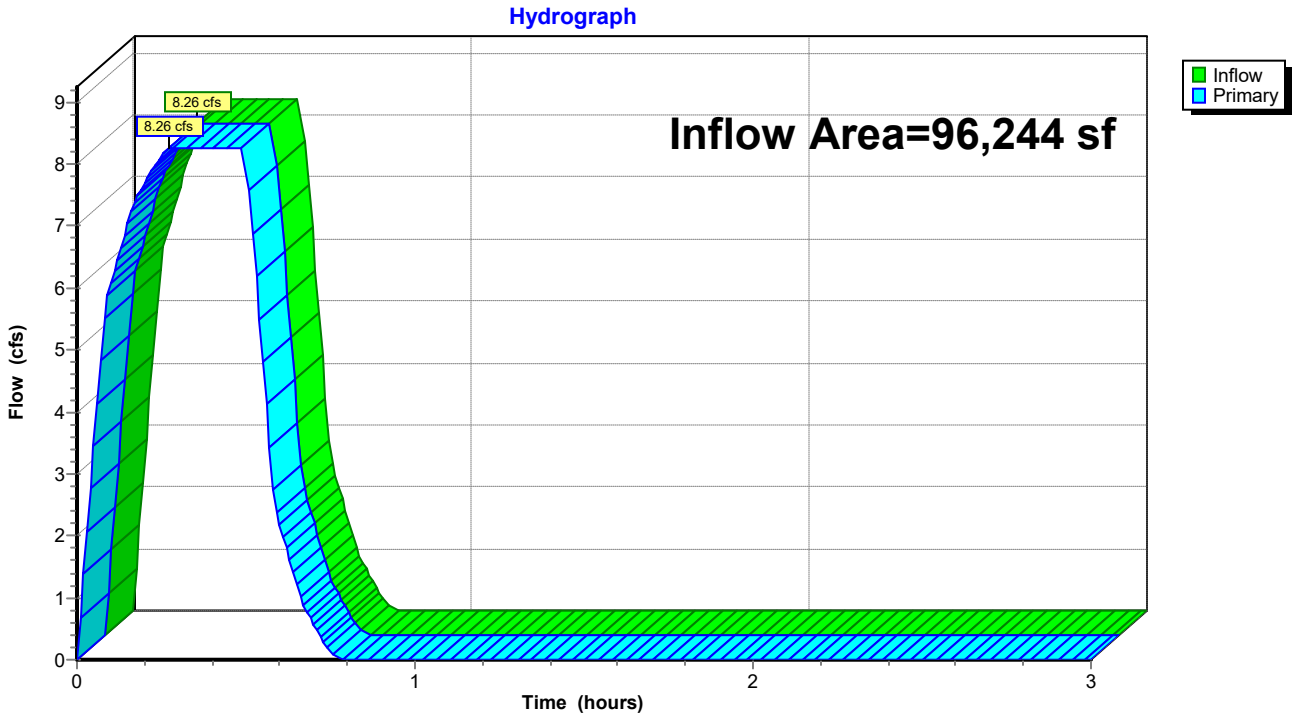


## Summary for Pond CI-A5: CI - A5

Inflow Area = 96,244 sf, 65.33% Impervious, Inflow Depth = 1.85" for 100-yr event
Inflow = 8.26 cfs @ 0.27 hrs, Volume= 14,861 cf
Primary = 8.26 cfs @ 0.27 hrs, Volume= 14,861 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-A5: CI - A5

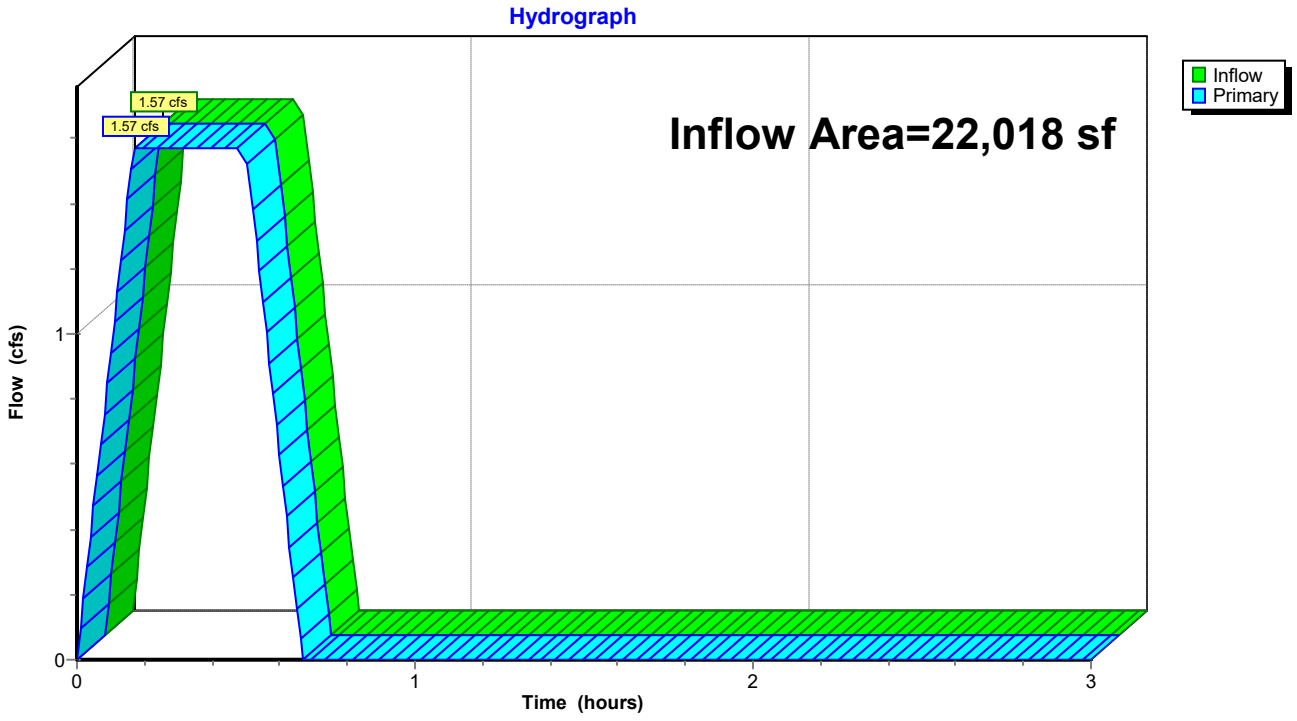


## Summary for Pond CI-B2: CI - B2

Inflow Area = 22,018 sf, 42.08% Impervious, Inflow Depth = 1.54" for 100-yr event
Inflow = 1.57 cfs @ 0.17 hrs, Volume= 2,821 cf
Primary = 1.57 cfs @ 0.17 hrs, Volume= 2,821 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-B2: CI - B2

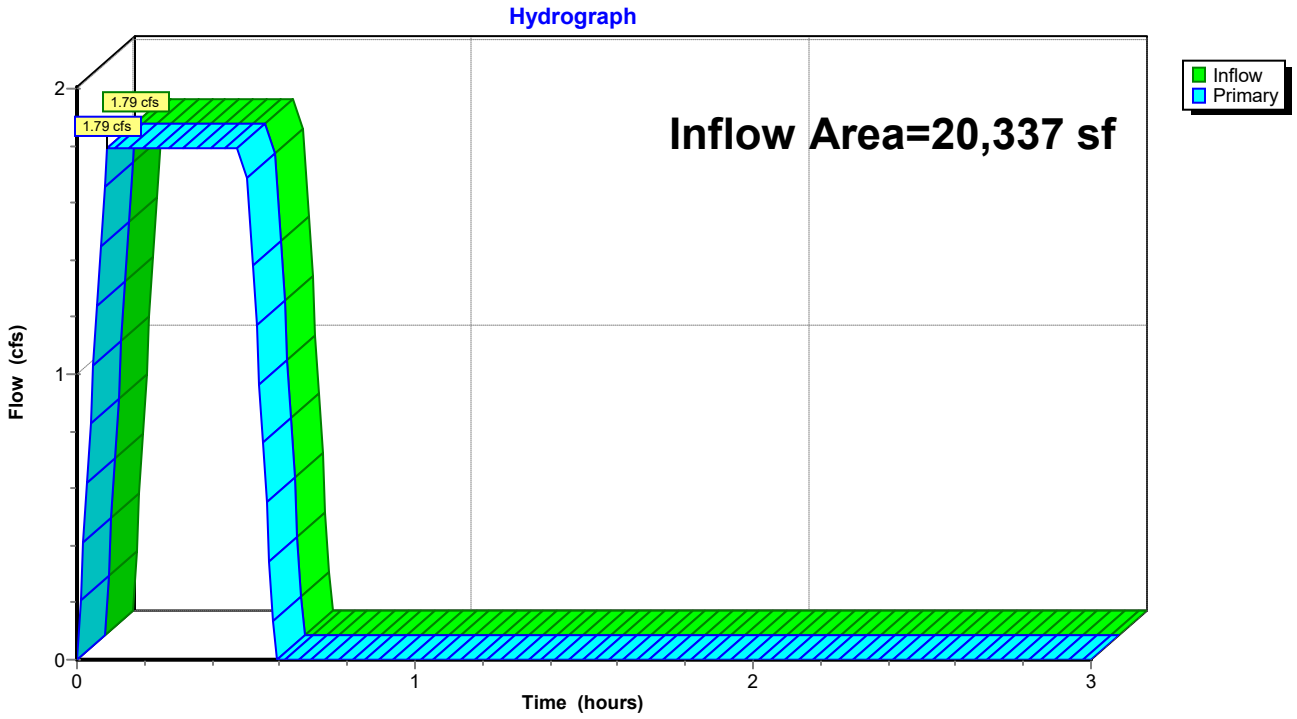


## Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.90" for 100-yr event
Inflow = 1.79 cfs @ 0.09 hrs, Volume= 3,225 cf
Primary = 1.79 cfs @ 0.09 hrs, Volume= 3,225 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C1: CI - C1

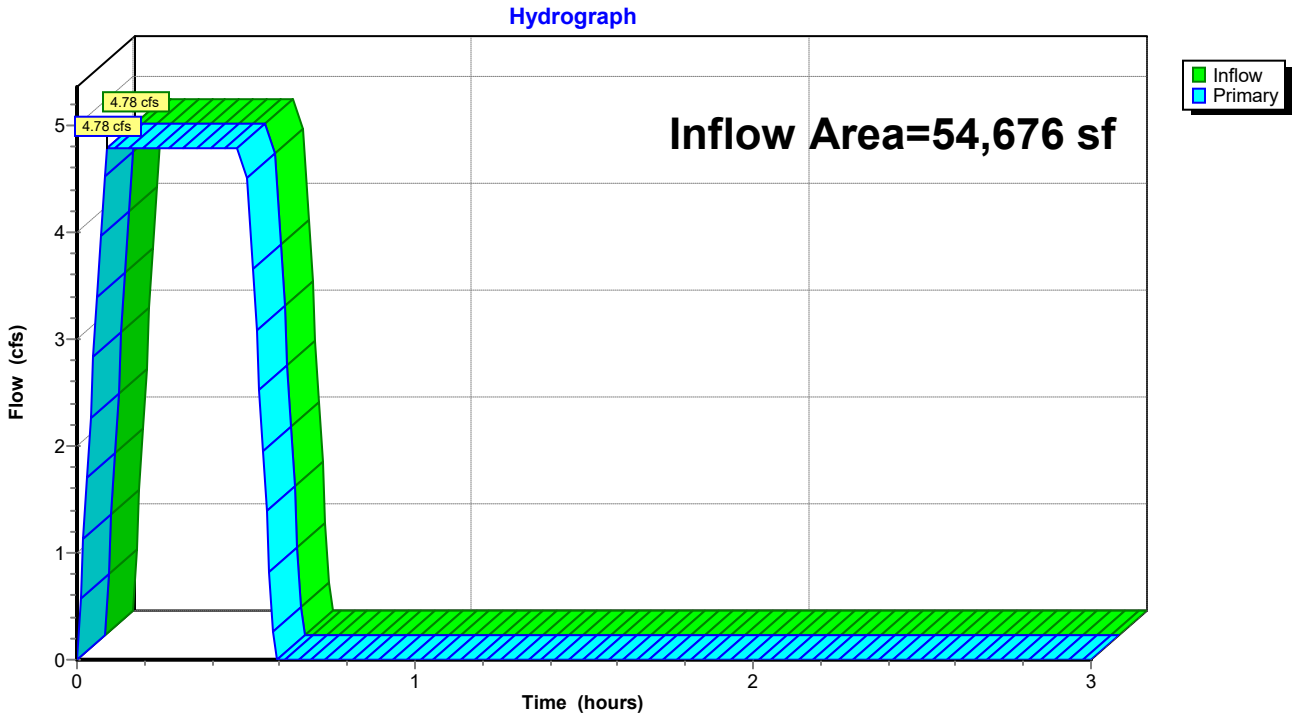


## Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.89" for 100-yr event
Inflow = 4.78 cfs @ 0.09 hrs, Volume= 8,602 cf
Primary = 4.78 cfs @ 0.09 hrs, Volume= 8,602 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C2: CI - C2

