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Division of Pennoni

ENGINEERING REPORT

**Princeton Nurseries
Block 102, Lots 5 & 6, and Block 106, Lot 1
Plainsboro Township, Middlesex County, New Jersey
Block 99, Lot 14.04
South Brunswick Township, Middlesex County,
New Jersey**

A handwritten signature in black ink, appearing to read 'Chad Gaulrapp', is positioned above a horizontal line.

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1.0 INTRODUCTION

Van-note Harvey, a division of Pennoni, has been retained to provide preliminary/final site design for a proposed mixed-use development primarily in the Township of Plainsboro within certain improvements in the Township of South Brunswick, Middlesex County, New Jersey. The improvements include retail buildings, hotel, single family homes, townhomes, residential flats, age-restricted apartments, offices, and two clubhouses. The project includes creation of a new roadway network with full public utilities, at-grade and multi-level parking, pedestrian connectivity, recreational facilities, stormwater management system, sanitary sewer pump station, and landscaping and lighting.

The site is the location of the former Princeton Nurseries which includes various vegetative covers, a gravel road (known as Nursery Drive) extending from College Road West into south Brunswick, and stormwater conveyance through the site from road improvements to College Road West and Seminary Drive. This conveyance discharges to a surface detention basin located in South Brunswick just north of the municipal boundary with an existing outfall to Heathcote Brook Tributary (aka Harry's Brook).

The site is bounded to the north by the South Brunswick municipal boundary with dense tree cover; to the east by wooded areas and Harry's Brook stream; to the south by Seminary Drive and College Road West; and to the west by the Barclay Square residential development. The existing site is accessed from College Road and Seminary Drive, and a future proposed access by way of a planned extension of Nursery Drive through South Brunswick, connecting to State Route 1.

2.0 PROJECT DESCRIPTION

Existing Conditions

The project is located with southerly frontage to College Road West and Seminary Drive within the Township of Plainsboro and the Township of South Brunswick. The property can be found on the United States Geological Survey (USGS) 7.5- minute topographic quadrangle for Highstown, New Jersey. A copy of the USGS map is provided as Figure 1. The property is located on Block 102, Lots 5 & 6 and Block 106, Lot 1, Township of Plainsboro and Block 99, Lot 14.04, Township of South Brunswick as shown on the Township of Plainsboro and Township of South Brunswick Tax Maps (Figure 2).

The existing watershed area for this analysis is divided into three (3) sub areas (See sheet CS9001, Appendix H). For this report, the pre-developed calculations were analyzed to three (3) "points of interest" (POI-1, POI-2, and POI-3). Pre-developed runoff hydrographs are located within Appendix A.

Existing Drainage Area #1 (EDA-1) consists of runoff from the grass meadow and wooded areas located on the westerly side of the existing gravel roadway. The runoff from EDA-1 flows in a northwesterly direction toward an existing outfall pipe located at the northwest corner of the site adjacent to the existing sanitary pump station. The Tc flow path is shown from the existing gravel road to the outfall pipe based on the topography which indicates an existing concentrated surface flow along the selected path. The existing stormwater outfall is the analysis point of interest (POI-1) for EDA-1. This conveyance routes stormwater to a basin within the adjacent Barclay Square development.

Existing Drainage Area #2 (EDA-2) consists of a combination of areas consisting of the grass and wooded areas located on the easterly side of the existing gravel roadway, and the area of the College Road West intersection improvements to create the proposed Nursey Drive stub road into the site. The paved intersection and stub road runoff is collected by existing inlets and is routed through storm pipe to the existing stormwater basin located north of the site in South Brunswick. This basin outfalls to Harry's Brook. The overland Tc flow path is shown based on the existing topography as this Tc is longer than the piped conveyance from the intersection to POI-2.

Existing Drainage Area #3 (EDA-3) consists of runoff from the onsite grass-covered berm along the westerly property boundary with the Barclay Square development. The runoff from EDA-3 flows in an easterly direction for the length of the berm to the Barclay Square community (POI-3).

Proposed Conditions

The proposed site development contains a total of 59 basins, (17 bioretention basins, 2 infiltration basins, and 40 subsurface basins (59 total basins) as shown on sheet CS9002, Appendix H "Post Developed Drainage Area Plan".

Proposed Drainage Area #1: The basins located within PDA-1 on the eastern side of the development all ultimately discharge to the existing outfall pipe (POI-1). This drainage area includes the hotel and restaurant lot, the western portion of the building A retail / residential building improvements, the western portion of the future phase lot, and all of the NVR residential development.

Proposed Drainage Area #2: The basin drainage areas within PDA-2 all discharge to Harry's Creek, either through the basin #6 outfall located in South Brunswick, or the basin #30 outfall located upstream of the basin #6 outfall. This drainage area includes the easterly portions of the hotel, Building A, and future phase lot east of Nursery Drive, along with all of nursery drive and all development east of Nursery Drive. The peak reduction analysis is performed at the downstream basin #6 outfall (POI-2). Basin #6 is proposed to be expanded from its existing constructed condition.

Proposed Drainage Area #3: consists of runoff from the onsite grass-covered berm along the westerly property boundary with the Barclay Square development. The runoff from EDA-3 flows in an easterly direction for the length of the berm to the Barclay Square community (POI-3) and remains unchanged from the existing condition.

The Post-Developed Hydrographs are included as Appendix B.

Table 1 below summarizes the pre- vs. post-developed impervious areas onsite.

Table 1 - Project Area Comparison

	Impervious Area* (acre)	Motor Vehicle Surface Area** (acre)	Pervious Area (acre)
Pre-Developed	0.09	1.79	89.55
Post-Developed	26.55	30.51	34.37
Increase	+26.46	+28.72	-55.18

*Roof and sidewalk areas

**Includes porous asphalt areas

3.0 SOIL DATA

The site soils consist of Fallsington bedrock substratum variant loam (FavAr), B/D soil, 0 to 5 percent slopes, Hammonton loamy sand (HbmB), B soil, 0 to 5 percent slopes, Nixon loam (NknA), B soil, 0 to 2 percent slopes, Nixon loam (NknB), B soil, 2 to 5 percent slopes, Nixon moderately well drained variant loam, (NkrA), C soil, 0 to 2 percent slopes, Nixon moderately well drained variant loam, (NkrB), C soil, 2 to 5 percent slopes, Woodstown loam, (WogA), C soil, 0 to 2 percent slopes, as depicted on the United States Department of Agriculture, (USDA) Web Soil Survey of Middlesex County, New Jersey (Figure 3).

4.0 WATERSHED DATA

Based on a review of FEMA Flood Insurance Rate Maps, and NJ GeoWeb, we have made the following determinations near the project limits:

FEMA FIRM panel number 34023C0226F (effective 7/06/2010) indicates the immediate project area is not located within a FEMA flood hazard zone (Zone X). There is a flood hazard area associated with Harry's Creek for which the flood elevation has been determined, and flood hazard limit shown on the plans outside the development area.

5.0 DESIGN CRITERIA

GREEN INFRASTRUCTURE:

To satisfy the groundwater recharge, runoff quality and runoff quantity the project design must utilize green infrastructure BMP's (GI BMP) as identified in Table 5-1 at N.J.A.C. 7:8-5.2 (f) or an alternative stormwater management measure approved in accordance with N.J.A.C. 7:8-5.2(g). The following green infrastructure BMPs from Table 5-1 at N.J.A.C. 7:8-5.2 (b) have been incorporated into the project design:

1. Small Scale Bioretention Basin – Twenty (20) small scale bioretention basins are provided as part of the project design. As required by N.J.A.C. 7:8-5.3 (b), small-scale bioretention basins are subject to a maximum contributory drainage area of 2.5 acres.

The proposed small scale surface infiltration basins have a contributory drainage area of 2.50 acres or less. The proposed green infrastructure BMP complies with N.J.A.C. 7:8-5.3 (b).

2. Pervious paving- Porous asphalt areas are provided as part of the project design. As required by N.J.A.C. 7:8-5.3 (b), area of additional inflow cannot exceed three times the area occupied by the pervious paving systems.

The area of additional inflow does not exceed three times the area occupied by the proposed porous asphalt areas. The proposed green infrastructure BMPs comply with N.J.A.C. 7:8-5.5 (b).

3. Green Infrastructure Manufactured Treatment Device (GI MTD) – GI MTD's are provided as part of the project design. The total suspended solids (TSS) removal rate for GI MTDs is 80% and must receive New Jersey Center for Advanced Technology (NJCAT) verification and NJDEP certification for each type of device.

The proposed GI MTD's provide 80% TSS removal rate and have received NJCAT verification and certification from NJDEP. The proposed green infrastructure BMPs comply with N.J.A.C. 7:8-5.3.

NONSTRUCTURAL MEASURES EMPLOYED IN THE ENGINEERING OF THIS SITE INCLUDE

The below discussion of nonstructural BMP strategies is provided as the primary basis for compliance with the BMP rules, as the NJDEP "Nonstructural Strategies Points System" (NSPS) does not provide an accurate valuation of the BMP design and is no longer required by the NJDEP.

To the maximum extent practicable, nonstructural stormwater management strategies must be incorporated into the design in accordance with N.J.A.C. 7:45-8.4.

1. Protect areas that provide water quality benefits or areas particularly susceptible to erosion of sediment loss.

- The DRCC conservation easement associated with Harry's Brook (17.7 Ac.) will not be disturbed with the exception of the recommended reconstruction of the Basin #6 outfall resulting in a 0.04 Ac. disturbance.
 - Freshwater wetlands on site totally 9.16 Ac. are not proposed to be disturbed.
 - Wetlands buffers on site totaling 7.5 Ac. will not be disturbed with the exception of 0.20 Ac. for grading of a surface stormwater basin up to ½ the width of the buffer. A Transition Area Waiver will be used to provide an equivalent or greater area for conservation adjacent to the same wetlands buffer on site.
 - Construction of the project will comply with the Soil Erosion and Sediment Control Act, NJSA 4:24-39 et seq. and implementing rules.
2. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces.
 - Porous asphalt has been utilized at all residential driveways and many other site locations in lieu of standard impervious pavement (total 9.2 Ac.). Porous asphalt will reduce stormwater runoff, provide water quality treatment and groundwater infiltration.
 - Minimum cartway and parking space widths are utilized in the design.
 3. Maximize the protection of natural drainage features and vegetation.
 - In addition to the response to #1 above, there will not be any disturbance directly to Harry's Brook.
 4. Minimize the decrease in the pre-construction time of concentration.
 - Runoff from the site will be routed through small scale bioretention and infiltration basins to slow the flow of surface runoff, minimizing the decrease in the time of concentration to the point of interest within the watersheds.
 5. Minimize land disturbance including clearing and grading.
 - Although the site design requires significant clearing (as it was previously a tree nursery), and regrading of the project area due to the existing topography, land disturbance has been minimized to the extent practical. Perimeter trees and two existing large arborvitae windrows are designated to be maintained with the proposed development.
 6. Minimize soil compaction.
 - Light construction equipment will be utilized to minimize soil compaction within proposed basin areas.
 - Surface basin bottoms will have sedimentation removed and will be sacrificed as the contributing site areas are being stabilized with vegetation.
 7. Provide low maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers, and pesticides.
 - The landscaping has been designed to encourage retention of stormwater and minimize the need for pesticides and fertilizers.
 8. Provide vegetated open-channel conveyance systems discharge into and through stable vegetated areas.
 - Side yards between single family and townhome buildings are designed with grass-stabilized swales prior to the discharge the inlet structures.

Provide preventative source controls to prevent or minimize the use or exposure of pollutants from development sites in order to prevent or minimize the release of those pollutants into stormwater runoff.

Site design features that help to prevent accumulation of trash and debris in drainage systems;

- **All proposed inlets will comply with the NJPDES storm drain inlet criteria.**
- **All inlets will be fitted with silt sacks for the duration of construction.**

Site design features that help to prevent discharge of trash and debris in drainage systems;

- **All proposed basin outlet structures will contain trash racks in accordance with NJAC 7:8-6.2.**
- **A Stormwater Maintenance Manual has been prepared in accordance with NJAC 7:8-5.8 to address the removal of accumulated trash and debris.**

Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments;

- **Industrial development is not proposed as part of this project. The commercial portions of the development will provide good housekeeping measures including designated dumpster, recycling, and trash compactor enclosures, regular trash and recycling collection, trash receptacles for patron use and regular maintenance of parking and loading areas.**

When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules;

- **Construction of the project will comply with the Soil Erosion and Sediment Control Act, NJSA 4:24-39 et seq. and implementing rules.**
- **The HOA will be tasked with the management of the common open spaces through the preparation of HOA bylaws.**

GROUNDWATER RECHARGE:

Pursuant to the N.J.A.C. 7:8-5.4 (b) groundwater recharge requirements apply if there is either a 0.25 acre increase in impervious area or 1 acre of disturbance. The project disturbs more than 1 acre and increases motor vehicle surfaces by more than 0.25 acres. Therefore, one of the following requirements shall be met to satisfy the standards for groundwater recharge:

(1) 100 percent of the site's average annual pre-developed groundwater recharge volume shall be maintained after development; (2) 100 percent of the difference between the site's pre- and post-developed 2-year runoff volumes shall be infiltrated.

The stormwater management design consists of twenty-two small scale BMP's. The NJ Groundwater Recharge Spreadsheet provides a procedure to solve for smaller BMP's. The following parameters have been entered into the New Jersey Groundwater Recharge Spreadsheet (NJGRS) for each the twenty-two small scale BMP's.

- BMP Area (ABMP) Basin bottom (sq.ft.)

- BMP effective depth (dBMP) (in.)
- Upper Level of BMP (dBMPu) (in.) (lowest orifice elevation – bottom basin el.) (negative value for vegetated, surface recharge BMP, ref. Figure 6-4, Chapter 6, NJ BMP Manual, Appendix G).
- Depth of lower surface of BMP (dEXC) = 0" for vegetated surfaces (ref. Figure 6-4, Chapter 6, NJ BMP Manual, Appendix G).
- Post-D deficit recharge (or desired recharge volume) (Vdef) (impervious area runoff volume – 2-year storm) (cu.ft)
- Post-D impervious area (or target impervious area) (Aimp) (impervious area) (sq.ft)

The spreadsheets were solved for the effective depth (dBMP) to provide the required post-developed recharge deficit (Vdef) within each BMP area. The spreadsheets are included within Appendix E.

RUNOFF QUALITY:

Pursuant to N.J.A.C. 7:8-5.2 (f), the green infrastructure BMP's can be utilized to satisfy the requirements of N.J.A.C. 7:8-5.5 for stormwater runoff quality. Stormwater Management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm by 80 percent of the anticipated load from the developed site. The increase in motor vehicle surface must be treated for 80% TSS reductions.

The water quality standards will apply as the net increase of motor vehicle surface exceeds the limit for a maximum net increase of 0.25 acres for the site. The water quality (WQ) design storm is 1.25 inches of rainfall in 2-hours. In accordance with N.J.A.C. 7:8-5.5, Table 5-4, a one-minute water quality design storm rainfall distribution was utilized for the calculations. Bentley's Pondpack Connect Edition was used to perform the calculations. The design utilizes porous asphalt, bioretention basins and infiltration basins to meet the water quality requirements. As required by NJ BMP Manual, Chapter 9.6, the porous asphalt systems are designed to treat a maximum additional inflow area not to exceed three (3) times the area of the porous asphalt.

The water quality storm volume and volume infiltrated within the bioretention basins and infiltration basin is summarized in Table 2 below.

Table 2 – WQ Storm Volume and Volume Infiltrated

Infiltration Area	Motor Vehicle Impervious Runoff Volume (cf)	Volume Retained & Infiltrated (cf)
Bioretention Basin 1	2,119	2,541
Bioretention Basin 12	380	4,936
UGB 15	914	914
UGB 16	2,053	2,053

Infiltration Area	Motor Vehicle Impervious Runoff Volume (cf)	Volume Retained & Infiltrated (cf)
Bioretention Basin 25	4,655	19,806
Bioretention Basin 26	3,672	4,148
Bioretention Basin 28	1,919	2,148
Bioretention Basin 29	910	398**
Bioretention Basin 35	380	435
Bioretention Basin 36	496	659
Bioretention Basin 45	7,434	7,455
Bioretention Basin 51	1,091	3,038
Bioretention Basin 52	686	725
Bioretention Basin 53	343	995
Bioretention Basin 58	4,034	4,200
UGB 59	1,327	1,327
Infiltration Basin 30	2,044	2,265
UGB2	1,066	1,067
UGB4	1,254	2,536
UGB5	418	418
UGB6	601	601
UGB7	866	3,733
UGB9	801	857
UGB10	570	1,927
UGB11	565	410**
UGB13	342	342
UGB14	380	380
UGB17	648	648
UGB18	1,113	700**
UGB19	413	290**
UGB20	1,125	1,125
UGB21	601	29

Infiltration Area	Motor Vehicle Impervious Runoff Volume (cf)	Volume Retained & Infiltrated (cf)
UGB22	647	647
UGB31	943	843**
UGB32	2,667	2,667
UGB33	342	342
UGB34	379	379
UGB37	381	381
UGB41	190	653
UGB42	305	2,265
UGB43	380	915
UGB44	382	1,045
UGB46	534	245**
UGB47	1,015	610**
UGB48	225	160**
UGB49	340	210**
UGB50	759	450**
UGB54	380	125**
UGB55	3,989	3,989
UGB56	3,547	3,547
UGB57	1,672	1,672
UGB60	1,900	1,900
UGB61	1,981	548**
UGB62	4,842	2,863**
UGB63	1,257	1,257

** Additional treatment provided through porous asphalt

Green Infrastructure Manufactured Treatment Device

Per NJ BMP Manual, Chapter 9.8, pretreatment is a requirement for all small-scale subsurface infiltration basins. Green infrastructure manufactured treatment devices (GI MTD's) are proposed for pretreatment. The GI MTD's must be sized in accordance with its published verification report and have a NJDEP-issued certification letter in order to be accepted for use to meet the green infrastructure requirement specified in N.J.A.C. 7:8-5.3 (Refer to Appendix D for NJDEP-issued certification letter).

Table 2A below indicates the nearest site structure, drainage area to MTD, water quality flow and type of GI MTD. Supporting calculations are in Appendix D - Water Quality MTD Sizing.

Table 2A – Green Infrastructure Manufactured Treatment Device

NEAREST SITE STRUCTURE	DRAINAGE AREA (SF)	WQ FLOW (CFS)	GI MTD SIZING
I-300	1492	0.10	4'x4' Offline Filterra HC
I-87	1587	0.11	4'x4' Offline Filterra HC
I-71/I-74	2224	0.16	4'x4' Offline Filterra HC
I-304	5110	0.36	8'x6' Offline Filterra HC
MH-52	9269	0.65	8'x12' Modular Wetlands Linear
I-368	16669	1.16	8'x20' Modular Wetlands Linear
I-309	7838	0.50	(2) 7.83'x4.5' Offline Filterra HC
MH-15	3009	0.21	4'x8' Modular Wetlands Linear
I-545	5427	0.37	8'x8' Modular Wetlands Linear
I-235	1639	0.11	4'x4' Modular Wetlands Linear
MH-22	1888	0.13	4'x4' Modular Wetlands Linear
I-214	6030	0.42	8'x8' Modular Wetlands Linear
I-219	946	0.07	4'x4' Modular Wetlands Linear
I-470	3638	0.25	4'x8' Modular Wetlands Linear
I-28	331	0.02	4'x4' Offline Filterra HC
I-24	1530	0.11	4'x4' Offline Filterra HC
I-227	1784	0.12	4'x4' Offline Filterra HC
I-131	13411	0.92	8'x16' Modular Wetlands Linear
I-292	12766	0.89	8'x16' Modular Wetlands Linear

RUNOFF QUANTITY:

Post-construction runoff hydrographs for the 2, 10 and 100-year have been analyzed as part of the stormwater management design. Pursuant to N.J.A.C. 7:8-5.6(b) one of the following peak runoff requirements must be met: (1) demonstrate that the post development hydrograph is

less than the pre-development hydrograph at all points during 2, 10 and 100 year storm events; (2) demonstrate that there is no increase in peak runoff rates of stormwater leaving the site for the 2, 10 and 100 year storm events and that the increased volume or change in timing will not increase flood damage at or downstream of the site; or (3) reduce the post-development peak discharge for the 2, 10, and 100-year storm events to release 50%, 75% and 80%, respectively as a result of the proposed development.

The proposed stormwater management system design has been revised to reduce the post-development peak discharge for the 2, 10, and 100-year storm events to release 50%, 75% and 80% (option 3 above) to POI-1 and POI-2. See Appendices A & B for pre- and post-construction hydrographs. POI-3 remains undisturbed.

Table 3 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rates for the current rainfall precipitation depth to POI-1.

Table 3 – Pre-Developed Flow vs. Post-Developed Flow to POI-1 (Current year)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable % of Pre-Developed Peak Flow	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)	Proposed % Reduced
2	14.72	50	7.36	6.60	-8.12	55.1
10	60.03	75	45.02	32.62	-27.41	45.6
100	186.70	80	149.36	110.77	-75.93	40.6

Table 4 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rate for the projected rainfall precipitation depth to POI-1.

Table 4 – Pre-Developed Flow vs. Post-Developed Flow to POI-1 (Projected year 2100)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable % of Pre-Developed Peak Flow	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)	Proposed % Reduced
2	25.96	50	12.98	10.33	-15.63	60.2
10	90.32	75	67.74	52.46	-37.86	41.9
100	279.24	80	223.39	133.20	-146.04	52.2

Table 5 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rate for the current rainfall precipitation depth to POI-2.

Table 5 – Pre-Developed Flow vs. Post-Developed Flow to POI-2 (Current year)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable % of Pre-Developed Peak Flow	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)	Proposed % Reduced
2	8.73	50	4.36	4.36	-4.40	50.4
10	37.09	75	27.81	27.59	-9.50	25.6
100	119.18	80	95.34	47.43	-71.75	60.2

Table 6 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rate for the projected rainfall precipitation depth to POI-2.

Table 6 – Pre-Developed Flow vs. Post-Developed Flow to POI-2 (Projected year 2100)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable % of Pre-Developed Peak Flow	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)	Proposed % Reduced
2	15.45	50	7.73	6.72	-8.73	56.5
10	56.76	75	42.57	26.59	-30.35	46.8
100	182.00	80	145.60	57.11	-125.81	69.1

Table 7 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rate for the current rainfall precipitation depth to POI-3. The area draining towards POI-3 has remained undisturbed.

Table 7 – Pre-Developed Flow vs. Post-Developed Flow to POI-3 (Current year)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)
2	2.17	2.17	1.96	-0.21
10	7.04	7.04	6.68	-0.36
100	20.15	20.15	19.26	-0.34

Table 8 below provides a comparison of the Pre-Developed and Post-Developed peak runoff rate for the projected rainfall precipitation depth to POI-3.

Table 8 – Pre-Developed Flow vs. Post-Developed Flow to POI-3 (Projected year 2100)

Storm (Year)	Pre-Developed Runoff Rate (cfs)	Allowable Post-Developed Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	Runoff Rate Increase from Pre-Developed (cfs)
2	3.42	3.14	3.14	-0.28
10	10.36	9.93	9.93	-0.43
100	29.87	29.27	29.27	-0.50

6.0 TECHNIQUES OF ANALYSIS

In accordance with the stormwater runoff calculation methodology at N.J.A.C. 7:8-5.6, the quantity (volume and rate) of stormwater runoff for pre- and post-developed conditions is calculated based on the USDA NRCS methodology as described in NRCS National Engineering Handbook, Part 630.

Pre- and post-developed times of concentration (Tc) are determined using the hydraulically longest flow path. Curve numbers (CN) for the drainage areas are based on the hydrologic soil group and land use. The developed area is made up of Type B and C soils, and therefore the following CN values were utilized:

Type B soils – Woods 55; Open Space 61 and Impervious 98

Type C soils - Woods 70; Open Space 74 and Impervious 98

The impervious areas were calculated as separate subareas to generate hydrographs without weighted CNs as outlined in the CMP N.J.A.C. 7:50-6.84(a) 6.i (2) and the BMP manual chapter 5.

Using the drainage areas, the Tcs and CNs as input data, *Pond Pack Connect Edition*, a hydrologic/hydraulic software program by Bentley, was utilized to generate the runoff rates and volumes.

7.0 KEY HYDROLOGIC PRINCIPALS

A 24-hour, NOAA _D (Region D) storm distribution was utilized with the following precipitation amounts, within Middlesex County for each storm analyzed. Precipitation adjustment factors are included in the precipitation depths below. (reference Appendix G).

<u>Storm Event</u>	<u>Current</u>	<u>Projected (year 2100)</u>
2 year	3.4 inches	3.9 inches
10 year	5.2 inches	6.2 inches
100 year	8.9 inches	11.5 inches

Water Quality Storm 1.25 inches / 2 hours

8.0 STORMWATER MANAGEMENT

Stormwater management measures are designed so that the post-construction for the peak runoff rates for the 2, 10 and 100-year storm events are 50, 75 and 80 percent, respectively of the pre-construction peak runoff rates. Bentley's Pondpack Connect Edition was used to perform the calculations. Pre- and post-developed drainage area delineations can be found on Sheets CS-9001 and CS-9002 in Appendix H.

Small Scale Bioretention Basin #1

Basin #1 consists of a small-scale bioretention basin. The outlet structure consists of (2) 7.5" dia. orifices, (2) 2' wide rectangular weirs (el. 84.00), (2) 2.5' wide rectangular weirs (el. 84.75), and pre-cast concrete box with a grate (el. 86.00). Basin 1 outflow is routed towards an existing FES along the northwesterly corner of the property. Table 9 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current year rainfall, and Table 9A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected year 2100 rainfall.

Table 9 (Current Rainfall)
Basin #1 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	16.19	6.60	34,546	82.82
10	45.04	32.62	53,838	85.32
100	109.46	107.01	64,479	86.55

Table 9A (Projected year 2100)
Basin #1 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	22.40	10.33	47,192	84.50
10	59.66	52.46	59,348	85.97
100	135.20	119.17	68,532	87.00

Small Scale Subsurface Basin #2

Basin #2 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1.5' wide rectangular weir (el. 86.25) and a 4-foot rectangular weir (el. 87.00). Basin 2 outflow is routed to Basin 12. Table 10 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current year rainfall, and Table 10A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected year 2100 rainfall.

