



STORMWATER MANAGEMENT STATEMENT

To: Borough of Dunellen Planning Board

Project: Proposed Mixed-Use Development
Block I, Lot I4
150 North Avenue (State Route 28)
Borough of Dunellen, Middlesex County, New Jersey

Dated: June 19, 2020

Reference: Preliminary & Final Site Major Site Plan
(prepared by Stonefield Engineering & Design, LLC, dated July 13, 2020)

CommuniPaw Associates, LLC is proposing the construction of a three-story mixed use retail and residential building. The building proposes two (2) retail establishments, an open-walled parking area, and a residential lobby on the ground floor, with residential apartments on the two floors above. The mixed-use development of 1,578 SF of retail space, four (4) one-bedroom apartments, and ten (10) two-bedroom apartments which are serviced by 19 resident-only parking spaces. The subject property is designated as Block I, Lot I4, commonly known as 150 North Avenue (State Route 28), on the corner of North Avenue and Jackson Avenue. The site is located within the redevelopment area of Dunellen in the Remainder Parcels – North Avenue between Jackson Avenue and Jefferson Avenue district, and is bounded by residential housing on the adjacent lot to the northwest and commercial uses surrounding otherwise.

The proposed project area is 9,980 SF (0.23 AC). The site is currently a vacant lot previously occupied by a one-story automobile service station. The site, prior to recent demolition, was completely impervious. The project consists of the construction of a mixed-use residential building with a gross floor area of 19,214 SF. Additional site improvements include parking, landscaping, lighting, and utility services. The overall disturbance area associated with the project is 13,278 SF (0.30 AC), consisting of the area around and within the building, the public sidewalk along both (2) frontages, and minimal disturbances within the roadway on Jackson Avenue for installation of utility services. The reduction in the total area of impervious surfaces is 1,246 SF (0.03 AC).

This Stormwater Management Statement has been prepared to analyze the potential stormwater runoff impacts of the proposed project and discuss measures proposed to conform to the stormwater management requirements set forth by the Borough of Dunellen, Freehold Soil Conservation District, the New Jersey Administration Code (NJAC) and the New Jersey Department of Environmental Protection (NJDEP).

PRE-DEVELOPMENT DRAINAGE CONDITIONS

The pre-development condition of the site was 100% impervious coverage consisted of a one-story automobile service station and surrounding paved areas. All storm runoff sheet flows off-site and discharges into the NJDOT storm sewer system via inlets on North Avenue (State Route 28). The following table summarizes Drainage Area E-I of the stormwater analysis:

TABLE I: PRE-DEVELOPMENT DRAINAGE AREAS

Drainage Area	Description	Area Extents	Impervious Area	Time of Concentration
E-I	Pre-Development Drainage	9,980 SF	9,980 SF	6 Minutes



Stormwater Management Statement

Proposed Mixed-Use Development

Borough of Dunellen, New Jersey

June 19, 2020

PROPOSED DRAINAGE CONDITIONS

Under proposed conditions, the site will consist of the mixed-use building with landscaping along the sides/rear of the site. The uncovered portion of the site sheet flow into the Jackson Avenue and North Avenue right-of-ways where it will discharge into the NJDOT storm system within Jackson Avenue. Roof leaders located internal to the building will connect to an inlet in the parking area which will then connect into the storm system at a proposed manhole on Jackson Avenue via a 12" Class V RCP, ultimately discharging into the NJDOT storm system within Jackson Avenue. The following table summarizes Drainage Area P-I of the stormwater analysis:

TABLE 2: POST-DEVELOPMENT DRAINAGE AREAS

Drainage Area	Description	Area Extents	Impervious Area	Time of Concentration
P-I	Post-Development Drainage	9,980 SF	8,734 SF	6 Minutes

STORMWATER MANAGEMENT ANALYSIS

The project disturbs less than one acre of land and is therefore defined as a Minor Development as indicated by the Borough Ordinance and NJDEP. As a Minor Development, water quality requirements and groundwater recharge requirements are not required. The project is designed to conform to the stormwater management requirements set forth by the Borough of Dunellen, Freehold Soil Conservation District, the NJAC and the NJDEP.

As impervious surfaces are decreased by 0.03 AC, the proposed project meets stormwater quantity requirements as the post-development hydrograph does not exceed the pre-development hydrograph for the 2-, 10-, 25-, 100-year storm events at any point in time. The following table outlines the stormwater peak discharge and runoff rates for the point of interest:

TABLE 3: STORMWATER PEAK DISCHARGE ANALYSIS SUMMARY

Storm Event	Pre-Development Peak Discharge	Post-Development Peak Discharge	Pre-Development Runoff Volume	Post-Development Runoff Volume
2-Year	0.73 CFS	0.63 CFS	2,592 CF	2,269 CF
10-Year	1.12 CFS	0.98 CFS	4,061 CF	3,577 CF
25-Year	1.39 CFS	1.22 CFS	5,091 CF	4,513 CF
100-Year	1.89 CFS	1.69 CFS	6,978 CF	6,255 CF

*A minimum concentration of 10-minutes was utilized for all drainage areas.

No adverse impacts to the municipal drainage system or adjacent properties are anticipated as a result of the project. Detailed hydrologic calculations and mapping can be found in the Appendix of this Statement.

Prepared by:

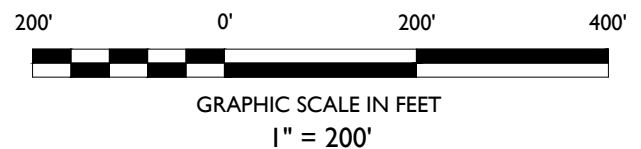
Matthew J. Seckler, PE
NJ PE License No. 48731

Stonefield Engineering and Design, LLC



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**APPENDIX A
AERIAL MAP
USGS QUAD MAP
TAX & ZONING MAP**



AERIAL MAP

SOURCE: GOOGLE EARTH PRO, DATED 2018

150 NORTH AVENUE PROPOSED APARTMENT BUILDING

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

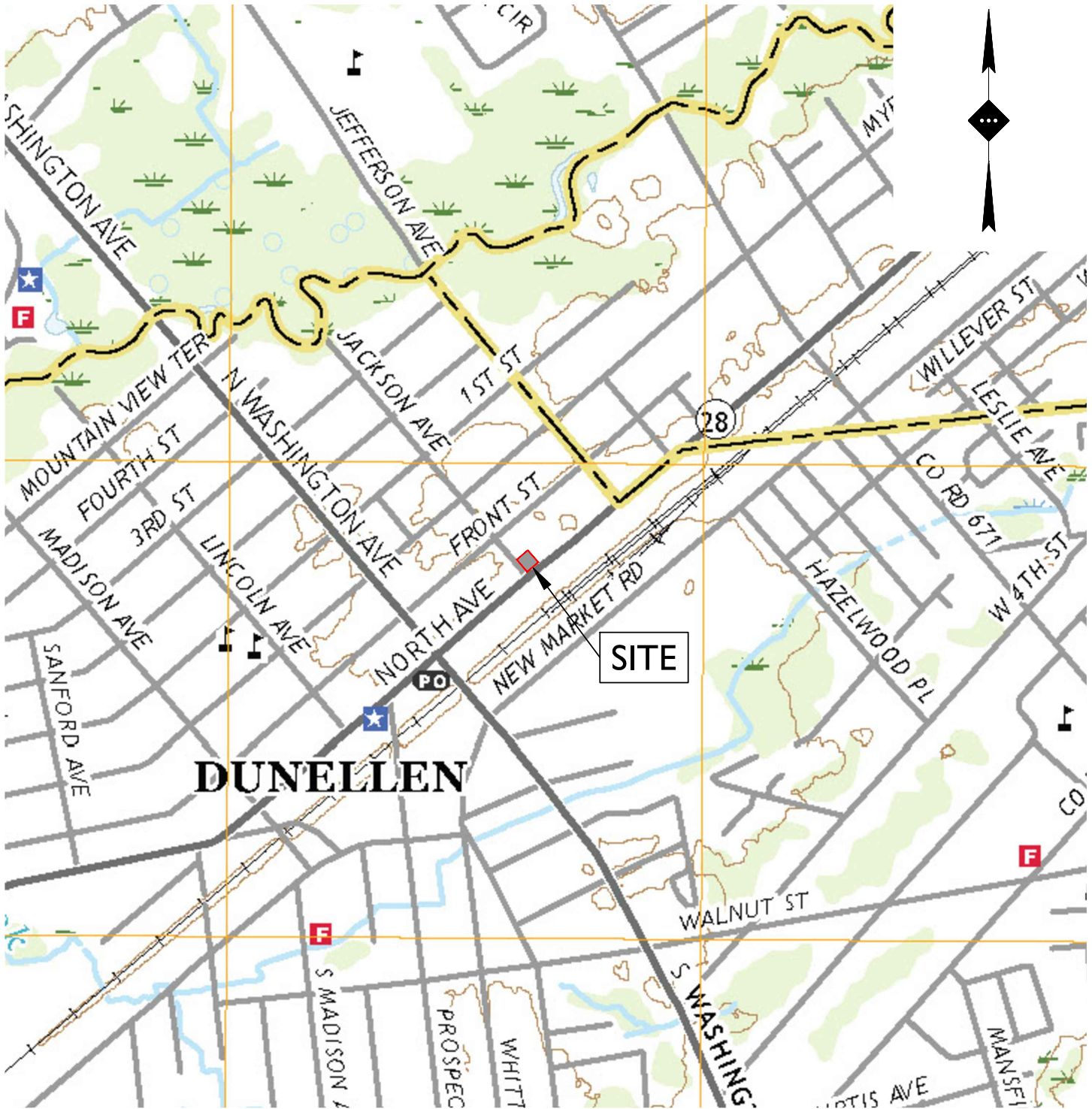
DRAWN BY:	TR
CHECKED BY:	ANV
DATE:	11/11/2019
SCALE:	1" = 200'
PROJECT ID:	T-19325



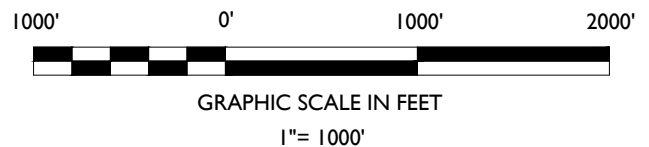
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USGS QUADRANGLE MAP



SOURCE: UNITED STATES GEOLOGICAL SURVEY QUADRANGLE MAP, PLAINFIELD, NEW JERSEY, 7.5 MINUTE SERIES, 2019

150 NORTH AVENUE PROPOSED APARTMENT BUILDING

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

DRAWN BY:	TR
CHECKED BY:	ANV
DATE:	11/11/2019
SCALE:	1" = 1000'
PROJECT ID:	T-19325

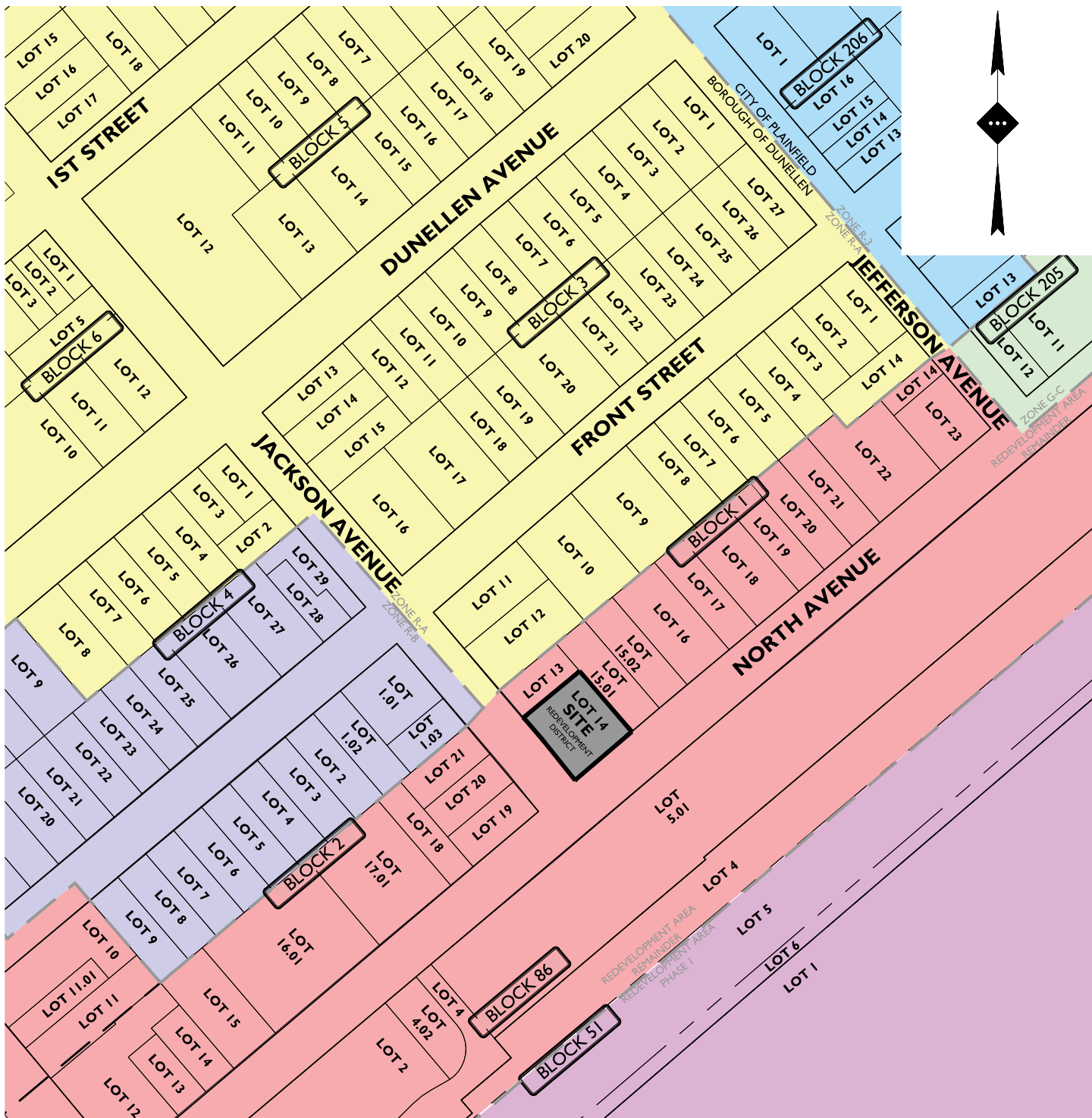
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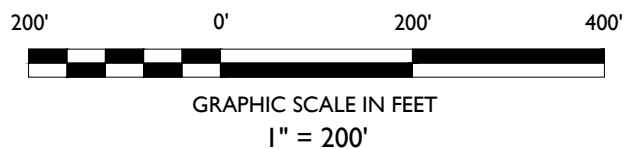
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TAX AND ZONING MAP



SOURCES: BOROUGH OF DUNELLEN, NEW JERSEY - TAX MAP SHEETS 1, 2, 8, 29 & 30 AND CITY OF PLAINFIELD - TAX MAP SHEET 144. BOROUGH OF DUNELLEN ZONING MAP, CITY OF PLAINFIELD ZONING MAP.

150 NORTH AVENUE PROPOSED APARTMENT BUILDING

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

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APPENDIX B

NRCS SOIL REPORT



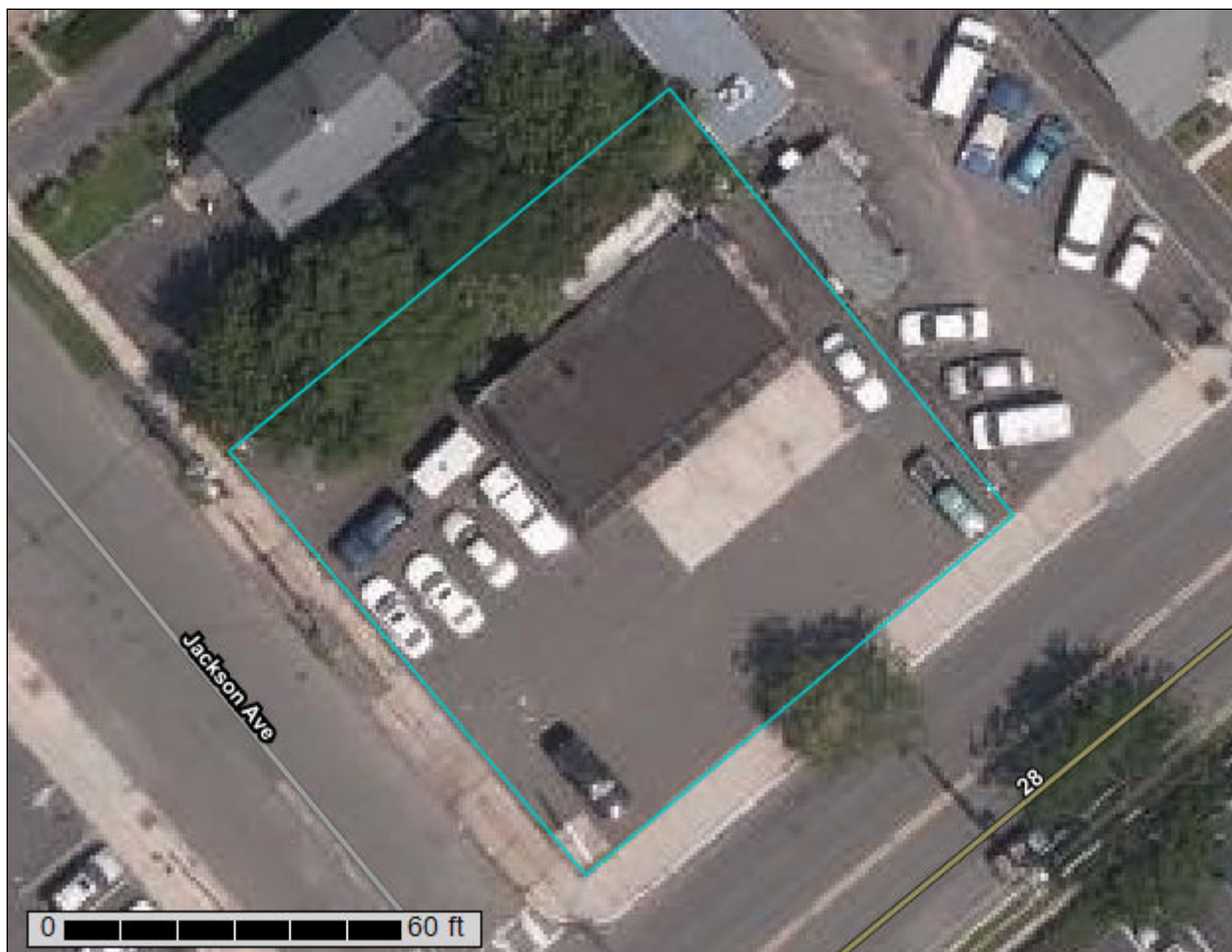
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Middlesex County, New Jersey



May 8, 2020

Custom Soil Resource Report Soil Map



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DuuA	Dunellen-Urban land complex, 0 to 3 percent slopes	0.2	76.5%
DuuB	Dunellen-Urban land complex, 3 to 8 percent slopes	0.1	23.5%
Totals for Area of Interest		0.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Middlesex County, New Jersey

DuuA—Dunellen-Urban land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: nc0t
Elevation: 50 to 150 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days
Farmland classification: Not prime farmland

Map Unit Composition

Dunellen and similar soils: 55 percent
Urban land: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dunellen

Setting

Landform: Outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy outwash derived from sandstone