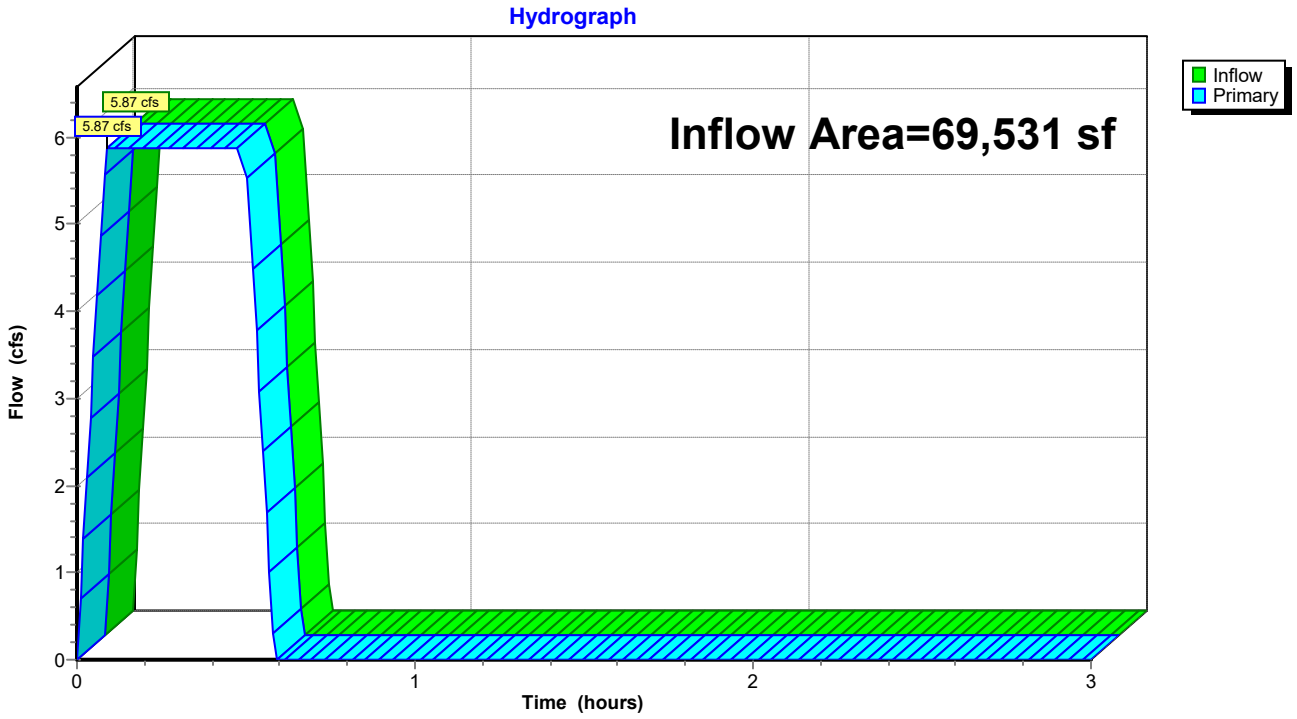


## Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.82" for 100-yr event
Inflow = 5.87 cfs @ 0.09 hrs, Volume= 10,569 cf
Primary = 5.87 cfs @ 0.09 hrs, Volume= 10,569 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C3: CI - C3

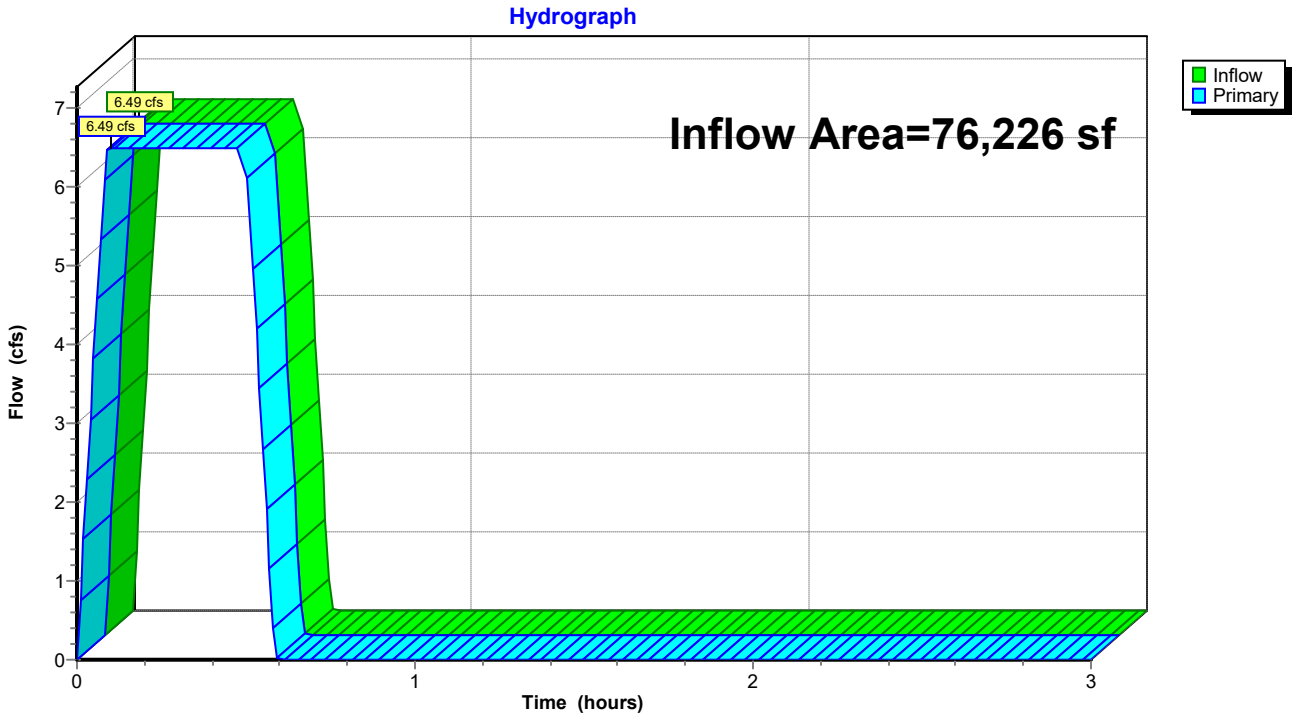


## Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.84" for 100-yr event
Inflow = 6.49 cfs @ 0.10 hrs, Volume= 11,686 cf
Primary = 6.49 cfs @ 0.10 hrs, Volume= 11,686 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C4: CI - C4

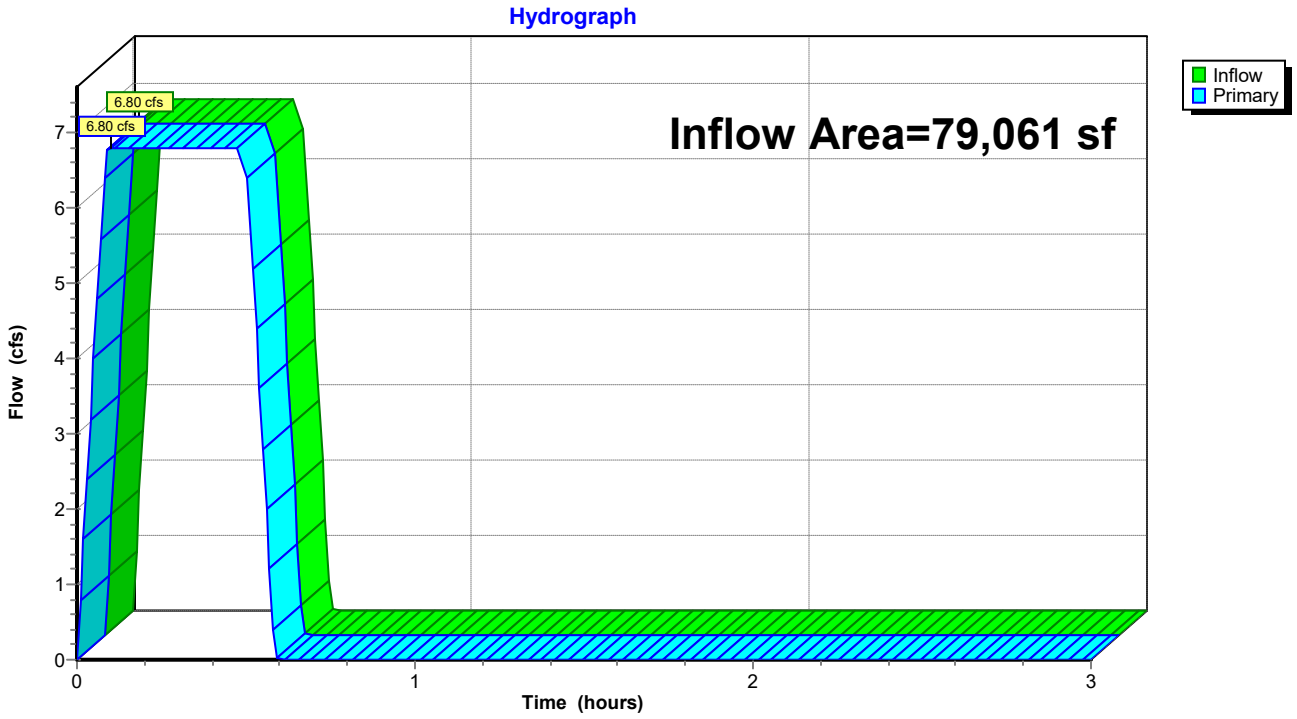


## Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.86" for 100-yr event
Inflow = 6.80 cfs @ 0.10 hrs, Volume= 12,233 cf
Primary = 6.80 cfs @ 0.10 hrs, Volume= 12,233 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C5: CI - C5

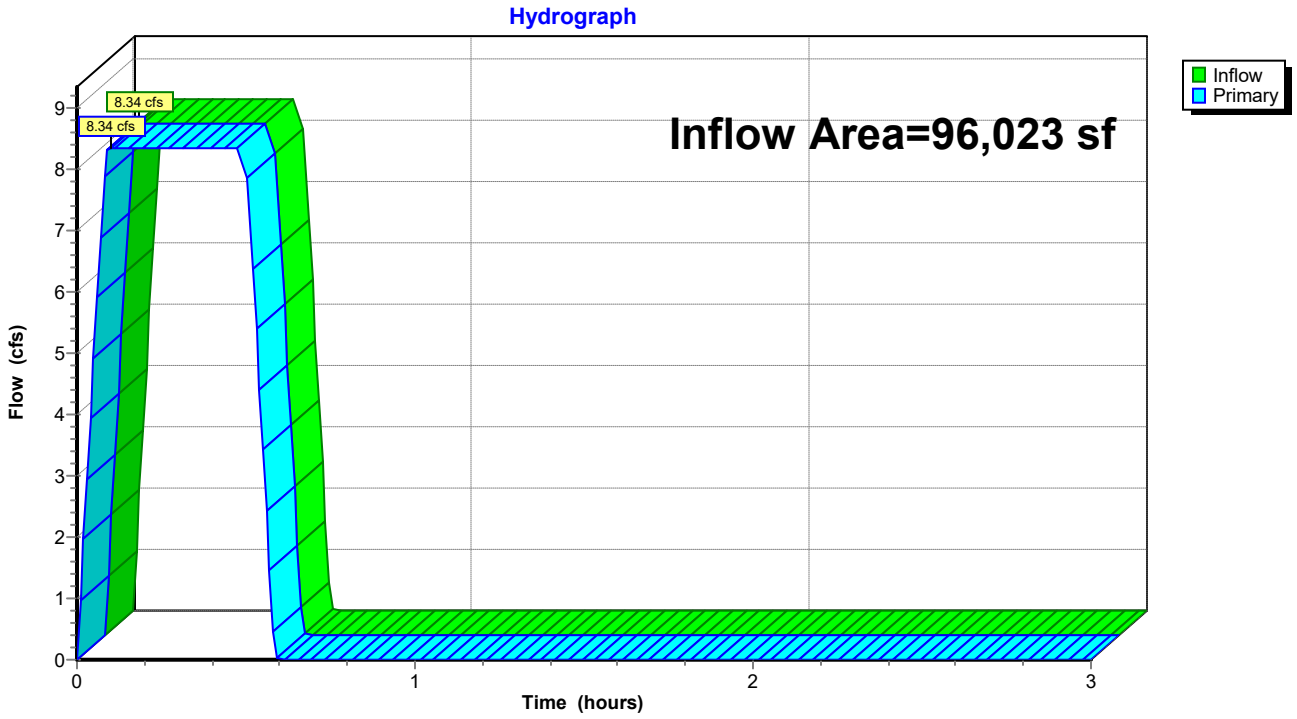


## Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.88" for 100-yr event
Inflow = 8.34 cfs @ 0.10 hrs, Volume= 15,004 cf
Primary = 8.34 cfs @ 0.10 hrs, Volume= 15,004 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C6: CI - C6