Table 10 (Current Rainfall)
Basin #2 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.15	3.78	4,104	87.03
10	8.94	7.69	4,610	87.30
100	18.58	13.43	5,152	87.58

Table 10A (Projected year 2100)
Basin #2 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.12	4.59	4,219	87.09
10	11.09	9.17	4,753	87.38
100	24.78	13.43	5,152	87.58

Small Scale Subsurface Basin #3

Basin #3 consists of a small-scale subsurface basin consisting of 48-inch HDPE perforated pipe. The outlet structure consists of a pre-cast concrete box with a 0.85-foot-wide rectangular weir (el. 85.51). Basin 3 outflow is routed to Basin 12. Table 11 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 11A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 11 (Current Rainfall)
Basin #3 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.43	0.39	344	85.84
10	2.31	1.76	1,360	86.37
100	11.43	11.02	6,458	88.35

Table 11A (Projected year 2100)
Basin #3 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.82	0.64	538	85.96
10	3.56	2.94	2,142	86.70
100	23.88	18.36	8,482	89.50

Small Scale Subsurface Basin #4

Basin #4 consists of two adjacent small-scale subsurface basins (Basins 4A and 4B) which were modeled together and consist of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot-wide rectangular weir (el. 86.10). Basin 4 outflow is routed to Basin 1. Table 12 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 12A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 12 (Current Rainfall)
Basin #4 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.07	0.81	3,912	86.51
10	4.94	2.48	5,428	86.98
100	8.86	5.43	7,234	87.59

Table 12A (Projected year 2100)
Basin #4 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.57	1.26	4,394	86.66
10	5.96	3.29	5,999	87.16
100	11.58	7.72	8,180	73.55

Small Scale Subsurface Basin #5

Basin #5 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of pre-cast concrete box with an 8" diameter orifice (el. 95.00) and a 4-foot rectangular weir (el. 96.90). Basin 5 outflow is routed to Basin 1. Table 13 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 13A provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 13 (Current Rainfall)
Basin #5 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.96	1.88	2,046	96.59
10	5.76	5.32	2,503	97.29
100	7.58	7.35	2,603	97.45

Table 13A (Projected year 2100)
Basin #5 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.73	2.18	2,271	96.92
10	7.34	6.38	2,555	97.37
100	8.27	7.72	2,621	97.47

Small Scale Subsurface Basin #6

Basin #6 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot-wide rectangular weir (el. 95.00) and a 4-foot rectangular weir (el. 97.45). Basin 6 outflow is routed to Basin 5. Table 14 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 14A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 14 (Current Rainfall)
Basin #6 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.09	1.77	2,091	96.65
10	5.28	4.21	2,635	97.45
100	10.01	4.71	2,638	97.50

Table 14A (Projected year 2100)
Basin #6 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.69	2.11	2,323	97.00
10	6.55	4.74	2,638	97.50
100	13.57	5.31	2,638	97.50

Small Scale Subsurface Basin #7

Basin #7 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of pre-cast concrete box with an 8" diameter orifice (el. 101.50) and a 1-foot-wide rectangular weir (el. 101.82). Basin 7 outflow is routed to Basin 1. Table 15 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 15A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 15 (Current Rainfall)
Basin #7 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.50	0.00	3,150	101.11
10	2.54	0.30	4,168	101.84
100	4.83	3.05	4,882	102.50

Table 15A (Projected year 2100)
Basin #7 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.78	0.01	3,797	101.55
10	3.14	1.03	4,401	102.05
100	6.48	3.05	4,882	102.50

Small Scale Infiltration Basin #8

Basin #8 consists of a small-scale infiltration basin. The outlet structure consists of a pre-cast concrete box with a 10" orifice (el. 109.50), a 1.5-foot-wide rectangular weir (el. 110.75) and pre-cast concrete box with a grate (el. 111.48). Basin 8 outflow is routed to Basin 1. Table 16 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 16A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 16 (Current Rainfall)
Basin #8 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.24	1.20	3,099	110.19
10	5.74	2.17	5,196	110.60
100	11.47	5.04	9,264	111.32

Table 16A (Projected year 2100)
Basin #8 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.95	1.66	2,505	110.35
10	7.24	2.68	5,167	110.85
100	15.86	8.92	10,001	111.66

Small Scale Subsurface Basin #9

Basin #9 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1.5-foot-wide rectangular weir (el. 101.30). Basin 9 outflow is routed to Basin 6. Table 17 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 17A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 17 (Current Rainfall)
Basin #9 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.74	1.37	1,371	101.75
10	2.84	2.39	1,600	101.95
100	5.18	4.58	2,000	102.31

Table 17A (Projected year 2100)
Basin #9 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.04	1.63	1,440	101.81
10	3.47	2.95	1,717	102.05
100	6.87	6.23	2,247	102.54

Small Scale Subsurface Basin #10

Basin #10 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1.5-foot-wide rectangular weir (el. 107.00). Basin 10 outflow is routed to Basin 8. Table 18 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 18A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 18 (Current Rainfall)
Basin #10 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.94	1.84	3,325	107.55
10	4.77	3.23	3,946	107.80
100	8.72	6.45	5,058	108.27

Table 18A (Projected year 2100)
Basin #10 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.44	2.23	3,508	107.62
10	5.82	4.04	4,256	107.93
100	25.10	9.10	5,762	108.60

Small Scale Subsurface Basin #11

Basin #11 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of pre-cast concrete box with (2) 1-foot rectangular weirs (el. 84.98), and (2) 2-foot rectangular weirs (el. 85.25). Basin 11 outflow is routed to Basin 1. Table 19 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 19A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 19 (Current Rainfall)
Basin #11 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.70	3.45	807	85.47
10	7.38	7.15	996	85.69
100	16.44	15.60	1,301	86.06

Table 19A (Projected year 2100)
Basin #11 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.39	5.07	1,014	85.58
10	10.72	10.31	1,262	85.84
100	24.10	22.18	1,636	86.31

Small Scale Bioretention Basin #12

Basin #12 consists of a small-scale bioretention basin. The outlet structure consists of a 1.5-foot-wide rectangular weir (el. 86.15) and (2) 2-foot-wide rectangular weirs (el. 87.00), a 4.25-foot rectangular weir (el. 87.50) and pre-cast concrete box with a grate (el. 89.54) which routes flow to Basin 1. A secondary outflow structure with a grate elev. 88.75, diverts flow to the existing 24" RCP. Table 20 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 20A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 20 (Current Rainfall)
Basin #12 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	12.66	9.29	12,411	87.39
10	30.36	27.92	16,536	88.01
100	76.28	73.10	22,734	88.85

Table 20A (Projected year 2100)
Basin #12 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	16.21	13.25	13,689	87.59
10	41.42	37.55	19,682	88.45
100	98.25	96.14	26,317	89.30

Small Scale Subsurface Basin #13

Basin #13 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot-wide rectangular weir (el. 87.00) and a 4.0-foot rectangular weir (el. 88.86). Basin 13 outflow is routed to Basin 2. Table 21 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 21A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 21 (Current Rainfall)
Basin #13 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.99	1.67	790	87.67
10	3.00	2.59	940	87.94
100	6.44	5.68	1,311	88.63

Table 21A (Projected year 2100)
Basin #13 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.35	1.86	823	87.73
10	3.70	3.03	1,005	88.06
100	8.48	7.08	1,424	88.86

Small Scale Subsurface Basin #14

Basin #14 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of pre-cast concrete box with an 8" diameter orifice (el. 87.23) and a 4-foot rectangular weir (el. 88.40). Basin 14 outflow is routed to Basin 13. Table 22 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 22A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 22 (Current Rainfall)
Basin #14 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.18	0.81	796	87.93
10	1.91	1.12	1,061	88.41
100	3.45	3.00	1,255	88.77

Table 22A (Projected year 2100)
Basin #14 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.38	0.98	824	87.98
10	2.32	1.49	1,112	88.50
100	4.54	4.07	1,346	88.95

Small Scale Subsurface Basin #15

Basin #15 consists of a small-scale subsurface basin. The outlet structure consists of a 1.75-foot-wide rectangular weir (el. 92.63). Basin 15 outflow is routed to Basin 11. Table 23 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 23A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 23 (Current Rainfall)
Basin #15 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.34	2.01	5,230	93.15
10	8.30	4.56	7,445	93.54
100	17.75	11.36	11,481	94.30

Table 23A (Projected year 2100)
Basin #15 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.37	2.61	5,849	93.26
10	10.62	6.01	8,473	93.72
100	25.40	17.11	13,752	94.83

Small Scale Subsurface Basin #16

Basin #16 consists of a small-scale subsurface basin. The outlet structure consists of a 9-inch-wide rectangular weir (el. 94.63). Basin 16 outflow is routed to Basin 15. Table 24 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 24A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 24 (Current Rainfall)
Basin #16 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.46	1.22	8,578	95.29
10	9.19	2.71	12,305	95.76
100	17.42	6.76	18,820	96.71

Table 24A (Projected year 2100)
Basin #16 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.49	1.60	9,655	95.42
10	11.39	3.62	14,125	96.00
100	23.48	10.67	22,336	97.46

Small Scale Subsurface Basin #17

Basin #17 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot-wide rectangular weir (el. 111.50). Basin 17 outflow is routed to existing Basin 6. Table 25 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 25A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 25 (Current Rainfall)
Basin #17 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.99	0.06	7,746	111.54
10	4.77	0.38	9,778	111.75
100	8.51	2.02	14,641	112.27

Table 25A (Projected year 2100)
Basin #17 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.48	0.13	8,153	111.58
10	5.77	0.74	11,038	111.88
100	11.13	3.43	17,517	112.59

Small Scale Subsurface Basin #18

Basin #18 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot rectangular weir (el. 95.00) and a 4-foot rectangular weir (el. 96.50). Basin 18 outflow is routed to Basin 12. Table 26 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 26A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 26 (Current Rainfall)
Basin #18 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.46	3.86	1,692	96.18
10	10.34	10.26	2,210	96.86
100	25.37	23.86	2,626	97.50

Table 26A (Projected year 2100)
Basin #18 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.50	4.73	1,834	96.35
10	13.63	12.91	2,308	97.01
100	33.90	23.86	2,626	97.50

Small Scale Subsurface Basin #19

Basin #19 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with (3) 3.5" dia. orifices (el. 95.03) and a 4-foot rectangular weir (el. 95.50). Basin 19 outflow is routed to Basin 18. Table 27 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 27A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 27 (Current Rainfall)
Basin #19 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.84	2.58	1,343	96.27
10	7.72	6.90	1,938	96.98
100	18.18	17.95	2,436	97.71

Table 27A (Projected year 2100)
Basin #19 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.54	3.24	1,457	96.40
10	10.38	8.95	2,059	97.14
100	24.87	23.62	2,515	97.83

Small Scale Subsurface Basin #20

Basin #20 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 10" dia. orifice (el. 97.72). Basin 20 outflow is routed to Basin 19. Table 28 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 28A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 28 (Current Rainfall)
Basin #20 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.81	2.02	6,097	98.73
10	10.07	6.10	8,172	99.23
100	19.36	15.20	10,268	99.79

Table 28A (Projected year 2100)
Basin #20 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.01	2.85	6,855	98.91
10	12.55	8.37	8,804	99.39
100	26.18	20.88	11,095	100.01

Small Scale Subsurface Basin #21

Basin #21 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1-foot-wide rectangular weir (el. 98.50). Basin 21 outflow is routed to Basin 20. Table 29 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 29A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 29 (Current Rainfall)
Basin #21 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.76	1.61	53	99.30
10	2.97	2.72	72	99.63
100	5.61	5.12	111	100.23

Table 29A (Projected year 2100)
Basin #21 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.12	1.91	59	99.39
10	3.71	3.34	83	99.80
100	7.60	6.82	136	100.59

Small Scale Subsurface Basin #22

Basin #22 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 1.5-foot rectangular weir (el. 108.00). Basin 22 outflow is routed to Basin 12. Table 30 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 30A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 30 (Current Rainfall)
Basin #22 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.21	0.15	6,914	108.07
10	5.47	0.92	9,153	108.34
100	10.40	4.17	13,924	108.95

Table 30A (Projected year 2100)
Basin #22 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.82	0.29	7,443	108.13
10	6.76	1.65	10,552	108.51
100	13.90	6.58	16,332	109.29

Off-Site Small Scale Bioretention Basin #25

Basin #25 consists of a small-scale bioretention basin. The outlet structure consists of a 3" diameter orifice (el. 101.35), a 1.5-foot rectangular weir (el. 102.00) and pre-cast concrete box with a grate (el. 103.26). Basin 25 outflow is routed to existing off-site Basin 6. Table 31 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 31A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 31 (Current Rainfall)
Basin #25 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.58	0.00	15,417	101.07
10	11.68	0.14	27,544	101.83
100	23.16	2.89	42,679	102.69

Table 31A (Projected year 2100)
Basin #25 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.97	0.00	19,204	101.31
10	14.70	0.47	32,638	102.13
100	31.58	6.69	53,285	103.26

Small Scale Bioretention Basin #26

Basin #26 consists of a small-scale bioretention basin. The outlet structure consists of a 1.0-foot rectangular weir (el. 97.80), a 1.5-foot rectangular weir (el. 98.50) and pre-cast concrete box with a grate (el. 99.79). Basin 26 outflow is routed to Basin 30. Table 32 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 32A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 32 (Current Rainfall)
Basin #26 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.08	2.54	9,805	98.62
10	11.25	5.74	12,955	99.02
100	18.90	11.35	17,229	99.52

Table 32A (Projected year 2100)
Basin #26 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	8.32	3.41	10,848	98.76
10	13.36	7.36	14,250	99.17
100	24.35	15.07	19,760	99.79

Small Scale Subsurface Basin #27

Basin #27 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 12" diameter orifice. Basin 27 outflow is routed to Basin 26. Table 33 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 33A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 33 (Current Rainfall)
Basin #27 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.73	1.72	2,408	100.53
10	4.20	2.80	2,911	100.80
100	7.20	4.27	4,161	101.53

Table 33A (Projected year 2100)
Basin #27 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.13	2.05	2,550	100.61
10	4.99	3.21	3,219	100.97
100	9.27	5.32	5,099	102.23

Small Scale Bioretention Basin #28

Basin #28 consists of a small-scale bioretention basin. The outlet structure consists of a 1.25-foot rectangular weir (el. 91.50) and pre-cast concrete box with a grate (el. 94.18). Basin 28 outflow is routed to Harry's Brook. Table 34 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 34A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 34 (Current Rainfall)
Basin #28 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.55	1.16	4,254	91.96
10	10.80	3.92	7,148	92.54
100	19.96	10.29	12,624	93.54

Table 34A (Projected year 2100)
Basin #28 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.73	2.78	6,023	92.32
10	13.27	6.60	9,566	93.00
100	26.81	15.29	16,590	94.19

Small Scale Bioretention Basin #29

Basin #29 consists of a small-scale bioretention basin. The outlet structure consists of a 1.5-foot rectangular weir (el. 94.00) and pre-cast concrete box with a grate (el. 95.90). Basin 29 outflow is routed to Basin 28. Table 35 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 35A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 35 (Current Rainfall)
Basin #29 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.70	3.28	1,025	94.81
10	5.93	5.29	1,335	95.11
100	10.65	9.48	1,989	95.64

Table 35A (Projected year 2100)
Basin #29 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.30	3.84	1,112	94.90
10	7.17	6.41	1,510	95.27
100	13.95	12.57	2,442	95.95

Small Scale Infiltration Basin #30

Basin #30 consists of a small-scale infiltration basin. The outlet structure consists of 2.5" diameter orifice (el. 91.45), a 2.25-foot rectangular weir (el. 92.17), a 4.33-foot rectangular weir (el. 93.52) and pre-cast concrete box with a grate (el. 95.71). Basin 30 outflow is routed to Harry's Brook. Table 36 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 36A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 36 (Current Rainfall)
Basin #30 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	15.31	4.15	42,931	92.87
10	32.09	15.02	73,009	93.76
100	85.68	56.46	119,752	95.06

Table 36A (Projected year 2100)
Basin #30 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	20.01	6.10	49,957	93.09
10	43.40	23.94	86,815	94.15
100	123.23	85.57	144,824	95.71

Small Scale Subsurface Basin #31

Basin #31 consists of a small-scale subsurface basin consisting of Stormtech chambers. The outlet structure consists of a pre-cast concrete box with a 10" diameter orifice (el. 93.10). Basin 31 outflow is routed to Basin 30. Table 37 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 37A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 37 (Current Rainfall)
Basin #31 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.90	1.44	2,818	93.87
10	4.47	2.18	3,722	94.21
100	7.70	3.23	5,799	95.04

Table 37A (Projected year 2100)
Basin #31 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.35	1.67	3,074	93.97
10	5.36	2.48	4,262	94.41
100	9.98	4.01	7,324	95.85

Small Scale Subsurface Basin #32

Basin #32 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1.5-foot rectangular weir (el. 110.50). Basin 22 outflow is routed to Basin 33. Table 38 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 38A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 38 (Current Rainfall)
Basin #32 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	8.10	3.01	10,813	111.26
10	12.77	5.71	14,094	111.67
100	22.46	12.15	19,567	112.44

Table 38A (Projected year 2100)
Basin #32 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	9.41	3.78	11,825	111.39
10	15.38	7.30	15,696	111.88
100	29.29	18.02	22,489	113.02

Small Scale Subsurface Basin #33

Basin #33 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1.5-foot rectangular weir (el. 106.40). Basin 33 outflow is routed to Basin 30. 39 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 39A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 39 (Current Rainfall)
Basin #33 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.20	3.63	2,248	107.26
10	7.86	7.01	3,125	107.74
100	16.12	14.97	4,568	108.63

Table 39A (Projected year 2100)
Basin #33 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.23	4.57	2,516	107.41
10	9.98	8.99	3,553	107.98
100	23.49	22.34	5,421	109.31

Small Scale Subsurface Basin #34

Basin #34 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with an 8" diameter orifice (el. 110.00). Basin 34 outflow is routed to Basin 33. Table 40 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 40A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 40 (Current Rainfall)
Basin #34 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.30	0.35	1,939	110.36
10	2.14	0.79	2,660	110.61
100	3.97	1.47	3,992	111.11

Table 40A (Projected year 2100)
Basin #34 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.53	0.47	2,154	110.44
10	2.63	1.03	3,004	110.72
100	5.28	1.88	4,922	111.59

Small Scale Bioretention Basin #35

Basin #35 consists of a small-scale bioretention basin. The outlet structure consists of a 4" diameter orifice (el. 103.90) and a 3.25-foot rectangular weir (el. 105.75) and pre-cast concrete box with a grate (el. 107.19). Basin 35 outflow is routed to Basin 3. Table 41 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 41A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 41 (Current Rainfall)
Basin #35 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.06	0.39	7,471	104.93
10	3.07	1.21	13,562	105.91
100	11.49	9.14	19,193	106.66

Table 41A (Projected year 2100)
Basin #35 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.71	0.46	9,514	105.27
10	5.35	2.60	14,811	106.09
100	24.47	19.79	24,587	107.32

Small Scale Bioretention Basin #36

Basin #36 consists of a small-scale bioretention basin. The outlet structure consists of a 1.0-foot rectangular weir (el. 98.75) and pre-cast concrete box with a grate (el. 101.04). Basin 36 outflow is routed to Basin 30. Table 42 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 42A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 42 (Current Rainfall)
Basin #36 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.64	1.84	1,504	99.47
10	4.86	3.61	2,070	99.88
100	9.81	7.58	3,257	100.60

Table 42A (Projected year 2100)
Basin #36 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.24	2.32	1,661	99.59
10	6.15	4.66	2,390	100.09
100	13.34	10.43	4,101	101.04

Small Scale Subsurface Basin #37

Basin #35 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with 1.0-foot rectangular weir (el. 104.50). Basin 37 outflow is routed to Basin 30. Table 43 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 43A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 43 (Current Rainfall)
Basin #37 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.29	0.51	1,979	104.80
10	2.16	1.32	2,491	105.07
100	4.07	2.79	3,174	105.45

Table 43A (Projected year 2100)
Basin #37 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.53	0.78	2,165	104.90
10	2.67	1.71	2,692	105.18
100	5.47	3.90	3,596	105.69

Small Scale Subsurface Basin #41

Basin #41 consists of a small-scale bioretention basin. The outlet structure consists of a pre-cast concrete box with an 8" diameter orifice (el. 104.79). Basin 41 outflow is routed to Basin 12. Table 44 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 44A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 44 (Current Rainfall)
Basin #41 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.60	0.55	295	105.24
10	0.96	0.88	345	105.42
100	1.70	1.48	467	105.91

Table 44A (Projected year 2100)
Basin #41 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.70	0.64	309	105.29
10	1.15	1.06	374	105.52
100	2.21	1.85	569	106.33

Small Scale Subsurface Basin #42

Basin #42 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 0.75-foot rectangular weir (el. 96.00). Basin 42 outflow is routed to Basin 30. Table 45 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 44A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 45 (Current Rainfall)
Basin #42 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.10	1.10	2,229	96.61
10	3.40	2.17	2,799	96.97
100	6.41	4.60	3,728	97.61

Table 45A (Projected year 2100)
Basin #42 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.38	1.40	2,411	96.73
10	4.19	2.78	3,066	97.15
100	8.54	6.76	4,277	98.08

Small Scale Subsurface Basin #43

Basin #43 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with 1.0-foot rectangular weir (el. 99.00). Basin 43 outflow is routed to Basin 45. Table 46 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 46A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 46 (Current Rainfall)
Basin #43 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.60	0.00	1,021	98.83
10	1.08	0.25	1,615	99.17
100	3.16	1.95	2,630	99.75

Table 46A (Projected year 2100)
Basin #43- Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.73	0.00	1,298	98.99
10	1.53	0.55	1,877	99.32
100	4.62	3.30	3,157	100.06

Small Scale Subsurface Basin #44

Basin #44 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with 1.0-foot rectangular weir (el. 102.00). Basin 44 outflow is routed to Basin 43. Table 47 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 47A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 47 (Current Rainfall)
Basin #44 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.65	0.00	1,022	101.83
10	1.11	0.15	1,491	102.10
100	2.06	1.12	2,229	102.52

Table 47A (Projected year 2100)
Basin #44 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.78	0.00	1,290	101.98
10	1.37	0.31	1,687	102.21
100	2.73	1.74	2,529	102.69

Small Scale Bioretention Basin #45

Basin #45 consists of a small-scale bioretention basin. The outlet structure consists of a 0.5-foot rectangular weir (el. 97.08), (2) 3-foot rectangular weirs (el. 98.75) and pre-cast concrete box with a grate (el. 100.44). Basin 42 outflow is routed to Basin 30. Table 48 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 48A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 48 (Current Rainfall)
Basin #45 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	10.88	2.32	26,406	98.42
10	20.88	9.19	37,937	99.16
100	44.99	32.40	52,126	99.99

Table 48A (Projected year 2100)
Basin #45- Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	13.54	3.29	31,581	98.76
10	26.91	14.27	41,744	99.38
100	65.26	48.62	60,408	100.44

Small Scale Subsurface Basin #46

Basin #46 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 10" diameter orifice (el. 103.50). Basin 46 outflow is routed to Basin 45. Table 49 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 49A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 49 (Current Rainfall)
Basin #46 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.14	0.99	418	104.11
10	1.88	1.63	536	104.35
100	3.48	2.70	844	104.97

Table 49A (Projected year 2100)
Basin #46 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.34	1.18	451	104.18
10	2.31	1.99	607	104.49
100	4.65	3.40	1,144	105.60

Small Scale Subsurface Basin #47

Basin #47 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 10" diameter orifice (el. 108.50). Basin 47 outflow is routed to Basin 20. Table 50 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 50A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 50 (Current Rainfall)
Basin #47 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.86	1.08	1,578	109.15
10	3.04	1.85	2,092	109.44
100	5.60	3.00	3,411	110.22

Table 50A (Projected year 2100)
Basin #47 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.19	1.32	1,723	109.23
10	3.74	2.19	2,405	109.62
100	7.51	3.81	4,524	111.02

Small Scale Subsurface Basin #48

Basin #48 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 15" diameter orifice (el. 101.50). Basin 48 outflow is routed to Basin 20. Table 51 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 51A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 51 (Current Rainfall)
Basin #48 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.73	0.62	311	101.91
10	1.22	1.08	364	102.05
100	2.31	2.07	464	102.29

Table 51A (Projected year 2100)
Basin #48 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	0.87	0.75	326	101.95
10	1.53	1.33	394	102.12
100	3.12	2.84	530	102.45

Small Scale Subsurface Basin #49

Basin #49 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 15" diameter orifice (el. 101.50). Basin 49 outflow is routed to Basin 20. Table 52 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 52A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 52 (Current Rainfall)
Basin #49 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.14	1.04	373	103.87
10	1.96	1.86	458	104.07
100	3.76	3.64	604	104.43

Table 512A (Projected year 2100)
Basin #49 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.36	1.24	399	103.93
10	2.43	2.32	500	104.14
100	5.06	4.93	703	104.67

Small Scale Subsurface Basin #50

Basin #50 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 10" diameter orifice (el. 102.00). Basin 50 outflow is routed to Basin 45. Table 53 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 53A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 53 (Current Rainfall)
Basin #50 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.30	1.13	690	102.66
10	2.11	1.81	819	102.92
100	3.84	2.92	1,169	103.66

Table 53A (Projected year 2100)
Basin #50 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.52	1.33	726	102.73
10	2.57	2.15	903	103.09
100	5.10	3.76	1,500	104.46

Small Scale Bioretention Basin #51

Basin #51 consists of a small-scale bioretention basin. The outlet structure consists of a pre-cast concrete box with a 1.5-foot rectangular weir (el. 103.00). Basin 51 outflow is routed to Basin 3. Table 54 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 54A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 54 (Current Rainfall)
Basin #51 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.48	0.43	3,716	103.19
10	4.64	2.23	5,317	103.62
100	9.68	6.21	7,824	104.24

Table 54A (Projected year 2100)
Basin #51 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.08	0.82	4,160	103.31
10	6.02	3.40	6,119	103.83
100	13.64	9.03	9,352	104.59

Small Scale Bioretention Basin #52

Basin #52 consists of a small-scale bioretention basin. The outlet structure consists of a 1.0-foot rectangular weir (el. 100.62) and pre-cast concrete box with a grate (el. 102.03). Basin 52 outflow is routed to Basin 12. Table 55 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 55A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 55 (Current Rainfall)
Basin #52 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.50	0.86	1,429	101.05
10	2.66	1.68	1,887	101.29
100	5.29	3.59	2,814	101.74

Table 55A (Projected year 2100)
Basin #52 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.82	1.08	1,565	101.12
10	3.37	2.19	2,144	101.43
100	7.29	5.03	3,476	102.03

Small Scale Bioretention Basin #53

Basin #53 consists of a small-scale bioretention basin. The outlet structure consists of a 1.0-foot rectangular weir (el. 105.45) and pre-cast concrete box with a grate (el. 106.74). Basin 53 outflow is routed to Basin 12. Table 56 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 56A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 56 (Current Rainfall)
Basin #53 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.24	0.68	1,542	105.81
10	2.25	1.45	1,962	106.06
100	4.57	3.12	2,775	106.48

Table 56A (Projected year 2100)
Basin #53 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.51	0.91	1,672	105.89
10	2.87	1.89	2,184	106.18
100	6.33	4.38	3,363	106.74

Small Scale Subsurface Basin #54

Basin #54 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 12" diameter orifice (el. 99.50). Basin 54 outflow is routed to Basin 12. Table 57 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 57A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 57 (Current Rainfall)
Basin #54 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.13	1.01	402	100.08
10	1.86	1.74	498	100.29
100	3.43	3.18	667	100.71

Table 57A (Projected year 2100)
Basin #54 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.33	1.21	431	100.14
10	2.28	2.16	546	100.40
100	4.55	4.08	826	101.17

Small Scale Subsurface Basin #55

Basin #55 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1.0-foot rectangular weir (el. 106.79) and a 2.0-foot rectangular weir (el. 107.50). Basin 55 outflow is routed to Basin 12. Table 58 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 58A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 58 (Current Rainfall)
Basin #55 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.73	1.49	13,547	107.41
10	12.27	4.40	18,212	107.83
100	21.82	11.98	24,415	108.45

Table 58A (Projected year 2100)
Basin #55 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	8.97	2.13	15,083	107.55
10	14.80	6.35	20,201	108.02
100	28.51	17.82	27,467	108.82

Small Scale Subsurface Basin #56

Basin #56 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1.0-foot rectangular weir (el. 111.00) and a 2.0-foot rectangular weir (el. 112.50). Basin 56 outflow is routed to Basin 45. Table 59 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 59A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 59 (Current Rainfall)
Basin #56 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.42	0.29	17,024	111.19
10	11.76	1.24	23,349	111.55
100	20.85	4.58	35,802	112.35

Table 59A (Projected year 2100)
Basin #56 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	8.62	0.48	18,773	111.29
10	14.19	1.99	26,903	111.76
100	27.24	8.61	42,333	112.83

Small Scale Subsurface Basin #57

Basin #57 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 0.75-foot rectangular weir (el. 112.50). Basin 57 outflow is routed to Basin 45. Table 60 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 60A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 60 (Current Rainfall)
Basin #57 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.00	0.00	9,478	112.31
10	4.72	0.10	12,531	112.62
100	8.30	1.00	16,761	113.08

Table 60A (Projected year 2100)
Basin #57 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.46	0.00	11,058	112.47
10	5.66	0.25	13,404	112.71
100	10.77	2.18	20,149	113.48

Small Scale Bioretention Basin #58

Basin #58 consists of a small-scale bioretention basin. The outlet structure consists of a 0.50-foot rectangular weir (el. 107.15), a 1.50-foot rectangular weir (el. 108.75), and pre-cast concrete box with a grate (el. 109.98). Basin 58 outflow is routed to Basin 59. Table 61 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 61A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 61 (Current Rainfall)
Basin #58 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.37	1.02	11,619	107.92
10	10.92	2.61	17,953	108.60
100	20.86	8.58	27,644	109.53

Table 61A (Projected year 2100)
Basin #58 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	7.68	1.43	13,354	108.12
10	13.72	3.81	20,969	108.91
100	28.40	13.28	32,679	109.98

Small Scale Subsurface Basin #59

Basin #59 consists of a small-scale subsurface basin. The outlet structure consists of a 1.25-foot rectangular weir (el. 105.00), a 1.50-foot rectangular weir (el. 105.50), and a 3.00-foot rectangular weir (el. 106.50). Basin 59 outflow is routed to Basin 35. Table 62 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 62A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 62 (Current Rainfall)
Basin #59 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.88	0.75	18,129	105.07
10	9.43	2.74	31,742	105.93
100	20.62	9.20	45,015	106.76

Table 62A (Projected year 2100)
Basin #59 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	6.20	0.99	23,494	105.41
10	12.25	4.15	35,506	106.16
100	30.33	22.44	51,899	107.51

Small Scale Subsurface Basin #60

Basin #60 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 1-foot rectangular weir (el. 112.10). Basin 60 outflow is routed to Basin 45. Table 63 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 63A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 63 (Current Rainfall)
Basin #60 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.77	0.35	9,751	112.33
10	7.63	1.47	13,416	112.71
100	13.63	4.61	19,770	113.43

Table 63A (Projected year 2100)
Basin #60 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.54	0.61	10,727	112.43
10	9.19	2.26	15,372	112.93
100	17.79	7.14	23,108	113.88

Small Scale Subsurface Basin #61

Basin #61 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with an 8" diameter orifice (el. 108.25). Basin 61 outflow is routed to Basin 45. Table 64 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 64A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 64 (Current Rainfall)
Basin #61 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	1.87	0.86	2,004	108.89
10	2.95	1.30	2,667	109.18
100	5.19	1.91	4,169	109.88

Table 64A (Projected year 2100)
Basin #61 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	2.17	1.02	2,186	108.97
10	3.54	1.48	3,057	109.36
100	6.76	2.31	5,329	110.48

Small Scale Subsurface Basin #62

Basin #62 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with an 8" diameter orifice (el. 108.50), a 1.0-foot rectangular weir (el. 110.00). Basin 62 outflow is routed to Basin 45. Table 65 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 65A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 65 (Current Rainfall)
Basin #62 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.03	0.65	9,358	109.03
10	7.86	1.24	13,495	109.38
100	13.75	2.10	21,729	110.13

Table 65A (Projected year 2100)
Basin #62 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	5.80	0.85	10,525	109.13
10	9.42	1.45	15,775	109.58
100	17.84	3.60	26,174	110.59

Small Scale Subsurface Basin #63

Basin #63 consists of a small-scale subsurface basin. The outlet structure consists of a pre-cast concrete box with a 0.83-foot rectangular weir (el. 105.00) and a 1.75-foot rectangular weir (el. 106.00). Basin 63 outflow is routed to Basin 45. Table 65 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 65A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 65 (Current Rainfall)
Basin #63 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	3.54	0.63	6,612	105.39
10	5.45	1.80	8,895	105.80
100	9.35	5.02	11,697	106.35

Table 65A (Projected year 2100)
Basin #63 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	4.06	0.93	7,326	105.52
10	6.48	2.42	9,846	105.98
100	12.03	7.63	12,898	106.61

Off-site Bioretention Basin #6

Off-site Basin #6 consists of a previously approved, partially constructed bioretention basin. The basin will be expanded to its previously approved design. Off-site Basin 6 outflow is currently routed through an existing outlet structure to Harry's Brook. No changes to the existing outfall structure are proposed. Table 66 below provides a summary of the basin inflow rates, outflow rates, storage volumes and elevations for the current rainfall and Table 66A provides summary of the basin inflow rates, outflow rates, storage volumes and elevations for the projected rainfall.

Table 66 (Current Rainfall)
Off-site Basin #6 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	32.33	0.36	150,189	91.38
10	53.56	3.75	188,159	91.91
100	102.51	21.27	290,239	93.24

Table 66A (Projected year 2100)
Off-site Basin #6 - Proposed Basin Parameters

Storm (year)	Peak Inflow (cfs)	Peak Outflow Routed (cfs)	Storage Volume (cf)	Peak Elevations (ft)
2	38.18	0.97	161,152	91.54
10	66.19	7.19	213,062	92.25
100	141.36	37.71	364,922	94.14

9.0 GROUNDWATER MOUNDING

A groundwater mounding (GWM) analysis has been performed to determine the height and range of groundwater mounding beneath the stormwater infiltration facility.

The U.S. Geological Survey (USGS), in coordination with N.J. Department of Environmental Protection developed a report entitled “Simulation of Groundwater Mounding Beneath Hypothetical Stormwater Infiltration Basins”, this report outlines the method utilized for analysis of groundwater mounding.