Typical profile

A - 0 to 6 inches: loam
Bt1 - 6 to 15 inches: loam
Bt2 - 15 to 26 inches: loam
2C - 26 to 66 inches: stratified gravelly sand to sand to loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Outwash plains
Down-slope shape: Linear
Across-slope shape: Linear

Custom Soil Resource Report

Parent material: Surface covered by pavement, concrete, buildings, and other structures underlain by disturbed and natural soil material

Typical profile

C - 0 to 60 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components

Riverhead

Percent of map unit: 5 percent

Landform: Outwash fans

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Udorthents, dunellen substratum

Percent of map unit: 5 percent

Landform: Outwash plains

Landform position (three-dimensional): Lower third of mountainflank

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Pascack

Percent of map unit: 5 percent

Landform: Drainageways

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

DuuB—Dunellen-Urban land complex, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 4jvj

Elevation: 50 to 150 feet

Mean annual precipitation: 30 to 64 inches

Mean annual air temperature: 46 to 79 degrees F

Frost-free period: 131 to 178 days

Farmland classification: Not prime farmland

Map Unit Composition

Dunellen and similar soils: 60 percent

Custom Soil Resource Report

Urban land, dunellen substratum: 30 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dunellen

Setting

Landform: Outwash plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy outwash derived from sandstone

Typical profile

A1 - 0 to 8 inches: sandy loam

A2 - 8 to 14 inches: sandy loam

BA - 14 to 20 inches: sandy loam

Bt - 20 to 31 inches: sandy loam

C - 31 to 42 inches: sandy loam

2C - 42 to 70 inches: stratified gravelly sand to sand to loamy sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: A

Hydric soil rating: No

Description of Urban Land, Dunellen Substratum

Setting

Landform: Outwash plains

Landform position (three-dimensional): Lower third of mountainflank

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Surface covered by pavement, concrete, buildings, and other structures underlain by disturbed and natural soil material

Typical profile

H1 - 0 to 12 inches: material

H2 - 12 to 31 inches: sandy loam

2C - 31 to 42 inches: sandy loam

3C - 42 to 70 inches: loamy sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components

Udorthents, dunellen substratum

Percent of map unit: 10 percent

Landform: Outwash plains

Landform position (three-dimensional): Lower third of mountainflank

Down-slope shape: Linear

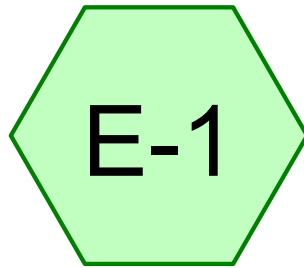
Across-slope shape: Linear

Hydric soil rating: No

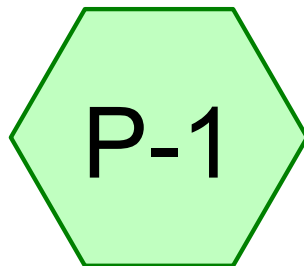


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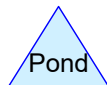
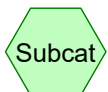
APPENDIX C-I HYDROCAD ROUTING DIAGRAM



Pre-Development
Drainage to North
Avenue



Post-Development
Drainage to North
Avenue



Routing Diagram for 2020-06-19_HydroCAD

Prepared by {enter your company name here}, Printed 6/19/2020
HydroCAD® 10.00-22 s/n 06682 © 2018 HydroCAD Software Solutions LLC



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APPENDIX C-2

2-YEAR HYDROGRAPHS

Summary for Subcatchment E-1: Pre-Development Drainage to North Avenue

Runoff = 0.73 cfs @ 12.13 hrs, Volume= 2,592 cf, Depth= 3.12"

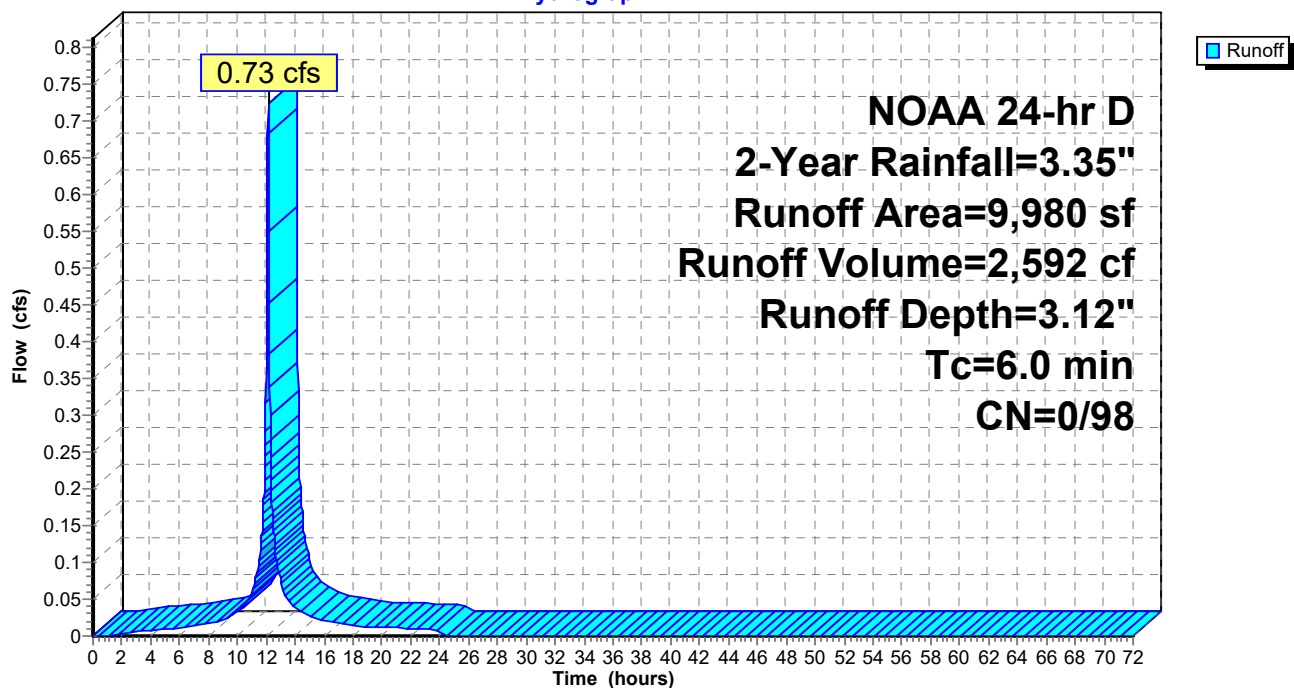
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 2-Year Rainfall=3.35"

	Area (sf)	CN	Description
*	9,980	98	Impervious Areas
	9,980	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment E-1: Pre-Development Drainage to North Avenue

Hydrograph



Summary for Subcatchment P-1: Post-Development Drainage to North Avenue

Runoff = 0.63 cfs @ 12.13 hrs, Volume= 2,269 cf, Depth= 2.73"

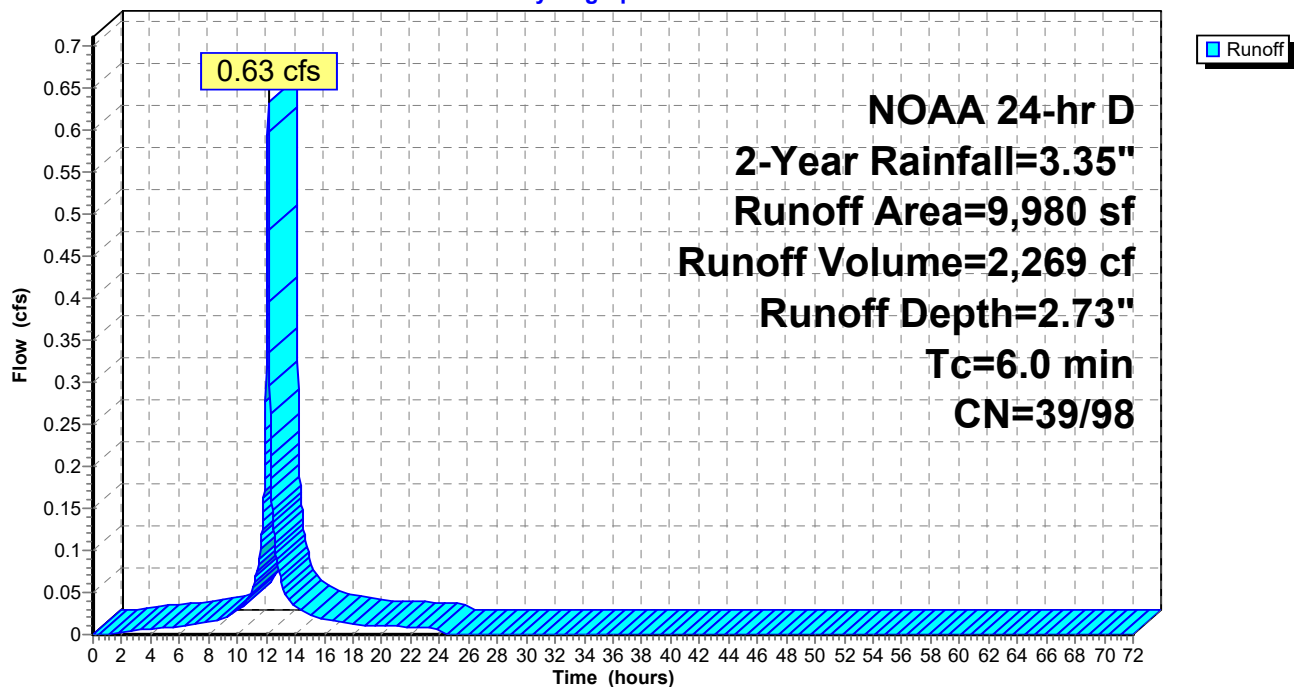
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 2-Year Rainfall=3.35"

Area (sf)	CN	Description
1,246	39	>75% Grass cover, Good, HSG A
* 8,734	98	Impervious Area
9,980	91	Weighted Average
1,246	39	12.48% Pervious Area
8,734	98	87.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment P-1: Post-Development Drainage to North Avenue

Hydrograph





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APPENDIX C-3

10-YEAR HYDROGRAPHS

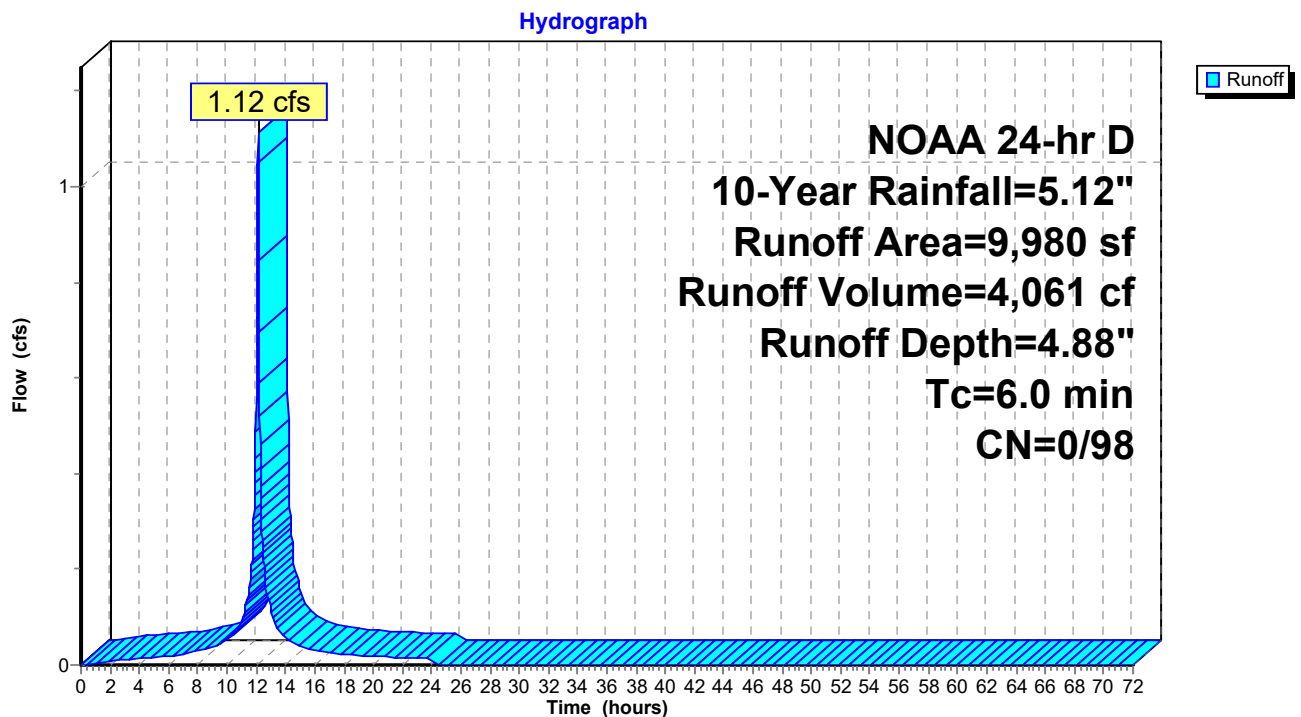
Summary for Subcatchment E-1: Pre-Development Drainage to North Avenue

Runoff = 1.12 cfs @ 12.13 hrs, Volume= 4,061 cf, Depth= 4.88"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 10-Year Rainfall=5.12"

Area (sf)	CN	Description
* 9,980	98	Impervious Areas
9,980	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment E-1: Pre-Development Drainage to North Avenue

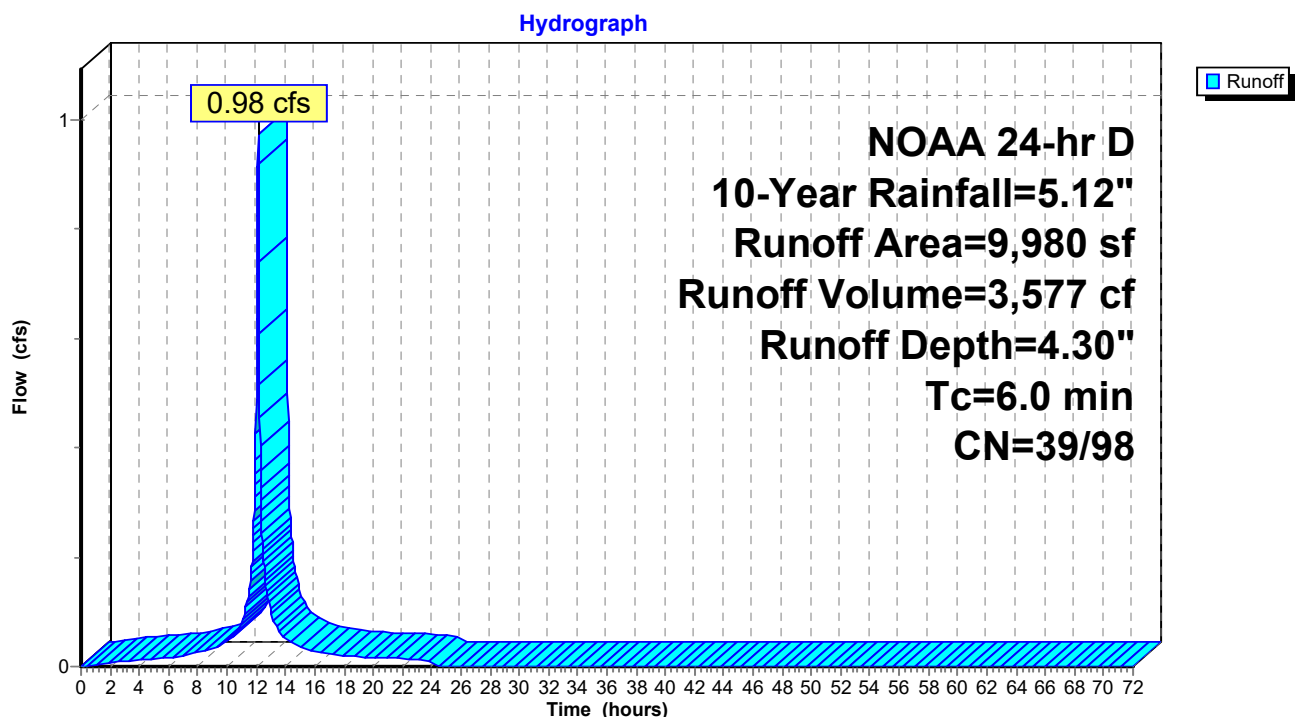
Summary for Subcatchment P-1: Post-Development Drainage to North Avenue

Runoff = 0.98 cfs @ 12.13 hrs, Volume= 3,577 cf, Depth= 4.30"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 10-Year Rainfall=5.12"

Area (sf)	CN	Description
1,246	39	>75% Grass cover, Good, HSG A
* 8,734	98	Impervious Area
9,980	91	Weighted Average
1,246	39	12.48% Pervious Area
8,734	98	87.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment P-1: Post-Development Drainage to North Avenue



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APPENDIX C-4

25-YEAR HYDROGRAPHS

Summary for Subcatchment E-1: Pre-Development Drainage to North Avenue

Runoff = 1.39 cfs @ 12.13 hrs, Volume= 5,091 cf, Depth= 6.12"

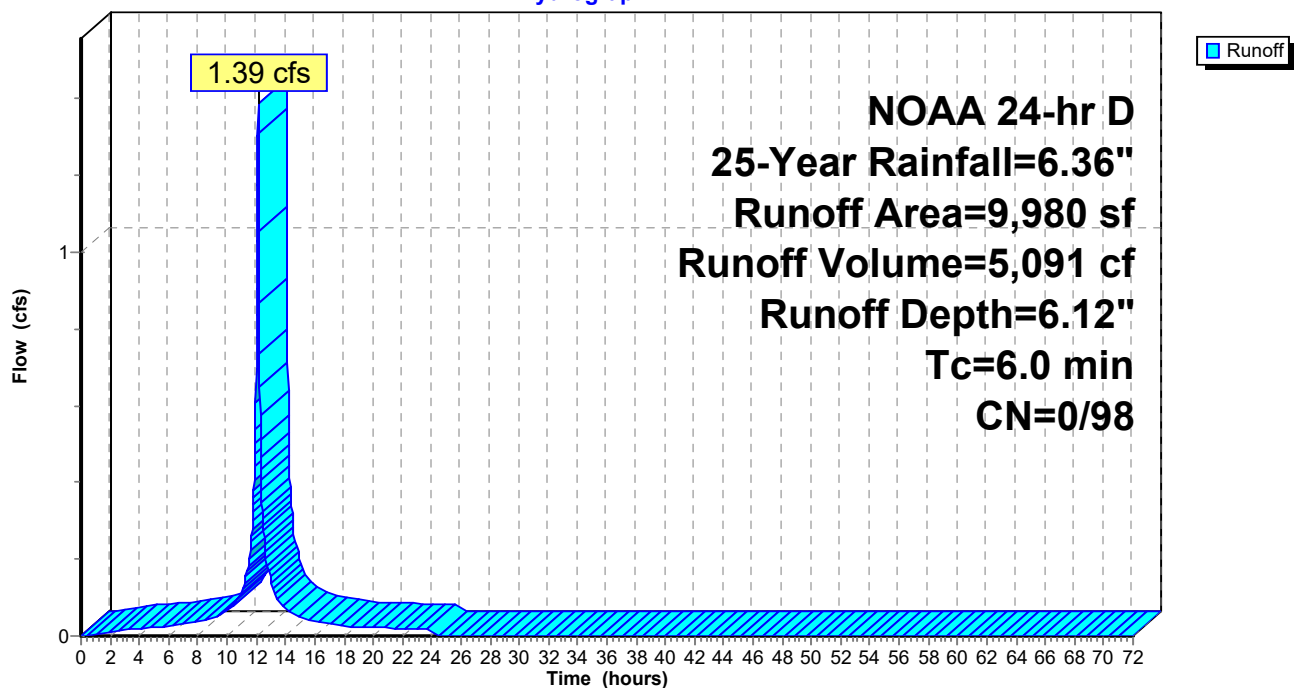
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 25-Year Rainfall=6.36"