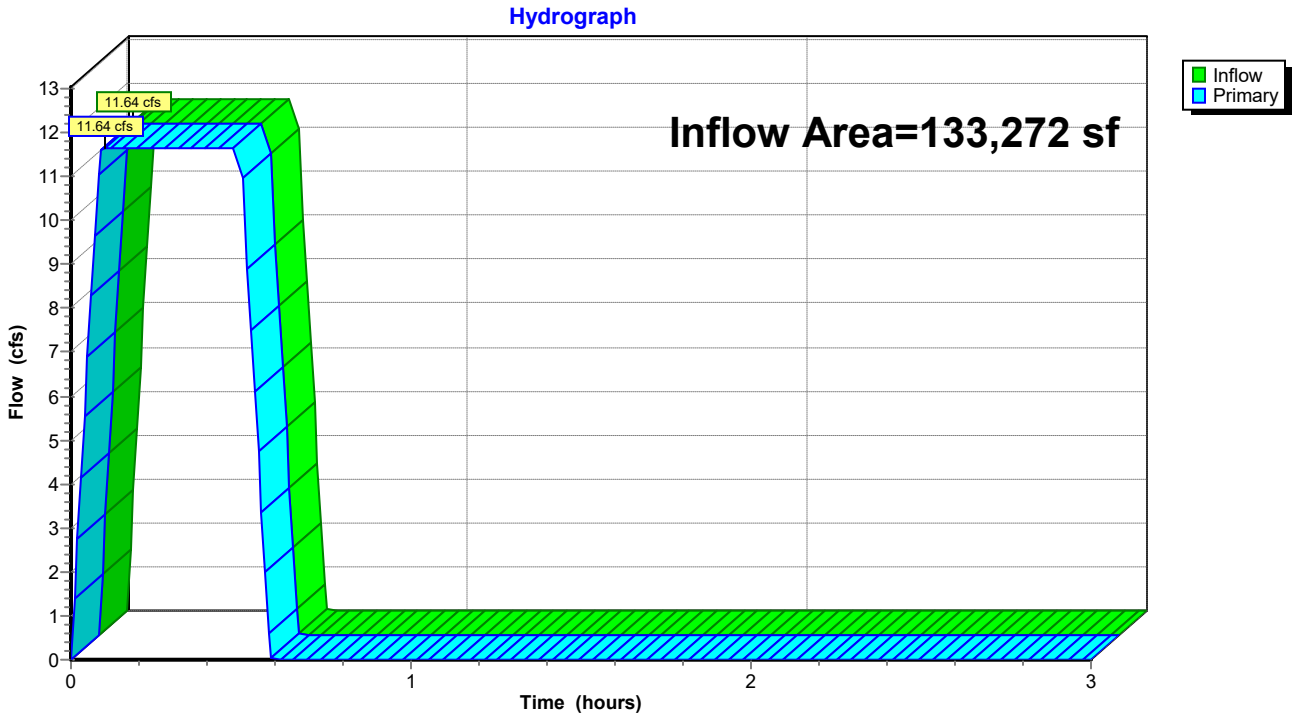


## Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.89" for 100-yr event
Inflow = 11.64 cfs @ 0.10 hrs, Volume= 20,958 cf
Primary = 11.64 cfs @ 0.10 hrs, Volume= 20,958 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-C7: CI - C7

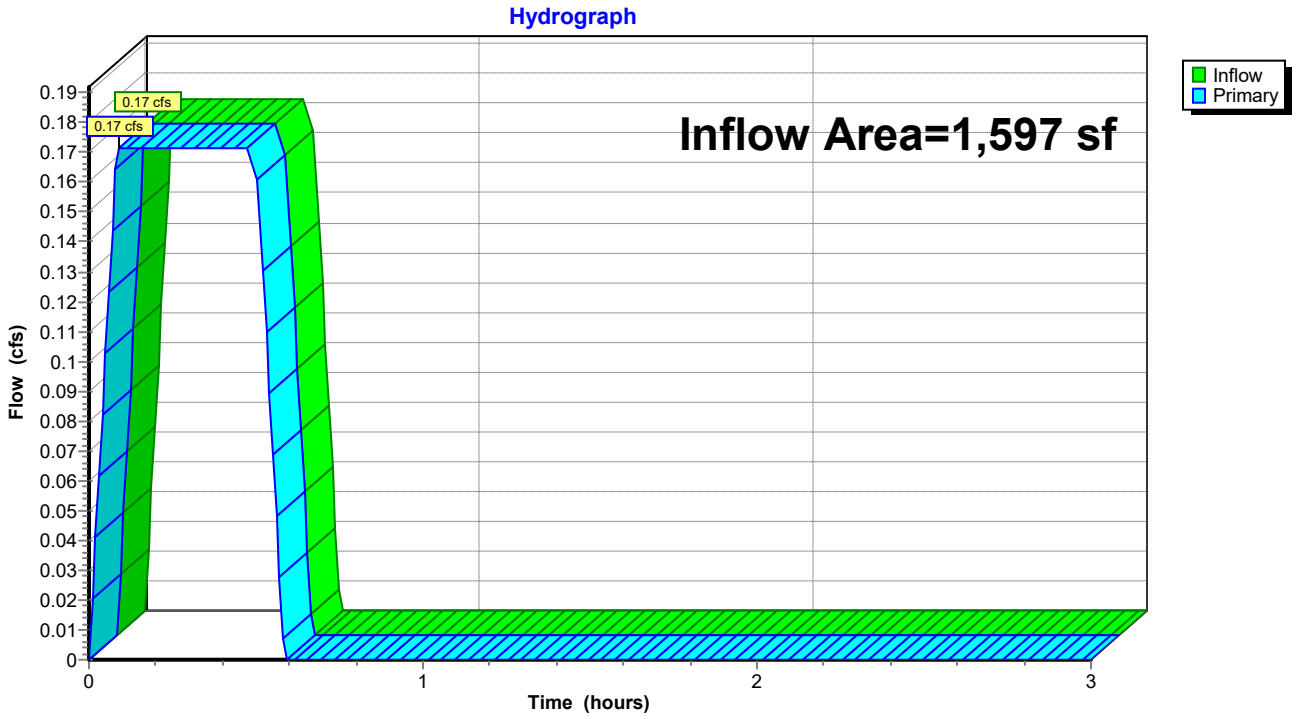


## Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 2.32" for 100-yr event
Inflow = 0.17 cfs @ 0.09 hrs, Volume= 308 cf
Primary = 0.17 cfs @ 0.09 hrs, Volume= 308 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D1: CI - D1

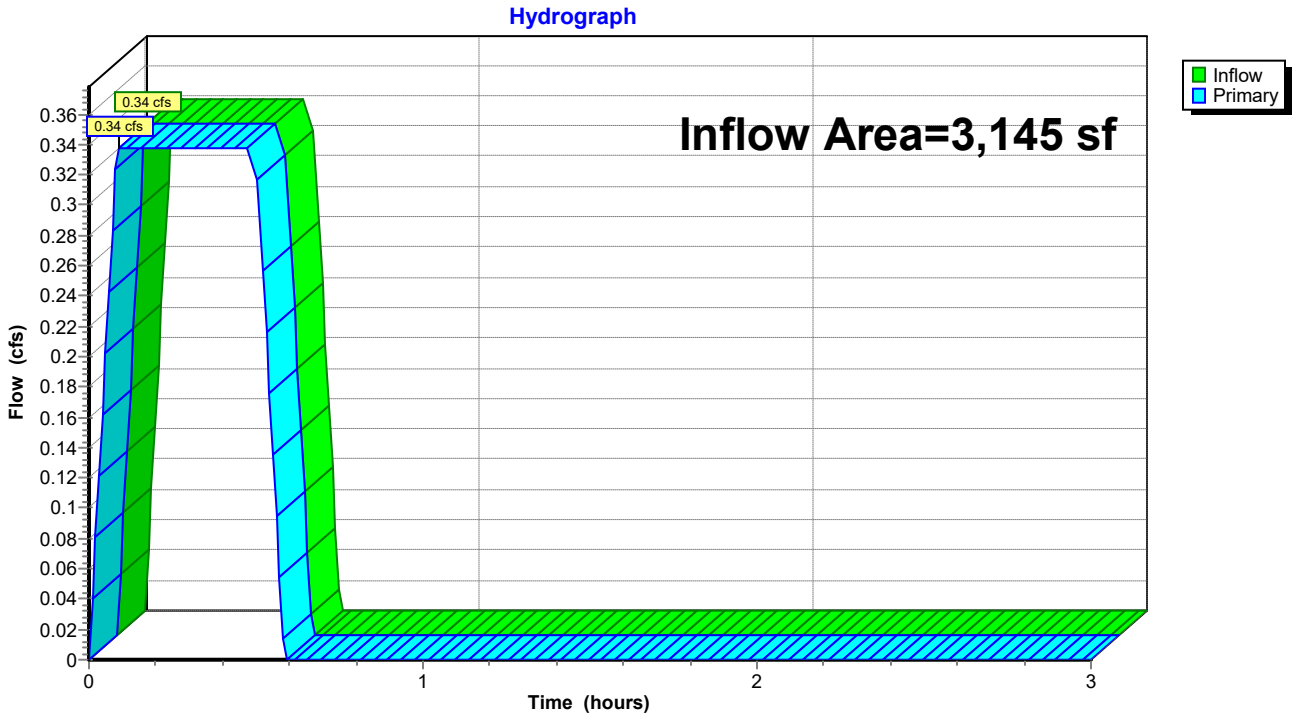


## Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 2.32" for 100-yr event
Inflow = 0.34 cfs @ 0.09 hrs, Volume= 608 cf
Primary = 0.34 cfs @ 0.09 hrs, Volume= 608 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-D2: CI - D2

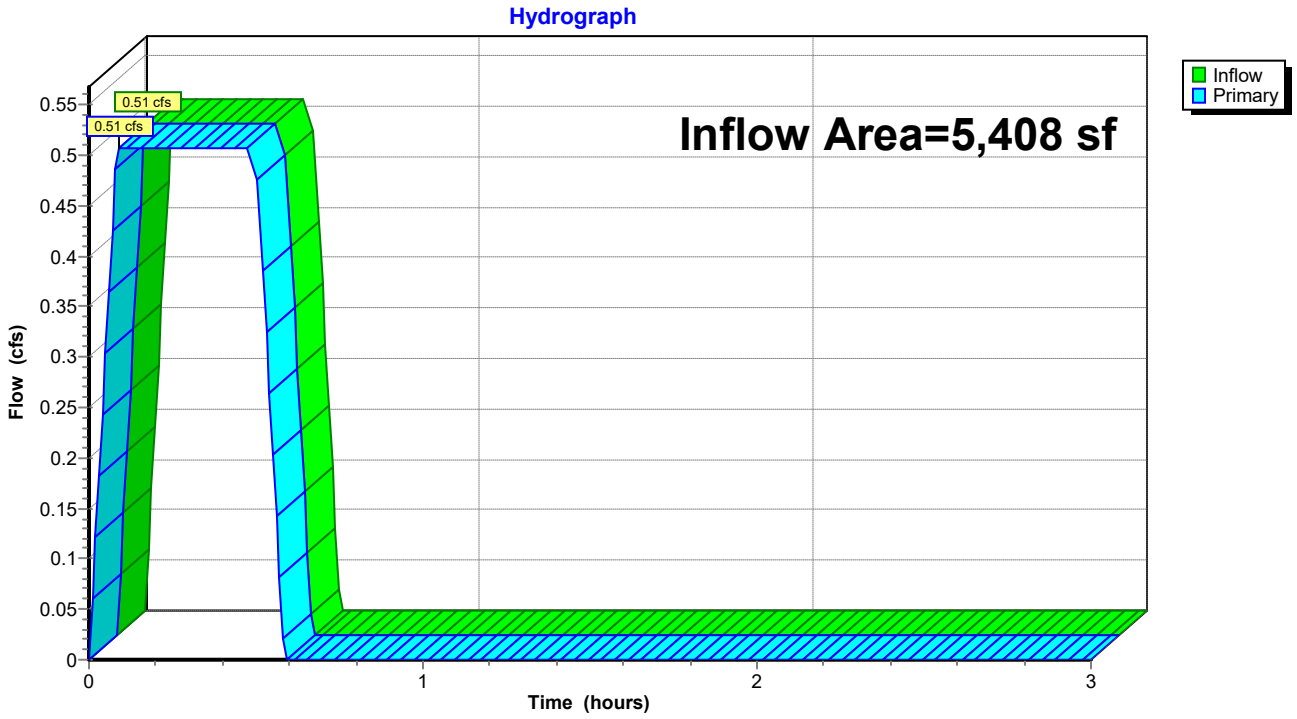


## Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 2.03" for 100-yr event
Inflow = 0.51 cfs @ 0.09 hrs, Volume= 913 cf
Primary = 0.51 cfs @ 0.09 hrs, Volume= 913 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E1: CI - E1

