Appendix A-10
Hydrology Report

N&P, LLC

March 30, 2016
(Appendix B on accompanying CD)

Hydrology Report

Hydraulic and Hydrologic Analysis

For

The Hills at Southampton

East Quogue, Town of Southampton
Suffolk County, New York

N&P Project No. 05105

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Dated: March 30, 2016

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1 INTRODUCTION

1.1 PURPOSE

This document is a Hydraulic and Hydrologic Technical Report for the proposed project referred to as "The Hills at Southampton," a 118-unit resort residential community with amenities including a golf course, clubhouse and related facilities (the "proposed project"). The purpose of this report is to determine if the Post-Development Peak Stormwater Flow is equal to or less then the Pre-Development Peak Stromwater Flow for the 10 and 100 year, 24 hr storm event for the proposed project. The analysis will demonstrate that the proposed project is compliant with Overbank Flood (Qp) and Extreme Strom (Qf) Stormwater Sizing Criteria as per the NYS DEC Stormwater Design Manual [1] Chapter 4. This analysis is based on the Drainage and Water Distribution Plans prepared by Nelson and Pope [2]. (See **Appendix A**)

1.2 SITE LOCATION

The proposed project is located in East Quogue, Town of Southampton, Suffolk County, New York and is comprised of four distinct parcels in three properties totaling an approximate area of 591 acres. The site is generally north and east of Lewis Road in the vicinity of Spinney Road, and extends north to and beyond Sunrise Highway (New York State [NYS] Route 27. The portion of the property subject to the analysis is the land that has proposed disturbance. This is labeled as "Proposed Development Area" on maps included in this analysis (See **Figure 1 - Site Location Map**, Aerial Photograph from Google Earth Pro [3]).

The Stormwater Tributary Area extends into the farm land approximately 3,500 feet to the west of the development area. The proposed development area covers approximately 51% of the total site tributary area.

1.3 LAND USE

Within the analysis tributary area existing land uses currently comprise of agricultural land, woodland, open sand pit (sand mine) and residential properties. Under proposed conditions there will be the addition of golf course, club house, condominiums and additional roadway / parking infrastructure.

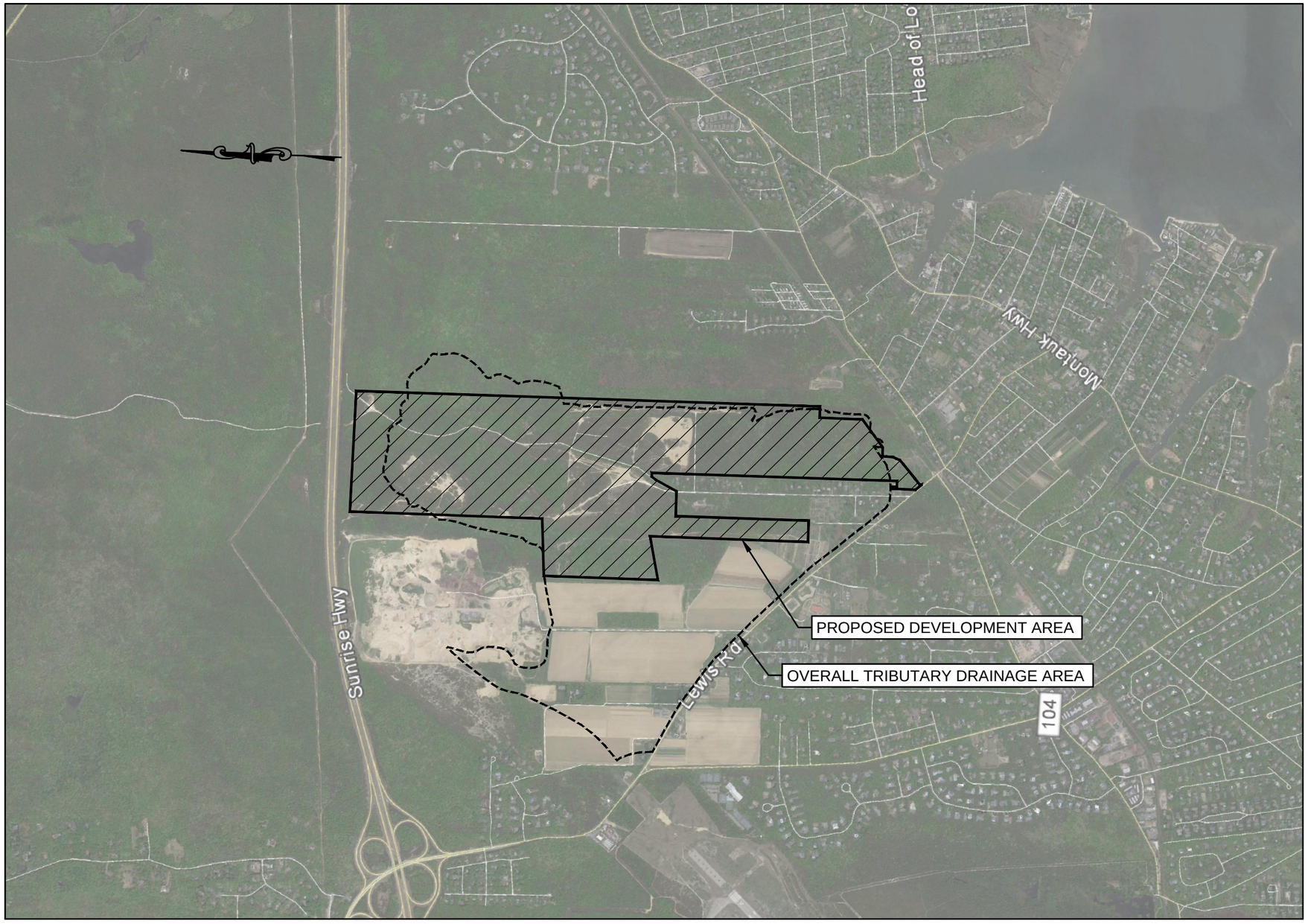

FIGURE 1
SITE LOCATION MAP

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STORMWATER

1.4 PRE-DEVELOPMENT CONDITION

The subject drainage area has a general overall gradient from west to the east, with sub-sheds internal to the site flowing predominately southerly. The highest point is along the north end of the tributary area at an elevation of approximately 230 ft. The lowest elevations found in the subject drainage area are at approximately elevation 16 ft along the southeast corner of the tributary area.

On-site topographical information is derived from information provided on the Drainage and Water Distribution Plans [2], off-site topographical information is from the Suffolk County Sewer Topography [4]. The topographic information for all diagrams included in this document is in NAVD 88.

The tributary area for the proposed project is approximately 780 acres. The existing stormwater flows toward two swales that extend east-west through the proposed project. The swales are ultimately an upper tributary to Weesuck Creek, off-site to the southeast. There are several local low points that pond, recharge and in some cases overflow "downstream", these are to be referred to as existing Drainage Reserve Areas (DRAs). Ultimately, all stormwater discharges at a point approximately 2,100 ft north of the LIRR right of way along the east property line. The proposed project and its contributing area have been separated into drainage sub-sheds based on existing condition topography (See **Figure 2 - Preliminary Pre-Development Drainage Delineation Map**).

1.5 POST-DEVELOPMENT CONDITION

The proposed project's drainage design utilizes a series of proposed surface ponding areas that are referred to as Proposed Drainage Reserve Areas (DRAs), leaching pools and ponds. The proposed DRAs are designed to collect and manage small tributary areas. If the rainfall event theoretically exceeds the storage in a DRA the stormwater overflows to the next ("downstream") DRA. Stormwater design calculations were prepared for the Drainage and Water Distribution Plans [2], the stormwater system was designed to capture 2 inches of stormwater runoff, the storm design event has been approved by the Town Engineers office. Each proposed DRA is to be constructed with a minimum of 1 leaching pool located at the bottom of the depression to allow for infiltration during winter conditions. This allows for the DRAs to draw down during and in between storm events, allowing the drainage facilities to provide the full storage volume for the next rain event.

In addition to the DRA ponding there will be leaching pool systems for select areas throughout the site. The leaching pool systems are generally found in areas

of concentrated impervious area (buildings and roadways). Due to the preliminary nature of the design, all preliminary stormwater calculations were prepared excluding the capacity of the majority of the leaching pool systems, thus resulting in a conservative design and analysis.

The proposed project and its contributing area have been separated into drainage sub-sheds based on proposed topography and stormwater conveyance infrastructure (See **Figure 3 - Preliminary Post-Development Drainage Delineation Map**).

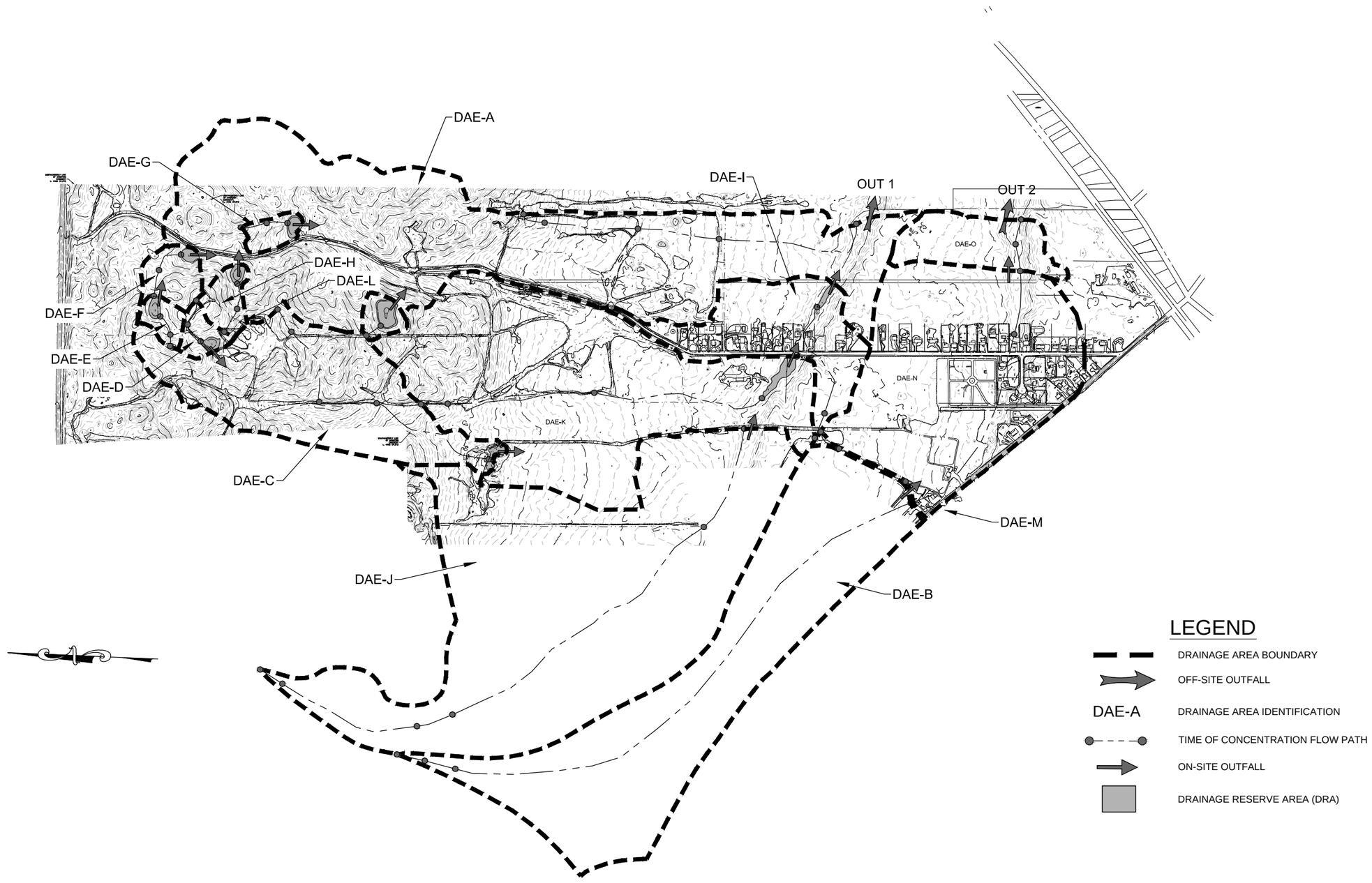

FIGURE 2
PRELIMINARY PRE-DEVELOPMENT
DRAINAGE AREA DELINEATION MAP

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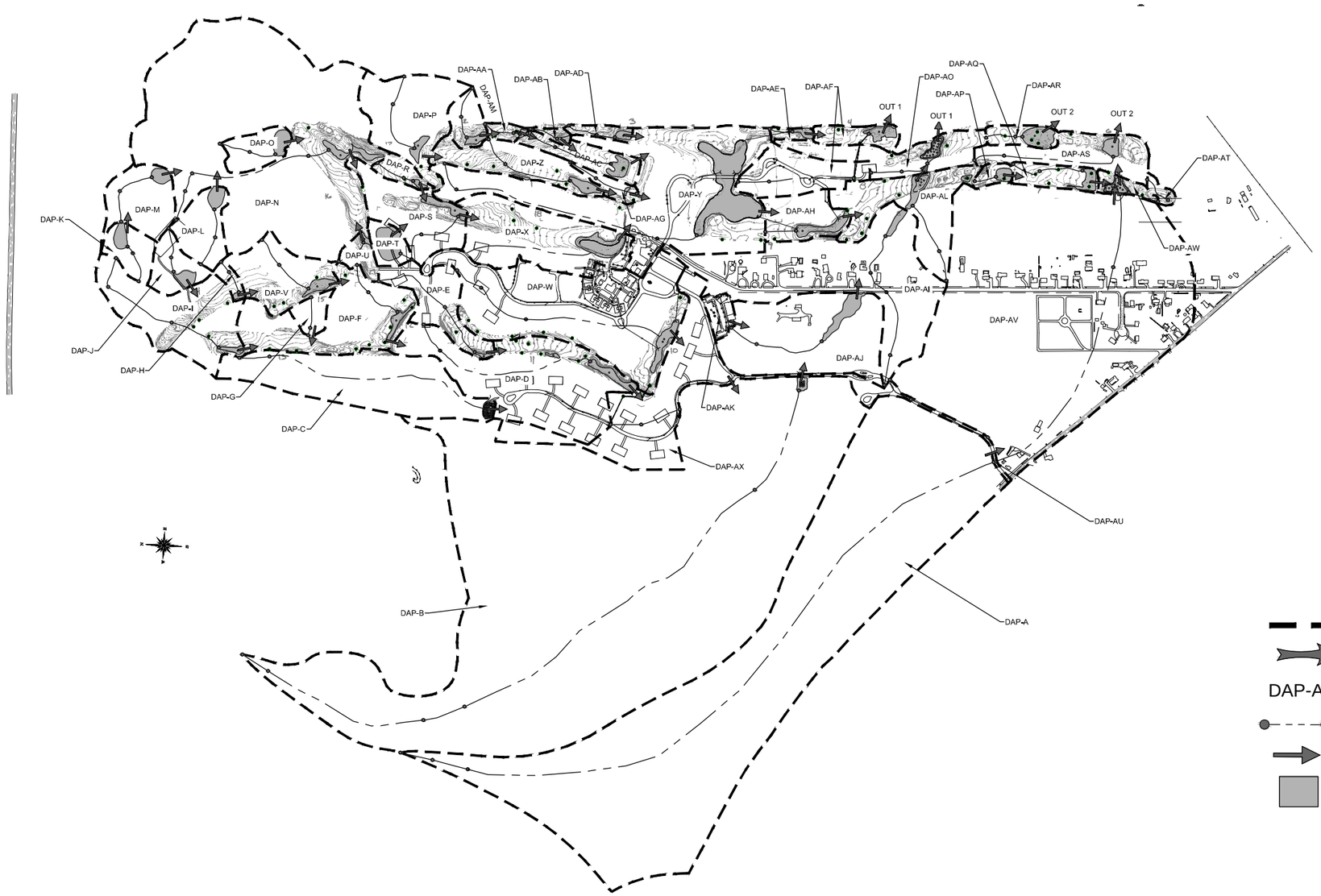

LEGEND

- DRAINAGE AREA BOUNDARY
- OFF-SITE OUTFALL
- DAP-A — DRAINAGE AREA IDENTIFICATION
- TIME OF CONCENTRATION FLOW PATH
- ON-SITE OUTFALL
- DRAINAGE RESERVE AREA (DRA)

FIGURE 3
PRELIMINARY POST-DEVELOPMENT DRAINAGE AREA DELINEATION MAP

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1.6 SOILS

The Soil Survey of Suffolk County (SCS Survey) [5] is a reliable source for soils information and identifies soil types resulting from natural deposition and modification, as well as man-induced alterations associated with land use.

According to the SCS Survey, the subject watershed contains five (5) soil types. The soil types for the subject analysis are shown on **Figure 4 - Suffolk County Soil Survey Map** the map unit symbol and map unit names are shown in **Figure 5 - Soil Types and Hydrologic Soil Groups** (data presented in both **Figure 4** and **Figure 5** are from the USDA Web Soil Survey [6]). Descriptions of the soils can be found in the SCS Survey [5] (starting on Page 60).