Area (sf)	CN	Description
* 9,980	98	Impervious Areas
9,980	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment E-1: Pre-Development Drainage to North Avenue

Hydrograph



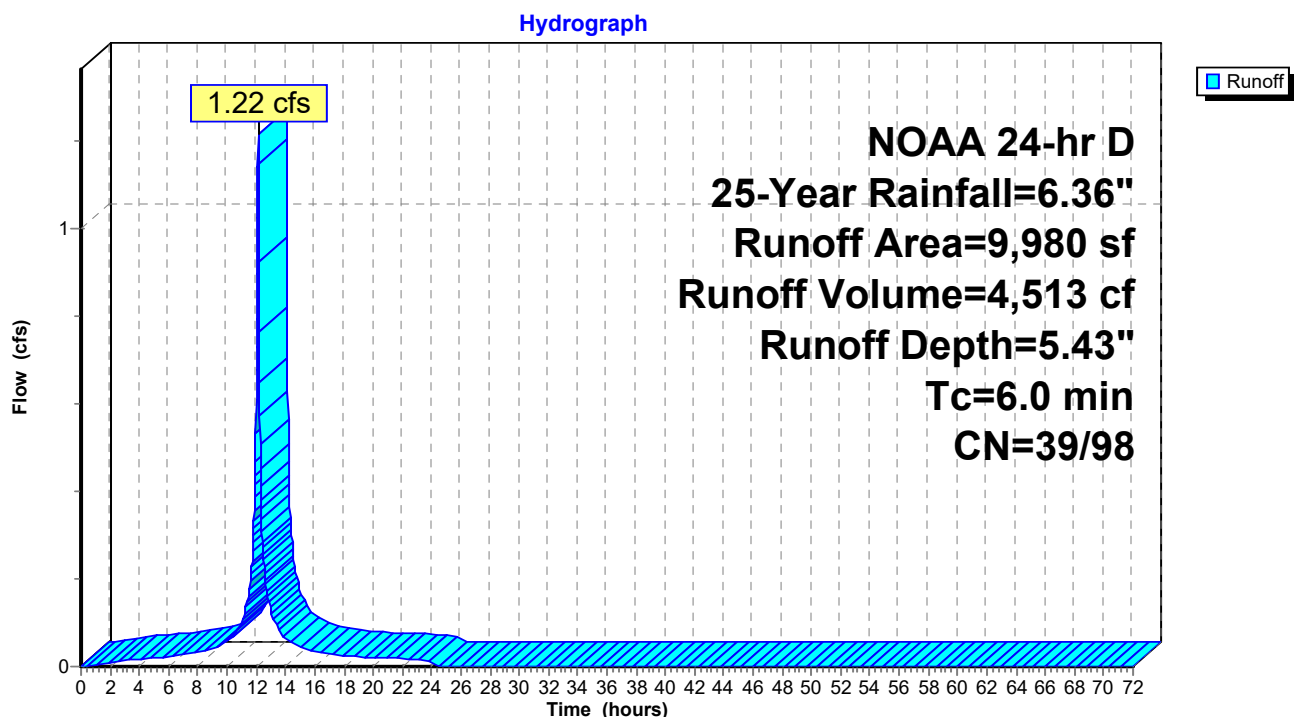
Summary for Subcatchment P-1: Post-Development Drainage to North Avenue

Runoff = 1.22 cfs @ 12.13 hrs, Volume= 4,513 cf, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 25-Year Rainfall=6.36"

Area (sf)	CN	Description
1,246	39	>75% Grass cover, Good, HSG A
* 8,734	98	Impervious Area
9,980	91	Weighted Average
1,246	39	12.48% Pervious Area
8,734	98	87.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment P-1: Post-Development Drainage to North Avenue



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APPENDIX C-5

100-YEAR HYDROGRAPH

Summary for Subcatchment E-1: Pre-Development Drainage to North Avenue

Runoff = 1.89 cfs @ 12.13 hrs, Volume= 6,978 cf, Depth= 8.39"

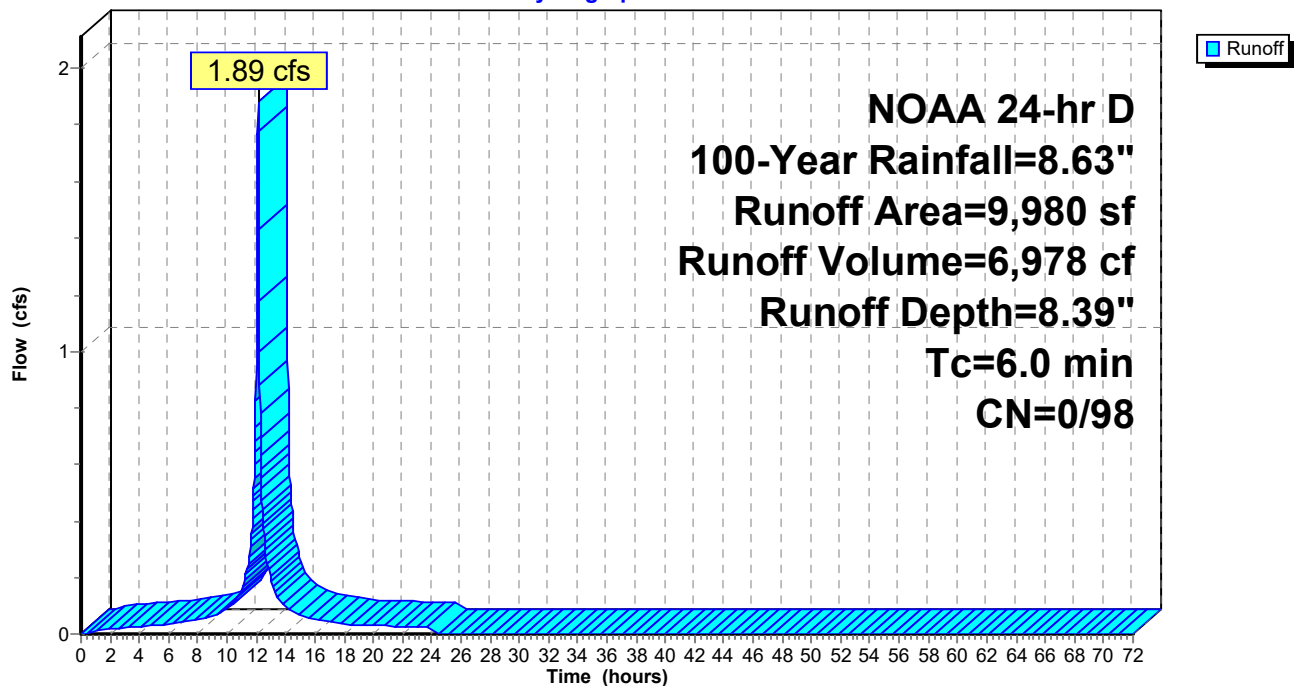
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
 NOAA 24-hr D 100-Year Rainfall=8.63"

Area (sf)	CN	Description
* 9,980	98	Impervious Areas
9,980	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment E-1: Pre-Development Drainage to North Avenue

Hydrograph



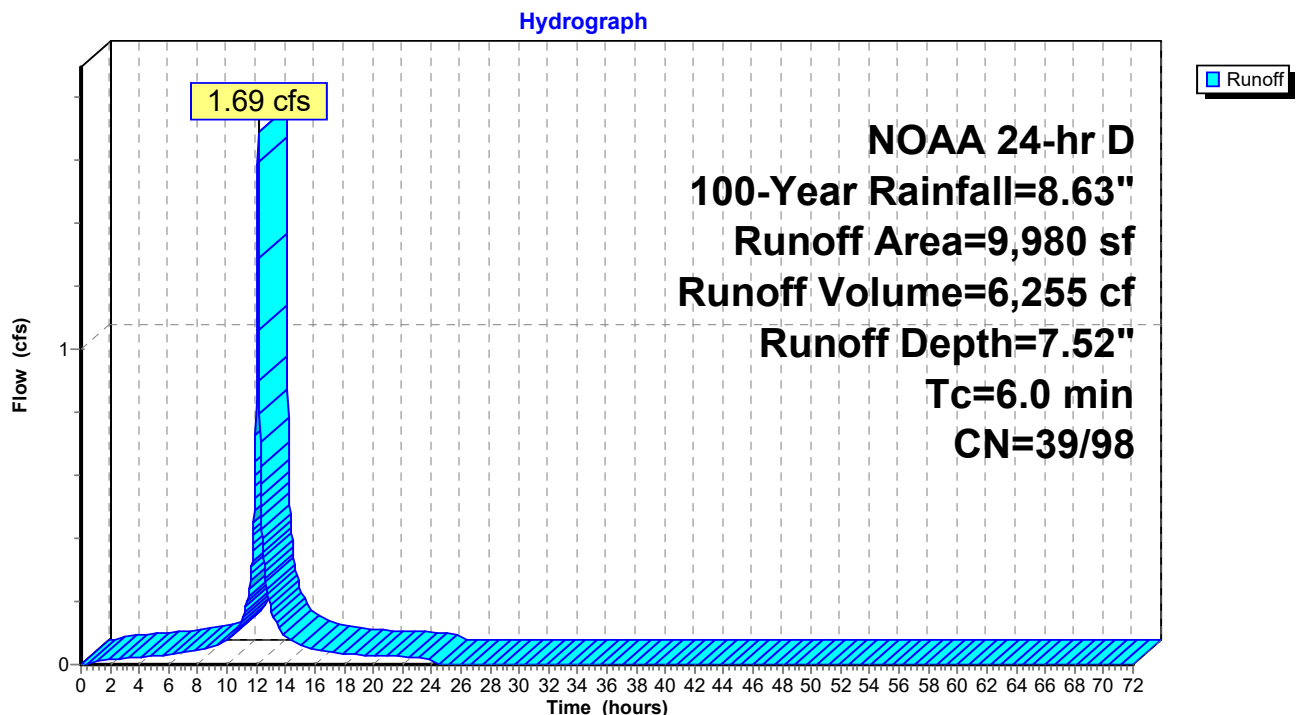
Summary for Subcatchment P-1: Post-Development Drainage to North Avenue

Runoff = 1.69 cfs @ 12.13 hrs, Volume= 6,255 cf, Depth= 7.52"

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.02 hrs
NOAA 24-hr D 100-Year Rainfall=8.63"

Area (sf)	CN	Description
1,246	39	>75% Grass cover, Good, HSG A
* 8,734	98	Impervious Area
9,980	91	Weighted Average
1,246	39	12.48% Pervious Area
8,734	98	87.52% Impervious Area

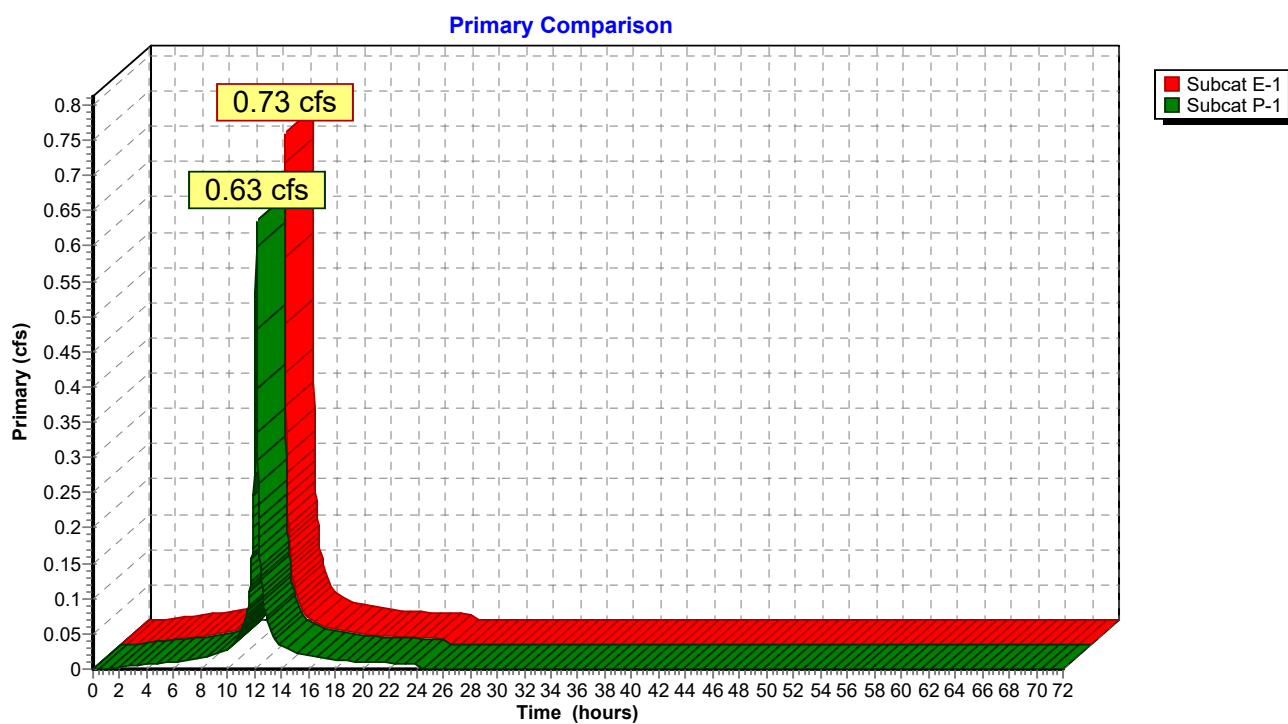
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Minimum Time of Concentration

Subcatchment P-1: Post-Development Drainage to North Avenue



STONEFIELD
engineering & design

APPENDIX C-6
2-YEAR, 10- YEAR, 25- YEAR & 100-YEAR
COMPARISON HYDROGRAPHS



Primary Comparison

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
0.00	0.00	0.00	5.30	0.01	0.01	10.60	0.04	0.04
0.10	0.00	0.00	5.40	0.01	0.01	10.70	0.05	0.04
0.20	0.00	0.00	5.50	0.01	0.01	10.80	0.05	0.05
0.30	0.00	0.00	5.60	0.01	0.01	10.90	0.06	0.05
0.40	0.00	0.00	5.70	0.01	0.01	11.00	0.06	0.05
0.50	0.00	0.00	5.80	0.01	0.01	11.10	0.07	0.06
0.60	0.00	0.00	5.90	0.01	0.01	11.20	0.07	0.07
0.70	0.00	0.00	6.00	0.01	0.01	11.30	0.08	0.07
0.80	0.00	0.00	6.10	0.01	0.01	11.40	0.09	0.08
0.90	0.00	0.00	6.20	0.01	0.01	11.50	0.10	0.09
1.00	0.00	0.00	6.30	0.01	0.01	11.60	0.12	0.11
1.10	0.00	0.00	6.40	0.01	0.01	11.70	0.14	0.12
1.20	0.00	0.00	6.50	0.01	0.01	11.80	0.18	0.16
1.30	0.00	0.00	6.60	0.01	0.01	11.90	0.25	0.22
1.40	0.00	0.00	6.70	0.01	0.01	12.00	0.40	0.35
1.50	0.00	0.00	6.80	0.01	0.01	12.10	0.68	0.59
1.60	0.00	0.00	6.90	0.01	0.01	12.20	0.45	0.40
1.70	0.00	0.00	7.00	0.01	0.01	12.30	0.24	0.21
1.80	0.00	0.00	7.10	0.01	0.01	12.40	0.17	0.15
1.90	0.00	0.00	7.20	0.01	0.01	12.50	0.14	0.13
2.00	0.00	0.00	7.30	0.02	0.01	12.60	0.12	0.10
2.10	0.00	0.00	7.40	0.02	0.01	12.70	0.10	0.09
2.20	0.00	0.00	7.50	0.02	0.01	12.80	0.09	0.08
2.30	0.00	0.00	7.60	0.02	0.01	12.90	0.08	0.07
2.40	0.00	0.00	7.70	0.02	0.01	13.00	0.08	0.07
2.50	0.00	0.00	7.80	0.02	0.02	13.10	0.07	0.06
2.60	0.00	0.00	7.90	0.02	0.02	13.20	0.06	0.05
2.70	0.00	0.00	8.00	0.02	0.02	13.30	0.06	0.05
2.80	0.00	0.00	8.10	0.02	0.02	13.40	0.05	0.05
2.90	0.01	0.00	8.20	0.02	0.02	13.50	0.05	0.04
3.00	0.01	0.00	8.30	0.02	0.02	13.60	0.04	0.04
3.10	0.01	0.00	8.40	0.02	0.02	13.70	0.04	0.04
3.20	0.01	0.01	8.50	0.02	0.02	13.80	0.04	0.04
3.30	0.01	0.01	8.60	0.02	0.02	13.90	0.04	0.03
3.40	0.01	0.01	8.70	0.02	0.02	14.00	0.04	0.03
3.50	0.01	0.01	8.80	0.02	0.02	14.10	0.04	0.03
3.60	0.01	0.01	8.90	0.02	0.02	14.20	0.04	0.03
3.70	0.01	0.01	9.00	0.02	0.02	14.30	0.03	0.03
3.80	0.01	0.01	9.10	0.02	0.02	14.40	0.03	0.03
3.90	0.01	0.01	9.20	0.02	0.02	14.50	0.03	0.03
4.00	0.01	0.01	9.30	0.02	0.02	14.60	0.03	0.03
4.10	0.01	0.01	9.40	0.03	0.02	14.70	0.03	0.03
4.20	0.01	0.01	9.50	0.03	0.02	14.80	0.03	0.02
4.30	0.01	0.01	9.60	0.03	0.02	14.90	0.03	0.02
4.40	0.01	0.01	9.70	0.03	0.03	15.00	0.03	0.02
4.50	0.01	0.01	9.80	0.03	0.03	15.10	0.02	0.02
4.60	0.01	0.01	9.90	0.03	0.03	15.20	0.02	0.02
4.70	0.01	0.01	10.00	0.03	0.03	15.30	0.02	0.02
4.80	0.01	0.01	10.10	0.03	0.03	15.40	0.02	0.02
4.90	0.01	0.01	10.20	0.04	0.03	15.50	0.02	0.02
5.00	0.01	0.01	10.30	0.04	0.03	15.60	0.02	0.02
5.10	0.01	0.01	10.40	0.04	0.03	15.70	0.02	0.02
5.20	0.01	0.01	10.50	0.04	0.03	15.80	0.02	0.02