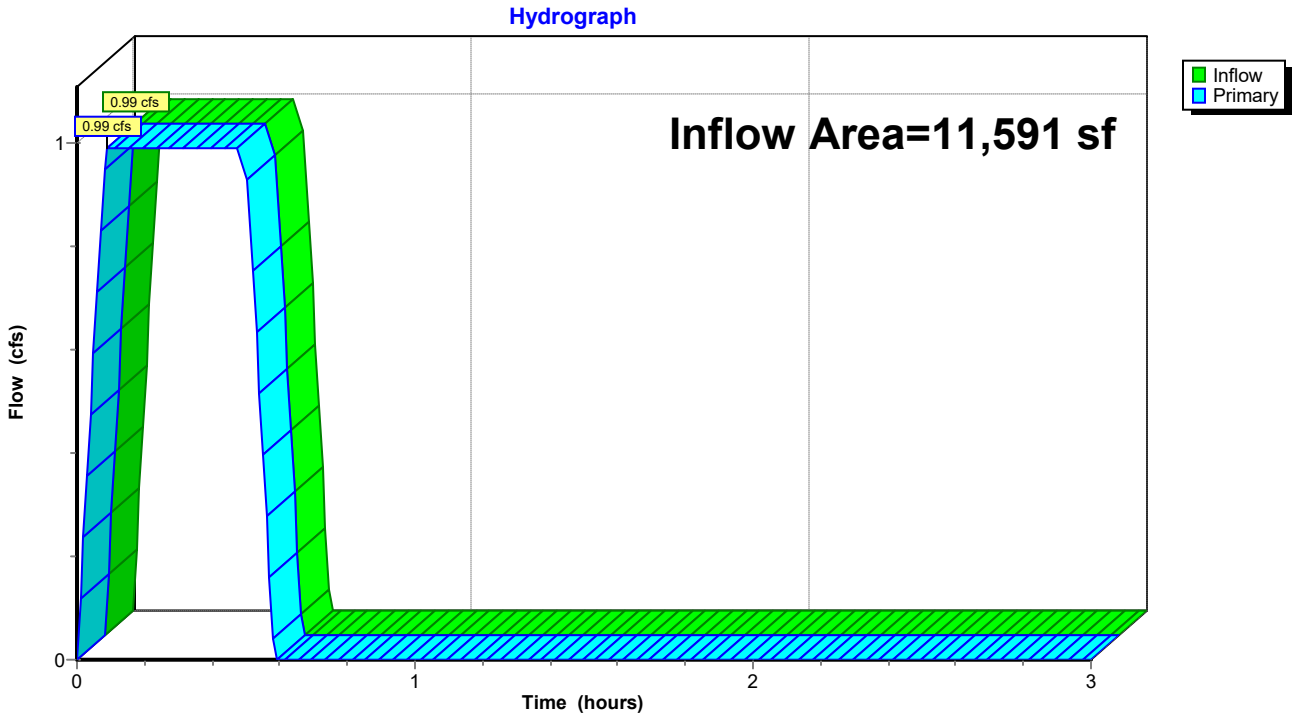


## Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.84" for 100-yr event
Inflow = 0.99 cfs @ 0.09 hrs, Volume= 1,780 cf
Primary = 0.99 cfs @ 0.09 hrs, Volume= 1,780 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond CI-E2: CI - E2



## Summary for Pond DP: Existing North Detention Pond

Inflow Area = 321,792 sf, 58.73% Impervious, Inflow Depth = 1.76" for 100-yr event
Inflow = 26.26 cfs @ 0.27 hrs, Volume= 47,277 cf
Outflow = 13.63 cfs @ 0.55 hrs, Volume= 47,277 cf, Atten= 48%, Lag= 16.7 min
Primary = 13.63 cfs @ 0.55 hrs, Volume= 47,277 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 383.40' @ 0.55 hrs Storage= 27,495 cf

Plug-Flow detention time= 24.2 min calculated for 47,120 cf (100% of inflow)
Center-of-Mass det. time= 24.3 min ( 42.8 - 18.5 )

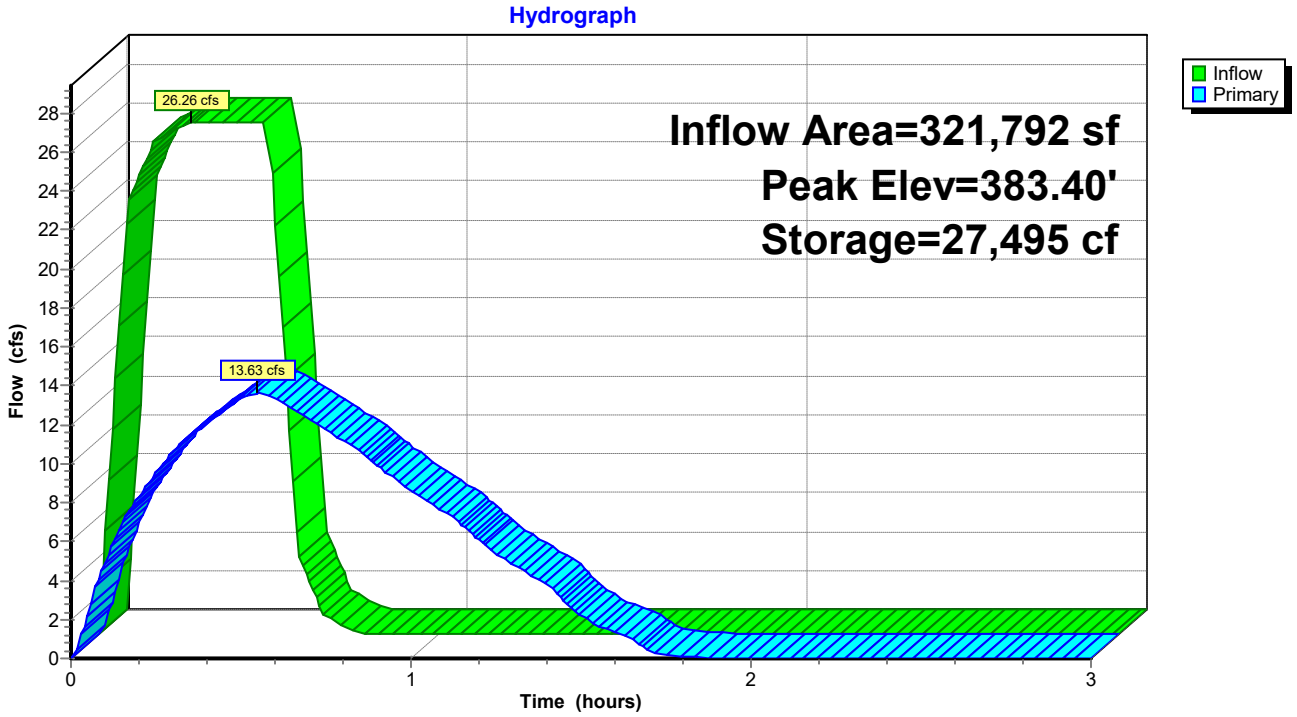
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 381.17' | 72,742 cf | **Custom Stage Data** Listed below |

| Elevation (feet) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|
| 381.17 | 0 | 0 |
| 381.50 | 200 | 200 |
| 382.00 | 1,825 | 2,025 |
| 382.50 | 5,265 | 7,290 |
| 383.00 | 9,300 | 16,590 |
| 383.50 | 13,733 | 30,323 |
| 384.00 | 18,578 | 48,901 |
| 384.50 | 23,841 | 72,742 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 384.16' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #2 | Primary | 381.17' | **1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=13.63 cfs @ 0.55 hrs HW=383.40' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 13.63 cfs @ 4.88 fps)

## Pond DP: Existing North Detention Pond

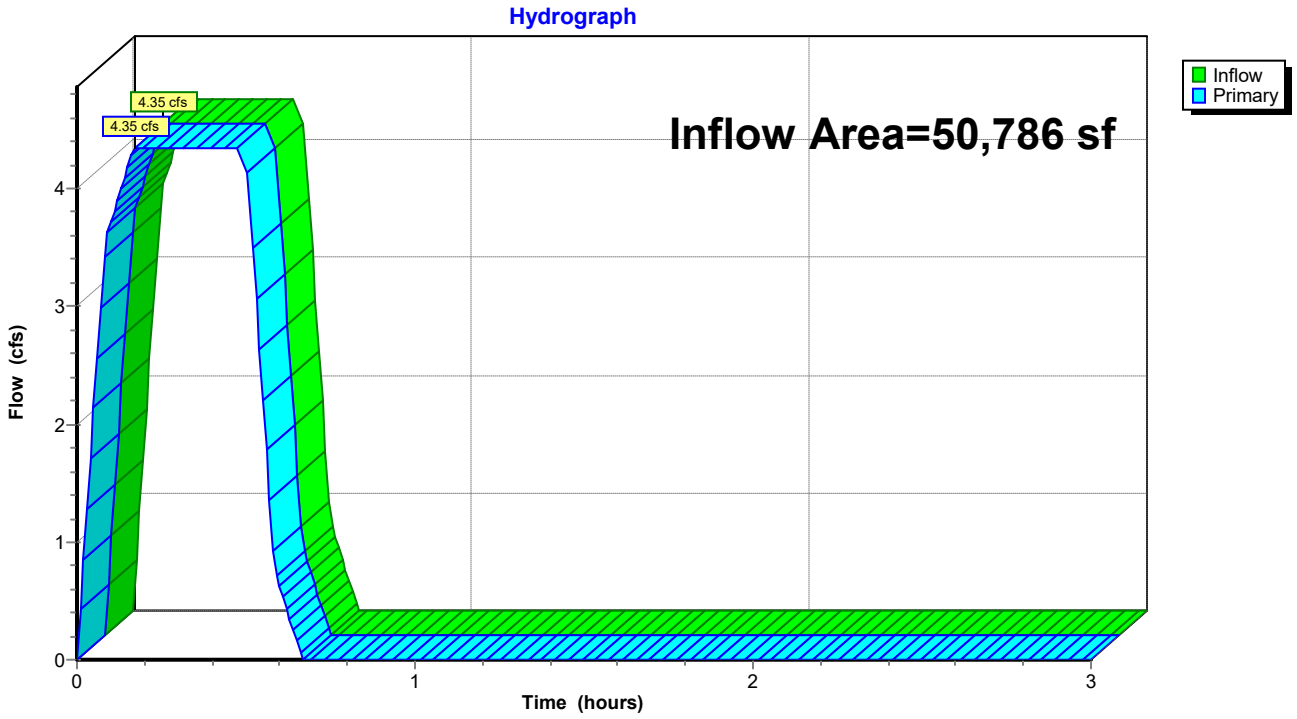


## Summary for Pond JB-A2: JB - A2

Inflow Area = 50,786 sf, 65.23% Impervious, Inflow Depth = 1.85" for 100-yr event
Inflow = 4.35 cfs @ 0.17 hrs, Volume= 7,823 cf
Primary = 4.35 cfs @ 0.17 hrs, Volume= 7,823 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Pond JB-A2: JB - A2

