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Preliminary Stormwater Pollution Prevention Plan

for

**Eagle Ridge
Town of North Castle**

November 28, 2022

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PROJECT: Eagle Ridge
Town of North Castle, NY

SCOPE: Preliminary Stormwater Pollution Prevention Plan

DATE: November 28, 2022

Introduction:

The subject site is located at 1 North Castle Drive, in the Town of North Castle, New York. The proposed development of this site, with more than one (1) acre of disturbance requires a Stormwater Pollution Prevention plan as per New York State Department of Environmental Conservation. This stormwater pollution prevention plan complies with New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity—GP-0-20-001 and New York State Stormwater Management Design Manual, dated January 2015.

Description:

The site is located on approximately 32 acres at 1 North Castle Drive in the Town of North Castle. The project site consists of one lot, with property tax map identification number; 108.03-1-62. The existing site consists of vacant land consisting of meadow areas, wooded areas, and abandoned asphalt road. On the southern end of the site there is a helicopter pad and internal roadways associated with the neighboring IBM property.

The applicant is proposing a mixed-use development consisting of townhouses, a hotel building, and restaurant, with associated improvements.

The proposed disturbance for the site is approximately 22.3 acres. This project results in the creation of approximately 9.35 acres of impervious area. The site generally slopes in an easterly direction.

Runoff from the site drains partially to an on-site wetland and to the adjacent property owned by the Town of North Castle. Eventually runoff from the site makes its way to the Wampus River, then to the Byram River, then to the Long Island Sound.

Owner/Operator/Applicant:
MADDD/Madonna Armonk LLC
7 Spruce Hill Court
Pleasantville, New York 10570

Contractors:
TBD

Individual Responsible for Implementation of SWPPP:
TBD

Individual Responsible for Periodic Inspections:
Alfonzetti Engineering, PC
14 Smith Avenue
Mount Kisco, NY 10549

At the time of the preparation of this Stormwater Pollution Prevention Plan, there are no know violations on this site.

A Phase I Cultural Resources Survey has been conducted on the site. A portion of the report prepared by Historical Perspectives, Inc., dated June 2018, is included in the appendix of this report.

The approvals associated with this project are as follows:

Agency	Approval	Status
Town of North Castle	- Zoning Amendment	Approved
	- Site Plan Approval	Pending
Westchester County Department of Health (WCDH),	- Watermain Extension - Sewermain Extension	Pending
New York State Department of Environmental Conservation	- Stormwater	Pending

Deep test holes and percolation tests were performed on site to determine the suitability of the soil for subsurface detention/infiltration. The results are shown in the appendix of this report. In addition, the soils according to the USDA (United States Department of Agriculture), NRCS (Natural Resources Conservation Service) are also shown in the appendix of this report.

Discussion:

Temporary Erosion Control Measures:

The following is an inventory and description of the temporary erosion control devices proposed on this site.

Anti-Tracking Pad – Anti-Tracking Pads shall be installed at all construction entrances. The purpose of the Anti-Tracking Pad shall be to dislodge mud, dirt, and debris from construction vehicles prior to these vehicles leaving the construction site. This will ensure the existing roadways are kept clear of sediment. Locations and details of the Anti-Tracking Pad are shown on the plans.

Silt Fence – Silt Fencing consists of a fabric barrier between supporting stakes or posts usually made of wood. The fabric is proposed to capture suspended sediments from construction runoff and also decreases the velocity of the runoff to protect off-site areas. The proposed location of the silt fence is shown on the plans along with details for installing the silt fence.

Haybales – Haybales are used in a variety of erosion control devices. At the top of an excavation, haybales are used to spread out concentrated flow to prevent erosion. Haybales are used in conjunction with silt fence to add additional protection to sensitive areas such as wetlands and water bodies. Haybales are also used in conjunction with Silt Fence to protect surrounding areas from soil stockpile erosion. The proposed location of the haybales is shown on the plans along with details.

Inlet protection – Inlet protection is used to filter runoff from non-stabilized construction sites prior to this runoff entering the drainage system.

Temporary Sediment Trap – Temporary Sediment Traps are small ponding basins constructed by excavation or embankment used to intercept sediment laden runoff. The sediment trap protects waterways, properties, and right-of-ways below the sediment trap.

Construction Sequence:

The construction will be in a sequence that will minimize the potential for erosion. No phase will be more than 5 acres and no two adjacent phases will be disturbed at the same time, without prior approval. Construction is anticipated to begin in the Fall of 2023, and last approximately up to 36 months for the entire site to be built.

The general sequence of construction is as follows:

- Pre-Construction Meeting, Stakeout, Erosion Control Measures, Clearing
 1. Pre-construction meeting with the Town Engineer, Applicant, Applicant's representative, and Contractors.
 2. Survey and stake for disturbance limits and erosion control installation.
 3. Establish parking and storage area via existing entrance.
 4. Place construction trailer and/or field office and a construction yard, if necessary.
 5. Mark and protect all trees to be preserved within the disturbance limits.
 6. Install anti-tracking pad and silt fence as shown on the erosion control plan and as per the respective erosion control details. Note: Silt fence should not be installed in areas where tree clearing operations will damage silt fence.
 7. Clear trees to be removed.
 8. Install silt fence in areas of tree clearing.
 9. Remove tree stumps, brush and other vegetation. Tree stump removal shall only include stumps within the immediate work area. Note: Tree stump removal shall only begin following the installation of the anti-tracking pads at all the construction entrances as shown on plans.

- Earthwork, Sewer and Water Connections, Utilities and Ponds, Hotel & Townhouse's foundation, and Retaining walls
 1. Erosion control devices must be installed before earthwork operations can commence. A water truck will be available during dry times to reduce airborne dust.

2. Parking and storage shall remain throughout all phases of the project.
3. Begin rough grading and stockpiling.
4. Install soil stockpiles within disturbance limits and sediment traps. Construct temporary sediment traps in the location indicated on plan.
5. Install diversion ditches within disturbance limits. Install temporary pipes to convey runoff in areas of vehicular/machinery traffic.
6. Set up rock crushing area and erosion control for stockpiles shown on plans.
7. Begin rough grading operations for the parking lot, roads and ponds. Stockpiles will be used to supply the fill needed.
8. Install appropriate proposed utilities to the site. Utility services include sanitary sewer service, water service, stormwater drains, electrical lines, and other utilities needed for the site.
9. Sanitary sewer and water service shall be connected to the public line as shown on the plan.
10. Backfill and compact trenches as installation progresses.
11. Complete rough grading.
12. Begin final grading, seeding, sodding, and soil stabilizing landscaping.
13. Complete final grading and stabilize earthwork.
14. Sediment traps shall remain until all phases are completed. Once all phases are completed sediment traps shall be cleaned and modified into stormwater basins as shown on the plans. Sediment traps shall be filled and graded once construction is complete.
15. Proposed infiltration systems shall not be operational until all phases are complete or approved to be active.
16. Anti-tracking pad shall remain until construction is complete.
17. All inlet protection shall be removed.
18. All infiltration systems shall be put online. Install roadway top course when heavy equipment is no longer needed and prior to the final Certificate of Occupancy.
19. As areas are stabilized, sediment shall be removed and erosion control devices shall be discarded in an appropriate manner. Final stabilization for vegetated areas requires at least 80% vegetative cover. All drainage structures shall be inspected and cleaned if necessary.

Potential pollutants during construction are sediment laden stormwater runoff, litter, and construction fluids/chemical spills. During construction, the sediment laden runoff will be trapped or filtered through the silt fence and other erosion control devices prior to being discharged. The construction litter will be cleaned on a daily basis and disposed of in a lawful manner. The storage of any construction fluids or chemicals will be within water tight containers suitable for storage and will not be exposed to the elements.

During the construction phase, the trained contractor shall be responsible for erosion and sediment control device maintenance and pollution prevention measures. The trained contractor shall also be responsible for maintenance of the permanent drainage structures during construction and to ensure protection of the subsurface infiltration system areas. The trained contractor shall inspect the erosion control devices daily to ensure they are in effective operating condition.

The qualified inspector shall conduct site inspections at least once every seven (7) calendar days while soil disturbance activities are on-going. If soil disturbance activities are suspended, inspections shall occur under the guidelines in the appendix of this report.

After construction, the maintenance of the stormwater mitigating devices shall be the responsibility of the managing entity for the townhouse development and the managing entity of the hotel site.

Permanent Stormwater Management Devices:

The proposed stormwater mitigation practices have been sized according to the New York State Department of Environmental Conservation Stormwater Design Manual (Stormwater Design Manual). The project is a mixed-use development that is proposed to disturb more than 1 acre, therefore the Stormwater Pollution Prevention Plan must incorporate Water Quality treatment features as well as Water Quantity control features.

After construction, in the post development stage, potential pollutants can be an increase in runoff rates as well as suspended sediment and elevated nutrient levels within the runoff. The increase in runoff rates is mitigated by the combined use of the stormwater practices located throughout the site, namely the subsurface infiltration systems, the stormwater ponds, and the green roof. The

increase in suspended sediment and elevated nutrients are mitigated by the infiltration systems, the extended detention ponds, the hydrodynamic separators, and the sumps in all the drain inlets and catch basins. By meeting NYSDEC Water Quality criteria and Runoff Reduction Volume criteria the pollutants of concern will be mitigated.

There are no stormwater discharges due to industrial activities, apart from construction, associated with this site.

The Stormwater Design Manual criteria are as follows:

Water Quality Volume (WQv):

- Capture and treat runoff from the 90th percentile rain event.

Runoff Reduction Volume (RRv):

- Reduction of the total WQv by application of green infrastructure techniques and standard Stormwater Management Practices to replicate pre-development hydrology.

Channel Protection Volume (Cpv):

- Provide 24 hour extended detention of the 1-year storm event, remained from runoff reduction.

Overbank Flood Protection (Qp):

- Attenuate the post development 10-year, 24-hour peak discharge rate to pre-development rates.

Extreme Flood Protection (Qf):

- Attenuate the post development 100-year, 24-hour peak discharge rate to pre-development rates.

This project incorporates the six-step process involving site planning and stormwater management practice selection to provide a more holistic approach to stormwater management per Chapter 3 of the *New York State Stormwater Design Manual* as described below.

1. Site planning to preserve natural features and reduce impervious cover.

2. Determine Water Quality Volume (WQv) for the site.
3. Apply Runoff Reduction Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv.
4. Determine the minimum Runoff Reduction Volume (RRv) required.
5. Apply standard SMPs, where applicable, to address remaining Water Quality Volume (WQv) not addressed by runoff reduction techniques and standard SMPs with RRv capacity.
6. Apply Volume and Peak Rate Control Practices if still needed to meet requirements.

Step 1 was achieved by locating the proposed development away from the wetlands and watercourses and using the minimum required driveway width, parking space dimensions, and drive aisle widths as per the Town of North Castle design standards. In addition, the bulk of the proposed development is located outside the steep slope areas of the site. The majority of the steep areas of the site remain undisturbed. Another preservation of natural features is the preservation of the wetland buffer. The development maintains a 150-foot buffer from the wetland on-site. Steps 2-6 are addressed in subsequent sections of this report.

The Stormwater Pollution Prevention Plan analyzes 7 Design Points. In order to determine the existing and proposed runoff flows at each respective design point, the stormwater model uses data from the existing and proposed watersheds. The watersheds and descriptions are below.

The Design Points are described below.

- | | |
|-----------------|--|
| Design Point 1 | DP1 is a linear design point located along the eastern property line. In the existing condition and proposed condition, this represents the runoff from Watershed 1. |
| Design Point 2. | DP2 is a linear design point located along the eastern property line. In the existing condition and proposed condition, this represents the runoff from Watershed 2. |

- Design Point 3 DP3 is another linear design point located along the eastern property line. In the existing condition, this represents the runoff from Watershed 3. In the proposed condition, this represents the runoff from Watersheds 3A-3G after they have been routed through their respective stormwater mitigation devices.
- Design Point 4 DP4 is another linear design point located along the eastern property line. In the existing condition, this represents the runoff from Watershed 4. In the proposed condition, this represents the sum of the runoff from Watersheds 4A-4F after they have been routed through their respective stormwater mitigation devices.
- Design Point 5 DP5 is a linear design point along the eastern property line within an on-site wetland. In the existing condition this represents the runoff from Watershed 5. In the proposed condition, this represents the sum of the runoff from Watershed 5A-5C after they have been routed through its stormwater mitigation devices.
- Design Point 6 DP6 is located within an existing drainage swale along North Castle Drive at the northern property line. In the existing condition and the proposed condition, this represents the runoff from Watershed 6.
- Design Point 7 DP7 is located at an existing drain inlet, at the south west property corner. In the existing condition and the proposed condition, this represents the runoff from Watershed 7.

The rainfall amounts required to satisfy the stormwater design criteria for the site are:

Design Storm Summary Table

Criteria	Storm	Rainfall (Inches)
Water Quality Volume (WQv)	90%	1.5
Channel Protection Volume (Cpv)	1 year	2.8
	2 year	3.43
	5 year	4.31
Overbank Flood Protection (Qp)	10-year	5.13
	25 year	6.46
	50 year	7.69
Extreme Flood Protection (Qf)	100-year	9.17

The methods used to calculate the runoff flows for the selected storms is as follows:

- The existing and proposed watersheds are determined and curve numbers are calculated for both conditions. Travel times are also calculated for the existing conditions.
- The existing watershed areas, curve numbers, and travel times are input into 'HydroCad' stormwater modeling software to determine the existing condition peak runoff flows.
- The proposed watershed areas, curve numbers, travel times, and stormwater mitigating devices and routings are input into 'HydroCad' stormwater modeling software to determine the proposed peak runoff flows. The results of the existing and the proposed peak runoff flow calculations are shown in the summary tables included in this report. The data used to determine the existing and the proposed peak runoff flows is also shown in the summary tables.
- The topography and land use/cover for the site was taken from a site-specific survey. The topography for off-site is taken from GIS mapping. The curve numbers and the travel times for the off-site watersheds are estimated using available aerial photographs. The soil grouping for the site was taken from the USDA (United States Department of Agriculture), NRCS (Natural Resources Conservation Service) soil survey.

Water Quality:

The water quality volume is calculated using the following formula from the Stormwater Design Manual:

$$WQ_v = ((P)(R_v)(A))/12)$$

where $R_v = 0.05 + 0.009(I)$

I = Impervious Cover (percent)

P = 90th % Rainfall Event Number (Use 1.5")

A = Site Area in acres

Designing the stormwater mitigation practices in accordance with the requirements of the NYSDEC Stormwater Design Manual will maintain proposed pollutant loading at or below existing condition levels. The impervious cover was calculated for each of the watersheds tributary to a stormwater treatment practice and tabulated below.

Watershed Name	Watershed Area (Acres)	Impervious Area (Acres)	Percent Impervious
PRWS3F	1.742	1.487	85.4%
PRWS3G	7.696	4.822	62.7%
PRWS4B	1.666	1.078	64.7%
PRWS4E	3.177	1.964	61.8%

Using the percent impervious and the formulas above, the resulting Water Quality Volumes are calculated in the table below for the developed watersheds.

NYSDEC PROPOSED WATER QUALITY VOLUME (WQv) CALCULATIONS								
Watershed Name	Watershed Area (Acres)	Impervious Area (Acres)	Percent Impervious	90% Rainfall (Inches)	Rv	Wqv (Ac-Ft)	Required Wqv (C.F.)	Provided Wqv (C.F.)
PRWS3F	1.742	2.74	85.4	1.50	0.82	0.18	7763.71	9592
PRWS3G	7.696	4.822	62.7	1.50	0.61	0.59	25725.0	30927
PRWS4B	1.666	1.078	64.7	1.50	0.63	0.13	5735.0	5768
PRWS4E	3.177	1.964	61.8	1.50	0.61	0.24	10488.9	25850

The Water Quality Volume for the development is proposed to be captured and treated in infiltration systems throughout the site. The infiltration systems shall

consist of cylindrical drywells, 10' in diameter and 6' in height, surrounded by crushed stone and filter fabric and infiltration basins.

Prior to entering the infiltration practices the stormwater runoff will pass through pre-treatment devices.

A summary of pollutants removed by standard practice:

Infiltration Practice	Phosphorous Nitrogen Metals – Cadmium, Copper, Lead, and Zinc Pathogens – Coliform, Streptococci, E. Coli
Extended Detention Pond	Phosphorous Nitrogen Metals – Cadmium, Copper, Lead, and Zinc Pathogens – Coliform, Streptococci, E. Coli

Runoff Reduction Volume (RRv):

The runoff reduction volume criteria requires the reduction of runoff volume by green infrastructure techniques, infiltrating, ground water recharge, reuse, recycle, or evaporation/evapotranspiration of the entire Water Quality Volume.

The Water Quality Volume calculations are discussed in the section above. Since the entire Water Quality Volume for Watersheds 3F, 3G, 4B, and 4E is being infiltrated, the Runoff Reduction Volume criteria has been met.

In addition, we are proposing rainwater harvesting for a portion of the site, and throughout the site we are proposing shallow sloped diversion swales and depressed areas that slow runoff and aid in groundwater recharge. No credit has been taken for the rainwater harvesting, swales, or depressions.

Channel Protection Volume (Cpv):

Since every infiltration basin and detention basin all capture a minimum of the 1-year storm and the discharge from each pond or structure is zero for the 1-year storm, the Channel Protection Volume criteria has been met for these watersheds. In addition, the small watershed sizes result in using very small orifice sizes to accomplish the 24-hour detention. Since such small orifices tend to clog and the New York State Stormwater Design Manual recommends a

minimum orifice size of 3”, channel protection is met by maintaining or reducing the proposed peak runoff to the existing peak runoff for the 1 year storm event. All discharges are to a stone dissipater/trench to ensure no erosion and to promote sheet flow.

The table below summarizes the data used for the stormwater calculations:

Watershed Designation	Area (Square Feet)	Curve Number	Travel Time (Minutes)
EXWS1	80,670	55	20.0
EXWS2	17,034	55	13.5
EXWS3	255,227	61	33.2
EXWS4	718,402	60	23.7
EXWS5A	249,233	55	12.1
EXWS5B	182,046	71	10.6
EXWS6	256,054	69	6.0
EXWS7	97,844	64	4.7
PRWS1	80,465	55	20.0
PRWS2	17,134	55	13.5
PRWS3A	47,238	59	12.6
PRWS3B	19,240	59	14.8
PRWS3C	10,409	61	6.0
PRWS3D	16,753	61	6.0
PRWS3E	13,831	61	6.0
PRWS3F	75,883	93	6.0
PRWS3G	335,218	84	6.0
PRWS4A	268,460	56	17.3
PRWS4B	72,554	85	6.0
PRWS4C	49,463	63	6.0
PRWS4D	24,852	61	6.0
PRWS4E	138,393	84	12.0
PRWS4F	39,950	61	11.3
PRWS5A	229,437	55	15.1
PRWS5B	187,100	71	14.4
PRWS5C	11,223	86	6.0
PRWS6A	147,405	72	6.0
PRWS7A	71,502	60	4.7

The tables below show a comparison of the existing and proposed peak flows:

DESIGN POINT 1			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	0.1	0.1	0
2 Year	0.2	0.2	0
5 Year	0.7	0.7	0
10 Year	1.2	1.2	0
25 Year	2.4	2.4	0
50 Year	3.6	3.6	0
100 Year	5.2	5.1	-0.1

DESIGN POINT 2			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	0	0	0
2 Year	0.1	0.1	0
5 Year	0.2	0.2	0
10 Year	0.3	0.3	0
25 Year	0.6	0.6	0
50 Year	0.9	0.9	0
100 Year	1.3	1.3	0

DESIGN POINT 3			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	0.6	0.1	-0.5
2 Year	1.5	0.3	-1.2
5 Year	3.1	1.3	-1.8
10 Year	4.9	2.7	-2.2
25 Year	8.3	6.9	-1.4
50 Year	11.7	9.1	-2.6
100 Year	16	11.4	-4.6

DESIGN POINT 4			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	1.7	0.4	-1.3
2 Year	4.2	1.3	-2.9
5 Year	9.3	5.9	-3.4
10 Year	15	13.4	-1.6
25 Year	25.8	23.7	-2.1
50 Year	36.8	31.8	-5
100 Year	50.9	41.9	-9

DESIGN POINT 5			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	2.3	2.1	-0.2
2 Year	4.4	4.2	-0.2
5 Year	8.7	8.4	-0.3
10 Year	13.6	12.8	-0.8
25 Year	22.4	20.9	-1.5
50 Year	31.2	28.9	-2.3
100 Year	42.5	39.2	-3.3

DESIGN POINT 6			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	3.2	1.5	-1.7
2 Year	5.7	2.8	-2.9
5 Year	9.7	5	-4.7
10 Year	13.9	7.3	-6.6
25 Year	21.1	11.3	-9.8
50 Year	28.2	15.3	-12.9
100 Year	36.9	20.3	-16.6

DESIGN POINT 7			
Storm Event	Existing Peak Runoff (cfs)	Proposed Peak Runoff (cfs)	Net Change (cfs)
1 Year	0.7	0.2	-0.5
2 Year	1.5	0.7	-0.8
5 Year	2.9	1.5	-1.4
10 Year	4.4	2.5	-1.9
25 Year	7	4.3	-2.7
50 Year	9.7	6.1	-3.6
100 Year	13.1	8.5	-4.6

Overbank Flood Protection (Qp):

As seen on the peak flow comparison charts, the proposed peak runoff is maintained or reduced as compared to the existing peak runoff for the 10-year storm event.

Extreme Flood Protection (Qf):

As seen on the peak flow comparison charts, the proposed peak runoff is maintained or reduced as compared to the existing peak runoff for the 100-year storm event.

Conclusion:

Based on the analysis in the Stormwater Pollution Prevention Plan, the stormwater management practices proposed will adequately treat the runoff leaving the site in regard to water quality. In addition, the proposed stormwater practices will control runoff quantities to ensure no adverse affects due to stormwater as a result of the proposed development.

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Ralph Alfonzetti, P.E.



Maintenance:

The maintenance chart below shows typical maintenance of temporary and permanent structures and erosion control devices during construction,

Device	Weekly	Monthly	Bi-annually	Annually	Prior to Significant Rainfall	After Significant Rainfall
Haybales		Inspect		Replace	Inspect	Inspect/clean
Silt fence		Inspect		Inspect	Inspect	Inspect/clean
Anti-tracking pad	Inspect		Restore			Inspect
Inlet protection		Inspect	Restore		Inspect	Inspect/clean
Catch basins/ Drain inlets	Inspect (during construction)		Clean			Inspect

Temporary Sediment Traps shall be inspected prior to significant rainfall and inspected and cleaned if needed after significant rainfall. The sediment trap shall be cleaned and sediment removed when sediment reaches ½ the design depth.

Permanent stormwater management device maintenance schedule is as follows:

- Hydrodynamic separator devices shall be inspected biannually and cleaned out as per manufacturers’ instructions (included in the appendix of this report).
- All catch basins/drain inlets/drain manholes shall be inspected and cleaned biannually. These structures should also be inspected weekly during construction and after significant rainfall.
- The subsurface infiltration systems shall be inspected annually through observation ports.
- Stormwater Basins/Detention ponds should be inspected after major storm events and semi-annually. During the inspections, the following should be checked:
 - Clogging of outlet structure.
 - Erosion on the embankment/berm.

- Condition of the emergency spillway.
 - Accumulation of sediment around the outlet structure.
 - Erosion of the basin bed and banks.
 - Sources of erosion in the contributory drainage, which should be stabilized.
- Sediment removal in the forebay shall occur every five to six years or after 50% of total forebay capacity has been lost.
 - If any trash has made its way to the pond, it shall be cleaned out and disposed of in a lawful manner.
 - Grass should be cut at a minimum twice a year.
 - Dead/Diseased plants shall be removed and disposed of in a lawful manner. Replacement plants shall be of the same type and size as initially planted.
 - No herbicides, pesticides, or fertilizers should be used in or near the ponds.

Archeological Information:

**Phase IA Cultural Resources Survey
Eagle Ridge Development
1 North Castle Drive, Armonk, Town of North Castle
Westchester County, New York**

Prepared For:

Frank Madonna

Prepared By:

Historical Perspectives, Inc.
P.O. Box 529
Westport, CT 06881

Authors:

Dawn L. Brown, M.A., R.P.A.

June 2018

MANAGEMENT SUMMARY

SHPO Project Review Number (if available):

Involved State and Federal Agencies:

Phase of Survey: **Phase IA Cultural Resources Survey**

Location Information

Location: **1 North Castle Drive**
Minor Civil Division: **11910, North Castle**
County: **Westchester**

Survey Area

Length:
Width:
Number of Acres Surveyed: **32.5**

USGS 7.5 Minute Quadrangle Map: **Glenville, CT**

Archaeological Survey Overview

Number & Interval of Shovel Tests:
Number & Size of Units: **N/A**
Width of Plowed Strips: **N/A**
Surface Survey Transect Interval: **N/A**

Results of Archaeological Survey

Number & name of precontact sites identified:
Number & name of historic sites identified:
Number & name of sites recommended for Phase II/Avoidance:

Results of Architectural Survey

Number of buildings/structures/cemeteries within project area:
Number of buildings/structures/cemeteries adjacent to project area:
Number of previously determined NRHP listed or eligible buildings/structures/cemeteries/districts:
Number of identified eligible buildings/structures/cemeteries/districts:

Report Authors(s): **Dawn L. Brown, M.A., R.P.A., Historical Perspectives, Inc.**

Date of Report: **June 2018**

EXECUTIVE SUMMARY

Eagle Ridge is a proposed Armonk development of a boutique hotel with residential housing, and supportive services and parking, and a separate 94-unit townhome complex. Rezoning, subdivision and construction of the 32.5-acre property at 1 North Castle Drive requires local permits and zoning approval prior to implementation. The development parcel, which contains steep slopes, is immediately west of a municipal sports park and north of an International Business Machines Corporation (IBM) corporate complex (Figure 1 and 2). Originally a part of the IBM complex, a small western portion of the project site was previously graded and developed by IBM into a helipad. The local Planning Board has requested the completion of a Phase I cultural resources evaluation of the project site acreage so that the Eagle Ridge site application can move forward.

From what is known of precontact period settlement patterns in Westchester County, most habitation and processing sites are found in sheltered, elevated locales close to wetland features, major waterways, and with nearby sources of fresh water. The project site is located near the Wampus River and contains well-drained soils uphill from the water. Research found that fourteen precontact sites have been identified within a one-mile radius of the project APE. One of these sites, an Early Archaic (LeCroy) site, was on the IBM property immediately south of the APE (Boesch 1995a, b, c). In addition, bedrock outcrops on the APE may contain possible rockshelters. These factors signify potential precontact sensitivity.

The 18th to 19th century Cornell-Birdsall farm, and later 20th century Wenga Farm, consisted of a large complex of buildings that existed on the northern portion of the APE; the APE was part of the larger agricultural history which consisted of orchards, livestock and farm buildings. IBM purchased this land from the Agnew family in 1955. The farm buildings were moved or demolished by the 1960s. Aerial photographs show that some of these buildings were originally located where Route 128 intersects with North Castle Drive; however, a number of buildings also existed on the northern portion of the present APE. These factors signify potential historic-period sensitivity.

Archaeological testing is recommended for only a portion of the project site (Figure 8). No field testing is recommended for the project APE with more than 12% slope. Also, no field testing is recommended for land areas with clear evidence of 20th century disturbance (e.g., road prep and installation, rock and tree removal, helipad construction, and installation of sewer line).

Some portions of the APE which fit the model for possible precontact occupation are clearly undisturbed (i.e., southeastern wooded portion) and standard Phase IB Archaeological Field Testing is recommended. However, on other portions of the APE (i.e., center field area, western, and northwestern edge) complete disturbance is unclear or intermittent; therefore, limited Phase IB field testing is recommended to confirm possible disturbance.

In addition, further archaeological investigations are recommended for the northern portion of the APE due to possible middens, privys, wells or cisterns related to the Cornell-Birdsall residence that may have remained intact. No foundation or structural remains could be seen upon visual inspection (5/26/2018); however, the area was heavily overgrown.

Testing is also recommended for several rock overhangs that are present within the bedrock outcrops.

Deep Test Hole Information:
 (designations are shown on the plan in this appendix)

DEEP TEST 1 (DT1)

0"-6"	TOPSOIL
6"-12"	SANDY LOAM
12"	ROCK

DEEP TEST 2 (DT2)

0"-6"	TOPSOIL
6"-30"	SANDY LOAM
30"	ROCK

DEEP TEST 3 (DT3)

0"-10"	TOPSOIL
10"-16"	GRAVEL
16"-60"	SANDY, SILTY LOAM
60"	ROCK

DEEP TEST 4 (DT4)

0"-6"	TOPSOIL
6"-108"	SANDY LOAM
108"	WATER

DEEP TEST 5 (DT5)

0"-6"	TOPSOIL
6"-102"	SANDY, SILTY LOAM
102"	WATER

DEEP TEST 6A (DT6A)

0"-6"	TOPSOIL
6"-92"	SANDY, SILTY LOAM

DEEP TEST 6B (DT6B)

0"-6"	TOPSOIL
6"-84"	SANDY LOAM WITH COBBLES

DEEP TEST 7 (DT7)

0"-6"	TOPSOIL
6"-132"	SANDY LOAM

DEEP TEST 8 (DT8)

0"-6"	TOPSOIL
6"-132"	SANDY LOAM

DEEP TEST 9A (DT9A)

0"-6"	TOPSOIL
6"-86"	SANDY LOAM

DEEP TEST 9B (DT9B)

0"-6"	TOPSOIL
6"-100"	SANDY LOAM

DEEP TEST 10 (DT10)

0"-6"	TOPSOIL
6"-78"	SANDY LOAM WITH BOULDERS

DEEP TEST 11 (DT11)

0"-6"	TOPSOIL
6"-96"	SANDY, SILTY LOAM

DEEP TEST 12 (DT12)

0"-6"	TOPSOIL
6"-70"	SANDY LOAM
70"-120"	MIXED SANDS
120"	ROCK

DEEP TEST 13 (DT13)

0"-6"	TOPSOIL
6"-66"	SANDY LOAM WITH COBBLES
66"-97"	MIXED SANDS

DEEP TEST 14 (DT14)

0"-6"	TOPSOIL
6"-66"	SANDY LOAM
66"-78"	MIXED SANDS

Deep Test Hole Information:
 (designations are shown on the plan in this appendix)

DEEP TEST 15 (DT15)

0"-12"	TOPSOIL
12"-58"	SANDY LOAM
58"-94"	MIXED SANDS

DEEP TEST 18 (DT18)

0"-6"	TOPSOIL
6"-80"	SANDY, SILTY LOAM WITH COBBLES

DEEP TEST 16 (DT16)

0"-6"	TOPSOIL
6"-108"	SANDY, SILTY LOAM

DEEP TEST 19 (DT19)

0"-6"	TOPSOIL
6"-122"	SANDY LOAM
122"	ROCK

DEEP TEST 17 (DT17)

0"-6"	TOPSOIL
6"-100"	SANDY LOAM WITH BOULDERS

Percolation Test Results:

PERCOLATION TEST	PERCOLATION RATE (MIN./IN.)
P4	2
P5	3
P6	2
P7	12
P9	46
P10	20
P11	30
P12	3
P13	7
P14	2
P16	8
P18	3
P19	6

Soil Information as per USDA (United States Department of Agriculture), NRCS (Natural Resources Conservation Service):



Soil Map—Westchester County, New York

MAP LEGEND		MAP INFORMATION	
<p>Area of Interest (AOI)</p> <ul style="list-style-type: none"> Area of Interest (AOI) <p>Soils</p> <ul style="list-style-type: none"> Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points <p>Special Point Features</p> <ul style="list-style-type: none"> Blowout Borrow Pit Clay Spot Closed Depression Gravel Pit Gravelly Spot Landfill Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot 	<ul style="list-style-type: none"> Spoil Area Stony Spot Very Stony Spot Wet Spot Other Special Line Features <p>Water Features</p> <ul style="list-style-type: none"> Streams and Canals <p>Transportation</p> <ul style="list-style-type: none"> Rails Interstate Highways US Routes Major Roads Local Roads <p>Background</p> <ul style="list-style-type: none"> Aerial Photography 	<p>The soil surveys that comprise your AOI were mapped at 1:12,000.</p> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Westchester County, New York Survey Area Data: Version 13, Oct 8, 2017</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>	

Soil Map—Westchester County, New York

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	0.0	0.0%
ChD	Charlton fine sandy loam, 15 to 25 percent slopes	3.1	3.0%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	46.7	45.1%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	28.2	27.2%
Ff	Fluvaquents-Udfluvents complex, frequently flooded	0.3	0.3%
HrF	Hollis-Rock outcrop complex, 35 to 60 percent slopes	1.6	1.5%
Pw	Pompton silt loam, loamy substratum	2.1	2.0%
Ub	Udorthents, smoothed	4.4	4.2%
Uf	Urban land	17.1	16.5%
Totals for Area of Interest		103.5	100.0%

Hydrodynamic Separator Maintenance:

CDS Maintenance

The CDS system must be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit, e.g., unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant deposition and transport may vary from year to year and regular inspections will help insure that the system is cleaned out at the appropriate time. At a minimum, inspections must be performed twice per year (i.e. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid pollutant accumulations, or in equipment washdown areas. Additionally, installations where excessive amounts of trash are expected should be inspected more frequently.

The visual inspection must ascertain that the system components are in working order and that there are no blockages or obstructions to the inlet and/or separation screen. The inspection must also identify accumulations of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick such as a stadia rod, tape measure or other measuring instrument. If sorbent material is used for enhanced removal of hydrocarbons then the level of discoloration of the sorbent material should also be identified during inspection. Sorbent material must be replaced when it is predominantly dark in color (similar to oil). It is useful and often required as part of a permit to keep a record of each inspection.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (screen/cylinder) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained behind the screen. For units possessing a sizable depth below grade (depth to pipe), a single access point allows for both sump cleanout and access behind the screen.

The CDS system must be cleaned when the level of sediment in the sump has reached a depth of 12 inches or more to avoid exceeding the maximum 24 inch sediment depth and/or when an appreciable level of hydrocarbons and trash has accumulated. If sorbent material is used, it must be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine if the height of the sediment pile off the bottom of the sump floor exceeds 75% (18 inches) of the total height of isolated sump.

Cleaning

Cleaning of the CDS systems should be done during dry weather conditions when no flow is entering the system. Cleanout of the CDS with a vacuum truck is generally the most effective and convenient method of excavating pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be pumped out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis must be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use adsorbent pads since they are usually less expensive to dispose of than the oil/water emulsion that may be created by vacuuming the oily layer. Trash can be netted out if you wish to separate it from the other pollutants. The screen should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure proper safety precautions. Confined Space Entry procedures need to be followed.

Disposal of all material removed from the CDS system must be done in accordance with local regulations. In many locations, disposal of evacuated sediments may be handled in the same manner as disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal.

CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	yd3	m3
CDS2015-4	4	1.2	3.0	0.9	0.9	0.7
CDS2015	5	1.5	3.0	0.9	1.3	1.0
CDS2020	5	1.5	3.5	1.1	1.3	1.0
CDS2025	5	1.5	4.0	1.2	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3030	6	1.8	4.6	1.4	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4030	8	2.4	4.6	1.4	5.6	4.3
CDS4040	8	2.4	5.7	1.7	5.6	4.3
CDS4045	8	2.4	6.2	1.9	5.6	4.3
CDS5640	10	3.0	6.3	1.9	8.7	6.7
CDS5653	10	3.0	7.7	2.3	8.7	6.7
CDS5668	10	3.0	9.3	2.8	8.7	6.7
CDS5678	10	3.0	10.3	3.1	8.7	6.7

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

New York State Department of Environmental Conservation Notice of Intent:

0644089821

NOTICE OF INTENT



**New York State Department of Environmental Conservation
 Division of Water
 625 Broadway, 4th Floor
 Albany, New York 12233-3505**

NYR
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001
 All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

- IMPORTANT -
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

M A D D D M A D O N N A A R M O N K L L C

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

M A D O N N A

Owner/Operator Contact Person First Name

F R A N K J .

Owner/Operator Mailing Address

5 0 1 M A R B L E A V E N U E

CITY

P L E A S A N T V I L L E

State Zip

N Y 1 0 5 7 0 -

Phone (Owner/Operator) Fax (Owner/Operator)

9 1 4 - 5 5 7 - 4 6 8 5 9 1 4 - 7 0 9 - 4 6 0 5

Email (Owner/Operator)

F J M A D O N N A @ A O L . C O Y

REC DAX ID

8 2 - 2 5 5 1 0 9 7 (not required for individuals)

64010099028

Project Site Information																			
Project/Site Name																			
E	A	G	L	E		R	I	D	G	E									
Street Address (NOT P.O. BOX)																			
1	N	C	A	S	T	L	E		D	R	I	V	E						
Side of Street																			
<input type="radio"/> North <input type="radio"/> South <input checked="" type="radio"/> East <input type="radio"/> West																			
City/Town/Village (DEAL ISSUES BEYONDING BOUND)																			
T	O	W	N		O	F		N	O	R	T	H		C	A	S	T	L	E
State Zip County DEC Region																			
N	Y																		
Name of Nearest Cross Street																			
N	.	Y	.	S	.		R	O	U	T	E		2	2					
Distance to Nearest Cross Street (Feet)										Project In Relation to Cross Street									
Tax Map Numbers Section-Block-Parcel										Tax Map Numbers									

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

<https://giservices.dec.ny.gov/gis/stormwater/>

Zoom into your Project location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting) -7 6 0 7 7 2 7 Ex. -73.749	Y Coordinates (Northing) 4 5 5 2 6 2 7 Ex. 42.652
---	--

2. What is the nature of this construction project?

New Construction
 Redevelopment with increase in impervious area
 Redevelopment with no increase in impervious area

41.07069929

3. Select the predominant land use for both pre and post development conditions.
 SELECT ONLY ONE CHOICE FOR EACH

- Pre-Development Existing Land Use**
- FOREST
 - PASTURE/OPEN LAND
 - CULTIVATED LAND
 - SINGLE FAMILY HOME
 - SINGLE FAMILY SUBDIVISION
 - TOWN HOME RESIDENTIAL
 - MULTIFAMILY RESIDENTIAL
 - INSTITUTIONAL/SCHOOL
 - INDUSTRIAL
 - COMMERCIAL
 - ROAD/HIGHWAY
 - RECREATIONAL/SPORTS FIELD
 - BIKE PATH/TRAIL
 - LINEAR UTILITY
 - PARKING LOT
 - OTHER
- | | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

- Post-Development Future Land Use**
- SINGLE FAMILY HOME Number of Lots
 - SINGLE FAMILY SUBDIVISION
 - TOWN HOME RESIDENTIAL
 - MULTIFAMILY RESIDENTIAL
 - INSTITUTIONAL/SCHOOL
 - INDUSTRIAL
 - COMMERCIAL
 - MUNICIPAL
 - ROAD/HIGHWAY
 - RECREATIONAL/SPORTS FIELD
 - BIKE PATH/TRAIL
 - LINEAR UTILITY (water, sewer, gas, etc.)
 - PARKING LOT
 - CLEARING/GRADING ONLY
 - DEMOLITION, NO REDEVELOPMENT
 - WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
 - OTHER
- | | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

*Note: For gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area
32.5	19.1	1.6	7.8

5. Do you plan to disturb more than 5 acres of soil at any one time? Yes No

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
	100		

7. Is this a phased project? Yes No

8. Enter the planned start and end dates of the disturbance activities.

Start Date	End Date
09/20/2020	09/20/2023

64030899020

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? Yes No Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

T o w n o f N o r t h C a s t l e

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? Yes No Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? Yes No

19. Is this property owned by a state authority, state agency, federal government or local government? Yes No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) Yes No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? Yes No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? Yes No
If No, skip questions 23 and 27-30.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? Yes No

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24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- Professional Engineer (P.E.)
- Soil and Water Conservation District (SWCD)
- Registered Landscape Architect (R.L.A.)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Owner/Operator
- Other

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SWPPP Preparer

A L F O N Z E T T I E N G I N E E R I N G , P . E .

Contact Name (Last, Space, First)

A L F O N Z E T T I , R A L P H

Mailing Address

1 0 0 R O U T E 5 2

City

C A R M E L

State Zip

N Y 1 0 5 1 2 - 4 5 4 9

Phone

8 4 5 - 2 2 8 - 9 8 0 0

Fax

8 4 5 - 2 2 8 - 9 8 0 1

Email

I N F O @ A L F O N Z E T T I _ E N G . C O M

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the OP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name

R A L P H

MI

Last Name

A L F O N Z E T T I

Signature

Date

 / /

0005000022

25. Has a construction sequence schedule for the planned management practices been prepared? Yes No

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- Check Dam
- Construction Road Stabilization
- Dust Control
- Earth Dike
- Level Spreader
- Perimeter Dike/Swale
- Pipe Slope Drain
- Portable Sediment Tank
- Rock Dam
- Sediment Basin
- Sediment Traps
- Silt Fence
- Stabilized Construction Entrance
- Storm Drain Inlet Protection
- Straw/Hay Bale Dike
- Temporary Access Waterway Crossing
- Temporary Stormdrain Diversion
- Temporary Swale
- Turbidity Curtain
- Water bars

Biotechnical

- Brush Matting
- Wattling

Vegetative Measures

- Brush Matting
- Dune Stabilization
- Grassed Waterway
- Mulching
- Protecting Vegetation
- Recreation Area Improvement
- Seeding
- Sodding
- Straw/Hay Bale Dike
- Streambank Protection
- Temporary Swale
- Topsoiling
- Vegetating Waterways

Permanent Structural

- Debris Basin
- Diversion
- Grade Stabilization Structure
- Land Grading
- Lined Waterway (Rock)
- Paved Channel (Concrete)
- Paved Flume
- Retaining Wall
- Riprap Slope Protection
- Rock Outlet Protection
- Streambank Protection

Other

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Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- Preservation of Undisturbed Areas
- Preservation of Buffers
- Reduction of Clearing and Grading
- Locating Development in Less Sensitive Areas
- Roadway Reduction
- Sidewalk Reduction
- Driveway Reduction
- Cul-de-sac Reduction
- Building Footprint Reduction
- Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6 ("Soil Restoration") of the Design Manual (2018 version).

- All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- Compacted areas were considered as impervious cover when calculating the WQv Required, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

0	.	9	5	2	acre-feet
---	---	---	---	---	-----------

29. Identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RR Capacity in Table 1 (See Page 9) that were used to reduce the total WQv Required (#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 30s after identifying the SMPs.

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Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

RR Techniques (Area Reduction)	Total Contributing Area (acres)		Total Contributing Impervious Area (acres)		
<input type="radio"/> Conservation of Natural Areas (RR-1) ...			and/or		
<input type="radio"/> Sheetflow to Riparian Buffers/Filter Strips (RR-2)			and/or		
<input type="radio"/> Tree Planting/Tree Pit (RR-3)			and/or		
<input type="radio"/> Disconnection of Rooftop Runoff (RR-4) ..			and/or		
RR Techniques (Volume Reduction)					
<input type="radio"/> Vegetated Swale (RR-5)					
<input type="radio"/> Rain Garden (RR-6)					
<input type="radio"/> Stormwater Planter (RR-7)					
<input type="radio"/> Rain Barrel/Cistern (RR-8)					
<input type="radio"/> Porous Pavement (RR-9)					
<input type="radio"/> Green Roof (RR-10)					
Standard SMPs with RV Capacity					
<input type="radio"/> Infiltration Trench (I-1)					
<input type="radio"/> Infiltration Basin (I-2)					
<input checked="" type="radio"/> Dry Well (I-3)			7	1	6
<input checked="" type="radio"/> Underground Infiltration System (I-4)			0	5	8
<input type="radio"/> Bioretention (F-5)					
<input type="radio"/> Dry Swale (O-1)					
Standard SMPs					
<input type="radio"/> Micropond Extended Detention (P-1)					
<input type="radio"/> Wet Pond (P-2)					
<input type="radio"/> Wet Extended Detention (P-3)					
<input type="radio"/> Multiple Pond System (P-4)					
<input type="radio"/> Pocket Pond (P-5)					
<input type="radio"/> Surface Sand Filter (F-1)					
<input type="radio"/> Underground Sand Filter (F-2)					
<input type="radio"/> Perimeter Sand Filter (F-3)					
<input type="radio"/> Organic Filter (F-4)					
<input type="radio"/> Shallow Wetland (W-1)					
<input type="radio"/> Extended Detention Wetland (W-2)					
<input type="radio"/> Pond/Wetland System (W-3)					
<input type="radio"/> Pocket Wetland (W-4)					
<input type="radio"/> Wet Swale (O-2)					

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**Table 2 - Alternative SMPs
(DO NOT INCLUDE PRACTICES BEING
USED FOR PRETREATMENT ONLY)**

Alternative SMP	Total Contributing Impervious Area (acres)			
<input type="radio"/> Hydrodynamic				
<input type="radio"/> Wet Vault				
<input type="radio"/> Media Filter				
<input type="radio"/> Other				

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name _____

Manufacturer _____

Note: Redevelopment projects which do not use RR techniques, shall use questions 26, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided
 acre-feet

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

Yes No

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on NSG.
 [Minimum RRv Required = (R) (0.95) (A1)/12, A1-(B) (A1c)]

Minimum RRv Required
 . acre-feet

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

Yes No

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
 If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

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33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv (Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided
 [][] . [][] acre-feet

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice is the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). [][] . [][]

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? Yes No

If Yes, go to question 36.
 If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required [][] . [][] acre-feet CPv Provided [][] . [][] acre-feet

36a. The need to provide channel protection has been waived because:
 Site discharges directly to tidal waters or a fifth order or larger stream.
 Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qo) and Extreme Flood (Qe) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qo)

Pre-Development [5] [0] . [1] [] CFS Post-development [3] [1] . [9] [] CFS

Total Extreme Flood Control Criteria (Qe)

Pre-Development [1] [5] [8] . [9] [] CFS Post-development [1] [1] [9] . [5] [] CFS

1.310099022

37a. The need to meet the Qp and Qf criteria has been waived because:

- Site discharges directly to tidal waters or a fifth order or larger stream.
- Downstream analysis reveals that the Qp and Qf controls are not required.

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? Yes No

If Yes, Identify the entity responsible for the long term Operation and Maintenance

M	A	D	D		M	A	D	O	N	N	A		A	R	M	O	N	K		L	L	C																		
---	---	---	---	--	---	---	---	---	---	---	---	--	---	---	---	---	---	---	--	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(§28). (See question 32a)
This space can also be used for other pertinent project information.

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40. Identify other DEC permits, existing and new, that are required for this project/facility.

- Air Pollution Control
- Coastal Erosion
- Hazardous Waste
- Long Island Bays
- Mined Land Reclamation
- Solid Waste
- Navigable Waters Protection / Article 15
- Water Quality Certificate
- Dam Safety
- Water Supply
- Freshwater Wetlands/Article 24
- Tidal Wetlands
- Wild, Scenic and Recreational Rivers
- Stream Bed or Bank Protection / Article 15
- Endangered or Threatened Species (Incidental Take Permit)
- Individual SPDES
- SPDES Multi-Sector GP

N	Y	R																	
---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
- Other

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
- None

41. Does this project require a US Army Corps of Engineers Wetland Permit? Yes No
 If Yes, Indicate Size of Impact.

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

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? Yes No
 (If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? Yes No

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

N	Y	R																		
---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

3547069926

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first phase of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name

E R A N K

MI

J

Print Last Name

M A D O N N A

Owner/Operator Signature

Date

/ /

Construction Site Log Book

APPENDIX H

**STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION
ACTIVITIES
CONSTRUCTION SITE LOG BOOK**

Table of Contents

- I. Pre-Construction Meeting Documents
 - a. Preamble to Site Assessment and Inspections
 - b. Operator's Certification
 - c. Qualified Professional's Credentials & Certification
 - d. Pre-Construction Site Assessment Checklist

- II. Construction Duration Inspections
 - a. Directions
 - b. Modification to the SWPPP

- III. Monthly Summary Reports

- IV. Monitoring, Reporting, and Three-Month Status Reports
 - a. Operator's Compliance Response Form

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____
Permit No. _____ Date of Authorization _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional¹ conduct an assessment of the site prior to the commencement of construction² and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization³ using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).
2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Name (please print): _____
Title _____ **Date:** _____
Address: _____
Phone: _____ **Email:** _____
Signature: _____

c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (please print): _____
Title _____ **Date:** _____
Address: _____
Phone: _____ **Email:** _____
Signature: _____

d. Pre-construction Site Assessment Checklist

(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

- Has a Notice of Intent been filed with the NYS Department of Conservation?
- Is the SWPPP on-site? Where? _____
- Is the Plan current? What is the latest revision date? _____
- Is a copy of the NOI (with brief description) onsite? Where? _____
- Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

- Are construction limits clearly flagged or fenced?
- Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
- Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

- Clean stormwater runoff has been diverted from areas to be disturbed.
- Bodies of water located either on site or in the vicinity of the site have been identified and protected.
- Appropriate practices to protect on-site or downstream surface water are installed.
- Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

- A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
- Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
- Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

- Silt fence material and installation comply with the standard drawing and specifications.
- Silt fences are installed at appropriate spacing intervals
- Sediment/detention basin was installed as first land disturbing activity.
- Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

- The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- The plan is contained in the SWPPP on page _____
- Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

- (1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- (2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- (3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- (4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- (5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- (6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

CONSTRUCTION DURATION INSPECTIONS Page 1 of _____

SITE PLAN/SKETCH

Inspector (print name)

Date of Inspection

Qualified Professional (print name)

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

CONSTRUCTION DURATION INSPECTIONS

Page 2 of _____

Maintaining Water Quality

Yes No NA

- Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- Is there residue from oil and floating substances, visible oil film, or globules or grease?
- All disturbance is within the limits of the approved plans.
- Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- Is construction site litter and debris appropriately managed?
- Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- Is construction impacting the adjacent property?
- Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- Maximum diameter pipes necessary to span creek without dredging are installed.
- Installed non-woven geotextile fabric beneath approaches.
- Is fill composed of aggregate (no earth or soil)?
- Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- Clean water from upstream pool is being pumped to the downstream pool.
- Sediment laden water from work area is being discharged to a silt-trapping device.
- Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

- Installed per plan.
- Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- Installed per plan with minimum side slopes 2H:1V or flatter.
- Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- Sediment-laden runoff directed to sediment trapping structure

CONSTRUCTION DURATION INSPECTIONS
Runoff Control Practices (continued)

Page 3 of _____

4. Stone Check Dam

Yes No NA

- Is channel stable? (flow is not eroding soil underneath or around the structure).
- Check is in good condition (rocks in place and no permanent pools behind the structure).
- Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

- Installed per plan.
- Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- Stockpiles are stabilized with vegetation and/or mulch.
- Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- Temporary seedings and mulch have been applied to idle areas.
- 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Stabilized Construction Entrance

Yes No NA

- Stone is clean enough to effectively remove mud from vehicles.
- Installed per standards and specifications?
- Does all traffic use the stabilized entrance to enter and leave site?
- Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

- Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
- Joints constructed by wrapping the two ends together for continuous support.
- Fabric buried 6 inches minimum.
- Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is ___% of design capacity.

CONSTRUCTION DURATION INSPECTIONS

Page 4 of _____

Sediment Control Practices (continued)

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

Yes No NA

- Installed concrete blocks lengthwise so open ends face outward, not upward.
 - Placed wire screen between No. 3 crushed stone and concrete blocks.
 - Drainage area is 1 acre or less.
 - Excavated area is 900 cubic feet.
 - Excavated side slopes should be 2:1.
 - 2" x 4" frame is constructed and structurally sound.
 - Posts 3-foot maximum spacing between posts.
 - Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
 - Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

- Outlet structure is constructed per the approved plan or drawing.
 - Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

- Basin and outlet structure constructed per the approved plan.
 - Basin side slopes are stabilized with seed/mulch.
 - Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.
Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

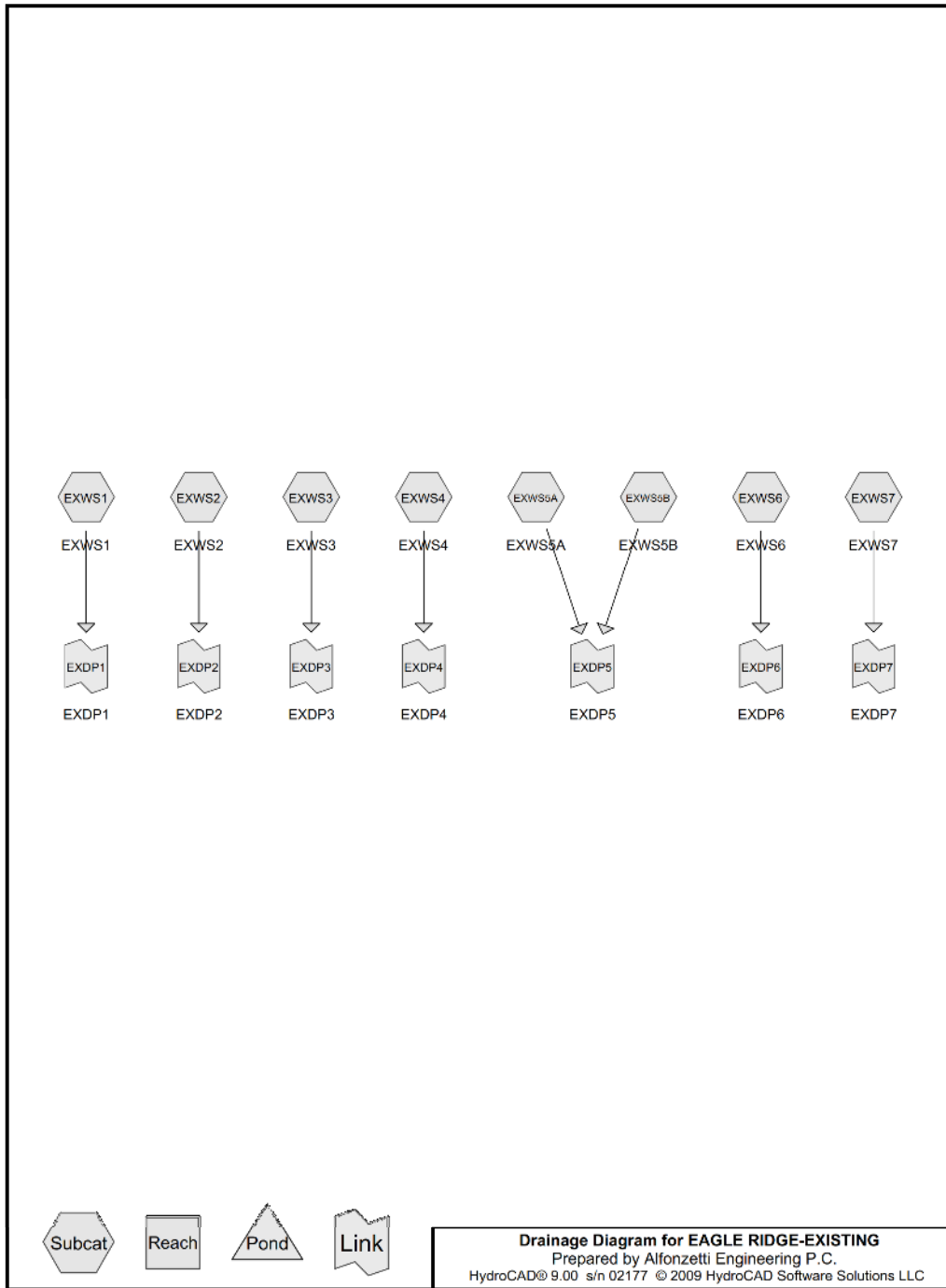
Owner/Operator Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

 Signature of Permittee or Duly Authorized Representative Name of Permittee or Duly Authorized Representative Date

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

HydroCad Report:



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
HydroCAD® 9.00 s/n 02177 © 2009 HydroCAD Software Solutions LLC

Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.1 cfs 974 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.0 cfs 206 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=0.29" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=0.6 cfs 6,219 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=0.26" Flow Length=759' Tc=23.7 min CN=60 Runoff=1.7 cfs 15,834 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=500' Tc=12.1 min CN=55 Runoff=0.2 cfs 3,009 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=0.65" Flow Length=641' Tc=10.6 min CN=71 Runoff=2.3 cfs 9,833 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=0.57" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=3.2 cfs 12,065 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=0.38" Flow Length=706' Tc=4.7 min CN=64 Runoff=0.7 cfs 3,134 cf
Link EXDP1: EXDP1	Inflow=0.1 cfs 974 cf Primary=0.1 cfs 974 cf
Link EXDP2: EXDP2	Inflow=0.0 cfs 206 cf Primary=0.0 cfs 206 cf
Link EXDP3: EXDP3	Inflow=0.6 cfs 6,219 cf Primary=0.6 cfs 6,219 cf
Link EXDP4: EXDP4	Inflow=1.7 cfs 15,834 cf Primary=1.7 cfs 15,834 cf
Link EXDP5: EXDP5	Inflow=2.3 cfs 12,842 cf Primary=2.3 cfs 12,842 cf
Link EXDP6: EXDP6	Inflow=3.2 cfs 12,065 cf Primary=3.2 cfs 12,065 cf
Link EXDP7: EXDP7	Inflow=0.7 cfs 3,134 cf Primary=0.7 cfs 3,134 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 51,273 cf Average Runoff Depth = 0.33"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
 HydroCAD® 9.00 s/n 02177 © 2009 HydroCAD Software Solutions LLC

Summary for Subcatchment EXWS1: EXWS1

Runoff = 0.1 cfs @ 12.64 hrs, Volume= 974 cf, Depth= 0.14"

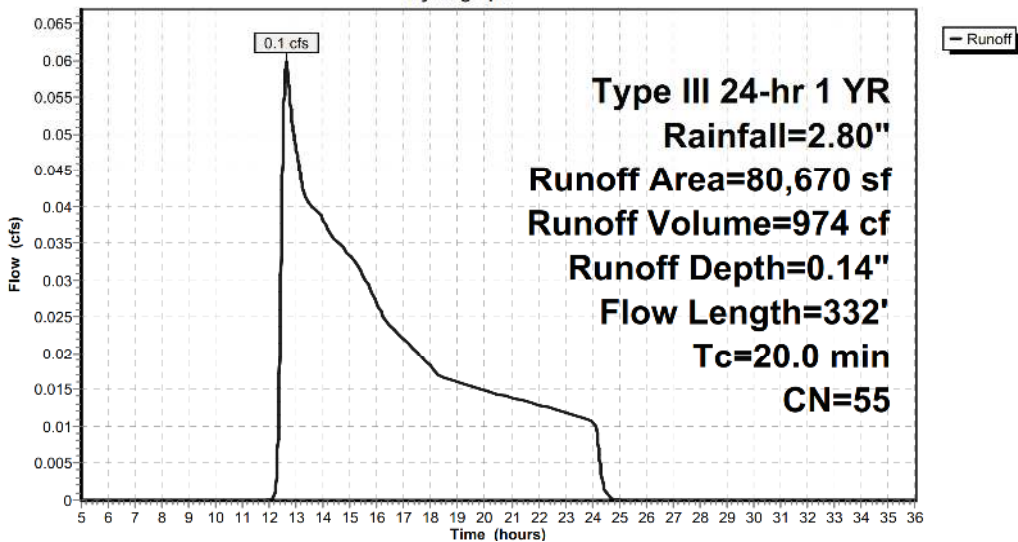
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
 HydroCAD® 9.00 s/n 02177 © 2009 HydroCAD Software Solutions LLC

Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.0 cfs @ 12.53 hrs, Volume= 206 cf, Depth= 0.14"

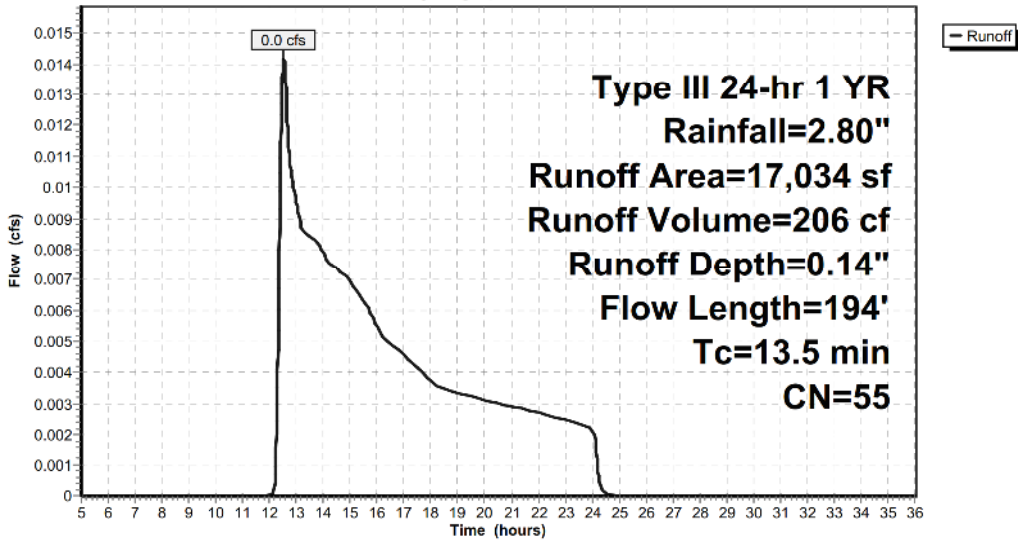
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS3: EXWS3

Runoff = 0.6 cfs @ 12.66 hrs, Volume= 6,219 cf, Depth= 0.29"

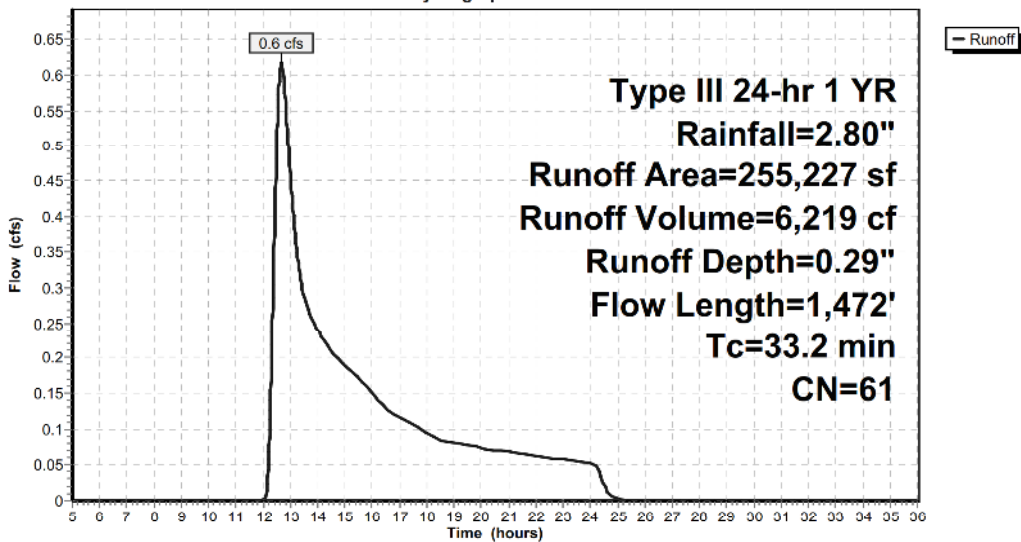
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment EXWS4: EXWS4

Runoff = 1.7 cfs @ 12.56 hrs, Volume= 15,834 cf, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

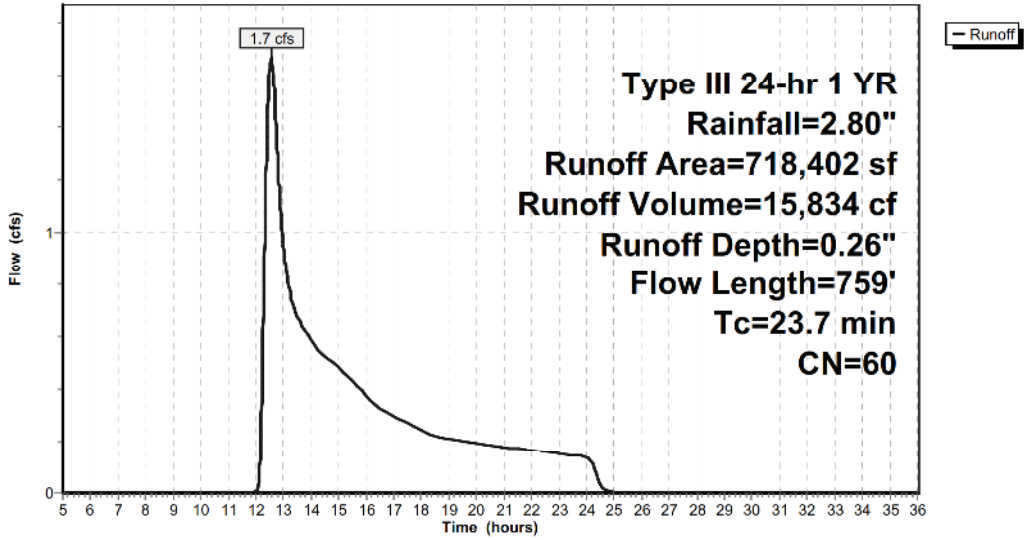
EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXW55A: EXW55A

Runoff = 0.2 cfs @ 12.51 hrs, Volume= 3,009 cf, Depth= 0.14"

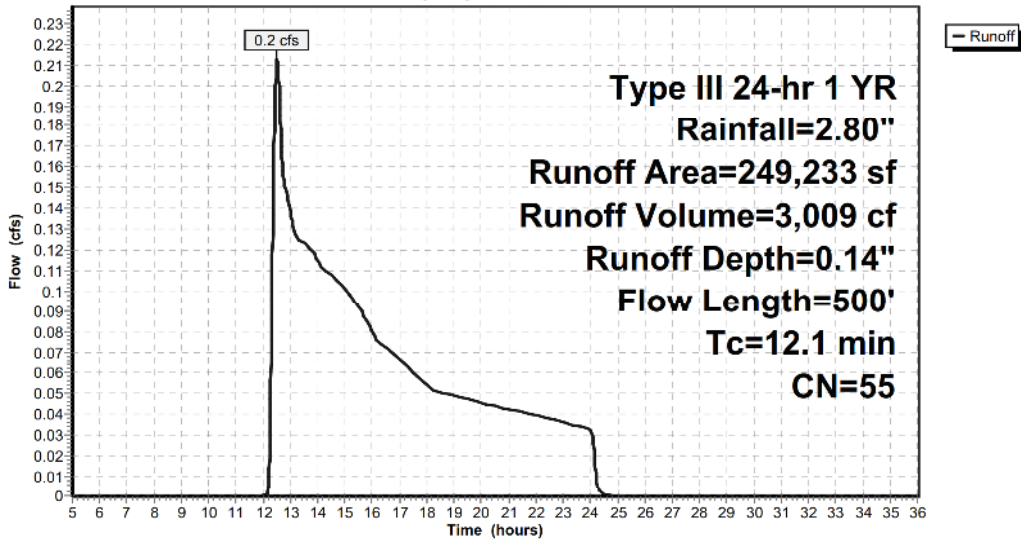
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500	Total			

Subcatchment EXW55A: EXW55A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 2.3 cfs @ 12.17 hrs, Volume= 9,833 cf, Depth= 0.65"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

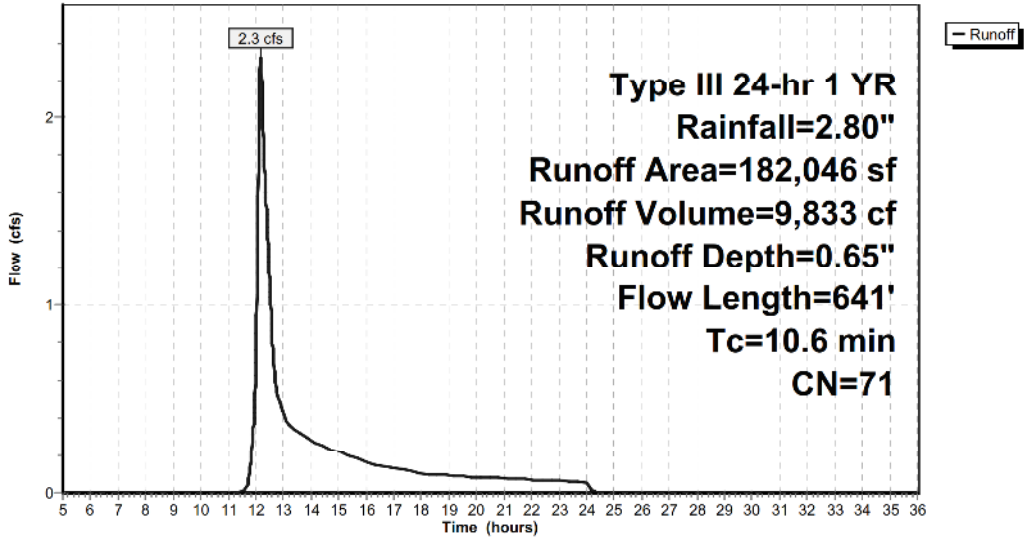
EAGLE RIDGE-EXISTING

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Type III 24-hr 1 YR Rainfall=2.80"

Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 3.2 cfs @ 12.11 hrs, Volume= 12,065 cf, Depth= 0.57"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

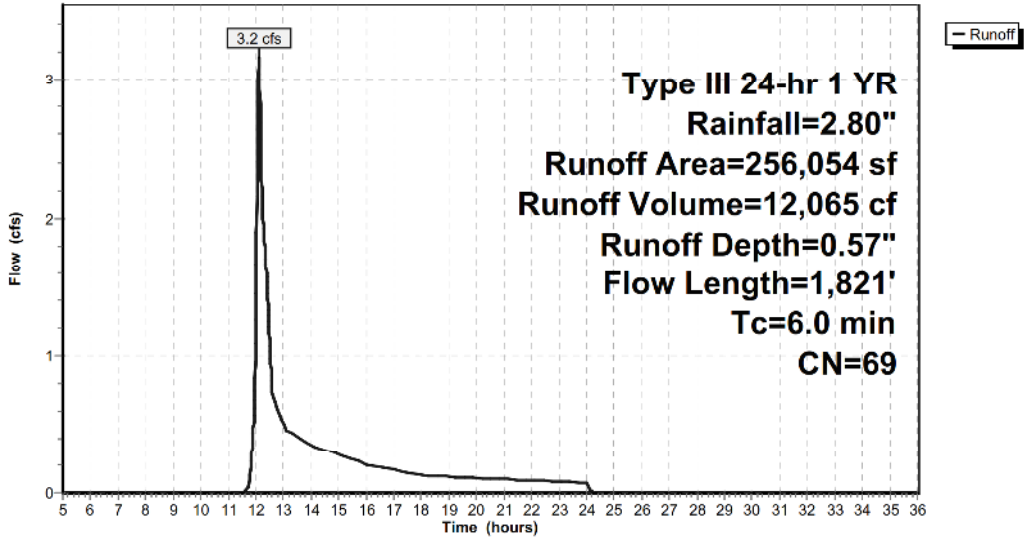
EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 0.7 cfs @ 12.10 hrs, Volume= 3,134 cf, Depth= 0.38"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

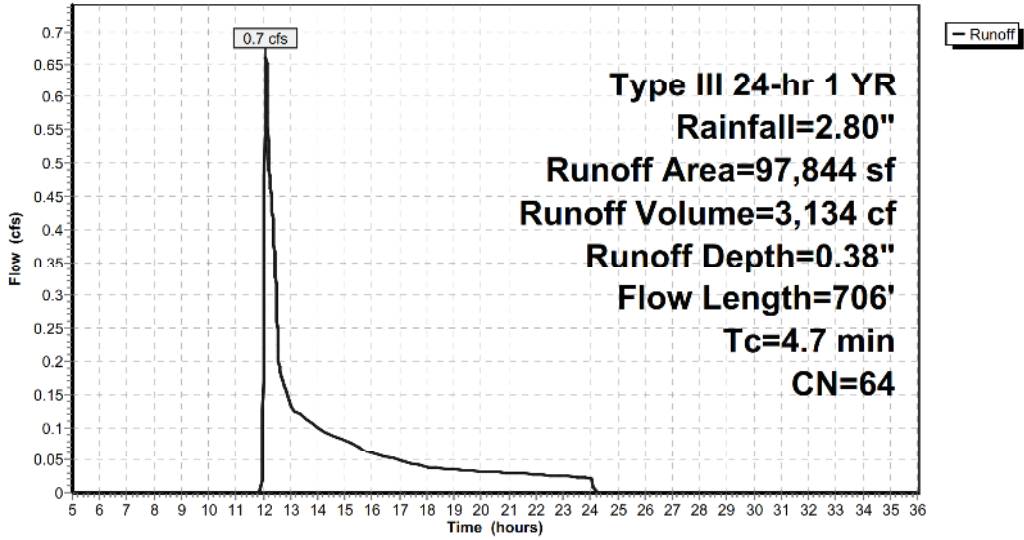
EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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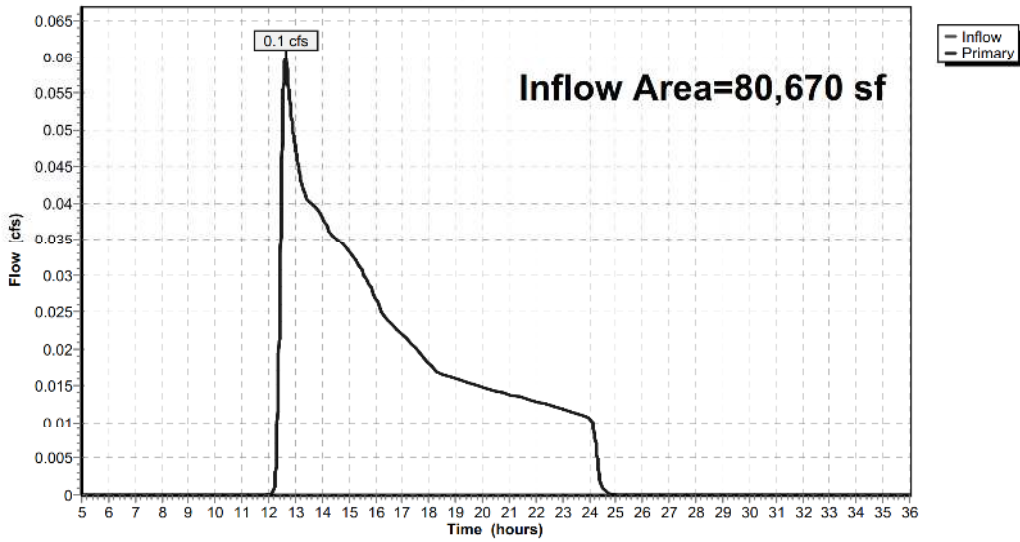
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 0.14" for 1 YR event
Inflow = 0.1 cfs @ 12.64 hrs, Volume= 974 cf
Primary = 0.1 cfs @ 12.64 hrs, Volume= 974 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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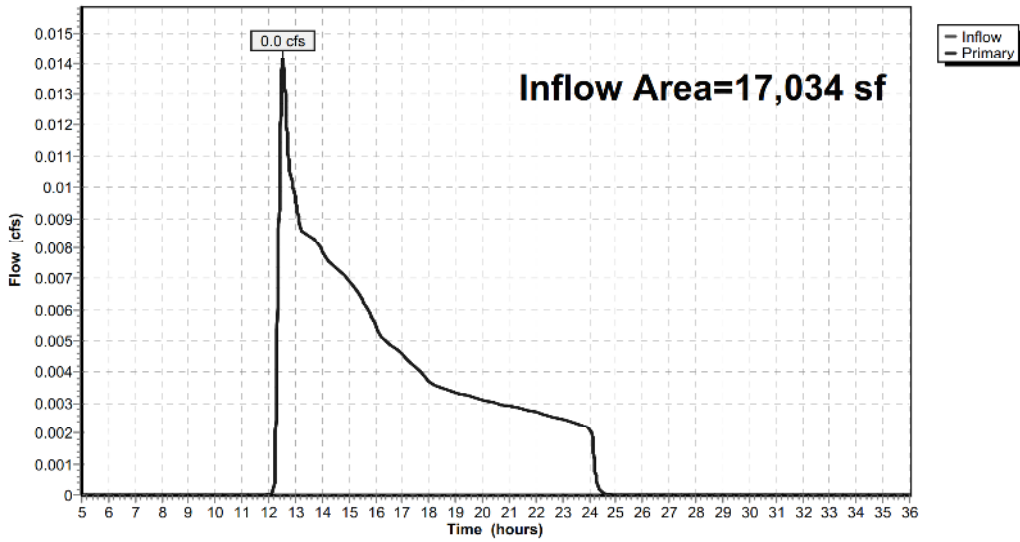
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 0.14" for 1 YR event
Inflow = 0.0 cfs @ 12.53 hrs, Volume= 206 cf
Primary = 0.0 cfs @ 12.53 hrs, Volume= 206 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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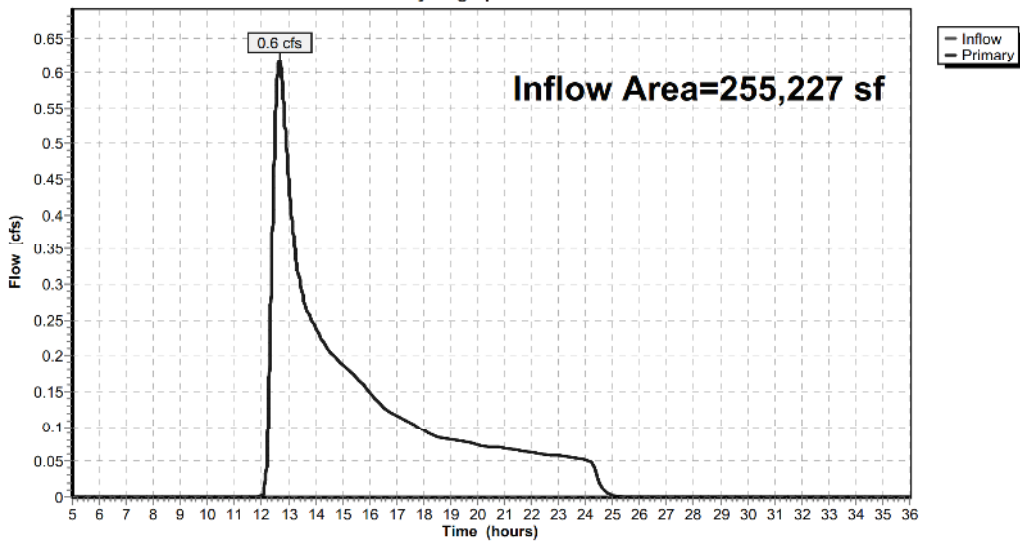
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 0.29" for 1 YR event
Inflow = 0.6 cfs @ 12.66 hrs, Volume= 6,219 cf
Primary = 0.6 cfs @ 12.66 hrs, Volume= 6,219 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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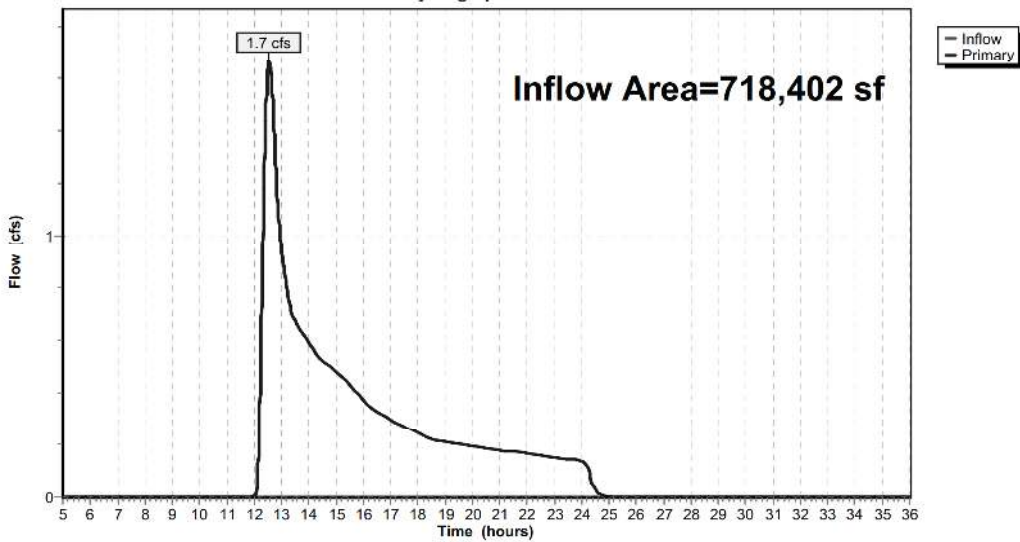
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 0.26" for 1 YR event
Inflow = 1.7 cfs @ 12.56 hrs, Volume= 15,834 cf
Primary = 1.7 cfs @ 12.56 hrs, Volume= 15,834 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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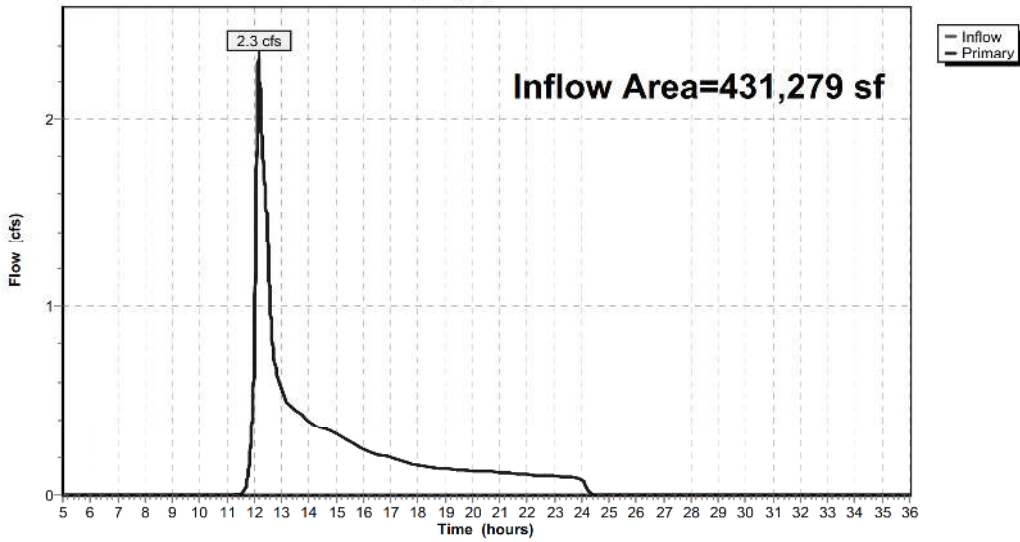
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 0.36" for 1 YR event
Inflow = 2.3 cfs @ 12.17 hrs, Volume= 12,842 cf
Primary = 2.3 cfs @ 12.17 hrs, Volume= 12,842 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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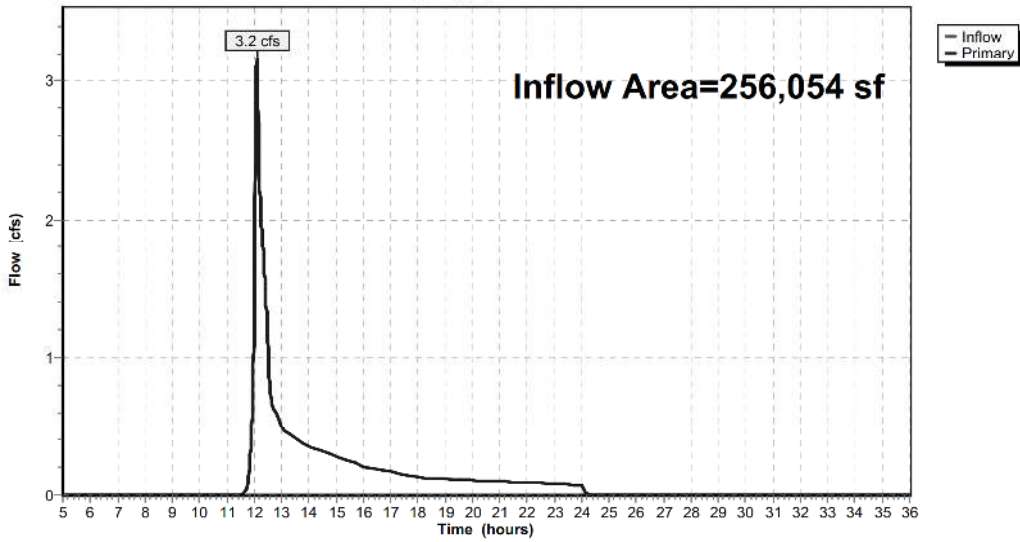
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 0.57" for 1 YR event
Inflow = 3.2 cfs @ 12.11 hrs, Volume= 12,065 cf
Primary = 3.2 cfs @ 12.11 hrs, Volume= 12,065 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 1 YR Rainfall=2.80"

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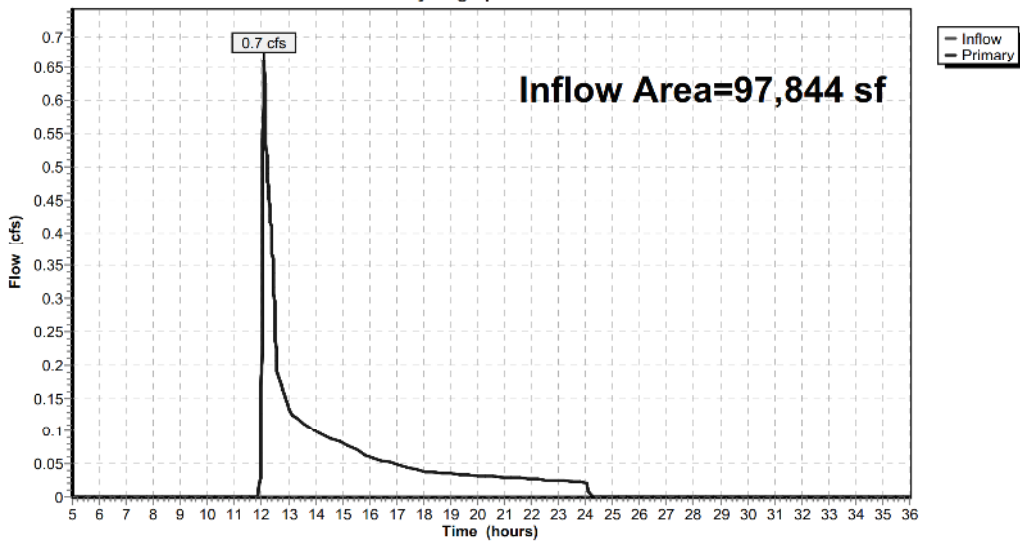
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 0.38" for 1 YR event
Inflow = 0.7 cfs @ 12.10 hrs, Volume= 3,134 cf
Primary = 0.7 cfs @ 12.10 hrs, Volume= 3,134 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.2 cfs 2,168 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.1 cfs 458 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=0.54" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=1.5 cfs 11,520 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=0.50" Flow Length=759' Tc=23.7 min CN=60 Runoff=4.2 cfs 30,031 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=500' Tc=12.1 min CN=55 Runoff=0.8 cfs 6,698 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=1.02" Flow Length=641' Tc=10.6 min CN=71 Runoff=4.0 cfs 15,466 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=0.91" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=5.7 cfs 19,467 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=0.67" Flow Length=706' Tc=4.7 min CN=64 Runoff=1.5 cfs 5,463 cf
Link EXDP1: EXDP1	Inflow=0.2 cfs 2,168 cf Primary=0.2 cfs 2,168 cf
Link EXDP2: EXDP2	Inflow=0.1 cfs 458 cf Primary=0.1 cfs 458 cf
Link EXDP3: EXDP3	Inflow=1.5 cfs 11,520 cf Primary=1.5 cfs 11,520 cf
Link EXDP4: EXDP4	Inflow=4.2 cfs 30,031 cf Primary=4.2 cfs 30,031 cf
Link EXDP5: EXDP5	Inflow=4.4 cfs 22,165 cf Primary=4.4 cfs 22,165 cf
Link EXDP6: EXDP6	Inflow=5.7 cfs 19,467 cf Primary=5.7 cfs 19,467 cf
Link EXDP7: EXDP7	Inflow=1.5 cfs 5,463 cf Primary=1.5 cfs 5,463 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 91,272 cf Average Runoff Depth = 0.59"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS1: EXWS1

Runoff = 0.2 cfs @ 12.51 hrs, Volume= 2,168 cf, Depth= 0.32"

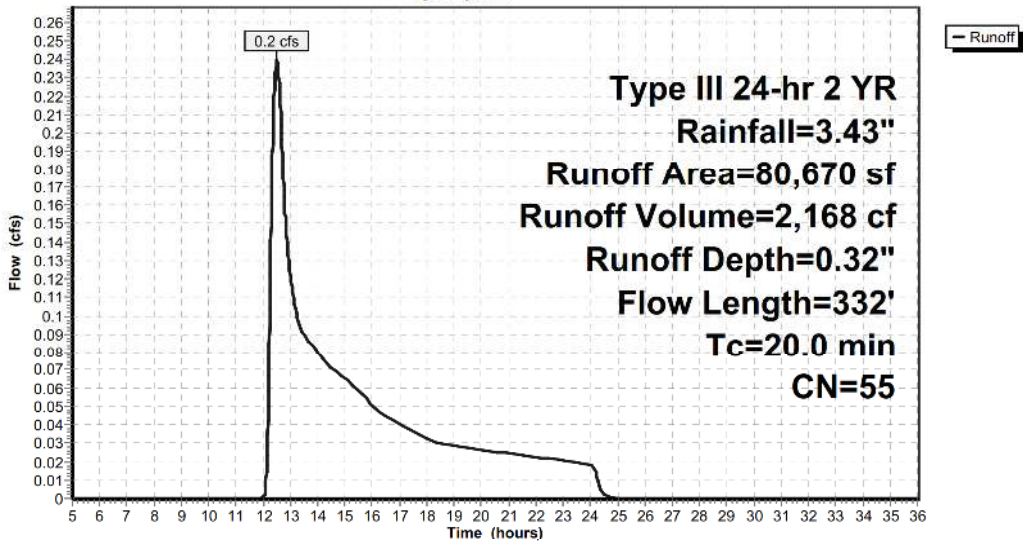
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.1 cfs @ 12.41 hrs, Volume= 458 cf, Depth= 0.32"

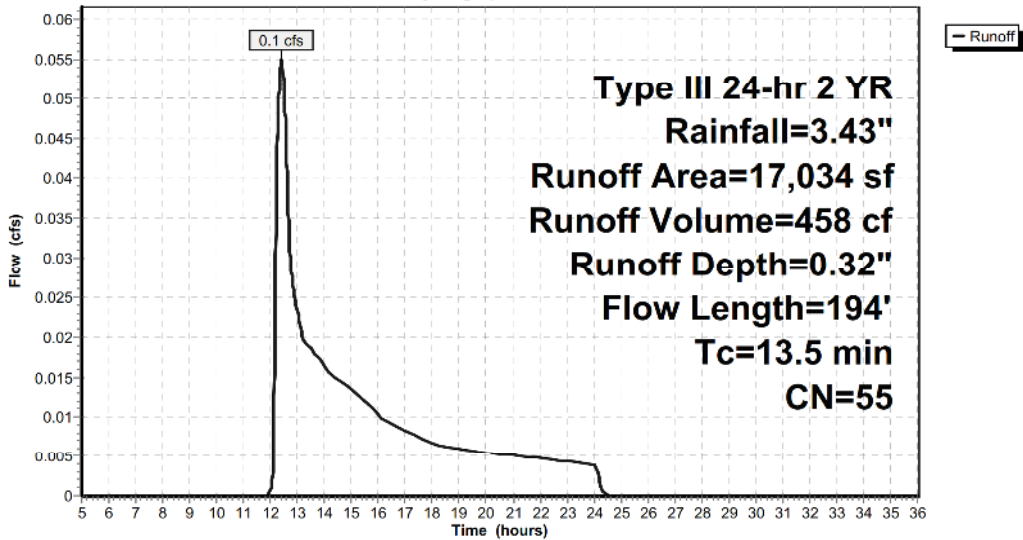
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS3: EXWS3

Runoff = 1.5 cfs @ 12.58 hrs, Volume= 11,520 cf, Depth= 0.54"

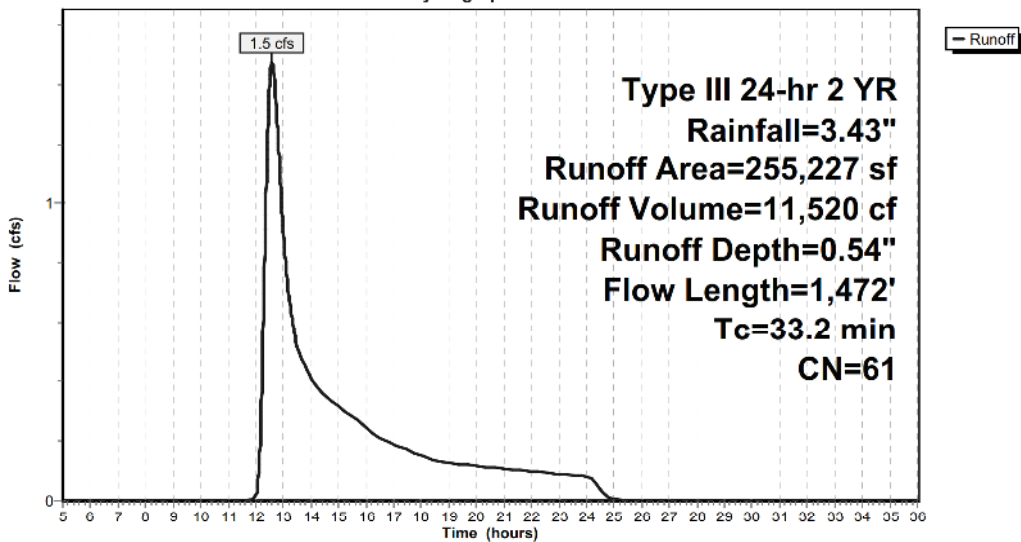
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS4: EXWS4

Runoff = 4.2 cfs @ 12.45 hrs, Volume= 30,031 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B

718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

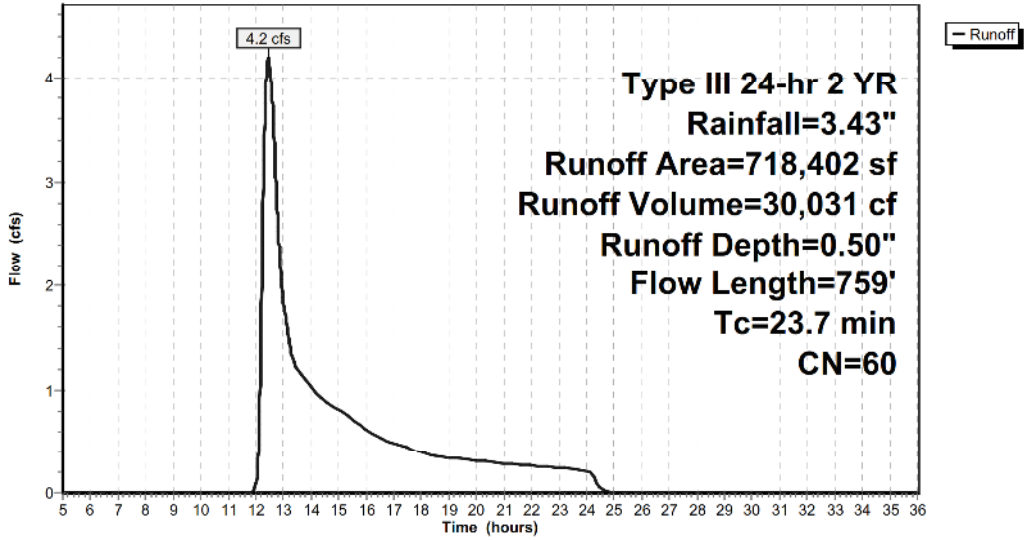
EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXW55A: EXW55A

Runoff = 0.8 cfs @ 12.38 hrs, Volume= 6,698 cf, Depth= 0.32"

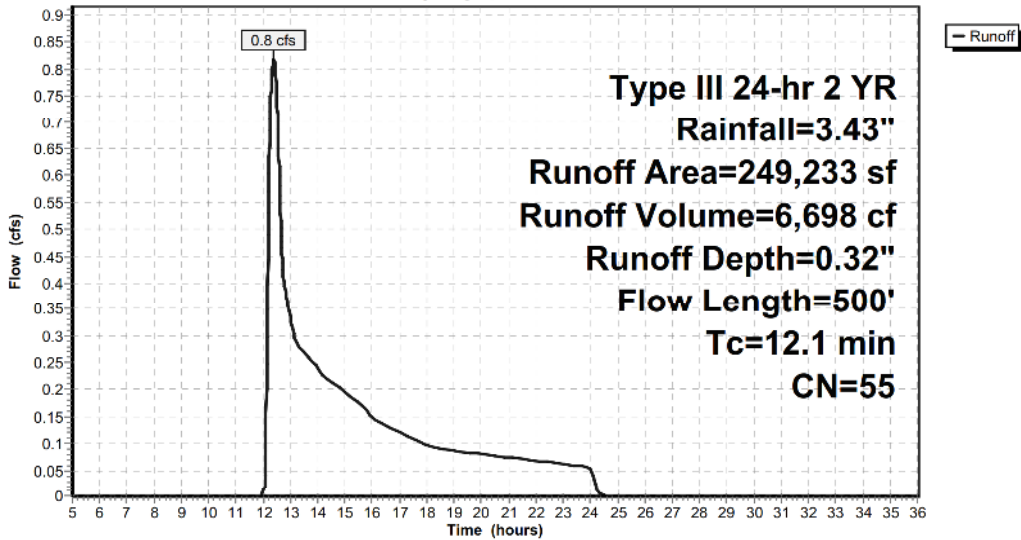
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXW55A: EXW55A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 4.0 cfs @ 12.16 hrs, Volume= 15,466 cf, Depth= 1.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

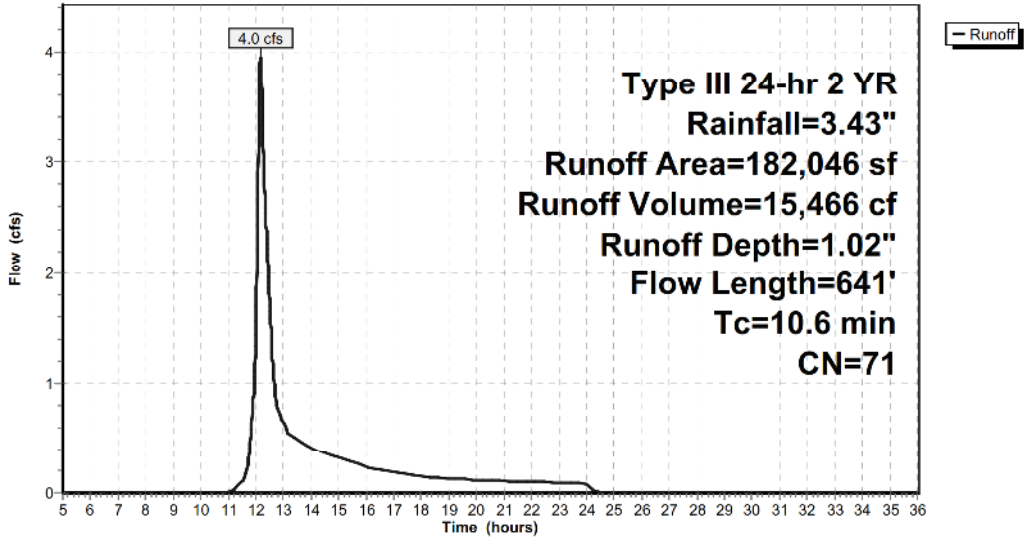
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Type III 24-hr 2 YR Rainfall=3.43"

Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 5.7 cfs @ 12.10 hrs, Volume= 19,467 cf, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

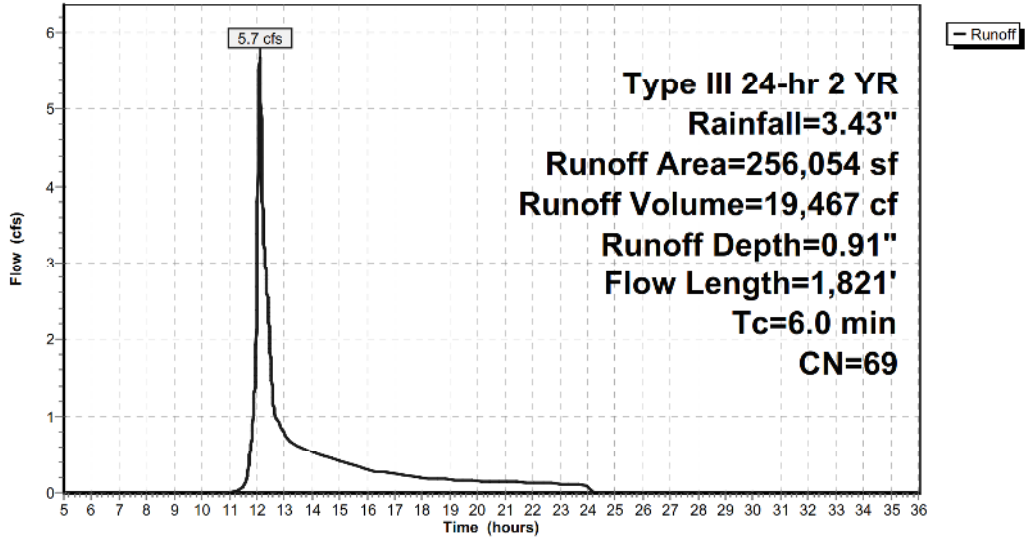
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Type III 24-hr 2 YR Rainfall=3.43"

Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 1.5 cfs @ 12.09 hrs, Volume= 5,463 cf, Depth= 0.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

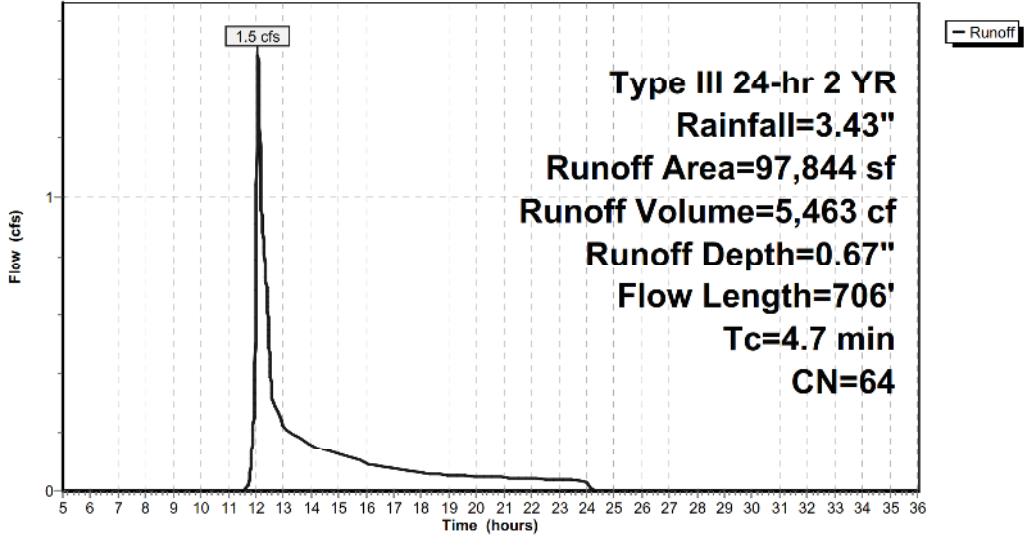
EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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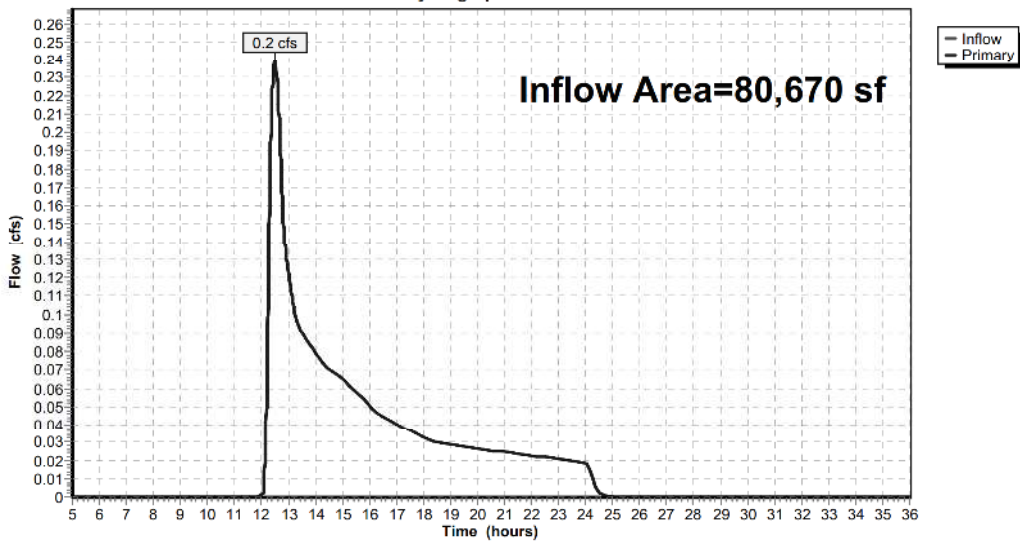
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 0.32" for 2 YR event
Inflow = 0.2 cfs @ 12.51 hrs, Volume= 2,168 cf
Primary = 0.2 cfs @ 12.51 hrs, Volume= 2,168 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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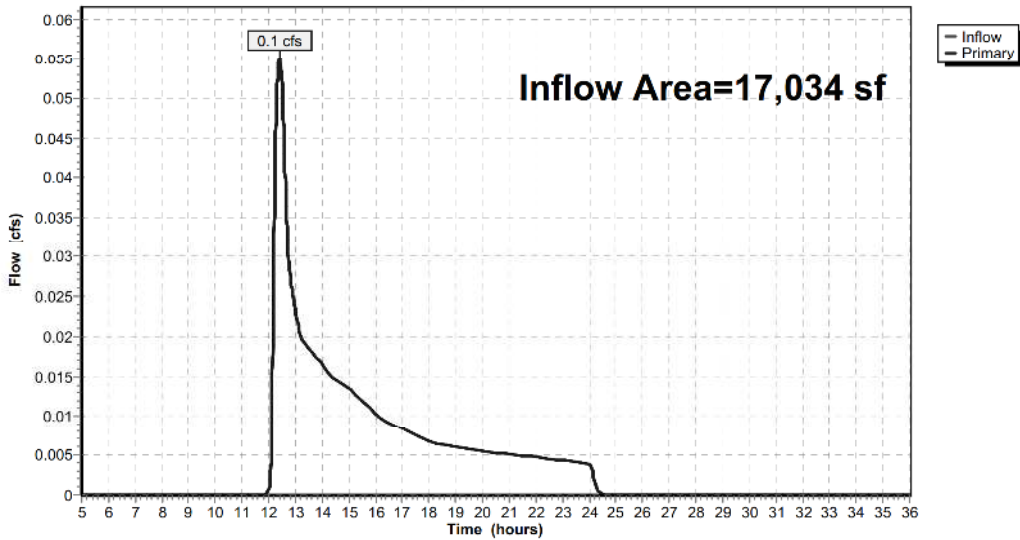
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 0.32" for 2 YR event
Inflow = 0.1 cfs @ 12.41 hrs, Volume= 458 cf
Primary = 0.1 cfs @ 12.41 hrs, Volume= 458 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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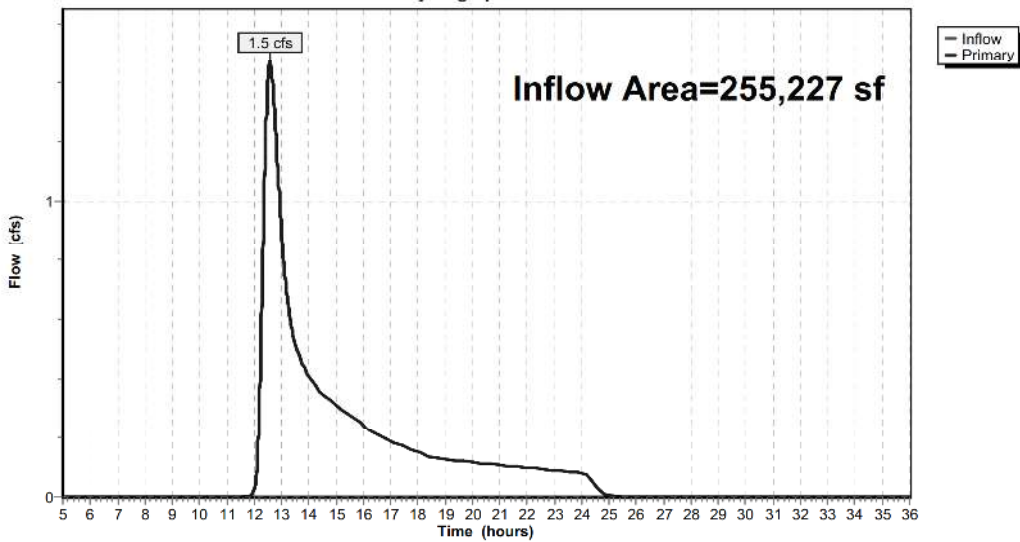
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 0.54" for 2 YR event
Inflow = 1.5 cfs @ 12.58 hrs, Volume= 11,520 cf
Primary = 1.5 cfs @ 12.58 hrs, Volume= 11,520 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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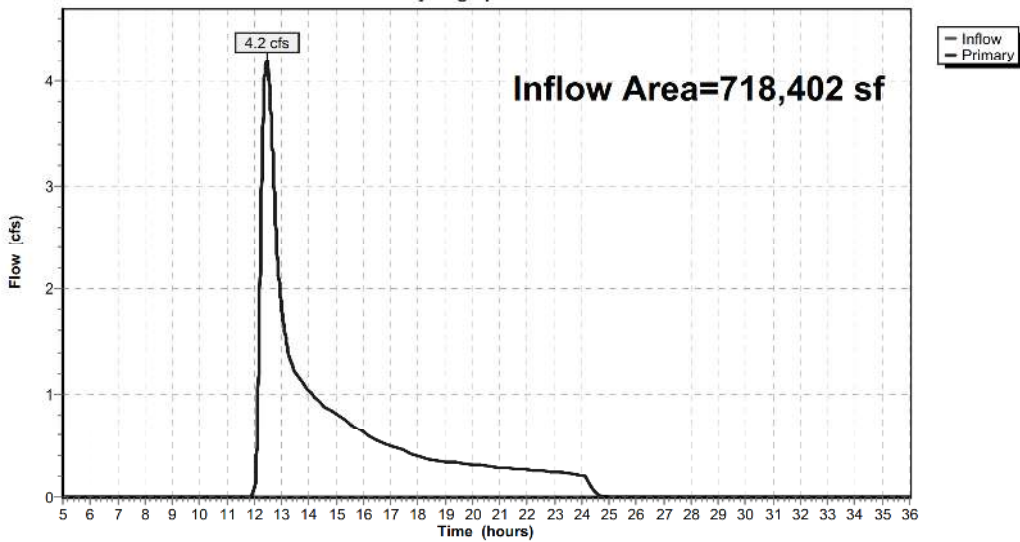
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 0.50" for 2 YR event
Inflow = 4.2 cfs @ 12.45 hrs, Volume= 30,031 cf
Primary = 4.2 cfs @ 12.45 hrs, Volume= 30,031 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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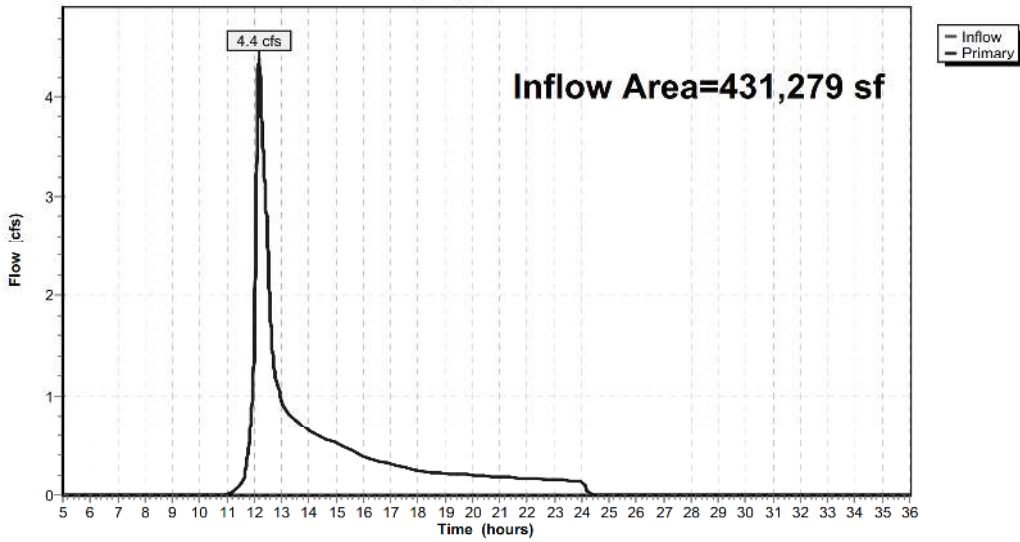
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 0.62" for 2 YR event
Inflow = 4.4 cfs @ 12.17 hrs, Volume= 22,165 cf
Primary = 4.4 cfs @ 12.17 hrs, Volume= 22,165 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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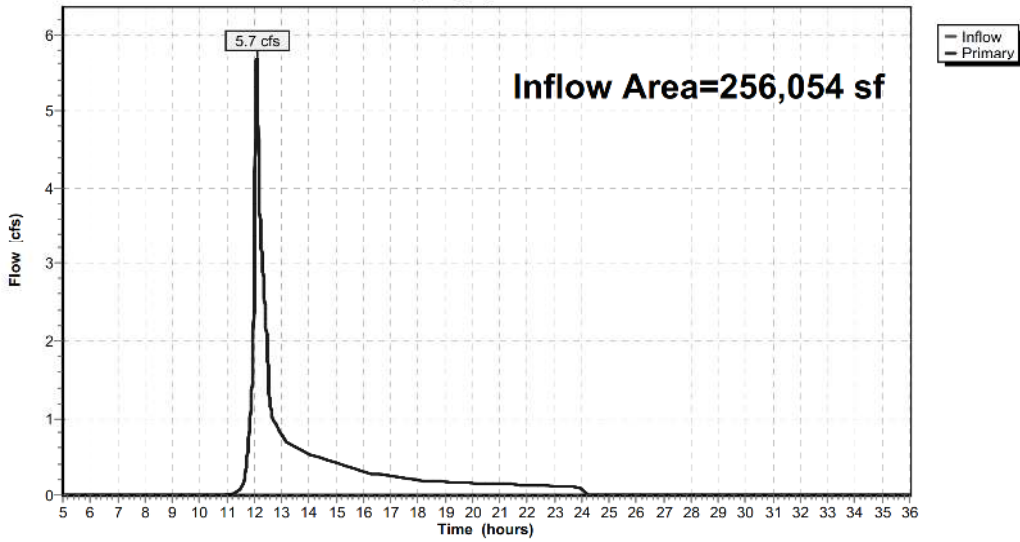
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 0.91" for 2 YR event
Inflow = 5.7 cfs @ 12.10 hrs, Volume= 19,467 cf
Primary = 5.7 cfs @ 12.10 hrs, Volume= 19,467 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 2 YR Rainfall=3.43"