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
15.90	0.02	0.02	21.20	0.01	0.01	26.50	0.00	0.00
16.00	0.02	0.02	21.30	0.01	0.01	26.60	0.00	0.00
16.10	0.02	0.02	21.40	0.01	0.01	26.70	0.00	0.00
16.20	0.02	0.02	21.50	0.01	0.01	26.80	0.00	0.00
16.30	0.02	0.02	21.60	0.01	0.01	26.90	0.00	0.00
16.40	0.02	0.02	21.70	0.01	0.01	27.00	0.00	0.00
16.50	0.02	0.02	21.80	0.01	0.01	27.10	0.00	0.00
16.60	0.02	0.02	21.90	0.01	0.01	27.20	0.00	0.00
16.70	0.02	0.02	22.00	0.01	0.01	27.30	0.00	0.00
16.80	0.02	0.02	22.10	0.01	0.01	27.40	0.00	0.00
16.90	0.02	0.02	22.20	0.01	0.01	27.50	0.00	0.00
17.00	0.02	0.02	22.30	0.01	0.01	27.60	0.00	0.00
17.10	0.02	0.01	22.40	0.01	0.01	27.70	0.00	0.00
17.20	0.02	0.01	22.50	0.01	0.01	27.80	0.00	0.00
17.30	0.02	0.01	22.60	0.01	0.01	27.90	0.00	0.00
17.40	0.02	0.01	22.70	0.01	0.01	28.00	0.00	0.00
17.50	0.02	0.01	22.80	0.01	0.01	28.10	0.00	0.00
17.60	0.02	0.01	22.90	0.01	0.01	28.20	0.00	0.00
17.70	0.01	0.01	23.00	0.01	0.01	28.30	0.00	0.00
17.80	0.01	0.01	23.10	0.01	0.01	28.40	0.00	0.00
17.90	0.01	0.01	23.20	0.01	0.01	28.50	0.00	0.00
18.00	0.01	0.01	23.30	0.01	0.01	28.60	0.00	0.00
18.10	0.01	0.01	23.40	0.01	0.01	28.70	0.00	0.00
18.20	0.01	0.01	23.50	0.01	0.01	28.80	0.00	0.00
18.30	0.01	0.01	23.60	0.01	0.01	28.90	0.00	0.00
18.40	0.01	0.01	23.70	0.01	0.01	29.00	0.00	0.00
18.50	0.01	0.01	23.80	0.01	0.01	29.10	0.00	0.00
18.60	0.01	0.01	23.90	0.01	0.01	29.20	0.00	0.00
18.70	0.01	0.01	24.00	0.01	0.01	29.30	0.00	0.00
18.80	0.01	0.01	24.10	0.00	0.00	29.40	0.00	0.00
18.90	0.01	0.01	24.20	0.00	0.00	29.50	0.00	0.00
19.00	0.01	0.01	24.30	0.00	0.00	29.60	0.00	0.00
19.10	0.01	0.01	24.40	0.00	0.00	29.70	0.00	0.00
19.20	0.01	0.01	24.50	0.00	0.00	29.80	0.00	0.00
19.30	0.01	0.01	24.60	0.00	0.00	29.90	0.00	0.00
19.40	0.01	0.01	24.70	0.00	0.00	30.00	0.00	0.00
19.50	0.01	0.01	24.80	0.00	0.00	30.10	0.00	0.00
19.60	0.01	0.01	24.90	0.00	0.00	30.20	0.00	0.00
19.70	0.01	0.01	25.00	0.00	0.00	30.30	0.00	0.00
19.80	0.01	0.01	25.10	0.00	0.00	30.40	0.00	0.00
19.90	0.01	0.01	25.20	0.00	0.00	30.50	0.00	0.00
20.00	0.01	0.01	25.30	0.00	0.00	30.60	0.00	0.00
20.10	0.01	0.01	25.40	0.00	0.00	30.70	0.00	0.00
20.20	0.01	0.01	25.50	0.00	0.00	30.80	0.00	0.00
20.30	0.01	0.01	25.60	0.00	0.00	30.90	0.00	0.00
20.40	0.01	0.01	25.70	0.00	0.00	31.00	0.00	0.00
20.50	0.01	0.01	25.80	0.00	0.00	31.10	0.00	0.00
20.60	0.01	0.01	25.90	0.00	0.00	31.20	0.00	0.00
20.70	0.01	0.01	26.00	0.00	0.00	31.30	0.00	0.00
20.80	0.01	0.01	26.10	0.00	0.00	31.40	0.00	0.00
20.90	0.01	0.01	26.20	0.00	0.00	31.50	0.00	0.00
21.00	0.01	0.01	26.30	0.00	0.00	31.60	0.00	0.00
21.10	0.01	0.01	26.40	0.00	0.00	31.70	0.00	0.00

Primary Comparison (continued)

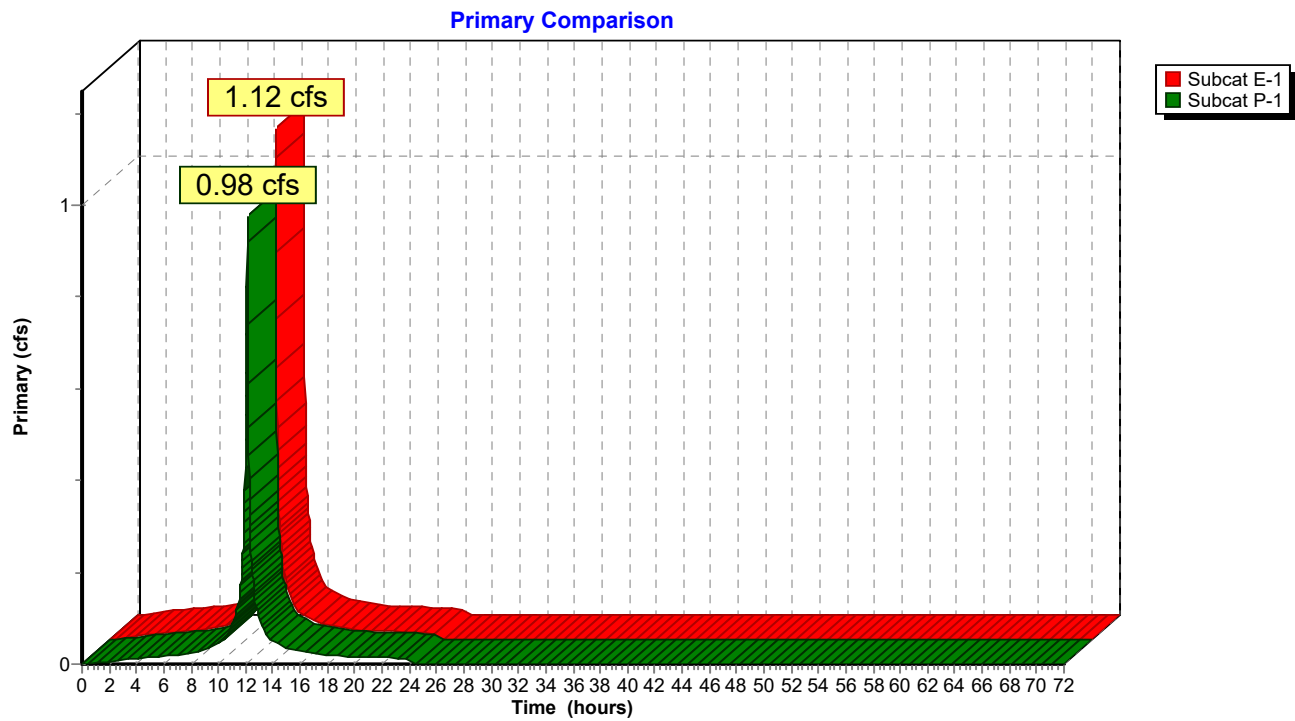
Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
31.80	0.00	0.00	37.10	0.00	0.00	42.40	0.00	0.00
31.90	0.00	0.00	37.20	0.00	0.00	42.50	0.00	0.00
32.00	0.00	0.00	37.30	0.00	0.00	42.60	0.00	0.00
32.10	0.00	0.00	37.40	0.00	0.00	42.70	0.00	0.00
32.20	0.00	0.00	37.50	0.00	0.00	42.80	0.00	0.00
32.30	0.00	0.00	37.60	0.00	0.00	42.90	0.00	0.00
32.40	0.00	0.00	37.70	0.00	0.00	43.00	0.00	0.00
32.50	0.00	0.00	37.80	0.00	0.00	43.10	0.00	0.00
32.60	0.00	0.00	37.90	0.00	0.00	43.20	0.00	0.00
32.70	0.00	0.00	38.00	0.00	0.00	43.30	0.00	0.00
32.80	0.00	0.00	38.10	0.00	0.00	43.40	0.00	0.00
32.90	0.00	0.00	38.20	0.00	0.00	43.50	0.00	0.00
33.00	0.00	0.00	38.30	0.00	0.00	43.60	0.00	0.00
33.10	0.00	0.00	38.40	0.00	0.00	43.70	0.00	0.00
33.20	0.00	0.00	38.50	0.00	0.00	43.80	0.00	0.00
33.30	0.00	0.00	38.60	0.00	0.00	43.90	0.00	0.00
33.40	0.00	0.00	38.70	0.00	0.00	44.00	0.00	0.00
33.50	0.00	0.00	38.80	0.00	0.00	44.10	0.00	0.00
33.60	0.00	0.00	38.90	0.00	0.00	44.20	0.00	0.00
33.70	0.00	0.00	39.00	0.00	0.00	44.30	0.00	0.00
33.80	0.00	0.00	39.10	0.00	0.00	44.40	0.00	0.00
33.90	0.00	0.00	39.20	0.00	0.00	44.50	0.00	0.00
34.00	0.00	0.00	39.30	0.00	0.00	44.60	0.00	0.00
34.10	0.00	0.00	39.40	0.00	0.00	44.70	0.00	0.00
34.20	0.00	0.00	39.50	0.00	0.00	44.80	0.00	0.00
34.30	0.00	0.00	39.60	0.00	0.00	44.90	0.00	0.00
34.40	0.00	0.00	39.70	0.00	0.00	45.00	0.00	0.00
34.50	0.00	0.00	39.80	0.00	0.00	45.10	0.00	0.00
34.60	0.00	0.00	39.90	0.00	0.00	45.20	0.00	0.00
34.70	0.00	0.00	40.00	0.00	0.00	45.30	0.00	0.00
34.80	0.00	0.00	40.10	0.00	0.00	45.40	0.00	0.00
34.90	0.00	0.00	40.20	0.00	0.00	45.50	0.00	0.00
35.00	0.00	0.00	40.30	0.00	0.00	45.60	0.00	0.00
35.10	0.00	0.00	40.40	0.00	0.00	45.70	0.00	0.00
35.20	0.00	0.00	40.50	0.00	0.00	45.80	0.00	0.00
35.30	0.00	0.00	40.60	0.00	0.00	45.90	0.00	0.00
35.40	0.00	0.00	40.70	0.00	0.00	46.00	0.00	0.00
35.50	0.00	0.00	40.80	0.00	0.00	46.10	0.00	0.00
35.60	0.00	0.00	40.90	0.00	0.00	46.20	0.00	0.00
35.70	0.00	0.00	41.00	0.00	0.00	46.30	0.00	0.00
35.80	0.00	0.00	41.10	0.00	0.00	46.40	0.00	0.00
35.90	0.00	0.00	41.20	0.00	0.00	46.50	0.00	0.00
36.00	0.00	0.00	41.30	0.00	0.00	46.60	0.00	0.00
36.10	0.00	0.00	41.40	0.00	0.00	46.70	0.00	0.00
36.20	0.00	0.00	41.50	0.00	0.00	46.80	0.00	0.00
36.30	0.00	0.00	41.60	0.00	0.00	46.90	0.00	0.00
36.40	0.00	0.00	41.70	0.00	0.00	47.00	0.00	0.00
36.50	0.00	0.00	41.80	0.00	0.00	47.10	0.00	0.00
36.60	0.00	0.00	41.90	0.00	0.00	47.20	0.00	0.00
36.70	0.00	0.00	42.00	0.00	0.00	47.30	0.00	0.00
36.80	0.00	0.00	42.10	0.00	0.00	47.40	0.00	0.00
36.90	0.00	0.00	42.20	0.00	0.00	47.50	0.00	0.00
37.00	0.00	0.00	42.30	0.00	0.00	47.60	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
47.70	0.00	0.00	53.00	0.00	0.00	58.30	0.00	0.00
47.80	0.00	0.00	53.10	0.00	0.00	58.40	0.00	0.00
47.90	0.00	0.00	53.20	0.00	0.00	58.50	0.00	0.00
48.00	0.00	0.00	53.30	0.00	0.00	58.60	0.00	0.00
48.10	0.00	0.00	53.40	0.00	0.00	58.70	0.00	0.00
48.20	0.00	0.00	53.50	0.00	0.00	58.80	0.00	0.00
48.30	0.00	0.00	53.60	0.00	0.00	58.90	0.00	0.00
48.40	0.00	0.00	53.70	0.00	0.00	59.00	0.00	0.00
48.50	0.00	0.00	53.80	0.00	0.00	59.10	0.00	0.00
48.60	0.00	0.00	53.90	0.00	0.00	59.20	0.00	0.00
48.70	0.00	0.00	54.00	0.00	0.00	59.30	0.00	0.00
48.80	0.00	0.00	54.10	0.00	0.00	59.40	0.00	0.00
48.90	0.00	0.00	54.20	0.00	0.00	59.50	0.00	0.00
49.00	0.00	0.00	54.30	0.00	0.00	59.60	0.00	0.00
49.10	0.00	0.00	54.40	0.00	0.00	59.70	0.00	0.00
49.20	0.00	0.00	54.50	0.00	0.00	59.80	0.00	0.00
49.30	0.00	0.00	54.60	0.00	0.00	59.90	0.00	0.00
49.40	0.00	0.00	54.70	0.00	0.00	60.00	0.00	0.00
49.50	0.00	0.00	54.80	0.00	0.00	60.10	0.00	0.00
49.60	0.00	0.00	54.90	0.00	0.00	60.20	0.00	0.00
49.70	0.00	0.00	55.00	0.00	0.00	60.30	0.00	0.00
49.80	0.00	0.00	55.10	0.00	0.00	60.40	0.00	0.00
49.90	0.00	0.00	55.20	0.00	0.00	60.50	0.00	0.00
50.00	0.00	0.00	55.30	0.00	0.00	60.60	0.00	0.00
50.10	0.00	0.00	55.40	0.00	0.00	60.70	0.00	0.00
50.20	0.00	0.00	55.50	0.00	0.00	60.80	0.00	0.00
50.30	0.00	0.00	55.60	0.00	0.00	60.90	0.00	0.00
50.40	0.00	0.00	55.70	0.00	0.00	61.00	0.00	0.00
50.50	0.00	0.00	55.80	0.00	0.00	61.10	0.00	0.00
50.60	0.00	0.00	55.90	0.00	0.00	61.20	0.00	0.00
50.70	0.00	0.00	56.00	0.00	0.00	61.30	0.00	0.00
50.80	0.00	0.00	56.10	0.00	0.00	61.40	0.00	0.00
50.90	0.00	0.00	56.20	0.00	0.00	61.50	0.00	0.00
51.00	0.00	0.00	56.30	0.00	0.00	61.60	0.00	0.00
51.10	0.00	0.00	56.40	0.00	0.00	61.70	0.00	0.00
51.20	0.00	0.00	56.50	0.00	0.00	61.80	0.00	0.00
51.30	0.00	0.00	56.60	0.00	0.00	61.90	0.00	0.00
51.40	0.00	0.00	56.70	0.00	0.00	62.00	0.00	0.00
51.50	0.00	0.00	56.80	0.00	0.00	62.10	0.00	0.00
51.60	0.00	0.00	56.90	0.00	0.00	62.20	0.00	0.00
51.70	0.00	0.00	57.00	0.00	0.00	62.30	0.00	0.00
51.80	0.00	0.00	57.10	0.00	0.00	62.40	0.00	0.00
51.90	0.00	0.00	57.20	0.00	0.00	62.50	0.00	0.00
52.00	0.00	0.00	57.30	0.00	0.00	62.60	0.00	0.00
52.10	0.00	0.00	57.40	0.00	0.00	62.70	0.00	0.00
52.20	0.00	0.00	57.50	0.00	0.00	62.80	0.00	0.00
52.30	0.00	0.00	57.60	0.00	0.00	62.90	0.00	0.00
52.40	0.00	0.00	57.70	0.00	0.00	63.00	0.00	0.00
52.50	0.00	0.00	57.80	0.00	0.00	63.10	0.00	0.00
52.60	0.00	0.00	57.90	0.00	0.00	63.20	0.00	0.00
52.70	0.00	0.00	58.00	0.00	0.00	63.30	0.00	0.00
52.80	0.00	0.00	58.10	0.00	0.00	63.40	0.00	0.00
52.90	0.00	0.00	58.20	0.00	0.00	63.50	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
63.60	0.00	0.00	68.90	0.00	0.00
63.70	0.00	0.00	69.00	0.00	0.00
63.80	0.00	0.00	69.10	0.00	0.00
63.90	0.00	0.00	69.20	0.00	0.00
64.00	0.00	0.00	69.30	0.00	0.00
64.10	0.00	0.00	69.40	0.00	0.00
64.20	0.00	0.00	69.50	0.00	0.00
64.30	0.00	0.00	69.60	0.00	0.00
64.40	0.00	0.00	69.70	0.00	0.00
64.50	0.00	0.00	69.80	0.00	0.00
64.60	0.00	0.00	69.90	0.00	0.00
64.70	0.00	0.00	70.00	0.00	0.00
64.80	0.00	0.00	70.10	0.00	0.00
64.90	0.00	0.00	70.20	0.00	0.00
65.00	0.00	0.00	70.30	0.00	0.00
65.10	0.00	0.00	70.40	0.00	0.00
65.20	0.00	0.00	70.50	0.00	0.00
65.30	0.00	0.00	70.60	0.00	0.00
65.40	0.00	0.00	70.70	0.00	0.00
65.50	0.00	0.00	70.80	0.00	0.00
65.60	0.00	0.00	70.90	0.00	0.00
65.70	0.00	0.00	71.00	0.00	0.00
65.80	0.00	0.00	71.10	0.00	0.00
65.90	0.00	0.00	71.20	0.00	0.00
66.00	0.00	0.00	71.30	0.00	0.00
66.10	0.00	0.00	71.40	0.00	0.00
66.20	0.00	0.00	71.50	0.00	0.00
66.30	0.00	0.00	71.60	0.00	0.00
66.40	0.00	0.00	71.70	0.00	0.00
66.50	0.00	0.00	71.80	0.00	0.00
66.60	0.00	0.00	71.90	0.00	0.00
66.70	0.00	0.00	72.00	0.00	0.00
66.80	0.00	0.00			
66.90	0.00	0.00			
67.00	0.00	0.00			
67.10	0.00	0.00			
67.20	0.00	0.00			
67.30	0.00	0.00			
67.40	0.00	0.00			
67.50	0.00	0.00			
67.60	0.00	0.00			
67.70	0.00	0.00			
67.80	0.00	0.00			
67.90	0.00	0.00			
68.00	0.00	0.00			
68.10	0.00	0.00			
68.20	0.00	0.00			
68.30	0.00	0.00			
68.40	0.00	0.00			
68.50	0.00	0.00			
68.60	0.00	0.00			
68.70	0.00	0.00			
68.80	0.00	0.00			