Each soil type has a Hydrologic Soil Group that characterizes soils based on the amount of runoff potential for the soil. The hydrologic soil groups for the soils within the analysis area are shown in **Figure 5 - Soil Types and Hydrologic Soil Groups**. Groups range from A to D where A is the soil with the smallest runoff potential and D is the highest runoff potential. The majority of the soils found to be within the analysis area are of the Group A classification.

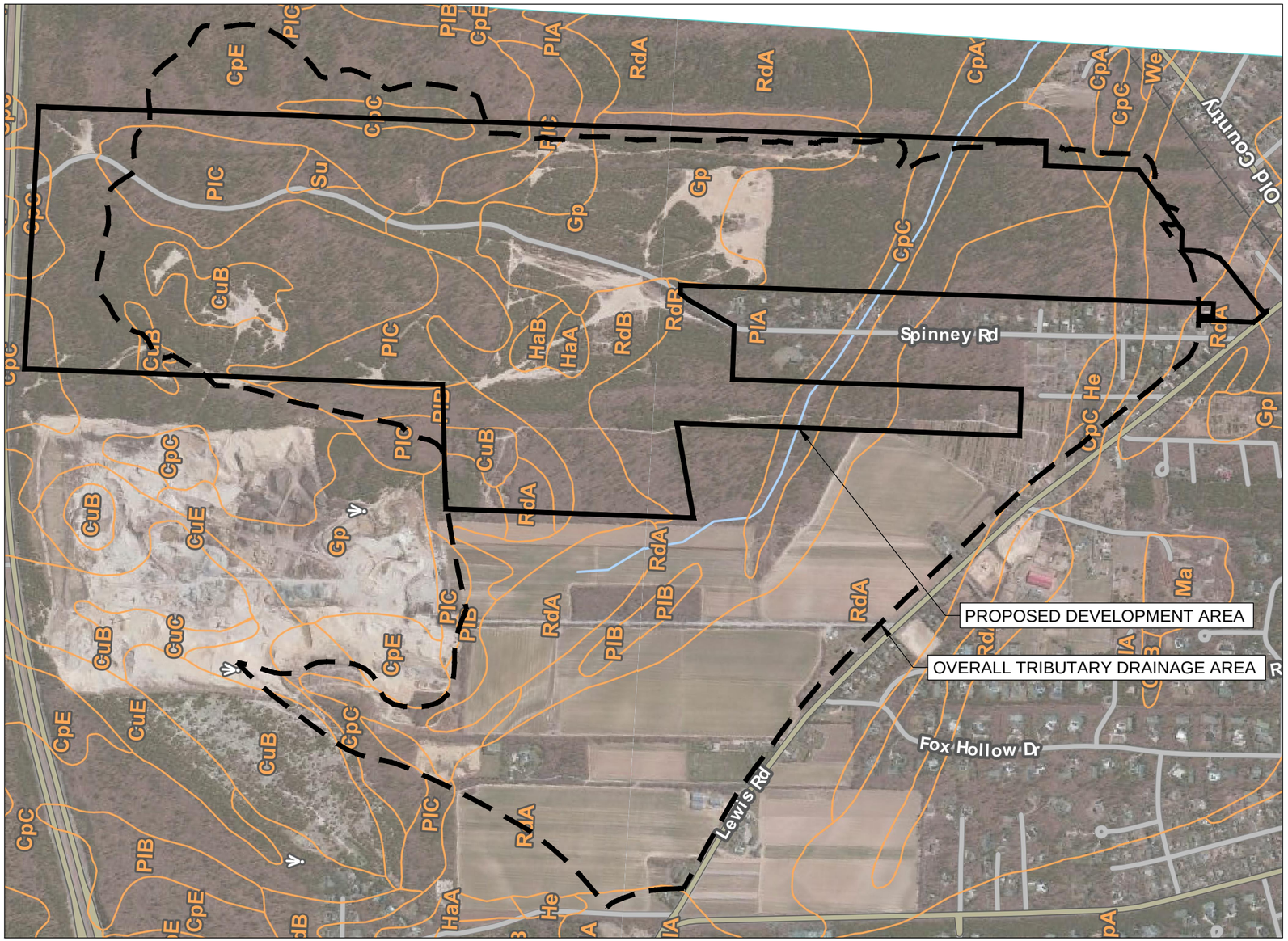

FIGURE 4
SUFFOLK COUNTY SOIL SURVEY MAP

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Figure 5 - Soil Types and Hydrologic Soil Groups

(Information from the USDA Web Soil Survey [6])

Hydrologic Soil Group

Summary by Map Unit — Suffolk County, New York (NY103)		
Map unit symbol	**Map unit name**	**Rating**
CpA	Carver and Plymouth sands, 0 to 3 percent slopes	A
CpC	Carver and Plymouth sands, 3 to 15 percent slopes	A
CpE	Carver and Plymouth sands, 15 to 35 percent slopes	A
CuB	Cut and fill land, gently sloping	
CuC	Cut and fill land, sloping	
CuE	Cut and fill land, steep	
Gp	Gravel pits	
HaA	Haven loam, 0 to 2 percent slopes	B
HaB	Haven loam, 2 to 6 percent slopes	B
He	Haven loam, thick surface layer	B
PlA	Plymouth loamy sand, 0 to 3 percent slopes	A
PlB	Plymouth loamy sand, 3 to 8 percent slopes	A
PlC	Plymouth loamy sand, 8 to 15 percent slopes	A
RdA	Riverhead sandy loam, 0 to 3 percent slopes	A
RdB	Riverhead sandy loam, 3 to 8 percent slopes	A
Su	Sudbury sandy loam	B

Description — Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

2 STORMWATER MODEL ANALYSIS

The following sections describe and discuss the methodology used to develop the model as well as the interpretation of results.

2.1 STORMWATER ANALYSIS SOFTWARE

A computer model utilizing PondPack Version V8i by Bentley was developed to determine the stormwater discharge rates through a hydraulic and hydrologic analysis for the proposed development area and upper tributary. This software uses the methodology outlined in USDA TR-55 [7] to estimate stormwater conditions based on pre and post development site characteristics.

2.2 METHODOLOGY

To compare the pre and post-development flows for the 10 and 100-year storm, the tributary area is delineated in to sub-shed areas. Drainage characteristics for each area was determined; these characteristics include soil types, coverage data, time of concentration data, and DRA and leaching pool volume and outlet control data. Runoff hydrographs were generated for each drainage sub-shed using the SCS Type III Unit hydrograph method.

The hydrographs were routed through the stormwater management facilities storing and detaining stormwater runoff.

During the extreme storm event some of the detention areas may potentially reach maximum storage capacity and overflow. The overflow from is directed to the next downstream drainage area or site outfall.

The analysis will determine a stormwater runoff hydrograph for the 10 and 100-year 24-hr storm events for both the pre and post-development conditions.

The results are presented as hydrograph comparison graphs and discussed in Section 2.2 - Model Output and Results.

2.3 SOFTWARE MODEL INPUT DATA DEFINITIONS

2.3.1 Stormwater Network

The drainage conditions shown in **Figure 2 - Preliminary Pre-Development Drainage Delineation Map** and **Figure 3 - Preliminary Post-Development Drainage Delineation Map** are represented in the model as elements; each element has input data that is determined from existing and proposed plans. The schematic stormwater network diagrams are shown in **Figure 6 - Pre-Development Stormwater**

Network Diagram and **Figure 7 - Post-Development Stormwater Network Diagram**. The input requirements for each element are described in Sections 2.3.2 -Curve Numbers, 2.3.3 - Time of Concentration and 2.3.4 - Stormwater Detention.

2.3.2 Curve Numbers

The Composite Curve Number, or CN, of the drainage area is a value that represents the infiltration of the runoff directly into the soil as it flows overland. The CN is a weighted average computed from coverage data. Impervious areas have the highest CN value and woods are on the low end of the spectrum. These CN values also are affected by the hydrologic classification group of the soil, as discussed in Section 1.6 - Soils. Surface soil types expected for the subject site belong to both group A and B but with the majority of the analysis area within an area of group A classification. The calculation assumes that all soils within the analysis are of group A. See TR-55 [7] for a list of common CN values for different coverage types and soil types. . Drainage sub-shed coverage input data can be found in **Appendix B**.

2.3.3 Time of Concentration

The Time of Concentration (Tc) is a characteristic of the individual sub-shed that represents the time it takes for water to flow from the most hydrologically distant point in the drainage sub-shed to the discharge point. Time of Concentration values were calculated using the methods described in the TR-55 Reference manual. Time of concentration flow paths can be found on **Figure 2 - Preliminary Pre-Development Drainage Delineation Map** and **Figure 3 - Preliminary Post-Development Drainage Delineation Map**. Input data can be found in **Appendix B**.

2.3.4 Stormwater Detention and Recharge

The stormwater runoff is collected, detained and recharged in drainage reserve areas and leaching pool systems. DRA volumes are input into the model as elevation vs area data (See **Appendix B**). Overflows from DRAs are regulated by Outlets (see Section 2.3.4.1). ***The majority of the leaching pool systems capacity and infiltration is not included in this analysis rendering the results conservative.***

2.3.4.1 Outlets

If the DRA reaches maximum capacity the overflow is routed to the next “downstream” receiving system. The rate that the storage facility will discharge is governed by the hydraulic

properties of the Outlet Control Structure. Input data for the outlet controls are found in **Appendix B**.

2.3.4.2 Infiltration

Although the majority of the detention elements were not modeled utilizing the recharge capacity of the leaching pools a few DRAs in critical areas have been modeled to include infiltration. The infiltration calculations for these areas have been included in **Appendix B**.

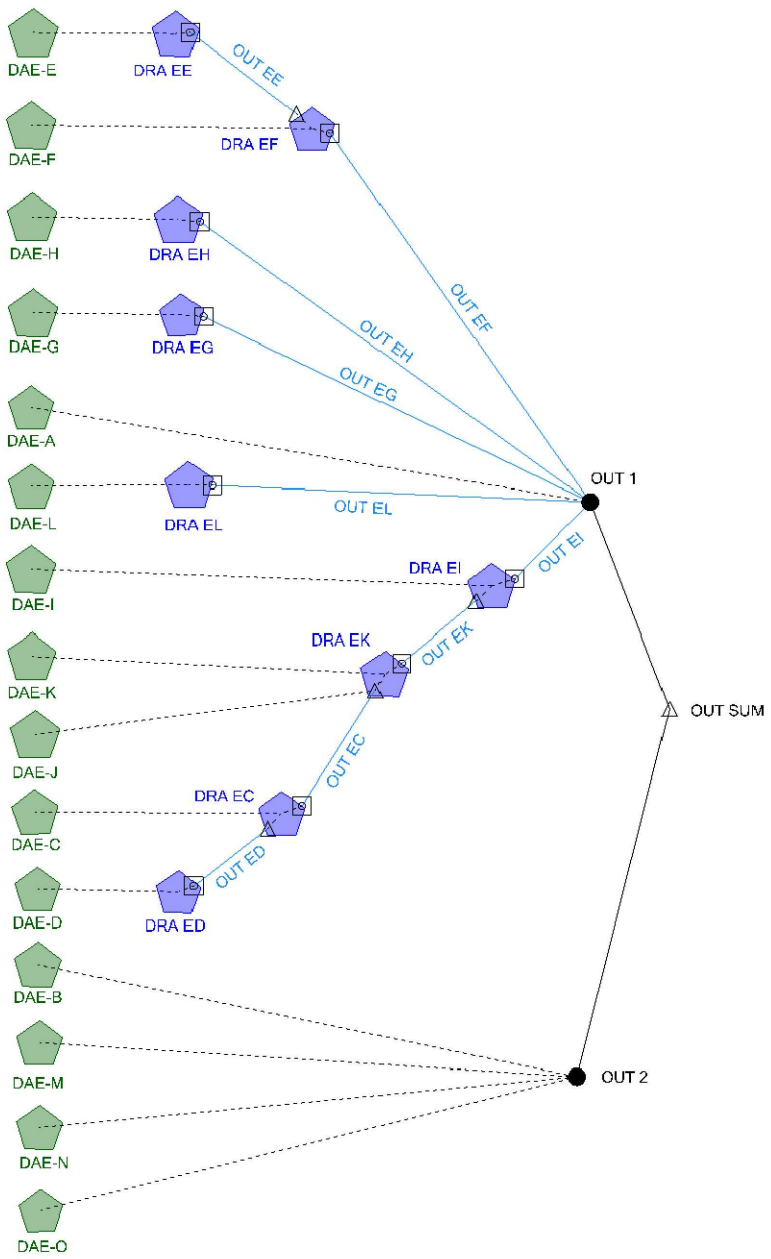

FIGURE 6

PRE-DEVELOPMENT NETWORK DIAGRAM

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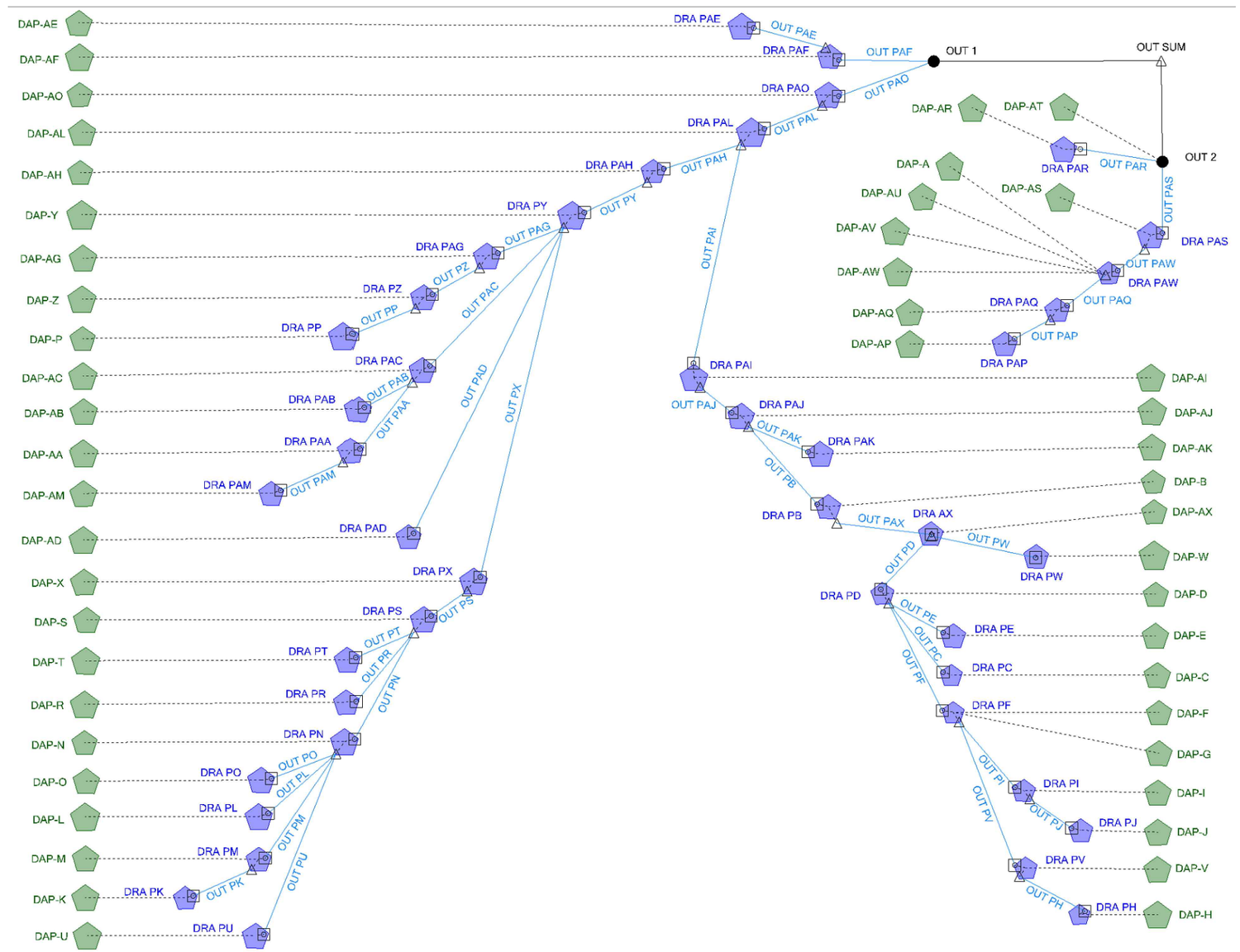