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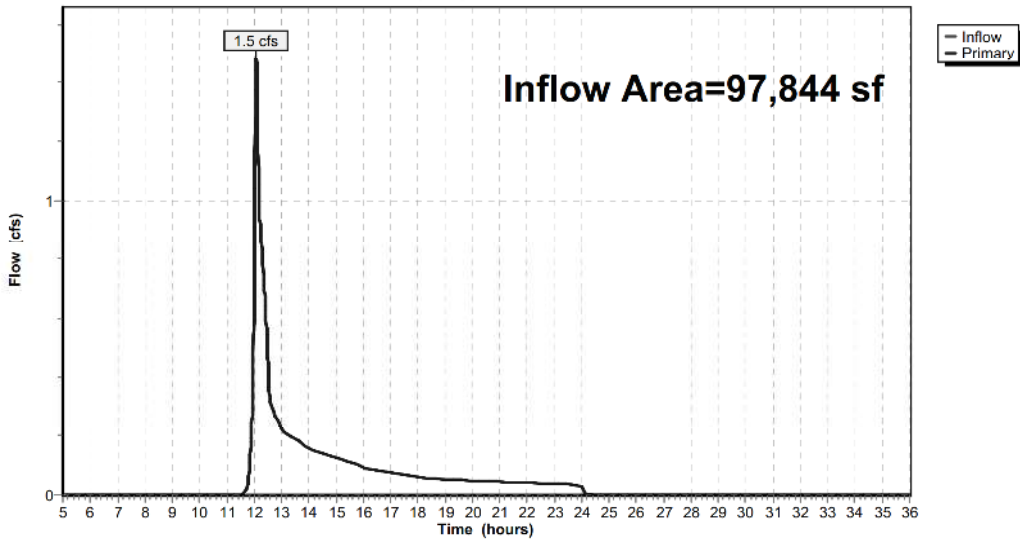
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 0.67" for 2 YR event
Inflow = 1.5 cfs @ 12.09 hrs, Volume= 5,463 cf
Primary = 1.5 cfs @ 12.09 hrs, Volume= 5,463 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.7 cfs 4,427 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.2 cfs 935 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=0.97" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=3.1 cfs 20,737 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=0.92" Flow Length=759' Tc=23.7 min CN=60 Runoff=9.3 cfs 55,007 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=500' Tc=12.1 min CN=55 Runoff=2.4 cfs 13,677 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=1.61" Flow Length=641' Tc=10.6 min CN=71 Runoff=6.5 cfs 24,428 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=1.47" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=9.7 cfs 31,417 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=1.15" Flow Length=706' Tc=4.7 min CN=64 Runoff=2.9 cfs 9,388 cf
Link EXDP1: EXDP1	Inflow=0.7 cfs 4,427 cf Primary=0.7 cfs 4,427 cf
Link EXDP2: EXDP2	Inflow=0.2 cfs 935 cf Primary=0.2 cfs 935 cf
Link EXDP3: EXDP3	Inflow=3.1 cfs 20,737 cf Primary=3.1 cfs 20,737 cf
Link EXDP4: EXDP4	Inflow=9.3 cfs 55,007 cf Primary=9.3 cfs 55,007 cf
Link EXDP5: EXDP5	Inflow=8.7 cfs 38,105 cf Primary=8.7 cfs 38,105 cf
Link EXDP6: EXDP6	Inflow=9.7 cfs 31,417 cf Primary=9.7 cfs 31,417 cf
Link EXDP7: EXDP7	Inflow=2.9 cfs 9,388 cf Primary=2.9 cfs 9,388 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 160,016 cf Average Runoff Depth = 1.03"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXWS1: EXWS1

Runoff = 0.7 cfs @ 12.38 hrs, Volume= 4,427 cf, Depth= 0.66"

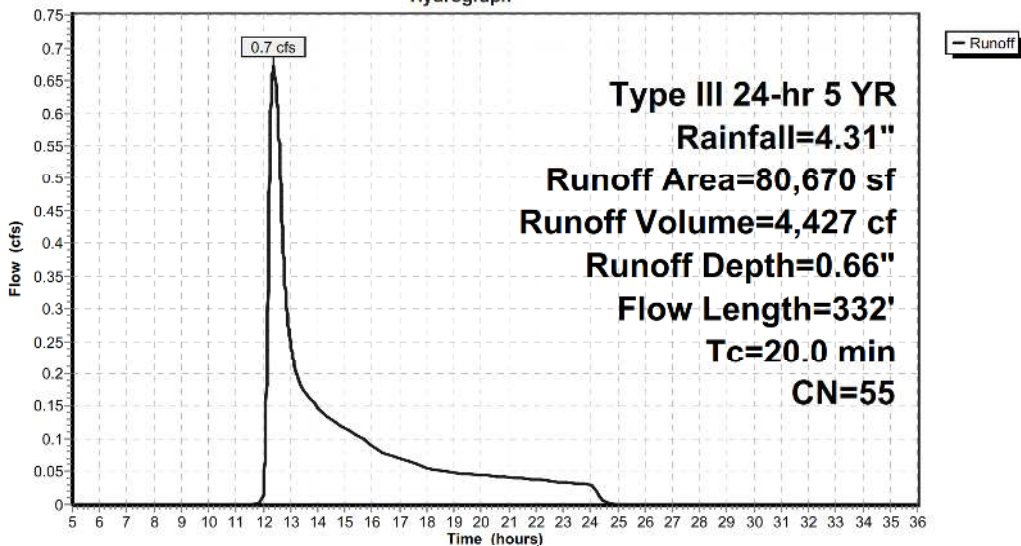
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.2 cfs @ 12.25 hrs, Volume= 935 cf, Depth= 0.66"

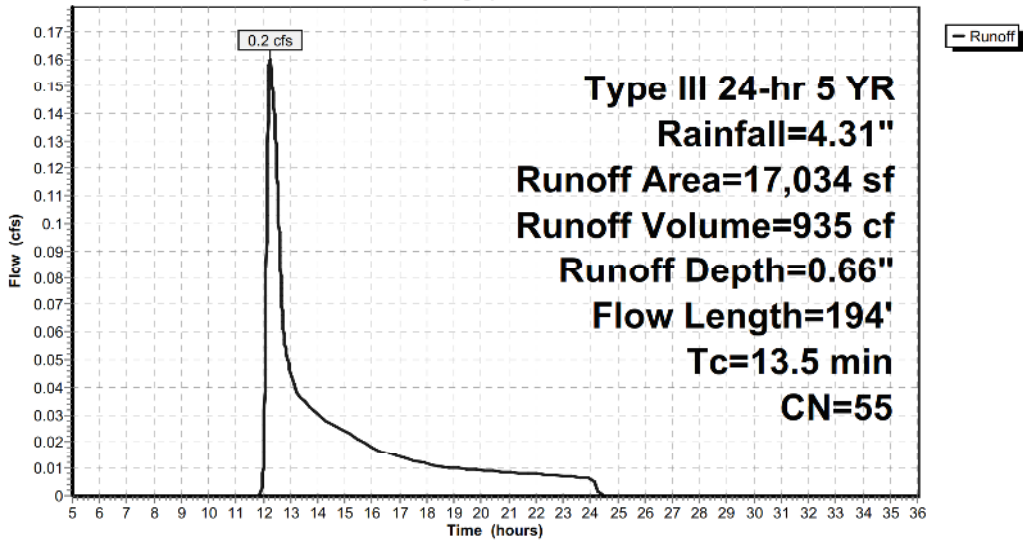
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS3: EXWS3

Runoff = 3.1 cfs @ 12.54 hrs, Volume= 20,737 cf, Depth= 0.97"

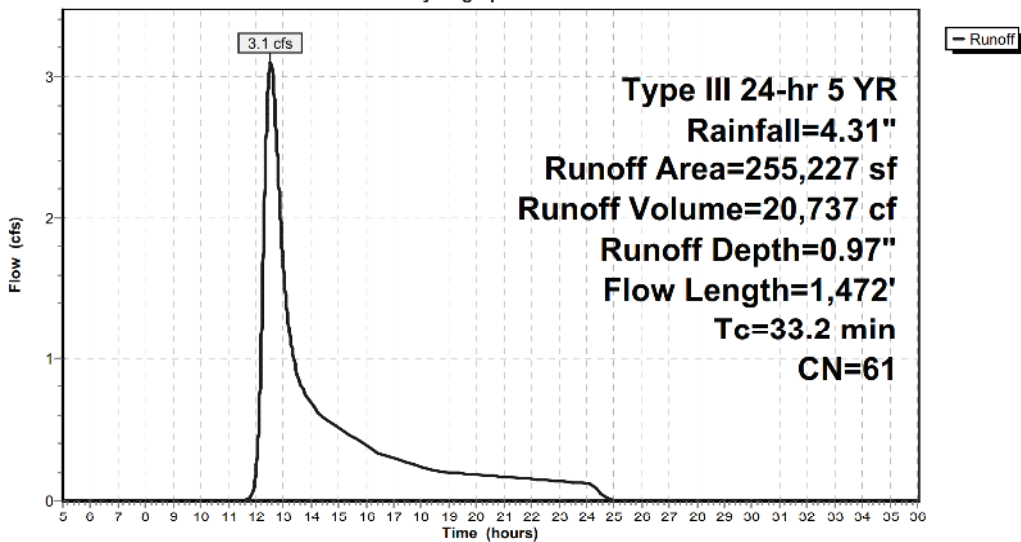
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS4: EXWS4

Runoff = 9.3 cfs @ 12.40 hrs, Volume= 55,007 cf, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

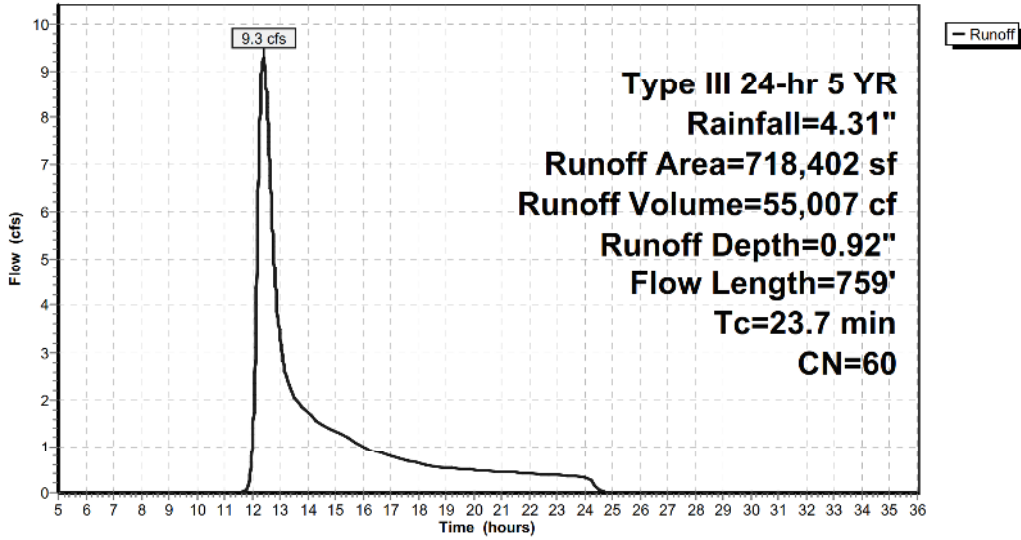
EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXW55A: EXW55A

Runoff = 2.4 cfs @ 12.22 hrs, Volume= 13,677 cf, Depth= 0.66"

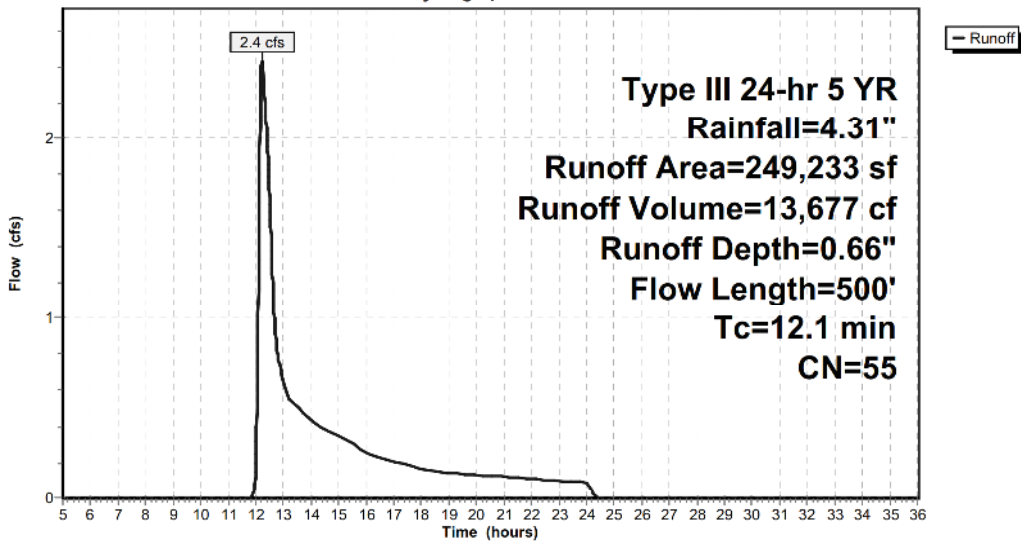
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXW55A: EXW55A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 6.5 cfs @ 12.15 hrs, Volume= 24,428 cf, Depth= 1.61"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

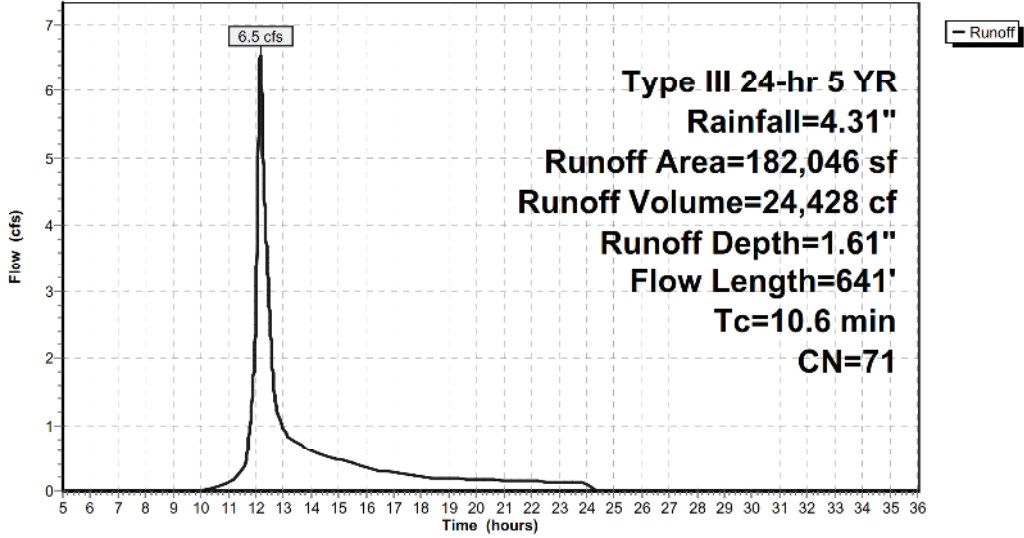
EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 9.7 cfs @ 12.09 hrs, Volume= 31,417 cf, Depth= 1.47"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

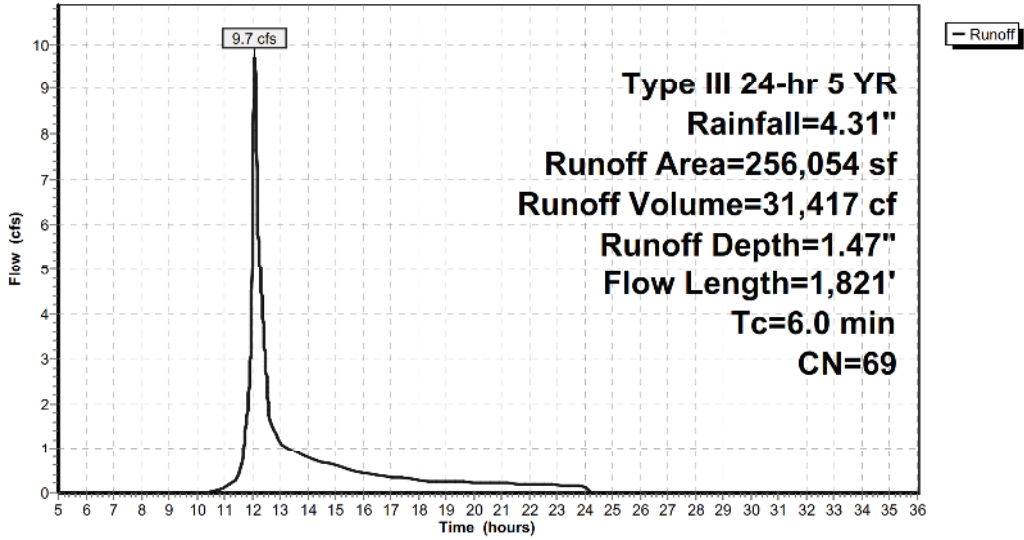
EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 2.9 cfs @ 12.08 hrs, Volume= 9,388 cf, Depth= 1.15"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

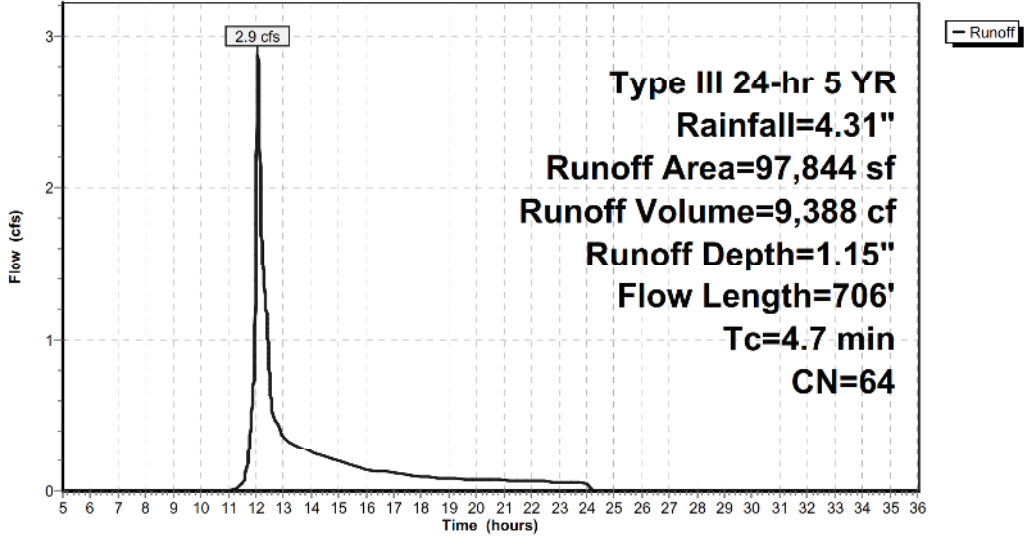
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Type III 24-hr 5 YR Rainfall=4.31"

Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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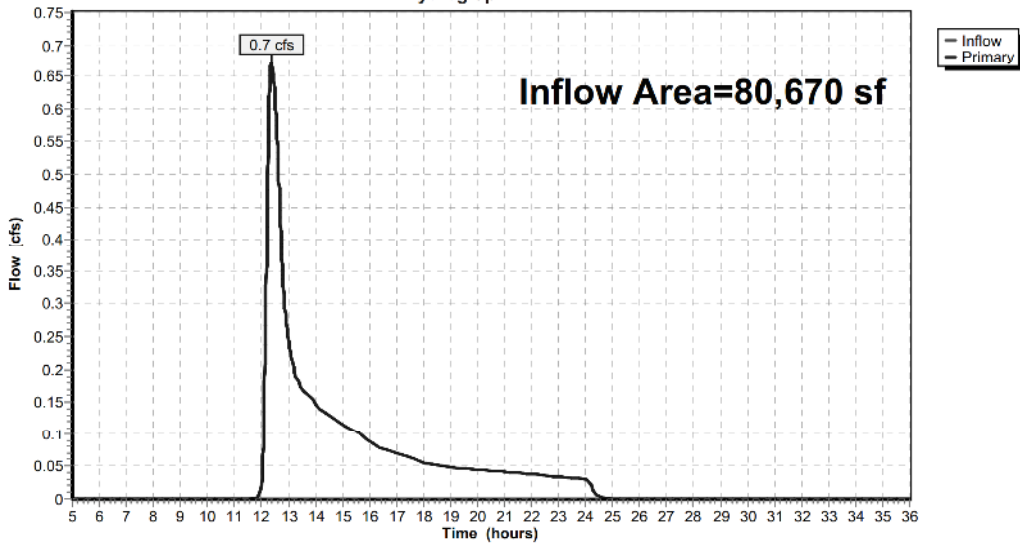
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 0.66" for 5 YR event
Inflow = 0.7 cfs @ 12.38 hrs, Volume= 4,427 cf
Primary = 0.7 cfs @ 12.38 hrs, Volume= 4,427 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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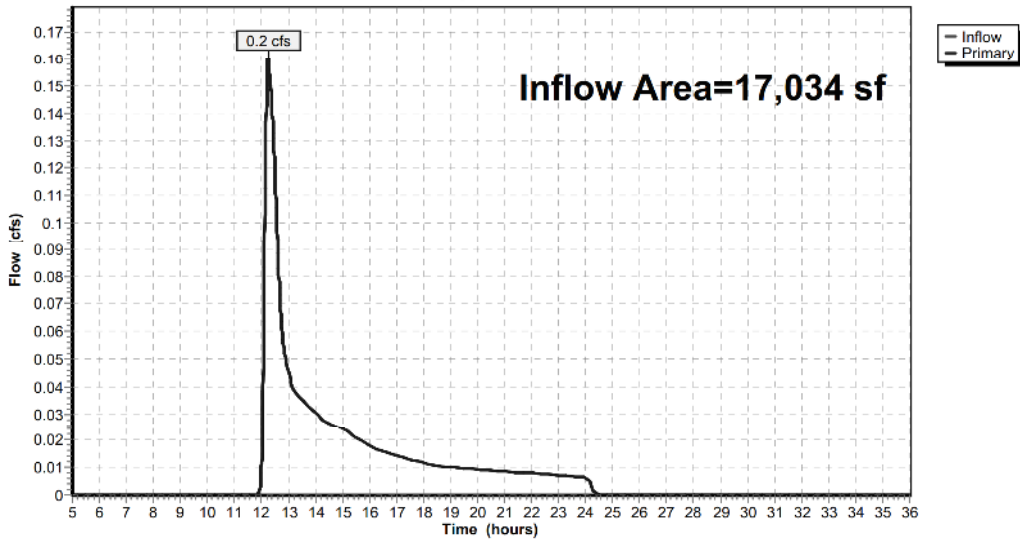
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 0.66" for 5 YR event
Inflow = 0.2 cfs @ 12.25 hrs, Volume= 935 cf
Primary = 0.2 cfs @ 12.25 hrs, Volume= 935 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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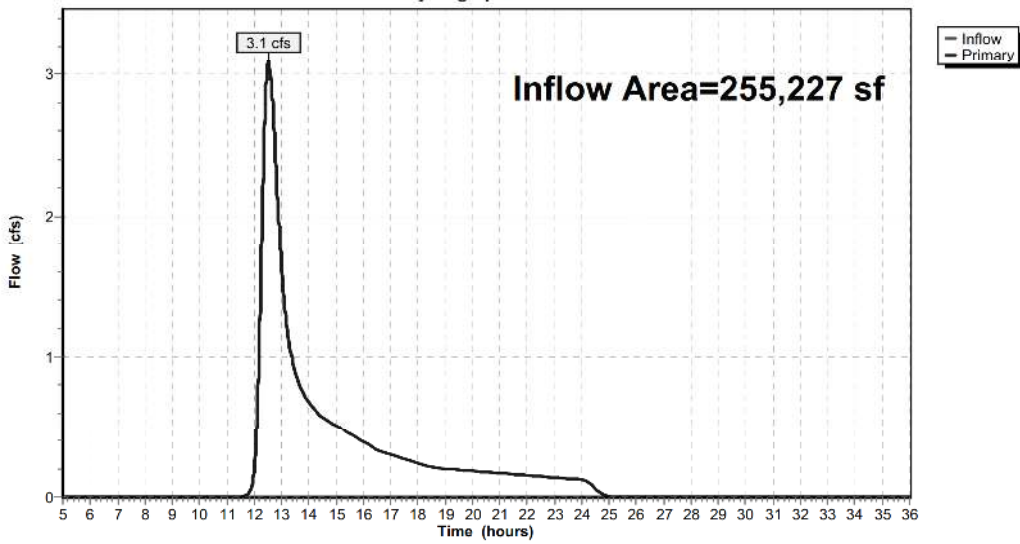
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 0.97" for 5 YR event
Inflow = 3.1 cfs @ 12.54 hrs, Volume= 20,737 cf
Primary = 3.1 cfs @ 12.54 hrs, Volume= 20,737 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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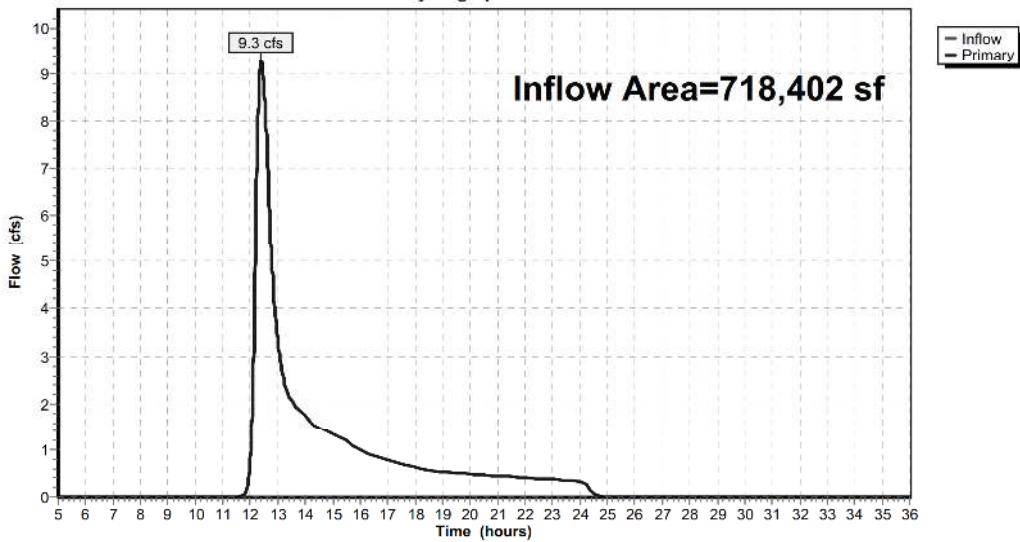
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 0.92" for 5 YR event
Inflow = 9.3 cfs @ 12.40 hrs, Volume= 55,007 cf
Primary = 9.3 cfs @ 12.40 hrs, Volume= 55,007 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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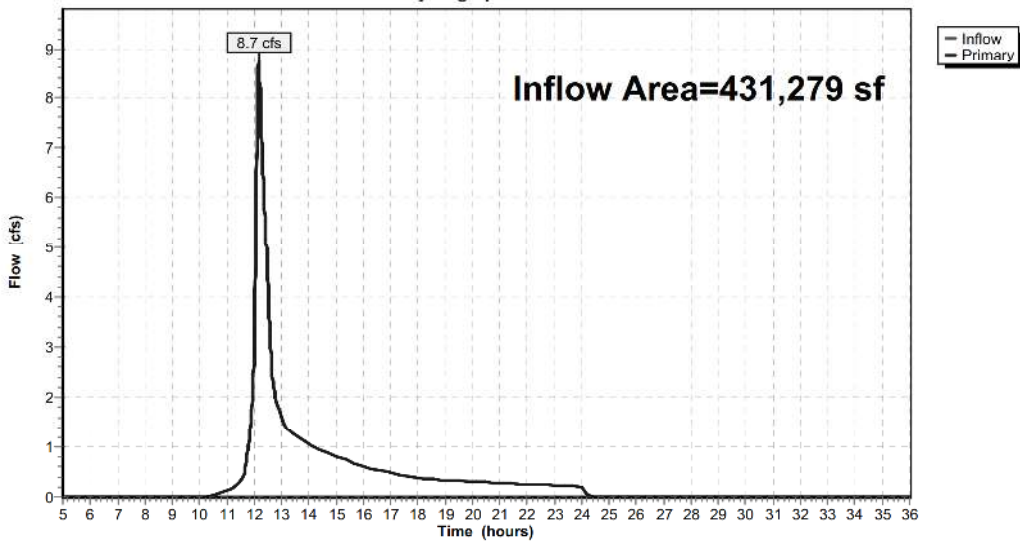
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 1.06" for 5 YR event
Inflow = 8.7 cfs @ 12.17 hrs, Volume= 38,105 cf
Primary = 8.7 cfs @ 12.17 hrs, Volume= 38,105 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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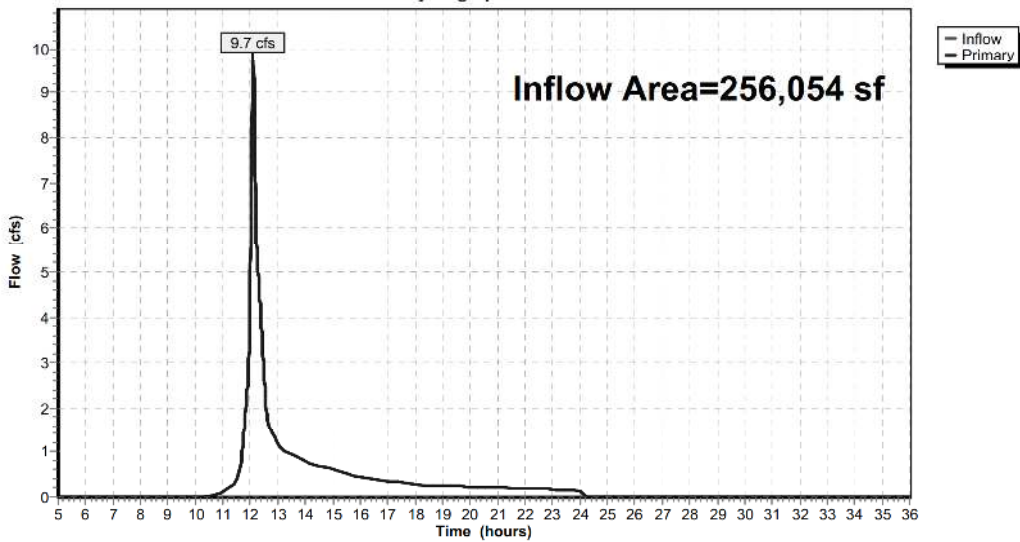
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 1.47" for 5 YR event
Inflow = 9.7 cfs @ 12.09 hrs, Volume= 31,417 cf
Primary = 9.7 cfs @ 12.09 hrs, Volume= 31,417 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 5 YR Rainfall=4.31"

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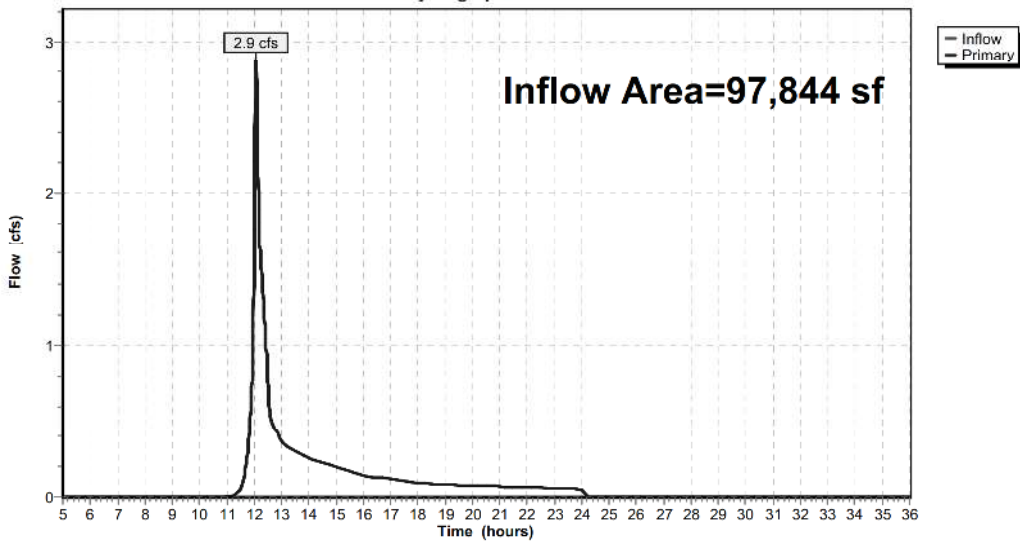
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 1.15" for 5 YR event
Inflow = 2.9 cfs @ 12.08 hrs, Volume= 9,388 cf
Primary = 2.9 cfs @ 12.08 hrs, Volume= 9,388 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=332' Tc=20.0 min CN=55 Runoff=1.2 cfs 7,028 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.3 cfs 1,484 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=1.45" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=4.9 cfs 30,794 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=1.38" Flow Length=759' Tc=23.7 min CN=60 Runoff=15.0 cfs 82,475 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=500' Tc=12.1 min CN=55 Runoff=4.6 cfs 21,712 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=2.22" Flow Length=641' Tc=10.6 min CN=71 Runoff=9.2 cfs 33,606 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=2.05" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=13.9 cfs 43,793 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=1.67" Flow Length=706' Tc=4.7 min CN=64 Runoff=4.4 cfs 13,581 cf
Link EXDP1: EXDP1	Inflow=1.2 cfs 7,028 cf Primary=1.2 cfs 7,028 cf
Link EXDP2: EXDP2	Inflow=0.3 cfs 1,484 cf Primary=0.3 cfs 1,484 cf
Link EXDP3: EXDP3	Inflow=4.9 cfs 30,794 cf Primary=4.9 cfs 30,794 cf
Link EXDP4: EXDP4	Inflow=15.0 cfs 82,475 cf Primary=15.0 cfs 82,475 cf
Link EXDP5: EXDP5	Inflow=13.6 cfs 55,319 cf Primary=13.6 cfs 55,319 cf
Link EXDP6: EXDP6	Inflow=13.9 cfs 43,793 cf Primary=13.9 cfs 43,793 cf
Link EXDP7: EXDP7	Inflow=4.4 cfs 13,581 cf Primary=4.4 cfs 13,581 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 234,473 cf Average Runoff Depth = 1.52"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS1: EXWS1

Runoff = 1.2 cfs @ 12.33 hrs, Volume= 7,028 cf, Depth= 1.05"

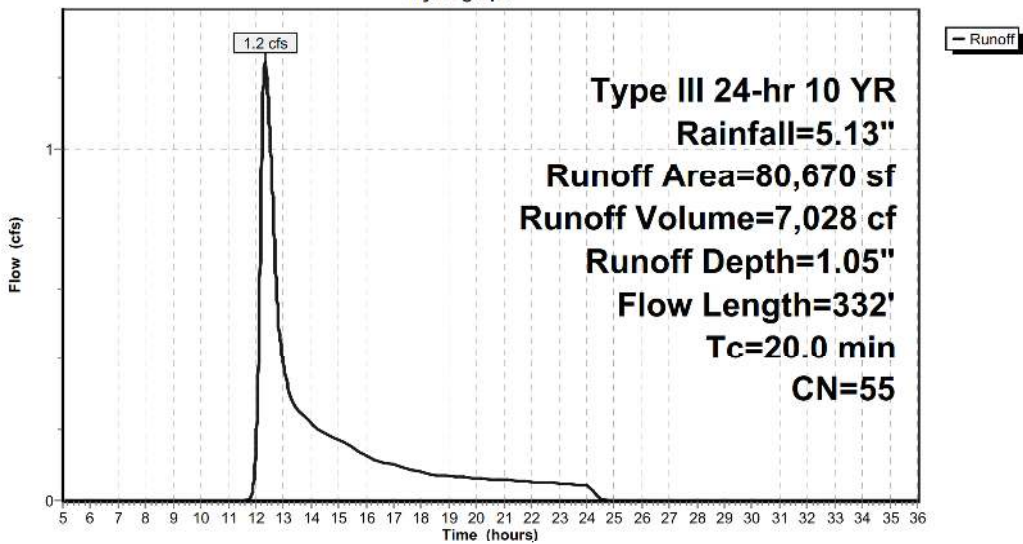
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.3 cfs @ 12.22 hrs, Volume= 1,484 cf, Depth= 1.05"

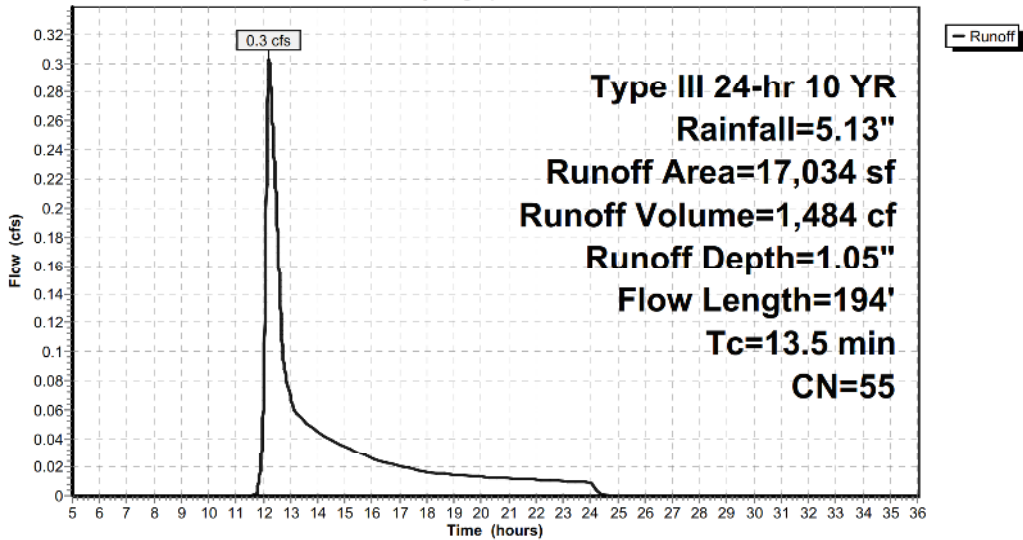
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS3: EXWS3

Runoff = 4.9 cfs @ 12.51 hrs, Volume= 30,794 cf, Depth= 1.45"

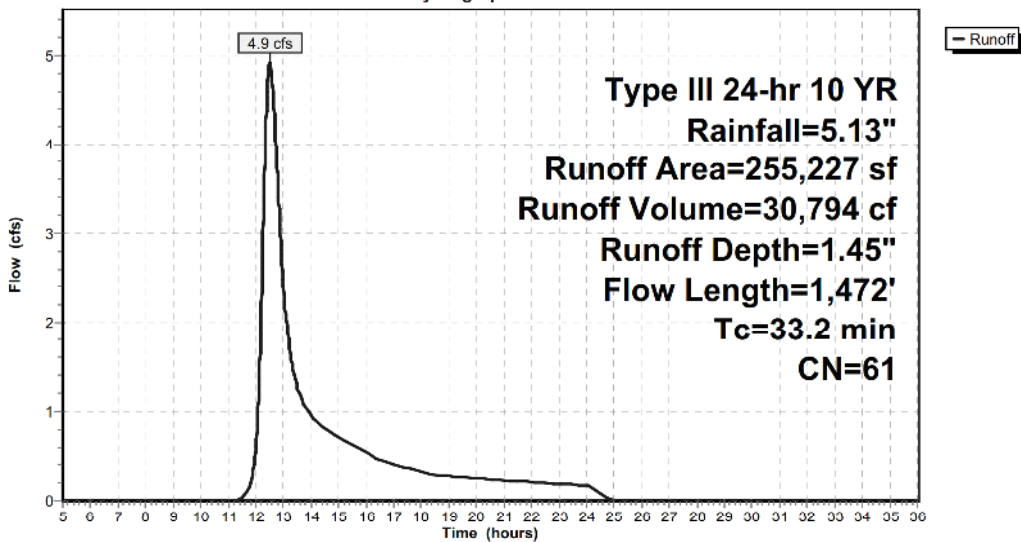
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS4: EXWS4

Runoff = 15.0 cfs @ 12.37 hrs, Volume= 82,475 cf, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

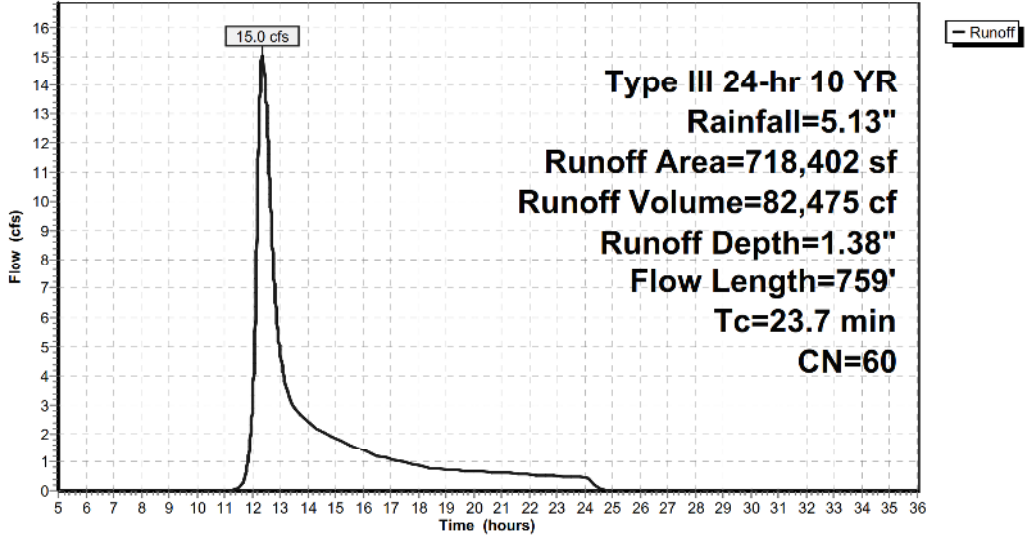
EAGLE RIDGE-EXISTING

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Type III 24-hr 10 YR Rainfall=5.13"

Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS5A: EXWS5A

Runoff = 4.6 cfs @ 12.20 hrs, Volume= 21,712 cf, Depth= 1.05"

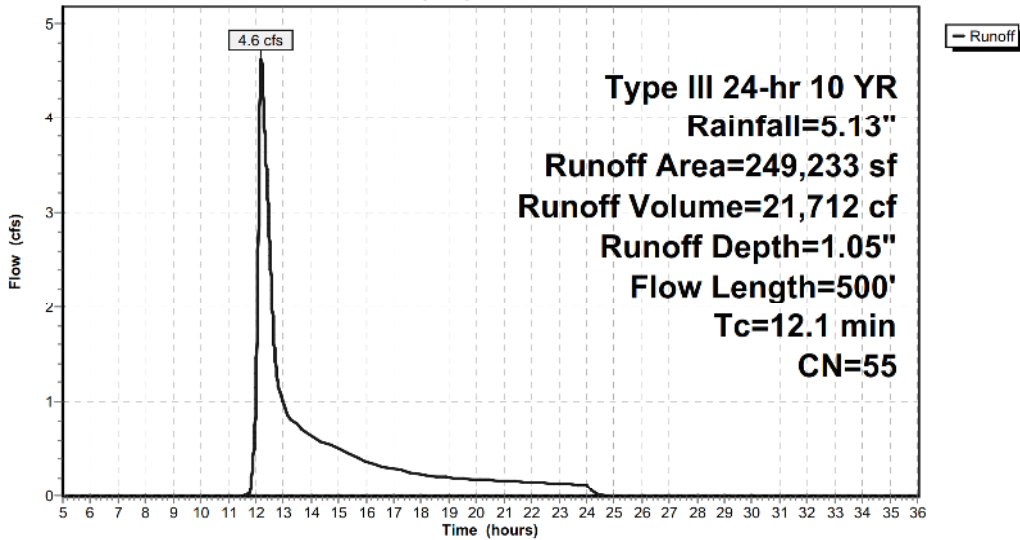
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXWS5A: EXWS5A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 9.2 cfs @ 12.15 hrs, Volume= 33,606 cf, Depth= 2.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

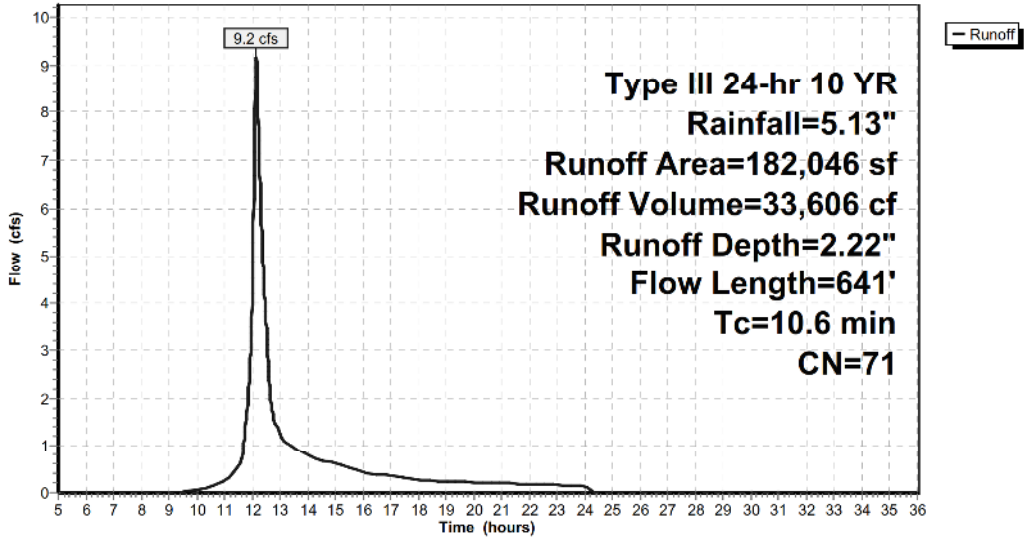
EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 13.9 cfs @ 12.09 hrs, Volume= 43,793 cf, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

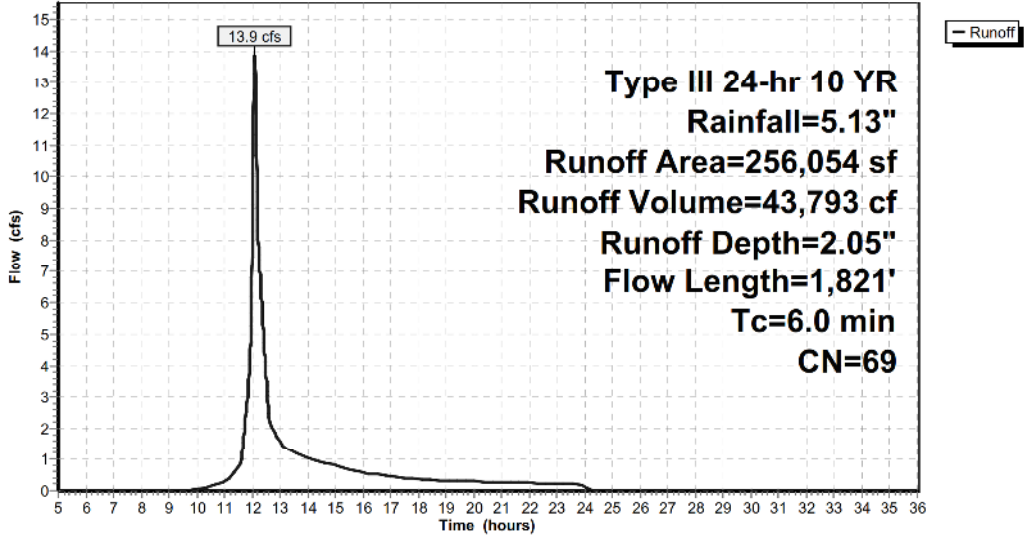
EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 4.4 cfs @ 12.08 hrs, Volume= 13,581 cf, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

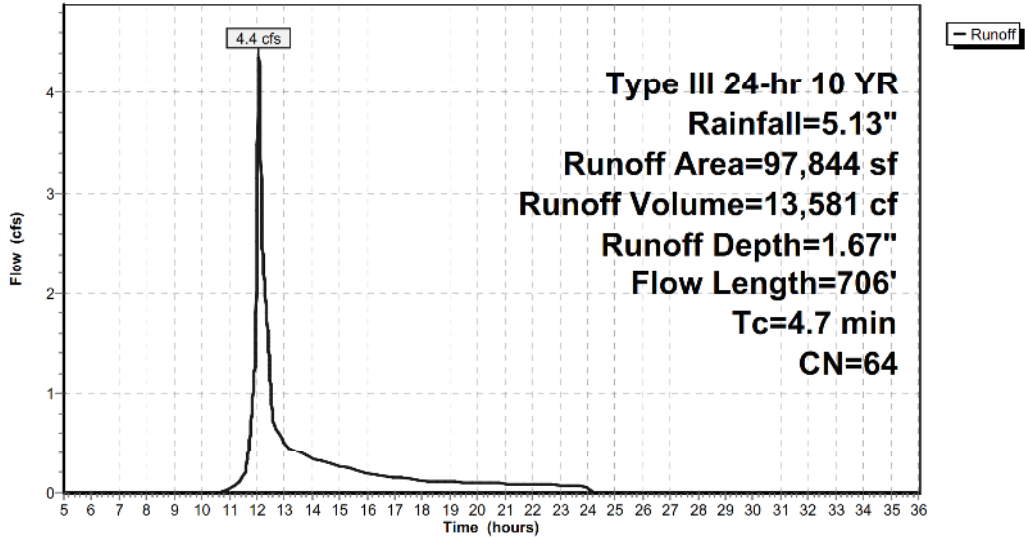
EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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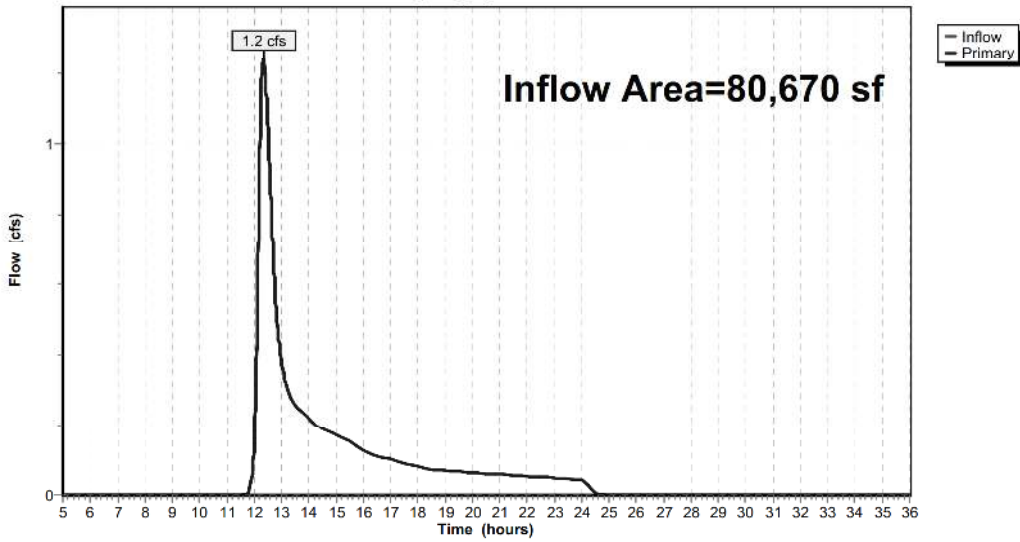
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 1.05" for 10 YR event
Inflow = 1.2 cfs @ 12.33 hrs, Volume= 7,028 cf
Primary = 1.2 cfs @ 12.33 hrs, Volume= 7,028 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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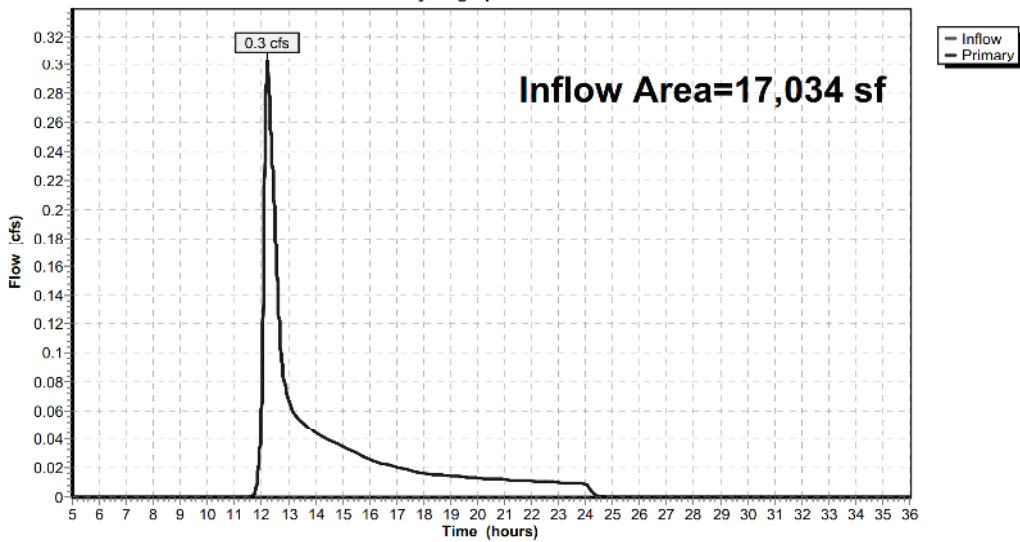
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 1.05" for 10 YR event
Inflow = 0.3 cfs @ 12.22 hrs, Volume= 1,484 cf
Primary = 0.3 cfs @ 12.22 hrs, Volume= 1,484 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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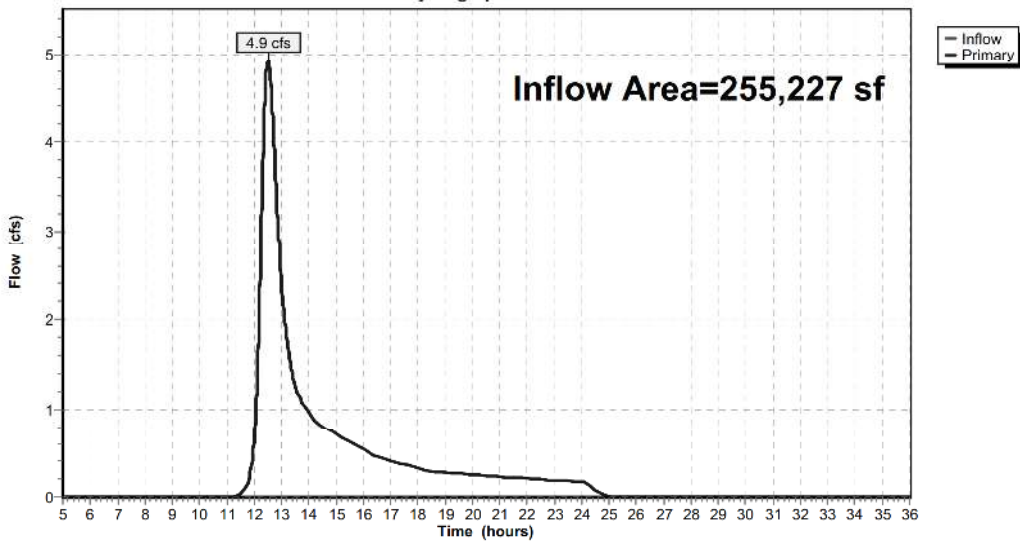
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 1.45" for 10 YR event
Inflow = 4.9 cfs @ 12.51 hrs, Volume= 30,794 cf
Primary = 4.9 cfs @ 12.51 hrs, Volume= 30,794 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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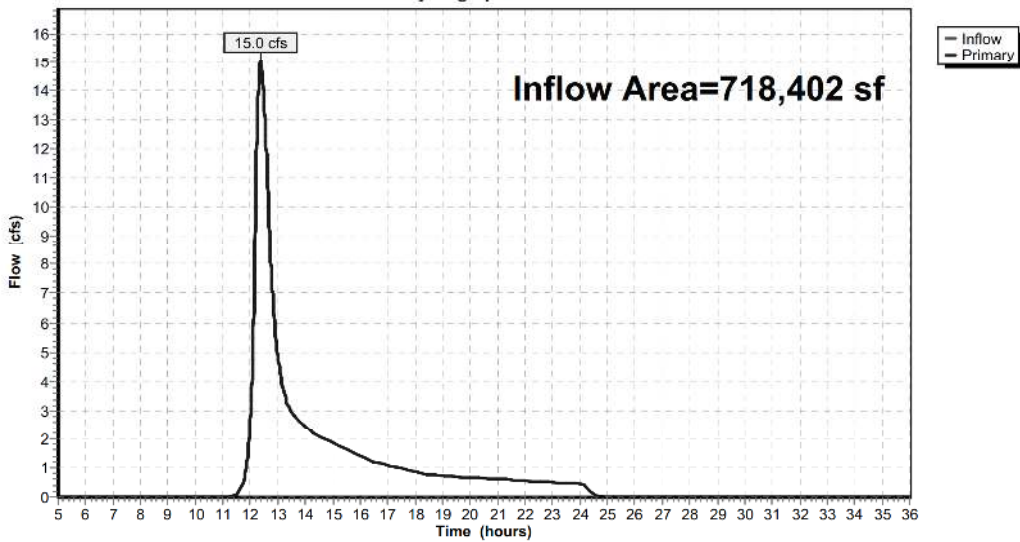
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 1.38" for 10 YR event
Inflow = 15.0 cfs @ 12.37 hrs, Volume= 82,475 cf
Primary = 15.0 cfs @ 12.37 hrs, Volume= 82,475 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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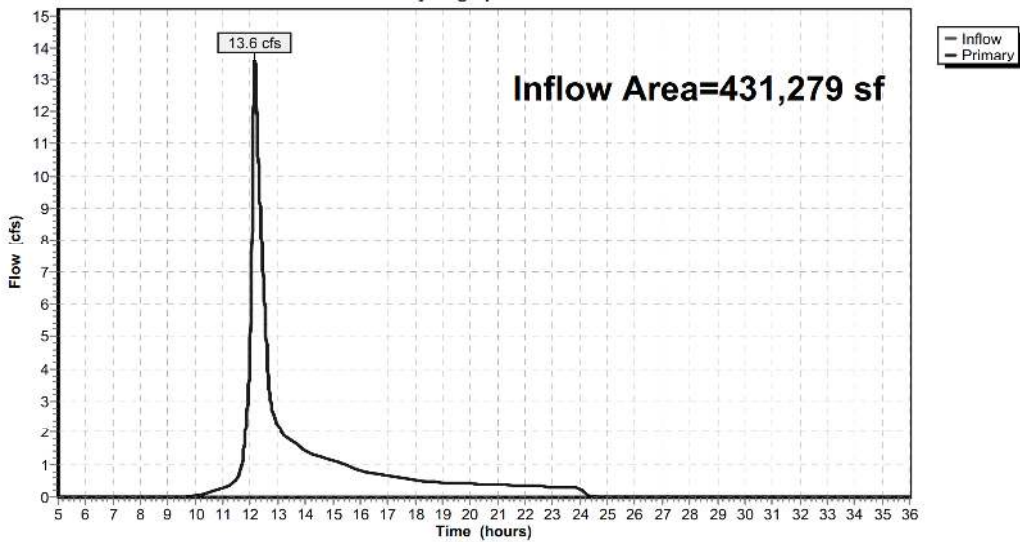
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 1.54" for 10 YR event
Inflow = 13.6 cfs @ 12.17 hrs, Volume= 55,319 cf
Primary = 13.6 cfs @ 12.17 hrs, Volume= 55,319 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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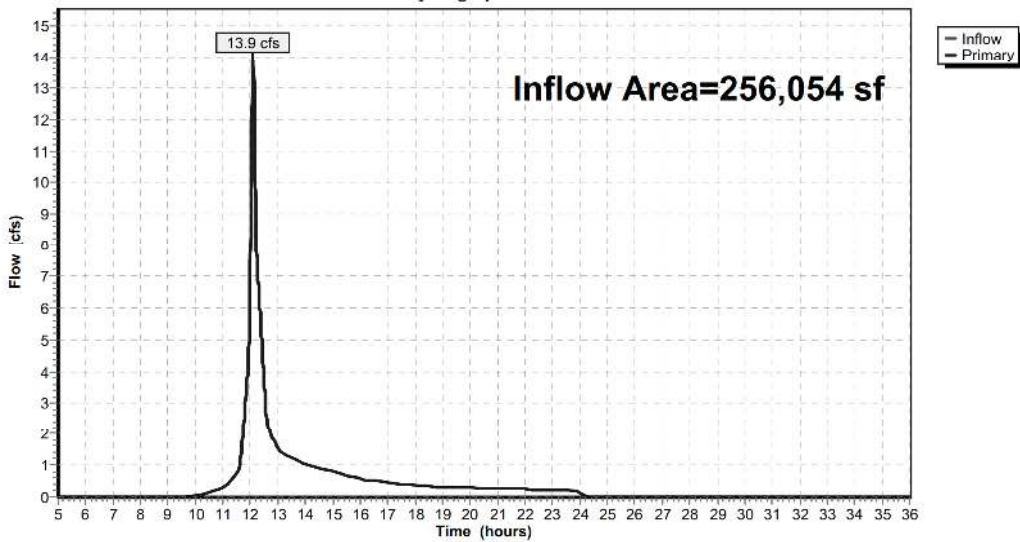
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 2.05" for 10 YR event
Inflow = 13.9 cfs @ 12.09 hrs, Volume= 43,793 cf
Primary = 13.9 cfs @ 12.09 hrs, Volume= 43,793 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 10 YR Rainfall=5.13"

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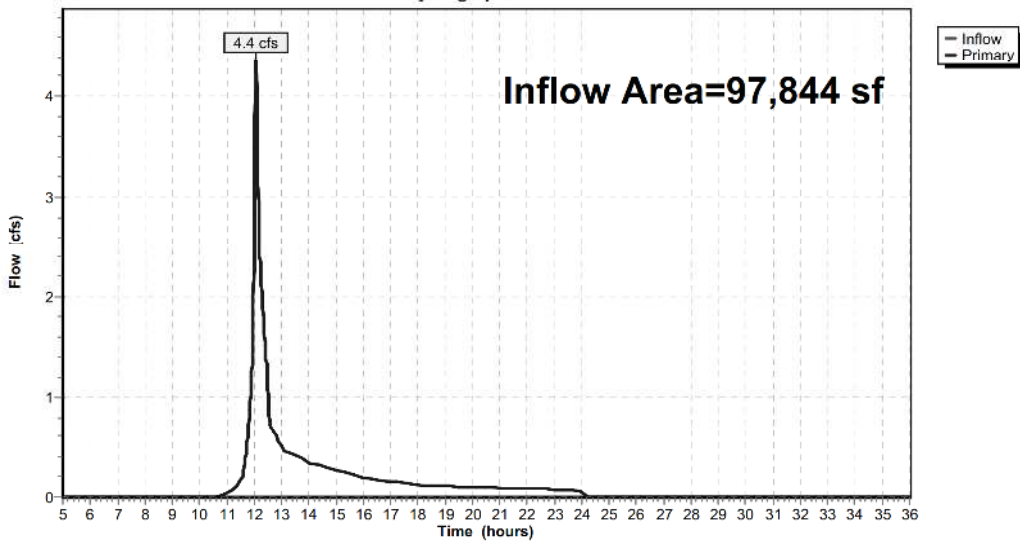
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 1.67" for 10 YR event
Inflow = 4.4 cfs @ 12.08 hrs, Volume= 13,581 cf
Primary = 4.4 cfs @ 12.08 hrs, Volume= 13,581 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=332' Tc=20.0 min CN=55 Runoff=2.4 cfs 12,027 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.6 cfs 2,540 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=2.32" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=8.3 cfs 49,330 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=2.23" Flow Length=759' Tc=23.7 min CN=60 Runoff=25.8 cfs 133,420 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=500' Tc=12.1 min CN=55 Runoff=8.9 cfs 37,158 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=3.27" Flow Length=641' Tc=10.6 min CN=71 Runoff=13.7 cfs 49,663 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=3.08" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=21.1 cfs 65,642 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=2.60" Flow Length=706' Tc=4.7 min CN=64 Runoff=7.0 cfs 21,174 cf
Link EXDP1: EXDP1	Inflow=2.4 cfs 12,027 cf Primary=2.4 cfs 12,027 cf
Link EXDP2: EXDP2	Inflow=0.6 cfs 2,540 cf Primary=0.6 cfs 2,540 cf
Link EXDP3: EXDP3	Inflow=8.3 cfs 49,330 cf Primary=8.3 cfs 49,330 cf
Link EXDP4: EXDP4	Inflow=25.8 cfs 133,420 cf Primary=25.8 cfs 133,420 cf
Link EXDP5: EXDP5	Inflow=22.4 cfs 86,820 cf Primary=22.4 cfs 86,820 cf
Link EXDP6: EXDP6	Inflow=21.1 cfs 65,642 cf Primary=21.1 cfs 65,642 cf
Link EXDP7: EXDP7	Inflow=7.0 cfs 21,174 cf Primary=7.0 cfs 21,174 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 370,952 cf Average Runoff Depth = 2.40"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS1: EXWS1

Runoff = 2.4 cfs @ 12.31 hrs, Volume= 12,027 cf, Depth= 1.79"

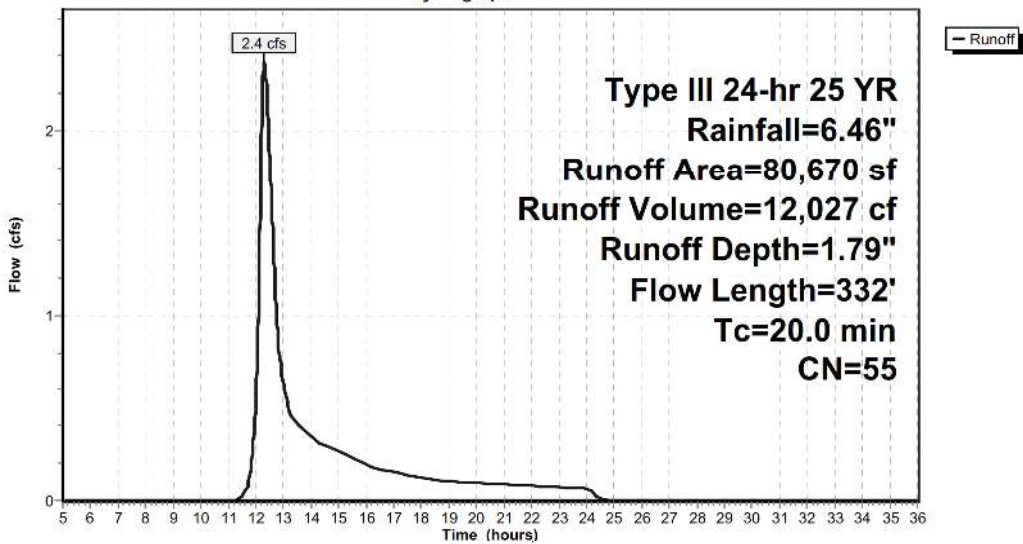
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.6 cfs @ 12.20 hrs, Volume= 2,540 cf, Depth= 1.79"

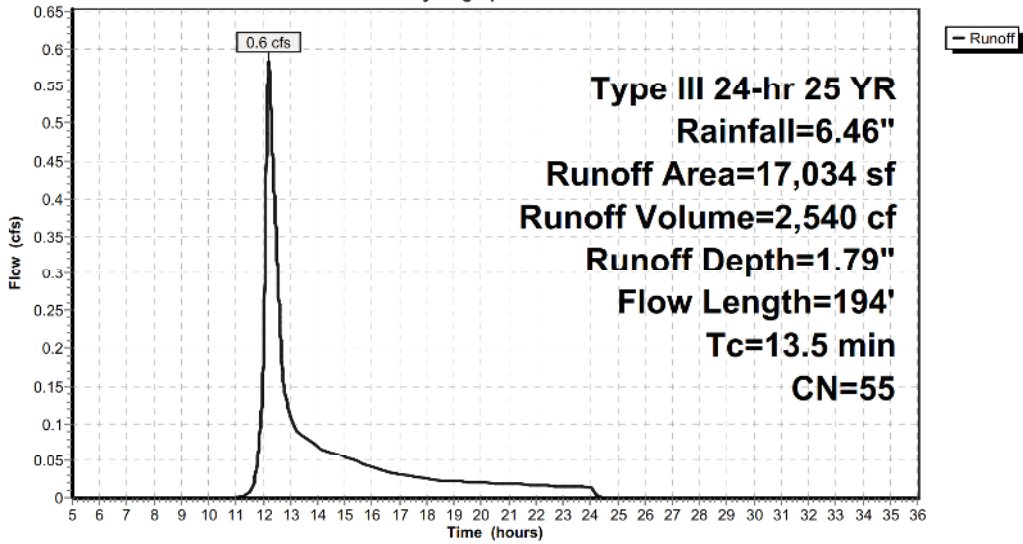
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS3: EXWS3

Runoff = 8.3 cfs @ 12.50 hrs, Volume= 49,330 cf, Depth= 2.32"

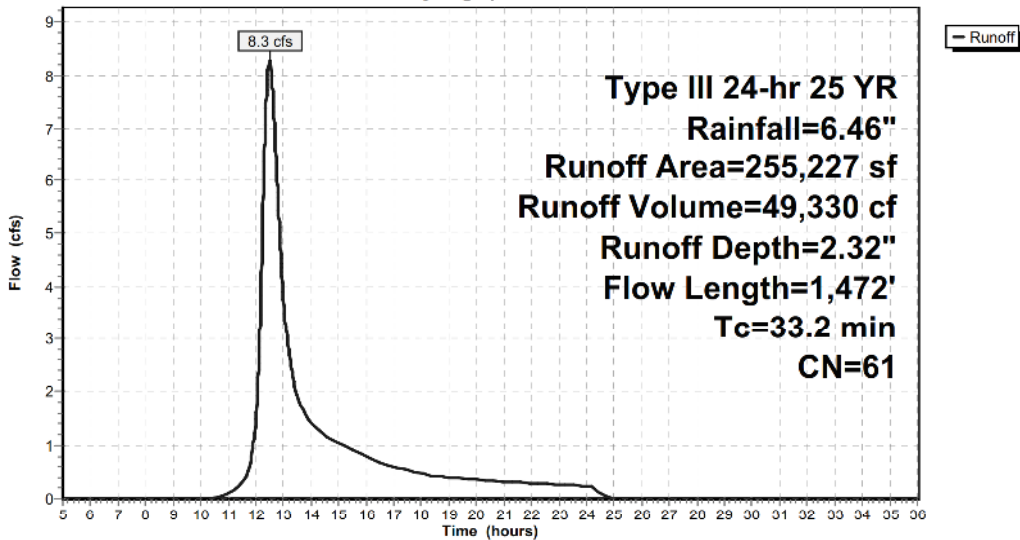
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS4: EXWS4

Runoff = 25.8 cfs @ 12.35 hrs, Volume= 133,420 cf, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

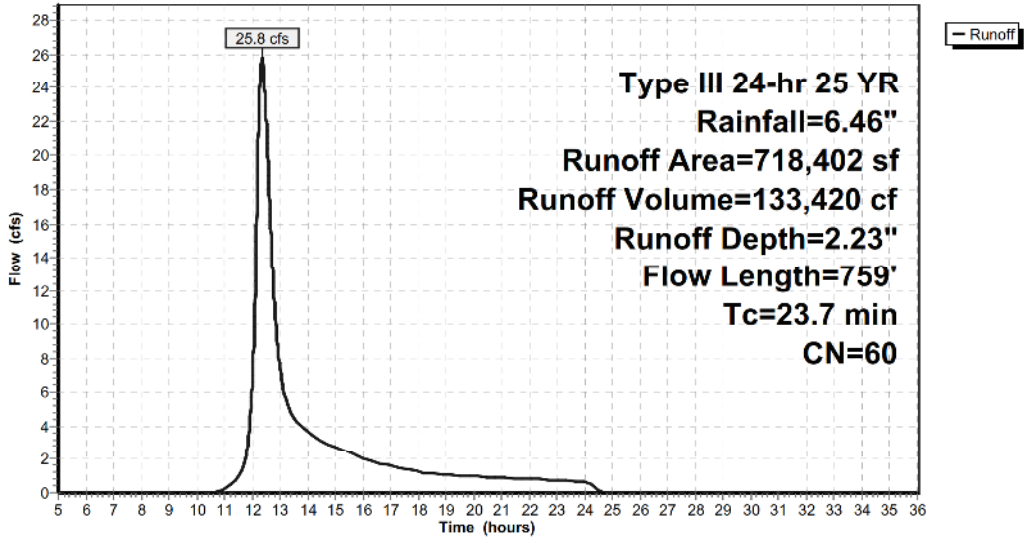
EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS5A: EXWS5A

Runoff = 8.9 cfs @ 12.18 hrs, Volume= 37,158 cf, Depth= 1.79"

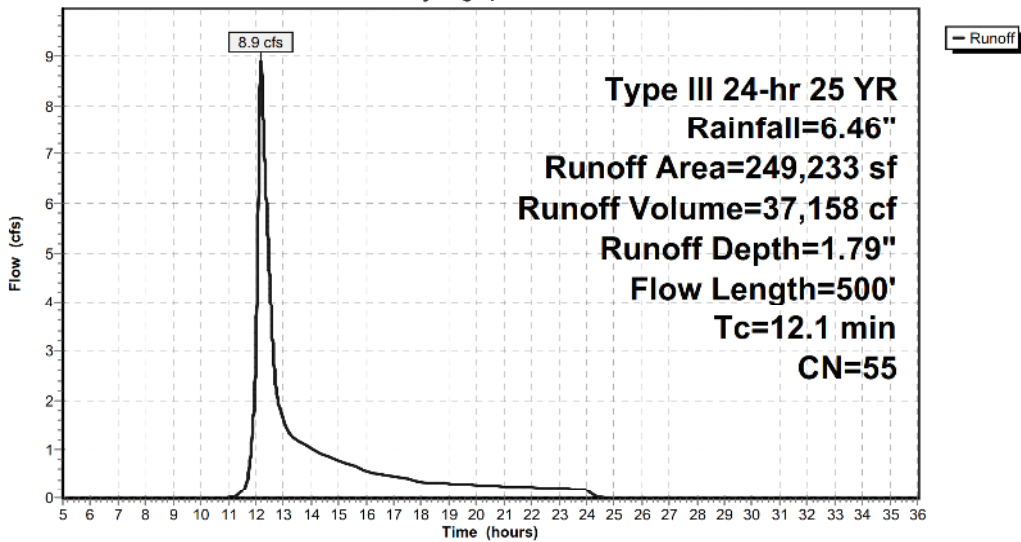
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXWS5A: EXWS5A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 13.7 cfs @ 12.15 hrs, Volume= 49,663 cf, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P7= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

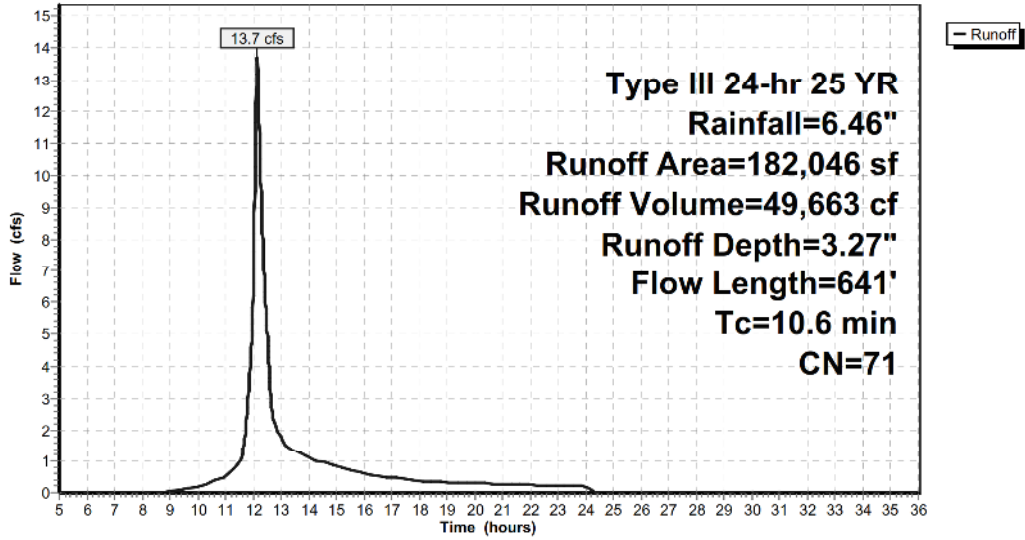
EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 21.1 cfs @ 12.09 hrs, Volume= 65,642 cf, Depth= 3.08"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

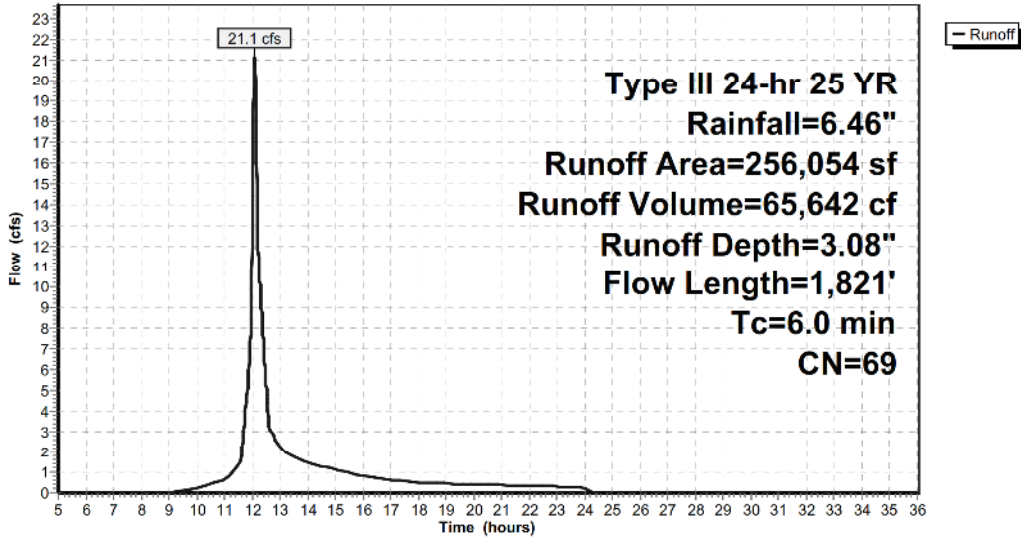
EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 7.0 cfs @ 12.07 hrs, Volume= 21,174 cf, Depth= 2.60"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

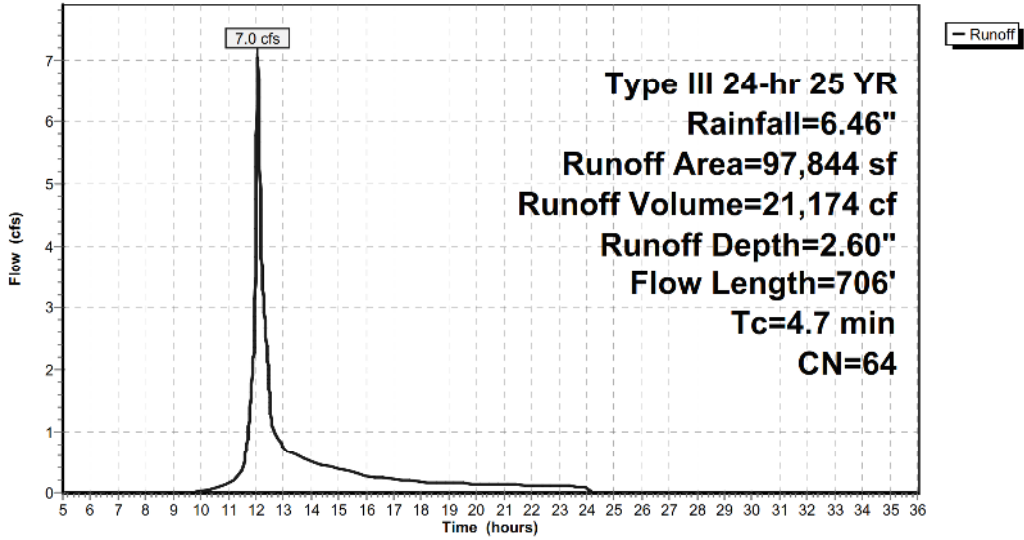
EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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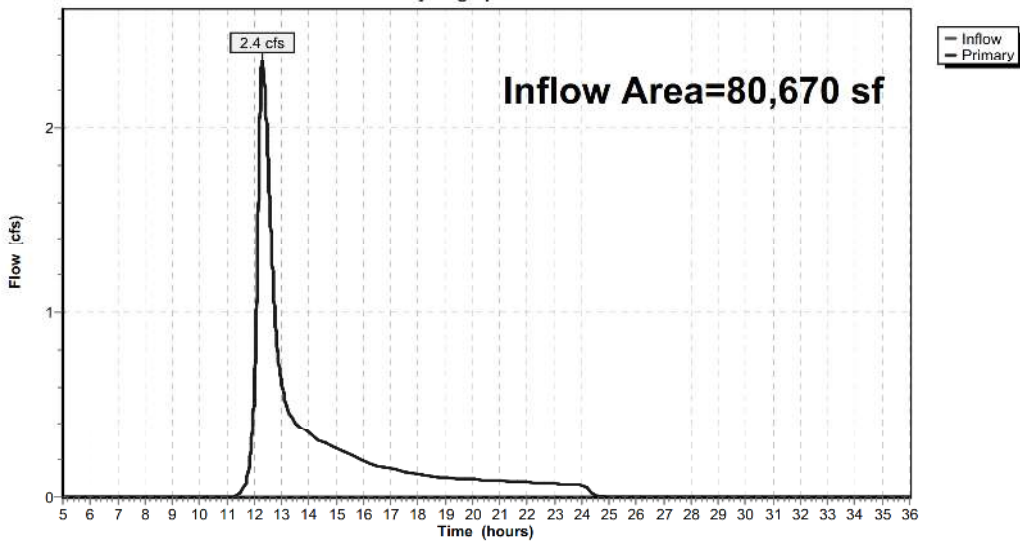
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 1.79" for 25 YR event
Inflow = 2.4 cfs @ 12.31 hrs, Volume= 12,027 cf
Primary = 2.4 cfs @ 12.31 hrs, Volume= 12,027 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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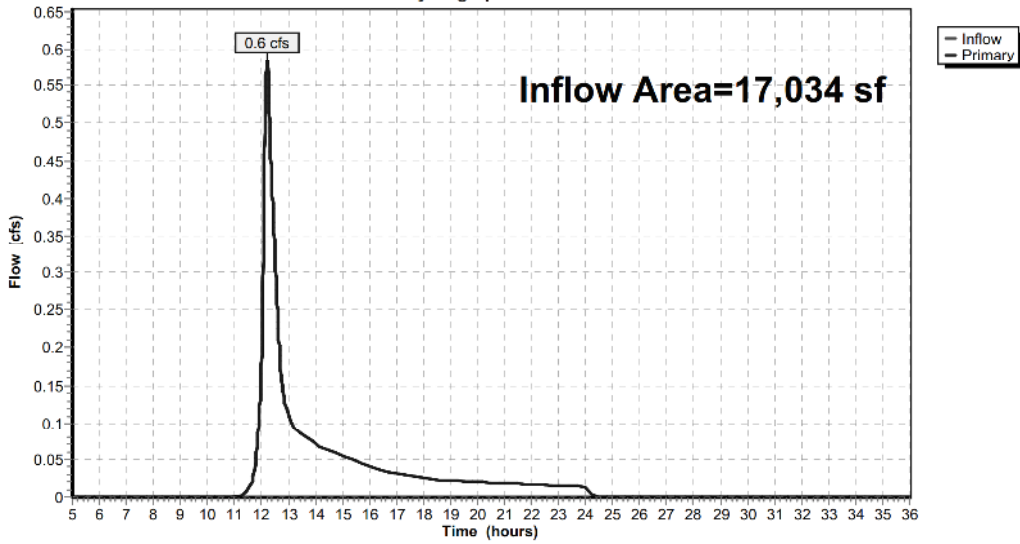
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 1.79" for 25 YR event
Inflow = 0.6 cfs @ 12.20 hrs, Volume= 2,540 cf
Primary = 0.6 cfs @ 12.20 hrs, Volume= 2,540 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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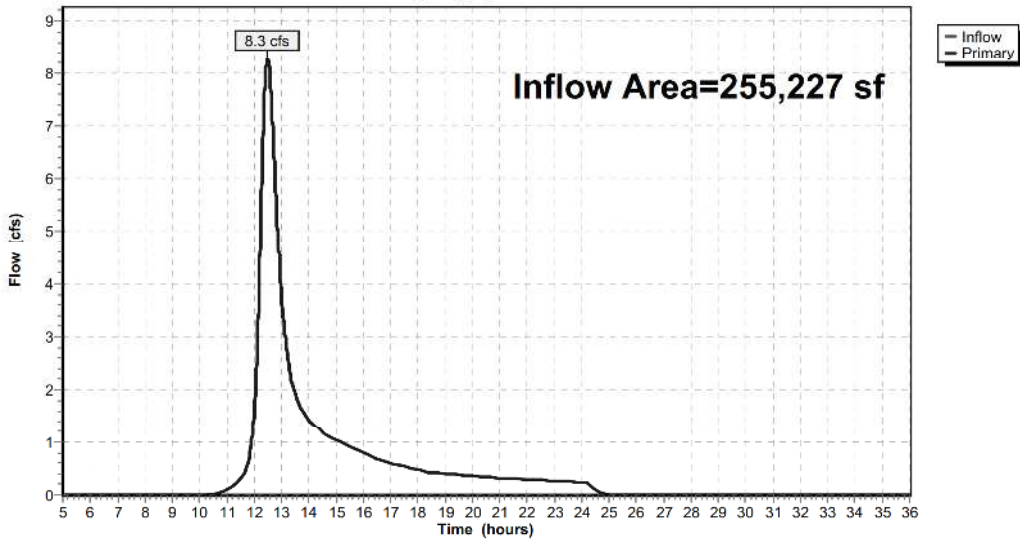
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 2.32" for 25 YR event
Inflow = 8.3 cfs @ 12.50 hrs, Volume= 49,330 cf
Primary = 8.3 cfs @ 12.50 hrs, Volume= 49,330 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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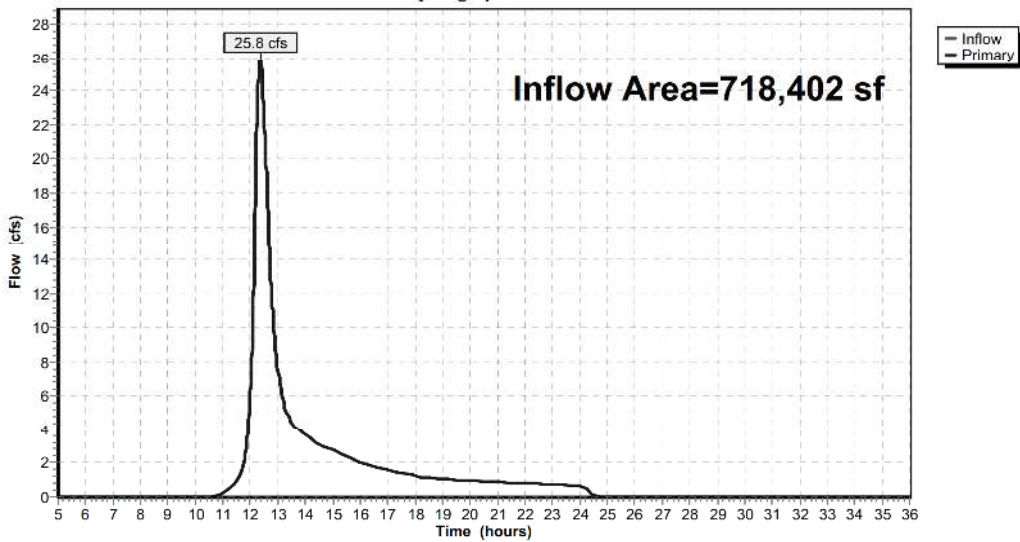
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 2.23" for 25 YR event
Inflow = 25.8 cfs @ 12.35 hrs, Volume= 133,420 cf
Primary = 25.8 cfs @ 12.35 hrs, Volume= 133,420 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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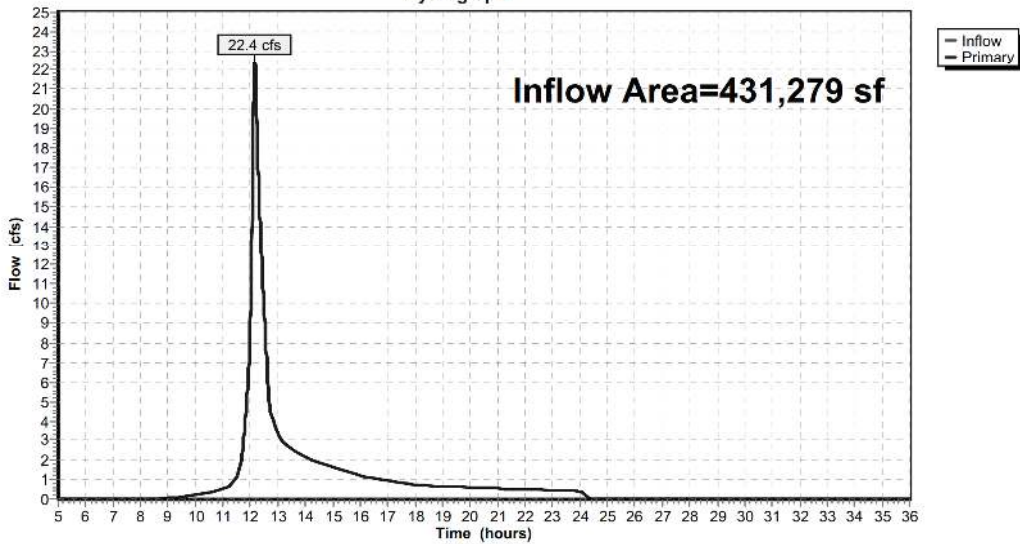
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 2.42" for 25 YR event
Inflow = 22.4 cfs @ 12.16 hrs, Volume= 86,820 cf
Primary = 22.4 cfs @ 12.16 hrs, Volume= 86,820 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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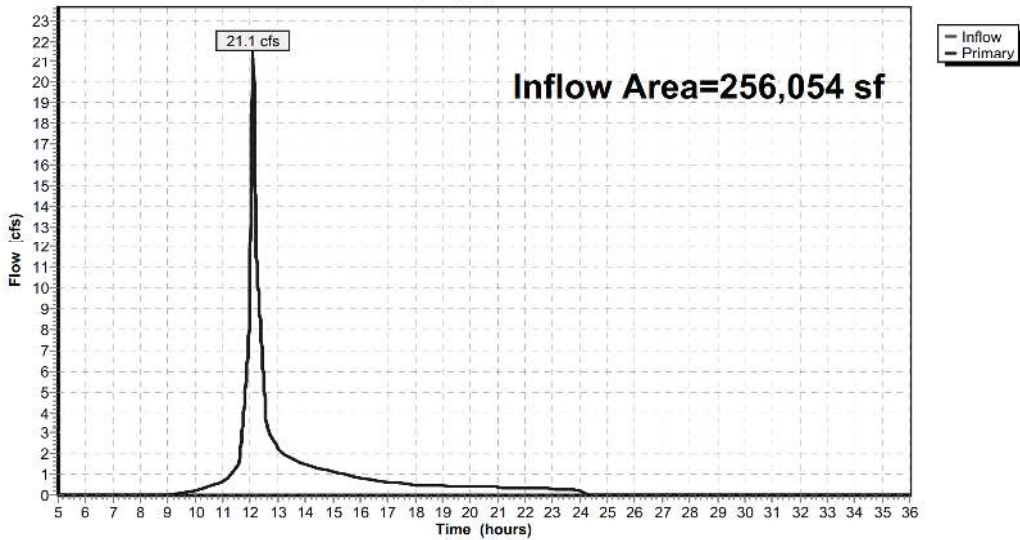
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 3.08" for 25 YR event
Inflow = 21.1 cfs @ 12.09 hrs, Volume= 65,642 cf
Primary = 21.1 cfs @ 12.09 hrs, Volume= 65,642 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 25 YR Rainfall=6.46"

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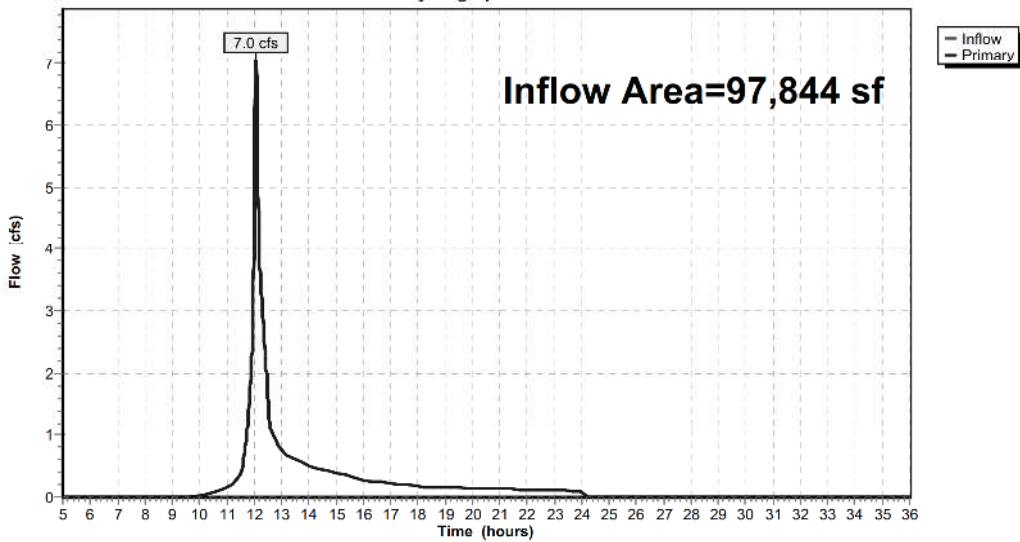
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 2.60" for 25 YR event
Inflow = 7.0 cfs @ 12.07 hrs, Volume= 21,174 cf
Primary = 7.0 cfs @ 12.07 hrs, Volume= 21,174 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=332' Tc=20.0 min CN=55 Runoff=3.6 cfs 17,306 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.9 cfs 3,654 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=3.21" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=11.7 cfs 68,276 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=3.10" Flow Length=759' Tc=23.7 min CN=60 Runoff=36.8 cfs 185,748 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=500' Tc=12.1 min CN=55 Runoff=13.4 cfs 53,467 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=4.31" Flow Length=641' Tc=10.6 min CN=71 Runoff=18.1 cfs 65,402 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=4.09" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=28.2 cfs 87,218 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=3.54" Flow Length=706' Tc=4.7 min CN=64 Runoff=9.7 cfs 28,828 cf
Link EXDP1: EXDP1	Inflow=3.6 cfs 17,306 cf Primary=3.6 cfs 17,306 cf
Link EXDP2: EXDP2	Inflow=0.9 cfs 3,654 cf Primary=0.9 cfs 3,654 cf
Link EXDP3: EXDP3	Inflow=11.7 cfs 68,276 cf Primary=11.7 cfs 68,276 cf
Link EXDP4: EXDP4	Inflow=36.8 cfs 185,748 cf Primary=36.8 cfs 185,748 cf
Link EXDP5: EXDP5	Inflow=31.2 cfs 118,869 cf Primary=31.2 cfs 118,869 cf
Link EXDP6: EXDP6	Inflow=28.2 cfs 87,218 cf Primary=28.2 cfs 87,218 cf
Link EXDP7: EXDP7	Inflow=9.7 cfs 28,828 cf Primary=9.7 cfs 28,828 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 509,898 cf Average Runoff Depth = 3.30"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS1: EXWS1

Runoff = 3.6 cfs @ 12.29 hrs, Volume= 17,306 cf, Depth= 2.57"

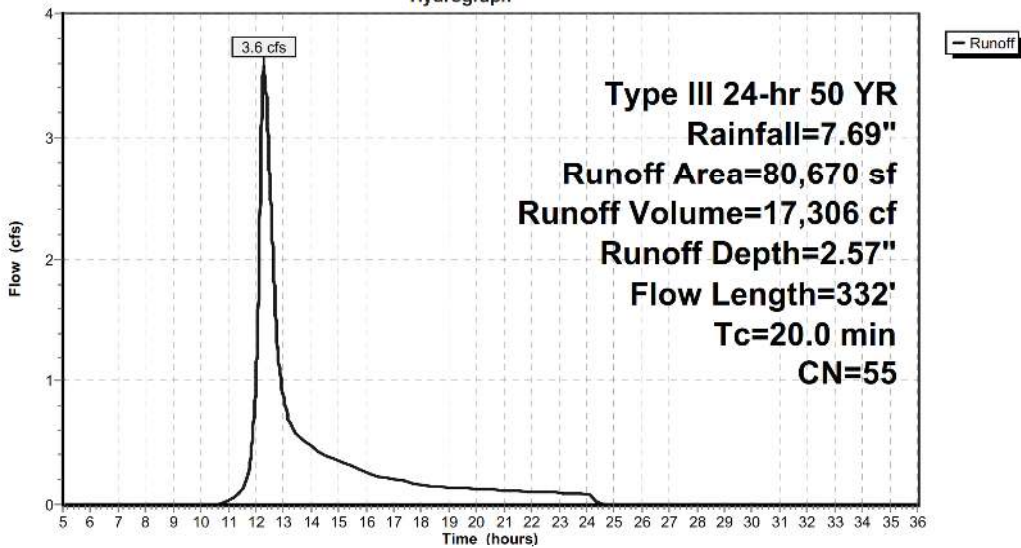
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS2: EXWS2

Runoff = 0.9 cfs @ 12.20 hrs, Volume= 3,654 cf, Depth= 2.57"

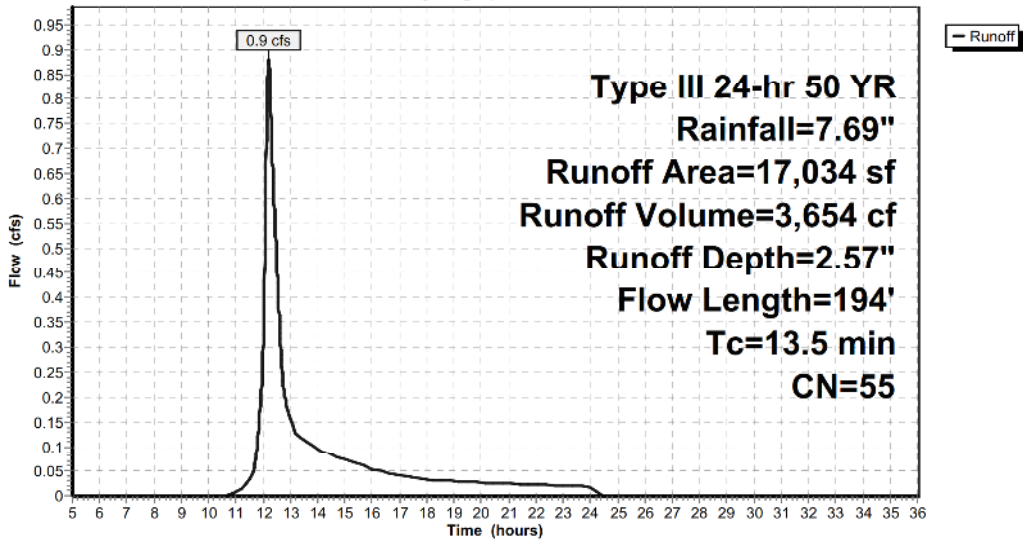
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS3: EXWS3

Runoff = 11.7 cfs @ 12.50 hrs, Volume= 68,276 cf, Depth= 3.21"

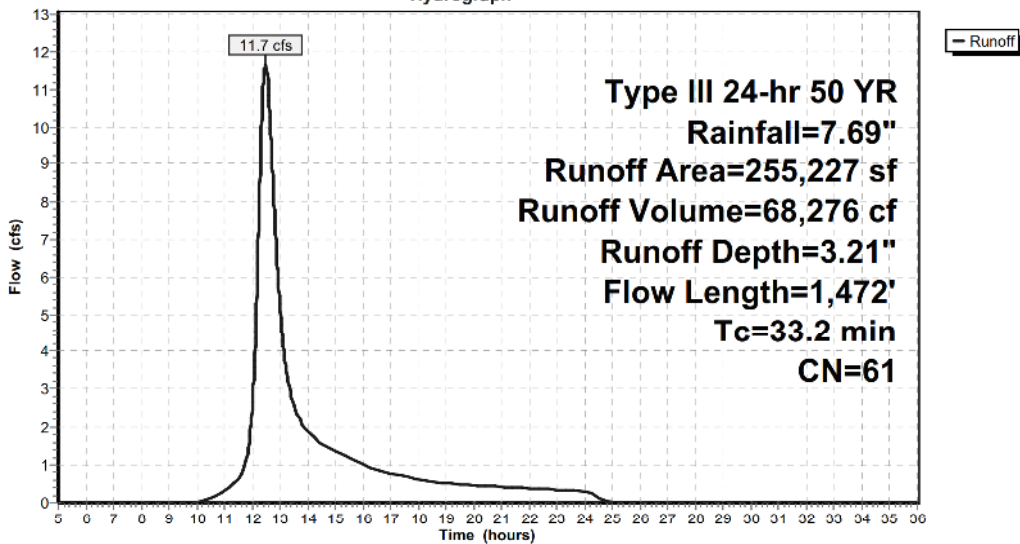
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS4: EXWS4

Runoff = 36.8 cfs @ 12.35 hrs, Volume= 185,748 cf, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

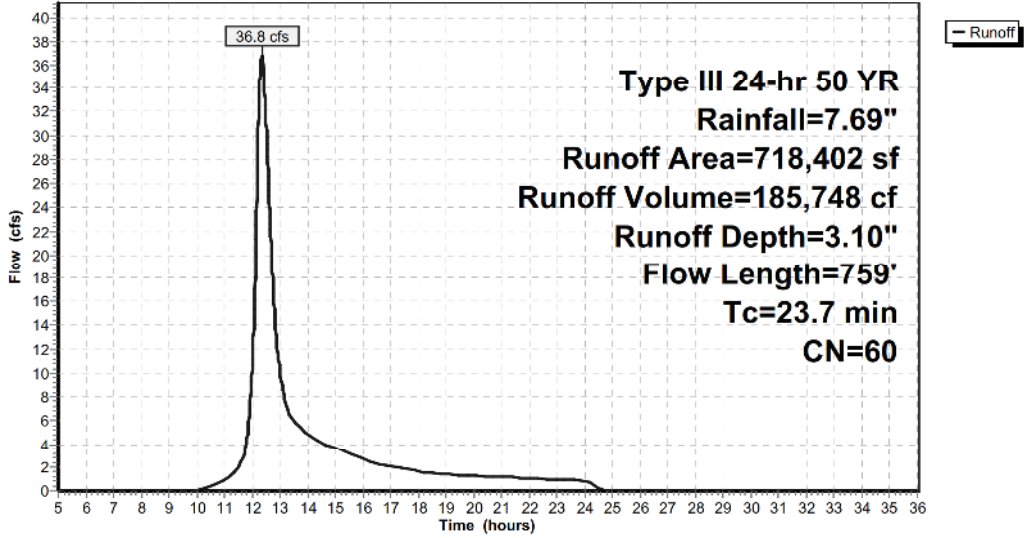
EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXW55A: EXW55A

Runoff = 13.4 cfs @ 12.18 hrs, Volume= 53,467 cf, Depth= 2.57"

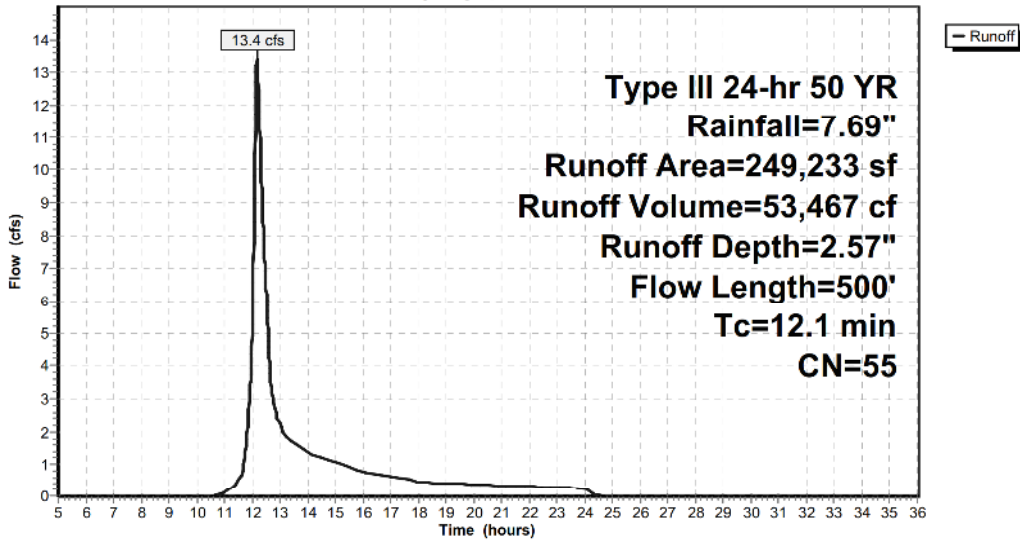
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXW55A: EXW55A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 18.1 cfs @ 12.15 hrs, Volume= 65,402 cf, Depth= 4.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

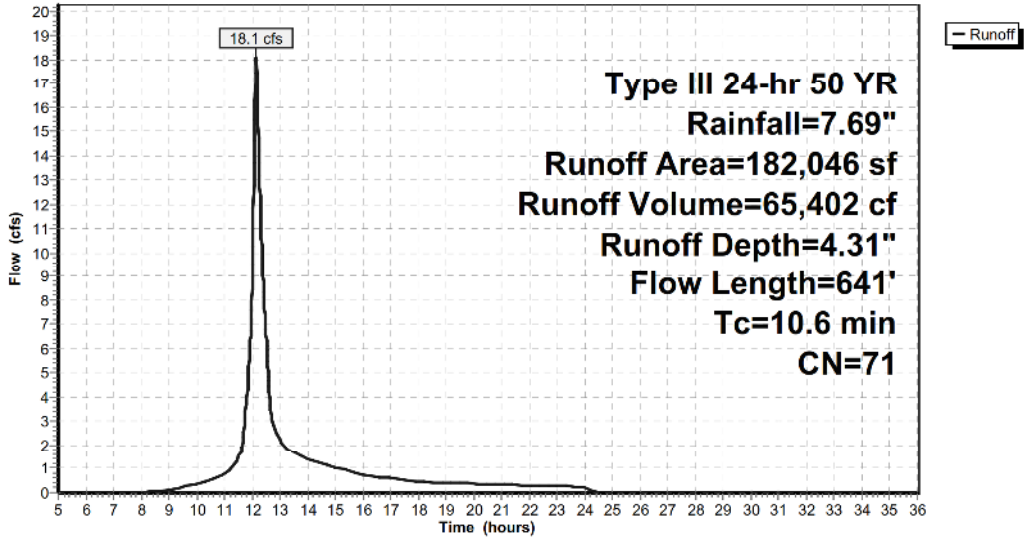
EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 28.2 cfs @ 12.09 hrs, Volume= 87,218 cf, Depth= 4.09"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
295	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

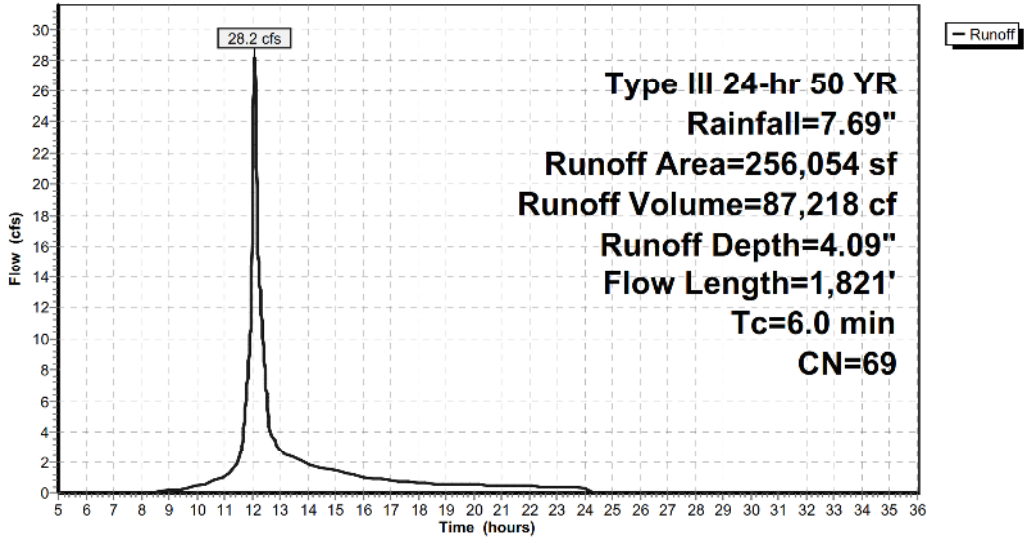
EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 9.7 cfs @ 12.07 hrs, Volume= 28,828 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

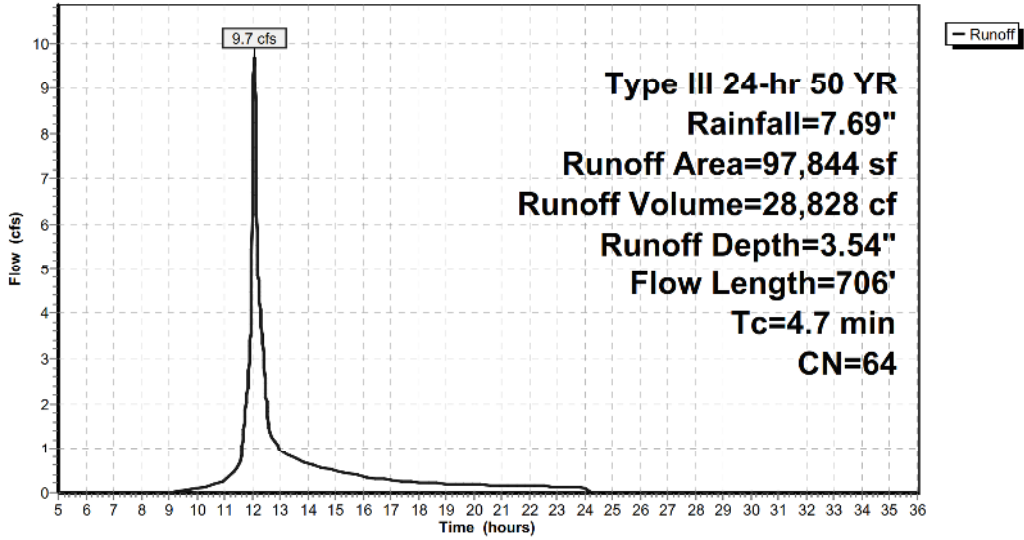
EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