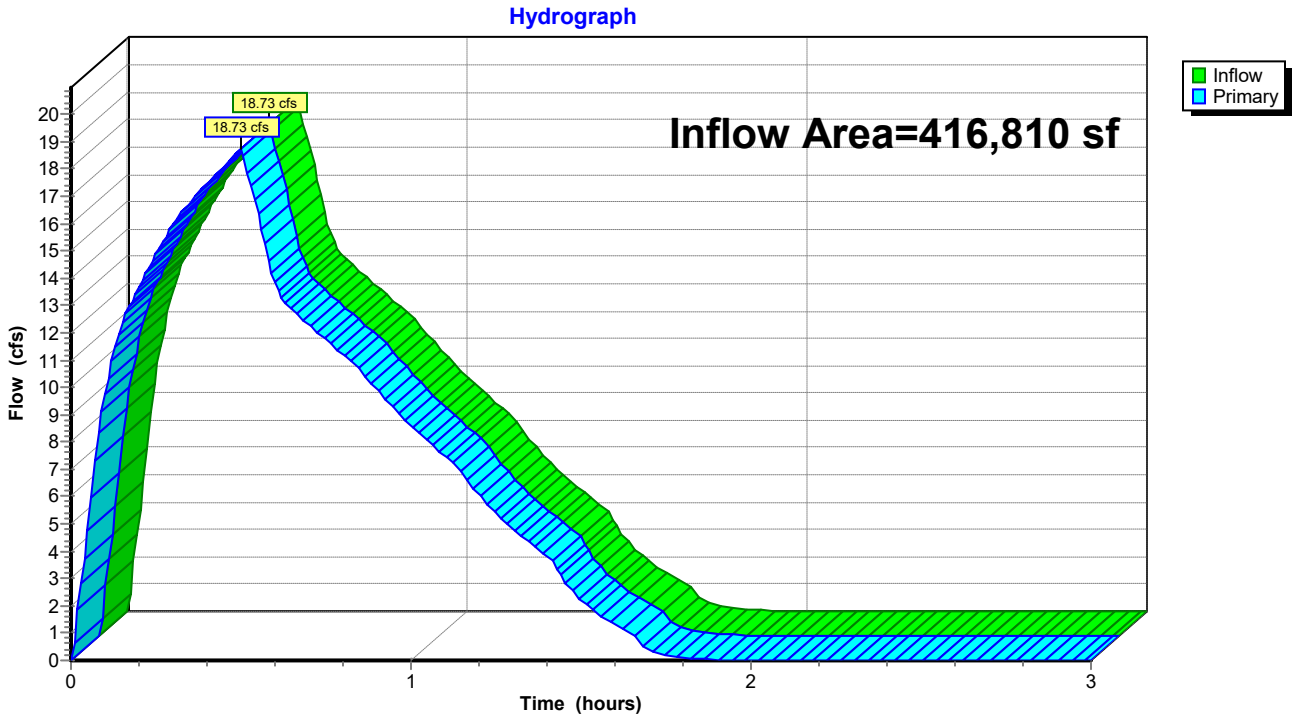


## Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 416,810 sf, 49.40% Impervious, Inflow Depth = 1.64" for 100-yr event
Inflow = 18.73 cfs @ 0.50 hrs, Volume= 56,925 cf
Primary = 18.73 cfs @ 0.50 hrs, Volume= 56,925 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

## Link FINAL: APPROX DISCHARGE



# STORM SEWER SIZING

# Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## JB-A1 (100 yr)

**Curb Inlet**

| | |
|---|---|
| Location | = Sag |
| Curb Length (ft) | = 4.00 |
| Throat Height (in) | = 6.00 |
| Grate Area (sqft) | = -0- |
| Grate Width (ft) | = -0- |
| Grate Length (ft) | = -0- |

**Gutter**

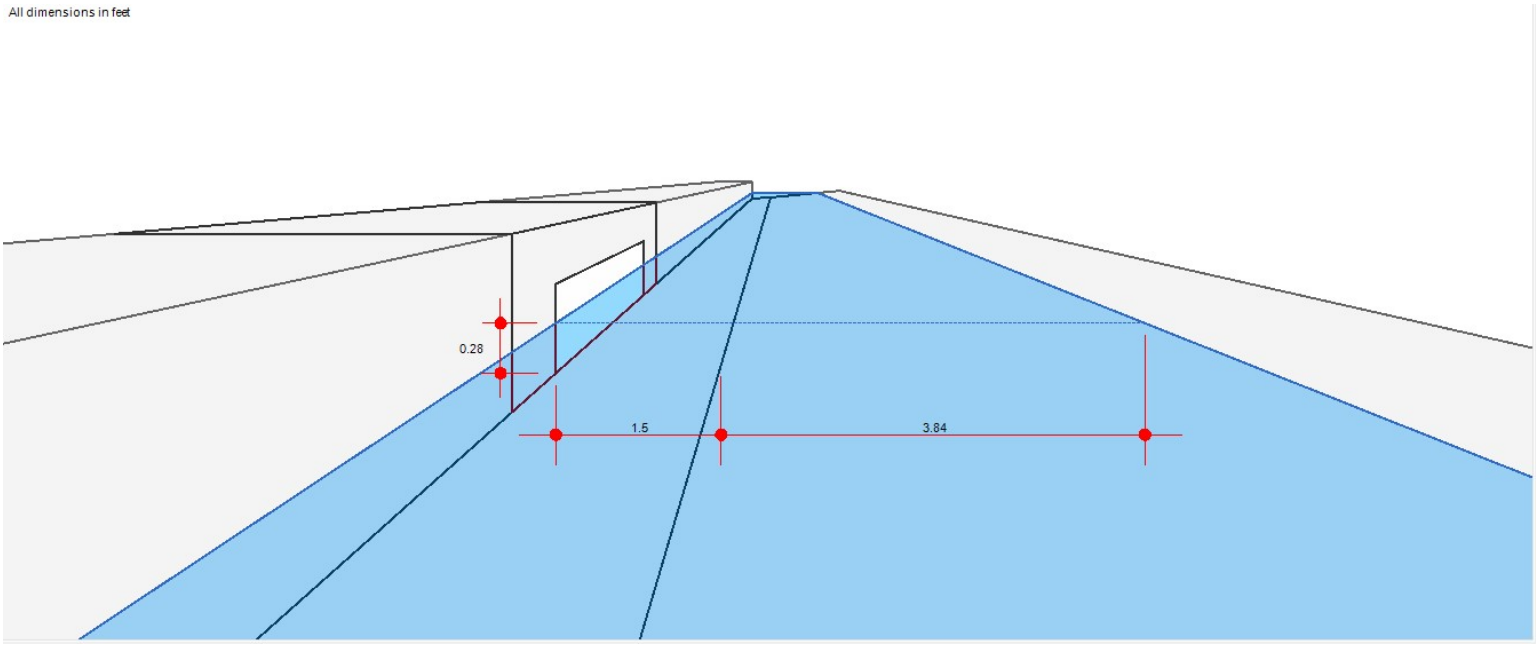
| | |
|---|---|
| Slope, Sw (ft/ft) | = 0.033 |
| Slope, Sx (ft/ft) | = 0.060 |
| Local Depr (in) | = -0- |
| Gutter Width (ft) | = 1.50 |
| Gutter Slope (%) | = -0- |
| Gutter n-value | = -0- |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Q (cfs) | = 1.78 |

**Highlighted**

| | |
|---|---|
| Q Total (cfs) | = 1.78 |
| Q Capt (cfs) | = 1.78 |
| Q Bypass (cfs) | = -0- |
| Depth at Inlet (in) | = 3.36 |
| Efficiency (%) | = 100 |
| Gutter Spread (ft) | = 5.34 |
| Gutter Vel (ft/s) | = -0- |
| Bypass Spread (ft) | = -0- |
| Bypass Depth (in) | = -0- |



# Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## JB-A3 (100 yr)

**Curb Inlet**

| | |
|---|---|
| Location | = Sag |
| Curb Length (ft) | = 4.00 |
| Throat Height (in) | = 6.00 |
| Grate Area (sqft) | = -0- |
| Grate Width (ft) | = -0- |
| Grate Length (ft) | = -0- |

**Gutter**

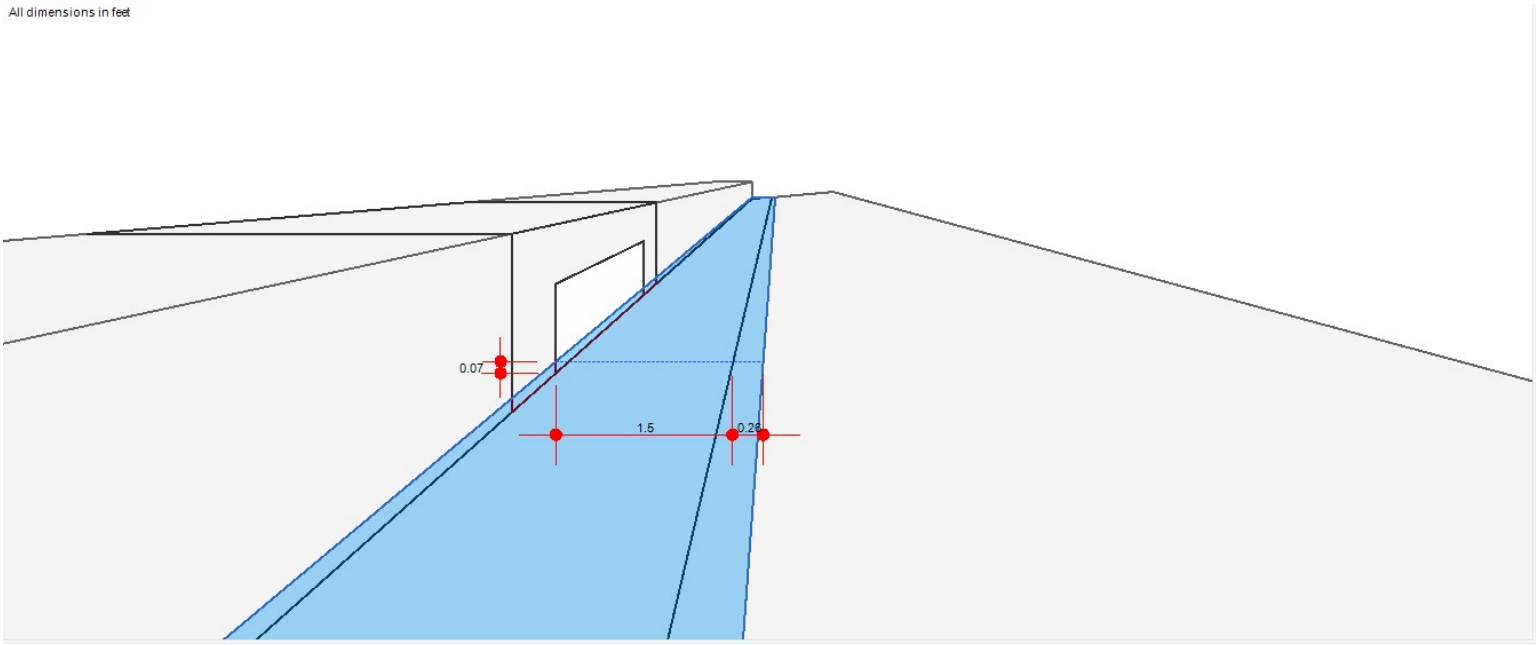
| | |
|---|---|
| Slope, Sw (ft/ft) | = 0.033 |
| Slope, Sx (ft/ft) | = 0.060 |
| Local Depr (in) | = -0- |
| Gutter Width (ft) | = 1.50 |
| Gutter Slope (%) | = -0- |
| Gutter n-value | = -0- |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Q (cfs) | = 0.20 |

**Highlighted**

| | |
|---|---|
| Q Total (cfs) | = 0.20 |
| Q Capt (cfs) | = 0.20 |
| Q Bypass (cfs) | = -0- |
| Depth at Inlet (in) | = 0.78 |
| Efficiency (%) | = 100 |
| Gutter Spread (ft) | = 1.76 |
| Gutter Vel (ft/s) | = -0- |
| Bypass Spread (ft) | = -0- |
| Bypass Depth (in) | = -0- |



# Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## JB-B1 (100 yr)

**Curb Inlet**

| | |
|---|---|
| Location | = Sag |
| Curb Length (ft) | = 6.00 |
| Throat Height (in) | = 6.00 |
| Grate Area (sqft) | = -0- |
| Grate Width (ft) | = -0- |
| Grate Length (ft) | = -0- |