Primary Comparison

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
0.00	0.00	0.00	5.30	0.02	0.01	10.60	0.07	0.06
0.10	0.00	0.00	5.40	0.02	0.01	10.70	0.07	0.06
0.20	0.00	0.00	5.50	0.02	0.02	10.80	0.08	0.07
0.30	0.00	0.00	5.60	0.02	0.02	10.90	0.09	0.08
0.40	0.00	0.00	5.70	0.02	0.02	11.00	0.09	0.08
0.50	0.00	0.00	5.80	0.02	0.02	11.10	0.10	0.09
0.60	0.00	0.00	5.90	0.02	0.02	11.20	0.12	0.10
0.70	0.00	0.00	6.00	0.02	0.02	11.30	0.13	0.11
0.80	0.00	0.00	6.10	0.02	0.02	11.40	0.14	0.12
0.90	0.00	0.00	6.20	0.02	0.02	11.50	0.15	0.13
1.00	0.00	0.00	6.30	0.02	0.02	11.60	0.19	0.17
1.10	0.00	0.00	6.40	0.02	0.02	11.70	0.22	0.19
1.20	0.00	0.00	6.50	0.02	0.02	11.80	0.28	0.24
1.30	0.00	0.00	6.60	0.02	0.02	11.90	0.38	0.33
1.40	0.00	0.00	6.70	0.02	0.02	12.00	0.62	0.54
1.50	0.00	0.00	6.80	0.02	0.02	12.10	1.04	0.91
1.60	0.01	0.00	6.90	0.02	0.02	12.20	0.70	0.61
1.70	0.01	0.01	7.00	0.02	0.02	12.30	0.37	0.33
1.80	0.01	0.01	7.10	0.02	0.02	12.40	0.26	0.23
1.90	0.01	0.01	7.20	0.02	0.02	12.50	0.22	0.19
2.00	0.01	0.01	7.30	0.03	0.02	12.60	0.18	0.16
2.10	0.01	0.01	7.40	0.03	0.02	12.70	0.15	0.13
2.20	0.01	0.01	7.50	0.03	0.02	12.80	0.14	0.12
2.30	0.01	0.01	7.60	0.03	0.02	12.90	0.13	0.11
2.40	0.01	0.01	7.70	0.03	0.02	13.00	0.12	0.10
2.50	0.01	0.01	7.80	0.03	0.02	13.10	0.10	0.09
2.60	0.01	0.01	7.90	0.03	0.02	13.20	0.09	0.08
2.70	0.01	0.01	8.00	0.03	0.03	13.30	0.09	0.08
2.80	0.01	0.01	8.10	0.03	0.03	13.40	0.08	0.07
2.90	0.01	0.01	8.20	0.03	0.03	13.50	0.07	0.07
3.00	0.01	0.01	8.30	0.03	0.03	13.60	0.07	0.06
3.10	0.01	0.01	8.40	0.03	0.03	13.70	0.06	0.06
3.20	0.01	0.01	8.50	0.03	0.03	13.80	0.06	0.05
3.30	0.01	0.01	8.60	0.03	0.03	13.90	0.06	0.05
3.40	0.01	0.01	8.70	0.03	0.03	14.00	0.06	0.05
3.50	0.01	0.01	8.80	0.03	0.03	14.10	0.06	0.05
3.60	0.01	0.01	8.90	0.03	0.03	14.20	0.05	0.05
3.70	0.01	0.01	9.00	0.03	0.03	14.30	0.05	0.05
3.80	0.01	0.01	9.10	0.04	0.03	14.40	0.05	0.04
3.90	0.01	0.01	9.20	0.04	0.03	14.50	0.05	0.04
4.00	0.01	0.01	9.30	0.04	0.03	14.60	0.05	0.04
4.10	0.01	0.01	9.40	0.04	0.04	14.70	0.04	0.04
4.20	0.01	0.01	9.50	0.04	0.04	14.80	0.04	0.04
4.30	0.01	0.01	9.60	0.05	0.04	14.90	0.04	0.04
4.40	0.01	0.01	9.70	0.05	0.04	15.00	0.04	0.03
4.50	0.02	0.01	9.80	0.05	0.04	15.10	0.04	0.03
4.60	0.02	0.01	9.90	0.05	0.04	15.20	0.04	0.03
4.70	0.02	0.01	10.00	0.05	0.05	15.30	0.04	0.03
4.80	0.02	0.01	10.10	0.05	0.05	15.40	0.04	0.03
4.90	0.02	0.01	10.20	0.06	0.05	15.50	0.03	0.03
5.00	0.02	0.01	10.30	0.06	0.05	15.60	0.03	0.03
5.10	0.02	0.01	10.40	0.06	0.05	15.70	0.03	0.03
5.20	0.02	0.01	10.50	0.06	0.05	15.80	0.03	0.03

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
15.90	0.03	0.03	21.20	0.02	0.01	26.50	0.00	0.00
16.00	0.03	0.03	21.30	0.02	0.01	26.60	0.00	0.00
16.10	0.03	0.03	21.40	0.02	0.01	26.70	0.00	0.00
16.20	0.03	0.03	21.50	0.02	0.01	26.80	0.00	0.00
16.30	0.03	0.03	21.60	0.02	0.01	26.90	0.00	0.00
16.40	0.03	0.03	21.70	0.02	0.01	27.00	0.00	0.00
16.50	0.03	0.03	21.80	0.02	0.01	27.10	0.00	0.00
16.60	0.03	0.03	21.90	0.02	0.01	27.20	0.00	0.00
16.70	0.03	0.03	22.00	0.02	0.01	27.30	0.00	0.00
16.80	0.03	0.02	22.10	0.02	0.01	27.40	0.00	0.00
16.90	0.03	0.02	22.20	0.02	0.01	27.50	0.00	0.00
17.00	0.03	0.02	22.30	0.02	0.01	27.60	0.00	0.00
17.10	0.03	0.02	22.40	0.02	0.01	27.70	0.00	0.00
17.20	0.03	0.02	22.50	0.01	0.01	27.80	0.00	0.00
17.30	0.03	0.02	22.60	0.01	0.01	27.90	0.00	0.00
17.40	0.02	0.02	22.70	0.01	0.01	28.00	0.00	0.00
17.50	0.02	0.02	22.80	0.01	0.01	28.10	0.00	0.00
17.60	0.02	0.02	22.90	0.01	0.01	28.20	0.00	0.00
17.70	0.02	0.02	23.00	0.01	0.01	28.30	0.00	0.00
17.80	0.02	0.02	23.10	0.01	0.01	28.40	0.00	0.00
17.90	0.02	0.02	23.20	0.01	0.01	28.50	0.00	0.00
18.00	0.02	0.02	23.30	0.01	0.01	28.60	0.00	0.00
18.10	0.02	0.02	23.40	0.01	0.01	28.70	0.00	0.00
18.20	0.02	0.02	23.50	0.01	0.01	28.80	0.00	0.00
18.30	0.02	0.02	23.60	0.01	0.01	28.90	0.00	0.00
18.40	0.02	0.02	23.70	0.01	0.01	29.00	0.00	0.00
18.50	0.02	0.02	23.80	0.01	0.01	29.10	0.00	0.00
18.60	0.02	0.02	23.90	0.01	0.01	29.20	0.00	0.00
18.70	0.02	0.02	24.00	0.01	0.01	29.30	0.00	0.00
18.80	0.02	0.02	24.10	0.00	0.00	29.40	0.00	0.00
18.90	0.02	0.02	24.20	0.00	0.00	29.50	0.00	0.00
19.00	0.02	0.02	24.30	0.00	0.00	29.60	0.00	0.00
19.10	0.02	0.02	24.40	0.00	0.00	29.70	0.00	0.00
19.20	0.02	0.02	24.50	0.00	0.00	29.80	0.00	0.00
19.30	0.02	0.02	24.60	0.00	0.00	29.90	0.00	0.00
19.40	0.02	0.02	24.70	0.00	0.00	30.00	0.00	0.00
19.50	0.02	0.02	24.80	0.00	0.00	30.10	0.00	0.00
19.60	0.02	0.02	24.90	0.00	0.00	30.20	0.00	0.00
19.70	0.02	0.02	25.00	0.00	0.00	30.30	0.00	0.00
19.80	0.02	0.02	25.10	0.00	0.00	30.40	0.00	0.00
19.90	0.02	0.02	25.20	0.00	0.00	30.50	0.00	0.00
20.00	0.02	0.02	25.30	0.00	0.00	30.60	0.00	0.00
20.10	0.02	0.02	25.40	0.00	0.00	30.70	0.00	0.00
20.20	0.02	0.02	25.50	0.00	0.00	30.80	0.00	0.00
20.30	0.02	0.02	25.60	0.00	0.00	30.90	0.00	0.00
20.40	0.02	0.02	25.70	0.00	0.00	31.00	0.00	0.00
20.50	0.02	0.02	25.80	0.00	0.00	31.10	0.00	0.00
20.60	0.02	0.02	25.90	0.00	0.00	31.20	0.00	0.00
20.70	0.02	0.02	26.00	0.00	0.00	31.30	0.00	0.00
20.80	0.02	0.02	26.10	0.00	0.00	31.40	0.00	0.00
20.90	0.02	0.02	26.20	0.00	0.00	31.50	0.00	0.00
21.00	0.02	0.02	26.30	0.00	0.00	31.60	0.00	0.00
21.10	0.02	0.02	26.40	0.00	0.00	31.70	0.00	0.00

Primary Comparison (continued)

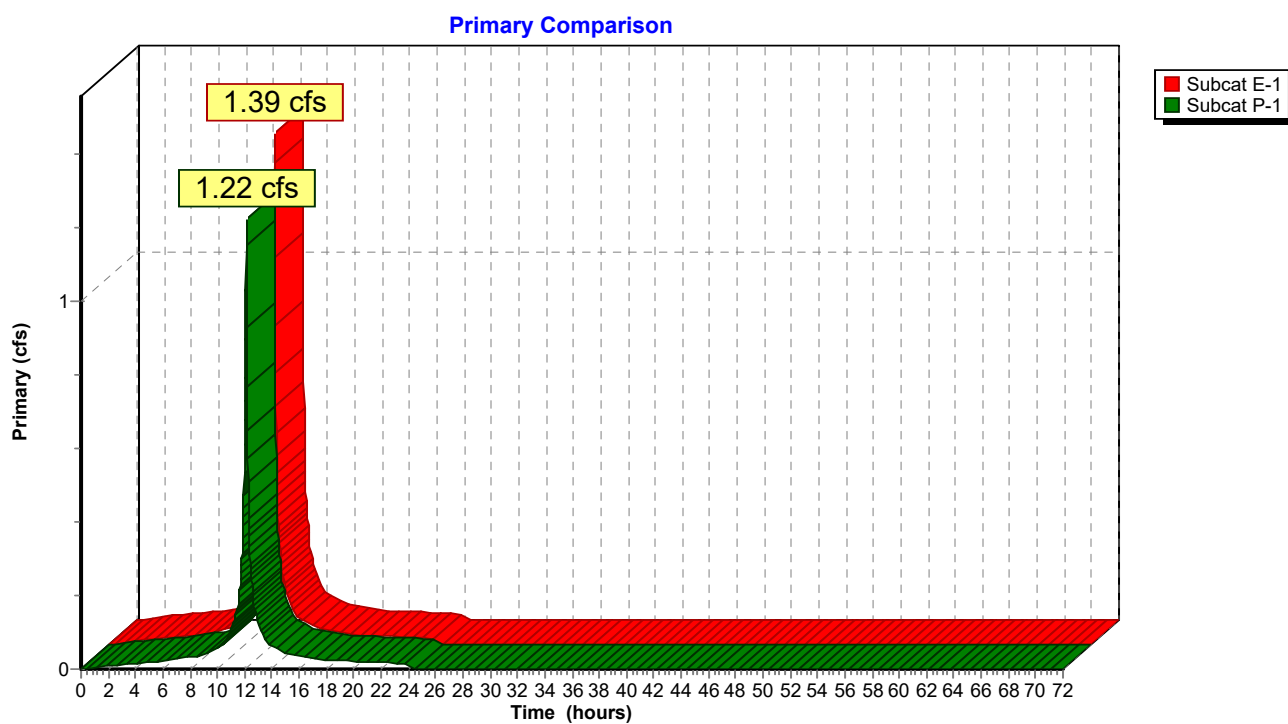
Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
31.80	0.00	0.00	37.10	0.00	0.00	42.40	0.00	0.00
31.90	0.00	0.00	37.20	0.00	0.00	42.50	0.00	0.00
32.00	0.00	0.00	37.30	0.00	0.00	42.60	0.00	0.00
32.10	0.00	0.00	37.40	0.00	0.00	42.70	0.00	0.00
32.20	0.00	0.00	37.50	0.00	0.00	42.80	0.00	0.00
32.30	0.00	0.00	37.60	0.00	0.00	42.90	0.00	0.00
32.40	0.00	0.00	37.70	0.00	0.00	43.00	0.00	0.00
32.50	0.00	0.00	37.80	0.00	0.00	43.10	0.00	0.00
32.60	0.00	0.00	37.90	0.00	0.00	43.20	0.00	0.00
32.70	0.00	0.00	38.00	0.00	0.00	43.30	0.00	0.00
32.80	0.00	0.00	38.10	0.00	0.00	43.40	0.00	0.00
32.90	0.00	0.00	38.20	0.00	0.00	43.50	0.00	0.00
33.00	0.00	0.00	38.30	0.00	0.00	43.60	0.00	0.00
33.10	0.00	0.00	38.40	0.00	0.00	43.70	0.00	0.00
33.20	0.00	0.00	38.50	0.00	0.00	43.80	0.00	0.00
33.30	0.00	0.00	38.60	0.00	0.00	43.90	0.00	0.00
33.40	0.00	0.00	38.70	0.00	0.00	44.00	0.00	0.00
33.50	0.00	0.00	38.80	0.00	0.00	44.10	0.00	0.00
33.60	0.00	0.00	38.90	0.00	0.00	44.20	0.00	0.00
33.70	0.00	0.00	39.00	0.00	0.00	44.30	0.00	0.00
33.80	0.00	0.00	39.10	0.00	0.00	44.40	0.00	0.00
33.90	0.00	0.00	39.20	0.00	0.00	44.50	0.00	0.00
34.00	0.00	0.00	39.30	0.00	0.00	44.60	0.00	0.00
34.10	0.00	0.00	39.40	0.00	0.00	44.70	0.00	0.00
34.20	0.00	0.00	39.50	0.00	0.00	44.80	0.00	0.00
34.30	0.00	0.00	39.60	0.00	0.00	44.90	0.00	0.00
34.40	0.00	0.00	39.70	0.00	0.00	45.00	0.00	0.00
34.50	0.00	0.00	39.80	0.00	0.00	45.10	0.00	0.00
34.60	0.00	0.00	39.90	0.00	0.00	45.20	0.00	0.00
34.70	0.00	0.00	40.00	0.00	0.00	45.30	0.00	0.00
34.80	0.00	0.00	40.10	0.00	0.00	45.40	0.00	0.00
34.90	0.00	0.00	40.20	0.00	0.00	45.50	0.00	0.00
35.00	0.00	0.00	40.30	0.00	0.00	45.60	0.00	0.00
35.10	0.00	0.00	40.40	0.00	0.00	45.70	0.00	0.00
35.20	0.00	0.00	40.50	0.00	0.00	45.80	0.00	0.00
35.30	0.00	0.00	40.60	0.00	0.00	45.90	0.00	0.00
35.40	0.00	0.00	40.70	0.00	0.00	46.00	0.00	0.00
35.50	0.00	0.00	40.80	0.00	0.00	46.10	0.00	0.00
35.60	0.00	0.00	40.90	0.00	0.00	46.20	0.00	0.00
35.70	0.00	0.00	41.00	0.00	0.00	46.30	0.00	0.00
35.80	0.00	0.00	41.10	0.00	0.00	46.40	0.00	0.00
35.90	0.00	0.00	41.20	0.00	0.00	46.50	0.00	0.00
36.00	0.00	0.00	41.30	0.00	0.00	46.60	0.00	0.00
36.10	0.00	0.00	41.40	0.00	0.00	46.70	0.00	0.00
36.20	0.00	0.00	41.50	0.00	0.00	46.80	0.00	0.00
36.30	0.00	0.00	41.60	0.00	0.00	46.90	0.00	0.00
36.40	0.00	0.00	41.70	0.00	0.00	47.00	0.00	0.00
36.50	0.00	0.00	41.80	0.00	0.00	47.10	0.00	0.00
36.60	0.00	0.00	41.90	0.00	0.00	47.20	0.00	0.00
36.70	0.00	0.00	42.00	0.00	0.00	47.30	0.00	0.00
36.80	0.00	0.00	42.10	0.00	0.00	47.40	0.00	0.00
36.90	0.00	0.00	42.20	0.00	0.00	47.50	0.00	0.00
37.00	0.00	0.00	42.30	0.00	0.00	47.60	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
47.70	0.00	0.00	53.00	0.00	0.00	58.30	0.00	0.00
47.80	0.00	0.00	53.10	0.00	0.00	58.40	0.00	0.00
47.90	0.00	0.00	53.20	0.00	0.00	58.50	0.00	0.00
48.00	0.00	0.00	53.30	0.00	0.00	58.60	0.00	0.00
48.10	0.00	0.00	53.40	0.00	0.00	58.70	0.00	0.00
48.20	0.00	0.00	53.50	0.00	0.00	58.80	0.00	0.00
48.30	0.00	0.00	53.60	0.00	0.00	58.90	0.00	0.00
48.40	0.00	0.00	53.70	0.00	0.00	59.00	0.00	0.00
48.50	0.00	0.00	53.80	0.00	0.00	59.10	0.00	0.00
48.60	0.00	0.00	53.90	0.00	0.00	59.20	0.00	0.00
48.70	0.00	0.00	54.00	0.00	0.00	59.30	0.00	0.00
48.80	0.00	0.00	54.10	0.00	0.00	59.40	0.00	0.00
48.90	0.00	0.00	54.20	0.00	0.00	59.50	0.00	0.00
49.00	0.00	0.00	54.30	0.00	0.00	59.60	0.00	0.00
49.10	0.00	0.00	54.40	0.00	0.00	59.70	0.00	0.00
49.20	0.00	0.00	54.50	0.00	0.00	59.80	0.00	0.00
49.30	0.00	0.00	54.60	0.00	0.00	59.90	0.00	0.00
49.40	0.00	0.00	54.70	0.00	0.00	60.00	0.00	0.00
49.50	0.00	0.00	54.80	0.00	0.00	60.10	0.00	0.00
49.60	0.00	0.00	54.90	0.00	0.00	60.20	0.00	0.00
49.70	0.00	0.00	55.00	0.00	0.00	60.30	0.00	0.00
49.80	0.00	0.00	55.10	0.00	0.00	60.40	0.00	0.00
49.90	0.00	0.00	55.20	0.00	0.00	60.50	0.00	0.00
50.00	0.00	0.00	55.30	0.00	0.00	60.60	0.00	0.00
50.10	0.00	0.00	55.40	0.00	0.00	60.70	0.00	0.00
50.20	0.00	0.00	55.50	0.00	0.00	60.80	0.00	0.00
50.30	0.00	0.00	55.60	0.00	0.00	60.90	0.00	0.00
50.40	0.00	0.00	55.70	0.00	0.00	61.00	0.00	0.00
50.50	0.00	0.00	55.80	0.00	0.00	61.10	0.00	0.00
50.60	0.00	0.00	55.90	0.00	0.00	61.20	0.00	0.00
50.70	0.00	0.00	56.00	0.00	0.00	61.30	0.00	0.00
50.80	0.00	0.00	56.10	0.00	0.00	61.40	0.00	0.00
50.90	0.00	0.00	56.20	0.00	0.00	61.50	0.00	0.00
51.00	0.00	0.00	56.30	0.00	0.00	61.60	0.00	0.00
51.10	0.00	0.00	56.40	0.00	0.00	61.70	0.00	0.00
51.20	0.00	0.00	56.50	0.00	0.00	61.80	0.00	0.00
51.30	0.00	0.00	56.60	0.00	0.00	61.90	0.00	0.00
51.40	0.00	0.00	56.70	0.00	0.00	62.00	0.00	0.00
51.50	0.00	0.00	56.80	0.00	0.00	62.10	0.00	0.00
51.60	0.00	0.00	56.90	0.00	0.00	62.20	0.00	0.00
51.70	0.00	0.00	57.00	0.00	0.00	62.30	0.00	0.00
51.80	0.00	0.00	57.10	0.00	0.00	62.40	0.00	0.00
51.90	0.00	0.00	57.20	0.00	0.00	62.50	0.00	0.00
52.00	0.00	0.00	57.30	0.00	0.00	62.60	0.00	0.00
52.10	0.00	0.00	57.40	0.00	0.00	62.70	0.00	0.00
52.20	0.00	0.00	57.50	0.00	0.00	62.80	0.00	0.00
52.30	0.00	0.00	57.60	0.00	0.00	62.90	0.00	0.00
52.40	0.00	0.00	57.70	0.00	0.00	63.00	0.00	0.00
52.50	0.00	0.00	57.80	0.00	0.00	63.10	0.00	0.00
52.60	0.00	0.00	57.90	0.00	0.00	63.20	0.00	0.00
52.70	0.00	0.00	58.00	0.00	0.00	63.30	0.00	0.00
52.80	0.00	0.00	58.10	0.00	0.00	63.40	0.00	0.00
52.90	0.00	0.00	58.20	0.00	0.00	63.50	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
63.60	0.00	0.00	68.90	0.00	0.00
63.70	0.00	0.00	69.00	0.00	0.00
63.80	0.00	0.00	69.10	0.00	0.00
63.90	0.00	0.00	69.20	0.00	0.00
64.00	0.00	0.00	69.30	0.00	0.00
64.10	0.00	0.00	69.40	0.00	0.00
64.20	0.00	0.00	69.50	0.00	0.00
64.30	0.00	0.00	69.60	0.00	0.00
64.40	0.00	0.00	69.70	0.00	0.00
64.50	0.00	0.00	69.80	0.00	0.00
64.60	0.00	0.00	69.90	0.00	0.00
64.70	0.00	0.00	70.00	0.00	0.00
64.80	0.00	0.00	70.10	0.00	0.00
64.90	0.00	0.00	70.20	0.00	0.00
65.00	0.00	0.00	70.30	0.00	0.00
65.10	0.00	0.00	70.40	0.00	0.00
65.20	0.00	0.00	70.50	0.00	0.00
65.30	0.00	0.00	70.60	0.00	0.00
65.40	0.00	0.00	70.70	0.00	0.00
65.50	0.00	0.00	70.80	0.00	0.00
65.60	0.00	0.00	70.90	0.00	0.00
65.70	0.00	0.00	71.00	0.00	0.00
65.80	0.00	0.00	71.10	0.00	0.00
65.90	0.00	0.00	71.20	0.00	0.00
66.00	0.00	0.00	71.30	0.00	0.00
66.10	0.00	0.00	71.40	0.00	0.00
66.20	0.00	0.00	71.50	0.00	0.00
66.30	0.00	0.00	71.60	0.00	0.00
66.40	0.00	0.00	71.70	0.00	0.00
66.50	0.00	0.00	71.80	0.00	0.00
66.60	0.00	0.00	71.90	0.00	0.00
66.70	0.00	0.00	72.00	0.00	0.00
66.80	0.00	0.00			
66.90	0.00	0.00			
67.00	0.00	0.00			
67.10	0.00	0.00			
67.20	0.00	0.00			
67.30	0.00	0.00			
67.40	0.00	0.00			
67.50	0.00	0.00			
67.60	0.00	0.00			
67.70	0.00	0.00			
67.80	0.00	0.00			
67.90	0.00	0.00			
68.00	0.00	0.00			
68.10	0.00	0.00			
68.20	0.00	0.00			
68.30	0.00	0.00			
68.40	0.00	0.00			
68.50	0.00	0.00			
68.60	0.00	0.00			
68.70	0.00	0.00			
68.80	0.00	0.00			