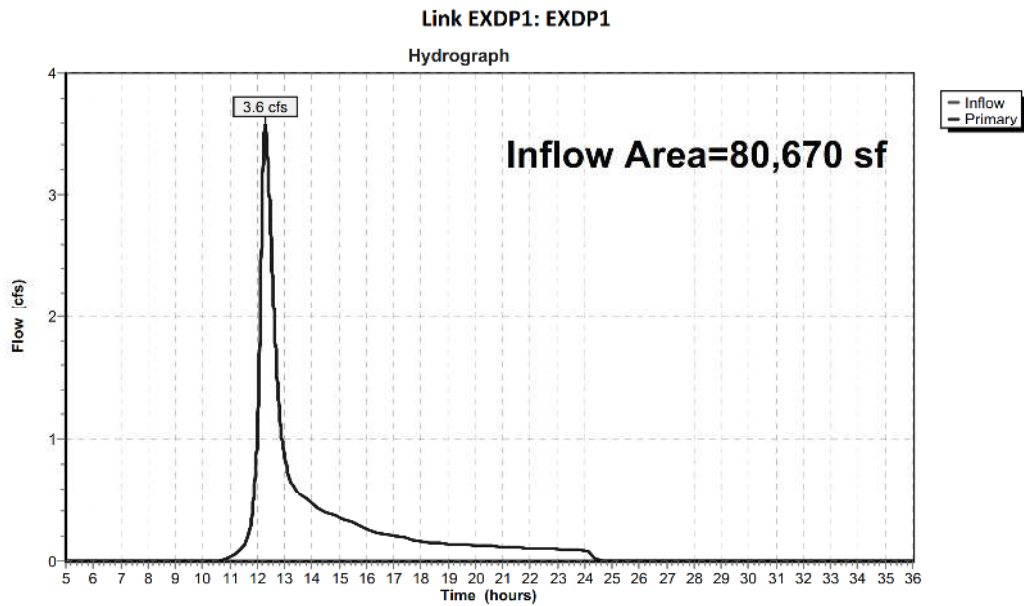
Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 2.57" for 50 YR event
Inflow = 3.6 cfs @ 12.29 hrs, Volume= 17,306 cf
Primary = 3.6 cfs @ 12.29 hrs, Volume= 17,306 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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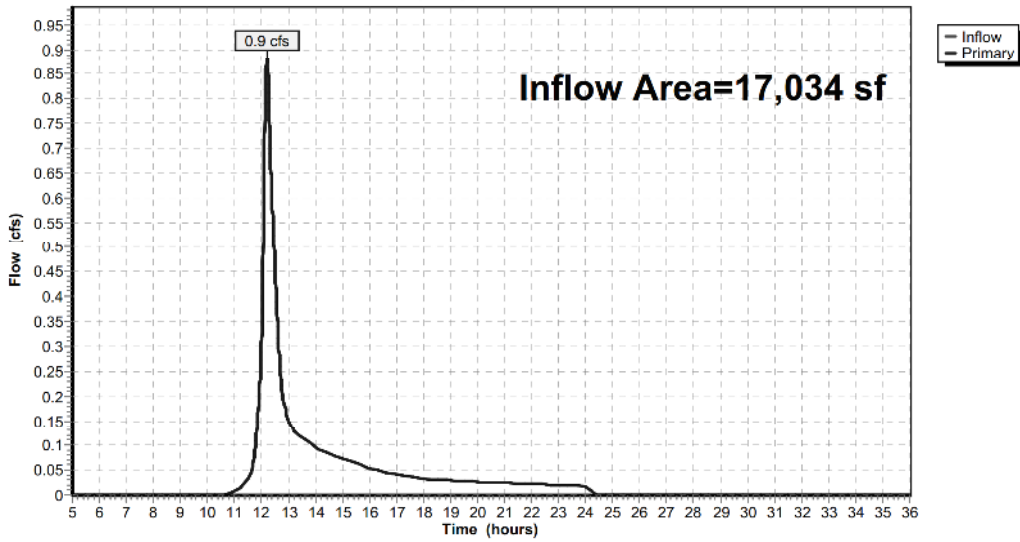
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 2.57" for 50 YR event
Inflow = 0.9 cfs @ 12.20 hrs, Volume= 3,654 cf
Primary = 0.9 cfs @ 12.20 hrs, Volume= 3,654 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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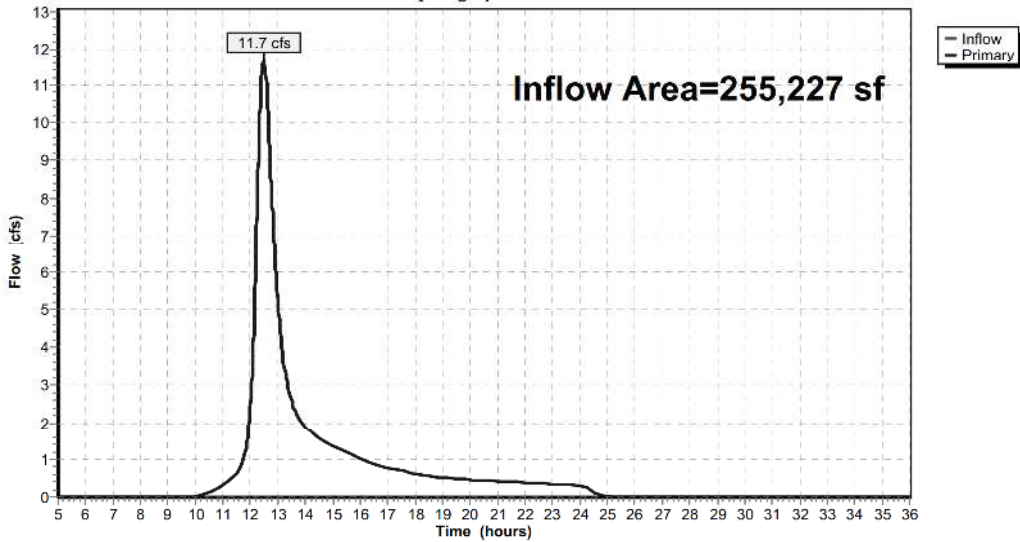
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 3.21" for 50 YR event
Inflow = 11.7 cfs @ 12.50 hrs, Volume= 68,276 cf
Primary = 11.7 cfs @ 12.50 hrs, Volume= 68,276 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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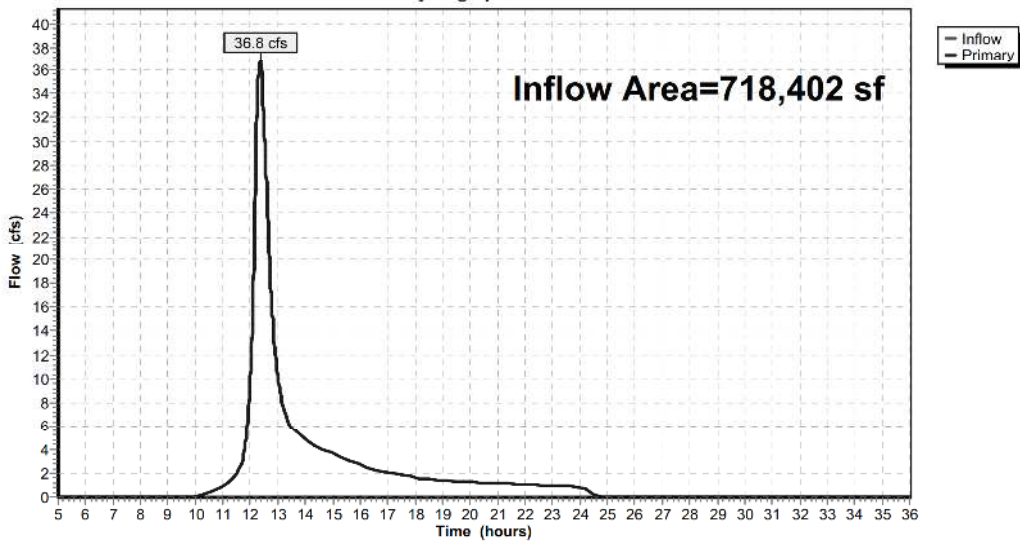
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 3.10" for 50 YR event
Inflow = 36.8 cfs @ 12.35 hrs, Volume= 185,748 cf
Primary = 36.8 cfs @ 12.35 hrs, Volume= 185,748 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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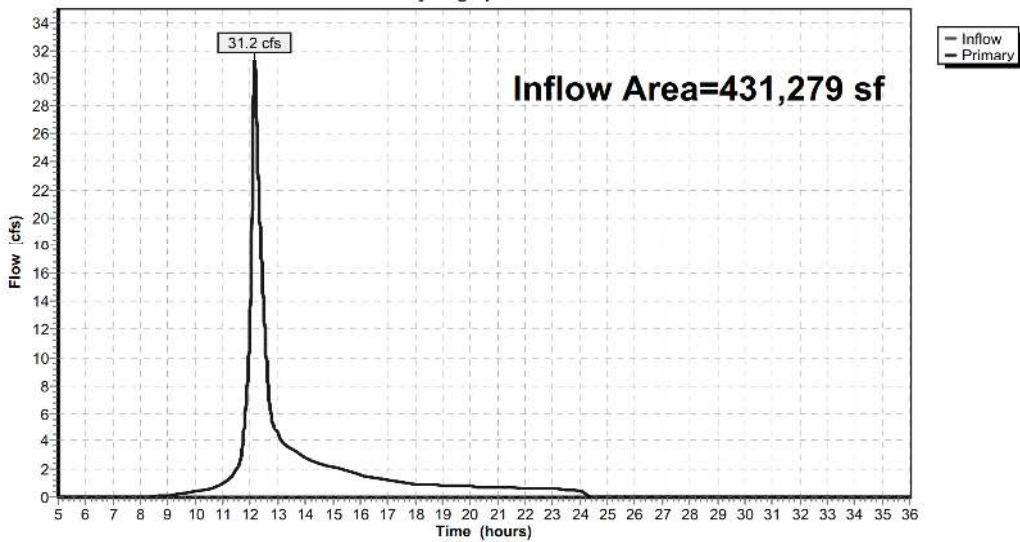
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 3.31" for 50 YR event
Inflow = 31.2 cfs @ 12.16 hrs, Volume= 118,869 cf
Primary = 31.2 cfs @ 12.16 hrs, Volume= 118,869 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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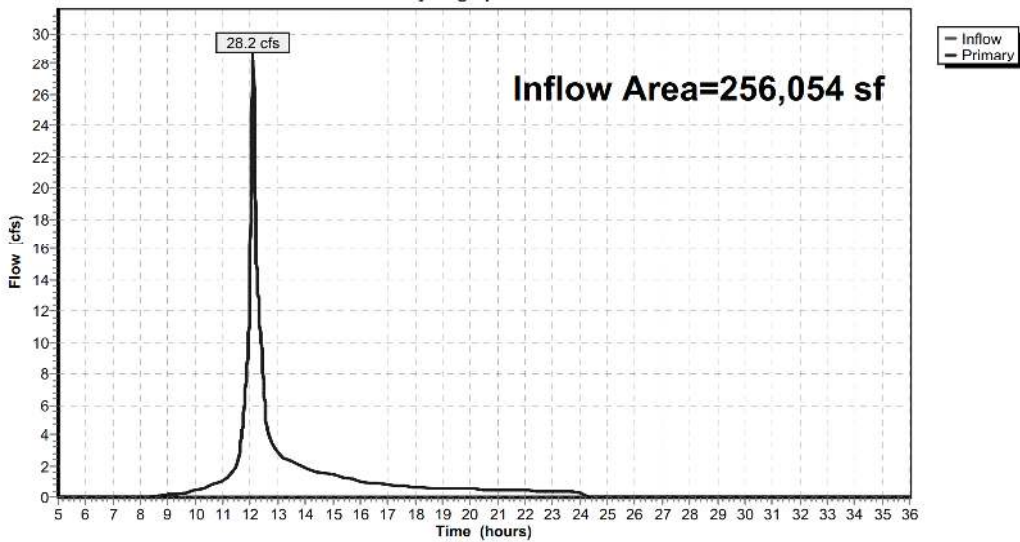
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 4.09" for 50 YR event
Inflow = 28.2 cfs @ 12.09 hrs, Volume= 87,218 cf
Primary = 28.2 cfs @ 12.09 hrs, Volume= 87,218 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 50 YR Rainfall=7.69"

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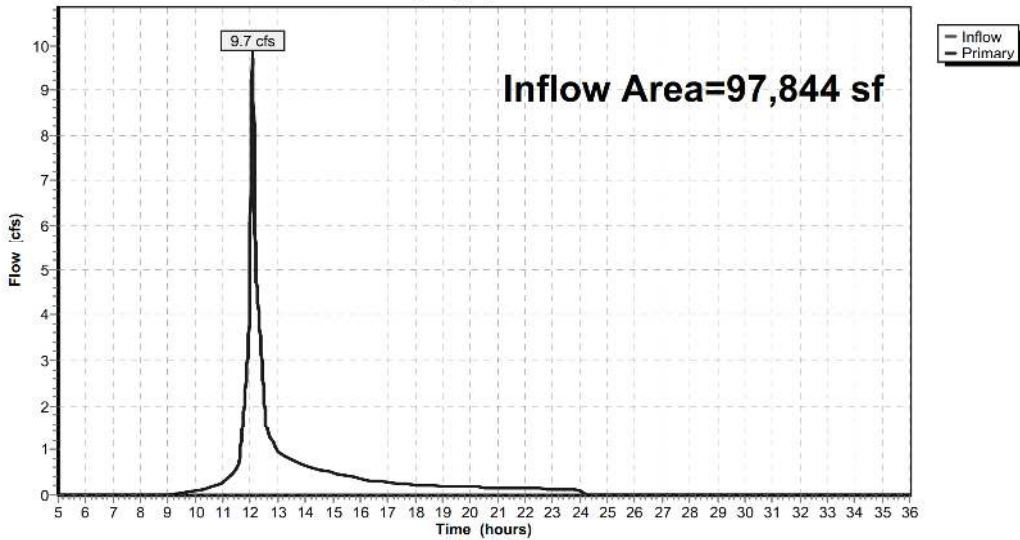
Summary for Link EXDP7: EXDP7

Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 3.54" for 50 YR event
Inflow = 9.7 cfs @ 12.07 hrs, Volume= 28,828 cf
Primary = 9.7 cfs @ 12.07 hrs, Volume= 28,828 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Time span=5.00-36.00 hrs, dt=0.01 hrs, 3101 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment EXWS1: EXWS1	Runoff Area=80,670 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=332' Tc=20.0 min CN=55 Runoff=5.2 cfs 24,278 cf
Subcatchment EXWS2: EXWS2	Runoff Area=17,034 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=194' Tc=13.5 min CN=55 Runoff=1.3 cfs 5,126 cf
Subcatchment EXWS3: EXWS3	Runoff Area=255,227 sf 4.07% Impervious Runoff Depth=4.36" Flow Length=1,472' Tc=33.2 min CN=61 Runoff=16.0 cfs 92,719 cf
Subcatchment EXWS4: EXWS4	Runoff Area=718,402 sf 5.52% Impervious Runoff Depth=4.23" Flow Length=759' Tc=23.7 min CN=60 Runoff=50.9 cfs 253,502 cf
Subcatchment EXWS5A: EXWS5A	Runoff Area=249,233 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=500' Tc=12.1 min CN=55 Runoff=19.3 cfs 75,008 cf
Subcatchment EXWS5B: EXWS5B	Runoff Area=182,046 sf 27.44% Impervious Runoff Depth=5.61" Flow Length=641' Tc=10.6 min CN=71 Runoff=23.5 cfs 85,106 cf
Subcatchment EXWS6: EXWS6	Runoff Area=256,054 sf 22.42% Impervious Runoff Depth=5.36" Flow Length=1,821' Tc=6.0 min CN=69 Runoff=36.9 cfs 114,372 cf
Subcatchment EXWS7: EXWS7	Runoff Area=97,844 sf 14.41% Impervious Runoff Depth=4.73" Flow Length=706' Tc=4.7 min CN=64 Runoff=13.1 cfs 38,604 cf
Link EXDP1: EXDP1	Inflow=5.2 cfs 24,278 cf Primary=5.2 cfs 24,278 cf
Link EXDP2: EXDP2	Inflow=1.3 cfs 5,126 cf Primary=1.3 cfs 5,126 cf
Link EXDP3: EXDP3	Inflow=16.0 cfs 92,719 cf Primary=16.0 cfs 92,719 cf
Link EXDP4: EXDP4	Inflow=50.9 cfs 253,502 cf Primary=50.9 cfs 253,502 cf
Link EXDP5: EXDP5	Inflow=42.5 cfs 160,113 cf Primary=42.5 cfs 160,113 cf
Link EXDP6: EXDP6	Inflow=36.9 cfs 114,372 cf Primary=36.9 cfs 114,372 cf
Link EXDP7: EXDP7	Inflow=13.1 cfs 38,604 cf Primary=13.1 cfs 38,604 cf

Total Runoff Area = 1,856,510 sf Runoff Volume = 688,716 cf Average Runoff Depth = 4.45"
90.76% Pervious = 1,684,976 sf 9.24% Impervious = 171,534 sf

EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS1: EXWS1

Runoff = 5.2 cfs @ 12.29 hrs, Volume= 24,278 cf, Depth= 3.61"

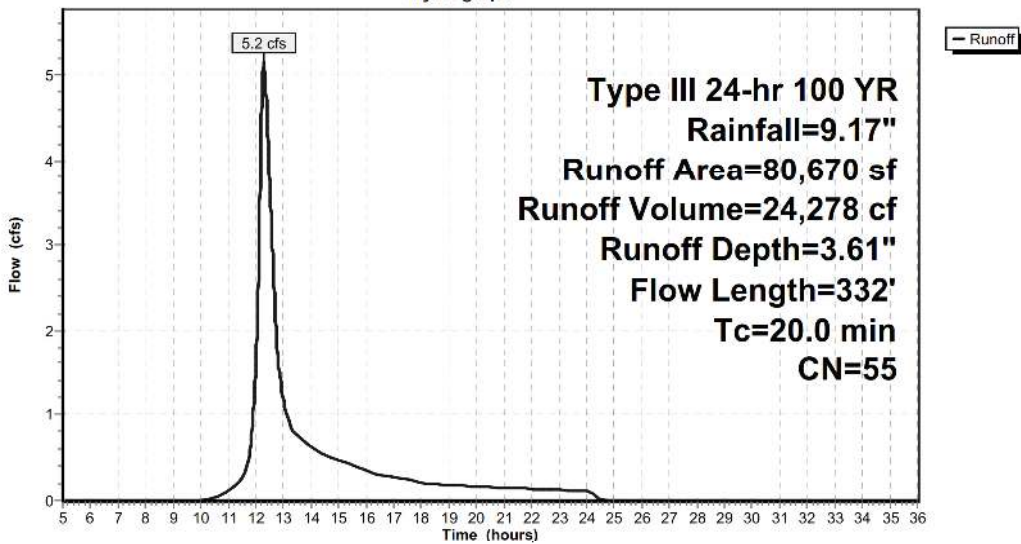
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
* 78,687	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,670	55	Weighted Average
80,670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment EXWS1: EXWS1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment EXWS2: EXWS2

Runoff = 1.3 cfs @ 12.19 hrs, Volume= 5,126 cf, Depth= 3.61"

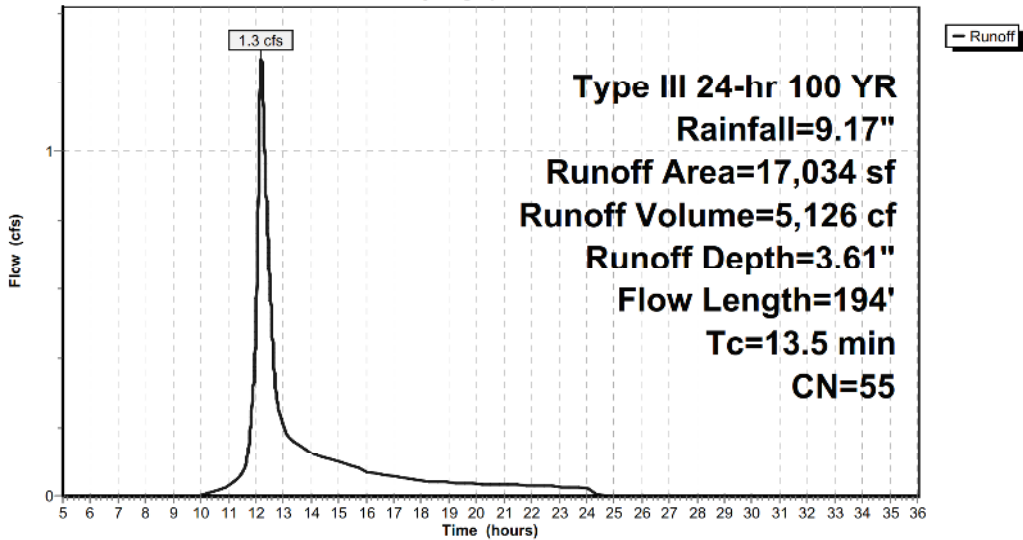
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
17,034	55	Woods, Good, HSG B
17,034		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment EXWS2: EXWS2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXWS3: EXWS3

Runoff = 16.0 cfs @ 12.47 hrs, Volume= 92,719 cf, Depth= 4.36"

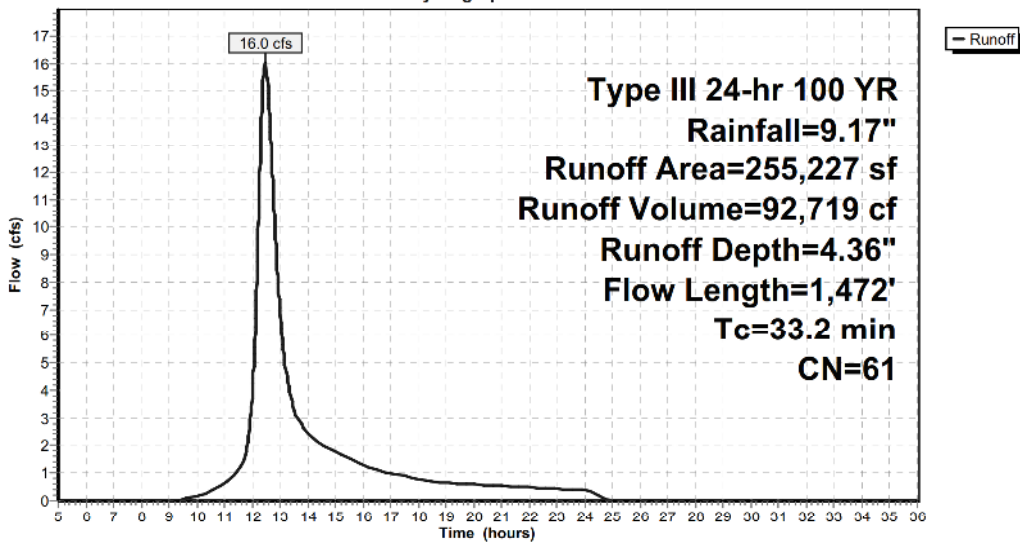
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
81,245	55	Woods, Good, HSG B
162,736	61	>75% Grass cover, Good, HSG B
10,397	98	Paved parking, HSG B
849	61	>75% Grass cover, Good, HSG B
255,227	61	Weighted Average
244,830		95.93% Pervious Area
10,397		4.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0430	0.12		Sheet Flow, Woods: light underbrush n= 0.400 P2= 3.43"
6.2	529	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.9	793	0.1030	2.25		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.2	1,472	Total			

Subcatchment EXWS3: EXWS3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXWS4: EXWS4

Runoff = 50.9 cfs @ 12.35 hrs, Volume= 253,502 cf, Depth= 4.23"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
1,090	61	>75% Grass cover, Good, HSG B
31,029	98	Paved parking, HSG B
359,184	55	Woods, Good, HSG B
314,447	61	>75% Grass cover, Good, HSG B
8,523	98	Paved parking, HSG B
271	61	>75% Grass cover, Good, HSG B
118	98	Paved parking, HSG B
3,740	61	>75% Grass cover, Good, HSG B
718,402	60	Weighted Average
678,732		94.48% Pervious Area
39,670		5.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0620	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.5	48	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	74	0.1350	1.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.3	109	0.0730	1.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	172	0.1160	1.70		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	56	0.2850	2.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	59	0.1530	1.96		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.5	91	0.3840	3.10		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.7	759	Total			

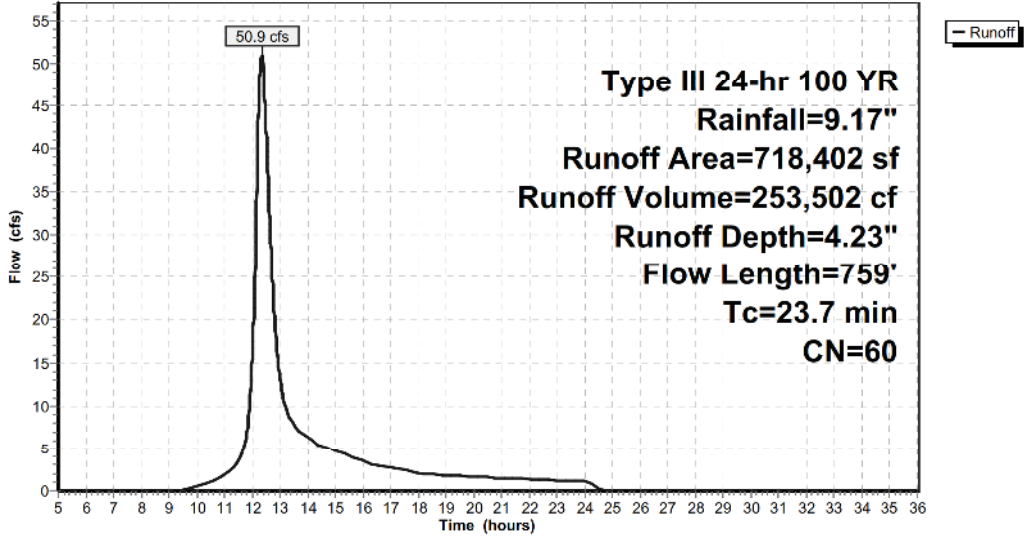
EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment EXWS4: EXWS4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXW55A: EXW55A

Runoff = 19.3 cfs @ 12.17 hrs, Volume= 75,008 cf, Depth= 3.61"

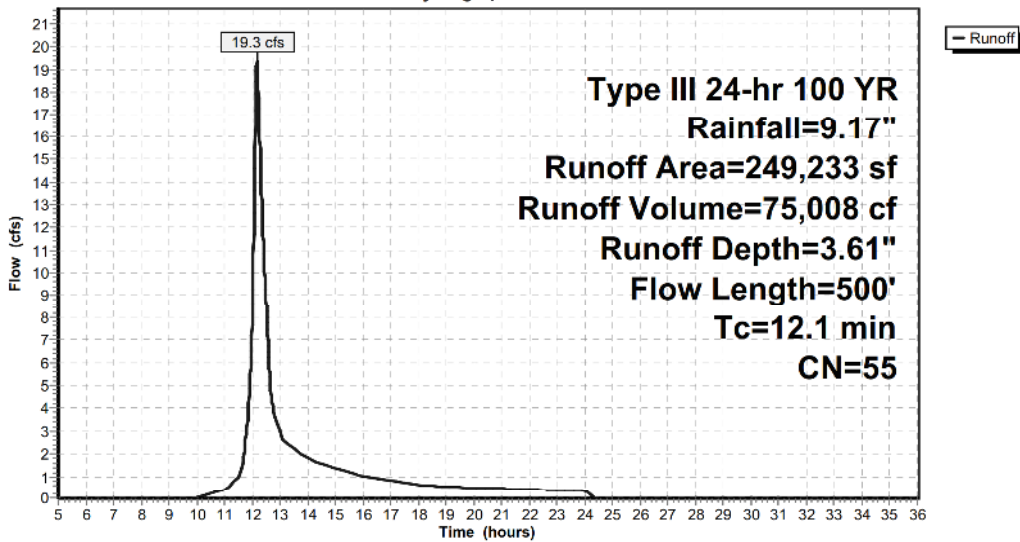
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
87,490	55	Woods, Good, HSG B
50,967	55	Woods, Good, HSG B
22,785	55	Woods, Good, HSG B
87,991	55	Woods, Good, HSG B
249,233	55	Weighted Average
249,233		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.1	500				Total

Subcatchment EXW55A: EXW55A

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXWS5B: EXWS5B

Runoff = 23.5 cfs @ 12.15 hrs, Volume= 85,106 cf, Depth= 5.61"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
49,949	98	Paved parking, HSG B
1,904	61	>75% Grass cover, Good, HSG B
7,404	61	>75% Grass cover, Good, HSG B
122,789	61	>75% Grass cover, Good, HSG B
182,046	71	Weighted Average
132,097		72.56% Pervious Area
49,949		27.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0279	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.40	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
10.6	641				Total

EAGLE RIDGE-EXISTING

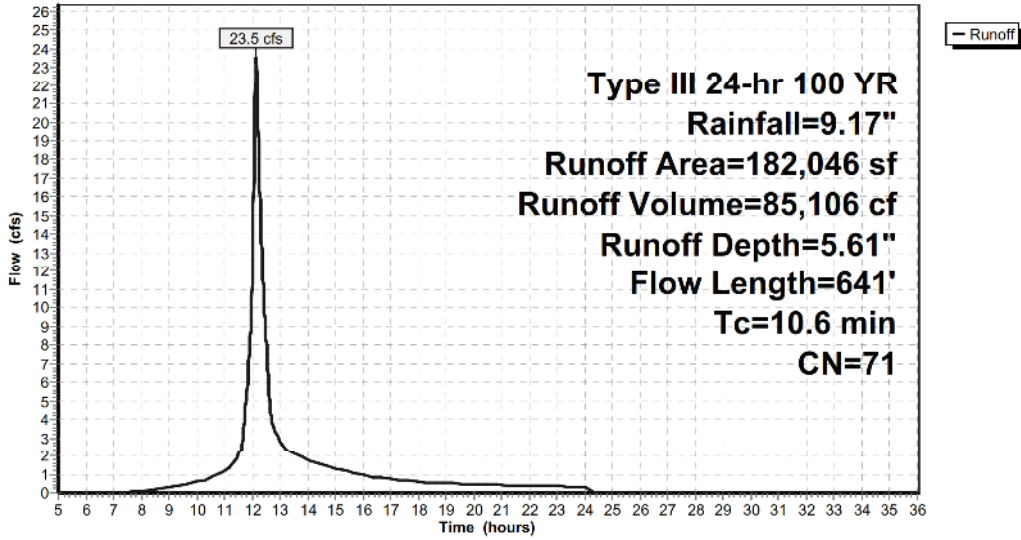
Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment EXWS5B: EXWS5B

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXWS6: EXWS6

Runoff = 36.9 cfs @ 12.09 hrs, Volume= 114,372 cf, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
30,242	61	>75% Grass cover, Good, HSG B
150,793	61	>75% Grass cover, Good, HSG B
4,924	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
795	61	>75% Grass cover, Good, HSG B
41,631	98	Paved parking, HSG B
2,635	61	>75% Grass cover, Good, HSG B
7,567	61	>75% Grass cover, Good, HSG B
15,787	98	Paved parking, HSG B
1,191	61	>75% Grass cover, Good, HSG B
256,054	69	Weighted Average
198,636		77.58% Pervious Area
57,418		22.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.58	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.41	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.85	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.50	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

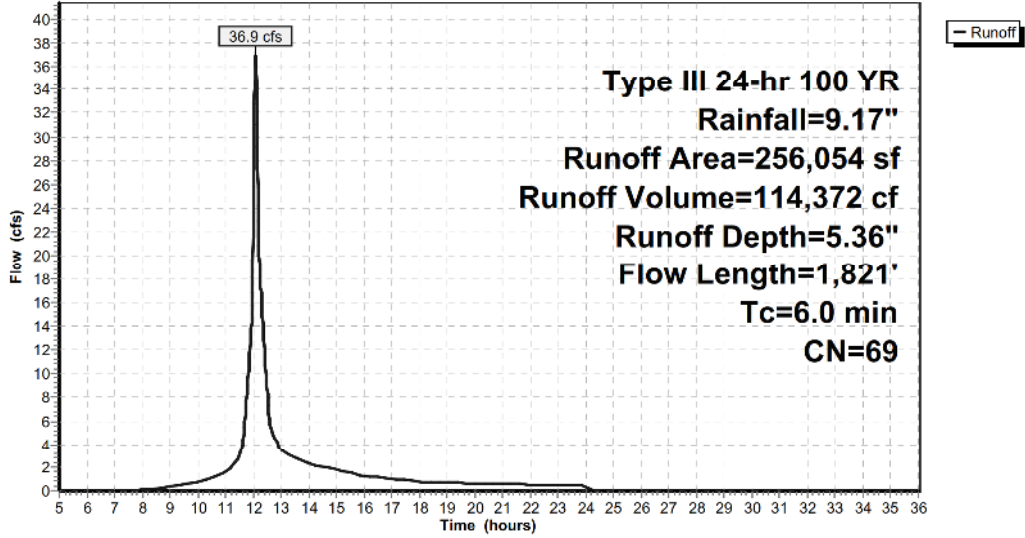
EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment EXWS6: EXWS6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment EXWS7: EXWS7

Runoff = 13.1 cfs @ 12.07 hrs, Volume= 38,604 cf, Depth= 4.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
5,433	61	>75% Grass cover, Good, HSG B
14,290	55	Woods, Good, HSG B
14,905	61	>75% Grass cover, Good, HSG B
29,839	55	Woods, Good, HSG B
12,976	61	>75% Grass cover, Good, HSG B
4,785	98	Paved parking, HSG B
2,157	61	>75% Grass cover, Good, HSG B
913	61	>75% Grass cover, Good, HSG B
989	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
9,315	98	Paved parking, HSG B
97,844	64	Weighted Average
83,744		85.59% Pervious Area
14,100		14.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.70	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706				Total

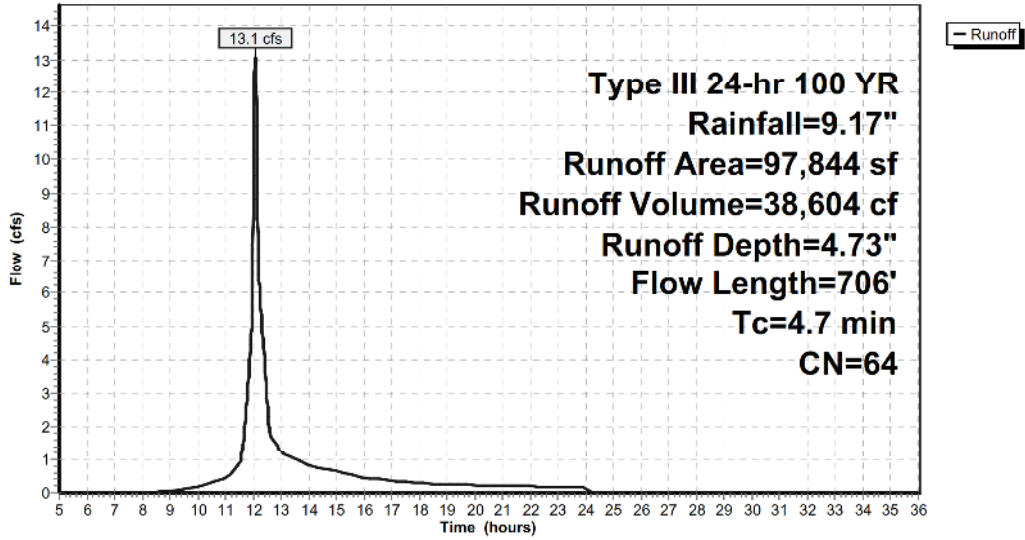
EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment EXWS7: EXWS7

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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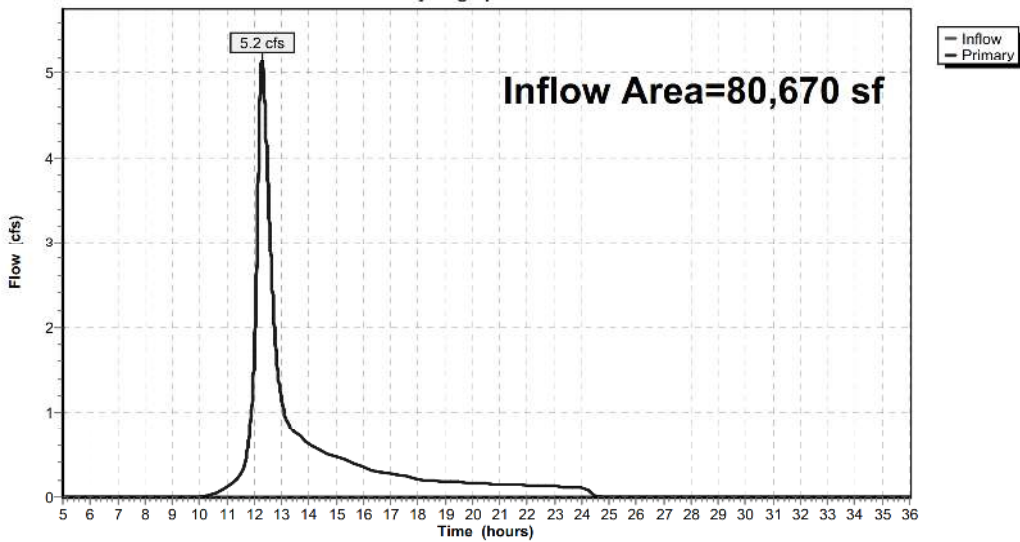
Summary for Link EXDP1: EXDP1

Inflow Area = 80,670 sf, 0.00% Impervious, Inflow Depth = 3.61" for 100 YR event
Inflow = 5.2 cfs @ 12.29 hrs, Volume= 24,278 cf
Primary = 5.2 cfs @ 12.29 hrs, Volume= 24,278 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP1: EXDP1

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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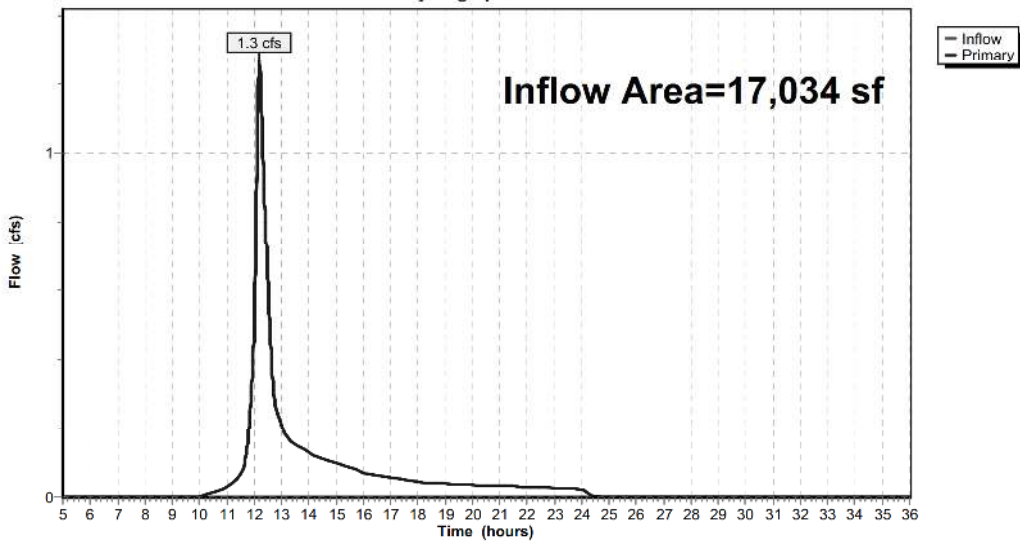
Summary for Link EXDP2: EXDP2

Inflow Area = 17,034 sf, 0.00% Impervious, Inflow Depth = 3.61" for 100 YR event
Inflow = 1.3 cfs @ 12.19 hrs, Volume= 5,126 cf
Primary = 1.3 cfs @ 12.19 hrs, Volume= 5,126 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP2: EXDP2

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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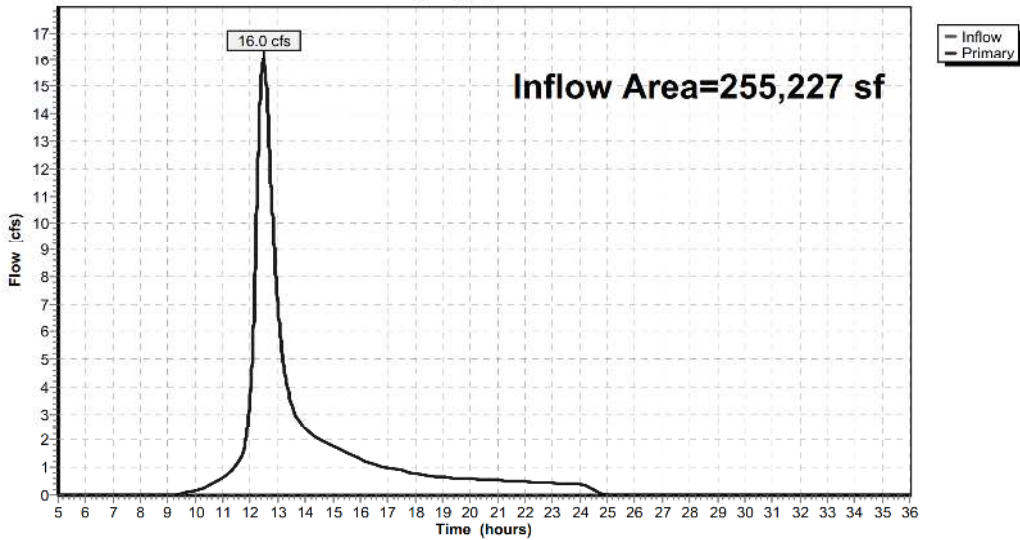
Summary for Link EXDP3: EXDP3

Inflow Area = 255,227 sf, 4.07% Impervious, Inflow Depth = 4.36" for 100 YR event
Inflow = 16.0 cfs @ 12.47 hrs, Volume= 92,719 cf
Primary = 16.0 cfs @ 12.47 hrs, Volume= 92,719 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP3: EXDP3

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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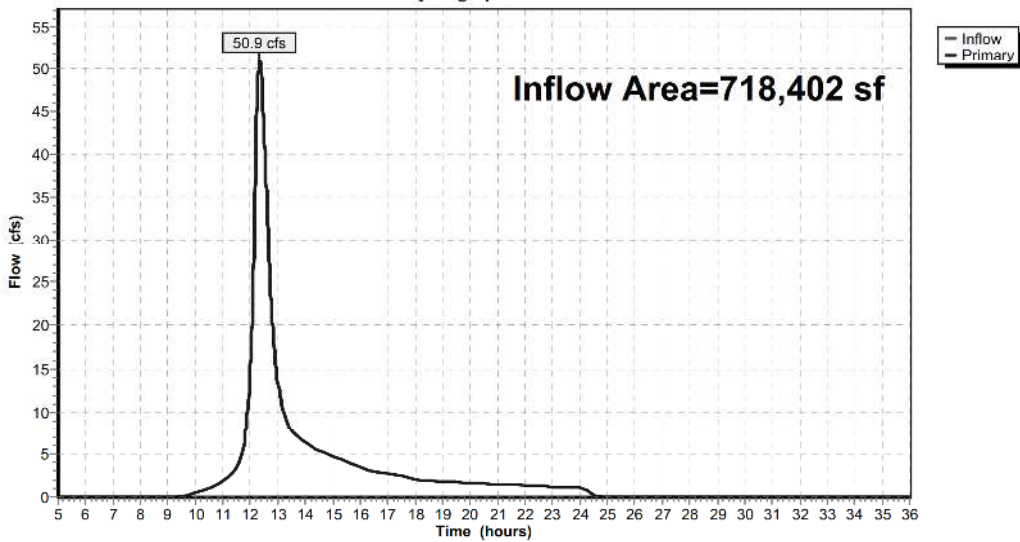
Summary for Link EXDP4: EXDP4

Inflow Area = 718,402 sf, 5.52% Impervious, Inflow Depth = 4.23" for 100 YR event
Inflow = 50.9 cfs @ 12.35 hrs, Volume= 253,502 cf
Primary = 50.9 cfs @ 12.35 hrs, Volume= 253,502 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP4: EXDP4

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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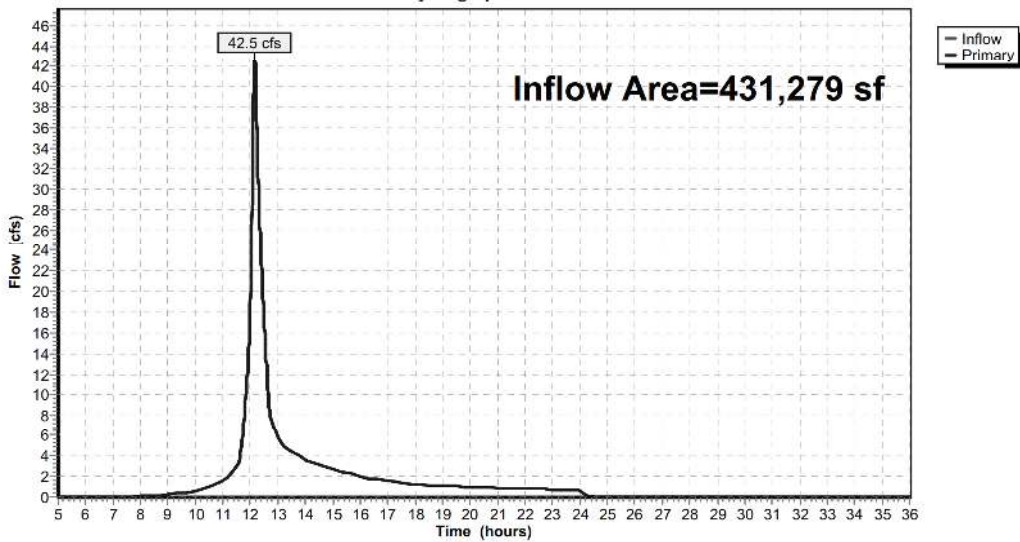
Summary for Link EXDP5: EXDP5

Inflow Area = 431,279 sf, 11.58% Impervious, Inflow Depth = 4.46" for 100 YR event
Inflow = 42.5 cfs @ 12.16 hrs, Volume= 160,113 cf
Primary = 42.5 cfs @ 12.16 hrs, Volume= 160,113 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP5: EXDP5

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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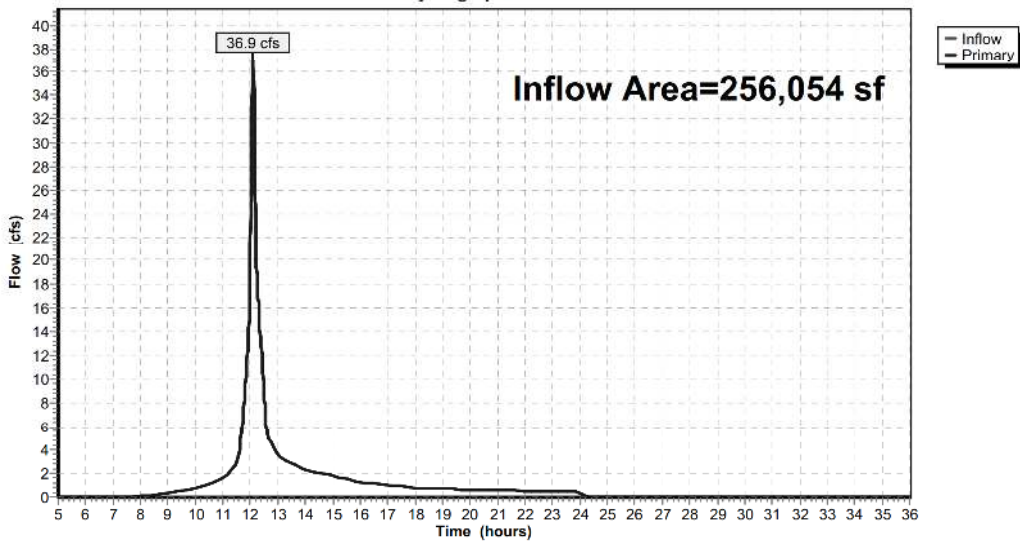
Summary for Link EXDP6: EXDP6

Inflow Area = 256,054 sf, 22.42% Impervious, Inflow Depth = 5.36" for 100 YR event
Inflow = 36.9 cfs @ 12.09 hrs, Volume= 114,372 cf
Primary = 36.9 cfs @ 12.09 hrs, Volume= 114,372 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP6: EXDP6

Hydrograph



EAGLE RIDGE-EXISTING

Type III 24-hr 100 YR Rainfall=9.17"

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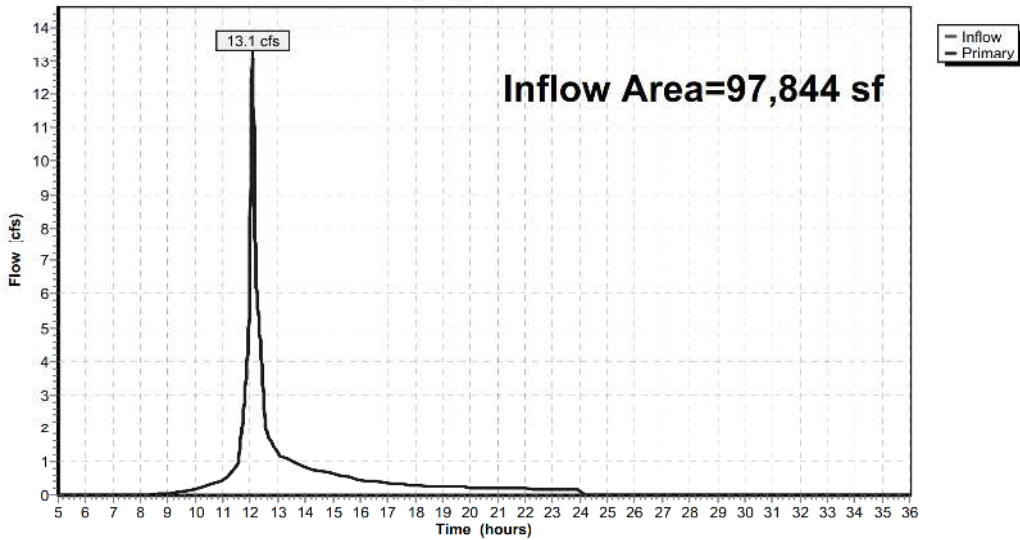
Summary for Link EXDP7: EXDP7

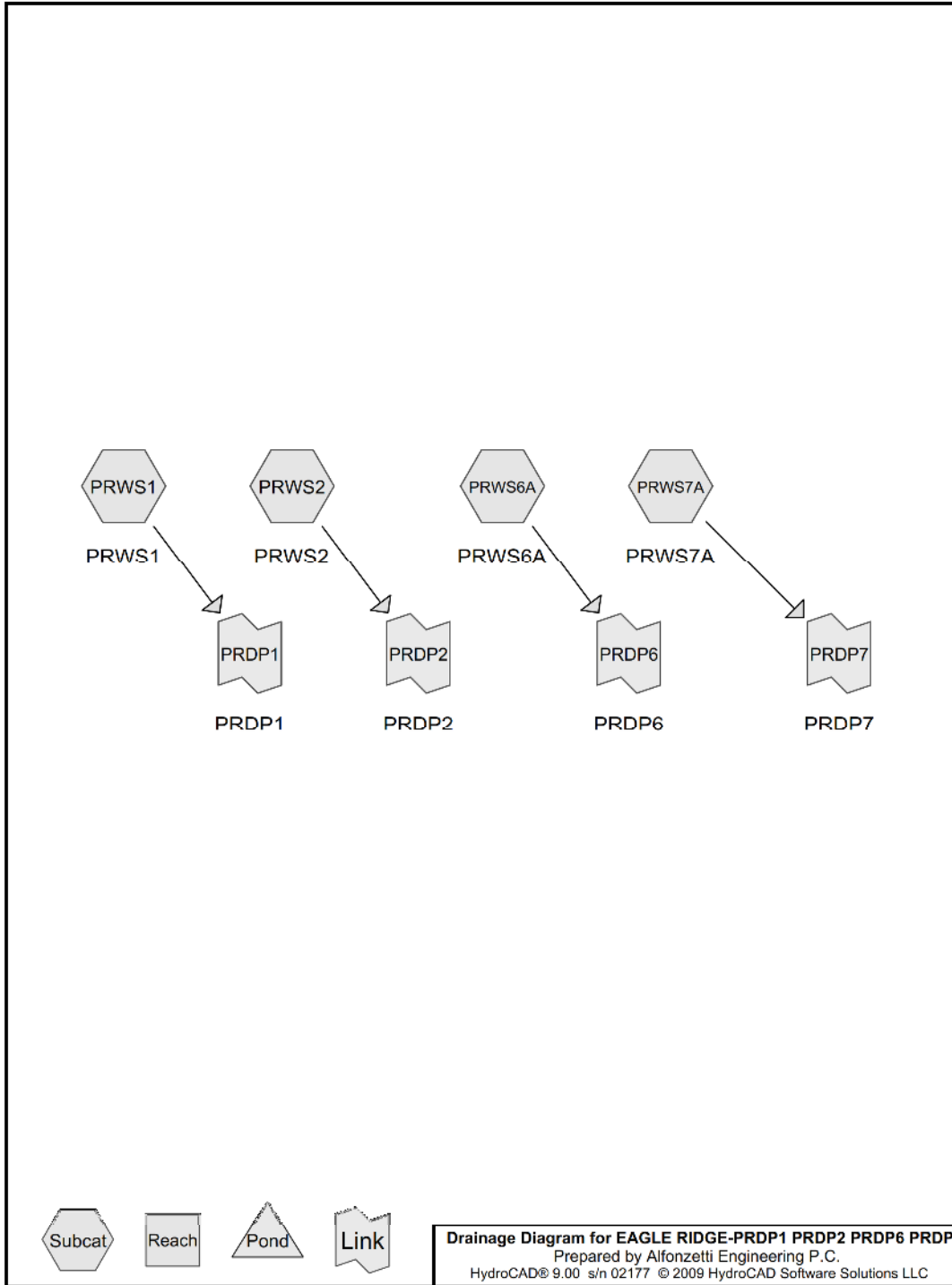
Inflow Area = 97,844 sf, 14.41% Impervious, Inflow Depth = 4.73" for 100 YR event
Inflow = 13.1 cfs @ 12.07 hrs, Volume= 38,604 cf
Primary = 13.1 cfs @ 12.07 hrs, Volume= 38,604 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.01 hrs

Link EXDP7: EXDP7

Hydrograph





EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.1 cfs 972 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.0 cfs 207 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=0.49" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=1.5 cfs 6,003 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=0.26" Flow Length=706' Tc=4.7 min CN=60 Runoff=0.2 cfs 1,576 cf
Link PRDP1: PRDP1	Inflow=0.1 cfs 972 cf Primary=0.1 cfs 972 cf
Link PRDP2: PRDP2	Inflow=0.0 cfs 207 cf Primary=0.0 cfs 207 cf
Link PRDP6: PRDP6	Inflow=1.5 cfs 6,003 cf Primary=1.5 cfs 6,003 cf
Link PRDP7: PRDP7	Inflow=0.2 cfs 1,576 cf Primary=0.2 cfs 1,576 cf

Total Runoff Area = 316,506 sf Runoff Volume = 8,757 cf Average Runoff Depth = 0.33"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 0.1 cfs @ 12.64 hrs, Volume= 972 cf, Depth= 0.14"

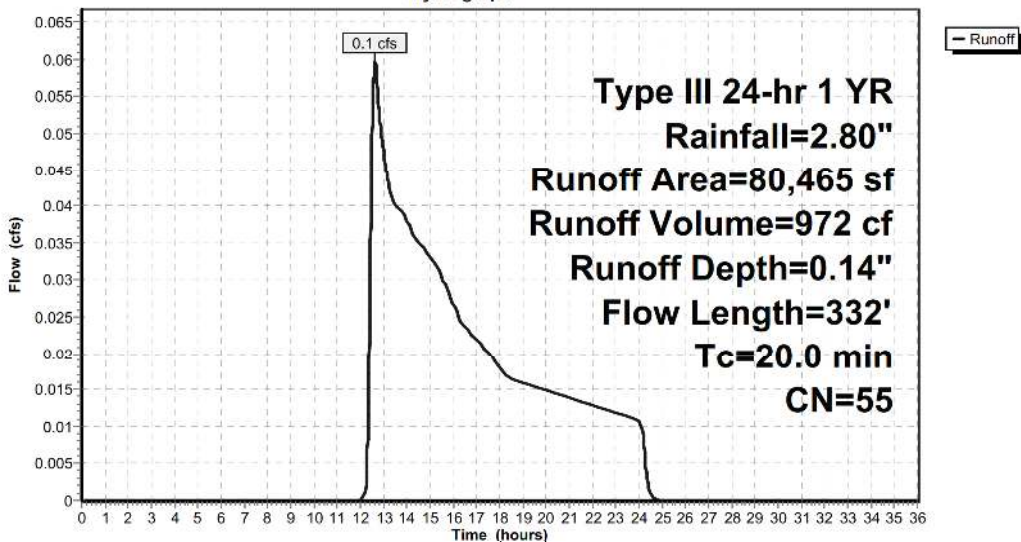
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.0 cfs @ 12.53 hrs, Volume= 207 cf, Depth= 0.14"

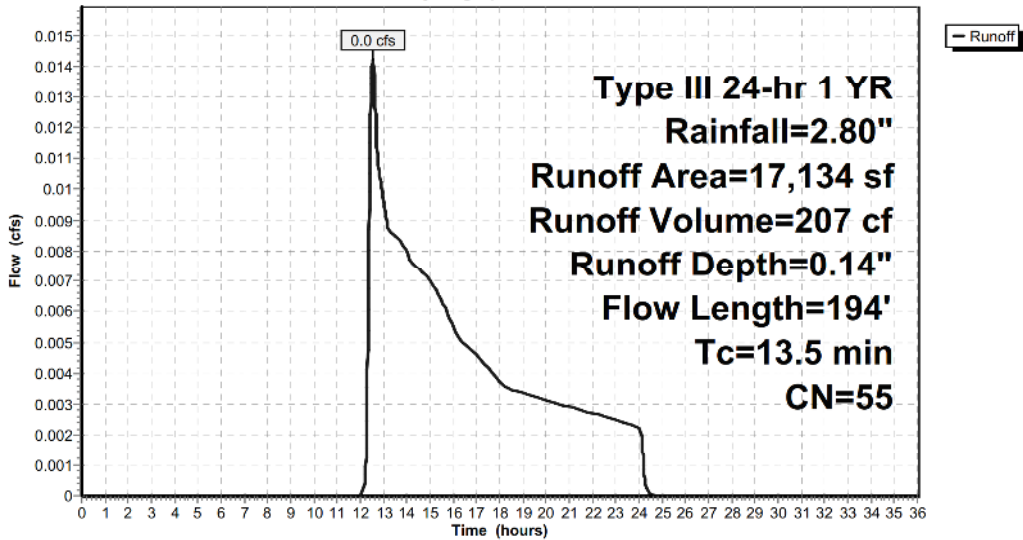
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 1.5 cfs @ 12.11 hrs, Volume= 6,003 cf, Depth= 0.49"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

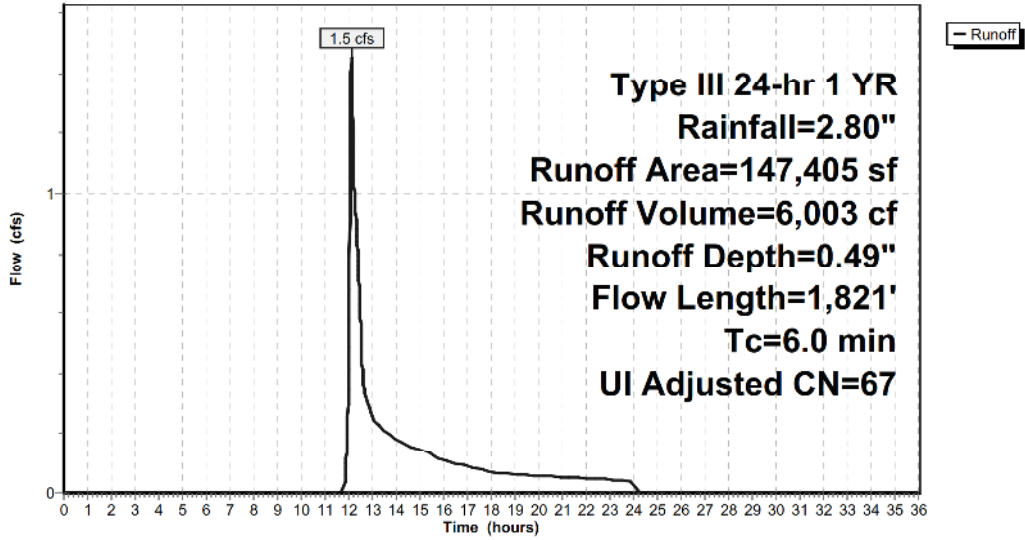
Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 0.2 cfs @ 12.27 hrs, Volume= 1,576 cf, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

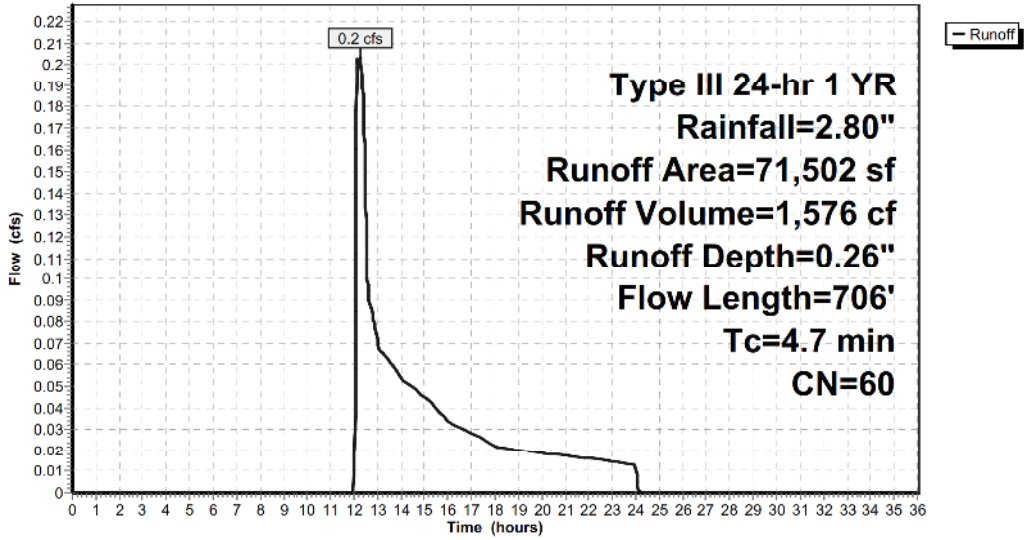
Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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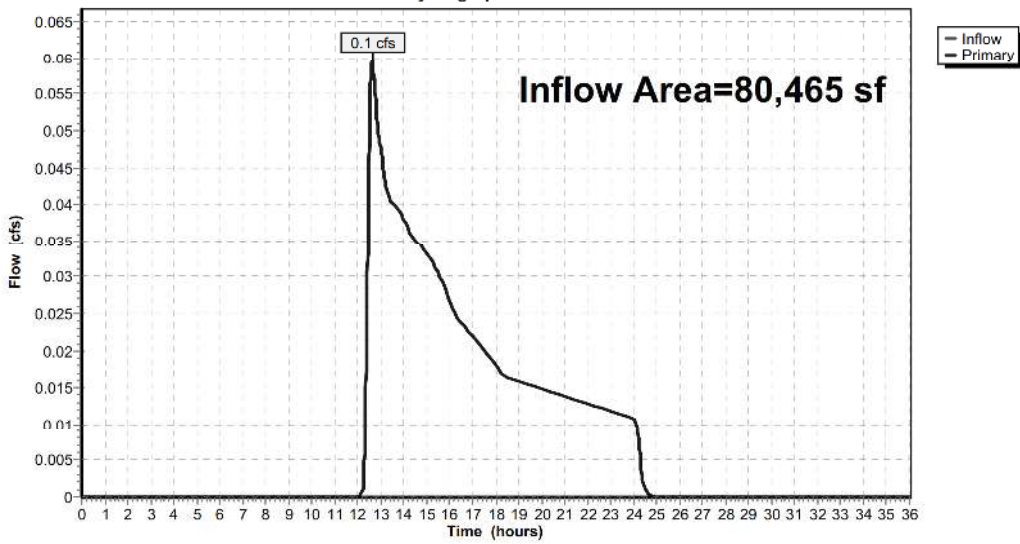
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 0.14" for 1 YR event
Inflow = 0.1 cfs @ 12.64 hrs, Volume= 972 cf
Primary = 0.1 cfs @ 12.64 hrs, Volume= 972 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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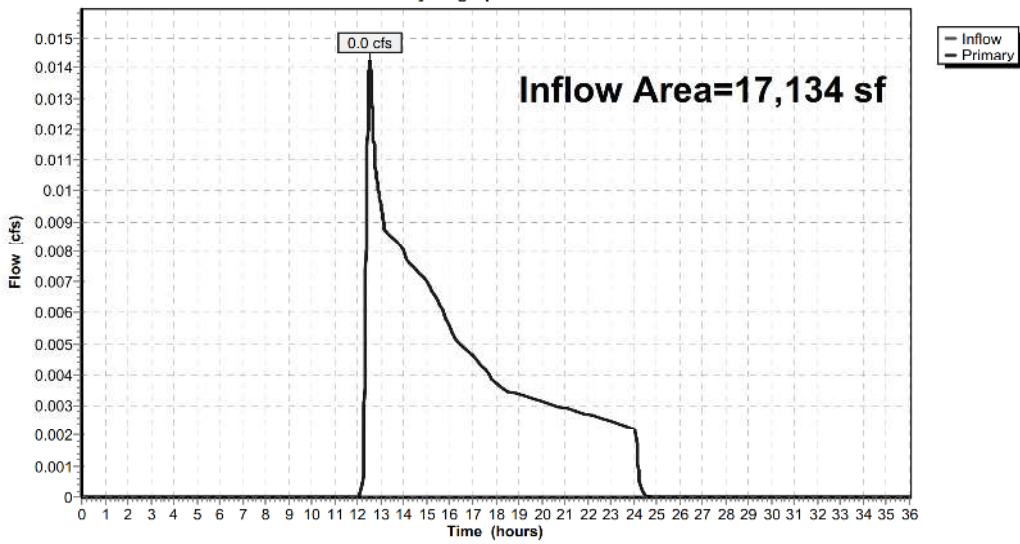
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 0.14" for 1 YR event
Inflow = 0.0 cfs @ 12.53 hrs, Volume= 207 cf
Primary = 0.0 cfs @ 12.53 hrs, Volume= 207 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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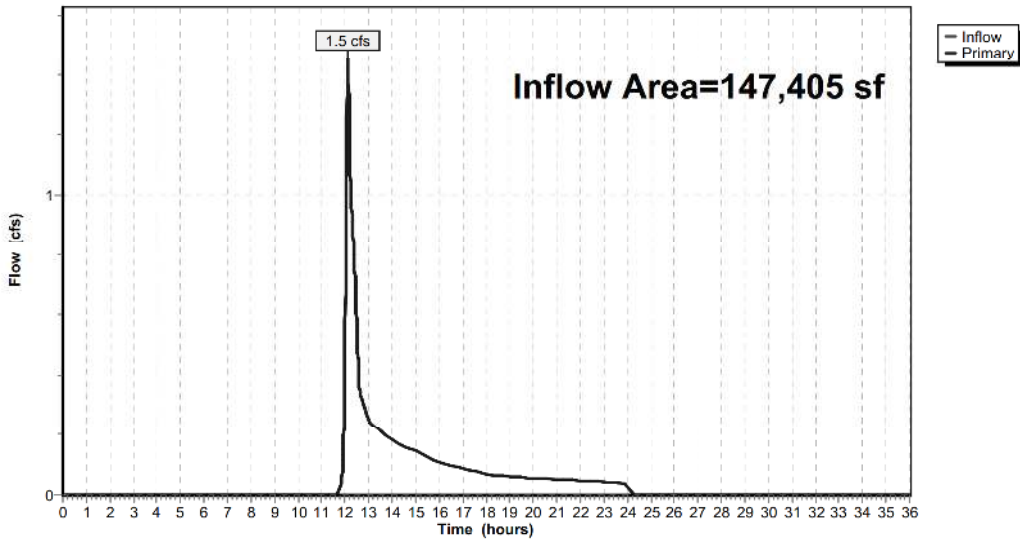
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 0.49" for 1 YR event
Inflow = 1.5 cfs @ 12.11 hrs, Volume= 6,003 cf
Primary = 1.5 cfs @ 12.11 hrs, Volume= 6,003 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 1 YR Rainfall=2.80"

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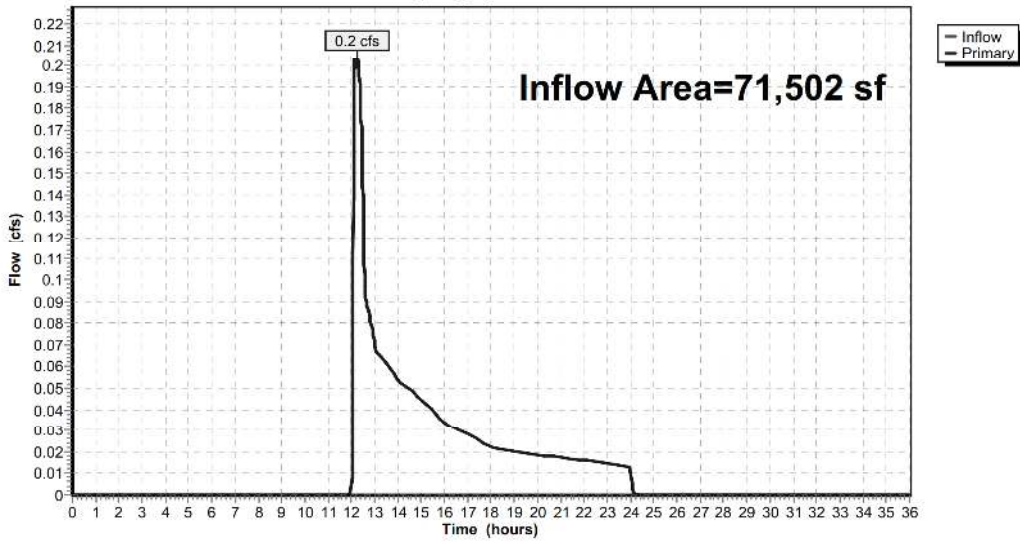
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 0.26" for 1 YR event
Inflow = 0.2 cfs @ 12.27 hrs, Volume= 1,576 cf
Primary = 0.2 cfs @ 12.27 hrs, Volume= 1,576 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.2 cfs 2,163 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.1 cfs 460 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=0.81" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=2.8 cfs 9,963 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=0.50" Flow Length=706' Tc=4.7 min CN=60 Runoff=0.7 cfs 2,989 cf
Link PRDP1: PRDP1	Inflow=0.2 cfs 2,163 cf Primary=0.2 cfs 2,163 cf
Link PRDP2: PRDP2	Inflow=0.1 cfs 460 cf Primary=0.1 cfs 460 cf
Link PRDP6: PRDP6	Inflow=2.8 cfs 9,963 cf Primary=2.8 cfs 9,963 cf
Link PRDP7: PRDP7	Inflow=0.7 cfs 2,989 cf Primary=0.7 cfs 2,989 cf

Total Runoff Area = 316,506 sf Runoff Volume = 15,575 cf Average Runoff Depth = 0.59"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 0.2 cfs @ 12.51 hrs, Volume= 2,163 cf, Depth= 0.32"

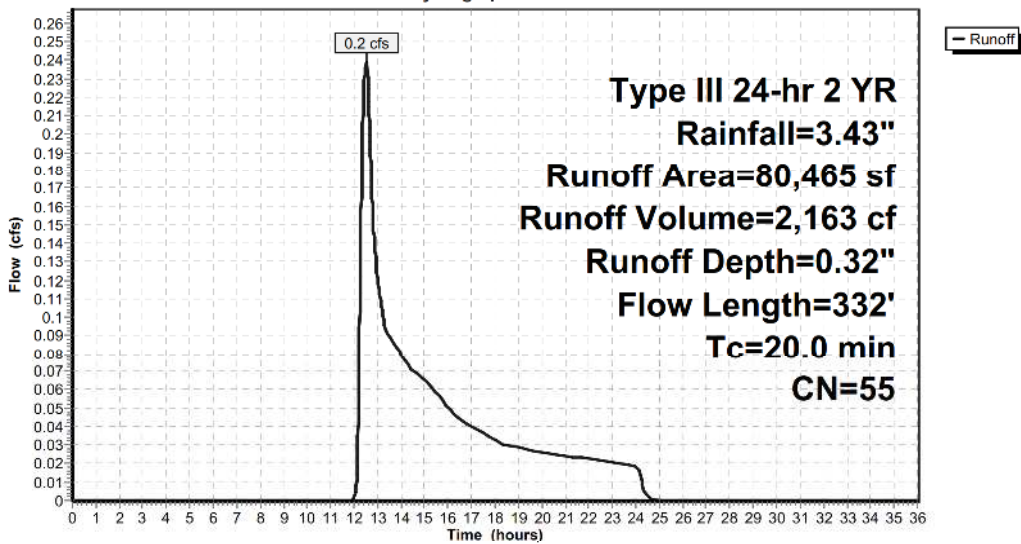
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.1 cfs @ 12.41 hrs, Volume= 460 cf, Depth= 0.32"

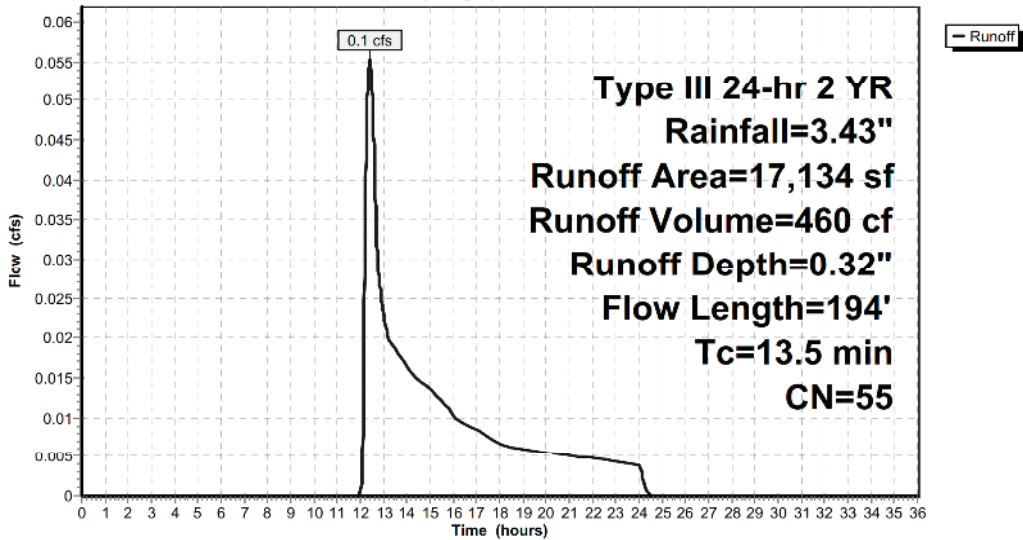
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 2.8 cfs @ 12.10 hrs, Volume= 9,963 cf, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

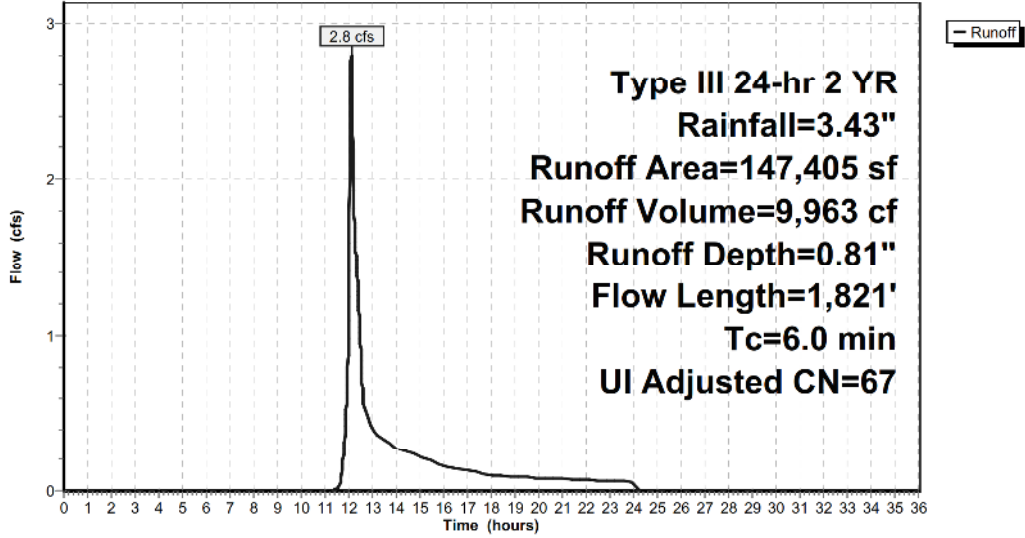
Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 0.7 cfs @ 12.10 hrs, Volume= 2,989 cf, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

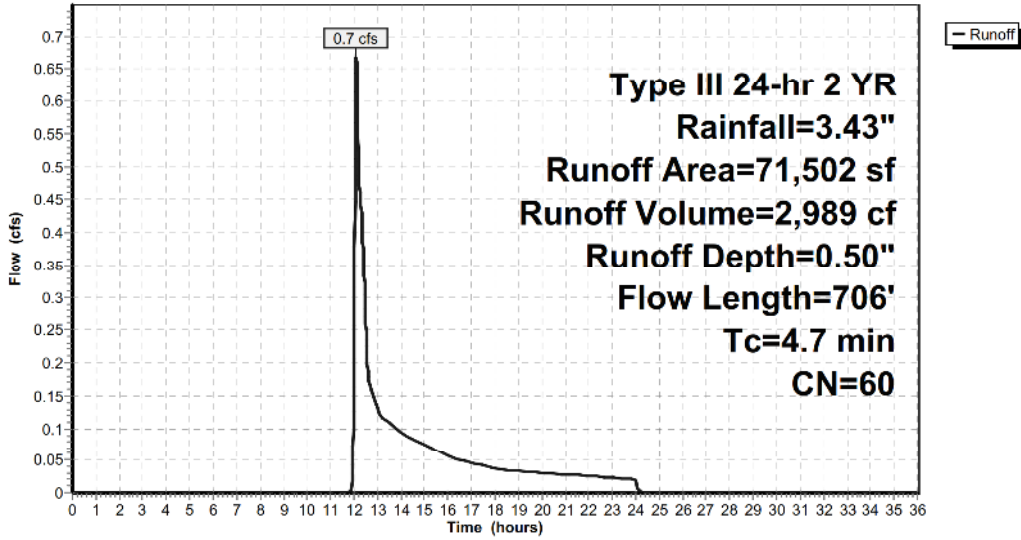
Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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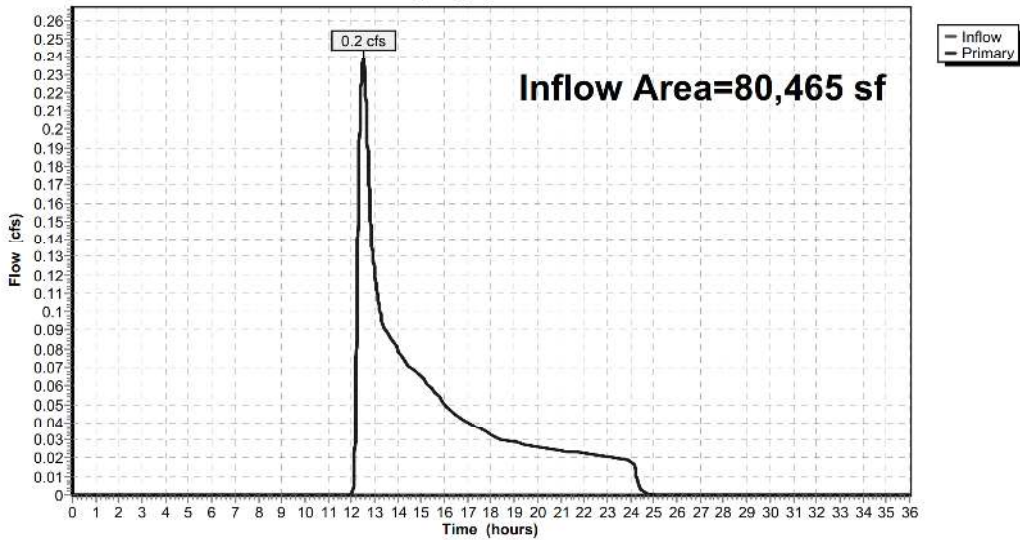
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 0.32" for 2 YR event
Inflow = 0.2 cfs @ 12.51 hrs, Volume= 2,163 cf
Primary = 0.2 cfs @ 12.51 hrs, Volume= 2,163 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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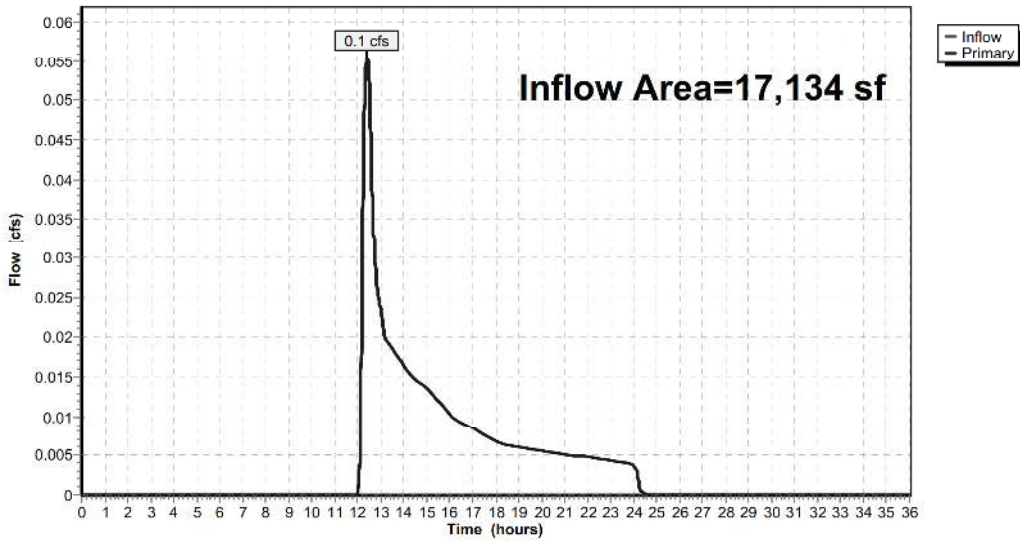
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 0.32" for 2 YR event
Inflow = 0.1 cfs @ 12.41 hrs, Volume= 460 cf
Primary = 0.1 cfs @ 12.41 hrs, Volume= 460 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

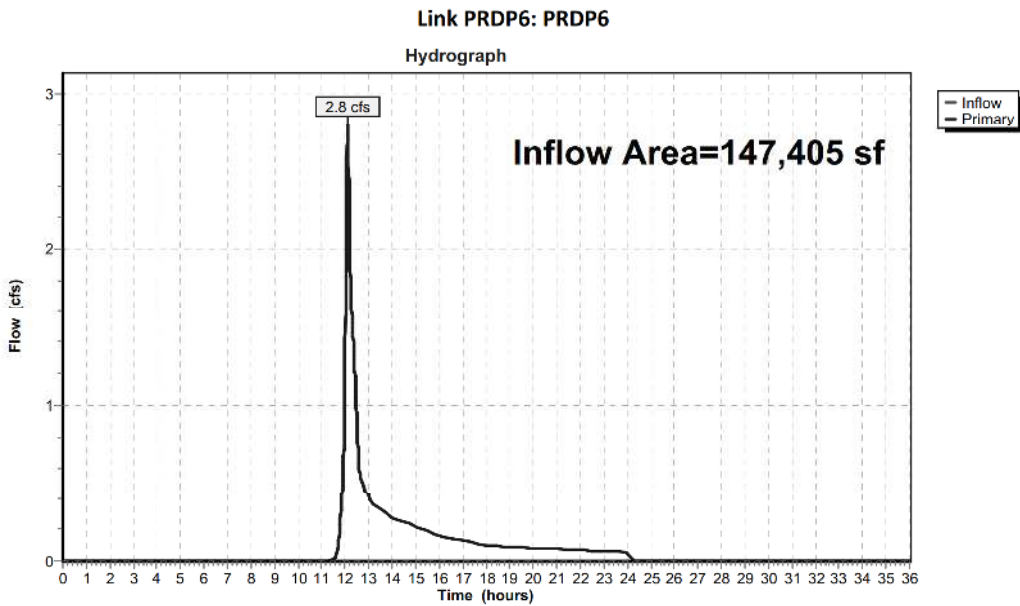
Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 0.81" for 2 YR event
Inflow = 2.8 cfs @ 12.10 hrs, Volume= 9,963 cf
Primary = 2.8 cfs @ 12.10 hrs, Volume= 9,963 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 2 YR Rainfall=3.43"

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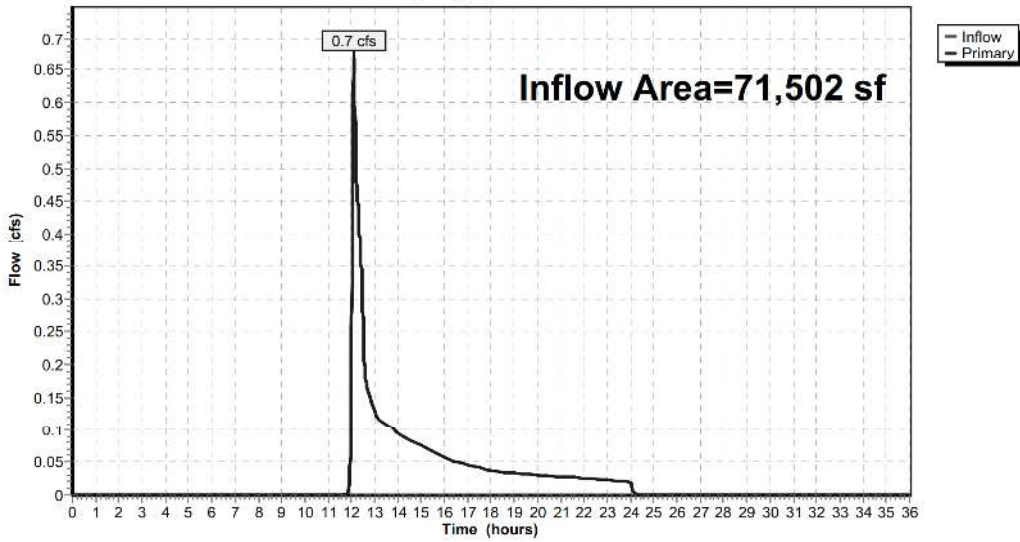
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 0.50" for 2 YR event
Inflow = 0.7 cfs @ 12.10 hrs, Volume= 2,989 cf
Primary = 0.7 cfs @ 12.10 hrs, Volume= 2,989 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=332' Tc=20.0 min CN=55 Runoff=0.7 cfs 4,416 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.2 cfs 940 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=1.34" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=5.0 cfs 16,460 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=0.92" Flow Length=706' Tc=4.7 min CN=60 Runoff=1.5 cfs 5,475 cf
Link PRDP1: PRDP1	Inflow=0.7 cfs 4,416 cf Primary=0.7 cfs 4,416 cf
Link PRDP2: PRDP2	Inflow=0.2 cfs 940 cf Primary=0.2 cfs 940 cf
Link PRDP6: PRDP6	Inflow=5.0 cfs 16,460 cf Primary=5.0 cfs 16,460 cf
Link PRDP7: PRDP7	Inflow=1.5 cfs 5,475 cf Primary=1.5 cfs 5,475 cf

Total Runoff Area = 316,506 sf Runoff Volume = 27,290 cf Average Runoff Depth = 1.03"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 0.7 cfs @ 12.38 hrs, Volume= 4,416 cf, Depth= 0.66"

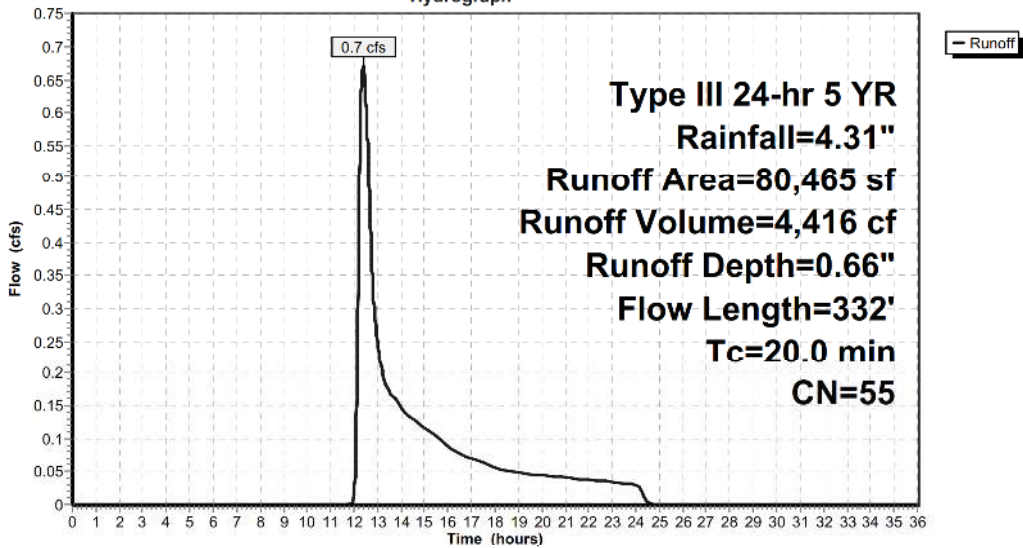
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.2 cfs @ 12.25 hrs, Volume= 940 cf, Depth= 0.66"

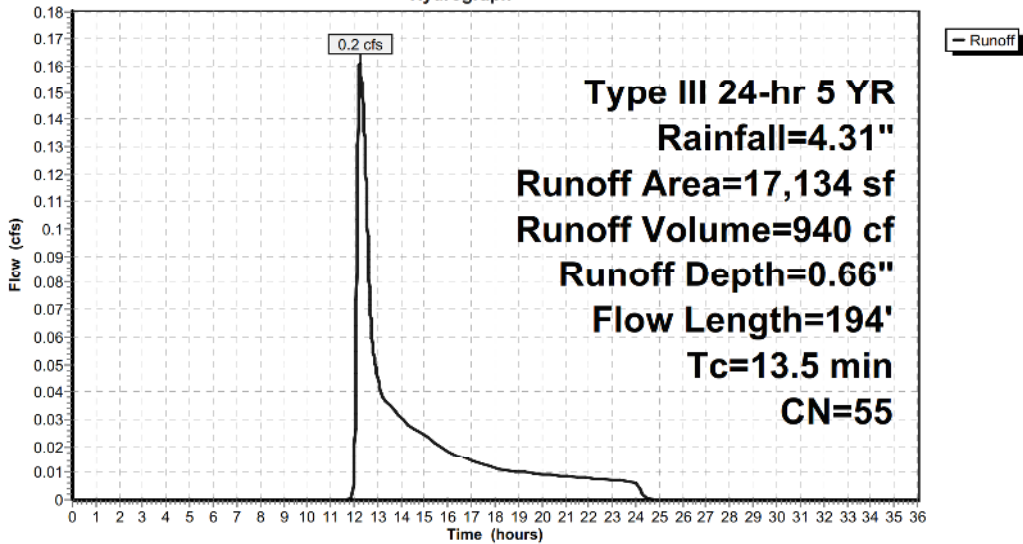
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 5.0 cfs @ 12.10 hrs, Volume= 16,460 cf, Depth= 1.34"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

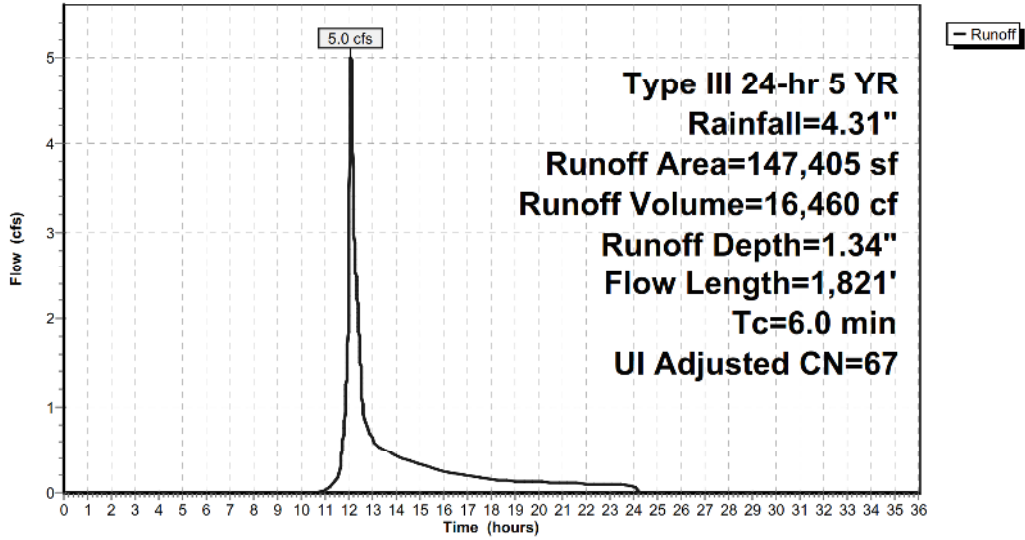
Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 1.5 cfs @ 12.09 hrs, Volume= 5,475 cf, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

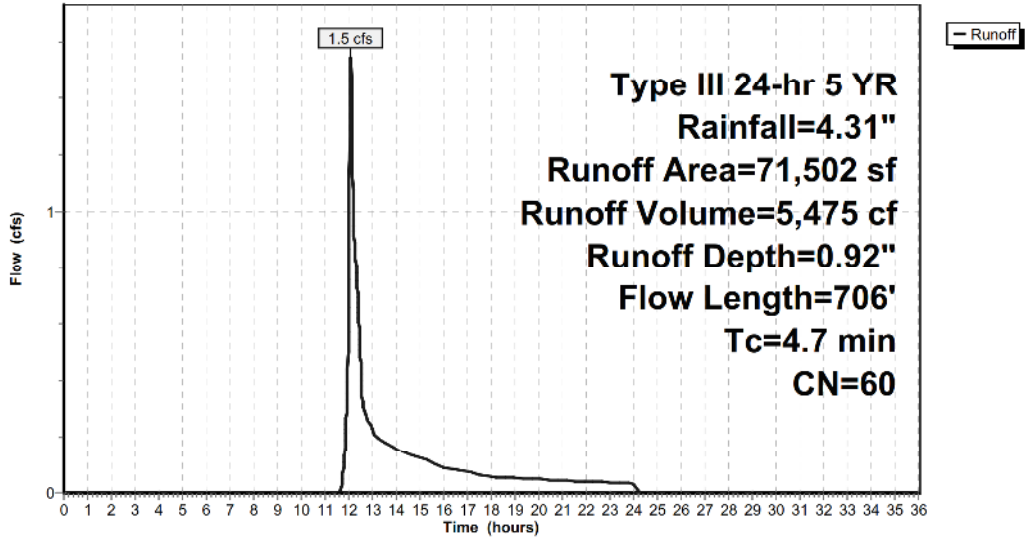
Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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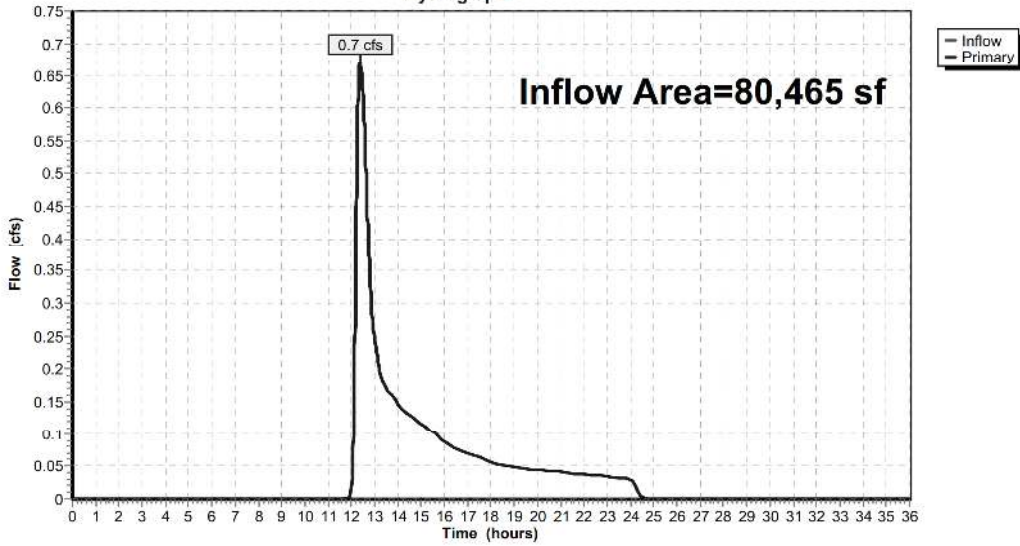
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 0.66" for 5 YR event
Inflow = 0.7 cfs @ 12.38 hrs, Volume= 4,416 cf
Primary = 0.7 cfs @ 12.38 hrs, Volume= 4,416 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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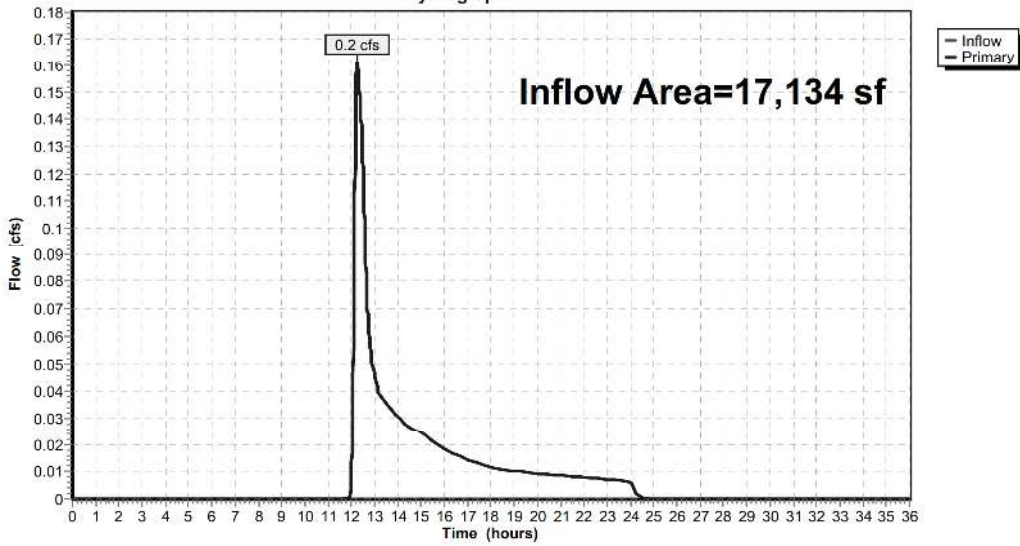
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 0.66" for 5 YR event
Inflow = 0.2 cfs @ 12.25 hrs, Volume= 940 cf
Primary = 0.2 cfs @ 12.25 hrs, Volume= 940 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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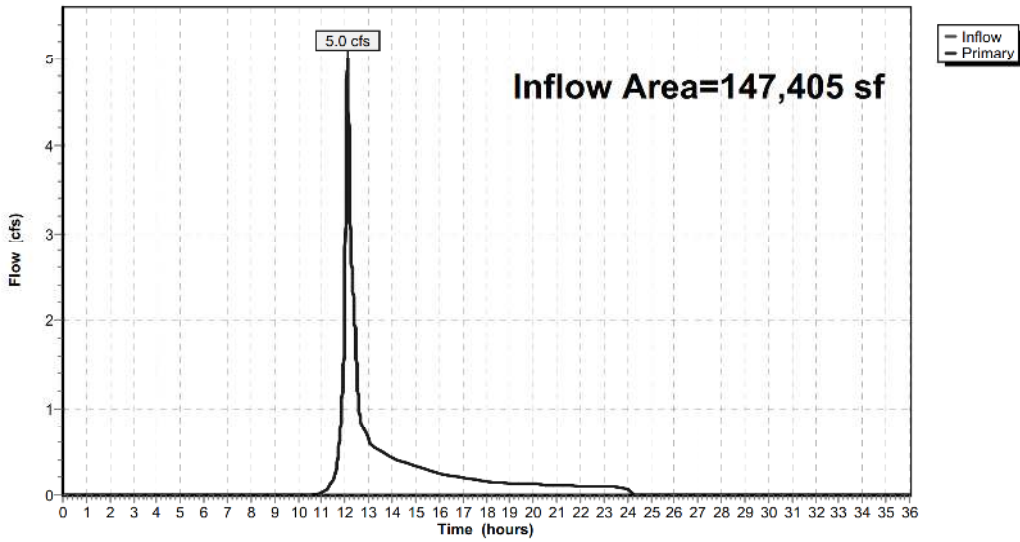
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 1.34" for 5 YR event
Inflow = 5.0 cfs @ 12.10 hrs, Volume= 16,460 cf
Primary = 5.0 cfs @ 12.10 hrs, Volume= 16,460 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 5 YR Rainfall=4.31"

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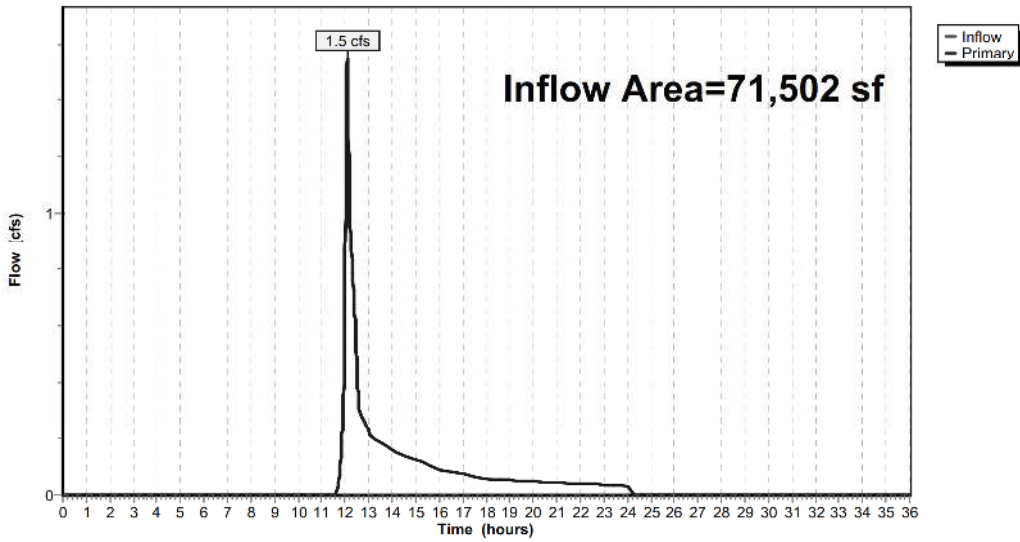
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 0.92" for 5 YR event
Inflow = 1.5 cfs @ 12.09 hrs, Volume= 5,475 cf
Primary = 1.5 cfs @ 12.09 hrs, Volume= 5,475 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=332' Tc=20.0 min CN=55 Runoff=1.2 cfs 7,010 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.3 cfs 1,493 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=1.89" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=7.3 cfs 23,267 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=1.38" Flow Length=706' Tc=4.7 min CN=60 Runoff=2.5 cfs 8,209 cf
Link PRDP1: PRDP1	Inflow=1.2 cfs 7,010 cf Primary=1.2 cfs 7,010 cf
Link PRDP2: PRDP2	Inflow=0.3 cfs 1,493 cf Primary=0.3 cfs 1,493 cf
Link PRDP6: PRDP6	Inflow=7.3 cfs 23,267 cf Primary=7.3 cfs 23,267 cf
Link PRDP7: PRDP7	Inflow=2.5 cfs 8,209 cf Primary=2.5 cfs 8,209 cf

Total Runoff Area = 316,506 sf Runoff Volume = 39,978 cf Average Runoff Depth = 1.52"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 1.2 cfs @ 12.33 hrs, Volume= 7,010 cf, Depth= 1.05"

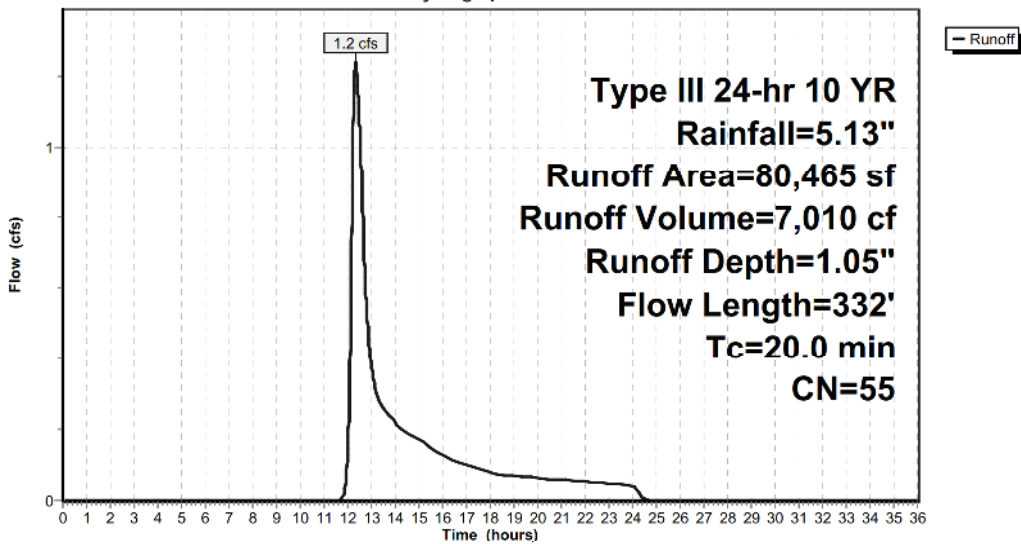
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.3 cfs @ 12.22 hrs, Volume= 1,493 cf, Depth= 1.05"

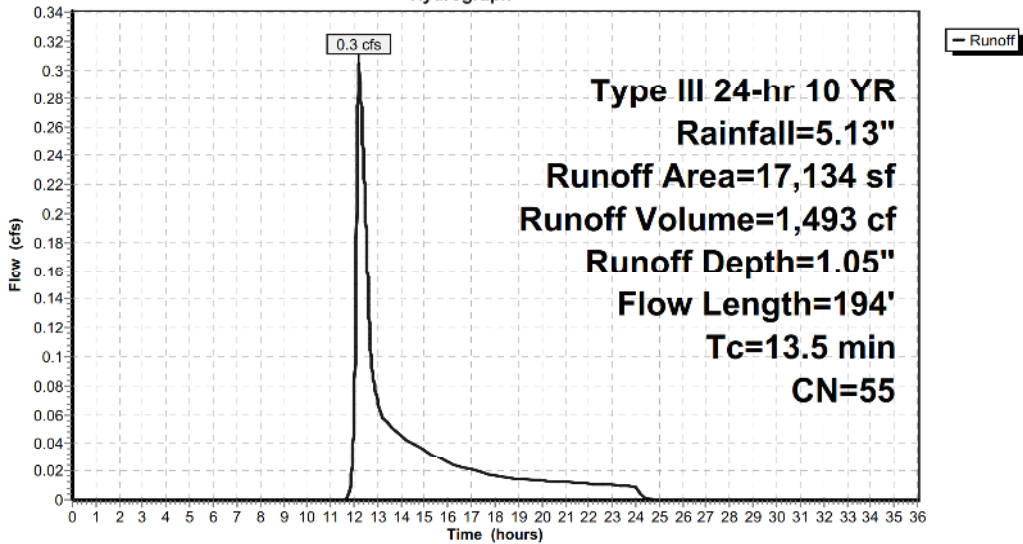
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 7.3 cfs @ 12.09 hrs, Volume= 23,267 cf, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

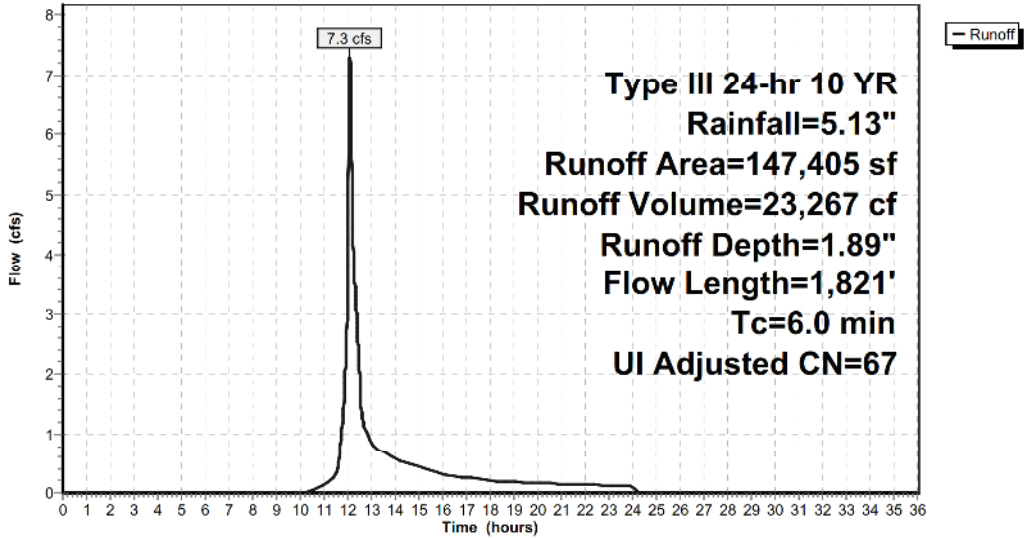
EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 2.5 cfs @ 12.08 hrs, Volume= 8,209 cf, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

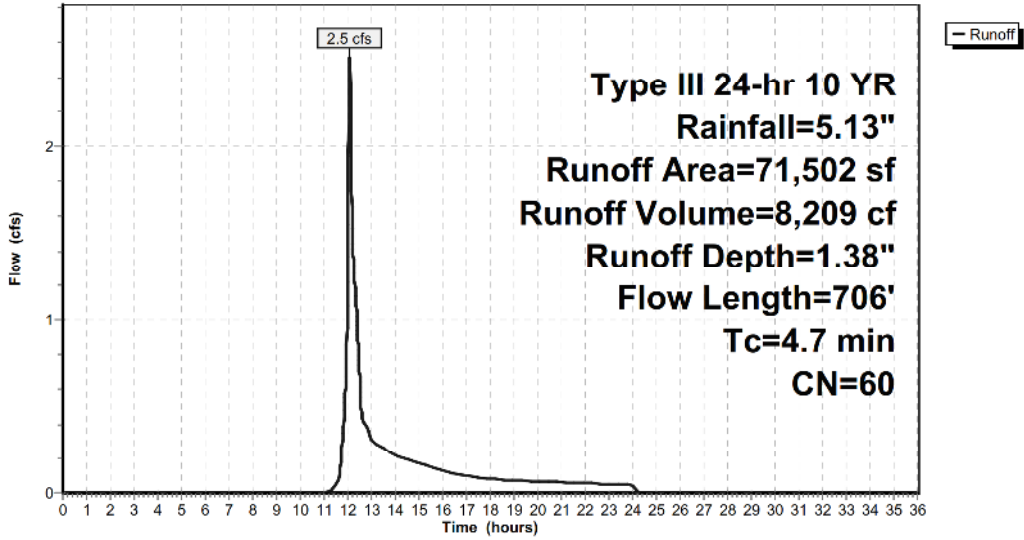
EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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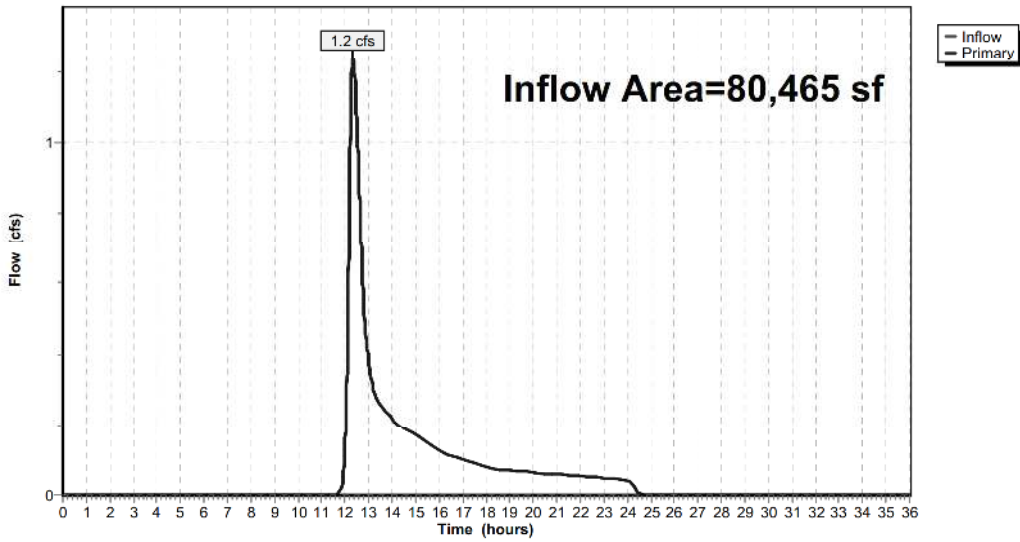
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 1.05" for 10 YR event
Inflow = 1.2 cfs @ 12.33 hrs, Volume= 7,010 cf
Primary = 1.2 cfs @ 12.33 hrs, Volume= 7,010 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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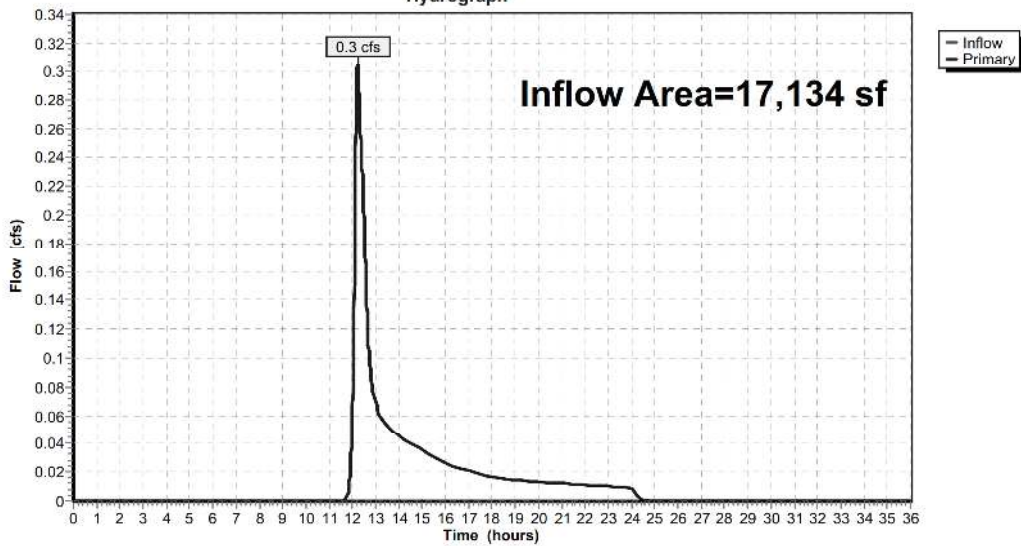
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 1.05" for 10 YR event
Inflow = 0.3 cfs @ 12.22 hrs, Volume= 1,493 cf
Primary = 0.3 cfs @ 12.22 hrs, Volume= 1,493 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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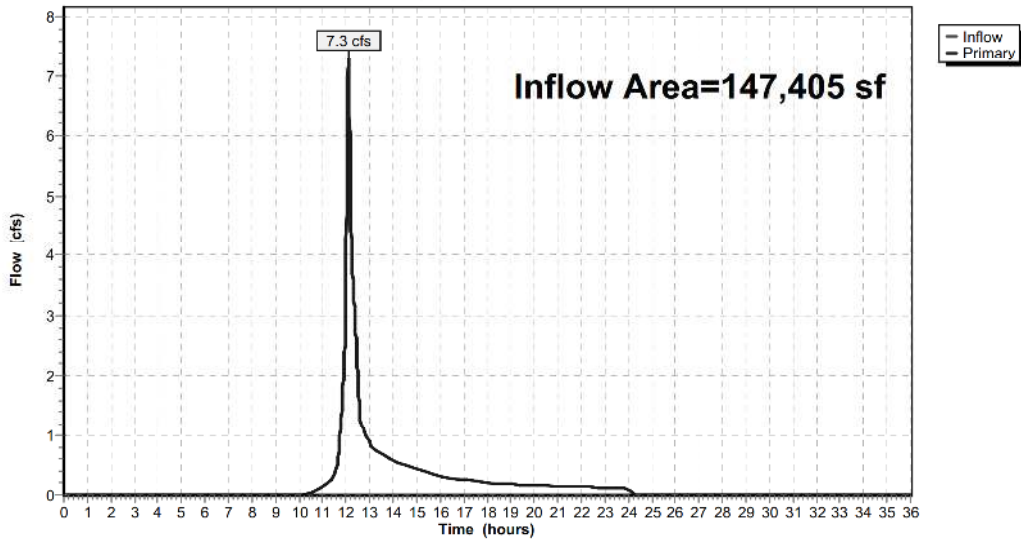
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 1.89" for 10 YR event
Inflow = 7.3 cfs @ 12.09 hrs, Volume= 23,267 cf
Primary = 7.3 cfs @ 12.09 hrs, Volume= 23,267 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 10 YR Rainfall=5.13"

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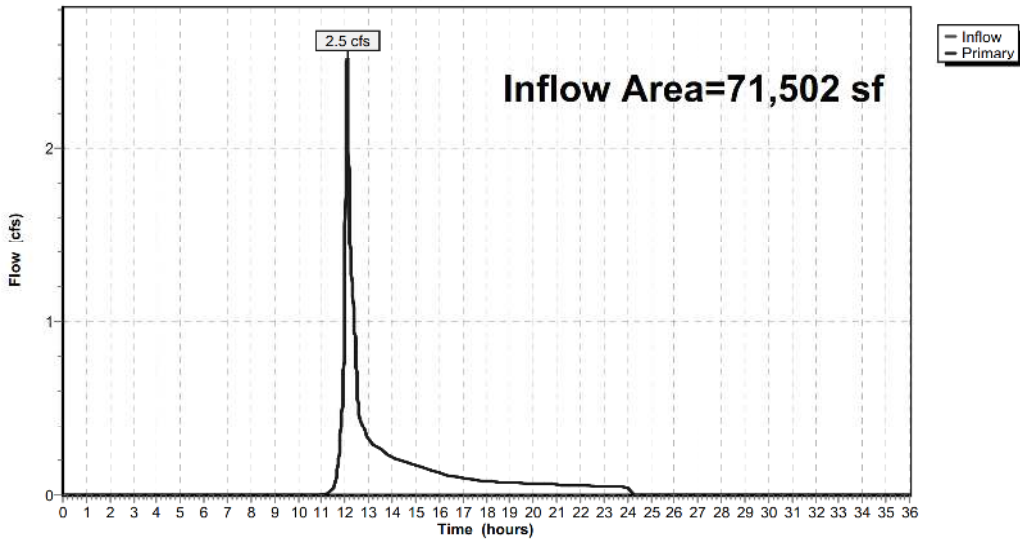
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 1.38" for 10 YR event
Inflow = 2.5 cfs @ 12.08 hrs, Volume= 8,209 cf
Primary = 2.5 cfs @ 12.08 hrs, Volume= 8,209 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=332' Tc=20.0 min CN=55 Runoff=2.4 cfs 11,996 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.6 cfs 2,554 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=2.88" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=11.3 cfs 35,403 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=2.23" Flow Length=706' Tc=4.7 min CN=60 Runoff=4.3 cfs 13,279 cf
Link PRDP1: PRDP1	Inflow=2.4 cfs 11,996 cf Primary=2.4 cfs 11,996 cf
Link PRDP2: PRDP2	Inflow=0.6 cfs 2,554 cf Primary=0.6 cfs 2,554 cf
Link PRDP6: PRDP6	Inflow=11.3 cfs 35,403 cf Primary=11.3 cfs 35,403 cf
Link PRDP7: PRDP7	Inflow=4.3 cfs 13,279 cf Primary=4.3 cfs 13,279 cf

Total Runoff Area = 316,506 sf Runoff Volume = 63,233 cf Average Runoff Depth = 2.40"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 2.4 cfs @ 12.31 hrs, Volume= 11,996 cf, Depth= 1.79"

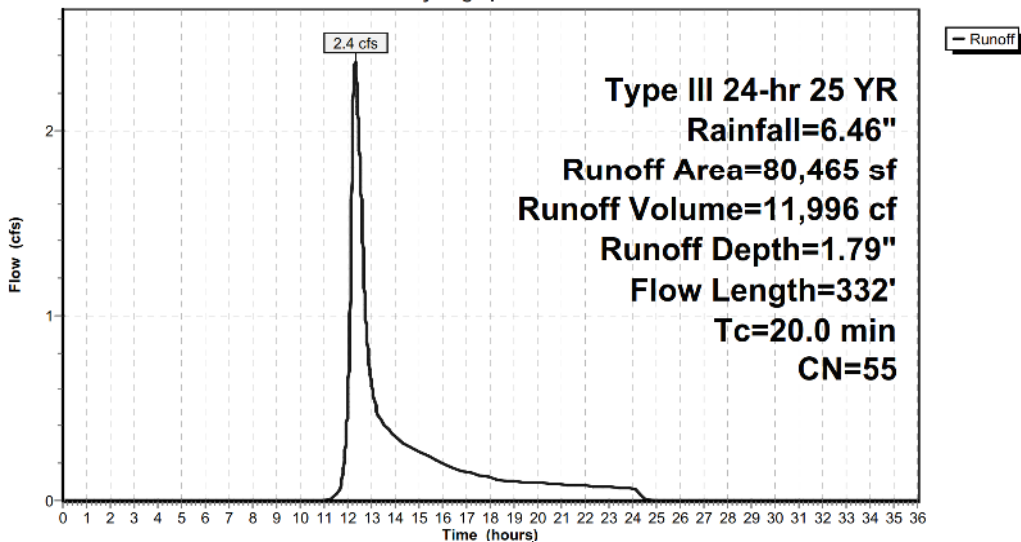
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.6 cfs @ 12.20 hrs, Volume= 2,554 cf, Depth= 1.79"