As spreadsheet was then developed by USGS to solve the Hantush equation, referred to as the Hantush Spreadsheet, which calculates the maximum height of the mounding formed and assumes all groundwater flow is horizontal above an infinite aquifer.

The maximum height of mounding occurs when the entire volume of runoff has been infiltrated into the subsoil through the bottom of the infiltration basin. Adjustment of the recharge rate to a lower value allows slower infiltration of runoff and more time for the infiltrated runoff to dissipate into the saturated zone. A reduced recharge rate will have a smaller mounding height but result in a longer duration of infiltration period. Several trials of different reduced recharge rates may be needed to find which recharge rate works. The duration of infiltration period based on the reduced recharge rate may not exceed 72 hours.

Note: All basins infiltrate in less than 72 hours.

Utilizing the Hantush method and minimum input model parameters in accordance with NJ BMP Manual, Groundwater Table Hydraulic Assessment Guide for Infiltration BMP's, Chapter 13, the maximum height and range of the groundwater mound was calculated (Refer to the Appendix E for Hantush GWM spreadsheet). Note that the Hantush method is uses conservative values for the horizontal hydraulic conductivity (Kh) in the calculations. Limiting Kh to the recharge rate results.

A higher Kh would result in a flatter curve, less mounding height and a greater horizontal distance with hydraulic conductive zone effects further out.

Duration of Infiltration Period, $t = \frac{\text{volume of runoff to be infiltrated (cf)}^*}{\text{Infiltration area (sf) x recharge rate (ft/day)}}$

Refer to Appendix E for groundwater mounding calculations.

10.0 STORM SEWER DESIGN

Storm sewer design consists of Type “B” and “E” inlets, manholes, and HDPE and RCP storm pipes. All proposed conveyance systems have been sized to accommodate the 25-year storm event (Appendix F). Rainfall intensities are based on NOAA data for Township of Plainsboro and Township of South Brunswick, NJ (Appendix G). The infrastructure is depicted on sheet CS9002, Inlet Drainage Area Plan (Appendix H).

11.0 SOIL EROSION AND SEDIMENT CONTROL

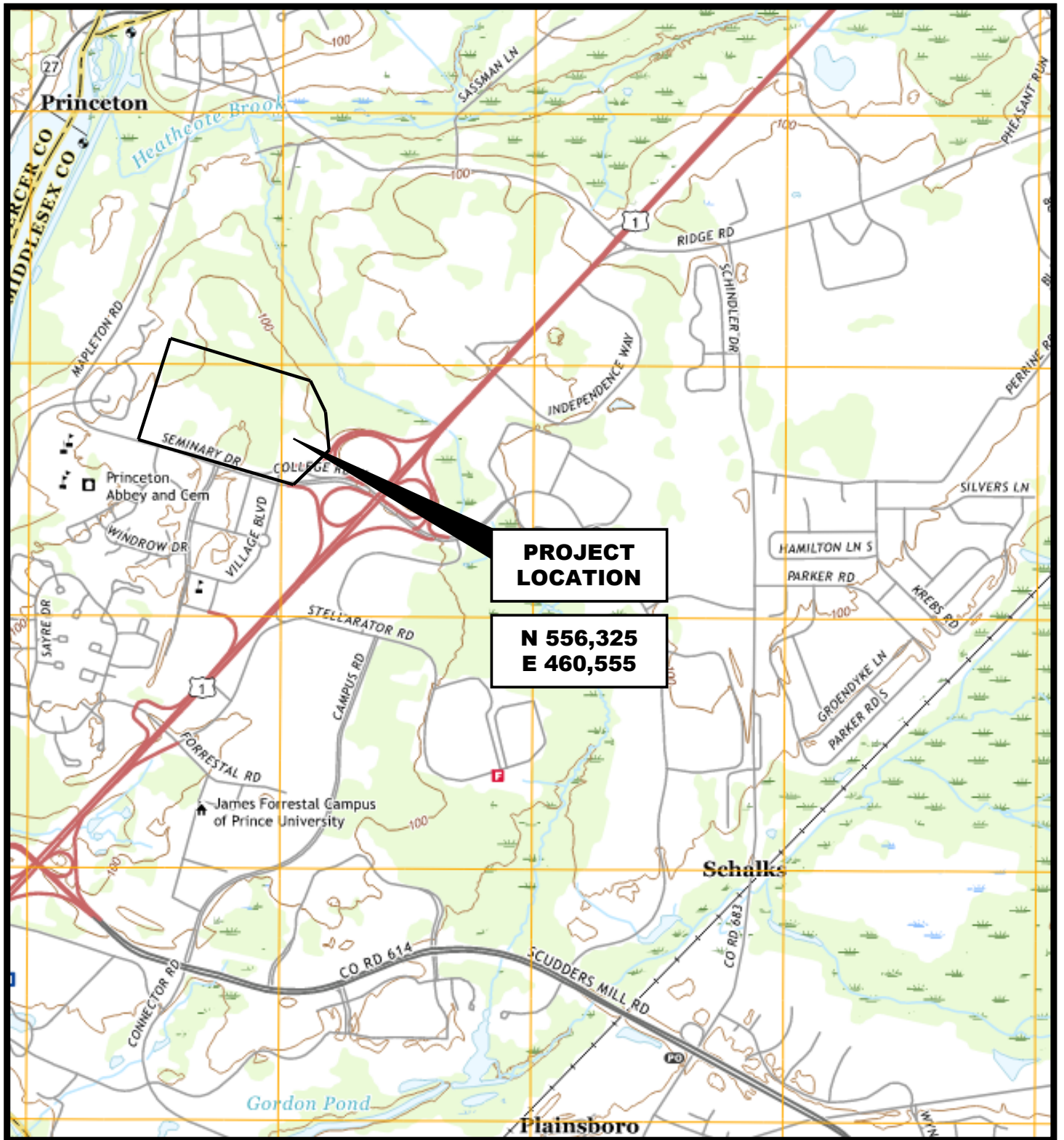
The project will comply with the minimum design and performance standards for erosion control established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules. Anticipated BMP's to be included in the Soil Erosion and Sediment Control Plan will include, structural and non-structural soil erosion BMP's to be implemented during construction, including: minimizing the area of disturbance, placement of silt fencing around the limit of disturbance, temporary soil stockpiles surrounded with silt fencing, temporary vegetative cover standards, inlet filter covers over all existing and proposed stormwater inlets, and an anti-tracking stabilized construction entrance (see Dwg. CS8001). The project will be submitted to the Freehold Soil Conservation District for certification of a Soil Erosion and Sediment Control Plan prior to commencement of construction.

12.0 CONCLUSION

Pursuant to N.J.A.C. 7:8-5, the proposed stormwater management system has been designed such that:

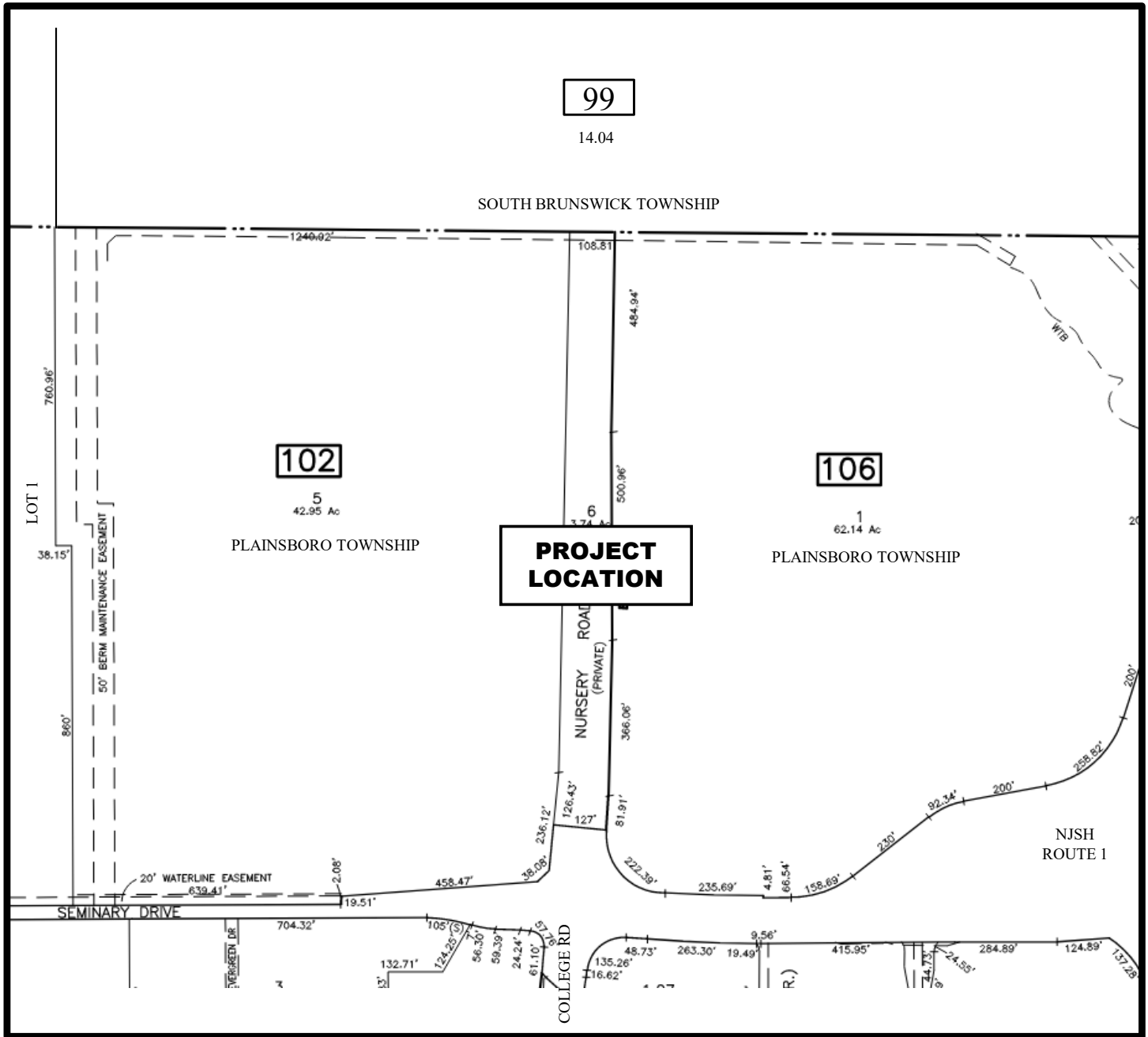
- Post-construction for the peak runoff rates for the 2, 10 and 100-year storm events are no greater than 50, 75 and 80 percent, respectively of the pre-construction peak runoff rates for developed areas.
- The site has been designed to provide TSS removal for the motor vehicle surface area at a rate of 80% utilizing small scale green infrastructure BMP's such as porous asphalt, bioretention basins, infiltration basins and subsurface infiltration basins.
- Groundwater recharge has been met by infiltrating 100 percent of the site's average annual pre-developed groundwater recharge volume after development. The water will be infiltrated within Basins 1 through 22.

Exhibits



USGS Quad Map, Hightstown, NJ

		PRINCETON NURSERIES		
		BLOCK 102, LOTS 5 & 6, BLOCK 106, LOT 1, PLAINSBORO TOWNSHIP BLOCK 99, LOT 14.04, SOUTH BRUNSWICK TOWNSHIP MIDDLESEX COUNTY, NEW JERSEY		
Job No.	WRNUL23001	Scale:	1”=2,000’	Figure 1 – Location Map

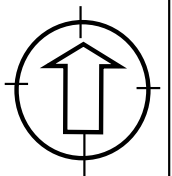


Plainsboro Twp, Tax Map Plate 1
South Brunswick, Tax Map Plate 23



PRINCETON NURSERIES

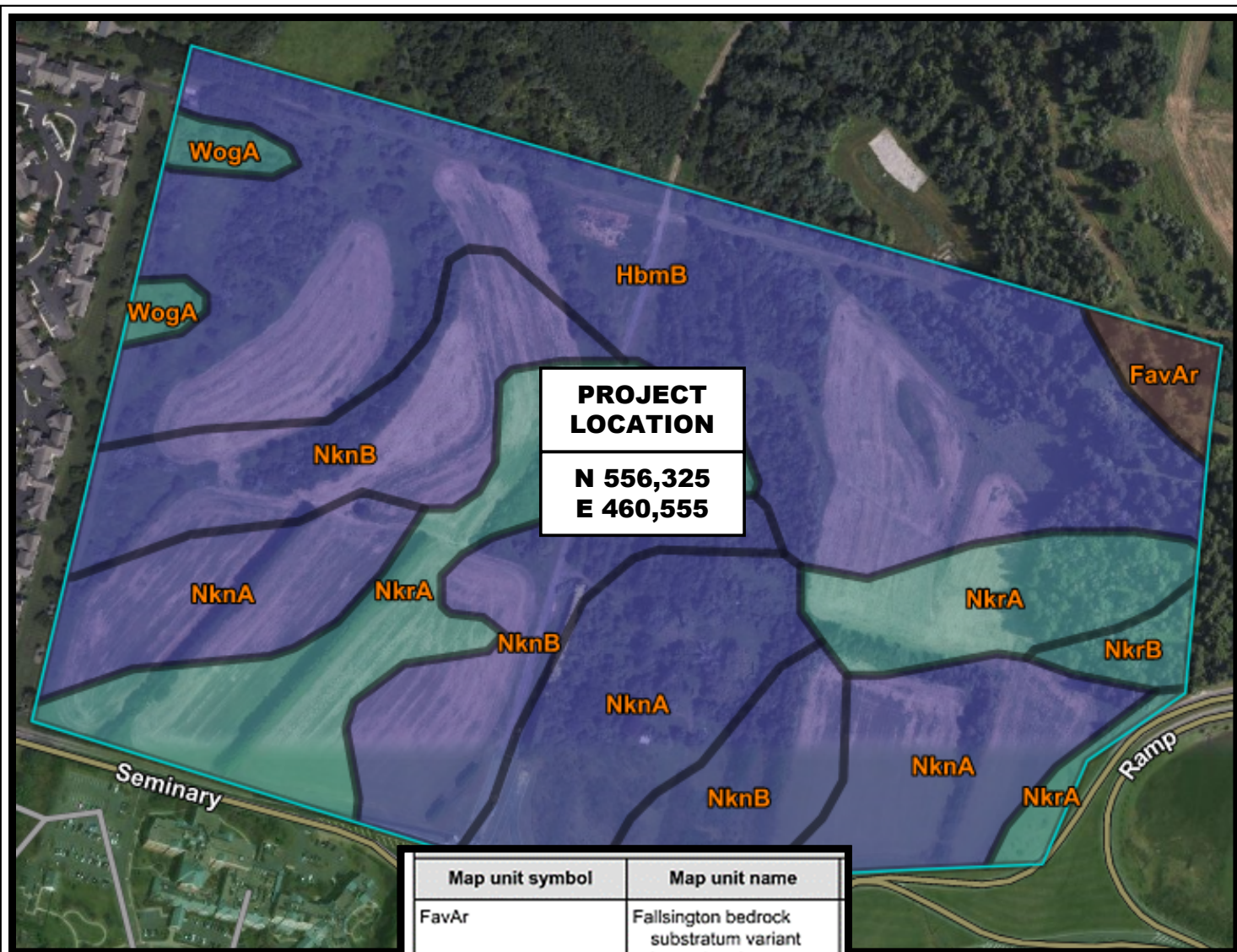
BLOCK 102, LOTS 5 & 6, BLOCK 106, LOT 1, PLAINSBORO TOWNSHIP
BLOCK 99, LOT 14.04, SOUTH BRUNSWICK TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY



Job No. WRNUL23001

Scale: NTS

Figure 2 – Tax Map



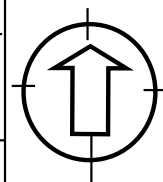
Map unit symbol	Map unit name
FavAr	Fallsington bedrock substratum variant loam, 0 to 2 percent slopes, rarely flooded
HbmB	Hammonton loamy sand, 0 to 5 percent slopes
NknA	Nixon loam, 0 to 2 percent slopes
NknB	Nixon loam, 2 to 5 percent slopes
NkrA	Nixon moderately well drained variant loam, 0 to 2 percent slopes
NkrB	Nixon moderately well drained variant loam, 2 to 5 percent slopes
WogA	Woodstown loam, 0 to 2 percent slopes, Northern Coastal Plain

NRCS WebSoil Survey, Middlesex County, NJ



PRINCETON NURSERIES

BLOCK 102, LOTS 5 & 6, BLOCK 106, LOT 1, PLAINSBORO TOWNSHIP
BLOCK 99, LOT 14.04, SOUTH BRUNSWICK TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY



Job No. WRNUL23001

Scale: NTS

Figure 3 – Soils Map

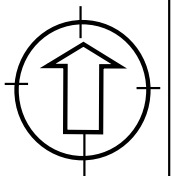


FEMA Panel Number 34023C0226F, effective 7/6/2010 , Plainsboro Township, NJ



PRINCETON NURSERIES

BLOCK 102, LOTS 5 & 6, BLOCK 106, LOT 1 , PLAINSBORO TOWNSHIP
BLOCK 99, LOT 14.04, SOUTH BRUNSWICK TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY



Job No. WRNUL23001

Scale: NTS

Figure 4 – FEMA Map

Appendix A

CN Area Collection - EDA-1 Imp (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Gravel (w/ right-of- way) - Soil B	85.000	0.350	0.0	0.0
Impervious Areas - Paved; curbs and storm sewers - Soil B	98.000	0.150	0.0	0.0

CN Area Collection - EDA-1 Pervious (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Meadow - cont. grass (non grazed) - ---- - Soil B	58.000	40.460	0.0	0.0
Grass/Meadow C soils	71.000	2.010	0.0	0.0
Woods B soil	55.000	0.540	0.0	0.0

CN Area Collection - EDA-2 Imp (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious Areas - Gravel (w/ right-of- way) - Soil B	85.000	0.200	0.0	0.0
Impervious Areas - Paved; curbs and storm sewers - Soil B	98.000	0.300	0.0	0.0

CN Area Collection - EDA-2 Pervious (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Grass/Meadow B soil	58.000	20.900	0.0	0.0
Woods B soil	55.000	15.200	0.0	0.0
Grass/Meadow C soil	71.000	2.600	0.0	0.0
Woods C soil	70.000	3.000	0.0	0.0

CN Area Collection - EDA-3 Pervious (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil C	74.000	0.790	0.0	0.0
Woods - good - Soil B	55.000	0.500	0.0	0.0
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	2.600	0.0	0.0

CN Area Collection - EDA-6 Imp (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Impervious vehicular	98.000	0.790	0.0	0.0
Impervious non vehicular	98.000	0.090	0.0	0.0

CN Area Collection - SBruns-6 PER (Catchment)

Description	CN	Area (acres)	Percent Connected Impervious Area (%)	Percent Unconnected Impervious Area (%)
Basin 6 area	61.000	1.910	0.0	0.0
Woods	55.000	2.530	0.0	0.0
Grass B soil	61.000	0.850	0.0	0.0
Grass C soil	74.000	0.030	0.0	0.0

PRE-DEVELOPED
CURRENT RAINFALL

pre-developed current

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
EDA-1 Pervious	2YR	2	1.617	12.150	13.60
EDA-1 Pervious	10YR	10	4.837	12.150	58.14
EDA-1 Pervious	100YR	100	14.260	12.150	183.17
EDA-2 Pervious	2YR	2	1.567	12.350	8.32
EDA-2 Pervious	10YR	10	4.689	12.300	36.31
EDA-2 Pervious	100YR	100	13.823	12.300	117.80
EDA-2 Imp	2YR	2	0.110	12.100	1.40
EDA-2 Imp	10YR	10	0.183	12.100	2.27
EDA-2 Imp	100YR	100	0.340	12.100	4.06
EDA-1 Imp	2YR	2	0.094	12.150	1.11
EDA-1 Imp	10YR	10	0.165	12.150	1.90
EDA-1 Imp	100YR	100	0.320	12.150	3.53
EDA-3 Pervious	2YR	2	0.198	12.150	2.17
EDA-3 Pervious	10YR	10	0.531	12.100	7.04
EDA-3 Pervious	100YR	100	1.449	12.100	20.15
EDA-6 Imp	2YR	2	0.232	12.100	3.07
EDA-6 Imp	10YR	10	0.364	12.100	4.72
EDA-6 Imp	100YR	100	0.642	12.100	8.19
SBruns-6 PER	2YR	2	0.184	12.200	1.20
SBruns-6 PER	10YR	10	0.568	12.200	5.72
SBruns-6 PER	100YR	100	1.709	12.150	19.09

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
EPOI-1	2YR	2	1.711	12.150	14.72
EPOI-1	10YR	10	5.002	12.150	60.03
EPOI-1	100YR	100	14.579	12.150	186.70
EPOI-2 (Harry's Br)	2YR	2	1.677	12.350	8.73
EPOI-2 (Harry's Br)	10YR	10	4.872	12.300	37.09
EPOI-2 (Harry's Br)	100YR	100	14.562	12.300	119.18
EPOI-3	2YR	2	0.198	12.150	2.17
EPOI-3	10YR	10	0.531	12.100	7.04
EPOI-3	100YR	100	1.449	12.100	20.15
EDA2	2YR	2	1.677	12.350	8.73
EDA2	10YR	10	4.872	12.300	37.09
EDA2	100YR	100	14.163	12.300	119.18

Pond Summary

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pre-developed current

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
EX BASIN 6 (IN)	2YR	2	0.416	12.100	3.62	(N/A)	(N/A)
EX BASIN 6 (OUT)	2YR	2	0.000	0.000	0.00	89.32	0.412
EX BASIN 6 (IN)	10YR	10	0.932	12.100	9.03	(N/A)	(N/A)
EX BASIN 6 (OUT)	10YR	10	0.000	0.000	0.00	89.70	0.927
EX BASIN 6 (IN)	100YR	100	2.351	12.100	23.86	(N/A)	(N/A)
EX BASIN 6 (OUT)	100YR	100	0.399	24.150	0.16	90.62	2.234

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pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.79 ft/s
Segment Time of Concentration	0.007 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours
Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
S= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
S= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.79 ft/s
Segment Time of Concentration	0.007 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours
Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
S= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.79 ft/s
Segment Time of Concentration	0.007 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours
Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

$(Lf / V) / 3600$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.33 ft/s
Segment Time of Concentration	0.071 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	440.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours
Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.134 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$\text{Unpaved surface:}$$
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$\text{Paved Surface:}$$
$$V = 20.3282 * (S^{.48} * 0.5)$$
$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$
$$\text{Time of concentration, hours}$$

Where:

n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.33 ft/s
Segment Time of Concentration	0.071 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	440.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours
Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.134 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.486} * (2/3)) * (S^{.486 * 0.5})) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.486 * 0.5})$$

Paved Surface:
$$V = 20.3282 * (S^{.486 * 0.5})$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.486}) / ((P^{.486 * 0.5}) * (S^{.486 * 0.4})))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.33 ft/s
Segment Time of Concentration	0.071 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	440.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours

Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.134 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =

Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$

Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.70 ft/s
Segment Time of Concentration	0.040 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.106 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.70 ft/s
Segment Time of Concentration	0.040 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.106 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.486} * (2/3)) * (S^{.486 * 0.5})) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.486 * 0.5})$$

Paved Surface:
$$V = 20.3282 * (S^{.486 * 0.5})$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.486}) / ((P^{.486 * 0.5}) * (S^{.486 * 0.4})))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.70 ft/s
Segment Time of Concentration	0.040 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.106 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.486} * (S^{.483} * (2/3)) * (S^{.48} * -.0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf^{.48} * -.0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf^{.48} * -.0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * -.0.8)) / ((P^{.48} * .5) * (Sf^{.48} * .4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.231 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.375 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.231 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.375 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.231 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.375 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.34 ft/s
Segment Time of Concentration	0.057 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.094 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$\text{Unpaved surface:}$$
$$V = 16.1345 * (Sf**0.5)$$
$$\text{Paved Surface:}$$
$$V = 20.3282 * (Sf**0.5)$$
$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.34 ft/s
Segment Time of Concentration	0.057 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.094 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.34 ft/s
Segment Time of Concentration	0.057 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.094 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$\text{Unpaved surface:}$$
$$V = 16.1345 * (Sf**0.5)$$
$$\text{Paved Surface:}$$
$$V = 20.3282 * (Sf**0.5)$$
$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.97 ft/s
Segment Time of Concentration	0.004 hours
Segment #2: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.056 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.97 ft/s
Segment Time of Concentration	0.004 hours
Segment #2: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.056 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.97 ft/s
Segment Time of Concentration	0.004 hours

Segment #2: TR-55 Channel Flow

Flow Area	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.056 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{**}(2/3)) * (S^{**}0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{**0.8})) / ((P^{**0.5}) * (S^{**0.4}))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.175 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.192 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$
 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.175 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.192 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.175 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.192 hours

pre-developed current

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$
Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed current

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.171 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.153 hours
Flow (Peak, Computed)	1.12 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.11 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	1.2 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.3 in
Runoff Volume (Pervious)	0.094 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.094 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

pre-developed current

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.31 ft ³ /s
Unit peak time, Tp	0.114 hours
Unit receding limb, Tr	0.456 hours
Total unit time, Tb	0.570 hours

pre-developed current

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event	10yr Current NOAA D
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.171 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.153 hours
Flow (Peak, Computed)	1.91 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.90 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Previous)	1.2 in
Maximum Retention (Previous, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.0 in
Runoff Volume (Previous)	0.165 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.165 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	3.31 ft ³ /s
Unit peak time, T _p	0.114 hours
Unit receding limb, T _r	0.456 hours
Total unit time, T _b	0.570 hours

pre-developed current

Subsection: Unit Hydrograph Summary
Label: EDA-1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.171 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.153 hours
Flow (Peak, Computed)	3.55 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	3.53 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	1.2 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.7 in
Runoff Volume (Pervious)	0.320 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.320 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.31 ft ³ /s
Unit peak time, Tp	0.114 hours
Unit receding limb, Tr	0.456 hours
Total unit time, Tb	0.570 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.134 hours
Area (User Defined)	43,010 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	13.61 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	13.60 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	43,010 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	1.617 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.617 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	363.68 ft ³ /s
Unit peak time, Tp	0.089 hours
Unit receding limb, Tr	0.357 hours
Total unit time, Tb	0.447 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event	10yr Current NOAA D
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.134 hours
Area (User Defined)	43,010 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	58.28 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	58.14 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	43,010 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.3 in
Runoff Volume (Pervious)	4,836 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	4,837 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	363.68 ft ³ /s
Unit peak time, Tp	0.089 hours
Unit receding limb, Tr	0.357 hours
Total unit time, Tb	0.447 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.134 hours
Area (User Defined)	43,010 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.131 hours
Flow (Peak, Computed)	185.72 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	183.17 ft³/s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	43,010 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.0 in
Runoff Volume (Pervious)	14,257 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	14,260 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	363.68 ft³/s
Unit peak time, Tp	0.089 hours
Unit receding limb, Tr	0.357 hours
Total unit time, Tb	0.447 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	2 years
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.106 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.126 hours
Flow (Peak, Computed)	1.45 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	0.8 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.6 in
Runoff Volume (Pervious)	0.110 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.110 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.106 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	5.33 ft ³ /s
Unit peak time, Tp	0.071 hours
Unit receding limb, Tr	0.284 hours
Total unit time, Tb	0.355 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event		10yr Current NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.106 hours	
Area (User Defined)	0.500 acres	

Computational Time		0.014 hours
Increment	12.112 hours	
Time to Peak (Computed)	2.33 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12.100 hours	
Time to Flow (Peak Interpolated Output)	2.27 ft³/s	
Flow (Peak Interpolated Output)		

Drainage Area		
SCS CN (Composite)	93.000	
Area (User Defined)	0.500 acres	
Maximum Retention (Previous)	0.8 in	
Maximum Retention (Previous, 20 percent)	0.2 in	

Cumulative Runoff		
Cumulative Runoff Depth (Previous)	4.4 in	
Runoff Volume (Previous)	0.183 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.183 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.106 hours	
Computational Time Increment	0.014 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters		
Receding/Rising, Tr/Tp	1.670	
Unit peak, qp	5.33 ft³/s	
Unit peak time, Tp	0.071 hours	
Unit receding limb, Tr	0.284 hours	
Total unit time, Tb	0.355 hours	

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.106 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.112 hours
Flow (Peak, Computed)	4.17 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.06 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	0.8 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.2 in
Runoff Volume (Pervious)	0.340 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.340 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.106 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	5.33 ft ³ /s
Unit peak time, Tp	0.071 hours
Unit receding limb, Tr	0.284 hours
Total unit time, Tb	0.355 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	2 years
Return Event	48,000 hours
Duration	3.4 in
Depth	0.375 hours
Time of Concentration (Composite)	41,700 acres

Computational Time Increment	0.050 hours
Time to Peak (Computed)	12.351 hours
Flow (Peak, Computed)	8.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	8.32 ft³/s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	41,700 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	1,567 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,567 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.375 hours
Computational Time Increment	0.050 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	125.99 ft³/s
Unit peak time, Tp	0.250 hours
Unit receding limb, Tr	1.000 hours
Total unit time, Tb	1.250 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event	10yr Current NOAA D
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.375 hours
Area (User Defined)	41,700 acres

Computational Time Increment	0.050 hours
Time to Peak (Computed)	12.301 hours
Flow (Peak, Computed)	36.33 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	36.31 ft ³ /s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	41,700 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.3 in
Runoff Volume (Pervious)	4,689 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	4,689 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.375 hours
Computational Time Increment	0.050 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	125.99 ft ³ /s
Unit peak time, T _p	0.250 hours
Unit receding limb, T _r	1.000 hours
Total unit time, T _b	1.250 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.375 hours
Area (User Defined)	41,700 acres