FIGURE 7
POST-DEVELOPMENT
NETWORK DIAGRAM

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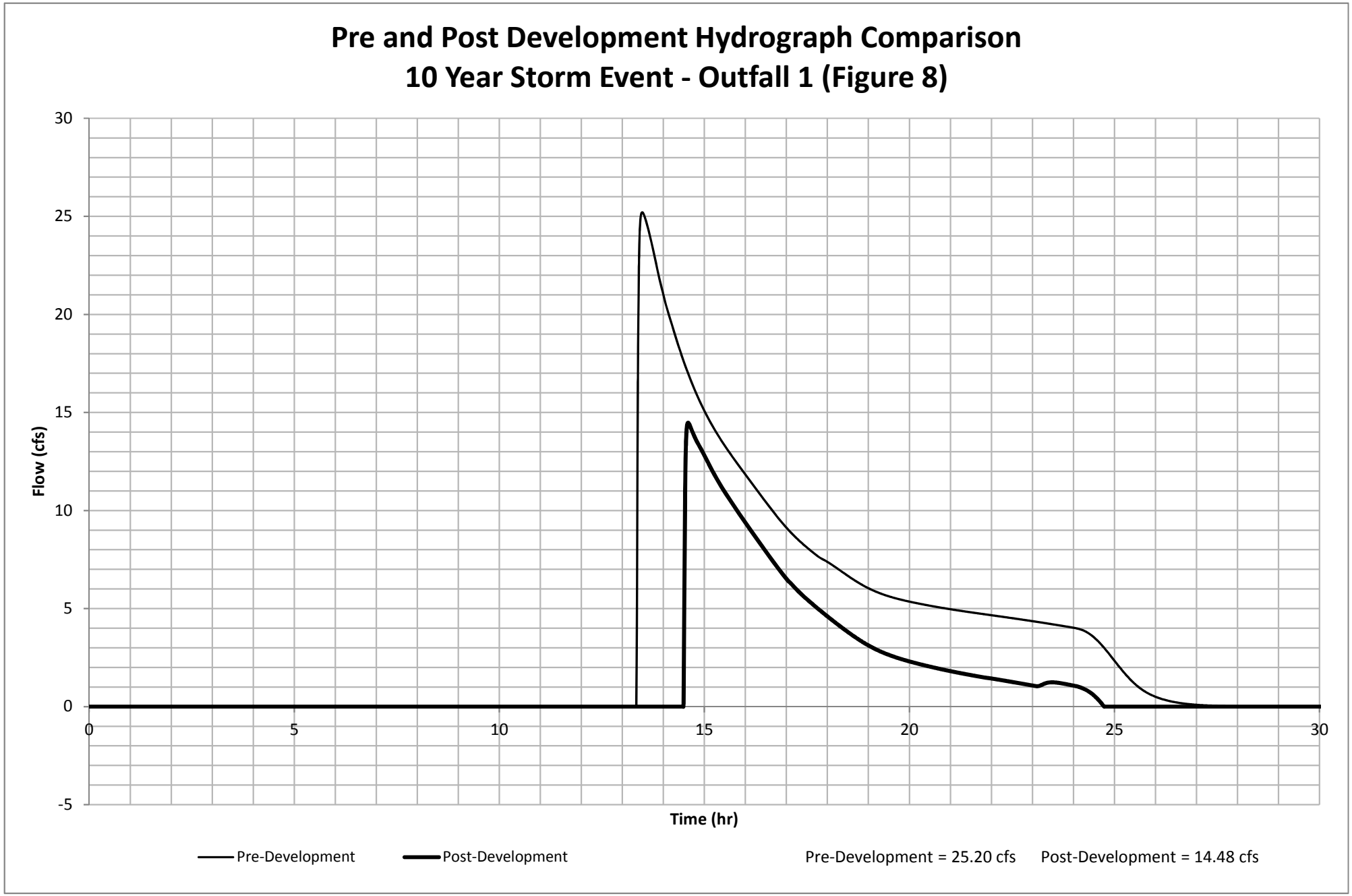
2.2 Model Output and Results

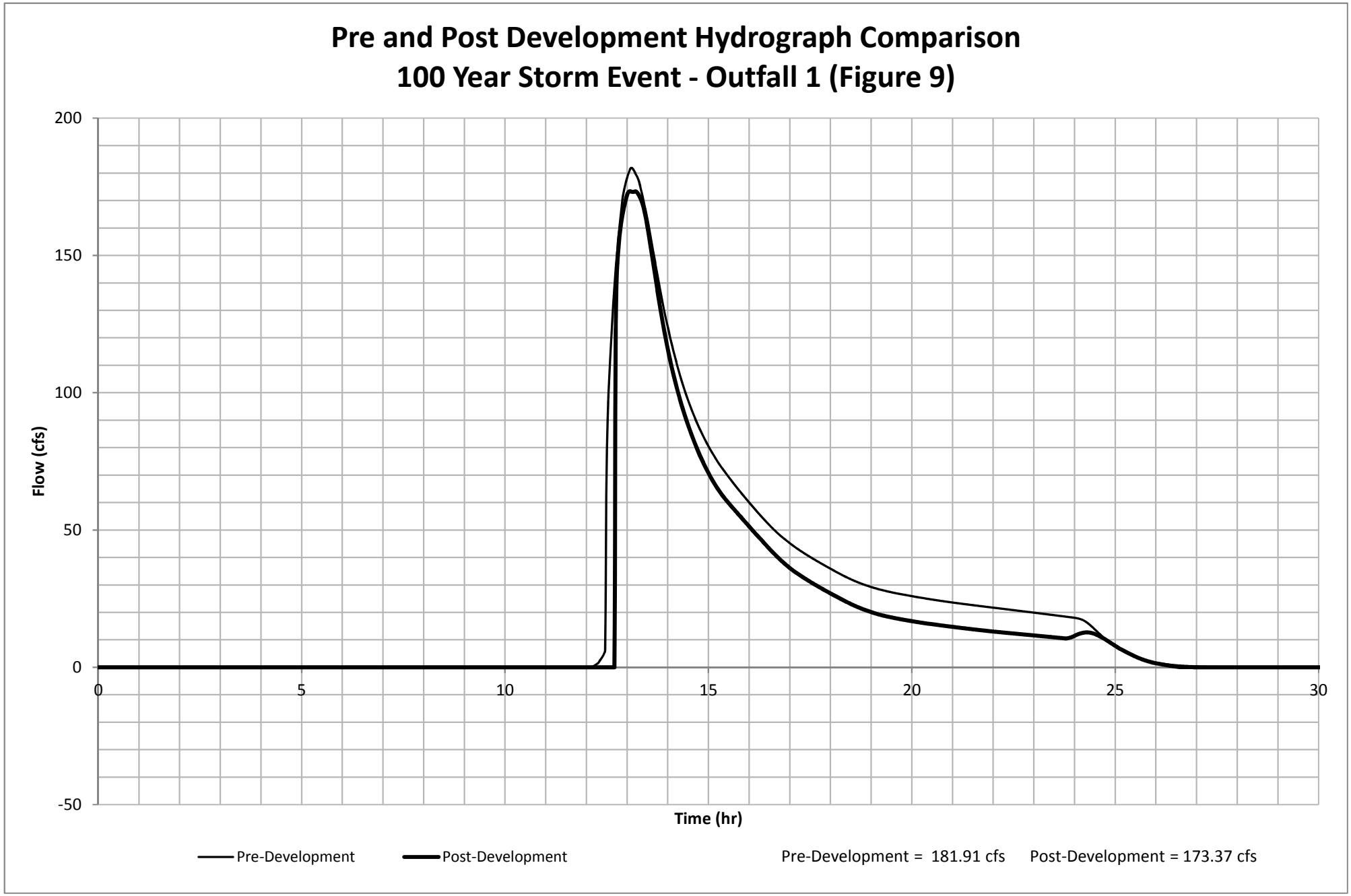
To support compliance with the NYSDEC Peak flow sizing criteria, hydrograph comparison graphs have been prepared for both the pre and post-development for the 10 and 100-year storm events. The graphs show the flow out of site stormwater outlets over time, the peak flow is the highest flow rate seen over the course of the analysis. The peak flows for both pre and post-development are presented for comparison on the graphs.

In addition to the hydrographs the Schematic Stormwater Network Diagrams have been annotated to show peak flow for the elements that contribute to the outfall peak flow discharge rates. See **Figure 8** through **Figure 15**.

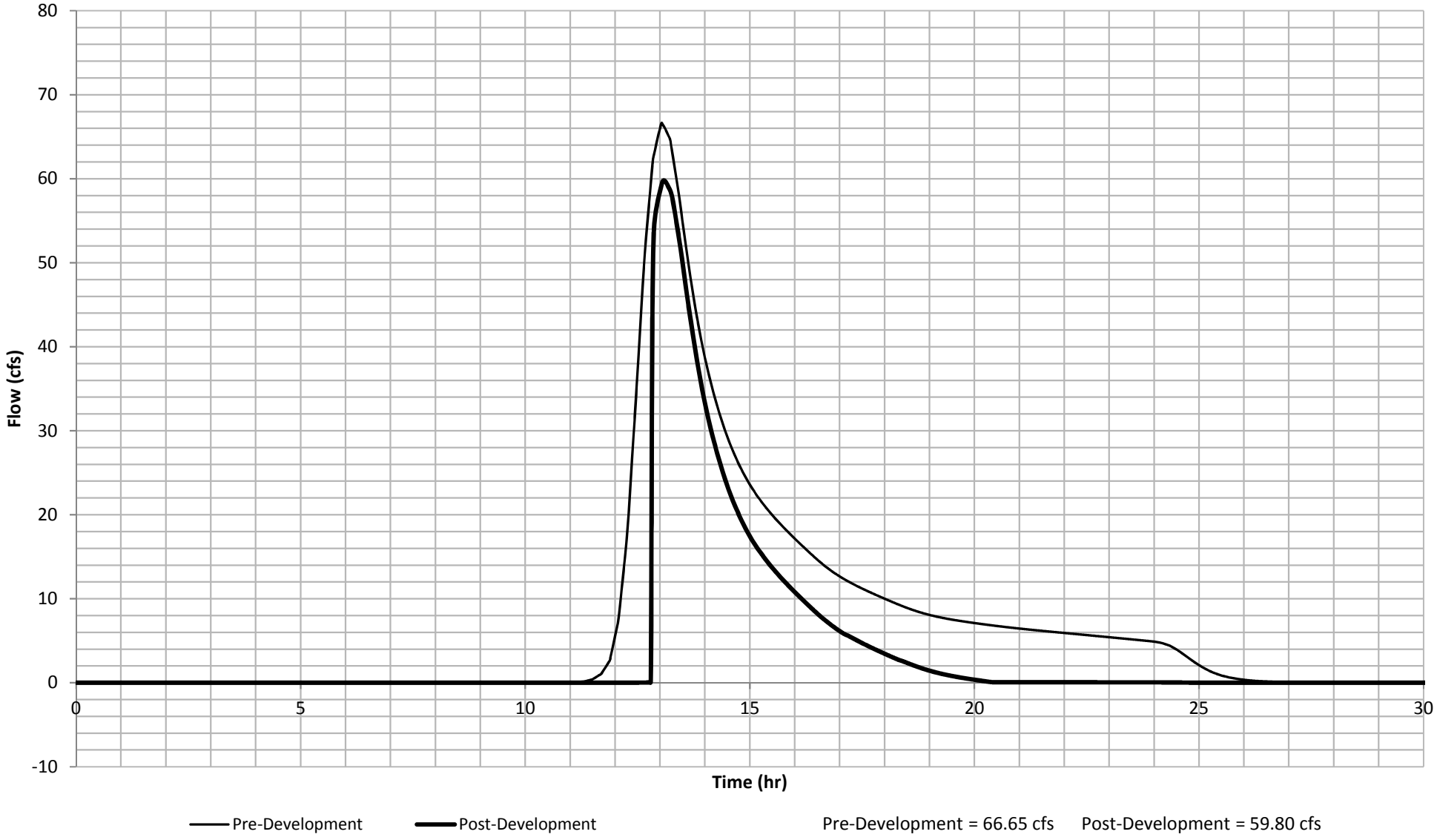
3 Conclusion

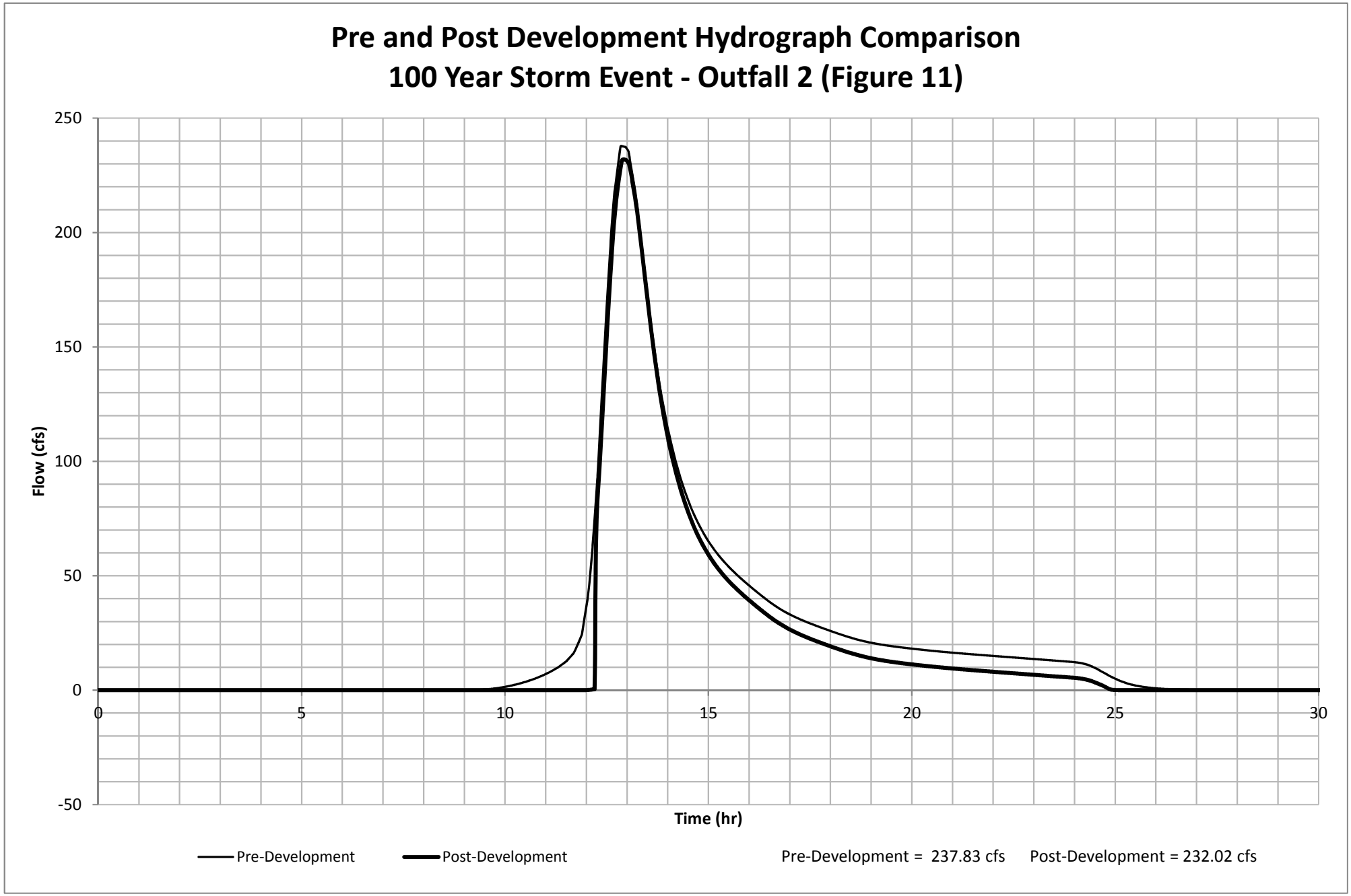
The results presented demonstrate that post-development peak flow discharge rates for 10 and 100-year, 24-hr storm have flow rates equal to or less then the pre-development condition. The proposed plans have been designed in such a manner that it exceeds the requirements of NYDEC Stormwater Sizing Criteria for the (Qp) and (Qf) criteria.