**Gutter**

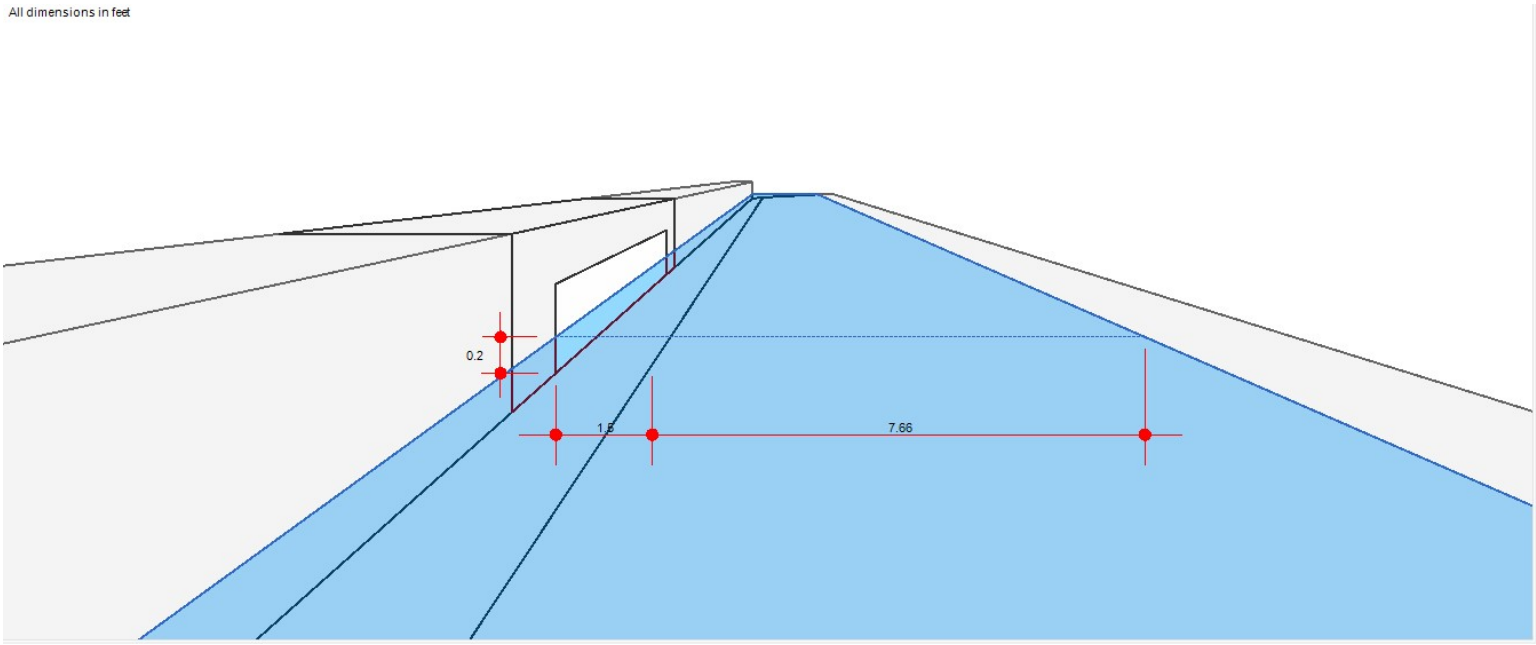
| | |
|---|---|
| Slope, Sw (ft/ft) | = 0.033 |
| Slope, Sx (ft/ft) | = 0.020 |
| Local Depr (in) | = -0- |
| Gutter Width (ft) | = 1.50 |
| Gutter Slope (%) | = -0- |
| Gutter n-value | = -0- |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Q (cfs) | = 1.57 |

**Highlighted**

| | |
|---|---|
| Q Total (cfs) | = 1.57 |
| Q Capt (cfs) | = 1.57 |
| Q Bypass (cfs) | = -0- |
| Depth at Inlet (in) | = 2.43 |
| Efficiency (%) | = 100 |
| Gutter Spread (ft) | = 9.16 |
| Gutter Vel (ft/s) | = -0- |
| Bypass Spread (ft) | = -0- |
| Bypass Depth (in) | = -0- |



# Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## Pipe-A1

**Circular**

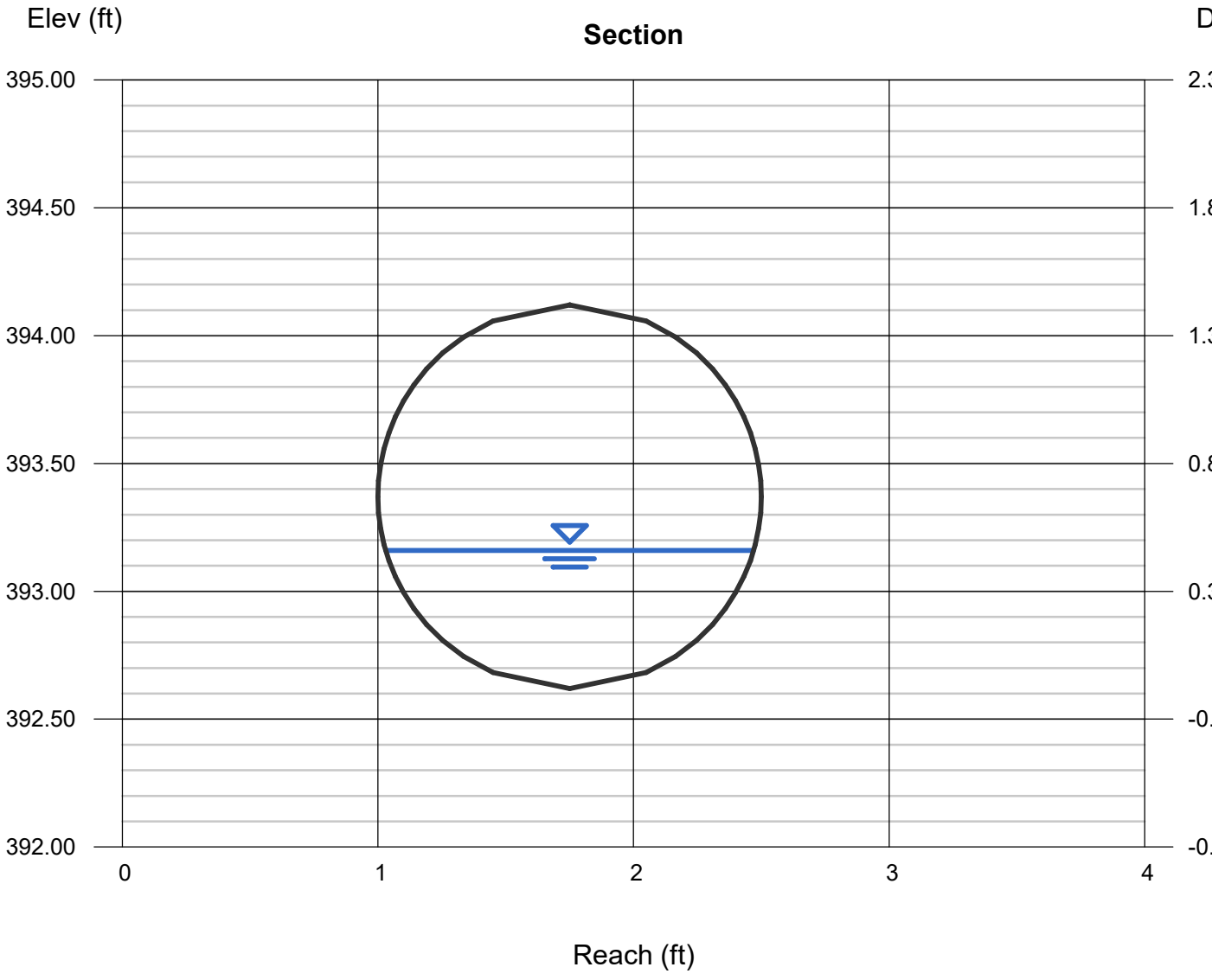
| | |
|---|---|
| Diameter (ft) | = 1.50 |
| Invert Elev (ft) | = 392.62 |
| Slope (%) | = 0.50 |
| N-Value | = 0.015 |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Known Q (cfs) | = 1.78 |

**Highlighted**

| | |
|---|---|
| Depth (ft) | = 0.54 |
| Q (cfs) | = 1.780 |
| Area (sqft) | = 0.58 |
| Velocity (ft/s) | = 3.09 |
| Wetted Perim (ft) | = 1.93 |
| Crit Depth, Yc (ft) | = 0.50 |
| Top Width (ft) | = 1.44 |
| EGL (ft) | = 0.69 |



# Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## Pipe-A2

**Circular**

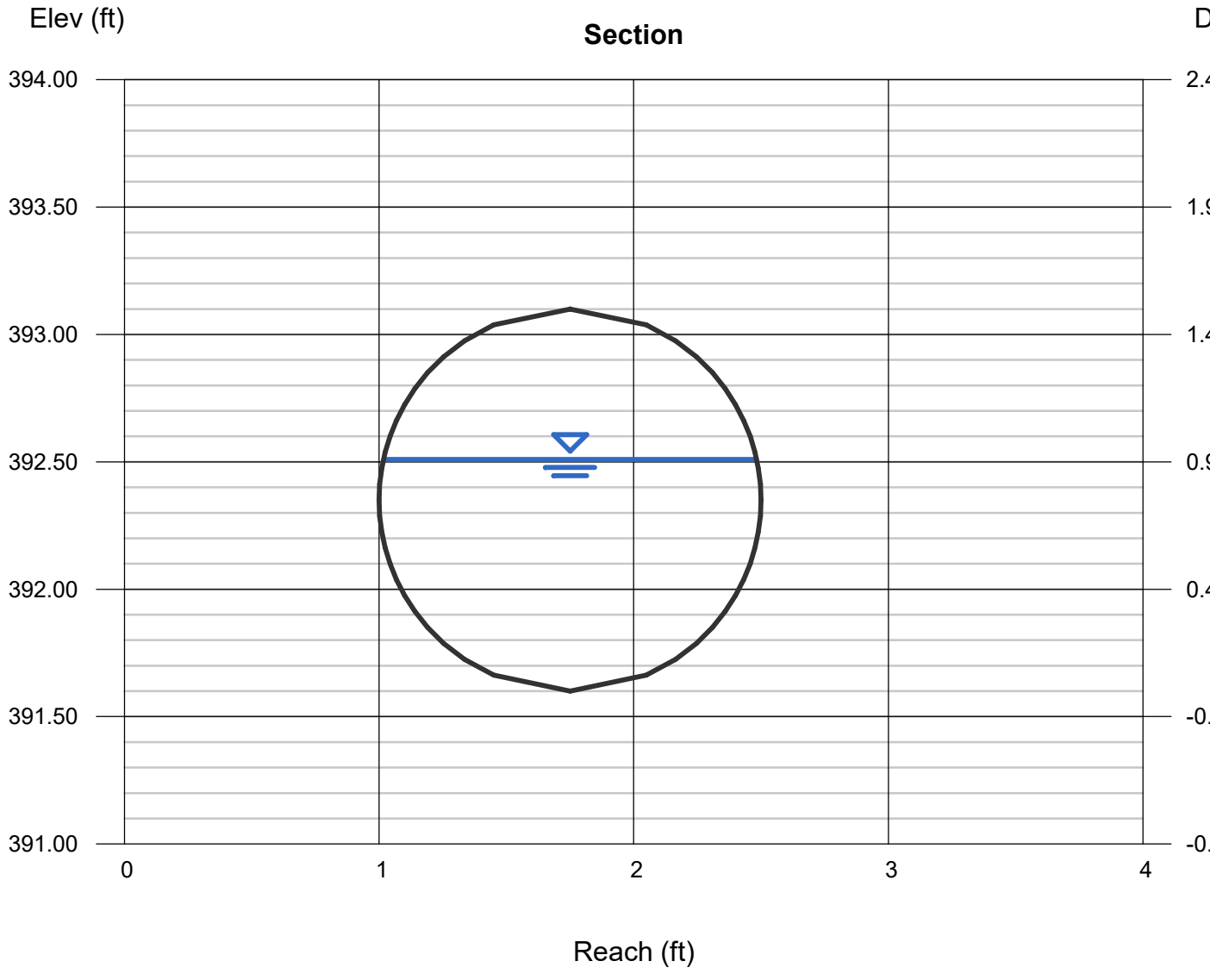
| | |
|---|---|
| Diameter (ft) | = 1.50 |
| Invert Elev (ft) | = 391.60 |
| Slope (%) | = 0.50 |
| N-Value | = 0.015 |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Known Q (cfs) | = 4.35 |

**Highlighted**

| | |
|---|---|
| Depth (ft) | = 0.91 |
| Q (cfs) | = 4.350 |
| Area (sqft) | = 1.13 |
| Velocity (ft/s) | = 3.86 |
| Wetted Perim (ft) | = 2.68 |
| Crit Depth, Yc (ft) | = 0.80 |
| Top Width (ft) | = 1.46 |
| EGL (ft) | = 1.14 |



# Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## Pipe-A3

**Circular**

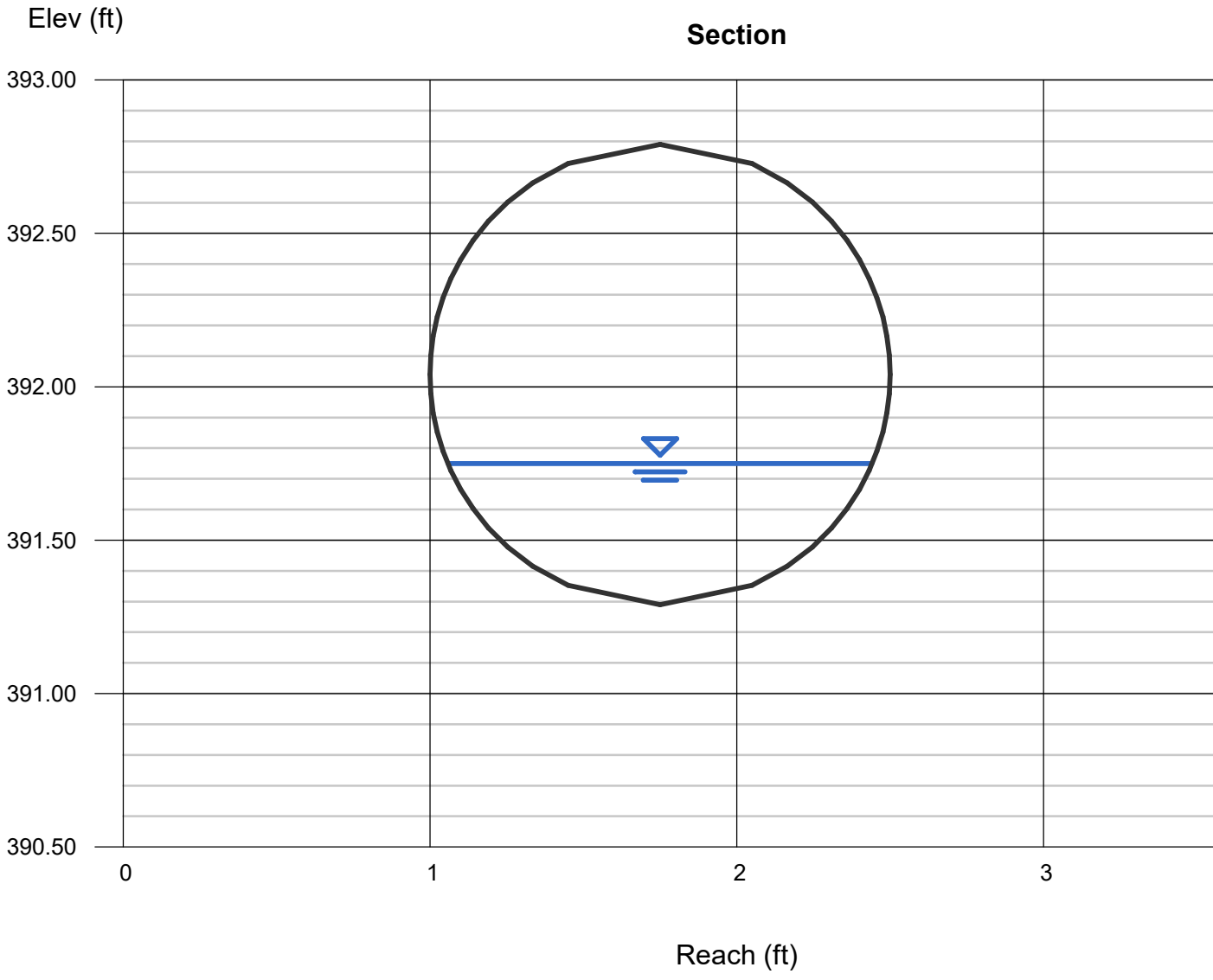
| | |
|---|---|
| Diameter (ft) | = 1.50 |
| Invert Elev (ft) | = 391.29 |
| Slope (%) | = 6.20 |
| N-Value | = 0.015 |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Known Q (cfs) | = 4.55 |

**Highlighted**

| | |
|---|---|
| Depth (ft) | = 0.46 |
| Q (cfs) | = 4.550 |
| Area (sqft) | = 0.46 |
| Velocity (ft/s) | = 9.87 |
| Wetted Perim (ft) | = 1.76 |
| Crit Depth, Yc (ft) | = 0.82 |
| Top Width (ft) | = 1.38 |
| EGL (ft) | = 1.98 |



# Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

## Pipe-B1

**Circular**

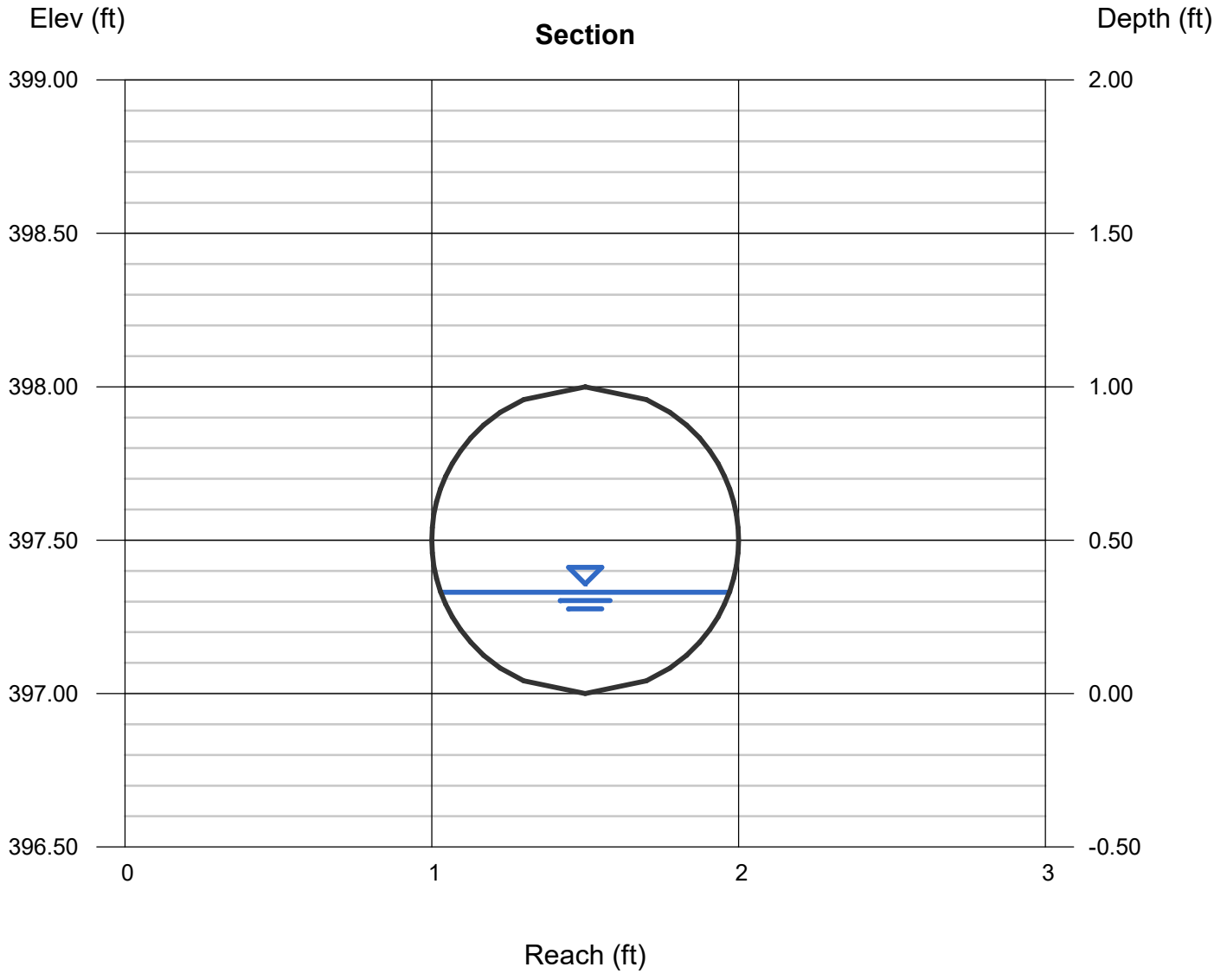
| | |
|---|---|
| Diameter (ft) | = 1.00 |
| Invert Elev (ft) | = 397.00 |
| Slope (%) | = 4.92 |
| N-Value | = 0.015 |

**Calculations**

| | |
|---|---|
| Compute by: | Known Q |
| Known Q (cfs) | = 1.57 |

**Highlighted**

| | |
|---|---|
| Depth (ft) | = 0.33 |
| Q (cfs) | = 1.570 |
| Area (sqft) | = 0.23 |
| Velocity (ft/s) | = 6.93 |
| Wetted Perim (ft) | = 1.22 |
| Crit Depth, Yc (ft) | = 0.53 |
| Top Width (ft) | = 0.94 |
| EGL (ft) | = 1.08 |



# DRAINAGE BASIN MAPS




# PRE DRAINAGE PLAN

SCALE 1" = 20'

## GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

**THE GODDARD SCHOOL OF BRYANT**
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-11-2026

PAGE TITLE:
PRE DRAINAGE PLAN

SHEET NUMBER:
C1.5

N
0 20'
1" = 20'-0"




# OVERALL DRAINAGE PLAN

SCALE 1" = 20'

## DRAINAGE BASINS AREAS

| DRAINAGE BASIN | PERVIOUS | IMPERVIOUS |
|---|---|---|
| B1 | 28,665 | 770 |
| B2 | 4,916 | 14,577 |
| B3 | 0 | 9,275 |
| B4 | 0 | 1887 |
| B5 | 12,580 | 8,589 |
| B6 | 7,516 | 2,763 |
| C1 | 6,135 | 14,202 |
| C2 | 11,376 | 22,963 |
| C3 | 0 | 3,480 |
| C4 | 8,130 | 3,245 |
| C5 | 1,634 | 5,061 |
| C6 | 0 | 2,835 |
| C7 | 0 | 1,597 |
| C8 | 0 | 1,548 |
| C9 | 4,456 | 9,361 |
| C10 | 1,225 | 4,183 |
| C11 | 2,876 | 3,307 |
| C12 | 7,218 | 18,440 |
| C13 | 2,240 | 9,873 |
| C14 | 6,127 | 15,898 |
| C15 | 0 | 13,450 |
| C16 | 15,465 | 6,612 |
| C17 | 40,914 | 15,835 |
| C18 | 12,812 | 9,973 |
| C19 | 15,129 | 2,880 |
| C20 | 24,838 | 2,321 |
| C21 | 1,234 | 919 |

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PHILLIP A. LEWIS

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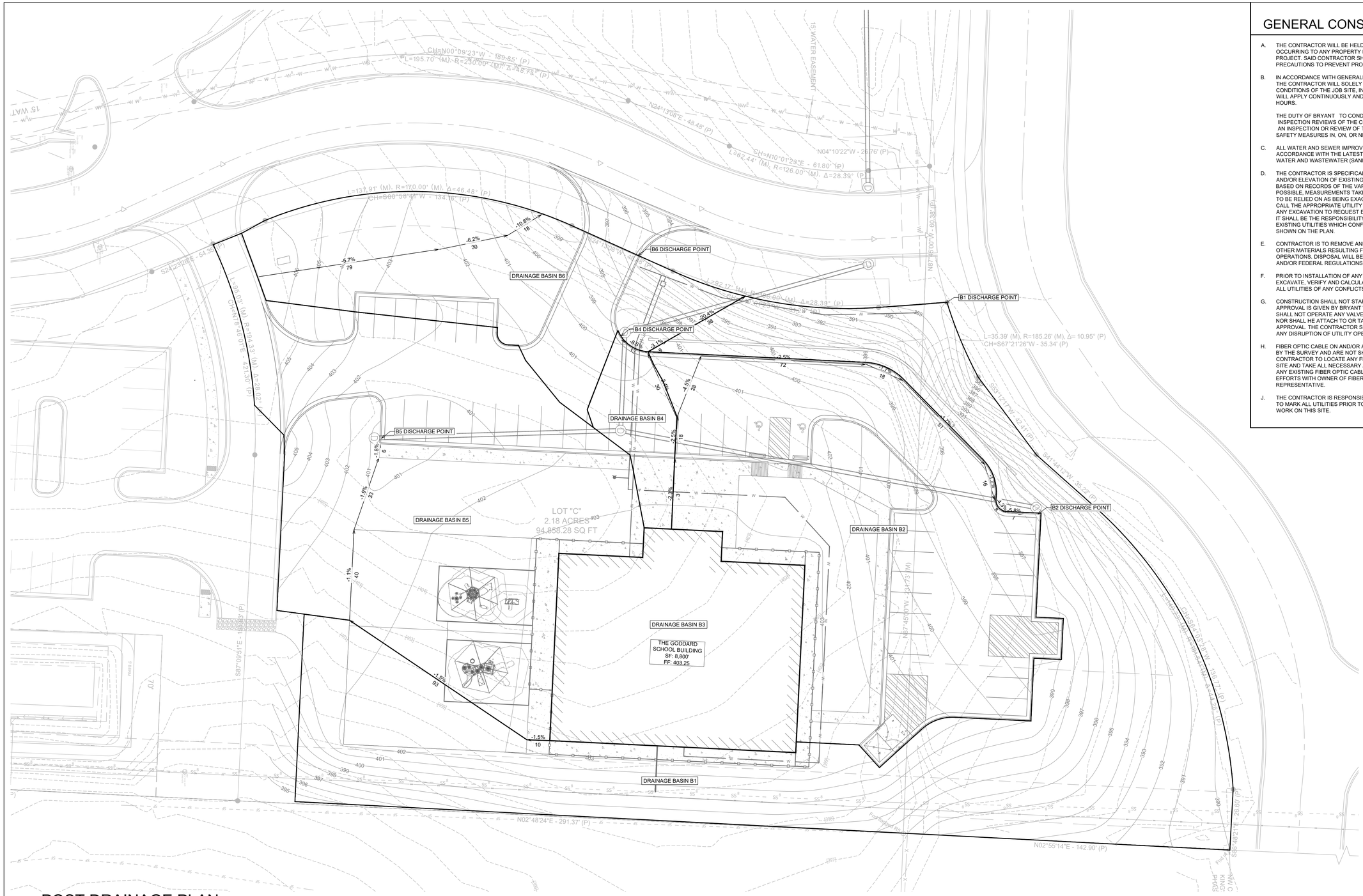
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OVERALL DRAINAGE PLAN