Computational Time Increment	0.050 hours
Time to Peak (Computed)	12.301 hours
Flow (Peak, Computed)	117.81 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	117.80 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	41,700 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.0 in
Runoff Volume (Pervious)	13,823 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	13,823 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.375 hours
Computational Time Increment	0.050 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	125.99 ft ³ /s
Unit peak time, Tp	0.250 hours
Unit receding limb, Tr	1.000 hours
Total unit time, Tb	1.250 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	2 years
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.094 hours
Area (User Defined)	3,890 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.129 hours
Flow (Peak, Computed)	2.36 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.17 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3,890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.198 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.198 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	46.85 ft ³ /s
Unit peak time, Tp	0.063 hours
Unit receding limb, Tr	0.251 hours
Total unit time, Tb	0.314 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event	10yr Current NOAA D
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.094 hours
Area (User Defined)	3,890 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.117 hours
Flow (Peak, Computed)	7.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	7.04 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3,890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.531 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.531 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	46.85 ft ³ /s
Unit peak time, T _p	0.063 hours
Unit receding limb, T _r	0.251 hours
Total unit time, T _b	0.314 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.094 hours
Area (User Defined)	3,890 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.117 hours
Flow (Peak, Computed)	20.83 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	20.15 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3,890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.5 in
Runoff Volume (Pervious)	1,449 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,449 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	46.85 ft ³ /s
Unit peak time, Tp	0.063 hours
Unit receding limb, Tr	0.251 hours
Total unit time, Tb	0.314 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	2 years
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.056 hours
Area (User Defined)	0.880 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.101 hours
Flow (Peak, Computed)	3.07 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.07 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.880 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.232 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.232 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.056 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.89 ft³/s
Unit peak time, Tp	0.037 hours
Unit receding limb, Tr	0.149 hours
Total unit time, Tb	0.186 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event		10yr Current NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.056 hours	
Area (User Defined)	0.880 acres	

Computational Time		0.007 hours
Increment	12.101 hours	
Time to Peak (Computed)	4.72 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12.100 hours	
Time to Flow (Peak Interpolated Output)	4.72 ft³/s	
Flow (Peak Interpolated Output)		

Drainage Area		
SCS CN (Composite)	98.000	
Area (User Defined)	0.880 acres	
Maximum Retention (Previous)	0.2 in	
Maximum Retention (Previous, 20 percent)	0.0 in	

Cumulative Runoff		
Cumulative Runoff Depth (Previous)	5.0 in	
Runoff Volume (Previous)	0.364 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.364 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.056 hours	
Computational Time Increment	0.007 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters		
Receding/Rising, Tr/Tp	1.670	
Unit peak, qp	17.89 ft³/s	
Unit peak time, Tp	0.037 hours	
Unit receding limb, Tr	0.149 hours	
Total unit time, Tb	0.186 hours	

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	100 years
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.056 hours
Area (User Defined)	0.880 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.101 hours
Flow (Peak, Computed)	8.20 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	8.19 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.880 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.8 in
Runoff Volume (Pervious)	0.642 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.642 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.056 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.89 ft ³ /s
Unit peak time, Tp	0.037 hours
Unit receding limb, Tr	0.149 hours
Total unit time, Tb	0.186 hours

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Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

2yr Current NOAA D	
Storm Event	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.192 hours
Area (User Defined)	5.320 acres

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.210 hours
Flow (Peak, Computed)	1.21 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	1.20 ft ³ /s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	5.320 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.4 in
Runoff Volume (Pervious)	0.184 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.184 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

pre-developed current

Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	31.46 ft ³ /s
Unit peak time, Tp	0.128 hours
Unit receding limb, Tr	0.511 hours
Total unit time, Tb	0.639 hours

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Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

Storm Event	10yr Current NOAA D
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.192 hours
Area (User Defined)	5.320 acres

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.184 hours
Flow (Peak, Computed)	5.87 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	5.72 ft ³ /s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	5.320 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.3 in
Runoff Volume (Pervious)	0.568 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.568 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 10YR

Return Event: 10 years
Storm Event: 10yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	31.46 ft ³ /s
Unit peak time, T _p	0.128 hours
Unit receding limb, T _r	0.511 hours
Total unit time, T _b	0.639 hours

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Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr Current NOAA D

100yr Current NOAA D	
Storm Event	
Return Event	100 years
Duration	48,000 hours
Depth	9.0 in
Time of Concentration (Composite)	0.192 hours
Area (User Defined)	5.320 acres

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.158 hours
Flow (Peak, Computed)	19.47 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	19.09 ft ³ /s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	5.320 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	1.709 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.709 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: SBruns-6 PER

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr Current NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	31.46 ft ³ /s
Unit peak time, Tp	0.128 hours
Unit receding limb, Tr	0.511 hours
Total unit time, Tb	0.639 hours

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PROJECTED RAINFALL

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Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
EDA-1 Pervious	2YR Projected	2	2.387	12.150	24.63
EDA-1 Pervious	10YR Projected	10	7.028	12.150	87.99
EDA-1 Pervious	100YR Projected	100	21.384	12.150	274.66
EDA-2 Pervious	2YR Projected	2	2.314	12.300	14.88
EDA-2 Pervious	10YR Projected	10	6.812	12.300	55.84
EDA-2 Pervious	100YR Projected	100	20.727	12.250	179.74
EDA-2 Imp	2YR Projected	2	0.130	12.100	1.66
EDA-2 Imp	10YR Projected	10	0.224	12.100	2.76
EDA-2 Imp	100YR Projected	100	0.442	12.100	5.27
EDA-1 Imp	2YR Projected	2	0.114	12.150	1.33
EDA-1 Imp	10YR Projected	10	0.205	12.150	2.33
EDA-1 Imp	100YR Projected	100	0.421	12.150	4.58
EDA-3 Pervious	2YR Projected	2	0.280	12.100	3.42
EDA-3 Pervious	10YR Projected	10	0.749	12.100	10.36
EDA-3 Pervious	100YR Projected	100	2.125	12.100	29.87
EDA-6 Imp	2YR Projected	2	0.269	12.100	3.53
EDA-6 Imp	10YR Projected	10	0.436	12.100	5.63
EDA-6 Imp	100YR Projected	100	0.823	12.100	10.45
SBruns-6 PER	2YR Projected	2	0.275	12.200	2.33
SBruns-6 PER	10YR Projected	10	0.832	12.150	9.12
SBruns-6 PER	100YR Projected	100	2.579	12.150	30.14

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
EPOI-1	2YR Projected	2	2.501	12.150	25.96
EPOI-1	10YR Projected	10	7.233	12.150	90.32
EPOI-1	100YR Projected	100	21.895	12.150	279.24
EPOI-2 (Harry's Br)	2YR Projected	2	2.444	12.300	15.45
EPOI-2 (Harry's Br)	10YR Projected	10	7.036	12.300	56.76
EPOI-2 (Harry's Br)	100YR Projected	100	21.834	12.250	182.00
EPOI-3	2YR Projected	2	0.280	12.100	3.42
EPOI-3	10YR Projected	10	0.749	12.100	10.36
EPOI-3	100YR Projected	100	2.125	12.100	29.87
EDA2	2YR Projected	2	2.444	12.300	15.45
EDA2	10YR Projected	10	7.036	12.300	56.76
EDA2	100YR Projected	100	21.169	12.250	181.98

Pond Summary

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Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
EX BASIN 6 (IN)	2YR Projected	2	0.544	12.100	5.05	(N/A)	(N/A)
EX BASIN 6 (OUT)	2YR Projected	2	0.000	0.000	0.00	89.42	0.542
EX BASIN 6 (IN)	10YR Projected	10	1.268	12.100	12.93	(N/A)	(N/A)
EX BASIN 6 (OUT)	10YR Projected	10	0.000	0.000	0.00	89.95	1.266
EX BASIN 6 (IN)	100YR Projected	100	3.402	12.150	36.04	(N/A)	(N/A)
EX BASIN 6 (OUT)	100YR Projected	100	0.666	24.150	0.25	91.24	3.190

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Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.84 ft/s
Segment Time of Concentration	0.007 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours
Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

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Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.49} * ((S^{.49} * (2/3)) * (S^{.49} * 0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf^{.49} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf^{.49} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.49} * 0.8)) / ((P^{.49} * 0.5) * (Sf^{.49} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

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Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 10YR Projected
Time of Concentration Results

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.84 ft/s
Segment Time of Concentration	0.007 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours

Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

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Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (S^{1/2} * 0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{1/2} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{1/2} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
S= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
Where:
 $(0.007 * ((n * Lf)^{0.8})) / ((P^{0.5}) * (S^{1/2} * 0.4))$
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

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Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	21.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.84 ft/s
Segment Time of Concentration	0.007 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	676.00 ft
Is Paved?	False
Slope	0.008 ft/ft
Average Velocity	1.44 ft/s
Segment Time of Concentration	0.130 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.008 hours

Segment #4: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.171 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
S= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.36 ft/s
Segment Time of Concentration	0.066 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	440.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours
Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.129 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.36 ft/s
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Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours
Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.129 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	85.00 ft
Manning's n	0.240
Slope	0.280 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.36 ft/s
Segment Time of Concentration	0.066 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	440.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.038 hours
Segment #3: TR-55 Channel Flow	
Flow Area	9.3 ft²
Hydraulic Length	654.00 ft
Manning's n	0.030
Slope	0.028 ft/ft
Wetted Perimeter	11.80 ft
Average Velocity	7.09 ft/s
Segment Time of Concentration	0.026 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.129 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-1 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	1.82 ft/s
Segment Time of Concentration	0.037 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.104 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
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Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
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Flow Area	3.1 ft²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.104 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.66} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	245.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	1.82 ft/s
Segment Time of Concentration	0.037 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	245.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.024 hours

Segment #3: TR-55 Channel Flow	
Flow Area	3.1 ft ²
Hydraulic Length	671.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.043 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.104 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.215 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.360 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

Where:
$$(Lf / V) / 3600$$

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.215 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.360 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$
$$V = 20.3282 * (Sf**0.5)$$

Unpaved surface:
Paved Surface:

Where:

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.215 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,271.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.144 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.360 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-2 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.37 ft/s
Segment Time of Concentration	0.053 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.090 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$
$$V = 20.3282 * (Sf**0.5)$$

Unpaved surface:
Paved Surface:

Where:

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.37 ft/s
Segment Time of Concentration	0.053 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.090 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.37 ft/s
Segment Time of Concentration	0.053 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.17 ft/s
Segment Time of Concentration	0.038 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.090 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-3 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$
$$V = 20.3282 * (Sf**0.5)$$

Unpaved surface:
Paved Surface:

Where:

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	1.04 ft/s
Segment Time of Concentration	0.004 hours
Segment #2: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.055 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{**}(2/3)) * (S^{**}0.5)) / n$
 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{**}0.8)) / ((P^{**}0.5) * (S^{**}0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	1.04 ft/s
Segment Time of Concentration	0.004 hours

Segment #2: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.055 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.667} * (2/3)) * (S^{.667} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.667} * 0.8)) / ((P^{.667} * 0.5) * (S^{.667} * 0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
S= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	1.04 ft/s
Segment Time of Concentration	0.004 hours
Segment #2: TR-55 Channel Flow	
Flow Area	
Hydraulic Length	3.1 ft²
Hydraulic Length	2,300.00 ft
Manning's n	0.012
Slope	0.010 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	12.42 ft/s
Segment Time of Concentration	0.051 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.055 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: EDA-6 Imp
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.163 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.180 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$

Paved Surface:
 $V = 20.3282 * (Sf**0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.163 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.180 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$
$$V = 20.3282 * (Sf**0.5)$$

Unpaved surface:
Paved Surface:

Where:

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.9 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.163 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.180 hours

pre-developed projected

Subsection: Time of Concentration Calculations
Label: SBruns-6 PER
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event	
2yr Projected NOAA D	
Return Event	2 years
Duration	48,000 hours
Depth	3.9 in
Time of Concentration (Composite)	0.171 hours
Area (User Defined)	0.500 acres

Computational Time	
Increment	0.023 hours
Time to Peak (Computed)	12.141 hours
Flow (Peak, Computed)	1.33 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.33 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	1.2 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	0.114 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.114 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.32 ft ³ /s
Unit peak time, Tp	0.114 hours
Unit receding limb, Tr	0.455 hours
Total unit time, Tb	0.568 hours

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.171 hours	
Area (User Defined)	0.500 acres	

Computational Time	
Increment	0.023 hours
Time to Peak (Computed)	12.141 hours
Flow (Peak, Computed)	2.33 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.33 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	1.2 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.9 in
Runoff Volume (Pervious)	0.205 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.205 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	3.32 ft ³ /s
Unit peak time, T _p	0.114 hours
Unit receding limb, T _r	0.455 hours
Total unit time, T _b	0.568 hours

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event	100 years	
Duration	48,000 hours	
Depth	11.5 in	
Time of Concentration (Composite)	0.171 hours	
Area (User Defined)	0.500 acres	

Computational Time	
Increment	0.023 hours
Time to Peak (Computed)	12.141 hours
Flow (Peak, Computed)	4.59 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	4.58 ft ³ /s

Drainage Area	
SCS CN (Composite)	89.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	1.2 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	10.1 in
Runoff Volume (Pervious)	0.421 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.421 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.171 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-1 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	3.32 ft ³ /s
Unit peak time, T _p	0.114 hours
Unit receding limb, T _r	0.455 hours
Total unit time, T _b	0.568 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event	
2yr Projected NOAA D	
Return Event	2 years
Duration	48,000 hours
Depth	3.9 in
Time of Concentration (Composite)	0.129 hours
Area (User Defined)	43,010 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	24.71 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	24.63 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	43,010 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	2.387 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.387 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.129 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	376.83 ft ³ /s
Unit peak time, Tp	0.086 hours
Unit receding limb, Tr	0.345 hours
Total unit time, Tb	0.431 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.129 hours	
Area (User Defined)	43,010 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	89.84 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	87.99 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	43,010 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	7.029 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	7.028 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.129 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	376.83 ft ³ /s
Unit peak time, T _p	0.086 hours
Unit receding limb, T _r	0.345 hours
Total unit time, T _b	0.431 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event	100 years	
Duration	48,000 hours	
Depth	11.5 in	
Time of Concentration (Composite)	0.129 hours	
Area (User Defined)	43,010 acres	

Computational Time		0.017 hours
Increment	12.139 hours	
Time to Peak (Computed)	282.53 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12.150 hours	
Time to Flow (Peak Interpolated Output)	274.66 ft³/s	
Flow (Peak Interpolated Output)		

Drainage Area		
SCS CN (Composite)	59,000	
Area (User Defined)	43,010 acres	
Maximum Retention (Pervious)	6.9 in	
Maximum Retention (Pervious, 20 percent)	1.4 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	6.0 in	
Runoff Volume (Pervious)	21,386 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	21,384 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.129 hours	
Computational Time Increment	0.017 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	

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Subsection: Unit Hydrograph Summary
Label: EDA-1 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters		
Receding/Rising, T _r /T _p	1.670	
Unit peak, q _p	376.83 ft³/s	
Unit peak time, T _p	0.086 hours	
Unit receding limb, T _r	0.345 hours	
Total unit time, T _b	0.431 hours	

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event		2yr Projected NOAA D
Return Event	2 years	
Duration	48,000 hours	
Depth	3.9 in	
Time of Concentration (Composite)	0.104 hours	
Area (User Defined)	0.500 acres	
Computational Time Increment	0.014 hours	
Time to Peak (Computed)	12.113 hours	
Flow (Peak, Computed)	1.71 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.100 hours	
Flow (Peak Interpolated Output)	1.66 ft ³ /s	

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	0.8 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.130 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.130 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.104 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

pre-developed projected

Subsection: Unit Hydrograph Summary
Label: EDA-2 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	5.46 ft ³ /s
Unit peak time, T _p	0.069 hours
Unit receding limb, T _r	0.277 hours
Total unit time, T _b	0.346 hours

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.104 hours	
Area (User Defined)	0.500 acres	

Computational Time	
Increment	0.014 hours
Time to Peak (Computed)	12.113 hours
Flow (Peak, Computed)	2.84 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.76 ft ³ /s

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	0.8 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.4 in
Runoff Volume (Pervious)	0.224 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.224 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.104 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	5.46 ft ³ /s
Unit peak time, T _p	0.069 hours
Unit receding limb, T _r	0.277 hours
Total unit time, T _b	0.346 hours

pre-developed projected

Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event	100 years	
Duration	48,000 hours	
Depth	11.5 in	
Time of Concentration (Composite)	0.104 hours	
Area (User Defined)	0.500 acres	
Computational Time Increment	0.014 hours	
Time to Peak (Computed)	12.113 hours	
Flow (Peak, Computed)	5.40 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.100 hours	
Flow (Peak Interpolated Output)	5.27 ft ³ /s	

Drainage Area	
SCS CN (Composite)	93.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	0.8 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	10.6 in
Runoff Volume (Pervious)	0.442 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.442 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.104 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-2 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	5.46 ft ³ /s
Unit peak time, T _p	0.069 hours
Unit receding limb, T _r	0.277 hours
Total unit time, T _b	0.346 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event	
2yr Projected NOAA D	
Return Event	2 years
Duration	48,000 hours
Depth	3.9 in
Time of Concentration (Composite)	0.360 hours
Area (User Defined)	41,700 acres

Computational Time Increment	0.048 hours
Time to Peak (Computed)	12.327 hours
Flow (Peak, Computed)	15.10 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	14.88 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	41,700 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	2.315 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2,314 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.360 hours
Computational Time Increment	0.048 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	131.34 ft ³ /s
Unit peak time, Tp	0.240 hours
Unit receding limb, Tr	0.999 hours
Total unit time, Tb	1.199 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.360 hours	
Area (User Defined)	41,700 acres	

Computational Time Increment	0.048 hours
Time to Peak (Computed)	12.279 hours
Flow (Peak, Computed)	56.44 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	55.84 ft ³ /s

Drainage Area	
SCS CN (Composite)	59,000
Area (User Defined)	41,700 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	6.815 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	6.812 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.360 hours
Computational Time Increment	0.048 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	131.34 ft ³ /s
Unit peak time, T _p	0.240 hours
Unit receding limb, T _r	0.959 hours
Total unit time, T _b	1.199 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event	100 years	
Duration	48,000 hours	
Depth	11.5 in	
Time of Concentration (Composite)	0.360 hours	
Area (User Defined)	41,700 acres	

Computational Time		0.048 hours
Increment	12,279 hours	
Time to Peak (Computed)	181.69 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12,250 hours	
Time to Flow (Peak Interpolated Output)	179.74 ft³/s	
Flow (Peak Interpolated Output)		

Drainage Area		
SCS CN (Composite)	59,000	
Area (User Defined)	41,700 acres	
Maximum Retention (Pervious)	6.9 in	
Maximum Retention (Pervious, 20 percent)	1.4 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	6.0 in	
Runoff Volume (Pervious)	20,734 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	20,727 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.360 hours	
Computational Time Increment	0.048 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	

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Subsection: Unit Hydrograph Summary
Label: EDA-2 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters		
Receding/Rising, Tr/Tp	1.670	
Unit peak, qp	131.34 ft³/s	
Unit peak time, Tp	0.240 hours	
Unit receding limb, Tr	0.999 hours	
Total unit time, Tb	1.199 hours	

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event	
2yr Projected NOAA D	
Return Event	2 years
Duration	48,000 hours
Depth	3.9 in
Time of Concentration (Composite)	0.090 hours
Area (User Defined)	3,890 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.128 hours
Flow (Peak, Computed)	3.65 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.42 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3,890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	0.280 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.280 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.090 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	48.80 ft ³ /s
Unit peak time, Tp	0.060 hours
Unit receding limb, Tr	0.241 hours
Total unit time, Tb	0.301 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.090 hours	
Area (User Defined)	3.890 acres	

Computational Time	
Increment	0.012 hours
Time to Peak (Computed)	12.116 hours
Flow (Peak, Computed)	10.76 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	10.36 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3.890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.3 in
Runoff Volume (Pervious)	0.749 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.749 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.090 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	48.80 ft ³ /s
Unit peak time, T _p	0.060 hours
Unit receding limb, T _r	0.241 hours
Total unit time, T _b	0.301 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event		100 years
Duration		48,000 hours
Depth		11.5 in
Time of Concentration (Composite)		0.090 hours
Area (User Defined)		3,890 acres
Computational Time Increment		0.012 hours
Time to Peak (Computed)		12.116 hours
Flow (Peak, Computed)		30.62 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.100 hours
Flow (Peak Interpolated Output)		29.87 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	3,890 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.6 in
Runoff Volume (Pervious)	2.125 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.125 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.090 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-3 Pervious
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	48.80 ft ³ /s
Unit peak time, T _p	0.060 hours
Unit receding limb, T _r	0.241 hours
Total unit time, T _b	0.301 hours

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Subsection: Unit Hydrograph Summary
Label: EDA-6 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event	
2yr Projected NOAA D	
Return Event	2 years
Duration	48,000 hours
Depth	3.9 in
Time of Concentration (Composite)	0.055 hours
Area (User Defined)	0.880 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	3.53 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.53 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.880 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.7 in
Runoff Volume (Pervious)	0.269 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.269 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.055 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: EDA-6 Imp
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.98 ft³/s
Unit peak time, Tp	0.037 hours
Unit receding limb, Tr	0.148 hours
Total unit time, Tb	0.185 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.055 hours	
Area (User Defined)	0.880 acres	

Computational Time	
Increment	0.007 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	5.63 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.63 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.880 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.0 in
Runoff Volume (Pervious)	0.436 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.436 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.055 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 10YR Projected

Return Event: 10 years

Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	17.98 ft ³ /s
Unit peak time, T _p	0.037 hours
Unit receding limb, T _r	0.148 hours
Total unit time, T _b	0.185 hours

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

100yr Projected NOAA D	
Storm Event	100 years
Return Event	100 years
Duration	48,000 hours
Depth	11.5 in
Time of Concentration (Composite)	0.055 hours
Area (User Defined)	0.880 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	10.46 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	10.45 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.880 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	11.2 in
Runoff Volume (Pervious)	0.823 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.823 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.055 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary

Label: EDA-6 Imp

Scenario: 100YR Projected

Return Event: 100 years

Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	17.98 ft ³ /s
Unit peak time, T _p	0.037 hours
Unit receding limb, T _r	0.148 hours
Total unit time, T _b	0.185 hours

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Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

Storm Event		2yr Projected NOAA D
Return Event	2 years	
Duration	48,000 hours	
Depth	3.9 in	
Time of Concentration (Composite)	0.180 hours	
Area (User Defined)	5.320 acres	
Computational Time Increment	0.024 hours	
Time to Peak (Computed)	12.191 hours	
Flow (Peak, Computed)	2.36 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.200 hours	
Flow (Peak Interpolated Output)	2.33 ft ³ /s	

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	5.320 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.275 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.275 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 2YR Projected

Return Event: 2 years
Storm Event: 2yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	33.49 ft ³ /s
Unit peak time, T _p	0.120 hours
Unit receding limb, T _r	0.480 hours
Total unit time, T _b	0.600 hours

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Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

Storm Event		10yr Projected NOAA D
Return Event	10 years	
Duration	48,000 hours	
Depth	6.2 in	
Time of Concentration (Composite)	0.180 hours	
Area (User Defined)	5.320 acres	

Computational Time	
Increment	0.024 hours
Time to Peak (Computed)	12.167 hours
Flow (Peak, Computed)	9.34 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	9.12 ft ³ /s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	5.320 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.832 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.832 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 10YR Projected

Return Event: 10 years
Storm Event: 10yr Projected NOAA D

SCS Unit Hydrograph Parameters	
Receding/Rising, T _r /T _p	1.670
Unit peak, q _p	33.49 ft ³ /s
Unit peak time, T _p	0.120 hours
Unit receding limb, T _r	0.480 hours
Total unit time, T _b	0.600 hours

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Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

Storm Event		100yr Projected NOAA D
Return Event	100 years	
Duration	48,000 hours	
Depth	11.5 in	
Time of Concentration (Composite)	0.180 hours	
Area (User Defined)	5.320 acres	

Computational Time		0.024 hours
Increment	12.167 hours	
Time to Peak (Computed)	30.45 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12.150 hours	
Time to Flow (Peak Interpolated Output)	30.14 ft³/s	
Flow (Peak Interpolated Output)		

Drainage Area		
SCS CN (Composite)	58.000	
Area (User Defined)	5.320 acres	
Maximum Retention (Pervious)	7.2 in	
Maximum Retention (Pervious, 20 percent)	1.4 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	5.8 in	
Runoff Volume (Pervious)	2.579 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	2.579 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.180 hours	
Computational Time Increment	0.024 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	

Projected Pre Developed.ppc
6/11/2024

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pre-developed projected

Subsection: Unit Hydrograph Summary
Label: SBruns-6 PER
Scenario: 100YR Projected

Return Event: 100 years
Storm Event: 100yr Projected NOAA D

SCS Unit Hydrograph Parameters		
Receding/Rising, T _r /T _p	1.670	
Unit peak, q _p	33.49 ft³/s	
Unit peak time, T _p	0.120 hours	
Unit receding limb, T _r	0.480 hours	
Total unit time, T _b	0.600 hours	

Projected Pre Developed.ppc
6/11/2024

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Post Dev Cn

Subsection: Runoff CN-Area
Label: DA1 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.390	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.040	0.0	0.0	90.000
Impervious non vehicular	98.000	0.040	0.0	0.0	98.000
Impervious roof	98.000	0.070	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.540	(N/A)	(N/A)	97.407

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA1 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.530	0.0	0.0	61.000
Grass C soils	74.000	0.310	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.840	(N/A)	(N/A)	65.798

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA1 Perv Basin
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.140	0.0	0.0	61.000
Grass C soil	74.000	0.130	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.270	(N/A)	(N/A)	67.259

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA10 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.150	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.010	0.0	0.0	90.000
Impervious non vehicular	98.000	0.100	0.0	0.0	98.000
Impervious roof	98.000	0.530	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.790	(N/A)	(N/A)	97.899

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA10 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.240	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.240	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA11 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.150	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.130	0.0	0.0	90.000
Impervious non vehicula	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.300	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.610	(N/A)	(N/A)	96.295

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA11 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.180	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.180	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA12A Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Roof	98.000	0.360	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.360	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA12A Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass basin area C soils	74.000	0.170	0.0	0.0	74.000
Grass B soils	61.000	2.090	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.260	(N/A)	(N/A)	61.978

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA13 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.110	0.0	0.0	90.000
Impervious non vehicular	98.000	0.010	0.0	0.0	98.000
Impervious roof	98.000	0.130	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.340	(N/A)	(N/A)	95.412

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA13 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.040	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.040	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA14 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.100	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.090	0.0	0.0	90.000
Impervious non vehicular	98.000	0.040	0.0	0.0	98.000
Impervious roof	98.000	0.100	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.330	(N/A)	(N/A)	95.818

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA14 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.070	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.070	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA15 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.240	0.0	0.0	98.000
Impervious non vehicular	98.000	0.090	0.0	0.0	98.000
Impervious roof	98.000	0.470	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.040	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.840	(N/A)	(N/A)	97.619

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA15 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.820	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.820	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA16 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.540	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.240	0.0	0.0	90.000
Impervious roof	98.000	0.570	0.0	0.0	98.000
Impervious non vehicular	98.000	0.130	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.480	(N/A)	(N/A)	96.703

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA16 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.870	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.870	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA17 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.170	0.0	0.0	98.000
Impervious non vehicular	98.000	0.460	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.220	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.850	(N/A)	(N/A)	95.929

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA17 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.120	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.120	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA18 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.260	0.0	0.0	98.000
Impervious non vehicular	98.000	0.120	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.110	0.0	0.0	90.000
Impervious Roof	98.000	0.290	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.780	(N/A)	(N/A)	96.872

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA18 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.370	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.370	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA19 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.110	0.0	0.0	98.000
Impervious non vehicular	98.000	0.140	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.100	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.350	(N/A)	(N/A)	95.714

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA19 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.100	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.100	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.280	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.140	0.0	0.0	90.000
Impervious non vehicular	98.000	0.120	0.0	0.0	98.000
Impervious roof	98.000	0.300	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.840	(N/A)	(N/A)	96.667

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA2 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.870	0.0	0.0	61.000
Grass C soils	74.000	0.050	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.920	(N/A)	(N/A)	61.707

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA20 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.070	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.070	0.0	0.0	90.000
Impervious non vehicular	98.000	0.090	0.0	0.0	98.000
Impervious roof	98.000	0.460	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.690	(N/A)	(N/A)	97.188

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA20 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.400	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.400	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA21 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.160	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.120	0.0	0.0	90.000
Impervious non vehicular	98.000	0.040	0.0	0.0	98.000
Impervious roof	98.000	0.200	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.520	(N/A)	(N/A)	96.154

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA21 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.230	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.230	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA22 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.170	0.0	0.0	98.000
Impervious non vehicular	98.000	0.290	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.220	0.0	0.0	90.000
Impervious roof	98.000	0.150	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.830	(N/A)	(N/A)	95.880

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA22 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.380	0.0	0.0	61.000
Grass C soil	74.000	0.070	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.450	(N/A)	(N/A)	63.022

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA25 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	1.240	0.0	0.0	98.000
Impervious Non Vehicular	98.000	0.260	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.430	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.930	(N/A)	(N/A)	96.218

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA25 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.190	0.0	0.0	61.000
Grass C soils	74.000	0.030	0.0	0.0	74.000
Basin area	61.000	1.260	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.480	(N/A)	(N/A)	61.264

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA26 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.520	0.0	0.0	98.000
Impervious non vehicular	98.000	0.110	0.0	0.0	98.000
Impervious roof	98.000	0.550	0.0	0.0	98.000
Impervious porous asphalt	98.000	0.410	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.590	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA26 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.110	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.110	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA28 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.380	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.150	0.0	0.0	90.000
Impervious non vehicular	98.000	0.080	0.0	0.0	98.000
Impervious roof	98.000	0.290	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.900	(N/A)	(N/A)	96.667

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA28 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.400	0.0	0.0	61.000
Basin area B soils	61.000	0.410	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.810	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA29 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.240	0.0	0.0	98.000
Impervious porous asphalt	98.000	0.220	0.0	0.0	98.000
Impervious non vehicular	90.000	0.080	0.0	0.0	90.000
Impervious roof	98.000	0.490	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.030	(N/A)	(N/A)	97.379

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA29 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.210	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.210	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA30 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.460	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.270	0.0	0.0	90.000
Impervious non vehicular	98.000	0.150	0.0	0.0	98.000
Impervious roof	98.000	0.500	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.380	(N/A)	(N/A)	96.435

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA30 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.670	0.0	0.0	61.000
Grass C soils	74.000	0.450	0.0	0.0	74.000
Grass Basin area B soil	61.000	0.300	0.0	0.0	61.000
Grass Basin area C soil	74.000	0.290	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.710	(N/A)	(N/A)	66.626

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA31 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.250	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.050	0.0	0.0	90.000
Impervious non vehicular	98.000	0.080	0.0	0.0	98.000
Impervious roof	98.000	0.200	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.580	(N/A)	(N/A)	97.310

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA31 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	98.000	0.270	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.270	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA32 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.700	0.0	0.0	98.000
Impervious non vehicular	98.000	0.200	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.250	0.0	0.0	90.000
Impervious roof	98.000	1.130	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.280	(N/A)	(N/A)	97.123