Pre and Post Development Hydrograph Comparison
10 Year Storm Event - Outfall 1 (Figure 8)
Flow (cfs)
30
25
20
15
10
5
0
-5
0
5
10
15
20
25
30
Time (hr)
Pre-Development
Post-Development
Pre-Development = 25.20 cfs
Post-Development = 14.48 cfs

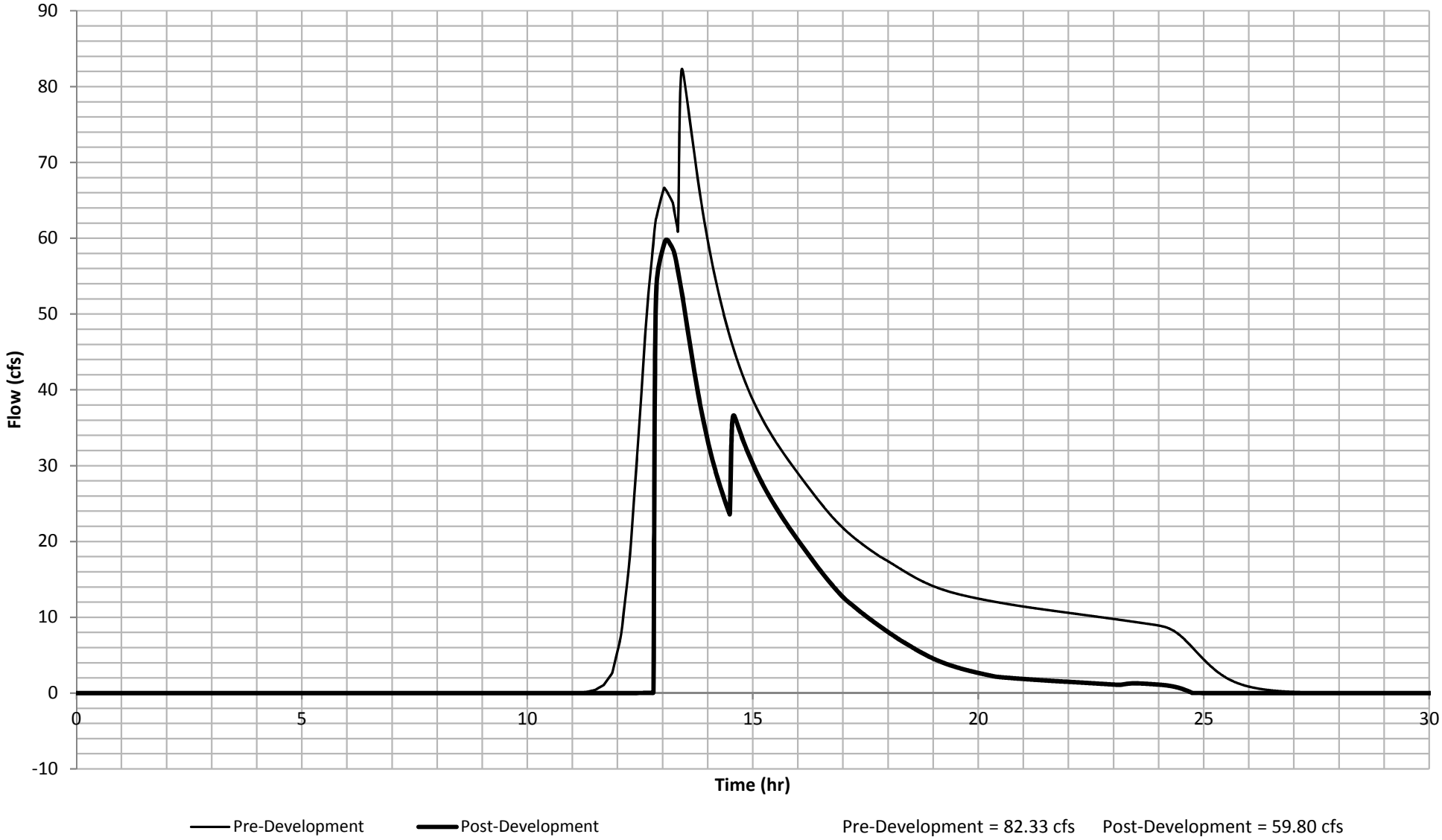

Pre and Post Development Hydrograph Comparison
100 Year Storm Event - Outfall 1 (Figure 9)
200
150
100
50
0
-50
Flow (cfs)
0
5
10
15
20
25
30
Time (hr)
Pre-Development
Post-Development
Pre-Development = 181.91 cfs
Post-Development = 173.37 cfs

Pre and Post Development Hydrograph Comparison
10 Year Storm Event - Outfall 2 (Figure 10)

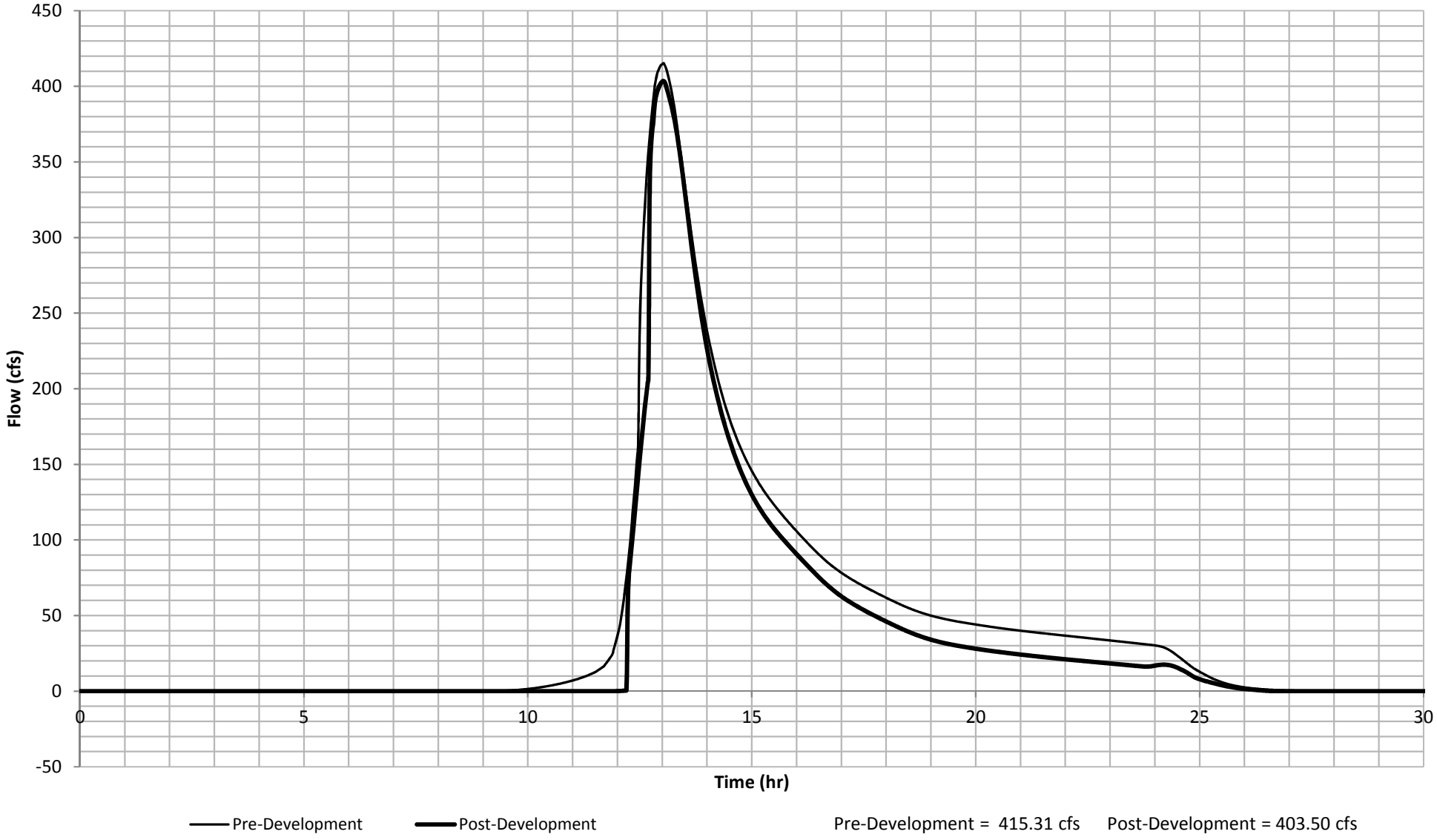



Pre and Post Development Hydrograph Comparison
100 Year Storm Event - Outfall 2 (Figure 11)
250
200
150
100
50
0
-50
Flow (cfs)
0
5
10
15
20
25
30
Time (hr)
Pre-Development
Post-Development
Pre-Development = 237.83 cfs
Post-Development = 232.02 cfs

Pre and Post Development Hydrograph Comparison
10 Year Storm Event - Outfall Summary (Figure 12)



Pre and Post Development Hydrograph Comparison
100 Year Storm Event - Outfall Summary (Figure 13)



NOTES

1) FLOW RATES SHOWN ARE PEAK FLOWS AND ARE NOT DIRECTLY ADDITIVE.
2) FLOWS SHOWN ARE FOR NETWORK ELEMENTS THAT CONTRIBUTE TO OFF-SITE DISCHARGE.

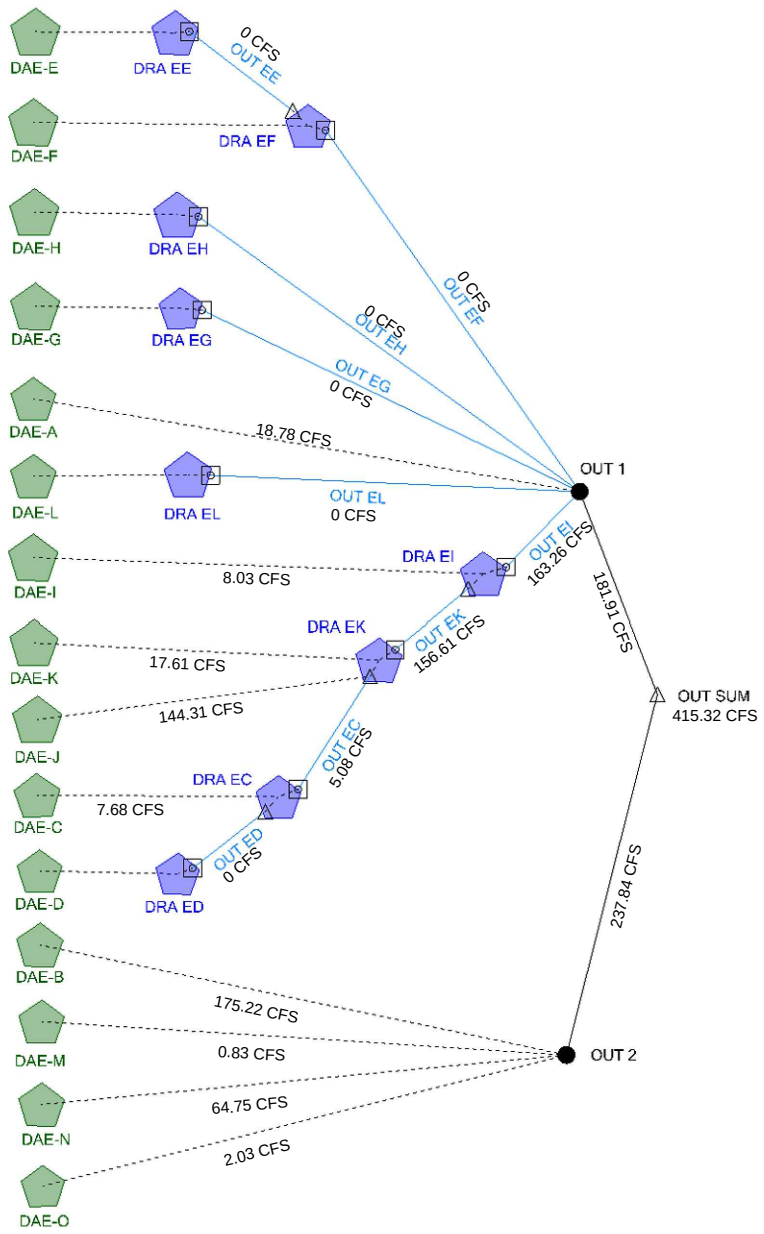
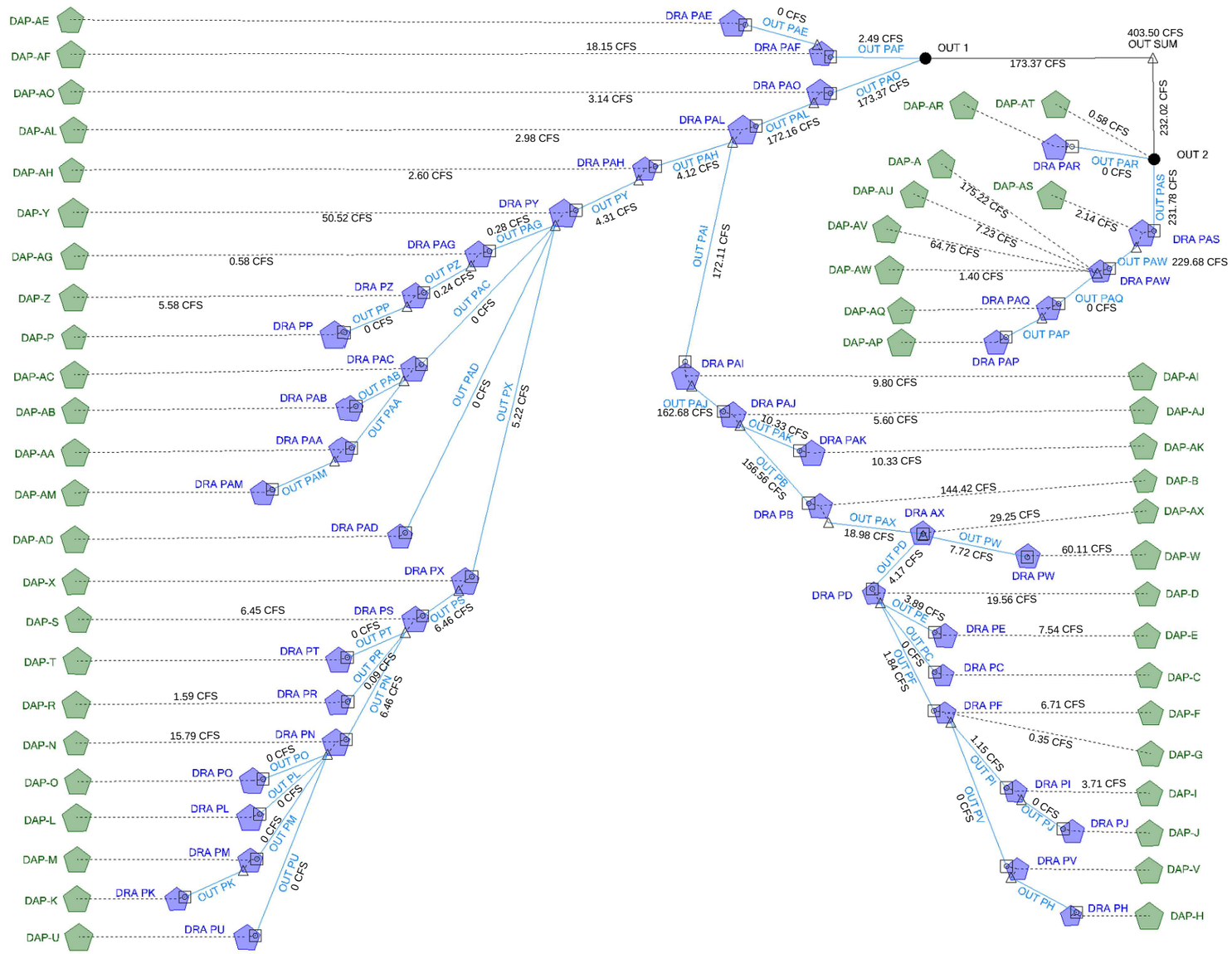


FIGURE 14
PRE-DEVELOPMENT NETWORK DIAGRAM
(100 YEAR PEAK FLOWS)



NOTES

1) FLOW RATES SHOWN ARE PEAK FLOWS AND ARE NOT DIRECTLY ADDITIVE.
2) FLOWS SHOWN ARE FOR NETWORK ELEMENTS THAT CONTRIBUTE TO OFF-SITE DISCHARGE.

FIGURE 15
POST-DEVELOPMENT NETWORK DIAGRAM
(100 YEAR PEAK FLOWS)

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4 REFERENCES

[1] NYSDEC, *Stormwater Design Manual,* Albany, NY, 2015.

[2] Nelson and Pope, *Drainage and Water Distribution Plans,* Dated 10/7/14 and Revised 4/24/15.

[3] Google, "Google Earth Pro," East Quogue, NY, Imagery Date 5/23/2015.

[4] Prepared for Suffolk County Dept. of Public Works and by Lockwood, Kessler & Bartlett, Inc., *"SC Sewer Topo" Topographic Map - Five Eastern Towns of Suffolk County NY,* Circa 1975.

[5] J. W. H. R. L. J. W. J. N. R. H. C. R. Warner, "Soil Survey of Suffolk County (SCS Survey)," U.S. Department of Agriculture, Soil Conservation Service, in cooperation with Cornell Agriculture, New York, Washington, D.C., 1975.

[6] USDA NRCS Soil Survey Staff, "Web Soil Survey," [Online]. Available: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. [Accessed March 2016].

[7] USDA NRCS Conservation Engineering Division et al., "Urban Hydrology for Small Watersheds, TR-55," 1986.