Primary Comparison

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
0.00	0.00	0.00	5.30	0.02	0.02	10.60	0.08	0.07
0.10	0.00	0.00	5.40	0.02	0.02	10.70	0.09	0.08
0.20	0.00	0.00	5.50	0.02	0.02	10.80	0.10	0.09
0.30	0.00	0.00	5.60	0.02	0.02	10.90	0.11	0.10
0.40	0.00	0.00	5.70	0.02	0.02	11.00	0.12	0.10
0.50	0.00	0.00	5.80	0.02	0.02	11.10	0.13	0.11
0.60	0.00	0.00	5.90	0.02	0.02	11.20	0.15	0.13
0.70	0.00	0.00	6.00	0.02	0.02	11.30	0.16	0.14
0.80	0.00	0.00	6.10	0.02	0.02	11.40	0.18	0.15
0.90	0.00	0.00	6.20	0.02	0.02	11.50	0.19	0.17
1.00	0.00	0.00	6.30	0.03	0.02	11.60	0.24	0.21
1.10	0.00	0.00	6.40	0.03	0.02	11.70	0.27	0.24
1.20	0.01	0.00	6.50	0.03	0.02	11.80	0.34	0.30
1.30	0.01	0.01	6.60	0.03	0.02	11.90	0.47	0.42
1.40	0.01	0.01	6.70	0.03	0.02	12.00	0.77	0.68
1.50	0.01	0.01	6.80	0.03	0.03	12.10	1.30	1.14
1.60	0.01	0.01	6.90	0.03	0.03	12.20	0.87	0.77
1.70	0.01	0.01	7.00	0.03	0.03	12.30	0.46	0.41
1.80	0.01	0.01	7.10	0.03	0.03	12.40	0.32	0.29
1.90	0.01	0.01	7.20	0.03	0.03	12.50	0.27	0.24
2.00	0.01	0.01	7.30	0.03	0.03	12.60	0.22	0.20
2.10	0.01	0.01	7.40	0.03	0.03	12.70	0.19	0.17
2.20	0.01	0.01	7.50	0.03	0.03	12.80	0.17	0.15
2.30	0.01	0.01	7.60	0.03	0.03	12.90	0.16	0.14
2.40	0.01	0.01	7.70	0.03	0.03	13.00	0.14	0.13
2.50	0.01	0.01	7.80	0.04	0.03	13.10	0.13	0.12
2.60	0.01	0.01	7.90	0.04	0.03	13.20	0.12	0.11
2.70	0.01	0.01	8.00	0.04	0.03	13.30	0.11	0.10
2.80	0.01	0.01	8.10	0.04	0.03	13.40	0.10	0.09
2.90	0.01	0.01	8.20	0.04	0.03	13.50	0.09	0.08
3.00	0.02	0.01	8.30	0.04	0.03	13.60	0.08	0.08
3.10	0.02	0.01	8.40	0.04	0.03	13.70	0.08	0.07
3.20	0.02	0.01	8.50	0.04	0.04	13.80	0.08	0.07
3.30	0.02	0.01	8.60	0.04	0.04	13.90	0.07	0.07
3.40	0.02	0.01	8.70	0.04	0.04	14.00	0.07	0.06
3.50	0.02	0.01	8.80	0.04	0.04	14.10	0.07	0.06
3.60	0.02	0.02	8.90	0.04	0.04	14.20	0.07	0.06
3.70	0.02	0.02	9.00	0.04	0.04	14.30	0.06	0.06
3.80	0.02	0.02	9.10	0.05	0.04	14.40	0.06	0.06
3.90	0.02	0.02	9.20	0.05	0.04	14.50	0.06	0.05
4.00	0.02	0.02	9.30	0.05	0.04	14.60	0.06	0.05
4.10	0.02	0.02	9.40	0.05	0.05	14.70	0.06	0.05
4.20	0.02	0.02	9.50	0.05	0.05	14.80	0.05	0.05
4.30	0.02	0.02	9.60	0.06	0.05	14.90	0.05	0.05
4.40	0.02	0.02	9.70	0.06	0.05	15.00	0.05	0.04
4.50	0.02	0.02	9.80	0.06	0.05	15.10	0.05	0.04
4.60	0.02	0.02	9.90	0.06	0.06	15.20	0.04	0.04
4.70	0.02	0.02	10.00	0.07	0.06	15.30	0.04	0.04
4.80	0.02	0.02	10.10	0.07	0.06	15.40	0.04	0.04
4.90	0.02	0.02	10.20	0.07	0.06	15.50	0.04	0.04
5.00	0.02	0.02	10.30	0.07	0.06	15.60	0.04	0.04
5.10	0.02	0.02	10.40	0.08	0.07	15.70	0.04	0.04
5.20	0.02	0.02	10.50	0.08	0.07	15.80	0.04	0.04

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
15.90	0.04	0.04	21.20	0.02	0.02	26.50	0.00	0.00
16.00	0.04	0.04	21.30	0.02	0.02	26.60	0.00	0.00
16.10	0.04	0.04	21.40	0.02	0.02	26.70	0.00	0.00
16.20	0.04	0.03	21.50	0.02	0.02	26.80	0.00	0.00
16.30	0.04	0.03	21.60	0.02	0.02	26.90	0.00	0.00
16.40	0.04	0.03	21.70	0.02	0.02	27.00	0.00	0.00
16.50	0.04	0.03	21.80	0.02	0.02	27.10	0.00	0.00
16.60	0.04	0.03	21.90	0.02	0.02	27.20	0.00	0.00
16.70	0.04	0.03	22.00	0.02	0.02	27.30	0.00	0.00
16.80	0.03	0.03	22.10	0.02	0.02	27.40	0.00	0.00
16.90	0.03	0.03	22.20	0.02	0.02	27.50	0.00	0.00
17.00	0.03	0.03	22.30	0.02	0.02	27.60	0.00	0.00
17.10	0.03	0.03	22.40	0.02	0.02	27.70	0.00	0.00
17.20	0.03	0.03	22.50	0.02	0.02	27.80	0.00	0.00
17.30	0.03	0.03	22.60	0.02	0.02	27.90	0.00	0.00
17.40	0.03	0.03	22.70	0.02	0.02	28.00	0.00	0.00
17.50	0.03	0.03	22.80	0.02	0.02	28.10	0.00	0.00
17.60	0.03	0.03	22.90	0.02	0.02	28.20	0.00	0.00
17.70	0.03	0.03	23.00	0.02	0.02	28.30	0.00	0.00
17.80	0.03	0.03	23.10	0.02	0.02	28.40	0.00	0.00
17.90	0.03	0.02	23.20	0.02	0.02	28.50	0.00	0.00
18.00	0.03	0.02	23.30	0.02	0.02	28.60	0.00	0.00
18.10	0.03	0.02	23.40	0.02	0.02	28.70	0.00	0.00
18.20	0.03	0.02	23.50	0.02	0.02	28.80	0.00	0.00
18.30	0.03	0.02	23.60	0.02	0.02	28.90	0.00	0.00
18.40	0.03	0.02	23.70	0.02	0.02	29.00	0.00	0.00
18.50	0.03	0.02	23.80	0.02	0.01	29.10	0.00	0.00
18.60	0.02	0.02	23.90	0.02	0.01	29.20	0.00	0.00
18.70	0.02	0.02	24.00	0.02	0.01	29.30	0.00	0.00
18.80	0.02	0.02	24.10	0.01	0.01	29.40	0.00	0.00
18.90	0.02	0.02	24.20	0.00	0.00	29.50	0.00	0.00
19.00	0.02	0.02	24.30	0.00	0.00	29.60	0.00	0.00
19.10	0.02	0.02	24.40	0.00	0.00	29.70	0.00	0.00
19.20	0.02	0.02	24.50	0.00	0.00	29.80	0.00	0.00
19.30	0.02	0.02	24.60	0.00	0.00	29.90	0.00	0.00
19.40	0.02	0.02	24.70	0.00	0.00	30.00	0.00	0.00
19.50	0.02	0.02	24.80	0.00	0.00	30.10	0.00	0.00
19.60	0.02	0.02	24.90	0.00	0.00	30.20	0.00	0.00
19.70	0.02	0.02	25.00	0.00	0.00	30.30	0.00	0.00
19.80	0.02	0.02	25.10	0.00	0.00	30.40	0.00	0.00
19.90	0.02	0.02	25.20	0.00	0.00	30.50	0.00	0.00
20.00	0.02	0.02	25.30	0.00	0.00	30.60	0.00	0.00
20.10	0.02	0.02	25.40	0.00	0.00	30.70	0.00	0.00
20.20	0.02	0.02	25.50	0.00	0.00	30.80	0.00	0.00
20.30	0.02	0.02	25.60	0.00	0.00	30.90	0.00	0.00
20.40	0.02	0.02	25.70	0.00	0.00	31.00	0.00	0.00
20.50	0.02	0.02	25.80	0.00	0.00	31.10	0.00	0.00
20.60	0.02	0.02	25.90	0.00	0.00	31.20	0.00	0.00
20.70	0.02	0.02	26.00	0.00	0.00	31.30	0.00	0.00
20.80	0.02	0.02	26.10	0.00	0.00	31.40	0.00	0.00
20.90	0.02	0.02	26.20	0.00	0.00	31.50	0.00	0.00
21.00	0.02	0.02	26.30	0.00	0.00	31.60	0.00	0.00
21.10	0.02	0.02	26.40	0.00	0.00	31.70	0.00	0.00

Primary Comparison (continued)