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA32 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.220	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.220	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA33 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	98.000	0.060	0.0	0.0	98.000
Impervious roof	98.000	0.160	0.0	0.0	98.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.340	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA33 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.090	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.090	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA34 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.100	0.0	0.0	98.000
Impervious non-vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.160	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.060	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.350	(N/A)	(N/A)	96.629

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA34 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.130	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.130	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA35 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.100	0.0	0.0	98.000
Impervious porous asphalt	98.000	0.020	0.0	0.0	98.000
Impervious roof	98.000	0.060	0.0	0.0	98.000
Impervious	98.000	0.020	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.200	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA35 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.550	0.0	0.0	61.000
Grass Basin B soils	61.000	0.230	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.780	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA36 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.130	0.0	0.0	98.000
Impervious non vehicular	98.000	0.310	0.0	0.0	98.000
Impervious roof	98.000	0.070	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.510	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA36 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.330	0.0	0.0	61.000
Grass C soil	74.000	0.430	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.760	(N/A)	(N/A)	68.355

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA37 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.100	0.0	0.0	98.000
Impervious non vehicular	98.000	0.060	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.050	0.0	0.0	90.000
Impervious roof	98.000	0.140	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.350	(N/A)	(N/A)	96.857

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA37 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.180	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.180	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA4 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.330	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.210	0.0	0.0	90.000
Impervious non vehicular	98.000	0.020	0.0	0.0	98.000
Impervious roof	98.000	0.300	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.860	(N/A)	(N/A)	96.047

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA4 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.150	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.150	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA41 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.050	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.050	0.0	0.0	90.000
Impervious non vehicular	98.000	0.010	0.0	0.0	98.000
Impervious roof	98.000	0.060	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.170	(N/A)	(N/A)	95.647

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA41 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.020	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.020	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA42 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.080	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.250	0.0	0.0	90.000
Impervious roof	98.000	0.210	0.0	0.0	98.000
Impervious non vehicular	98.000	0.020	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.560	(N/A)	(N/A)	94.429

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA42 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.220	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.220	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA43 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious roof	98.000	0.100	0.0	0.0	98.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.130	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA43 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.080	0.0	0.0	61.000
Grass C soil	74.000	0.080	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.160	(N/A)	(N/A)	67.500

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA44 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious porous asphalt	90.000	0.090	0.0	0.0	90.000
Impervious roof	90.000	0.110	0.0	0.0	90.000
Impervious non Vehicular	90.000	0.010	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.210	(N/A)	(N/A)	90.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA44 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.030	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.030	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.700	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.420	0.0	0.0	90.000
Impervious non vehicular	98.000	0.080	0.0	0.0	98.000
Impervious roof	98.000	0.610	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.810	(N/A)	(N/A)	96.144

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Basin Area Grass B soil	61.000	0.470	0.0	0.0	61.000
Grass B soil	61.000	0.220	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.690	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA46 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.140	0.0	0.0	98.000
Impervious porous	90.000	0.040	0.0	0.0	90.000
Impervious roof	98.000	0.060	0.0	0.0	98.000
Impervious non vehicular	98.000	0.070	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.310	(N/A)	(N/A)	96.968

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA46 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.130	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.130	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA47 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.270	0.0	0.0	98.000
Impervious non vehicular	98.000	0.100	0.0	0.0	98.000
Impervious roof	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.070	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.530	(N/A)	(N/A)	96.943

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA47- Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.300	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.300	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA48 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.060	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.050	0.0	0.0	90.000
Impervious non vehicular	98.000	0.010	0.0	0.0	98.000
Impervious roof	98.000	0.090	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.210	(N/A)	(N/A)	96.095

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA48 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.090	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.090	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA49 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.030	0.0	0.0	90.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.150	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.300	(N/A)	(N/A)	97.200

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA49 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.180	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.180	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA5 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.110	0.0	0.0	98.000
Impervious non vehicular	98.000	0.170	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.100	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.380	(N/A)	(N/A)	95.895

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA5 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.130	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.130	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA50 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.200	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.030	0.0	0.0	90.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.100	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.360	(N/A)	(N/A)	97.333

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA50 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.120	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.120	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA51 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.290	0.0	0.0	98.000
Impervious roof	98.000	0.170	0.0	0.0	98.000
Impervious non vehicular	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	95.000	0.060	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.610	(N/A)	(N/A)	97.705

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Post Dev Cn

Subsection: Runoff CN-Area
Label: DA51 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.710	0.0	0.0	61.000
Grass Basin B soil	61.000	0.200	0.0	0.0	61.000
Grass C soil	74.000	0.100	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.010	(N/A)	(N/A)	62.287

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Subsection: Runoff CN-Area
Label: DA52 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.180	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.050	0.0	0.0	90.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.130	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.390	(N/A)	(N/A)	96.974

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA52 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.390	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.390	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA53 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.090	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.060	0.0	0.0	90.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.140	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.320	(N/A)	(N/A)	96.500

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA53 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.370	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.370	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA54 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.100	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.070	0.0	0.0	90.000
Impervious non vehicular	98.000	0.030	0.0	0.0	98.000
Impervious roof	98.000	0.110	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.310	(N/A)	(N/A)	96.194

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA54 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.100	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.100	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA55 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious non vehicular	98.000	0.270	0.0	0.0	98.000
Impervious roof	98.000	0.470	0.0	0.0	98.000
Impervious vehicular	98.000	1.050	0.0	0.0	98.000
Impervious porous asphalt	98.000	0.300	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.090	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA55 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.210	0.0	0.0	61.000
Grass C soils	74.000	0.200	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.410	(N/A)	(N/A)	67.341

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA56 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious roof	98.000	0.220	0.0	0.0	98.000
Impervious vehicular	98.000	0.930	0.0	0.0	98.000
Impervious non vehicular	98.000	0.090	0.0	0.0	98.000
Impervious Porous asphalt	95.000	0.840	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.080	(N/A)	(N/A)	96.788

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA56 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.280	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.280	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA57 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.440	0.0	0.0	98.000
Impervious Roof	98.000	0.090	0.0	0.0	98.000
Impervious non vehicular	98.000	0.080	0.0	0.0	98.000
Impervious porous asphalt	95.000	0.230	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.840	(N/A)	(N/A)	97.179

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA57 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.080	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.080	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA58 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	1.070	0.0	0.0	98.000
Impervious Non Vehicular	98.000	0.040	0.0	0.0	98.000
Impervious Porous Asphalt	95.000	0.460	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.570	(N/A)	(N/A)	97.121

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA58 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass Basin C soils	74.000	0.640	0.0	0.0	74.000
Grass C soils	74.000	0.360	0.0	0.0	74.000
Grass B soils	61.000	0.570	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.570	(N/A)	(N/A)	69.280

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA59 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.350	0.0	0.0	98.000
Impervious roof	98.000	0.400	0.0	0.0	98.000
Impervious non vehicular	98.000	0.150	0.0	0.0	98.000
Impervious porous asphalt	95.000	0.120	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.020	(N/A)	(N/A)	97.647

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA59 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.350	0.0	0.0	61.000
Grass C soil	74.000	1.090	0.0	0.0	74.000
Grass C Basin Area	74.000	0.400	0.0	0.0	74.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.840	(N/A)	(N/A)	71.527

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.160	0.0	0.0	98.000
Impervious non vehicular	98.000	0.260	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.070	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.490	(N/A)	(N/A)	96.857

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA6 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soils	61.000	0.220	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.220	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA60 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.500	0.0	0.0	98.000
Impervious Roof	98.000	0.360	0.0	0.0	98.000
Impervious non vehicular	98.000	0.150	0.0	0.0	98.000
Impervious Porous Asphalt	95.000	0.310	0.0	0.0	95.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.320	(N/A)	(N/A)	97.295

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA60 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.230	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.230	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA61 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.520	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.520	(N/A)	(N/A)	98.000

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Subsection: Runoff CN-Area
Label: DA61 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.060	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.060	(N/A)	(N/A)	61.000

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Subsection: Runoff CN-Area
Label: DA62 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	1.270	0.0	0.0	98.000
Impervious non vehicular	98.000	0.130	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.400	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA62 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.120	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.120	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA63 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Roof	98.000	0.670	0.0	0.0	98.000
Impervious Vehicular	98.000	0.330	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.000	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA7 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Vehicular	98.000	0.230	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.030	0.0	0.0	90.000
Impervious non vehicular	98.000	0.140	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.400	(N/A)	(N/A)	97.400

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA7 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.210	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.210	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA9 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular	98.000	0.210	0.0	0.0	98.000
Impervious porous asphalt	90.000	0.110	0.0	0.0	90.000
Impervious non vehicular	98.000	0.020	0.0	0.0	98.000
Impervious roof	98.000	0.150	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.490	(N/A)	(N/A)	96.204

Post Dev Cn

Subsection: Runoff CN-Area
Label: DA9 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.150	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.150	(N/A)	(N/A)	61.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: EDA3 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil B	61.000	2.840	0.0	0.0	61.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil C	74.000	0.550	0.0	0.0	74.000
Woods - good - Soil B	55.000	0.500	0.0	0.0	55.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.890	(N/A)	(N/A)	62.067

Post Dev Cn

Subsection: Runoff CN-Area
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Basin 6 Area	61.000	1.910	0.0	0.0	61.000
Wooded Area (S Brunswick)	55.000	1.730	0.0	0.0	55.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.640	(N/A)	(N/A)	58.148

Post Dev Cn

Subsection: Runoff CN-Area
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Future Connection Road	98.000	0.300	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.300	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious vehicular (Nursery Blvd)	98.000	4.500	0.0	0.0	98.000
Impervious non vehicular/roof (Nursery Bldg)	98.000	7.220	0.0	0.0	98.000
Impervious Vehicular Road C	98.000	0.340	0.0	0.0	98.000
Impervious roof	98.000	0.160	0.0	0.0	98.000
Impervious porous Road C	90.000	0.130	0.0	0.0	90.000
Impervious non vehicular Road C	98.000	0.110	0.0	0.0	98.000
Impervious porous asphalt Nursery Blvd	90.000	0.300	0.0	0.0	90.000
COMPOSITE AREA & WEIGHTED CN ---->	(N/A)	12.760	(N/A)	(N/A)	97.730

Post Dev Cn

Subsection: Runoff CN-Area
Label: PDA-6 PER (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Open space (Lawns,parks etc.) - Fair condition; grass cover 50% to 75% - Soil C (original design)	74.000	0.480	0.0	0.0	74.000
Open space B soil (Road C)	61.000	0.830	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN ---->	(N/A)	1.310	(N/A)	(N/A)	65.763

Post Dev Cn

Subsection: Runoff CN-Area
Label: PDA8 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious roof	98.000	0.380	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.380	(N/A)	(N/A)	98.000

Post Dev Cn

Subsection: Runoff CN-Area
Label: PDA8 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Grass B soil	61.000	0.260	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.260	(N/A)	(N/A)	61.000

POST-DEVELOPED
CURRENT RAINFALL

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Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	41.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.005 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	182.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.016 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.045 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	41.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.005 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	182.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.016 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.045 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
 $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Perv Basin
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.37 ft/s
Segment Time of Concentration	0.075 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.075 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA1 Perv Basin
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$\frac{R = Qa / Wp}{V = (1.49 * (R^{.66} * (2/3)) * (S^{.48} * 0.5)) / n}$$

Where:

$$\frac{(Lf / V) / 3600}{R = \text{Hydraulic radius}}$$

$$Aq = \text{Flow area, square feet}$$

$$Wp = \text{Wetted perimeter, feet}$$

$$V = \text{Velocity, ft/sec}$$

$$S = \text{Slope, ft/ft}$$

$$n = \text{Manning's n}$$

$$Tc = \text{Time of concentration, hours}$$

$$Lf = \text{Flow length, feet}$$

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA10 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.025 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.035 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA10 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA10 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.025 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.035 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA10 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA11 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.240
Slope	0.130 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	271.00 ft
Is Paved?	True
Slope	0.045 ft/ft
Average Velocity	4.31 ft/s
Segment Time of Concentration	0.017 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	131.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.053 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA11 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA11 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.240
Slope	0.130 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	271.00 ft
Is Paved?	True
Slope	0.045 ft/ft
Average Velocity	4.31 ft/s
Segment Time of Concentration	0.017 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	131.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.053 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA11 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA12A Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	10.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.89 ft/s
Segment Time of Concentration	0.003 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	120.00 ft
Is Paved?	False
Slope	0.025 ft/ft
Average Velocity	2.55 ft/s
Segment Time of Concentration	0.013 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	685.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.42 ft/s
Segment Time of Concentration	0.056 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.072 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA12A Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA12A Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.231 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	30.00 ft
Is Paved?	False
Slope	0.025 ft/ft
Average Velocity	2.55 ft/s
Segment Time of Concentration	0.003 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	685.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.42 ft/s
Segment Time of Concentration	0.056 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.290 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA12A Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((p**0.5) * (Sf**0.4))$$

Tc= Time of concentration, hours
Where:
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA13 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.014 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	54.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.36 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA13 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA13 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.014 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	54.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.36 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA13 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA14 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.014 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	111.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.36 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.036 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA14 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA14 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.014 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	111.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.36 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.036 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA14 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA15 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	24.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.30 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	286.00 ft
Is Paved?	True
Slope	0.024 ft/ft
Average Velocity	3.15 ft/s
Segment Time of Concentration	0.025 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	104.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.04 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.040 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA15 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA15 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	24.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.30 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	286.00 ft
Is Paved?	True
Slope	0.024 ft/ft
Average Velocity	3.15 ft/s
Segment Time of Concentration	0.025 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	104.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.04 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.040 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA15 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA16 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	20.00 ft
Manning's n	0.011
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	235.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.028 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	156.00 ft
Manning's n	0.015
Slope	0.008 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.92 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.044 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA16 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA16 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	67.00 ft
Manning's n	0.240
Slope	0.110 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.085 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	235.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.028 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	156.00 ft
Manning's n	0.015
Slope	0.008 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.92 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.124 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA16 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((p**0.5) * (Sf**0.4))$$

Tc= Time of concentration, hours
Where:
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA17 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	63.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.007 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA17 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA17 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	17.00 ft
Manning's n	0.240
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.048 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	263.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.029 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.077 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA17 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$
$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA18 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	50.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.100 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.020 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	292.00 ft
Manning's n	0.015
Slope	0.027 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	7.44 ft/s
Segment Time of Concentration	0.011 hours
Segment #4: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	32.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.134 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA18 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((P^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA18 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	50.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.100 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.020 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	292.00 ft
Manning's n	0.015
Slope	0.027 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	7.44 ft/s
Segment Time of Concentration	0.011 hours
Segment #4: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	32.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.134 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA18 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA19 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	26.00 ft
Manning's n	0.240
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.086 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	224.00 ft
Is Paved?	True
Slope	0.028 ft/ft
Average Velocity	3.40 ft/s
Segment Time of Concentration	0.018 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	6.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.105 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA19 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA19 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	26.00 ft
Manning's n	0.240
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.086 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	224.00 ft
Is Paved?	True
Slope	0.028 ft/ft
Average Velocity	3.40 ft/s
Segment Time of Concentration	0.018 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	6.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.105 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA19 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((p^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA2 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.19 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	70.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.008 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA2 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA2 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	10.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.037 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	170.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.020 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.057 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA2 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA20 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	20.00 ft
Manning's n	0.011
Slope	0.025 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.12 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	208.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.026 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	85.00 ft
Manning's n	0.015
Slope	0.047 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	9.81 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.033 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA20 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.66} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA20 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	20.00 ft
Manning's n	0.011
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.21 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	208.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.026 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	85.00 ft
Manning's n	0.015
Slope	0.047 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	9.81 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.033 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA20 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA21 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	58.00 ft
Manning's n	0.240
Slope	0.170 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.25 ft/s
Segment Time of Concentration	0.063 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.020 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	40.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.087 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA21 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA21 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	58.00 ft
Manning's n	0.240
Slope	0.170 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.25 ft/s
Segment Time of Concentration	0.063 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	149.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.020 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	30.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.086 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA21 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA22 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.73 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	45.00 ft
Is Paved?	True
Slope	0.033 ft/ft
Average Velocity	3.69 ft/s
Segment Time of Concentration	0.003 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	41.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.004 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.023 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA22 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA22 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	51.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.24 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	53.00 ft
Is Paved?	False
Slope	0.020 ft/ft
Average Velocity	2.28 ft/s
Segment Time of Concentration	0.006 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	35.00 ft
Is Paved?	True
Slope	0.028 ft/ft
Average Velocity	3.40 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.021 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA22 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$
$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA25 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.034 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.75 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	29.00 ft
Is Paved?	True
Slope	0.034 ft/ft
Average Velocity	3.75 ft/s
Segment Time of Concentration	0.002 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	920.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.080 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.098 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA25 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA25 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.034 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.75 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	29.00 ft
Is Paved?	True
Slope	0.034 ft/ft
Average Velocity	3.75 ft/s
Segment Time of Concentration	0.002 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	920.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.080 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.098 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA25 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA26 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	315.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.035 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	195.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.074 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA26 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA26 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	315.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.035 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	195.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.074 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA26 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA28 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	111.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.014 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.038 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA28 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{**}(2/3))) * (S^{**}0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{**}0.5)$
Paved Surface:
 $V = 20.3282 * (S^{**}0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA28 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	83.00 ft
Manning's n	0.240
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.223 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	228.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.027 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.250 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA28 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (Sf**0.5)$$
$$V = 20.3282 * (Sf**0.5)$$
$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA30 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	25.00 ft
Manning's n	0.011
Slope	0.048 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.53 ft/s
Segment Time of Concentration	0.005 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	194.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	54.00 ft
Manning's n	0.015
Slope	0.007 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.79 ft/s
Segment Time of Concentration	0.004 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.033 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA30 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((P^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA30 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	55.00 ft
Manning's n	0.240
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.15 ft/s
Segment Time of Concentration	0.099 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	194.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.024 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	54.00 ft
Manning's n	0.015
Slope	0.007 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.79 ft/s
Segment Time of Concentration	0.004 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.127 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA30 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA31 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.022 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.47 ft/s
Segment Time of Concentration	0.019 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	295.00 ft
Is Paved?	True
Slope	0.034 ft/ft
Average Velocity	3.75 ft/s
Segment Time of Concentration	0.022 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	93.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.008 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.049 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA31 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((P^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA31 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	15.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.051 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	379.00 ft
Is Paved?	True
Slope	0.034 ft/ft
Average Velocity	3.75 ft/s
Segment Time of Concentration	0.028 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	93.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.008 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.087 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA31 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA32 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.026 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.57 ft/s
Segment Time of Concentration	0.018 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	42.00 ft
Is Paved?	True
Slope	0.026 ft/ft
Average Velocity	3.28 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	126.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.031 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA32 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA32 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.026 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.57 ft/s
Segment Time of Concentration	0.018 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	42.00 ft
Is Paved?	True
Slope	0.026 ft/ft
Average Velocity	3.28 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	126.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.031 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA32 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((p^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA33 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	81.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.034 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA33 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA33 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	81.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.034 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA33 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA34 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.011 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.12 ft/s
Segment Time of Concentration	0.025 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	109.00 ft
Is Paved?	True
Slope	0.011 ft/ft
Average Velocity	2.13 ft/s
Segment Time of Concentration	0.014 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.039 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA34 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA34 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.011 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.12 ft/s
Segment Time of Concentration	0.025 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	109.00 ft
Is Paved?	True
Slope	0.011 ft/ft
Average Velocity	2.13 ft/s
Segment Time of Concentration	0.014 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.039 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA34 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA35 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.16 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	100.00 ft
Is Paved?	True
Slope	0.012 ft/ft
Average Velocity	2.23 ft/s
Segment Time of Concentration	0.012 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	121.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.047 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA35 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
 $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA35 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	45.00 ft
Manning's n	0.240
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.15 ft/s
Segment Time of Concentration	0.084 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.084 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA35 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA36 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.035 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.77 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	145.00 ft
Is Paved?	True
Slope	0.035 ft/ft
Average Velocity	3.80 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.026 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA36 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA36 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.015
Slope	0.035 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.38 ft/s
Segment Time of Concentration	0.020 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	145.00 ft
Is Paved?	True
Slope	0.035 ft/ft
Average Velocity	3.80 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.031 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA36 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{**}(2/3))) * (S^{**}0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{**}0.5)$
Paved Surface:
 $V = 20.3282 * (S^{**}0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA37 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.42 ft/s
Segment Time of Concentration	0.020 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	145.00 ft
Is Paved?	True
Slope	0.023 ft/ft
Average Velocity	3.10 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.033 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA37 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA37 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	31.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.090 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	223.00 ft
Is Paved?	True
Slope	0.023 ft/ft
Average Velocity	3.10 ft/s
Segment Time of Concentration	0.020 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.110 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA37 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA4 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.055 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	2.13 ft/s
Segment Time of Concentration	0.013 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	50.00 ft
Is Paved?	True
Slope	0.055 ft/ft
Average Velocity	4.77 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA4 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA4 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.055 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	2.13 ft/s
Segment Time of Concentration	0.013 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	50.00 ft
Is Paved?	True
Slope	0.055 ft/ft
Average Velocity	4.77 ft/s
Segment Time of Concentration	0.003 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA4 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA41 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	88.00 ft
Manning's n	0.011
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.82 ft/s
Segment Time of Concentration	0.013 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA41 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$\frac{R = Qa / Wp}{V = (1.49 * (R^{**}(2/3)) * (S^{**}0.5)) / n}$$

Where:

$$\frac{(Lf / V) / 3600}{R = \text{Hydraulic radius}$$

$$Aq = \text{Flow area, square feet}$$

$$Wp = \text{Wetted perimeter, feet}$$

$$V = \text{Velocity, ft/sec}$$

$$S = \text{Slope, ft/ft}$$

$$n = \text{Manning's n}$$

$$Tc = \text{Time of concentration, hours}$$

$$Lf = \text{Flow length, feet}$$

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA41 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	88.00 ft
Manning's n	0.011
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.82 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA41 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA42 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.73 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	150.00 ft
Is Paved?	True
Slope	0.033 ft/ft
Average Velocity	3.69 ft/s
Segment Time of Concentration	0.011 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	46.00 ft
Manning's n	0.015
Slope	0.018 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	6.07 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA42 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$

Paved Surface:

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA42 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.73 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	150.00 ft
Is Paved?	True
Slope	0.033 ft/ft
Average Velocity	3.69 ft/s
Segment Time of Concentration	0.011 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	46.00 ft
Manning's n	0.015
Slope	0.018 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	6.07 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA42 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA43 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	54.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.95 ft/s
Segment Time of Concentration	0.016 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA43 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$\frac{R = Qa / Wp}{V = (1.49 * (R^{**}(2/3)) * (S^{**}0.5)) / n}$$

Where:

$$\frac{(Lf / V) / 3600}{R = \text{Hydraulic radius}}$$

$$Aq = \text{Flow area, square feet}$$

$$Wp = \text{Wetted perimeter, feet}$$

$$V = \text{Velocity, ft/sec}$$

$$S = \text{Slope, ft/ft}$$

$$n = \text{Manning's n}$$

$$Tc = \text{Time of concentration, hours}$$

$$Lf = \text{Flow length, feet}$$

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA43 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	50.00 ft
Manning's n	0.240
Slope	0.045 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.096 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.096 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA43 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA44 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	60.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.04 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	72.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.022 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA44 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3))) * (Sf^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (Sf^{.48} * 0.4))$$

Where:

n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA44 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	60.00 ft
Manning's n	0.011
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.04 ft/s
Segment Time of Concentration	0.016 hours
Segment #2: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	72.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.022 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA44 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$$

Where:

- R= Hydraulic radius
- Aq= Flow area, square feet
- Wp= Wetted perimeter, feet
- V= Velocity, ft/sec
- Sf= Slope, ft/ft
- n= Manning's n
- Tc= Time of concentration, hours
- Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * L)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:

- Tc= Time of concentration, hours
- n= Manning's n
- Lf= Flow length, feet
- P= 24hr Rain depth, inches
- Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	55.00 ft
Manning's n	0.015
Slope	0.022 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.02 ft/s
Segment Time of Concentration	0.015 hours

Segment #2: TR-55 Channel Flow

Flow Area	
Hydraulic Length	1.2 ft²
Hydraulic Length	437.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.038 hours

Segment #3: TR-55 Channel Flow

Flow Area	
Hydraulic Length	1.8 ft²
Hydraulic Length	49.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	4.70 ft
Average Velocity	3.70 ft/s
Segment Time of Concentration	0.004 hours

Segment #4: TR-55 Channel Flow

Flow Area	
Hydraulic Length	3.1 ft²
Hydraulic Length	129.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.008 hours

Segment #5: TR-55 Channel Flow

Flow Area	
	7.1 ft²

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Segment #5: TR-55 Channel Flow	
Hydraulic Length	162.00 ft
Manning's n	0.015
Slope	0.003 ft/ft
Wetted Perimeter	9.40 ft
Average Velocity	4.51 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.075 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((P**0.5) * (Sf**0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= Zyr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	16.00 ft
Manning's n	0.240
Slope	0.059 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.035 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	42.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.004 hours

Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	437.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.038 hours

Segment #4: TR-55 Channel Flow	
Flow Area	1.8 ft²
Hydraulic Length	49.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	4.70 ft
Average Velocity	3.70 ft/s
Segment Time of Concentration	0.004 hours

Segment #5: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	129.00 ft
Manning's n	0.015

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Segment #5: TR-55 Channel Flow	
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.008 hours

Segment #6: TR-55 Channel Flow	
Flow Area	7.1 ft²
Hydraulic Length	162.00 ft
Manning's n	0.015
Slope	0.003 ft/ft
Wetted Perimeter	9.40 ft
Average Velocity	4.51 ft/s
Segment Time of Concentration	0.010 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.098 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.04} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.04} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.04} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.08})) / ((P^{.04} * 0.5) * (S^{.04} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA46 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.025 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.55 ft/s
Segment Time of Concentration	0.018 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	92.00 ft
Is Paved?	True
Slope	0.025 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.008 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	58.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.031 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA46 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA46 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	43.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.089 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	136.00 ft
Is Paved?	True
Slope	0.025 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.012 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	58.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.106 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA-46 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.08})) / ((P^{.04} * 0.5) * (S^{.04} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA47 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.019 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.39 ft/s
Segment Time of Concentration	0.020 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	189.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.41 ft/s
Segment Time of Concentration	0.022 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	211.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.018 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.060 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA47 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA47- Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.024 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.215 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	189.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.44 ft/s
Segment Time of Concentration	0.022 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	211.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.018 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.254 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA47- Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA48 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	25.00 ft
Manning's n	0.240
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.065 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	117.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.078 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA48 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA48 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	25.00 ft
Manning's n	0.240
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.065 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	117.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.078 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA-48 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA49 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.19 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	175.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.021 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	27.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.047 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA49 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA49 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.19 ft/s
Segment Time of Concentration	0.023 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	175.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.021 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	27.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.047 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA49 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA5 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	30.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.36 ft/s
Segment Time of Concentration	0.006 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	147.00 ft
Is Paved?	True
Slope	0.040 ft/ft
Average Velocity	4.07 ft/s
Segment Time of Concentration	0.010 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	25.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA5 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.08}) / ((p^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA5 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	30.00 ft
Manning's n	0.011
Slope	0.033 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.36 ft/s
Segment Time of Concentration	0.006 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	147.00 ft
Is Paved?	True
Slope	0.040 ft/ft
Average Velocity	4.07 ft/s
Segment Time of Concentration	0.010 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	25.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.002 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DAS Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
Where:
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DAS50 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.87 ft/s
Segment Time of Concentration	0.015 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	121.00 ft
Is Paved?	True
Slope	0.024 ft/ft
Average Velocity	3.15 ft/s
Segment Time of Concentration	0.011 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	140.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.012 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.038 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA50 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$

Unpaved surface:
Paved Surface:

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA50 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	42.00 ft
Manning's n	0.240
Slope	0.024 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.107 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	131.00 ft
Is Paved?	True
Slope	0.025 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.011 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	140.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.012 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.131 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA50 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((P^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA51 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.07 ft/s
Segment Time of Concentration	0.026 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	198.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.027 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	45.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.004 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.057 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA51 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((P^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA51 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	63.00 ft
Manning's n	0.240
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.111 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	206.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.028 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	45.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.004 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.143 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA51 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA52 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.028 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.62 ft/s
Segment Time of Concentration	0.017 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	48.00 ft
Is Paved?	True
Slope	0.028 ft/ft
Average Velocity	3.40 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	156.00 ft
Manning's n	0.015
Slope	0.008 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.92 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA52 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$

$$V = 20.3282 * (S^{.48} * 0.5)$$

Unpaved surface:
Paved Surface:
V = 20.3282 * (S^{.48} * 0.5)

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

$$Tc = Time of concentration, hours$$

Where:
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA52 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	36.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.102 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	132.00 ft
Is Paved?	True
Slope	0.030 ft/ft
Average Velocity	3.52 ft/s
Segment Time of Concentration	0.010 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	156.00 ft
Manning's n	0.015
Slope	0.008 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.92 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.123 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA52 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$

Paved Surface:
V = 20.3282 * (S^{.48} * 0.5)

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:

Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA53 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.67 ft/s
Segment Time of Concentration	0.017 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	55.00 ft
Is Paved?	True
Slope	0.030 ft/ft
Average Velocity	3.52 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	118.00 ft
Manning's n	0.015
Slope	0.004 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	2.86 ft/s
Segment Time of Concentration	0.011 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA53 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA53 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	35.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.100 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	130.00 ft
Is Paved?	True
Slope	0.030 ft/ft
Average Velocity	3.52 ft/s
Segment Time of Concentration	0.010 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	118.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.010 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.120 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA53 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (S**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S**0.5)$$

Paved Surface:
$$V = 20.3282 * (S**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((p**0.5) * (S**0.4))$$

Tc= Time of concentration, hours
Where:
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA54 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	122.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.014 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.036 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA54 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA54 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	122.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.014 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.036 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA54 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA55 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	30.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.11 ft/s
Segment Time of Concentration	0.007 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	73.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.007 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	123.00 ft
Manning's n	0.015
Slope	0.020 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	6.40 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA55 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA55 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	30.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.09 ft/s
Segment Time of Concentration	0.088 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	73.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.007 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	123.00 ft
Manning's n	0.015
Slope	0.020 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	6.40 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.100 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA55 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA56 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	10.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.89 ft/s
Segment Time of Concentration	0.003 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	181.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.025 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	10.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA56 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA56 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	10.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.037 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	181.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.025 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	10.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.062 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA56 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.04} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.04} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.04} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.08}) / ((p^{.04} * 0.5) * (S^{.04} * 0.4)))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA57 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	47.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.22 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	63.00 ft
Is Paved?	True
Slope	0.023 ft/ft
Average Velocity	3.08 ft/s
Segment Time of Concentration	0.006 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	10.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA57 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