Appendix A - Drainage and Water Distribution Plans

RUNNOFF COEFFICIENTS

RURAL	0.25
GOLF COURSE	0.35
PAVEMENT	1.00

- RURAL AREAS WERE INTERPRETED AS THE EXISTING ROLLING WOODED AREAS AND THE PROPOSED SUBDIVISION LOTS BECAUSE IT WAS AGREED THAT DRYWELLS WILL BE UTILIZED ON THE INDIVIDUAL LOTS TO ACCOMMODATE THE IMPERVIOUS AREAS
- EACH DRAINAGE RESERVE AREA (DRA) TO HAVE ONE 10' DIA. LEACHING POOL TO FACILITATE LEACHING DURING TIMES WHEN THE GROUND IS FROZEN

DRAINAGE SHED 9A

RURAL 94,340 SF X 0.25 X 2/12 = 0.09 A'

EXISTING NATURAL DRA = 0.45 A'

DRAINAGE SHED 9B

RURAL	427,464 SF	X 0.25	X 2/12	= 0.41 A'
GOLF	50,802 SF	X 0.35	X 2/12	= 0.07 A'
				0.48 A'

DRA = 0.62 A'

EXCESS STORAGE = 0.14 A'

NATURAL DRA - NO CLEARING

DRAINAGE SHED 9

RURAL	2,583,835 SF	X 0.25	X 2/12	= 2.47 A'
GOLF	294,678 SF	X 0.35	X 2/12	= 0.39 A'
				2.86 A'

DRA = 1.04 A'

OVERFLOW TO DRA 10 = 1.82 A'

DRAINAGE SHED 10

RURAL	1,679 SF	X 0.25	X 2/12	= 70 CF
GOLF	253,549 SF	X 0.35	X 2/12	= 4,109 CF
				0.10 A'
			OVERFLOW FROM DRA 1	+ 1.82 A'
				= 1.92 A'

DRA = 0.19 A'

OVERFLOW TO DRA 11 = 1.73 A'

LEGEND

ST	SANITARY SEPTIC TANK
SLP	SANITARY LEACHING POOL
GT	GREASE TRAP
(S)	SANITARY PIPING
	FIRE HYDRANT
(W)	WATER MAIN
B	POTENTIAL WATER BOOSTER STATION SITE
	CATCH BASIN
(D)	DRAINAGE PIPING
	DRAINAGE MANHOLE
	DRAINAGE LEACHING POOL
LCB	LEACHING CATCH BASIN
	OVERFLOW WEIR
LP	10' DIA. DRAINAGE LEACHING POOL
	RAIN GARDEN / BIOSWALE WITHIN DRAINAGE RESERVE AREA
	DRAINAGE RESERVE AREA (DRA)
7	GOLF COURSE HOLE NUMBER
	GOLF GREEN / TEE BOX
	DRAINAGE RESERVE AREA OVERFLOW
	DRAINAGE SHED BOUNDARY
	LIMIT OF CLEARING
	EXISTING SPOT GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR

DRAINAGE SHED 1

RURAL	422,590 SF	X 0.25	X 2/12	= 0.40 A'
GOLF	170,997 SF	X0.35	X 2/12	= 0.23 A'
				0.63 A'

DRA = 0.35 A'

OVERFLOW TO DRA 4 = 0.28A'

DRAINAGE SHED 2

RURAL	12,787 SF	X 0.25	X 2/12	= 533 CF
GOLF	26,765 SF	X0.35	X 2/12	=1,561 CF
				2,094 CF

DRA = 8,362 CF

EXCESS STORAGE = 6,268 CF

DRAINAGE SHED 3

RURAL	342,464 SF	X 0.25	X 2/12	= 0.33 A'
GOLF	175,942 SF	X 0.35	X 2/12	= 0.24 A'
				0.57 A'

DRA = 0.77 A'

EXCESS STORAGE = 0.20A'

DRAINAGE SHED 3A

RURAL	23,257 SF	X 0.25	X 2/12	= 969 CF
GOLF	53,985 SF	X0.35	X 2/12	=3,149 CF
				4,118 CF

DRA = 9,312 CF

EXCESS STORAGE = 5,194 CF

DRAINAGE SHED 4

RURAL	348,020 SF	X 0.25	X 2/12	= 0.33 A'
GOLF	253,549 SF	X 0.35	X 2/12	= 0.34 A'
				0.67 A'
			OVERFLOW FROM DRA 1	+ 0.28 A'
				= 0.95 A'

DRA = 0.69 A'

OVERFLOW TO DRA 5 = 0.26 A'

NO.	DATE:	REVISIONS:	BY:
2	03/14/2016	AS PER FEBRUARY 3, 2016 REVIEW BY AKRF	REP
1	04/24/2015	MINOR ADJUSTMENTS TO REDUCE CLEARING LIMITS	REP

DRAINAGE & WATER DISTRIBUTION - PARTIAL PLAN 1
FOR
THE HILLS AT SOUTHAMPTON
SITUATED AT
SOUTHAMPTON
TOWN OF SOUTHAMPTON, SUFFOLK COUNTY, NEW YORK

P.E. SEAL AND SIGNATURE

NELSON & POPE
ENGINEERS & SURVEYORS
572 WALT WHITMAN ROAD, MELVILLE, N.Y. 11747
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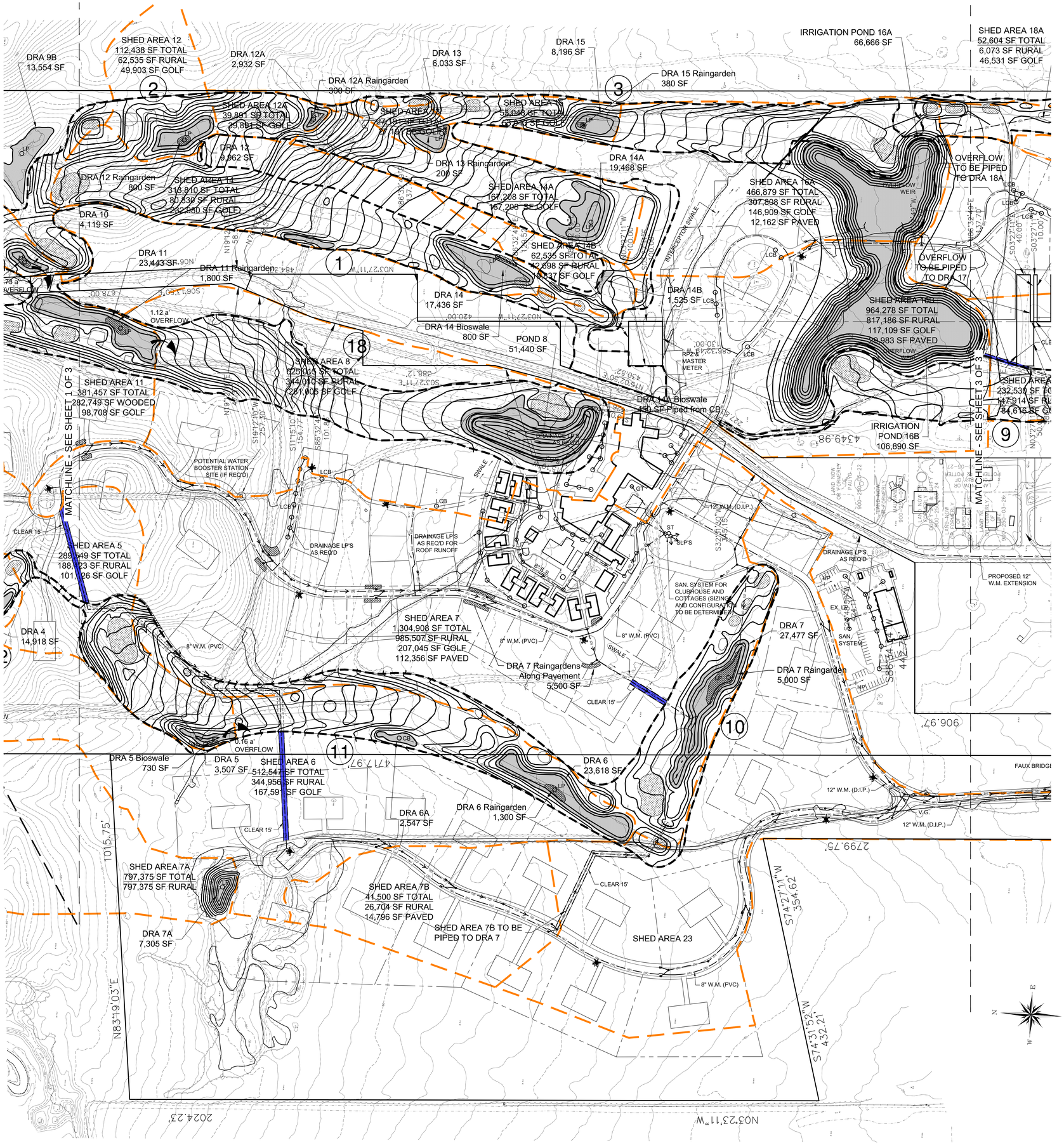
PROJECT NO.:	05105
DRAWN BY:	JM
CHECKED BY:	REP
DATE:	10-7-14
SCALE:	1" = 100'
FILE NO.:	-
CADD:	05105SP
DRAWING NO.:	C-101
SHEET NO.:	1



DRAINAGE SHED 5

RURAL	188,423 SF	X 0.25	X 2/12	= 0.18 A'
GOLF	101,126 SF	X 0.35	X 2/12	= 0.14 A'
				0.32 A'

DRA = 0.16 A'

OVERFLOW TO DRA 6 = 0.16 A'

DRAINAGE SHED 6

RURAL	344,956 SF	X 0.25	X 2/12	= 0.33 A'
GOLF	167,591 SF	X 0.35	X 2/12	= 0.22 A'
				0.55 A'
	OVERFLOW FROM DRA 4			+ 0.26 A'
	OVERFLOW FROM DRA 5			+ 0.16 A'
				= 0.97 A'

DRA = 1.20 A'

EXCESS STORAGE = 0.23 A'

DRAINAGE SHED 7 - TO DRA 7

RURAL	985,507 SF	X 0.25	X 2/12	= 0.94 A'
GOLF	207,045 SF	X 0.35	X 2/12	= 0.28 A'
PAVEMENT	112,356 SF	X 1.0	X 2/12	= 0.43 A'
				1.65 A'

DRAINAGE SHED 7B - PIPED TO DRA 7

RURAL	216,704 SF	X 0.25	X 2/12	= 0.21 A'
PAVEMENT	14,796 SF	X 1.0	X2/12	= 0.06 A'
				0.27 A'

SHED 7	1.65 A'
SHED 7B	0.27 A'
	1.92 A'

DRA 7 = 1.73 A'
LPs = 0.20 A'
= 1.93 A'

EXCESS STORAGE = 0.01 A'

DRAINAGE SHED7A

RURAL	797,375 SF	X 0.25	X 2/12	= 0.76 A'

DRA = 0.76 A'

MAY NEED TO ADD DRYWELLS TO DRA TO MEET STORAGE REQUIREMENTS

DRAINAGE SHED 11

RURAL	302,408 SF	X 0.25	X 2/12	= 0.29 A'
GOLF	98,708 SF	X 0.35	X 2/12	= 0.13 A'
PAVEMENT	11,958 SF	X 1.0	X2/12	= 0.05 A'
				0.47 A'
	OVERFLOW FROM DRA 4			+ 1.73A'
				= 2.20 A'

DRA = 1.08 A'

OVERFLOW TO POND 8 = 1.12 A'

DRAINAGE SHED 8

RURAL	344,010 SF	X 0.25	X 2/12	= 0.33 A'
GOLF	281,005 SF	X 0.35	X 2/12	= 0.38 A'
POND	51,440 SF	X 1.00	X 2/12	= 0.20 A'
				= 0.91A'
	OVERFLOW FROM DRA 11			+ 1.12A'
				= 2.03 A'

POND WITH 2' STORAGE = 2.16 A'

EXCESS STORAGE = 0.13 A'

DRAINAGE SHED 12

RURAL	62,535 SF	X 0.25	X 2/12	= 0.06 A'
GOLF	49,903 SF	X 0.35	X 2/12	= 0.07 A'
				0.13 A'

DRA = 0.46 A'

EXCESS STORAGE = 0.33 A'

DRAINAGE SHED 12A

GOLF	39,891 SF	X 0.35	X 2/12	= 2,327 CF

DRA = 5,865 CF

EXCESS STORAGE = 3,538 CF

DRAINAGE SHED 13

GOLF	27,191 SF	X 0.35	X 2/12	= 1,586 CF

DRA = 12,066 CF

EXCESS STORAGE = 10,4808 CF

DRAINAGE SHED 14

RURAL	80,830 SF	X 0.25	X 2/12	= 0.08 A'
GOLF	232,980 SF	X 0.35	X 2/12	= 0.31 A'
				0.39 A'

DRA = 0.80 A'

EXCESS STORAGE = 0.41 A'

DRAINAGE SHED 14A

GOLF	167,208 SF	X 0.35	X 2/12	= 0.22 A'

DRA = 0.89 A'

EXCESS STORAGE = 0.67 A'

DRAINAGE SHED 14B

RURAL	42,698 SF	X 0.25	X 2/12	= 0.04 A'
GOLF	19,837 SF	X 0.35	X 2/12	= 0.03 A'
				0.07 A'

DRA = 0.07 A'

DRAINAGE SHED 15

GOLF	53,043 SF	X 0.35	X 2/12	= 0.07 A'

DRA = 0.37 A'

EXCESS STORAGE = 0.30 A'

DRAINAGE SHED 16 A&B

RURAL	951,438 SF	X 0.25	X 5/12	= 2.28 A'
GOLF	264,018 SF	X 0.35	X 5/12	= 0.82 A'
PAVEMENT	42,145 SF	X 1.00	X 5/12	= 0.40 A'
POND	173,556 SF	X 1.00	X 5/12	= 1.66 A'
				= 5.16A'

PONDS 16 A&B WITH 2' STORAGE = 7.97 A'

EXCESS STORAGE = 2.81 A'

LEGEND

ST	SANITARY SEPTIC TANK
SLP	SANITARY LEACHING POOL
GT	GREASE TRAP
	SANITARY PIPING
	FIRE HYDRANT
	WATER MAIN
B	POTENTIAL WATER BOOSTER STATION SITE
	CATCH BASIN
	DRAINAGE PIPING
	DRAINAGE MANHOLE
	DRAINAGE LEACHING POOL
LCB	LEACHING CATCH BASIN
	OVERFLOW WEIR
LP	10' DIA. DRAINAGE LEACHING POOL
	RAIN GARDEN / BIOSWALE WITHIN DRAINAGE RESERVE AREA
	DRAINAGE RESERVE AREA (DRA)
7	GOLF COURSE HOLE NUMBER
	GOLF GREEN / TEE BOX
	DRAINAGE RESERVE AREA OVERFLOW
	DRAINAGE SHED BOUNDARY
	LIMIT OF CLEARING
	EXISTING SPOT GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR

NO.	DATE:	REVISIONS:	BY:
2	03/14/2016	AS PER FEBRUARY 3, 2016 REVIEW BY AKRF	REP
1	04/24/2015	MINOR ADJUSTMENTS TO REDUCE CLEARING LIMITS	REP

DRAINAGE & WATER DISTRIBUTION - PARTIAL PLAN 2
FOR
THE HILLS AT SOUTHAMPTON
SITUATED AT
SOUTHAMPTON
TOWN OF SOUTHAMPTON, SUFFOLK COUNTY, NEW YORK

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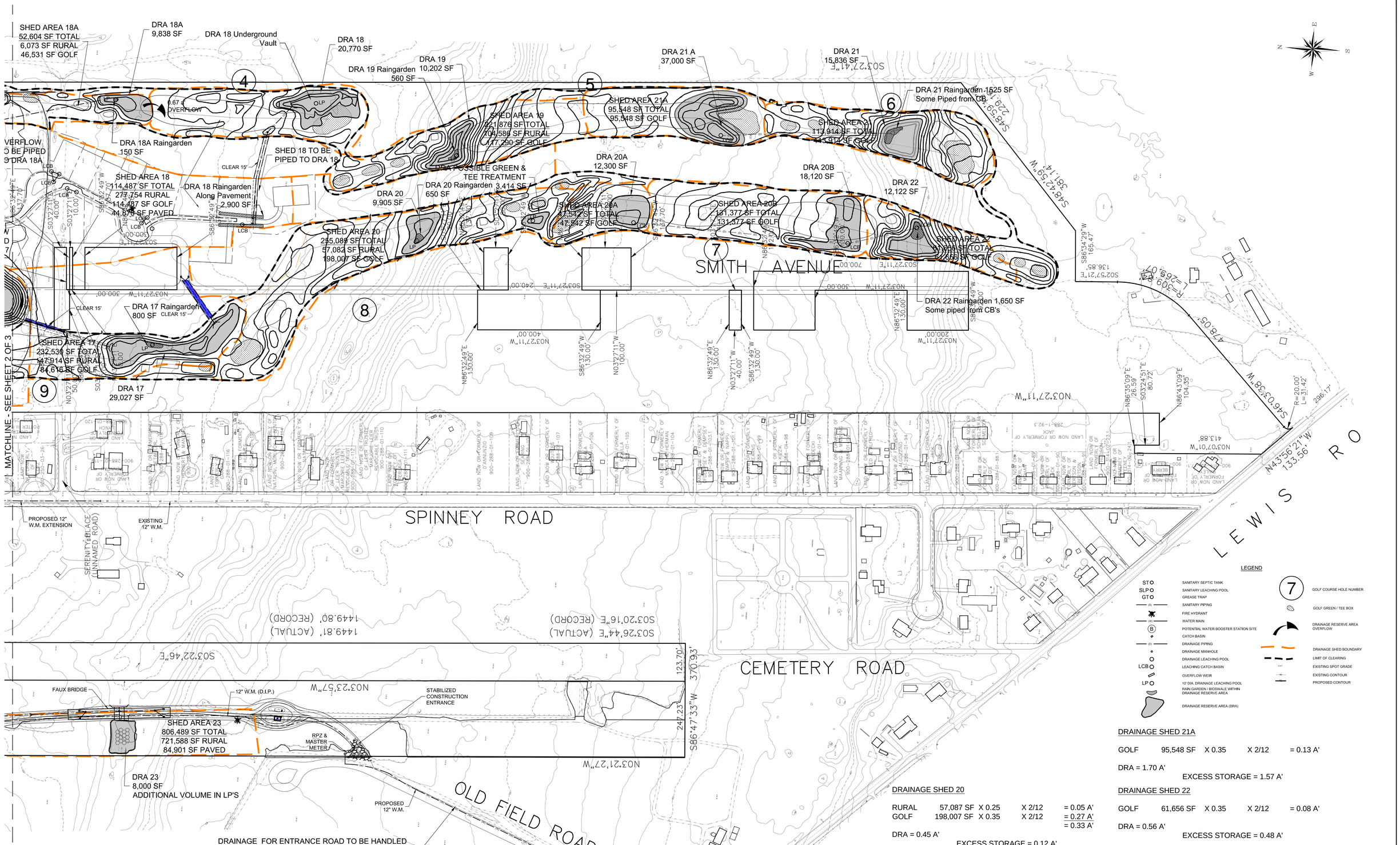
WWW.NELSONPOPE.COM