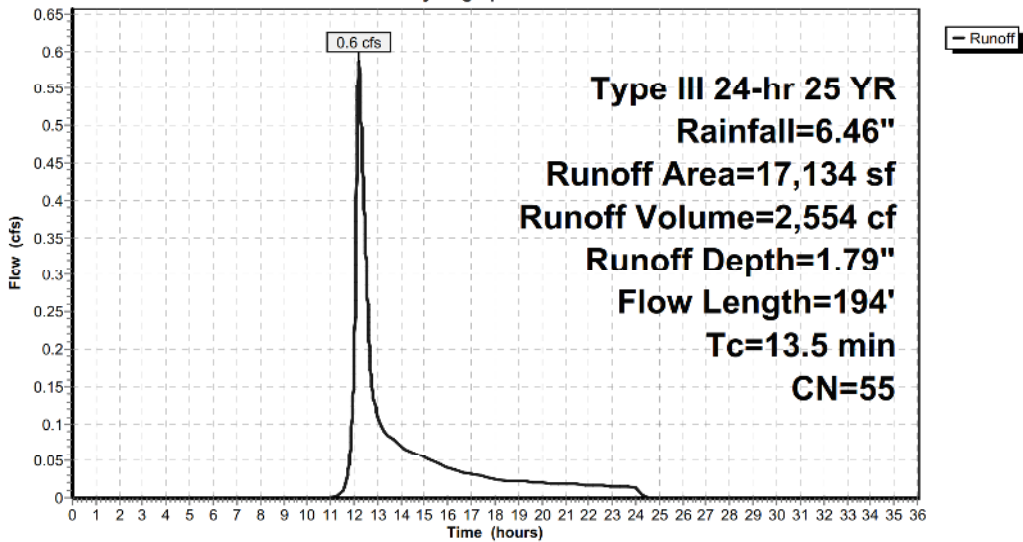
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 11.3 cfs @ 12.09 hrs, Volume= 35,403 cf, Depth= 2.88"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

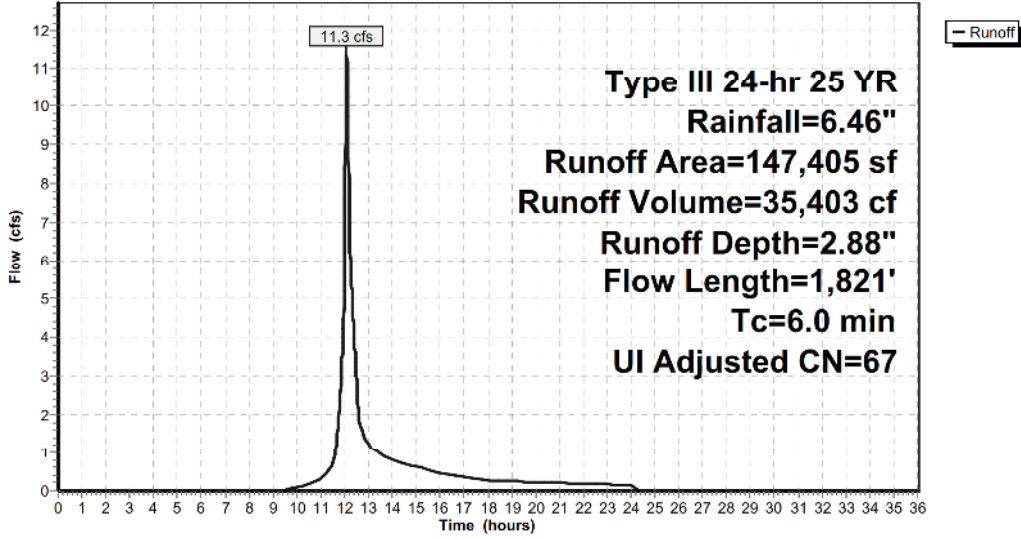
Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 4.3 cfs @ 12.08 hrs, Volume= 13,279 cf, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

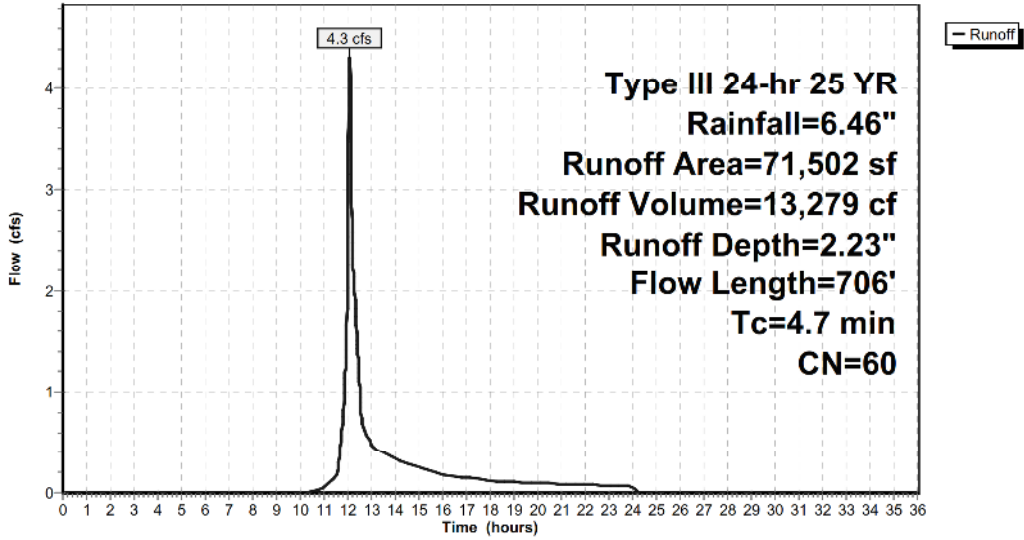
Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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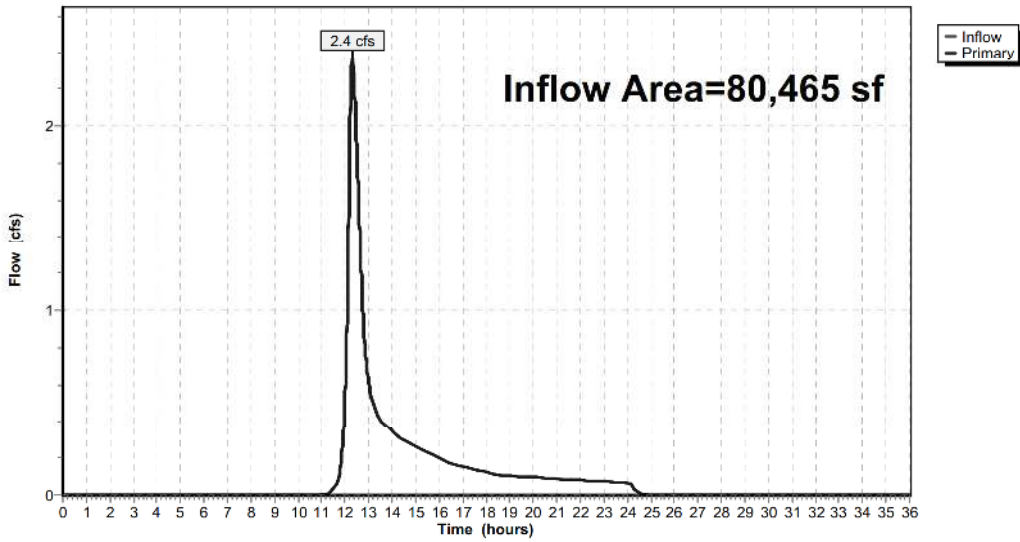
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 1.79" for 25 YR event
Inflow = 2.4 cfs @ 12.31 hrs, Volume= 11,996 cf
Primary = 2.4 cfs @ 12.31 hrs, Volume= 11,996 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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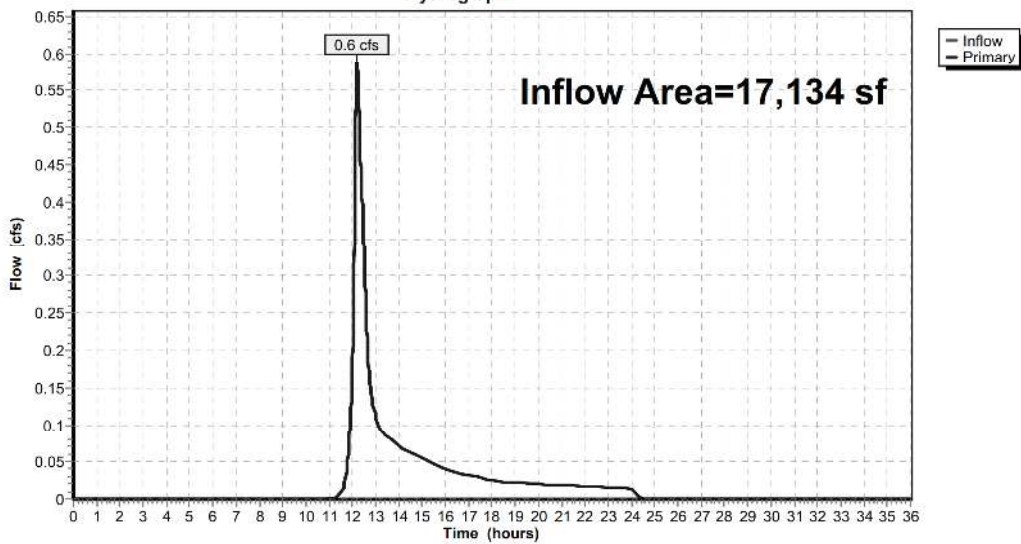
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 1.79" for 25 YR event
Inflow = 0.6 cfs @ 12.20 hrs, Volume= 2,554 cf
Primary = 0.6 cfs @ 12.20 hrs, Volume= 2,554 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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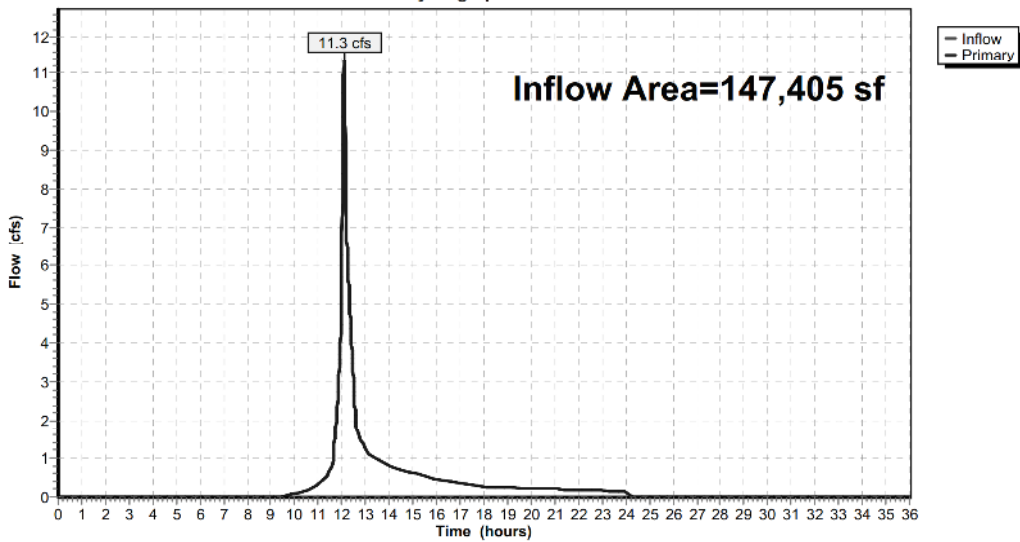
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 2.88" for 25 YR event
Inflow = 11.3 cfs @ 12.09 hrs, Volume= 35,403 cf
Primary = 11.3 cfs @ 12.09 hrs, Volume= 35,403 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 25 YR Rainfall=6.46"

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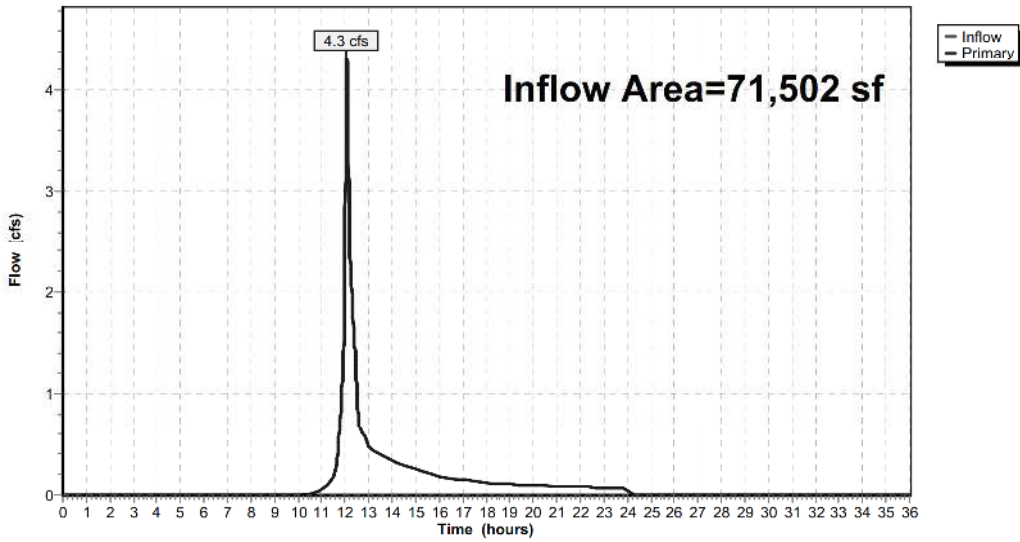
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 2.23" for 25 YR event
Inflow = 4.3 cfs @ 12.08 hrs, Volume= 13,279 cf
Primary = 4.3 cfs @ 12.08 hrs, Volume= 13,279 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=332' Tc=20.0 min CN=55 Runoff=3.6 cfs 17,262 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=194' Tc=13.5 min CN=55 Runoff=0.9 cfs 3,676 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=3.87" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=15.3 cfs 47,482 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=3.10" Flow Length=706' Tc=4.7 min CN=60 Runoff=6.1 cfs 18,487 cf
Link PRDP1: PRDP1	Inflow=3.6 cfs 17,262 cf Primary=3.6 cfs 17,262 cf
Link PRDP2: PRDP2	Inflow=0.9 cfs 3,676 cf Primary=0.9 cfs 3,676 cf
Link PRDP6: PRDP6	Inflow=15.3 cfs 47,482 cf Primary=15.3 cfs 47,482 cf
Link PRDP7: PRDP7	Inflow=6.1 cfs 18,487 cf Primary=6.1 cfs 18,487 cf

Total Runoff Area = 316,506 sf Runoff Volume = 86,907 cf Average Runoff Depth = 3.29"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 3.6 cfs @ 12.29 hrs, Volume= 17,262 cf, Depth= 2.57"

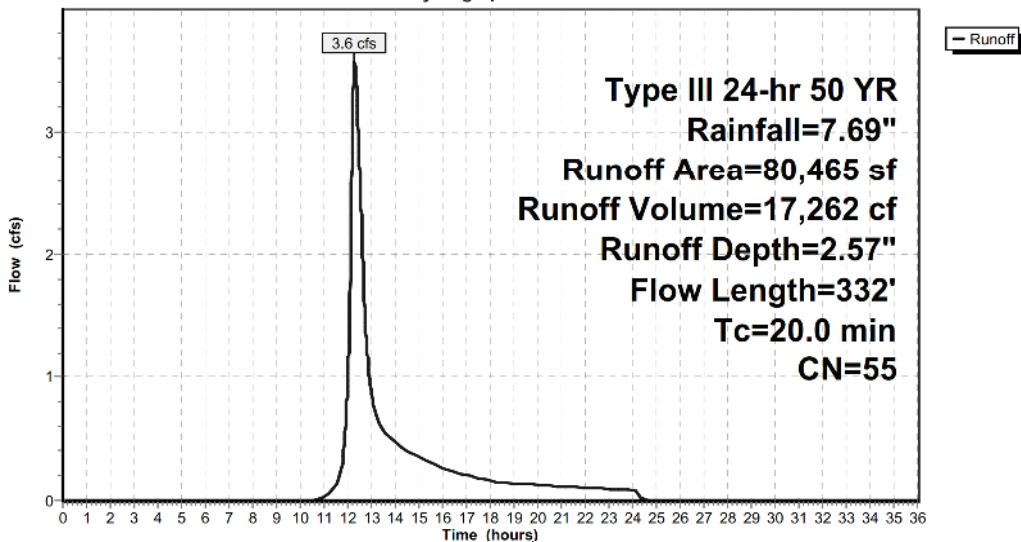
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 0.9 cfs @ 12.20 hrs, Volume= 3,676 cf, Depth= 2.57"

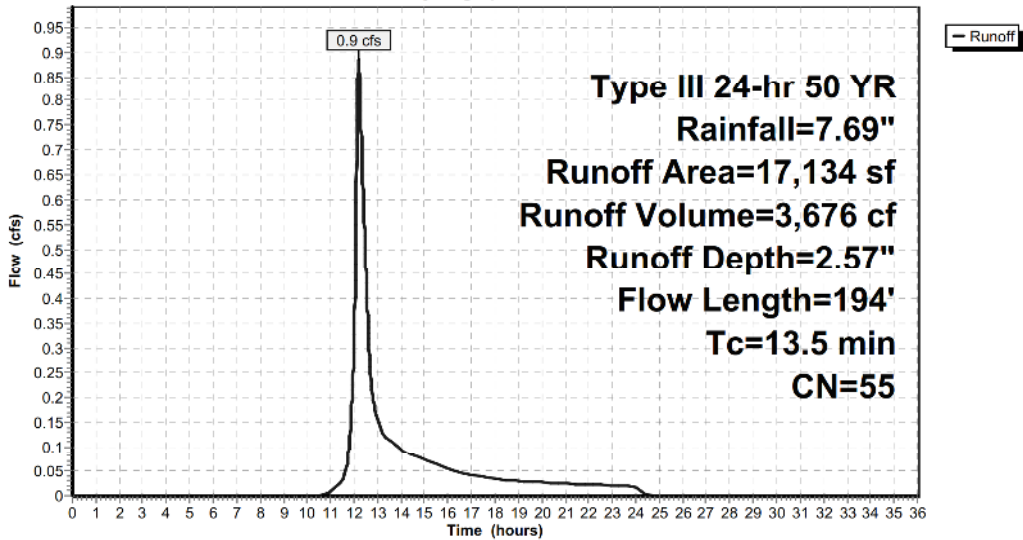
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 15.3 cfs @ 12.09 hrs, Volume= 47,482 cf, Depth= 3.87"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

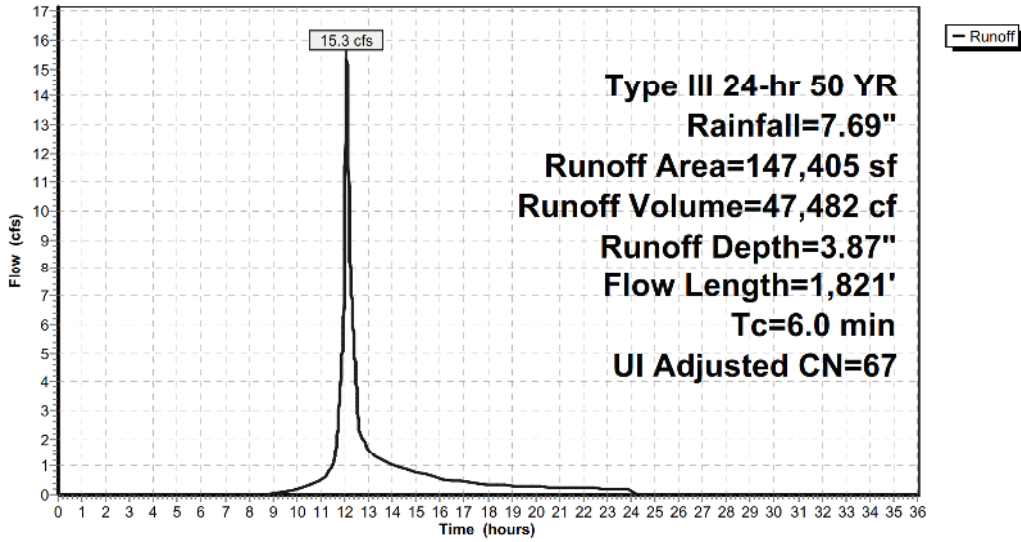
Type III 24-hr 50 YR Rainfall=7.69"

Prepared by Alfonzetti Engineering P.C.

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 6.1 cfs @ 12.07 hrs, Volume= 18,487 cf, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

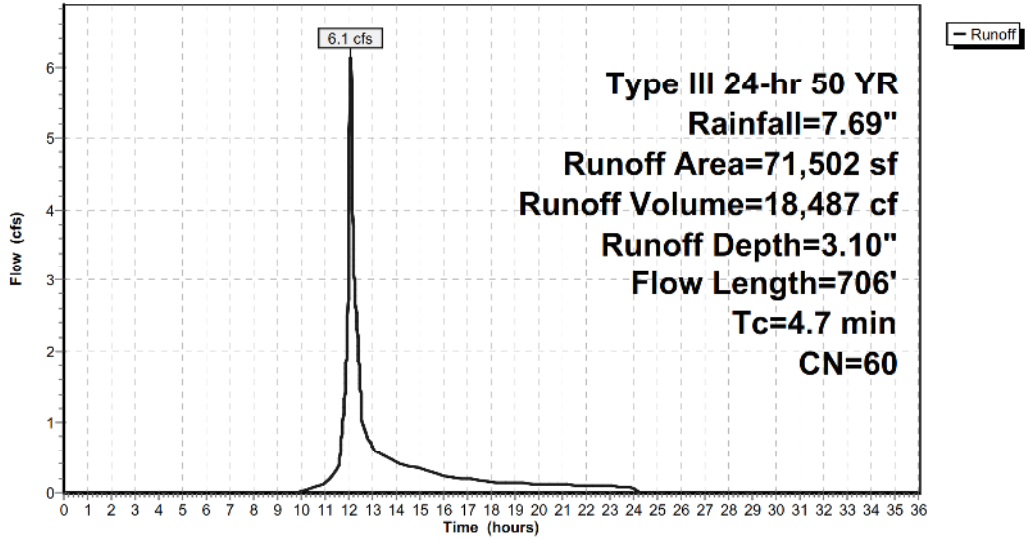
Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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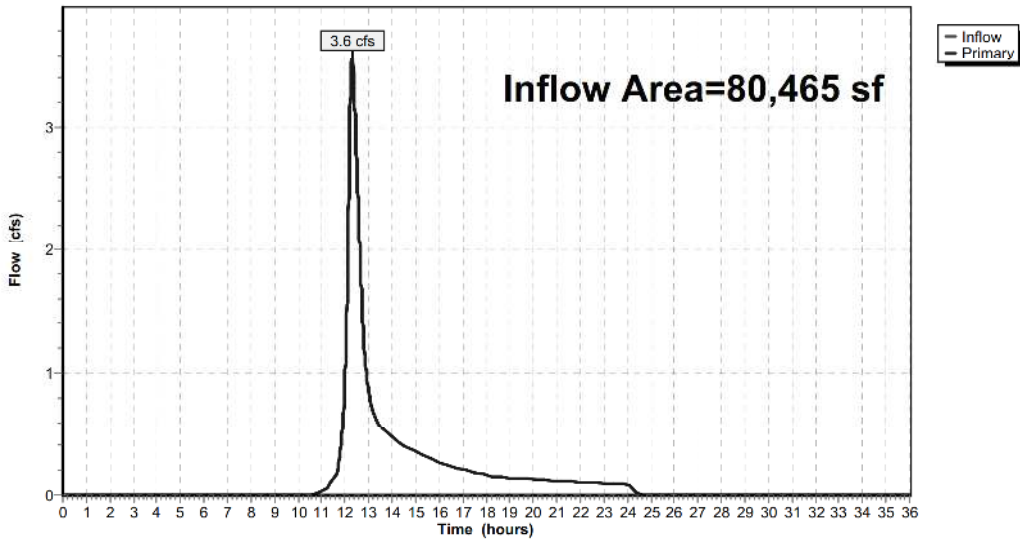
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 2.57" for 50 YR event
Inflow = 3.6 cfs @ 12.29 hrs, Volume= 17,262 cf
Primary = 3.6 cfs @ 12.29 hrs, Volume= 17,262 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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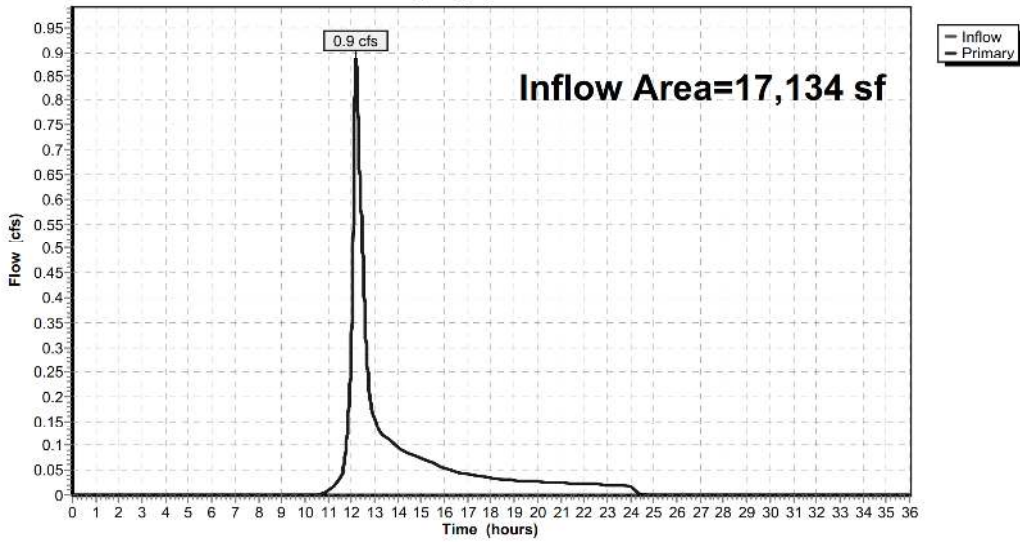
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 2.57" for 50 YR event
Inflow = 0.9 cfs @ 12.20 hrs, Volume= 3,676 cf
Primary = 0.9 cfs @ 12.20 hrs, Volume= 3,676 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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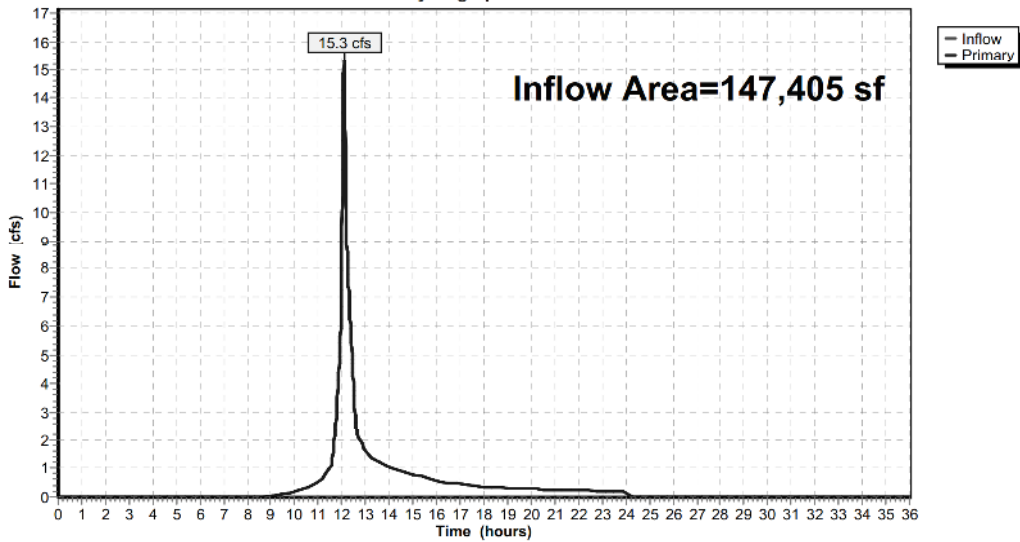
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 3.87" for 50 YR event
Inflow = 15.3 cfs @ 12.09 hrs, Volume= 47,482 cf
Primary = 15.3 cfs @ 12.09 hrs, Volume= 47,482 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 50 YR Rainfall=7.69"

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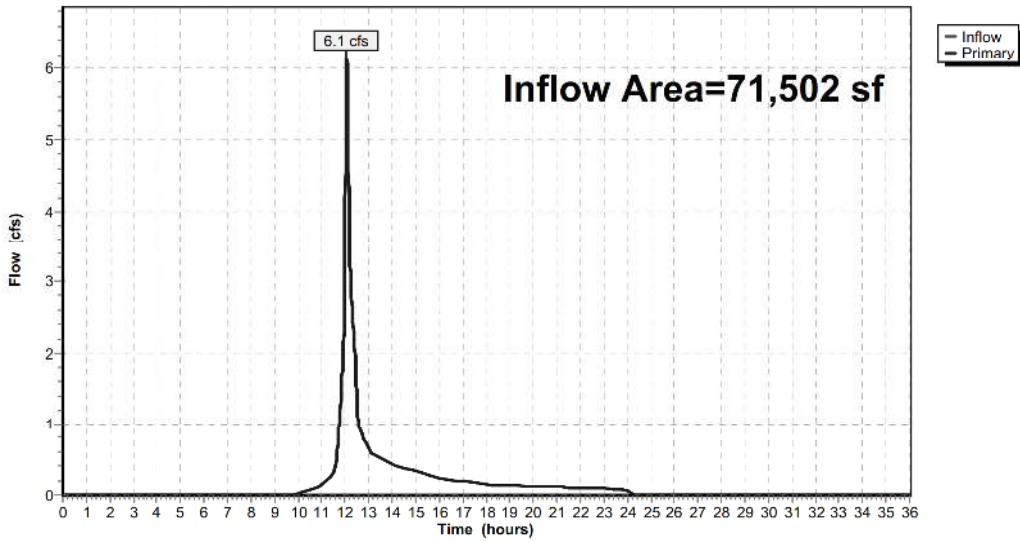
Summary for Link PRDP7: PRDP7

Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 3.10" for 50 YR event
Inflow = 6.1 cfs @ 12.07 hrs, Volume= 18,487 cf
Primary = 6.1 cfs @ 12.07 hrs, Volume= 18,487 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS1: PRWS1	Runoff Area=80,465 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=332' Tc=20.0 min CN=55 Runoff=5.1 cfs 24,216 cf
Subcatchment PRWS2: PRWS2	Runoff Area=17,134 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=194' Tc=13.5 min CN=55 Runoff=1.3 cfs 5,157 cf
Subcatchment PRWS6A: PRWS6A	Runoff Area=147,405 sf 29.32% Impervious Runoff Depth=5.11" Flow Length=1,821' Tc=6.0 min UI Adjusted CN=67 Runoff=20.3 cfs 62,769 cf
Subcatchment PRWS7A: PRWS7A	Runoff Area=71,502 sf 1.55% Impervious Runoff Depth=4.23" Flow Length=706' Tc=4.7 min CN=60 Runoff=8.5 cfs 25,231 cf
Link PRDP1: PRDP1	Inflow=5.1 cfs 24,216 cf Primary=5.1 cfs 24,216 cf
Link PRDP2: PRDP2	Inflow=1.3 cfs 5,157 cf Primary=1.3 cfs 5,157 cf
Link PRDP6: PRDP6	Inflow=20.3 cfs 62,769 cf Primary=20.3 cfs 62,769 cf
Link PRDP7: PRDP7	Inflow=8.5 cfs 25,231 cf Primary=8.5 cfs 25,231 cf

Total Runoff Area = 316,506 sf Runoff Volume = 117,373 cf Average Runoff Depth = 4.45"
85.99% Pervious = 272,174 sf 14.01% Impervious = 44,332 sf

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS1: PRWS1

Runoff = 5.1 cfs @ 12.29 hrs, Volume= 24,216 cf, Depth= 3.61"

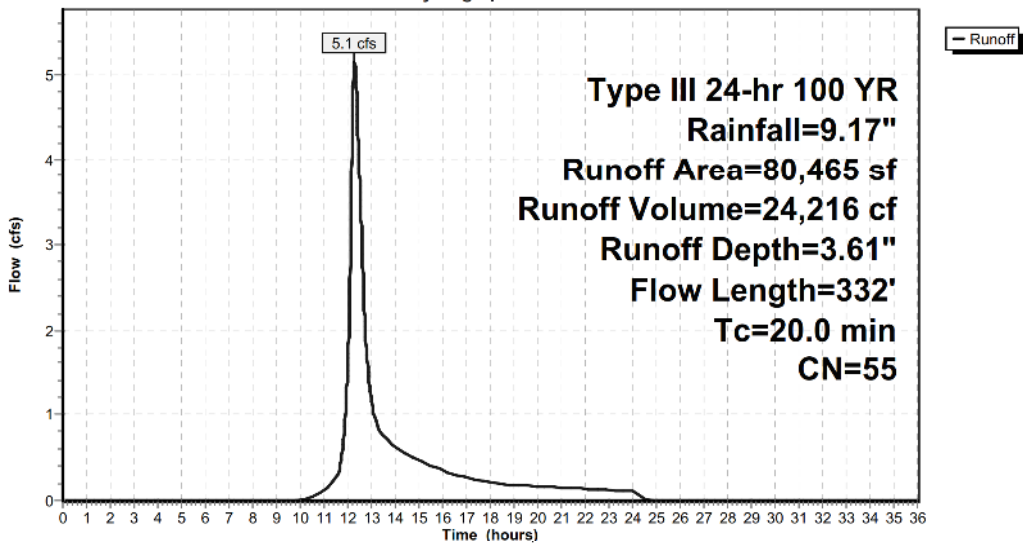
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
78,482	55	Woods, Good, HSG B
1,983	61	>75% Grass cover, Good, HSG B
80,465	55	Weighted Average
80,465		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	100	0.0280	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
0.4	50	0.1650	2.03		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.6	58	0.1030	1.60		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.9	124	0.2230	2.36		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.0	332	Total			

Subcatchment PRWS1: PRWS1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS2: PRWS2

Runoff = 1.3 cfs @ 12.19 hrs, Volume= 5,157 cf, Depth= 3.61"

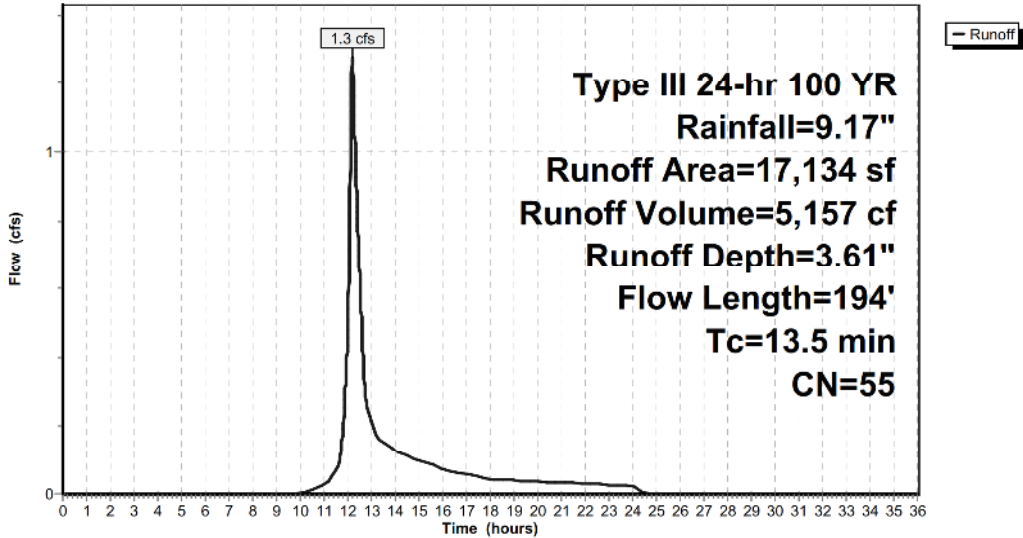
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
17,134	55	Woods, Good, HSG B
17,134		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	34	0.1470	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
9.3	116	0.1980	0.21		Sheet Flow, SF2 Woods: Light underbrush n= 0.400 P2= 3.43"
0.3	44	0.1920	2.19		Shallow Concentrated Flow, SC1 Woodland Kv= 5.0 fps
13.5	194	Total			

Subcatchment PRWS2: PRWS2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS6A: PRWS6A

Runoff = 20.3 cfs @ 12.09 hrs, Volume= 62,769 cf, Depth= 5.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
295	55	Woods, Good, HSG B
43,131	61	>75% Grass cover, Good, HSG B
* 4,638	61	>75% Grass cover, Good, HSG B
849	98	Paved parking, HSG B
39,747	98	Unconnected pavement, HSG B
44,058	61	>75% Grass cover, Good, HSG B
2,446	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
11,842	61	>75% Grass cover, Good, HSG B
147,405	72	Weighted Average, UI Adjusted CN = 67
104,183		70.68% Pervious Area
43,222		29.32% Impervious Area
42,373		98.04% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	28	0.0890	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.6	72	0.0490	1.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
0.2	50	0.0490	4.49		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	450	0.0710	4.00		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.4	474	0.0790	20.24	63.585	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	200	0.0600	17.64	55.413	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.2	189	0.0700	19.05	59.853	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
0.6	358	0.0170	9.39	29.496	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013 Concrete pipe, bends & connections
6.0	1,821	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

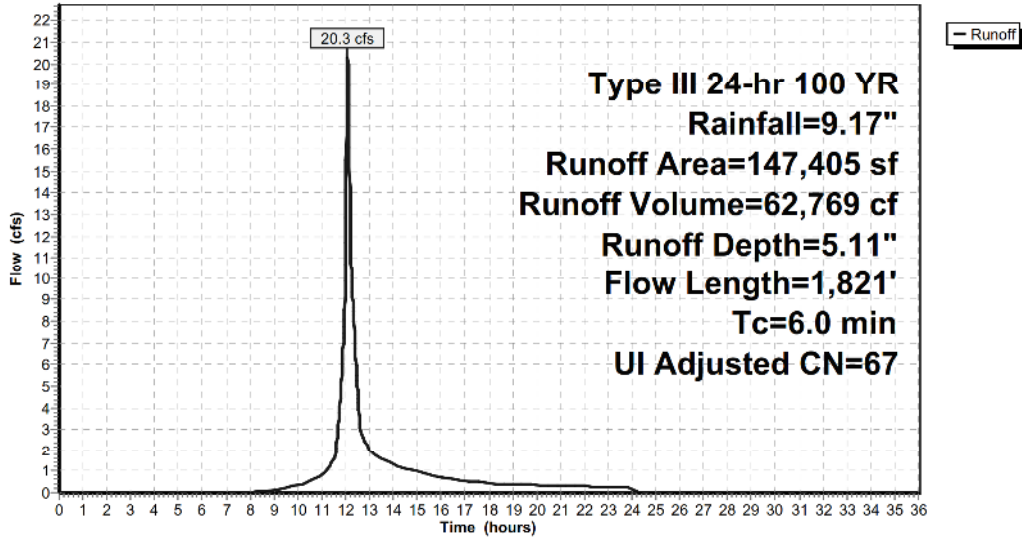
Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS6A: PRWS6A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS7A: PRWS7A

Runoff = 8.5 cfs @ 12.07 hrs, Volume= 25,231 cf, Depth= 4.23"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
15,421	55	Woods, Good, HSG B
53,657	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected roofs, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
71,502	60	Weighted Average
70,392		98.45% Pervious Area
1,110		1.55% Impervious Area
1,110		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.0740	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.5	60	0.0670	2.09		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.43"
1.1	346	0.0685	5.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	260	0.0400	10.44	5.697	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
4.7	706	Total			

EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

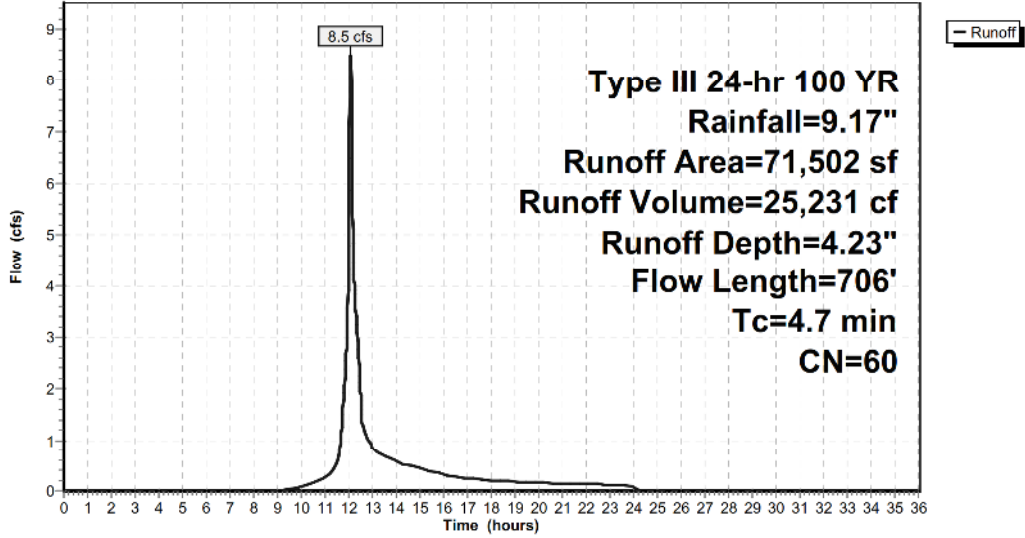
Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS7A: PRWS7A

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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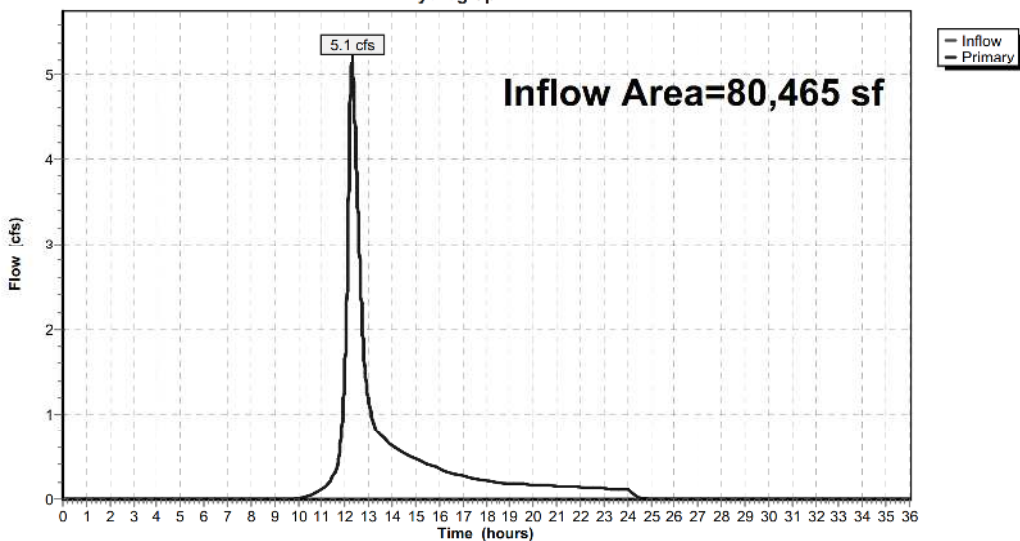
Summary for Link PRDP1: PRDP1

Inflow Area = 80,465 sf, 0.00% Impervious, Inflow Depth = 3.61" for 100 YR event
Inflow = 5.1 cfs @ 12.29 hrs, Volume= 24,216 cf
Primary = 5.1 cfs @ 12.29 hrs, Volume= 24,216 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP1: PRDP1

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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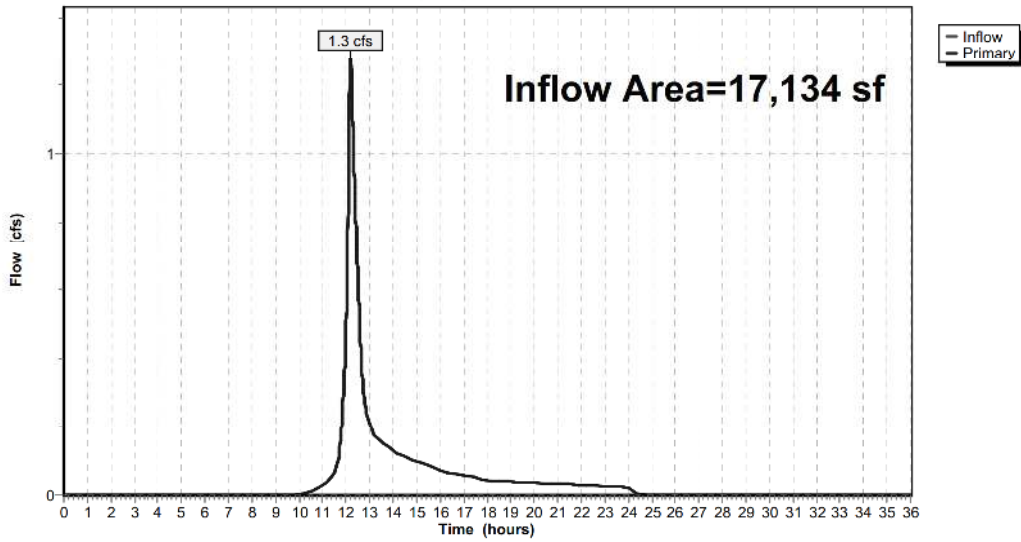
Summary for Link PRDP2: PRDP2

Inflow Area = 17,134 sf, 0.00% Impervious, Inflow Depth = 3.61" for 100 YR event
Inflow = 1.3 cfs @ 12.19 hrs, Volume= 5,157 cf
Primary = 1.3 cfs @ 12.19 hrs, Volume= 5,157 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP2: PRDP2

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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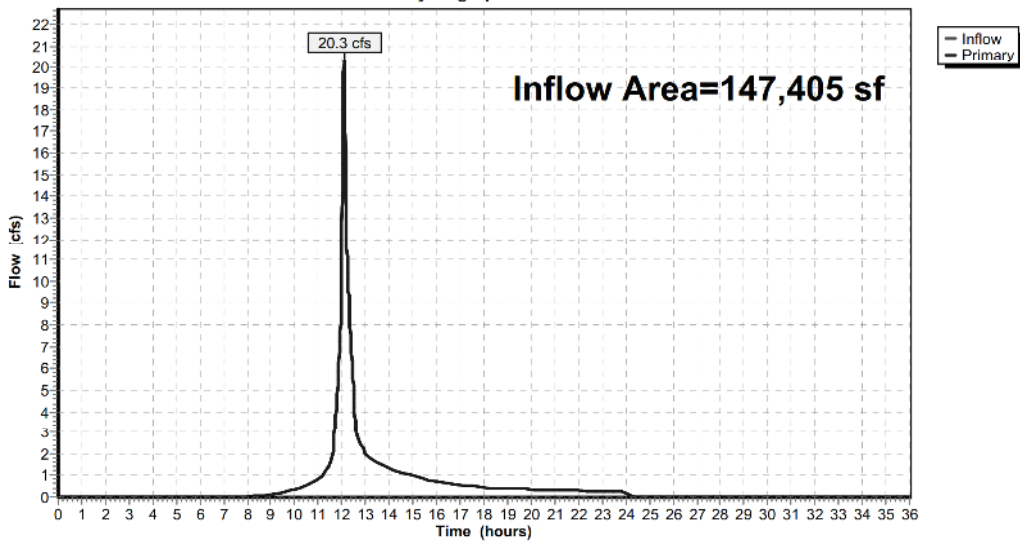
Summary for Link PRDP6: PRDP6

Inflow Area = 147,405 sf, 29.32% Impervious, Inflow Depth = 5.11" for 100 YR event
Inflow = 20.3 cfs @ 12.09 hrs, Volume= 62,769 cf
Primary = 20.3 cfs @ 12.09 hrs, Volume= 62,769 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP6: PRDP6

Hydrograph



EAGLE RIDGE-PRDP1 PRDP2 PRDP6 PRDP7

Type III 24-hr 100 YR Rainfall=9.17"

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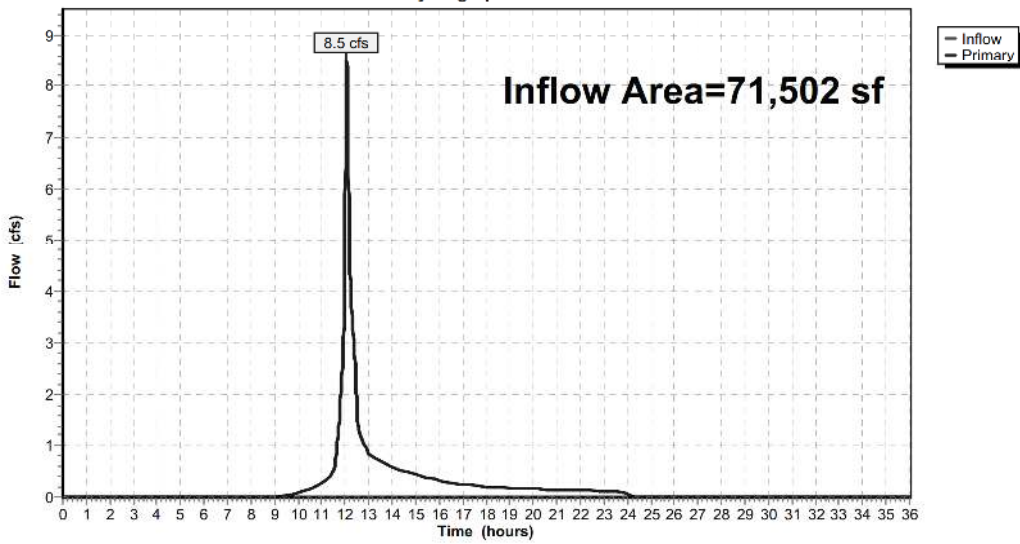
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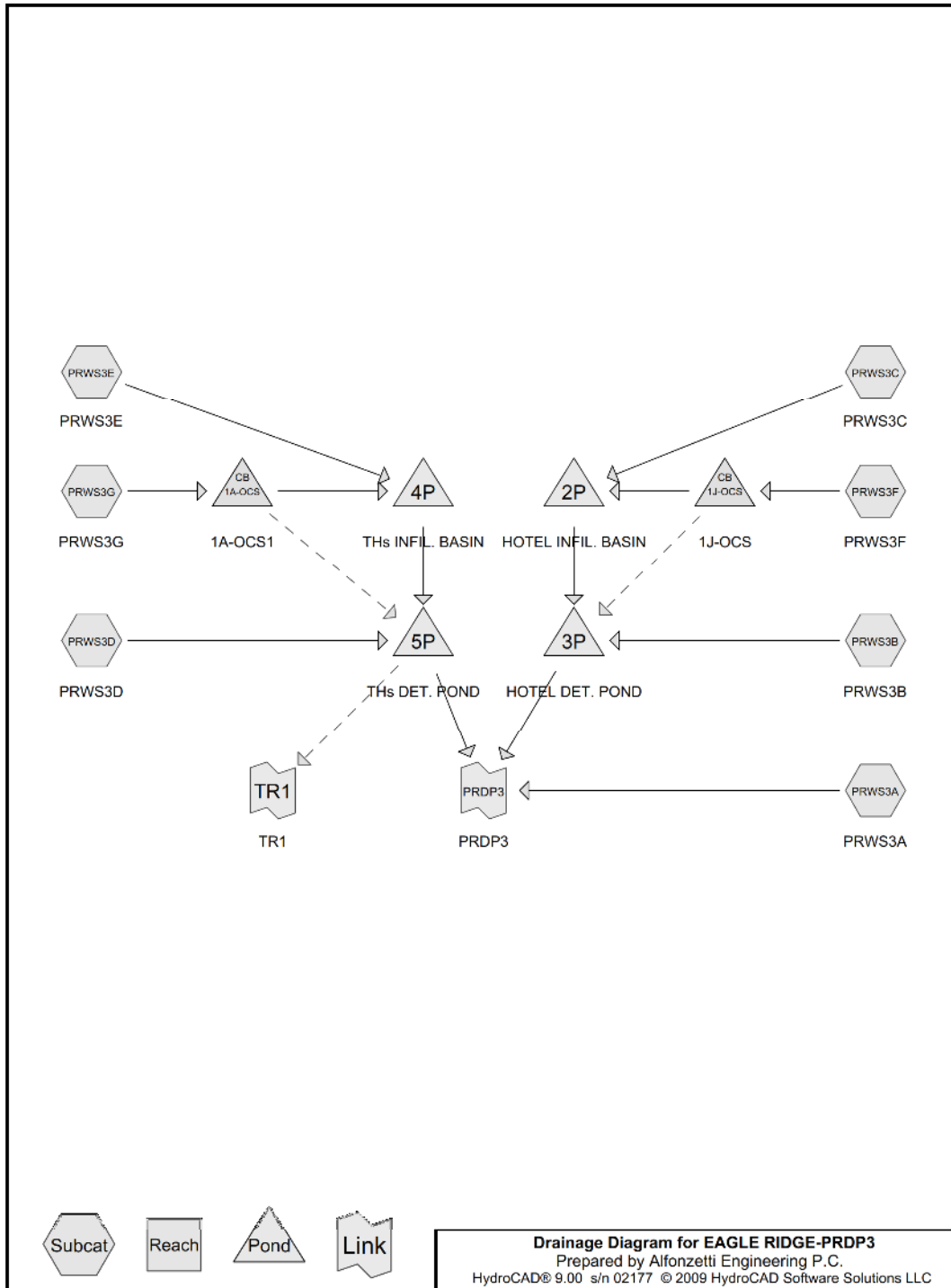
Inflow Area = 71,502 sf, 1.55% Impervious, Inflow Depth = 4.23" for 100 YR event
Inflow = 8.5 cfs @ 12.07 hrs, Volume= 25,231 cf
Primary = 8.5 cfs @ 12.07 hrs, Volume= 25,231 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP7: PRDP7

Hydrograph





EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=0.24" Flow Length=301' Tc=12.6 min CN=59 Runoff=0.1 cfs 936 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=0.24" Flow Length=197' Tc=14.8 min CN=59 Runoff=0.0 cfs 381 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=0.29" Tc=6.0 min CN=61 Runoff=0.0 cfs 254 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=0.29" Tc=6.0 min CN=61 Runoff=0.1 cfs 408 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=0.29" Tc=6.0 min CN=61 Runoff=0.0 cfs 337 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=2.06" Flow Length=150' Tc=6.0 min CN=93 Runoff=4.1 cfs 13,047 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=1.35" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=12.2 cfs 37,807 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=437.44' Inflow=12.2 cfs 37,807 cf Primary=12.2 cfs 37,807 cf Secondary=0.0 cfs 0 cf Outflow=12.2 cfs 37,807 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=438.05' Inflow=4.1 cfs 13,047 cf Primary=4.1 cfs 13,047 cf Secondary=0.0 cfs 0 cf Outflow=4.1 cfs 13,047 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=440.58' Storage=9,059 cf Inflow=4.1 cfs 13,301 cf Discarded=0.1 cfs 8,965 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.1 cfs 8,965 cf
Pond 3P: HOTEL DET. POND	Peak Elev=431.46' Storage=381 cf Inflow=0.0 cfs 381 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.0 cfs 0 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=436.04' Storage=30,488 cf Inflow=12.2 cfs 38,144 cf Discarded=0.2 cfs 14,698 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.2 cfs 14,698 cf
Pond 5P: THs DET. POND	Peak Elev=424.58' Storage=408 cf Inflow=0.1 cfs 408 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Tertiary=0.0 cfs 0 cf Outflow=0.0 cfs 0 cf
Link PRDP3: PRDP3	Inflow=0.1 cfs 936 cf Primary=0.1 cfs 936 cf
Link TR1: TR1	Inflow=0.0 cfs 0 cf Primary=0.0 cfs 0 cf

Total Runoff Area = 518,572 sf Runoff Volume = 53,171 cf Average Runoff Depth = 1.23"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 0.1 cfs @ 12.42 hrs, Volume= 936 cf, Depth= 0.24"

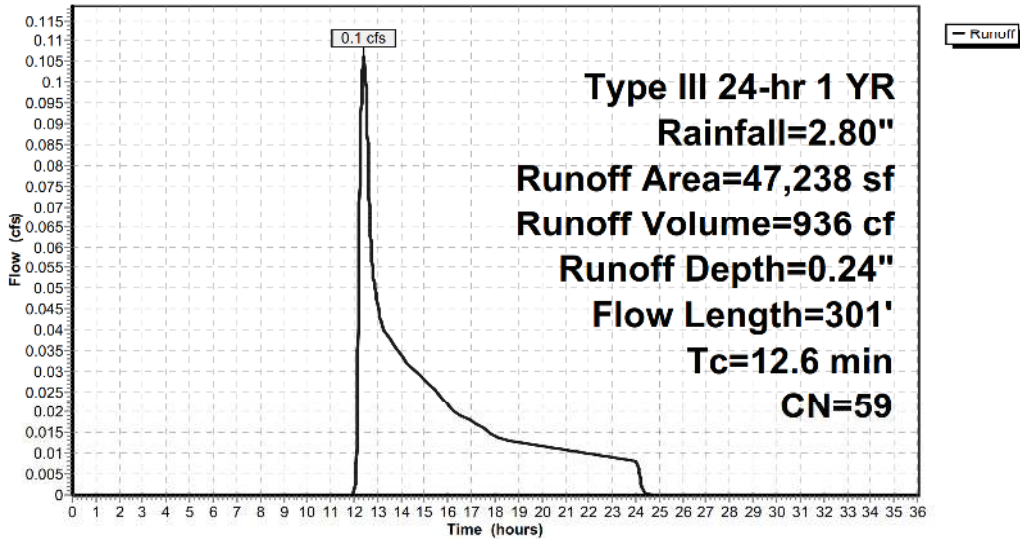
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 0.0 cfs @ 12.45 hrs, Volume= 381 cf, Depth= 0.24"

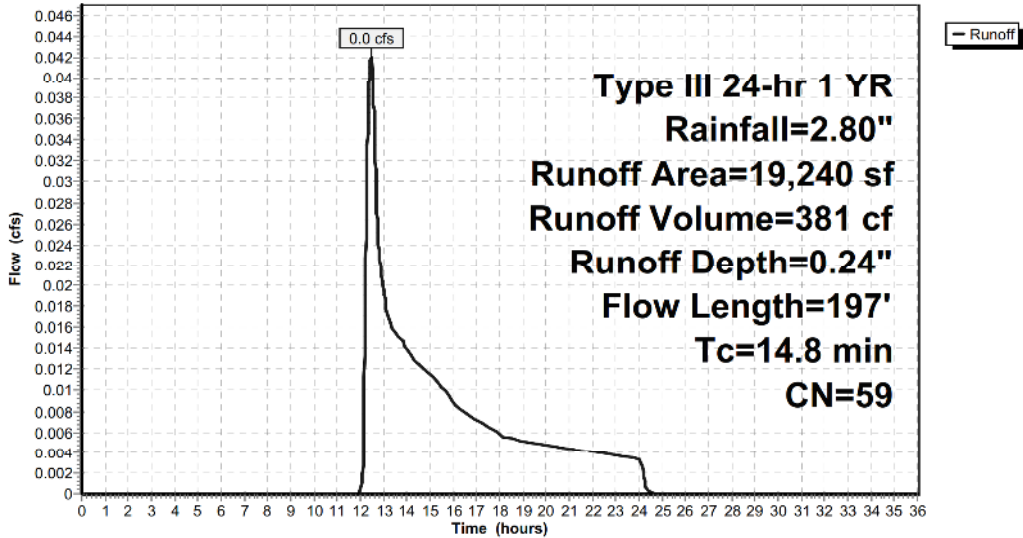
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.0 cfs @ 12.15 hrs, Volume= 254 cf, Depth= 0.29"

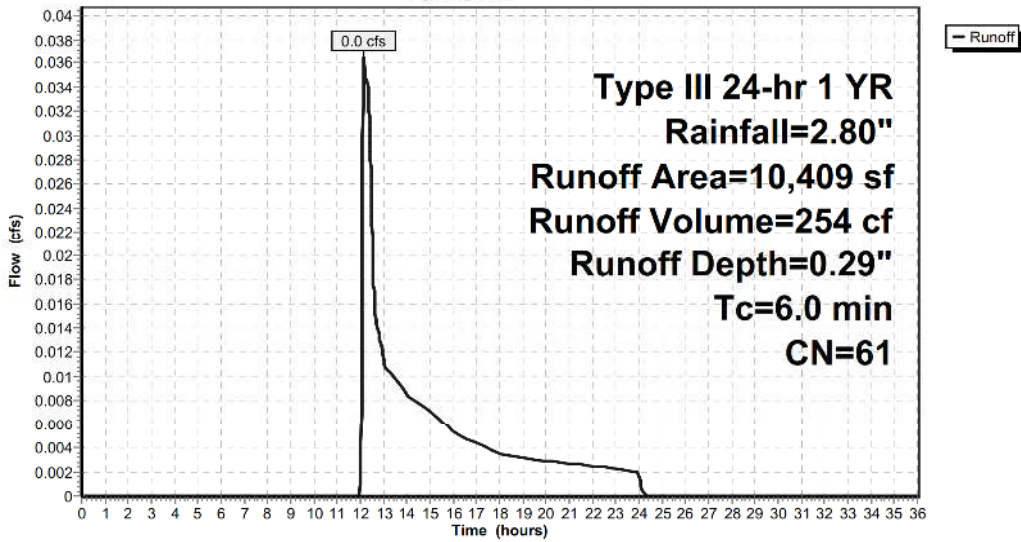
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 0.1 cfs @ 12.15 hrs, Volume= 408 cf, Depth= 0.29"

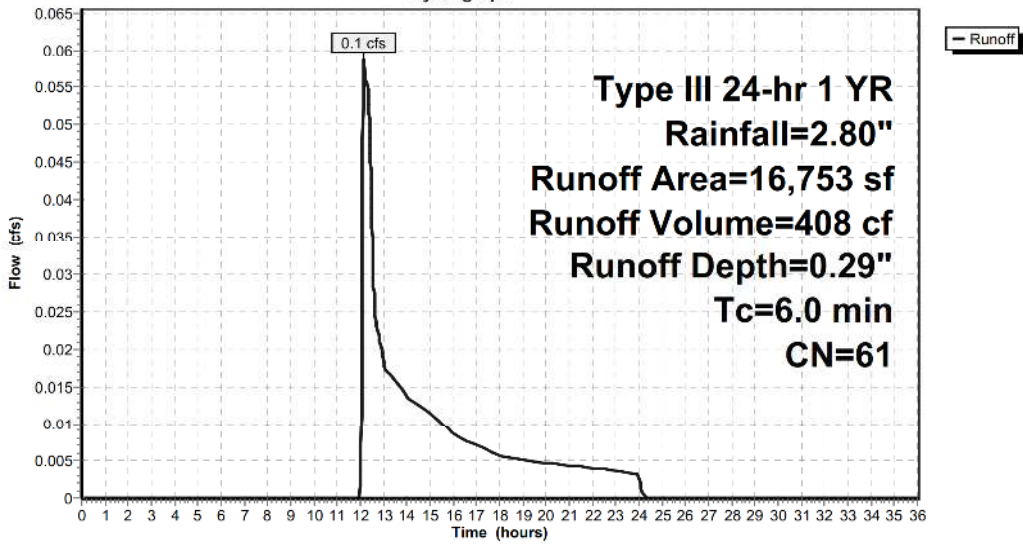
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 0.0 cfs @ 12.15 hrs, Volume= 337 cf, Depth= 0.29"

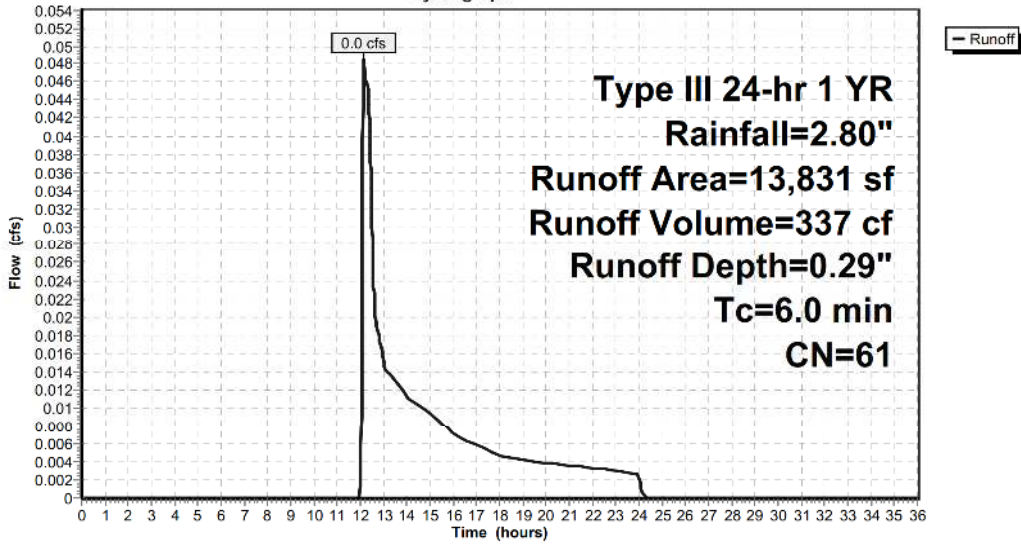
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 4.1 cfs @ 12.09 hrs, Volume= 13,047 cf, Depth= 2.06"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

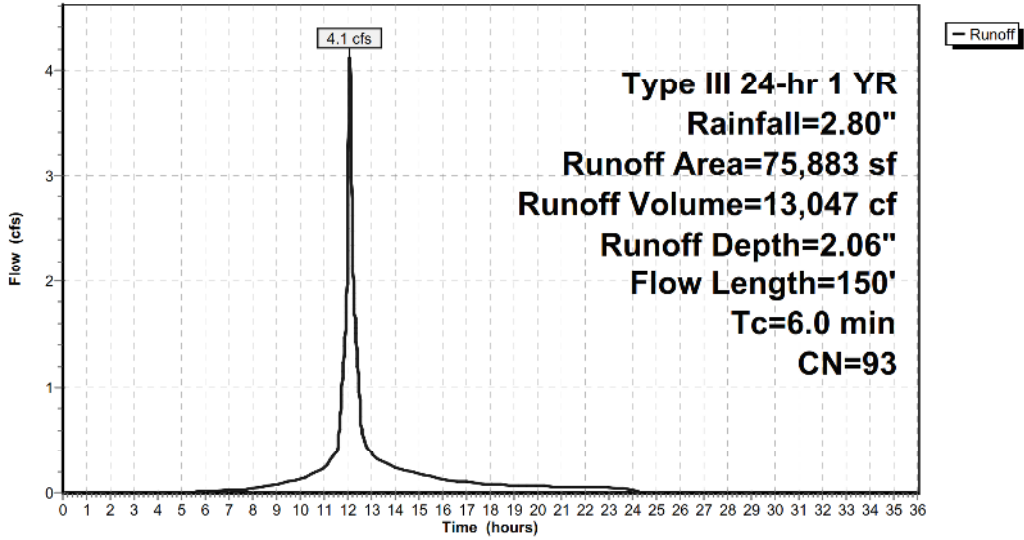
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Type III 24-hr 1 YR Rainfall=2.80"

Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 12.2 cfs @ 12.09 hrs, Volume= 37,807 cf, Depth= 1.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 1 YR Rainfall=2.80"

EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
2,441	98	Roofs, HSG B
52,654	61	>75% Grass cover, Good, HSG B
2,441	98	Roofs, HSG B
2,441	98	Roofs, HSG B
51,059	61	>75% Grass cover, Good, HSG B
2,239	98	Unconnected pavement, HSG B
71,764	98	Paved parking, HSG B
21,974	98	Roofs, HSG B
<hr/>		
335,218	84	Weighted Average
125,175		37.34% Pervious Area
210,043		62.66% Impervious Area
11,322		5.39% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	1,574		4.37		Direct Entry,

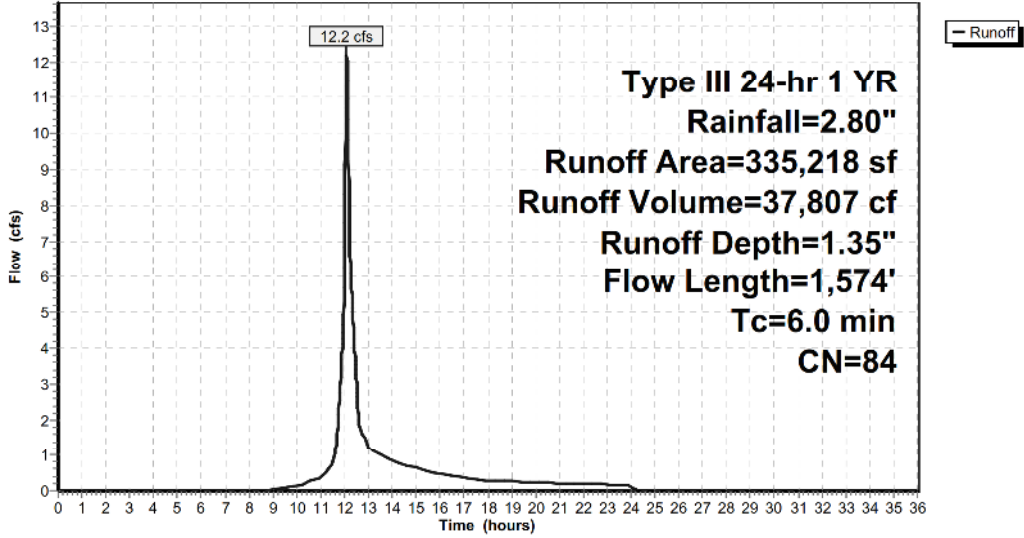
EAGLE RIDGE-PRDP3

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Type III 24-hr 1 YR Rainfall=2.80"

Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 1.35" for 1 YR event
 Inflow = 12.2 cfs @ 12.09 hrs, Volume= 37,807 cf
 Outflow = 12.2 cfs @ 12.09 hrs, Volume= 37,807 cf, Atten= 0%, Lag= 0.0 min
 Primary = 12.2 cfs @ 12.09 hrs, Volume= 37,807 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 437.44' @ 12.09 hrs

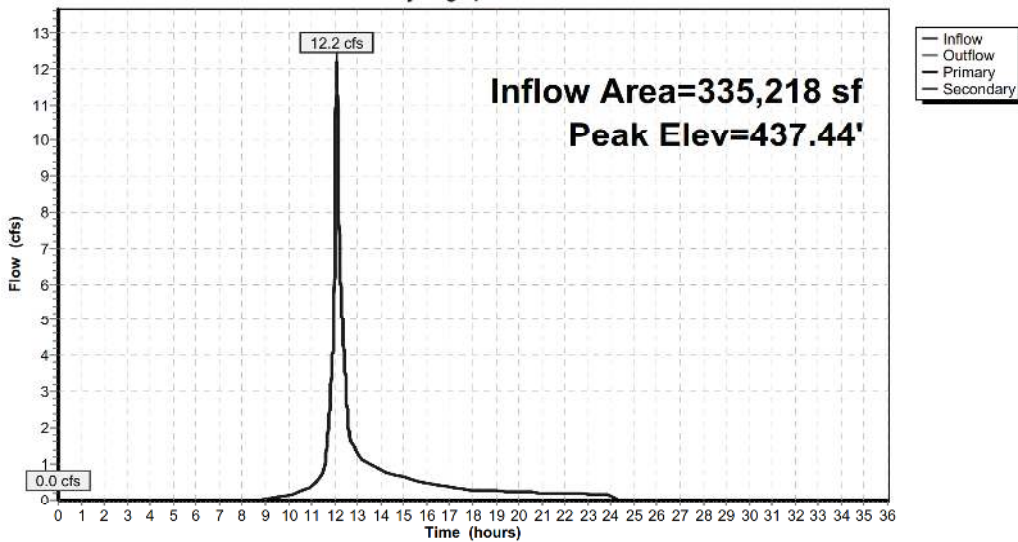
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.7' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=12.2 cfs @ 12.09 hrs HW=437.43' (Free Discharge)
 ↑ **1=15"Ø Culvert** (Inlet Controls 12.2 cfs @ 9.92 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=430.00' (Free Discharge)
 ↑ **2=15"Ø Culvert** (Controls 0.0 cfs)
 ↑ **3=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 2.06" for 1 YR event
 Inflow = 4.1 cfs @ 12.09 hrs, Volume= 13,047 cf
 Outflow = 4.1 cfs @ 12.09 hrs, Volume= 13,047 cf, Atten= 0%, Lag= 0.0 min
 Primary = 4.1 cfs @ 12.09 hrs, Volume= 13,047 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 438.05' @ 12.09 hrs

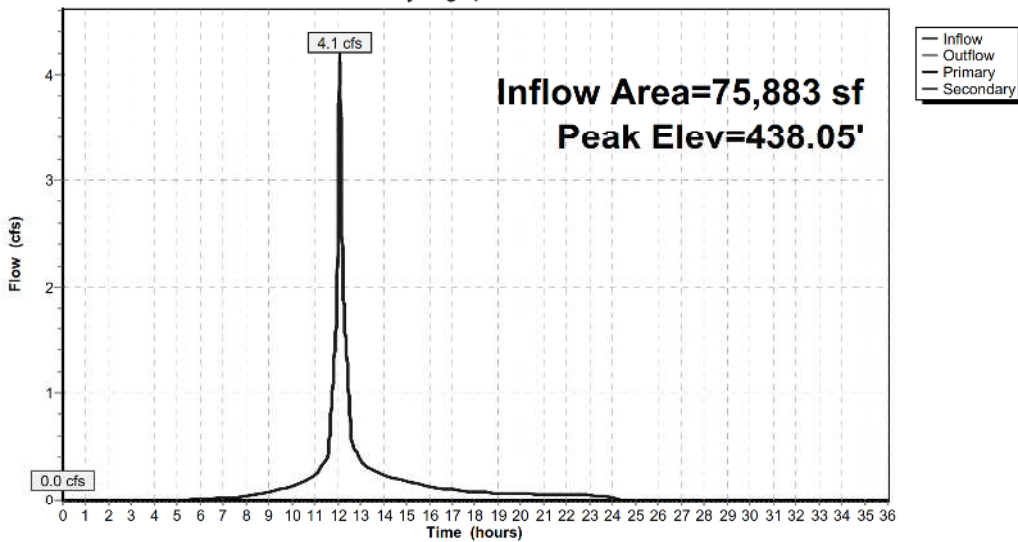
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=4.1 cfs @ 12.09 hrs HW=438.05' (Free Discharge)
 ↑1=Culvert (Barrel Controls 4.1 cfs @ 3.62 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=436.60' (Free Discharge)
 ↑2=Culvert (Controls 0.0 cfs)
 ↑3=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 1.85" for 1 YR event
 Inflow = 4.1 cfs @ 12.09 hrs, Volume= 13,301 cf
 Outflow = 0.1 cfs @ 17.06 hrs, Volume= 8,965 cf, Atten= 98%, Lag= 298.7 min
 Discarded = 0.1 cfs @ 17.06 hrs, Volume= 8,965 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 440.58' @ 17.06 hrs Surf.Area= 4,422 sf Storage= 9,059 cf

Plug-Flow detention time= 632.1 min calculated for 8,963 cf (67% of inflow)
 Center-of-Mass det. time= 535.1 min (1,335.1 - 800.0)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 17.06 hrs HW=440.58' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **2=Culvert** (Controls 0.0 cfs)
 ↳ **3=Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

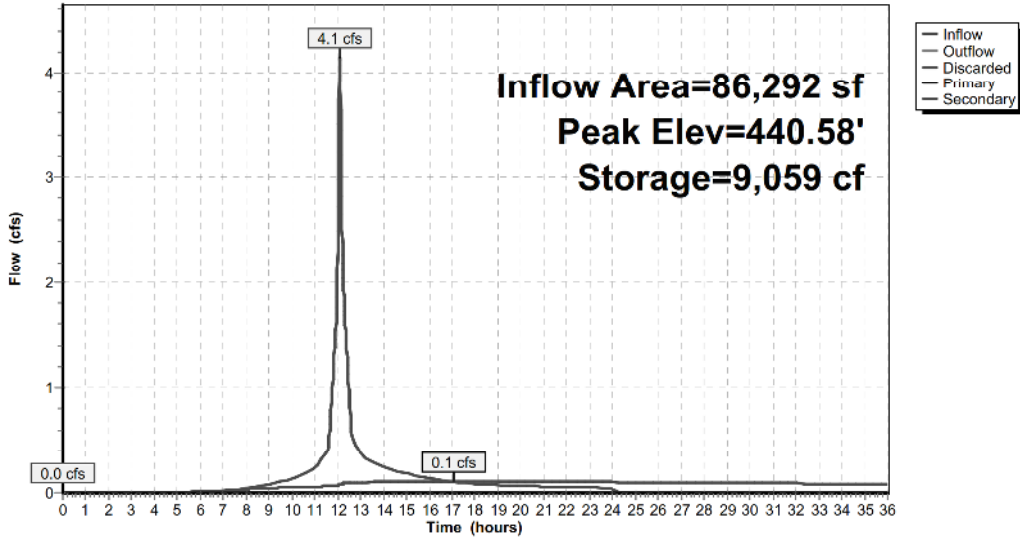
Type III 24-hr 1 YR Rainfall=2.80"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 0.04" for 1 YR event
 Inflow = 0.0 cfs @ 12.45 hrs, Volume= 381 cf
 Outflow = 0.0 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 431.46' @ 24.84 hrs Surf.Area= 916 sf Storage= 381 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
431.00	724	0	0
432.00	1,138	931	931
434.00	2,476	3,614	4,545
436.00	6,286	8,762	13,307
438.00	10,636	16,922	30,229
438.50	12,371	5,752	35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
 1=Culvert (Controls 0.0 cfs)
 3=Grate (Controls 0.0 cfs)
 2=Orifice/Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

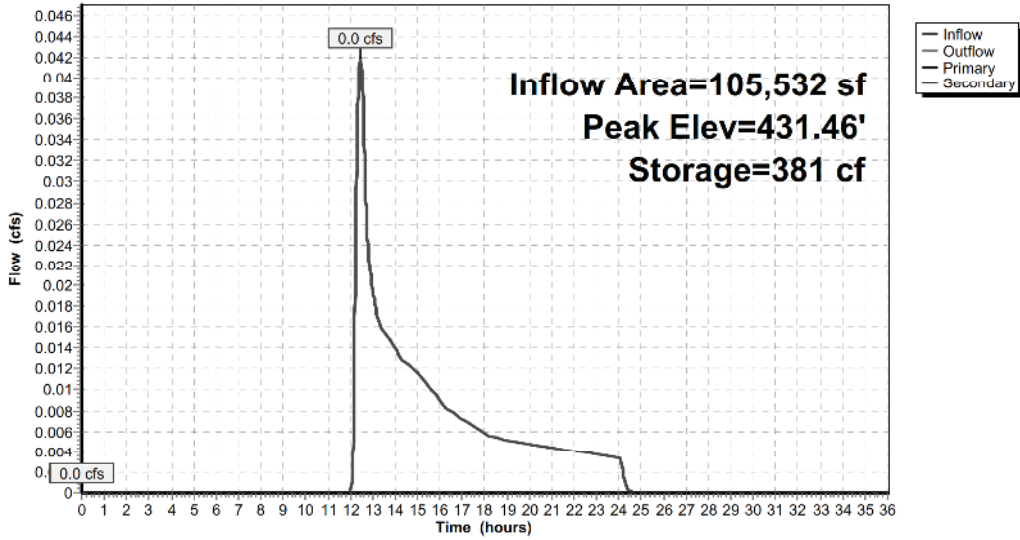
Type III 24-hr 1 YR Rainfall=2.80"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 1.31" for 1 YR event
 Inflow = 12.2 cfs @ 12.09 hrs, Volume= 38,144 cf
 Outflow = 0.2 cfs @ 22.94 hrs, Volume= 14,698 cf, Atten= 99%, Lag= 651.0 min
 Discarded = 0.2 cfs @ 22.94 hrs, Volume= 14,698 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.04' @ 22.94 hrs Surf.Area= 7,517 sf Storage= 30,488 cf

Plug-Flow detention time= 703.7 min calculated for 14,694 cf (39% of inflow)
 Center-of-Mass det. time= 577.1 min (1,413.8 - 836.7)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 22.94 hrs HW=436.04' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **2=Culvert** (Controls 0.0 cfs)
 ↑ **3=Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

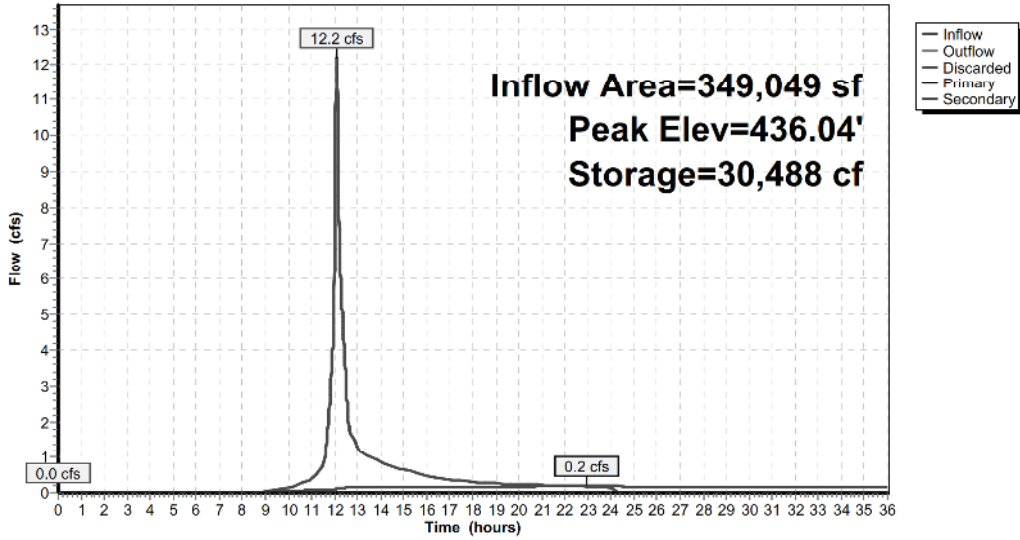
Type III 24-hr 1 YR Rainfall=2.80"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 0.01" for 1 YR event
 Inflow = 0.1 cfs @ 12.15 hrs, Volume= 408 cf
 Outflow = 0.0 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 424.58' @ 24.34 hrs Surf.Area= 286 sf Storage= 408 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 1=Culvert (Controls 0.0 cfs)
- 2=Orifice (Controls 0.0 cfs)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

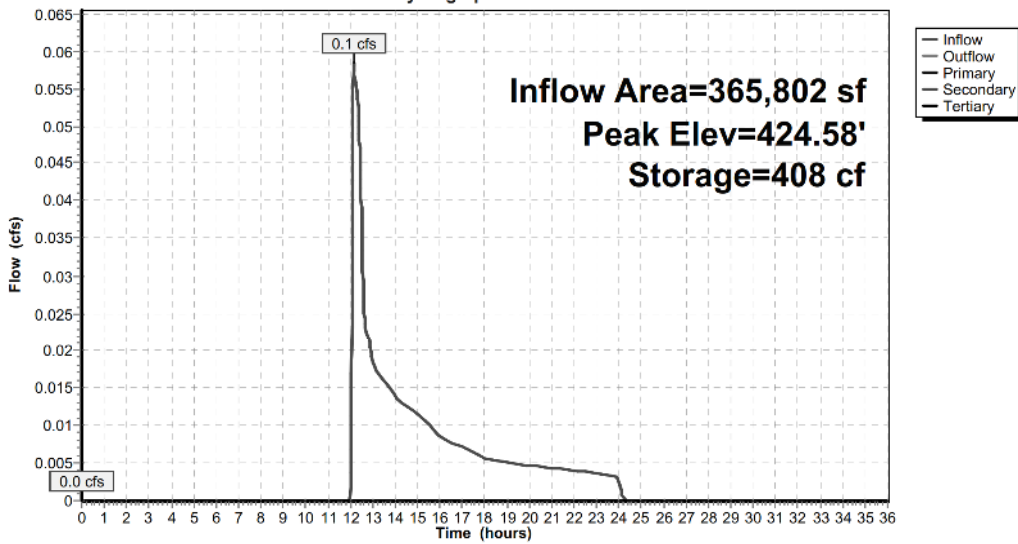
- 3=Orifice II (Controls 0.0 cfs)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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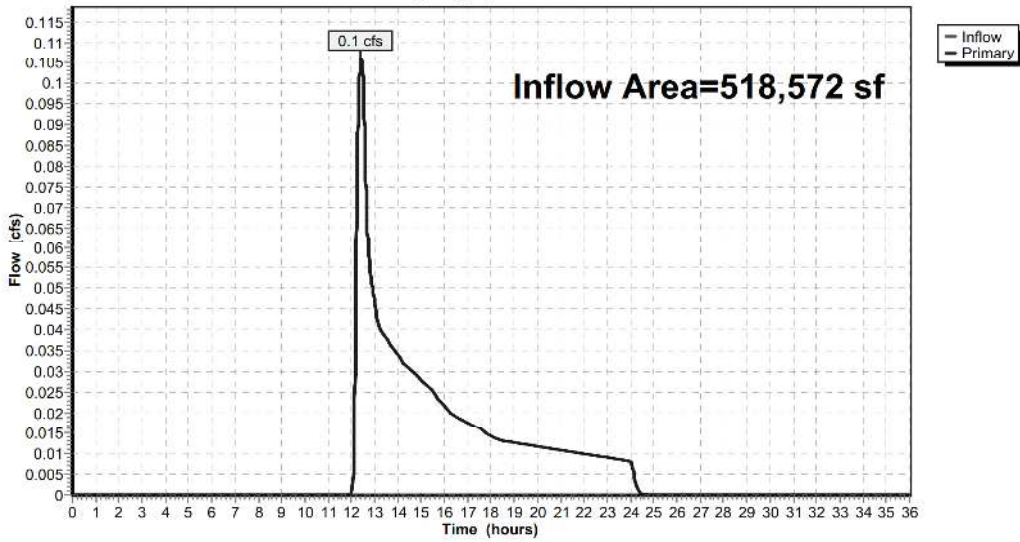
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 0.02" for 1 YR event
Inflow = 0.1 cfs @ 12.42 hrs, Volume= 936 cf
Primary = 0.1 cfs @ 12.42 hrs, Volume= 936 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 1 YR Rainfall=2.80"

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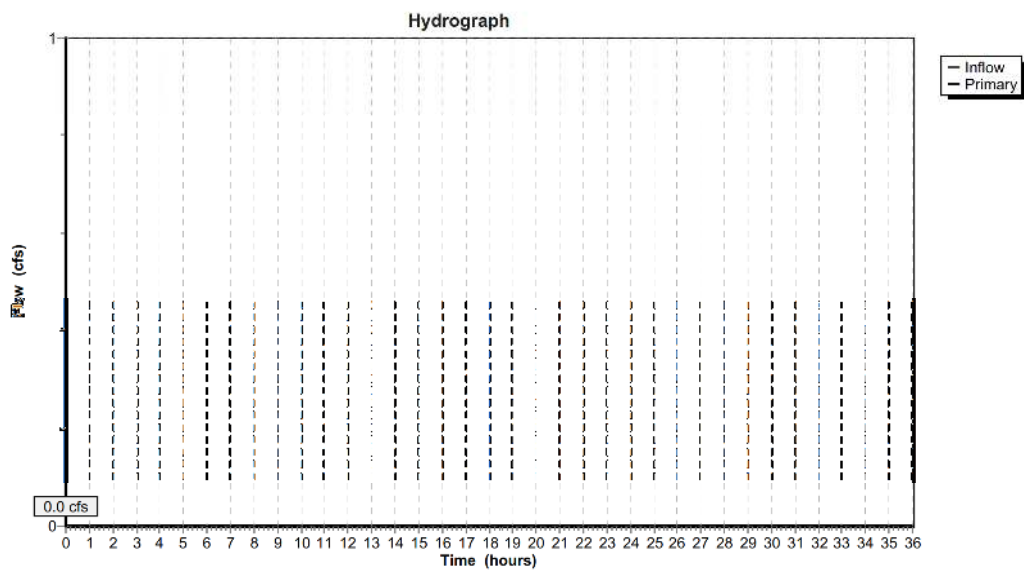
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Summary for Link TR1: TR1

Inflow = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=0.46" Flow Length=301' Tc=12.6 min CN=59 Runoff=0.3 cfs 1,823 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=0.46" Flow Length=197' Tc=14.8 min CN=59 Runoff=0.1 cfs 742 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=0.54" Tc=6.0 min CN=61 Runoff=0.1 cfs 470 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=0.54" Tc=6.0 min CN=61 Runoff=0.2 cfs 756 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=0.54" Tc=6.0 min CN=61 Runoff=0.1 cfs 624 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=2.67" Flow Length=150' Tc=6.0 min CN=93 Runoff=5.3 cfs 16,867 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=1.88" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=16.9 cfs 52,425 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=437.94' Inflow=16.9 cfs 52,425 cf Primary=12.6 cfs 51,078 cf Secondary=4.3 cfs 1,346 cf Outflow=16.9 cfs 52,425 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=438.54' Inflow=5.3 cfs 16,867 cf Primary=5.1 cfs 16,855 cf Secondary=0.1 cfs 12 cf Outflow=5.3 cfs 16,867 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=440.74' Storage=9,758 cf Inflow=5.2 cfs 17,324 cf Discarded=0.1 cfs 9,506 cf Primary=0.5 cfs 2,809 cf Secondary=0.0 cfs 0 cf Outflow=0.6 cfs 12,316 cf
Pond 3P: HOTEL DET. POND	Peak Elev=432.33' Storage=1,337 cf Inflow=0.5 cfs 3,564 cf Primary=0.3 cfs 2,633 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 2,633 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=436.17' Storage=31,460 cf Inflow=12.8 cfs 51,703 cf Discarded=0.2 cfs 15,353 cf Primary=1.1 cfs 12,466 cf Secondary=0.0 cfs 0 cf Outflow=1.3 cfs 27,819 cf
Pond 5P: THs DET. POND	Peak Elev=429.38' Storage=7,610 cf Inflow=4.5 cfs 14,568 cf Primary=0.0 cfs 0 cf Secondary=0.6 cfs 7,941 cf Tertiary=0.0 cfs 0 cf Outflow=0.6 cfs 7,941 cf
Link PRDP3: PRDP3	Inflow=0.3 cfs 4,455 cf Primary=0.3 cfs 4,455 cf
Link TR1: TR1	Inflow=0.6 cfs 7,941 cf Primary=0.6 cfs 7,941 cf

**Total Runoff Area = 518,572 sf Runoff Volume = 73,707 cf Average Runoff Depth = 1.71"
 47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf**

EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 0.3 cfs @ 12.25 hrs, Volume= 1,823 cf, Depth= 0.46"

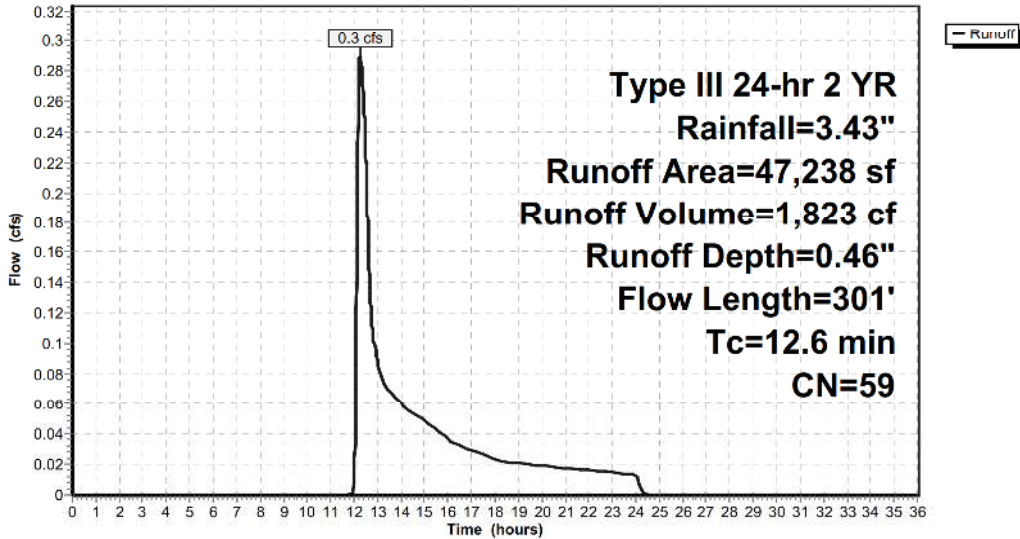
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 0.1 cfs @ 12.30 hrs, Volume= 742 cf, Depth= 0.46"

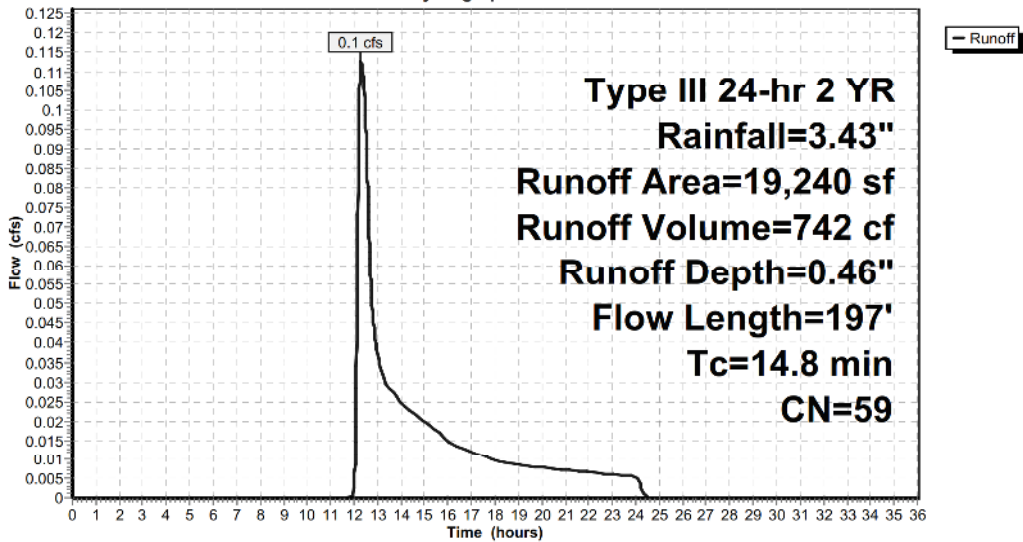
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.1 cfs @ 12.11 hrs, Volume= 470 cf, Depth= 0.54"

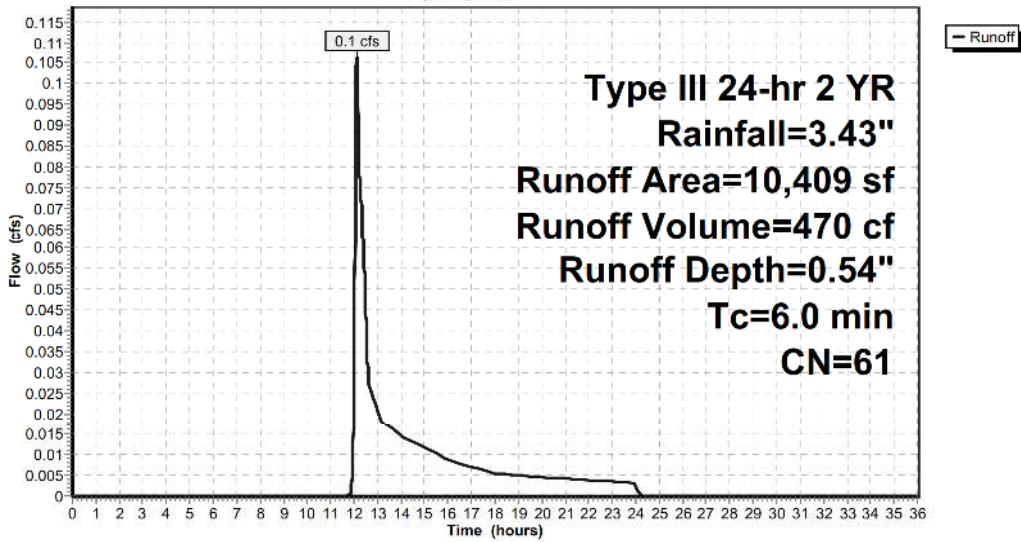
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 0.2 cfs @ 12.11 hrs, Volume= 756 cf, Depth= 0.54"

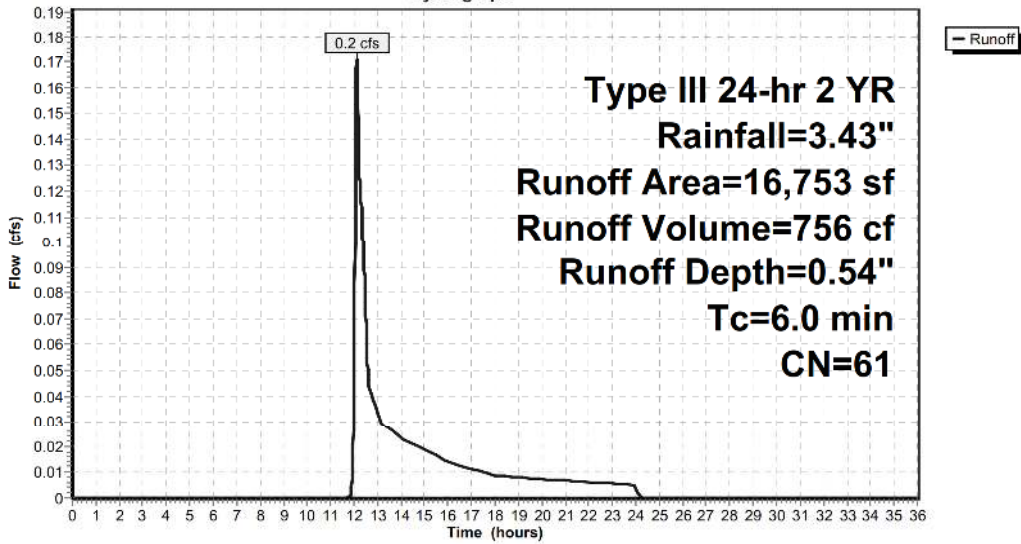
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 0.1 cfs @ 12.11 hrs, Volume= 624 cf, Depth= 0.54"

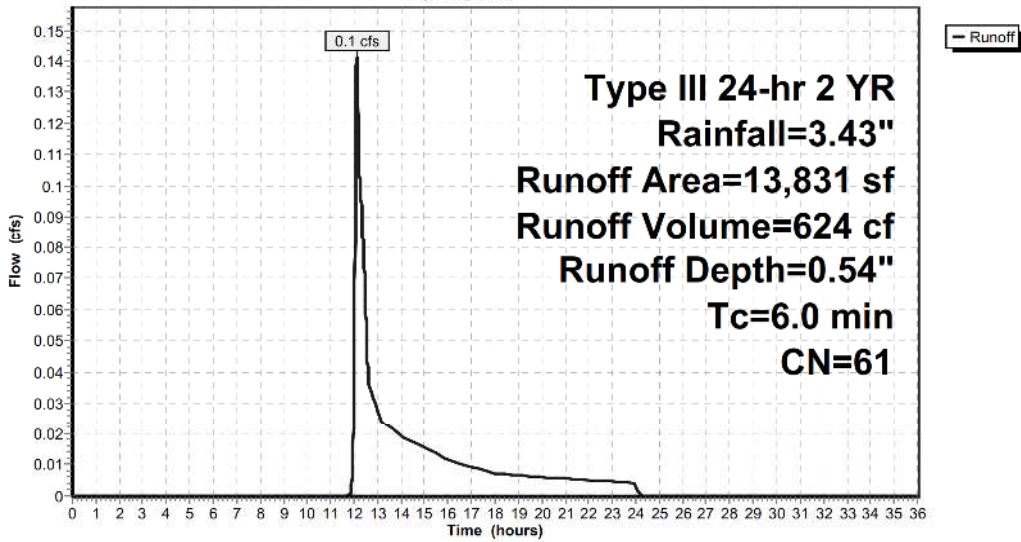
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 5.3 cfs @ 12.09 hrs, Volume= 16,867 cf, Depth= 2.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

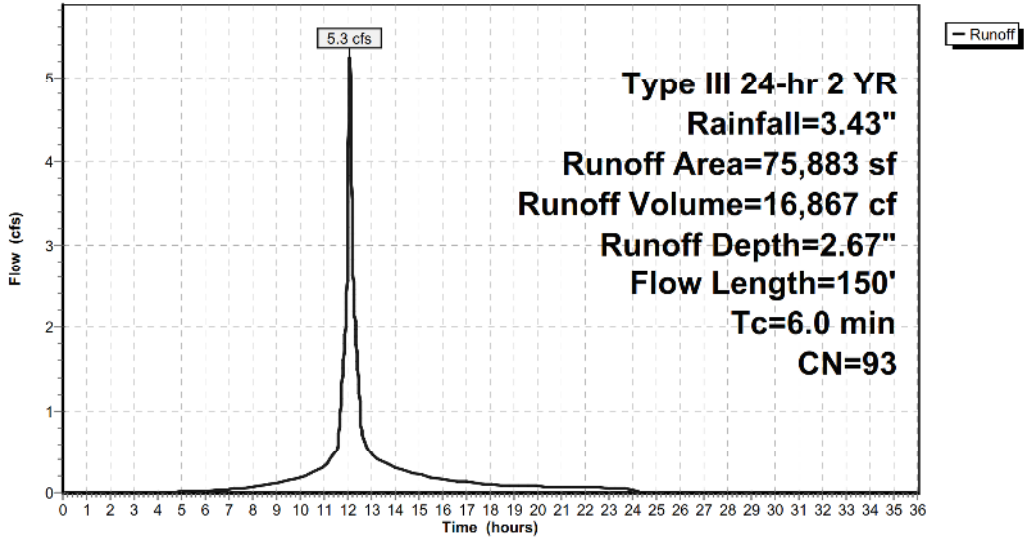
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Type III 24-hr 2 YR Rainfall=3.43"

Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 16.9 cfs @ 12.09 hrs, Volume= 52,425 cf, Depth= 1.88"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 2 YR Rainfall=3.43"

EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
52,654	61	>75% Grass cover, Good, HSG B			
2,441	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
51,059	61	>75% Grass cover, Good, HSG B			
2,239	98	Unconnected pavement, HSG B			
71,764	98	Paved parking, HSG B			
21,974	98	Roofs, HSG B			
<hr/>					
335,218	84	Weighted Average			
125,175		37.34% Pervious Area			
210,043		62.66% Impervious Area			
11,322		5.39% Unconnected			
<hr/>					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	1,574		4.37		Direct Entry,

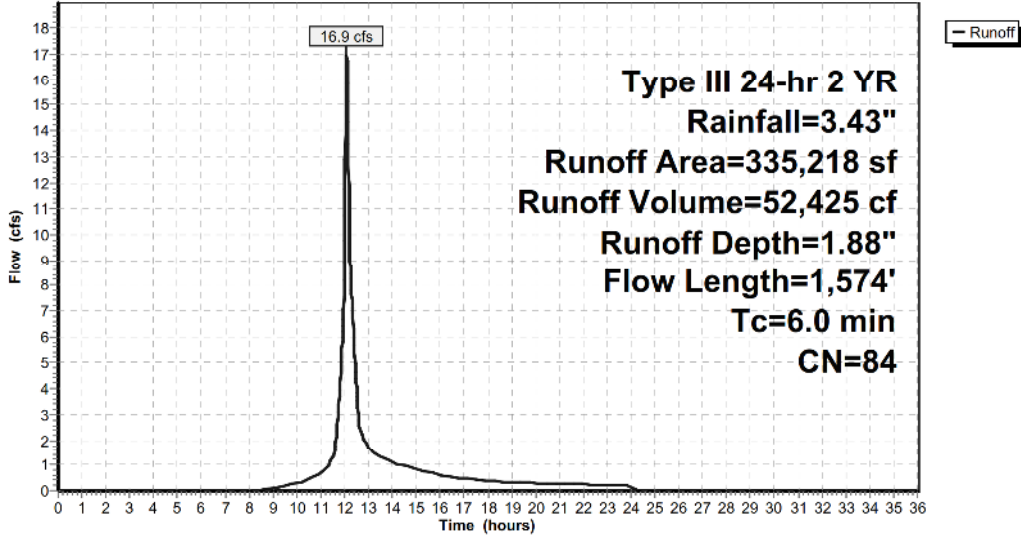
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Type III 24-hr 2 YR Rainfall=3.43"

Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 1.88" for 2 YR event
 Inflow = 16.9 cfs @ 12.09 hrs, Volume= 52,425 cf
 Outflow = 16.9 cfs @ 12.09 hrs, Volume= 52,425 cf, Atten= 0%, Lag= 0.0 min
 Primary = 12.6 cfs @ 12.09 hrs, Volume= 51,078 cf
 Secondary = 4.3 cfs @ 12.09 hrs, Volume= 1,346 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 437.94' @ 12.09 hrs

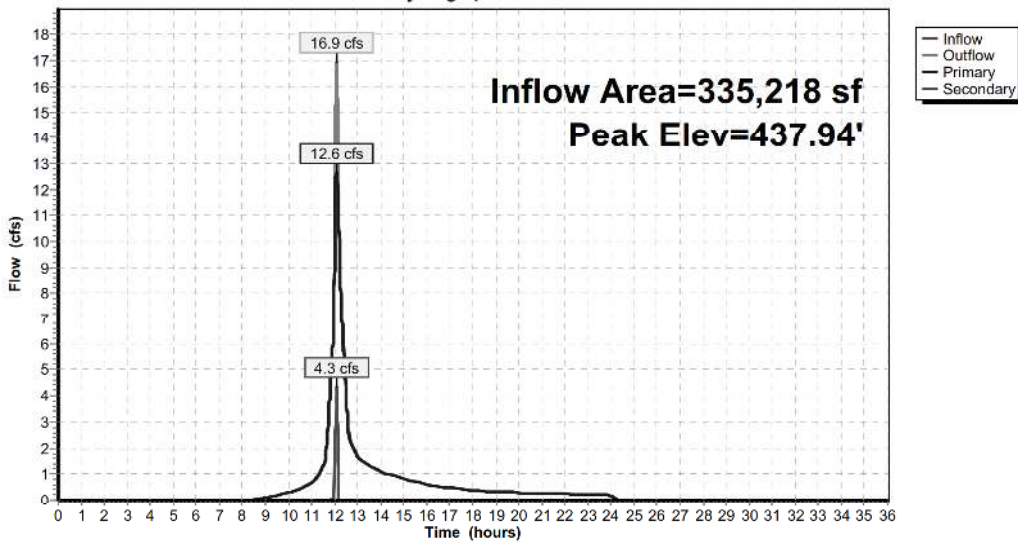
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.7' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=12.6 cfs @ 12.09 hrs HW=437.94' (Free Discharge)
 ↑ **1=15"Ø Culvert** (Inlet Controls 12.6 cfs @ 10.28 fps)

Secondary OutFlow Max=4.3 cfs @ 12.09 hrs HW=437.94' (Free Discharge)
 ↑ **2=15"Ø Culvert** (Passes 4.3 cfs of 9.7 cfs potential flow)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 4.3 cfs @ 1.96 fps)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 2.67" for 2 YR event
 Inflow = 5.3 cfs @ 12.09 hrs, Volume= 16,867 cf
 Outflow = 5.3 cfs @ 12.09 hrs, Volume= 16,867 cf, Atten= 0%, Lag= 0.0 min
 Primary = 5.1 cfs @ 12.09 hrs, Volume= 16,855 cf
 Secondary = 0.1 cfs @ 12.09 hrs, Volume= 12 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 438.54' @ 12.09 hrs

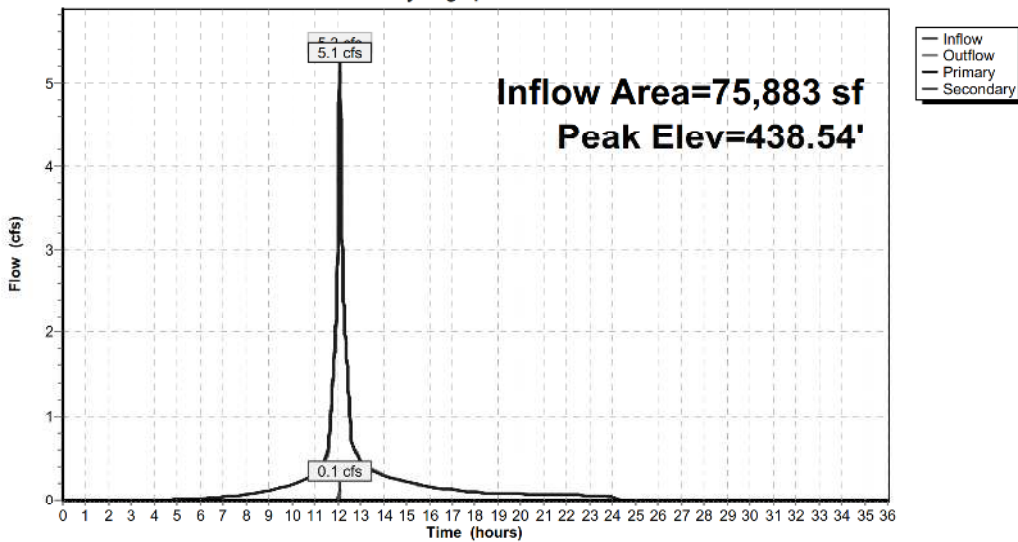
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=5.1 cfs @ 12.09 hrs HW=438.54' (Free Discharge)
 ↑ **1=Culvert** (Barrel Controls 5.1 cfs @ 4.18 fps)

Secondary OutFlow Max=0.1 cfs @ 12.09 hrs HW=438.54' (Free Discharge)
 ↑ **2=Culvert** (Passes 0.1 cfs of 3.0 cfs potential flow)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 0.1 cfs @ 0.55 fps)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 2.41" for 2 YR event
 Inflow = 5.2 cfs @ 12.09 hrs, Volume= 17,324 cf
 Outflow = 0.6 cfs @ 12.82 hrs, Volume= 12,316 cf, Atten= 89%, Lag= 43.9 min
 Discarded = 0.1 cfs @ 12.82 hrs, Volume= 9,506 cf
 Primary = 0.5 cfs @ 12.82 hrs, Volume= 2,809 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 440.74' @ 12.82 hrs Surf.Area= 4,561 sf Storage= 9,758 cf

Plug-Flow detention time= 508.9 min calculated for 12,312 cf (71% of inflow)
 Center-of-Mass det. time= 417.1 min (1,210.6 - 793.5)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.82 hrs HW=440.74' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.4 cfs @ 12.82 hrs HW=440.74' (Free Discharge)
 ↳ **2=Culvert** (Passes 0.4 cfs of 4.2 cfs potential flow)
 ↳ **3=Grate** (Weir Controls 0.4 cfs @ 0.62 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

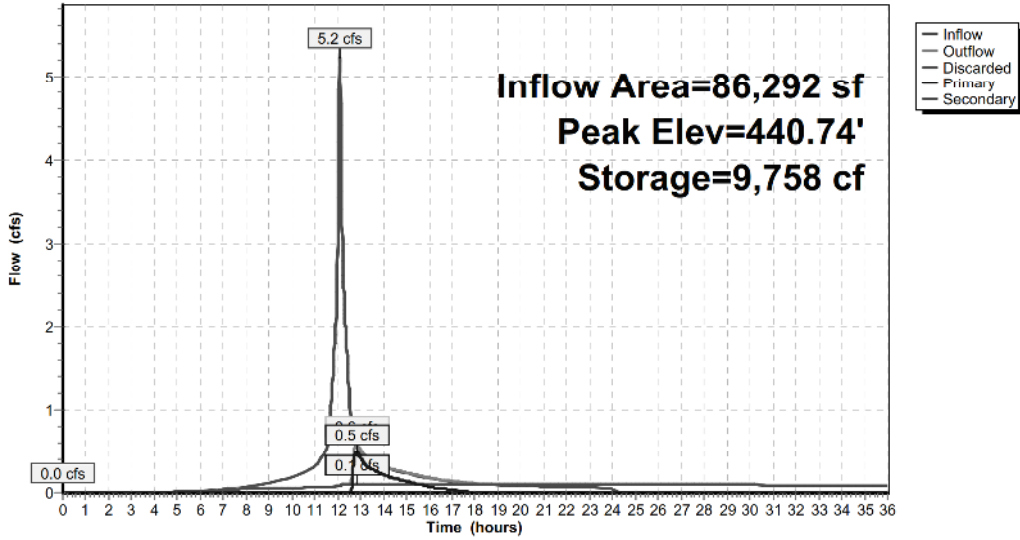
Type III 24-hr 2 YR Rainfall=3.43"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 0.41" for 2 YR event
Inflow = 0.5 cfs @ 12.81 hrs, Volume= 3,564 cf
Outflow = 0.3 cfs @ 13.82 hrs, Volume= 2,633 cf, Atten= 49%, Lag= 60.8 min
Primary = 0.3 cfs @ 13.82 hrs, Volume= 2,633 cf
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Peak Elev= 432.33' @ 13.82 hrs Surf.Area= 1,356 sf Storage= 1,337 cf

Plug-Flow detention time= 125.8 min calculated for 2,633 cf (74% of inflow)
Center-of-Mass det. time= 73.4 min (934.1 - 860.7)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
	Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet) Cum.Store (cubic-feet)
	431.00	724	0 0
	432.00	1,138	931 931
	434.00	2,476	3,614 4,545
	436.00	6,286	8,762 13,307
	438.00	10,636	16,922 30,229
	438.50	12,371	5,752 35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Cuef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.3 cfs @ 13.82 hrs HW=432.33' (Free Discharge)
1=Culvert (Passes 0.0 cfs of 0.4 cfs potential flow)
3=Grate (Controls 0.0 cfs)
2=Orifice/Grate (Orifice Controls 0.3 cfs @ 1.94 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

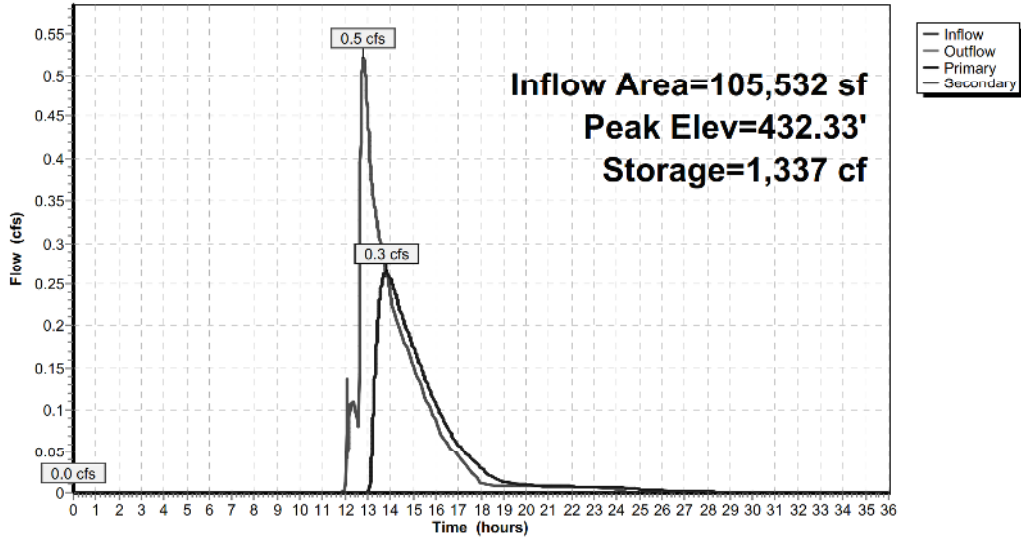
EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 1.78" for 2 YR event
 Inflow = 12.8 cfs @ 12.09 hrs, Volume= 51,703 cf
 Outflow = 1.3 cfs @ 13.57 hrs, Volume= 27,819 cf, Atten= 90%, Lag= 88.4 min
 Discarded = 0.2 cfs @ 13.57 hrs, Volume= 15,353 cf
 Primary = 1.1 cfs @ 13.57 hrs, Volume= 12,466 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.17' @ 13.57 hrs Surf.Area= 7,663 sf Storage= 31,460 cf