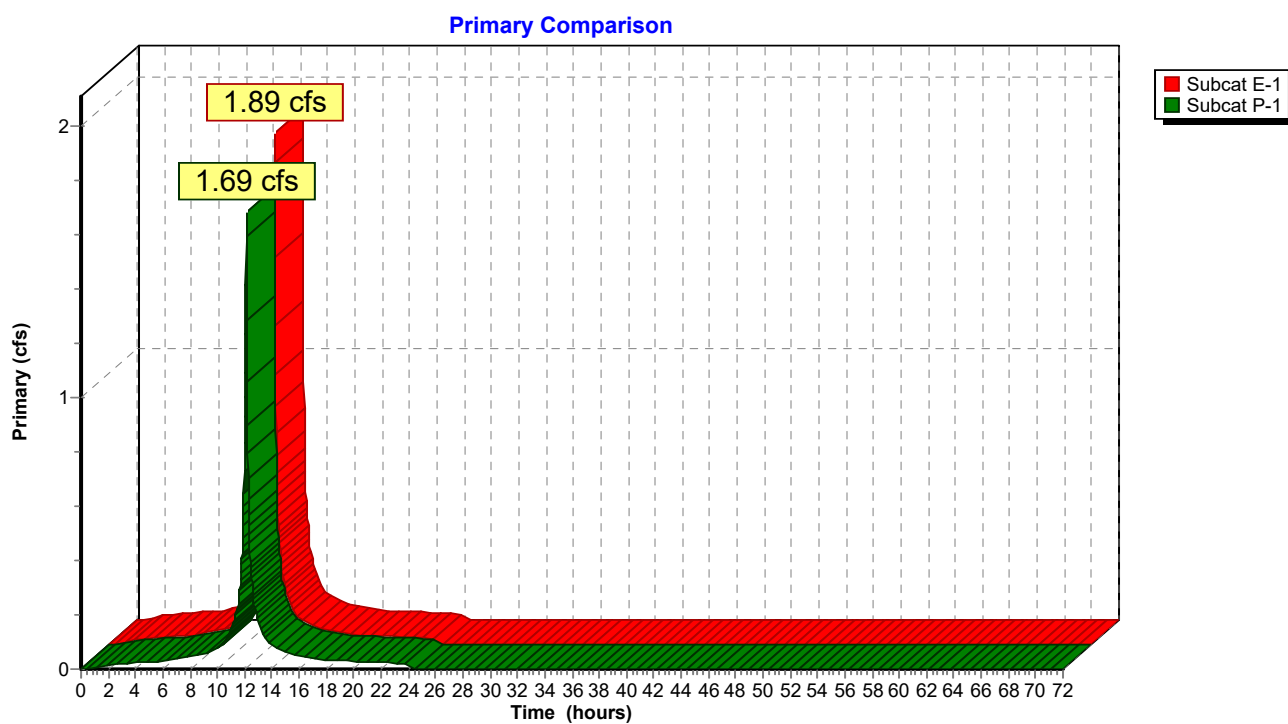
Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
31.80	0.00	0.00	37.10	0.00	0.00	42.40	0.00	0.00
31.90	0.00	0.00	37.20	0.00	0.00	42.50	0.00	0.00
32.00	0.00	0.00	37.30	0.00	0.00	42.60	0.00	0.00
32.10	0.00	0.00	37.40	0.00	0.00	42.70	0.00	0.00
32.20	0.00	0.00	37.50	0.00	0.00	42.80	0.00	0.00
32.30	0.00	0.00	37.60	0.00	0.00	42.90	0.00	0.00
32.40	0.00	0.00	37.70	0.00	0.00	43.00	0.00	0.00
32.50	0.00	0.00	37.80	0.00	0.00	43.10	0.00	0.00
32.60	0.00	0.00	37.90	0.00	0.00	43.20	0.00	0.00
32.70	0.00	0.00	38.00	0.00	0.00	43.30	0.00	0.00
32.80	0.00	0.00	38.10	0.00	0.00	43.40	0.00	0.00
32.90	0.00	0.00	38.20	0.00	0.00	43.50	0.00	0.00
33.00	0.00	0.00	38.30	0.00	0.00	43.60	0.00	0.00
33.10	0.00	0.00	38.40	0.00	0.00	43.70	0.00	0.00
33.20	0.00	0.00	38.50	0.00	0.00	43.80	0.00	0.00
33.30	0.00	0.00	38.60	0.00	0.00	43.90	0.00	0.00
33.40	0.00	0.00	38.70	0.00	0.00	44.00	0.00	0.00
33.50	0.00	0.00	38.80	0.00	0.00	44.10	0.00	0.00
33.60	0.00	0.00	38.90	0.00	0.00	44.20	0.00	0.00
33.70	0.00	0.00	39.00	0.00	0.00	44.30	0.00	0.00
33.80	0.00	0.00	39.10	0.00	0.00	44.40	0.00	0.00
33.90	0.00	0.00	39.20	0.00	0.00	44.50	0.00	0.00
34.00	0.00	0.00	39.30	0.00	0.00	44.60	0.00	0.00
34.10	0.00	0.00	39.40	0.00	0.00	44.70	0.00	0.00
34.20	0.00	0.00	39.50	0.00	0.00	44.80	0.00	0.00
34.30	0.00	0.00	39.60	0.00	0.00	44.90	0.00	0.00
34.40	0.00	0.00	39.70	0.00	0.00	45.00	0.00	0.00
34.50	0.00	0.00	39.80	0.00	0.00	45.10	0.00	0.00
34.60	0.00	0.00	39.90	0.00	0.00	45.20	0.00	0.00
34.70	0.00	0.00	40.00	0.00	0.00	45.30	0.00	0.00
34.80	0.00	0.00	40.10	0.00	0.00	45.40	0.00	0.00
34.90	0.00	0.00	40.20	0.00	0.00	45.50	0.00	0.00
35.00	0.00	0.00	40.30	0.00	0.00	45.60	0.00	0.00
35.10	0.00	0.00	40.40	0.00	0.00	45.70	0.00	0.00
35.20	0.00	0.00	40.50	0.00	0.00	45.80	0.00	0.00
35.30	0.00	0.00	40.60	0.00	0.00	45.90	0.00	0.00
35.40	0.00	0.00	40.70	0.00	0.00	46.00	0.00	0.00
35.50	0.00	0.00	40.80	0.00	0.00	46.10	0.00	0.00
35.60	0.00	0.00	40.90	0.00	0.00	46.20	0.00	0.00
35.70	0.00	0.00	41.00	0.00	0.00	46.30	0.00	0.00
35.80	0.00	0.00	41.10	0.00	0.00	46.40	0.00	0.00
35.90	0.00	0.00	41.20	0.00	0.00	46.50	0.00	0.00
36.00	0.00	0.00	41.30	0.00	0.00	46.60	0.00	0.00
36.10	0.00	0.00	41.40	0.00	0.00	46.70	0.00	0.00
36.20	0.00	0.00	41.50	0.00	0.00	46.80	0.00	0.00
36.30	0.00	0.00	41.60	0.00	0.00	46.90	0.00	0.00
36.40	0.00	0.00	41.70	0.00	0.00	47.00	0.00	0.00
36.50	0.00	0.00	41.80	0.00	0.00	47.10	0.00	0.00
36.60	0.00	0.00	41.90	0.00	0.00	47.20	0.00	0.00
36.70	0.00	0.00	42.00	0.00	0.00	47.30	0.00	0.00
36.80	0.00	0.00	42.10	0.00	0.00	47.40	0.00	0.00
36.90	0.00	0.00	42.20	0.00	0.00	47.50	0.00	0.00
37.00	0.00	0.00	42.30	0.00	0.00	47.60	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
47.70	0.00	0.00	53.00	0.00	0.00	58.30	0.00	0.00
47.80	0.00	0.00	53.10	0.00	0.00	58.40	0.00	0.00
47.90	0.00	0.00	53.20	0.00	0.00	58.50	0.00	0.00
48.00	0.00	0.00	53.30	0.00	0.00	58.60	0.00	0.00
48.10	0.00	0.00	53.40	0.00	0.00	58.70	0.00	0.00
48.20	0.00	0.00	53.50	0.00	0.00	58.80	0.00	0.00
48.30	0.00	0.00	53.60	0.00	0.00	58.90	0.00	0.00
48.40	0.00	0.00	53.70	0.00	0.00	59.00	0.00	0.00
48.50	0.00	0.00	53.80	0.00	0.00	59.10	0.00	0.00
48.60	0.00	0.00	53.90	0.00	0.00	59.20	0.00	0.00
48.70	0.00	0.00	54.00	0.00	0.00	59.30	0.00	0.00
48.80	0.00	0.00	54.10	0.00	0.00	59.40	0.00	0.00
48.90	0.00	0.00	54.20	0.00	0.00	59.50	0.00	0.00
49.00	0.00	0.00	54.30	0.00	0.00	59.60	0.00	0.00
49.10	0.00	0.00	54.40	0.00	0.00	59.70	0.00	0.00
49.20	0.00	0.00	54.50	0.00	0.00	59.80	0.00	0.00
49.30	0.00	0.00	54.60	0.00	0.00	59.90	0.00	0.00
49.40	0.00	0.00	54.70	0.00	0.00	60.00	0.00	0.00
49.50	0.00	0.00	54.80	0.00	0.00	60.10	0.00	0.00
49.60	0.00	0.00	54.90	0.00	0.00	60.20	0.00	0.00
49.70	0.00	0.00	55.00	0.00	0.00	60.30	0.00	0.00
49.80	0.00	0.00	55.10	0.00	0.00	60.40	0.00	0.00
49.90	0.00	0.00	55.20	0.00	0.00	60.50	0.00	0.00
50.00	0.00	0.00	55.30	0.00	0.00	60.60	0.00	0.00
50.10	0.00	0.00	55.40	0.00	0.00	60.70	0.00	0.00
50.20	0.00	0.00	55.50	0.00	0.00	60.80	0.00	0.00
50.30	0.00	0.00	55.60	0.00	0.00	60.90	0.00	0.00
50.40	0.00	0.00	55.70	0.00	0.00	61.00	0.00	0.00
50.50	0.00	0.00	55.80	0.00	0.00	61.10	0.00	0.00
50.60	0.00	0.00	55.90	0.00	0.00	61.20	0.00	0.00
50.70	0.00	0.00	56.00	0.00	0.00	61.30	0.00	0.00
50.80	0.00	0.00	56.10	0.00	0.00	61.40	0.00	0.00
50.90	0.00	0.00	56.20	0.00	0.00	61.50	0.00	0.00
51.00	0.00	0.00	56.30	0.00	0.00	61.60	0.00	0.00
51.10	0.00	0.00	56.40	0.00	0.00	61.70	0.00	0.00
51.20	0.00	0.00	56.50	0.00	0.00	61.80	0.00	0.00
51.30	0.00	0.00	56.60	0.00	0.00	61.90	0.00	0.00
51.40	0.00	0.00	56.70	0.00	0.00	62.00	0.00	0.00
51.50	0.00	0.00	56.80	0.00	0.00	62.10	0.00	0.00
51.60	0.00	0.00	56.90	0.00	0.00	62.20	0.00	0.00
51.70	0.00	0.00	57.00	0.00	0.00	62.30	0.00	0.00
51.80	0.00	0.00	57.10	0.00	0.00	62.40	0.00	0.00
51.90	0.00	0.00	57.20	0.00	0.00	62.50	0.00	0.00
52.00	0.00	0.00	57.30	0.00	0.00	62.60	0.00	0.00
52.10	0.00	0.00	57.40	0.00	0.00	62.70	0.00	0.00
52.20	0.00	0.00	57.50	0.00	0.00	62.80	0.00	0.00
52.30	0.00	0.00	57.60	0.00	0.00	62.90	0.00	0.00
52.40	0.00	0.00	57.70	0.00	0.00	63.00	0.00	0.00
52.50	0.00	0.00	57.80	0.00	0.00	63.10	0.00	0.00
52.60	0.00	0.00	57.90	0.00	0.00	63.20	0.00	0.00
52.70	0.00	0.00	58.00	0.00	0.00	63.30	0.00	0.00
52.80	0.00	0.00	58.10	0.00	0.00	63.40	0.00	0.00
52.90	0.00	0.00	58.20	0.00	0.00	63.50	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
63.60	0.00	0.00	68.90	0.00	0.00
63.70	0.00	0.00	69.00	0.00	0.00
63.80	0.00	0.00	69.10	0.00	0.00
63.90	0.00	0.00	69.20	0.00	0.00
64.00	0.00	0.00	69.30	0.00	0.00
64.10	0.00	0.00	69.40	0.00	0.00
64.20	0.00	0.00	69.50	0.00	0.00
64.30	0.00	0.00	69.60	0.00	0.00
64.40	0.00	0.00	69.70	0.00	0.00
64.50	0.00	0.00	69.80	0.00	0.00
64.60	0.00	0.00	69.90	0.00	0.00
64.70	0.00	0.00	70.00	0.00	0.00
64.80	0.00	0.00	70.10	0.00	0.00
64.90	0.00	0.00	70.20	0.00	0.00
65.00	0.00	0.00	70.30	0.00	0.00
65.10	0.00	0.00	70.40	0.00	0.00
65.20	0.00	0.00	70.50	0.00	0.00
65.30	0.00	0.00	70.60	0.00	0.00
65.40	0.00	0.00	70.70	0.00	0.00
65.50	0.00	0.00	70.80	0.00	0.00
65.60	0.00	0.00	70.90	0.00	0.00
65.70	0.00	0.00	71.00	0.00	0.00
65.80	0.00	0.00	71.10	0.00	0.00
65.90	0.00	0.00	71.20	0.00	0.00
66.00	0.00	0.00	71.30	0.00	0.00
66.10	0.00	0.00	71.40	0.00	0.00
66.20	0.00	0.00	71.50	0.00	0.00
66.30	0.00	0.00	71.60	0.00	0.00
66.40	0.00	0.00	71.70	0.00	0.00
66.50	0.00	0.00	71.80	0.00	0.00
66.60	0.00	0.00	71.90	0.00	0.00
66.70	0.00	0.00	72.00	0.00	0.00
66.80	0.00	0.00			
66.90	0.00	0.00			
67.00	0.00	0.00			
67.10	0.00	0.00			
67.20	0.00	0.00			
67.30	0.00	0.00			
67.40	0.00	0.00			
67.50	0.00	0.00			
67.60	0.00	0.00			
67.70	0.00	0.00			
67.80	0.00	0.00			
67.90	0.00	0.00			
68.00	0.00	0.00			
68.10	0.00	0.00			
68.20	0.00	0.00			
68.30	0.00	0.00			
68.40	0.00	0.00			
68.50	0.00	0.00			
68.60	0.00	0.00			
68.70	0.00	0.00			
68.80	0.00	0.00			



Primary Comparison

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
0.00	0.00	0.00	5.30	0.03	0.03	10.60	0.12	0.10
0.10	0.00	0.00	5.40	0.03	0.03	10.70	0.13	0.11
0.20	0.00	0.00	5.50	0.03	0.03	10.80	0.14	0.12
0.30	0.00	0.00	5.60	0.03	0.03	10.90	0.15	0.13
0.40	0.00	0.00	5.70	0.03	0.03	11.00	0.16	0.14
0.50	0.00	0.00	5.80	0.03	0.03	11.10	0.18	0.16
0.60	0.00	0.00	5.90	0.03	0.03	11.20	0.20	0.17
0.70	0.00	0.00	6.00	0.03	0.03	11.30	0.22	0.19
0.80	0.01	0.00	6.10	0.03	0.03	11.40	0.24	0.21
0.90	0.01	0.01	6.20	0.03	0.03	11.50	0.26	0.23
1.00	0.01	0.01	6.30	0.04	0.03	11.60	0.33	0.29
1.10	0.01	0.01	6.40	0.04	0.03	11.70	0.37	0.32
1.20	0.01	0.01	6.50	0.04	0.03	11.80	0.47	0.41
1.30	0.01	0.01	6.60	0.04	0.03	11.90	0.65	0.57
1.40	0.01	0.01	6.70	0.04	0.03	12.00	1.05	0.93
1.50	0.01	0.01	6.80	0.04	0.04	12.10	1.77	1.58
1.60	0.01	0.01	6.90	0.04	0.04	12.20	1.18	1.06
1.70	0.02	0.01	7.00	0.04	0.04	12.30	0.63	0.57
1.80	0.02	0.01	7.10	0.04	0.04	12.40	0.44	0.40
1.90	0.02	0.01	7.20	0.04	0.04	12.50	0.37	0.34
2.00	0.02	0.02	7.30	0.04	0.04	12.60	0.30	0.27
2.10	0.02	0.02	7.40	0.05	0.04	12.70	0.26	0.23
2.20	0.02	0.02	7.50	0.05	0.04	12.80	0.24	0.21
2.30	0.02	0.02	7.60	0.05	0.04	12.90	0.21	0.20
2.40	0.02	0.02	7.70	0.05	0.04	13.00	0.19	0.18
2.50	0.02	0.02	7.80	0.05	0.04	13.10	0.17	0.16
2.60	0.02	0.02	7.90	0.05	0.04	13.20	0.16	0.15
2.70	0.02	0.02	8.00	0.05	0.04	13.30	0.15	0.14
2.80	0.02	0.02	8.10	0.05	0.05	13.40	0.14	0.12
2.90	0.02	0.02	8.20	0.05	0.05	13.50	0.12	0.11
3.00	0.02	0.02	8.30	0.05	0.05	13.60	0.11	0.10
3.10	0.02	0.02	8.40	0.05	0.05	13.70	0.11	0.10
3.20	0.02	0.02	8.50	0.06	0.05	13.80	0.10	0.10
3.30	0.02	0.02	8.60	0.06	0.05	13.90	0.10	0.09
3.40	0.02	0.02	8.70	0.06	0.05	14.00	0.10	0.09
3.50	0.03	0.02	8.80	0.06	0.05	14.10	0.09	0.09
3.60	0.03	0.02	8.90	0.06	0.05	14.20	0.09	0.08
3.70	0.03	0.02	9.00	0.06	0.05	14.30	0.09	0.08
3.80	0.03	0.02	9.10	0.06	0.05	14.40	0.08	0.08
3.90	0.03	0.02	9.20	0.07	0.06	14.50	0.08	0.08
4.00	0.03	0.02	9.30	0.07	0.06	14.60	0.08	0.07
4.10	0.03	0.02	9.40	0.07	0.06	14.70	0.08	0.07
4.20	0.03	0.02	9.50	0.07	0.07	14.80	0.07	0.07
4.30	0.03	0.02	9.60	0.08	0.07	14.90	0.07	0.06
4.40	0.03	0.02	9.70	0.08	0.07	15.00	0.07	0.06
4.50	0.03	0.03	9.80	0.08	0.07	15.10	0.06	0.06
4.60	0.03	0.03	9.90	0.09	0.08	15.20	0.06	0.06
4.70	0.03	0.03	10.00	0.09	0.08	15.30	0.06	0.06
4.80	0.03	0.03	10.10	0.09	0.08	15.40	0.06	0.05
4.90	0.03	0.03	10.20	0.10	0.08	15.50	0.06	0.05
5.00	0.03	0.03	10.30	0.10	0.09	15.60	0.06	0.05
5.10	0.03	0.03	10.40	0.10	0.09	15.70	0.06	0.05
5.20	0.03	0.03	10.50	0.11	0.09	15.80	0.06	0.05