P.E. SEAL AND SIGNATURE

PROJECT NO.:	05105
DRAWN BY:	JM
CHECKED BY:	REP
DATE:	10-7-14
SCALE:	1" = 100'
FILE NO.:	-
CADD:	05105SP
DRAWING NO.:	C-102
SHEET NO.:	2



LEGEND

ST	SANITARY SEPTIC TANK
SLP	SANITARY LEACHING POOL
GT	GREASE TRAP
(S)	SANITARY PIPING
	FIRE HYDRANT
(W)	WATER MAIN
(B)	POTENTIAL WATER BOOSTER STATION SITE
	CATCH BASIN
(D)	DRAINAGE PIPING
	DRAINAGE MANHOLE
	DRAINAGE LEACHING POOL
LCB	LEACHING CATCH BASIN
	OVERFLOW WEIR
LP	10' DIA. DRAINAGE LEACHING POOL
	RAIN GARDEN / BIOSWALE WITHIN DRAINAGE RESERVE AREA
	DRAINAGE RESERVE AREA (DRA)
7	GOLF COURSE HOLE NUMBER
	GOLF GREEN / TEE BOX
	DRAINAGE RESERVE AREA OVERFLOW
	DRAINAGE SHED BOUNDARY
	LIMIT OF CLEARING
	EXISTING SPOT GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR

DRAINAGE FOR ENTRANCE ROAD TO BE HANDLED IN LP'S AS REQUIRED (SEE APPROVED DRAINAGE PLAN FOR SUBDIVISION SHOWING OLD FIELD ROAD)

DRAINAGE SHED 17

RURAL	147,914 SF	X 0.25	X 2/12	= 0.14 A'
GOLF	84,616 SF	X 0.35	X 2/12	= 0.11 A'
PAVEMENT	2,970 SF	X 1.0	X2/12	= 0.01 A'
				0.26A'

DRA = 1.33 A'

EXCESS STORAGE = 1.07 A'

DRAINAGE SHED 18A

RURAL	6,073 SF	X 0.25	X 2/12	= 253 CF
GOLF	46,531 SF	X 0.35	X 2/12	= 2,714 CF
				= 2,967 CF = 0.07 A'

DRA = 0.45 A'

EXCESS STORAGE = 0.38 A'

DRAINAGE SHED 18

RURAL	277,754 SF	X 0.25	X 2/12	= 0.27 A'
GOLF	114,487 SF	X 0.35	X 2/12	= 0.15 A'
PAVEMENT	44,876 SF	X 1	X 2/12	= 0.17 A'
				= 0.59 A'

DRA = 1.67 A'

EXCESS STORAGE = 1.08 A'

DRAINAGE SHED 19

RURAL	104,586 SF	X 0.25	X 2/12	= 0.10 A'
GOLF	117,290 SF	X 0.35	X 2/12	= 0.16 A'
				= 0.26 A'

DRA = 0.47 A'

EXCESS STORAGE = 0.21 A'

DRAINAGE SHED 20

RURAL	57,087 SF	X 0.25	X 2/12	= 0.05 A'
GOLF	198,007 SF	X 0.35	X 2/12	= 0.27 A'
				= 0.33 A'

DRA = 0.45 A'

EXCESS STORAGE = 0.12 A'

DRAINAGE SHED 20A

GOLF	47,542 SF	X 0.35	X 2/12	= 0.06 A'

DRA = 0.56 A'

EXCESS STORAGE = 0.50 A'

DRAINAGE SHED 20B

GOLF	131,377 SF	X 0.35	X 2/12	= 0.18 A'

DRA = 0.83 A'

EXCESS STORAGE = 0.65 A'

DRAINAGE SHED 21

GOLF	113,914 SF	X 0.35	X 2/12	= 0.15 A'

DRA = 0.73 A'

EXCESS STORAGE = 0.58 A'

DRAINAGE SHED 21A

GOLF	95,548 SF	X 0.35	X 2/12	= 0.13 A'

DRA = 1.70 A'

EXCESS STORAGE = 1.57 A'

DRAINAGE SHED 22

GOLF	61,656 SF	X 0.35	X 2/12	= 0.08 A'

DRA = 0.56 A'

EXCESS STORAGE = 0.48 A'

DRAINAGE SHED 23

RURAL	721,588 SF	X 0.25	X 2/12	= 0.69 A'
PAVED	84,901 SF	X 1	X 2/12	= 0.32 A'
				= 1.01 A'

DRA = 0.60 A'
LP'S = 0.45 A'
= 1.05 A'

EXCESS STORAGE = 0.04 A'

NO.	DATE:	REVISIONS:	BY:
2	03/14/2016	AS PER FEBRUARY 3, 2016 REVIEW BY AKRF	REP
1	04/24/2015	MINOR ADJUSTMENTS TO REDUCE CLEARING LIMITS	REP

DRAINAGE & WATER DISTRIBUTION - PARTIAL PLAN 3
FOR
THE HILLS AT SOUTHAMPTON
SITUATED AT
SOUTHAMPTON
TOWN OF SOUTHAMPTON, SUFFOLK COUNTY, NEW YORK

P.E. SEAL AND SIGNATURE

NELSON & POPE
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572 WALT WHITMAN ROAD, MELVILLE, N.Y. 11747
PHONE (631) 427-5665 FAX (631) 427-5620
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PROJECT NO.:	05105
DRAWN BY:	JM
CHECKED BY:	REP
DATE:	10-7-14
SCALE:	1" = 100'
FILE NO.:	-
CADD:	05105SP
DRAWING NO.:	C-103
SHEET NO.:	3

Appendix B - Model Input Data

Infiltration Calculations

Percolation rates from USDA Suffolk County Soil Survey.
Soil found at site are:

Carver and Plymouth Sands (CpA, CpC and CpE)
Surface Percolation = 1.0 min / in => 0.0014 cfs
Subsurface Percolation = 0.8 min / in => 0.0017 cfs

Haven Loam (HaA, and HaB)
Surface Percolation = 20.9 min / in => 0.00006 cfs
Subsurface Percolation = 0.1 min / in => 0.0139 cfs

Plymouth Loamy Sand (PlA, PlB and PlC)
Surface Percolation = 5.9 min / in => 0.000235 cfs
Subsurface Percolation = 0.2 min / in => 0.0069 cfs

Riverhead Sandy Loam (RdA and RdB)
Surface Percolation = 29.0 min / in => 0.00005 cfs
Subsurface Percolation = 0.1 min / in => 0.0139 cfs

Sudbury Sandy Loam (no soil percolation presented in the Soil Survey)

To determine the infiltration an effective leaching area is assumed:
Leaching Pools (LP): The bottom of the leaching pool is assumed to be the leaching area.

A 12' Dia. Leaching pool has a bottom area of 100.8 sf

Surface Ponding infiltration is not considered in either pre or post-development conditions.

Pre-Development
No surface or sub-surface infiltration occurs.

Post-Development

DRA PB – (Soil CpC)
(16) 12' dia. LP x 100.8 sf x 0.0017 cfs / sf = 2.74 cfs

DRA PC – (Soil PlB)
(1) 12' dia. LP x 100.8 sf x 0.0069 cfs / sf = 0.70 cfs

DRA PD – (Soil RdB)
(1) 12' dia. LP x 100.8 sf x 0.0139 cfs / sf = 1.40 cfs

DRA PE – (Soil RdB)
(1) 12’ dia. LP x 100.8 sf x 0.0139 cfs / sf = 1.40 cfs

DRA PF – (Soil PlC)
(1) 12’ dia. LP x 100.8 sf x 0.0069 cfs = 0.70 cfs

DRA PH – (Soil CuB assume surrounding CpE)

DRA PI – (Soil CpE)
(1) 12’ dia. LP x 100.8 sf x 0.0017 cfs = 0.17 cfs

DRA PW – (Soil RdB)
(2) 12’ dia. LP x 100.8 sf x 0.0139 cfs / sf = 14.01 cfs

DRA PAL – (Soil CpC)
(5) 12’ dia. LP x 100.8 x 0.0017 cfs = 0.86 cfs

DRA PAO – (Soil CpC)
(14) 12’ dia. LP x 100.8 x 0.0017 cfs = 2.40 cfs

DRA PAW – (Soils PlA)
(10) 12’ dia. LP x 100.8 sf x 0.0069 cfs = 6.96 cfs

Pre-Development Input Data

TC Data

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-A

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.494 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	888.00 ft
Is Paved?	False
Slope	0.030 ft/ft
Average Velocity	2.79 ft/s
Segment Time of Concentration	0.089 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	775.00 ft
Is Paved?	False
Slope	0.016 ft/ft
Average Velocity	2.04 ft/s
Segment Time of Concentration	0.105 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,522.00 ft
Is Paved?	False
Slope	0.016 ft/ft
Average Velocity	2.04 ft/s
Segment Time of Concentration	0.207 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.895 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-B

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.494 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	300.00 ft
Is Paved?	False
Slope	0.026 ft/ft
Average Velocity	2.60 ft/s
Segment Time of Concentration	0.032 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	5,297.00 ft
Is Paved?	False
Slope	0.010 ft/ft
Average Velocity	1.61 ft/s
Segment Time of Concentration	0.912 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.438 hours

Subsection: Time of Concentration Calculations
Label: DAE-C

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.052 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.486 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	770.00 ft
Is Paved?	False
Slope	0.054 ft/ft
Average Velocity	3.75 ft/s
Segment Time of Concentration	0.057 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	547.00 ft
Is Paved?	False
Slope	0.033 ft/ft
Average Velocity	2.93 ft/s
Segment Time of Concentration	0.052 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,145.00 ft
Is Paved?	False
Slope	0.044 ft/ft
Average Velocity	3.38 ft/s
Segment Time of Concentration	0.094 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.689 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-D

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.011
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	1.58 ft/s
Segment Time of Concentration	0.044 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	209.00 ft
Is Paved?	False
Slope	0.076 ft/ft
Average Velocity	4.45 ft/s
Segment Time of Concentration	0.013 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.057 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-E

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	107.00 ft
Manning's n	0.400
Slope	0.106 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.185 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	204.00 ft
Is Paved?	False
Slope	0.029 ft/ft
Average Velocity	2.75 ft/s
Segment Time of Concentration	0.021 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.206 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-F

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.028 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.623 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	302.00 ft
Is Paved?	False
Slope	0.061 ft/ft
Average Velocity	3.98 ft/s
Segment Time of Concentration	0.021 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.644 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-G

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.080 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.409 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	198.00 ft
Is Paved?	False
Slope	0.111 ft/ft
Average Velocity	5.38 ft/s
Segment Time of Concentration	0.010 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.419 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-H

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.056 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.15 ft/s
Segment Time of Concentration	0.472 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	247.00 ft
Is Paved?	False
Slope	0.065 ft/ft
Average Velocity	4.11 ft/s
Segment Time of Concentration	0.017 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.489 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-I

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.003 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.04 ft/s
Segment Time of Concentration	1.636 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,171.00 ft
Is Paved?	False
Slope	0.022 ft/ft
Average Velocity	2.39 ft/s
Segment Time of Concentration	0.136 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.772 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-J

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.712 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,392.00 ft
Is Paved?	False
Slope	0.032 ft/ft
Average Velocity	2.89 ft/s
Segment Time of Concentration	0.134 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	356.00 ft
Is Paved?	False
Slope	0.042 ft/ft
Average Velocity	3.31 ft/s
Segment Time of Concentration	0.030 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	3,023.00 ft
Is Paved?	False
Slope	0.015 ft/ft
Average Velocity	1.98 ft/s
Segment Time of Concentration	0.425 hours

Segment #5: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,025.00 ft
Is Paved?	False
Slope	0.012 ft/ft
Average Velocity	1.77 ft/s
Segment Time of Concentration	0.161 hours

Time of Concentration (Composite)

Subsection: Time of Concentration Calculations
Label: DAE-J

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.462 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-K

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.060
Slope	0.044 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.61 ft/s
Segment Time of Concentration	0.114 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,395.00 ft
Is Paved?	False
Slope	0.033 ft/ft
Average Velocity	2.93 ft/s
Segment Time of Concentration	0.132 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,656.00 ft
Is Paved?	False
Slope	0.017 ft/ft
Average Velocity	2.10 ft/s
Segment Time of Concentration	0.219 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.465 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-L

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	162.00 ft
Manning's n	0.400
Slope	0.179 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.209 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.209 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-M

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.004 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.901 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	702.00 ft
Is Paved?	False
Slope	0.011 ft/ft
Average Velocity	1.69 ft/s
Segment Time of Concentration	0.115 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.016 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-N

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.562 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,695.00 ft
Is Paved?	False
Slope	0.007 ft/ft
Average Velocity	1.35 ft/s
Segment Time of Concentration	0.349 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	605.00 ft
Is Paved?	False
Slope	0.013 ft/ft
Average Velocity	1.84 ft/s
Segment Time of Concentration	0.091 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.002 hours

PRE-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAE-O

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.005 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.06 ft/s
Segment Time of Concentration	1.240 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	244.00 ft
Is Paved?	False
Slope	0.005 ft/ft
Average Velocity	1.14 ft/s
Segment Time of Concentration	0.059 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.300 hours

CN Data

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-A

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	138.760	0.0	0.0	30.000
Sand	20.000	20.630	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	159.390	(N/A)	(N/A)	28.706

Subsection: Runoff CN-Area
Label: DAE-B

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	5.060	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	24.810	0.0	0.0	39.000
Woods - good - Soil A	30.000	2.390	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	3.270	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	76.050	0.0	0.0	67.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	111.580	(N/A)	(N/A)	61.534

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-C

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	50.300	0.0	0.0	30.000
Sand	20.000	8.400	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	58.700	(N/A)	(N/A)	28.569

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-D

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	2.840	0.0	0.0	30.000
Sand	20.000	0.670	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.510	(N/A)	(N/A)	28.091

Subsection: Runoff CN-Area
Label: DAE-E

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	3.060	0.0	0.0	30.000
Sand	20.000	0.150	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.210	(N/A)	(N/A)	29.533

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-F

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	6.360	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	6.360	(N/A)	(N/A)	30.000

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-G

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	3.410	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.410	(N/A)	(N/A)	30.000

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-H

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	4.420	0.0	0.0	30.000
Sand	20.000	0.430	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	4.850	(N/A)	(N/A)	29.113

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-I

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	2.930	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.290	0.0	0.0	39.000
Woods - good - Soil A	30.000	23.800	0.0	0.0	30.000
Sand	20.000	4.670	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	31.690	(N/A)	(N/A)	34.896

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-J

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	1.480	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	1.650	0.0	0.0	39.000
Woods - good - Soil A	30.000	67.580	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	1.700	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	81.660	0.0	0.0	67.000
Sand	20.000	21.460	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	175.530	(N/A)	(N/A)	47.055

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-K

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	0.420	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.300	0.0	0.0	39.000
Woods - good - Soil A	30.000	95.860	0.0	0.0	30.000
Sand	20.000	18.070	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	114.650	(N/A)	(N/A)	28.697

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-L

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	3.090	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.090	(N/A)	(N/A)	30.000

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-M

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.620	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.250	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	0.180	0.0	0.0	72.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.050	(N/A)	(N/A)	42.514

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-N

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	6.380	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	26.800	0.0	0.0	39.000
Woods - good - Soil A	30.000	42.680	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	0.680	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	10.320	0.0	0.0	67.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	86.860	(N/A)	(N/A)	42.496

PRE-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAE-O

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	15.810	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	15.810	(N/A)	(N/A)	30.000

Storage Data

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EC

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
156.00	0.0	0.010	0.000	0.000	0.000
158.00	0.0	0.110	0.153	0.102	0.102
160.00	0.0	0.270	0.552	0.368	0.470
160.50	0.0	0.280	0.825	0.137	0.608

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA ED

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
208.00	0.0	0.040	0.000	0.000	0.000
210.00	0.0	0.140	0.255	0.170	0.170
212.00	0.0	0.420	0.802	0.535	0.705
212.50	0.0	0.430	1.275	0.212	0.917

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EE

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
208.00	0.0	0.040	0.000	0.000	0.000
210.00	0.0	0.140	0.255	0.170	0.170
212.00	0.0	0.260	0.591	0.394	0.564
214.00	0.0	0.410	0.996	0.664	1.228
214.50	0.0	0.420	1.245	0.207	1.436

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EF

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
182.00	0.0	0.010	0.000	0.000	0.000
184.00	0.0	0.090	0.130	0.087	0.087
186.00	0.0	0.220	0.451	0.300	0.387
188.00	0.0	0.370	0.875	0.584	0.971
188.50	0.0	0.380	1.125	0.187	1.158

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EG

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
142.00	0.0	0.010	0.000	0.000	0.000
144.00	0.0	0.020	0.044	0.029	0.029
146.00	0.0	0.070	0.127	0.085	0.114
148.00	0.0	0.160	0.336	0.224	0.338
150.00	0.0	0.310	0.693	0.462	0.800
152.00	0.0	0.550	1.273	0.849	1.649
152.50	0.0	0.560	1.665	0.278	1.926