Plug-Flow detention time= 483.8 min calculated for 27,812 cf (54% of inflow)
 Center-of-Mass det. time= 367.6 min (1,197.6 - 830.0)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 13.57 hrs HW=436.17' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=1.1 cfs @ 13.57 hrs HW=436.17' (Free Discharge)
 ↑ **2=Culvert** (Passes 1.1 cfs of 13.9 cfs potential flow)
 ↑ **3=Grate** (Weir Controls 1.1 cfs @ 0.87 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

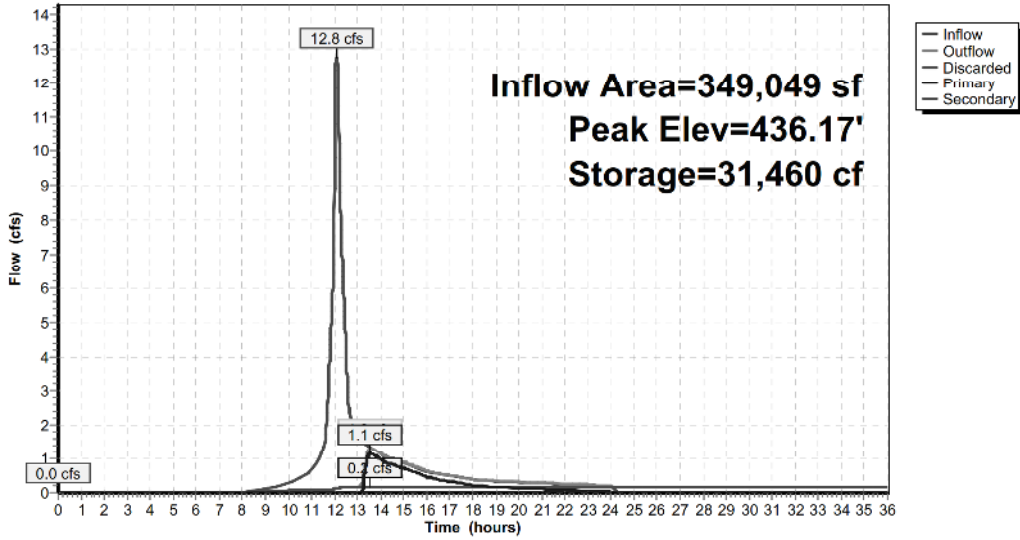
Type III 24-hr 2 YR Rainfall=3.43"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 0.48" for 2 YR event
 Inflow = 4.5 cfs @ 12.09 hrs, Volume= 14,568 cf
 Outflow = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf, Atten= 87%, Lag= 207.3 min
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 429.38' @ 15.54 hrs Surf.Area= 2,660 sf Storage= 7,610 cf

Plug-Flow detention time= 255.7 min calculated for 7,941 cf (55% of inflow)
 Center-of-Mass det. time= 145.0 min (1,079.8 - 934.8)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 1=Culvert (Controls 0.0 cfs)
- 2=Orifice (Controls 0.0 cfs)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.6 cfs @ 15.54 hrs HW=429.38' (Free Discharge)

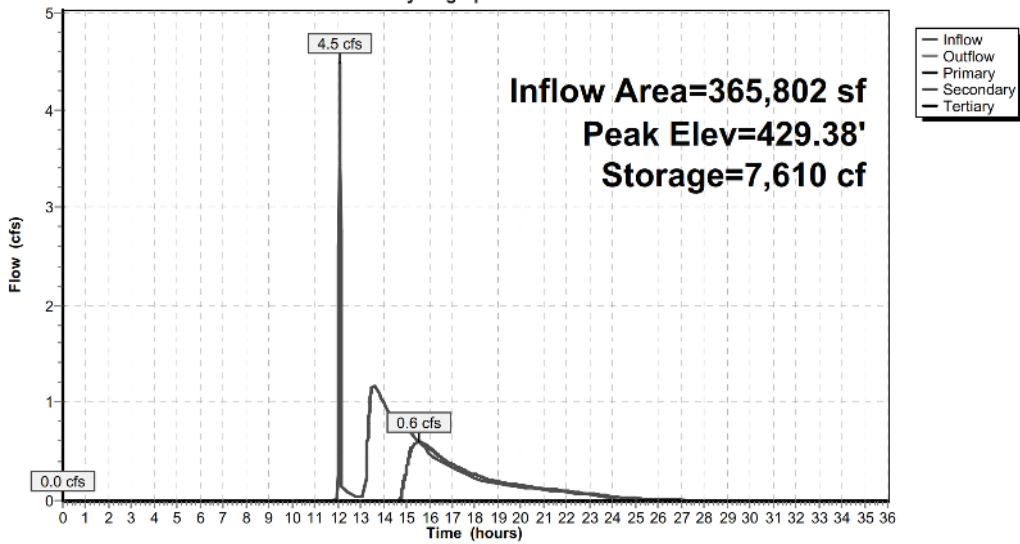
- 3=Orifice II (Orifice Controls 0.6 cfs @ 2.10 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

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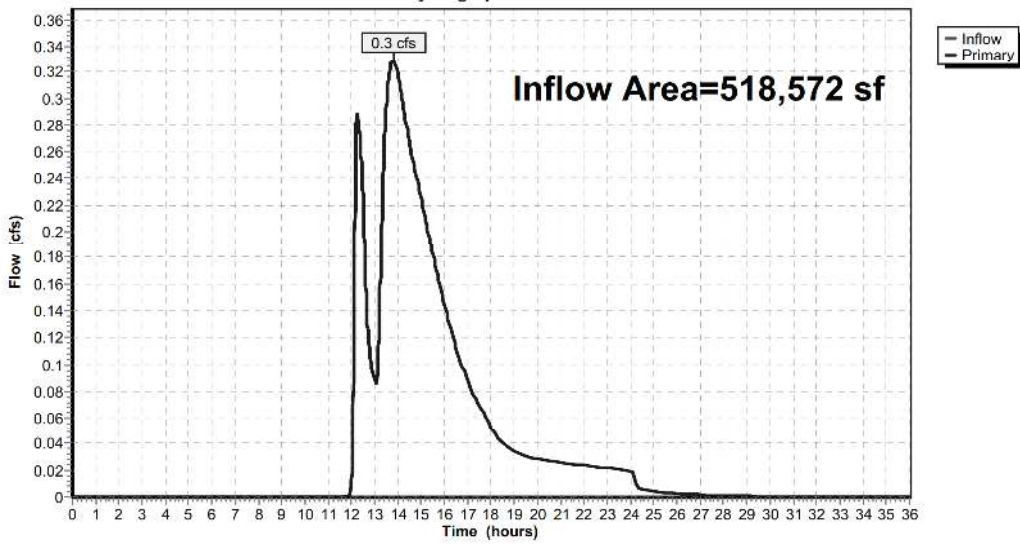
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 0.10" for 2 YR event
Inflow = 0.3 cfs @ 13.79 hrs, Volume= 4,455 cf
Primary = 0.3 cfs @ 13.79 hrs, Volume= 4,455 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 2 YR Rainfall=3.43"

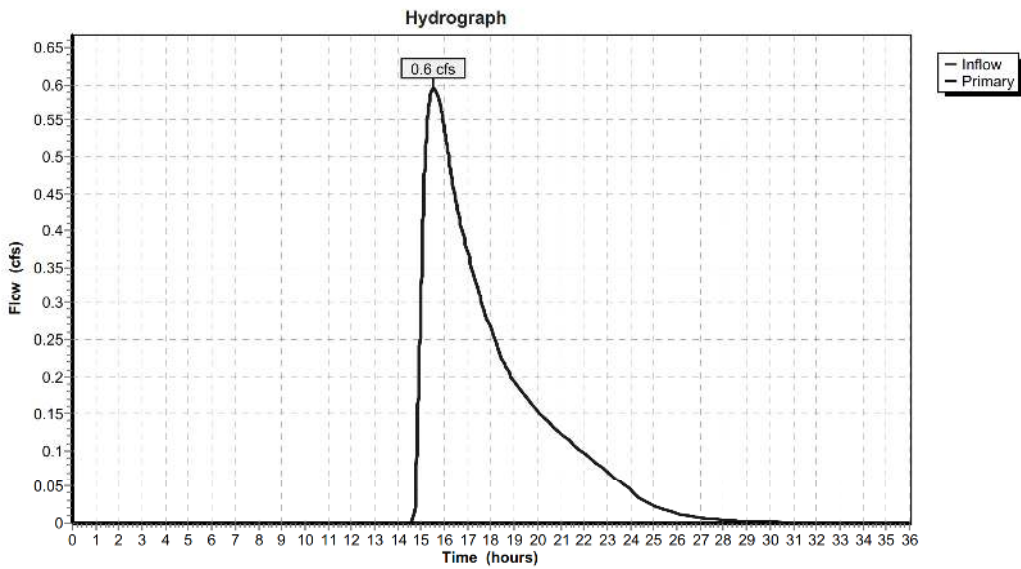
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Summary for Link TR1: TR1

Inflow = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf
Primary = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=0.86" Flow Length=301' Tc=12.6 min CN=59 Runoff=0.7 cfs 3,401 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=0.86" Flow Length=197' Tc=14.8 min CN=59 Runoff=0.3 cfs 1,385 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=0.97" Tc=6.0 min CN=61 Runoff=0.2 cfs 846 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=0.97" Tc=6.0 min CN=61 Runoff=0.4 cfs 1,361 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=0.97" Tc=6.0 min CN=61 Runoff=0.3 cfs 1,124 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=3.52" Flow Length=150' Tc=6.0 min CN=93 Runoff=6.8 cfs 22,272 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=2.65" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=23.8 cfs 73,921 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=438.73' Inflow=23.8 cfs 73,921 cf Primary=13.3 cfs 68,897 cf Secondary=10.5 cfs 5,024 cf Outflow=23.8 cfs 73,921 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=438.70' Inflow=6.8 cfs 22,272 cf Primary=5.5 cfs 21,898 cf Secondary=1.3 cfs 375 cf Outflow=6.8 cfs 22,272 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=440.83' Storage=10,186 cf Inflow=5.8 cfs 22,743 cf Discarded=0.1 cfs 9,855 cf Primary=2.8 cfs 7,578 cf Secondary=0.0 cfs 0 cf Outflow=2.9 cfs 17,433 cf
Pond 3P: HOTEL DET. POND	Peak Elev=433.29' Storage=2,949 cf Inflow=3.0 cfs 9,338 cf Primary=1.0 cfs 8,407 cf Secondary=0.0 cfs 0 cf Outflow=1.0 cfs 8,407 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=436.33' Storage=32,663 cf Inflow=13.6 cfs 70,021 cf Discarded=0.2 cfs 15,731 cf Primary=6.3 cfs 30,383 cf Secondary=0.0 cfs 0 cf Outflow=6.5 cfs 46,114 cf
Pond 5P: THs DET. POND	Peak Elev=430.14' Storage=9,767 cf Inflow=10.9 cfs 36,768 cf Primary=0.0 cfs 0 cf Secondary=3.0 cfs 30,141 cf Tertiary=0.0 cfs 0 cf Outflow=3.0 cfs 30,141 cf
Link PRDP3: PRDP3	Inflow=1.3 cfs 11,808 cf Primary=1.3 cfs 11,808 cf
Link TR1: TR1	Inflow=3.0 cfs 30,141 cf Primary=3.0 cfs 30,141 cf

Total Runoff Area = 518,572 sf Runoff Volume = 104,311 cf Average Runoff Depth = 2.41"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 0.7 cfs @ 12.20 hrs, Volume= 3,401 cf, Depth= 0.86"

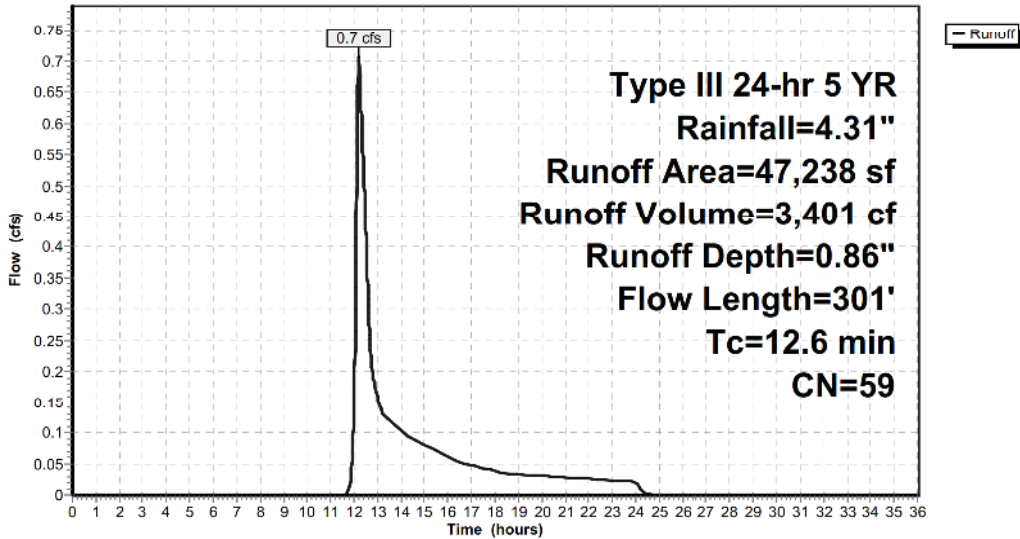
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 0.3 cfs @ 12.25 hrs, Volume= 1,385 cf, Depth= 0.86"

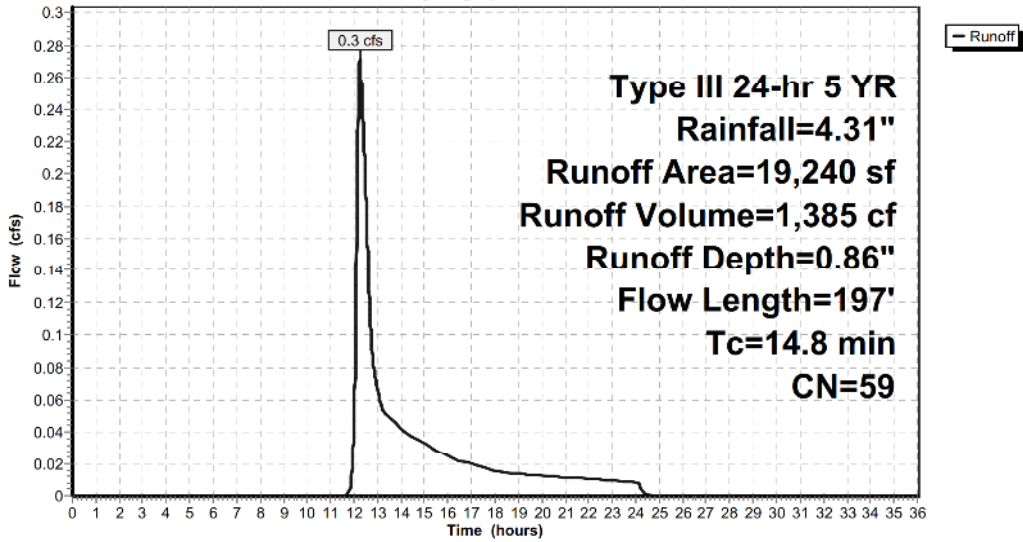
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.2 cfs @ 12.10 hrs, Volume= 846 cf, Depth= 0.97"

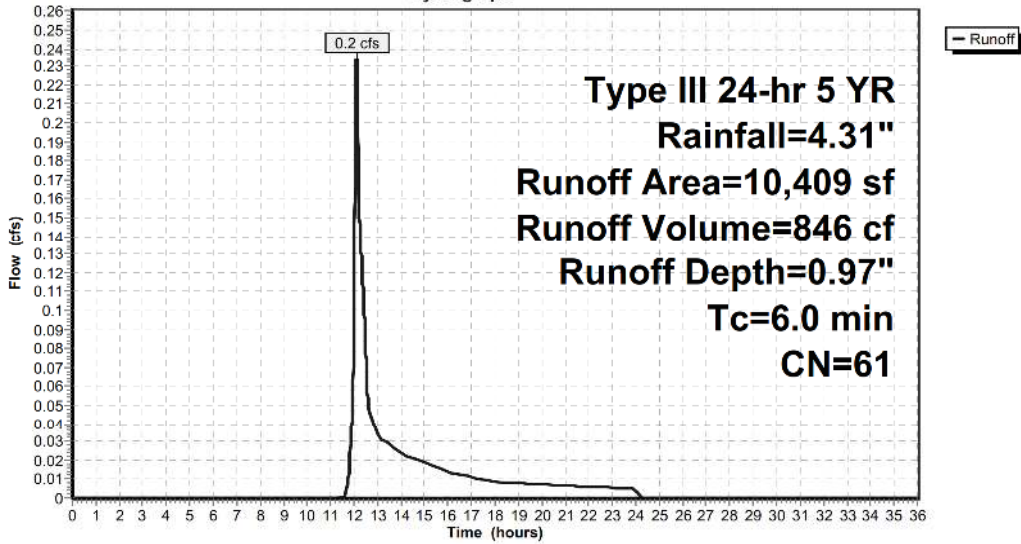
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 0.4 cfs @ 12.10 hrs, Volume= 1,361 cf, Depth= 0.97"

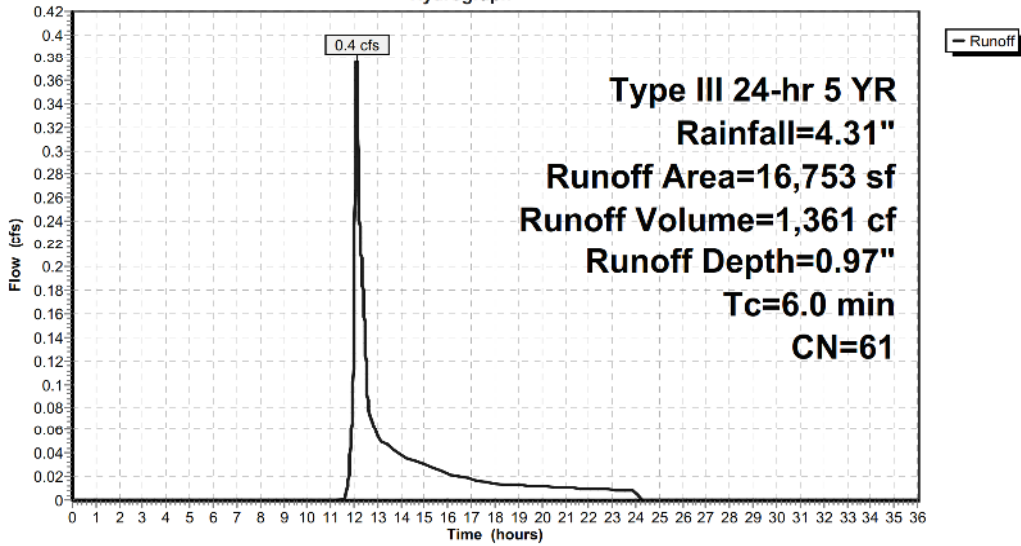
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 0.3 cfs @ 12.10 hrs, Volume= 1,124 cf, Depth= 0.97"

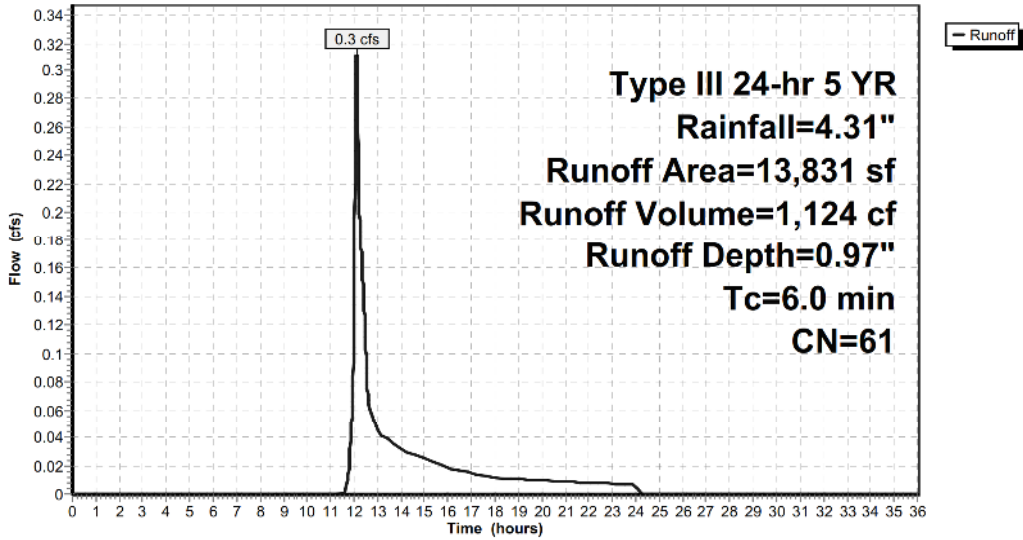
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 6.8 cfs @ 12.08 hrs, Volume= 22,272 cf, Depth= 3.52"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

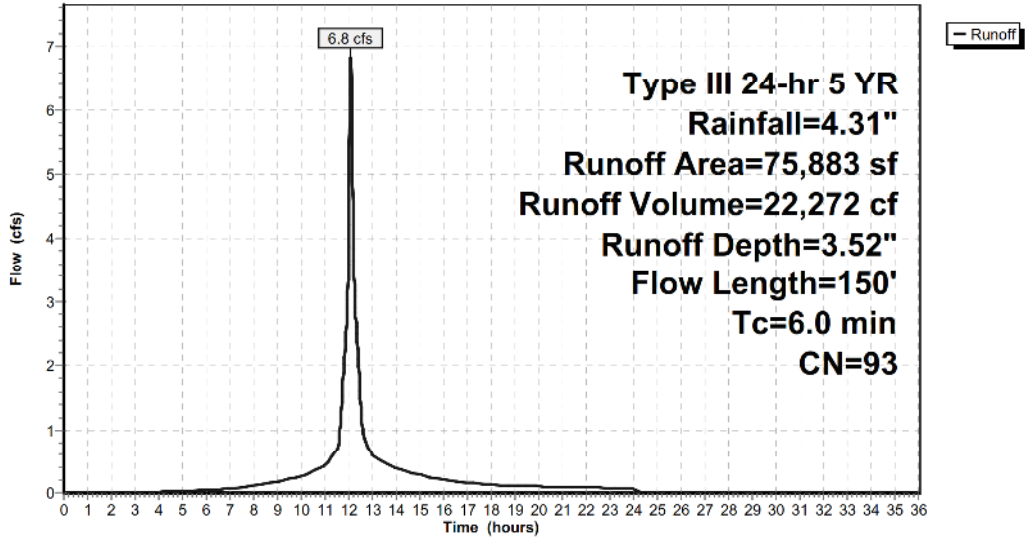
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Type III 24-hr 5 YR Rainfall=4.31"

Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 23.8 cfs @ 12.09 hrs, Volume= 73,921 cf, Depth= 2.65"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 5 YR Rainfall=4.31"

EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
2,441	98	Roofs, HSG B
52,654	61	>75% Grass cover, Good, HSG B
2,441	98	Roofs, HSG B
2,441	98	Roofs, HSG B
51,059	61	>75% Grass cover, Good, HSG B
2,239	98	Unconnected pavement, HSG B
71,764	98	Paved parking, HSG B
21,974	98	Roofs, HSG B
<hr/>		
335,218	84	Weighted Average
125,175		37.34% Pervious Area
210,043		62.66% Impervious Area
11,322		5.39% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	1,574		4.37		Direct Entry,

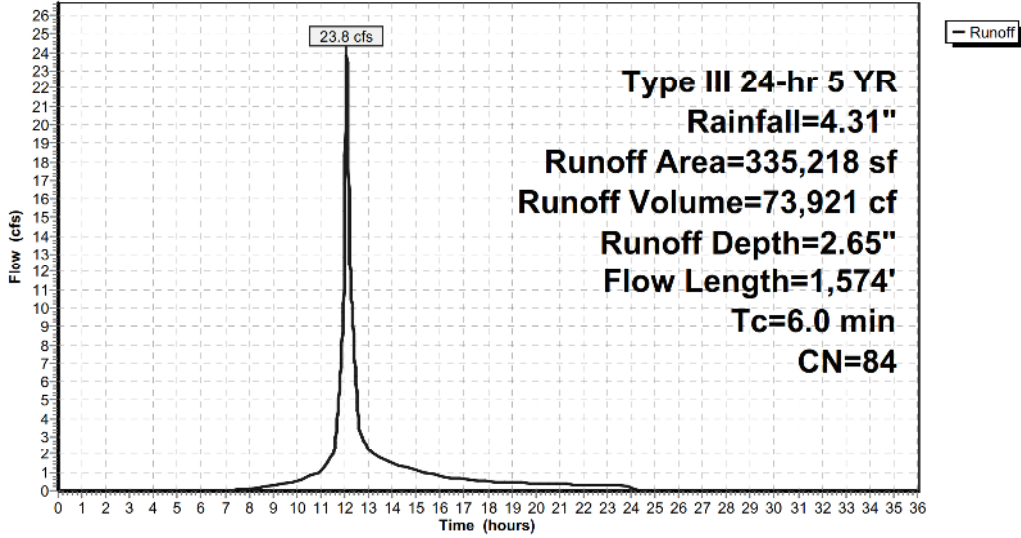
EAGLE RIDGE-PRDP3

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Type III 24-hr 5 YR Rainfall=4.31"

Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 2.65" for 5 YR event
 Inflow = 23.8 cfs @ 12.09 hrs, Volume= 73,921 cf
 Outflow = 23.8 cfs @ 12.09 hrs, Volume= 73,921 cf, Atten= 0%, Lag= 0.0 min
 Primary = 13.3 cfs @ 12.09 hrs, Volume= 68,897 cf
 Secondary = 10.5 cfs @ 12.09 hrs, Volume= 5,024 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 438.73' @ 12.09 hrs

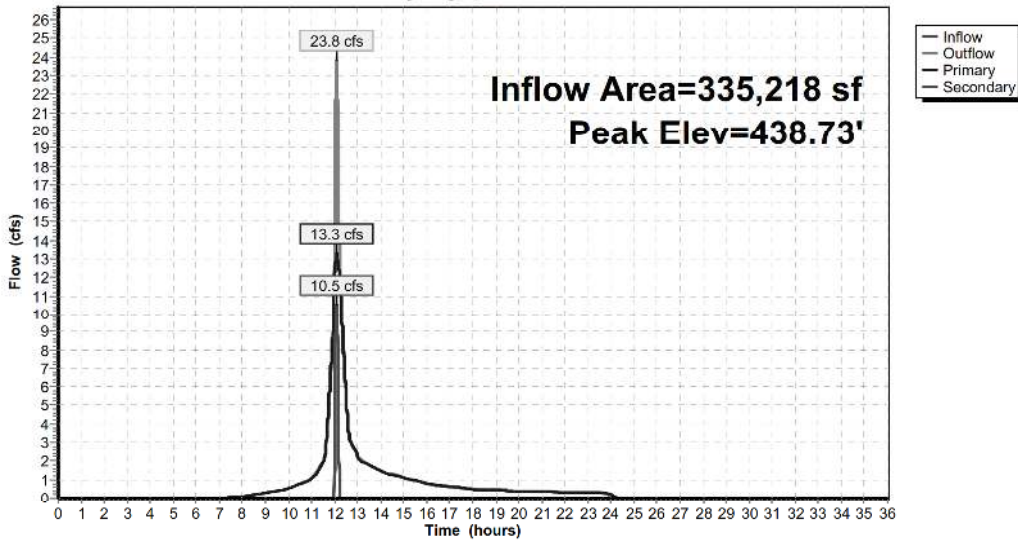
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.7' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=13.3 cfs @ 12.09 hrs HW=438.71' (Free Discharge)
 ↳ **1=15"Ø Culvert** (Inlet Controls 13.3 cfs @ 10.81 fps)

Secondary OutFlow Max=10.5 cfs @ 12.09 hrs HW=438.71' (Free Discharge)
 ↳ **2=15"Ø Culvert** (Inlet Controls 10.5 cfs @ 8.58 fps)
 ↳ **3=Broad-Crested Rectangular Weir** (Passes 10.5 cfs of 22.2 cfs potential flow)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 3.52" for 5 YR event
 Inflow = 6.8 cfs @ 12.08 hrs, Volume= 22,272 cf
 Outflow = 6.8 cfs @ 12.08 hrs, Volume= 22,272 cf, Atten= 0%, Lag= 0.0 min
 Primary = 5.5 cfs @ 12.08 hrs, Volume= 21,898 cf
 Secondary = 1.3 cfs @ 12.08 hrs, Volume= 375 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 438.70' @ 12.08 hrs

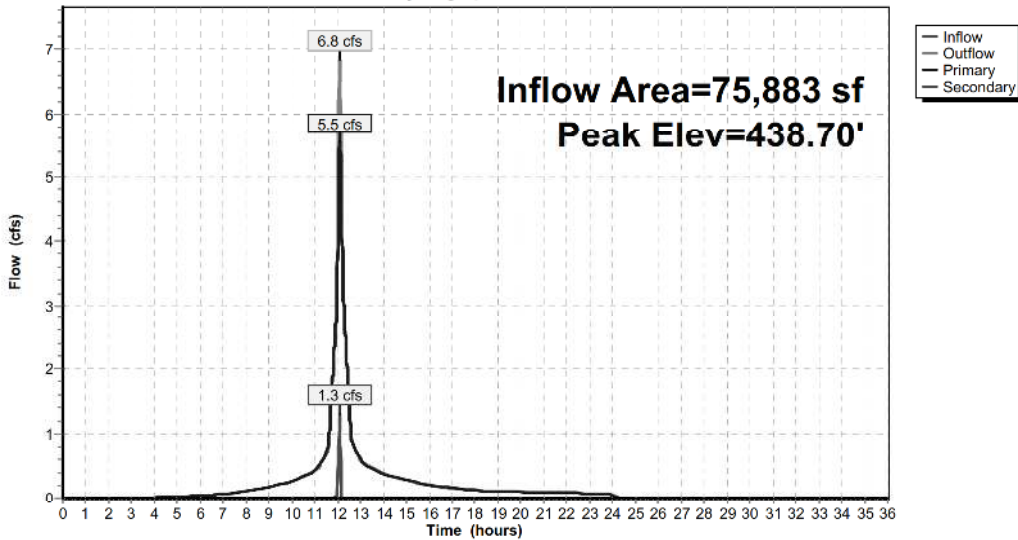
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=5.5 cfs @ 12.08 hrs HW=438.70' (Free Discharge)
 ↑ **1=Culvert** (Barrel Controls 5.5 cfs @ 4.52 fps)

Secondary OutFlow Max=1.3 cfs @ 12.08 hrs HW=438.70' (Free Discharge)
 ↑ **2=Culvert** (Passes 1.3 cfs of 3.6 cfs potential flow)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 1.3 cfs @ 1.26 fps)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 3.16" for 5 YR event
 Inflow = 5.8 cfs @ 12.09 hrs, Volume= 22,743 cf
 Outflow = 2.9 cfs @ 12.30 hrs, Volume= 17,433 cf, Atten= 50%, Lag= 12.8 min
 Discarded = 0.1 cfs @ 12.30 hrs, Volume= 9,855 cf
 Primary = 2.8 cfs @ 12.30 hrs, Volume= 7,578 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 440.83' @ 12.30 hrs Surf.Area= 4,644 sf Storage= 10,186 cf

Plug-Flow detention time= 383.0 min calculated for 17,433 cf (77% of inflow)
 Center-of-Mass det. time= 299.5 min (1,087.0 - 787.5)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.30 hrs HW=440.83' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=2.7 cfs @ 12.30 hrs HW=440.83' (Free Discharge)
 ↳ **2=Culvert** (Passes 2.7 cfs of 4.4 cfs potential flow)
 ↳ **3=Grate** (Weir Controls 2.7 cfs @ 1.18 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

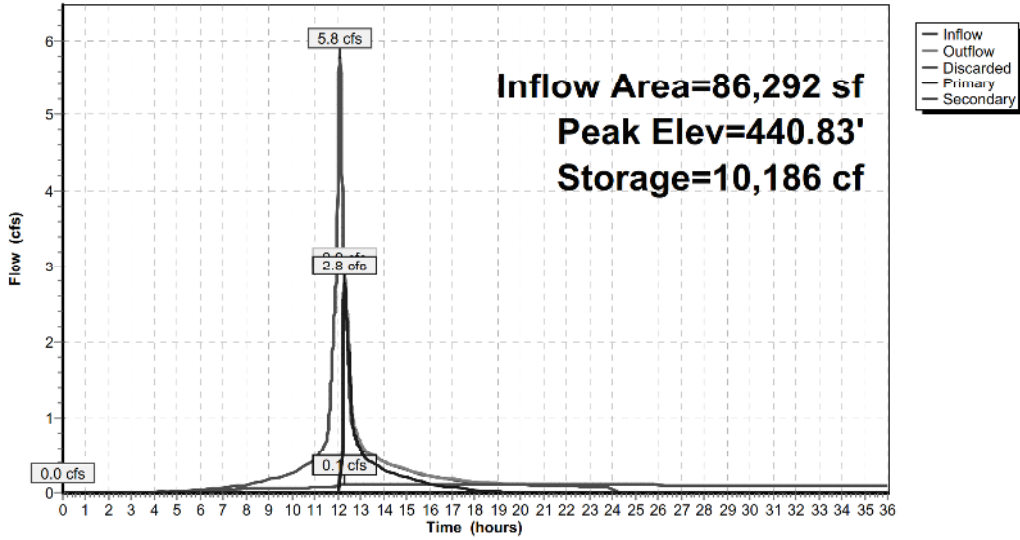
Type III 24-hr 5 YR Rainfall=4.31"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 1.06" for 5 YR event
 Inflow = 3.0 cfs @ 12.30 hrs, Volume= 9,338 cf
 Outflow = 1.0 cfs @ 12.69 hrs, Volume= 8,407 cf, Atten= 68%, Lag= 23.5 min
 Primary = 1.0 cfs @ 12.69 hrs, Volume= 8,407 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 433.29' @ 12.69 hrs Surf.Area= 1,999 sf Storage= 2,949 cf

Plug-Flow detention time= 72.5 min calculated for 8,407 cf (90% of inflow)
 Center-of-Mass det. time= 42.5 min (862.6 - 820.1)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
	Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet) Cum.Store (cubic-feet)
	431.00	724	0 0
	432.00	1,138	931 931
	434.00	2,476	3,614 4,545
	436.00	6,286	8,762 13,307
	438.00	10,636	16,922 30,229
	438.50	12,371	5,752 35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.0 cfs @ 12.69 hrs HW=433.29' (Free Discharge)

- 1=Culvert (Passes 0.0 cfs of 3.4 cfs potential flow)
- 3=Grate (Controls 0.0 cfs)
- 2=Orifice/Grate (Orifice Controls 1.0 cfs @ 4.90 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)

- 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

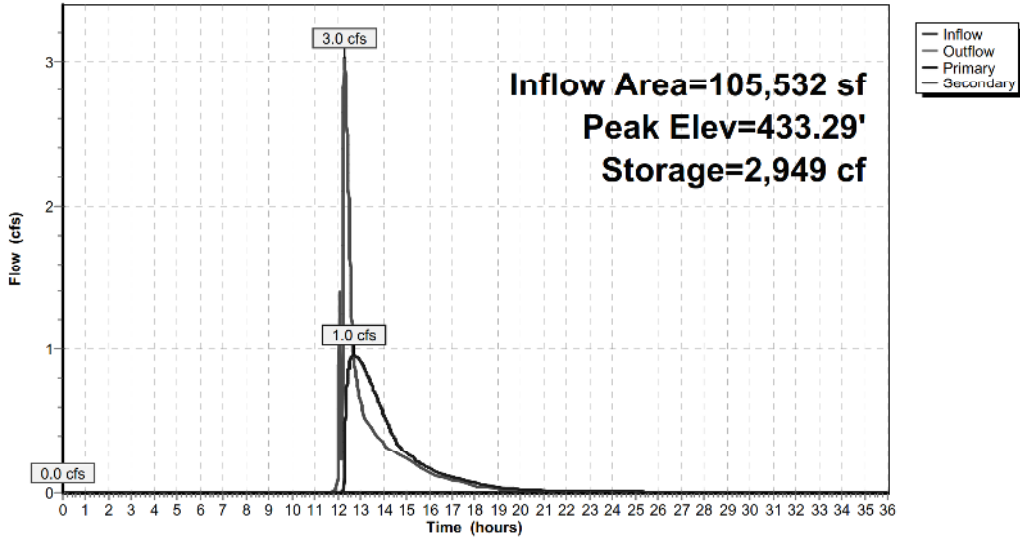
Type III 24-hr 5 YR Rainfall=4.31"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 2.41" for 5 YR event
 Inflow = 13.6 cfs @ 12.09 hrs, Volume= 70,021 cf
 Outflow = 6.5 cfs @ 12.46 hrs, Volume= 46,114 cf, Atten= 52%, Lag= 22.4 min
 Discarded = 0.2 cfs @ 12.46 hrs, Volume= 15,731 cf
 Primary = 6.3 cfs @ 12.46 hrs, Volume= 30,383 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.33' @ 12.46 hrs Surf.Area= 7,841 sf Storage= 32,663 cf

Plug-Flow detention time= 340.0 min calculated for 46,114 cf (66% of inflow)
 Center-of-Mass det. time= 235.0 min (1,059.1 - 824.2)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 12.46 hrs HW=436.33' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=6.3 cfs @ 12.46 hrs HW=436.33' (Free Discharge)
 ↑ **2=Culvert** (Passes 6.3 cfs of 14.2 cfs potential flow)
 ↑ **3=Grate** (Weir Controls 6.3 cfs @ 1.55 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

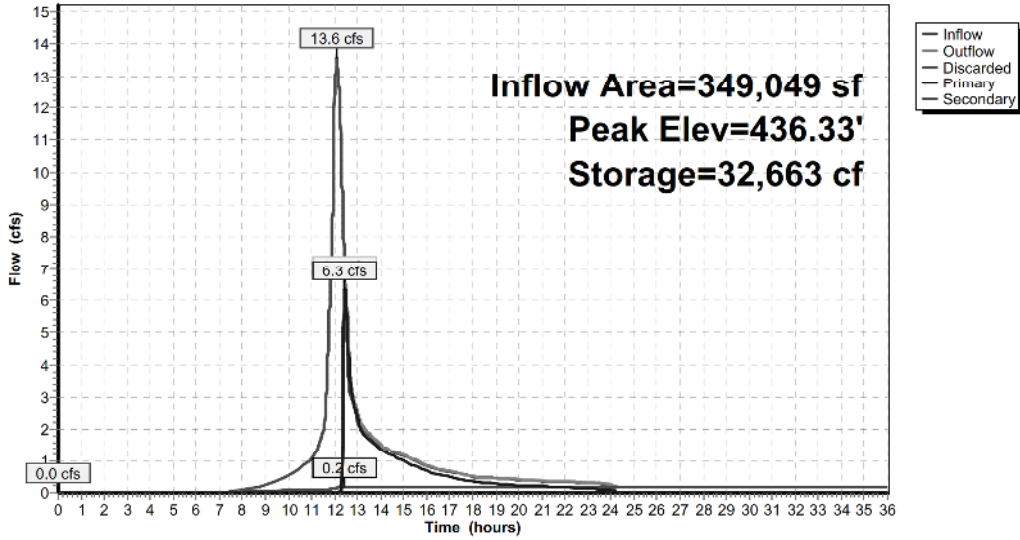
Type III 24-hr 5 YR Rainfall=4.31"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 1.21" for 5 YR event
 Inflow = 10.9 cfs @ 12.09 hrs, Volume= 36,768 cf
 Outflow = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf, Atten= 72%, Lag= 41.8 min
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 430.14' @ 12.79 hrs Surf.Area= 3,080 sf Storage= 9,767 cf

Plug-Flow detention time= 121.5 min calculated for 30,141 cf (82% of inflow)
 Center-of-Mass det. time= 56.3 min (929.2 - 872.9)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 1=Culvert (Controls 0.0 cfs)
- 2=Orifice (Controls 0.0 cfs)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=3.0 cfs @ 12.79 hrs HW=430.14' (Free Discharge)

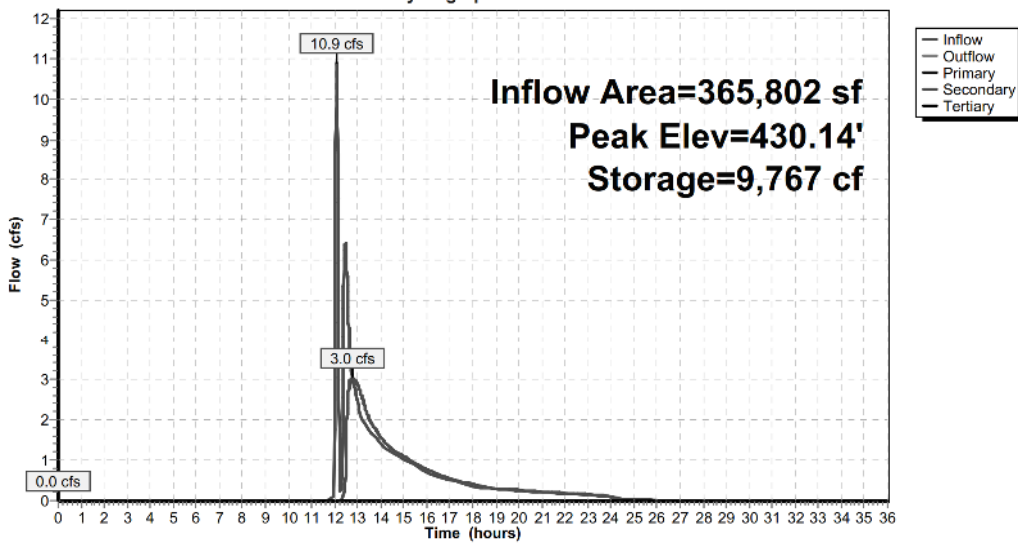
- 3=Orifice II (Orifice Controls 3.0 cfs @ 3.86 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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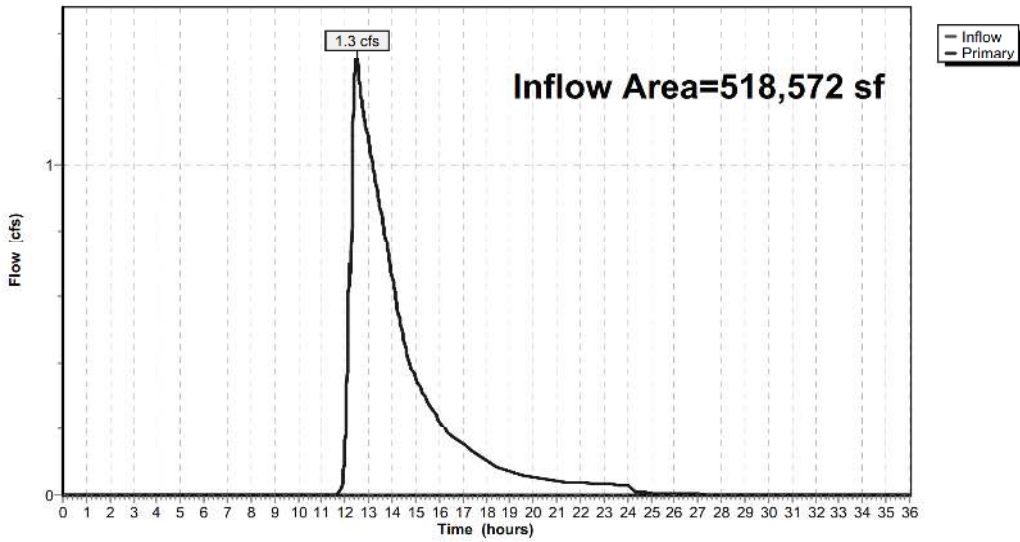
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 0.27" for 5 YR event
Inflow = 1.3 cfs @ 12.49 hrs, Volume= 11,808 cf
Primary = 1.3 cfs @ 12.49 hrs, Volume= 11,808 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 5 YR Rainfall=4.31"

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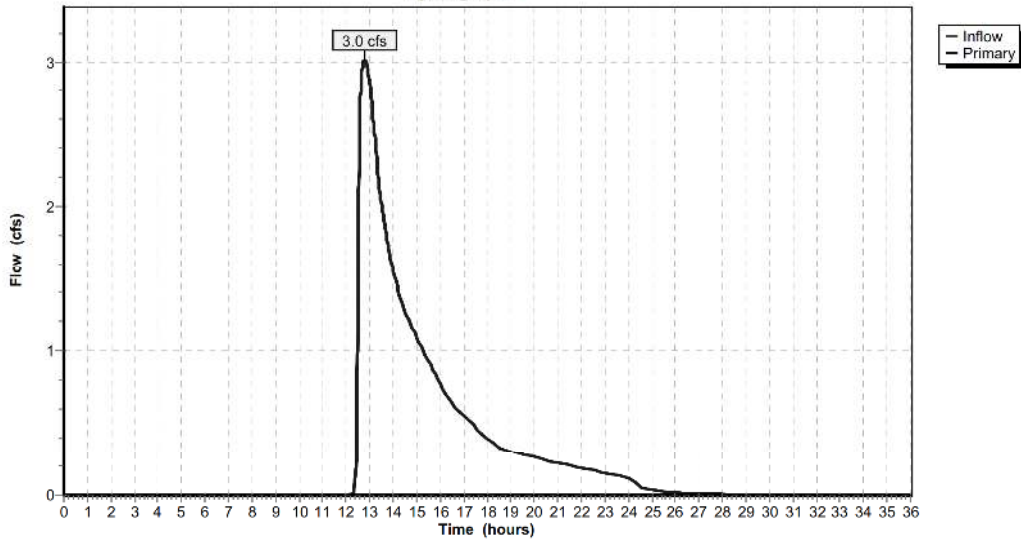
Summary for Link TR1: TR1

Inflow = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf
Primary = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=1.31" Flow Length=301' Tc=12.6 min CN=59 Runoff=1.2 cfs 5,152 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=1.31" Flow Length=197' Tc=14.8 min CN=59 Runoff=0.5 cfs 2,098 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=1.45" Tc=6.0 min CN=61 Runoff=0.4 cfs 1,256 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=1.45" Tc=6.0 min CN=61 Runoff=0.6 cfs 2,021 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=1.45" Tc=6.0 min CN=61 Runoff=0.5 cfs 1,669 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=4.33" Flow Length=150' Tc=6.0 min CN=93 Runoff=8.3 cfs 27,353 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=3.39" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=30.3 cfs 94,687 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=442.75' Inflow=30.3 cfs 94,687 cf Primary=16.2 cfs 85,664 cf Secondary=14.1 cfs 9,023 cf Outflow=30.3 cfs 94,687 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=438.81' Inflow=8.3 cfs 27,353 cf Primary=5.8 cfs 26,410 cf Secondary=2.5 cfs 944 cf Outflow=8.3 cfs 27,353 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=440.92' Storage=10,616 cf Inflow=6.2 cfs 27,666 cf Discarded=0.1 cfs 10,107 cf Primary=4.5 cfs 12,097 cf Secondary=0.0 cfs 0 cf Outflow=4.6 cfs 22,205 cf
Pond 3P: HOTEL DET. POND	Peak Elev=434.38' Storage=5,628 cf Inflow=5.6 cfs 15,139 cf Primary=1.4 cfs 14,208 cf Secondary=0.0 cfs 0 cf Outflow=1.4 cfs 14,208 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=436.45' Storage=33,642 cf Inflow=16.7 cfs 87,332 cf Discarded=0.2 cfs 16,040 cf Primary=11.9 cfs 47,368 cf Secondary=0.0 cfs 0 cf Outflow=12.1 cfs 63,408 cf
Pond 5P: THs DET. POND	Peak Elev=431.84' Storage=16,378 cf Inflow=14.7 cfs 58,412 cf Primary=0.7 cfs 588 cf Secondary=5.8 cfs 51,197 cf Tertiary=0.0 cfs 0 cf Outflow=6.5 cfs 51,785 cf
Link PRDP3: PRDP3	Inflow=2.7 cfs 19,948 cf Primary=2.7 cfs 19,948 cf
Link TR1: TR1	Inflow=5.8 cfs 51,197 cf Primary=5.8 cfs 51,197 cf

Total Runoff Area = 518,572 sf Runoff Volume = 134,236 cf Average Runoff Depth = 3.11"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 1.2 cfs @ 12.19 hrs, Volume= 5,152 cf, Depth= 1.31"

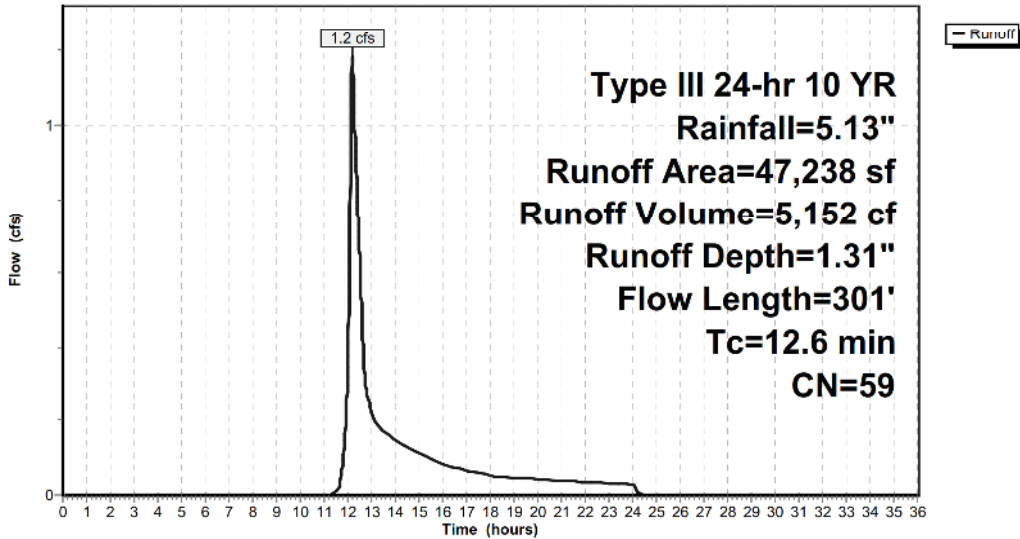
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 0.5 cfs @ 12.22 hrs, Volume= 2,098 cf, Depth= 1.31"

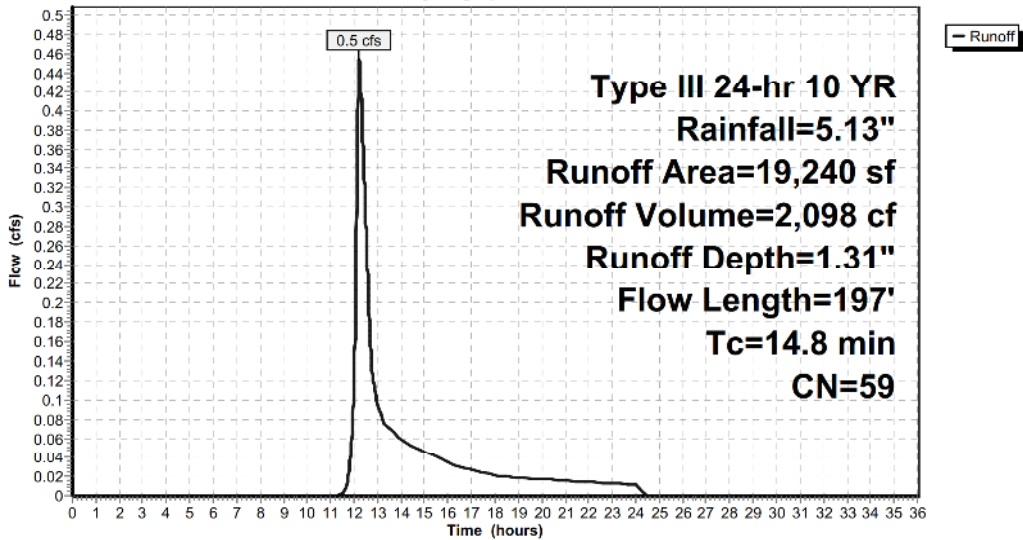
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.4 cfs @ 12.10 hrs, Volume= 1,256 cf, Depth= 1.45"

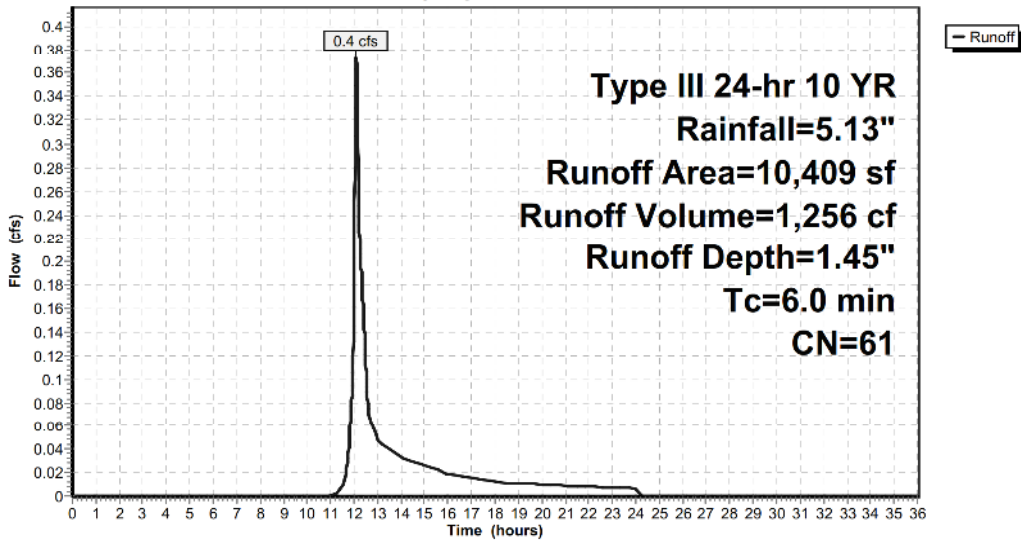
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 0.6 cfs @ 12.10 hrs, Volume= 2,021 cf, Depth= 1.45"

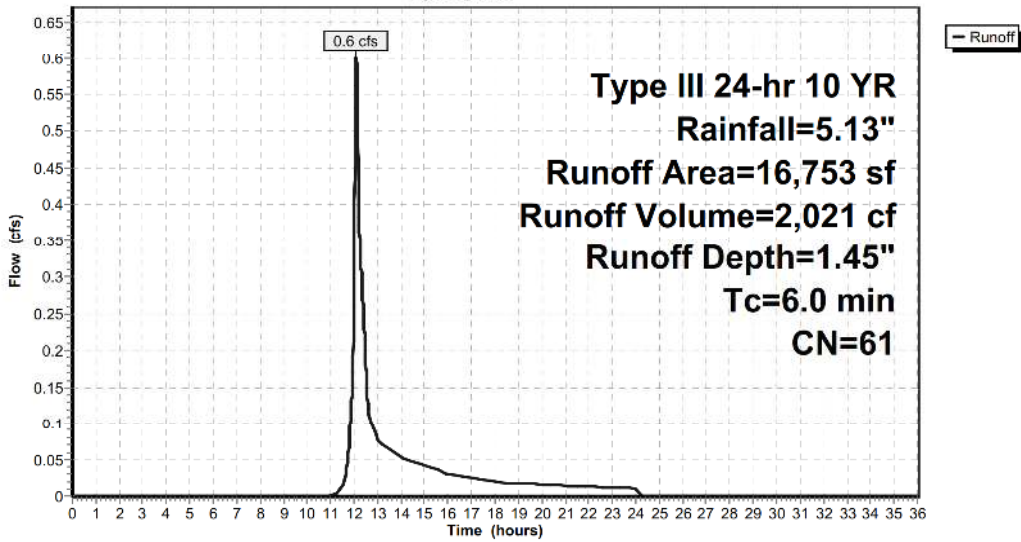
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 0.5 cfs @ 12.10 hrs, Volume= 1,669 cf, Depth= 1.45"

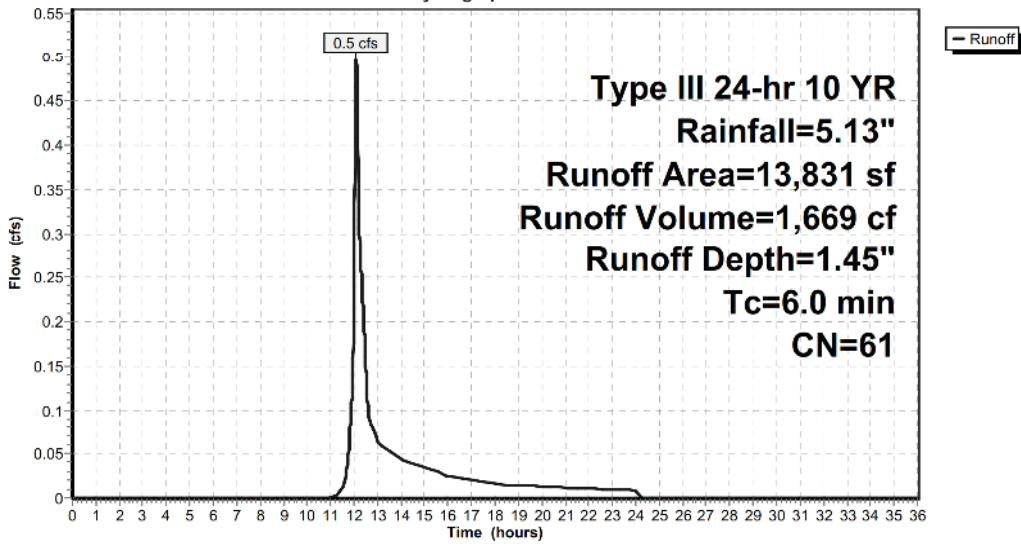
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 8.3 cfs @ 12.08 hrs, Volume= 27,353 cf, Depth= 4.33"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

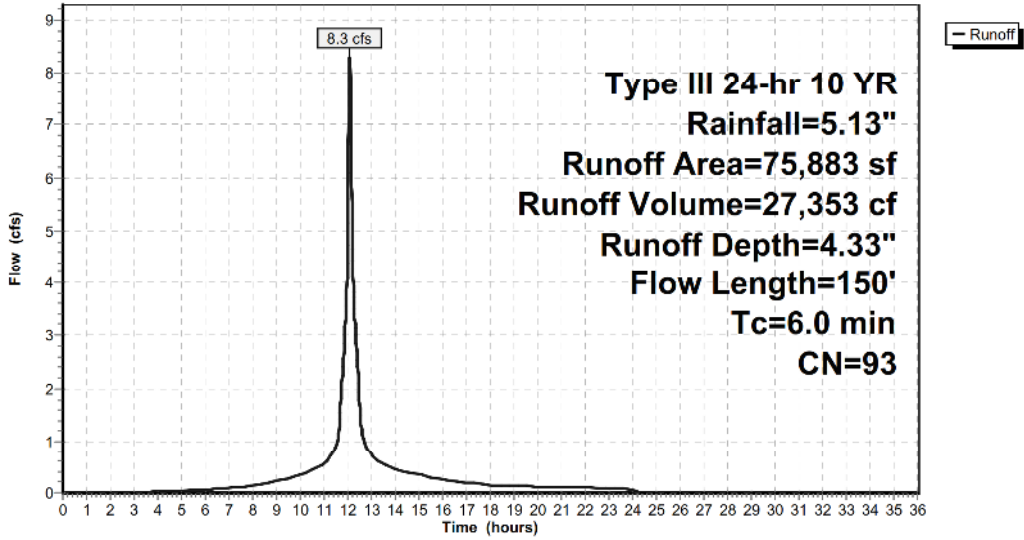
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Type III 24-hr 10 YR Rainfall=5.13"

Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 30.3 cfs @ 12.09 hrs, Volume= 94,687 cf, Depth= 3.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 10 YR Rainfall=5.13"

EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
2,441	98	Roofs, HSG B
52,654	61	>75% Grass cover, Good, HSG B
2,441	98	Roofs, HSG B
2,441	98	Roofs, HSG B
51,059	61	>75% Grass cover, Good, HSG B
2,239	98	Unconnected pavement, HSG B
71,764	98	Paved parking, HSG B
21,974	98	Roofs, HSG B
<hr/>		
335,218	84	Weighted Average
125,175		37.34% Pervious Area
210,043		62.66% Impervious Area
11,322		5.39% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	1,574		4.37		Direct Entry,

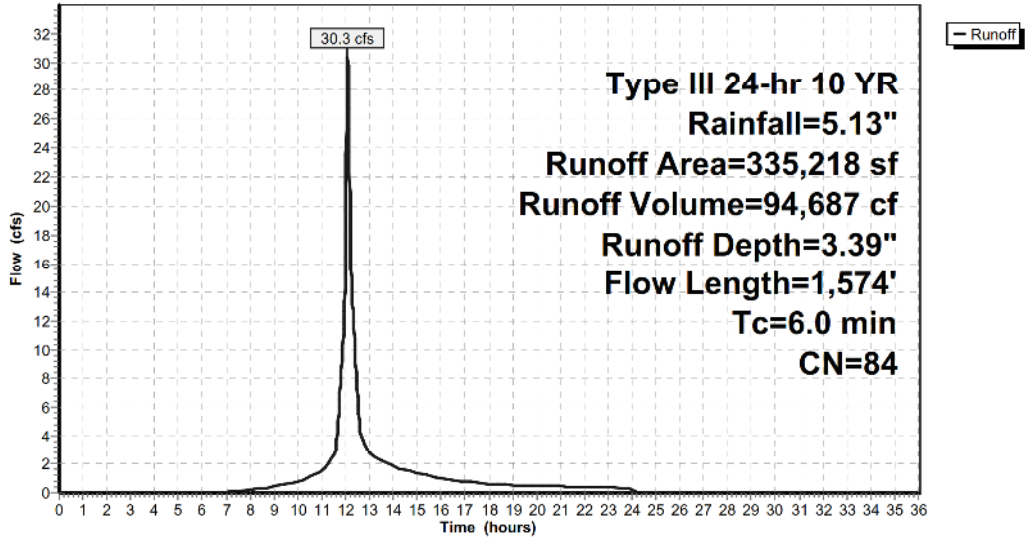
EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 3.39" for 10 YR event
 Inflow = 30.3 cfs @ 12.09 hrs, Volume= 94,687 cf
 Outflow = 30.3 cfs @ 12.09 hrs, Volume= 94,687 cf, Atten= 0%, Lag= 0.0 min
 Primary = 16.2 cfs @ 12.09 hrs, Volume= 85,664 cf
 Secondary = 14.1 cfs @ 12.09 hrs, Volume= 9,023 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 442.75' @ 12.09 hrs

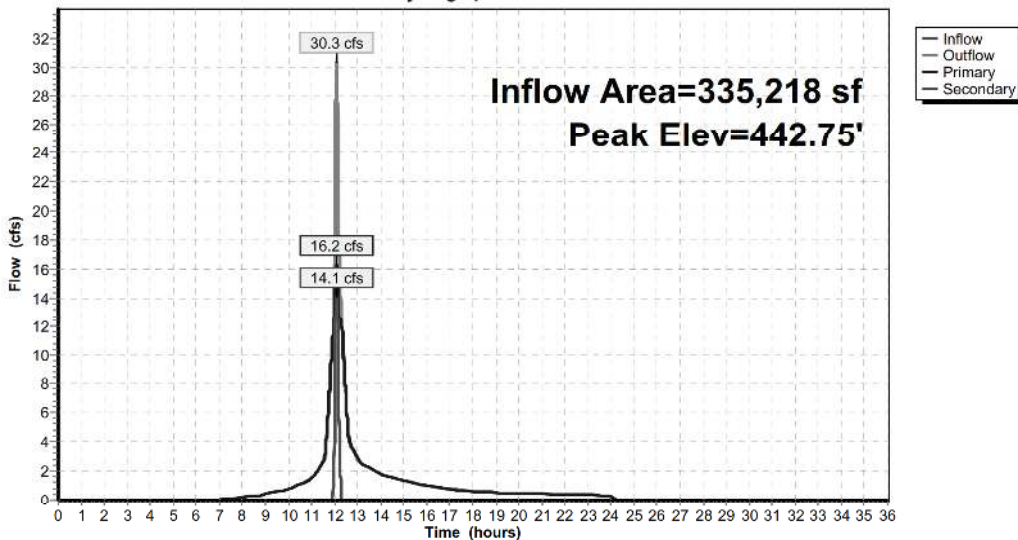
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=16.2 cfs @ 12.09 hrs HW=442.72' (Free Discharge)
 ↳ **1=15"Ø Culvert** (Inlet Controls 16.2 cfs @ 13.22 fps)

Secondary OutFlow Max=14.1 cfs @ 12.09 hrs HW=442.72' (Free Discharge)
 ↳ **2=15"Ø Culvert** (Inlet Controls 14.1 cfs @ 11.46 fps)
 ↳ **3=Broad-Crested Rectangular Weir** (Passes 14.1 cfs of 197.9 cfs potential flow)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 4.33" for 10 YR event
 Inflow = 8.3 cfs @ 12.08 hrs, Volume= 27,353 cf
 Outflow = 8.3 cfs @ 12.08 hrs, Volume= 27,353 cf, Atten= 0%, Lag= 0.0 min
 Primary = 5.8 cfs @ 12.08 hrs, Volume= 26,410 cf
 Secondary = 2.5 cfs @ 12.08 hrs, Volume= 944 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 438.81' @ 12.08 hrs

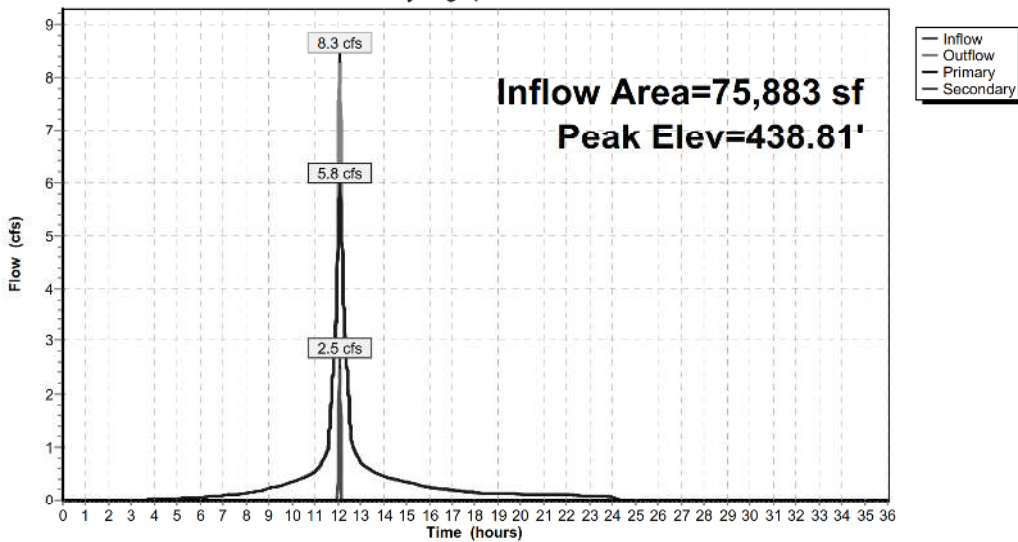
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=5.8 cfs @ 12.08 hrs HW=438.81' (Free Discharge)
 ↑ **1=Culvert** (Barrel Controls 5.8 cfs @ 4.72 fps)

Secondary OutFlow Max=2.5 cfs @ 12.08 hrs HW=438.81' (Free Discharge)
 ↑ **2=Culvert** (Passes 2.5 cfs of 3.9 cfs potential flow)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 2.5 cfs @ 1.60 fps)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 3.85" for 10 YR event
 Inflow = 6.2 cfs @ 12.09 hrs, Volume= 27,666 cf
 Outflow = 4.6 cfs @ 12.21 hrs, Volume= 22,205 cf, Atten= 25%, Lag= 7.5 min
 Discarded = 0.1 cfs @ 12.21 hrs, Volume= 10,107 cf
 Primary = 4.5 cfs @ 12.21 hrs, Volume= 12,097 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 440.92' @ 12.21 hrs Surf.Area= 4,726 sf Storage= 10,616 cf

Plug-Flow detention time= 317.0 min calculated for 22,205 cf (80% of inflow)
 Center-of-Mass det. time= 240.1 min (1,023.7 - 783.5)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.21 hrs HW=440.92' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=4.5 cfs @ 12.21 hrs HW=440.92' (Free Discharge)
 ↳ **2=Culvert** (Inlet Controls 4.5 cfs @ 5.74 fps)
 ↳ **3=Grate** (Passes 4.5 cfs of 6.1 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

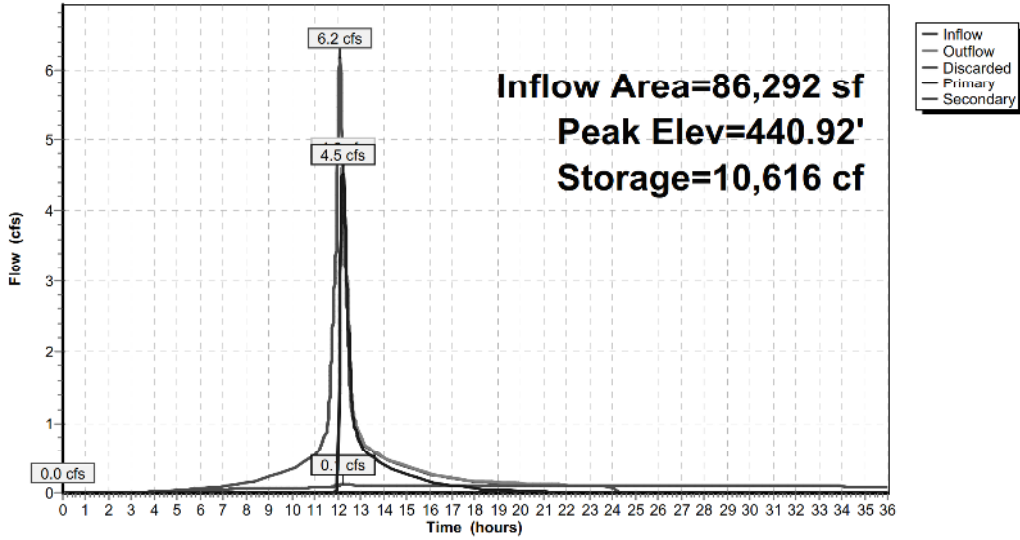
Type III 24-hr 10 YR Rainfall=5.13"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 1.72" for 10 YR event
 Inflow = 5.6 cfs @ 12.13 hrs, Volume= 15,139 cf
 Outflow = 1.4 cfs @ 12.64 hrs, Volume= 14,208 cf, Atten= 75%, Lag= 30.4 min
 Primary = 1.4 cfs @ 12.64 hrs, Volume= 14,208 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 434.38' @ 12.64 hrs Surf.Area= 3,203 sf Storage= 5,628 cf

Plug-Flow detention time= 70.6 min calculated for 14,204 cf (94% of inflow)
 Center-of-Mass det. time= 47.5 min (859.8 - 812.3)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
431.00	724	0	0
432.00	1,138	931	931
434.00	2,476	3,614	4,545
436.00	6,286	8,762	13,307
438.00	10,636	16,922	30,229
438.50	12,371	5,752	35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.4 cfs @ 12.64 hrs HW=434.38' (Free Discharge)
 1=Culvert (Passes 0.0 cfs of 5.0 cfs potential flow)
 3=Grate (Controls 0.0 cfs)
 2=Orifice/Grate (Orifice Controls 1.4 cfs @ 7.03 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

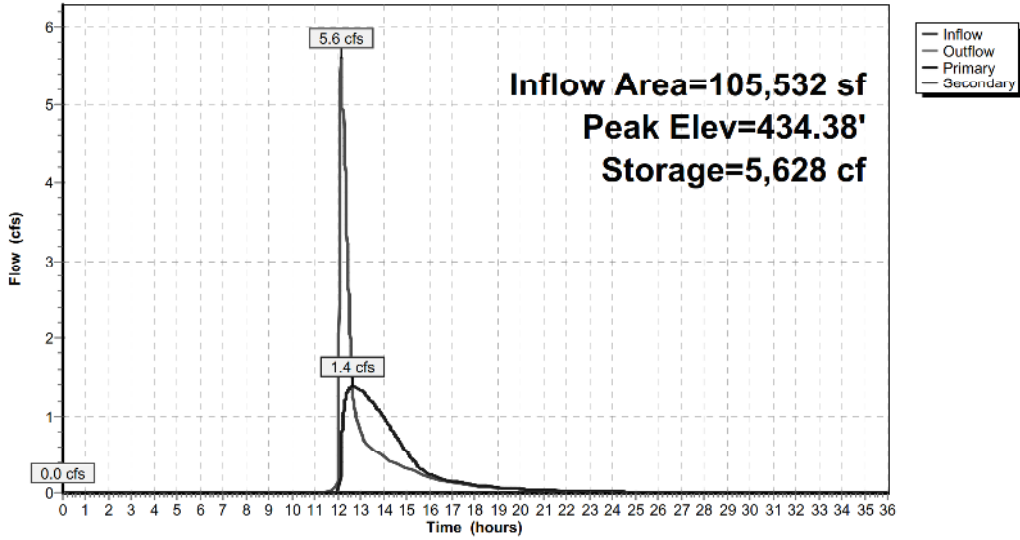
EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 3.00" for 10 YR event
 Inflow = 16.7 cfs @ 12.09 hrs, Volume= 87,332 cf
 Outflow = 12.1 cfs @ 12.33 hrs, Volume= 63,408 cf, Atten= 28%, Lag= 14.6 min
 Discarded = 0.2 cfs @ 12.33 hrs, Volume= 16,040 cf
 Primary = 11.9 cfs @ 12.33 hrs, Volume= 47,368 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.45' @ 12.33 hrs Surf.Area= 7,982 sf Storage= 33,642 cf

Plug-Flow detention time= 273.6 min calculated for 63,408 cf (73% of inflow)
 Center-of-Mass det. time= 178.6 min (997.9 - 819.3)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 12.33 hrs HW=436.45' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=12.1 cfs @ 12.33 hrs HW=436.45' (Free Discharge)
 ↑ **2=Culvert** (Passes 12.1 cfs of 14.4 cfs potential flow)
 ↑ **3=Grate** (Weir Controls 12.1 cfs @ 1.93 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

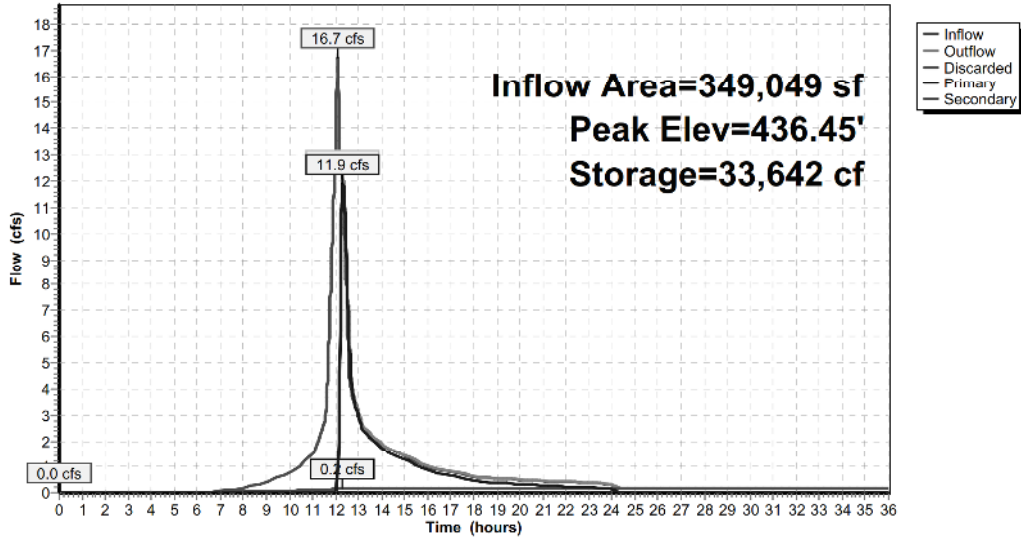
Type III 24-hr 10 YR Rainfall=5.13"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 1.92" for 10 YR event
 Inflow = 14.7 cfs @ 12.09 hrs, Volume= 58,412 cf
 Outflow = 6.5 cfs @ 12.56 hrs, Volume= 51,785 cf, Atten= 56%, Lag= 28.6 min
 Primary = 0.7 cfs @ 12.56 hrs, Volume= 588 cf
 Secondary = 5.8 cfs @ 12.56 hrs, Volume= 51,197 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 431.84' @ 12.56 hrs Surf.Area= 4,702 sf Storage= 16,378 cf

Plug-Flow detention time= 89.3 min calculated for 51,785 cf (89% of inflow)
 Center-of-Mass det. time= 40.9 min (893.6 - 852.7)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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Primary OutFlow Max=0.7 cfs @ 12.56 hrs HW=431.84' (Free Discharge)

- 1=Culvert (Inlet Controls 0.7 cfs @ 1.98 fps)
- 2=Orifice (Passes 0.7 cfs of 1.5 cfs potential flow)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=5.8 cfs @ 12.56 hrs HW=431.84' (Free Discharge)

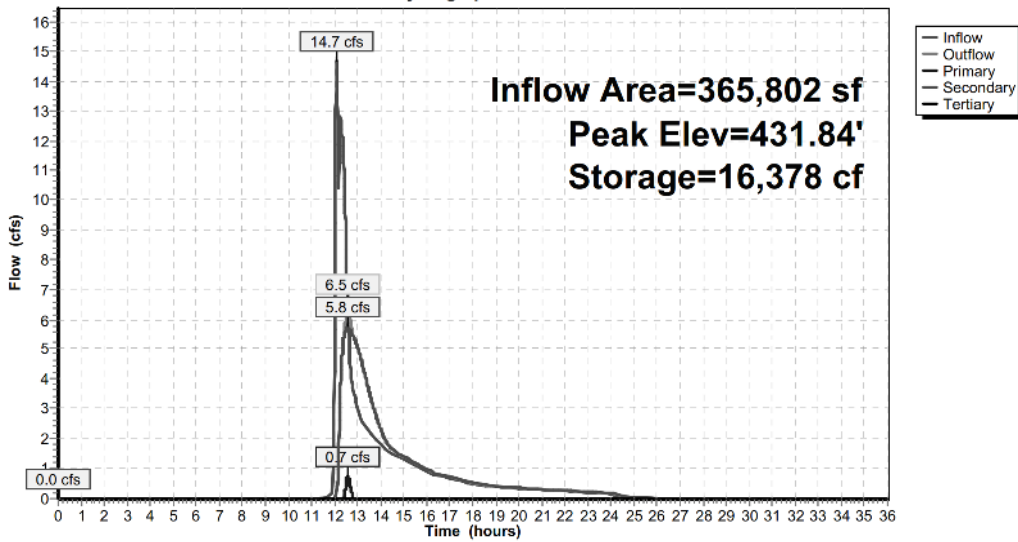
- 3=Orifice II (Orifice Controls 5.8 cfs @ 7.37 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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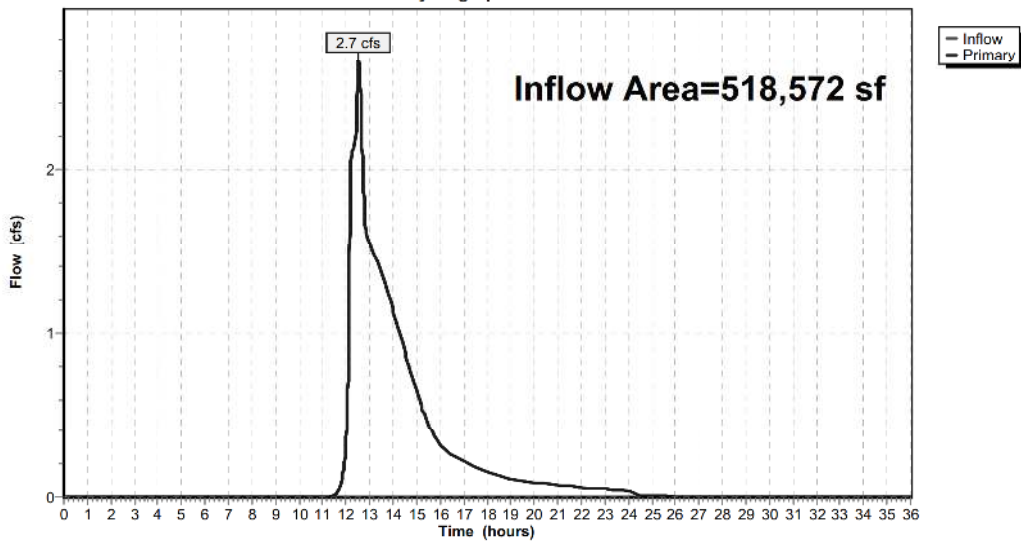
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 0.46" for 10 YR event
Inflow = 2.7 cfs @ 12.54 hrs, Volume= 19,948 cf
Primary = 2.7 cfs @ 12.54 hrs, Volume= 19,948 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 10 YR Rainfall=5.13"

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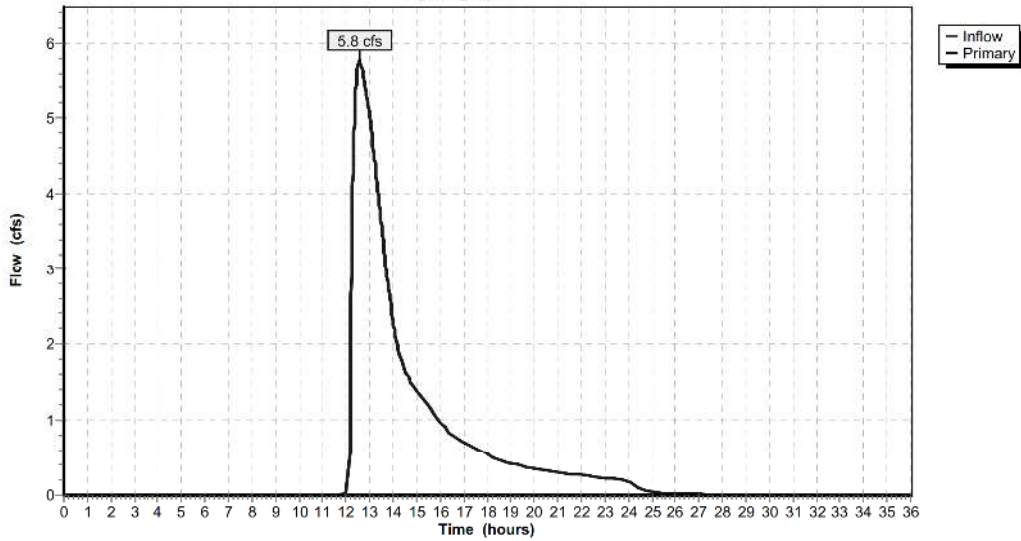
Summary for Link TR1: TR1

Inflow = 5.8 cfs @ 12.56 hrs, Volume= 51,197 cf
Primary = 5.8 cfs @ 12.56 hrs, Volume= 51,197 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=2.14" Flow Length=301' Tc=12.6 min CN=59 Runoff=2.1 cfs 8,419 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=2.14" Flow Length=197' Tc=14.8 min CN=59 Runoff=0.8 cfs 3,429 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=2.32" Tc=6.0 min CN=61 Runoff=0.6 cfs 2,012 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=2.32" Tc=6.0 min CN=61 Runoff=1.0 cfs 3,238 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=2.32" Tc=6.0 min CN=61 Runoff=0.8 cfs 2,673 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=5.64" Flow Length=150' Tc=6.0 min CN=93 Runoff=10.6 cfs 35,646 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=4.63" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=41.0 cfs 129,303 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=451.44' Inflow=41.0 cfs 129,303 cf Primary=21.3 cfs 112,190 cf Secondary=19.7 cfs 17,113 cf Outflow=41.0 cfs 129,303 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=439.01' Inflow=10.6 cfs 35,646 cf Primary=6.2 cfs 33,482 cf Secondary=4.4 cfs 2,164 cf Outflow=10.6 cfs 35,646 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=441.15' Storage=11,707 cf Inflow=6.9 cfs 35,494 cf Discarded=0.1 cfs 10,423 cf Primary=4.9 cfs 19,537 cf Secondary=0.0 cfs 0 cf Outflow=5.0 cfs 29,960 cf
Pond 3P: HOTEL DET. POND	Peak Elev=435.61' Storage=11,020 cf Inflow=9.5 cfs 25,130 cf Primary=1.7 cfs 24,198 cf Secondary=0.0 cfs 0 cf Outflow=1.7 cfs 24,198 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=436.75' Storage=36,076 cf Inflow=22.1 cfs 114,863 cf Discarded=0.2 cfs 16,513 cf Primary=15.0 cfs 74,405 cf Secondary=0.0 cfs 0 cf Outflow=15.2 cfs 90,917 cf
Pond 5P: THs DET. POND	Peak Elev=433.90' Storage=28,449 cf Inflow=35.4 cfs 94,755 cf Primary=4.1 cfs 12,498 cf Secondary=7.9 cfs 75,631 cf Tertiary=0.0 cfs 0 cf Outflow=12.0 cfs 88,128 cf
Link PRDP3: PRDP3	Inflow=6.9 cfs 45,115 cf Primary=6.9 cfs 45,115 cf
Link TR1: TR1	Inflow=7.9 cfs 75,631 cf Primary=7.9 cfs 75,631 cf

Total Runoff Area = 518,572 sf Runoff Volume = 184,720 cf Average Runoff Depth = 4.27"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 2.1 cfs @ 12.19 hrs, Volume= 8,419 cf, Depth= 2.14"

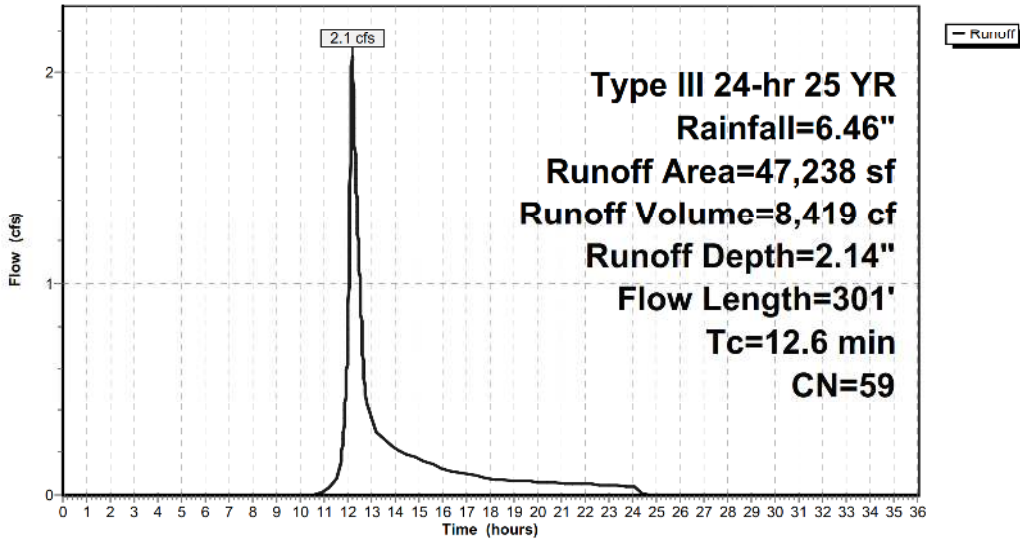
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 0.8 cfs @ 12.22 hrs, Volume= 3,429 cf, Depth= 2.14"

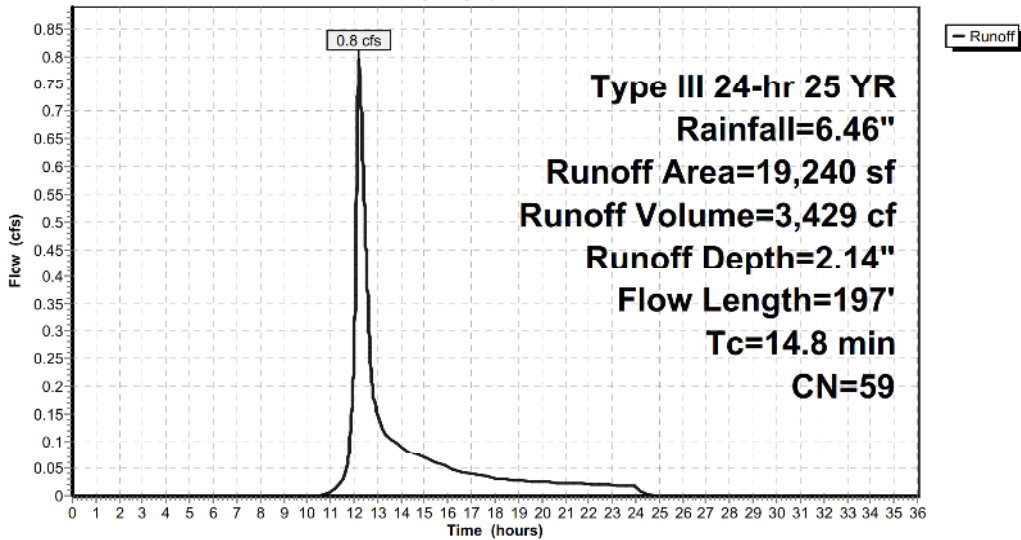
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.6 cfs @ 12.09 hrs, Volume= 2,012 cf, Depth= 2.32"

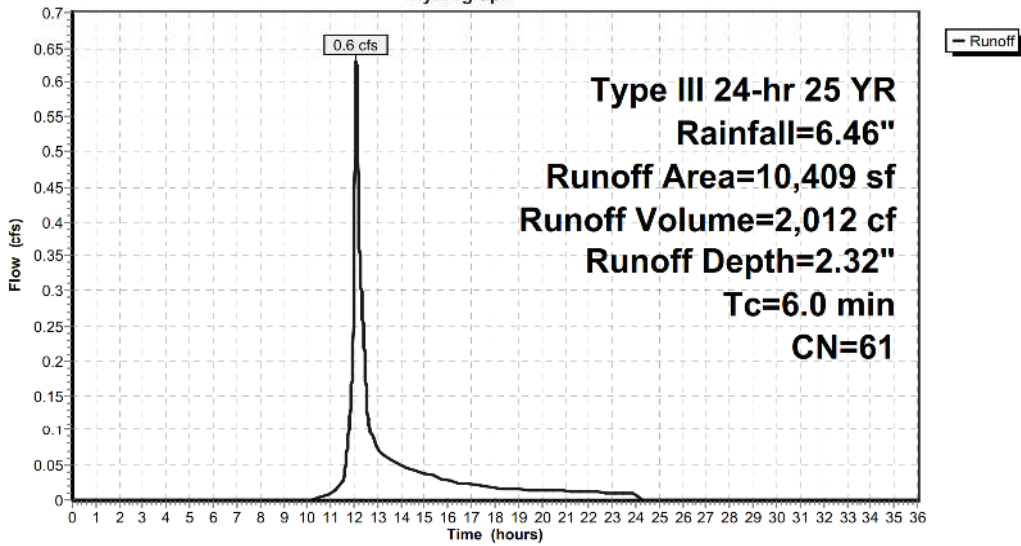
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 1.0 cfs @ 12.09 hrs, Volume= 3,238 cf, Depth= 2.32"

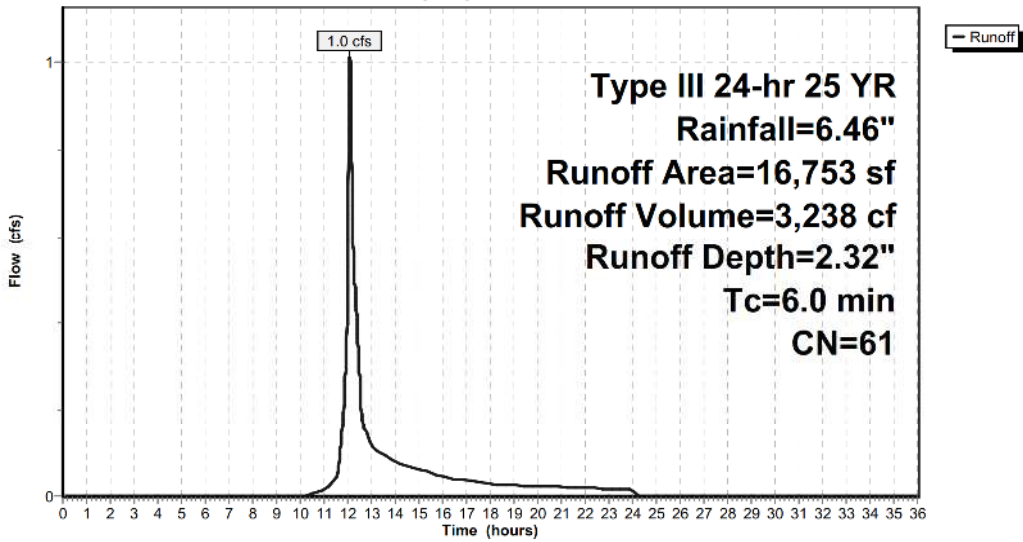
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 0.8 cfs @ 12.09 hrs, Volume= 2,673 cf, Depth= 2.32"

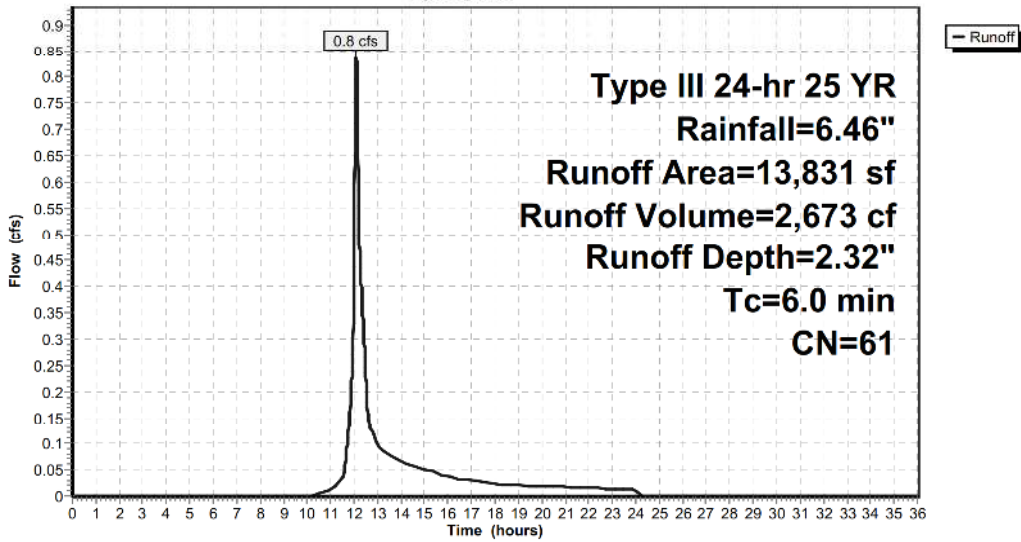
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 10.6 cfs @ 12.08 hrs, Volume= 35,646 cf, Depth= 5.64"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

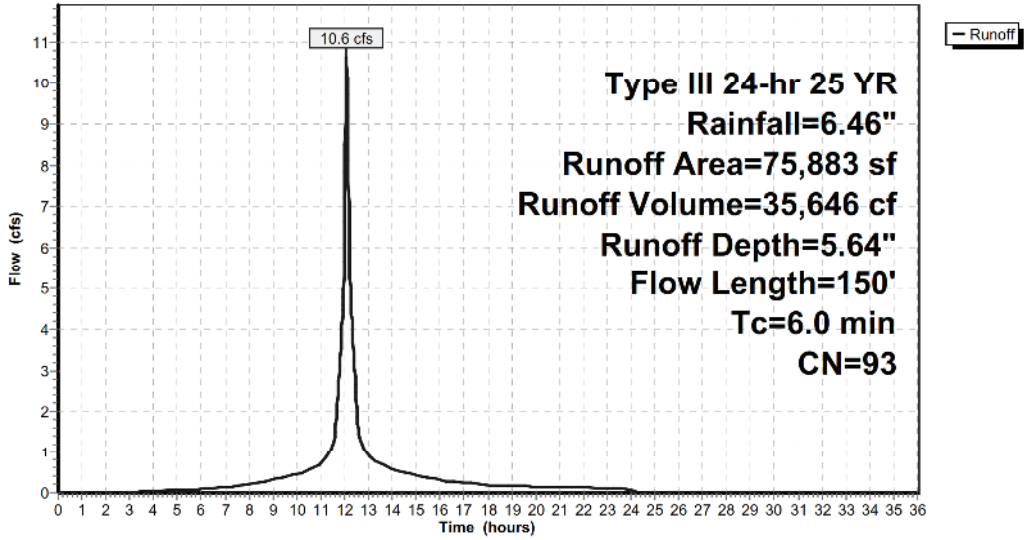
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Type III 24-hr 25 YR Rainfall=6.46"

Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 41.0 cfs @ 12.09 hrs, Volume= 129,303 cf, Depth= 4.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 25 YR Rainfall=6.46"

EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
52,654	61	>75% Grass cover, Good, HSG B			
2,441	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
51,059	61	>75% Grass cover, Good, HSG B			
2,239	98	Unconnected pavement, HSG B			
71,764	98	Paved parking, HSG B			
21,974	98	Roofs, HSG B			
<hr/>					
335,218	84	Weighted Average			
125,175		37.34% Pervious Area			
210,043		62.66% Impervious Area			
11,322		5.39% Unconnected			
<hr/>					
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.0	1,574		4.37		Direct Entry,

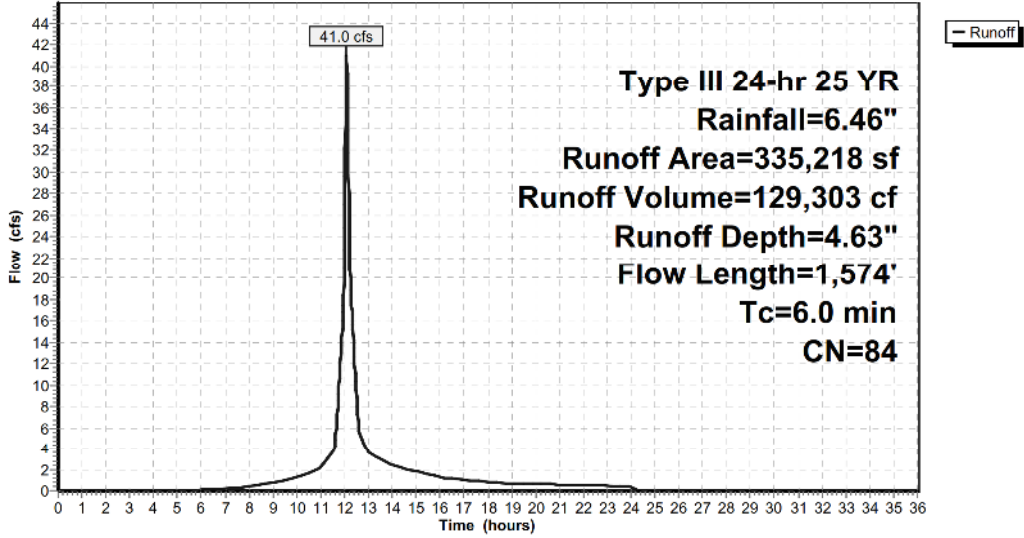
EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 4.63" for 25 YR event
 Inflow = 41.0 cfs @ 12.09 hrs, Volume= 129,303 cf
 Outflow = 41.0 cfs @ 12.09 hrs, Volume= 129,303 cf, Atten= 0%, Lag= 0.0 min
 Primary = 21.3 cfs @ 12.09 hrs, Volume= 112,190 cf
 Secondary = 19.7 cfs @ 12.09 hrs, Volume= 17,113 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 451.44' @ 12.09 hrs

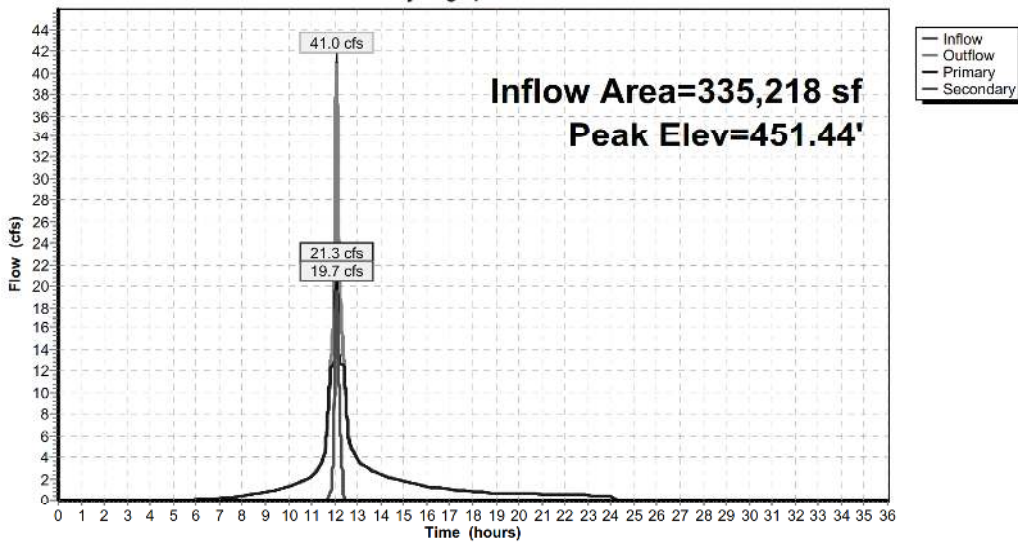
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=21.2 cfs @ 12.09 hrs HW=451.37' (Free Discharge)
 ↳ **1=15"Ø Culvert** (Inlet Controls 21.2 cfs @ 17.32 fps)

Secondary OutFlow Max=19.7 cfs @ 12.09 hrs HW=451.37' (Free Discharge)
 ↳ **2=15"Ø Culvert** (Inlet Controls 19.7 cfs @ 16.01 fps)
 ↳ **3=Broad-Crested Rectangular Weir** (Passes 19.7 cfs of 857.9 cfs potential flow)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 5.64" for 25 YR event
 Inflow = 10.6 cfs @ 12.08 hrs, Volume= 35,646 cf
 Outflow = 10.6 cfs @ 12.08 hrs, Volume= 35,646 cf, Atten= 0%, Lag= 0.0 min
 Primary = 6.2 cfs @ 12.08 hrs, Volume= 33,482 cf
 Secondary = 4.4 cfs @ 12.08 hrs, Volume= 2,164 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 439.01' @ 12.08 hrs

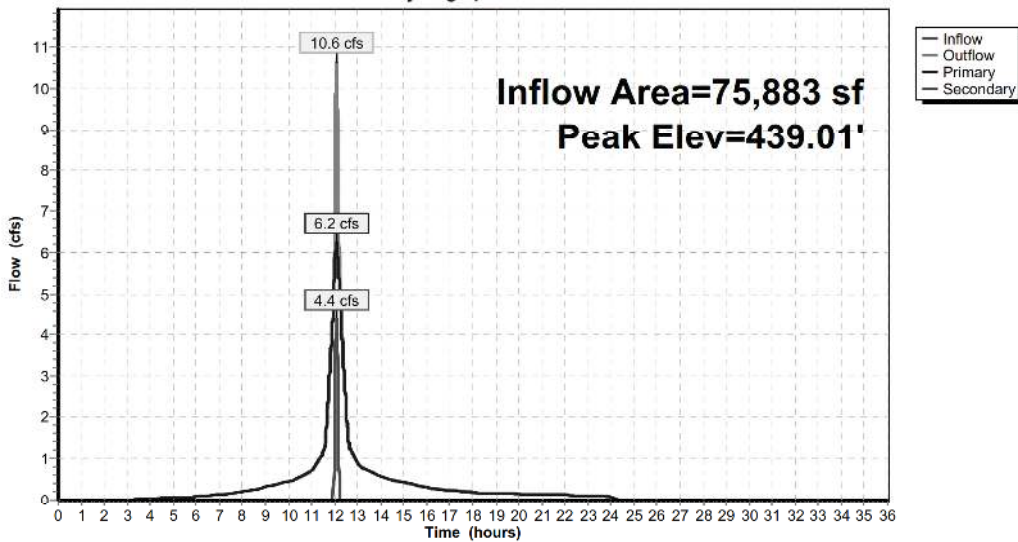
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=6.2 cfs @ 12.08 hrs HW=439.01' (Free Discharge)
 ↑1=Culvert (Inlet Controls 6.2 cfs @ 5.08 fps)

Secondary OutFlow Max=4.4 cfs @ 12.08 hrs HW=439.01' (Free Discharge)
 ↑2=Culvert (Inlet Controls 4.4 cfs @ 3.58 fps)
 ↑3=Broad-Crested Rectangular Weir (Passes 4.4 cfs of 5.5 cfs potential flow)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 4.94" for 25 YR event
 Inflow = 6.9 cfs @ 12.09 hrs, Volume= 35,494 cf
 Outflow = 5.0 cfs @ 12.27 hrs, Volume= 29,960 cf, Atten= 28%, Lag= 10.9 min
 Discarded = 0.1 cfs @ 12.27 hrs, Volume= 10,423 cf
 Primary = 4.9 cfs @ 12.27 hrs, Volume= 19,537 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 441.15' @ 12.27 hrs Surf.Area= 4,929 sf Storage= 11,707 cf

Plug-Flow detention time= 255.8 min calculated for 29,960 cf (84% of inflow)
 Center-of-Mass det. time= 188.2 min (966.7 - 778.5)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.27 hrs HW=441.15' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=4.9 cfs @ 12.27 hrs HW=441.15' (Free Discharge)
 ↳ **2=Culvert** (Inlet Controls 4.9 cfs @ 6.18 fps)
 ↳ **3=Grate** (Passes 4.9 cfs of 17.6 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

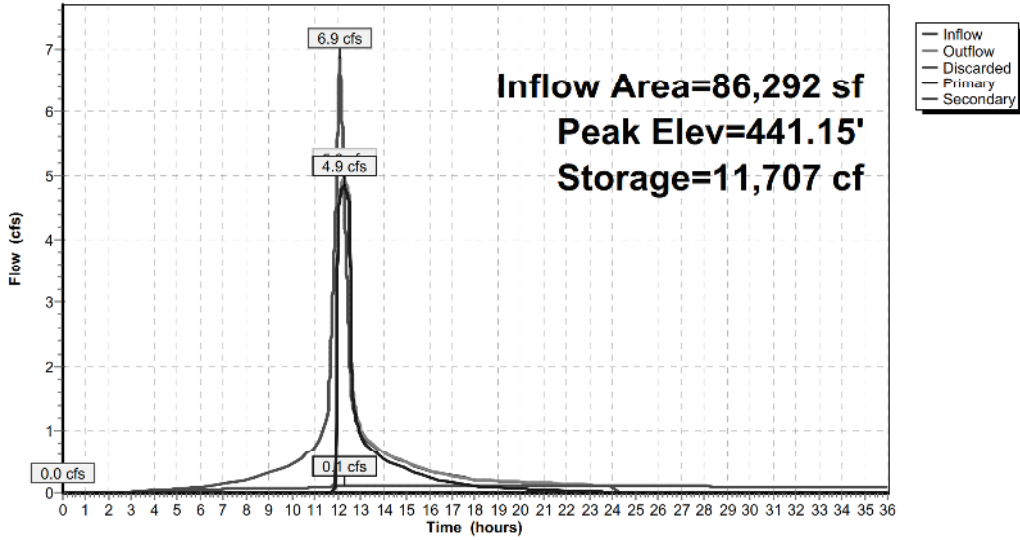
EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 2.86" for 25 YR event
 Inflow = 9.5 cfs @ 12.09 hrs, Volume= 25,130 cf
 Outflow = 1.7 cfs @ 12.68 hrs, Volume= 24,198 cf, Atten= 82%, Lag= 35.3 min
 Primary = 1.7 cfs @ 12.68 hrs, Volume= 24,198 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 435.61' @ 12.68 hrs Surf.Area= 5,550 sf Storage= 11,020 cf

Plug-Flow detention time= 84.5 min calculated for 24,192 cf (96% of inflow)
 Center-of-Mass det. time= 66.8 min (877.7 - 810.9)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
431.00	724	0	0
432.00	1,138	931	931
434.00	2,476	3,614	4,545
436.00	6,286	8,762	13,307
438.00	10,636	16,922	30,229
438.50	12,371	5,752	35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.7 cfs @ 12.68 hrs HW=435.61' (Free Discharge)
 1=Culvert (Passes 0.0 cfs of 6.2 cfs potential flow)
 3=Grate (Controls 0.0 cfs)
 2=Orifice/Grate (Orifice Controls 1.7 cfs @ 8.83 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

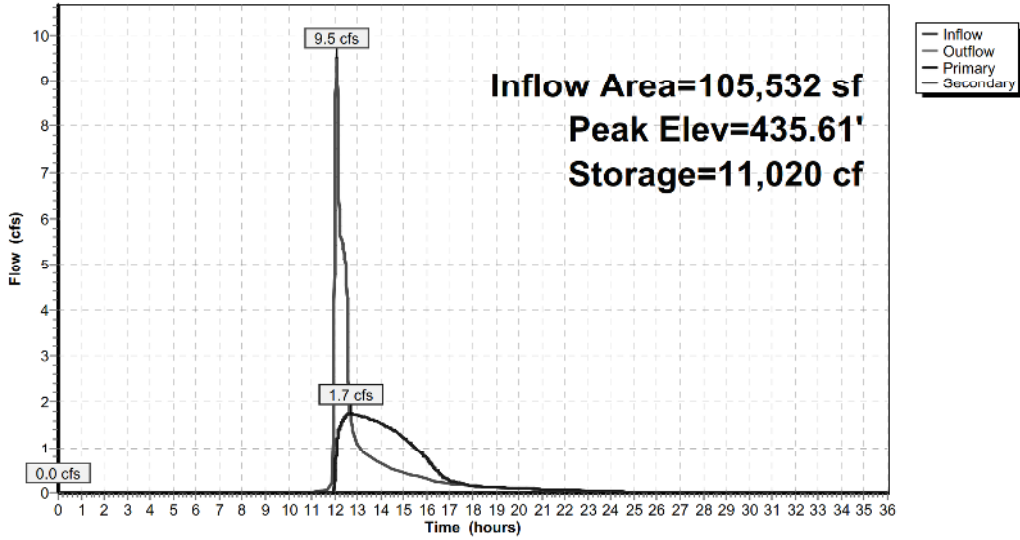
Type III 24-hr 25 YR Rainfall=6.46"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 3.95" for 25 YR event
 Inflow = 22.1 cfs @ 12.09 hrs, Volume= 114,863 cf
 Outflow = 15.2 cfs @ 12.18 hrs, Volume= 90,917 cf, Atten= 31%, Lag= 5.5 min
 Discarded = 0.2 cfs @ 12.18 hrs, Volume= 16,513 cf
 Primary = 15.0 cfs @ 12.18 hrs, Volume= 74,405 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.75' @ 12.18 hrs Surf.Area= 8,324 sf Storage= 36,076 cf

Plug-Flow detention time= 217.0 min calculated for 90,917 cf (79% of inflow)
 Center-of-Mass det. time= 134.5 min (947.6 - 813.0)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 12.18 hrs HW=436.75' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=15.0 cfs @ 12.18 hrs HW=436.75' (Free Discharge)
 ↑ **2=Culvert** (Barrel Controls 15.0 cfs @ 8.47 fps)
 ↑ **3=Grate** (Passes 15.0 cfs of 30.6 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

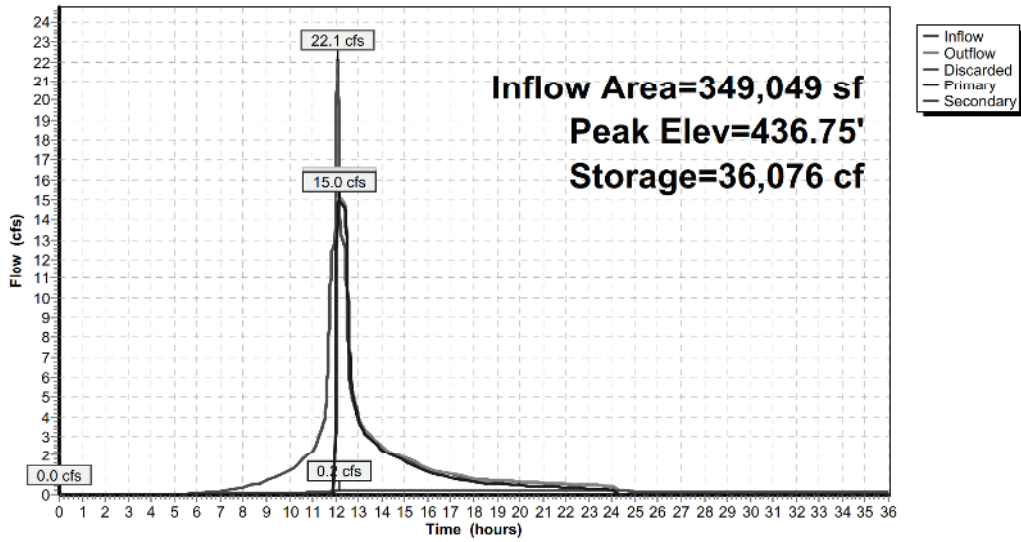
Type III 24-hr 25 YR Rainfall=6.46"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 3.11" for 25 YR event
 Inflow = 35.4 cfs @ 12.09 hrs, Volume= 94,755 cf
 Outflow = 12.0 cfs @ 12.50 hrs, Volume= 88,128 cf, Atten= 66%, Lag= 24.7 min
 Primary = 4.1 cfs @ 12.50 hrs, Volume= 12,498 cf
 Secondary = 7.9 cfs @ 12.50 hrs, Volume= 75,631 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 433.90' @ 12.50 hrs Surf.Area= 7,050 sf Storage= 28,449 cf

Plug-Flow detention time= 68.0 min calculated for 88,104 cf (93% of inflow)
 Center-of-Mass det. time= 34.0 min (871.1 - 837.1)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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Primary OutFlow Max=4.1 cfs @ 12.50 hrs HW=433.90' (Free Discharge)

- 1=Culvert (Passes 4.1 cfs of 17.9 cfs potential flow)
- 2=Orifice (Orifice Controls 4.1 cfs @ 7.46 fps)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=7.9 cfs @ 12.50 hrs HW=433.90' (Free Discharge)