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N
0 20'
1" = 20'-0"


DRAINAGE BASIN B6
B6 DISCHARGE POINT
DRAINAGE BASIN B4
B4 DISCHARGE POINT
B1 DISCHARGE POINT
DRAINAGE BASIN B5
B5 DISCHARGE POINT
DRAINAGE BASIN B2
B2 DISCHARGE POINT
DRAINAGE BASIN B3
THE GODDARD SCHOOL BUILDING
SF: 8,800'
FF: 403.25
DRAINAGE BASIN B1
LOT "C"
2.18 ACRES
94,858.28 SQ FT
15' WATER EASEMENT
L=137.91' (M), R=170.00' (M), Δ=46.48° (P)
CH=S00°58'44"W - 134.16' (P)
CH=N00°09'23"W - 189.85' (P)
L=195.70' (M), R=230.00' (M), Δ=48.75° (P)
N24°13'05"E - 48.48' (P)
CH=N10°01'23"E - 61.80' (P)
L=62.44' (M), R=126.00' (M), Δ=28.39° (P)
N04°10'22"W - 26.76' (P)
N24°13'05"E - 48.48' (P)
L=92.17' (M), R=185.00' (M), Δ=28.39° (P)
CH=N10°01'23"E - 91.20' (P)
L=35.39' (M), R=185.26' (M), Δ= 10.95° (P)
CH=S67°21'26"W - 35.34' (P)
S52°42'32"E - 54.37' (P)
L=99.05' (M), R=63.33' (M), Δ=89.60° (P)
CH=N46°10'E - 89.20' (P)
S87°09'51"E - 1.53' (P)
N02°48'24"E - 291.37' (P)
N02°55'14"E - 142.90' (P)
S87°45'04"W - 427.73' (M)
S87°44'12"W - 38.27' (P)
S87°45'04"W - 427.41' (P)
S87°45'04"W - 130.77' (P)
S87°45'04"W - 426.60' (P)
-5.7%
79
-6.2%
30
-10.8%
18
-20.4%
38
-8.5%
13
-3.1%
9
-2.5%
72
-1.7%
18
-2.4%
30
-4.5%
28
-2.5%
18
-1.7%
51
-1.7%
16
-3.1%
9
-5.8%
7
-1.8%
6
-1.9%
33
-1.1%
40
-1.5%
93
-1.5%
10
-2.5%
31
TYP. 5' UTILITY EASEMENT
TYP. 10' UTILITY EASEMENT
TYP. 20' UTILITY EASEMENT
TYP. 30' UTILITY EASEMENT
TYP. 70' UTILITY EASEMENT
TYP. 15' WATER EASEMENT
TYP. 15' WATER EASEMENT
TYP. 15' SANITARY SEWER EASEMENT
TYP. 15' SANITARY SEWER EASEMENT
TYP. 20' SANITARY SEWER EASEMENT
TYP. 30' SANITARY SEWER EASEMENT
TYP. 70' SANITARY SEWER EASEMENT
TYP. 15' GAS EASEMENT
TYP. 15' GAS EASEMENT
TYP. 20' GAS EASEMENT
TYP. 30' GAS EASEMENT
TYP. 70' GAS EASEMENT
TYP. 15' TELEPHONE EASEMENT
TYP. 15' TELEPHONE EASEMENT
TYP. 20' TELEPHONE EASEMENT
TYP. 30' TELEPHONE EASEMENT
TYP. 70' TELEPHONE EASEMENT
TYP. 15' CABLE TV EASEMENT
TYP. 15' CABLE TV EASEMENT
TYP. 20' CABLE TV EASEMENT
TYP. 30' CABLE TV EASEMENT
TYP. 70' CABLE TV EASEMENT
TYP. 15' DRAINAGE EASEMENT
TYP. 15' DRAINAGE EASEMENT
TYP. 20' DRAINAGE EASEMENT
TYP. 30' DRAINAGE EASEMENT
TYP. 70' DRAINAGE EASEMENT
TYP. 15' GAS EASEMENT
TYP. 15' GAS EASEMENT
TYP. 20' GAS EASEMENT
TYP. 30' GAS EASEMENT
TYP. 70' GAS EASEMENT
TYP. 15' TELEPHONE EASEMENT
TYP. 15' TELEPHONE EASEMENT
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TYP. 15' CABLE TV EASEMENT
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TYP. 15' DRAINAGE EASEMENT
TYP. 20' DRAINAGE EASEMENT
TYP. 30' DRAINAGE EASEMENT
TYP. 70' DRAINAGE EASEMENT
TYP. 15' SANITARY SEWER EASEMENT
TYP. 15' SANITARY SEWER EASEMENT
TYP. 20' SANITARY SEWER EASEMENT
TYP. 30' SANITARY SEWER EASEMENT
TYP. 70' SANITARY SEWER EASEMENT
TYP. 15' WATER EASEMENT
TYP. 15' WATER EASEMENT
TYP. 20' WATER EASEMENT
TYP. 30' WATER EASEMENT
TYP. 70' WATER




OVERALL DRAINAGE PLAN (2)

SCALE 1" = 20'

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REVISION:

# THE GODDARD SCHOOL OF BRYANT

BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION ARKANSAS—ENGINEER

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 9540 PHILLIP A. LEWIS

PHILLIP LEWIS ENGINEERING, INC. No. 566

PROJECT NUMBER:

SHEET ISSUE DATE: 03-11-2026

PAGE TITLE: OVERALL DRAINAGE PLAN (2)

SHEET NUMBER: C1.8

N

0 20'

1" = 20'-0"




# OVERALL DRAINAGE PLAN (3)

SCALE 1" = 20'

N

0 20'

1" = 20'-0"

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PHILLIP LEWIS ENGINEERING, INC.
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ARKANSAS ENGINEER

STATE OF ARKANSAS
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PHILLIP W. LEWIS

PROJECT NUMBER:

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OVERALL DRAINAGE PLAN (3)

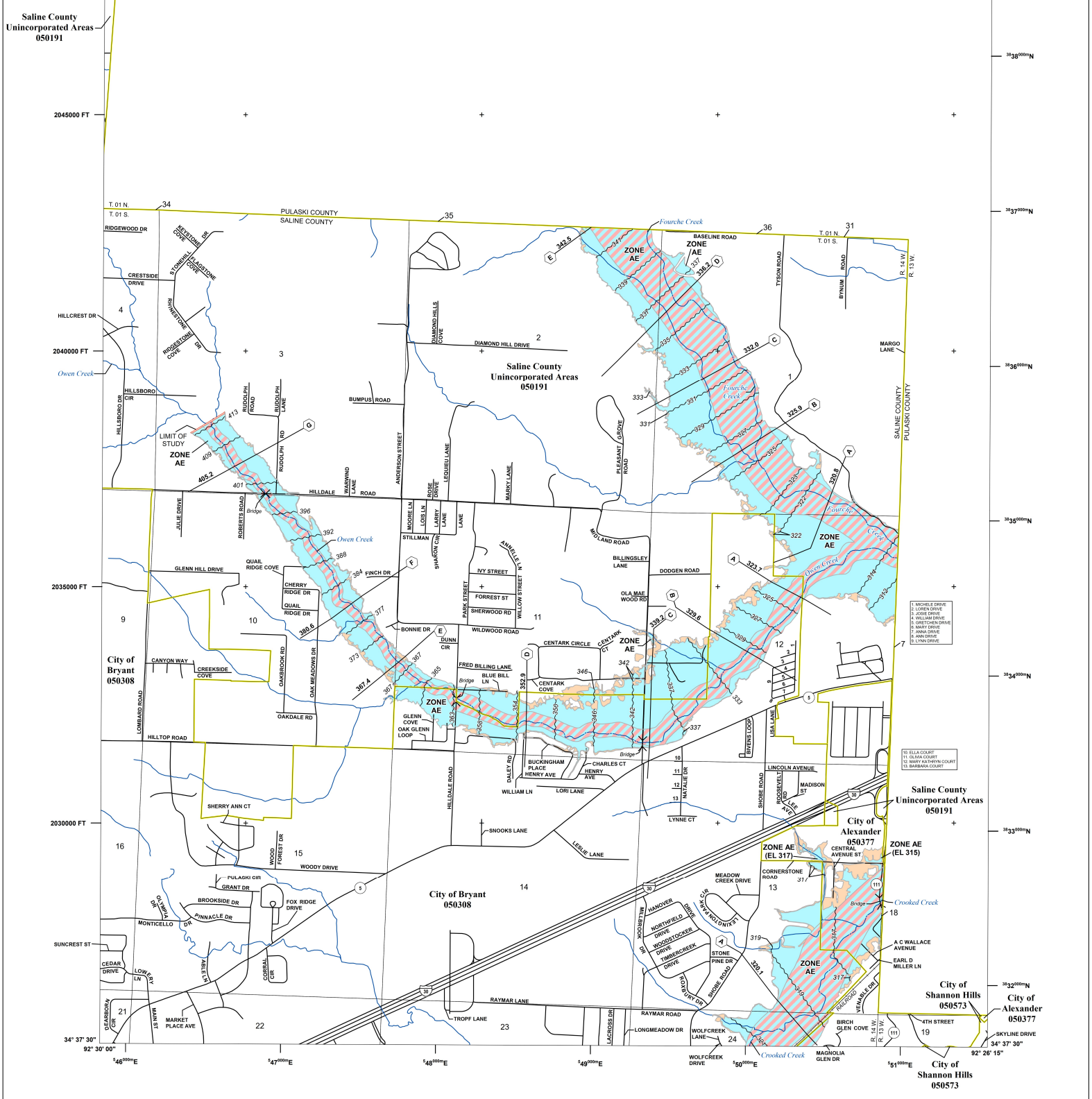
SHEET NUMBER:
C1.9

# DETENTION BASIN OUTLET STRUCTURES





FEMA FLOOD INSURANCE RATE MAP




## FLOOD HAZARD INFORMATION

**SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT**

**THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT**

**HTTPS://MSC.FEMA.GOV**

| | |
|---|---|
| SPECIAL FLOOD HAZARD AREAS | Without Base Flood Elevation (BFE) *Zone A,V, A99* |
| | With BFE or Depth *Zone AE, AO, AH, VE, AR* |
| | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X* |
| | Future Conditions 1% Annual Chance Flood Hazard *Zone X* |
| | Area with Reduced Flood Risk due to Levee See Notes. *Zone X* |
| | Area with Flood Risk due to Levee *Zone D* |
| OTHER AREAS | NO SCREEN Area of Minimal Flood Hazard *Zone X* |
| | Area of Undetermined Flood Hazard *Zone D* |
| GENERAL STRUCTURES | Channel, Culvert, or Storm Sewer |
| | Levee, Dike, or Floodwall |
| | E 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation |

## NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, dated 2015, and digital data provided by the Arkansas Geographic Information Office, dated 2015.

## SCALE

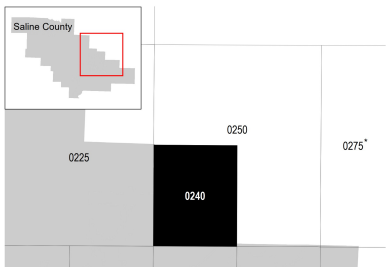
Map Projection:
State Plane Lambert Conformal Conic Arkansas South FIPS Zone 0302;
North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 1,000 2,000 4,000 Feet

0 250 500 1,000 Meters

## PANEL LOCATOR




National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM**

**FLOOD INSURANCE RATE MAP**

**SALINE COUNTY, ARKANSAS**
and Incorporated Areas

**PANEL 240 OF 575**

FEMA

Panel Contains:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| ALEXANDER, CITY OF | 050377 | 0240 | E |
| BRYANT, CITY OF | 050308 | 0240 | E |
| SALINE COUNTY | 050191 | 0240 | E |
| SHANNON HILLS, CITY OF | 050573 | 0240 | E |