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EH

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
176.00	0.0	0.010	0.000	0.000	0.000
178.00	0.0	0.060	0.094	0.063	0.063
180.00	0.0	0.140	0.292	0.194	0.257
182.00	0.0	0.280	0.618	0.412	0.669
184.00	0.0	0.440	1.071	0.714	1.383
184.50	0.0	0.450	1.335	0.222	1.606

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EI

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
22.00	0.0	0.010	0.000	0.000	0.000
24.00	0.0	0.030	0.057	0.038	0.038
26.00	0.0	0.140	0.235	0.157	0.195
27.00	0.0	0.280	0.618	0.206	0.401
27.50	0.0	0.290	0.855	0.142	0.543
28.00	0.0	0.290	0.870	0.145	0.688

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EK

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
34.00	0.0	0.170	0.000	0.000	0.000
36.00	0.0	0.830	1.376	0.917	0.917
36.50	0.0	0.840	2.505	0.417	1.335
37.00	0.0	0.840	2.520	0.420	1.755

PRE-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA EL

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
140.00	0.0	0.065	0.000	0.000	0.000
142.00	0.0	0.185	0.360	0.240	0.240
144.00	0.0	0.317	0.744	0.496	0.736
146.00	0.0	0.462	1.162	0.774	1.510
148.00	0.0	0.627	1.627	1.085	2.595
150.00	0.0	0.823	2.168	1.446	4.041
152.00	0.0	1.056	2.811	1.874	5.915

Outlet Data

Subsection: Outlet Input Data
Label: OUT EC

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	156.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	160.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	160.00	160.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EC

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	160.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT ED

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	208.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	212.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	212.00	212.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT ED

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	212.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EE

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	208.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	214.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	214.00	214.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EE

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	214.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EF

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	182.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	188.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	188.00	188.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EF

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	188.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EG

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	142.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	152.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	152.00	152.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EG

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	152.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EH

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	176.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	184.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	184.00	184.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EH

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	184.00 ft
Weir Length	5.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EI

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	22.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	28.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	27.00	28.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EI

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	27.00 ft
Weir Length	80.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EK

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	34.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	37.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	36.00	37.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EK

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	36.00 ft
Weir Length	75.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT EL

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	140.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	152.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	150.00	152.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT EL

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	150.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Post-Development Input Data

TC Data

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-A

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.050 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.494 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	300.00 ft
Is Paved?	False
Slope	0.026 ft/ft
Average Velocity	2.60 ft/s
Segment Time of Concentration	0.032 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	5,297.00 ft
Is Paved?	False
Slope	0.010 ft/ft
Average Velocity	1.61 ft/s
Segment Time of Concentration	0.912 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.438 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AA

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.056 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.314 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	53.00 ft
Is Paved?	False
Slope	0.151 ft/ft
Average Velocity	6.27 ft/s
Segment Time of Concentration	0.002 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.316 hours

Subsection: Time of Concentration Calculations
Label: DAP-AB

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	237.00 ft
Manning's n	0.240
Slope	0.101 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.28 ft/s
Segment Time of Concentration	0.237 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.237 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AC

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.092 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.27 ft/s
Segment Time of Concentration	0.257 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	477.00 ft
Is Paved?	False
Slope	0.048 ft/ft
Average Velocity	3.53 ft/s
Segment Time of Concentration	0.037 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.295 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AD

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.064 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.23 ft/s
Segment Time of Concentration	0.297 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	150.00 ft
Is Paved?	False
Slope	0.066 ft/ft
Average Velocity	4.15 ft/s
Segment Time of Concentration	0.010 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.307 hours

Subsection: Time of Concentration Calculations
Label: DAP-AE

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	190.00 ft
Manning's n	0.240
Slope	0.042 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.282 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.282 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AF

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.012 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.581 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	395.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.054 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	395.00 ft
Is Paved?	True
Slope	0.010 ft/ft
Average Velocity	2.03 ft/s
Segment Time of Concentration	0.054 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.689 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AG

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.036 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.563 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	361.00 ft
Is Paved?	False
Slope	0.019 ft/ft
Average Velocity	2.22 ft/s
Segment Time of Concentration	0.045 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.608 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AH

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.036 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.374 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.374 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AI

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.008 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.07 ft/s
Segment Time of Concentration	1.028 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	547.00 ft
Is Paved?	False
Slope	0.016 ft/ft
Average Velocity	2.04 ft/s
Segment Time of Concentration	0.074 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	212.00 ft
Is Paved?	True
Slope	0.051 ft/ft
Average Velocity	4.59 ft/s
Segment Time of Concentration	0.013 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	345.00 ft
Is Paved?	False
Slope	0.011 ft/ft
Average Velocity	1.69 ft/s
Segment Time of Concentration	0.057 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.172 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AJ

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.712 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	572.00 ft
Is Paved?	False
Slope	0.019 ft/ft
Average Velocity	2.22 ft/s
Segment Time of Concentration	0.071 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.784 hours

Subsection: Time of Concentration Calculations
Label: DAP-AK

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.011
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	1.31 ft/s
Segment Time of Concentration	0.053 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.053 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AL

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.07 ft/s
Segment Time of Concentration	0.940 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	436.00 ft
Is Paved?	False
Slope	0.047 ft/ft
Average Velocity	3.50 ft/s
Segment Time of Concentration	0.035 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.974 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AM

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.092 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.18 ft/s
Segment Time of Concentration	0.387 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	180.00 ft
Is Paved?	False
Slope	0.072 ft/ft
Average Velocity	4.33 ft/s
Segment Time of Concentration	0.012 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.398 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AO

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.712 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	238.00 ft
Is Paved?	False
Slope	0.029 ft/ft
Average Velocity	2.75 ft/s
Segment Time of Concentration	0.024 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.736 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AP

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	180.00 ft
Manning's n	0.240
Slope	0.044 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.266 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.266 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AQ

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.028 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.414 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	357.00 ft
Is Paved?	False
Slope	0.001 ft/ft
Average Velocity	0.51 ft/s
Segment Time of Concentration	0.194 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.608 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AR

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.028 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.414 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	50.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.23 ft/s
Segment Time of Concentration	0.004 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.418 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AS

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.09 ft/s
Segment Time of Concentration	0.779 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	937.00 ft
Is Paved?	False
Slope	0.024 ft/ft
Average Velocity	2.50 ft/s
Segment Time of Concentration	0.104 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.883 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AT

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.032 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.18 ft/s
Segment Time of Concentration	0.392 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.392 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AU

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.011
Slope	0.004 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.91 ft/s
Segment Time of Concentration	0.077 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	702.00 ft
Is Paved?	True
Slope	0.011 ft/ft
Average Velocity	2.13 ft/s
Segment Time of Concentration	0.091 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.168 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AV

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.013 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.562 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,695.00 ft
Is Paved?	False
Slope	0.007 ft/ft
Average Velocity	1.35 ft/s
Segment Time of Concentration	0.349 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	605.00 ft
Is Paved?	False
Slope	0.013 ft/ft
Average Velocity	1.84 ft/s
Segment Time of Concentration	0.091 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.002 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-AW

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.056 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.314 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.314 hours

Subsection: Time of Concentration Calculations
Label: DAP-AX

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.016 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.518 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	338.00 ft
Is Paved?	False
Slope	0.011 ft/ft
Average Velocity	1.69 ft/s
Segment Time of Concentration	0.055 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.573 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-B

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.10 ft/s
Segment Time of Concentration	0.712 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,392.00 ft
Is Paved?	False
Slope	0.032 ft/ft
Average Velocity	2.89 ft/s
Segment Time of Concentration	0.134 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	356.00 ft
Is Paved?	False
Slope	0.042 ft/ft
Average Velocity	3.31 ft/s
Segment Time of Concentration	0.030 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	3,023.00 ft
Is Paved?	False
Slope	0.015 ft/ft
Average Velocity	1.98 ft/s
Segment Time of Concentration	0.425 hours

Segment #5: TR-55 Shallow Concentrated Flow	
Hydraulic Length	908.00 ft
Is Paved?	False
Slope	0.011 ft/ft
Average Velocity	1.69 ft/s
Segment Time of Concentration	0.149 hours

Time of Concentration (Composite)

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-B

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration (Composite)	
Time of Concentration (Composite)	1.450 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-C

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.044 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.520 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,876.00 ft
Is Paved?	False
Slope	0.033 ft/ft
Average Velocity	2.91 ft/s
Segment Time of Concentration	0.179 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.699 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-D

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.096 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.18 ft/s
Segment Time of Concentration	0.380 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,331.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.19 ft/s
Segment Time of Concentration	0.116 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.496 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-E

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.100 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.374 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	406.00 ft
Is Paved?	False
Slope	0.056 ft/ft
Average Velocity	3.82 ft/s
Segment Time of Concentration	0.030 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	451.00 ft
Is Paved?	False
Slope	0.062 ft/ft
Average Velocity	4.02 ft/s
Segment Time of Concentration	0.031 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.435 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-F

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.040 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.13 ft/s
Segment Time of Concentration	0.540 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	302.00 ft
Is Paved?	False
Slope	0.099 ft/ft
Average Velocity	5.08 ft/s
Segment Time of Concentration	0.017 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.556 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-G

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.048 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.502 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	61.00 ft
Is Paved?	False
Slope	0.065 ft/ft
Average Velocity	4.11 ft/s
Segment Time of Concentration	0.004 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.506 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-H

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	105.00 ft
Manning's n	0.400
Slope	0.019 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.363 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	185.00 ft
Is Paved?	False
Slope	0.059 ft/ft
Average Velocity	3.92 ft/s
Segment Time of Concentration	0.013 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.376 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-I

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.036 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.563 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	605.00 ft
Is Paved?	False
Slope	0.029 ft/ft
Average Velocity	2.75 ft/s
Segment Time of Concentration	0.061 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	444.00 ft
Is Paved?	False
Slope	0.065 ft/ft
Average Velocity	4.11 ft/s
Segment Time of Concentration	0.030 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.654 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-J

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.036 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.12 ft/s
Segment Time of Concentration	0.563 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	121.00 ft
Is Paved?	False
Slope	0.091 ft/ft
Average Velocity	4.87 ft/s
Segment Time of Concentration	0.007 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.570 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-K

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.048 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.502 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	70.00 ft
Is Paved?	False
Slope	0.057 ft/ft
Average Velocity	3.85 ft/s
Segment Time of Concentration	0.005 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.507 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-L

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.056 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.15 ft/s
Segment Time of Concentration	0.472 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	232.00 ft
Is Paved?	False
Slope	0.069 ft/ft
Average Velocity	4.24 ft/s
Segment Time of Concentration	0.015 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.487 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-M

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.030 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.606 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	290.00 ft
Is Paved?	False
Slope	0.062 ft/ft
Average Velocity	4.02 ft/s
Segment Time of Concentration	0.020 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.626 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-N

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.132 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.335 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	158.00 ft
Is Paved?	False
Slope	0.111 ft/ft
Average Velocity	5.38 ft/s
Segment Time of Concentration	0.008 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	987.00 ft
Is Paved?	False
Slope	0.039 ft/ft
Average Velocity	3.19 ft/s
Segment Time of Concentration	0.086 hours

Segment #4: TR-55 Shallow Concentrated Flow	
Hydraulic Length	177.00 ft
Is Paved?	False
Slope	0.084 ft/ft
Average Velocity	4.68 ft/s
Segment Time of Concentration	0.011 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.440 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-O

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.100 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.374 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	220.00 ft
Is Paved?	False
Slope	0.077 ft/ft
Average Velocity	4.48 ft/s
Segment Time of Concentration	0.014 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.388 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-P

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.056 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.15 ft/s
Segment Time of Concentration	0.472 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	474.00 ft
Is Paved?	False
Slope	0.076 ft/ft
Average Velocity	4.45 ft/s
Segment Time of Concentration	0.030 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.501 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-R

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.052 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.323 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	80.00 ft
Is Paved?	False
Slope	0.112 ft/ft
Average Velocity	5.40 ft/s
Segment Time of Concentration	0.004 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.327 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-S

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.052 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.486 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	361.00 ft
Is Paved?	False
Slope	0.111 ft/ft
Average Velocity	5.38 ft/s
Segment Time of Concentration	0.019 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.505 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-T

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.240
Slope	0.120 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.25 ft/s
Segment Time of Concentration	0.111 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.111 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-U

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	157.00 ft
Manning's n	0.400
Slope	0.165 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.211 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	107.00 ft
Is Paved?	False
Slope	0.149 ft/ft
Average Velocity	6.23 ft/s
Segment Time of Concentration	0.005 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.216 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-V

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.052 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.486 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	312.00 ft
Is Paved?	False
Slope	0.038 ft/ft
Average Velocity	3.15 ft/s
Segment Time of Concentration	0.028 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.514 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-W

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.080 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.26 ft/s
Segment Time of Concentration	0.272 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	471.00 ft
Is Paved?	False
Slope	0.106 ft/ft
Average Velocity	5.25 ft/s
Segment Time of Concentration	0.025 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,118.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.127 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.424 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-X

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.400
Slope	0.076 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.418 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	781.00 ft
Is Paved?	False
Slope	0.060 ft/ft
Average Velocity	3.95 ft/s
Segment Time of Concentration	0.055 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.472 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-Y

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	240.00 ft
Manning's n	0.400
Slope	0.104 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.19 ft/s
Segment Time of Concentration	0.357 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	1,713.00 ft
Is Paved?	False
Slope	0.021 ft/ft
Average Velocity	2.34 ft/s
Segment Time of Concentration	0.204 hours

Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	339.00 ft
Is Paved?	False
Slope	0.032 ft/ft
Average Velocity	2.89 ft/s
Segment Time of Concentration	0.033 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.593 hours

POST-DEVELOPMENT - THE HILLS

Subsection: Time of Concentration Calculations
Label: DAP-Z

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	250.00 ft
Manning's n	0.240
Slope	0.072 ft/ft
2 Year 24 Hour Depth	3.5 in
Average Velocity	0.24 ft/s
Segment Time of Concentration	0.284 hours

Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	558.00 ft
Is Paved?	False
Slope	0.057 ft/ft
Average Velocity	3.85 ft/s
Segment Time of Concentration	0.040 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.324 hours

CN Data

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-A

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	5.060	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	24.810	0.0	0.0	39.000
Woods - good - Soil A	30.000	2.390	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	3.270	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	76.050	0.0	0.0	67.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	111.580	(N/A)	(N/A)	61.534

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AA

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.910	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.910	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AB

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.620	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.620	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AC

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	3.850	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.850	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AD

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.220	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.220	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AE

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.770	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.770	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AF

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	0.710	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	2.720	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.780	0.0	0.0	30.000
Residential Districts - 1/4 acre - Soil A	61.000	5.280	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	9.490	(N/A)	(N/A)	54.915

Subsection: Runoff CN-Area
Label: DAP-AG

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.580	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.860	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.440	(N/A)	(N/A)	33.625

Subsection: Runoff CN-Area
Label: DAP-AH

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	2.490	0.0	0.0	39.000
Woods - good - Soil A	30.000	2.850	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	5.340	(N/A)	(N/A)	34.197

Subsection: Runoff CN-Area
Label: DAP-AI

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	2.820	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.520	0.0	0.0	39.000
Woods - good - Soil A	30.000	18.210	0.0	0.0	30.000
Sand	20.000	4.980	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	26.530	(N/A)	(N/A)	35.527

Subsection: Runoff CN-Area
Label: DAP-AJ

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	0.670	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.290	0.0	0.0	39.000
Woods - good - Soil A	30.000	17.720	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	18.680	(N/A)	(N/A)	32.579

Subsection: Runoff CN-Area
Label: DAP-AK

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	1.080	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.480	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.560	(N/A)	(N/A)	79.846

Subsection: Runoff CN-Area
Label: DAP-AL

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	4.730	0.0	0.0	39.000
Woods - good - Soil A	30.000	5.800	0.0	0.0	30.000
Sand	20.000	0.730	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	11.260	(N/A)	(N/A)	33.132

Subsection: Runoff CN-Area
Label: DAP-AM

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	1.440	0.0	0.0	30.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	1.080	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.520	(N/A)	(N/A)	33.857

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AO

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	3.340	0.0	0.0	39.000
Woods - good - Soil A	30.000	3.840	0.0	0.0	30.000
Residential Districts - 1/4 acre - Soil A	61.000	0.260	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	7.440	(N/A)	(N/A)	35.124

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AP

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.090	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.090	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AQ

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	3.010	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.010	(N/A)	(N/A)	39.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AR

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	2.180	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.180	(N/A)	(N/A)	39.000

Subsection: Runoff CN-Area
Label: DAP-AS

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	2.950	0.0	0.0	39.000
Woods - good - Soil A	30.000	4.670	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	7.620	(N/A)	(N/A)	33.484

Subsection: Runoff CN-Area
Label: DAP-AT

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.620	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.090	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.710	(N/A)	(N/A)	37.859

Subsection: Runoff CN-Area
Label: DAP-AU

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	0.940	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.110	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.050	(N/A)	(N/A)	91.819

Subsection: Runoff CN-Area
Label: DAP-AV

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	6.380	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	26.800	0.0	0.0	39.000
Woods - good - Soil A	30.000	42.680	0.0	0.0	30.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	0.680	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	10.320	0.0	0.0	67.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	86.860	(N/A)	(N/A)	42.496