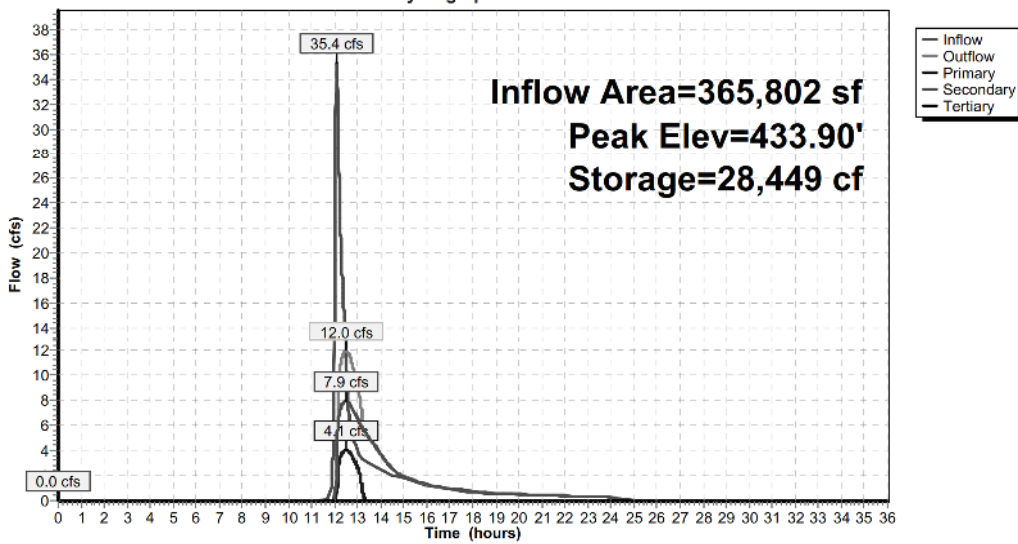
- 3=Orifice II (Orifice Controls 7.9 cfs @ 10.10 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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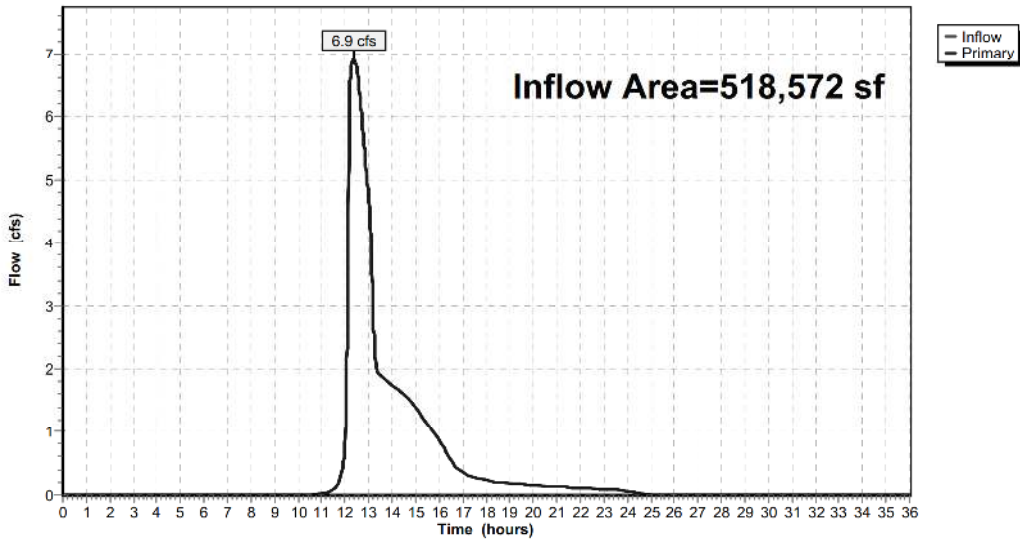
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 1.04" for 25 YR event
Inflow = 6.9 cfs @ 12.37 hrs, Volume= 45,115 cf
Primary = 6.9 cfs @ 12.37 hrs, Volume= 45,115 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 25 YR Rainfall=6.46"

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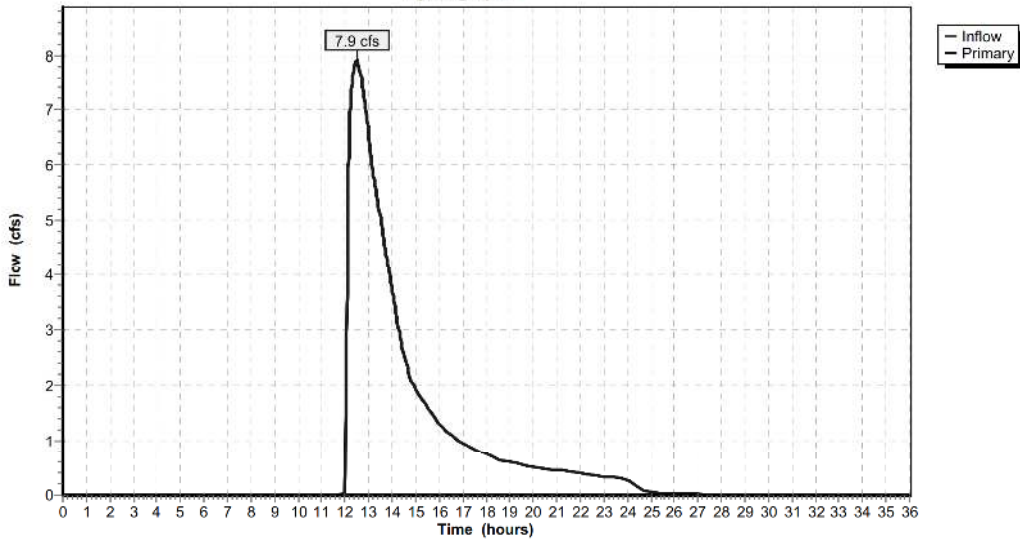
Summary for Link TR1: TR1

Inflow = 7.9 cfs @ 12.50 hrs, Volume= 75,631 cf
Primary = 7.9 cfs @ 12.50 hrs, Volume= 75,631 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=3.00" Flow Length=301' Tc=12.6 min CN=59 Runoff=3.0 cfs 11,793 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=3.00" Flow Length=197' Tc=14.8 min CN=59 Runoff=1.1 cfs 4,803 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=3.21" Tc=6.0 min CN=61 Runoff=0.9 cfs 2,785 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=3.21" Tc=6.0 min CN=61 Runoff=1.4 cfs 4,482 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=3.21" Tc=6.0 min CN=61 Runoff=1.2 cfs 3,700 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=6.86" Flow Length=150' Tc=6.0 min CN=93 Runoff=12.8 cfs 43,349 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=5.80" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=50.8 cfs 161,968 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=461.80' Inflow=50.8 cfs 161,968 cf Primary=26.0 cfs 136,295 cf Secondary=24.8 cfs 25,673 cf Outflow=50.8 cfs 161,968 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=439.58' Inflow=12.8 cfs 43,349 cf Primary=7.2 cfs 39,912 cf Secondary=5.6 cfs 3,437 cf Outflow=12.8 cfs 43,349 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=441.33' Storage=12,621 cf Inflow=8.0 cfs 42,696 cf Discarded=0.1 cfs 10,664 cf Primary=5.1 cfs 26,487 cf Secondary=0.0 cfs 0 cf Outflow=5.2 cfs 37,151 cf
Pond 3P: HOTEL DET. POND	Peak Elev=436.45' Storage=16,341 cf Inflow=11.2 cfs 34,727 cf Primary=1.9 cfs 33,796 cf Secondary=0.0 cfs 0 cf Outflow=1.9 cfs 33,796 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=437.13' Storage=39,320 cf Inflow=27.2 cfs 139,995 cf Discarded=0.2 cfs 16,931 cf Primary=15.6 cfs 99,103 cf Secondary=0.0 cfs 0 cf Outflow=15.8 cfs 116,033 cf
Pond 5P: THs DET. POND	Peak Elev=435.42' Storage=40,708 cf Inflow=41.3 cfs 129,257 cf Primary=5.2 cfs 23,945 cf Secondary=9.2 cfs 98,685 cf Tertiary=0.0 cfs 0 cf Outflow=14.4 cfs 122,630 cf
Link PRDP3: PRDP3	Inflow=9.1 cfs 69,534 cf Primary=9.1 cfs 69,534 cf
Link TR1: TR1	Inflow=9.2 cfs 98,685 cf Primary=9.2 cfs 98,685 cf

Total Runoff Area = 518,572 sf Runoff Volume = 232,879 cf Average Runoff Depth = 5.39"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 3.0 cfs @ 12.18 hrs, Volume= 11,793 cf, Depth= 3.00"

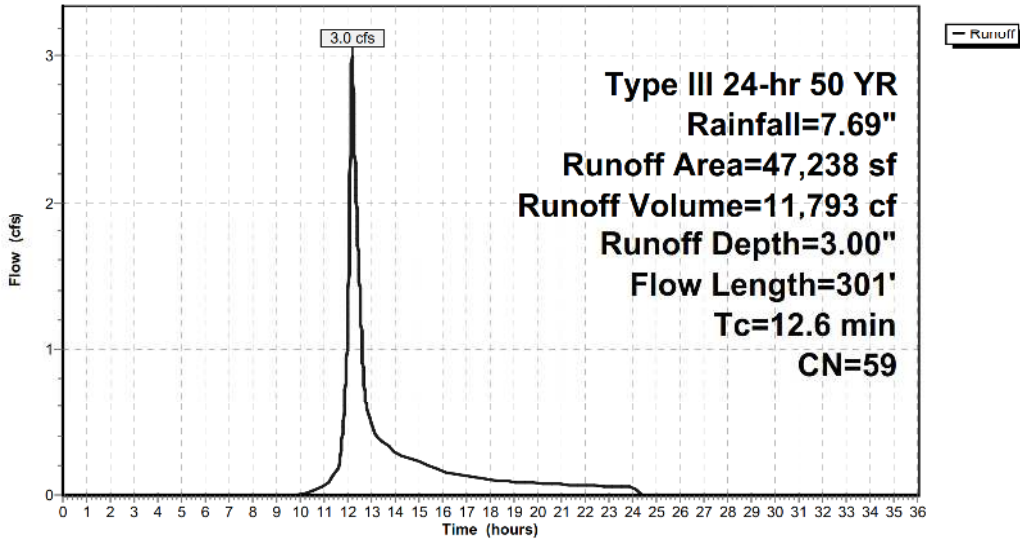
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 1.1 cfs @ 12.22 hrs, Volume= 4,803 cf, Depth= 3.00"

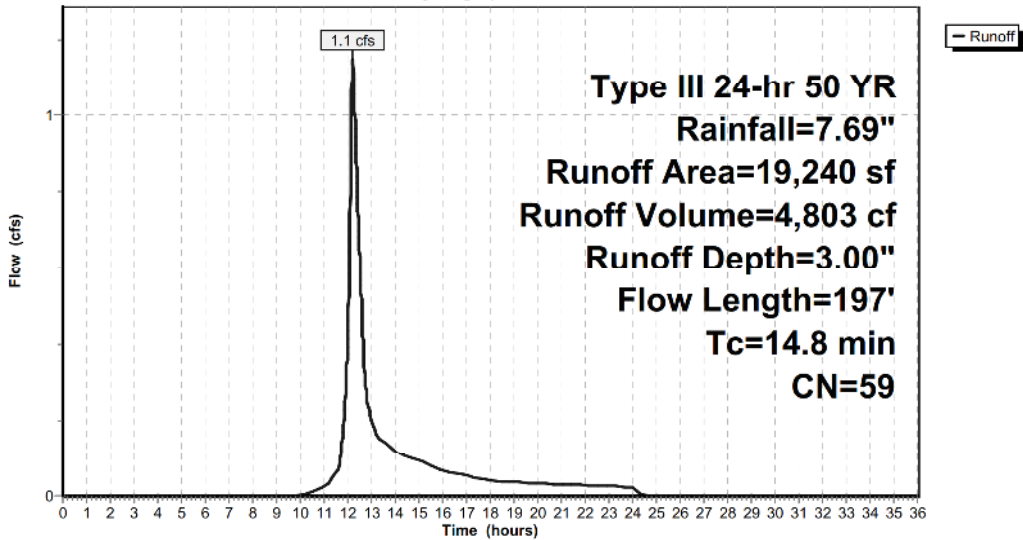
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 0.9 cfs @ 12.09 hrs, Volume= 2,785 cf, Depth= 3.21"

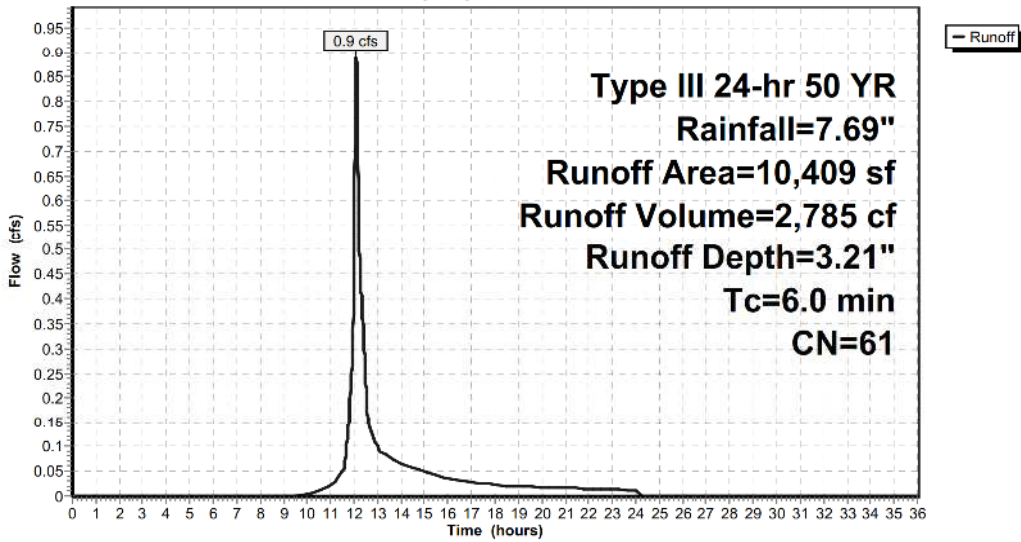
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 1.4 cfs @ 12.09 hrs, Volume= 4,482 cf, Depth= 3.21"

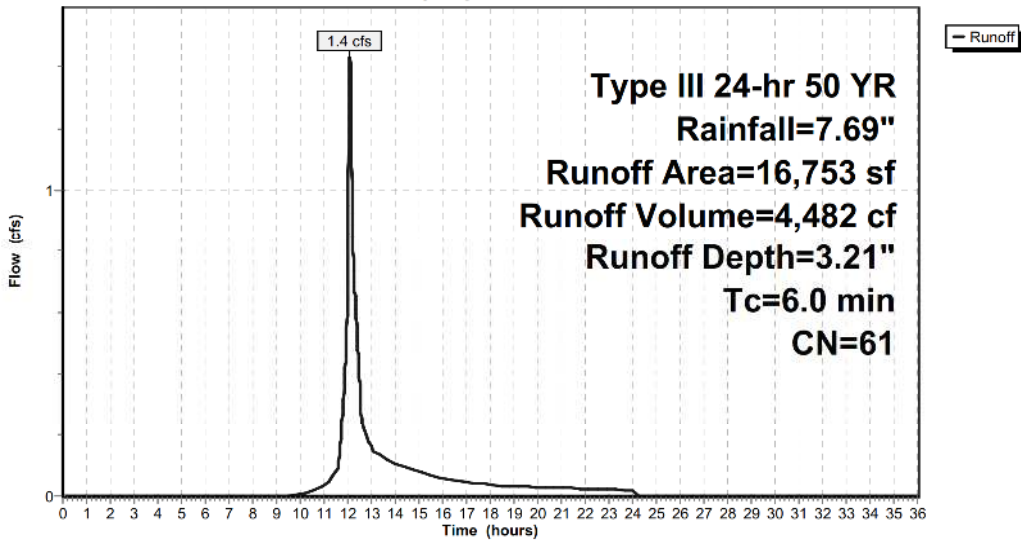
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 1.2 cfs @ 12.09 hrs, Volume= 3,700 cf, Depth= 3.21"

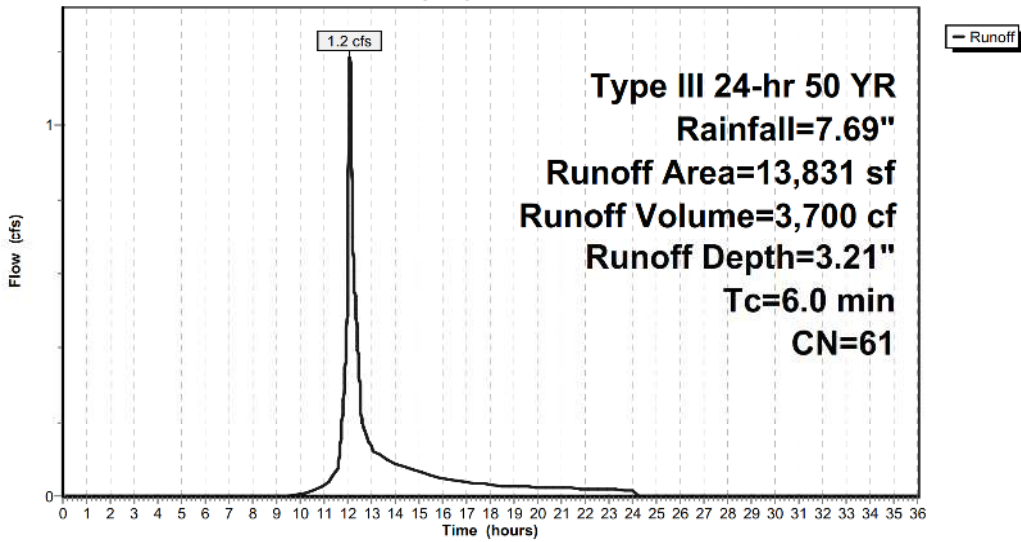
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 12.8 cfs @ 12.08 hrs, Volume= 43,349 cf, Depth= 6.86"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

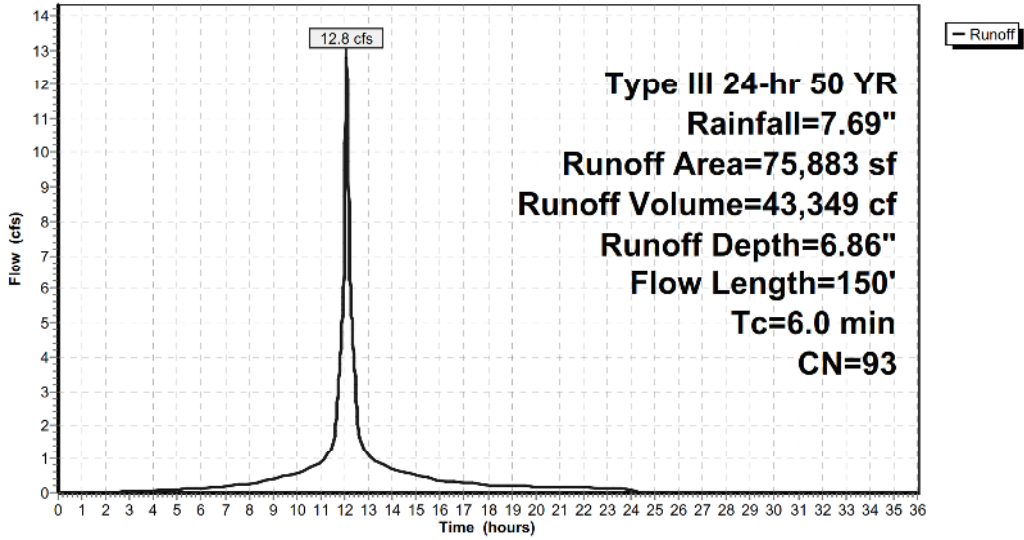
EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 50.8 cfs @ 12.09 hrs, Volume= 161,968 cf, Depth= 5.80"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 50 YR Rainfall=7.69"

EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
185	98	Unconnected pavement, HSG B			
185	98	Unconnected pavement, HSG B			
4,883	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
52,654	61	>75% Grass cover, Good, HSG B			
2,441	98	Roofs, HSG B			
2,441	98	Roofs, HSG B			
51,059	61	>75% Grass cover, Good, HSG B			
2,239	98	Unconnected pavement, HSG B			
71,764	98	Paved parking, HSG B			
21,974	98	Roofs, HSG B			
<hr/>					
335,218	84	Weighted Average			
125,175		37.34% Pervious Area			
210,043		62.66% Impervious Area			
11,322		5.39% Unconnected			
<hr/>					
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.0	1,574		4.37		Direct Entry,

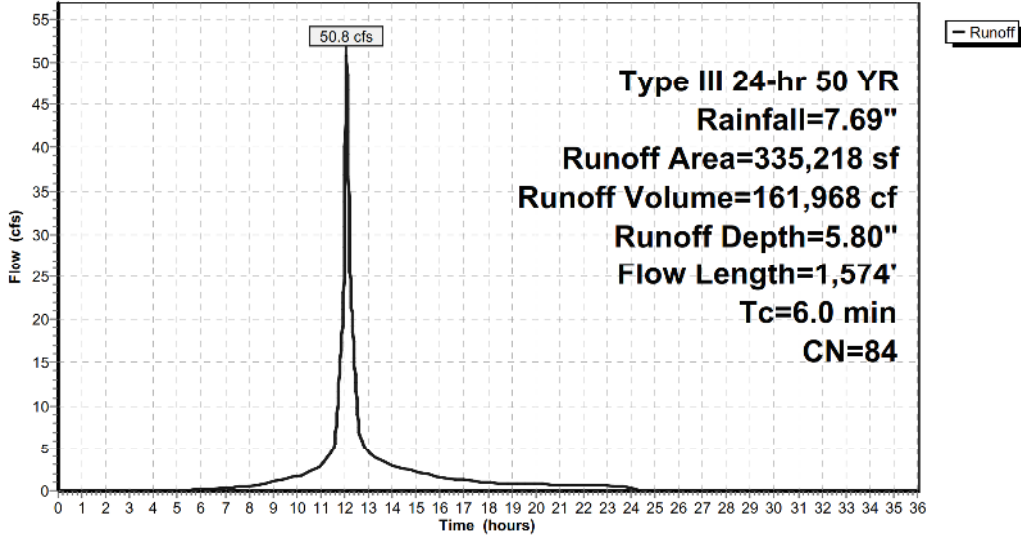
EAGLE RIDGE-PRDP3

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Type III 24-hr 50 YR Rainfall=7.69"

Subcatchment PRWS3G: PRWS3G

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 5.80" for 50 YR event
 Inflow = 50.8 cfs @ 12.09 hrs, Volume= 161,968 cf
 Outflow = 50.8 cfs @ 12.09 hrs, Volume= 161,968 cf, Atten= 0%, Lag= 0.0 min
 Primary = 26.0 cfs @ 12.09 hrs, Volume= 136,295 cf
 Secondary = 24.8 cfs @ 12.09 hrs, Volume= 25,673 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 461.80' @ 12.09 hrs

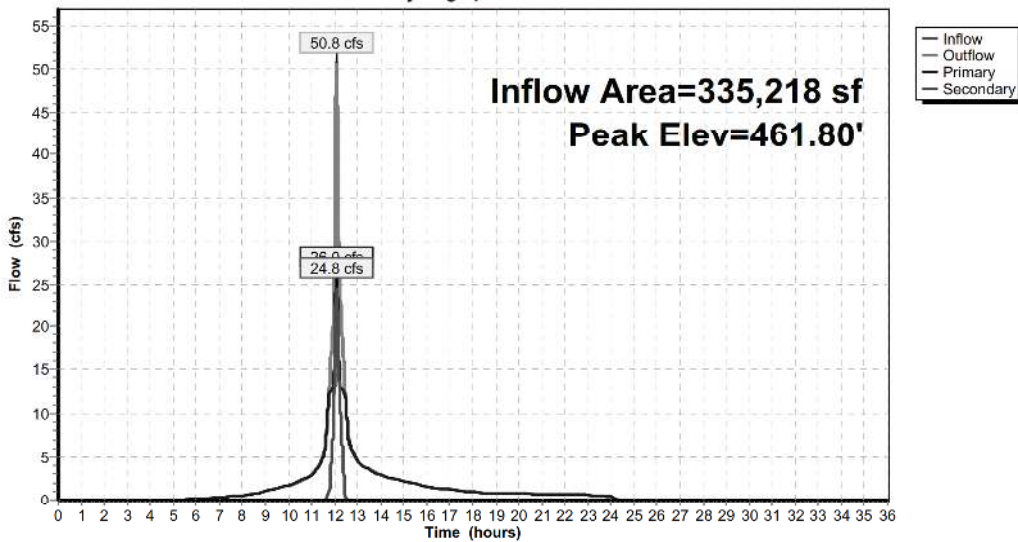
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=26.0 cfs @ 12.09 hrs HW=461.69' (Free Discharge)
 ↳ **1=15"Ø Culvert** (Inlet Controls 26.0 cfs @ 21.19 fps)

Secondary OutFlow Max=24.7 cfs @ 12.09 hrs HW=461.69' (Free Discharge)
 ↳ **2=15"Ø Culvert** (Inlet Controls 24.7 cfs @ 20.14 fps)
 ↳ **3=Broad-Crested Rectangular Weir** (Passes 24.7 cfs of 1,975.4 cfs potential flow)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 6.86" for 50 YR event
 Inflow = 12.8 cfs @ 12.08 hrs, Volume= 43,349 cf
 Outflow = 12.8 cfs @ 12.08 hrs, Volume= 43,349 cf, Atten= 0%, Lag= 0.0 min
 Primary = 7.2 cfs @ 12.08 hrs, Volume= 39,912 cf
 Secondary = 5.6 cfs @ 12.08 hrs, Volume= 3,437 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 439.58' @ 12.08 hrs

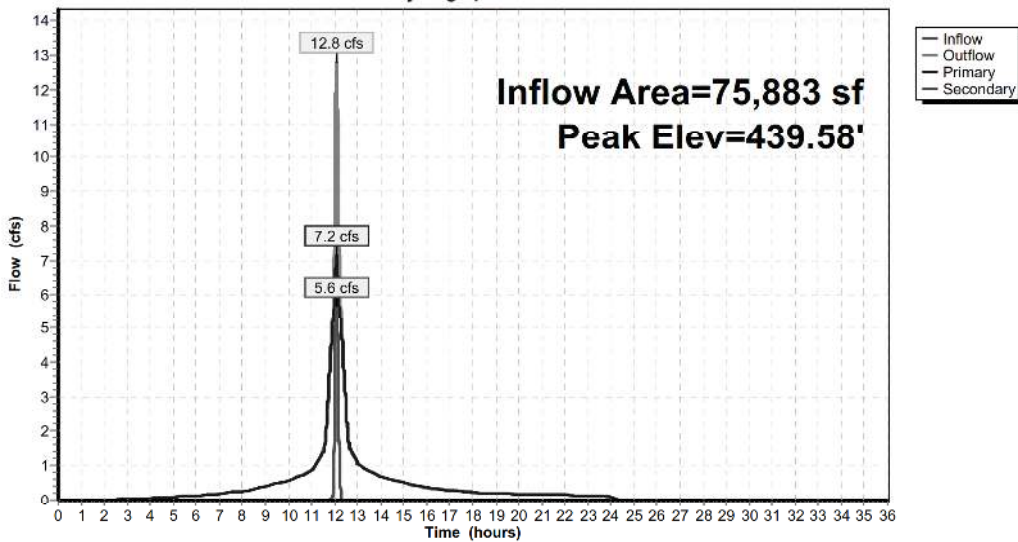
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/' Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=7.2 cfs @ 12.08 hrs HW=439.58' (Free Discharge)
 ↑1=Culvert (Inlet Controls 7.2 cfs @ 5.83 fps)

Secondary OutFlow Max=5.6 cfs @ 12.08 hrs HW=439.58' (Free Discharge)
 ↑2=Culvert (Inlet Controls 5.6 cfs @ 4.58 fps)
 ↑3=Broad-Crested Rectangular Weir (Passes 5.6 cfs of 18.6 cfs potential flow)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 5.94" for 50 YR event
 Inflow = 8.0 cfs @ 12.08 hrs, Volume= 42,696 cf
 Outflow = 5.2 cfs @ 12.32 hrs, Volume= 37,151 cf, Atten= 35%, Lag= 14.0 min
 Discarded = 0.1 cfs @ 12.32 hrs, Volume= 10,664 cf
 Primary = 5.1 cfs @ 12.32 hrs, Volume= 26,487 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 441.33' @ 12.32 hrs Surf.Area= 5,092 sf Storage= 12,621 cf

Plug-Flow detention time= 221.6 min calculated for 37,151 cf (87% of inflow)
 Center-of-Mass det. time= 160.9 min (935.7 - 774.8)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 1/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.32 hrs HW=441.33' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=5.1 cfs @ 12.32 hrs HW=441.33' (Free Discharge)
 ↳ **2=Culvert** (Inlet Controls 5.1 cfs @ 6.51 fps)
 ↳ **3=Grate** (Passes 5.1 cfs of 29.4 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

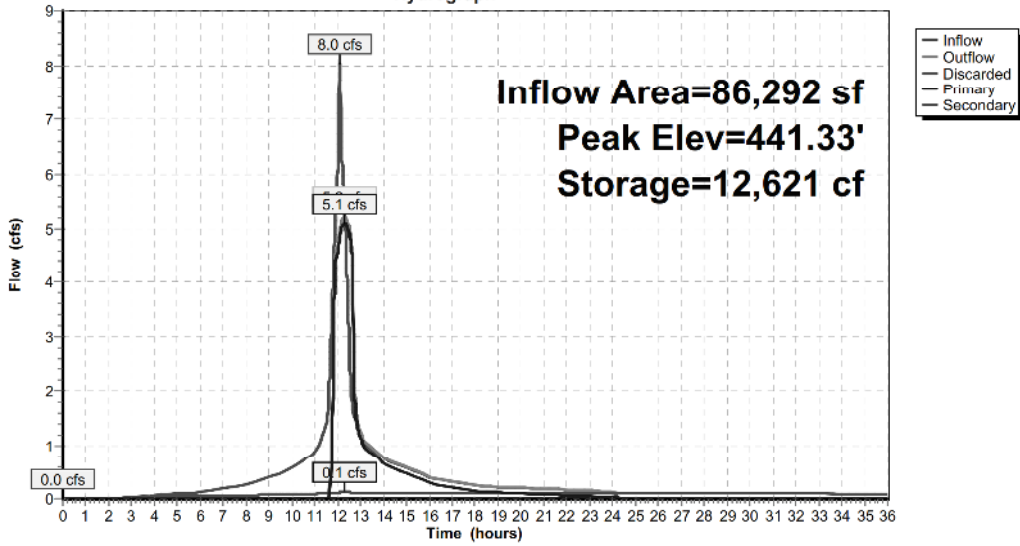
Type III 24-hr 50 YR Rainfall=7.69"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 3.95" for 50 YR event
 Inflow = 11.2 cfs @ 12.09 hrs, Volume= 34,727 cf
 Outflow = 1.9 cfs @ 12.77 hrs, Volume= 33,796 cf, Atten= 83%, Lag= 40.7 min
 Primary = 1.9 cfs @ 12.77 hrs, Volume= 33,796 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.45' @ 12.77 hrs Surf.Area= 7,260 sf Storage= 16,341 cf

Plug-Flow detention time= 101.3 min calculated for 33,786 cf (97% of inflow)
 Center-of-Mass det. time= 87.0 min (897.4 - 810.3)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
431.00	724	0	0
432.00	1,138	931	931
434.00	2,476	3,614	4,545
436.00	6,286	8,762	13,307
438.00	10,636	16,922	30,229
438.50	12,371	5,752	35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.9 cfs @ 12.77 hrs HW=436.45' (Free Discharge)
 1=Culvert (Passes 0.0 cfs of 6.9 cfs potential flow)
 3=Grate (Controls 0.0 cfs)
 2=Orifice/Grate (Orifice Controls 1.9 cfs @ 9.87 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)
 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

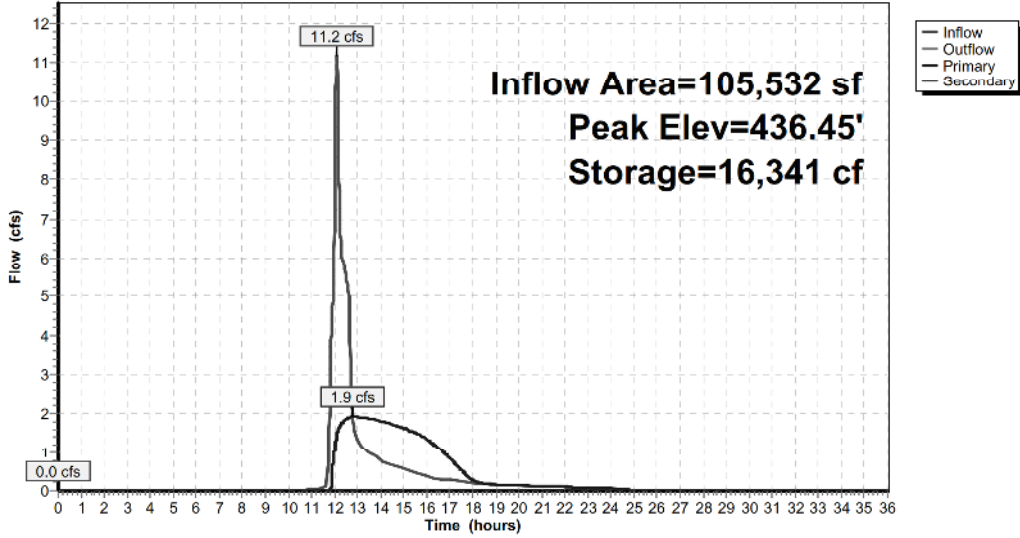
EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 4.81" for 50 YR event
 Inflow = 27.2 cfs @ 12.09 hrs, Volume= 139,995 cf
 Outflow = 15.8 cfs @ 12.21 hrs, Volume= 116,033 cf, Atten= 42%, Lag= 7.4 min
 Discarded = 0.2 cfs @ 12.21 hrs, Volume= 16,931 cf
 Primary = 15.6 cfs @ 12.21 hrs, Volume= 99,103 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 437.13' @ 12.21 hrs Surf.Area= 8,758 sf Storage= 39,320 cf

Plug-Flow detention time= 187.3 min calculated for 116,001 cf (83% of inflow)
 Center-of-Mass det. time= 113.9 min (922.1 - 808.3)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 12.21 hrs HW=437.13' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=15.6 cfs @ 12.21 hrs HW=437.13' (Free Discharge)
 ↑ **2=Culvert** (Barrel Controls 15.6 cfs @ 8.84 fps)
 ↑ **3=Grate** (Passes 15.6 cfs of 61.3 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

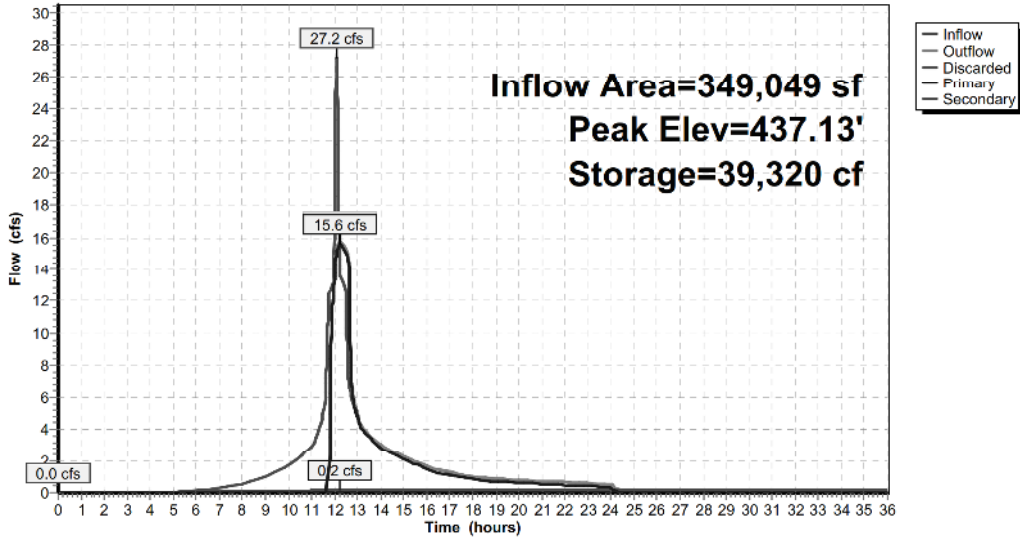
Type III 24-hr 50 YR Rainfall=7.69"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 4.24" for 50 YR event
Inflow = 41.3 cfs @ 12.09 hrs, Volume= 129,257 cf
Outflow = 14.4 cfs @ 12.62 hrs, Volume= 122,630 cf, Atten= 65%, Lag= 31.8 min
Primary = 5.2 cfs @ 12.62 hrs, Volume= 23,945 cf
Secondary = 9.2 cfs @ 12.62 hrs, Volume= 98,685 cf
Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Peak Elev= 435.42' @ 12.62 hrs Surf.Area= 9,093 sf Storage= 40,708 cf

Plug-Flow detention time= 61.7 min calculated for 122,596 cf (95% of inflow)
Center-of-Mass det. time= 35.1 min (864.3 - 829.2)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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Primary OutFlow Max=5.2 cfs @ 12.62 hrs HW=435.42' (Free Discharge)

- 1=Culvert (Passes 5.2 cfs of 25.8 cfs potential flow)
- 2=Orifice (Orifice Controls 5.2 cfs @ 9.53 fps)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=9.2 cfs @ 12.62 hrs HW=435.42' (Free Discharge)

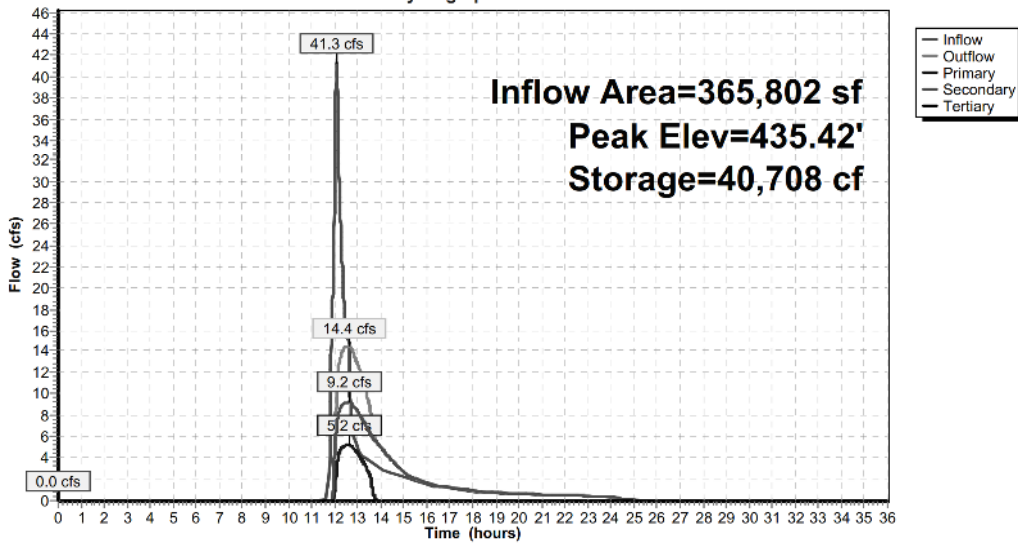
- 3=Orifice II (Orifice Controls 9.2 cfs @ 11.72 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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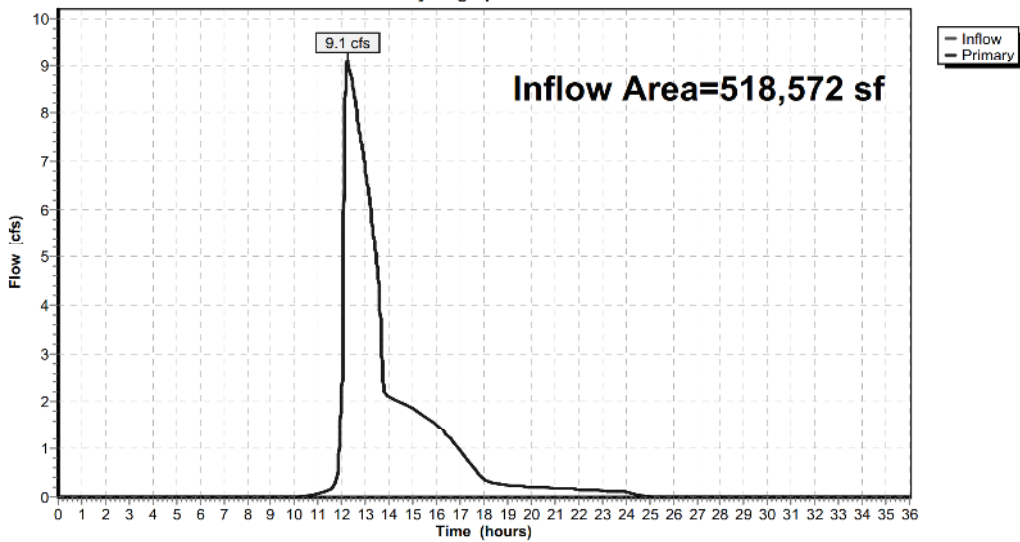
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 1.61" for 50 YR event
Inflow = 9.1 cfs @ 12.22 hrs, Volume= 69,534 cf
Primary = 9.1 cfs @ 12.22 hrs, Volume= 69,534 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 50 YR Rainfall=7.69"

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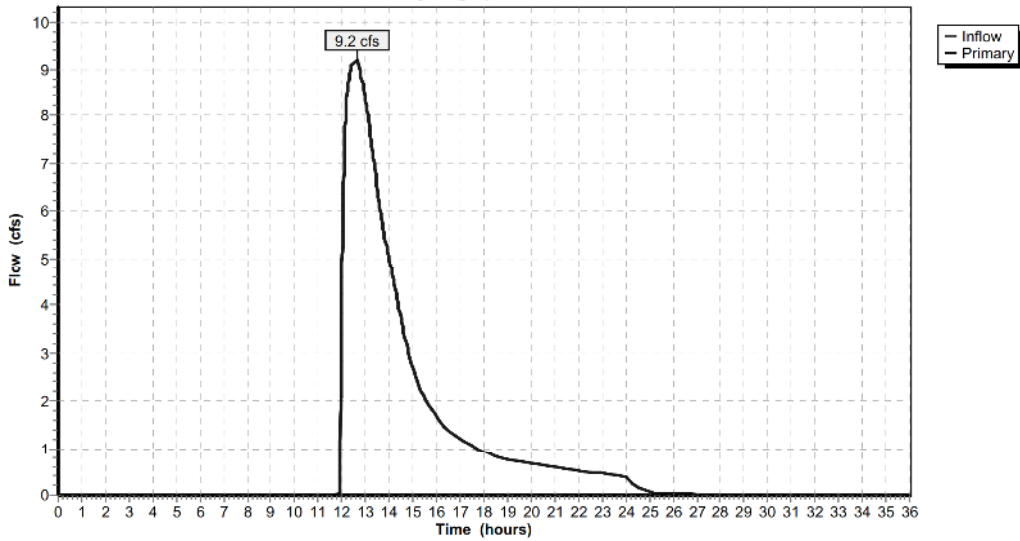
Summary for Link TR1: TR1

Inflow = 9.2 cfs @ 12.62 hrs, Volume= 98,685 cf
Primary = 9.2 cfs @ 12.62 hrs, Volume= 98,685 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

Prepared by Alfonzetti Engineering P.C.
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Time span=0.00-36.00 hrs, dt=0.010 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS3A: PRWS3A	Runoff Area=47,238 sf 0.00% Impervious Runoff Depth=4.11" Flow Length=301' Tc=12.6 min CN=59 Runoff=4.2 cfs 16,177 cf
Subcatchment PRWS3B: PRWS3B	Runoff Area=19,240 sf 0.00% Impervious Runoff Depth=4.11" Flow Length=197' Tc=14.8 min CN=59 Runoff=1.6 cfs 6,589 cf
Subcatchment PRWS3C: PRWS3C	Runoff Area=10,409 sf 0.00% Impervious Runoff Depth=4.36" Tc=6.0 min CN=61 Runoff=1.2 cfs 3,781 cf
Subcatchment PRWS3D: PRWS3D	Runoff Area=16,753 sf 0.00% Impervious Runoff Depth=4.36" Tc=6.0 min CN=61 Runoff=2.0 cfs 6,086 cf
Subcatchment PRWS3E: PRWS3E	Runoff Area=13,831 sf 0.00% Impervious Runoff Depth=4.36" Tc=6.0 min CN=61 Runoff=1.6 cfs 5,025 cf
Subcatchment PRWS3F: PRWS3F	Runoff Area=75,883 sf 85.39% Impervious Runoff Depth=8.32" Flow Length=150' Tc=6.0 min CN=93 Runoff=15.4 cfs 52,642 cf
Subcatchment PRWS3G: PRWS3G	Runoff Area=335,218 sf 62.66% Impervious Runoff Depth=7.22" Flow Length=1,574' Tc=6.0 min CN=84 Runoff=62.6 cfs 201,789 cf
Pond 1A-OCS: 1A-OCS1	Peak Elev=477.15' Inflow=62.6 cfs 201,789 cf Primary=31.8 cfs 165,601 cf Secondary=30.8 cfs 36,188 cf Outflow=62.6 cfs 201,789 cf
Pond 1J-OCS: 1J-OCS	Peak Elev=440.41' Inflow=15.4 cfs 52,642 cf Primary=8.3 cfs 47,399 cf Secondary=7.1 cfs 5,243 cf Outflow=15.4 cfs 52,642 cf
Pond 2P: HOTEL INFIL. BASIN	Peak Elev=441.54' Storage=13,703 cf Inflow=9.5 cfs 51,181 cf Discarded=0.1 cfs 10,916 cf Primary=5.4 cfs 34,709 cf Secondary=0.0 cfs 0 cf Outflow=5.5 cfs 45,625 cf
Pond 3P: HOTEL DET. POND	Peak Elev=437.25' Storage=22,891 cf Inflow=13.1 cfs 46,541 cf Primary=2.1 cfs 45,610 cf Secondary=0.0 cfs 0 cf Outflow=2.1 cfs 45,610 cf
Pond 4P: THs INFIL. BASIN	Peak Elev=437.58' Storage=43,419 cf Inflow=33.4 cfs 170,625 cf Discarded=0.2 cfs 17,402 cf Primary=16.4 cfs 129,247 cf Secondary=0.0 cfs 0 cf Outflow=16.6 cfs 146,648 cf
Pond 5P: THs DET. POND	Peak Elev=436.82' Storage=54,888 cf Inflow=48.2 cfs 171,521 cf Primary=6.1 cfs 38,297 cf Secondary=10.2 cfs 126,597 cf Tertiary=0.0 cfs 0 cf Outflow=16.3 cfs 164,894 cf
Link PRDP3: PRDP3	Inflow=11.4 cfs 100,084 cf Primary=11.4 cfs 100,084 cf
Link TR1: TR1	Inflow=10.2 cfs 126,597 cf Primary=10.2 cfs 126,597 cf

Total Runoff Area = 518,572 sf Runoff Volume = 292,089 cf Average Runoff Depth = 6.76"
47.00% Pervious = 243,734 sf 53.00% Impervious = 274,838 sf

EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3A: PRWS3A

Runoff = 4.2 cfs @ 12.18 hrs, Volume= 16,177 cf, Depth= 4.11"

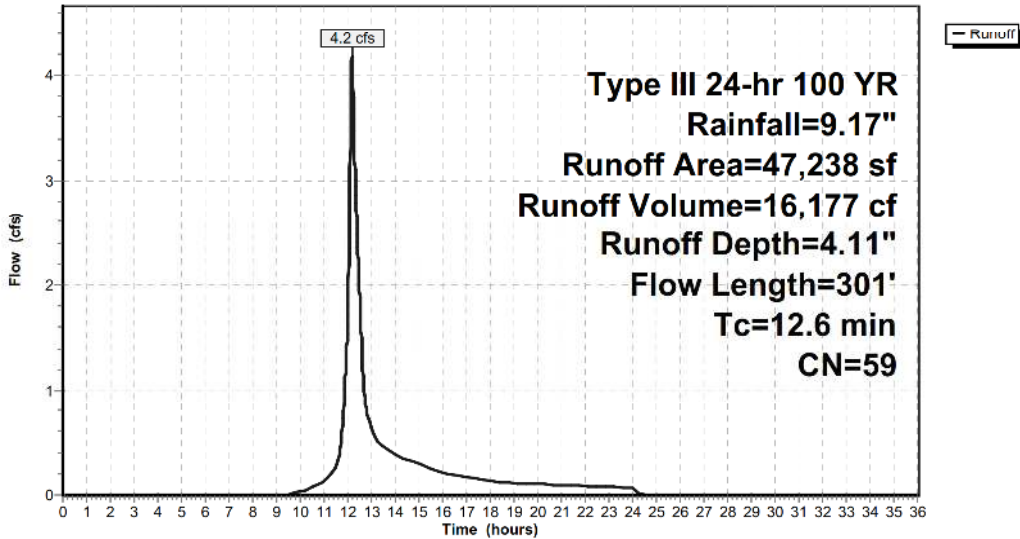
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
* 29,586	61	>75% Grass cover, Good, HSG B
17,652	55	Woods, Good, HSG B
47,238	59	Weighted Average
47,238		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8	100	0.1300	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.0	88	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	113	0.2500	2.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	301	Total			

Subcatchment PRWS3A: PRWS3A

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3B: PRWS3B

Runoff = 1.6 cfs @ 12.21 hrs, Volume= 6,589 cf, Depth= 4.11"

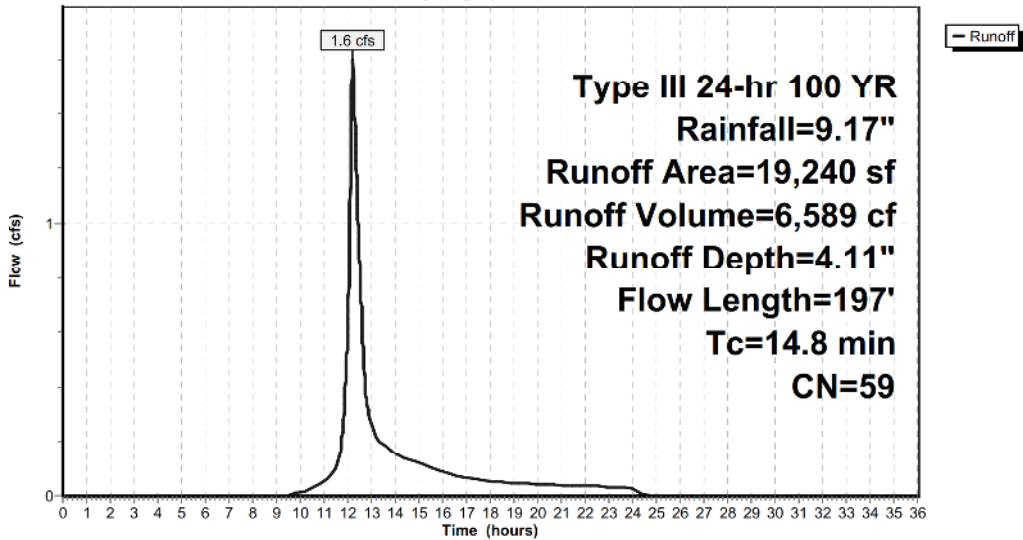
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
13,796	61	>75% Grass cover, Good, HSG B
5,444	55	Woods, Good, HSG B
19,240	59	Weighted Average
19,240		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0700	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.43"
2.2	97	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.8	197	Total			

Subcatchment PRWS3B: PRWS3B

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3C: PRWS3C

Runoff = 1.2 cfs @ 12.09 hrs, Volume= 3,781 cf, Depth= 4.36"

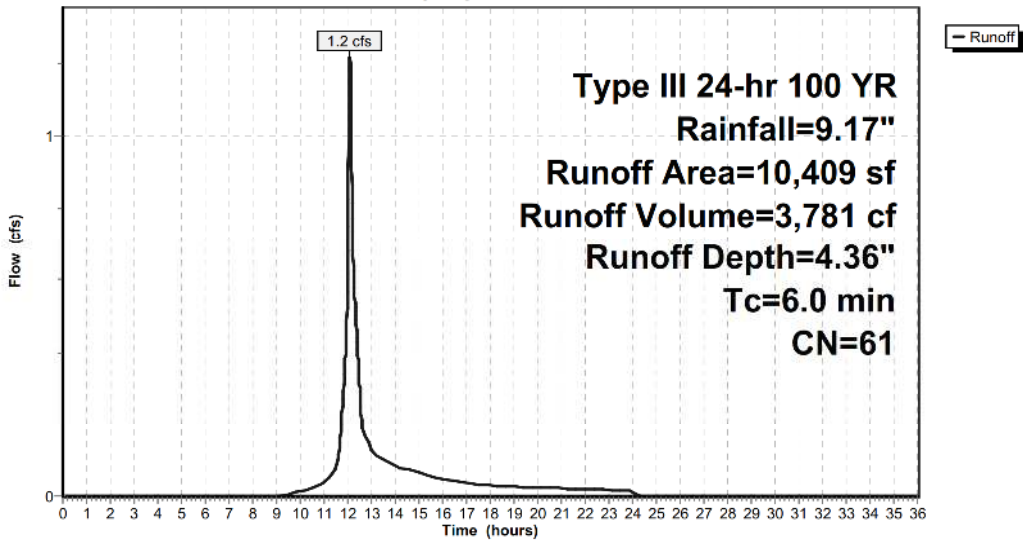
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
10,409	61	>75% Grass cover, Good, HSG B
10,409		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3C: PRWS3C

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3D: PRWS3D

Runoff = 2.0 cfs @ 12.09 hrs, Volume= 6,086 cf, Depth= 4.36"

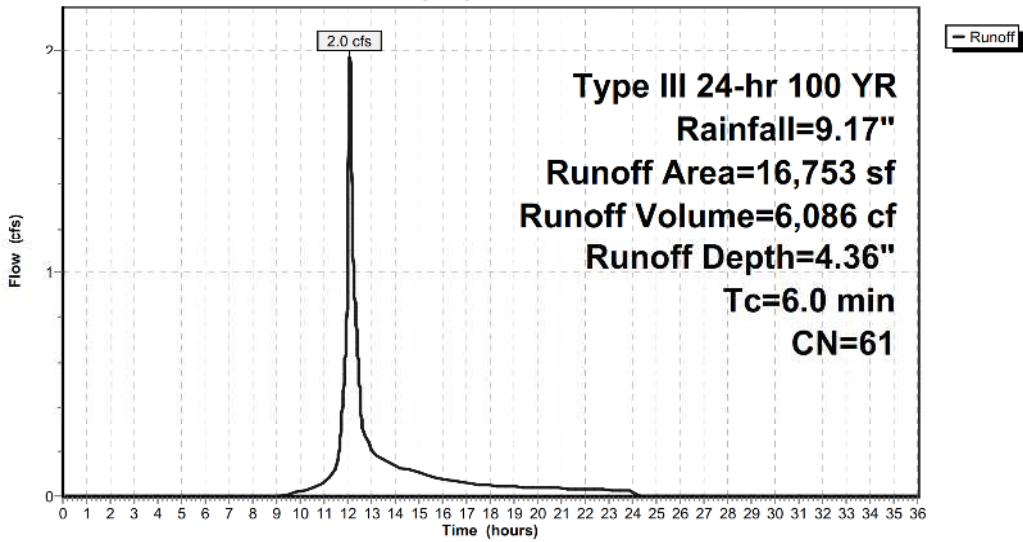
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
16,753	61	>75% Grass cover, Good, HSG B
16,753		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3D: PRWS3D

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3E: PRWS3E

Runoff = 1.6 cfs @ 12.09 hrs, Volume= 5,025 cf, Depth= 4.36"

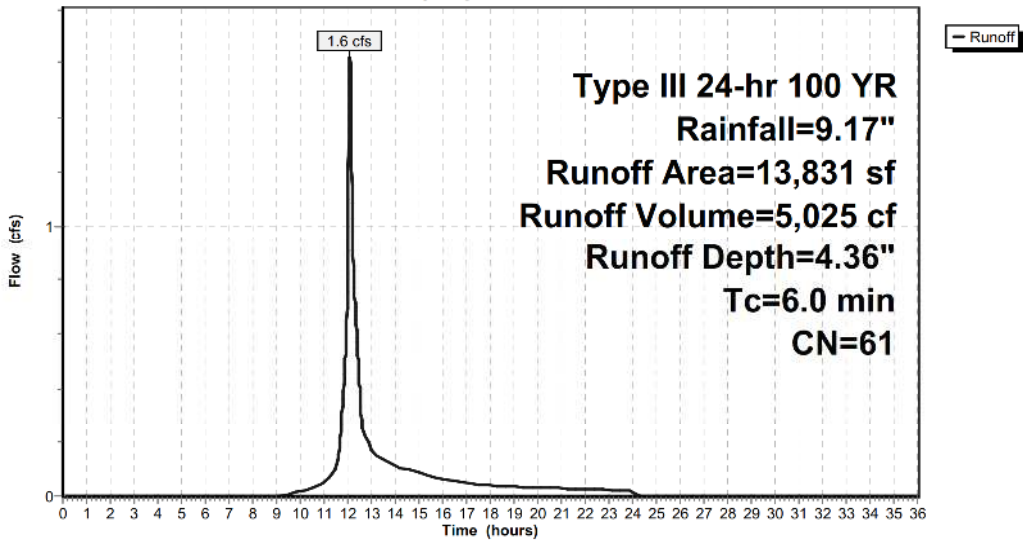
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
13,831	61	>75% Grass cover, Good, HSG B
13,831		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS3E: PRWS3E

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3F: PRWS3F

Runoff = 15.4 cfs @ 12.08 hrs, Volume= 52,642 cf, Depth= 8.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
366	61	>75% Grass cover, Good, HSG B
472	61	>75% Grass cover, Good, HSG B
137	61	>75% Grass cover, Good, HSG B
130	61	>75% Grass cover, Good, HSG B
138	61	>75% Grass cover, Good, HSG B
59	61	>75% Grass cover, Good, HSG B
29	61	>75% Grass cover, Good, HSG B
810	61	>75% Grass cover, Good, HSG B
569	98	Water Surface, HSG B
294	61	>75% Grass cover, Good, HSG B
283	61	>75% Grass cover, Good, HSG B
352	61	>75% Grass cover, Good, HSG B
3,184	61	>75% Grass cover, Good, HSG B
25	61	>75% Grass cover, Good, HSG B
232	61	>75% Grass cover, Good, HSG B
241	61	>75% Grass cover, Good, HSG B
45,986	98	Paved parking, HSG B
598	98	Roofs, HSG B
5,425	98	Unconnected pavement, HSG B
141	61	>75% Grass cover, Good, HSG B
4,195	61	>75% Grass cover, Good, HSG B
12,217	98	Roofs, HSG B
75,883	93	Weighted Average
11,088		14.61% Pervious Area
64,795		85.39% Impervious Area
5,425		8.37% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

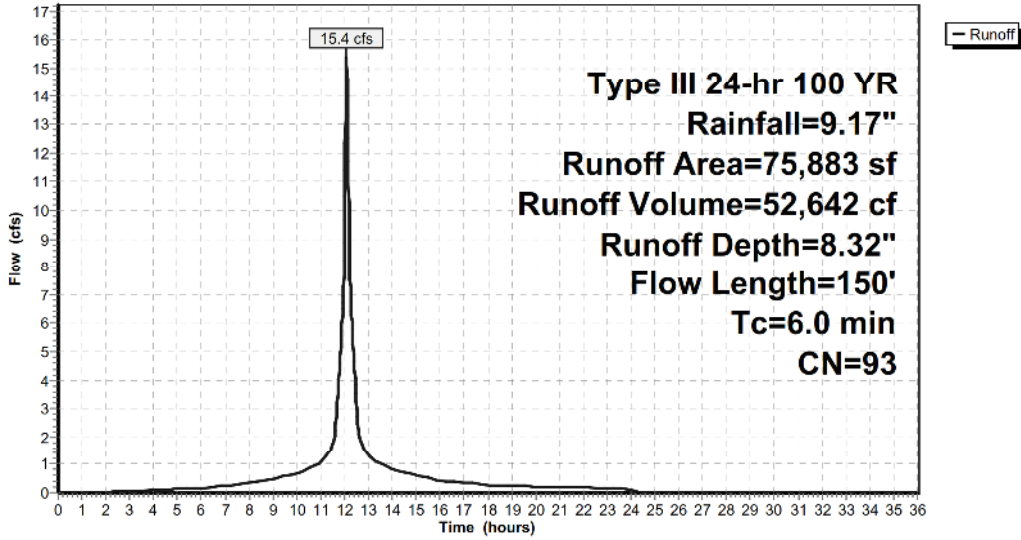
EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS3F: PRWS3F

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS3G: PRWS3G

Runoff = 62.6 cfs @ 12.08 hrs, Volume= 201,789 cf, Depth= 7.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
Type III 24 hr 100 YR Rainfall=9.17"

EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
4,883	98	Roofs, HSG B
2,441	98	Roofs, HSG B
52,654	61	>75% Grass cover, Good, HSG B
2,441	98	Roofs, HSG B
2,441	98	Roofs, HSG B
51,059	61	>75% Grass cover, Good, HSG B
2,239	98	Unconnected pavement, HSG B
71,764	98	Paved parking, HSG B
21,974	98	Roofs, HSG B
<hr/>		
335,218	84	Weighted Average
125,175		37.34% Pervious Area
210,043		62.66% Impervious Area
11,322		5.39% Unconnected

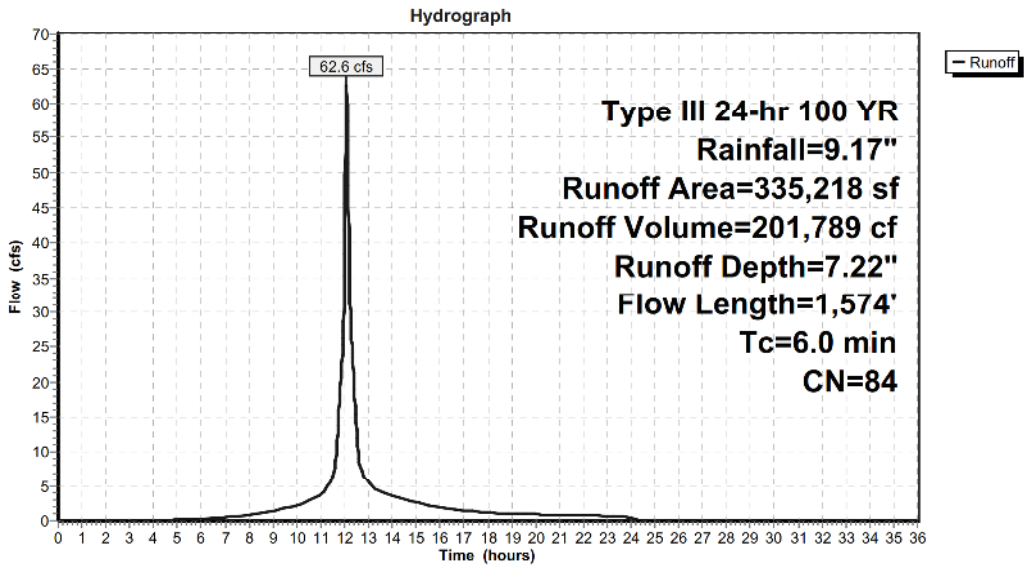
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	1,574		4.37		Direct Entry,

EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS3G: PRWS3G



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 1A-OCS: 1A-OCS1

Inflow Area = 335,218 sf, 62.66% Impervious, Inflow Depth = 7.22" for 100 YR event
 Inflow = 62.6 cfs @ 12.08 hrs, Volume= 201,789 cf
 Outflow = 62.6 cfs @ 12.08 hrs, Volume= 201,789 cf, Atten= 0%, Lag= 0.0 min
 Primary = 31.8 cfs @ 12.08 hrs, Volume= 165,601 cf
 Secondary = 30.8 cfs @ 12.08 hrs, Volume= 36,188 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 477.15' @ 12.08 hrs

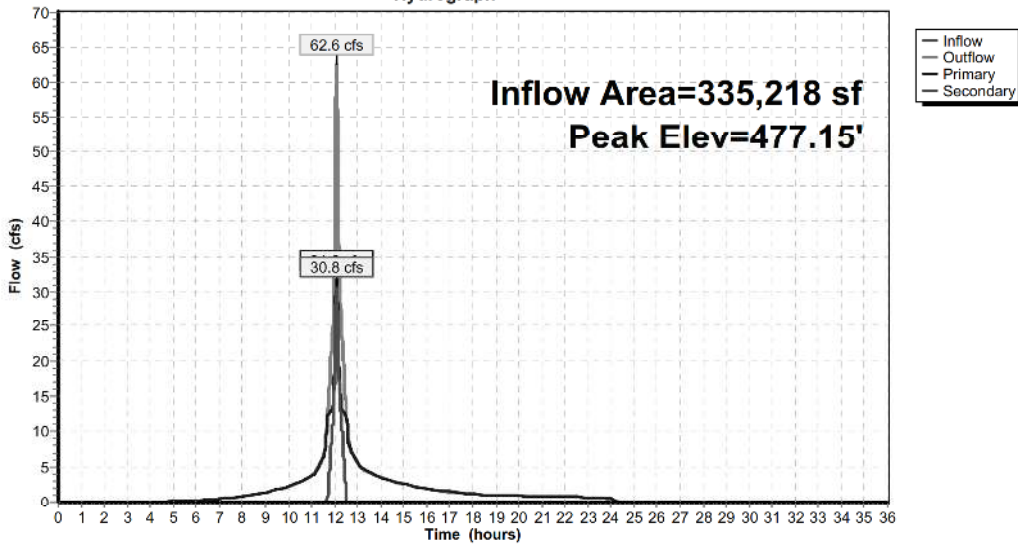
Device	Routing	Invert	Outlet Devices
#1	Primary	430.00'	15.0" Round 15"Ø Culvert L= 37.7' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 429.80' S= 0.0054 '/' Cc= 0.900 n= 0.013
#2	Secondary	433.00'	15.0" Round 15"Ø Culvert L= 66.8' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 426.00' S= 0.1048 '/' Cc= 0.900 n= 0.013
#3	Device 2	437.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=31.8 cfs @ 12.08 hrs HW=476.98' (Free Discharge)
 ↳ **1=15"Ø Culvert** (Inlet Controls 31.8 cfs @ 25.88 fps)

Secondary OutFlow Max=30.7 cfs @ 12.08 hrs HW=476.98' (Free Discharge)
 ↳ **2=15"Ø Culvert** (Inlet Controls 30.7 cfs @ 25.03 fps)
 ↳ **3=Broad-Crested Rectangular Weir** (Passes 30.7 cfs of 4,118.5 cfs potential flow)

Pond 1A-OCS: 1A-OCS1

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 1J-OCS: 1J-OCS

Inflow Area = 75,883 sf, 85.39% Impervious, Inflow Depth = 8.32" for 100 YR event
 Inflow = 15.4 cfs @ 12.08 hrs, Volume= 52,642 cf
 Outflow = 15.4 cfs @ 12.08 hrs, Volume= 52,642 cf, Atten= 0%, Lag= 0.0 min
 Primary = 8.3 cfs @ 12.08 hrs, Volume= 47,399 cf
 Secondary = 7.1 cfs @ 12.08 hrs, Volume= 5,243 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 440.41' @ 12.08 hrs

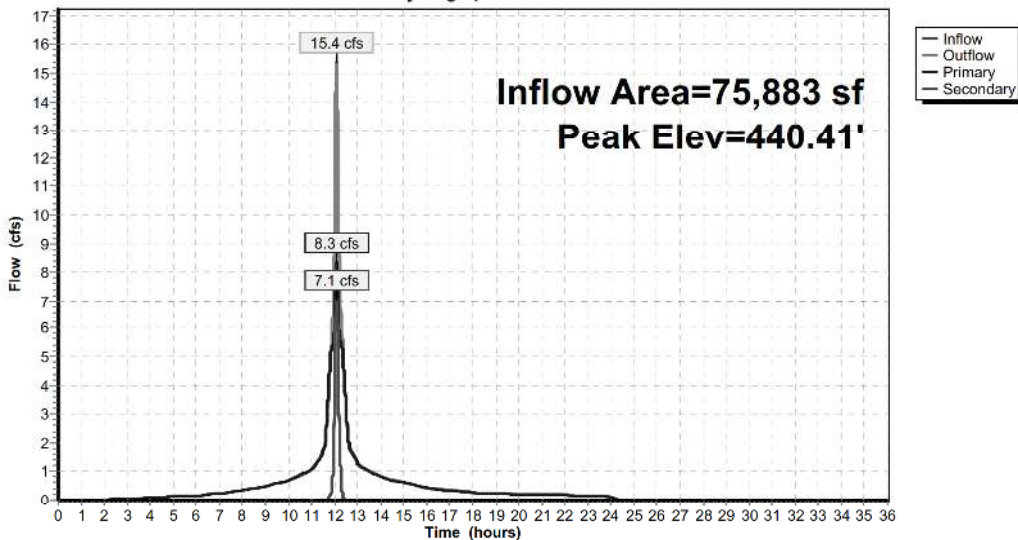
Device	Routing	Invert	Outlet Devices
#1	Primary	436.60'	15.0" Round Culvert L= 74.5' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 436.30' S= 0.0040 '/ S Cc= 0.900 n= 0.013
#2	Secondary	437.50'	15.0" Round Culvert L= 31.2' CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 432.00' S= 0.1763 '/ S Cc= 0.900 n= 0.013
#3	Device 2	438.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=8.3 cfs @ 12.08 hrs HW=440.40' (Free Discharge)
 ↑1=Culvert (Inlet Controls 8.3 cfs @ 6.78 fps)

Secondary OutFlow Max=7.0 cfs @ 12.08 hrs HW=440.40' (Free Discharge)
 ↑2=Culvert (Inlet Controls 7.0 cfs @ 5.74 fps)
 ↑3=Broad-Crested Rectangular Weir (Passes 7.0 cfs of 43.6 cfs potential flow)

Pond 1J-OCS: 1J-OCS

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 2P: HOTEL INFIL. BASIN

Inflow Area = 86,292 sf, 75.09% Impervious, Inflow Depth = 7.12" for 100 YR event
 Inflow = 9.5 cfs @ 12.08 hrs, Volume= 51,181 cf
 Outflow = 5.5 cfs @ 12.37 hrs, Volume= 45,625 cf, Atten= 42%, Lag= 16.9 min
 Discarded = 0.1 cfs @ 12.37 hrs, Volume= 10,916 cf
 Primary = 5.4 cfs @ 12.37 hrs, Volume= 34,709 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 441.54' @ 12.37 hrs Surf.Area= 5,278 sf Storage= 13,703 cf

Plug-Flow detention time= 194.3 min calculated for 45,625 cf (89% of inflow)
 Center-of-Mass det. time= 140.3 min (911.6 - 771.3)

Volume	Invert	Avail.Storage	Storage Description
#1	437.80'	19,411 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
437.80	1,643	0	0
438.00	2,340	398	398
440.00	3,903	6,243	6,641
442.00	5,691	9,594	16,235
442.50	7,010	3,175	19,411

Device	Routing	Invert	Outlet Devices
#1	Discarded	437.80'	1.000 in/hr Exfiltration over Surface area
#2	Primary	439.00'	12.0" Round Culvert L= 30.8' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 437.00' S= 0.0649 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	440.70'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	441.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.1 cfs @ 12.37 hrs HW=441.54' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=5.4 cfs @ 12.37 hrs HW=441.54' (Free Discharge)
 ↳ **2=Culvert** (Inlet Controls 5.4 cfs @ 6.87 fps)
 ↳ **3=Grate** (Passes 5.4 cfs of 45.2 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=437.80' (Free Discharge)
 ↳ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

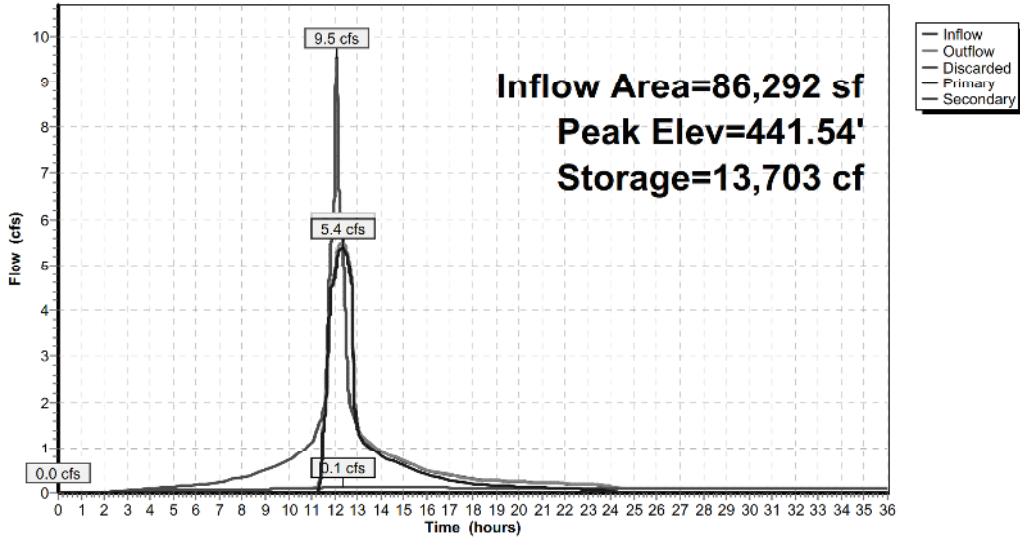
Type III 24-hr 100 YR Rainfall=9.17"

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Pond 2P: HOTEL INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 3P: HOTEL DET. POND

Inflow Area = 105,532 sf, 61.40% Impervious, Inflow Depth = 5.29" for 100 YR event
 Inflow = 13.1 cfs @ 12.09 hrs, Volume= 46,541 cf
 Outflow = 2.1 cfs @ 12.89 hrs, Volume= 45,610 cf, Atten= 84%, Lag= 47.6 min
 Primary = 2.1 cfs @ 12.89 hrs, Volume= 45,610 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 437.25' @ 12.89 hrs Surf.Area= 9,011 sf Storage= 22,891 cf

Plug-Flow detention time= 122.6 min calculated for 45,610 cf (98% of inflow)
 Center-of-Mass det. time= 111.2 min (919.9 - 808.8)

Volume	Invert	Avail.Storage	Storage Description
#1	431.00'	35,981 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
431.00	724	0	0
432.00	1,138	931	931
434.00	2,476	3,614	4,545
436.00	6,286	8,762	13,307
438.00	10,636	16,922	30,229
438.50	12,371	5,752	35,981

Device	Routing	Invert	Outlet Devices
#1	Primary	432.00'	12.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0333 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Primary	432.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	437.25'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=2.1 cfs @ 12.89 hrs HW=437.25' (Free Discharge)

- 1=Culvert (Passes 0.0 cfs of 7.5 cfs potential flow)
- 3=Grate (Weir Controls 0.0 cfs @ 0.18 fps)
- 2=Orifice/Grate (Orifice Controls 2.1 cfs @ 10.77 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=431.00' (Free Discharge)

- 4=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

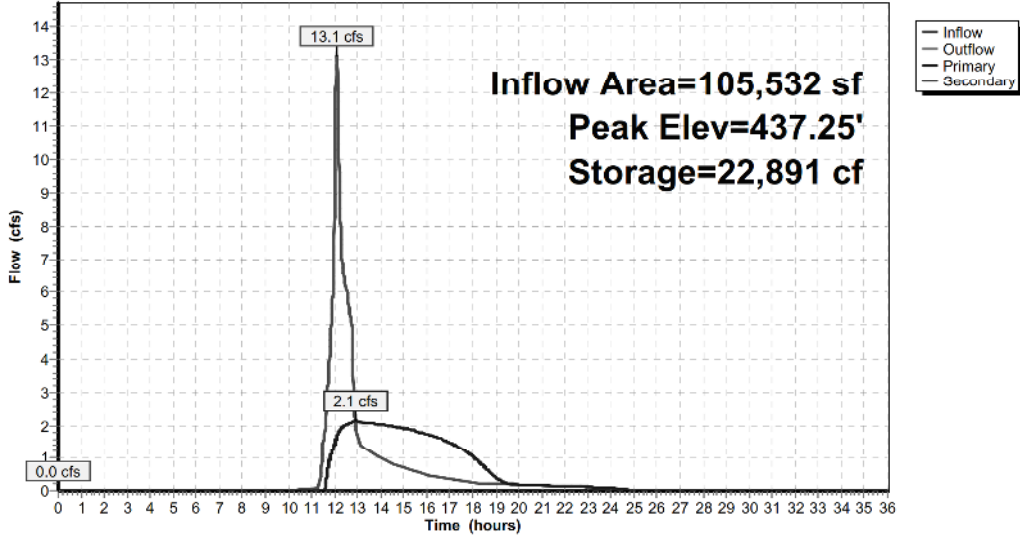
EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Pond 3P: HOTEL DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 4P: THs INFIL. BASIN

Inflow Area = 349,049 sf, 60.18% Impervious, Inflow Depth = 5.87" for 100 YR event
 Inflow = 33.4 cfs @ 12.09 hrs, Volume= 170,625 cf
 Outflow = 16.6 cfs @ 12.25 hrs, Volume= 146,648 cf, Atten= 50%, Lag= 9.9 min
 Discarded = 0.2 cfs @ 12.25 hrs, Volume= 17,402 cf
 Primary = 16.4 cfs @ 12.25 hrs, Volume= 129,247 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 437.58' @ 12.25 hrs Surf.Area= 9,278 sf Storage= 43,419 cf

Plug-Flow detention time= 163.9 min calculated for 146,648 cf (86% of inflow)
 Center-of-Mass det. time= 98.7 min (901.8 - 803.0)

Volume	Invert	Avail.Storage	Storage Description
#1	429.50'	52,546 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
429.50	0	0	0
430.00	2,668	667	667
432.00	4,042	6,710	7,377
434.00	5,643	9,685	17,062
436.00	7,469	13,112	30,174
438.00	9,756	17,225	47,399
438.50	10,830	5,147	52,546

Device	Routing	Invert	Outlet Devices
#1	Discarded	429.50'	1.000 in/hr Exfiltration over Surface area
#2	Primary	432.00'	18.0" Round Culvert L= 53.5' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 431.00' S= 0.0187 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#3	Device 2	436.10'	60.0" x 48.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.2 cfs @ 12.25 hrs HW=437.58' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.2 cfs)

Primary OutFlow Max=16.4 cfs @ 12.25 hrs HW=437.58' (Free Discharge)
 ↑ **2=Culvert** (Barrel Controls 16.4 cfs @ 9.26 fps)
 ↑ **3=Grate** (Passes 16.4 cfs of 106.2 cfs potential flow)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=429.50' (Free Discharge)
 ↑ **4=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP3

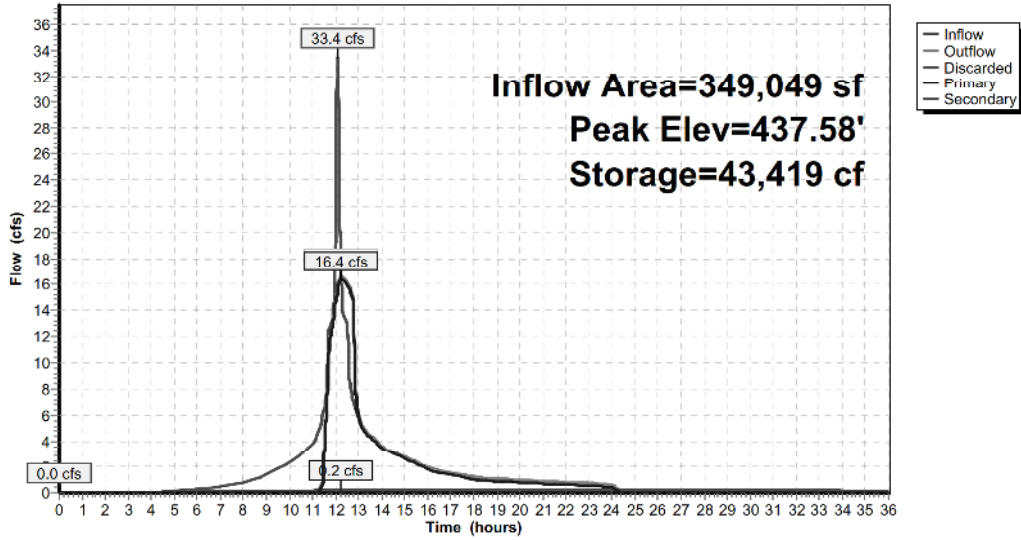
Type III 24-hr 100 YR Rainfall=9.17"

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Pond 4P: THs INFIL. BASIN

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 5P: THs DET. POND

Inflow Area = 365,802 sf, 57.42% Impervious, Inflow Depth = 5.63" for 100 YR event
 Inflow = 48.2 cfs @ 12.09 hrs, Volume= 171,521 cf
 Outflow = 16.3 cfs @ 12.53 hrs, Volume= 164,894 cf, Atten= 66%, Lag= 26.7 min
 Primary = 6.1 cfs @ 12.53 hrs, Volume= 38,297 cf
 Secondary = 10.2 cfs @ 12.53 hrs, Volume= 126,597 cf
 Tertiary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs
 Peak Elev= 436.82' @ 12.53 hrs Surf.Area= 11,165 sf Storage= 54,888 cf

Plug-Flow detention time= 59.8 min calculated for 164,894 cf (96% of inflow)
 Center-of-Mass det. time= 38.7 min (861.4 - 822.7)

Volume	Invert	Avail.Storage	Storage Description
#1	422.00'	76,010 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
422.00	15	0	0
424.00	240	255	255
425.00	319	280	535
426.00	1,103	711	1,246
430.00	2,945	8,096	9,342
432.00	4,855	7,800	17,142
434.00	7,166	12,021	29,163
436.00	9,880	17,046	46,209
438.00	12,996	22,876	69,085
438.50	14,705	6,925	76,010

Device	Routing	Invert	Outlet Devices
#1	Primary	431.50'	24.0" Round Culvert L= 63.7' CMP, square edge headwall, Ke= 0.500 Outlet Invert= 429.75' S= 0.0275 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Device 1	426.00'	10.0" Vert. Orifice C= 0.600
#3	Secondary	429.00'	12.0" Vert. Orifice II C= 0.600
#4	Device 1	437.10'	24.0" x 36.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Tertiary	437.60'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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Primary OutFlow Max=6.1 cfs @ 12.53 hrs HW=436.82' (Free Discharge)

- 1=Culvert (Passes 6.1 cfs of 30.9 cfs potential flow)
- 2=Orifice (Orifice Controls 6.1 cfs @ 11.11 fps)
- 4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=10.2 cfs @ 12.53 hrs HW=436.82' (Free Discharge)

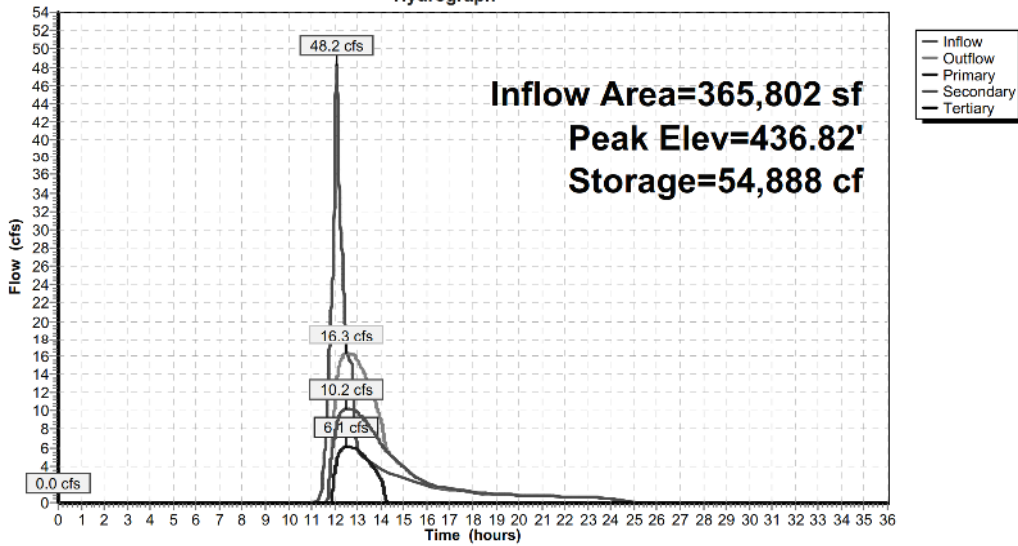
- 3=Orifice II (Orifice Controls 10.2 cfs @ 13.03 fps)

Tertiary OutFlow Max=0.0 cfs @ 0.00 hrs HW=422.00' (Free Discharge)

- 5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond 5P: THs DET. POND

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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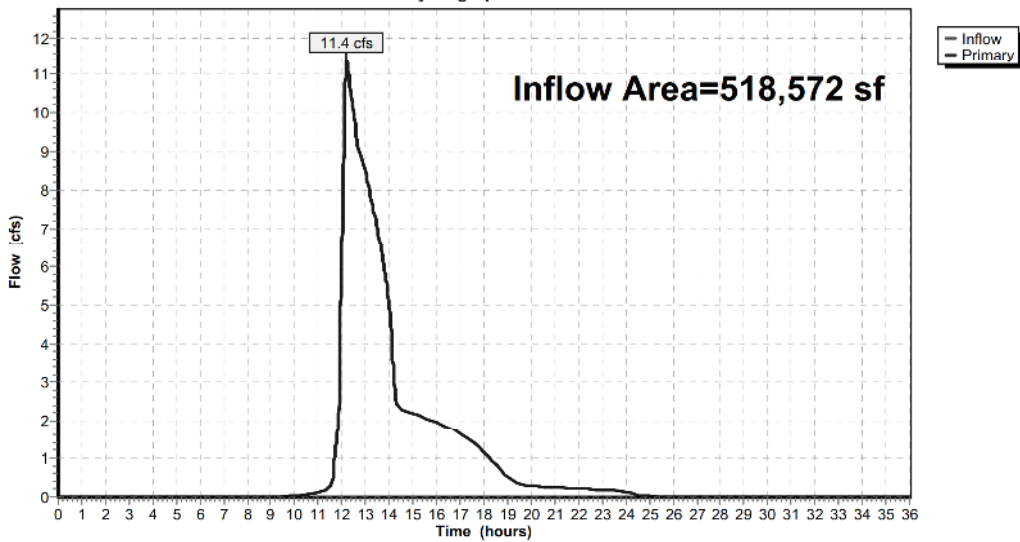
Summary for Link PRDP3: PRDP3

Inflow Area = 518,572 sf, 53.00% Impervious, Inflow Depth = 2.32" for 100 YR event
Inflow = 11.4 cfs @ 12.20 hrs, Volume= 100,084 cf
Primary = 11.4 cfs @ 12.20 hrs, Volume= 100,084 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.010 hrs

Link PRDP3: PRDP3

Hydrograph



EAGLE RIDGE-PRDP3

Type III 24-hr 100 YR Rainfall=9.17"

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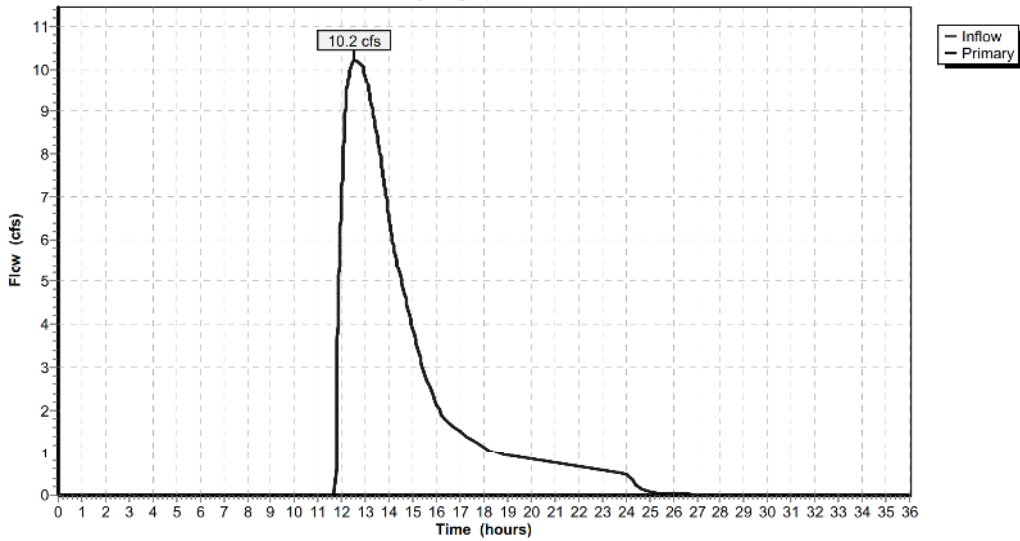
Summary for Link TR1: TR1

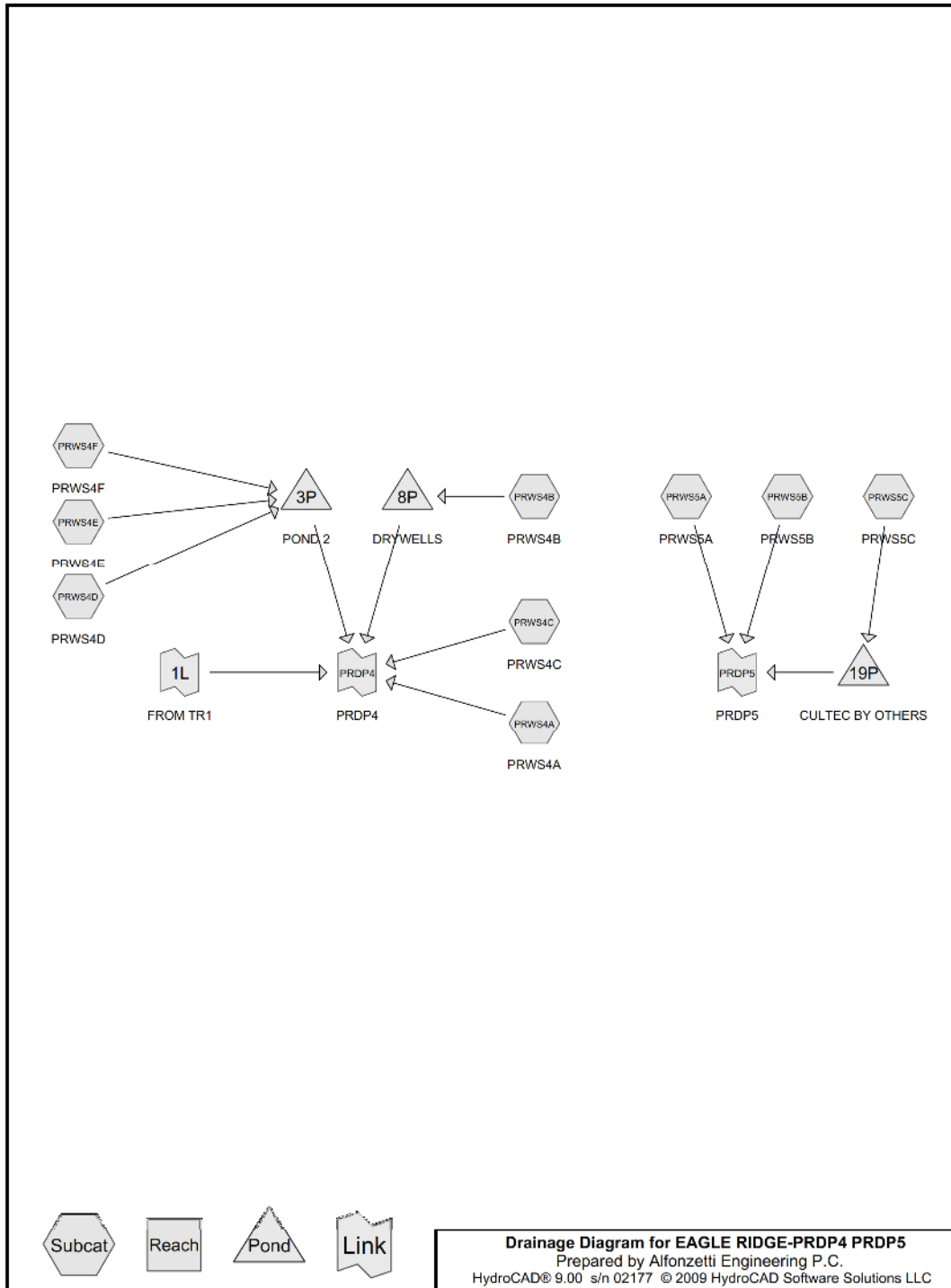
Inflow = 10.2 cfs @ 12.53 hrs, Volume= 126,597 cf
Primary = 10.2 cfs @ 12.53 hrs, Volume= 126,597 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.010 hrs

Link TR1: TR1

Hydrograph





EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=0.17" Flow Length=631' Tc=17.3 min CN=56 Runoff=0.3 cfs 3,717 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=1.42" Flow Length=150' Tc=6.0 min CN=85 Runoff=2.8 cfs 8,596 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=0.32" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=0.2 cfs 1,326 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=0.29" Flow Length=150' Tc=6.0 min CN=61 Runoff=0.1 cfs 606 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=1.35" Tc=12.0 min CN=84 Runoff=4.1 cfs 15,608 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=0.29" Flow Length=425' Tc=11.3 min CN=61 Runoff=0.1 cfs 973 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=0.14" Flow Length=500' Tc=15.1 min CN=55 Runoff=0.2 cfs 2,770 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=0.65" Flow Length=641' Tc=14.4 min CN=71 Runoff=2.1 cfs 10,106 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=1.49" Tc=6.0 min CN=86 Runoff=0.5 cfs 1,396 cf
Pond 3P: POND 2	Peak Elev=487.16' Storage=9,121 cf Inflow=4.3 cfs 17,187 cf Discarded=0.3 cfs 17,187 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 17,187 cf
Pond 8P: DRYWELLS	Peak Elev=435.67' Storage=5,882 cf Inflow=2.8 cfs 8,596 cf Discarded=0.1 cfs 4,989 cf Primary=0.0 cfs 282 cf Outflow=0.1 cfs 5,272 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=514.28' Storage=285 cf Inflow=0.5 cfs 1,396 cf Discarded=0.1 cfs 1,396 cf Primary=0.0 cfs 0 cf Outflow=0.1 cfs 1,396 cf
Link 1L: FROM TR1	1 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=0.0 cfs 0 cf Primary=0.0 cfs 0 cf
Link PRDP4: PRDP4	Inflow=0.4 cfs 5,325 cf Primary=0.4 cfs 5,325 cf
Link PRDP5: PRDP5	Inflow=2.1 cfs 12,876 cf Primary=2.1 cfs 12,876 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 45,098 cf Average Runoff Depth = 0.53"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 0.3 cfs @ 12.56 hrs, Volume= 3,717 cf, Depth= 0.17"

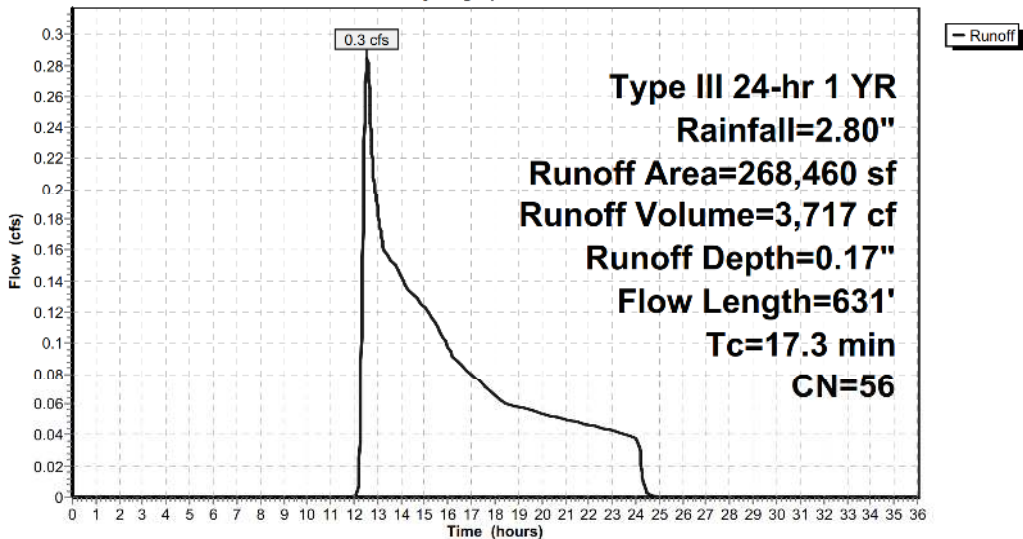
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 2.8 cfs @ 12.09 hrs, Volume= 8,596 cf, Depth= 1.42"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

EAGLE RIDGE-PRDP4 PRDP5

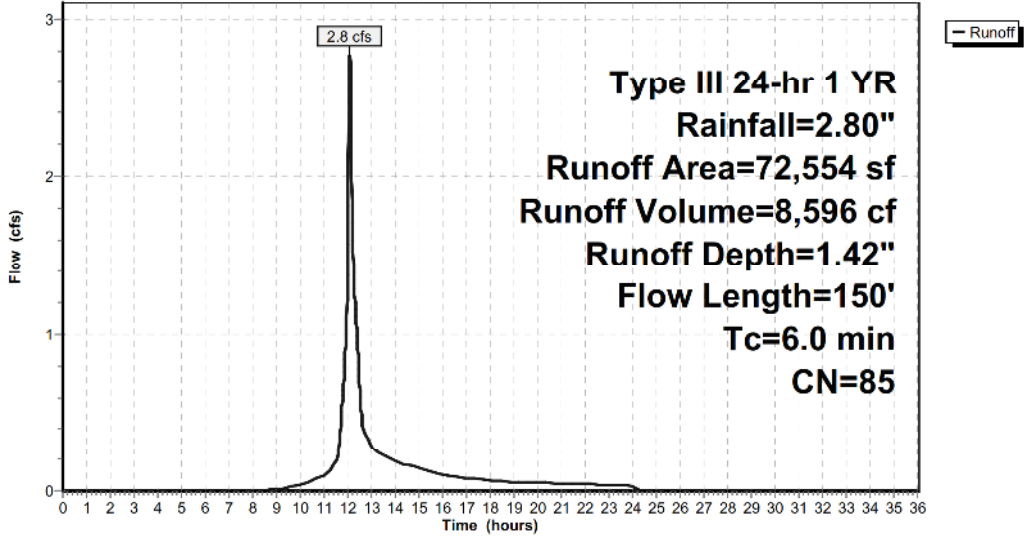
Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 0.2 cfs @ 12.14 hrs, Volume= 1,326 cf, Depth= 0.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

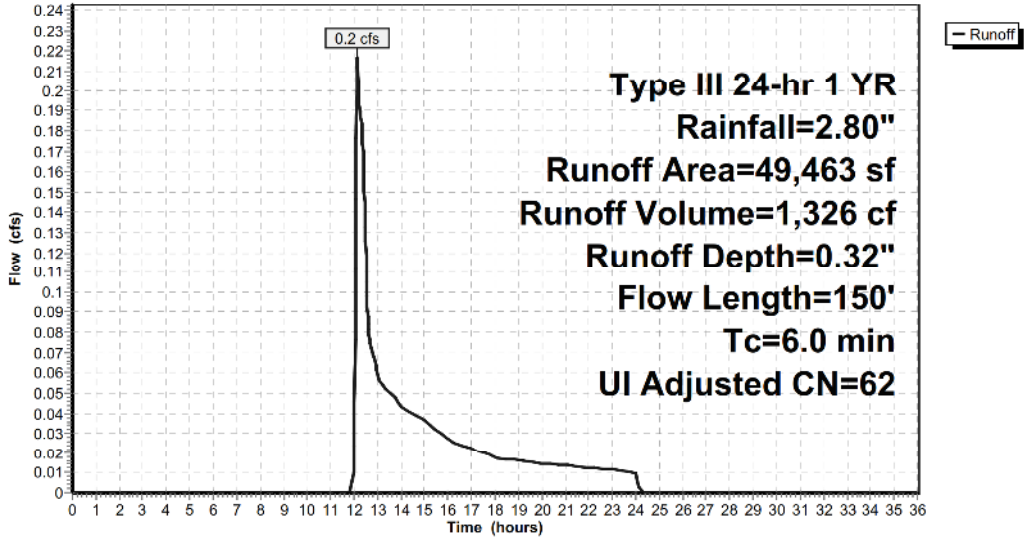
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 0.1 cfs @ 12.15 hrs, Volume= 606 cf, Depth= 0.29"

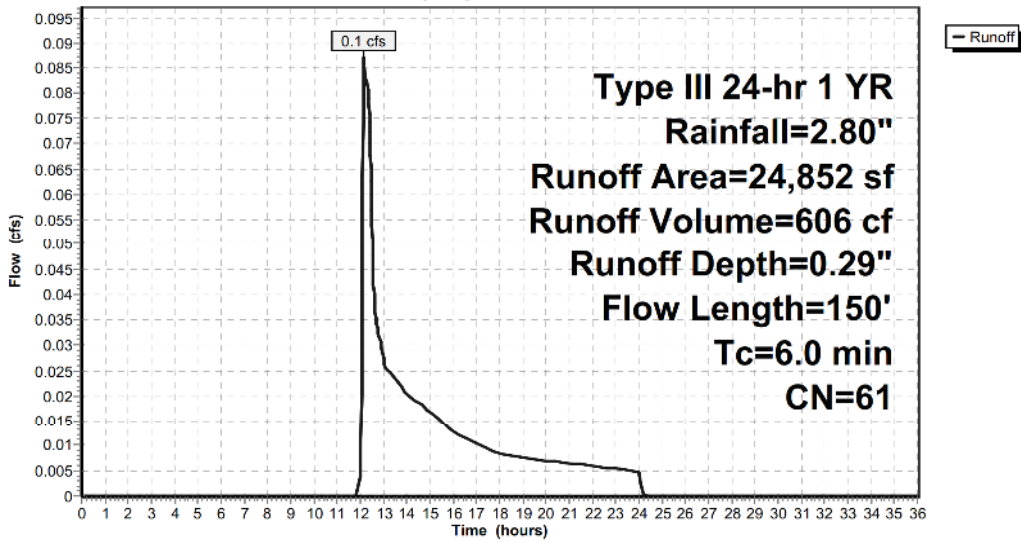
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 4.1 cfs @ 12.17 hrs, Volume= 15,608 cf, Depth= 1.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Type III 24 hr 1 YR Rainfall=2.80"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

Prepared by Alfonzetti Engineering P.C.
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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

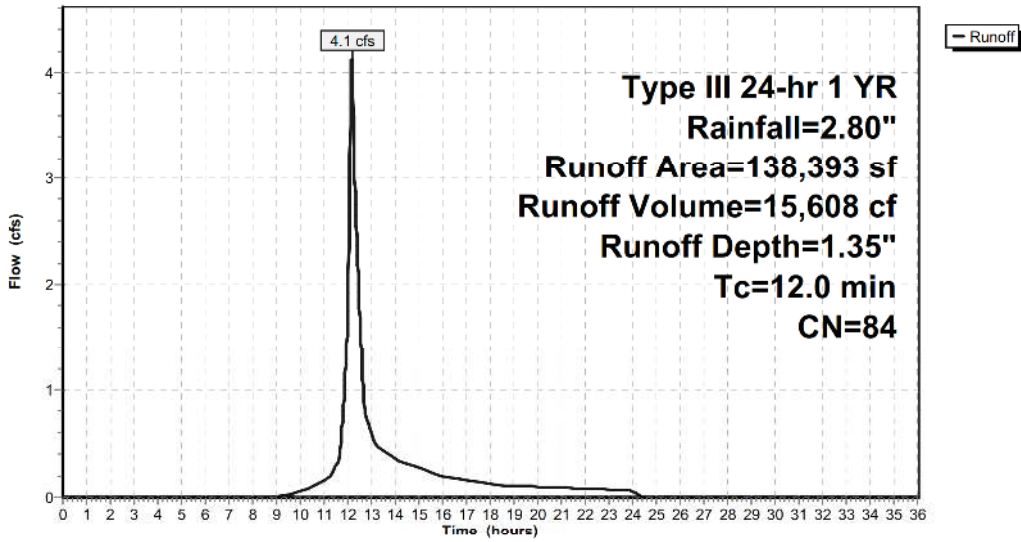
Type III 24-hr 1 YR Rainfall=2.80"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 0.1 cfs @ 12.34 hrs, Volume= 973 cf, Depth= 0.29"

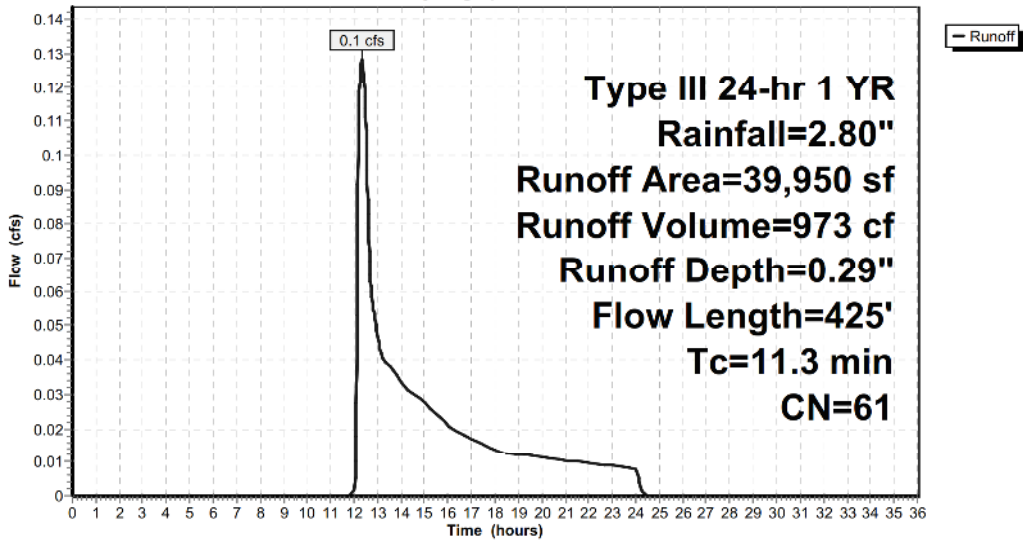
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRW55A: PRW55A

Runoff = 0.2 cfs @ 12.56 hrs, Volume= 2,770 cf, Depth= 0.14"

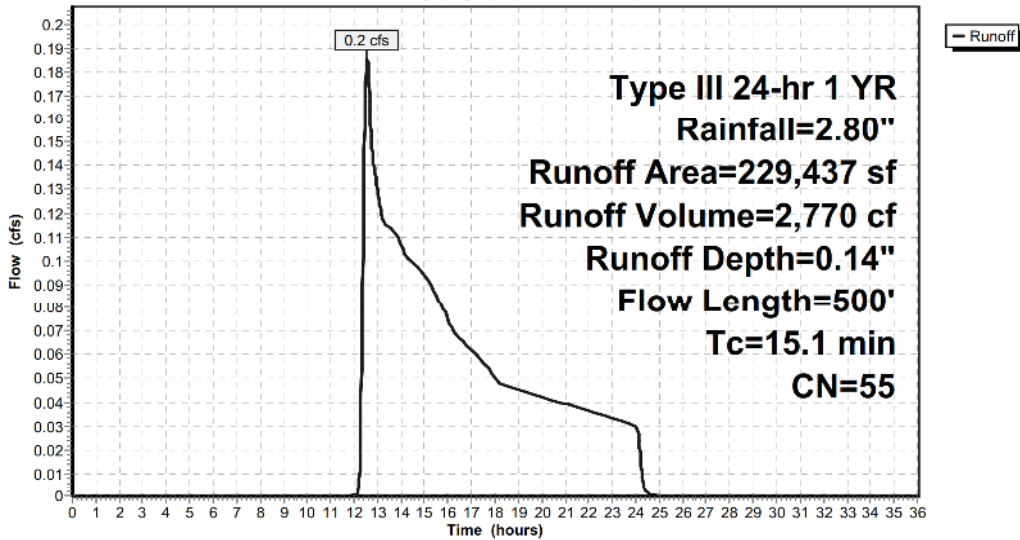
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRW55A: PRW55A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 2.1 cfs @ 12.23 hrs, Volume= 10,106 cf, Depth= 0.65"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

EAGLE RIDGE-PRDP4 PRDP5

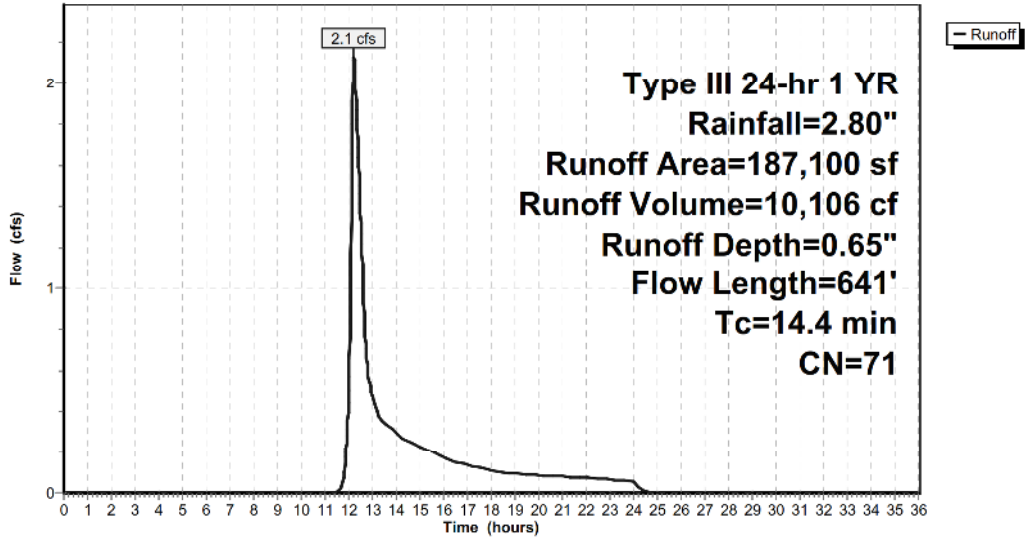
Type III 24-hr 1 YR Rainfall=2.80"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Subcatchment PRWS5C: PRWS5C

Runoff = 0.5 cfs @ 12.09 hrs, Volume= 1,396 cf, Depth= 1.49"

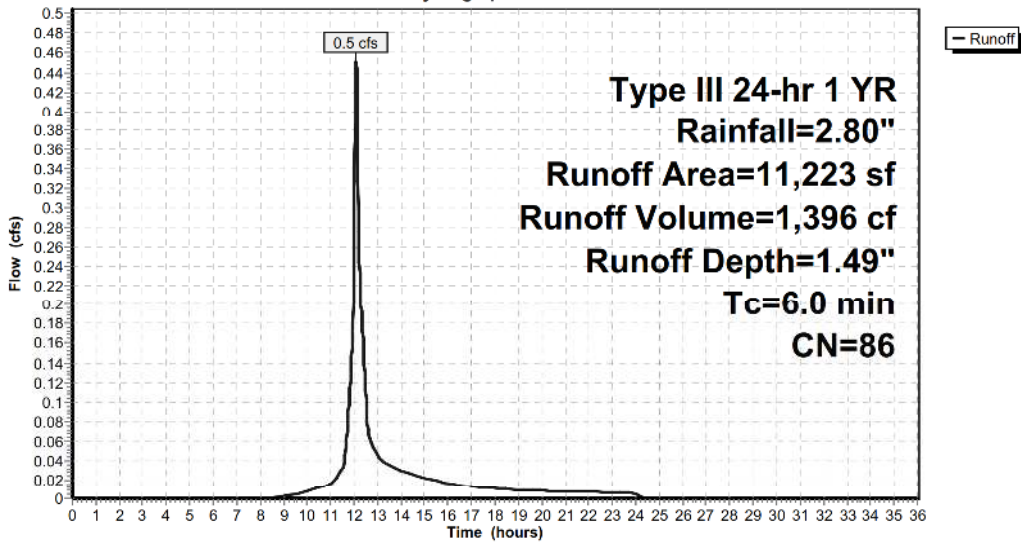
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 1 YR Rainfall=2.80"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS5C: PRWS5C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 1.02" for 1 YR event
 Inflow = 4.3 cfs @ 12.17 hrs, Volume= 17,187 cf
 Outflow = 0.3 cfs @ 15.65 hrs, Volume= 17,187 cf, Atten= 94%, Lag= 208.7 min
 Discarded = 0.3 cfs @ 15.65 hrs, Volume= 17,187 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 487.16' @ 15.65 hrs Surf.Area= 11,214 sf Storage= 9,121 cf

Plug-Flow detention time= 381.8 min calculated for 17,187 cf (100% of inflow)
 Center-of-Mass det. time= 381.8 min (1,232.0 - 850.2)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Cuef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.3 cfs @ 15.65 hrs HW=487.16' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.3 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳ **2=Culvert** (Controls 0.0 cfs)
 ↳ **3=Orifice** (Controls 0.0 cfs)
 ↳ **4=Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳ **5=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP4 PRDP5

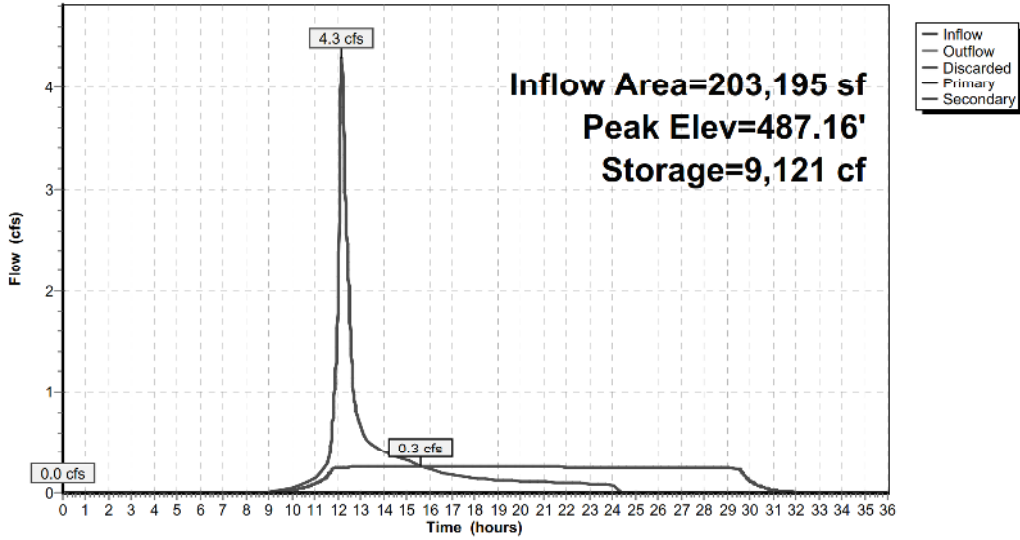
Type III 24-hr 1 YR Rainfall=2.80"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 1.42" for 1 YR event
 Inflow = 2.8 cfs @ 12.09 hrs, Volume= 8,596 cf
 Outflow = 0.1 cfs @ 16.84 hrs, Volume= 5,272 cf, Atten= 97%, Lag= 285.0 min
 Discarded = 0.1 cfs @ 10.79 hrs, Volume= 4,989 cf
 Primary = 0.0 cfs @ 16.84 hrs, Volume= 282 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 435.67' @ 16.84 hrs Surf.Area= 2,304 sf Storage= 5,882 cf

Plug-Flow detention time= 639.8 min calculated for 5,272 cf (61% of inflow)
 Center-of-Mass det. time= 530.9 min (1,363.1 - 832.2)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

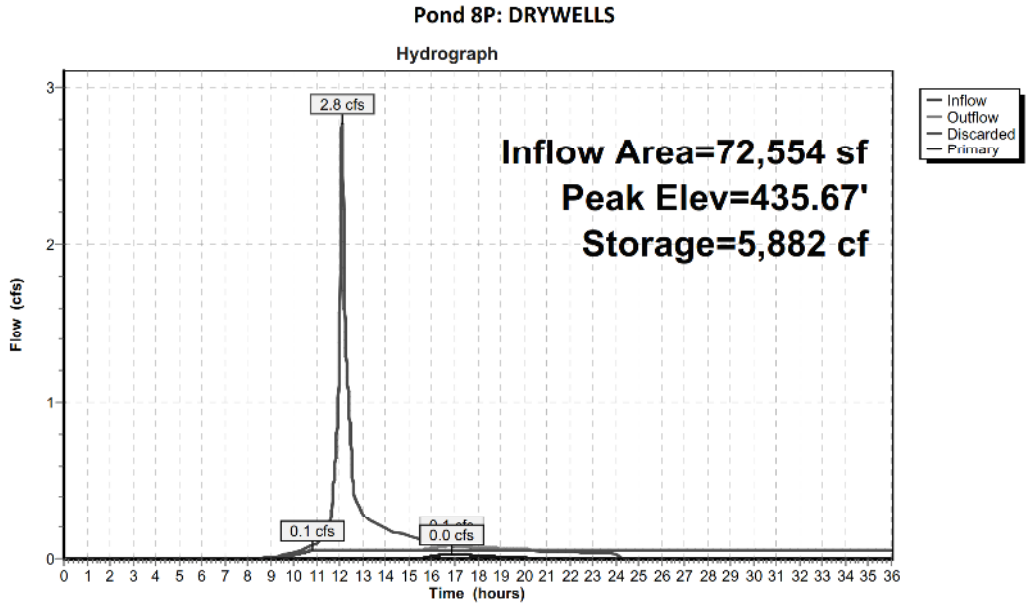
Discarded OutFlow Max=0.1 cfs @ 10.79 hrs HW=432.06' (Free Discharge)
 ↙ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.0 cfs @ 16.84 hrs HW=435.67' (Free Discharge)
 ↙ **2=Culvert** (Inlet Controls 0.0 cfs @ 0.91 fps)