Where:
 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc = $(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$
Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA57 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	47.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.22 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	63.00 ft
Is Paved?	True
Slope	0.023 ft/ft
Average Velocity	3.08 ft/s
Segment Time of Concentration	0.006 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	10.00 ft
Manning's n	0.015
Slope	0.006 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.51 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA57 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA58 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.42 ft/s
Segment Time of Concentration	0.020 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	80.00 ft
Is Paved?	True
Slope	0.017 ft/ft
Average Velocity	2.65 ft/s
Segment Time of Concentration	0.008 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	241.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.021 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.049 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA58 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA58 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	80.00 ft
Manning's n	0.240
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.193 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.193 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA58 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.66} * (2/3)) * (S^{.66} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA59 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.014 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.24 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	250.00 ft
Is Paved?	True
Slope	0.014 ft/ft
Average Velocity	2.41 ft/s
Segment Time of Concentration	0.029 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	55.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.056 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA59 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2Yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA59 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.09 ft/s
Segment Time of Concentration	0.304 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.304 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA59 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA6 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	35.00 ft
Manning's n	0.240
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.069 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	68.00 ft
Is Paved?	True
Slope	0.045 ft/ft
Average Velocity	4.31 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	60.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.079 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA6 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	35.00 ft
Manning's n	0.240
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.069 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	68.00 ft
Is Paved?	True
Slope	0.045 ft/ft
Average Velocity	4.31 ft/s
Segment Time of Concentration	0.004 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	60.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.005 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.079 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA6 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((p^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA60 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	47.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.22 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	74.00 ft
Is Paved?	True
Slope	0.019 ft/ft
Average Velocity	2.80 ft/s
Segment Time of Concentration	0.007 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA60 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA60 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	47.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.22 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	74.00 ft
Is Paved?	True
Slope	0.019 ft/ft
Average Velocity	2.80 ft/s
Segment Time of Concentration	0.007 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA60 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
 $R = Qa / Wp$
 $V = (1.49 * (R^{.48} * (2/3))) * (S^{.48} * 0.5)) / n$

 $(Lf / V) / 3600$
Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
 $V = 16.1345 * (S^{.48} * 0.5)$
Paved Surface:
 $V = 20.3282 * (S^{.48} * 0.5)$

 $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA61 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.023 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.50 ft/s
Segment Time of Concentration	0.019 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	128.00 ft
Is Paved?	True
Slope	0.018 ft/ft
Average Velocity	2.73 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA61 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA61 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.023 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.50 ft/s
Segment Time of Concentration	0.019 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	128.00 ft
Is Paved?	True
Slope	0.018 ft/ft
Average Velocity	2.73 ft/s
Segment Time of Concentration	0.013 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA61 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
$$V = 16.1345 * (S^{.48} * 0.5)$$
$$V = 20.3282 * (S^{.48} * 0.5)$$
$$(Lf / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA62 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.037 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.81 ft/s
Segment Time of Concentration	0.015 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	109.00 ft
Is Paved?	True
Slope	0.026 ft/ft
Average Velocity	3.28 ft/s
Segment Time of Concentration	0.009 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	68.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.030 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA62 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.48} * 0.8)) / ((P^{.48} * 0.5) * (S^{.48} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA62 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.037 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.81 ft/s
Segment Time of Concentration	0.015 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	109.00 ft
Is Paved?	True
Slope	0.026 ft/ft
Average Velocity	3.28 ft/s
Segment Time of Concentration	0.009 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	68.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.006 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.030 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA62 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

Where:
$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)**0.8)) / ((p**0.5) * (Sf**0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA63 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.17 ft/s
Segment Time of Concentration	0.024 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	115.00 ft
Is Paved?	True
Slope	0.036 ft/ft
Average Velocity	3.86 ft/s
Segment Time of Concentration	0.008 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.032 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA63 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA7 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	266.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.030 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.052 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA7 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA7 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.26 ft/s
Segment Time of Concentration	0.022 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	266.00 ft
Is Paved?	True
Slope	0.015 ft/ft
Average Velocity	2.49 ft/s
Segment Time of Concentration	0.030 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.052 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA7 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA9 Imp
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	22.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.05 ft/s
Segment Time of Concentration	0.006 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	174.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.32 ft/s
Segment Time of Concentration	0.021 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.027 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA9 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3))) * (Sf**(0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA9 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	33.00 ft
Manning's n	0.240
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.09 ft/s
Segment Time of Concentration	0.104 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	182.00 ft
Is Paved?	True
Slope	0.013 ft/ft
Average Velocity	2.27 ft/s
Segment Time of Concentration	0.022 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.126 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: DA9 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**(0.5))) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**(0.5))$$

Paved Surface:
$$V = 20.3282 * (Sf**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: EDA3 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	70.00 ft
Manning's n	0.240
Slope	0.330 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.34 ft/s
Segment Time of Concentration	0.057 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	428.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.19 ft/s
Segment Time of Concentration	0.037 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.094 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: EDA3 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (Sf**0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (Sf**0.5)$$

Paved Surface:
$$V = 20.3282 * (Sf**0.5)$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.175 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	217.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.192 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3))) * (S**(0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S**(0.5))$$

Paved Surface:
$$V = 20.3282 * (S**(0.5))$$

$$(Lf / V) / 3600$$

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	50.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.23 ft/s
Segment Time of Concentration	0.011 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	225.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.017 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.029 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R^{.48} * (2/3)) * (S^{.48} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.48} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.48} * 0.5)$$

$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.42 ft/s
Segment Time of Concentration	0.020 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	553.00 ft
Is Paved?	True
Slope	0.020 ft/ft
Average Velocity	2.87 ft/s
Segment Time of Concentration	0.053 hours
Segment #3: TR-55 Channel Flow	
Flow Area	1.2 ft²
Hydraulic Length	941.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	3.90 ft
Average Velocity	3.20 ft/s
Segment Time of Concentration	0.082 hours
Segment #4: TR-55 Channel Flow	
Flow Area	1.8 ft²
Hydraulic Length	385.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	4.70 ft
Average Velocity	3.70 ft/s
Segment Time of Concentration	0.029 hours
Segment #5: TR-55 Channel Flow	
Flow Area	3.1 ft²
Hydraulic Length	695.00 ft
Manning's n	0.015

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Segment #6: TR-55 Channel Flow	
Slope	0.005 ft/ft
Wetted Perimeter	6.30 ft
Average Velocity	4.38 ft/s
Segment Time of Concentration	0.044 hours
Segment #6: TR-55 Channel Flow	
Flow Area	7.1 ft²
Hydraulic Length	490.00 ft
Manning's n	0.015
Slope	0.005 ft/ft
Wetted Perimeter	9.40 ft
Average Velocity	5.83 ft/s
Segment Time of Concentration	0.023 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.251 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

==== SCS Channel Flow

Tc =
$$V = (1.49 * (R^{.486} * (2/3)) * (S^{.486} * 0.5)) / n$$

$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc =
Unpaved surface:
$$V = 16.1345 * (S^{.486} * 0.5)$$

Paved Surface:
$$V = 20.3282 * (S^{.486} * 0.5)$$

$$(Lf / V) / 3600$$

Where:
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

Tc =
$$(0.007 * ((n * Lf)^{.486} * 0.8)) / ((P^{.486} * 0.5) * (S^{.486} * 0.4))$$

Where:
Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 24hr Rain depth, inches
Sf= Slope, %

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA8 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	1.07 ft/s
Segment Time of Concentration	0.026 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.026 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA8 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

=== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (S**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA8 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

Time of Concentration Results	
Segment #1: TR-55 Sheet Flow	
Hydraulic Length	10.00 ft
Manning's n	0.240
Slope	0.300 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.012 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.020 hours

Current Post Dev Tc

Subsection: Time of Concentration Calculations
Label: PDA8 Perv
Scenario: 100YR
Return Event: 100 years
Storm Event: 100yr current

=== SCS Channel Flow

Tc =
$$R = Qa / Wp$$
$$V = (1.49 * (R**(2/3)) * (S**0.5)) / n$$
$$(Lf / V) / 3600$$

Where:
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
S= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.045 hours	
Area (User Defined)	0.540 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	1.88 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.88 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.540 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.137 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.137 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.61 ft³/s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.045 hours
Area (User Defined)	0.540 acres

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	2.91 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.91 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.540 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.218 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.218 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.61 ft³/s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.045 hours	
Area (User Defined)	0.540 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	5.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.01 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.540 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.384 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.384 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.61 ft³/s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.045 hours
Area (User Defined)	0.840 acres

Computational Time Increment	0.006 hours
Time to Peak (Computed)	12.008 hours
Flow (Peak, Computed)	0.78 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.77 ft³/s

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	5.2 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.052 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.052 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.18 ft³/s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.045 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment		0.006 hours
Time to Peak (Computed)	12,002 hours	
Flow (Peak, Computed)	2.07 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	2.07 ft ³ /s	

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	0.840 acres
Maximum Retention (Previous)	5.2 in
Maximum Retention (Previous, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	1.9 in
Runoff Volume (Previous)	0.131 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.131 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.18 ft ³ /s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.045 hours
Area (User Defined)		0.840 acres

Computational Time Increment	0.006 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	5.25 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.25 ft³/s

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	5.2 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.333 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.333 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.045 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.18 ft³/s
Unit peak time, Tp	0.030 hours
Unit receding limb, Tr	0.120 hours
Total unit time, Tb	0.150 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	0.270 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.019 hours
Flow (Peak, Computed)	0.25 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.24 ft³/s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	0.270 acres
Maximum Retention (Previous)	4.9 in
Maximum Retention (Previous, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	0.8 in
Runoff Volume (Previous)	0.018 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.018 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.07 ft³/s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.200 hours
Total unit time, Tb	0.251 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	0.270 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.009 hours
Flow (Peak, Computed)	0.65 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.64 ft ³ /s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	0.270 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.044 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.044 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.07 ft ³ /s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.200 hours
Total unit time, Tb	0.251 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	0.270 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.009 hours
Flow (Peak, Computed)	1.64 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.62 ft ³ /s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	0.270 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.9 in
Runoff Volume (Pervious)	0.110 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.110 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA1 Perv Basin
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.07 ft ³ /s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.200 hours
Total unit time, Tb	0.251 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.035 hours	
Area (User Defined)	0.790 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	2.80 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.80 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.790 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	3.2 in
Runoff Volume (Previous)	0.208 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.208 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	25.68 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.035 hours
Area (User Defined)	0.790 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	4.30 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.30 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.790 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	5.0 in
Runoff Volume (Previous)	0.327 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.327 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	25.68 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.035 hours
Area (User Defined)		0.790 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	7.38 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.38 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.790 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.570 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.570 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	25.68 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.035 hours
Area (User Defined)	0.240 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	0.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.14 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.240 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Working CURRENT POST Developed.ppc
6/11/2024

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[10.02.00.01]
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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.80 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Working CURRENT POST Developed.ppc
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[10.02.00.01]
Page 26 of 708

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.035 hours	
Area (User Defined)	0.240 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.47 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.47 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.240 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.030 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.030 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.80 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.035 hours
Area (User Defined)		0.240 acres

Computational Time Increment		0.005 hours
Time to Peak (Computed)		12,000 hours
Flow (Peak, Computed)		1.34 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12,000 hours
Flow (Peak Interpolated Output)		1.34 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.240 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.083 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.083 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.035 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA10 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.80 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.093 hours
Total unit time, Tb	0.116 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.053 hours
Area (User Defined)	0.610 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	2.08 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.08 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.610 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.150 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.150 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.10 ft³/s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.053 hours	
Area (User Defined)	0.610 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	3.24 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.24 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.610 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.7 in
Runoff Volume (Previous)	0.241 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.241 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.10 ft ³ /s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.053 hours	
Area (User Defined)	0.610 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	5.61 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.61 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.610 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.428 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.428 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.10 ft³/s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.053 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment		0.007 hours
Time to Peak (Computed)	12,012 hours	
Flow (Peak, Computed)	0.10 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.10 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.008 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.008 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.87 ft³/s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.053 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	0.34 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.34 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.022 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.022 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.87 ft³/s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.053 hours
Area (User Defined)		0.180 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	0.98 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.97 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.062 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.062 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.053 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA11 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.87 ft³/s
Unit peak time, Tp	0.035 hours
Unit receding limb, Tr	0.141 hours
Total unit time, Tb	0.176 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.072 hours	
Area (User Defined)	0.360 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	1.23 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.22 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.360 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.095 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.095 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.072 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.68 ft³/s
Unit peak time, Tp	0.048 hours
Unit receding limb, Tr	0.192 hours
Total unit time, Tb	0.239 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.072 hours	
Area (User Defined)	0.360 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	1.89 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.88 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.360 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.149 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.149 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.072 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.68 ft ³ /s
Unit peak time, Tp	0.048 hours
Unit receding limb, Tr	0.192 hours
Total unit time, Tb	0.239 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.072 hours
Area (User Defined)		0.360 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	3.24 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.23 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.360 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.260 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.260 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.072 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.68 ft³/s
Unit peak time, Tp	0.048 hours
Unit receding limb, Tr	0.192 hours
Total unit time, Tb	0.239 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.290 hours	
Area (User Defined)	2.260 acres	

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.166 hours
Flow (Peak, Computed)	0.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.76 ft³/s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	2.260 acres
Maximum Retention (Previous)	6.1 in
Maximum Retention (Previous, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	0.6 in
Runoff Volume (Previous)	0.107 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.107 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.84 ft³/s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.772 hours
Total unit time, Tb	0.966 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.290 hours
Area (User Defined)		2.260 acres

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.128 hours
Flow (Peak, Computed)	2.67 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.65 ft ³ /s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	2.260 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.294 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.294 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.84 ft ³ /s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.772 hours
Total unit time, Tb	0.966 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.290 hours	
Area (User Defined)	2.260 acres	

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.128 hours
Flow (Peak, Computed)	7.77 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	7.62 ft ³ /s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	2.260 acres
Maximum Retention (Previous)	6.1 in
Maximum Retention (Previous, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.3 in
Runoff Volume (Previous)	0.804 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.804 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA12A Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.84 ft ³ /s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.772 hours
Total unit time, Tb	0.966 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		0.340 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.15 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.15 ft³/s

Drainage Area	
SCS CN (Composite)	95,000
Area (User Defined)	0.340 acres
Maximum Retention (Previous)	0.5 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	2.8 in
Runoff Volume (Previous)	0.080 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.081 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.16 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.340 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.81 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.81 ft ³ /s

Drainage Area	
SCS CN (Composite)	95,000
Area (User Defined)	0.340 acres
Maximum Retention (Previous)	0.5 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.6 in
Runoff Volume (Previous)	0.131 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.131 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.16 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		0.340 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	3.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.15 ft³/s

Drainage Area	
SCS CN (Composite)	95.000
Area (User Defined)	0.340 acres
Maximum Retention (Previous)	0.5 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.3 in
Runoff Volume (Previous)	0.235 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.235 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.16 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.029 hours
Area (User Defined)	0.040 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	0.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.02 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.040 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.002 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.002 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.55 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.029 hours
Area (User Defined)	0.040 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.08 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.08 ft ³ /s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.040 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.55 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		0.040 acres
Computational Time Increment		0.004 hours
Time to Peak (Computed)		12,000 hours
Flow (Peak, Computed)		0.22 ft³/s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12,000 hours
Flow (Peak Interpolated Output)		0.22 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.040 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.014 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.014 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA13 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.55 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.036 hours
Area (User Defined)		0.330 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.14 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.330 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.081 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.081 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.39 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.036 hours
Area (User Defined)	0.330 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.77 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.77 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.330 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.7 in
Runoff Volume (Previous)	0.130 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.130 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.39 ft ³ /s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.036 hours
Area (User Defined)		0.330 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	3.07 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.06 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.330 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.232 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.232 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.39 ft ³ /s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.036 hours	
Area (User Defined)	0.070 acres	

Computational Time Increment		0.005 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	0.04 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.04 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.070 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	0.5 in
Runoff Volume (Previous)	0.003 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.003 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.20 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.036 hours	
Area (User Defined)	0.070 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	0.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.14 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.070 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	1.5 in
Runoff Volume (Previous)	0.009 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.009 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.20 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.036 hours	
Area (User Defined)	0.070 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	0.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.39 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.070 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.024 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.024 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA14 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.20 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.096 hours
Total unit time, Tb	0.120 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.040 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	2.97 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.97 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.222 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.222 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.88 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.106 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.040 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	4.57 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.57 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.840 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	5.0 in
Runoff Volume (Previous)	0.347 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.347 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.88 ft ³ /s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.106 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.040 hours
Area (User Defined)		0.840 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	7.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.84 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.840 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.606 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.606 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.88 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.106 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.040 hours	
Area (User Defined)	0.820 acres	

Computational Time Increment		0.005 hours
Time to Peak (Computed)	12.005 hours	
Flow (Peak, Computed)	0.48 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.000 hours	
Flow (Peak Interpolated Output)	0.48 ft ³ /s	

Drainage Area		
SCS CN (Composite)	61.000	
Area (User Defined)	0.820 acres	
Maximum Retention (Pervious)	6.4 in	
Maximum Retention (Pervious, 20 percent)	1.3 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	0.5 in	
Runoff Volume (Pervious)	0.036 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.036 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.040 hours	
Computational Time Increment	0.005 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	
Receding/Rising, Tr/Tp	1.670	

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters		
Unit peak, qp	23.31 ft ³ /s	
Unit peak time, Tp	0.027 hours	
Unit receding limb, Tr	0.106 hours	
Total unit time, Tb	0.133 hours	

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Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA15 Perv

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.820 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	1.61 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.60 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.820 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	1.5 in
Runoff Volume (Previous)	0.102 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.102 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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6/11/2024

PondPack CONNECT Edition
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Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA15 Perv

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.31 ft ³ /s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.106 hours
Total unit time, Tb	0.133 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.040 hours
Area (User Defined)		0.820 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	4.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.54 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.820 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.283 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.283 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA15 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.31 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.106 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.044 hours	
Area (User Defined)	1,480 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	5.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.16 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	1,480 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.377 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.377 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.044 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	38.27 ft³/s
Unit peak time, Tp	0.029 hours
Unit receding limb, Tr	0.117 hours
Total unit time, Tb	0.146 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.044 hours	
Area (User Defined)	1.480 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	7.99 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.98 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.480 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.598 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.598 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.044 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	38.27 ft³/s
Unit peak time, Tp	0.029 hours
Unit receding limb, Tr	0.117 hours
Total unit time, Tb	0.146 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48.000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.044 hours	
Area (User Defined)	1.480 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	13.76 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	13.74 ft³/s

Drainage Area

SCS CN (Composite)	97.000
Area (User Defined)	1.480 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	1.053 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	1.053 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.044 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	38.27 ft³/s
Unit peak time, Tp	0.029 hours
Unit receding limb, Tr	0.117 hours
Total unit time, Tb	0.146 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.124 hours	
Area (User Defined)	0.870 acres	

Computational Time Increment		0.017 hours
Time to Peak (Computed)	12.044 hours	
Flow (Peak, Computed)	0.38 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.38 ft ³ /s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.870 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	0.5 in
Runoff Volume (Previous)	0.038 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.038 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.124 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.96 ft ³ /s
Unit peak time, Tp	0.083 hours
Unit receding limb, Tr	0.330 hours
Total unit time, Tb	0.413 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.124 hours	
Area (User Defined)	0.870 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.044 hours
Flow (Peak, Computed)	1.36 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.34 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.870 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.108 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.108 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.124 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.96 ft ³ /s
Unit peak time, Tp	0.083 hours
Unit receding limb, Tr	0.330 hours
Total unit time, Tb	0.413 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.124 hours
Area (User Defined)		0.870 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.027 hours
Flow (Peak, Computed)	4.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	3.87 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.870 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.300 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.300 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.124 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA16 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.96 ft³/s
Unit peak time, Tp	0.083 hours
Unit receding limb, Tr	0.330 hours
Total unit time, Tb	0.413 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.850 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	11,998 hours	
Flow (Peak, Computed)	2.94 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	2.93 ft³/s	

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.850 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.209 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.209 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	33.20 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.077 hours
Total unit time, Tb	0.097 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.029 hours
Area (User Defined)	0.850 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	4.58 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.56 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.850 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.7 in
Runoff Volume (Previous)	0.335 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.335 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	33.20 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.077 hours
Total unit time, Tb	0.097 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.850 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	7.91 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.90 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.850 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.596 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.596 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	33.20 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.077 hours
Total unit time, Tb	0.097 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.077 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment		0.010 hours
Time to Peak (Computed)	12,024 hours	
Flow (Peak, Computed)	0.06 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.06 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.077 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.77 ft³/s
Unit peak time, Tp	0.051 hours
Unit receding limb, Tr	0.205 hours
Total unit time, Tb	0.256 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA17 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.077 hours
Area (User Defined)	0.120 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.014 hours
Flow (Peak, Computed)	0.21 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.21 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.015 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.015 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.077 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA17 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.77 ft³/s
Unit peak time, Tp	0.051 hours
Unit receding limb, Tr	0.205 hours
Total unit time, Tb	0.256 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.077 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.014 hours
Flow (Peak, Computed)	0.62 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.61 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.041 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.041 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.077 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA17 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.77 ft³/s
Unit peak time, Tp	0.051 hours
Unit receding limb, Tr	0.205 hours
Total unit time, Tb	0.256 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.134 hours	
Area (User Defined)	0.780 acres	

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.031 hours
Flow (Peak, Computed)	2.31 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	2.25 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.199 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.199 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.57 ft³/s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.134 hours	
Area (User Defined)	0.780 acres	

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.031 hours
Flow (Peak, Computed)	3.59 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	3.48 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.315 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.315 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.57 ft ³ /s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.134 hours
Area (User Defined)		0.780 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.031 hours
Flow (Peak, Computed)	6.18 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	6.00 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.555 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.555 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.57 ft³/s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.134 hours	
Area (User Defined)	0.370 acres	

Computational Time Increment		0.018 hours
Time to Peak (Computed)	12,049 hours	
Flow (Peak, Computed)	0.16 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,050 hours	
Flow (Peak Interpolated Output)	0.16 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.12 ft³/s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.134 hours
Area (User Defined)		0.370 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.049 hours
Flow (Peak, Computed)	0.57 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.56 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.046 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.046 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.12 ft ³ /s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.134 hours
Area (User Defined)		0.370 acres

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.031 hours
Flow (Peak, Computed)	1.66 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.64 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.128 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.128 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.134 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA18 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.12 ft ³ /s
Unit peak time, Tp	0.090 hours
Unit receding limb, Tr	0.359 hours
Total unit time, Tb	0.448 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	
2yr current	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.105 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	1.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.05 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.086 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.086 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.79 ft³/s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.105 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	1.70 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.65 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.138 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.138 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.79 ft ³ /s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.105 hours
Area (User Defined)		0.350 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	2.94 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.85 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.350 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.246 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.246 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.79 ft³/s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.105 hours	
Area (User Defined)	0.100 acres	

Computational Time Increment		0.014 hours
Time to Peak (Computed)	12.032 hours	
Flow (Peak, Computed)	0.05 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.05 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.100 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.08 ft³/s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.105 hours
Area (User Defined)	0.100 acres

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.032 hours
Flow (Peak, Computed)	0.17 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.15 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.100 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.012 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.012 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.08 ft ³ /s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.105 hours	
Area (User Defined)	0.100 acres	

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	0.48 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.46 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.100 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.035 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.035 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.105 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA19 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.08 ft ³ /s
Unit peak time, Tp	0.070 hours
Unit receding limb, Tr	0.279 hours
Total unit time, Tb	0.349 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA2 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	0.840 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	2.94 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.94 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.214 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.214 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA2 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	30.06 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.106 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.032 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	4.55 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.54 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.339 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.339 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	30.06 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.106 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.840 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	7.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.83 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.840 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.598 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.598 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	30.06 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.106 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.057 hours	
Area (User Defined)	0.920 acres	

Computational Time Increment		0.008 hours
Time to Peak (Computed)	12.011 hours	
Flow (Peak, Computed)	0.57 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.000 hours	
Flow (Peak Interpolated Output)	0.55 ft³/s	

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	0.920 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.044 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.044 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.057 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.31 ft³/s
Unit peak time, Tp	0.038 hours
Unit receding limb, Tr	0.152 hours
Total unit time, Tb	0.190 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.057 hours
Area (User Defined)		0.920 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	1.82 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.81 ft ³ /s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	0.920 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.120 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.120 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.057 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.31 ft ³ /s
Unit peak time, Tp	0.038 hours
Unit receding limb, Tr	0.152 hours
Total unit time, Tb	0.190 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.057 hours
Area (User Defined)		0.920 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	5.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.07 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	0.920 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.3 in
Runoff Volume (Pervious)	0.327 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.327 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.057 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA2 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.31 ft³/s
Unit peak time, Tp	0.038 hours
Unit receding limb, Tr	0.152 hours
Total unit time, Tb	0.190 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.033 hours
Area (User Defined)		0.690 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	2.42 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.42 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.690 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.176 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.176 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.48 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.089 hours
Total unit time, Tb	0.111 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.033 hours
Area (User Defined)	0.690 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	3.74 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.74 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.690 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.279 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.279 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.48 ft ³ /s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.089 hours
Total unit time, Tb	0.111 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.033 hours
Area (User Defined)		0.690 acres

Computational Time Increment		0.004 hours
Time to Peak (Computed)		12,000 hours
Flow (Peak, Computed)		6.44 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12,000 hours
Flow (Peak Interpolated Output)		6.44 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.690 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.491 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.491 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	23.48 ft ³ /s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.089 hours
Total unit time, Tb	0.111 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.033 hours	
Area (User Defined)	0.400 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,006 hours	
Flow (Peak, Computed)	0.24 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.24 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.400 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	0.5 in
Runoff Volume (Previous)	0.018 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.018 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.76 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.088 hours
Total unit time, Tb	0.110 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.033 hours
Area (User Defined)	0.400 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.79 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.79 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.400 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.050 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.050 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.76 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.088 hours
Total unit time, Tb	0.110 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.033 hours
Area (User Defined)		0.400 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	2.23 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.23 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.400 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.138 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.138 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA20 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.76 ft ³ /s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.088 hours
Total unit time, Tb	0.110 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.087 hours
Area (User Defined)		0.520 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.015 hours
Flow (Peak, Computed)	1.67 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.65 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.520 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.128 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.128 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.75 ft ³ /s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.233 hours
Total unit time, Tb	0.291 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.087 hours	
Area (User Defined)	0.520 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.015 hours
Flow (Peak, Computed)	2.61 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.58 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.520 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.7 in
Runoff Volume (Previous)	0.205 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.205 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.75 ft ³ /s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.233 hours
Total unit time, Tb	0.291 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.087 hours
Area (User Defined)		0.520 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.015 hours
Flow (Peak, Computed)	4.52 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.48 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.520 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.365 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.365 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.75 ft³/s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.233 hours
Total unit time, Tb	0.291 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.086 hours	
Area (User Defined)	0.230 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.022 hours
Flow (Peak, Computed)	0.11 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.10 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.086 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.02 ft³/s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.230 hours
Total unit time, Tb	0.288 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA21 Perv

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.086 hours	
Area (User Defined)	0.230 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.022 hours
Flow (Peak, Computed)	0.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.39 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.029 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.029 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.086 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA21 Perv

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.02 ft ³ /s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.230 hours
Total unit time, Tb	0.288 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.086 hours	
Area (User Defined)	0.230 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.010 hours
Flow (Peak, Computed)	1.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.14 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.086 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA21 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.02 ft³/s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.230 hours
Total unit time, Tb	0.288 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.023 hours	
Area (User Defined)	0.830 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11.997 hours
Flow (Peak, Computed)	2.87 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.87 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.830 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.204 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.204 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.023 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	40.93 ft ³ /s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.061 hours
Total unit time, Tb	0.077 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.023 hours
Area (User Defined)	0.830 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11,997 hours
Flow (Peak, Computed)	4.47 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.46 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.830 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.327 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.327 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.023 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	40.93 ft ³ /s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.061 hours
Total unit time, Tb	0.077 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.023 hours	
Area (User Defined)	0.830 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11,997 hours
Flow (Peak, Computed)	7.73 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.72 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.830 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.582 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.582 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.023 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	40.93 ft ³ /s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.061 hours
Total unit time, Tb	0.077 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.021 hours	
Area (User Defined)	0.450 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	0.34 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.34 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	0.450 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.023 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.023 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.021 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.58 ft³/s
Unit peak time, Tp	0.014 hours
Unit receding limb, Tr	0.055 hours
Total unit time, Tb	0.069 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.021 hours
Area (User Defined)	0.450 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.01 ft³/s

Drainage Area	
SCS CN (Composite)	63,000
Area (User Defined)	0.450 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.061 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.062 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.021 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.58 ft³/s
Unit peak time, Tp	0.014 hours
Unit receding limb, Tr	0.055 hours
Total unit time, Tb	0.069 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.021 hours
Area (User Defined)		0.450 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	2.68 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.68 ft ³ /s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	0.450 acres
Maximum Retention (Previous)	5.9 in
Maximum Retention (Previous, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.4 in
Runoff Volume (Previous)	0.165 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.165 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.021 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA22 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.58 ft ³ /s
Unit peak time, Tp	0.014 hours
Unit receding limb, Tr	0.055 hours
Total unit time, Tb	0.069 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.098 hours	
Area (User Defined)	1.930 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.013 hours
Flow (Peak, Computed)	6.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.96 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.930 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.474 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.474 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.35 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.098 hours
Area (User Defined)	1.930 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.013 hours
Flow (Peak, Computed)	9.52 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	9.32 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.930 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.761 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.761 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.35 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.098 hours
Area (User Defined)		1.930 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.013 hours
Flow (Peak, Computed)	16.48 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	16.15 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.930 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	1.354 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.354 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.35 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.098 hours	
Area (User Defined)	1,480 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	0.71 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.67 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1,480 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.065 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.065 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	17.14 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.098 hours
Area (User Defined)	1,480 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	2.51 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.36 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	1,480 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.184 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.184 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	17.14 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.098 hours	
Area (User Defined)	1,480 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	7.28 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.01 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1,480 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.511 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.511 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA25 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	17.14 ft³/s
Unit peak time, Tp	0.065 hours
Unit receding limb, Tr	0.261 hours
Total unit time, Tb	0.326 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.074 hours	
Area (User Defined)	1,590 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12,005 hours
Flow (Peak, Computed)	5.40 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.37 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1,590 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.420 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.420 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.33 ft³/s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.074 hours	
Area (User Defined)	1,590 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12,005 hours
Flow (Peak, Computed)	8.30 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	8.26 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1,590 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.658 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.658 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.33 ft³/s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48.000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.074 hours	
Area (User Defined)	1.590 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	14.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	14.18 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.590 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	1.147 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.147 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	24.33 ft³/s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.074 hours
Area (User Defined)		0.110 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.015 hours
Flow (Peak, Computed)	0.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.05 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.110 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.68 ft³/s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.074 hours	
Area (User Defined)	0.110 acres	