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-AW

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.430	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.430	(N/A)	(N/A)	39.000

Subsection: Runoff CN-Area
Label: DAP-AX

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	1.980	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.230	0.0	0.0	39.000
Woods - good - Soil A	30.000	1.600	0.0	0.0	30.000
Sand	20.000	1.470	0.0	0.0	20.000
Residential Districts - 1/4 acre - Soil A	61.000	0.560	0.0	0.0	61.000
Residential Districts - 2 acre - Soil A	46.000	13.510	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	19.350	(N/A)	(N/A)	48.374

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-B

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	1.480	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	1.650	0.0	0.0	39.000
Woods - good - Soil A	30.000	67.580	0.0	0.0	30.000
Sand	20.000	21.460	0.0	0.0	20.000
Impervious Areas - Dirt (w/ right-of-way) - Soil A	72.000	1.700	0.0	0.0	72.000
Row crops - Straight row (SR), good - Soil A	67.000	81.660	0.0	0.0	67.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	175.530	(N/A)	(N/A)	47.055

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-C

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	17.630	0.0	0.0	30.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	0.330	0.0	0.0	39.000
Sand	20.000	0.440	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	18.400	(N/A)	(N/A)	29.922

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-D

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	0.080	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	4.280	0.0	0.0	39.000
Woods - good - Soil A	30.000	4.810	0.0	0.0	30.000
Sand	20.000	0.800	0.0	0.0	20.000
Residential Districts - 2 acre - Soil A	46.000	11.540	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	21.510	(N/A)	(N/A)	40.256

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-E

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	2.300	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.120	0.0	0.0	30.000
Sand	20.000	0.310	0.0	0.0	20.000
Residential Districts - 2 acre - Soil A	46.000	3.900	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	6.630	(N/A)	(N/A)	42.066

Subsection: Runoff CN-Area
Label: DAP-F

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	5.460	0.0	0.0	39.000
Woods - good - Soil A	30.000	5.820	0.0	0.0	30.000
Sand	20.000	0.680	0.0	0.0	20.000
Residential Districts - 2 acre - Soil A	46.000	1.850	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	13.810	(N/A)	(N/A)	35.209

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-G

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	1.780	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.780	(N/A)	(N/A)	30.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-H

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	0.610	0.0	0.0	39.000
Sand	20.000	0.300	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	0.910	(N/A)	(N/A)	32.736

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-I

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	3.930	0.0	0.0	39.000
Woods - good - Soil A	30.000	8.580	0.0	0.0	30.000
Sand	20.000	1.130	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	13.640	(N/A)	(N/A)	31.765

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-J

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	2.680	0.0	0.0	30.000
Sand	20.000	0.850	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.530	(N/A)	(N/A)	27.592

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-K

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	3.210	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.210	(N/A)	(N/A)	30.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-L

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	4.600	0.0	0.0	30.000
Sand	20.000	0.260	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	4.860	(N/A)	(N/A)	29.465

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-M

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	6.360	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	6.360	(N/A)	(N/A)	30.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-N

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	52.220	0.0	0.0	30.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	6.800	0.0	0.0	39.000
Sand	20.000	1.040	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	60.060	(N/A)	(N/A)	30.846

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-O

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	3.330	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	3.330	(N/A)	(N/A)	30.000

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-P

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.130	0.0	0.0	39.000
Woods - good - Soil A	30.000	9.370	0.0	0.0	30.000
Sand	20.000	0.480	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	10.980	(N/A)	(N/A)	30.489

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-R

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.650	0.0	0.0	39.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.650	(N/A)	(N/A)	39.000

Subsection: Runoff CN-Area
Label: DAP-S

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	2.340	0.0	0.0	39.000
Woods - good - Soil A	30.000	2.280	0.0	0.0	30.000
Sand	20.000	0.610	0.0	0.0	20.000
Residential Districts - 2 acre - Soil A	46.000	3.540	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	8.770	(N/A)	(N/A)	38.164

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-T

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil A	30.000	0.480	0.0	0.0	30.000
Residential Districts - 2 acre - Soil A	46.000	1.740	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	2.220	(N/A)	(N/A)	42.541

Subsection: Runoff CN-Area
Label: DAP-U

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	1.210	0.0	0.0	39.000
Woods - good - Soil A	30.000	0.560	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1.770	(N/A)	(N/A)	36.153

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-V

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	4.080	0.0	0.0	39.000
Woods - good - Soil A	30.000	2.130	0.0	0.0	30.000
Sand	20.000	1.660	0.0	0.0	20.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	7.870	(N/A)	(N/A)	32.557

Subsection: Runoff CN-Area
Label: DAP-W

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	3.510	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	9.490	0.0	0.0	39.000
Woods - good - Soil A	30.000	4.290	0.0	0.0	30.000
Residential Districts - 1/4 acre - Soil A	61.000	7.660	0.0	0.0	61.000
Residential Districts - 2 acre - Soil A	46.000	5.010	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	29.960	(N/A)	(N/A)	51.419

Subsection: Runoff CN-Area
Label: DAP-X

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	1.320	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	4.780	0.0	0.0	39.000
Woods - good - Soil A	30.000	3.390	0.0	0.0	30.000
Sand	20.000	2.420	0.0	0.0	20.000
Residential Districts - 1/4 acre - Soil A	61.000	0.830	0.0	0.0	61.000
Residential Districts - 2 acre - Soil A	46.000	1.610	0.0	0.0	46.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	14.350	(N/A)	(N/A)	41.155

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-Y

Return Event: 100 years
Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil A	98.000	5.510	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil A	39.000	7.130	0.0	0.0	39.000
Woods - good - Soil A	30.000	9.980	0.0	0.0	30.000
Sand	20.000	4.080	0.0	0.0	20.000
Residential Districts - 1/4 acre - Soil A	61.000	7.360	0.0	0.0	61.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	34.060	(N/A)	(N/A)	48.385

POST-DEVELOPMENT - THE HILLS

Subsection: Runoff CN-Area
Label: DAP-Z

Return Event: 100 years
Storm Event: 100 YEAR

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 A	39.000	5.500	0.0	0.0	39.000
Woods - good - Soil A	30.000	1.730	0.0	0.0	30.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	7.230	(N/A)	(N/A)	36.846

Storage Data

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA AX

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-115.00	0.0	0.009	0.000	0.000	0.000
0.00	0.0	0.009	0.028	1.058	1.058
0.50	0.0	0.009	0.028	0.005	1.063

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAA

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.070	0.000	0.000	0.000
0.00	0.0	0.070	0.210	0.140	0.140
0.50	0.0	0.070	0.210	0.035	0.175

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAB

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.140	0.000	0.000	0.000
0.00	0.0	0.140	0.420	0.280	0.280
0.50	0.0	0.140	0.420	0.070	0.350

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAC

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.445	0.000	0.000	0.000
0.00	0.0	0.445	1.335	0.890	0.890
0.50	0.0	0.445	1.335	0.222	1.113

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAD

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.185	0.000	0.000	0.000
0.00	0.0	0.185	0.555	0.370	0.370
0.50	0.0	0.185	0.555	0.092	0.463

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAE

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.150	0.000	0.000	0.000
0.00	0.0	0.150	0.450	0.450	0.450
0.50	0.0	0.150	0.450	0.075	0.525

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAF

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.557	0.000	0.000	0.000
0.00	0.0	0.557	1.671	1.671	1.671
0.50	0.0	0.557	1.671	0.278	1.949

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAG

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-1.00	0.0	0.070	0.000	0.000	0.000
0.00	0.0	0.070	0.210	0.070	0.070
0.50	0.0	0.070	0.210	0.035	0.105

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAH

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.443	0.000	0.000	0.000
0.00	0.0	0.443	1.329	1.329	1.329
0.50	0.0	0.443	1.329	0.222	1.551

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAI

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
22.00	0.0	0.010	0.000	0.000	0.000
24.00	0.0	0.030	0.057	0.038	0.038
26.00	0.0	0.140	0.235	0.157	0.195
27.00	0.0	0.280	0.618	0.206	0.401
27.50	0.0	0.290	0.855	0.142	0.543

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAJ

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
34.00	0.0	0.170	0.000	0.000	0.000
36.00	0.0	0.830	1.376	0.917	0.917
36.50	0.0	0.840	2.505	0.417	1.335

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAL

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
21.00	0.0	0.000	0.000	0.000	0.000
22.00	0.0	0.075	0.075	0.025	0.025
24.00	0.0	0.226	0.431	0.287	0.312
26.00	0.0	0.584	1.173	0.782	1.095

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAM

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.230	0.000	0.000	0.000
0.00	0.0	0.230	0.690	0.460	0.460
0.50	0.0	0.230	0.690	0.115	0.575

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAO

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
20.00	0.0	0.234	0.000	0.000	0.000
22.00	0.0	0.338	0.853	0.569	0.569
23.00	0.0	0.440	1.164	0.388	0.957

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAP

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.187	0.000	0.000	0.000
0.00	0.0	0.187	0.561	0.561	0.561
0.50	0.0	0.187	0.561	0.094	0.654

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAQ

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.277	0.000	0.000	0.000
0.00	0.0	0.277	0.831	0.831	0.831
0.50	0.0	0.277	0.831	0.138	0.969

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAR

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.567	0.000	0.000	0.000
0.00	0.0	0.567	1.701	1.701	1.701
0.50	0.0	0.567	1.701	0.283	1.985

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAS

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.243	0.000	0.000	0.000
0.00	0.0	0.243	0.729	0.729	0.729
1.00	0.0	0.243	0.729	0.243	0.972

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PAW

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
17.00	0.0	0.000	0.000	0.000	0.000
18.00	0.0	0.270	0.270	0.090	0.090
20.00	0.0	0.390	0.984	0.656	0.746
21.00	0.0	0.530	1.375	0.458	1.205
21.50	0.0	0.540	1.605	0.267	1.472

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PB

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.350	0.000	0.000	0.000
0.00	0.0	0.350	1.050	1.050	1.050
0.50	0.0	0.350	1.050	0.175	1.225

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PC

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.380	0.000	0.000	0.000
0.00	0.0	0.380	1.140	0.760	0.760
0.50	0.0	0.380	1.140	0.190	0.950

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PD

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.400	0.000	0.000	0.000
0.00	0.0	0.400	1.200	1.200	1.200
0.50	0.0	0.400	1.200	0.200	1.400

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PE

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-1.00	0.0	0.160	0.000	0.000	0.000
0.00	0.0	0.160	0.480	0.160	0.160
0.50	0.0	0.160	0.480	0.080	0.240

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PF

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.345	0.000	0.000	0.000
0.00	0.0	0.345	1.035	0.690	0.690
0.50	0.0	0.345	1.035	0.172	0.863

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PH

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-1.00	0.0	0.190	0.000	0.000	0.000
0.00	0.0	0.190	0.570	0.190	0.190
0.50	0.0	0.190	0.570	0.095	0.285

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PI

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-1.00	0.0	0.350	0.000	0.000	0.000
0.00	0.0	0.350	1.050	0.350	0.350
0.50	0.0	0.350	1.050	0.175	0.525

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PJ

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
208.00	0.0	0.040	0.000	0.000	0.000
210.00	0.0	0.140	0.255	0.170	0.170
212.00	0.0	0.420	0.802	0.535	0.705
212.50	0.0	0.430	1.275	0.212	0.917

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PK

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
208.00	0.0	0.040	0.000	0.000	0.000
210.00	0.0	0.140	0.255	0.170	0.170
212.00	0.0	0.260	0.591	0.394	0.564
214.00	0.0	0.410	0.996	0.664	1.228
214.50	0.0	0.420	1.245	0.207	1.436

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PL

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
176.00	0.0	0.010	0.000	0.000	0.000
178.00	0.0	0.060	0.094	0.063	0.063
180.00	0.0	0.140	0.292	0.194	0.257
182.00	0.0	0.280	0.618	0.412	0.669
184.00	0.0	0.440	1.071	0.714	1.383
184.50	0.0	0.450	1.335	0.222	1.606

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PM

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
182.00	0.0	0.010	0.000	0.000	0.000
184.00	0.0	0.090	0.130	0.087	0.087
186.00	0.0	0.220	0.451	0.300	0.387
188.00	0.0	0.370	0.875	0.584	0.971
188.50	0.0	0.380	1.125	0.187	1.158

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PN

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.347	0.000	0.000	0.000
0.00	0.0	0.347	1.041	1.041	1.041
0.50	0.0	0.347	1.041	0.174	1.215

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PO

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.310	0.000	0.000	0.000
0.00	0.0	0.310	0.930	0.620	0.620
0.50	0.0	0.310	0.930	0.155	0.775

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PP

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.310	0.000	0.000	0.000
0.00	0.0	0.310	0.930	0.620	0.620
0.50	0.0	0.310	0.930	0.155	0.775

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PR

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.095	0.000	0.000	0.000
0.00	0.0	0.095	0.285	0.190	0.190
0.50	0.0	0.095	0.285	0.047	0.238

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PS

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.360	0.000	0.000	0.000
0.00	0.0	0.360	1.080	1.080	1.080
0.50	0.0	0.360	1.080	0.180	1.260

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PT

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
140.00	0.0	0.065	0.000	0.000	0.000
142.00	0.0	0.185	0.360	0.240	0.240
144.00	0.0	0.317	0.744	0.496	0.736
146.00	0.0	0.462	1.162	0.774	1.510
148.00	0.0	0.627	1.627	1.085	2.595
150.00	0.0	0.823	2.168	1.446	4.041
152.00	0.0	1.056	2.811	1.874	5.915

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PU

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.110	0.000	0.000	0.000
0.00	0.0	0.110	0.330	0.220	0.220
0.50	0.0	0.110	0.330	0.055	0.275

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PV

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-3.00	0.0	0.257	0.000	0.000	0.000
0.00	0.0	0.257	0.771	0.771	0.771
0.50	0.0	0.257	0.771	0.128	0.899

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PW

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-260.00	0.0	0.002	0.000	0.000	0.000
-4.50	0.0	0.002	0.007	0.590	0.590
-4.00	0.0	0.643	0.684	0.114	0.704
0.00	0.0	0.643	1.929	2.572	3.276
0.50	0.0	0.643	1.929	0.322	3.598

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PX

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	1.080	0.000	0.000	0.000
0.00	0.0	1.080	3.240	2.160	2.160
0.50	0.0	1.080	3.240	0.540	2.700

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PY

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	3.985	0.000	0.000	0.000
0.00	0.0	3.985	11.955	7.970	7.970
0.50	0.0	3.985	11.955	1.992	9.963

POST-DEVELOPMENT - THE HILLS

Subsection: Elevation-Area Volume Curve
Label: DRA PZ

Return Event: 100 years
Storm Event: 100 YEAR

Elevation (ft)	Planimeter (ft²)	Area (acres)	A1+A2+sqr (A1*A2) (acres)	Volume (ac-ft)	Volume (Total) (ac-ft)
-2.00	0.0	0.400	0.000	0.000	0.000
0.00	0.0	0.400	1.200	0.800	0.800
0.50	0.0	0.400	1.200	0.200	1.000

Outlet Data

Subsection: Outlet Input Data
Label: OUT PAA

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAA

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAB

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAB

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAC

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAC

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAD

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAD

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAE

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAE

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAF

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAF

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAG

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-1.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAG

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAH

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAH

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAI

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	22.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	27.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	27.00	27.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAI

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	27.00 ft
Weir Length	175.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAJ

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	34.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	36.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	36.00	36.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAJ

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	36.00 ft
Weir Length	170.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAL

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	21.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	26.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	24.00	26.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAL

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	24.00 ft
Weir Length	24.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAM

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAM

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAO

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	20.00 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	23.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	22.50	23.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAO

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	22.50 ft
Weir Length	190.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAP

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAP

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAQ

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAQ

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAR

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAR

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAS

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	1.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	1.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAS

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	80.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAW

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	17.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	21.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	20.00	21.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAW

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	20.00 ft
Weir Length	60.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PAX

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-115.00 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PAX

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	30.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PB

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PB

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	160.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PC

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PC

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PD

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PD

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PE

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-1.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PE

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PF

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PF

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PH

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-1.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PH

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PI

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-1.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PI

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PJ

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	208.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	212.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	212.00	212.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PJ

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	212.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PK

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	208.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	214.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	214.00	214.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PK

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	214.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PL

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	176.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	184.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	184.00	184.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PL

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	184.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PM

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	182.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	188.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	188.00	188.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PM

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	188.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PN

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PN

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PO

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PO

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PP

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PP

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PR

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PR

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PS

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PS

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PT

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	140.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	152.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	150.00	152.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PT

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	150.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PU

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PU

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PV

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-3.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PV

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PW

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations		
Minimum (Headwater)	-260.00	ft
Increment (Headwater)	0.10	ft
Maximum (Headwater)	0.50	ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PW

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	15.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PX

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PX

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PY

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PY

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Outlet Input Data
Label: OUT PZ

Return Event: 100 years
Storm Event: 100 YEAR

Requested Pond Water Surface Elevations	
Minimum (Headwater)	-2.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	0.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	0.00	0.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OUT PZ

Return Event: 100 years
Storm Event: 100 YEAR

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	0.00 ft
Weir Length	10.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s