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 1.49" for 1 YR event
 Inflow = 0.5 cfs @ 12.09 hrs, Volume= 1,396 cf
 Outflow = 0.1 cfs @ 11.85 hrs, Volume= 1,396 cf, Atten= 74%, Lag= 0.0 min
 Discarded = 0.1 cfs @ 11.85 hrs, Volume= 1,396 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 514.28' @ 12.48 hrs Surf.Area= 335 sf Storage= 285 cf

Plug-Flow detention time= 12.9 min calculated for 1,395 cf (100% of inflow)
 Center-of-Mass det. time= 12.9 min (841.4 - 828.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.85 hrs HW=512.99' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=512.95' (Free Discharge)
 ↳1=Culvert (Controls 0.0 cfs)

EAGLE RIDGE-PRDP4 PRDP5

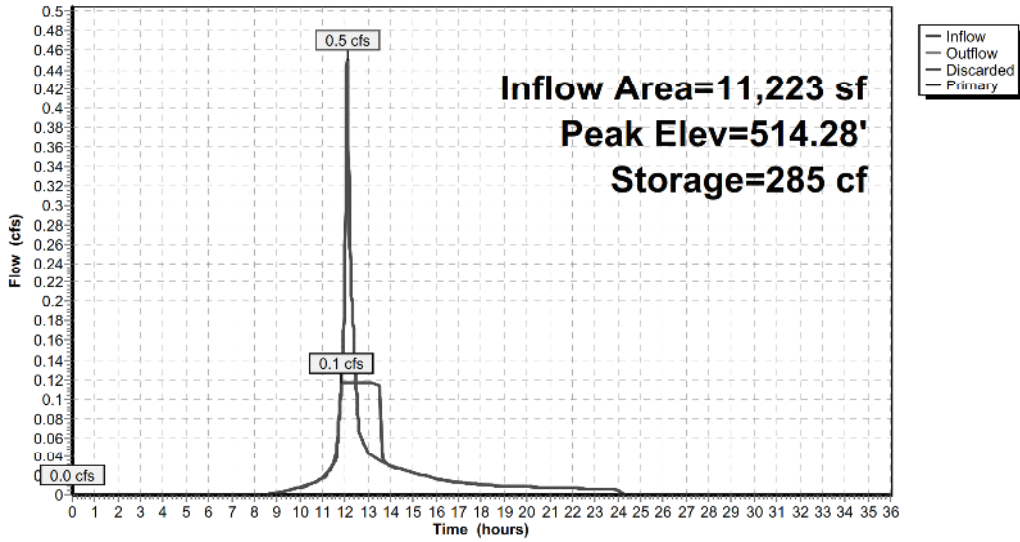
Type III 24-hr 1 YR Rainfall=2.80"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

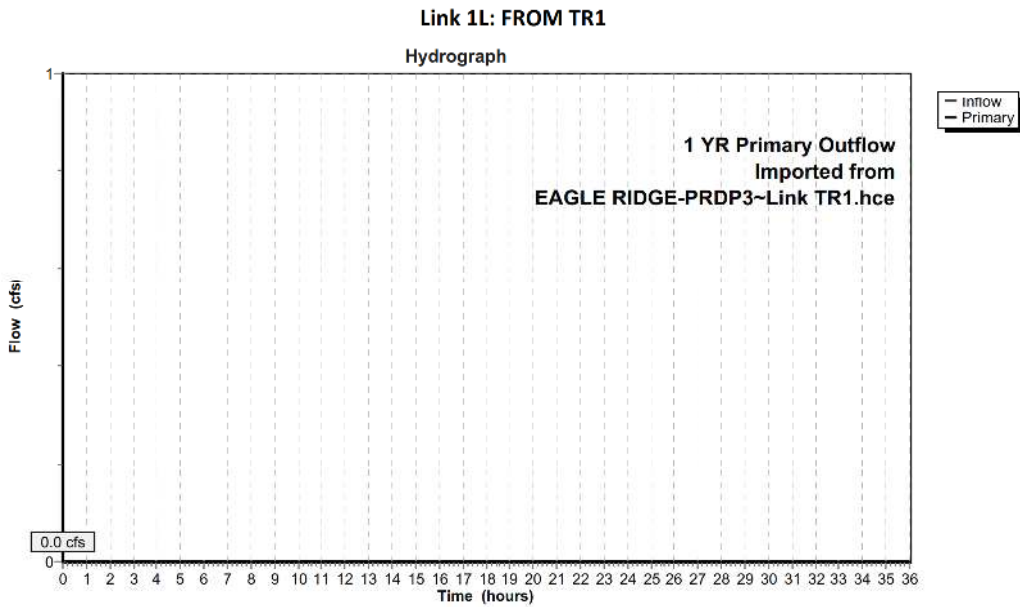
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Summary for Link 1L: FROM TR1

Inflow = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

1 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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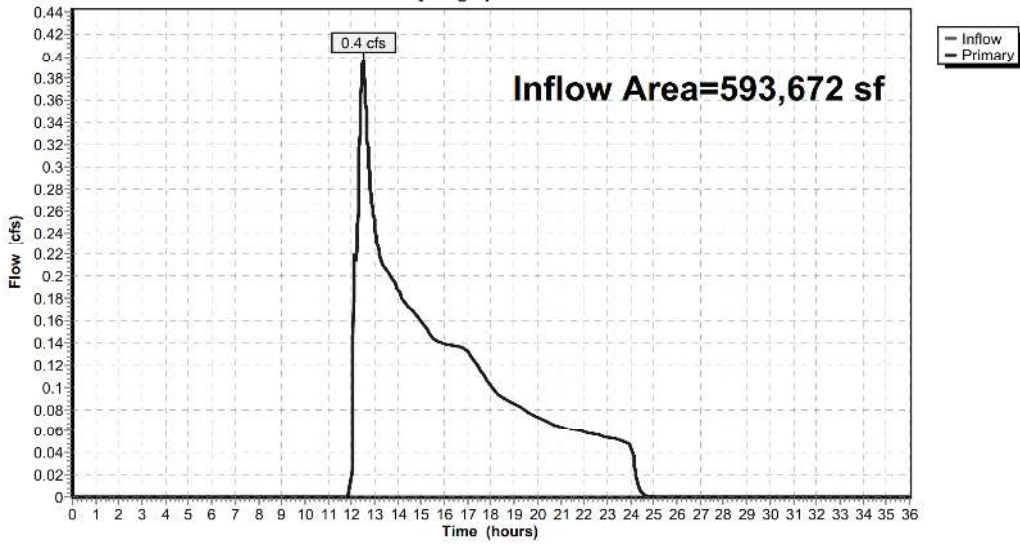
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 0.11" for 1 YR event
Inflow = 0.4 cfs @ 12.49 hrs, Volume= 5,325 cf
Primary = 0.4 cfs @ 12.49 hrs, Volume= 5,325 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 1 YR Rainfall=2.80"

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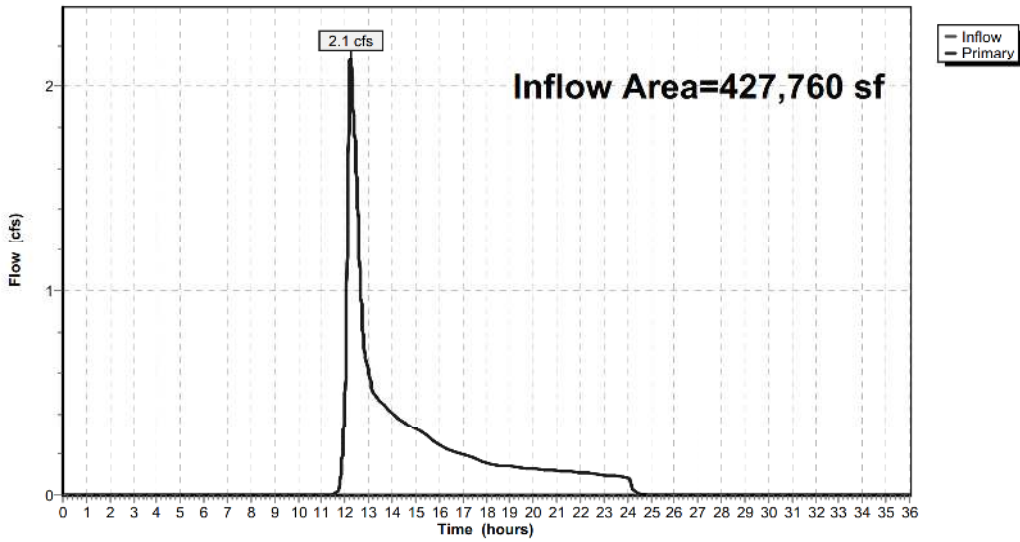
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 0.36" for 1 YR event
Inflow = 2.1 cfs @ 12.23 hrs, Volume= 12,876 cf
Primary = 2.1 cfs @ 12.23 hrs, Volume= 12,876 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=0.36" Flow Length=631' Tc=17.3 min CN=56 Runoff=1.0 cfs 7,954 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=1.96" Flow Length=150' Tc=6.0 min CN=85 Runoff=3.8 cfs 11,824 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=0.58" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=0.6 cfs 2,403 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=0.54" Flow Length=150' Tc=6.0 min CN=61 Runoff=0.3 cfs 1,122 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=1.88" Tc=12.0 min CN=84 Runoff=5.7 cfs 21,643 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=0.54" Flow Length=425' Tc=11.3 min CN=61 Runoff=0.3 cfs 1,803 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=0.32" Flow Length=500' Tc=15.1 min CN=55 Runoff=0.7 cfs 6,166 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=1.02" Flow Length=641' Tc=14.4 min CN=71 Runoff=3.6 cfs 15,896 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=2.04" Tc=6.0 min CN=86 Runoff=0.6 cfs 1,905 cf
Pond 3P: POND 2	Peak Elev=487.62' Storage=14,493 cf Inflow=6.3 cfs 24,568 cf Discarded=0.3 cfs 23,987 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 23,987 cf
Pond 8P: DRYWELLS	Peak Elev=435.86' Storage=6,182 cf Inflow=3.8 cfs 11,824 cf Discarded=0.1 cfs 5,135 cf Primary=0.4 cfs 3,229 cf Outflow=0.4 cfs 8,364 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=514.69' Storage=389 cf Inflow=0.6 cfs 1,905 cf Discarded=0.1 cfs 1,758 cf Primary=0.1 cfs 147 cf Outflow=0.3 cfs 1,905 cf
Link 1L: FROM TR1	2 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=0.6 cfs 7,941 cf Primary=0.6 cfs 7,941 cf
Link PRDP4: PRDP4	Inflow=1.3 cfs 21,527 cf Primary=1.3 cfs 21,527 cf
Link PRDP5: PRDP5	Inflow=4.2 cfs 22,209 cf Primary=4.2 cfs 22,209 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 70,716 cf Average Runoff Depth = 0.83"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 1.0 cfs @ 12.44 hrs, Volume= 7,954 cf, Depth= 0.36"

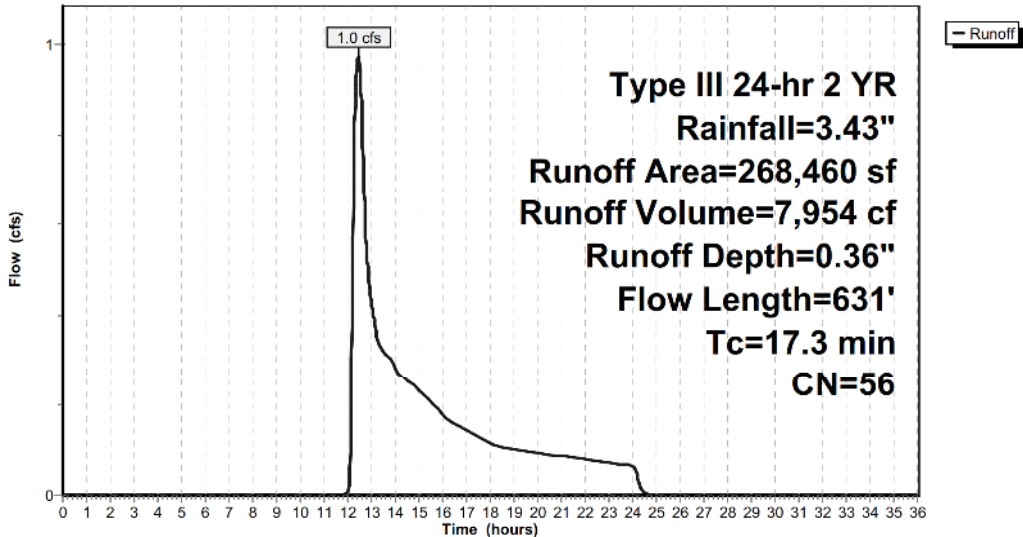
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 3.8 cfs @ 12.09 hrs, Volume= 11,824 cf, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

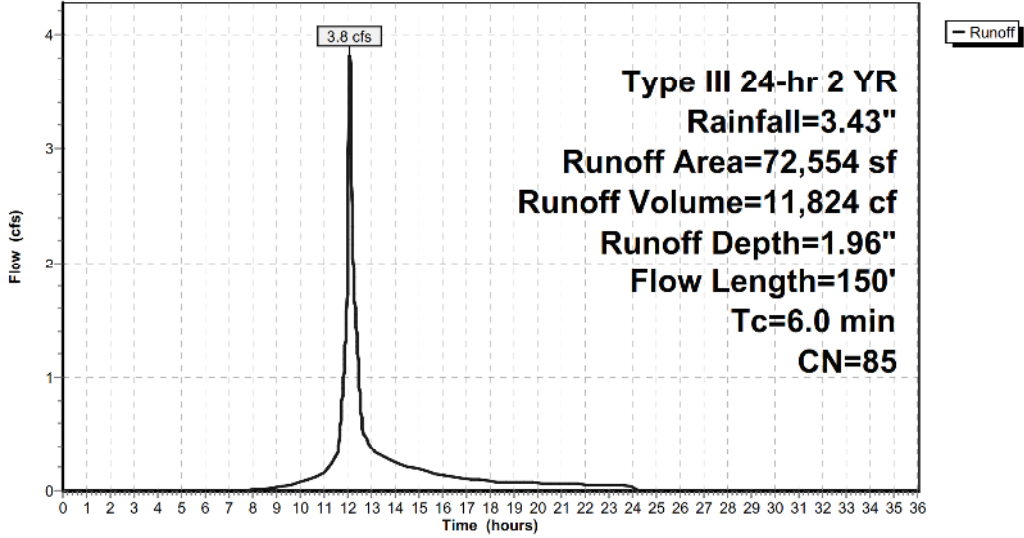
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 0.6 cfs @ 12.11 hrs, Volume= 2,403 cf, Depth= 0.58"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

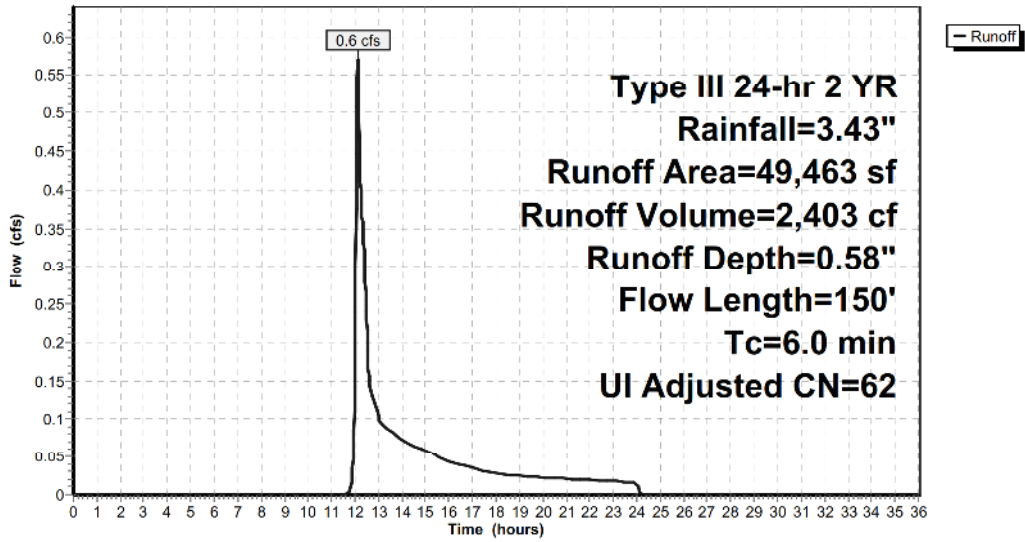
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 0.3 cfs @ 12.12 hrs, Volume= 1,122 cf, Depth= 0.54"

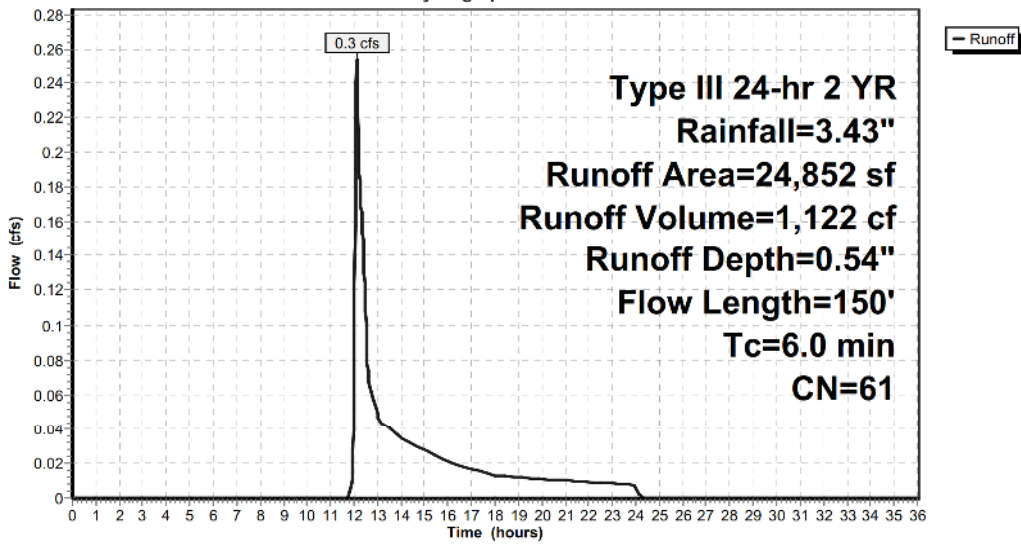
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 5.7 cfs @ 12.17 hrs, Volume= 21,643 cf, Depth= 1.88"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Type III 24 hr 2 YR Rainfall=3.43"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,980		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

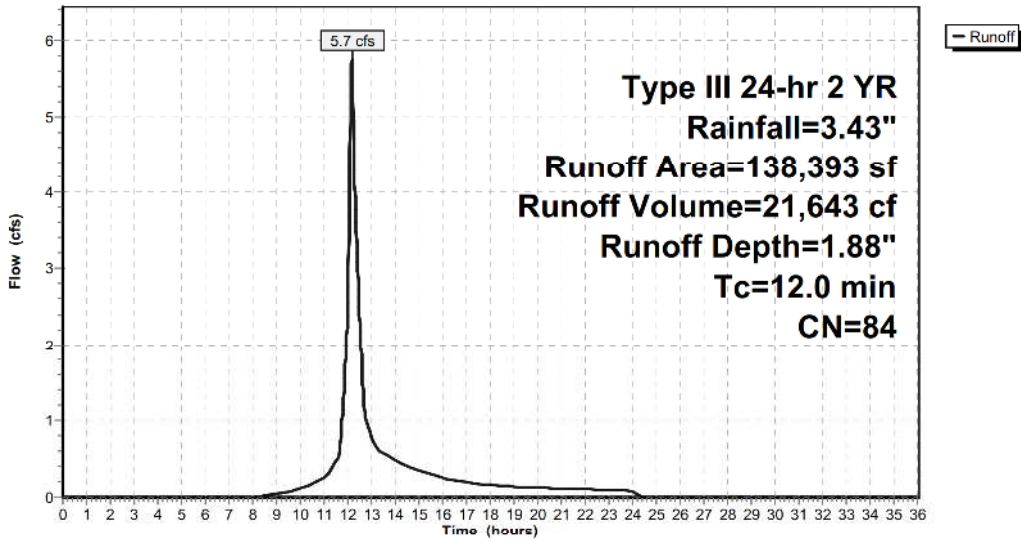
Type III 24-hr 2 YR Rainfall=3.43"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 0.3 cfs @ 12.20 hrs, Volume= 1,803 cf, Depth= 0.54"

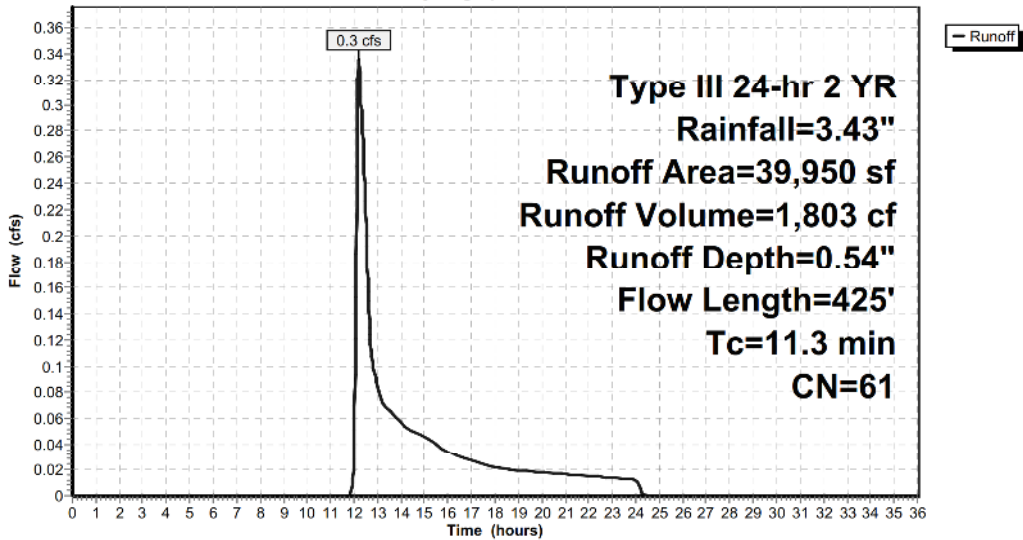
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS5A: PRWS5A

Runoff = 0.7 cfs @ 12.43 hrs, Volume= 6,166 cf, Depth= 0.32"

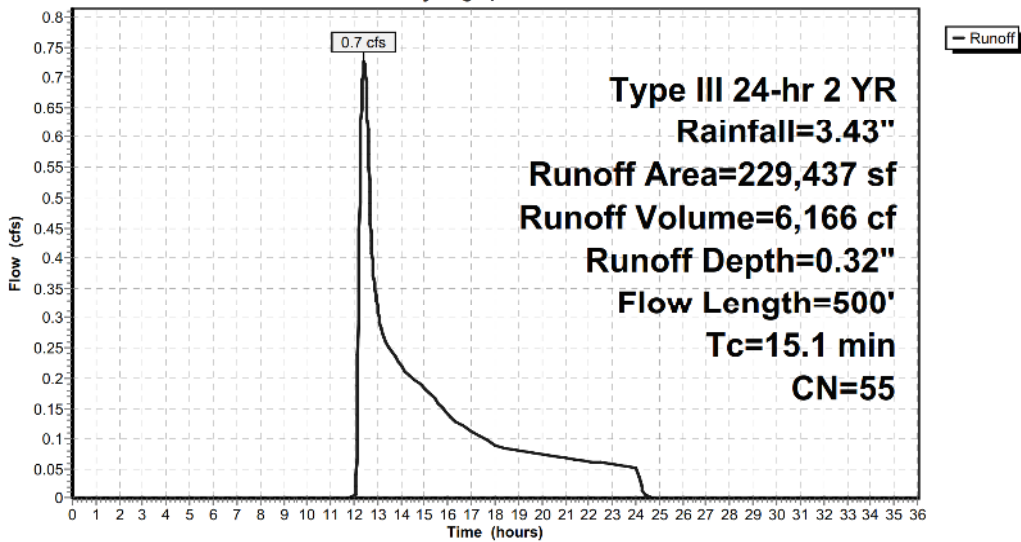
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRWS5A: PRWS5A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 3.6 cfs @ 12.21 hrs, Volume= 15,896 cf, Depth= 1.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

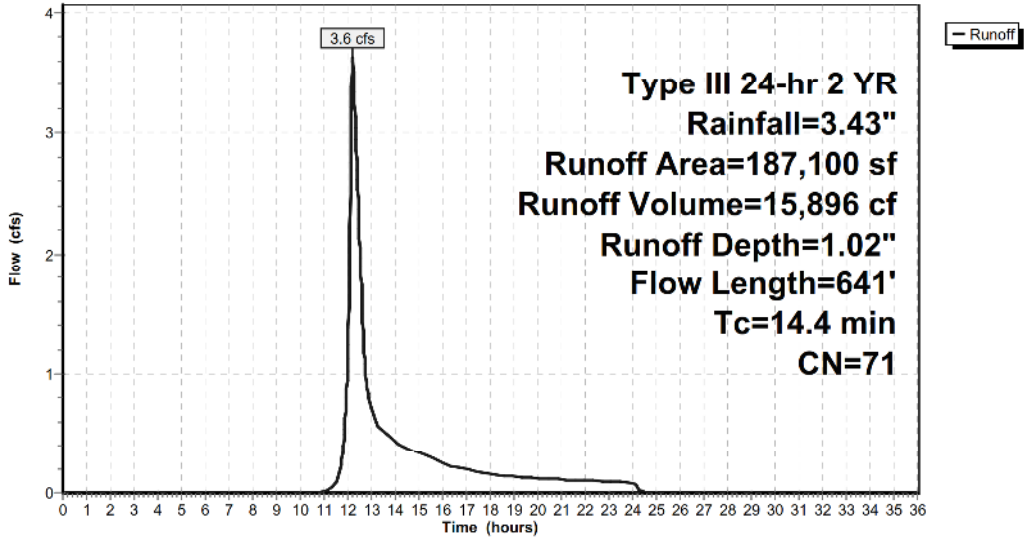
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Type III 24-hr 2 YR Rainfall=3.43"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Subcatchment PRWS5C: PRWS5C

Runoff = 0.6 cfs @ 12.09 hrs, Volume= 1,905 cf, Depth= 2.04"

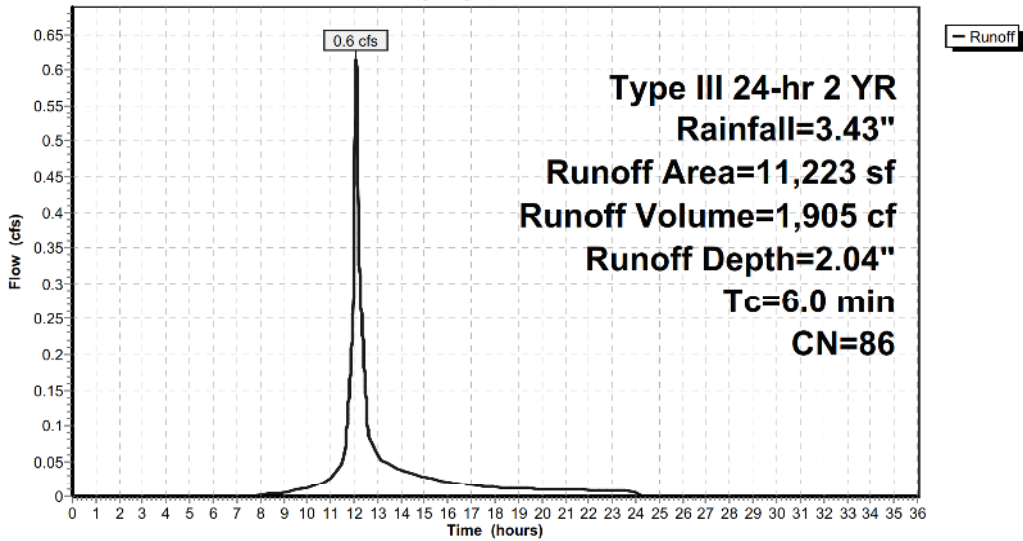
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 2 YR Rainfall=3.43"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS5C: PRWS5C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 1.45" for 2 YR event
 Inflow = 6.3 cfs @ 12.17 hrs, Volume= 24,568 cf
 Outflow = 0.3 cfs @ 16.33 hrs, Volume= 23,987 cf, Atten= 96%, Lag= 249.9 min
 Discarded = 0.3 cfs @ 16.33 hrs, Volume= 23,987 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 487.62' @ 16.33 hrs Surf.Area= 12,089 sf Storage= 14,493 cf

Plug-Flow detention time= 551.2 min calculated for 23,987 cf (98% of inflow)
 Center-of-Mass det. time= 537.5 min (1,378.7 - 841.2)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Ccoef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.3 cfs @ 16.33 hrs HW=487.62' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.3 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳2=Culvert (Controls 0.0 cfs)
 ↳3=Orifice (Controls 0.0 cfs)
 ↳4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

EAGLE RIDGE-PRDP4 PRDP5

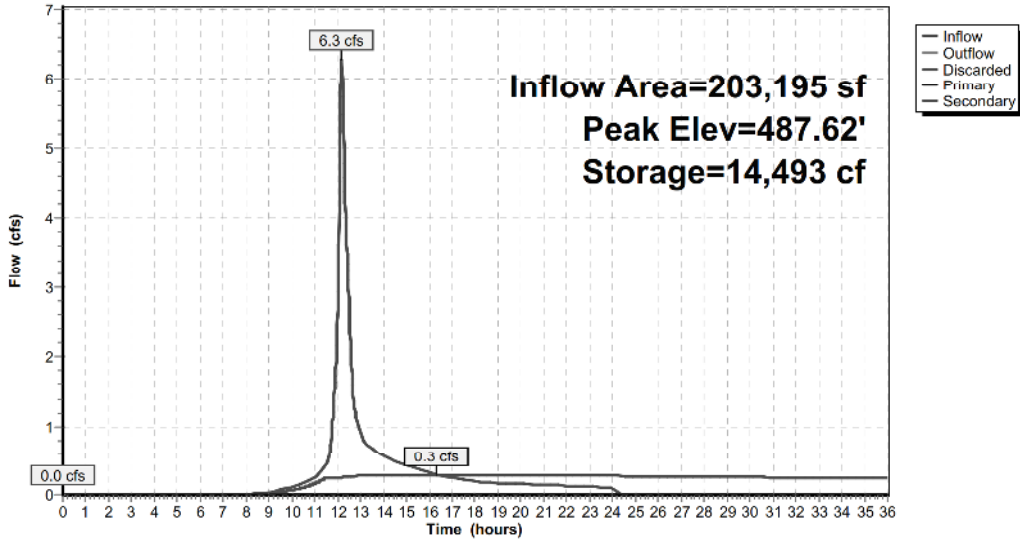
Type III 24-hr 2 YR Rainfall=3.43"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 1.96" for 2 YR event
 Inflow = 3.8 cfs @ 12.09 hrs, Volume= 11,824 cf
 Outflow = 0.4 cfs @ 12.92 hrs, Volume= 8,364 cf, Atten= 89%, Lag= 50.0 min
 Discarded = 0.1 cfs @ 10.10 hrs, Volume= 5,135 cf
 Primary = 0.4 cfs @ 12.92 hrs, Volume= 3,229 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 435.86' @ 12.92 hrs Surf.Area= 2,304 sf Storage= 6,182 cf

Plug-Flow detention time= 449.5 min calculated for 8,361 cf (71% of inflow)
 Center-of-Mass det. time= 355.0 min (1,178.0 - 823.0)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

Discarded OutFlow Max=0.1 cfs @ 10.10 hrs HW=432.06' (Free Discharge)
 ↖**1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.4 cfs @ 12.92 hrs HW=435.86' (Free Discharge)
 ↖**2=Culvert** (Inlet Controls 0.4 cfs @ 1.73 fps)

EAGLE RIDGE-PRDP4 PRDP5

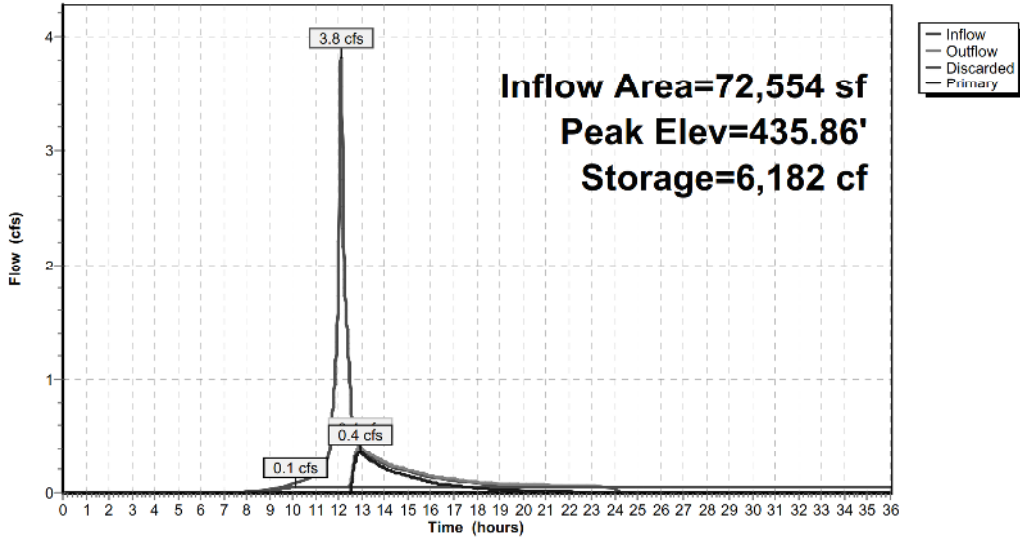
Type III 24-hr 2 YR Rainfall=3.43"

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Pond 8P: DRYWELLS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 2.04" for 2 YR event
 Inflow = 0.6 cfs @ 12.09 hrs, Volume= 1,905 cf
 Outflow = 0.3 cfs @ 12.30 hrs, Volume= 1,905 cf, Atten= 57%, Lag= 12.8 min
 Discarded = 0.1 cfs @ 11.75 hrs, Volume= 1,758 cf
 Primary = 0.1 cfs @ 12.30 hrs, Volume= 147 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 514.69' @ 12.30 hrs Surf.Area= 335 sf Storage= 389 cf

Plug-Flow detention time= 16.1 min calculated for 1,904 cf (100% of inflow)
 Center-of-Mass det. time= 16.1 min (835.7 - 819.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.75 hrs HW=512.99' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.1 cfs @ 12.30 hrs HW=514.69' (Free Discharge)
 ↳1=Culvert (Barrel Controls 0.1 cfs @ 1.55 fps)

EAGLE RIDGE-PRDP4 PRDP5

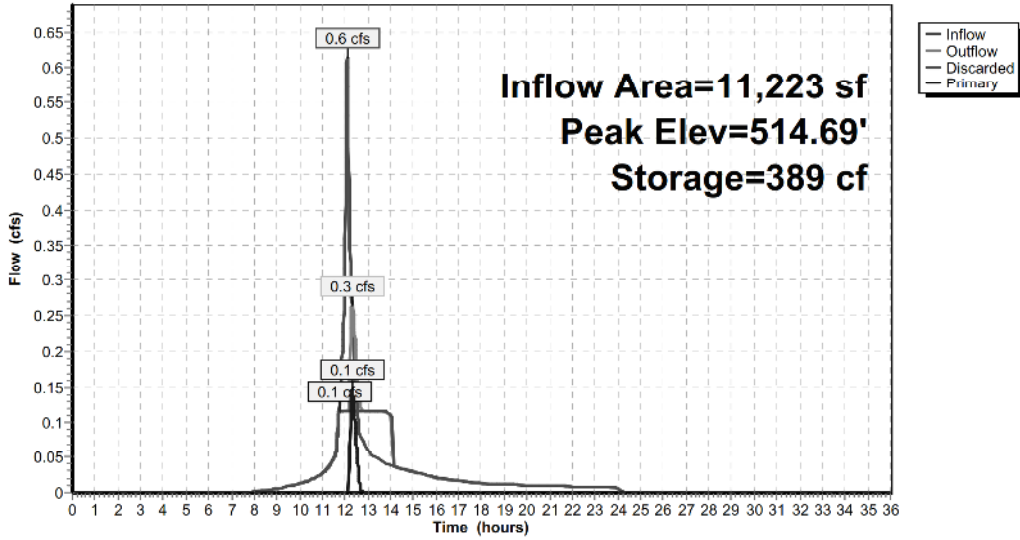
Type III 24-hr 2 YR Rainfall=3.43"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

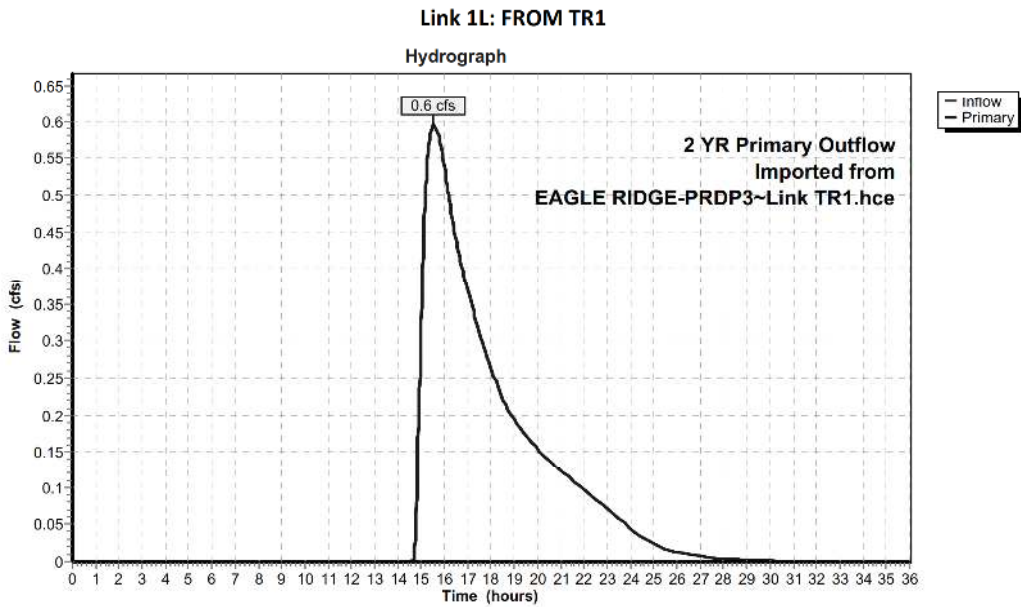
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Summary for Link 1L: FROM TR1

Inflow = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf
Primary = 0.6 cfs @ 15.54 hrs, Volume= 7,941 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

2 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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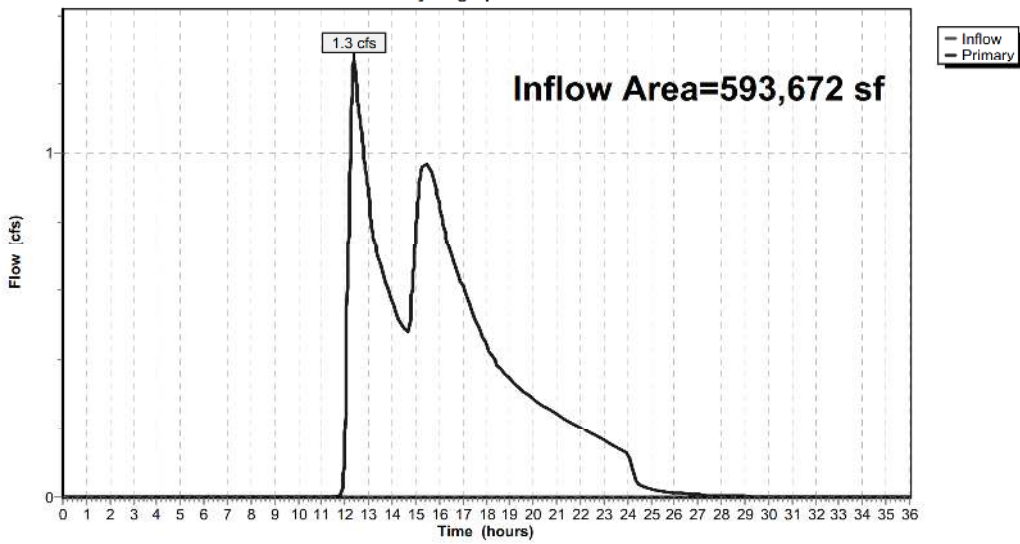
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 0.44" for 2 YR event
Inflow = 1.3 cfs @ 12.39 hrs, Volume= 21,527 cf
Primary = 1.3 cfs @ 12.39 hrs, Volume= 21,527 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 2 YR Rainfall=3.43"

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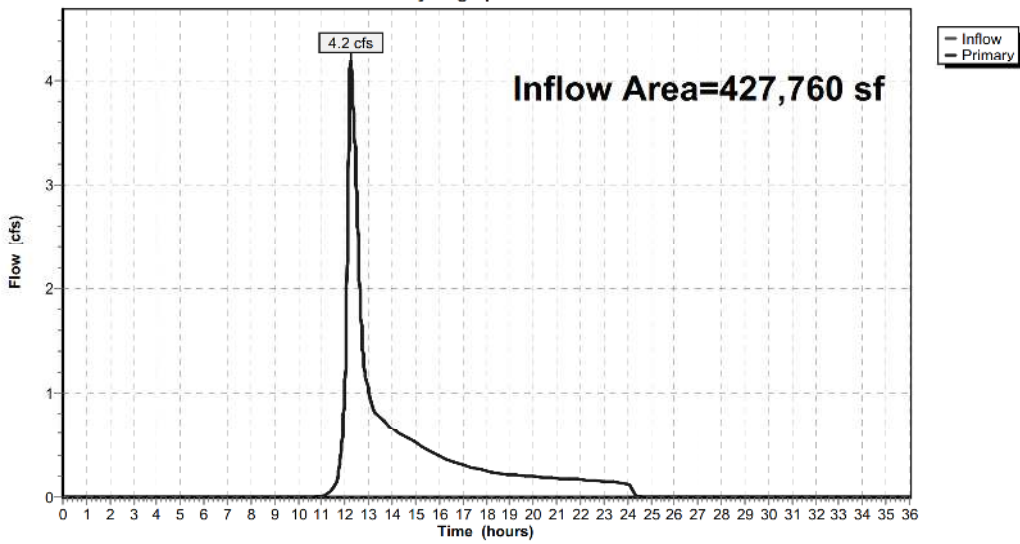
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 0.62" for 2 YR event
Inflow = 4.2 cfs @ 12.24 hrs, Volume= 22,209 cf
Primary = 4.2 cfs @ 12.24 hrs, Volume= 22,209 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=0.71" Flow Length=631' Tc=17.3 min CN=56 Runoff=2.6 cfs 15,835 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=2.74" Flow Length=150' Tc=6.0 min CN=85 Runoff=5.3 cfs 16,546 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=1.03" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=1.2 cfs 4,256 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=0.97" Flow Length=150' Tc=6.0 min CN=61 Runoff=0.6 cfs 2,019 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=2.65" Tc=12.0 min CN=84 Runoff=8.1 cfs 30,518 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=0.97" Flow Length=425' Tc=11.3 min CN=61 Runoff=0.7 cfs 3,246 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=0.66" Flow Length=500' Tc=15.1 min CN=55 Runoff=2.1 cfs 12,590 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=1.61" Flow Length=641' Tc=14.4 min CN=71 Runoff=6.0 cfs 25,106 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=2.83" Tc=6.0 min CN=86 Runoff=0.8 cfs 2,646 cf
Pond 3P: POND 2	Peak Elev=488.30' Storage=23,127 cf Inflow=9.3 cfs 35,783 cf Discarded=0.3 cfs 27,162 cf Primary=0.0 cfs 0 cf Secondary=0.0 cfs 0 cf Outflow=0.3 cfs 27,162 cf
Pond 8P: DRYWELLS	Peak Elev=436.25' Storage=6,802 cf Inflow=5.3 cfs 16,546 cf Discarded=0.1 cfs 5,306 cf Primary=2.0 cfs 7,713 cf Outflow=2.0 cfs 13,018 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=514.90' Storage=442 cf Inflow=0.8 cfs 2,646 cf Discarded=0.1 cfs 2,164 cf Primary=0.5 cfs 482 cf Outflow=0.6 cfs 2,646 cf
Link 1L: FROM TR1	5 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=3.0 cfs 30,141 cf Primary=3.0 cfs 30,141 cf
Link PRDP4: PRDP4	Inflow=5.9 cfs 57,944 cf Primary=5.9 cfs 57,944 cf
Link PRDP5: PRDP5	Inflow=8.4 cfs 38,178 cf Primary=8.4 cfs 38,178 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 112,762 cf Average Runoff Depth = 1.32"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 2.6 cfs @ 12.31 hrs, Volume= 15,835 cf, Depth= 0.71"

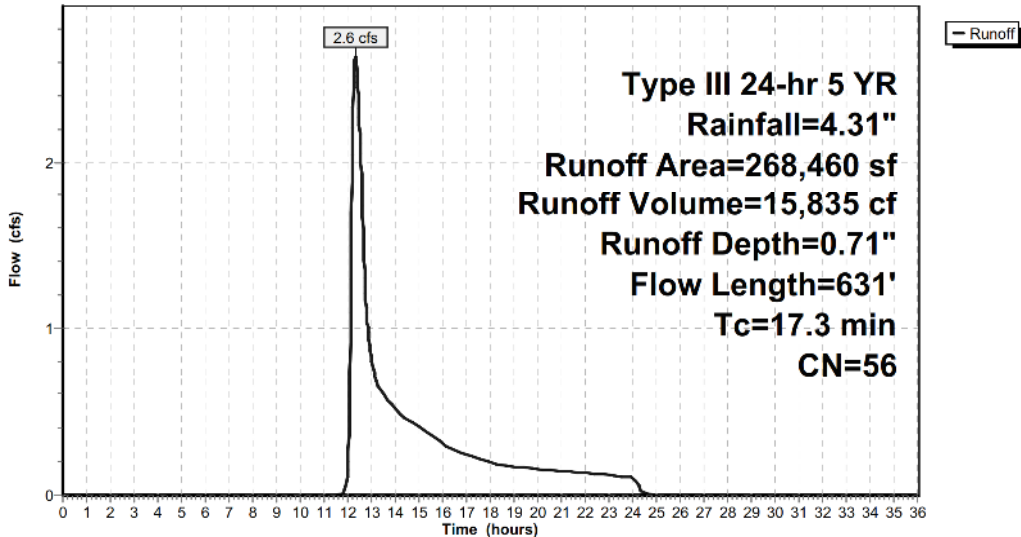
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 5.3 cfs @ 12.09 hrs, Volume= 16,546 cf, Depth= 2.74"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

EAGLE RIDGE-PRDP4 PRDP5

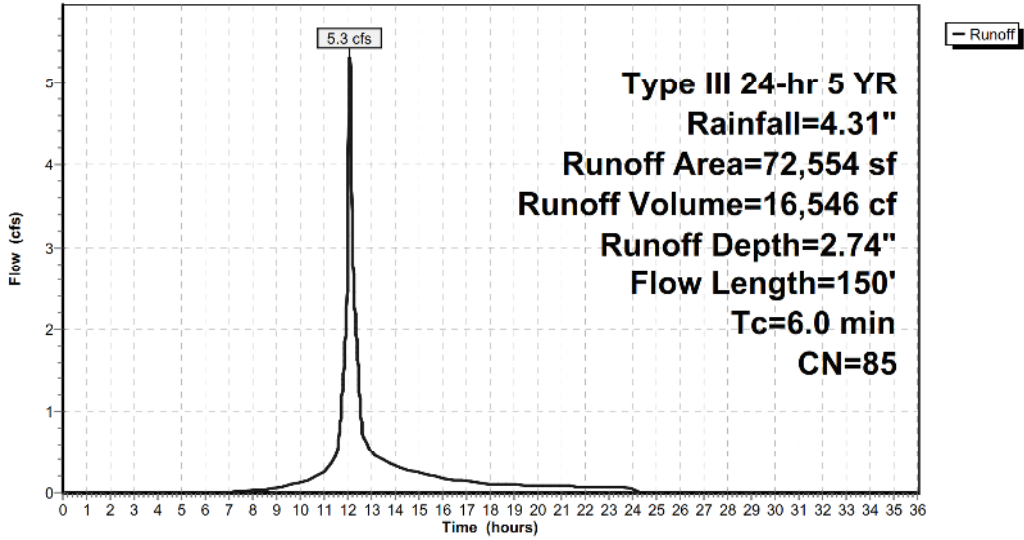
Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 1.2 cfs @ 12.10 hrs, Volume= 4,256 cf, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

EAGLE RIDGE-PRDP4 PRDP5

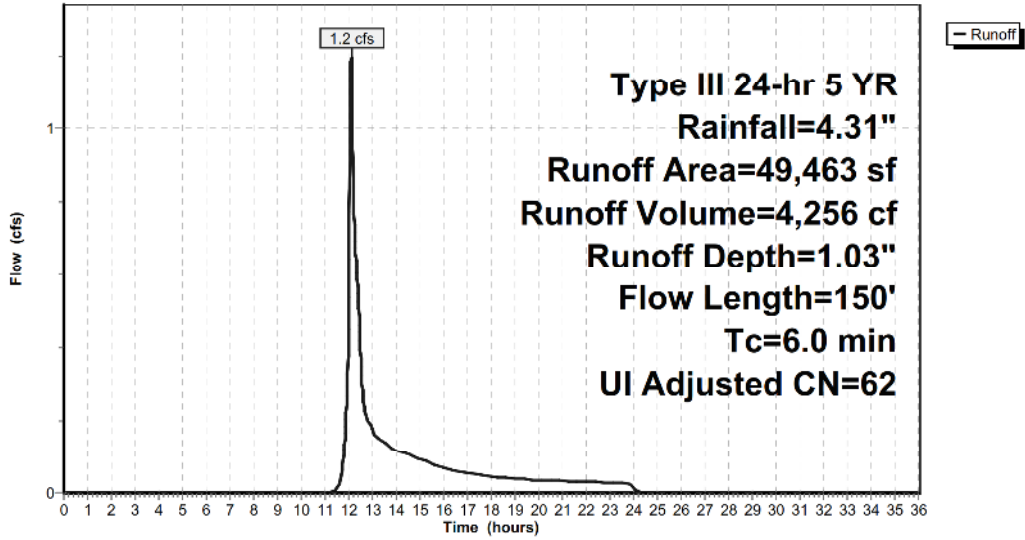
Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 0.6 cfs @ 12.10 hrs, Volume= 2,019 cf, Depth= 0.97"

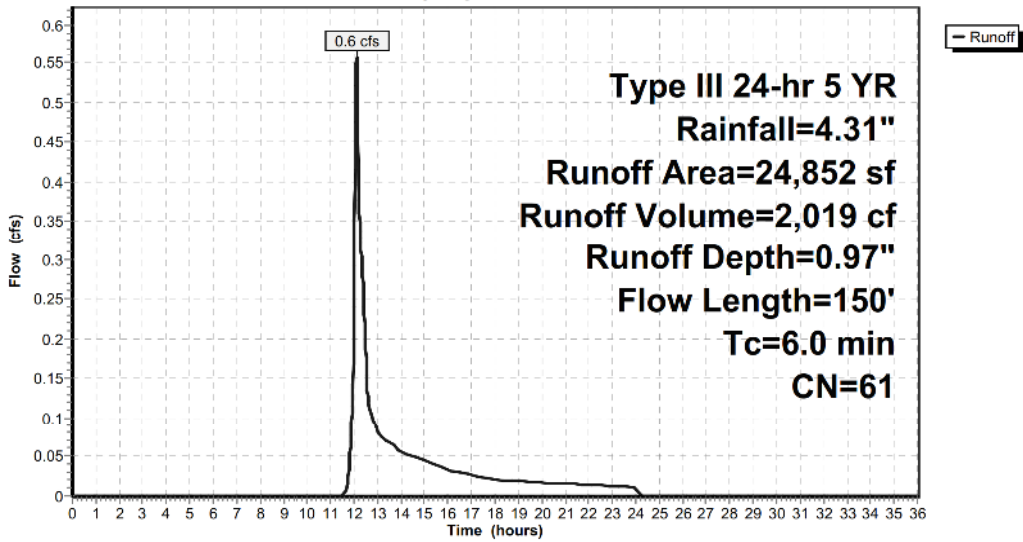
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 8.1 cfs @ 12.16 hrs, Volume= 30,518 cf, Depth= 2.65"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Type III 24 hr 5 YR Rainfall=4.31"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

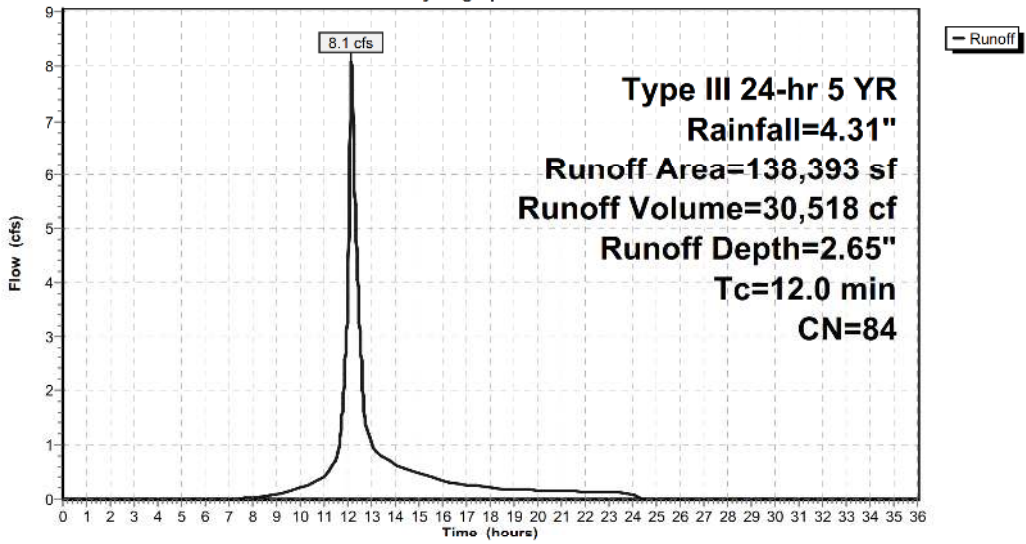
Type III 24-hr 5 YR Rainfall=4.31"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 0.7 cfs @ 12.18 hrs, Volume= 3,246 cf, Depth= 0.97"

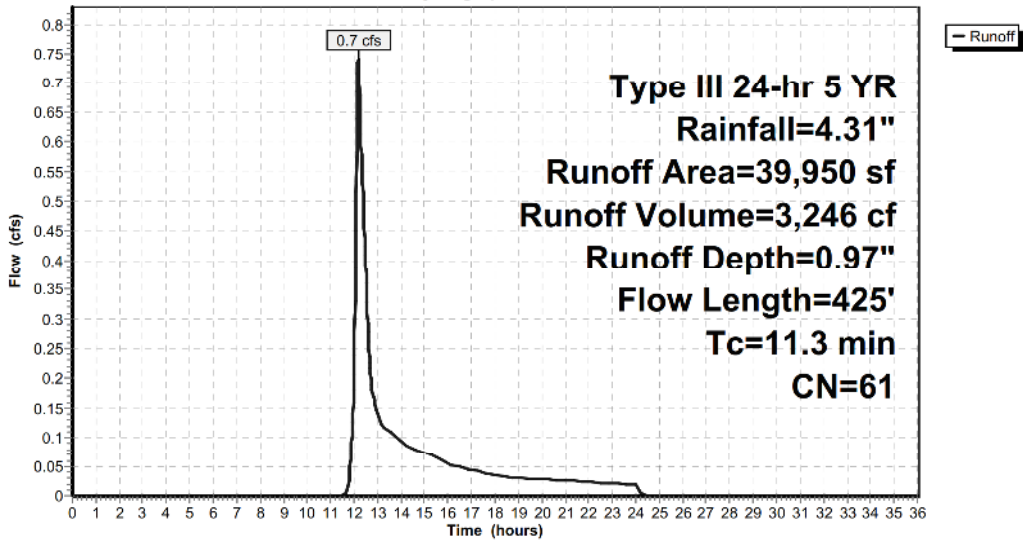
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS5A: PRWS5A

Runoff = 2.1 cfs @ 12.28 hrs, Volume= 12,590 cf, Depth= 0.66"

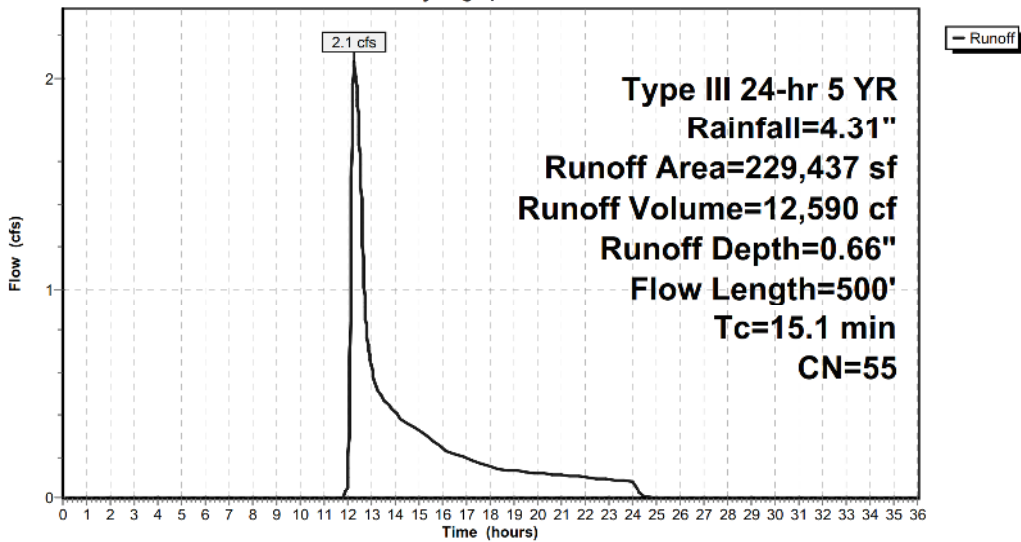
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500				Total

Subcatchment PRWS5A: PRWS5A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 6.0 cfs @ 12.21 hrs, Volume= 25,106 cf, Depth= 1.61"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

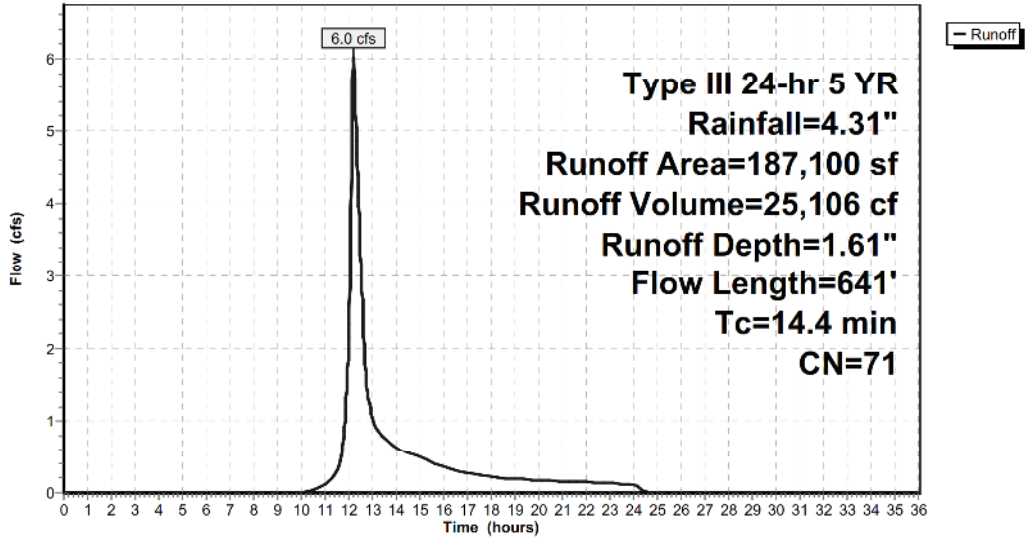
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Subcatchment PRWS5C: PRWS5C

Runoff = 0.8 cfs @ 12.09 hrs, Volume= 2,646 cf, Depth= 2.83"

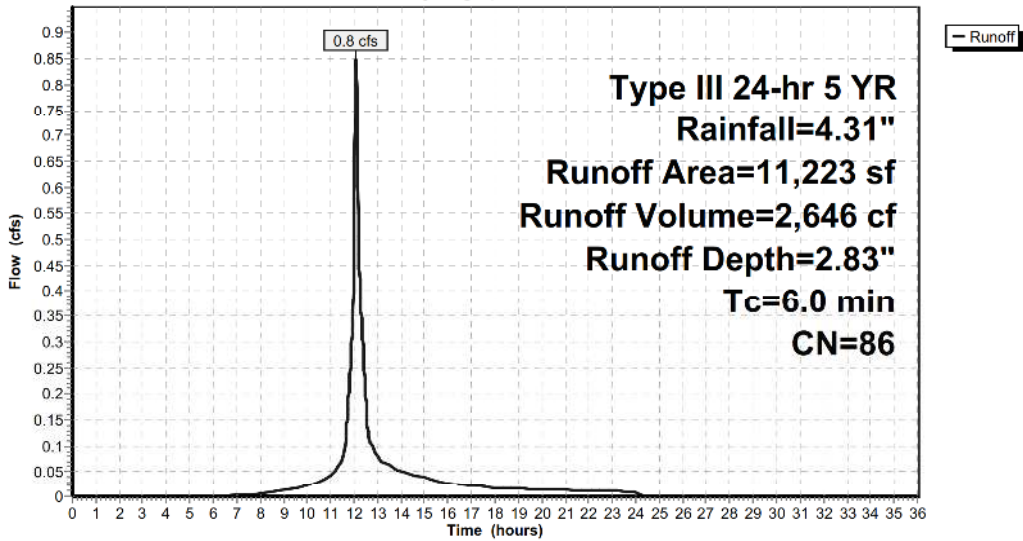
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 5 YR Rainfall=4.31"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRWS5C: PRWS5C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 2.11" for 5 YR event
 Inflow = 9.3 cfs @ 12.16 hrs, Volume= 35,783 cf
 Outflow = 0.3 cfs @ 17.37 hrs, Volume= 27,162 cf, Atten= 97%, Lag= 312.3 min
 Discarded = 0.3 cfs @ 17.37 hrs, Volume= 27,162 cf
 Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 488.30' @ 17.37 hrs Surf.Area= 13,307 sf Storage= 23,127 cf

Plug-Flow detention time= 621.0 min calculated for 27,162 cf (76% of inflow)
 Center-of-Mass det. time= 533.3 min (1,365.0 - 831.7)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Cuef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.3 cfs @ 17.37 hrs HW=488.30' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.3 cfs)

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳ **2=Culvert** (Controls 0.0 cfs)
 ↳ **3=Orifice** (Controls 0.0 cfs)
 ↳ **4=Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳ **5=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP4 PRDP5

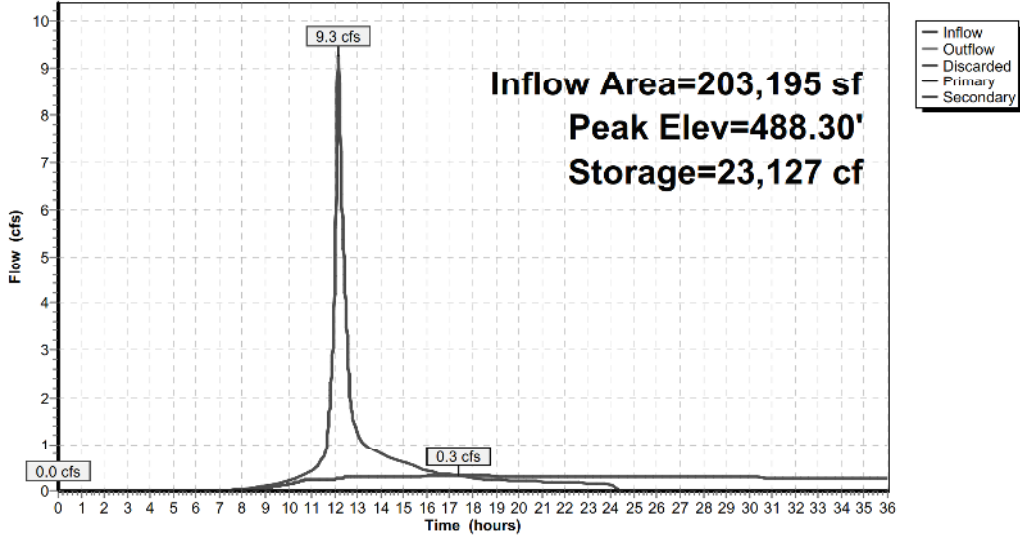
Type III 24-hr 5 YR Rainfall=4.31"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 2.74" for 5 YR event
 Inflow = 5.3 cfs @ 12.09 hrs, Volume= 16,546 cf
 Outflow = 2.0 cfs @ 12.34 hrs, Volume= 13,018 cf, Atten= 62%, Lag= 15.2 min
 Discarded = 0.1 cfs @ 9.24 hrs, Volume= 5,306 cf
 Primary = 2.0 cfs @ 12.34 hrs, Volume= 7,713 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 436.25' @ 12.34 hrs Surf.Area= 2,304 sf Storage= 6,802 cf

Plug-Flow detention time= 313.4 min calculated for 13,013 cf (79% of inflow)
 Center-of-Mass det. time= 234.3 min (1,047.7 - 813.4)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 1/' Cc= 0.900 n= 0.013

Discarded OutFlow Max=0.1 cfs @ 9.24 hrs HW=432.06' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=2.0 cfs @ 12.34 hrs HW=436.25' (Free Discharge)
 ↳2=Culvert (Inlet Controls 2.0 cfs @ 2.73 fps)

EAGLE RIDGE-PRDP4 PRDP5

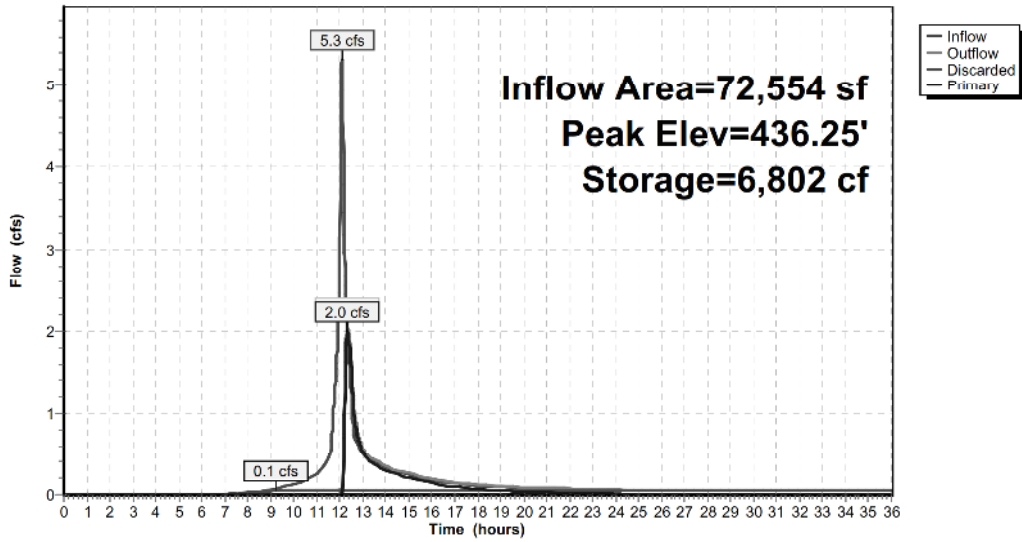
Type III 24-hr 5 YR Rainfall=4.31"

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Pond 8P: DRYWELLS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 2.83" for 5 YR event
 Inflow = 0.8 cfs @ 12.09 hrs, Volume= 2,646 cf
 Outflow = 0.6 cfs @ 12.16 hrs, Volume= 2,646 cf, Atten= 27%, Lag= 4.5 min
 Discarded = 0.1 cfs @ 11.67 hrs, Volume= 2,164 cf
 Primary = 0.5 cfs @ 12.16 hrs, Volume= 482 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 514.90' @ 12.16 hrs Surf.Area= 335 sf Storage= 442 cf

Plug-Flow detention time= 15.0 min calculated for 2,646 cf (100% of inflow)
 Center-of-Mass det. time= 15.0 min (825.2 - 810.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.67 hrs HW=512.99' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.5 cfs @ 12.16 hrs HW=514.90' (Free Discharge)
 ↑**1=Culvert** (Barrel Controls 0.5 cfs @ 2.13 fps)

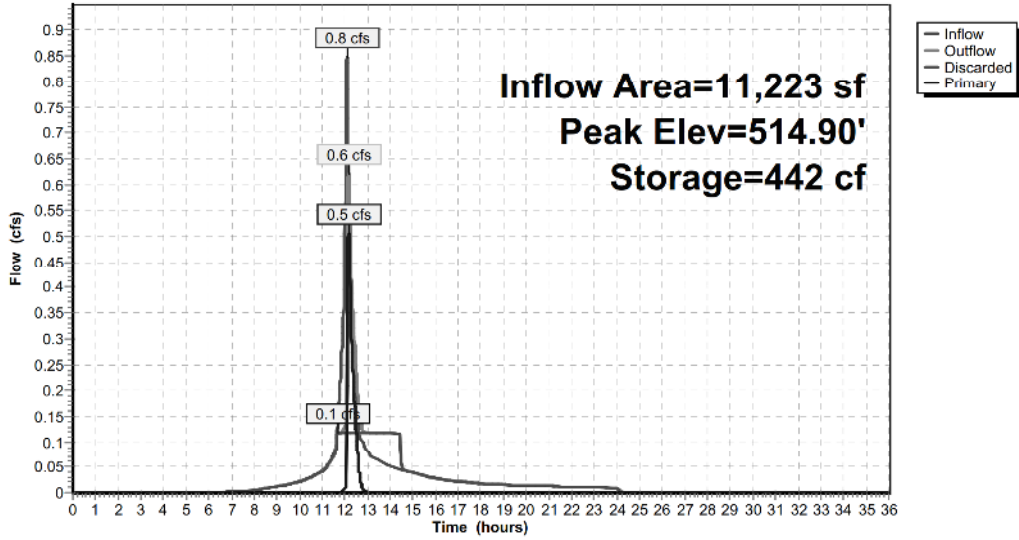
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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Summary for Link 1L: FROM TR1

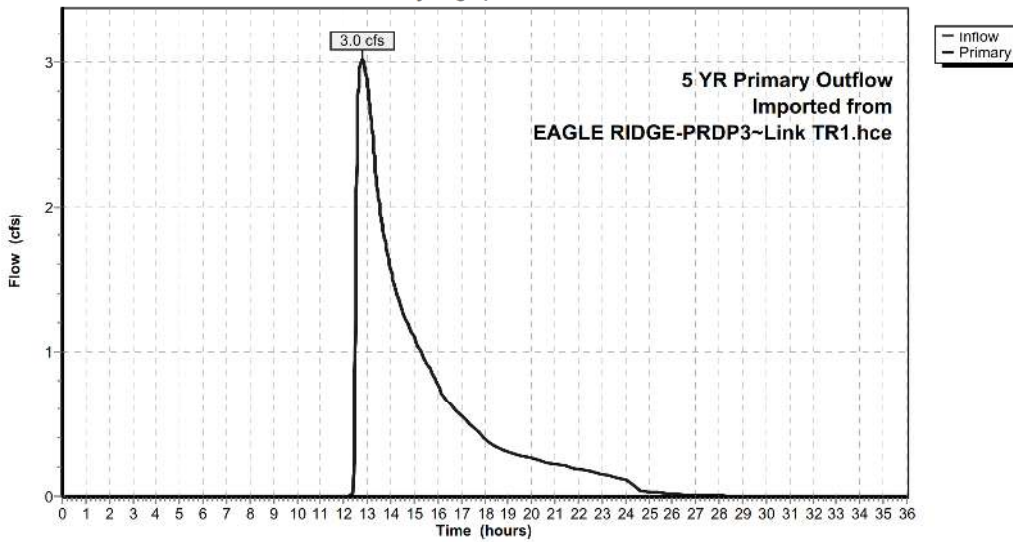
Inflow = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf
Primary = 3.0 cfs @ 12.79 hrs, Volume= 30,141 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

5 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce

Link 1L: FROM TR1

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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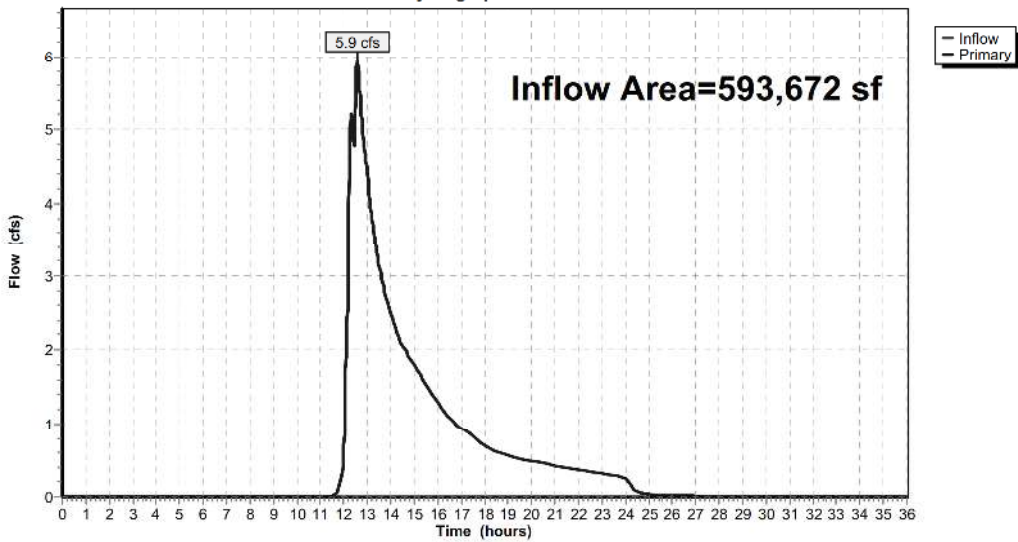
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 1.17" for 5 YR event
Inflow = 5.9 cfs @ 12.57 hrs, Volume= 57,944 cf
Primary = 5.9 cfs @ 12.57 hrs, Volume= 57,944 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 5 YR Rainfall=4.31"

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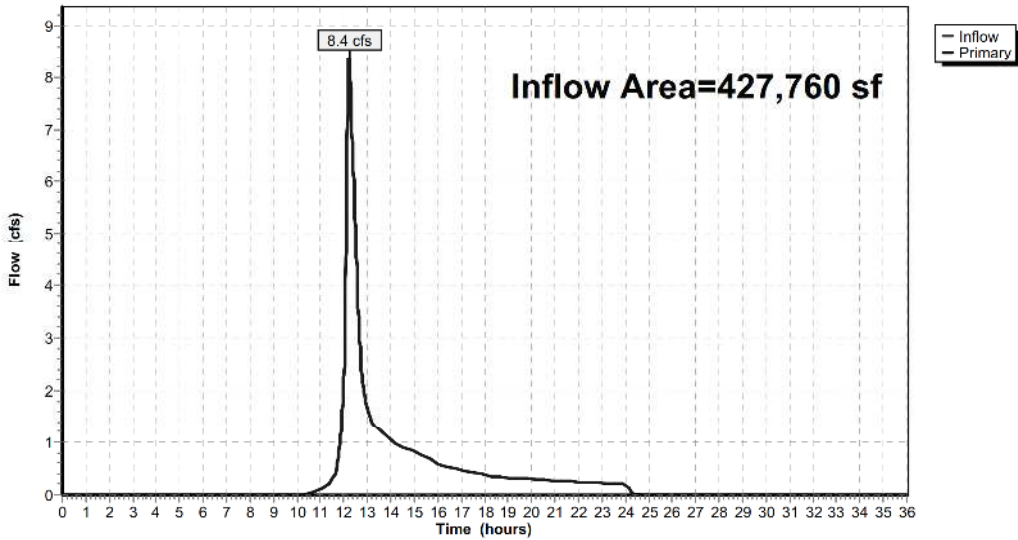
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 1.07" for 5 YR event
Inflow = 8.4 cfs @ 12.22 hrs, Volume= 38,178 cf
Primary = 8.4 cfs @ 12.22 hrs, Volume= 38,178 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=1.11" Flow Length=631' Tc=17.3 min CN=56 Runoff=4.7 cfs 24,817 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=3.49" Flow Length=150' Tc=6.0 min CN=85 Runoff=6.7 cfs 21,091 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=1.52" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=1.9 cfs 6,262 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=1.45" Flow Length=150' Tc=6.0 min CN=61 Runoff=0.9 cfs 2,998 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=3.39" Tc=12.0 min CN=84 Runoff=10.3 cfs 39,091 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=1.45" Flow Length=425' Tc=11.3 min CN=61 Runoff=1.2 cfs 4,820 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=1.05" Flow Length=500' Tc=15.1 min CN=55 Runoff=3.9 cfs 19,988 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=2.22" Flow Length=641' Tc=14.4 min CN=71 Runoff=8.4 cfs 34,539 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=3.59" Tc=6.0 min CN=86 Runoff=1.1 cfs 3,356 cf
Pond 3P: POND 2	Peak Elev=488.86' Storage=30,799 cf Inflow=12.2 cfs 46,909 cf Discarded=0.3 cfs 29,556 cf Primary=0.2 cfs 2,677 cf Secondary=0.0 cfs 0 cf Outflow=0.5 cfs 32,233 cf
Pond 8P: DRYWELLS	Peak Elev=436.59' Storage=7,346 cf Inflow=6.7 cfs 21,091 cf Discarded=0.1 cfs 5,442 cf Primary=4.2 cfs 12,089 cf Outflow=4.2 cfs 17,530 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=515.05' Storage=478 cf Inflow=1.1 cfs 3,356 cf Discarded=0.1 cfs 2,537 cf Primary=0.8 cfs 819 cf Outflow=1.0 cfs 3,356 cf
Link 1L: FROM TR1	10 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=5.8 cfs 51,197 cf Primary=5.8 cfs 51,197 cf
Link PRDP4: PRDP4	Inflow=13.4 cfs 97,043 cf Primary=13.4 cfs 97,043 cf
Link PRDP5: PRDP5	Inflow=12.8 cfs 55,347 cf Primary=12.8 cfs 55,347 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 156,963 cf Average Runoff Depth = 1.84"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 4.7 cfs @ 12.28 hrs, Volume= 24,817 cf, Depth= 1.11"

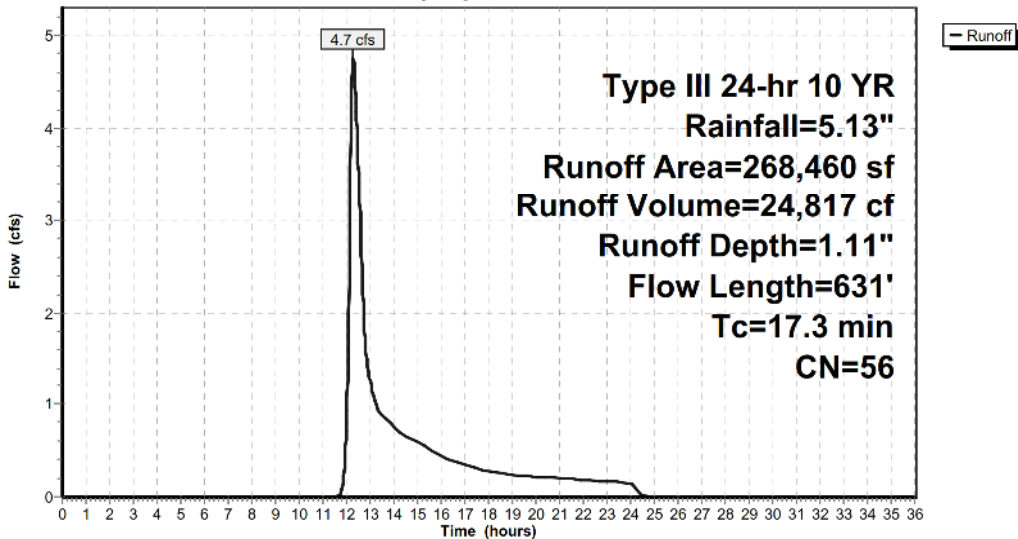
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 6.7 cfs @ 12.09 hrs, Volume= 21,091 cf, Depth= 3.49"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

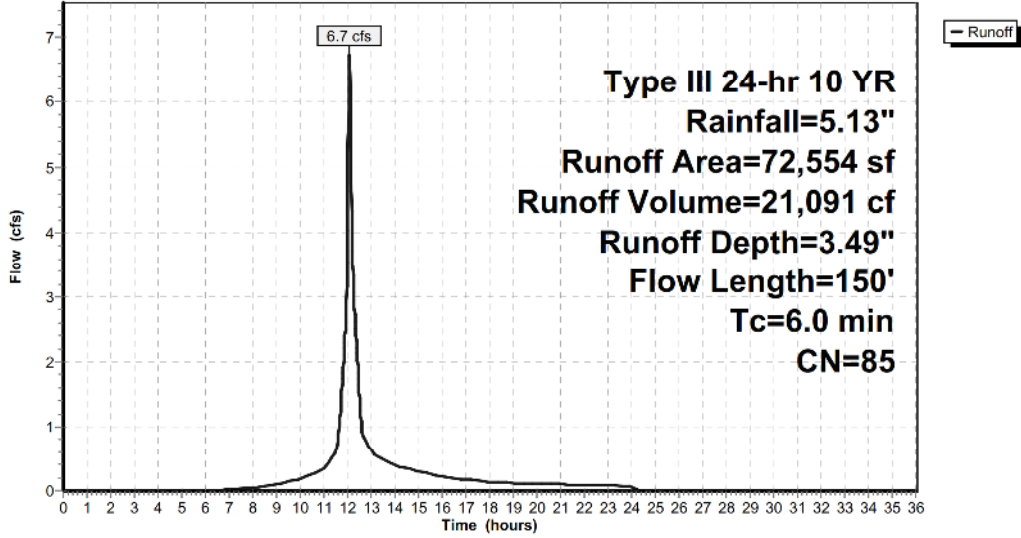
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 1.9 cfs @ 12.10 hrs, Volume= 6,262 cf, Depth= 1.52"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

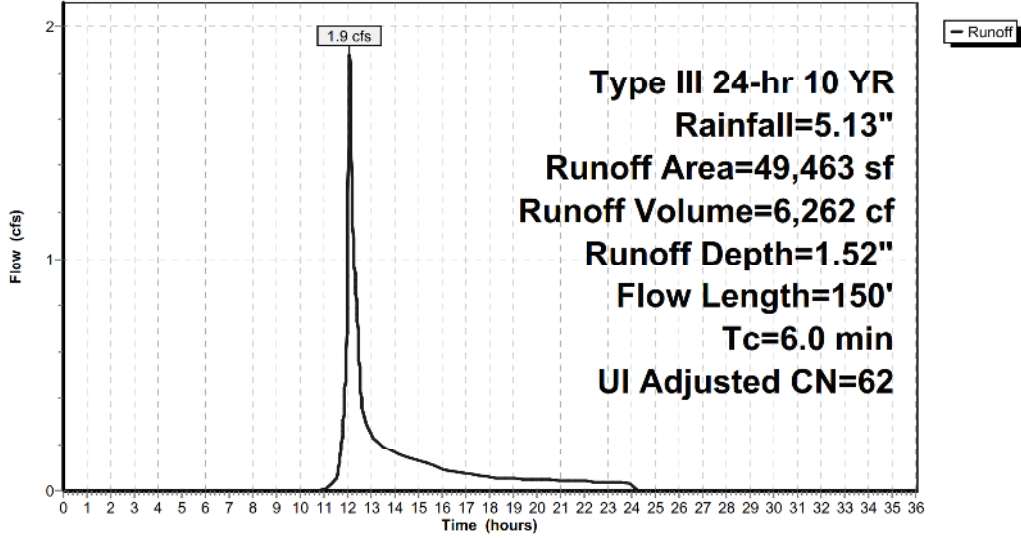
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 0.9 cfs @ 12.10 hrs, Volume= 2,998 cf, Depth= 1.45"

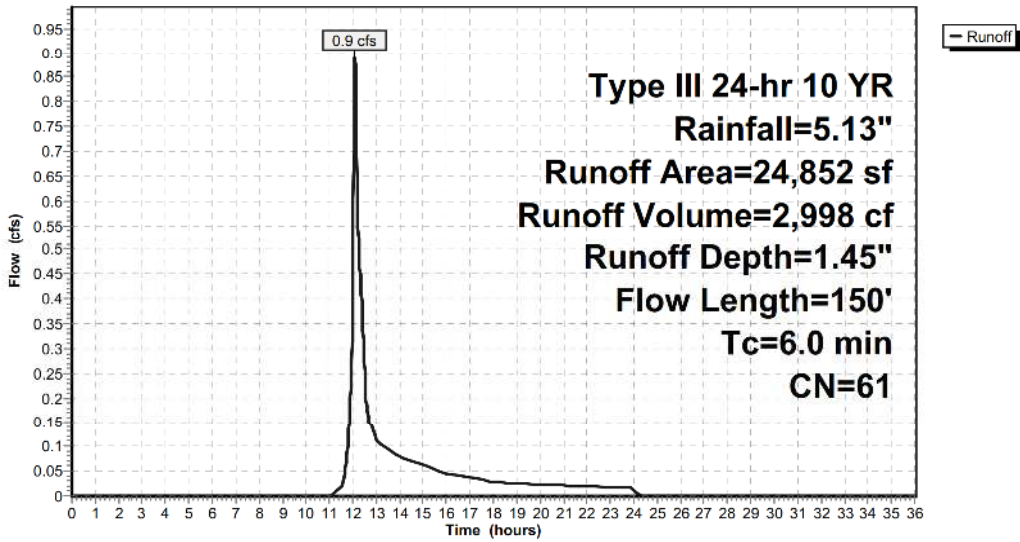
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 10.3 cfs @ 12.16 hrs, Volume= 39,091 cf, Depth= 3.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Type III 24 hr 10 YR Rainfall=5.13"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

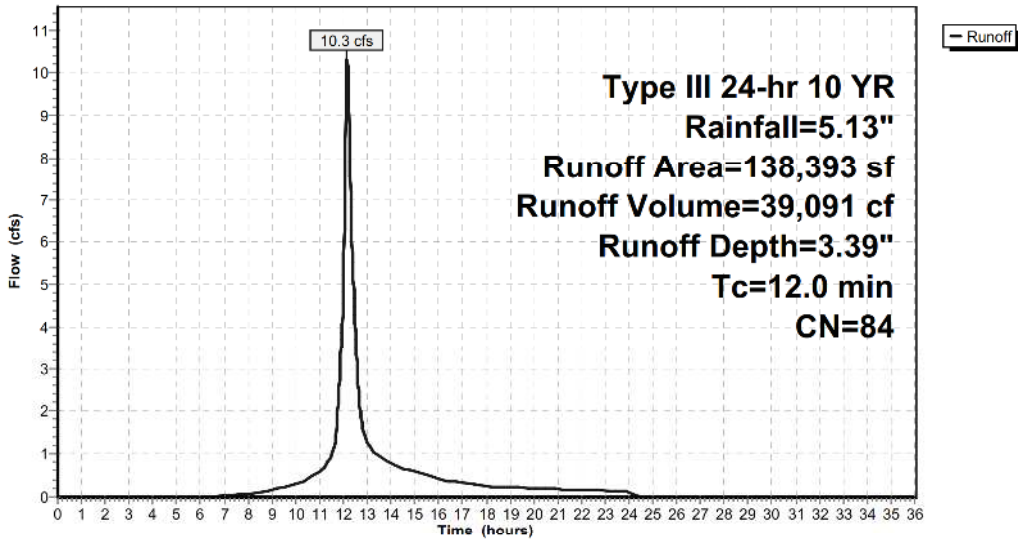
Type III 24-hr 10 YR Rainfall=5.13"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 1.2 cfs @ 12.17 hrs, Volume= 4,820 cf, Depth= 1.45"

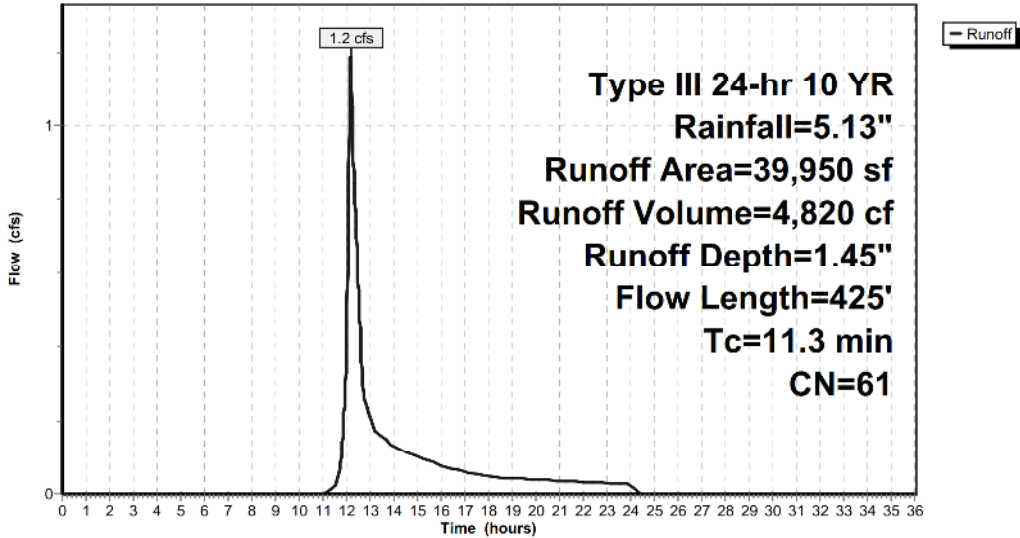
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRW55A: PRW55A

Runoff = 3.9 cfs @ 12.25 hrs, Volume= 19,988 cf, Depth= 1.05"

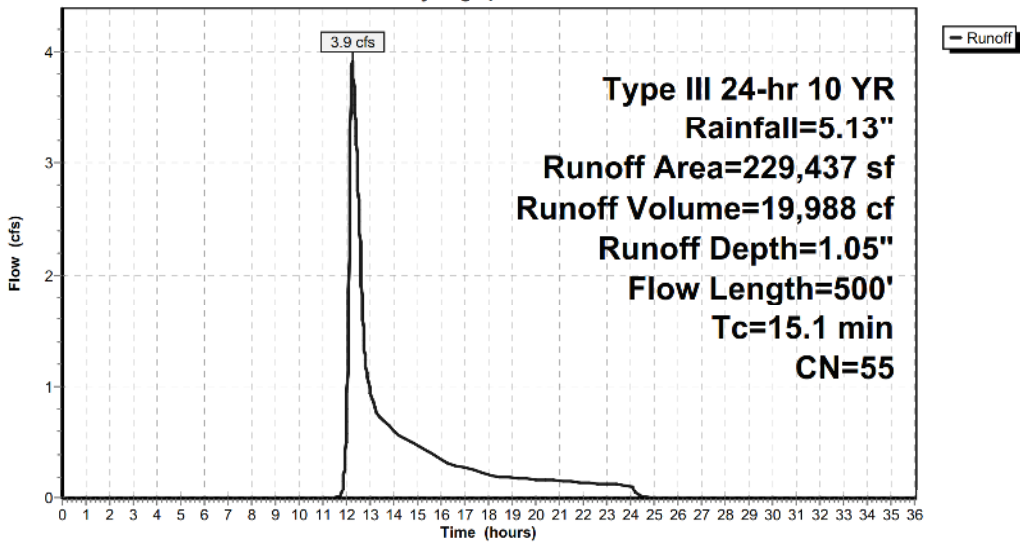
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRW55A: PRW55A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 8.4 cfs @ 12.21 hrs, Volume= 34,539 cf, Depth= 2.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

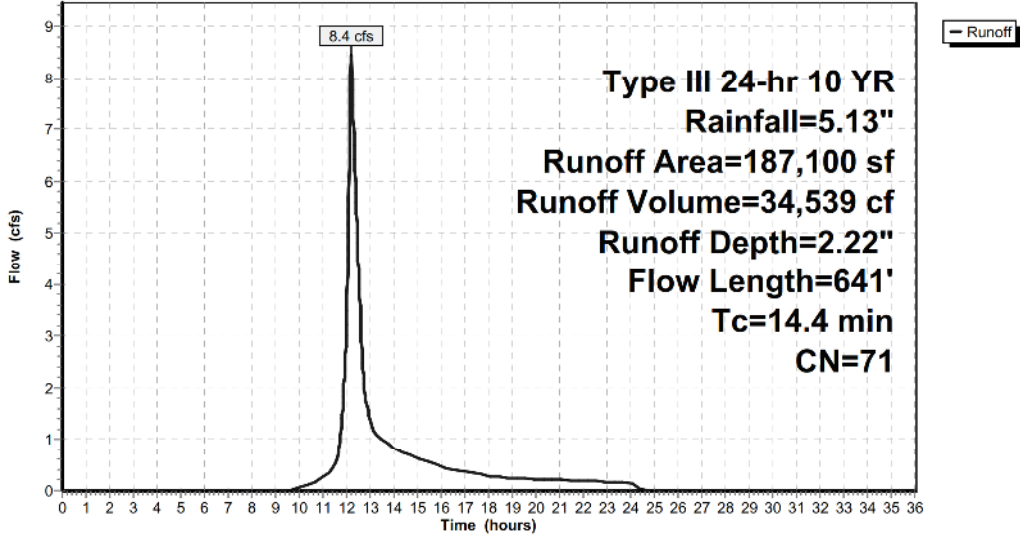
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Subcatchment PRW55C: PRW55C

Runoff = 1.1 cfs @ 12.09 hrs, Volume= 3,356 cf, Depth= 3.59"

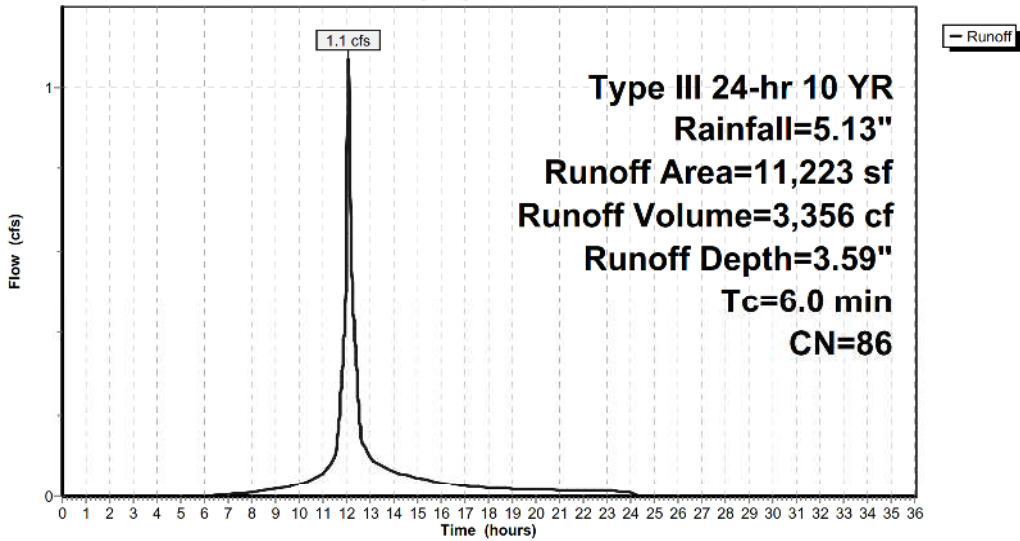
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 10 YR Rainfall=5.13"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRW55C: PRW55C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 2.77" for 10 YR event
 Inflow = 12.2 cfs @ 12.16 hrs, Volume= 46,909 cf
 Outflow = 0.5 cfs @ 16.37 hrs, Volume= 32,233 cf, Atten= 96%, Lag= 252.8 min
 Discarded = 0.3 cfs @ 16.37 hrs, Volume= 29,556 cf
 Primary = 0.2 cfs @ 16.37 hrs, Volume= 2,677 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 488.86' @ 16.37 hrs Surf.Area= 14,232 sf Storage= 30,799 cf

Plug-Flow detention time= 603.5 min calculated for 32,220 cf (69% of inflow)
 Center-of-Mass det. time= 505.0 min (1,329.8 - 824.8)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.3 cfs @ 16.37 hrs HW=488.86' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.3 cfs)

Primary OutFlow Max=0.1 cfs @ 16.37 hrs HW=488.86' (Free Discharge)
 ↳2=Culvert (Passes 0.1 cfs of 6.6 cfs potential flow)
 ↳3=Orifice (Orifice Controls 0.1 cfs @ 1.65 fps)
 ↳4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

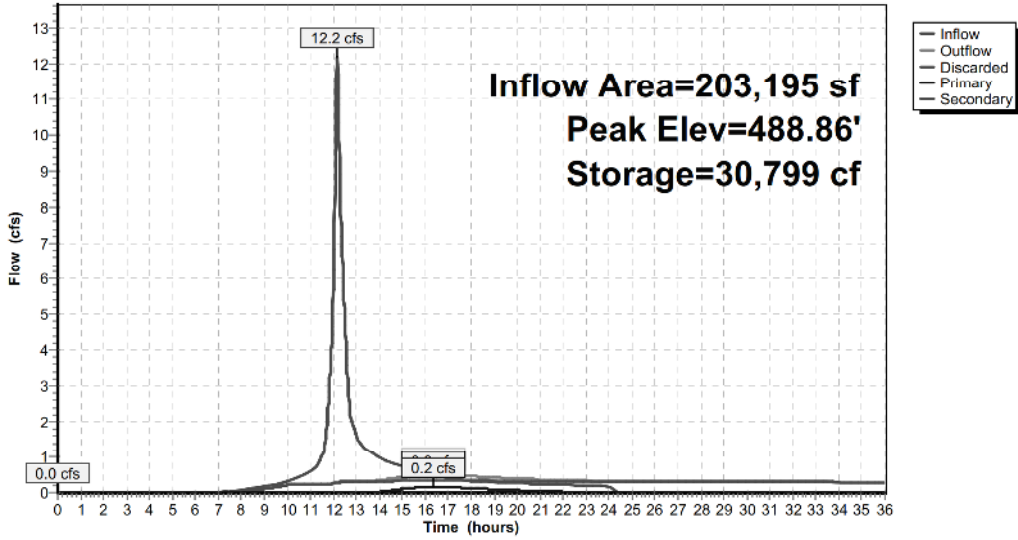
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 3.49" for 10 YR event
 Inflow = 6.7 cfs @ 12.09 hrs, Volume= 21,091 cf
 Outflow = 4.2 cfs @ 12.19 hrs, Volume= 17,530 cf, Atten= 37%, Lag= 6.0 min
 Discarded = 0.1 cfs @ 8.61 hrs, Volume= 5,442 cf
 Primary = 4.2 cfs @ 12.19 hrs, Volume= 12,089 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 436.59' @ 12.19 hrs Surf.Area= 2,304 sf Storage= 7,346 cf

Plug-Flow detention time= 247.5 min calculated for 17,523 cf (83% of inflow)
 Center-of-Mass det. time= 178.9 min (985.4 - 806.5)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

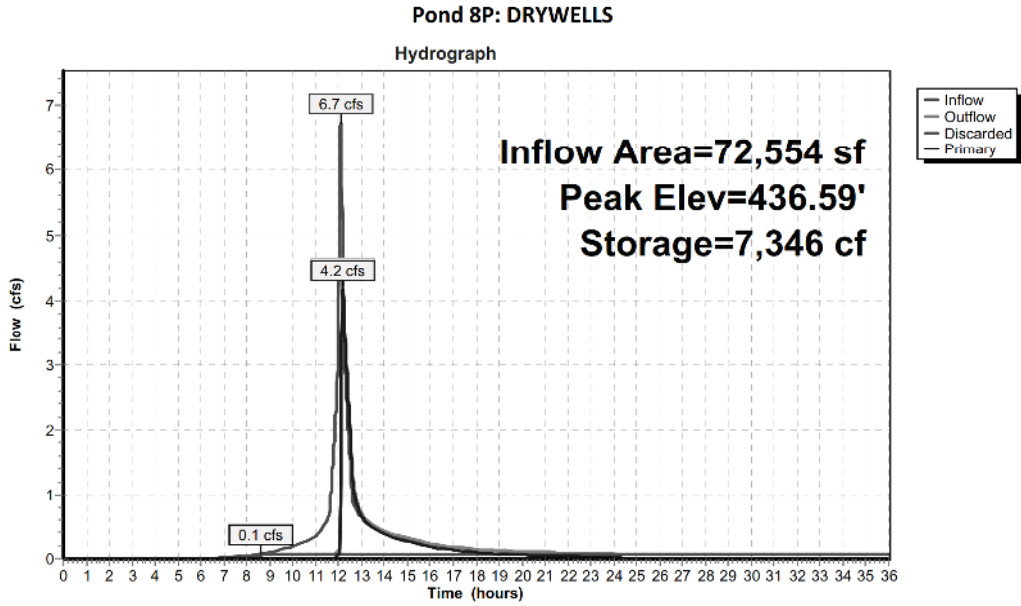
Discarded OutFlow Max=0.1 cfs @ 8.61 hrs HW=432.06' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=4.1 cfs @ 12.19 hrs HW=436.58' (Free Discharge)
 ↳2=Culvert (Inlet Controls 4.1 cfs @ 3.38 fps)

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 3.59" for 10 YR event
 Inflow = 1.1 cfs @ 12.09 hrs, Volume= 3,356 cf
 Outflow = 1.0 cfs @ 12.13 hrs, Volume= 3,356 cf, Atten= 10%, Lag= 2.5 min
 Discarded = 0.1 cfs @ 11.61 hrs, Volume= 2,537 cf
 Primary = 0.8 cfs @ 12.13 hrs, Volume= 819 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 515.05' @ 12.13 hrs Surf.Area= 335 sf Storage= 478 cf

Plug-Flow detention time= 14.4 min calculated for 3,356 cf (100% of inflow)
 Center-of-Mass det. time= 14.4 min (817.8 - 803.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.61 hrs HW=512.99' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=0.8 cfs @ 12.13 hrs HW=515.05' (Free Discharge)
 ↳1=Culvert (Barrel Controls 0.8 cfs @ 2.42 fps)

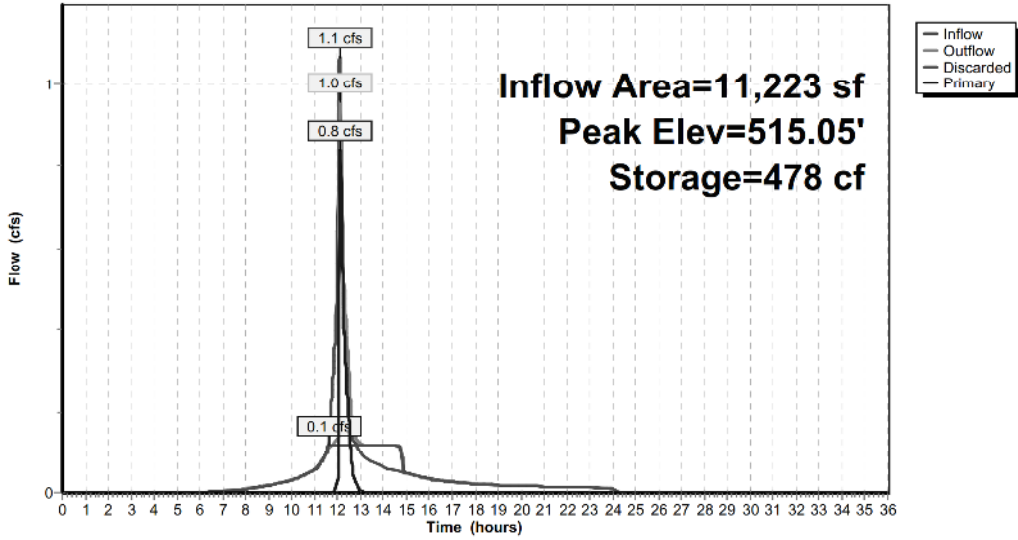
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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Summary for Link 1L: FROM TR1

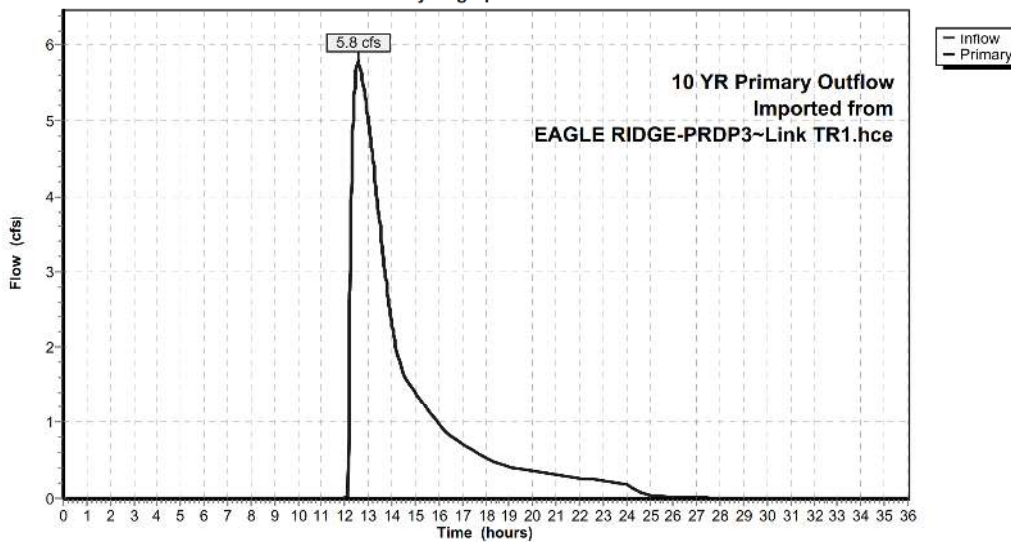
Inflow = 5.8 cfs @ 12.56 hrs, Volume= 51,197 cf
Primary = 5.8 cfs @ 12.56 hrs, Volume= 51,197 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

10 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce

Link 1L: FROM TR1

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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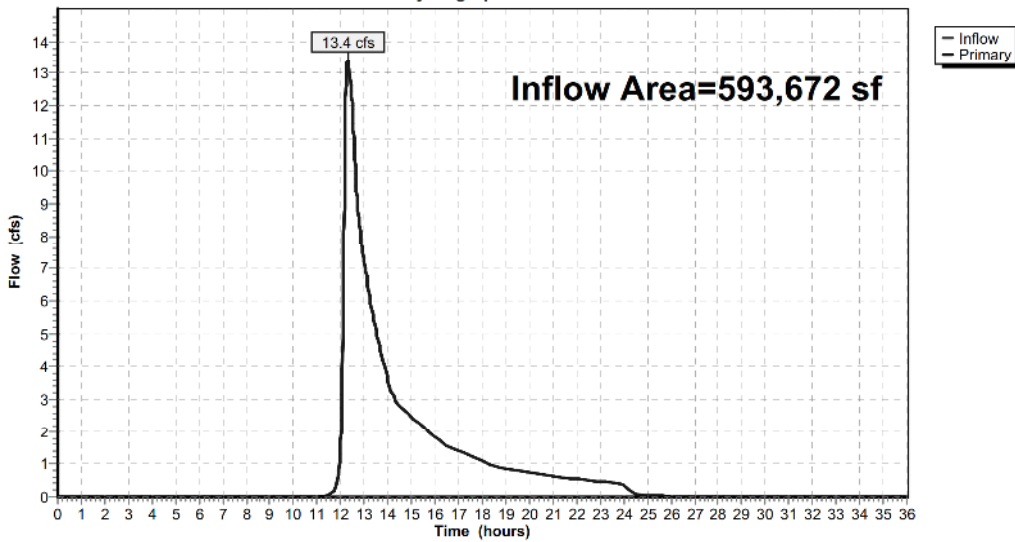
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 1.96" for 10 YR event
Inflow = 13.4 cfs @ 12.30 hrs, Volume= 97,043 cf
Primary = 13.4 cfs @ 12.30 hrs, Volume= 97,043 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 10 YR Rainfall=5.13"

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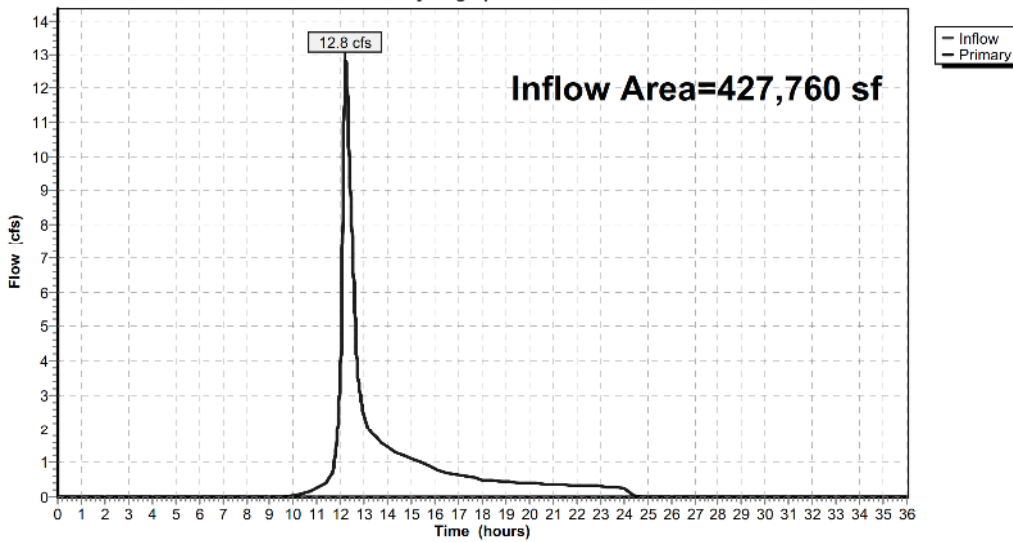
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 1.55" for 10 YR event
Inflow = 12.8 cfs @ 12.21 hrs, Volume= 55,347 cf
Primary = 12.8 cfs @ 12.21 hrs, Volume= 55,347 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=1.87" Flow Length=631' Tc=17.3 min CN=56 Runoff=8.9 cfs 41,947 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=4.74" Flow Length=150' Tc=6.0 min CN=85 Runoff=9.0 cfs 28,647 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=2.41" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=3.1 cfs 9,938 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=2.32" Flow Length=150' Tc=6.0 min CN=61 Runoff=1.5 cfs 4,803 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=4.63" Tc=12.0 min CN=84 Runoff=13.9 cfs 53,382 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=2.32" Flow Length=425' Tc=11.3 min CN=61 Runoff=2.0 cfs 7,722 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=1.79" Flow Length=500' Tc=15.1 min CN=55 Runoff=7.5 cfs 34,206 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=3.27" Flow Length=641' Tc=14.4 min CN=71 Runoff=12.6 cfs 51,041 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=4.85" Tc=6.0 min CN=86 Runoff=1.4 cfs 4,534 cf
Pond 3P: POND 2	Peak Elev=489.42' Storage=39,031 cf Inflow=17.1 cfs 65,907 cf Discarded=0.4 cfs 31,258 cf Primary=0.7 cfs 18,301 cf Secondary=0.0 cfs 0 cf Outflow=1.0 cfs 49,559 cf
Pond 8P: DRYWELLS	Peak Elev=437.09' Storage=8,150 cf Inflow=9.0 cfs 28,647 cf Discarded=0.1 cfs 5,632 cf Primary=7.3 cfs 19,430 cf Outflow=7.4 cfs 25,063 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=515.21' Storage=514 cf Inflow=1.4 cfs 4,534 cf Discarded=0.1 cfs 3,120 cf Primary=1.2 cfs 1,414 cf Outflow=1.4 cfs 4,534 cf
Link 1L: FROM TR1	25 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=7.9 cfs 75,633 cf Primary=7.9 cfs 75,633 cf
Link PRDP4: PRDP4	Inflow=23.7 cfs 165,249 cf Primary=23.7 cfs 165,249 cf
Link PRDP5: PRDP5	Inflow=20.9 cfs 86,662 cf Primary=20.9 cfs 86,662 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 236,220 cf Average Runoff Depth = 2.78"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 8.9 cfs @ 12.26 hrs, Volume= 41,947 cf, Depth= 1.87"

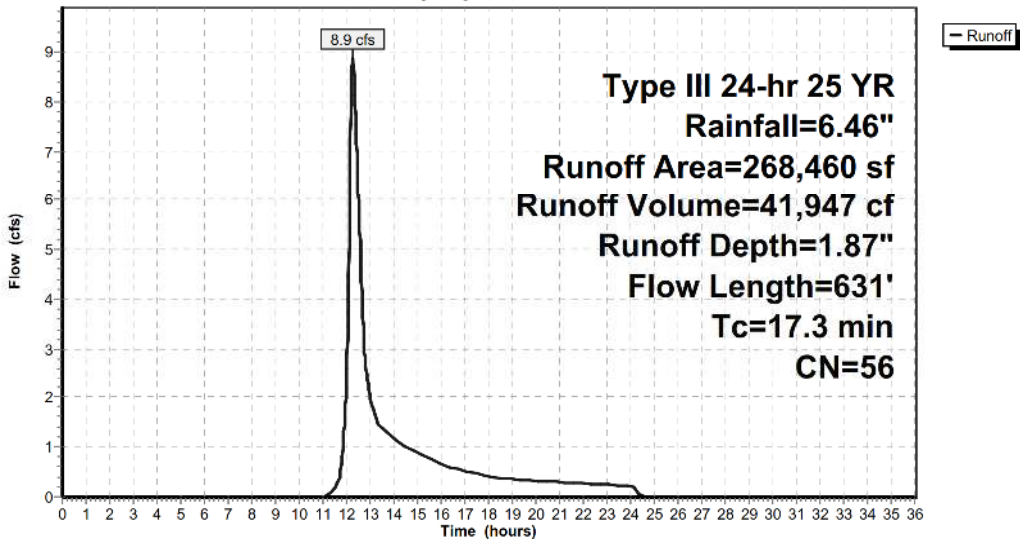
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 9.0 cfs @ 12.09 hrs, Volume= 28,647 cf, Depth= 4.74"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

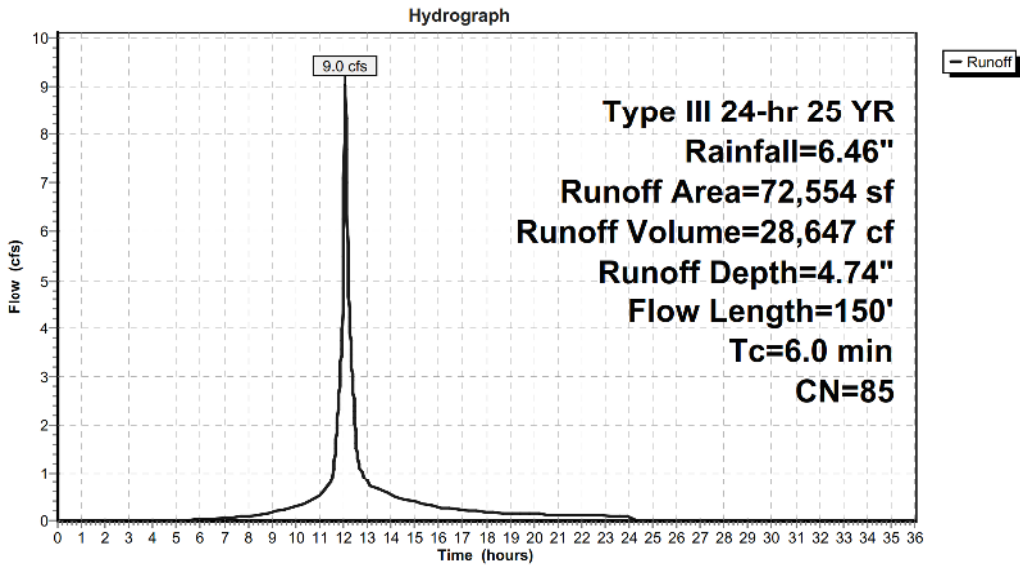
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment PRWS4B: PRWS4B