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
15.90	0.05	0.05	21.20	0.03	0.03	26.50	0.00	0.00
16.00	0.05	0.05	21.30	0.03	0.03	26.60	0.00	0.00
16.10	0.05	0.05	21.40	0.03	0.03	26.70	0.00	0.00
16.20	0.05	0.05	21.50	0.03	0.03	26.80	0.00	0.00
16.30	0.05	0.05	21.60	0.03	0.03	26.90	0.00	0.00
16.40	0.05	0.05	21.70	0.03	0.03	27.00	0.00	0.00
16.50	0.05	0.05	21.80	0.03	0.02	27.10	0.00	0.00
16.60	0.05	0.04	21.90	0.03	0.02	27.20	0.00	0.00
16.70	0.05	0.04	22.00	0.03	0.02	27.30	0.00	0.00
16.80	0.05	0.04	22.10	0.03	0.02	27.40	0.00	0.00
16.90	0.05	0.04	22.20	0.03	0.02	27.50	0.00	0.00
17.00	0.05	0.04	22.30	0.03	0.02	27.60	0.00	0.00
17.10	0.04	0.04	22.40	0.03	0.02	27.70	0.00	0.00
17.20	0.04	0.04	22.50	0.03	0.02	27.80	0.00	0.00
17.30	0.04	0.04	22.60	0.02	0.02	27.90	0.00	0.00
17.40	0.04	0.04	22.70	0.02	0.02	28.00	0.00	0.00
17.50	0.04	0.04	22.80	0.02	0.02	28.10	0.00	0.00
17.60	0.04	0.04	22.90	0.02	0.02	28.20	0.00	0.00
17.70	0.04	0.04	23.00	0.02	0.02	28.30	0.00	0.00
17.80	0.04	0.04	23.10	0.02	0.02	28.40	0.00	0.00
17.90	0.04	0.03	23.20	0.02	0.02	28.50	0.00	0.00
18.00	0.04	0.03	23.30	0.02	0.02	28.60	0.00	0.00
18.10	0.04	0.03	23.40	0.02	0.02	28.70	0.00	0.00
18.20	0.03	0.03	23.50	0.02	0.02	28.80	0.00	0.00
18.30	0.03	0.03	23.60	0.02	0.02	28.90	0.00	0.00
18.40	0.03	0.03	23.70	0.02	0.02	29.00	0.00	0.00
18.50	0.03	0.03	23.80	0.02	0.02	29.10	0.00	0.00
18.60	0.03	0.03	23.90	0.02	0.02	29.20	0.00	0.00
18.70	0.03	0.03	24.00	0.02	0.02	29.30	0.00	0.00
18.80	0.03	0.03	24.10	0.01	0.01	29.40	0.00	0.00
18.90	0.03	0.03	24.20	0.00	0.00	29.50	0.00	0.00
19.00	0.03	0.03	24.30	0.00	0.00	29.60	0.00	0.00
19.10	0.03	0.03	24.40	0.00	0.00	29.70	0.00	0.00
19.20	0.03	0.03	24.50	0.00	0.00	29.80	0.00	0.00
19.30	0.03	0.03	24.60	0.00	0.00	29.90	0.00	0.00
19.40	0.03	0.03	24.70	0.00	0.00	30.00	0.00	0.00
19.50	0.03	0.03	24.80	0.00	0.00	30.10	0.00	0.00
19.60	0.03	0.03	24.90	0.00	0.00	30.20	0.00	0.00
19.70	0.03	0.03	25.00	0.00	0.00	30.30	0.00	0.00
19.80	0.03	0.03	25.10	0.00	0.00	30.40	0.00	0.00
19.90	0.03	0.03	25.20	0.00	0.00	30.50	0.00	0.00
20.00	0.03	0.03	25.30	0.00	0.00	30.60	0.00	0.00
20.10	0.03	0.03	25.40	0.00	0.00	30.70	0.00	0.00
20.20	0.03	0.03	25.50	0.00	0.00	30.80	0.00	0.00
20.30	0.03	0.03	25.60	0.00	0.00	30.90	0.00	0.00
20.40	0.03	0.03	25.70	0.00	0.00	31.00	0.00	0.00
20.50	0.03	0.03	25.80	0.00	0.00	31.10	0.00	0.00
20.60	0.03	0.03	25.90	0.00	0.00	31.20	0.00	0.00
20.70	0.03	0.03	26.00	0.00	0.00	31.30	0.00	0.00
20.80	0.03	0.03	26.10	0.00	0.00	31.40	0.00	0.00
20.90	0.03	0.03	26.20	0.00	0.00	31.50	0.00	0.00
21.00	0.03	0.03	26.30	0.00	0.00	31.60	0.00	0.00
21.10	0.03	0.03	26.40	0.00	0.00	31.70	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
31.80	0.00	0.00	37.10	0.00	0.00	42.40	0.00	0.00
31.90	0.00	0.00	37.20	0.00	0.00	42.50	0.00	0.00
32.00	0.00	0.00	37.30	0.00	0.00	42.60	0.00	0.00
32.10	0.00	0.00	37.40	0.00	0.00	42.70	0.00	0.00
32.20	0.00	0.00	37.50	0.00	0.00	42.80	0.00	0.00
32.30	0.00	0.00	37.60	0.00	0.00	42.90	0.00	0.00
32.40	0.00	0.00	37.70	0.00	0.00	43.00	0.00	0.00
32.50	0.00	0.00	37.80	0.00	0.00	43.10	0.00	0.00
32.60	0.00	0.00	37.90	0.00	0.00	43.20	0.00	0.00
32.70	0.00	0.00	38.00	0.00	0.00	43.30	0.00	0.00
32.80	0.00	0.00	38.10	0.00	0.00	43.40	0.00	0.00
32.90	0.00	0.00	38.20	0.00	0.00	43.50	0.00	0.00
33.00	0.00	0.00	38.30	0.00	0.00	43.60	0.00	0.00
33.10	0.00	0.00	38.40	0.00	0.00	43.70	0.00	0.00
33.20	0.00	0.00	38.50	0.00	0.00	43.80	0.00	0.00
33.30	0.00	0.00	38.60	0.00	0.00	43.90	0.00	0.00
33.40	0.00	0.00	38.70	0.00	0.00	44.00	0.00	0.00
33.50	0.00	0.00	38.80	0.00	0.00	44.10	0.00	0.00
33.60	0.00	0.00	38.90	0.00	0.00	44.20	0.00	0.00
33.70	0.00	0.00	39.00	0.00	0.00	44.30	0.00	0.00
33.80	0.00	0.00	39.10	0.00	0.00	44.40	0.00	0.00
33.90	0.00	0.00	39.20	0.00	0.00	44.50	0.00	0.00
34.00	0.00	0.00	39.30	0.00	0.00	44.60	0.00	0.00
34.10	0.00	0.00	39.40	0.00	0.00	44.70	0.00	0.00
34.20	0.00	0.00	39.50	0.00	0.00	44.80	0.00	0.00
34.30	0.00	0.00	39.60	0.00	0.00	44.90	0.00	0.00
34.40	0.00	0.00	39.70	0.00	0.00	45.00	0.00	0.00
34.50	0.00	0.00	39.80	0.00	0.00	45.10	0.00	0.00
34.60	0.00	0.00	39.90	0.00	0.00	45.20	0.00	0.00
34.70	0.00	0.00	40.00	0.00	0.00	45.30	0.00	0.00
34.80	0.00	0.00	40.10	0.00	0.00	45.40	0.00	0.00
34.90	0.00	0.00	40.20	0.00	0.00	45.50	0.00	0.00
35.00	0.00	0.00	40.30	0.00	0.00	45.60	0.00	0.00
35.10	0.00	0.00	40.40	0.00	0.00	45.70	0.00	0.00
35.20	0.00	0.00	40.50	0.00	0.00	45.80	0.00	0.00
35.30	0.00	0.00	40.60	0.00	0.00	45.90	0.00	0.00
35.40	0.00	0.00	40.70	0.00	0.00	46.00	0.00	0.00
35.50	0.00	0.00	40.80	0.00	0.00	46.10	0.00	0.00
35.60	0.00	0.00	40.90	0.00	0.00	46.20	0.00	0.00
35.70	0.00	0.00	41.00	0.00	0.00	46.30	0.00	0.00
35.80	0.00	0.00	41.10	0.00	0.00	46.40	0.00	0.00
35.90	0.00	0.00	41.20	0.00	0.00	46.50	0.00	0.00
36.00	0.00	0.00	41.30	0.00	0.00	46.60	0.00	0.00
36.10	0.00	0.00	41.40	0.00	0.00	46.70	0.00	0.00
36.20	0.00	0.00	41.50	0.00	0.00	46.80	0.00	0.00
36.30	0.00	0.00	41.60	0.00	0.00	46.90	0.00	0.00
36.40	0.00	0.00	41.70	0.00	0.00	47.00	0.00	0.00
36.50	0.00	0.00	41.80	0.00	0.00	47.10	0.00	0.00
36.60	0.00	0.00	41.90	0.00	0.00	47.20	0.00	0.00
36.70	0.00	0.00	42.00	0.00	0.00	47.30	0.00	0.00
36.80	0.00	0.00	42.10	0.00	0.00	47.40	0.00	0.00
36.90	0.00	0.00	42.20	0.00	0.00	47.50	0.00	0.00
37.00	0.00	0.00	42.30	0.00	0.00	47.60	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
47.70	0.00	0.00	53.00	0.00	0.00	58.30	0.00	0.00
47.80	0.00	0.00	53.10	0.00	0.00	58.40	0.00	0.00
47.90	0.00	0.00	53.20	0.00	0.00	58.50	0.00	0.00
48.00	0.00	0.00	53.30	0.00	0.00	58.60	0.00	0.00
48.10	0.00	0.00	53.40	0.00	0.00	58.70	0.00	0.00
48.20	0.00	0.00	53.50	0.00	0.00	58.80	0.00	0.00
48.30	0.00	0.00	53.60	0.00	0.00	58.90	0.00	0.00
48.40	0.00	0.00	53.70	0.00	0.00	59.00	0.00	0.00
48.50	0.00	0.00	53.80	0.00	0.00	59.10	0.00	0.00
48.60	0.00	0.00	53.90	0.00	0.00	59.20	0.00	0.00
48.70	0.00	0.00	54.00	0.00	0.00	59.30	0.00	0.00
48.80	0.00	0.00	54.10	0.00	0.00	59.40	0.00	0.00
48.90	0.00	0.00	54.20	0.00	0.00	59.50	0.00	0.00
49.00	0.00	0.00	54.30	0.00	0.00	59.60	0.00	0.00
49.10	0.00	0.00	54.40	0.00	0.00	59.70	0.00	0.00
49.20	0.00	0.00	54.50	0.00	0.00	59.80	0.00	0.00
49.30	0.00	0.00	54.60	0.00	0.00	59.90	0.00	0.00
49.40	0.00	0.00	54.70	0.00	0.00	60.00	0.00	0.00
49.50	0.00	0.00	54.80	0.00	0.00	60.10	0.00	0.00
49.60	0.00	0.00	54.90	0.00	0.00	60.20	0.00	0.00
49.70	0.00	0.00	55.00	0.00	0.00	60.30	0.00	0.00
49.80	0.00	0.00	55.10	0.00	0.00	60.40	0.00	0.00
49.90	0.00	0.00	55.20	0.00	0.00	60.50	0.00	0.00
50.00	0.00	0.00	55.30	0.00	0.00	60.60	0.00	0.00
50.10	0.00	0.00	55.40	0.00	0.00	60.70	0.00	0.00
50.20	0.00	0.00	55.50	0.00	0.00	60.80	0.00	0.00
50.30	0.00	0.00	55.60	0.00	0.00	60.90	0.00	0.00
50.40	0.00	0.00	55.70	0.00	0.00	61.00	0.00	0.00
50.50	0.00	0.00	55.80	0.00	0.00	61.10	0.00	0.00
50.60	0.00	0.00	55.90	0.00	0.00	61.20	0.00	0.00
50.70	0.00	0.00	56.00	0.00	0.00	61.30	0.00	0.00
50.80	0.00	0.00	56.10	0.00	0.00	61.40	0.00	0.00
50.90	0.00	0.00	56.20	0.00	0.00	61.50	0.00	0.00
51.00	0.00	0.00	56.30	0.00	0.00	61.60	0.00	0.00
51.10	0.00	0.00	56.40	0.00	0.00	61.70	0.00	0.00
51.20	0.00	0.00	56.50	0.00	0.00	61.80	0.00	0.00
51.30	0.00	0.00	56.60	0.00	0.00	61.90	0.00	0.00
51.40	0.00	0.00	56.70	0.00	0.00	62.00	0.00	0.00
51.50	0.00	0.00	56.80	0.00	0.00	62.10	0.00	0.00
51.60	0.00	0.00	56.90	0.00	0.00	62.20	0.00	0.00
51.70	0.00	0.00	57.00	0.00	0.00	62.30	0.00	0.00
51.80	0.00	0.00	57.10	0.00	0.00	62.40	0.00	0.00
51.90	0.00	0.00	57.20	0.00	0.00	62.50	0.00	0.00
52.00	0.00	0.00	57.30	0.00	0.00	62.60	0.00	0.00
52.10	0.00	0.00	57.40	0.00	0.00	62.70	0.00	0.00
52.20	0.00	0.00	57.50	0.00	0.00	62.80	0.00	0.00
52.30	0.00	0.00	57.60	0.00	0.00	62.90	0.00	0.00
52.40	0.00	0.00	57.70	0.00	0.00	63.00	0.00	0.00
52.50	0.00	0.00	57.80	0.00	0.00	63.10	0.00	0.00
52.60	0.00	0.00	57.90	0.00	0.00	63.20	0.00	0.00
52.70	0.00	0.00	58.00	0.00	0.00	63.30	0.00	0.00
52.80	0.00	0.00	58.10	0.00	0.00	63.40	0.00	0.00
52.90	0.00	0.00	58.20	0.00	0.00	63.50	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)	Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
63.60	0.00	0.00	68.90	0.00	0.00
63.70	0.00	0.00	69.00	0.00	0.00
63.80	0.00	0.00	69.10	0.00	0.00
63.90	0.00	0.00	69.20	0.00	0.00
64.00	0.00	0.00	69.30	0.00	0.00
64.10	0.00	0.00	69.40	0.00	0.00
64.20	0.00	0.00	69.50	0.00	0.00
64.30	0.00	0.00	69.60	0.00	0.00
64.40	0.00	0.00	69.70	0.00	0.00
64.50	0.00	0.00	69.80	0.00	0.00
64.60	0.00	0.00	69.90	0.00	0.00
64.70	0.00	0.00	70.00	0.00	0.00
64.80	0.00	0.00	70.10	0.00	0.00
64.90	0.00	0.00	70.20	0.00	0.00
65.00	0.00	0.00	70.30	0.00	0.00
65.10	0.00	0.00	70.40	0.00	0.00
65.20	0.00	0.00	70.50	0.00	0.00
65.30	0.00	0.00	70.60	0.00	0.00
65.40	0.00	0.00	70.70	0.00	0.00
65.50	0.00	0.00	70.80	0.00	0.00
65.60	0.00	0.00	70.90	0.00	0.00
65.70	0.00	0.00	71.00	0.00	0.00
65.80	0.00	0.00	71.10	0.00	0.00
65.90	0.00	0.00	71.20	0.00	0.00
66.00	0.00	0.00	71.30	0.00	0.00
66.10	0.00	0.00	71.40	0.00	0.00
66.20	0.00	0.00	71.50	0.00	0.00
66.30	0.00	0.00	71.60	0.00	0.00
66.40	0.00	0.00	71.70	0.00	0.00
66.50	0.00	0.00	71.80	0.00	0.00
66.60	0.00	0.00	71.90	0.00	0.00
66.70	0.00	0.00	72.00	0.00	0.00
66.80	0.00	0.00			
66.90	0.00	0.00			
67.00	0.00	0.00			
67.10	0.00	0.00			
67.20	0.00	0.00			
67.30	0.00	0.00			
67.40	0.00	0.00			
67.50	0.00	0.00			
67.60	0.00	0.00			
67.70	0.00	0.00			
67.80	0.00	0.00			
67.90	0.00	0.00			
68.00	0.00	0.00			
68.10	0.00	0.00			
68.20	0.00	0.00			
68.30	0.00	0.00			
68.40	0.00	0.00			
68.50	0.00	0.00			
68.60	0.00	0.00			
68.70	0.00	0.00			
68.80	0.00	0.00			

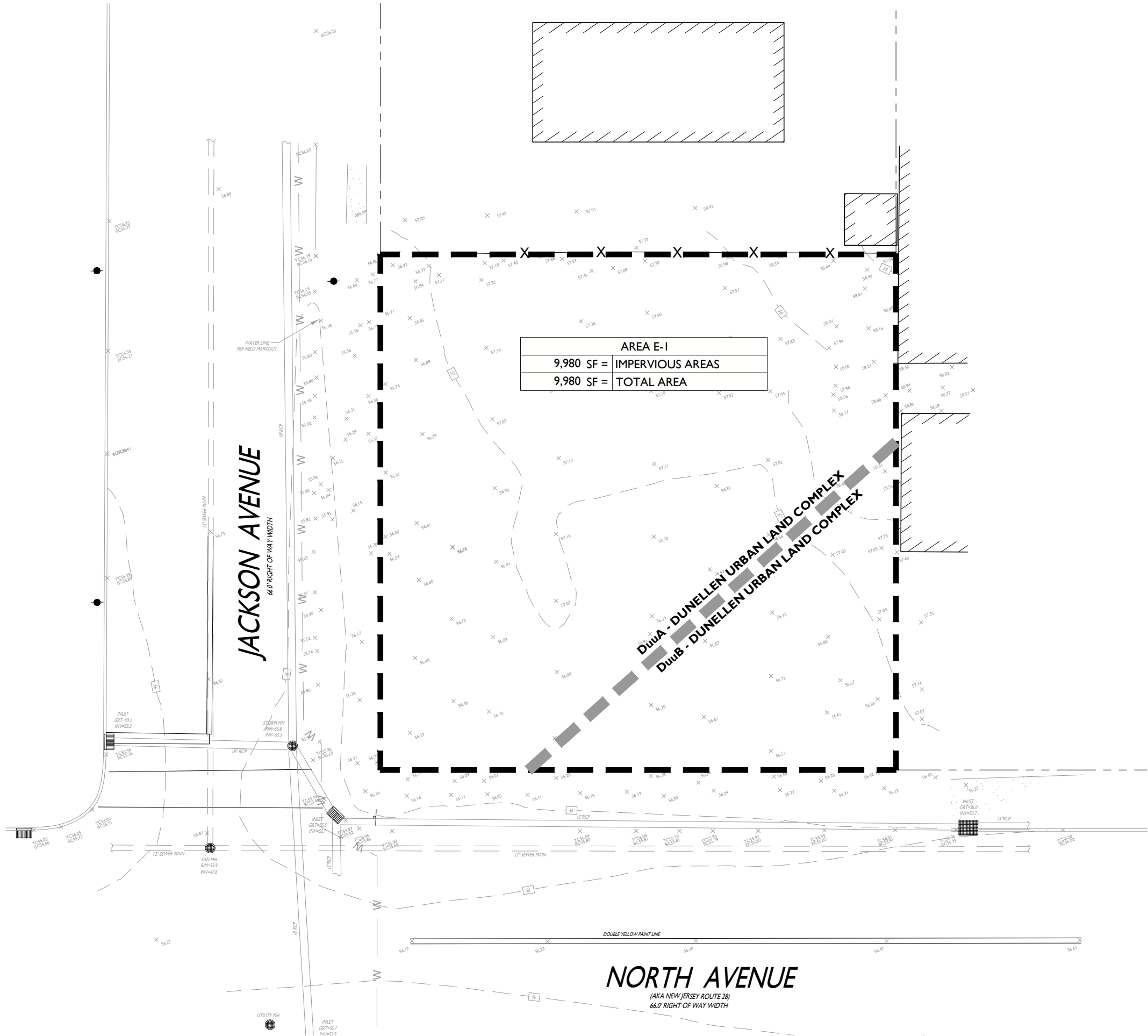


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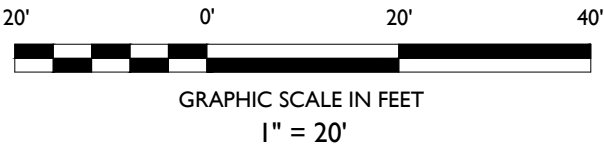
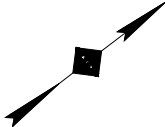
APPENDIX D

DRAINAGE AREA MAPS

T:\320\WT-1 9325 Villand Builders - 150 North Avenue, Dunellen, NJ\CADD\Exhibits\2023-04-18 Drainage Area Maps.dwg

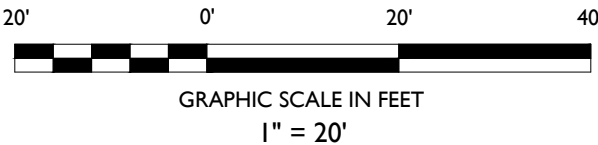
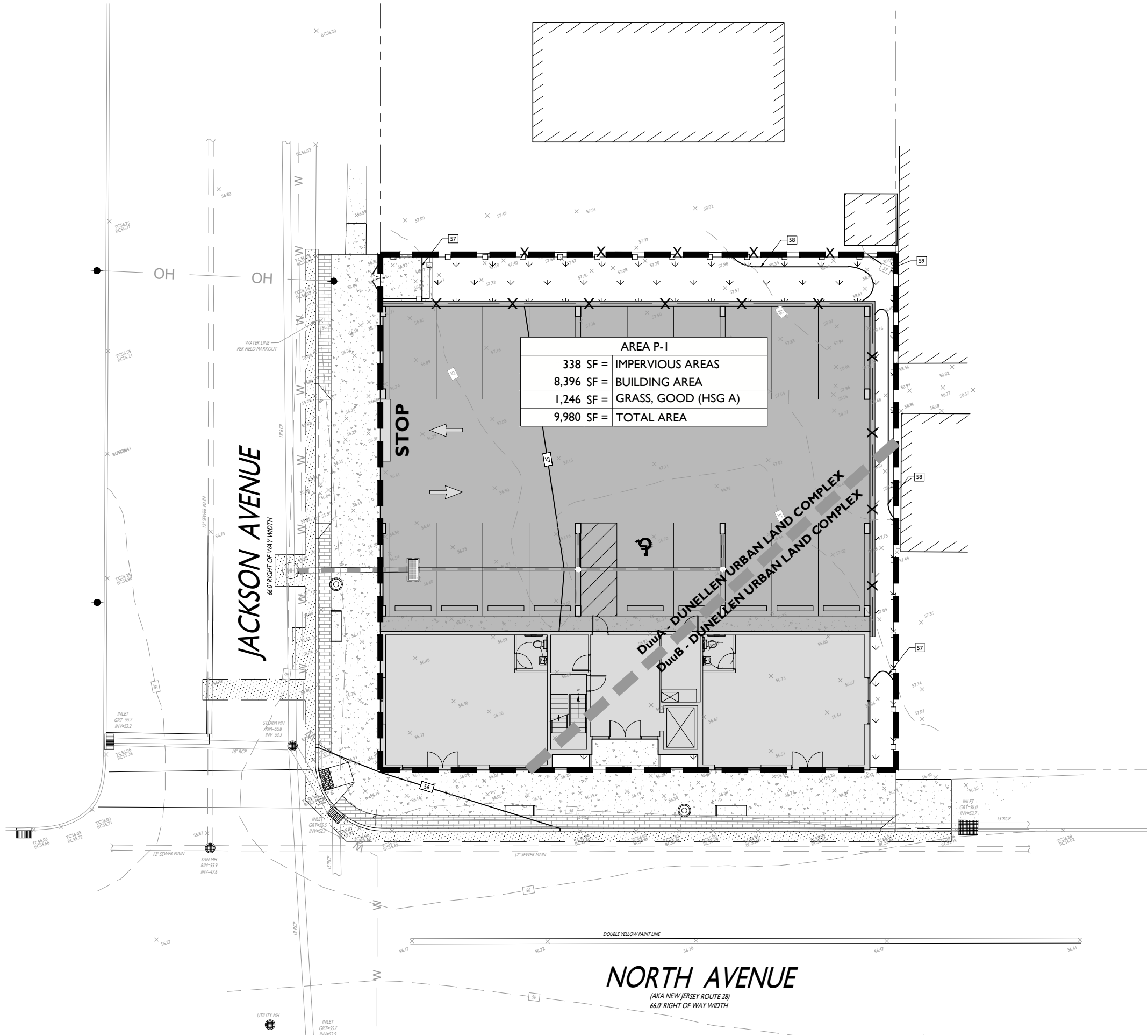


SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	SOIL BOUNDARY LINE
---	EXISTING SITE DRAINAGE AREA

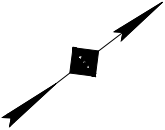


DRAINAGE AREA MAPS		STONEFIELD engineering & design Rutherford, NJ · New York, NY · Boston, MA Princeton, NJ · Tampa, FL · Detroit, MI www.stonefieldeng.com Headquarters: 92 Park Avenue, Rutherford, NJ 07070 Phone 201.340.4468 · Fax 201.340.4472	
COMMUNIPAW ASSOCIATES, LLC PROPOSED MIXED-USE DEVELOPMENT		INITIAL SUBMISSION SET	
MATTHEW J. SECKLER, P.E. NEW JERSEY LICENSE NO. 40731 LICENSED PROFESSIONAL ENGINEER		BY	
NOT APPROVED FOR CONSTRUCTION		DATE	
SCALE: (H) 1" = 20'		07/13/2020	
PROJECT ID: T-19325		ISSUE	
BLOCK 1, LOT 14 150 NORTH AVENUE BOROUGH OF DUNELLEN MIDDLESEX COUNTY, NEW JERSEY		I	
EXISTING DRAINAGE AREA MAP		DESCRIPTION	
SHEET: SW-1			

T:\320\PT-1\9325 Villard Builders - 150 North Avenue, Dunellen, NJ\CADD\Exhibits\2020-04-18 Drainage Area Map.dwg



SYMBOL	DESCRIPTION
	PROPERTY LINE
	SOIL BOUNDARY LINE
	PROPOSED SITE DRAINAGE AREA
	PROPOSED PERVIOUS AREA



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Phone 201.340.4468 · Fax 201.340.4472

COMMUNIPAW ASSOCIATES, LLC
PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1, LOT 14
150 NORTH AVENUE
BOROUGH OF DUNELLEN
MIDDLESEX COUNTY, NEW JERSEY

MATTHEW J. SECKLER, P.E.
NEW JERSEY LICENSE NO. 40731
LICENSED PROFESSIONAL ENGINEER

NOT APPROVED FOR
CONSTRUCTION

SCALE: (H) 1" = 20'

PROJECT ID: T-19325

STONEFIELD
engineering & design

TITLE:
PROPOSED DRAINAGE
AREA MAP

SHEET:
SW-2

INITIAL SUBMISSION SET

DATE

BY

ISSUE

07/13/2020

BJD

I

DESCRIPTION