Computational Time Increment		0.010 hours
Time to Peak (Computed)	12.015 hours	
Flow (Peak, Computed)	0.20 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.000 hours	
Flow (Peak Interpolated Output)	0.19 ft ³ /s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.110 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.014 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.014 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.68 ft ³ /s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.074 hours
Area (User Defined)		0.110 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	0.57 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.56 ft³/s

Drainage Area	
SCS CN (Composite)	
Area (User Defined)	61,000
Maximum Retention (Pervious)	0.110 acres
Maximum Retention (Pervious, 20 percent)	6.4 in
	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.038 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.038 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.074 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA26 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.68 ft³/s
Unit peak time, Tp	0.049 hours
Unit receding limb, Tr	0.197 hours
Total unit time, Tb	0.247 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA27

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.770 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12,000 hours	
Flow (Peak, Computed)	2.73 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	2.73 ft ³ /s	

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.770 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.203 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.203 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA27

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	43.62 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA27

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.770 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	4.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.20 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.770 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	5.0 in
Runoff Volume (Previous)	0.318 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.319 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA27

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	43.62 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA27
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.770 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	7.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.20 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.770 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.556 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.556 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA27
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	43.62 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.038 hours
Area (User Defined)		0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	3.15 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.15 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.900 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	3.1 in
Runoff Volume (Previous)	0.229 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.229 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	26.92 ft³/s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.101 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.038 hours
Area (User Defined)		0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	4.87 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.87 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.363 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.363 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	26.92 ft ³ /s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.101 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.038 hours
Area (User Defined)		0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	8.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	8.39 ft³/s

Drainage Area

SCS CN (Composite)	97.000
Area (User Defined)	0.900 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.640 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	0.640 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	26.92 ft³/s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.101 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.250 hours
Area (User Defined)		0.810 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.150 hours
Flow (Peak, Computed)	0.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.26 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.810 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.036 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.036 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.67 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.668 hours
Total unit time, Tb	0.835 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.250 hours	
Area (User Defined)	0.810 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.117 hours
Flow (Peak, Computed)	0.96 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.95 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.810 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.101 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.101 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.67 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.668 hours
Total unit time, Tb	0.835 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.250 hours	
Area (User Defined)	0.810 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.117 hours
Flow (Peak, Computed)	2.85 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.85 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.810 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.280 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.280 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA28 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.67 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.668 hours
Total unit time, Tb	0.835 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.040 hours	
Area (User Defined)	1.030 acres	

Computational Time Increment		0.005 hours
Time to Peak (Computed)	12,000 hours	
Flow (Peak, Computed)	3.60 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	3.60 ft³/s	

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	1.030 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	3.1 in
Runoff Volume (Previous)	0.262 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.262 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	29.18 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.040 hours	
Area (User Defined)	1.030 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	5.57 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.57 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.030 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.416 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.416 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	29.18 ft ³ /s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.040 hours
Area (User Defined)		1.030 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	9.60 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	9.60 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.030 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.733 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.733 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	29.18 ft ³ /s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.080 hours
Area (User Defined)		0.210 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.021 hours
Flow (Peak, Computed)	0.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.10 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.009 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.009 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.080 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.97 ft ³ /s
Unit peak time, Tp	0.053 hours
Unit receding limb, Tr	0.213 hours
Total unit time, Tb	0.267 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.080 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.021 hours
Flow (Peak, Computed)	0.37 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.36 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.026 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.026 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.080 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.97 ft ³ /s
Unit peak time, Tp	0.053 hours
Unit receding limb, Tr	0.213 hours
Total unit time, Tb	0.267 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event	100yr current
Return Event	100 years
Duration	48,000 hours
Depth	8.9 in
Time of Concentration (Composite)	0.080 hours
Area (User Defined)	0.210 acres
Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.011 hours
Flow (Peak, Computed)	1.08 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.06 ft³/s
Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.073 ac-ft
Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.073 ac-ft
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.080 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA29 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.97 ft³/s
Unit peak time, Tp	0.053 hours
Unit receding limb, Tr	0.213 hours
Total unit time, Tb	0.267 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.033 hours	
Area (User Defined)	1.380 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	4.76 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.76 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.380 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.339 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.339 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.80 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.033 hours	
Area (User Defined)	1.380 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	7.43 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.42 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	1.380 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.544 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.544 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.80 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event	100yr current
Return Event	100 years
Duration	48.000 hours
Depth	8.9 in
Time of Concentration (Composite)	0.033 hours
Area (User Defined)	1.380 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	12.85 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	12.83 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.380 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.968 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.968 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.80 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.127 hours	
Area (User Defined)	1.710 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.034 hours
Flow (Peak, Computed)	1.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.34 ft³/s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	1.710 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.8 in
Runoff Volume (Pervious)	0.113 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.113 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.127 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	15.22 ft³/s
Unit peak time, Tp	0.085 hours
Unit receding limb, Tr	0.339 hours
Total unit time, Tb	0.424 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.127 hours	
Area (User Defined)	1.710 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.034 hours
Flow (Peak, Computed)	3.65 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	3.56 ft ³ /s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	1.710 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.277 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.277 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.127 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	15.22 ft ³ /s
Unit peak time, Tp	0.085 hours
Unit receding limb, Tr	0.339 hours
Total unit time, Tb	0.424 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.127 hours
Area (User Defined)		1.710 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.034 hours
Flow (Peak, Computed)	9.27 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	8.97 ft ³ /s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	1.710 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.9 in
Runoff Volume (Pervious)	0.695 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.695 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.127 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA30 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	15.22 ft ³ /s
Unit peak time, Tp	0.085 hours
Unit receding limb, Tr	0.339 hours
Total unit time, Tb	0.424 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.049 hours	
Area (User Defined)	0.580 acres	

Computational Time		0.007 hours
Increment	11,996 hours	
Time to Peak (Computed)	2.01 ft³/s	
Flow (Peak, Computed)	0.050 hours	
Output Increment	12,000 hours	
Time to Flow (Peak Interpolated Output)	2.01 ft³/s	

Drainage Area		
SCS CN (Composite)	97,000	
Area (User Defined)	0.580 acres	
Maximum Retention (Pervious)	0.3 in	
Maximum Retention (Pervious, 20 percent)	0.1 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	3.1 in	
Runoff Volume (Pervious)	0.148 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.148 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.049 hours	
Computational Time Increment	0.007 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	
Receding/Rising, Tr/Tp	1.670	

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters		
Unit peak, qp	13.47 ft³/s	
Unit peak time, Tp	0.033 hours	
Unit receding limb, Tr	0.130 hours	
Total unit time, Tb	0.163 hours	

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA31 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.049 hours	
Area (User Defined)	0.580 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	3.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.11 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.580 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.234 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.234 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.049 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA31 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.47 ft ³ /s
Unit peak time, Tp	0.033 hours
Unit receding limb, Tr	0.130 hours
Total unit time, Tb	0.163 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.049 hours
Area (User Defined)		0.580 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11.996 hours
Flow (Peak, Computed)	5.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.36 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.580 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.413 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.413 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.049 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.47 ft³/s
Unit peak time, Tp	0.033 hours
Unit receding limb, Tr	0.130 hours
Total unit time, Tb	0.163 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.087 hours	
Area (User Defined)	0.270 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	0.89 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.89 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.270 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.071 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.071 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.53 ft³/s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.231 hours
Total unit time, Tb	0.289 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.087 hours	
Area (User Defined)	0.270 acres	

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	1.37 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.36 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.270 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.112 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.112 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.53 ft ³ /s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.231 hours
Total unit time, Tb	0.289 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.087 hours
Area (User Defined)		0.270 acres

Computational Time Increment	0.012 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	2.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.34 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.270 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.195 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.195 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.087 hours
Computational Time Increment	0.012 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA31 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.53 ft³/s
Unit peak time, Tp	0.058 hours
Unit receding limb, Tr	0.231 hours
Total unit time, Tb	0.289 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.031 hours	
Area (User Defined)	2.280 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	7.99 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.97 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	2.280 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.580 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.581 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.85 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48.000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.031 hours	
Area (User Defined)	2.280 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	12.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	12.33 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	2.280 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.921 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.921 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.85 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.031 hours
Area (User Defined)		2.280 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	21.28 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	21.23 ft³/s

Drainage Area

SCS CN (Composite)	97.000
Area (User Defined)	2.280 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff

Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	1.622 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.623 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.85 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

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Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.031 hours	
Area (User Defined)	0.220 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,002 hours	
Flow (Peak, Computed)	0.13 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.13 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.99 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.031 hours
Area (User Defined)	0.220 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.44 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.44 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.027 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.027 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.99 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.031 hours
Area (User Defined)		0.220 acres

Computational Time Increment		0.004 hours
Time to Peak (Computed)		12.002 hours
Flow (Peak, Computed)		1.23 ft³/s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.000 hours
Flow (Peak Interpolated Output)		1.23 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.076 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.076 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA32 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.99 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.083 hours
Total unit time, Tb	0.104 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.034 hours	
Area (User Defined)	0.340 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.20 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.340 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.090 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.090 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.29 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA33 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.034 hours	
Area (User Defined)	0.340 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.85 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.85 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.340 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.141 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.141 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA33 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.29 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.034 hours
Area (User Defined)		0.340 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	3.18 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.17 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.340 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.245 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.245 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.29 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.034 hours	
Area (User Defined)	0.090 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.05 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.05 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.99 ft³/s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.034 hours
Area (User Defined)	0.090 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.18 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.18 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.99 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.034 hours
Area (User Defined)		0.090 acres

Computational Time Increment		0.005 hours
Time to Peak (Computed)		12.002 hours
Flow (Peak, Computed)		0.50 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.000 hours
Flow (Peak Interpolated Output)		0.50 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.031 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.031 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.034 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA33 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.99 ft ³ /s
Unit peak time, Tp	0.023 hours
Unit receding limb, Tr	0.091 hours
Total unit time, Tb	0.114 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.039 hours	
Area (User Defined)	0.350 acres	

Computational Time Increment		0.005 hours
Time to Peak (Computed)	11,997 hours	
Flow (Peak, Computed)	1.22 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	1.22 ft³/s	

Drainage Area		
SCS CN (Composite)	97,000	
Area (User Defined)	0.350 acres	
Maximum Retention (Pervious)	0.3 in	
Maximum Retention (Pervious, 20 percent)	0.1 in	

Cumulative Runoff		
Cumulative Runoff Depth (Pervious)	3.1 in	
Runoff Volume (Pervious)	0.089 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.089 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.039 hours	
Computational Time Increment	0.005 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	
Receding/Rising, Tr/Tp	1.670	

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters		
Unit peak, qp	10.15 ft³/s	
Unit peak time, Tp	0.026 hours	
Unit receding limb, Tr	0.104 hours	
Total unit time, Tb	0.130 hours	

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.039 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,997 hours
Flow (Peak, Computed)	1.89 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.89 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.350 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.141 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.141 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.039 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.15 ft ³ /s
Unit peak time, Tp	0.026 hours
Unit receding limb, Tr	0.104 hours
Total unit time, Tb	0.130 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.039 hours
Area (User Defined)		0.350 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11.997 hours
Flow (Peak, Computed)	3.26 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.25 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.249 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.249 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.039 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.15 ft ³ /s
Unit peak time, Tp	0.026 hours
Unit receding limb, Tr	0.104 hours
Total unit time, Tb	0.130 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.039 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.007 hours
Flow (Peak, Computed)	0.08 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.08 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.006 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.039 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.77 ft³/s
Unit peak time, Tp	0.026 hours
Unit receding limb, Tr	0.104 hours
Total unit time, Tb	0.130 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.039 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.25 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.25 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.039 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.77 ft³/s
Unit peak time, Tp	0.026 hours
Unit receding limb, Tr	0.104 hours
Total unit time, Tb	0.130 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.039 hours
Area (User Defined)		0.130 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.72 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.72 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.045 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.045 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.039 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA34 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.77 ft³/s
Unit peak time, Tp	0.026 hours
Unit receding limb, Tr	0.104 hours
Total unit time, Tb	0.130 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.047 hours
Area (User Defined)	0.200 acres

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	0.70 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.70 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.200 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.053 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.053 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.82 ft³/s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.125 hours
Total unit time, Tb	0.157 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.200 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	1.08 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.08 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.200 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.083 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.083 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.82 ft ³ /s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.125 hours
Total unit time, Tb	0.157 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.200 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	1.86 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.86 ft ³ /s

Drainage Area

SCS CN (Composite)	98,000
Area (User Defined)	0.200 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.144 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	0.144 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.82 ft ³ /s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.125 hours
Total unit time, Tb	0.157 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.084 hours	
Area (User Defined)	0.780 acres	

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	0.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.36 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.034 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.034 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.084 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.47 ft³/s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.225 hours
Total unit time, Tb	0.281 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.084 hours
Area (User Defined)	0.780 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	1.37 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.32 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.097 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.097 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.084 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.47 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.225 hours
Total unit time, Tb	0.281 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.084 hours
Area (User Defined)		0.780 acres

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.012 hours
Flow (Peak, Computed)	3.97 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.88 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.780 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.269 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.269 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.084 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA35 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.47 ft³/s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.225 hours
Total unit time, Tb	0.281 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.026 hours
Area (User Defined)	0.510 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	1.81 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.80 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.510 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.135 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.135 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.01 ft³/s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.070 hours
Total unit time, Tb	0.088 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.026 hours
Area (User Defined)	0.510 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	2.78 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.78 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.510 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.211 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.211 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.01 ft³/s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.070 hours
Total unit time, Tb	0.088 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.026 hours
Area (User Defined)		0.510 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	4.77 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.76 ft ³ /s

Drainage Area

SCS CN (Composite)	98.000
Area (User Defined)	0.510 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff

Cumulative Runoff Depth (Pervious)	8.7 in
Runoff Volume (Pervious)	0.368 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	0.368 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	22.01 ft ³ /s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.070 hours
Total unit time, Tb	0.088 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.031 hours	
Area (User Defined)	0.760 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	0.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.84 ft³/s

Drainage Area	
SCS CN (Composite)	68.000
Area (User Defined)	0.760 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.8 in
Runoff Volume (Pervious)	0.053 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.054 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	28.08 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.102 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.031 hours	
Area (User Defined)	0.760 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	2.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.08 ft³/s

Drainage Area	
SCS CN (Composite)	68,000
Area (User Defined)	0.760 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	0.128 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.128 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	28.08 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.102 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.031 hours
Area (User Defined)		0.760 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	5.05 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.05 ft³/s

Drainage Area	
SCS CN (Composite)	68.000
Area (User Defined)	0.760 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.317 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.317 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA36 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	28.08 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.102 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.033 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	1.23 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.22 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.089 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.089 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	12.18 ft ³ /s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.033 hours	
Area (User Defined)	0.350 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	1.90 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.89 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.350 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.141 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.141 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	12.18 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.033 hours
Area (User Defined)		0.350 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	3.27 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.26 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.249 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.249 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.033 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	12.18 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.109 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.110 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.038 hours
Flow (Peak, Computed)	0.08 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.08 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.008 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.008 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.85 ft³/s
Unit peak time, Tp	0.074 hours
Unit receding limb, Tr	0.294 hours
Total unit time, Tb	0.368 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.110 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	0.29 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.28 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.022 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.022 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.85 ft³/s
Unit peak time, Tp	0.074 hours
Unit receding limb, Tr	0.294 hours
Total unit time, Tb	0.368 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.110 hours
Area (User Defined)		0.180 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	0.86 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.81 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.062 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.062 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA37 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.85 ft³/s
Unit peak time, Tp	0.074 hours
Unit receding limb, Tr	0.294 hours
Total unit time, Tb	0.368 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.860 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	2.97 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.97 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.211 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.211 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	4.63 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.63 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.339 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.339 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	8.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	8.01 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.603 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.604 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.150 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	0.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.09 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.007 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.50 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.150 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.30 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.30 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.019 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.019 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.50 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.150 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.85 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.85 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.052 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.052 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA4 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.50 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.59 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.59 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.042 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.042 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.63 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA41 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.92 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.92 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.067 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.067 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA41 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.63 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event	100yr current
Return Event	100 years
Duration	48,000 hours
Depth	8.9 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.58 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.58 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.119 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.119 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.63 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.020 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	0.01 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.01 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.001 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.001 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.020 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.04 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.04 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.002 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.003 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.020 acres

Computational Time Increment		0.003 hours
Time to Peak (Computed)		12,000 hours
Flow (Peak, Computed)		0.11 ft³/s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12,000 hours
Flow (Peak Interpolated Output)		0.11 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.007 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA41 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.560 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.86 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.86 ft³/s

Drainage Area	
SCS CN (Composite)	94,000
Area (User Defined)	0.560 acres
Maximum Retention (Pervious)	0.6 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	0.128 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.128 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.57 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.560 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	2.96 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.96 ft³/s

Drainage Area	
SCS CN (Composite)	94,000
Area (User Defined)	0.560 acres
Maximum Retention (Pervious)	0.6 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.5 in
Runoff Volume (Pervious)	0.210 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.210 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.57 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		0.560 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.996 hours
Flow (Peak, Computed)	5.17 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.17 ft ³ /s

Drainage Area	
SCS CN (Composite)	94.000
Area (User Defined)	0.560 acres
Maximum Retention (Previous)	0.6 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.2 in
Runoff Volume (Previous)	0.382 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.382 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.57 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.029 hours
Area (User Defined)	0.220 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.004 hours
Flow (Peak, Computed)	0.13 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.13 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.47 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.220 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,000 hours	
Flow (Peak, Computed)	0.44 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.44 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.027 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.027 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.47 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.220 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,000 hours	
Flow (Peak, Computed)	1.23 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	1.23 ft ³ /s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.076 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.076 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA42 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.47 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.078 hours
Total unit time, Tb	0.098 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.46 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.46 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.034 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.034 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.130 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.71 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.71 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.054 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.054 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	1.22 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.22 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.130 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.094 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.094 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.096 hours	
Area (User Defined)	0.160 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.021 hours
Flow (Peak, Computed)	0.15 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.14 ft ³ /s

Drainage Area	
SCS CN (Composite)	68.000
Area (User Defined)	0.160 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.8 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.096 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.89 ft ³ /s
Unit peak time, Tp	0.064 hours
Unit receding limb, Tr	0.255 hours
Total unit time, Tb	0.319 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.096 hours	
Area (User Defined)	0.160 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.021 hours
Flow (Peak, Computed)	0.38 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.37 ft ³ /s

Drainage Area	
SCS CN (Composite)	68.000
Area (User Defined)	0.160 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	0.027 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.027 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.096 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.89 ft ³ /s
Unit peak time, Tp	0.064 hours
Unit receding limb, Tr	0.255 hours
Total unit time, Tb	0.319 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.096 hours
Area (User Defined)		0.160 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.021 hours
Flow (Peak, Computed)	0.95 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.92 ft³/s

Drainage Area	
SCS CN (Composite)	68.000
Area (User Defined)	0.160 acres
Maximum Retention (Pervious)	4.7 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.067 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.067 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.096 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA43 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.89 ft³/s
Unit peak time, Tp	0.064 hours
Unit receding limb, Tr	0.255 hours
Total unit time, Tb	0.319 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.022 hours
Area (User Defined)		0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	0.63 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.63 ft³/s

Drainage Area	
SCS CN (Composite)	90,000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	1.1 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.4 in
Runoff Volume (Pervious)	0.041 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.041 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.71 ft³/s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.022 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.05 ft ³ /s

Drainage Area	
SCS CN (Composite)	90,000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	1.1 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.071 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.071 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.71 ft ³ /s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.022 hours
Area (User Defined)		0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	1.90 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.89 ft³/s

Drainage Area	
SCS CN (Composite)	90.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	1.1 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.7 in
Runoff Volume (Pervious)	0.135 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.135 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.71 ft³/s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.022 hours	
Area (User Defined)	0.030 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12,001 hours	
Flow (Peak, Computed)	0.02 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.02 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.030 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.001 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.001 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.53 ft³/s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.022 hours
Area (User Defined)	0.030 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.001 hours
Flow (Peak, Computed)	0.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.06 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.030 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.53 ft³/s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.022 hours
Area (User Defined)		0.030 acres

Computational Time Increment		0.003 hours
Time to Peak (Computed)		12.001 hours
Flow (Peak, Computed)		0.17 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.000 hours
Flow (Peak Interpolated Output)		0.17 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.030 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.022 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA44 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.53 ft ³ /s
Unit peak time, Tp	0.015 hours
Unit receding limb, Tr	0.059 hours
Total unit time, Tb	0.074 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	1.810 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.007 hours
Flow (Peak, Computed)	5.97 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.93 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.810 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.444 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.444 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.44 ft³/s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.199 hours
Total unit time, Tb	0.249 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	1.810 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.007 hours
Flow (Peak, Computed)	9.32 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	9.27 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.810 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.714 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.714 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.44 ft³/s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.199 hours
Total unit time, Tb	0.249 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.075 hours	
Area (User Defined)	1.810 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.007 hours
Flow (Peak, Computed)	16.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	16.05 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	1.810 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	1.270 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.270 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.075 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.44 ft³/s
Unit peak time, Tp	0.050 hours
Unit receding limb, Tr	0.199 hours
Total unit time, Tb	0.249 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.098 hours
Area (User Defined)	0.690 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	0.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.31 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.690 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.030 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.030 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.95 ft³/s
Unit peak time, Tp	0.066 hours
Unit receding limb, Tr	0.262 hours
Total unit time, Tb	0.328 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.098 hours	
Area (User Defined)	0.690 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	1.17 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.10 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.690 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.086 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.086 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.95 ft ³ /s
Unit peak time, Tp	0.066 hours
Unit receding limb, Tr	0.262 hours
Total unit time, Tb	0.328 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.098 hours	
Area (User Defined)	0.690 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.026 hours
Flow (Peak, Computed)	3.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.26 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.690 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.238 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.238 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.098 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA45 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.95 ft³/s
Unit peak time, Tp	0.066 hours
Unit receding limb, Tr	0.262 hours
Total unit time, Tb	0.328 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.031 hours
Area (User Defined)	0.310 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.08 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.37 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.103 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.031 hours
Area (User Defined)	0.310 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.68 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.68 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.125 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.125 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.37 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.103 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.031 hours
Area (User Defined)		0.310 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	2.89 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.89 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.221 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.221 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.031 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.37 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.082 hours
Total unit time, Tb	0.103 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.106 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	0.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.06 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.006 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.106 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft³/s
Unit peak time, Tp	0.071 hours
Unit receding limb, Tr	0.283 hours
Total unit time, Tb	0.354 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.106 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.014 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	0.22 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.20 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.106 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft ³ /s
Unit peak time, Tp	0.071 hours
Unit receding limb, Tr	0.283 hours
Total unit time, Tb	0.354 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.106 hours
Area (User Defined)		0.130 acres
Computational Time Increment		0.014 hours
Time to Peak (Computed)		12.028 hours
Flow (Peak, Computed)		0.63 ft³/s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.000 hours
Flow (Peak Interpolated Output)		0.60 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.045 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.045 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.106 hours
Computational Time Increment	0.014 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA46 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft³/s
Unit peak time, Tp	0.071 hours
Unit receding limb, Tr	0.283 hours
Total unit time, Tb	0.354 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.060 hours	
Area (User Defined)	0.530 acres	

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	1.82 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.81 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.530 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.135 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.135 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.99 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.060 hours	
Area (User Defined)	0.530 acres	

Computational Time Increment		0.008 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	2.81 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	2.81 ft³/s	

Drainage Area		
SCS CN (Composite)	97,000	
Area (User Defined)	0.530 acres	
Maximum Retention (Previous)	0.3 in	
Maximum Retention (Previous, 20 percent)	0.1 in	

Cumulative Runoff		
Cumulative Runoff Depth (Previous)	4.8 in	
Runoff Volume (Previous)	0.214 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.214 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.060 hours	
Computational Time Increment	0.008 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	
Receding/Rising, Tr/Tp	1.670	

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters		
Unit peak, qp	9.99 ft³/s	
Unit peak time, Tp	0.040 hours	
Unit receding limb, Tr	0.160 hours	
Total unit time, Tb	0.200 hours	

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.060 hours
Area (User Defined)		0.530 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	4.85 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.84 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.530 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.377 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.377 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.99 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.254 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.132 hours
Flow (Peak, Computed)	0.10 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.09 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.013 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.013 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.254 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.34 ft³/s
Unit peak time, Tp	0.169 hours
Unit receding limb, Tr	0.678 hours
Total unit time, Tb	0.847 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.254 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.098 hours
Flow (Peak, Computed)	0.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.35 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.037 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.037 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.254 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.34 ft³/s
Unit peak time, Tp	0.169 hours
Unit receding limb, Tr	0.678 hours
Total unit time, Tb	0.847 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.254 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.098 hours
Flow (Peak, Computed)	1.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.06 ft³/s

Drainage Area

SCS CN (Composite)	61.000
Area (User Defined)	0.300 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.104 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	0.104 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.254 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA47- Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.34 ft³/s
Unit peak time, Tp	0.169 hours
Unit receding limb, Tr	0.678 hours
Total unit time, Tb	0.847 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.078 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.008 hours
Flow (Peak, Computed)	0.69 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.68 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.052 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.052 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.06 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.078 hours	
Area (User Defined)	0.210 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.008 hours
Flow (Peak, Computed)	1.08 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.07 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.083 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.083 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.06 ft ³ /s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.078 hours	
Area (User Defined)	0.210 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.008 hours
Flow (Peak, Computed)	1.86 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.85 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.210 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.147 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.147 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.06 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.078 hours
Area (User Defined)	0.090 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	0.05 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.04 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.31 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.078 hours	
Area (User Defined)	0.090 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.018 hours
Flow (Peak, Computed)	0.16 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.16 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.31 ft ³ /s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.078 hours	
Area (User Defined)	0.090 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.008 hours
Flow (Peak, Computed)	0.46 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.46 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.090 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.031 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.031 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.078 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA48 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.31 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.207 hours
Total unit time, Tb	0.259 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	1.04 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.04 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.076 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.076 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.30 ft³/s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.047 hours
Area (User Defined)	0.300 acres

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11,996 hours
Flow (Peak, Computed)	1.61 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.61 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.121 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.121 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.30 ft ³ /s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48.000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	11.996 hours
Flow (Peak, Computed)	2.78 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.78 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.213 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.213 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.30 ft ³ /s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment		0.006 hours
Time to Peak (Computed)	12,008 hours	
Flow (Peak, Computed)	0.10 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.10 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.008 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.008 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.38 ft³/s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.35 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.022 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.022 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.38 ft ³ /s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.047 hours	
Area (User Defined)	0.180 acres	

Computational Time Increment	0.006 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.99 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.98 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.180 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.062 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.062 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.047 hours
Computational Time Increment	0.006 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA49 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.38 ft³/s
Unit peak time, Tp	0.031 hours
Unit receding limb, Tr	0.124 hours
Total unit time, Tb	0.155 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.380 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	1.31 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.31 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.380 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.093 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.093 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.380 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	2.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.05 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.380 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.150 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.150 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.380 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	3.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.54 ft³/s

Drainage Area

SCS CN (Composite)	96,000
Area (User Defined)	0.380 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.267 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	0.267 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	0.08 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.08 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.006 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Return Event: 2 years
Storm Event: 2yr current

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.26 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.130 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.74 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.74 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.130 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.045 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.045 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA5 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.36 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.038 hours	
Area (User Defined)	0.360 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	1.26 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.26 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.360 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.092 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.092 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.83 ft ³ /s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.100 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.038 hours
Area (User Defined)	0.360 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	1.95 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.94 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.360 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.145 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.145 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.83 ft ³ /s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.100 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.038 hours
Area (User Defined)		0.360 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	3.36 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.35 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.360 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.256 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.256 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.038 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	10.83 ft ³ /s
Unit peak time, Tp	0.025 hours
Unit receding limb, Tr	0.100 hours
Total unit time, Tb	0.126 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.131 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment		0.017 hours
Time to Peak (Computed)	12.053 hours	
Flow (Peak, Computed)	0.05 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.05 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.131 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.04 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.348 hours
Total unit time, Tb	0.435 hours

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Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.131 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.036 hours
Flow (Peak, Computed)	0.19 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.18 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.015 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.015 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.131 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.04 ft ³ /s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.348 hours
Total unit time, Tb	0.435 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.131 hours	
Area (User Defined)	0.120 acres	
Computational Time Increment	0.017 hours	
Time to Peak (Computed)	12.036 hours	
Flow (Peak, Computed)	0.55 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.53 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.041 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.041 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.131 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA50 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.04 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.348 hours
Total unit time, Tb	0.435 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.057 hours	
Area (User Defined)	0.610 acres	

Computational Time Increment		0.008 hours
Time to Peak (Computed)	11,999 hours	
Flow (Peak, Computed)	2.13 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	2.12 ft ³ /s	

Drainage Area		
SCS CN (Composite)	98,000	
Area (User Defined)	0.610 acres	
Maximum Retention (Previous)	0.2 in	
Maximum Retention (Previous, 20 percent)	0.0 in	

Cumulative Runoff		
Cumulative Runoff Depth (Previous)	3.2 in	
Runoff Volume (Previous)	0.161 ac-ft	

Hydrograph Volume (Area under Hydrograph curve)		
Volume	0.161 ac-ft	

SCS Unit Hydrograph Parameters		
Time of Concentration (Composite)	0.057 hours	
Computational Time Increment	0.008 hours	
Unit Hydrograph Shape Factor	483.432	
K Factor	0.749	
Receding/Rising, Tr/Tp	1.670	

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters		
Unit peak, qp	12.17 ft ³ /s	
Unit peak time, Tp	0.038 hours	
Unit receding limb, Tr	0.151 hours	
Total unit time, Tb	0.189 hours	

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.057 hours	
Area (User Defined)	0.610 acres	

Computational Time Increment	0.008 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	3.27 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.27 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.610 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	5.0 in
Runoff Volume (Previous)	0.252 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.252 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.057 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	12.17 ft³/s
Unit peak time, Tp	0.038 hours
Unit receding limb, Tr	0.151 hours
Total unit time, Tb	0.189 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.057 hours	
Area (User Defined)	0.610 acres	