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 3.1 cfs @ 12.09 hrs, Volume= 9,938 cf, Depth= 2.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

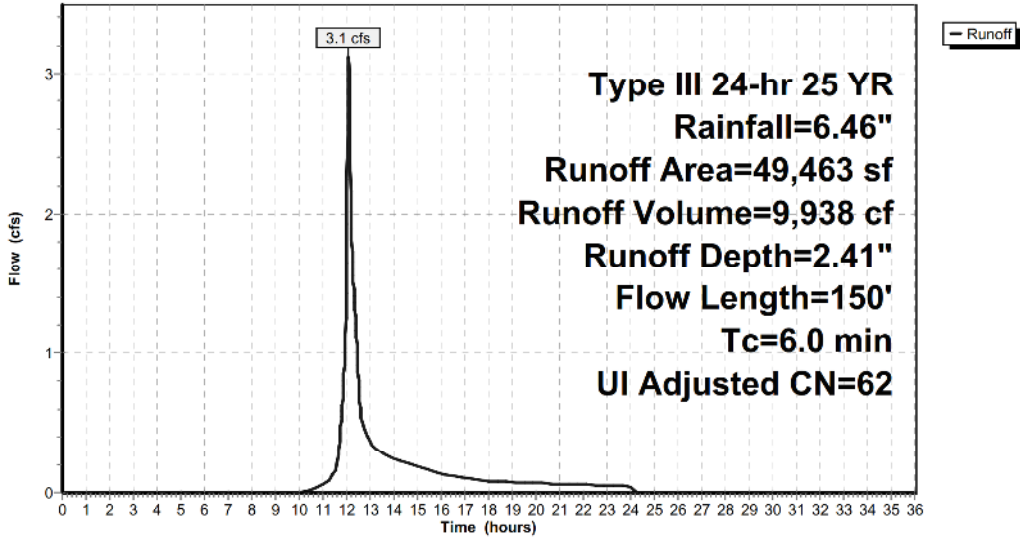
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 1.5 cfs @ 12.09 hrs, Volume= 4,803 cf, Depth= 2.32"

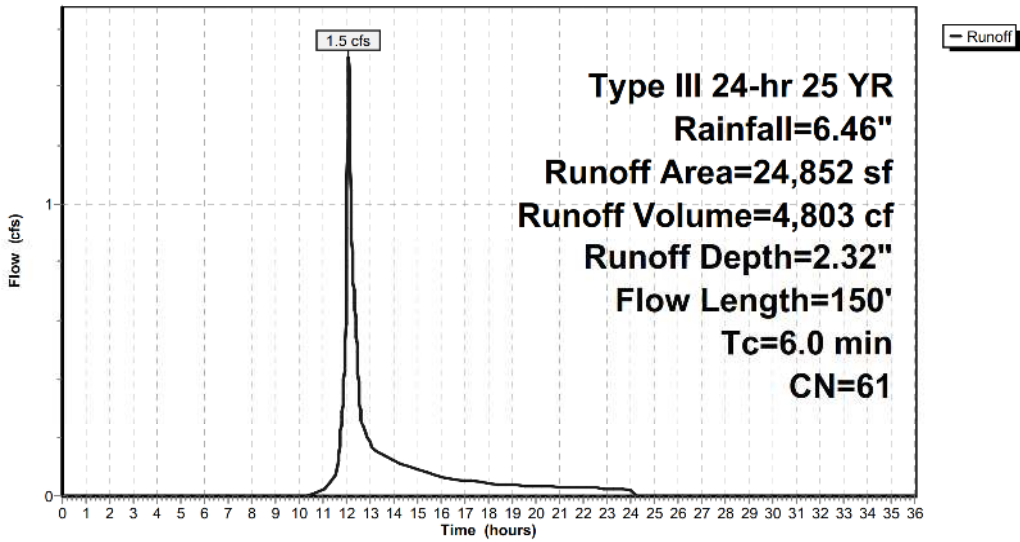
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 13.9 cfs @ 12.16 hrs, Volume= 53,382 cf, Depth= 4.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 25 YR Rainfall=6.46"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

Prepared by Alfonzetti Engineering P.C.
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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

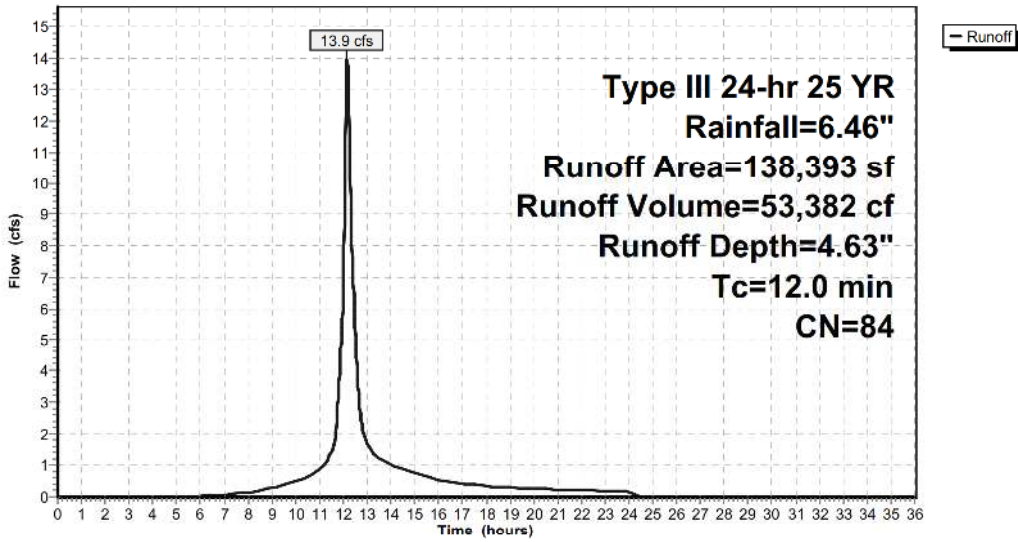
Type III 24-hr 25 YR Rainfall=6.46"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 2.0 cfs @ 12.17 hrs, Volume= 7,722 cf, Depth= 2.32"

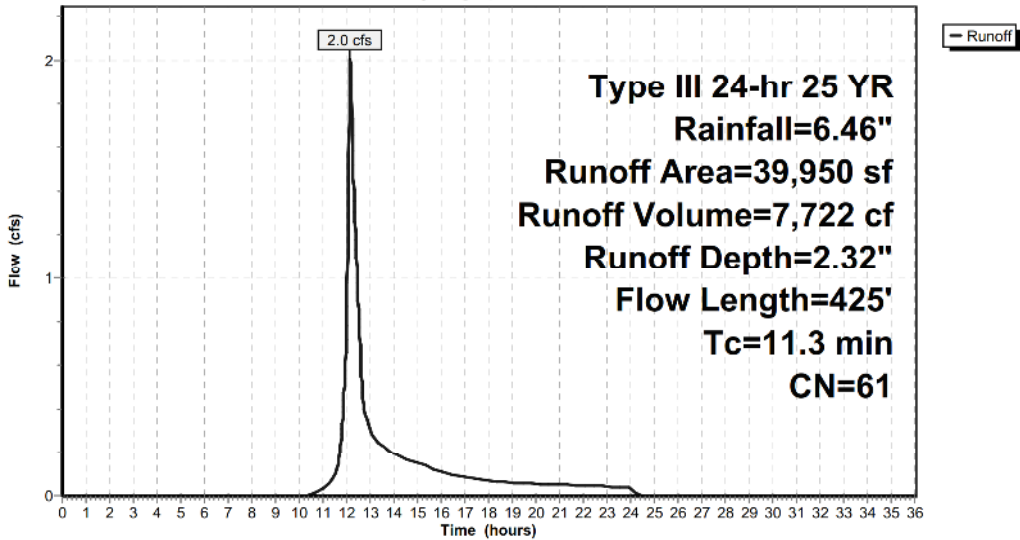
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRW55A: PRW55A

Runoff = 7.5 cfs @ 12.23 hrs, Volume= 34,206 cf, Depth= 1.79"

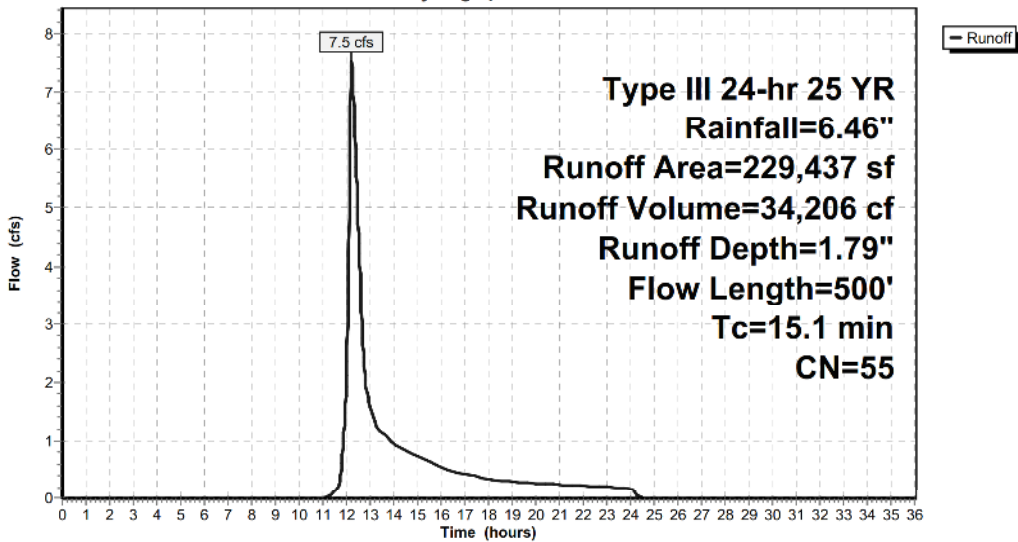
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRW55A: PRW55A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 12.6 cfs @ 12.20 hrs, Volume= 51,041 cf, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

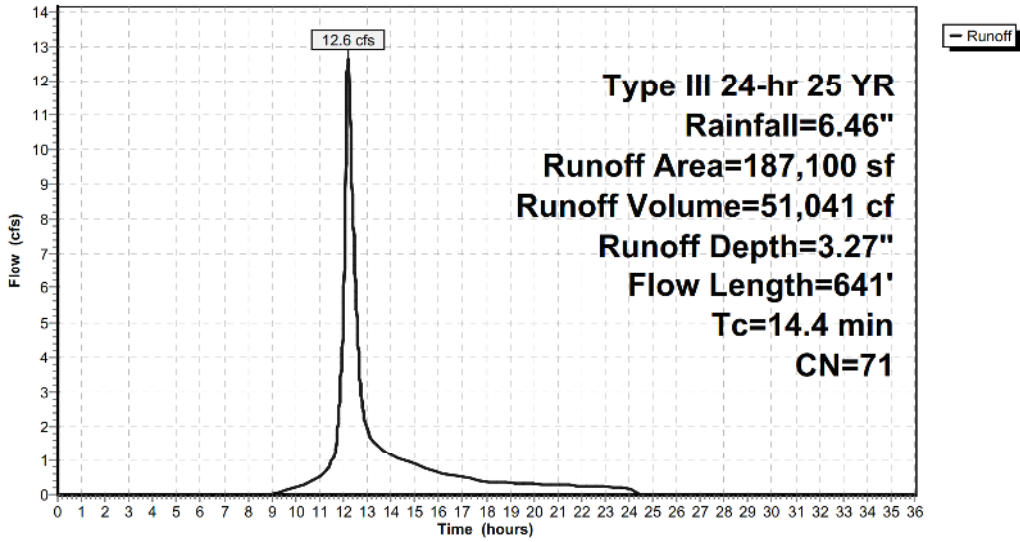
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Subcatchment PRW55C: PRW55C

Runoff = 1.4 cfs @ 12.09 hrs, Volume= 4,534 cf, Depth= 4.85"

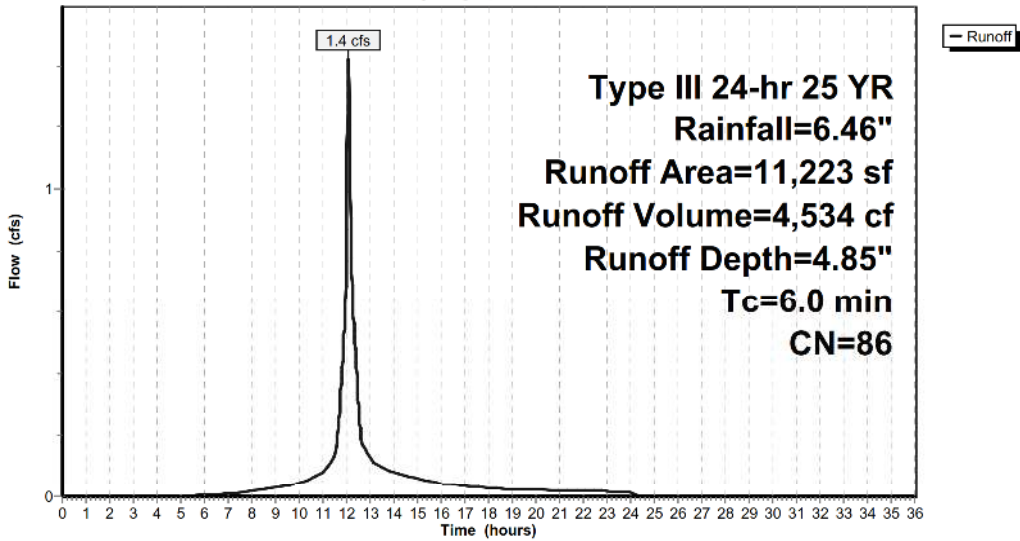
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 25 YR Rainfall=6.46"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRW55C: PRW55C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 3.89" for 25 YR event
 Inflow = 17.1 cfs @ 12.16 hrs, Volume= 65,907 cf
 Outflow = 1.0 cfs @ 14.83 hrs, Volume= 49,559 cf, Atten= 94%, Lag= 160.3 min
 Discarded = 0.4 cfs @ 14.83 hrs, Volume= 31,258 cf
 Primary = 0.7 cfs @ 14.83 hrs, Volume= 18,301 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 489.42' @ 14.83 hrs Surf.Area= 15,162 sf Storage= 39,031 cf

Plug-Flow detention time= 481.5 min calculated for 49,539 cf (75% of inflow)
 Center-of-Mass det. time= 394.6 min (1,210.9 - 816.3)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.4 cfs @ 14.83 hrs HW=489.42' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.4 cfs)

Primary OutFlow Max=0.7 cfs @ 14.83 hrs HW=489.42' (Free Discharge)
 ↳2=Culvert (Passes 0.7 cfs of 7.9 cfs potential flow)
 ↳3=Orifice (Orifice Controls 0.7 cfs @ 3.56 fps)
 ↳4=Grate (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

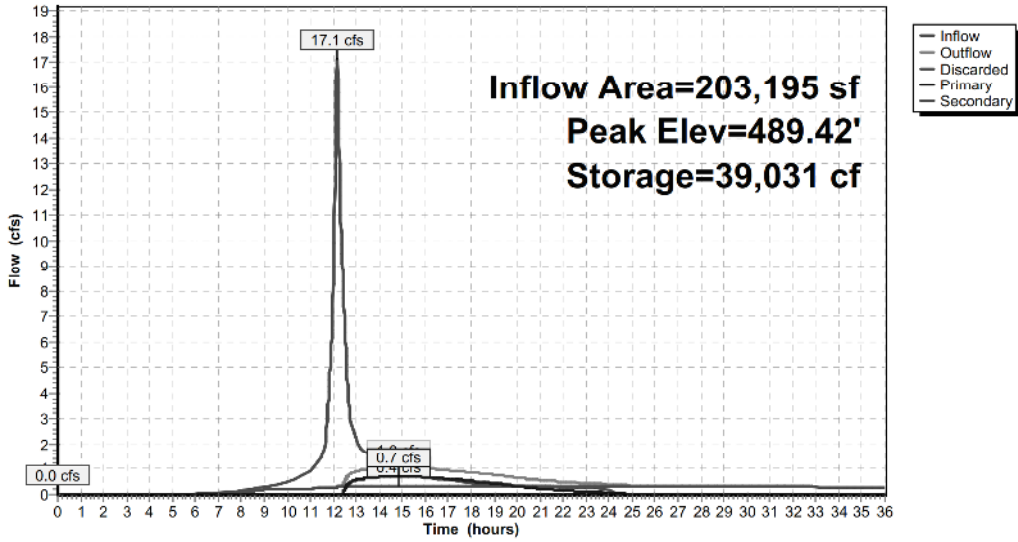
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 4.74" for 25 YR event
 Inflow = 9.0 cfs @ 12.09 hrs, Volume= 28,647 cf
 Outflow = 7.4 cfs @ 12.14 hrs, Volume= 25,063 cf, Atten= 18%, Lag= 3.4 min
 Discarded = 0.1 cfs @ 7.65 hrs, Volume= 5,632 cf
 Primary = 7.3 cfs @ 12.14 hrs, Volume= 19,430 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 437.09' @ 12.14 hrs Surf.Area= 2,304 sf Storage= 8,150 cf

Plug-Flow detention time= 189.1 min calculated for 25,063 cf (87% of inflow)
 Center-of-Mass det. time= 132.3 min (930.3 - 797.9)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

Discarded OutFlow Max=0.1 cfs @ 7.65 hrs HW=432.06' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=7.3 cfs @ 12.14 hrs HW=437.08' (Free Discharge)
 ↳2=Culvert (Inlet Controls 7.3 cfs @ 4.15 fps)

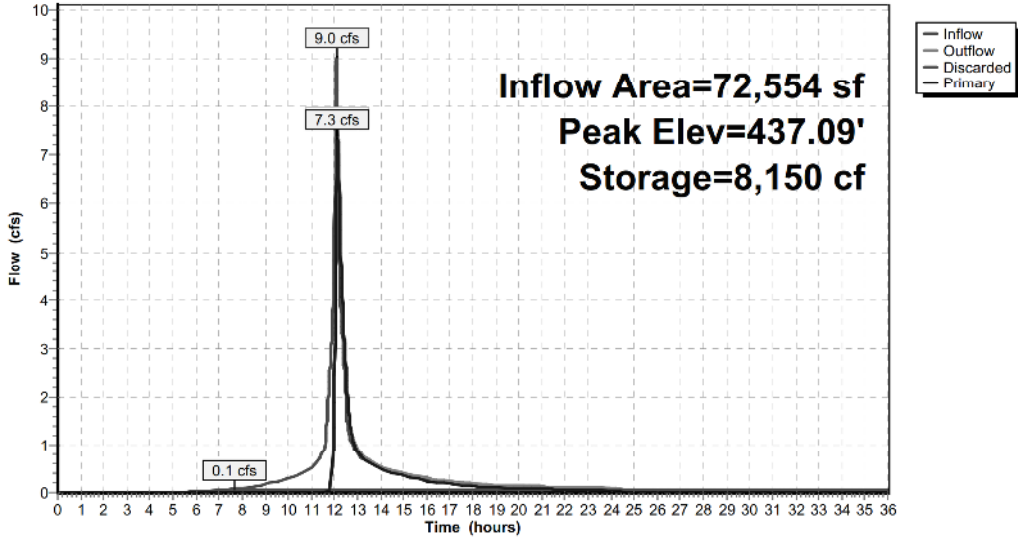
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Pond 8P: DRYWELLS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 4.85" for 25 YR event
 Inflow = 1.4 cfs @ 12.09 hrs, Volume= 4,534 cf
 Outflow = 1.4 cfs @ 12.11 hrs, Volume= 4,534 cf, Atten= 4%, Lag= 1.5 min
 Discarded = 0.1 cfs @ 11.37 hrs, Volume= 3,120 cf
 Primary = 1.2 cfs @ 12.11 hrs, Volume= 1,414 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 515.21' @ 12.11 hrs Surf.Area= 335 sf Storage= 514 cf

Plug-Flow detention time= 14.0 min calculated for 4,532 cf (100% of inflow)
 Center-of-Mass det. time= 14.0 min (809.1 - 795.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.37 hrs HW=512.99' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=1.2 cfs @ 12.11 hrs HW=515.21' (Free Discharge)
 ↳1=Culvert (Barrel Controls 1.2 cfs @ 2.68 fps)

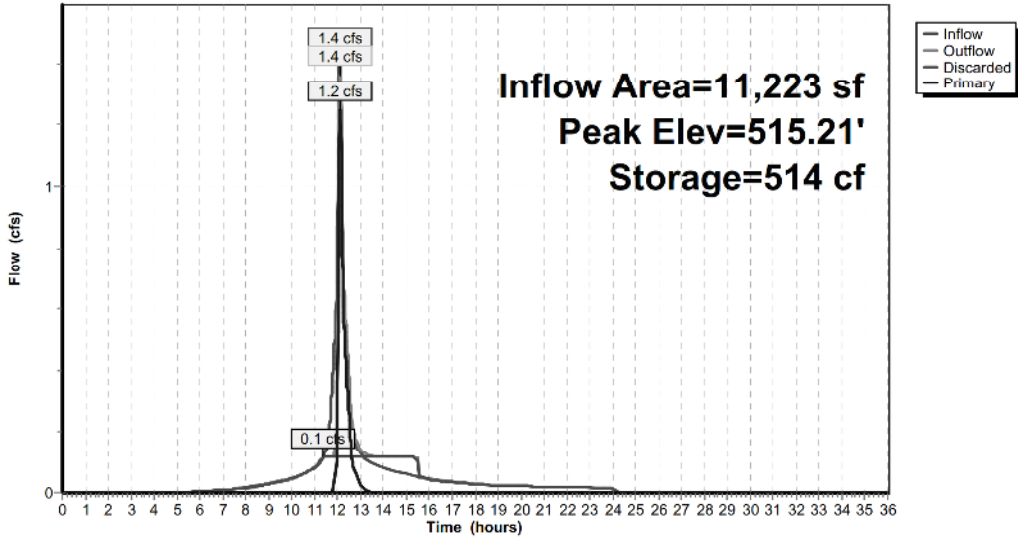
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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Summary for Link 1L: FROM TR1

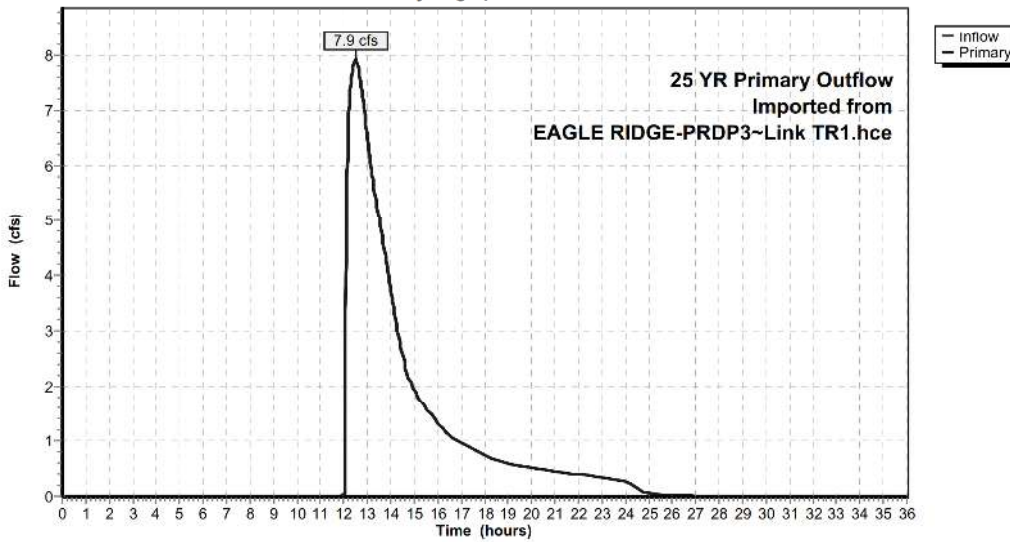
Inflow = 7.9 cfs @ 12.50 hrs, Volume= 75,633 cf
Primary = 7.9 cfs @ 12.50 hrs, Volume= 75,633 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

25 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce

Link 1L: FROM TR1

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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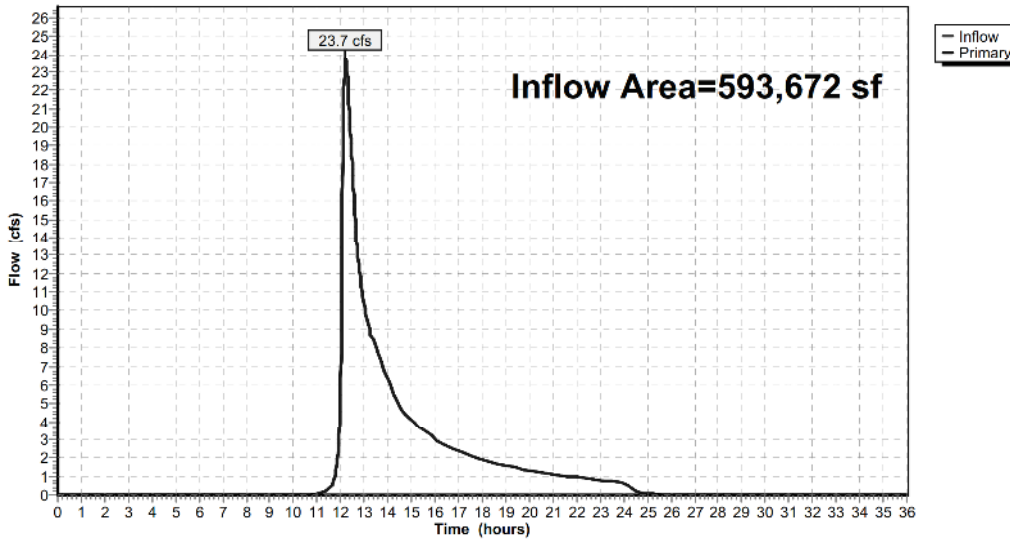
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 3.34" for 25 YR event
Inflow = 23.7 cfs @ 12.21 hrs, Volume= 165,249 cf
Primary = 23.7 cfs @ 12.21 hrs, Volume= 165,249 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 25 YR Rainfall=6.46"

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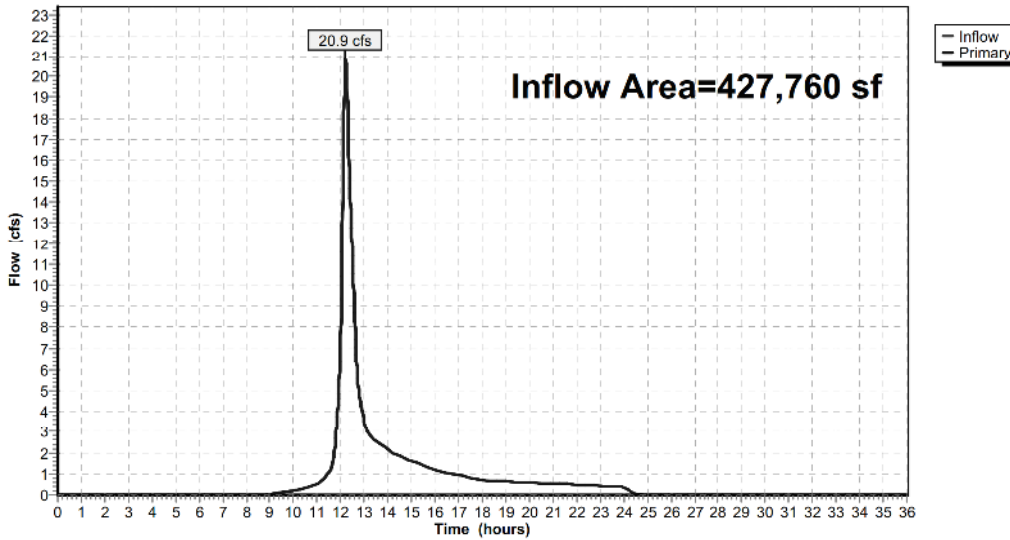
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 2.43" for 25 YR event
Inflow = 20.9 cfs @ 12.21 hrs, Volume= 86,662 cf
Primary = 20.9 cfs @ 12.21 hrs, Volume= 86,662 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=2.68" Flow Length=631' Tc=17.3 min CN=56 Runoff=13.2 cfs 59,927 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=5.91" Flow Length=150' Tc=6.0 min CN=85 Runoff=11.2 cfs 35,760 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=3.32" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=4.4 cfs 13,677 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=3.21" Flow Length=150' Tc=6.0 min CN=61 Runoff=2.1 cfs 6,648 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=5.80" Tc=12.0 min CN=84 Runoff=17.3 cfs 66,868 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=3.21" Flow Length=425' Tc=11.3 min CN=61 Runoff=2.8 cfs 10,687 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=2.57" Flow Length=500' Tc=15.1 min CN=55 Runoff=11.3 cfs 49,220 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=4.31" Flow Length=641' Tc=14.4 min CN=71 Runoff=16.7 cfs 67,217 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=6.03" Tc=6.0 min CN=86 Runoff=1.8 cfs 5,641 cf
Pond 3P: POND 2	Peak Elev=490.07' Storage=49,392 cf Inflow=21.8 cfs 84,203 cf Discarded=0.4 cfs 32,916 cf Primary=1.0 cfs 33,510 cf Secondary=0.0 cfs 0 cf Outflow=1.4 cfs 66,426 cf
Pond 8P: DRYWELLS	Peak Elev=437.46' Storage=8,742 cf Inflow=11.2 cfs 35,760 cf Discarded=0.1 cfs 5,777 cf Primary=8.9 cfs 26,383 cf Outflow=9.0 cfs 32,160 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=515.33' Storage=541 cf Inflow=1.8 cfs 5,641 cf Discarded=0.1 cfs 3,615 cf Primary=1.6 cfs 2,025 cf Outflow=1.7 cfs 5,641 cf
Link 1L: FROM TR1	50 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=9.2 cfs 98,685 cf Primary=9.2 cfs 98,685 cf
Link PRDP4: PRDP4	Inflow=31.8 cfs 232,182 cf Primary=31.8 cfs 232,182 cf
Link PRDP5: PRDP5	Inflow=28.9 cfs 118,463 cf Primary=28.9 cfs 118,463 cf

Total Runoff Area = 1,021,432 sf Runoff Volume = 315,645 cf Average Runoff Depth = 3.71"
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 13.2 cfs @ 12.25 hrs, Volume= 59,927 cf, Depth= 2.68"

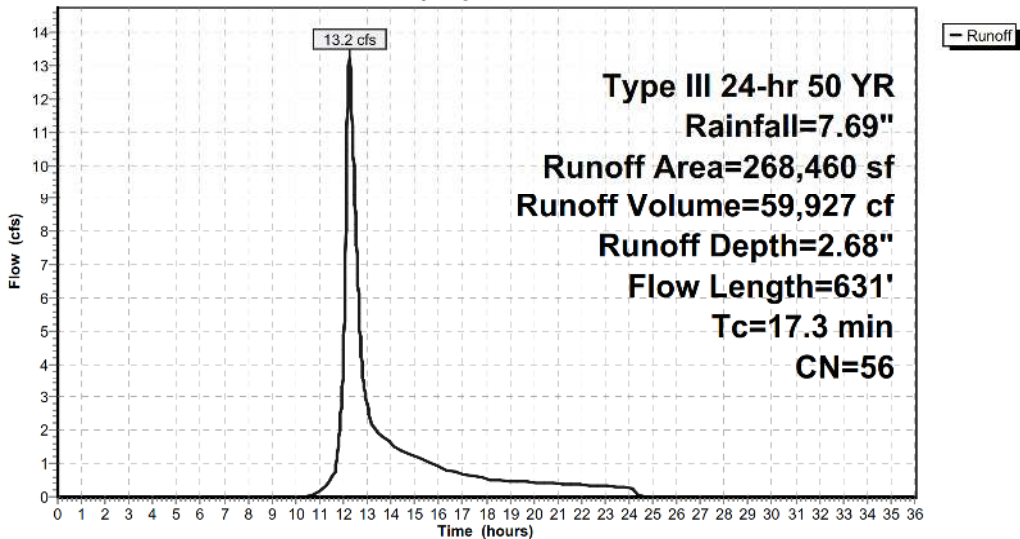
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 11.2 cfs @ 12.09 hrs, Volume= 35,760 cf, Depth= 5.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

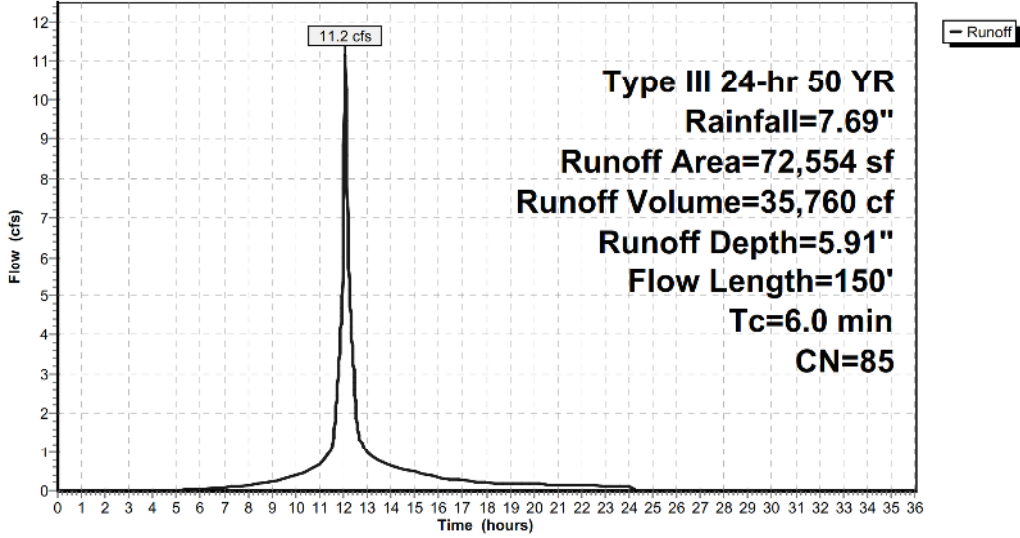
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 4.4 cfs @ 12.09 hrs, Volume= 13,677 cf, Depth= 3.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

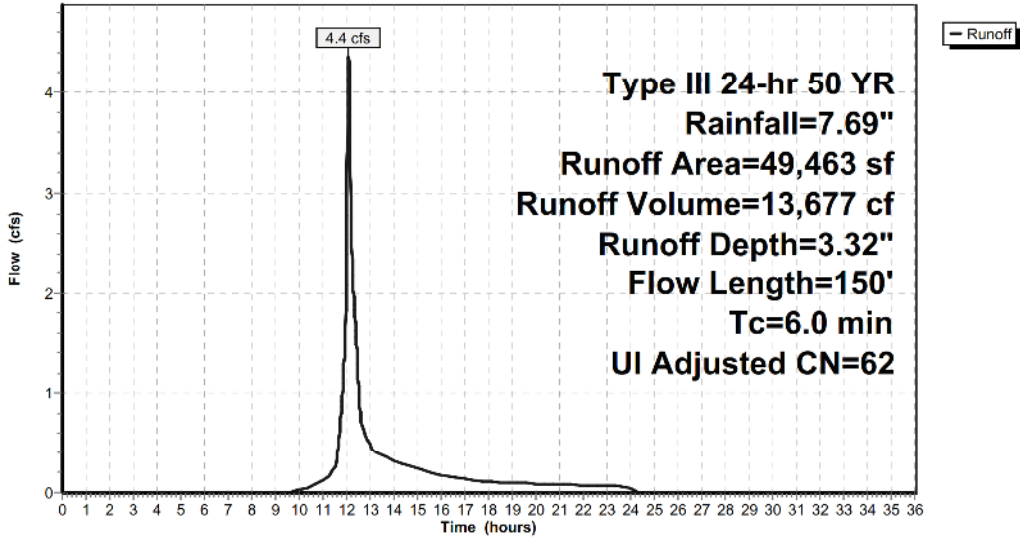
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 2.1 cfs @ 12.09 hrs, Volume= 6,648 cf, Depth= 3.21"

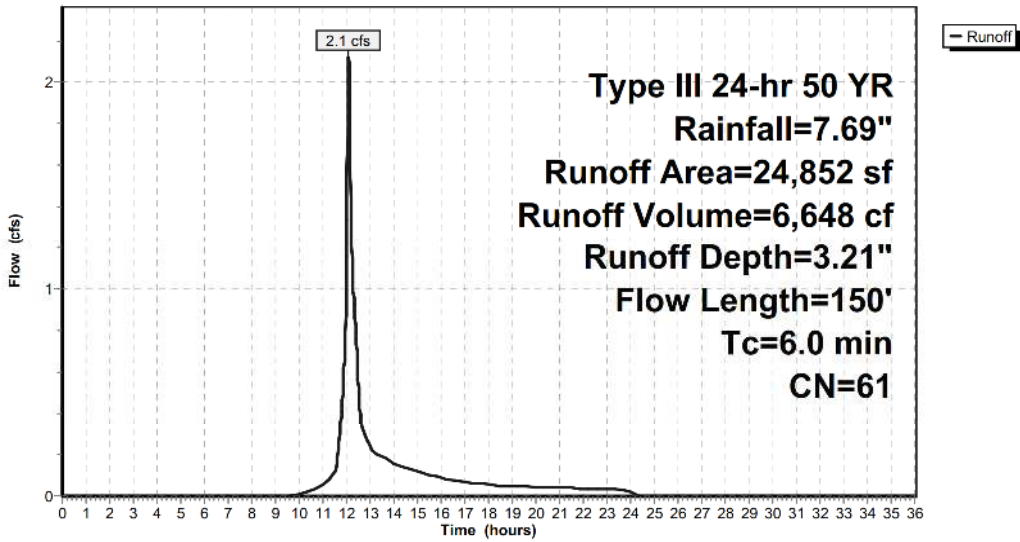
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 17.3 cfs @ 12.16 hrs, Volume= 66,868 cf, Depth= 5.80"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 50 YR Rainfall=7.69"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

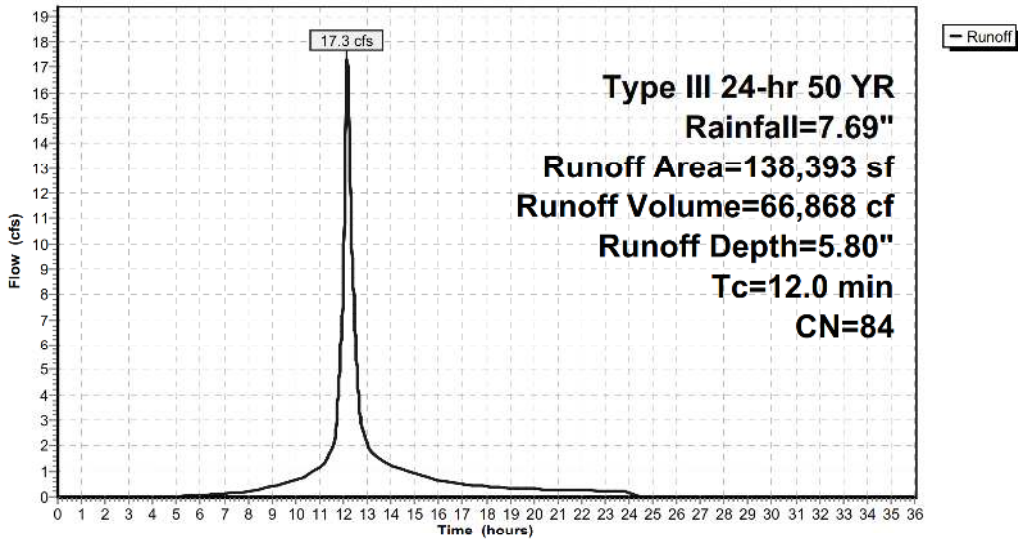
Type III 24-hr 50 YR Rainfall=7.69"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 2.8 cfs @ 12.16 hrs, Volume= 10,687 cf, Depth= 3.21"

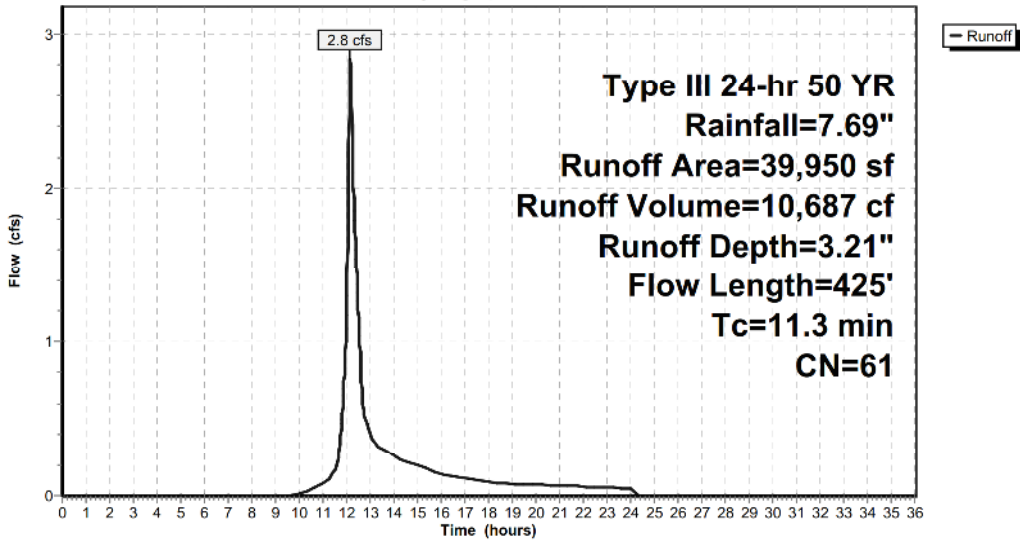
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRW55A: PRW55A

Runoff = 11.3 cfs @ 12.22 hrs, Volume= 49,220 cf, Depth= 2.57"

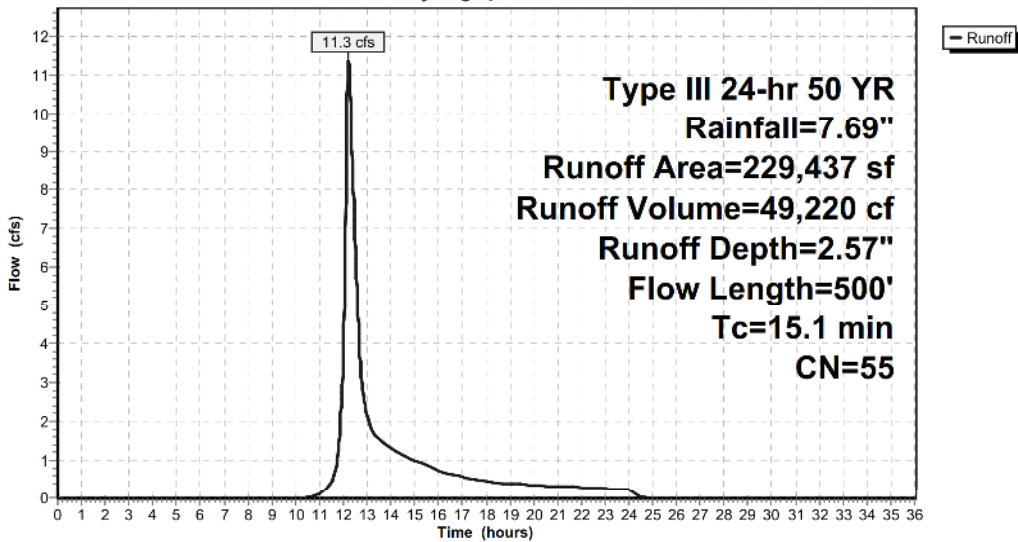
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRW55A: PRW55A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 16.7 cfs @ 12.20 hrs, Volume= 67,217 cf, Depth= 4.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641	Total			

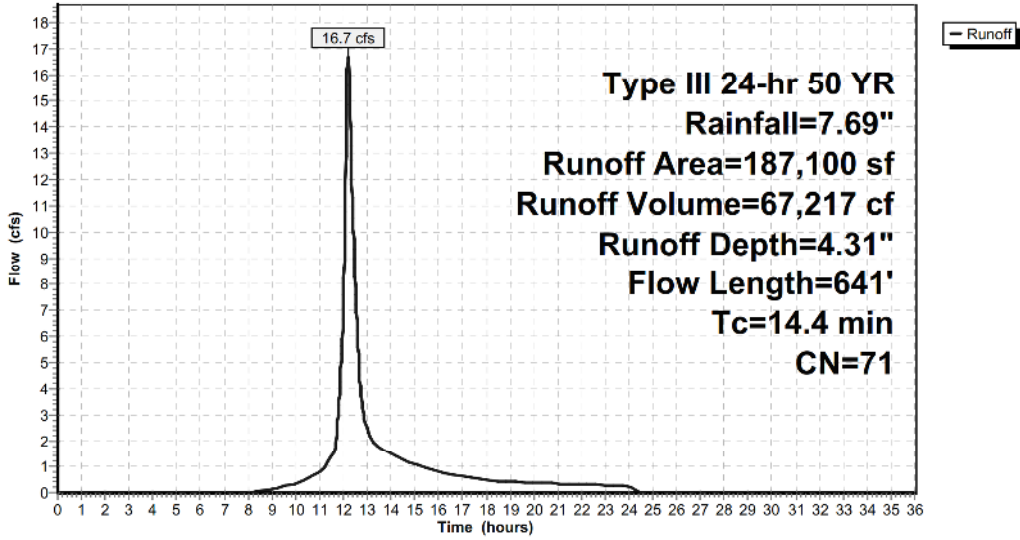
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Subcatchment PRW55C: PRW55C

Runoff = 1.8 cfs @ 12.08 hrs, Volume= 5,641 cf, Depth= 6.03"

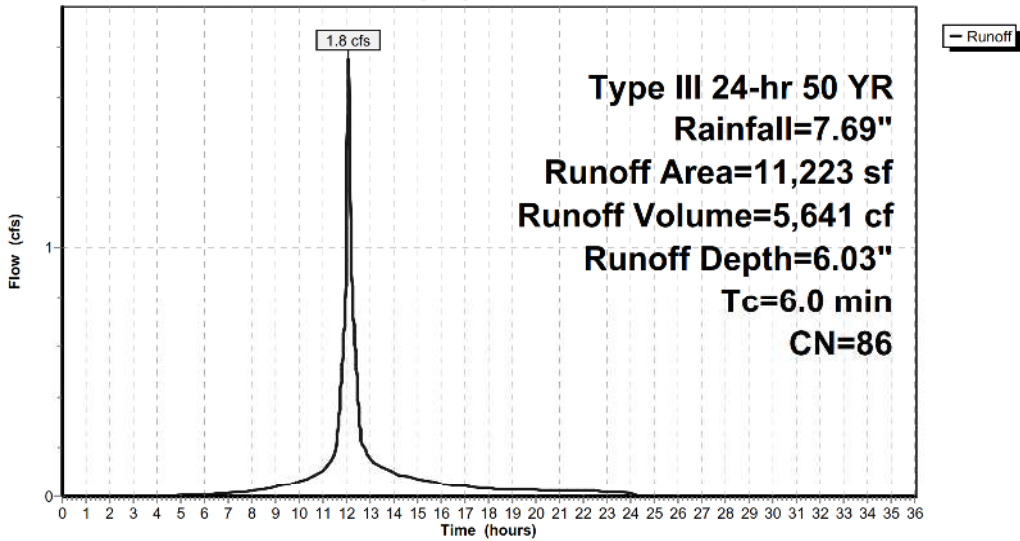
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 50 YR Rainfall=7.69"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRW55C: PRW55C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 4.97" for 50 YR event
 Inflow = 21.8 cfs @ 12.15 hrs, Volume= 84,203 cf
 Outflow = 1.4 cfs @ 14.49 hrs, Volume= 66,426 cf, Atten= 94%, Lag= 140.0 min
 Discarded = 0.4 cfs @ 14.49 hrs, Volume= 32,916 cf
 Primary = 1.0 cfs @ 14.49 hrs, Volume= 33,510 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 490.07' @ 14.49 hrs Surf.Area= 16,266 sf Storage= 49,392 cf

Plug-Flow detention time= 443.9 min calculated for 66,398 cf (79% of inflow)
 Center-of-Mass det. time= 364.9 min (1,175.0 - 810.1)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.4 cfs @ 14.49 hrs HW=490.07' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.4 cfs)

Primary OutFlow Max=1.0 cfs @ 14.49 hrs HW=490.07' (Free Discharge)
 ↳ **2=Culvert** (Passes 1.0 cfs of 9.2 cfs potential flow)
 ↳ **3=Orifice** (Orifice Controls 1.0 cfs @ 5.28 fps)
 ↳ **4=Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳ **5=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

EAGLE RIDGE-PRDP4 PRDP5

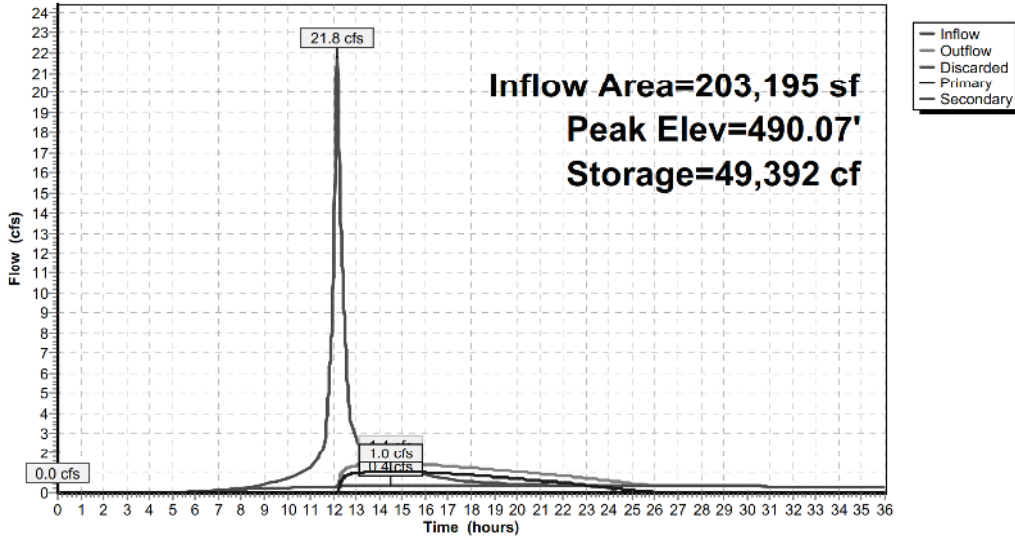
Type III 24-hr 50 YR Rainfall=7.69"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 5.91" for 50 YR event
 Inflow = 11.2 cfs @ 12.09 hrs, Volume= 35,760 cf
 Outflow = 9.0 cfs @ 12.14 hrs, Volume= 32,160 cf, Atten= 19%, Lag= 3.5 min
 Discarded = 0.1 cfs @ 6.91 hrs, Volume= 5,777 cf
 Primary = 8.9 cfs @ 12.14 hrs, Volume= 26,383 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 437.46' @ 12.14 hrs Surf.Area= 2,304 sf Storage= 8,742 cf

Plug-Flow detention time= 158.0 min calculated for 32,160 cf (90% of inflow)
 Center-of-Mass det. time= 109.1 min (900.9 - 791.8)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

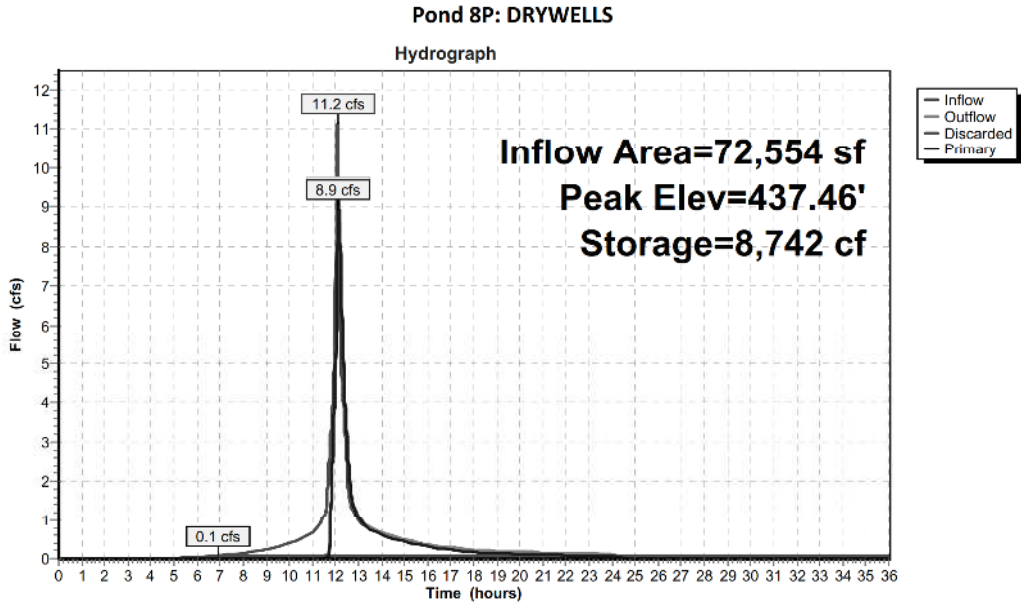
Discarded OutFlow Max=0.1 cfs @ 6.91 hrs HW=432.06' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=8.9 cfs @ 12.14 hrs HW=437.45' (Free Discharge)
 ↳2=Culvert (Inlet Controls 8.9 cfs @ 5.06 fps)

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 6.03" for 50 YR event
 Inflow = 1.8 cfs @ 12.08 hrs, Volume= 5,641 cf
 Outflow = 1.7 cfs @ 12.11 hrs, Volume= 5,641 cf, Atten= 3%, Lag= 1.3 min
 Discarded = 0.1 cfs @ 11.16 hrs, Volume= 3,615 cf
 Primary = 1.6 cfs @ 12.11 hrs, Volume= 2,025 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 515.33' @ 12.11 hrs Surf.Area= 335 sf Storage= 541 cf

Plug-Flow detention time= 13.9 min calculated for 5,638 cf (100% of inflow)
 Center-of-Mass det. time= 13.9 min (802.9 - 789.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 11.16 hrs HW=512.99' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=1.6 cfs @ 12.11 hrs HW=515.33' (Free Discharge)
 ↑**1=Culvert** (Barrel Controls 1.6 cfs @ 2.85 fps)

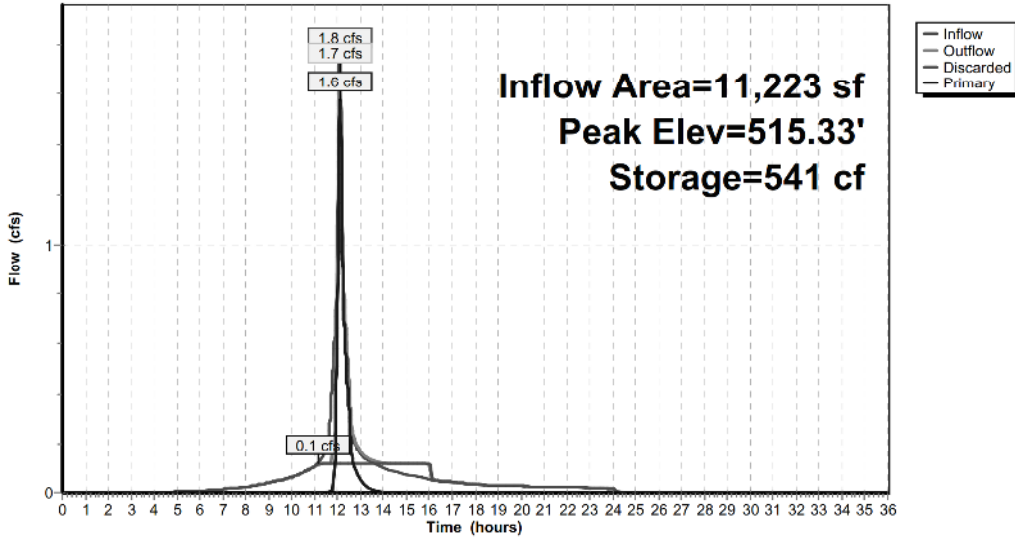
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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Summary for Link 1L: FROM TR1

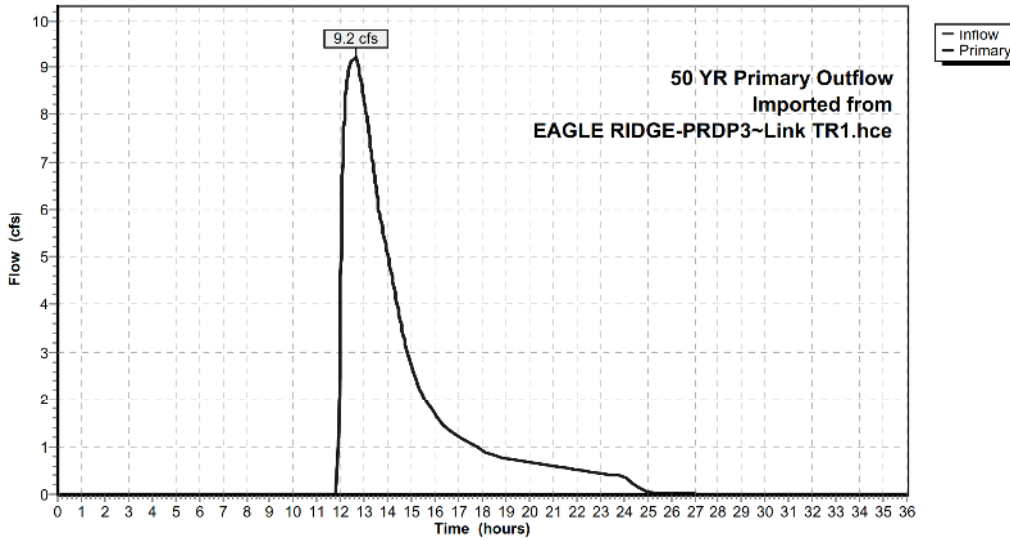
Inflow = 9.2 cfs @ 12.62 hrs, Volume= 98,685 cf
Primary = 9.2 cfs @ 12.62 hrs, Volume= 98,685 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

50 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce

Link 1L: FROM TR1

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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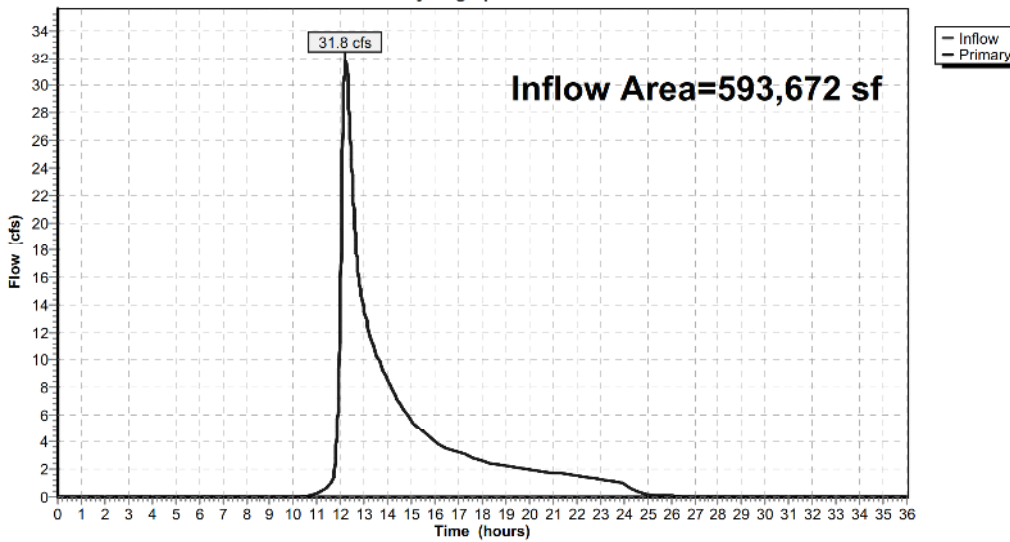
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 4.69" for 50 YR event
Inflow = 31.8 cfs @ 12.21 hrs, Volume= 232,182 cf
Primary = 31.8 cfs @ 12.21 hrs, Volume= 232,182 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 50 YR Rainfall=7.69"

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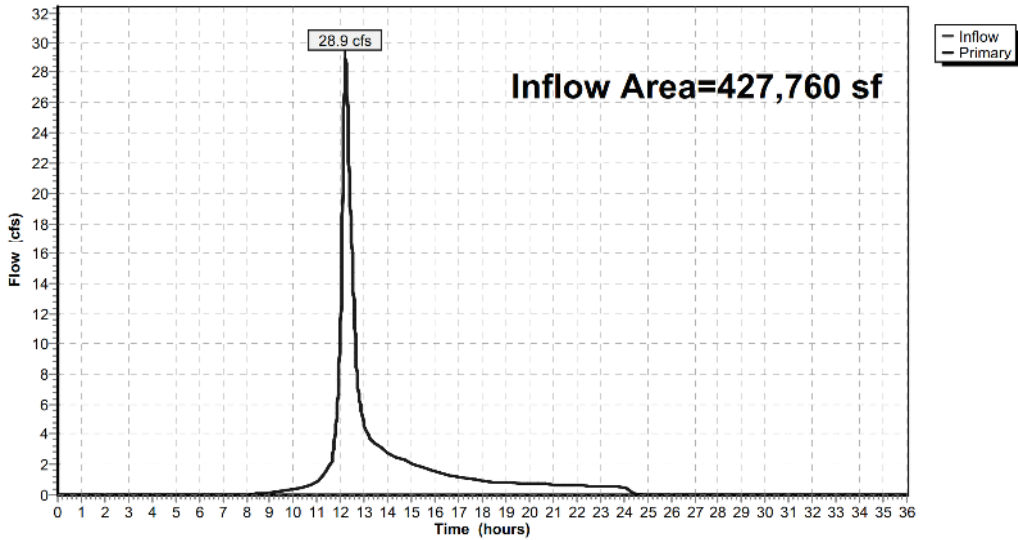
Summary for Link PRDP5: PRDP5

Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 3.32" for 50 YR event
Inflow = 28.9 cfs @ 12.20 hrs, Volume= 118,463 cf
Primary = 28.9 cfs @ 12.20 hrs, Volume= 118,463 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP5: PRDP5

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Time span=0.00-36.00 hrs, dt=0.015 hrs, 2401 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment PRWS4A: PRWS4A	Runoff Area=268,460 sf 0.00% Impervious Runoff Depth=3.74" Flow Length=631' Tc=17.3 min CN=56 Runoff=18.9 cfs 83,574 cf
Subcatchment PRWS4B: PRWS4B	Runoff Area=72,554 sf 64.71% Impervious Runoff Depth=7.35" Flow Length=150' Tc=6.0 min CN=85 Runoff=13.7 cfs 44,419 cf
Subcatchment PRWS4C: PRWS4C	Runoff Area=49,463 sf 5.41% Impervious Runoff Depth=4.48" Flow Length=150' Tc=6.0 min UI Adjusted CN=62 Runoff=6.0 cfs 18,484 cf
Subcatchment PRWS4D: PRWS4D	Runoff Area=24,852 sf 0.00% Impervious Runoff Depth=4.36" Flow Length=150' Tc=6.0 min CN=61 Runoff=2.9 cfs 9,028 cf
Subcatchment PRWS4E: PRWS4E	Runoff Area=138,393 sf 61.81% Impervious Runoff Depth=7.22" Tc=12.0 min CN=84 Runoff=21.3 cfs 83,307 cf
Subcatchment PRWS4F: PRWS4F	Runoff Area=39,950 sf 0.00% Impervious Runoff Depth=4.36" Flow Length=425' Tc=11.3 min CN=61 Runoff=3.9 cfs 14,513 cf
Subcatchment PRWS5A: PRWS5A	Runoff Area=229,437 sf 0.00% Impervious Runoff Depth=3.61" Flow Length=500' Tc=15.1 min CN=55 Runoff=16.4 cfs 69,050 cf
Subcatchment PRWS5B: PRWS5B	Runoff Area=187,100 sf 27.68% Impervious Runoff Depth=5.61" Flow Length=641' Tc=14.4 min CN=71 Runoff=21.7 cfs 87,468 cf
Subcatchment PRWS5C: PRWS5C	Runoff Area=11,223 sf 67.54% Impervious Runoff Depth=7.47" Tc=6.0 min CN=86 Runoff=2.1 cfs 6,986 cf
Pond 3P: POND 2	Peak Elev=490.63' Storage=58,621 cf Inflow=27.5 cfs 106,849 cf Discarded=0.4 cfs 34,608 cf Primary=3.2 cfs 53,040 cf Secondary=0.0 cfs 0 cf Outflow=3.6 cfs 87,647 cf
Pond 8P: DRYWELLS	Peak Elev=437.91' Storage=9,471 cf Inflow=13.7 cfs 44,419 cf Discarded=0.1 cfs 5,925 cf Primary=10.6 cfs 34,880 cf Outflow=10.7 cfs 40,805 cf
Pond 19P: CULTEC BY OTHERS	Peak Elev=515.48' Storage=570 cf Inflow=2.1 cfs 6,986 cf Discarded=0.1 cfs 4,156 cf Primary=2.0 cfs 2,830 cf Outflow=2.1 cfs 6,986 cf
Link 1L: FROM TR1	100 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce Inflow=10.2 cfs 126,596 cf Primary=10.2 cfs 126,596 cf
Link PRDP4: PRDP4	Inflow=41.9 cfs 316,575 cf Primary=41.9 cfs 316,575 cf
Link PRDP5: PRDP5	Inflow=39.2 cfs 159,348 cf Primary=39.2 cfs 159,348 cf
Total Runoff Area = 1,021,432 sf Runoff Volume = 416,831 cf Average Runoff Depth = 4.90"	
80.95% Pervious = 826,900 sf 19.05% Impervious = 194,532 sf	

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4A: PRWS4A

Runoff = 18.9 cfs @ 12.25 hrs, Volume= 83,574 cf, Depth= 3.74"

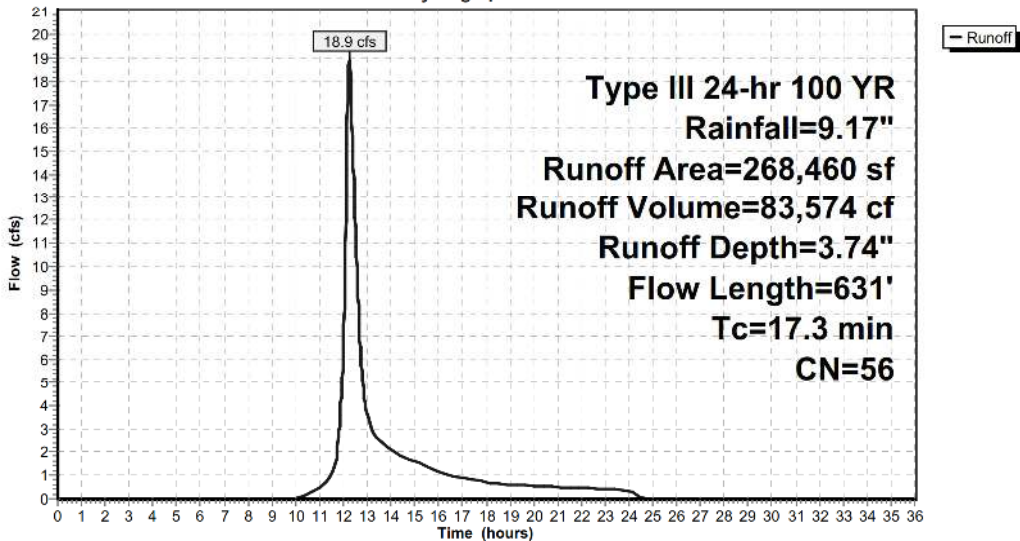
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
204,378	55	Woods, Good, HSG B
56,502	61	>75% Grass cover, Good, HSG B
7,580	61	>75% Grass cover, Good, HSG B
268,460	56	Weighted Average
268,460		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0150	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
3.9	200	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	331	0.1500	1.94		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
17.3	631	Total			

Subcatchment PRWS4A: PRWS4A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4B: PRWS4B

Runoff = 13.7 cfs @ 12.08 hrs, Volume= 44,419 cf, Depth= 7.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
15,530	61	>75% Grass cover, Good, HSG B
30,968	98	Paved parking, HSG B
157	61	>75% Grass cover, Good, HSG B
791	61	>75% Grass cover, Good, HSG B
486	61	>75% Grass cover, Good, HSG B
7,503	61	>75% Grass cover, Good, HSG B
192	61	>75% Grass cover, Good, HSG B
458	61	>75% Grass cover, Good, HSG B
2,044	98	Unconnected pavement, HSG B
135	61	>75% Grass cover, Good, HSG B
581	98	Unconnected pavement, HSG B
42	61	>75% Grass cover, Good, HSG B
94	61	>75% Grass cover, Good, HSG B
582	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
12,587	98	Roofs, HSG B
72,554	85	Weighted Average
25,607		35.29% Pervious Area
46,947		64.71% Impervious Area
3,392		7.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

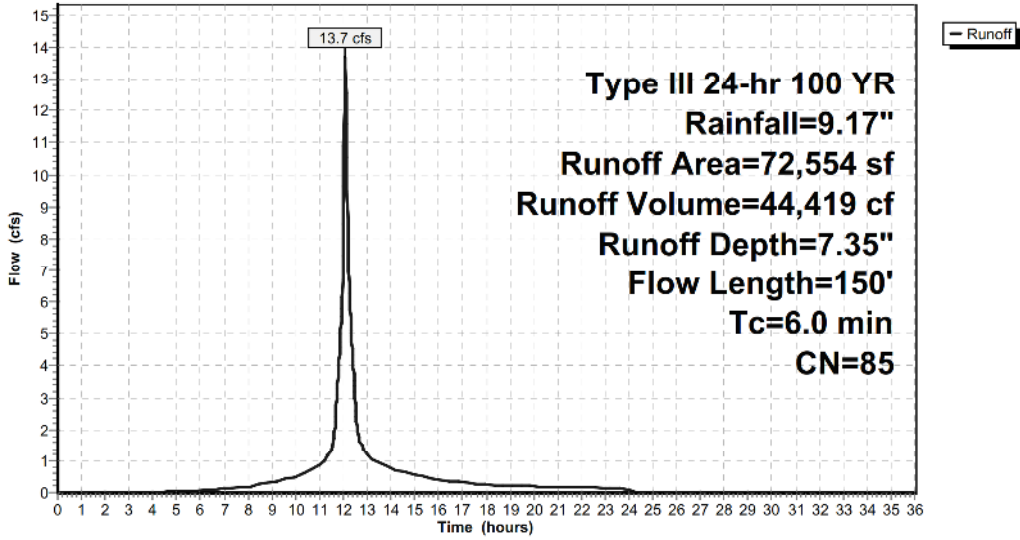
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS4B: PRWS4B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4C: PRWS4C

Runoff = 6.0 cfs @ 12.09 hrs, Volume= 18,484 cf, Depth= 4.48"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
1,622	61	>75% Grass cover, Good, HSG B
16	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
617	98	Unconnected pavement, HSG B
564	98	Unconnected roofs, HSG B
43,412	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected roofs, HSG B
185	98	Unconnected roofs, HSG B
49,463	63	Weighted Average, UI Adjusted CN = 62
46,786		94.59% Pervious Area
2,677		5.41% Impervious Area
2,677		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

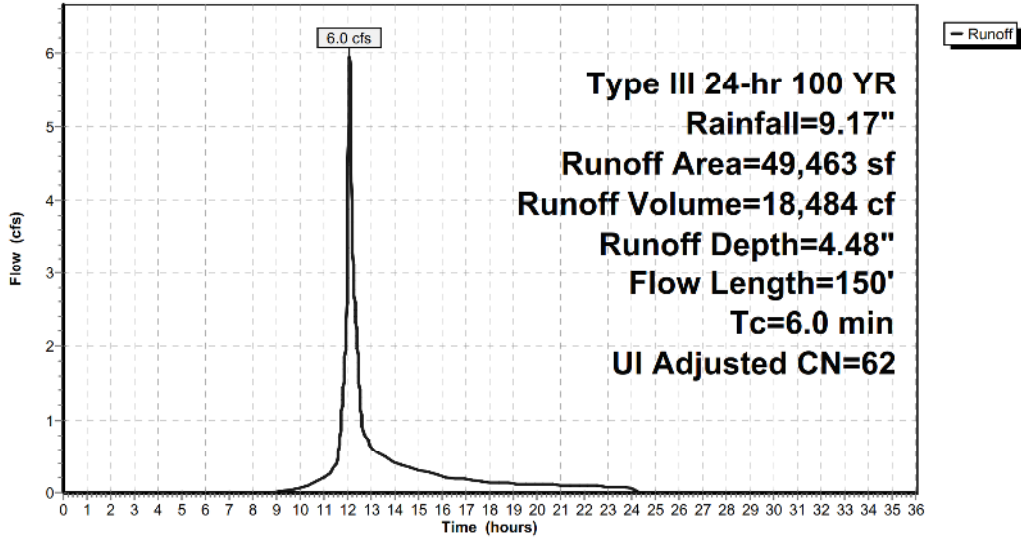
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS4C: PRWS4C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4D: PRWS4D

Runoff = 2.9 cfs @ 12.09 hrs, Volume= 9,028 cf, Depth= 4.36"

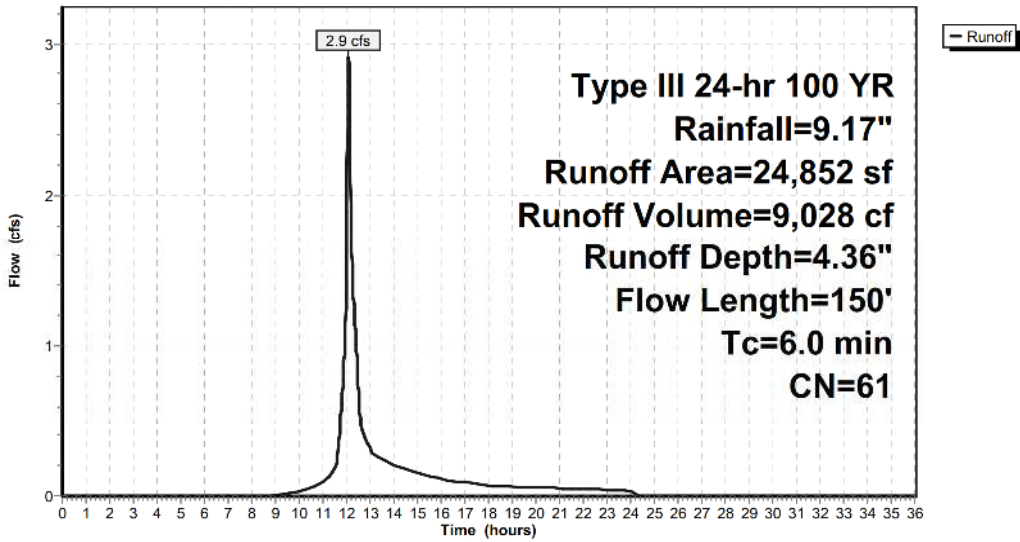
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
24,852	61	>75% Grass cover, Good, HSG B
24,852		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	150		0.42		Direct Entry,

Subcatchment PRWS4D: PRWS4D

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4E: PRWS4E

Runoff = 21.3 cfs @ 12.16 hrs, Volume= 83,307 cf, Depth= 7.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Type III 24 hr 100 YR Rainfall=9.17"

EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Area (sf)	CN	Description
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
28,092	98	Paved parking, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,442	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
2,407	98	Roofs, HSG B
781	98	Unconnected pavement, HSG B
140	98	Unconnected pavement, HSG B
1,400	61	>75% Grass cover, Good, HSG B
2,640	98	Unconnected pavement, HSG B
208	98	Unconnected pavement, HSG B
76	98	Unconnected pavement, HSG B
674	61	>75% Grass cover, Good, HSG B
400	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
4,876	98	Roofs, HSG B
185	98	Unconnected pavement, HSG B
219	61	>75% Grass cover, Good, HSG B
185	98	Unconnected pavement, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,876	98	Roofs, HSG B
4,883	98	Roofs, HSG B
36,258	61	>75% Grass cover, Good, HSG B
12,106	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
219	61	>75% Grass cover, Good, HSG B
2,434	98	Roofs, HSG B
138,393	84	Weighted Average
52,847		38.19% Pervious Area
85,546		61.81% Impervious Area
5,880		6.87% Unconnected

EAGLE RIDGE-PRDP4 PRDP5

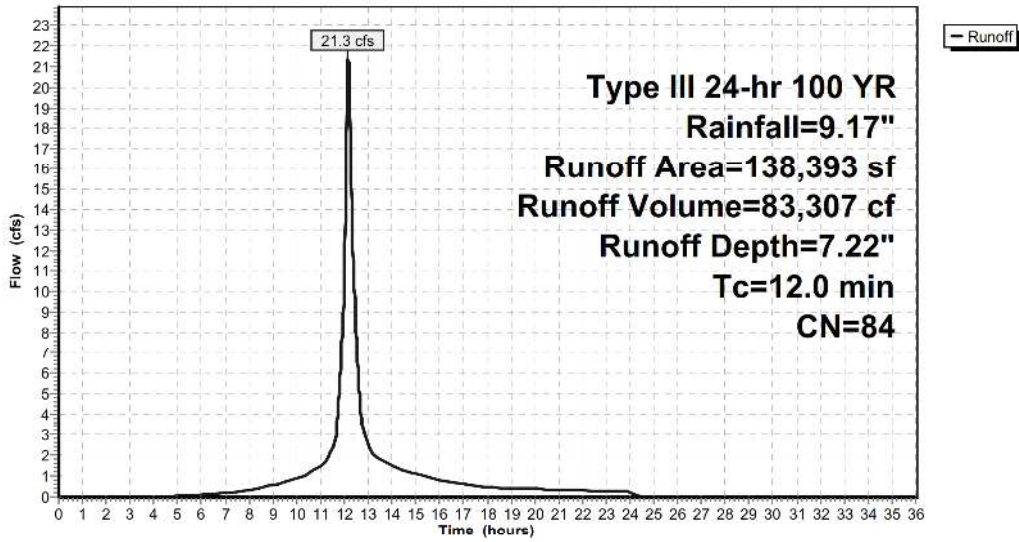
Type III 24-hr 100 YR Rainfall=9.17"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Subcatchment PRWS4E: PRWS4E

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS4F: PRWS4F

Runoff = 3.9 cfs @ 12.16 hrs, Volume= 14,513 cf, Depth= 4.36"

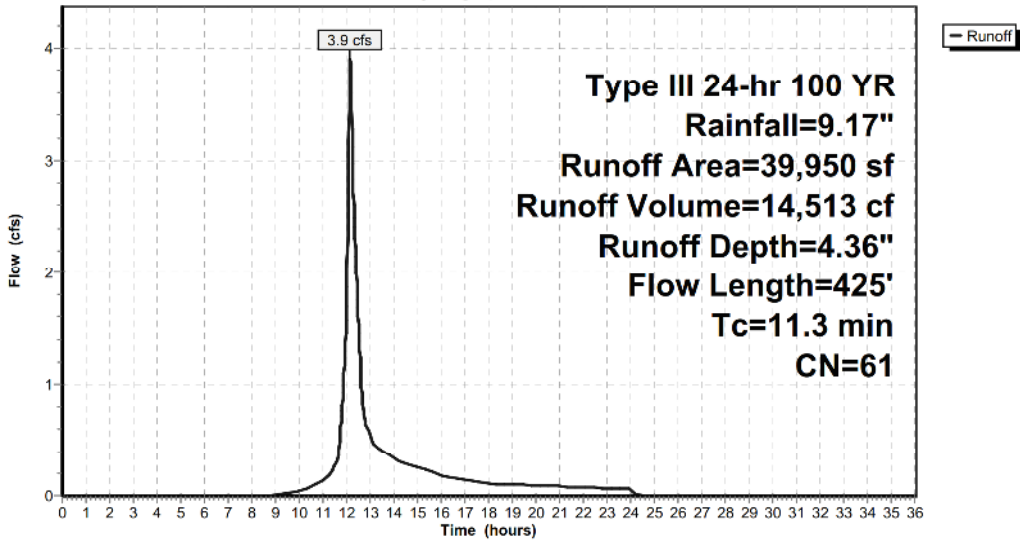
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
39,950	61	>75% Grass cover, Good, HSG B
39,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.43"
0.9	150	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	175	0.0380	3.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
11.3	425	Total			

Subcatchment PRWS4F: PRWS4F

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

Prepared by Alfonzetti Engineering P.C.
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Summary for Subcatchment PRW55A: PRW55A

Runoff = 16.4 cfs @ 12.22 hrs, Volume= 69,050 cf, Depth= 3.61"

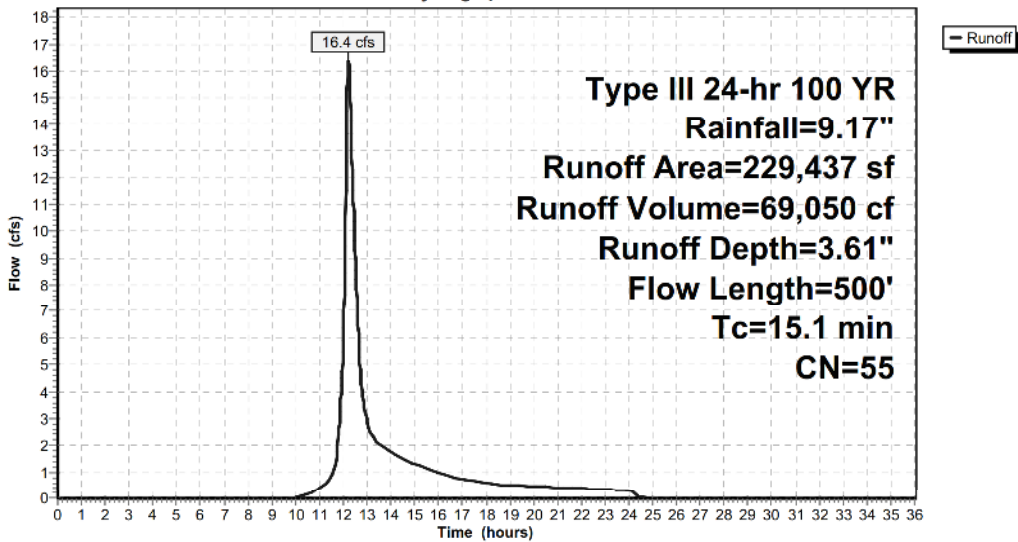
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
87,992	55	Woods, Good, HSG B
22,043	55	Woods, Good, HSG B
77,637	55	Woods, Good, HSG B
41,765	55	Woods, Good, HSG B
229,437	55	Weighted Average
229,437		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0500	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
1.9	200	0.1200	1.73		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.4	100	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	100	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
15.1	500	Total			

Subcatchment PRW55A: PRW55A

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRWS5B: PRWS5B

Runoff = 21.7 cfs @ 12.20 hrs, Volume= 87,468 cf, Depth= 5.61"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
51,782	98	Paved parking, HSG B
125,011	61	>75% Grass cover, Good, HSG B
7,566	61	>75% Grass cover, Good, HSG B
1,899	61	>75% Grass cover, Good, HSG B
847	55	Woods, Good, HSG B
187,100	71	Weighted Average
135,318		72.32% Pervious Area
51,782		27.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0279	0.14		Sheet Flow, Grass: Dense n= 0.240 P2= 3.43"
0.8	60	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	31	0.2420	3.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.2	345	0.0520	4.63		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	105	0.1840	17.23	9.398	Pipe Channel, 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.013 Concrete pipe, bends & connections
14.4	641				Total

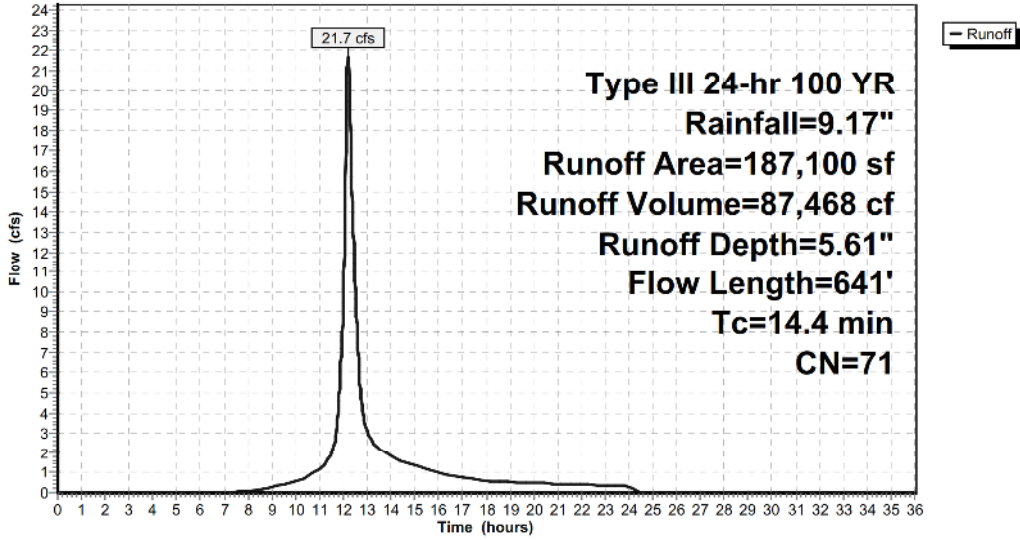
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Subcatchment PRWS5B: PRWS5B

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Subcatchment PRW55C: PRW55C

Runoff = 2.1 cfs @ 12.08 hrs, Volume= 6,986 cf, Depth= 7.47"

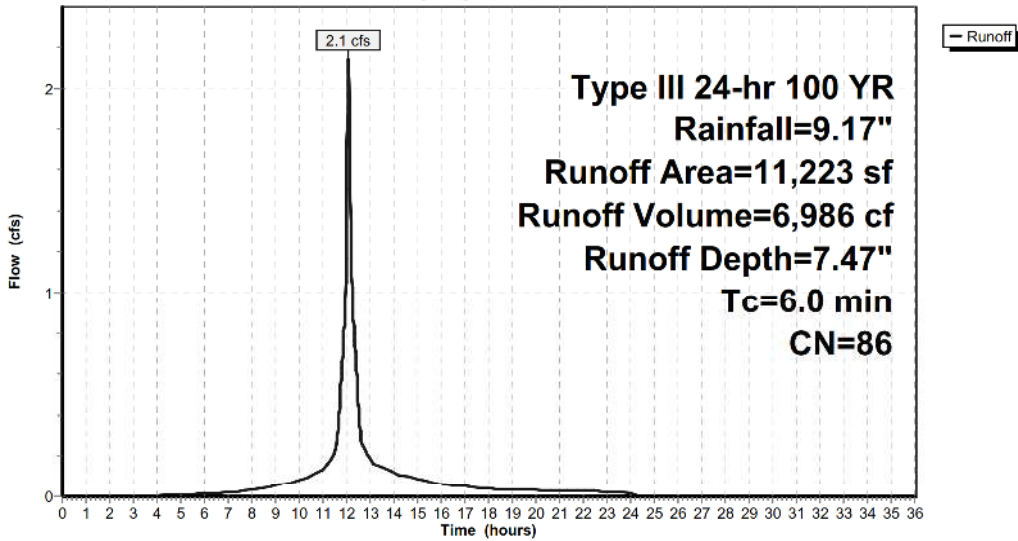
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Type III 24 hr 100 YR Rainfall=9.17"

Area (sf)	CN	Description
7,580	98	Paved parking, HSG B
211	61	>75% Grass cover, Good, HSG B
2,242	61	>75% Grass cover, Good, HSG B
1,190	61	>75% Grass cover, Good, HSG B
11,223	86	Weighted Average
3,643		32.46% Pervious Area
7,580		67.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment PRW55C: PRW55C

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 3P: POND 2

Inflow Area = 203,195 sf, 42.10% Impervious, Inflow Depth = 6.31" for 100 YR event
 Inflow = 27.5 cfs @ 12.15 hrs, Volume= 106,849 cf
 Outflow = 3.6 cfs @ 12.95 hrs, Volume= 87,647 cf, Atten= 87%, Lag= 47.5 min
 Discarded = 0.4 cfs @ 12.95 hrs, Volume= 34,608 cf
 Primary = 3.2 cfs @ 12.95 hrs, Volume= 53,040 cf
 Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 490.63' @ 12.95 hrs Surf.Area= 17,243 sf Storage= 58,621 cf

Plug-Flow detention time= 402.2 min calculated for 87,611 cf (82% of inflow)
 Center-of-Mass det. time= 330.5 min (1,134.7 - 804.2)

Volume	Invert	Avail.Storage	Storage Description
#1	486.30'	83,995 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
486.30	10,153	0	0
487.00	10,914	7,373	7,373
488.00	12,812	11,863	19,236
490.00	16,133	28,945	48,181
492.00	19,681	35,814	83,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	486.30'	1.000 in/hr Exfiltration over Surface area
#2	Primary	487.00'	15.0" Round Culvert L= 30.7' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 486.50' S= 0.0163 '/' Cc= 0.900 n= 0.013
#3	Device 2	488.62'	6.0" Vert. Orifice C= 0.600
#4	Device 2	490.50'	36.0" x 42.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads
#5	Secondary	491.50'	5.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.4 cfs @ 12.95 hrs HW=490.63' (Free Discharge)
 ↳1=Exfiltration (Exfiltration Controls 0.4 cfs)

Primary OutFlow Max=3.1 cfs @ 12.95 hrs HW=490.63' (Free Discharge)
 ↳2=Culvert (Passes 3.1 cfs of 10.2 cfs potential flow)
 ↳3=Orifice (Orifice Controls 1.3 cfs @ 6.38 fps)
 ↳4=Grate (Weir Controls 1.9 cfs @ 1.16 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=486.30' (Free Discharge)
 ↳5=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

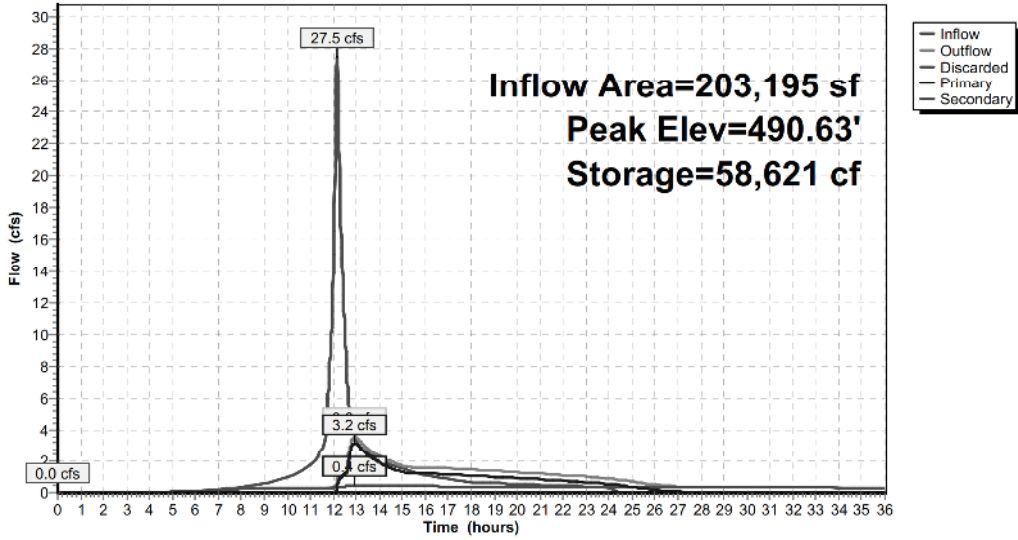
EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Pond 3P: POND 2

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 8P: DRYWELLS

Inflow Area = 72,554 sf, 64.71% Impervious, Inflow Depth = 7.35" for 100 YR event
Inflow = 13.7 cfs @ 12.08 hrs, Volume= 44,419 cf
Outflow = 10.7 cfs @ 12.15 hrs, Volume= 40,805 cf, Atten= 22%, Lag= 3.8 min
Discarded = 0.1 cfs @ 6.12 hrs, Volume= 5,925 cf
Primary = 10.6 cfs @ 12.15 hrs, Volume= 34,880 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
Peak Elev= 437.91' @ 12.15 hrs Surf.Area= 2,304 sf Storage= 9,471 cf

Plug-Flow detention time= 133.9 min calculated for 40,805 cf (92% of inflow)
Center-of-Mass det. time= 92.0 min (878.0 - 785.9)

Volume	Invert	Avail.Storage	Storage Description
#1	432.00'	2,074 cf	Custom Stage Data (Prismatic) Listed below (Recalc) x 16 13,824 cf Overall - 7,540 cf Embedded = 6,284 cf x 33.0% Voids
#2	432.00'	7,540 cf	10.00'D x 6.00'H Vertical Cone/Cylinder x 16 Inside #1
		9,614 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
432.00	144	0	0
438.00	144	864	864

Device	Routing	Invert	Outlet Devices
#1	Discarded	432.00'	1.000 in/hr Exfiltration over Surface area
#2	Primary	435.60'	18.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Outlet Invert= 421.15' S= 0.1490 '/' Cc= 0.900 n= 0.013

Discarded OutFlow Max=0.1 cfs @ 6.12 hrs HW=432.06' (Free Discharge)
↳ **1=Exfiltration** (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=10.6 cfs @ 12.15 hrs HW=437.91' (Free Discharge)
↳ **2=Culvert** (Inlet Controls 10.6 cfs @ 6.01 fps)

EAGLE RIDGE-PRDP4 PRDP5

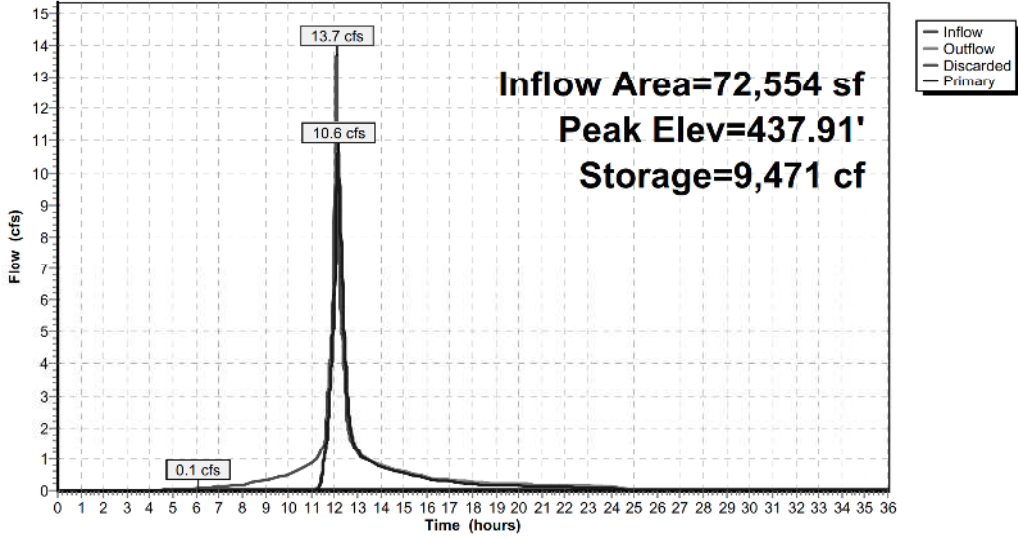
Type III 24-hr 100 YR Rainfall=9.17"

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Pond 8P: DRYWELLS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Pond 19P: CULTEC BY OTHERS

Inflow Area = 11,223 sf, 67.54% Impervious, Inflow Depth = 7.47" for 100 YR event
 Inflow = 2.1 cfs @ 12.08 hrs, Volume= 6,986 cf
 Outflow = 2.1 cfs @ 12.11 hrs, Volume= 6,986 cf, Atten= 3%, Lag= 1.3 min
 Discarded = 0.1 cfs @ 10.73 hrs, Volume= 4,156 cf
 Primary = 2.0 cfs @ 12.11 hrs, Volume= 2,830 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs
 Peak Elev= 515.48' @ 12.11 hrs Surf.Area= 335 sf Storage= 570 cf

Plug-Flow detention time= 13.7 min calculated for 6,983 cf (100% of inflow)
 Center-of-Mass det. time= 13.7 min (797.1 - 783.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	512.95'	308 cf	11.17'W x 30.00'L x 3.54'H Field A 1,186 cf Overall - 417 cf Embedded = 769 cf x 40.0% Voids
#2A	513.45'	417 cf	Cultec R-330XL x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
		725 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	514.45'	12.0" Round Culvert L= 25.0' CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 514.35' S= 0.0040 '/' Cc= 0.900 n= 0.013
#2	Discarded	512.95'	15.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.1 cfs @ 10.73 hrs HW=512.99' (Free Discharge)
 ↳2=Exfiltration (Exfiltration Controls 0.1 cfs)

Primary OutFlow Max=2.0 cfs @ 12.11 hrs HW=515.47' (Free Discharge)
 ↳1=Culvert (Barrel Controls 2.0 cfs @ 3.02 fps)

EAGLE RIDGE-PRDP4 PRDP5

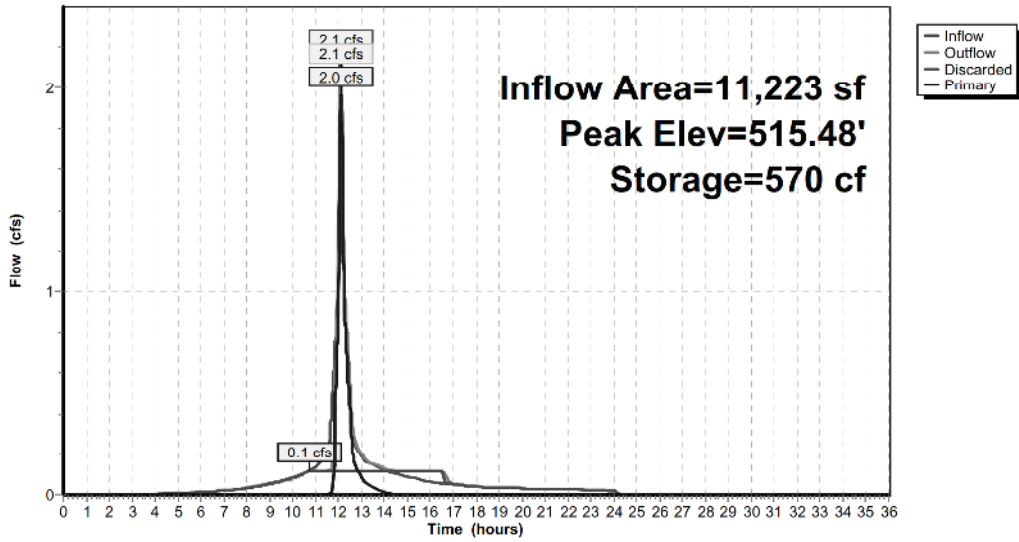
Type III 24-hr 100 YR Rainfall=9.17"

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Pond 19P: CULTEC BY OTHERS

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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Summary for Link 1L: FROM TR1

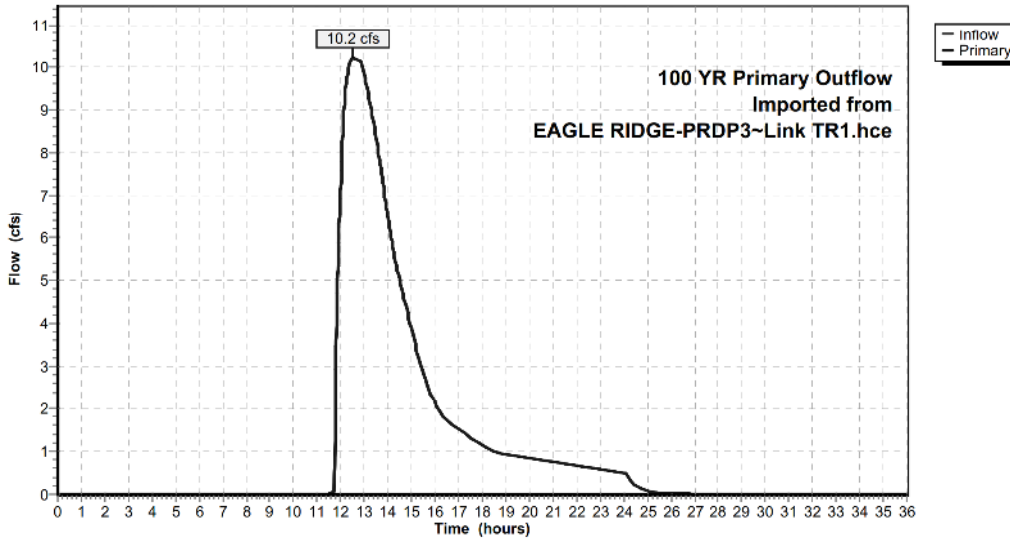
Inflow = 10.2 cfs @ 12.53 hrs, Volume= 126,596 cf
Primary = 10.2 cfs @ 12.53 hrs, Volume= 126,596 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00 36.00 hrs, dt= 0.015 hrs

100 YR Primary Outflow Imported from EAGLE RIDGE-PRDP3~Link TR1.hce

Link 1L: FROM TR1

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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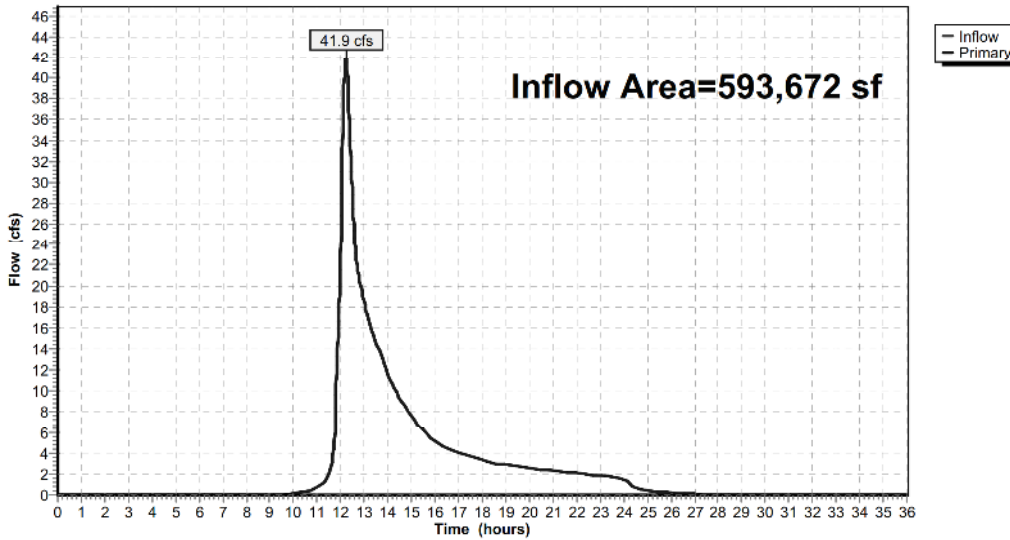
Summary for Link PRDP4: PRDP4

Inflow Area = 593,672 sf, 22.77% Impervious, Inflow Depth = 6.40" for 100 YR event
Inflow = 41.9 cfs @ 12.21 hrs, Volume= 316,575 cf
Primary = 41.9 cfs @ 12.21 hrs, Volume= 316,575 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

Link PRDP4: PRDP4

Hydrograph



EAGLE RIDGE-PRDP4 PRDP5

Type III 24-hr 100 YR Rainfall=9.17"

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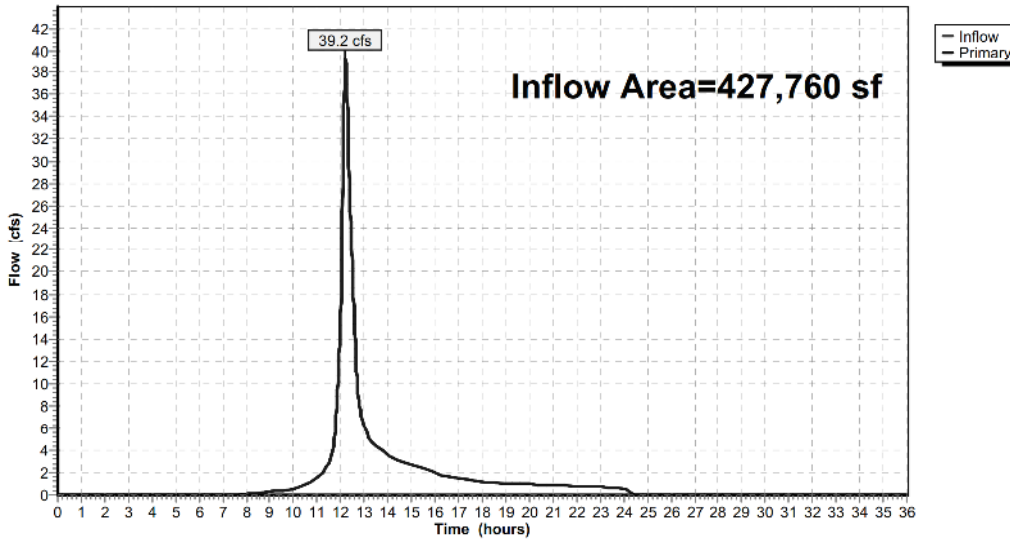
Summary for Link PRDP5: PRDP5

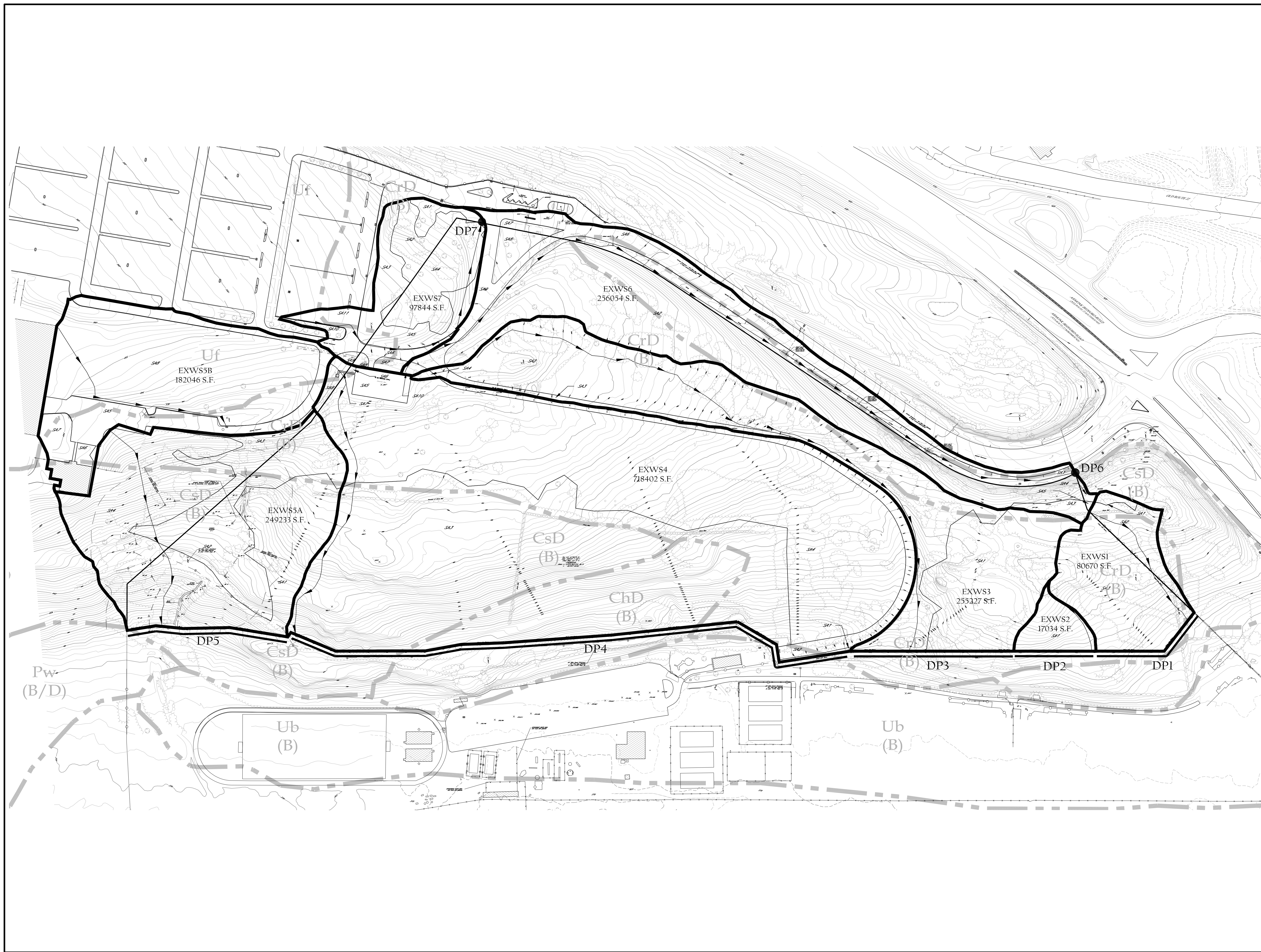
Inflow Area = 427,760 sf, 13.88% Impervious, Inflow Depth = 4.47" for 100 YR event
Inflow = 39.2 cfs @ 12.20 hrs, Volume= 159,348 cf
Primary = 39.2 cfs @ 12.20 hrs, Volume= 159,348 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.015 hrs

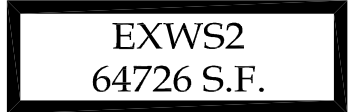



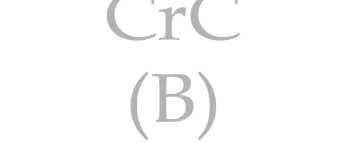
Link PRDP5: PRDP5

Hydrograph



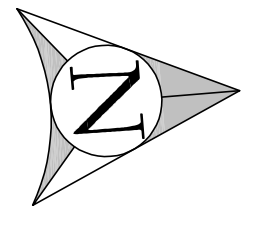


LEGEND

-  EXWS2
64726 S.F. WATERSHED BOUNDARY
WITH NAME AND AREA
-  SA1 SUB-AREA
-  FLOWPATH
-  DP4 DESIGN POINT
-  CrC
(B) SOIL SYMBOL WITH
HYDROLOGIC SOIL TYPE

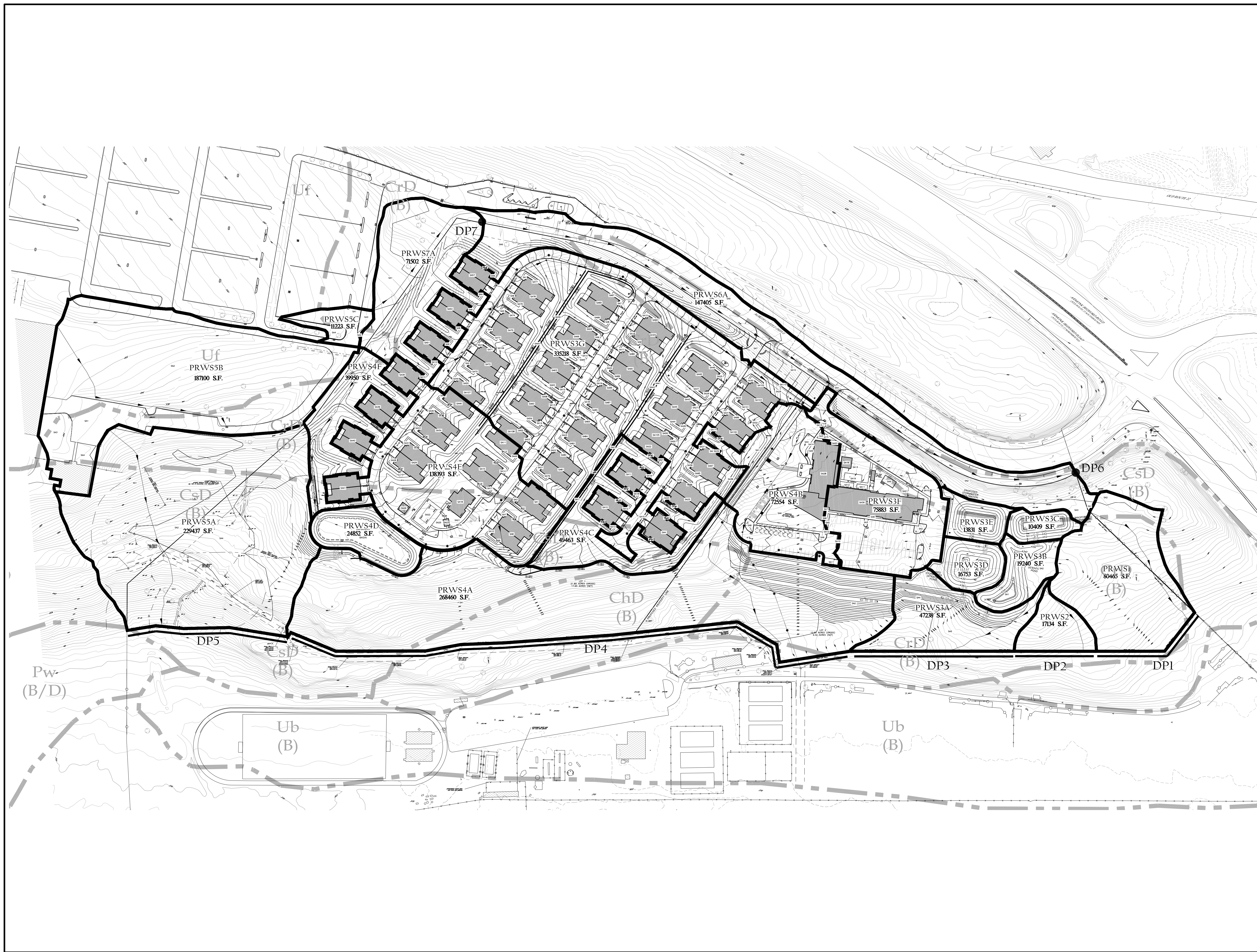


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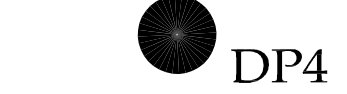
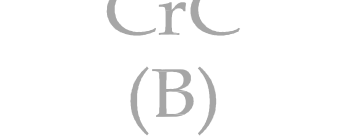

SCALE: 1" = 100'

ALFONZETTI ENGINEERING, P.C.
14 SMITH AVE, MT. KISCO, N.Y. 10549
914-666-9800 INFO@ALFONZETTIENG.COM

SITE DATA	
OWNER/APPLICANT: MADDO MADONNA ARMONK LLC	
SITE ADDRESS: 3 NORTH CASTLE DR. ARMONK, NEW YORK, 10504	
TAX MAP #: 108.03-1-62.1	
LOT AREA: 32,547 ACRES	
ZONING: OBH/RF-MF-SCH	
DRAWING:	SHEET:
EXISTING WATERSHED MAP	01
NOVEMBER 28, 2022	02
PROJECT:	
EAGLE RIDGE TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NEW YORK	

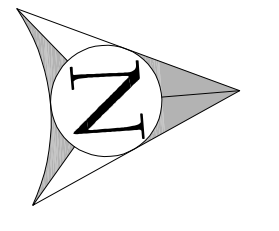
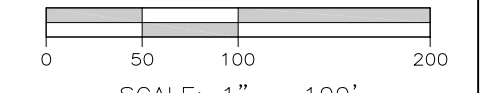


LEGEND

-  **PRWS2**
64726 S.F. WATERSHED BOUNDARY WITH NAME AND AREA
-  SA1 SUB-AREA
-  FLOWPATH
-  DP4 DESIGN POINT
-  CrC (B) SOIL SYMBOL WITH HYDROLOGIC SOIL TYPE



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 SCALE: 1" = 100'

ALFONZETTI ENGINEERING, P.C.
 14 SMITH AVE, MT. KISCO, N.Y. 10549
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SITE DATA	
OWNER/APPLICANT: MADDO MADONNA ARMONK LLC SITE ADDRESS: 3 NORTH CASTLE DR. ARMONK, NEW YORK, 10504 TAX MAP #: 108.03-1-62.1 LOT AREA: 32,547 ACRES ZONING: OSH/RF-MF-SCH	
PROPOSED WATERSHED MAP NOVEMBER 28, 2022	
PROJECT: EAGLE RIDGE TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NEW YORK	
SHEETS 02 OF 02	