Computational Time Increment	0.008 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	5.61 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.61 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.610 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.7 in
Runoff Volume (Pervious)	0.440 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.440 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.057 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	12.17 ft³/s
Unit peak time, Tp	0.038 hours
Unit receding limb, Tr	0.151 hours
Total unit time, Tb	0.189 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.143 hours	
Area (User Defined)	1.010 acres	

Computational Time Increment		0.019 hours
Time to Peak (Computed)	12.052 hours	
Flow (Peak, Computed)	0.47 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.47 ft ³ /s	

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	1.010 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.048 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.048 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.143 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.03 ft ³ /s
Unit peak time, Tp	0.095 hours
Unit receding limb, Tr	0.380 hours
Total unit time, Tb	0.475 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.143 hours	
Area (User Defined)	1.010 acres	

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.052 hours
Flow (Peak, Computed)	1.60 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.60 ft ³ /s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	1.010 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.132 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.132 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.143 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.03 ft ³ /s
Unit peak time, Tp	0.095 hours
Unit receding limb, Tr	0.380 hours
Total unit time, Tb	0.475 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.143 hours	
Area (User Defined)	1.010 acres	

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.033 hours
Flow (Peak, Computed)	4.59 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	4.57 ft ³ /s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	1.010 acres
Maximum Retention (Previous)	6.1 in
Maximum Retention (Previous, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.3 in
Runoff Volume (Previous)	0.359 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.359 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.143 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA51 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.03 ft ³ /s
Unit peak time, Tp	0.095 hours
Unit receding limb, Tr	0.380 hours
Total unit time, Tb	0.475 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	0.390 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.37 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.37 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.099 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.099 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.77 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.086 hours
Total unit time, Tb	0.107 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.032 hours	
Area (User Defined)	0.390 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	2.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.11 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.390 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.8 in
Runoff Volume (Previous)	0.158 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.158 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.77 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.086 hours
Total unit time, Tb	0.107 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.390 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	3.64 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.64 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.278 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.278 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.77 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.086 hours
Total unit time, Tb	0.107 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.123 hours	
Area (User Defined)	0.390 acres	

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.040 hours
Flow (Peak, Computed)	0.17 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.17 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.017 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.017 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.123 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.58 ft ³ /s
Unit peak time, Tp	0.082 hours
Unit receding limb, Tr	0.329 hours
Total unit time, Tb	0.411 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.123 hours	
Area (User Defined)	0.390 acres	

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.040 hours
Flow (Peak, Computed)	0.61 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.60 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.048 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.048 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.123 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.58 ft ³ /s
Unit peak time, Tp	0.082 hours
Unit receding limb, Tr	0.329 hours
Total unit time, Tb	0.411 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.123 hours
Area (User Defined)		0.390 acres

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.024 hours
Flow (Peak, Computed)	1.79 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.73 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.135 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.135 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.123 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA52 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.58 ft ³ /s
Unit peak time, Tp	0.082 hours
Unit receding limb, Tr	0.329 hours
Total unit time, Tb	0.411 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	
2yr current	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	0.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.10 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.10 ft³/s

Drainage Area	
SCS CN (Composite)	
96,000	
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.18 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.108 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.72 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.72 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.126 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.126 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.18 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.108 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.996 hours
Flow (Peak, Computed)	2.98 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.98 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.225 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.225 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.18 ft³/s
Unit peak time, Tp	0.022 hours
Unit receding limb, Tr	0.087 hours
Total unit time, Tb	0.108 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.120 hours	
Area (User Defined)	0.370 acres	

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.044 hours
Flow (Peak, Computed)	0.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.16 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.120 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.49 ft³/s
Unit peak time, Tp	0.080 hours
Unit receding limb, Tr	0.320 hours
Total unit time, Tb	0.400 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.120 hours	
Area (User Defined)	0.370 acres	

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	0.59 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.57 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.046 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.046 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.120 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.49 ft ³ /s
Unit peak time, Tp	0.080 hours
Unit receding limb, Tr	0.320 hours
Total unit time, Tb	0.400 hours

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Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.120 hours
Area (User Defined)		0.370 acres

Computational Time Increment	0.016 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	1.73 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.65 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.128 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.128 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.120 hours
Computational Time Increment	0.016 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA53 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.49 ft ³ /s
Unit peak time, Tp	0.080 hours
Unit receding limb, Tr	0.320 hours
Total unit time, Tb	0.400 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.036 hours	
Area (User Defined)	0.310 acres	

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11.997 hours
Flow (Peak, Computed)	1.07 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.07 ft³/s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.076 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.076 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.87 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.036 hours
Area (User Defined)	0.310 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11,997 hours
Flow (Peak, Computed)	1.67 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.66 ft ³ /s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.122 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.122 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.87 ft ³ /s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.036 hours
Area (User Defined)		0.310 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	11.997 hours
Flow (Peak, Computed)	2.88 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.88 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.310 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.4 in
Runoff Volume (Pervious)	0.217 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.217 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.87 ft ³ /s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.036 hours	
Area (User Defined)	0.100 acres	

Computational Time Increment		0.005 hours
Time to Peak (Computed)	12,006 hours	
Flow (Peak, Computed)	0.06 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.06 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.100 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.18 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA54 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.036 hours
Area (User Defined)	0.100 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.20 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.100 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.012 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.012 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA54 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.18 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.036 hours
Area (User Defined)		0.100 acres

Computational Time Increment		0.005 hours
Time to Peak (Computed)		12,002 hours
Flow (Peak, Computed)		0.56 ft³/s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12,000 hours
Flow (Peak Interpolated Output)		0.56 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.100 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.035 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.035 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.036 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA54 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.18 ft³/s
Unit peak time, Tp	0.024 hours
Unit receding limb, Tr	0.095 hours
Total unit time, Tb	0.119 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	2.090 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	7.41 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.41 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	2.090 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.552 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.552 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	118.40 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	2.090 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	11.39 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	11.39 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	2.090 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.864 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.865 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	118.40 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48.000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	2.090 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	19.55 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	19.55 ft³/s

Drainage Area

SCS CN (Composite)	98.000
Area (User Defined)	2.090 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff

Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	1.508 ac-ft

Hydrograph Volume (Area under Hydrograph curve)

Volume	1.509 ac-ft

SCS Unit Hydrograph Parameters

Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	118.40 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.100 hours
Area (User Defined)		0.410 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	0.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.32 ft ³ /s

Drainage Area	
SCS CN (Composite)	67,000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.8 in
Runoff Volume (Pervious)	0.027 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.027 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.62 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.268 hours
Total unit time, Tb	0.335 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.100 hours	
Area (User Defined)	0.410 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.028 hours
Flow (Peak, Computed)	0.93 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.88 ft ³ /s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.066 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.066 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.62 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.268 hours
Total unit time, Tb	0.335 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.100 hours
Area (User Defined)		0.410 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.015 hours
Flow (Peak, Computed)	2.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.27 ft³/s

Drainage Area	
SCS CN (Composite)	67.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	4.9 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.9 in
Runoff Volume (Pervious)	0.167 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.167 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA55 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.62 ft³/s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.268 hours
Total unit time, Tb	0.335 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		2.080 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	7.29 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.27 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	2.080 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.530 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.530 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.32 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.029 hours
Area (User Defined)	2.080 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	11.28 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	11.25 ft ³ /s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	2.080 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.840 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.840 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.32 ft ³ /s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.029 hours
Area (User Defined)		2.080 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	19.42 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	19.37 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	2.080 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	1.480 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.480 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	82.32 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA56 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.062 hours	
Area (User Defined)	0.280 acres	

Computational Time Increment		0.008 hours
Time to Peak (Computed)	12.013 hours	
Flow (Peak, Computed)	0.15 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.000 hours	
Flow (Peak Interpolated Output)	0.15 ft ³ /s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.012 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.012 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.062 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA56 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.11 ft ³ /s
Unit peak time, Tp	0.041 hours
Unit receding limb, Tr	0.166 hours
Total unit time, Tb	0.207 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.062 hours	
Area (User Defined)	0.280 acres	

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.013 hours
Flow (Peak, Computed)	0.52 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.51 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.035 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.035 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.062 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.11 ft³/s
Unit peak time, Tp	0.041 hours
Unit receding limb, Tr	0.166 hours
Total unit time, Tb	0.207 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.062 hours
Area (User Defined)		0.280 acres

Computational Time Increment		0.008 hours
Time to Peak (Computed)		12.005 hours
Flow (Peak, Computed)		1.49 ft ³ /s
Output Increment		0.050 hours
Time to Flow (Peak Interpolated Output)		12.000 hours
Flow (Peak Interpolated Output)		1.48 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.097 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.097 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.062 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA56 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.11 ft ³ /s
Unit peak time, Tp	0.041 hours
Unit receding limb, Tr	0.166 hours
Total unit time, Tb	0.207 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	2.95 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.95 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.214 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.214 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.59 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.840 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	4.56 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.56 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.339 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.339 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.59 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.840 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	7.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.84 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.840 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.598 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.598 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	47.59 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48.000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.080 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12.003 hours	
Flow (Peak, Computed)	0.05 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.000 hours	
Flow (Peak Interpolated Output)	0.05 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.080 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.004 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.004 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.53 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.080 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.16 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.080 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.53 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.080 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.45 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.45 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.080 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.028 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.028 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA57 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.53 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	
2yr current	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.049 hours
Area (User Defined)	1.570 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	5.46 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	5.45 ft³/s

Drainage Area	
SCS CN (Composite)	
Area (User Defined)	97,000
Maximum Retention (Pervious)	1.570 acres
Maximum Retention (Pervious, 20 percent)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.400 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.400 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.049 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	36.39 ft³/s
Unit peak time, Tp	0.033 hours
Unit receding limb, Tr	0.130 hours
Total unit time, Tb	0.163 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	
10 yr current	
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.049 hours
Area (User Defined)	1.570 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	8.44 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	8.44 ft ³ /s

Drainage Area	
SCS CN (Composite)	
Area (User Defined)	97,000
Maximum Retention (Pervious)	1.570 acres
Maximum Retention (Pervious, 20 percent)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.634 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.634 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.049 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.049 hours
Area (User Defined)		1.570 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	14.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	14.54 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.570 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	1.117 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.117 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.049 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	36.39 ft³/s
Unit peak time, Tp	0.033 hours
Unit receding limb, Tr	0.130 hours
Total unit time, Tb	0.163 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.193 hours	
Area (User Defined)	1.570 acres	

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.070 hours
Flow (Peak, Computed)	1.23 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.20 ft³/s

Drainage Area	
SCS CN (Composite)	69.000
Area (User Defined)	1.570 acres
Maximum Retention (Pervious)	4.5 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	0.117 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.117 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.193 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.22 ft³/s
Unit peak time, Tp	0.129 hours
Unit receding limb, Tr	0.515 hours
Total unit time, Tb	0.643 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.193 hours	
Area (User Defined)	1.570 acres	

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.070 hours
Flow (Peak, Computed)	3.12 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	3.04 ft³/s

Drainage Area	
SCS CN (Composite)	69.000
Area (User Defined)	1.570 acres
Maximum Retention (Pervious)	4.5 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.1 in
Runoff Volume (Pervious)	0.275 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.275 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.193 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.22 ft³/s
Unit peak time, Tp	0.129 hours
Unit receding limb, Tr	0.515 hours
Total unit time, Tb	0.643 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.193 hours
Area (User Defined)		1.570 acres

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.070 hours
Flow (Peak, Computed)	7.67 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	7.54 ft ³ /s

Drainage Area	
SCS CN (Composite)	69.000
Area (User Defined)	1.570 acres
Maximum Retention (Pervious)	4.5 in
Maximum Retention (Pervious, 20 percent)	0.9 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.1 in
Runoff Volume (Pervious)	0.670 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.670 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.193 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA58 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.22 ft ³ /s
Unit peak time, Tp	0.129 hours
Unit receding limb, Tr	0.515 hours
Total unit time, Tb	0.643 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.056 hours	
Area (User Defined)	1.020 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	3.56 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.56 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.269 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.269 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.056 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.60 ft³/s
Unit peak time, Tp	0.037 hours
Unit receding limb, Tr	0.150 hours
Total unit time, Tb	0.187 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.056 hours	
Area (User Defined)	1.020 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	5.48 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.47 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.422 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.422 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.056 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.056 hours	
Area (User Defined)	1.020 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	9.40 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	9.40 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.736 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.736 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.056 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.60 ft³/s
Unit peak time, Tp	0.037 hours
Unit receding limb, Tr	0.150 hours
Total unit time, Tb	0.187 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.304 hours	
Area (User Defined)	1.840 acres	

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.138 hours
Flow (Peak, Computed)	1.44 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.44 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	1.840 acres
Maximum Retention (Pervious)	3.9 in
Maximum Retention (Pervious, 20 percent)	0.8 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.1 in
Runoff Volume (Pervious)	0.162 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.162 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.304 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.85 ft ³ /s
Unit peak time, Tp	0.203 hours
Unit receding limb, Tr	0.812 hours
Total unit time, Tb	1.015 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA59 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.304 hours	
Area (User Defined)	1.840 acres	

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.138 hours
Flow (Peak, Computed)	3.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	3.36 ft ³ /s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	1.840 acres
Maximum Retention (Pervious)	3.9 in
Maximum Retention (Pervious, 20 percent)	0.8 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.4 in
Runoff Volume (Pervious)	0.361 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.361 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.304 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA59 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.85 ft ³ /s
Unit peak time, Tp	0.203 hours
Unit receding limb, Tr	0.812 hours
Total unit time, Tb	1.015 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.304 hours
Area (User Defined)		1.840 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.138 hours
Flow (Peak, Computed)	7.94 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	7.85 ft³/s

Drainage Area	
SCS CN (Composite)	72.000
Area (User Defined)	1.840 acres
Maximum Retention (Pervious)	3.9 in
Maximum Retention (Pervious, 20 percent)	0.8 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.5 in
Runoff Volume (Pervious)	0.842 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.842 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.304 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA59 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.85 ft³/s
Unit peak time, Tp	0.203 hours
Unit receding limb, Tr	0.812 hours
Total unit time, Tb	1.015 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.079 hours	
Area (User Defined)	0.490 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12,006 hours
Flow (Peak, Computed)	1.63 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.62 ft³/s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.490 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.125 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.125 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.06 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA6 Imp

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.079 hours
Area (User Defined)	0.490 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12,006 hours
Flow (Peak, Computed)	2.52 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.51 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.490 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.198 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.198 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA6 Imp

Scenario: 10YR

Return Event: 10 years

Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.06 ft ³ /s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.079 hours
Area (User Defined)		0.490 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.006 hours
Flow (Peak, Computed)	4.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.32 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.490 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.5 in
Runoff Volume (Pervious)	0.349 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.349 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.06 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA6 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.079 hours
Area (User Defined)	0.220 acres

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.016 hours
Flow (Peak, Computed)	0.11 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.10 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA6 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.17 ft ³ /s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.079 hours	
Area (User Defined)	0.220 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.016 hours
Flow (Peak, Computed)	0.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.38 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.027 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.027 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.17 ft³/s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.079 hours	
Area (User Defined)	0.220 acres	

Computational Time Increment	0.010 hours
Time to Peak (Computed)	12.016 hours
Flow (Peak, Computed)	1.13 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.11 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.220 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.076 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.076 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.079 hours
Computational Time Increment	0.010 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA6 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.17 ft ³ /s
Unit peak time, Tp	0.052 hours
Unit receding limb, Tr	0.210 hours
Total unit time, Tb	0.262 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		1.320 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	4.63 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.63 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.336 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.336 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	74.78 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	7.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.16 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.533 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.533 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	74.78 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		1.320 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	12.32 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	12.32 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	1.320 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.939 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.940 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	74.78 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.230 acres	

Computational Time Increment		0.003 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	0.14 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.14 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.03 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.230 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	0.47 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.47 ft ³ /s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.029 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.029 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.03 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.020 hours
Area (User Defined)		0.230 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	1.30 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.30 ft ³ /s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.080 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA60 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	13.03 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.520 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.84 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.520 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.137 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.137 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.67 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	0.520 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	2.83 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.83 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.520 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.215 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.215 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.67 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.520 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	4.86 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	4.85 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.520 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.7 in
Runoff Volume (Pervious)	0.375 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.375 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	18.67 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.032 hours	
Area (User Defined)	0.060 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,002 hours	
Flow (Peak, Computed)	0.04 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.04 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.060 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.003 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.003 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA61 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.15 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

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Subsection: Unit Hydrograph Summary

Label: DA61 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	0.060 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.002 hours
Flow (Peak, Computed)	0.12 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.12 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.060 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.007 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA61 Perv

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.15 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		0.060 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	0.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	0.33 ft³/s

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.060 acres
Maximum Retention (Previous)	6.4 in
Maximum Retention (Previous, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	4.1 in
Runoff Volume (Previous)	0.021 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.021 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA61 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.15 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.084 hours
Total unit time, Tb	0.105 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.030 hours	
Area (User Defined)	1,400 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	4.96 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.96 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	1,400 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.369 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.370 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	52.09 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.081 hours
Total unit time, Tb	0.102 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.030 hours	
Area (User Defined)	1,400 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	7.63 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	7.62 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	1,400 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.579 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.579 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.030 hours
Area (User Defined)		1.400 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	13.10 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	13.08 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.400 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	1.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	52.09 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.081 hours
Total unit time, Tb	0.102 hours

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Subsection: Unit Hydrograph Summary

Label: DA62 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event	2yr current
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.120 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	0.07 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.07 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary

Label: DA62 Perv

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.46 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.081 hours
Total unit time, Tb	0.102 hours

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Subsection: Unit Hydrograph Summary
Label: DA62 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.030 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment		0.004 hours
Time to Peak (Computed)	12,003 hours	
Flow (Peak, Computed)	0.24 ft ³ /s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.24 ft ³ /s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.015 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.015 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA62 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.46 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.081 hours
Total unit time, Tb	0.102 hours

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Subsection: Unit Hydrograph Summary
Label: DA62 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.030 hours	
Area (User Defined)	0.120 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	0.67 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.67 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.041 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.042 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA62 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.46 ft ³ /s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.081 hours
Total unit time, Tb	0.102 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	
2yr current	
Return Event	2 years
Duration	48,000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.032 hours
Area (User Defined)	1,000 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	3.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	3.54 ft³/s

Drainage Area	
SCS CN (Composite)	
Area (User Defined)	98,000
Maximum Retention (Pervious)	1,000 acres
Maximum Retention (Pervious, 20 percent)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.264 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.264 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	35.49 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.085 hours
Total unit time, Tb	0.106 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.032 hours	
Area (User Defined)	1,000 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12,000 hours
Flow (Peak, Computed)	5.45 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	5.45 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	1,000 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.414 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.414 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	35.49 ft ³ /s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.085 hours
Total unit time, Tb	0.106 hours

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Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.032 hours
Area (User Defined)		1.000 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	9.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	9.35 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.000 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.722 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.722 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.032 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA63 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	35.49 ft³/s
Unit peak time, Tp	0.021 hours
Unit receding limb, Tr	0.085 hours
Total unit time, Tb	0.106 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA7 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.052 hours	
Area (User Defined)	0.400 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	1.39 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.38 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.400 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.1 in
Runoff Volume (Pervious)	0.102 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.102 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA7 Imp

Scenario: 2YR

Return Event: 2 years

Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.77 ft ³ /s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

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Subsection: Unit Hydrograph Summary
Label: DA7 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.052 hours	
Area (User Defined)	0.400 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	2.14 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.14 ft ³ /s

Drainage Area	
SCS CN (Composite)	97,000
Area (User Defined)	0.400 acres
Maximum Retention (Pervious)	0.3 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.162 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.162 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary
Label: DA7 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.77 ft ³ /s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.052 hours	
Area (User Defined)	0.400 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	3.69 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.69 ft³/s

Drainage Area	
SCS CN (Composite)	97.000
Area (User Defined)	0.400 acres
Maximum Retention (Previous)	0.3 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.5 in
Runoff Volume (Previous)	0.285 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.285 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	8.77 ft³/s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.052 hours	
Area (User Defined)	0.210 acres	

Computational Time Increment		0.007 hours
Time to Peak (Computed)	12,012 hours	
Flow (Peak, Computed)	0.12 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12,000 hours	
Flow (Peak Interpolated Output)	0.12 ft³/s	

Drainage Area	
SCS CN (Composite)	61,000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.009 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.009 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.61 ft³/s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.052 hours	
Area (User Defined)	0.210 acres	

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	0.40 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.40 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.026 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.026 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.61 ft³/s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.052 hours
Area (User Defined)		0.210 acres

Computational Time Increment	0.007 hours
Time to Peak (Computed)	12.005 hours
Flow (Peak, Computed)	1.14 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.14 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.073 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.072 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.052 hours
Computational Time Increment	0.007 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA7 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.61 ft ³ /s
Unit peak time, Tp	0.034 hours
Unit receding limb, Tr	0.138 hours
Total unit time, Tb	0.172 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.027 hours	
Area (User Defined)	0.490 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	1.69 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.69 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.490 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.9 in
Runoff Volume (Pervious)	0.120 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.120 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.027 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.80 ft ³ /s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.071 hours
Total unit time, Tb	0.089 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA9 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48.000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.027 hours
Area (User Defined)	0.490 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.999 hours
Flow (Peak, Computed)	2.64 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.63 ft ³ /s

Drainage Area	
SCS CN (Composite)	96.000
Area (User Defined)	0.490 acres
Maximum Retention (Pervious)	0.4 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.193 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.193 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.027 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA9 Imp

Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.80 ft ³ /s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.071 hours
Total unit time, Tb	0.089 hours

Current Post Dev

Subsection: Unit Hydrograph Summary

Label: DA9 Imp

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.027 hours	
Area (User Defined)	0.490 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,999 hours
Flow (Peak, Computed)	4.56 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	4.55 ft³/s

Drainage Area	
SCS CN (Composite)	96,000
Area (User Defined)	0.490 acres
Maximum Retention (Previous)	0.4 in
Maximum Retention (Previous, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.4 in
Runoff Volume (Previous)	0.344 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.344 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.027 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Subsection: Unit Hydrograph Summary

Label: DA9 Imp

Scenario: 100YR

Return Event: 100 years

Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.80 ft³/s
Unit peak time, Tp	0.018 hours
Unit receding limb, Tr	0.071 hours
Total unit time, Tb	0.089 hours

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Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.126 hours	
Area (User Defined)	0.150 acres	

Computational Time Increment		0.017 hours
Time to Peak (Computed)	12.044 hours	
Flow (Peak, Computed)	0.07 ft³/s	
Output Increment	0.050 hours	
Time to Flow (Peak Interpolated Output)	12.050 hours	
Flow (Peak Interpolated Output)	0.06 ft³/s	

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.007 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.126 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.35 ft³/s
Unit peak time, Tp	0.084 hours
Unit receding limb, Tr	0.336 hours
Total unit time, Tb	0.421 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event	10 yr current
Return Event	10 years
Duration	48,000 hours
Depth	5.2 in
Time of Concentration (Composite)	0.126 hours
Area (User Defined)	0.150 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.044 hours
Flow (Peak, Computed)	0.23 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.23 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.019 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.019 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.126 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.35 ft ³ /s
Unit peak time, Tp	0.084 hours
Unit receding limb, Tr	0.336 hours
Total unit time, Tb	0.421 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.126 hours	
Area (User Defined)	0.150 acres	

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.027 hours
Flow (Peak, Computed)	0.69 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.67 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.150 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.052 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.052 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.126 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: DA9 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.35 ft ³ /s
Unit peak time, Tp	0.084 hours
Unit receding limb, Tr	0.336 hours
Total unit time, Tb	0.421 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.094 hours	
Area (User Defined)	3.890 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	2.12 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.96 ft³/s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	3.890 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.185 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.185 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	46.97 ft³/s
Unit peak time, Tp	0.063 hours
Unit receding limb, Tr	0.250 hours
Total unit time, Tb	0.313 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.094 hours	
Area (User Defined)	3.890 acres	

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	7.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	6.68 ft ³ /s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	3.890 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	0.507 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.507 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	46.97 ft ³ /s
Unit peak time, Tp	0.063 hours
Unit receding limb, Tr	0.250 hours
Total unit time, Tb	0.313 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48,000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.094 hours
Area (User Defined)		3.890 acres

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.023 hours
Flow (Peak, Computed)	19.88 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	19.26 ft³/s

Drainage Area	
SCS CN (Composite)	62,000
Area (User Defined)	3.890 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.3 in
Runoff Volume (Pervious)	1.383 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.383 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.094 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: EDA3 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	46.97 ft³/s
Unit peak time, Tp	0.063 hours
Unit receding limb, Tr	0.250 hours
Total unit time, Tb	0.313 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.192 hours	
Area (User Defined)	3.640 acres	

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	0.83 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.82 ft ³ /s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	3.640 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.4 in
Runoff Volume (Pervious)	0.126 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.126 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft ³ /s
Unit peak time, Tp	0.128 hours
Unit receding limb, Tr	0.511 hours
Total unit time, Tb	0.639 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.192 hours	
Area (User Defined)	3.640 acres	

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.082 hours
Flow (Peak, Computed)	4.03 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.92 ft³/s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	3.640 acres
Maximum Retention (Previous)	7.2 in
Maximum Retention (Previous, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	1.3 in
Runoff Volume (Previous)	0.388 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.388 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft³/s
Unit peak time, Tp	0.128 hours
Unit receding limb, Tr	0.511 hours
Total unit time, Tb	0.639 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.192 hours	
Area (User Defined)	3.640 acres	

Computational Time Increment	0.026 hours
Time to Peak (Computed)	12.082 hours
Flow (Peak, Computed)	13.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	12.82 ft³/s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	3.640 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.8 in
Runoff Volume (Pervious)	1.146 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.146 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.192 hours
Computational Time Increment	0.026 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Ex DA-6 Perv (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	21.53 ft³/s
Unit peak time, Tp	0.128 hours
Unit receding limb, Tr	0.511 hours
Total unit time, Tb	0.639 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.06 ft³/s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	1.63 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	1.63 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	0.124 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.124 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.90 ft ³ /s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48.000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.029 hours	
Area (User Defined)	0.300 acres	

Computational Time Increment	0.004 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	2.81 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	2.80 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.7 in
Runoff Volume (Pervious)	0.216 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.217 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.029 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: Future Imp Road-Basin 6 (S Brunswick)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.019 hours
Unit receding limb, Tr	0.076 hours
Total unit time, Tb	0.095 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.251 hours	
Area (User Defined)	12,760 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.082 hours
Flow (Peak, Computed)	30.65 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	30.42 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	12,760 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	3.367 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3.367 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.251 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	57.60 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.669 hours
Total unit time, Tb	0.837 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.251 hours	
Area (User Defined)	12,760 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.082 hours
Flow (Peak, Computed)	47.20 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	46.84 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	12,760 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.0 in
Runoff Volume (Pervious)	5.277 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	5.277 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.251 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	57.60 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.669 hours
Total unit time, Tb	0.837 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.251 hours	
Area (User Defined)	12,760 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.082 hours
Flow (Peak, Computed)	81.08 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	80.45 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	12,760 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.7 in
Runoff Volume (Pervious)	9.208 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	9.208 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.251 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 Imp (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	57.60 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.669 hours
Total unit time, Tb	0.837 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	Duration	2 years 48,000 hours
Depth		3.4 in
Time of Concentration (Composite)		0.250 hours
Area (User Defined)		1.310 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.72 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.72 ft ³ /s

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	5.2 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.082 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.082 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.94 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	Duration	10 years 48,000 hours
Depth		5.2 in
Time of Concentration (Composite)		0.250 hours
Area (User Defined)		1.310 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	2.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.05 ft ³ /s

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	5.2 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.204 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.204 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.94 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.250 hours	
Area (User Defined)	1.310 acres	

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	5.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	66.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	5.2 in
Maximum Retention (Pervious, 20 percent)	1.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	0.519 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.519 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA-6 PER (Plainsboro)
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.94 ft ³ /s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event	
2yr current	
Return Event	2 years
Duration	48.000 hours
Depth	3.4 in
Time of Concentration (Composite)	0.026 hours
Area (User Defined)	0.380 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	1.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.34 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.380 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	0.100 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.100 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	16.66 ft ³ /s
Unit peak time, Tp	0.017 hours
Unit receding limb, Tr	0.069 hours
Total unit time, Tb	0.086 hours

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Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.026 hours	
Area (User Defined)	0.380 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11,998 hours
Flow (Peak, Computed)	2.07 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12,000 hours
Flow (Peak Interpolated Output)	2.07 ft ³ /s

Drainage Area	
SCS CN (Composite)	98,000
Area (User Defined)	0.380 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	5.0 in
Runoff Volume (Previous)	0.157 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.157 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	16.66 ft ³ /s
Unit peak time, Tp	0.017 hours
Unit receding limb, Tr	0.069 hours
Total unit time, Tb	0.086 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event		100 years
Duration		48.000 hours
Depth		8.9 in
Time of Concentration (Composite)		0.026 hours
Area (User Defined)		0.380 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	11.998 hours
Flow (Peak, Computed)	3.55 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	3.55 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.380 acres
Maximum Retention (Previous)	0.2 in
Maximum Retention (Previous, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Previous)	8.7 in
Runoff Volume (Previous)	0.274 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.274 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.026 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Imp
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	16.66 ft³/s
Unit peak time, Tp	0.017 hours
Unit receding limb, Tr	0.069 hours
Total unit time, Tb	0.086 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

Storm Event		2yr current
Return Event	2 years	
Duration	48,000 hours	
Depth	3.4 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.260 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.003 hours
Flow (Peak, Computed)	0.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.16 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.5 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.012 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 2YR

Return Event: 2 years
Storm Event: 2yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	14.73 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

Storm Event		10 yr current
Return Event	10 years	
Duration	48,000 hours	
Depth	5.2 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.260 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	0.53 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	0.53 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.5 in
Runoff Volume (Pervious)	0.032 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.033 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 10YR

Return Event: 10 years
Storm Event: 10 yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	14.73 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

Storm Event		100yr current
Return Event	100 years	
Duration	48,000 hours	
Depth	8.9 in	
Time of Concentration (Composite)	0.020 hours	
Area (User Defined)	0.260 acres	

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.000 hours
Flow (Peak, Computed)	1.47 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	1.47 ft ³ /s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.090 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.090 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Current Post Dev

Subsection: Unit Hydrograph Summary
Label: PDA8 Perv
Scenario: 100YR

Return Event: 100 years
Storm Event: 100yr current

SCS Unit Hydrograph Parameters	
Unit peak, qp	14.73 ft ³ /s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours