

STONEFIELD

STORMWATER MANAGEMENT STATEMENT

RE: 55 North Broad LLC
Proposed Chase Bank with Drive-Through
Block 3804 Lot 2.01
55 North Broad Street
Village of Ridgewood, Bergen County, NJ 07451

DATE: 10/11/2024

PROJECT ENGINEER: Aaron Chan, PE
New Jersey Professional Engineer License #57348

INTRODUCTION

This Stormwater Management Statement has been prepared to analyze the anticipated stormwater runoff impacts of the proposed project and discuss the measures proposed to conform to the stormwater management requirements set forth by the Village of Ridgewood, Bergen County Soil Conservation District, and the NJDEP. The subject property is located at 55 North Broad Street in the Village of Ridgewood, Block 3804 Lot 2.01. Appendix A contains the following project maps for reference: aerial and tax/zoning.

The Applicant, Vanrock Properties, is proposing the demolition of a portion of an existing 2-story masonry building and parking lot for the construction of a new Chase Bank with drive-through. The 0.38-acre subject property is currently comprised of primarily (89.4%) impervious surfaces including an 2,087 square-foot building, and associated asphalt pavement in fair condition. The proposed redevelopment includes the construction of a single-story 3,344 square foot Chase Bank with drive-through and associated parking. Existing access to the site is provided via access from North Broad Street, Frankline Avenue and Chestnut Street respectively. Proposed access will feature the closure of the Franklin Avenue access and the same access on North Broad Street and Chestnut Street. An additional one-lane for the drive-through will be adjacent to the Chestnut Street access. Additional site improvements for the project include parking, lighting, soil erosion measures, utilities, stormwater measures, and landscaping.

EXECUTIVE SUMMARY

The project includes 0.42 acres of disturbance, thus classifying the project as a minor redevelopment as indicated in the Village Ordinance and NJAC 7:8. The proposed redevelopment results in a reduction of 215 square feet (0.01%) of impervious surface and does not result in an increase of more than one quarter acre of motor vehicle surface. Peak runoff attenuation is naturally achieved for each of the 2-, 10- and 100-year 24-hour rainfall events due to the decrease in impervious surface. Post-construction runoff hydrographs for each of these events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same events – therefore, the proposed design meets State runoff quantity requirements. Due to the reduction in motor vehicle surface, State runoff quality requirements are not applicable.

Proposed stormwater improvements include an underground pipe network that connects to the existing inlet onsite and ultimately discharges to the existing system within the Chestnut Street.

As the project meets Township and State stormwater management requirements and due to the overall decrease in impervious coverage, no adverse impacts to the municipal drainage system or adjacent properties are anticipated as a result of the proposed redevelopment.

PRE-DEVELOPMENT DRAINAGE CONDITIONS

Under existing conditions drainage sheet flows from west to east, with an existing inlets at the low point of the site. Runoff is collected and ultimately connects to the existing 18" stormwater system within Chestnut Street. A very small portion of the site overland flows to the west curb gutter line of North Broad Street.

Per the National Resource Conservation Service (NRCS) data, the soil underlying the project site consists of the following:

TABLE 1: NRCS PROJECT SOILS

<i>Soil Unit Code</i>	<i>Soil Description</i>	<i>Approximate Project Coverage</i>	<i>Hydrologic Soil Group</i>
UR	Urban Land	100%	Unranked

The hydrologic soil group classification above has been utilized in the landcover data for the stormwater analysis performed on the project. The NRCS Soil Survey can be found in Appendix B of this report.

The following table summarizes the existing drainage area utilized in the stormwater analysis. Drainage area maps for pre-development conditions can be found in Appendix C of this report.

TABLE 2: PRE-DEVELOPMENT DRAINAGE AREAS

<i>Drainage Area</i>	<i>Description</i>	<i>Area Extents</i>	<i>Impervious Area</i>	<i>Time of Concentration</i>
E-1	Existing Runoff to Chestnut Street	26,734 SF	25,489 SF	1.5 Minutes
E-2	Existing Runoff to North Broad Street	761 SF	761 SF	1.0 Minute

PROPOSED DRAINAGE CONDITIONS

The application proposes a single-story 3,344 square foot Chase Bank with drive-through and associated parking. The proposed redevelopment results in a net decrease of impervious area throughout the site. The pre-development impervious area within the limit of disturbance is 16,689 square feet, while the post-development impervious area is 16,474 square feet. This reduction of impervious surface naturally reduces the total runoff produced by the site. Proposed drainage patterns will generally remain the same in the post-development conditions.

Proposed stormwater improvements include a conveyance system consisting of inlets connected via a HDPE pipe network. The system connects to the existing downstream inlet onsite and ultimately discharges to the existing storm system within Chestnut Street.

STORMWATER MANAGEMENT STATEMENT

PROPOSED CHASE BANK WITH DRIVE-THROUGH

OCTOBER 11, 2024

The following table summarizes each proposed drainage area utilized in the stormwater analysis. Drainage area maps for post-development conditions can be found in Appendix C of this report.

TABLE 3: POST-DEVELOPMENT DRAINAGE AREAS

<i>Drainage Area</i>	<i>Description</i>	<i>Area Extents</i>	<i>Impervious Area</i>	<i>Time of Concentration</i>
P-1	Proposed Runoff to Chestnut Street	17,751 SF	15,713 SF	1.5 Minutes
P-2	Proposed Runoff to North Broad Street	761 SF	761 SF	1 Minute

STORMWATER MANAGEMENT ANALYSIS

The project is a redevelopment that reduces overall impervious surface coverage. The overall land disturbance is under an acre and therefore is defined as a minor redevelopment as indicated in the Village Ordinance and NJAC 7:8. However, the project is designed to conform to the stormwater management requirements set forth by the Village of Ridgewood, Bergen County Soil Conservation District, and the NJDEP.

The redevelopment reduces overall impervious surface area while maintaining drainage patterns consistent with pre-redevelopment conditions. As a result of these improvements, peak runoff rates and runoff volume are naturally reduced.

STORMWATER RUNOFF QUANTITY

The project results in a net decrease in impervious surfaces, naturally achieving peak runoff for each of the 2-, 10- and 100-year 24-hour rainfall events. Refer to Tables 4 and 5 wherein the pre- and post-development peak flows are compared.

TABLE 4: QUANTITY COMPARISON POINTS OF INTEREST

<i>Point of Interest</i>	<i>Area Description</i>	<i>Existing Tributary Drainage Areas</i>	<i>Proposed Tributary Drainage Areas</i>
POI-1	Runoff to Chestnut Street	E-1	P-1
POI-1	Runoff to North Broad Street	E-2	P-2

TABLE 5: POI-1 STORMWATER PEAK DISCHARGE & VOLUME ANALYSIS SUMMARY

<i>Storm Event</i>	<i>Pre-Development Peak Discharge</i>	<i>Post-Development Peak Discharge</i>	<i>Pre-Development Runoff Volume</i>	<i>Post-Development Runoff Volume</i>
2-Year (Current)	1.40 CFS	1.40 CFS	4,042 CF	4,042 CF
10-Year (Current)	2.22 CFS	2.22 CFS	6,549 CF	6,549 CF
100-Year (Current)	3.87 CFS	3.87 CFS	11,590 CF	11,590 CF
2-Year (2100)	1.71 CFS	1.71 CFS	4,991 CF	4,991 CF
10-Year (2100)	2.67 CFS	2.67 CFS	7,917 CF	7,917 CF
100-Year (2100)	5.02 CFS	5.02 CFS	15,090 CF	15,090 CF

TABLE 6: POI-2 STORMWATER PEAK DISCHARGE & VOLUME ANALYSIS SUMMARY

<i>Storm Event</i>	<i>Pre-Development Peak Discharge</i>	<i>Post-Development Peak Discharge</i>	<i>Pre-Development Runoff Volume</i>	<i>Post-Development Runoff Volume</i>
2-Year (Current)	0.06 CFS	0.06 CFS	184 CF	184 CF
10-Year (Current)	0.10 CFS	0.10 CFS	290 CF	290 CF
100-Year (Current)	0.17 CFS	0.17 CFS	504 CF	504 CF
2-Year (2100)	0.08 CFS	0.08 CFS	224 CF	224 CF
10-Year (2100)	0.12 CFS	0.12 CFS	348 CF	348 CF
100-Year (2100)	0.22 CFS	0.22 CFS	653 CF	653 CF

As demonstrated in the tables above, peak stormwater discharge rates and runoff volumes are reduced for each storm event. Appendix D demonstrates that post-construction runoff hydrographs for each of these events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same events – therefore, the proposed design meets State runoff quantity requirements per NJAC 7:8. More detailed data can be found in Appendix E.

STORMWATER RUNOFF QUALITY

The redevelopment does not result in an increase of one quarter acre of regulated motor vehicle surface; therefore, stormwater quality requirements per NJAC 7:8 are not applicable. However, the addition of landscaped areas will naturally improve stormwater runoff quality for the proposed site.

GROUNDWATER RECHARGE

The site is located in the “urban redevelopment area”; therefore, groundwater recharge requirements per NJAC 7:8 are not applicable. However, the addition of landscaped areas will naturally improve groundwater recharge rates for the proposed site.

CONCLUSION

The proposed redevelopment meets stormwater management requirements set forth by the Village of Ridgewood, Bergen County Soil Conservation District, and the NJDEP. Proposed additional green space and landscaping will naturally enhance groundwater recharge rates and stormwater runoff quality. Therefore, no adverse impacts to the municipal drainage system or adjacent properties are anticipated as a result of the proposed improvements.

Prepared by:



Aaron Chan, PE

Stonefield Engineering and Design, LLC

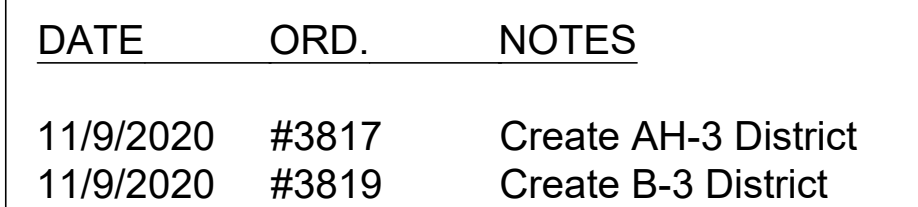
APPENDIX A
PROJECT MAPS



PROJECT SITE

FEBRUARY 7, 2022

 Historic Preservation District
 Historic Preservation Site



APPENDIX B
NRCS COUNTY SOIL SURVEY



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 **Bergen County, New Jersey**



October 11, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Bergen County, New Jersey.....	13
UR—Urban land.....	13
References	14

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bergen County, New Jersey
Survey Area Data: Version 21, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 10, 2022—Oct 16, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UR	Urban land	1.4	100.0%
Totals for Area of Interest		1.4	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.

Custom Soil Resource Report

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.

Bergen County, New Jersey

UR—Urban land

Map Unit Setting

National map unit symbol: b0ss

Elevation: 0 to 170 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

Urban land: 95 percent

Minor components: 5 percent

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

Description of Urban Land

Setting

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components

Udorthents

Percent of map unit: 5 percent

Landform: Low hills

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

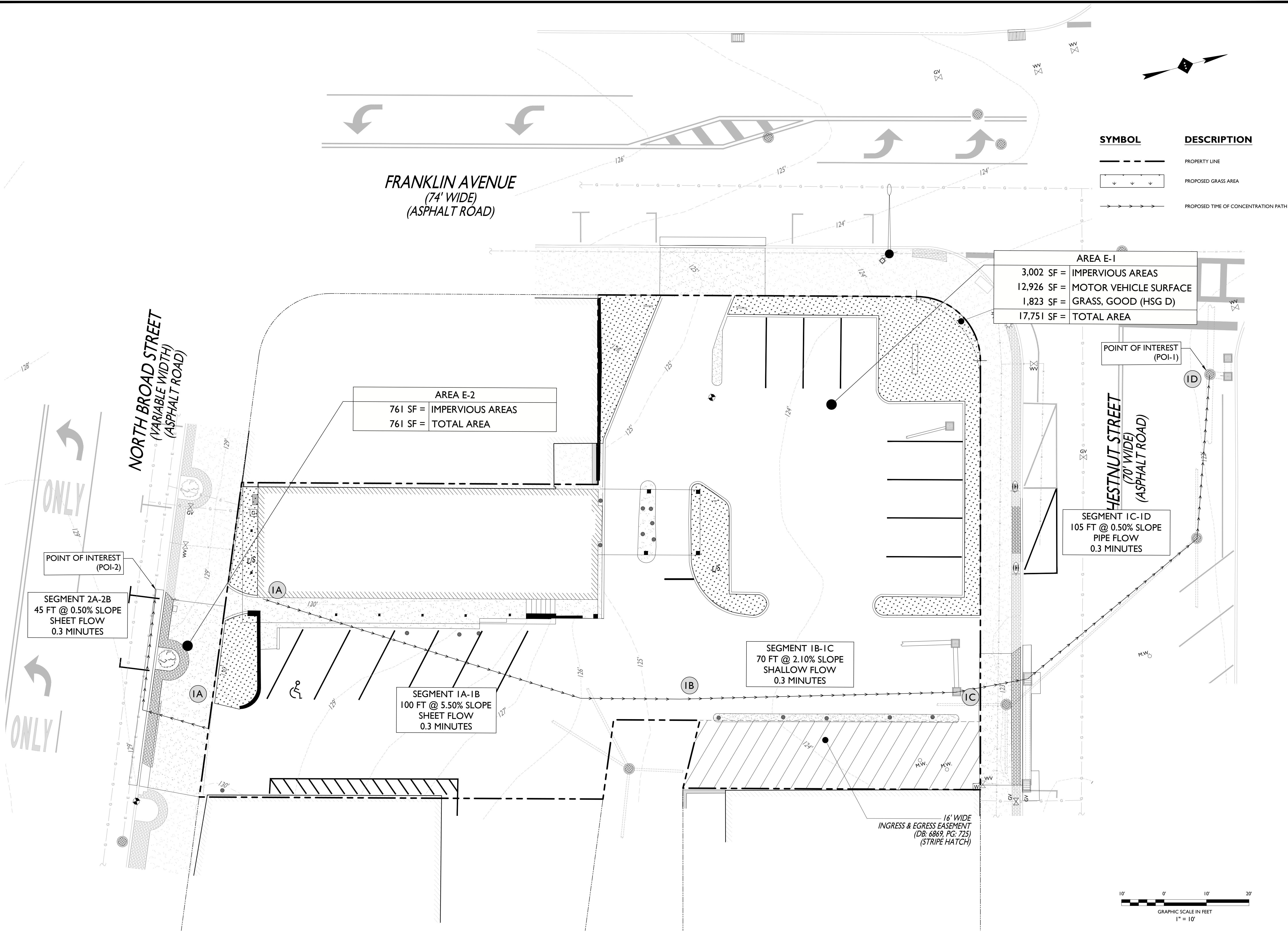
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

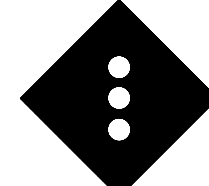
APPENDIX C
DRAINAGE AREA MAPS

Z:\RUTHERFORD\72032\72032.DWG: 15 NORTH BROAD STREET, RIDGEWOOD, NJ\CAD\DWG\DRAINAGE AREA MAP\230372.DWG: 15 NORTH BROAD STREET, RIDGEWOOD, NJ\CAD\DWG\DRAINAGE AREA MAP\230372.DWG: 15 NORTH BROAD STREET, RIDGEWOOD, NJ\CAD\DWG\DRAINAGE AREA MAP\230372.DWG



FOR MUNICIPAL SUBMISSION		DESCRIPTION	
DATE	BY	DATE	BY
10/1/2024			
1			

NOT APPROVED FOR CONSTRUCTION

**STONEFIELD**
engineering & design

Rutherford, NJ · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
15 Spring Street, Princeton, NJ 08542
Phone 609.362.6900

PRELIMINARY & FINAL MAJOR SITE PLAN
JP MORGAN CHASE BANK
PROPOSED BANK WITH DRIVE THROUGH

BLOCK 3804, LOT 2.01
55 NORTH BROAD STREET
VILLAGE OF RIDGEWOOD
BERGEN COUNTY, NJ

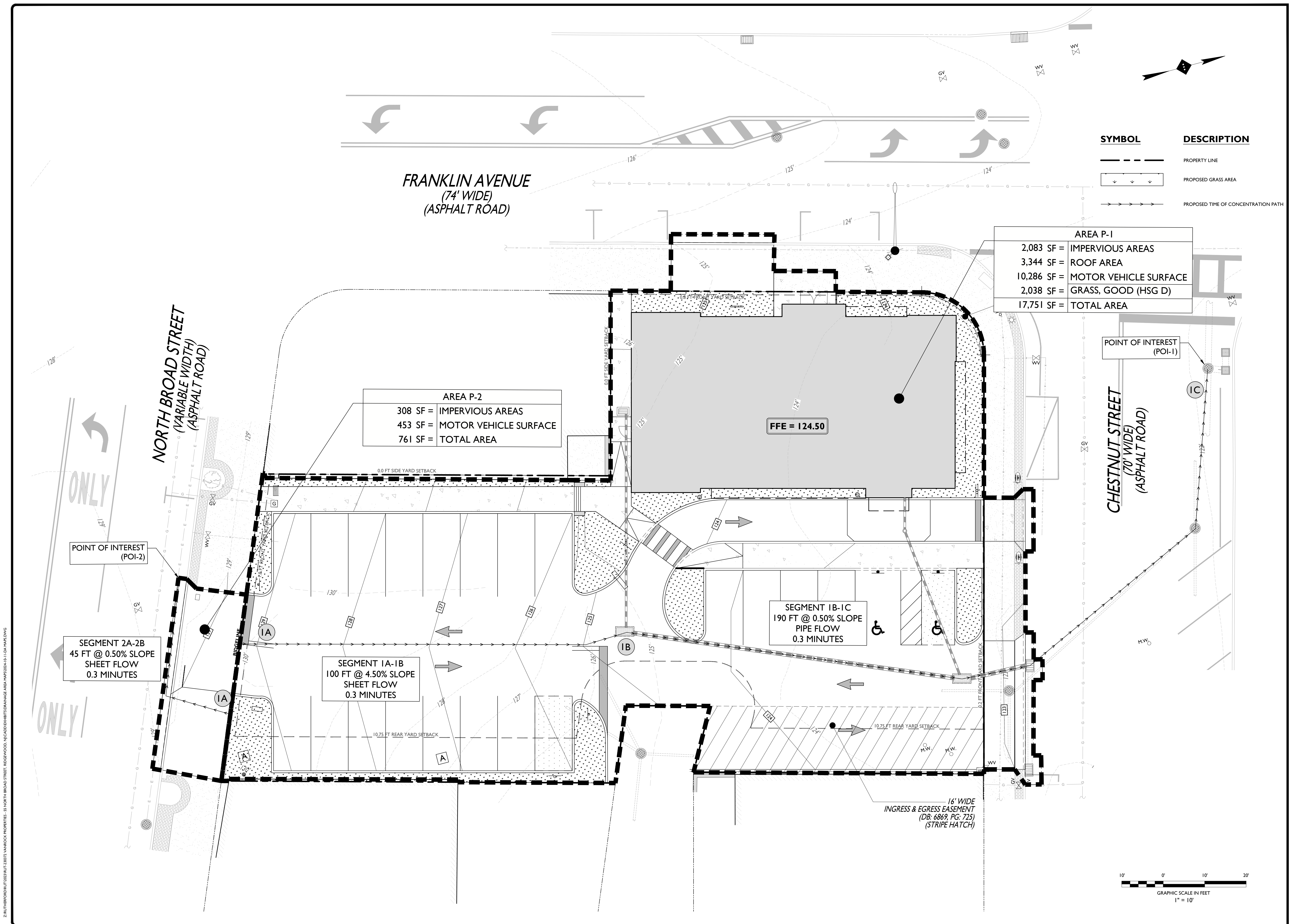
AARON CHAN, P.E.
NEW JERSEY LICENSE No. 57348
LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**
engineering & design

SCALE: 1" = 10' PROJECT ID: RUT-230372

TITLE:
EXISTING DRAINAGE AREA MAP

DRAWING:
1 OF 2

[illegible]

NOT APPROVED FOR CONSTRUCTION

Rutherford, NJ • New York, NY • Salem, MA
Princeton, NJ • Tampa, FL • Detroit, MI

www.stonefieldeng.com

15 Spring Street, Princeton, NJ 08542

Phone 609.362.6900

PRELIMINARY & FINAL MAJOR SITE PLAN

JPMORGAN CHASE BANK

**PROPOSED BANK WITH
DRIVE THROUGH**

**BLOCK 3804, LOT 2.01
55 NORTH BROAD STREET
VILLAGE OF RIDGEWOOD
BERGEN COUNTY, NJ**

AARON CHAN, P.E.
NEW JERSEY LICENSE No. 57341
LICENSED PROFESSIONAL ENGINEER



STONEFIELD
engineering & design

SCALE:	1" = 10'	PROJECT ID: RUT-230372
--------	----------	------------------------

TITLE:

PROPOSED DRAINAGE AREA MAP

DRAWING:

2 OF 2

APPENDIX D
POINT OF INTEREST COMPARISON HYDROGRAPHS



Existing Runoff to
Chestnut Street



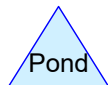
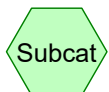
Proposed Runoff to
Chestnut Street



Existing Runoff to North
Broad Street



Proposed Runoff to
North Broad Street



Routing Diagram for 2024-10-11_Ridgewood, NJ

Prepared by Stonefield Engineering & Design, Printed 10/11/2024
HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

2024-10-11_Ridgewood, NJNOAA 24-hr D **2-Year Current Rainfall=3.40"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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)
5.00	0.01	0.01	10.30	0.06	0.06	15.60	0.04	0.04
5.10	0.01	0.01	10.40	0.06	0.06	15.70	0.04	0.04
5.20	0.01	0.01	10.50	0.07	0.07	15.80	0.04	0.04
5.30	0.01	0.01	10.60	0.07	0.07	15.90	0.04	0.04
5.40	0.01	0.01	10.70	0.08	0.08	16.00	0.04	0.04
5.50	0.01	0.01	10.80	0.09	0.09	16.10	0.04	0.04
5.60	0.01	0.01	10.90	0.10	0.10	16.20	0.04	0.04
5.70	0.01	0.01	11.00	0.10	0.10	16.30	0.04	0.04
5.80	0.01	0.01	11.10	0.12	0.12	16.40	0.03	0.03
5.90	0.01	0.01	11.20	0.13	0.13	16.50	0.03	0.03
6.00	0.01	0.01	11.30	0.14	0.14	16.60	0.03	0.03
6.10	0.01	0.01	11.40	0.16	0.16	16.70	0.03	0.03
6.20	0.01	0.01	11.50	0.18	0.18	16.80	0.03	0.03
6.30	0.02	0.02	11.60	0.23	0.23	16.90	0.03	0.03
6.40	0.02	0.02	11.70	0.26	0.26	17.00	0.03	0.03
6.50	0.02	0.02	11.80	0.35	0.35	17.10	0.03	0.03
6.60	0.02	0.02	11.90	0.51	0.51	17.20	0.03	0.03
6.70	0.02	0.02	12.00	0.89	0.89	17.30	0.03	0.03
6.80	0.02	0.02	12.10	1.31	1.31	17.40	0.03	0.03
6.90	0.02	0.02	12.20	0.48	0.48	17.50	0.03	0.03
7.00	0.02	0.02	12.30	0.34	0.34	17.60	0.03	0.03
7.10	0.02	0.02	12.40	0.26	0.26	17.70	0.03	0.03
7.20	0.02	0.02	12.50	0.24	0.24	17.80	0.03	0.03
7.30	0.02	0.02	12.60	0.18	0.18	17.90	0.03	0.03
7.40	0.02	0.02	12.70	0.17	0.17	18.00	0.02	0.02
7.50	0.02	0.02	12.80	0.15	0.15	18.10	0.02	0.02
7.60	0.02	0.02	12.90	0.14	0.14	18.20	0.02	0.02
7.70	0.02	0.02	13.00	0.13	0.13	18.30	0.02	0.02
7.80	0.02	0.02	13.10	0.11	0.11	18.40	0.02	0.02
7.90	0.03	0.03	13.20	0.11	0.11	18.50	0.02	0.02
8.00	0.03	0.03	13.30	0.10	0.10	18.60	0.02	0.02
8.10	0.03	0.03	13.40	0.09	0.09	18.70	0.02	0.02
8.20	0.03	0.03	13.50	0.08	0.08	18.80	0.02	0.02
8.30	0.03	0.03	13.60	0.07	0.07	18.90	0.02	0.02
8.40	0.03	0.03	13.70	0.07	0.07	19.00	0.02	0.02
8.50	0.03	0.03	13.80	0.07	0.07	19.10	0.02	0.02
8.60	0.03	0.03	13.90	0.07	0.07	19.20	0.02	0.02
8.70	0.03	0.03	14.00	0.07	0.07	19.30	0.02	0.02
8.80	0.03	0.03	14.10	0.06	0.06	19.40	0.02	0.02
8.90	0.03	0.03	14.20	0.06	0.06	19.50	0.02	0.02
9.00	0.03	0.03	14.30	0.06	0.06	19.60	0.02	0.02
9.10	0.04	0.04	14.40	0.06	0.06	19.70	0.02	0.02
9.20	0.04	0.04	14.50	0.06	0.06	19.80	0.02	0.02
9.30	0.04	0.04	14.60	0.05	0.05	19.90	0.02	0.02
9.40	0.04	0.04	14.70	0.05	0.05	20.00	0.02	0.02
9.50	0.04	0.04	14.80	0.05	0.05			
9.60	0.05	0.05	14.90	0.05	0.05			
9.70	0.05	0.05	15.00	0.04	0.04			
9.80	0.05	0.05	15.10	0.04	0.04			
9.90	0.05	0.05	15.20	0.04	0.04			
10.00	0.05	0.05	15.30	0.04	0.04			
10.10	0.06	0.06	15.40	0.04	0.04			
10.20	0.06	0.06	15.50	0.04	0.04			

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Future Rainfall=4.11"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	2.65	0.00	0.00	5.30	0.02	0.02
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.02	0.02
0.10	0.00	0.00	2.75	0.01	0.01	5.40	0.02	0.02
0.15	0.00	0.00	2.80	0.01	0.01	5.45	0.02	0.02
0.20	0.00	0.00	2.85	0.01	0.01	5.50	0.02	0.02
0.25	0.00	0.00	2.90	0.01	0.01	5.55	0.02	0.02
0.30	0.00	0.00	2.95	0.01	0.01	5.60	0.02	0.02
0.35	0.00	0.00	3.00	0.01	0.01	5.65	0.02	0.02
0.40	0.00	0.00	3.05	0.01	0.01	5.70	0.02	0.02
0.45	0.00	0.00	3.10	0.01	0.01	5.75	0.02	0.02
0.50	0.00	0.00	3.15	0.01	0.01	5.80	0.02	0.02
0.55	0.00	0.00	3.20	0.01	0.01	5.85	0.02	0.02
0.60	0.00	0.00	3.25	0.01	0.01	5.90	0.02	0.02
0.65	0.00	0.00	3.30	0.01	0.01	5.95	0.02	0.02
0.70	0.00	0.00	3.35	0.01	0.01	6.00	0.02	0.02
0.75	0.00	0.00	3.40	0.01	0.01	6.05	0.02	0.02
0.80	0.00	0.00	3.45	0.01	0.01	6.10	0.02	0.02
0.85	0.00	0.00	3.50	0.01	0.01	6.15	0.02	0.02
0.90	0.00	0.00	3.55	0.01	0.01	6.20	0.02	0.02
0.95	0.00	0.00	3.60	0.01	0.01	6.25	0.02	0.02
1.00	0.00	0.00	3.65	0.01	0.01	6.30	0.02	0.02
1.05	0.00	0.00	3.70	0.01	0.01	6.35	0.02	0.02
1.10	0.00	0.00	3.75	0.01	0.01	6.40	0.02	0.02
1.15	0.00	0.00	3.80	0.01	0.01	6.45	0.02	0.02
1.20	0.00	0.00	3.85	0.01	0.01	6.50	0.02	0.02
1.25	0.00	0.00	3.90	0.01	0.01	6.55	0.02	0.02
1.30	0.00	0.00	3.95	0.01	0.01	6.60	0.02	0.02
1.35	0.00	0.00	4.00	0.01	0.01	6.65	0.02	0.02
1.40	0.00	0.00	4.05	0.01	0.01	6.70	0.02	0.02
1.45	0.00	0.00	4.10	0.01	0.01	6.75	0.02	0.02
1.50	0.00	0.00	4.15	0.01	0.01	6.80	0.02	0.02
1.55	0.00	0.00	4.20	0.01	0.01	6.85	0.03	0.03
1.60	0.00	0.00	4.25	0.01	0.01	6.90	0.03	0.03
1.65	0.00	0.00	4.30	0.01	0.01	6.95	0.03	0.03
1.70	0.00	0.00	4.35	0.01	0.01	7.00	0.03	0.03
1.75	0.00	0.00	4.40	0.01	0.01	7.05	0.03	0.03
1.80	0.00	0.00	4.45	0.01	0.01	7.10	0.03	0.03
1.85	0.00	0.00	4.50	0.01	0.01	7.15	0.03	0.03
1.90	0.00	0.00	4.55	0.01	0.01	7.20	0.03	0.03
1.95	0.00	0.00	4.60	0.01	0.01	7.25	0.03	0.03
2.00	0.00	0.00	4.65	0.01	0.01	7.30	0.03	0.03
2.05	0.00	0.00	4.70	0.01	0.01	7.35	0.03	0.03
2.10	0.00	0.00	4.75	0.01	0.01	7.40	0.03	0.03
2.15	0.00	0.00	4.80	0.01	0.01	7.45	0.03	0.03
2.20	0.00	0.00	4.85	0.01	0.01	7.50	0.03	0.03
2.25	0.00	0.00	4.90	0.01	0.01	7.55	0.03	0.03
2.30	0.00	0.00	4.95	0.01	0.01	7.60	0.03	0.03
2.35	0.00	0.00	5.00	0.01	0.01	7.65	0.03	0.03
2.40	0.00	0.00	5.05	0.02	0.02	7.70	0.03	0.03
2.45	0.00	0.00	5.10	0.02	0.02	7.75	0.03	0.03
2.50	0.00	0.00	5.15	0.02	0.02	7.80	0.03	0.03
2.55	0.00	0.00	5.20	0.02	0.02	7.85	0.03	0.03
2.60	0.00	0.00	5.25	0.02	0.02	7.90	0.03	0.03

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Future Rainfall=4.11"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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)
7.95	0.03	0.03	10.60	0.09	0.09	13.25	0.12	0.12
8.00	0.03	0.03	10.65	0.10	0.10	13.30	0.12	0.12
8.05	0.03	0.03	10.70	0.10	0.10	13.35	0.11	0.11
8.10	0.04	0.04	10.75	0.11	0.11	13.40	0.11	0.11
8.15	0.04	0.04	10.80	0.11	0.11	13.45	0.10	0.10
8.20	0.04	0.04	10.85	0.12	0.12	13.50	0.10	0.10
8.25	0.04	0.04	10.90	0.12	0.12	13.55	0.09	0.09
8.30	0.04	0.04	10.95	0.13	0.13	13.60	0.09	0.09
8.35	0.04	0.04	11.00	0.13	0.13	13.65	0.09	0.09
8.40	0.04	0.04	11.05	0.14	0.14	13.70	0.09	0.09
8.45	0.04	0.04	11.10	0.15	0.15	13.75	0.09	0.09
8.50	0.04	0.04	11.15	0.16	0.16	13.80	0.09	0.09
8.55	0.04	0.04	11.20	0.16	0.16	13.85	0.08	0.08
8.60	0.04	0.04	11.25	0.18	0.18	13.90	0.08	0.08
8.65	0.04	0.04	11.30	0.18	0.18	13.95	0.08	0.08
8.70	0.04	0.04	11.35	0.19	0.19	14.00	0.08	0.08
8.75	0.04	0.04	11.40	0.20	0.20	14.05	0.08	0.08
8.80	0.04	0.04	11.45	0.21	0.21	14.10	0.08	0.08
8.85	0.04	0.04	11.50	0.22	0.22	14.15	0.08	0.08
8.90	0.04	0.04	11.55	0.28	0.28	14.20	0.07	0.07
8.95	0.04	0.04	11.60	0.29	0.29	14.25	0.07	0.07
9.00	0.04	0.04	11.65	0.30	0.30	14.30	0.07	0.07
9.05	0.04	0.04	11.70	0.32	0.32	14.35	0.07	0.07
9.10	0.05	0.05	11.75	0.41	0.41	14.40	0.07	0.07
9.15	0.05	0.05	11.80	0.44	0.44	14.45	0.07	0.07
9.20	0.05	0.05	11.85	0.57	0.57	14.50	0.07	0.07
9.25	0.05	0.05	11.90	0.63	0.63	14.55	0.06	0.06
9.30	0.05	0.05	11.95	0.99	0.99	14.60	0.06	0.06
9.35	0.05	0.05	12.00	1.09	1.09	14.65	0.06	0.06
9.40	0.05	0.05	12.05	1.66	1.66	14.70	0.06	0.06
9.45	0.05	0.05	12.10	1.60	1.60	14.75	0.06	0.06
9.50	0.06	0.06	12.15	0.68	0.68	14.80	0.06	0.06
9.55	0.06	0.06	12.20	0.58	0.58	14.85	0.06	0.06
9.60	0.06	0.06	12.25	0.44	0.44	14.90	0.06	0.06
9.65	0.06	0.06	12.30	0.42	0.42	14.95	0.05	0.05
9.70	0.06	0.06	12.35	0.32	0.32	15.00	0.05	0.05
9.75	0.06	0.06	12.40	0.31	0.31	15.05	0.05	0.05
9.80	0.06	0.06	12.45	0.30	0.30	15.10	0.05	0.05
9.85	0.07	0.07	12.50	0.29	0.29	15.15	0.05	0.05
9.90	0.07	0.07	12.55	0.23	0.23	15.20	0.05	0.05
9.95	0.07	0.07	12.60	0.22	0.22	15.25	0.05	0.05
10.00	0.07	0.07	12.65	0.21	0.21	15.30	0.05	0.05
10.05	0.07	0.07	12.70	0.20	0.20	15.35	0.05	0.05
10.10	0.07	0.07	12.75	0.19	0.19	15.40	0.05	0.05
10.15	0.07	0.07	12.80	0.19	0.19	15.45	0.05	0.05
10.20	0.07	0.07	12.85	0.17	0.17	15.50	0.05	0.05
10.25	0.08	0.08	12.90	0.17	0.17	15.55	0.05	0.05
10.30	0.08	0.08	12.95	0.16	0.16	15.60	0.05	0.05
10.35	0.08	0.08	13.00	0.15	0.15	15.65	0.05	0.05
10.40	0.08	0.08	13.05	0.14	0.14	15.70	0.05	0.05
10.45	0.08	0.08	13.10	0.14	0.14	15.75	0.05	0.05
10.50	0.08	0.08	13.15	0.13	0.13	15.80	0.05	0.05
10.55	0.09	0.09	13.20	0.13	0.13	15.85	0.05	0.05

2024-10-11_Ridgewood, NJNOAA 24-hr D **2-Year Future Rainfall=4.11"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	18.55	0.03	0.03	21.20	0.02	0.02
15.95	0.04	0.04	18.60	0.03	0.03	21.25	0.02	0.02
16.00	0.04	0.04	18.65	0.03	0.03	21.30	0.02	0.02
16.05	0.04	0.04	18.70	0.03	0.03	21.35	0.02	0.02
16.10	0.04	0.04	18.75	0.03	0.03	21.40	0.02	0.02
16.15	0.04	0.04	18.80	0.03	0.03	21.45	0.02	0.02
16.20	0.04	0.04	18.85	0.03	0.03	21.50	0.02	0.02
16.25	0.04	0.04	18.90	0.03	0.03	21.55	0.02	0.02
16.30	0.04	0.04	18.95	0.03	0.03	21.60	0.02	0.02
16.35	0.04	0.04	19.00	0.03	0.03	21.65	0.02	0.02
16.40	0.04	0.04	19.05	0.03	0.03	21.70	0.02	0.02
16.45	0.04	0.04	19.10	0.03	0.03	21.75	0.02	0.02
16.50	0.04	0.04	19.15	0.03	0.03	21.80	0.02	0.02
16.55	0.04	0.04	19.20	0.03	0.03	21.85	0.02	0.02
16.60	0.04	0.04	19.25	0.03	0.03	21.90	0.02	0.02
16.65	0.04	0.04	19.30	0.03	0.03	21.95	0.02	0.02
16.70	0.04	0.04	19.35	0.03	0.03	22.00	0.02	0.02
16.75	0.04	0.04	19.40	0.03	0.03	22.05	0.02	0.02
16.80	0.04	0.04	19.45	0.03	0.03	22.10	0.02	0.02
16.85	0.04	0.04	19.50	0.03	0.03	22.15	0.02	0.02
16.90	0.04	0.04	19.55	0.03	0.03	22.20	0.02	0.02
16.95	0.04	0.04	19.60	0.03	0.03	22.25	0.02	0.02
17.00	0.04	0.04	19.65	0.03	0.03	22.30	0.02	0.02
17.05	0.04	0.04	19.70	0.03	0.03	22.35	0.02	0.02
17.10	0.04	0.04	19.75	0.03	0.03	22.40	0.02	0.02
17.15	0.04	0.04	19.80	0.03	0.03	22.45	0.02	0.02
17.20	0.04	0.04	19.85	0.03	0.03	22.50	0.02	0.02
17.25	0.04	0.04	19.90	0.03	0.03	22.55	0.02	0.02
17.30	0.04	0.04	19.95	0.03	0.03	22.60	0.02	0.02
17.35	0.03	0.03	20.00	0.03	0.03	22.65	0.02	0.02
17.40	0.03	0.03	20.05	0.03	0.03	22.70	0.02	0.02
17.45	0.03	0.03	20.10	0.03	0.03	22.75	0.02	0.02
17.50	0.03	0.03	20.15	0.03	0.03	22.80	0.02	0.02
17.55	0.03	0.03	20.20	0.03	0.03	22.85	0.02	0.02
17.60	0.03	0.03	20.25	0.03	0.03	22.90	0.02	0.02
17.65	0.03	0.03	20.30	0.03	0.03	22.95	0.02	0.02
17.70	0.03	0.03	20.35	0.03	0.03	23.00	0.02	0.02
17.75	0.03	0.03	20.40	0.03	0.03	23.05	0.02	0.02
17.80	0.03	0.03	20.45	0.02	0.02	23.10	0.02	0.02
17.85	0.03	0.03	20.50	0.02	0.02	23.15	0.02	0.02
17.90	0.03	0.03	20.55	0.02	0.02	23.20	0.02	0.02
17.95	0.03	0.03	20.60	0.02	0.02	23.25	0.02	0.02
18.00	0.03	0.03	20.65	0.02	0.02	23.30	0.02	0.02
18.05	0.03	0.03	20.70	0.02	0.02	23.35	0.02	0.02
18.10	0.03	0.03	20.75	0.02	0.02	23.40	0.02	0.02
18.15	0.03	0.03	20.80	0.02	0.02	23.45	0.02	0.02
18.20	0.03	0.03	20.85	0.02	0.02	23.50	0.02	0.02
18.25	0.03	0.03	20.90	0.02	0.02	23.55	0.02	0.02
18.30	0.03	0.03	20.95	0.02	0.02	23.60	0.02	0.02
18.35	0.03	0.03	21.00	0.02	0.02	23.65	0.02	0.02
18.40	0.03	0.03	21.05	0.02	0.02	23.70	0.02	0.02
18.45	0.03	0.03	21.10	0.02	0.02	23.75	0.02	0.02
18.50	0.03	0.03	21.15	0.02	0.02	23.80	0.02	0.02

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **2-Year Future Rainfall=4.11"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
23.85	0.02	0.02
23.90	0.02	0.02
23.95	0.02	0.02
24.00	0.02	0.02

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Current Rainfall=3.40"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.00	0.00
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.00	0.00
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.00	0.00
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.00	0.00
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.00	0.00
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.00	0.00
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.00	0.00
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Current Rainfall=3.40"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.00	0.00	10.60	0.00	0.00	13.25	0.00	0.00
8.00	0.00	0.00	10.65	0.00	0.00	13.30	0.00	0.00
8.05	0.00	0.00	10.70	0.00	0.00	13.35	0.00	0.00
8.10	0.00	0.00	10.75	0.00	0.00	13.40	0.00	0.00
8.15	0.00	0.00	10.80	0.00	0.00	13.45	0.00	0.00
8.20	0.00	0.00	10.85	0.00	0.00	13.50	0.00	0.00
8.25	0.00	0.00	10.90	0.00	0.00	13.55	0.00	0.00
8.30	0.00	0.00	10.95	0.00	0.00	13.60	0.00	0.00
8.35	0.00	0.00	11.00	0.00	0.00	13.65	0.00	0.00
8.40	0.00	0.00	11.05	0.01	0.01	13.70	0.00	0.00
8.45	0.00	0.00	11.10	0.01	0.01	13.75	0.00	0.00
8.50	0.00	0.00	11.15	0.01	0.01	13.80	0.00	0.00
8.55	0.00	0.00	11.20	0.01	0.01	13.85	0.00	0.00
8.60	0.00	0.00	11.25	0.01	0.01	13.90	0.00	0.00
8.65	0.00	0.00	11.30	0.01	0.01	13.95	0.00	0.00
8.70	0.00	0.00	11.35	0.01	0.01	14.00	0.00	0.00
8.75	0.00	0.00	11.40	0.01	0.01	14.05	0.00	0.00
8.80	0.00	0.00	11.45	0.01	0.01	14.10	0.00	0.00
8.85	0.00	0.00	11.50	0.01	0.01	14.15	0.00	0.00
8.90	0.00	0.00	11.55	0.01	0.01	14.20	0.00	0.00
8.95	0.00	0.00	11.60	0.01	0.01	14.25	0.00	0.00
9.00	0.00	0.00	11.65	0.01	0.01	14.30	0.00	0.00
9.05	0.00	0.00	11.70	0.01	0.01	14.35	0.00	0.00
9.10	0.00	0.00	11.75	0.02	0.02	14.40	0.00	0.00
9.15	0.00	0.00	11.80	0.02	0.02	14.45	0.00	0.00
9.20	0.00	0.00	11.85	0.02	0.02	14.50	0.00	0.00
9.25	0.00	0.00	11.90	0.02	0.02	14.55	0.00	0.00
9.30	0.00	0.00	11.95	0.04	0.04	14.60	0.00	0.00
9.35	0.00	0.00	12.00	0.04	0.04	14.65	0.00	0.00
9.40	0.00	0.00	12.05	0.06	0.06	14.70	0.00	0.00
9.45	0.00	0.00	12.10	0.05	0.05	14.75	0.00	0.00
9.50	0.00	0.00	12.15	0.02	0.02	14.80	0.00	0.00
9.55	0.00	0.00	12.20	0.02	0.02	14.85	0.00	0.00
9.60	0.00	0.00	12.25	0.02	0.02	14.90	0.00	0.00
9.65	0.00	0.00	12.30	0.01	0.01	14.95	0.00	0.00
9.70	0.00	0.00	12.35	0.01	0.01	15.00	0.00	0.00
9.75	0.00	0.00	12.40	0.01	0.01	15.05	0.00	0.00
9.80	0.00	0.00	12.45	0.01	0.01	15.10	0.00	0.00
9.85	0.00	0.00	12.50	0.01	0.01	15.15	0.00	0.00
9.90	0.00	0.00	12.55	0.01	0.01	15.20	0.00	0.00
9.95	0.00	0.00	12.60	0.01	0.01	15.25	0.00	0.00
10.00	0.00	0.00	12.65	0.01	0.01	15.30	0.00	0.00
10.05	0.00	0.00	12.70	0.01	0.01	15.35	0.00	0.00
10.10	0.00	0.00	12.75	0.01	0.01	15.40	0.00	0.00
10.15	0.00	0.00	12.80	0.01	0.01	15.45	0.00	0.00
10.20	0.00	0.00	12.85	0.01	0.01	15.50	0.00	0.00
10.25	0.00	0.00	12.90	0.01	0.01	15.55	0.00	0.00
10.30	0.00	0.00	12.95	0.01	0.01	15.60	0.00	0.00
10.35	0.00	0.00	13.00	0.01	0.01	15.65	0.00	0.00
10.40	0.00	0.00	13.05	0.00	0.00	15.70	0.00	0.00
10.45	0.00	0.00	13.10	0.00	0.00	15.75	0.00	0.00
10.50	0.00	0.00	13.15	0.00	0.00	15.80	0.00	0.00
10.55	0.00	0.00	13.20	0.00	0.00	15.85	0.00	0.00

2024-10-11_Ridgewood, NJNOAA 24-hr D **2-Year Current Rainfall=3.40"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.00	0.00	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.00	0.00	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.00	0.00	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.00	0.00	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.00	0.00	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.00	0.00	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.00	0.00	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.00	0.00	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.00	0.00	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.00	0.00	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.00	0.00	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.00	0.00	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.00	0.00	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.00	0.00	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **2-Year Current Rainfall=3.40"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time	Subcat E-2	Subcat P-2
(hours)	(cfs)	(cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Future Rainfall=4.11"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.00	0.00
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.00	0.00
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.00	0.00
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.00	0.00
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.00	0.00
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.00	0.00
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.00	0.00
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 2-Year Future Rainfall=4.11"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.00	0.00	10.60	0.00	0.00	13.25	0.01	0.01
8.00	0.00	0.00	10.65	0.00	0.00	13.30	0.01	0.01
8.05	0.00	0.00	10.70	0.00	0.00	13.35	0.00	0.00
8.10	0.00	0.00	10.75	0.01	0.01	13.40	0.00	0.00
8.15	0.00	0.00	10.80	0.01	0.01	13.45	0.00	0.00
8.20	0.00	0.00	10.85	0.01	0.01	13.50	0.00	0.00
8.25	0.00	0.00	10.90	0.01	0.01	13.55	0.00	0.00
8.30	0.00	0.00	10.95	0.01	0.01	13.60	0.00	0.00
8.35	0.00	0.00	11.00	0.01	0.01	13.65	0.00	0.00
8.40	0.00	0.00	11.05	0.01	0.01	13.70	0.00	0.00
8.45	0.00	0.00	11.10	0.01	0.01	13.75	0.00	0.00
8.50	0.00	0.00	11.15	0.01	0.01	13.80	0.00	0.00
8.55	0.00	0.00	11.20	0.01	0.01	13.85	0.00	0.00
8.60	0.00	0.00	11.25	0.01	0.01	13.90	0.00	0.00
8.65	0.00	0.00	11.30	0.01	0.01	13.95	0.00	0.00
8.70	0.00	0.00	11.35	0.01	0.01	14.00	0.00	0.00
8.75	0.00	0.00	11.40	0.01	0.01	14.05	0.00	0.00
8.80	0.00	0.00	11.45	0.01	0.01	14.10	0.00	0.00
8.85	0.00	0.00	11.50	0.01	0.01	14.15	0.00	0.00
8.90	0.00	0.00	11.55	0.01	0.01	14.20	0.00	0.00
8.95	0.00	0.00	11.60	0.01	0.01	14.25	0.00	0.00
9.00	0.00	0.00	11.65	0.01	0.01	14.30	0.00	0.00
9.05	0.00	0.00	11.70	0.01	0.01	14.35	0.00	0.00
9.10	0.00	0.00	11.75	0.02	0.02	14.40	0.00	0.00
9.15	0.00	0.00	11.80	0.02	0.02	14.45	0.00	0.00
9.20	0.00	0.00	11.85	0.03	0.03	14.50	0.00	0.00
9.25	0.00	0.00	11.90	0.03	0.03	14.55	0.00	0.00
9.30	0.00	0.00	11.95	0.04	0.04	14.60	0.00	0.00
9.35	0.00	0.00	12.00	0.05	0.05	14.65	0.00	0.00
9.40	0.00	0.00	12.05	0.07	0.07	14.70	0.00	0.00
9.45	0.00	0.00	12.10	0.07	0.07	14.75	0.00	0.00
9.50	0.00	0.00	12.15	0.03	0.03	14.80	0.00	0.00
9.55	0.00	0.00	12.20	0.02	0.02	14.85	0.00	0.00
9.60	0.00	0.00	12.25	0.02	0.02	14.90	0.00	0.00
9.65	0.00	0.00	12.30	0.02	0.02	14.95	0.00	0.00
9.70	0.00	0.00	12.35	0.01	0.01	15.00	0.00	0.00
9.75	0.00	0.00	12.40	0.01	0.01	15.05	0.00	0.00
9.80	0.00	0.00	12.45	0.01	0.01	15.10	0.00	0.00
9.85	0.00	0.00	12.50	0.01	0.01	15.15	0.00	0.00
9.90	0.00	0.00	12.55	0.01	0.01	15.20	0.00	0.00
9.95	0.00	0.00	12.60	0.01	0.01	15.25	0.00	0.00
10.00	0.00	0.00	12.65	0.01	0.01	15.30	0.00	0.00
10.05	0.00	0.00	12.70	0.01	0.01	15.35	0.00	0.00
10.10	0.00	0.00	12.75	0.01	0.01	15.40	0.00	0.00
10.15	0.00	0.00	12.80	0.01	0.01	15.45	0.00	0.00
10.20	0.00	0.00	12.85	0.01	0.01	15.50	0.00	0.00
10.25	0.00	0.00	12.90	0.01	0.01	15.55	0.00	0.00
10.30	0.00	0.00	12.95	0.01	0.01	15.60	0.00	0.00
10.35	0.00	0.00	13.00	0.01	0.01	15.65	0.00	0.00
10.40	0.00	0.00	13.05	0.01	0.01	15.70	0.00	0.00
10.45	0.00	0.00	13.10	0.01	0.01	15.75	0.00	0.00
10.50	0.00	0.00	13.15	0.01	0.01	15.80	0.00	0.00
10.55	0.00	0.00	13.20	0.01	0.01	15.85	0.00	0.00

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.00	0.00	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.00	0.00	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.00	0.00	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.00	0.00	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.00	0.00	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.00	0.00	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.00	0.00	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.00	0.00	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.00	0.00	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.00	0.00	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.00	0.00	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.00	0.00	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.00	0.00	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.00	0.00	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **2-Year Future Rainfall=4.11"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time	Subcat E-2	Subcat P-2
(hours)	(cfs)	(cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

2024-10-11_Ridgewood, NJNOAA 24-hr D **10-Year Current Rainfall=5.28"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	2.65	0.01	0.01	5.30	0.02	0.02
0.05	0.00	0.00	2.70	0.01	0.01	5.35	0.02	0.02
0.10	0.00	0.00	2.75	0.01	0.01	5.40	0.02	0.02
0.15	0.00	0.00	2.80	0.01	0.01	5.45	0.02	0.02
0.20	0.00	0.00	2.85	0.01	0.01	5.50	0.03	0.03
0.25	0.00	0.00	2.90	0.01	0.01	5.55	0.03	0.03
0.30	0.00	0.00	2.95	0.01	0.01	5.60	0.03	0.03
0.35	0.00	0.00	3.00	0.01	0.01	5.65	0.03	0.03
0.40	0.00	0.00	3.05	0.01	0.01	5.70	0.03	0.03
0.45	0.00	0.00	3.10	0.01	0.01	5.75	0.03	0.03
0.50	0.00	0.00	3.15	0.01	0.01	5.80	0.03	0.03
0.55	0.00	0.00	3.20	0.01	0.01	5.85	0.03	0.03
0.60	0.00	0.00	3.25	0.01	0.01	5.90	0.03	0.03
0.65	0.00	0.00	3.30	0.01	0.01	5.95	0.03	0.03
0.70	0.00	0.00	3.35	0.01	0.01	6.00	0.03	0.03
0.75	0.00	0.00	3.40	0.01	0.01	6.05	0.03	0.03
0.80	0.00	0.00	3.45	0.01	0.01	6.10	0.03	0.03
0.85	0.00	0.00	3.50	0.01	0.01	6.15	0.03	0.03
0.90	0.00	0.00	3.55	0.02	0.02	6.20	0.03	0.03
0.95	0.00	0.00	3.60	0.02	0.02	6.25	0.03	0.03
1.00	0.00	0.00	3.65	0.02	0.02	6.30	0.03	0.03
1.05	0.00	0.00	3.70	0.02	0.02	6.35	0.03	0.03
1.10	0.00	0.00	3.75	0.02	0.02	6.40	0.03	0.03
1.15	0.00	0.00	3.80	0.02	0.02	6.45	0.03	0.03
1.20	0.00	0.00	3.85	0.02	0.02	6.50	0.03	0.03
1.25	0.00	0.00	3.90	0.02	0.02	6.55	0.03	0.03
1.30	0.00	0.00	3.95	0.02	0.02	6.60	0.03	0.03
1.35	0.00	0.00	4.00	0.02	0.02	6.65	0.03	0.03
1.40	0.00	0.00	4.05	0.02	0.02	6.70	0.03	0.03
1.45	0.00	0.00	4.10	0.02	0.02	6.75	0.03	0.03
1.50	0.00	0.00	4.15	0.02	0.02	6.80	0.04	0.04
1.55	0.00	0.00	4.20	0.02	0.02	6.85	0.04	0.04
1.60	0.00	0.00	4.25	0.02	0.02	6.90	0.04	0.04
1.65	0.00	0.00	4.30	0.02	0.02	6.95	0.04	0.04
1.70	0.00	0.00	4.35	0.02	0.02	7.00	0.04	0.04
1.75	0.00	0.00	4.40	0.02	0.02	7.05	0.04	0.04
1.80	0.00	0.00	4.45	0.02	0.02	7.10	0.04	0.04
1.85	0.00	0.00	4.50	0.02	0.02	7.15	0.04	0.04
1.90	0.00	0.00	4.55	0.02	0.02	7.20	0.04	0.04
1.95	0.00	0.00	4.60	0.02	0.02	7.25	0.04	0.04
2.00	0.00	0.00	4.65	0.02	0.02	7.30	0.04	0.04
2.05	0.01	0.01	4.70	0.02	0.02	7.35	0.04	0.04
2.10	0.01	0.01	4.75	0.02	0.02	7.40	0.04	0.04
2.15	0.01	0.01	4.80	0.02	0.02	7.45	0.04	0.04
2.20	0.01	0.01	4.85	0.02	0.02	7.50	0.04	0.04
2.25	0.01	0.01	4.90	0.02	0.02	7.55	0.04	0.04
2.30	0.01	0.01	4.95	0.02	0.02	7.60	0.04	0.04
2.35	0.01	0.01	5.00	0.02	0.02	7.65	0.04	0.04
2.40	0.01	0.01	5.05	0.02	0.02	7.70	0.04	0.04
2.45	0.01	0.01	5.10	0.02	0.02	7.75	0.05	0.05
2.50	0.01	0.01	5.15	0.02	0.02	7.80	0.05	0.05
2.55	0.01	0.01	5.20	0.02	0.02	7.85	0.05	0.05
2.60	0.01	0.01	5.25	0.02	0.02	7.90	0.05	0.05

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Current Rainfall=5.28"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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)
7.95	0.05	0.05	10.60	0.12	0.12	13.25	0.16	0.16
8.00	0.05	0.05	10.65	0.13	0.13	13.30	0.15	0.15
8.05	0.05	0.05	10.70	0.13	0.13	13.35	0.14	0.14
8.10	0.05	0.05	10.75	0.14	0.14	13.40	0.14	0.14
8.15	0.05	0.05	10.80	0.15	0.15	13.45	0.13	0.13
8.20	0.05	0.05	10.85	0.16	0.16	13.50	0.13	0.13
8.25	0.05	0.05	10.90	0.16	0.16	13.55	0.12	0.12
8.30	0.05	0.05	10.95	0.17	0.17	13.60	0.12	0.12
8.35	0.05	0.05	11.00	0.17	0.17	13.65	0.11	0.11
8.40	0.05	0.05	11.05	0.19	0.19	13.70	0.11	0.11
8.45	0.05	0.05	11.10	0.19	0.19	13.75	0.11	0.11
8.50	0.05	0.05	11.15	0.21	0.21	13.80	0.11	0.11
8.55	0.05	0.05	11.20	0.22	0.22	13.85	0.11	0.11
8.60	0.05	0.05	11.25	0.23	0.23	13.90	0.11	0.11
8.65	0.06	0.06	11.30	0.24	0.24	13.95	0.10	0.10
8.70	0.06	0.06	11.35	0.26	0.26	14.00	0.10	0.10
8.75	0.06	0.06	11.40	0.26	0.26	14.05	0.10	0.10
8.80	0.06	0.06	11.45	0.28	0.28	14.10	0.10	0.10
8.85	0.06	0.06	11.50	0.29	0.29	14.15	0.10	0.10
8.90	0.06	0.06	11.55	0.37	0.37	14.20	0.10	0.10
8.95	0.06	0.06	11.60	0.38	0.38	14.25	0.09	0.09
9.00	0.06	0.06	11.65	0.40	0.40	14.30	0.09	0.09
9.05	0.06	0.06	11.70	0.41	0.41	14.35	0.09	0.09
9.10	0.06	0.06	11.75	0.54	0.54	14.40	0.09	0.09
9.15	0.06	0.06	11.80	0.57	0.57	14.45	0.09	0.09
9.20	0.07	0.07	11.85	0.75	0.75	14.50	0.09	0.09
9.25	0.07	0.07	11.90	0.82	0.82	14.55	0.08	0.08
9.30	0.07	0.07	11.95	1.28	1.28	14.60	0.08	0.08
9.35	0.07	0.07	12.00	1.42	1.42	14.65	0.08	0.08
9.40	0.07	0.07	12.05	2.16	2.16	14.70	0.08	0.08
9.45	0.07	0.07	12.10	2.07	2.07	14.75	0.08	0.08
9.50	0.08	0.08	12.15	0.88	0.88	14.80	0.08	0.08
9.55	0.08	0.08	12.20	0.75	0.75	14.85	0.07	0.07
9.60	0.08	0.08	12.25	0.57	0.57	14.90	0.07	0.07
9.65	0.08	0.08	12.30	0.54	0.54	14.95	0.07	0.07
9.70	0.08	0.08	12.35	0.42	0.42	15.00	0.07	0.07
9.75	0.08	0.08	12.40	0.41	0.41	15.05	0.07	0.07
9.80	0.09	0.09	12.45	0.39	0.39	15.10	0.07	0.07
9.85	0.09	0.09	12.50	0.38	0.38	15.15	0.07	0.07
9.90	0.09	0.09	12.55	0.30	0.30	15.20	0.07	0.07
9.95	0.09	0.09	12.60	0.29	0.29	15.25	0.06	0.06
10.00	0.09	0.09	12.65	0.27	0.27	15.30	0.06	0.06
10.05	0.10	0.10	12.70	0.26	0.26	15.35	0.06	0.06
10.10	0.10	0.10	12.75	0.25	0.25	15.40	0.06	0.06
10.15	0.10	0.10	12.80	0.24	0.24	15.45	0.06	0.06
10.20	0.10	0.10	12.85	0.22	0.22	15.50	0.06	0.06
10.25	0.10	0.10	12.90	0.22	0.22	15.55	0.06	0.06
10.30	0.10	0.10	12.95	0.20	0.20	15.60	0.06	0.06
10.35	0.11	0.11	13.00	0.20	0.20	15.65	0.06	0.06
10.40	0.11	0.11	13.05	0.18	0.18	15.70	0.06	0.06
10.45	0.11	0.11	13.10	0.18	0.18	15.75	0.06	0.06
10.50	0.11	0.11	13.15	0.17	0.17	15.80	0.06	0.06
10.55	0.12	0.12	13.20	0.17	0.17	15.85	0.06	0.06

2024-10-11_Ridgewood, NJNOAA 24-hr D **10-Year Current Rainfall=5.28"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	0.06	0.06	18.55	0.04	0.04	21.20	0.03	0.03
15.95	0.06	0.06	18.60	0.04	0.04	21.25	0.03	0.03
16.00	0.06	0.06	18.65	0.04	0.04	21.30	0.03	0.03
16.05	0.06	0.06	18.70	0.04	0.04	21.35	0.03	0.03
16.10	0.06	0.06	18.75	0.04	0.04	21.40	0.03	0.03
16.15	0.06	0.06	18.80	0.04	0.04	21.45	0.03	0.03
16.20	0.06	0.06	18.85	0.04	0.04	21.50	0.03	0.03
16.25	0.06	0.06	18.90	0.04	0.04	21.55	0.03	0.03
16.30	0.06	0.06	18.95	0.04	0.04	21.60	0.03	0.03
16.35	0.05	0.05	19.00	0.04	0.04	21.65	0.03	0.03
16.40	0.05	0.05	19.05	0.04	0.04	21.70	0.03	0.03
16.45	0.05	0.05	19.10	0.04	0.04	21.75	0.03	0.03
16.50	0.05	0.05	19.15	0.04	0.04	21.80	0.03	0.03
16.55	0.05	0.05	19.20	0.04	0.04	21.85	0.03	0.03
16.60	0.05	0.05	19.25	0.03	0.03	21.90	0.03	0.03
16.65	0.05	0.05	19.30	0.03	0.03	21.95	0.03	0.03
16.70	0.05	0.05	19.35	0.03	0.03	22.00	0.03	0.03
16.75	0.05	0.05	19.40	0.03	0.03	22.05	0.03	0.03
16.80	0.05	0.05	19.45	0.03	0.03	22.10	0.03	0.03
16.85	0.05	0.05	19.50	0.03	0.03	22.15	0.03	0.03
16.90	0.05	0.05	19.55	0.03	0.03	22.20	0.03	0.03
16.95	0.05	0.05	19.60	0.03	0.03	22.25	0.03	0.03
17.00	0.05	0.05	19.65	0.03	0.03	22.30	0.03	0.03
17.05	0.05	0.05	19.70	0.03	0.03	22.35	0.03	0.03
17.10	0.05	0.05	19.75	0.03	0.03	22.40	0.03	0.03
17.15	0.05	0.05	19.80	0.03	0.03	22.45	0.03	0.03
17.20	0.05	0.05	19.85	0.03	0.03	22.50	0.03	0.03
17.25	0.05	0.05	19.90	0.03	0.03	22.55	0.03	0.03
17.30	0.05	0.05	19.95	0.03	0.03	22.60	0.03	0.03
17.35	0.04	0.04	20.00	0.03	0.03	22.65	0.03	0.03
17.40	0.04	0.04	20.05	0.03	0.03	22.70	0.03	0.03
17.45	0.04	0.04	20.10	0.03	0.03	22.75	0.03	0.03
17.50	0.04	0.04	20.15	0.03	0.03	22.80	0.03	0.03
17.55	0.04	0.04	20.20	0.03	0.03	22.85	0.03	0.03
17.60	0.04	0.04	20.25	0.03	0.03	22.90	0.03	0.03
17.65	0.04	0.04	20.30	0.03	0.03	22.95	0.03	0.03
17.70	0.04	0.04	20.35	0.03	0.03	23.00	0.03	0.03
17.75	0.04	0.04	20.40	0.03	0.03	23.05	0.03	0.03
17.80	0.04	0.04	20.45	0.03	0.03	23.10	0.03	0.03
17.85	0.04	0.04	20.50	0.03	0.03	23.15	0.03	0.03
17.90	0.04	0.04	20.55	0.03	0.03	23.20	0.03	0.03
17.95	0.04	0.04	20.60	0.03	0.03	23.25	0.03	0.03
18.00	0.04	0.04	20.65	0.03	0.03	23.30	0.03	0.03
18.05	0.04	0.04	20.70	0.03	0.03	23.35	0.03	0.03
18.10	0.04	0.04	20.75	0.03	0.03	23.40	0.03	0.03
18.15	0.04	0.04	20.80	0.03	0.03	23.45	0.02	0.02
18.20	0.04	0.04	20.85	0.03	0.03	23.50	0.02	0.02
18.25	0.04	0.04	20.90	0.03	0.03	23.55	0.02	0.02
18.30	0.04	0.04	20.95	0.03	0.03	23.60	0.02	0.02
18.35	0.04	0.04	21.00	0.03	0.03	23.65	0.02	0.02
18.40	0.04	0.04	21.05	0.03	0.03	23.70	0.02	0.02
18.45	0.04	0.04	21.10	0.03	0.03	23.75	0.02	0.02
18.50	0.04	0.04	21.15	0.03	0.03	23.80	0.02	0.02

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **10-Year Current Rainfall=5.28"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
23.85	0.02	0.02
23.90	0.02	0.02
23.95	0.02	0.02
24.00	0.02	0.02

2024-10-11_Ridgewood, NJNOAA 24-hr D **10-Year Future Rainfall=6.31"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	2.65	0.01	0.01	5.30	0.03	0.03
0.05	0.00	0.00	2.70	0.01	0.01	5.35	0.03	0.03
0.10	0.00	0.00	2.75	0.02	0.02	5.40	0.03	0.03
0.15	0.00	0.00	2.80	0.02	0.02	5.45	0.03	0.03
0.20	0.00	0.00	2.85	0.02	0.02	5.50	0.03	0.03
0.25	0.00	0.00	2.90	0.02	0.02	5.55	0.03	0.03
0.30	0.00	0.00	2.95	0.02	0.02	5.60	0.03	0.03
0.35	0.00	0.00	3.00	0.02	0.02	5.65	0.03	0.03
0.40	0.00	0.00	3.05	0.02	0.02	5.70	0.03	0.03
0.45	0.00	0.00	3.10	0.02	0.02	5.75	0.03	0.03
0.50	0.00	0.00	3.15	0.02	0.02	5.80	0.03	0.03
0.55	0.00	0.00	3.20	0.02	0.02	5.85	0.03	0.03
0.60	0.00	0.00	3.25	0.02	0.02	5.90	0.03	0.03
0.65	0.00	0.00	3.30	0.02	0.02	5.95	0.03	0.03
0.70	0.00	0.00	3.35	0.02	0.02	6.00	0.04	0.04
0.75	0.00	0.00	3.40	0.02	0.02	6.05	0.04	0.04
0.80	0.00	0.00	3.45	0.02	0.02	6.10	0.04	0.04
0.85	0.00	0.00	3.50	0.02	0.02	6.15	0.04	0.04
0.90	0.00	0.00	3.55	0.02	0.02	6.20	0.04	0.04
0.95	0.00	0.00	3.60	0.02	0.02	6.25	0.04	0.04
1.00	0.00	0.00	3.65	0.02	0.02	6.30	0.04	0.04
1.05	0.00	0.00	3.70	0.02	0.02	6.35	0.04	0.04
1.10	0.00	0.00	3.75	0.02	0.02	6.40	0.04	0.04
1.15	0.00	0.00	3.80	0.02	0.02	6.45	0.04	0.04
1.20	0.00	0.00	3.85	0.02	0.02	6.50	0.04	0.04
1.25	0.00	0.00	3.90	0.02	0.02	6.55	0.04	0.04
1.30	0.00	0.00	3.95	0.02	0.02	6.60	0.04	0.04
1.35	0.00	0.00	4.00	0.02	0.02	6.65	0.04	0.04
1.40	0.00	0.00	4.05	0.02	0.02	6.70	0.04	0.04
1.45	0.00	0.00	4.10	0.02	0.02	6.75	0.04	0.04
1.50	0.00	0.00	4.15	0.02	0.02	6.80	0.04	0.04
1.55	0.00	0.00	4.20	0.03	0.03	6.85	0.05	0.05
1.60	0.00	0.00	4.25	0.03	0.03	6.90	0.05	0.05
1.65	0.01	0.01	4.30	0.03	0.03	6.95	0.05	0.05
1.70	0.01	0.01	4.35	0.03	0.03	7.00	0.05	0.05
1.75	0.01	0.01	4.40	0.03	0.03	7.05	0.05	0.05
1.80	0.01	0.01	4.45	0.03	0.03	7.10	0.05	0.05
1.85	0.01	0.01	4.50	0.03	0.03	7.15	0.05	0.05
1.90	0.01	0.01	4.55	0.03	0.03	7.20	0.05	0.05
1.95	0.01	0.01	4.60	0.03	0.03	7.25	0.05	0.05
2.00	0.01	0.01	4.65	0.03	0.03	7.30	0.05	0.05
2.05	0.01	0.01	4.70	0.03	0.03	7.35	0.05	0.05
2.10	0.01	0.01	4.75	0.03	0.03	7.40	0.05	0.05
2.15	0.01	0.01	4.80	0.03	0.03	7.45	0.05	0.05
2.20	0.01	0.01	4.85	0.03	0.03	7.50	0.05	0.05
2.25	0.01	0.01	4.90	0.03	0.03	7.55	0.05	0.05
2.30	0.01	0.01	4.95	0.03	0.03	7.60	0.05	0.05
2.35	0.01	0.01	5.00	0.03	0.03	7.65	0.06	0.06
2.40	0.01	0.01	5.05	0.03	0.03	7.70	0.06	0.06
2.45	0.01	0.01	5.10	0.03	0.03	7.75	0.06	0.06
2.50	0.01	0.01	5.15	0.03	0.03	7.80	0.06	0.06
2.55	0.01	0.01	5.20	0.03	0.03	7.85	0.06	0.06
2.60	0.01	0.01	5.25	0.03	0.03	7.90	0.06	0.06

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)
7.95	0.06	0.06	10.60	0.15	0.15	13.25	0.19	0.19
8.00	0.06	0.06	10.65	0.16	0.16	13.30	0.18	0.18
8.05	0.06	0.06	10.70	0.16	0.16	13.35	0.17	0.17
8.10	0.06	0.06	10.75	0.18	0.18	13.40	0.17	0.17
8.15	0.06	0.06	10.80	0.18	0.18	13.45	0.16	0.16
8.20	0.06	0.06	10.85	0.19	0.19	13.50	0.15	0.15
8.25	0.06	0.06	10.90	0.19	0.19	13.55	0.14	0.14
8.30	0.06	0.06	10.95	0.21	0.21	13.60	0.14	0.14
8.35	0.06	0.06	11.00	0.21	0.21	13.65	0.14	0.14
8.40	0.06	0.06	11.05	0.23	0.23	13.70	0.14	0.14
8.45	0.07	0.07	11.10	0.24	0.24	13.75	0.13	0.13
8.50	0.07	0.07	11.15	0.26	0.26	13.80	0.13	0.13
8.55	0.07	0.07	11.20	0.26	0.26	13.85	0.13	0.13
8.60	0.07	0.07	11.25	0.28	0.28	13.90	0.13	0.13
8.65	0.07	0.07	11.30	0.29	0.29	13.95	0.12	0.12
8.70	0.07	0.07	11.35	0.31	0.31	14.00	0.12	0.12
8.75	0.07	0.07	11.40	0.31	0.31	14.05	0.12	0.12
8.80	0.07	0.07	11.45	0.33	0.33	14.10	0.12	0.12
8.85	0.07	0.07	11.50	0.35	0.35	14.15	0.12	0.12
8.90	0.07	0.07	11.55	0.45	0.45	14.20	0.12	0.12
8.95	0.07	0.07	11.60	0.46	0.46	14.25	0.11	0.11
9.00	0.07	0.07	11.65	0.48	0.48	14.30	0.11	0.11
9.05	0.08	0.08	11.70	0.50	0.50	14.35	0.11	0.11
9.10	0.08	0.08	11.75	0.65	0.65	14.40	0.11	0.11
9.15	0.08	0.08	11.80	0.69	0.69	14.45	0.10	0.10
9.20	0.08	0.08	11.85	0.90	0.90	14.50	0.10	0.10
9.25	0.08	0.08	11.90	0.99	0.99	14.55	0.10	0.10
9.30	0.08	0.08	11.95	1.55	1.55	14.60	0.10	0.10
9.35	0.09	0.09	12.00	1.71	1.71	14.65	0.10	0.10
9.40	0.09	0.09	12.05	2.59	2.59	14.70	0.10	0.10
9.45	0.09	0.09	12.10	2.49	2.49	14.75	0.09	0.09
9.50	0.09	0.09	12.15	1.05	1.05	14.80	0.09	0.09
9.55	0.10	0.10	12.20	0.90	0.90	14.85	0.09	0.09
9.60	0.10	0.10	12.25	0.69	0.69	14.90	0.09	0.09
9.65	0.10	0.10	12.30	0.65	0.65	14.95	0.08	0.08
9.70	0.10	0.10	12.35	0.50	0.50	15.00	0.08	0.08
9.75	0.10	0.10	12.40	0.49	0.49	15.05	0.08	0.08
9.80	0.10	0.10	12.45	0.47	0.47	15.10	0.08	0.08
9.85	0.11	0.11	12.50	0.45	0.45	15.15	0.08	0.08
9.90	0.11	0.11	12.55	0.35	0.35	15.20	0.08	0.08
9.95	0.11	0.11	12.60	0.34	0.34	15.25	0.08	0.08
10.00	0.11	0.11	12.65	0.32	0.32	15.30	0.08	0.08
10.05	0.12	0.12	12.70	0.32	0.32	15.35	0.08	0.08
10.10	0.12	0.12	12.75	0.30	0.30	15.40	0.08	0.08
10.15	0.12	0.12	12.80	0.29	0.29	15.45	0.08	0.08
10.20	0.12	0.12	12.85	0.27	0.27	15.50	0.07	0.07
10.25	0.12	0.12	12.90	0.26	0.26	15.55	0.07	0.07
10.30	0.13	0.13	12.95	0.24	0.24	15.60	0.07	0.07
10.35	0.13	0.13	13.00	0.24	0.24	15.65	0.07	0.07
10.40	0.13	0.13	13.05	0.22	0.22	15.70	0.07	0.07
10.45	0.13	0.13	13.10	0.21	0.21	15.75	0.07	0.07
10.50	0.13	0.13	13.15	0.20	0.20	15.80	0.07	0.07
10.55	0.15	0.15	13.20	0.20	0.20	15.85	0.07	0.07

2024-10-11_Ridgewood, NJNOAA 24-hr D **10-Year Future Rainfall=6.31"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	0.07	0.07	18.55	0.04	0.04	21.20	0.04	0.04
15.95	0.07	0.07	18.60	0.04	0.04	21.25	0.04	0.04
16.00	0.07	0.07	18.65	0.04	0.04	21.30	0.04	0.04
16.05	0.07	0.07	18.70	0.04	0.04	21.35	0.04	0.04
16.10	0.07	0.07	18.75	0.04	0.04	21.40	0.04	0.04
16.15	0.07	0.07	18.80	0.04	0.04	21.45	0.04	0.04
16.20	0.07	0.07	18.85	0.04	0.04	21.50	0.04	0.04
16.25	0.07	0.07	18.90	0.04	0.04	21.55	0.04	0.04
16.30	0.07	0.07	18.95	0.04	0.04	21.60	0.04	0.04
16.35	0.06	0.06	19.00	0.04	0.04	21.65	0.03	0.03
16.40	0.06	0.06	19.05	0.04	0.04	21.70	0.03	0.03
16.45	0.06	0.06	19.10	0.04	0.04	21.75	0.03	0.03
16.50	0.06	0.06	19.15	0.04	0.04	21.80	0.03	0.03
16.55	0.06	0.06	19.20	0.04	0.04	21.85	0.03	0.03
16.60	0.06	0.06	19.25	0.04	0.04	21.90	0.03	0.03
16.65	0.06	0.06	19.30	0.04	0.04	21.95	0.03	0.03
16.70	0.06	0.06	19.35	0.04	0.04	22.00	0.03	0.03
16.75	0.06	0.06	19.40	0.04	0.04	22.05	0.03	0.03
16.80	0.06	0.06	19.45	0.04	0.04	22.10	0.03	0.03
16.85	0.06	0.06	19.50	0.04	0.04	22.15	0.03	0.03
16.90	0.06	0.06	19.55	0.04	0.04	22.20	0.03	0.03
16.95	0.06	0.06	19.60	0.04	0.04	22.25	0.03	0.03
17.00	0.06	0.06	19.65	0.04	0.04	22.30	0.03	0.03
17.05	0.06	0.06	19.70	0.04	0.04	22.35	0.03	0.03
17.10	0.06	0.06	19.75	0.04	0.04	22.40	0.03	0.03
17.15	0.06	0.06	19.80	0.04	0.04	22.45	0.03	0.03
17.20	0.06	0.06	19.85	0.04	0.04	22.50	0.03	0.03
17.25	0.05	0.05	19.90	0.04	0.04	22.55	0.03	0.03
17.30	0.05	0.05	19.95	0.04	0.04	22.60	0.03	0.03
17.35	0.05	0.05	20.00	0.04	0.04	22.65	0.03	0.03
17.40	0.05	0.05	20.05	0.04	0.04	22.70	0.03	0.03
17.45	0.05	0.05	20.10	0.04	0.04	22.75	0.03	0.03
17.50	0.05	0.05	20.15	0.04	0.04	22.80	0.03	0.03
17.55	0.05	0.05	20.20	0.04	0.04	22.85	0.03	0.03
17.60	0.05	0.05	20.25	0.04	0.04	22.90	0.03	0.03
17.65	0.05	0.05	20.30	0.04	0.04	22.95	0.03	0.03
17.70	0.05	0.05	20.35	0.04	0.04	23.00	0.03	0.03
17.75	0.05	0.05	20.40	0.04	0.04	23.05	0.03	0.03
17.80	0.05	0.05	20.45	0.04	0.04	23.10	0.03	0.03
17.85	0.05	0.05	20.50	0.04	0.04	23.15	0.03	0.03
17.90	0.05	0.05	20.55	0.04	0.04	23.20	0.03	0.03
17.95	0.05	0.05	20.60	0.04	0.04	23.25	0.03	0.03
18.00	0.05	0.05	20.65	0.04	0.04	23.30	0.03	0.03
18.05	0.05	0.05	20.70	0.04	0.04	23.35	0.03	0.03
18.10	0.05	0.05	20.75	0.04	0.04	23.40	0.03	0.03
18.15	0.04	0.04	20.80	0.04	0.04	23.45	0.03	0.03
18.20	0.04	0.04	20.85	0.04	0.04	23.50	0.03	0.03
18.25	0.04	0.04	20.90	0.04	0.04	23.55	0.03	0.03
18.30	0.04	0.04	20.95	0.04	0.04	23.60	0.03	0.03
18.35	0.04	0.04	21.00	0.04	0.04	23.65	0.03	0.03
18.40	0.04	0.04	21.05	0.04	0.04	23.70	0.03	0.03
18.45	0.04	0.04	21.10	0.04	0.04	23.75	0.03	0.03
18.50	0.04	0.04	21.15	0.04	0.04	23.80	0.03	0.03

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Future Rainfall=6.31"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
23.85	0.03	0.03
23.90	0.03	0.03
23.95	0.03	0.03
24.00	0.03	0.03

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Current Rainfall=5.28"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.00	0.00
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.00	0.00
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.00	0.00
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.00	0.00
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.00	0.00
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.00	0.00
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.00	0.00
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Current Rainfall=5.28"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.00	0.00	10.60	0.01	0.01	13.25	0.01	0.01
8.00	0.00	0.00	10.65	0.01	0.01	13.30	0.01	0.01
8.05	0.00	0.00	10.70	0.01	0.01	13.35	0.01	0.01
8.10	0.00	0.00	10.75	0.01	0.01	13.40	0.01	0.01
8.15	0.00	0.00	10.80	0.01	0.01	13.45	0.01	0.01
8.20	0.00	0.00	10.85	0.01	0.01	13.50	0.01	0.01
8.25	0.00	0.00	10.90	0.01	0.01	13.55	0.01	0.01
8.30	0.00	0.00	10.95	0.01	0.01	13.60	0.01	0.01
8.35	0.00	0.00	11.00	0.01	0.01	13.65	0.00	0.00
8.40	0.00	0.00	11.05	0.01	0.01	13.70	0.00	0.00
8.45	0.00	0.00	11.10	0.01	0.01	13.75	0.00	0.00
8.50	0.00	0.00	11.15	0.01	0.01	13.80	0.00	0.00
8.55	0.00	0.00	11.20	0.01	0.01	13.85	0.00	0.00
8.60	0.00	0.00	11.25	0.01	0.01	13.90	0.00	0.00
8.65	0.00	0.00	11.30	0.01	0.01	13.95	0.00	0.00
8.70	0.00	0.00	11.35	0.01	0.01	14.00	0.00	0.00
8.75	0.00	0.00	11.40	0.01	0.01	14.05	0.00	0.00
8.80	0.00	0.00	11.45	0.01	0.01	14.10	0.00	0.00
8.85	0.00	0.00	11.50	0.01	0.01	14.15	0.00	0.00
8.90	0.00	0.00	11.55	0.02	0.02	14.20	0.00	0.00
8.95	0.00	0.00	11.60	0.02	0.02	14.25	0.00	0.00
9.00	0.00	0.00	11.65	0.02	0.02	14.30	0.00	0.00
9.05	0.00	0.00	11.70	0.02	0.02	14.35	0.00	0.00
9.10	0.00	0.00	11.75	0.02	0.02	14.40	0.00	0.00
9.15	0.00	0.00	11.80	0.03	0.03	14.45	0.00	0.00
9.20	0.00	0.00	11.85	0.03	0.03	14.50	0.00	0.00
9.25	0.00	0.00	11.90	0.04	0.04	14.55	0.00	0.00
9.30	0.00	0.00	11.95	0.06	0.06	14.60	0.00	0.00
9.35	0.00	0.00	12.00	0.07	0.07	14.65	0.00	0.00
9.40	0.00	0.00	12.05	0.10	0.10	14.70	0.00	0.00
9.45	0.00	0.00	12.10	0.08	0.08	14.75	0.00	0.00
9.50	0.00	0.00	12.15	0.03	0.03	14.80	0.00	0.00
9.55	0.00	0.00	12.20	0.03	0.03	14.85	0.00	0.00
9.60	0.00	0.00	12.25	0.02	0.02	14.90	0.00	0.00
9.65	0.00	0.00	12.30	0.02	0.02	14.95	0.00	0.00
9.70	0.00	0.00	12.35	0.02	0.02	15.00	0.00	0.00
9.75	0.00	0.00	12.40	0.02	0.02	15.05	0.00	0.00
9.80	0.00	0.00	12.45	0.02	0.02	15.10	0.00	0.00
9.85	0.00	0.00	12.50	0.02	0.02	15.15	0.00	0.00
9.90	0.00	0.00	12.55	0.01	0.01	15.20	0.00	0.00
9.95	0.00	0.00	12.60	0.01	0.01	15.25	0.00	0.00
10.00	0.00	0.00	12.65	0.01	0.01	15.30	0.00	0.00
10.05	0.00	0.00	12.70	0.01	0.01	15.35	0.00	0.00
10.10	0.00	0.00	12.75	0.01	0.01	15.40	0.00	0.00
10.15	0.00	0.00	12.80	0.01	0.01	15.45	0.00	0.00
10.20	0.00	0.00	12.85	0.01	0.01	15.50	0.00	0.00
10.25	0.00	0.00	12.90	0.01	0.01	15.55	0.00	0.00
10.30	0.00	0.00	12.95	0.01	0.01	15.60	0.00	0.00
10.35	0.00	0.00	13.00	0.01	0.01	15.65	0.00	0.00
10.40	0.00	0.00	13.05	0.01	0.01	15.70	0.00	0.00
10.45	0.00	0.00	13.10	0.01	0.01	15.75	0.00	0.00
10.50	0.01	0.01	13.15	0.01	0.01	15.80	0.00	0.00
10.55	0.01	0.01	13.20	0.01	0.01	15.85	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Current Rainfall=5.28"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.00	0.00	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.00	0.00	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.00	0.00	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.00	0.00	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.00	0.00	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.00	0.00	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.00	0.00	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.00	0.00	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.00	0.00	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.00	0.00	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.00	0.00	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.00	0.00	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.00	0.00	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.00	0.00	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Current Rainfall=5.28"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time	Subcat E-2	Subcat P-2
(hours)	(cfs)	(cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Future Rainfall=6.31"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.00	0.00
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.00	0.00
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.00	0.00
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.00	0.00
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.00	0.00
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.00	0.00
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.00	0.00
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Future Rainfall=6.31"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.00	0.00	10.60	0.01	0.01	13.25	0.01	0.01
8.00	0.00	0.00	10.65	0.01	0.01	13.30	0.01	0.01
8.05	0.00	0.00	10.70	0.01	0.01	13.35	0.01	0.01
8.10	0.00	0.00	10.75	0.01	0.01	13.40	0.01	0.01
8.15	0.00	0.00	10.80	0.01	0.01	13.45	0.01	0.01
8.20	0.00	0.00	10.85	0.01	0.01	13.50	0.01	0.01
8.25	0.00	0.00	10.90	0.01	0.01	13.55	0.01	0.01
8.30	0.00	0.00	10.95	0.01	0.01	13.60	0.01	0.01
8.35	0.00	0.00	11.00	0.01	0.01	13.65	0.01	0.01
8.40	0.00	0.00	11.05	0.01	0.01	13.70	0.01	0.01
8.45	0.00	0.00	11.10	0.01	0.01	13.75	0.01	0.01
8.50	0.00	0.00	11.15	0.01	0.01	13.80	0.01	0.01
8.55	0.00	0.00	11.20	0.01	0.01	13.85	0.01	0.01
8.60	0.00	0.00	11.25	0.01	0.01	13.90	0.01	0.01
8.65	0.00	0.00	11.30	0.01	0.01	13.95	0.01	0.01
8.70	0.00	0.00	11.35	0.01	0.01	14.00	0.01	0.01
8.75	0.00	0.00	11.40	0.01	0.01	14.05	0.01	0.01
8.80	0.00	0.00	11.45	0.01	0.01	14.10	0.01	0.01
8.85	0.00	0.00	11.50	0.02	0.02	14.15	0.01	0.01
8.90	0.00	0.00	11.55	0.02	0.02	14.20	0.00	0.00
8.95	0.00	0.00	11.60	0.02	0.02	14.25	0.00	0.00
9.00	0.00	0.00	11.65	0.02	0.02	14.30	0.00	0.00
9.05	0.00	0.00	11.70	0.02	0.02	14.35	0.00	0.00
9.10	0.00	0.00	11.75	0.03	0.03	14.40	0.00	0.00
9.15	0.00	0.00	11.80	0.03	0.03	14.45	0.00	0.00
9.20	0.00	0.00	11.85	0.04	0.04	14.50	0.00	0.00
9.25	0.00	0.00	11.90	0.05	0.05	14.55	0.00	0.00
9.30	0.00	0.00	11.95	0.07	0.07	14.60	0.00	0.00
9.35	0.00	0.00	12.00	0.08	0.08	14.65	0.00	0.00
9.40	0.00	0.00	12.05	0.11	0.11	14.70	0.00	0.00
9.45	0.00	0.00	12.10	0.10	0.10	14.75	0.00	0.00
9.50	0.00	0.00	12.15	0.04	0.04	14.80	0.00	0.00
9.55	0.00	0.00	12.20	0.04	0.04	14.85	0.00	0.00
9.60	0.00	0.00	12.25	0.03	0.03	14.90	0.00	0.00
9.65	0.00	0.00	12.30	0.03	0.03	14.95	0.00	0.00
9.70	0.00	0.00	12.35	0.02	0.02	15.00	0.00	0.00
9.75	0.00	0.00	12.40	0.02	0.02	15.05	0.00	0.00
9.80	0.00	0.00	12.45	0.02	0.02	15.10	0.00	0.00
9.85	0.00	0.00	12.50	0.02	0.02	15.15	0.00	0.00
9.90	0.00	0.00	12.55	0.01	0.01	15.20	0.00	0.00
9.95	0.01	0.01	12.60	0.01	0.01	15.25	0.00	0.00
10.00	0.01	0.01	12.65	0.01	0.01	15.30	0.00	0.00
10.05	0.01	0.01	12.70	0.01	0.01	15.35	0.00	0.00
10.10	0.01	0.01	12.75	0.01	0.01	15.40	0.00	0.00
10.15	0.01	0.01	12.80	0.01	0.01	15.45	0.00	0.00
10.20	0.01	0.01	12.85	0.01	0.01	15.50	0.00	0.00
10.25	0.01	0.01	12.90	0.01	0.01	15.55	0.00	0.00
10.30	0.01	0.01	12.95	0.01	0.01	15.60	0.00	0.00
10.35	0.01	0.01	13.00	0.01	0.01	15.65	0.00	0.00
10.40	0.01	0.01	13.05	0.01	0.01	15.70	0.00	0.00
10.45	0.01	0.01	13.10	0.01	0.01	15.75	0.00	0.00
10.50	0.01	0.01	13.15	0.01	0.01	15.80	0.00	0.00
10.55	0.01	0.01	13.20	0.01	0.01	15.85	0.00	0.00

2024-10-11_Ridgewood, NJNOAA 24-hr D **10-Year Future Rainfall=6.31"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.00	0.00	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.00	0.00	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.00	0.00	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.00	0.00	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.00	0.00	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.00	0.00	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.00	0.00	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.00	0.00	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.00	0.00	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.00	0.00	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.00	0.00	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.00	0.00	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.00	0.00	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.00	0.00	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 10-Year Future Rainfall=6.31"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Current Rainfall=9.09"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	2.65	0.03	0.03	5.30	0.05	0.05
0.05	0.00	0.00	2.70	0.03	0.03	5.35	0.05	0.05
0.10	0.00	0.00	2.75	0.03	0.03	5.40	0.05	0.05
0.15	0.00	0.00	2.80	0.03	0.03	5.45	0.05	0.05
0.20	0.00	0.00	2.85	0.03	0.03	5.50	0.05	0.05
0.25	0.00	0.00	2.90	0.03	0.03	5.55	0.05	0.05
0.30	0.00	0.00	2.95	0.03	0.03	5.60	0.05	0.05
0.35	0.00	0.00	3.00	0.03	0.03	5.65	0.05	0.05
0.40	0.00	0.00	3.05	0.03	0.03	5.70	0.05	0.05
0.45	0.00	0.00	3.10	0.03	0.03	5.75	0.05	0.05
0.50	0.00	0.00	3.15	0.03	0.03	5.80	0.05	0.05
0.55	0.00	0.00	3.20	0.03	0.03	5.85	0.06	0.06
0.60	0.00	0.00	3.25	0.04	0.04	5.90	0.06	0.06
0.65	0.00	0.00	3.30	0.04	0.04	5.95	0.06	0.06
0.70	0.00	0.00	3.35	0.04	0.04	6.00	0.06	0.06
0.75	0.00	0.00	3.40	0.04	0.04	6.05	0.06	0.06
0.80	0.00	0.00	3.45	0.04	0.04	6.10	0.06	0.06
0.85	0.00	0.00	3.50	0.04	0.04	6.15	0.06	0.06
0.90	0.00	0.00	3.55	0.04	0.04	6.20	0.06	0.06
0.95	0.00	0.00	3.60	0.04	0.04	6.25	0.06	0.06
1.00	0.00	0.00	3.65	0.04	0.04	6.30	0.06	0.06
1.05	0.00	0.00	3.70	0.04	0.04	6.35	0.06	0.06
1.10	0.01	0.01	3.75	0.04	0.04	6.40	0.06	0.06
1.15	0.01	0.01	3.80	0.04	0.04	6.45	0.06	0.06
1.20	0.01	0.01	3.85	0.04	0.04	6.50	0.06	0.06
1.25	0.01	0.01	3.90	0.04	0.04	6.55	0.07	0.07
1.30	0.01	0.01	3.95	0.04	0.04	6.60	0.07	0.07
1.35	0.01	0.01	4.00	0.04	0.04	6.65	0.07	0.07
1.40	0.01	0.01	4.05	0.04	0.04	6.70	0.07	0.07
1.45	0.01	0.01	4.10	0.04	0.04	6.75	0.07	0.07
1.50	0.01	0.01	4.15	0.04	0.04	6.80	0.07	0.07
1.55	0.01	0.01	4.20	0.04	0.04	6.85	0.07	0.07
1.60	0.01	0.01	4.25	0.04	0.04	6.90	0.07	0.07
1.65	0.02	0.02	4.30	0.04	0.04	6.95	0.07	0.07
1.70	0.02	0.02	4.35	0.05	0.05	7.00	0.07	0.07
1.75	0.02	0.02	4.40	0.05	0.05	7.05	0.07	0.07
1.80	0.02	0.02	4.45	0.05	0.05	7.10	0.08	0.08
1.85	0.02	0.02	4.50	0.05	0.05	7.15	0.08	0.08
1.90	0.02	0.02	4.55	0.05	0.05	7.20	0.08	0.08
1.95	0.02	0.02	4.60	0.05	0.05	7.25	0.08	0.08
2.00	0.02	0.02	4.65	0.05	0.05	7.30	0.08	0.08
2.05	0.02	0.02	4.70	0.05	0.05	7.35	0.08	0.08
2.10	0.02	0.02	4.75	0.05	0.05	7.40	0.08	0.08
2.15	0.02	0.02	4.80	0.05	0.05	7.45	0.08	0.08
2.20	0.02	0.02	4.85	0.05	0.05	7.50	0.08	0.08
2.25	0.02	0.02	4.90	0.05	0.05	7.55	0.08	0.08
2.30	0.02	0.02	4.95	0.05	0.05	7.60	0.08	0.08
2.35	0.03	0.03	5.00	0.05	0.05	7.65	0.09	0.09
2.40	0.03	0.03	5.05	0.05	0.05	7.70	0.09	0.09
2.45	0.03	0.03	5.10	0.05	0.05	7.75	0.09	0.09
2.50	0.03	0.03	5.15	0.05	0.05	7.80	0.09	0.09
2.55	0.03	0.03	5.20	0.05	0.05	7.85	0.09	0.09
2.60	0.03	0.03	5.25	0.05	0.05	7.90	0.09	0.09

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 100-Year Current Rainfall=9.09"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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)
7.95	0.09	0.09	10.60	0.22	0.22	13.25	0.27	0.27
8.00	0.09	0.09	10.65	0.24	0.24	13.30	0.27	0.27
8.05	0.09	0.09	10.70	0.24	0.24	13.35	0.25	0.25
8.10	0.09	0.09	10.75	0.26	0.26	13.40	0.24	0.24
8.15	0.09	0.09	10.80	0.26	0.26	13.45	0.23	0.23
8.20	0.09	0.09	10.85	0.28	0.28	13.50	0.22	0.22
8.25	0.10	0.10	10.90	0.29	0.29	13.55	0.20	0.20
8.30	0.10	0.10	10.95	0.30	0.30	13.60	0.20	0.20
8.35	0.10	0.10	11.00	0.31	0.31	13.65	0.20	0.20
8.40	0.10	0.10	11.05	0.34	0.34	13.70	0.20	0.20
8.45	0.10	0.10	11.10	0.35	0.35	13.75	0.19	0.19
8.50	0.10	0.10	11.15	0.38	0.38	13.80	0.19	0.19
8.55	0.10	0.10	11.20	0.38	0.38	13.85	0.19	0.19
8.60	0.10	0.10	11.25	0.41	0.41	13.90	0.18	0.18
8.65	0.10	0.10	11.30	0.42	0.42	13.95	0.18	0.18
8.70	0.10	0.10	11.35	0.45	0.45	14.00	0.18	0.18
8.75	0.11	0.11	11.40	0.46	0.46	14.05	0.17	0.17
8.80	0.11	0.11	11.45	0.49	0.49	14.10	0.17	0.17
8.85	0.11	0.11	11.50	0.51	0.51	14.15	0.17	0.17
8.90	0.11	0.11	11.55	0.65	0.65	14.20	0.17	0.17
8.95	0.11	0.11	11.60	0.67	0.67	14.25	0.16	0.16
9.00	0.11	0.11	11.65	0.70	0.70	14.30	0.16	0.16
9.05	0.11	0.11	11.70	0.73	0.73	14.35	0.16	0.16
9.10	0.12	0.12	11.75	0.95	0.95	14.40	0.16	0.16
9.15	0.12	0.12	11.80	1.00	1.00	14.45	0.15	0.15
9.20	0.12	0.12	11.85	1.31	1.31	14.50	0.15	0.15
9.25	0.13	0.13	11.90	1.44	1.44	14.55	0.14	0.14
9.30	0.13	0.13	11.95	2.25	2.25	14.60	0.14	0.14
9.35	0.13	0.13	12.00	2.48	2.48	14.65	0.14	0.14
9.40	0.13	0.13	12.05	3.76	3.76	14.70	0.14	0.14
9.45	0.14	0.14	12.10	3.61	3.61	14.75	0.13	0.13
9.50	0.14	0.14	12.15	1.52	1.52	14.80	0.13	0.13
9.55	0.14	0.14	12.20	1.31	1.31	14.85	0.13	0.13
9.60	0.14	0.14	12.25	1.00	1.00	14.90	0.13	0.13
9.65	0.15	0.15	12.30	0.94	0.94	14.95	0.12	0.12
9.70	0.15	0.15	12.35	0.73	0.73	15.00	0.12	0.12
9.75	0.16	0.16	12.40	0.70	0.70	15.05	0.12	0.12
9.80	0.16	0.16	12.45	0.68	0.68	15.10	0.11	0.11
9.85	0.16	0.16	12.50	0.65	0.65	15.15	0.11	0.11
9.90	0.16	0.16	12.55	0.51	0.51	15.20	0.11	0.11
9.95	0.17	0.17	12.60	0.50	0.50	15.25	0.11	0.11
10.00	0.17	0.17	12.65	0.47	0.47	15.30	0.11	0.11
10.05	0.17	0.17	12.70	0.46	0.46	15.35	0.11	0.11
10.10	0.17	0.17	12.75	0.43	0.43	15.40	0.11	0.11
10.15	0.18	0.18	12.80	0.42	0.42	15.45	0.11	0.11
10.20	0.18	0.18	12.85	0.39	0.39	15.50	0.11	0.11
10.25	0.19	0.19	12.90	0.38	0.38	15.55	0.11	0.11
10.30	0.19	0.19	12.95	0.35	0.35	15.60	0.11	0.11
10.35	0.19	0.19	13.00	0.35	0.35	15.65	0.11	0.11
10.40	0.19	0.19	13.05	0.31	0.31	15.70	0.11	0.11
10.45	0.20	0.20	13.10	0.31	0.31	15.75	0.10	0.10
10.50	0.20	0.20	13.15	0.29	0.29	15.80	0.10	0.10
10.55	0.22	0.22	13.20	0.29	0.29	15.85	0.10	0.10

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Current Rainfall=9.09"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	0.10	0.10	18.55	0.06	0.06	21.20	0.05	0.05
15.95	0.10	0.10	18.60	0.06	0.06	21.25	0.05	0.05
16.00	0.10	0.10	18.65	0.06	0.06	21.30	0.05	0.05
16.05	0.10	0.10	18.70	0.06	0.06	21.35	0.05	0.05
16.10	0.10	0.10	18.75	0.06	0.06	21.40	0.05	0.05
16.15	0.10	0.10	18.80	0.06	0.06	21.45	0.05	0.05
16.20	0.10	0.10	18.85	0.06	0.06	21.50	0.05	0.05
16.25	0.10	0.10	18.90	0.06	0.06	21.55	0.05	0.05
16.30	0.10	0.10	18.95	0.06	0.06	21.60	0.05	0.05
16.35	0.09	0.09	19.00	0.06	0.06	21.65	0.05	0.05
16.40	0.09	0.09	19.05	0.06	0.06	21.70	0.05	0.05
16.45	0.09	0.09	19.10	0.06	0.06	21.75	0.05	0.05
16.50	0.09	0.09	19.15	0.06	0.06	21.80	0.05	0.05
16.55	0.09	0.09	19.20	0.06	0.06	21.85	0.05	0.05
16.60	0.09	0.09	19.25	0.06	0.06	21.90	0.05	0.05
16.65	0.09	0.09	19.30	0.06	0.06	21.95	0.05	0.05
16.70	0.09	0.09	19.35	0.06	0.06	22.00	0.05	0.05
16.75	0.09	0.09	19.40	0.06	0.06	22.05	0.05	0.05
16.80	0.09	0.09	19.45	0.06	0.06	22.10	0.05	0.05
16.85	0.09	0.09	19.50	0.06	0.06	22.15	0.05	0.05
16.90	0.09	0.09	19.55	0.06	0.06	22.20	0.05	0.05
16.95	0.08	0.08	19.60	0.06	0.06	22.25	0.05	0.05
17.00	0.08	0.08	19.65	0.06	0.06	22.30	0.05	0.05
17.05	0.08	0.08	19.70	0.06	0.06	22.35	0.05	0.05
17.10	0.08	0.08	19.75	0.06	0.06	22.40	0.05	0.05
17.15	0.08	0.08	19.80	0.06	0.06	22.45	0.05	0.05
17.20	0.08	0.08	19.85	0.06	0.06	22.50	0.05	0.05
17.25	0.08	0.08	19.90	0.06	0.06	22.55	0.05	0.05
17.30	0.08	0.08	19.95	0.06	0.06	22.60	0.05	0.05
17.35	0.08	0.08	20.00	0.06	0.06	22.65	0.05	0.05
17.40	0.08	0.08	20.05	0.06	0.06	22.70	0.05	0.05
17.45	0.08	0.08	20.10	0.06	0.06	22.75	0.05	0.05
17.50	0.08	0.08	20.15	0.06	0.06	22.80	0.05	0.05
17.55	0.07	0.07	20.20	0.06	0.06	22.85	0.05	0.05
17.60	0.07	0.07	20.25	0.06	0.06	22.90	0.05	0.05
17.65	0.07	0.07	20.30	0.06	0.06	22.95	0.04	0.04
17.70	0.07	0.07	20.35	0.06	0.06	23.00	0.04	0.04
17.75	0.07	0.07	20.40	0.06	0.06	23.05	0.04	0.04
17.80	0.07	0.07	20.45	0.06	0.06	23.10	0.04	0.04
17.85	0.07	0.07	20.50	0.06	0.06	23.15	0.04	0.04
17.90	0.07	0.07	20.55	0.06	0.06	23.20	0.04	0.04
17.95	0.07	0.07	20.60	0.06	0.06	23.25	0.04	0.04
18.00	0.07	0.07	20.65	0.05	0.05	23.30	0.04	0.04
18.05	0.07	0.07	20.70	0.05	0.05	23.35	0.04	0.04
18.10	0.07	0.07	20.75	0.05	0.05	23.40	0.04	0.04
18.15	0.06	0.06	20.80	0.05	0.05	23.45	0.04	0.04
18.20	0.06	0.06	20.85	0.05	0.05	23.50	0.04	0.04
18.25	0.06	0.06	20.90	0.05	0.05	23.55	0.04	0.04
18.30	0.06	0.06	20.95	0.05	0.05	23.60	0.04	0.04
18.35	0.06	0.06	21.00	0.05	0.05	23.65	0.04	0.04
18.40	0.06	0.06	21.05	0.05	0.05	23.70	0.04	0.04
18.45	0.06	0.06	21.10	0.05	0.05	23.75	0.04	0.04
18.50	0.06	0.06	21.15	0.05	0.05	23.80	0.04	0.04

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **100-Year Current Rainfall=9.09"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
23.85	0.04	0.04
23.90	0.04	0.04
23.95	0.04	0.04
24.00	0.04	0.04

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 100-Year Future Rainfall=11.75"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	2.65	0.04	0.04	5.30	0.07	0.07
0.05	0.00	0.00	2.70	0.04	0.04	5.35	0.07	0.07
0.10	0.00	0.00	2.75	0.05	0.05	5.40	0.07	0.07
0.15	0.00	0.00	2.80	0.05	0.05	5.45	0.07	0.07
0.20	0.00	0.00	2.85	0.05	0.05	5.50	0.07	0.07
0.25	0.00	0.00	2.90	0.05	0.05	5.55	0.07	0.07
0.30	0.00	0.00	2.95	0.05	0.05	5.60	0.07	0.07
0.35	0.00	0.00	3.00	0.05	0.05	5.65	0.07	0.07
0.40	0.00	0.00	3.05	0.05	0.05	5.70	0.07	0.07
0.45	0.00	0.00	3.10	0.05	0.05	5.75	0.07	0.07
0.50	0.00	0.00	3.15	0.05	0.05	5.80	0.07	0.07
0.55	0.00	0.00	3.20	0.05	0.05	5.85	0.08	0.08
0.60	0.00	0.00	3.25	0.05	0.05	5.90	0.08	0.08
0.65	0.00	0.00	3.30	0.05	0.05	5.95	0.08	0.08
0.70	0.00	0.00	3.35	0.05	0.05	6.00	0.08	0.08
0.75	0.00	0.00	3.40	0.05	0.05	6.05	0.08	0.08
0.80	0.01	0.01	3.45	0.05	0.05	6.10	0.08	0.08
0.85	0.01	0.01	3.50	0.05	0.05	6.15	0.08	0.08
0.90	0.01	0.01	3.55	0.05	0.05	6.20	0.08	0.08
0.95	0.01	0.01	3.60	0.06	0.06	6.25	0.08	0.08
1.00	0.01	0.01	3.65	0.06	0.06	6.30	0.08	0.08
1.05	0.01	0.01	3.70	0.06	0.06	6.35	0.08	0.08
1.10	0.01	0.01	3.75	0.06	0.06	6.40	0.09	0.09
1.15	0.02	0.02	3.80	0.06	0.06	6.45	0.09	0.09
1.20	0.02	0.02	3.85	0.06	0.06	6.50	0.09	0.09
1.25	0.02	0.02	3.90	0.06	0.06	6.55	0.09	0.09
1.30	0.02	0.02	3.95	0.06	0.06	6.60	0.09	0.09
1.35	0.02	0.02	4.00	0.06	0.06	6.65	0.09	0.09
1.40	0.02	0.02	4.05	0.06	0.06	6.70	0.09	0.09
1.45	0.02	0.02	4.10	0.06	0.06	6.75	0.09	0.09
1.50	0.02	0.02	4.15	0.06	0.06	6.80	0.09	0.09
1.55	0.03	0.03	4.20	0.06	0.06	6.85	0.10	0.10
1.60	0.03	0.03	4.25	0.06	0.06	6.90	0.10	0.10
1.65	0.03	0.03	4.30	0.06	0.06	6.95	0.10	0.10
1.70	0.03	0.03	4.35	0.06	0.06	7.00	0.10	0.10
1.75	0.03	0.03	4.40	0.06	0.06	7.05	0.10	0.10
1.80	0.03	0.03	4.45	0.06	0.06	7.10	0.10	0.10
1.85	0.03	0.03	4.50	0.06	0.06	7.15	0.10	0.10
1.90	0.03	0.03	4.55	0.06	0.06	7.20	0.10	0.10
1.95	0.03	0.03	4.60	0.07	0.07	7.25	0.11	0.11
2.00	0.03	0.03	4.65	0.07	0.07	7.30	0.11	0.11
2.05	0.03	0.03	4.70	0.07	0.07	7.35	0.11	0.11
2.10	0.04	0.04	4.75	0.07	0.07	7.40	0.11	0.11
2.15	0.04	0.04	4.80	0.07	0.07	7.45	0.11	0.11
2.20	0.04	0.04	4.85	0.07	0.07	7.50	0.11	0.11
2.25	0.04	0.04	4.90	0.07	0.07	7.55	0.11	0.11
2.30	0.04	0.04	4.95	0.07	0.07	7.60	0.11	0.11
2.35	0.04	0.04	5.00	0.07	0.07	7.65	0.11	0.11
2.40	0.04	0.04	5.05	0.07	0.07	7.70	0.11	0.11
2.45	0.04	0.04	5.10	0.07	0.07	7.75	0.12	0.12
2.50	0.04	0.04	5.15	0.07	0.07	7.80	0.12	0.12
2.55	0.04	0.04	5.20	0.07	0.07	7.85	0.12	0.12
2.60	0.04	0.04	5.25	0.07	0.07	7.90	0.12	0.12

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)
7.95	0.12	0.12	10.60	0.29	0.29	13.25	0.35	0.35
8.00	0.12	0.12	10.65	0.31	0.31	13.30	0.34	0.34
8.05	0.12	0.12	10.70	0.32	0.32	13.35	0.32	0.32
8.10	0.12	0.12	10.75	0.34	0.34	13.40	0.32	0.32
8.15	0.13	0.13	10.80	0.34	0.34	13.45	0.29	0.29
8.20	0.13	0.13	10.85	0.37	0.37	13.50	0.29	0.29
8.25	0.13	0.13	10.90	0.37	0.37	13.55	0.27	0.27
8.30	0.13	0.13	10.95	0.39	0.39	13.60	0.26	0.26
8.35	0.13	0.13	11.00	0.40	0.40	13.65	0.26	0.26
8.40	0.13	0.13	11.05	0.44	0.44	13.70	0.25	0.25
8.45	0.13	0.13	11.10	0.45	0.45	13.75	0.25	0.25
8.50	0.13	0.13	11.15	0.49	0.49	13.80	0.25	0.25
8.55	0.13	0.13	11.20	0.50	0.50	13.85	0.24	0.24
8.60	0.13	0.13	11.25	0.54	0.54	13.90	0.24	0.24
8.65	0.14	0.14	11.30	0.55	0.55	13.95	0.23	0.23
8.70	0.14	0.14	11.35	0.59	0.59	14.00	0.23	0.23
8.75	0.14	0.14	11.40	0.60	0.60	14.05	0.23	0.23
8.80	0.14	0.14	11.45	0.64	0.64	14.10	0.22	0.22
8.85	0.14	0.14	11.50	0.67	0.67	14.15	0.22	0.22
8.90	0.14	0.14	11.55	0.85	0.85	14.20	0.22	0.22
8.95	0.14	0.14	11.60	0.87	0.87	14.25	0.21	0.21
9.00	0.14	0.14	11.65	0.91	0.91	14.30	0.21	0.21
9.05	0.15	0.15	11.70	0.95	0.95	14.35	0.20	0.20
9.10	0.15	0.15	11.75	1.23	1.23	14.40	0.20	0.20
9.15	0.16	0.16	11.80	1.30	1.30	14.45	0.20	0.20
9.20	0.16	0.16	11.85	1.70	1.70	14.50	0.19	0.19
9.25	0.17	0.17	11.90	1.87	1.87	14.55	0.19	0.19
9.30	0.17	0.17	11.95	2.92	2.92	14.60	0.19	0.19
9.35	0.17	0.17	12.00	3.22	3.22	14.65	0.18	0.18
9.40	0.17	0.17	12.05	4.88	4.88	14.70	0.18	0.18
9.45	0.18	0.18	12.10	4.67	4.67	14.75	0.17	0.17
9.50	0.18	0.18	12.15	1.97	1.97	14.80	0.17	0.17
9.55	0.19	0.19	12.20	1.69	1.69	14.85	0.16	0.16
9.60	0.19	0.19	12.25	1.29	1.29	14.90	0.16	0.16
9.65	0.20	0.20	12.30	1.22	1.22	14.95	0.16	0.16
9.70	0.20	0.20	12.35	0.94	0.94	15.00	0.16	0.16
9.75	0.20	0.20	12.40	0.91	0.91	15.05	0.15	0.15
9.80	0.21	0.21	12.45	0.87	0.87	15.10	0.15	0.15
9.85	0.21	0.21	12.50	0.85	0.85	15.15	0.15	0.15
9.90	0.21	0.21	12.55	0.66	0.66	15.20	0.15	0.15
9.95	0.22	0.22	12.60	0.64	0.64	15.25	0.14	0.14
10.00	0.22	0.22	12.65	0.60	0.60	15.30	0.14	0.14
10.05	0.23	0.23	12.70	0.59	0.59	15.35	0.14	0.14
10.10	0.23	0.23	12.75	0.55	0.55	15.40	0.14	0.14
10.15	0.23	0.23	12.80	0.54	0.54	15.45	0.14	0.14
10.20	0.24	0.24	12.85	0.50	0.50	15.50	0.14	0.14
10.25	0.24	0.24	12.90	0.50	0.50	15.55	0.14	0.14
10.30	0.24	0.24	12.95	0.46	0.46	15.60	0.14	0.14
10.35	0.25	0.25	13.00	0.45	0.45	15.65	0.14	0.14
10.40	0.25	0.25	13.05	0.41	0.41	15.70	0.14	0.14
10.45	0.26	0.26	13.10	0.40	0.40	15.75	0.13	0.13
10.50	0.26	0.26	13.15	0.38	0.38	15.80	0.13	0.13
10.55	0.28	0.28	13.20	0.37	0.37	15.85	0.13	0.13

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Future Rainfall=11.75"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

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	0.13	0.13	18.55	0.08	0.08	21.20	0.07	0.07
15.95	0.13	0.13	18.60	0.08	0.08	21.25	0.07	0.07
16.00	0.13	0.13	18.65	0.08	0.08	21.30	0.07	0.07
16.05	0.13	0.13	18.70	0.08	0.08	21.35	0.07	0.07
16.10	0.13	0.13	18.75	0.08	0.08	21.40	0.07	0.07
16.15	0.13	0.13	18.80	0.08	0.08	21.45	0.07	0.07
16.20	0.12	0.12	18.85	0.08	0.08	21.50	0.07	0.07
16.25	0.12	0.12	18.90	0.08	0.08	21.55	0.07	0.07
16.30	0.12	0.12	18.95	0.08	0.08	21.60	0.07	0.07
16.35	0.12	0.12	19.00	0.08	0.08	21.65	0.07	0.07
16.40	0.12	0.12	19.05	0.08	0.08	21.70	0.07	0.07
16.45	0.12	0.12	19.10	0.08	0.08	21.75	0.06	0.06
16.50	0.12	0.12	19.15	0.08	0.08	21.80	0.06	0.06
16.55	0.12	0.12	19.20	0.08	0.08	21.85	0.06	0.06
16.60	0.12	0.12	19.25	0.08	0.08	21.90	0.06	0.06
16.65	0.11	0.11	19.30	0.08	0.08	21.95	0.06	0.06
16.70	0.11	0.11	19.35	0.08	0.08	22.00	0.06	0.06
16.75	0.11	0.11	19.40	0.08	0.08	22.05	0.06	0.06
16.80	0.11	0.11	19.45	0.08	0.08	22.10	0.06	0.06
16.85	0.11	0.11	19.50	0.08	0.08	22.15	0.06	0.06
16.90	0.11	0.11	19.55	0.08	0.08	22.20	0.06	0.06
16.95	0.11	0.11	19.60	0.08	0.08	22.25	0.06	0.06
17.00	0.11	0.11	19.65	0.08	0.08	22.30	0.06	0.06
17.05	0.11	0.11	19.70	0.08	0.08	22.35	0.06	0.06
17.10	0.11	0.11	19.75	0.08	0.08	22.40	0.06	0.06
17.15	0.10	0.10	19.80	0.08	0.08	22.45	0.06	0.06
17.20	0.10	0.10	19.85	0.07	0.07	22.50	0.06	0.06
17.25	0.10	0.10	19.90	0.07	0.07	22.55	0.06	0.06
17.30	0.10	0.10	19.95	0.07	0.07	22.60	0.06	0.06
17.35	0.10	0.10	20.00	0.07	0.07	22.65	0.06	0.06
17.40	0.10	0.10	20.05	0.07	0.07	22.70	0.06	0.06
17.45	0.10	0.10	20.10	0.07	0.07	22.75	0.06	0.06
17.50	0.10	0.10	20.15	0.07	0.07	22.80	0.06	0.06
17.55	0.10	0.10	20.20	0.07	0.07	22.85	0.06	0.06
17.60	0.09	0.09	20.25	0.07	0.07	22.90	0.06	0.06
17.65	0.09	0.09	20.30	0.07	0.07	22.95	0.06	0.06
17.70	0.09	0.09	20.35	0.07	0.07	23.00	0.06	0.06
17.75	0.09	0.09	20.40	0.07	0.07	23.05	0.06	0.06
17.80	0.09	0.09	20.45	0.07	0.07	23.10	0.06	0.06
17.85	0.09	0.09	20.50	0.07	0.07	23.15	0.06	0.06
17.90	0.09	0.09	20.55	0.07	0.07	23.20	0.06	0.06
17.95	0.09	0.09	20.60	0.07	0.07	23.25	0.06	0.06
18.00	0.09	0.09	20.65	0.07	0.07	23.30	0.06	0.06
18.05	0.08	0.08	20.70	0.07	0.07	23.35	0.06	0.06
18.10	0.08	0.08	20.75	0.07	0.07	23.40	0.06	0.06
18.15	0.08	0.08	20.80	0.07	0.07	23.45	0.06	0.06
18.20	0.08	0.08	20.85	0.07	0.07	23.50	0.06	0.06
18.25	0.08	0.08	20.90	0.07	0.07	23.55	0.06	0.06
18.30	0.08	0.08	20.95	0.07	0.07	23.60	0.05	0.05
18.35	0.08	0.08	21.00	0.07	0.07	23.65	0.05	0.05
18.40	0.08	0.08	21.05	0.07	0.07	23.70	0.05	0.05
18.45	0.08	0.08	21.10	0.07	0.07	23.75	0.05	0.05
18.50	0.08	0.08	21.15	0.07	0.07	23.80	0.05	0.05

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **100-Year Future Rainfall=11.75"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-1 (cfs)	Subcat P-1 (cfs)
23.85	0.05	0.05
23.90	0.05	0.05
23.95	0.05	0.05
24.00	0.05	0.05

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 100-Year Current Rainfall=9.09"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.00	0.00
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.00	0.00
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.00	0.00
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.00	0.00
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.00	0.00
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.00	0.00
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.00	0.00
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 100-Year Current Rainfall=9.09"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.00	0.00	10.60	0.01	0.01	13.25	0.01	0.01
8.00	0.00	0.00	10.65	0.01	0.01	13.30	0.01	0.01
8.05	0.00	0.00	10.70	0.01	0.01	13.35	0.01	0.01
8.10	0.00	0.00	10.75	0.01	0.01	13.40	0.01	0.01
8.15	0.00	0.00	10.80	0.01	0.01	13.45	0.01	0.01
8.20	0.00	0.00	10.85	0.01	0.01	13.50	0.01	0.01
8.25	0.00	0.00	10.90	0.01	0.01	13.55	0.01	0.01
8.30	0.00	0.00	10.95	0.01	0.01	13.60	0.01	0.01
8.35	0.00	0.00	11.00	0.01	0.01	13.65	0.01	0.01
8.40	0.00	0.00	11.05	0.01	0.01	13.70	0.01	0.01
8.45	0.00	0.00	11.10	0.02	0.02	13.75	0.01	0.01
8.50	0.00	0.00	11.15	0.02	0.02	13.80	0.01	0.01
8.55	0.00	0.00	11.20	0.02	0.02	13.85	0.01	0.01
8.60	0.00	0.00	11.25	0.02	0.02	13.90	0.01	0.01
8.65	0.00	0.00	11.30	0.02	0.02	13.95	0.01	0.01
8.70	0.00	0.00	11.35	0.02	0.02	14.00	0.01	0.01
8.75	0.00	0.00	11.40	0.02	0.02	14.05	0.01	0.01
8.80	0.00	0.00	11.45	0.02	0.02	14.10	0.01	0.01
8.85	0.00	0.00	11.50	0.02	0.02	14.15	0.01	0.01
8.90	0.00	0.00	11.55	0.03	0.03	14.20	0.01	0.01
8.95	0.00	0.00	11.60	0.03	0.03	14.25	0.01	0.01
9.00	0.00	0.00	11.65	0.03	0.03	14.30	0.01	0.01
9.05	0.01	0.01	11.70	0.03	0.03	14.35	0.01	0.01
9.10	0.01	0.01	11.75	0.04	0.04	14.40	0.01	0.01
9.15	0.01	0.01	11.80	0.05	0.05	14.45	0.01	0.01
9.20	0.01	0.01	11.85	0.06	0.06	14.50	0.01	0.01
9.25	0.01	0.01	11.90	0.07	0.07	14.55	0.01	0.01
9.30	0.01	0.01	11.95	0.10	0.10	14.60	0.01	0.01
9.35	0.01	0.01	12.00	0.11	0.11	14.65	0.01	0.01
9.40	0.01	0.01	12.05	0.17	0.17	14.70	0.01	0.01
9.45	0.01	0.01	12.10	0.14	0.14	14.75	0.01	0.01
9.50	0.01	0.01	12.15	0.06	0.06	14.80	0.01	0.01
9.55	0.01	0.01	12.20	0.05	0.05	14.85	0.01	0.01
9.60	0.01	0.01	12.25	0.04	0.04	14.90	0.01	0.01
9.65	0.01	0.01	12.30	0.04	0.04	14.95	0.01	0.01
9.70	0.01	0.01	12.35	0.03	0.03	15.00	0.01	0.01
9.75	0.01	0.01	12.40	0.03	0.03	15.05	0.00	0.00
9.80	0.01	0.01	12.45	0.03	0.03	15.10	0.00	0.00
9.85	0.01	0.01	12.50	0.03	0.03	15.15	0.00	0.00
9.90	0.01	0.01	12.55	0.02	0.02	15.20	0.00	0.00
9.95	0.01	0.01	12.60	0.02	0.02	15.25	0.00	0.00
10.00	0.01	0.01	12.65	0.02	0.02	15.30	0.00	0.00
10.05	0.01	0.01	12.70	0.02	0.02	15.35	0.00	0.00
10.10	0.01	0.01	12.75	0.02	0.02	15.40	0.00	0.00
10.15	0.01	0.01	12.80	0.02	0.02	15.45	0.00	0.00
10.20	0.01	0.01	12.85	0.02	0.02	15.50	0.00	0.00
10.25	0.01	0.01	12.90	0.02	0.02	15.55	0.00	0.00
10.30	0.01	0.01	12.95	0.02	0.02	15.60	0.00	0.00
10.35	0.01	0.01	13.00	0.01	0.01	15.65	0.00	0.00
10.40	0.01	0.01	13.05	0.01	0.01	15.70	0.00	0.00
10.45	0.01	0.01	13.10	0.01	0.01	15.75	0.00	0.00
10.50	0.01	0.01	13.15	0.01	0.01	15.80	0.00	0.00
10.55	0.01	0.01	13.20	0.01	0.01	15.85	0.00	0.00

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Current Rainfall=9.09"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.00	0.00	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.00	0.00	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.00	0.00	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.00	0.00	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.00	0.00	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.00	0.00	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.00	0.00	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.00	0.00	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.00	0.00	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.00	0.00	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.00	0.00	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.00	0.00	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.00	0.00	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.00	0.00	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **100-Year Current Rainfall=9.09"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D 100-Year Future Rainfall=11.75"

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
0.00	0.00	0.00	2.65	0.00	0.00	5.30	0.00	0.00
0.05	0.00	0.00	2.70	0.00	0.00	5.35	0.00	0.00
0.10	0.00	0.00	2.75	0.00	0.00	5.40	0.00	0.00
0.15	0.00	0.00	2.80	0.00	0.00	5.45	0.00	0.00
0.20	0.00	0.00	2.85	0.00	0.00	5.50	0.00	0.00
0.25	0.00	0.00	2.90	0.00	0.00	5.55	0.00	0.00
0.30	0.00	0.00	2.95	0.00	0.00	5.60	0.00	0.00
0.35	0.00	0.00	3.00	0.00	0.00	5.65	0.00	0.00
0.40	0.00	0.00	3.05	0.00	0.00	5.70	0.00	0.00
0.45	0.00	0.00	3.10	0.00	0.00	5.75	0.00	0.00
0.50	0.00	0.00	3.15	0.00	0.00	5.80	0.00	0.00
0.55	0.00	0.00	3.20	0.00	0.00	5.85	0.00	0.00
0.60	0.00	0.00	3.25	0.00	0.00	5.90	0.00	0.00
0.65	0.00	0.00	3.30	0.00	0.00	5.95	0.00	0.00
0.70	0.00	0.00	3.35	0.00	0.00	6.00	0.00	0.00
0.75	0.00	0.00	3.40	0.00	0.00	6.05	0.00	0.00
0.80	0.00	0.00	3.45	0.00	0.00	6.10	0.00	0.00
0.85	0.00	0.00	3.50	0.00	0.00	6.15	0.00	0.00
0.90	0.00	0.00	3.55	0.00	0.00	6.20	0.00	0.00
0.95	0.00	0.00	3.60	0.00	0.00	6.25	0.00	0.00
1.00	0.00	0.00	3.65	0.00	0.00	6.30	0.00	0.00
1.05	0.00	0.00	3.70	0.00	0.00	6.35	0.00	0.00
1.10	0.00	0.00	3.75	0.00	0.00	6.40	0.00	0.00
1.15	0.00	0.00	3.80	0.00	0.00	6.45	0.00	0.00
1.20	0.00	0.00	3.85	0.00	0.00	6.50	0.00	0.00
1.25	0.00	0.00	3.90	0.00	0.00	6.55	0.00	0.00
1.30	0.00	0.00	3.95	0.00	0.00	6.60	0.00	0.00
1.35	0.00	0.00	4.00	0.00	0.00	6.65	0.00	0.00
1.40	0.00	0.00	4.05	0.00	0.00	6.70	0.00	0.00
1.45	0.00	0.00	4.10	0.00	0.00	6.75	0.00	0.00
1.50	0.00	0.00	4.15	0.00	0.00	6.80	0.00	0.00
1.55	0.00	0.00	4.20	0.00	0.00	6.85	0.00	0.00
1.60	0.00	0.00	4.25	0.00	0.00	6.90	0.00	0.00
1.65	0.00	0.00	4.30	0.00	0.00	6.95	0.00	0.00
1.70	0.00	0.00	4.35	0.00	0.00	7.00	0.00	0.00
1.75	0.00	0.00	4.40	0.00	0.00	7.05	0.00	0.00
1.80	0.00	0.00	4.45	0.00	0.00	7.10	0.00	0.00
1.85	0.00	0.00	4.50	0.00	0.00	7.15	0.00	0.00
1.90	0.00	0.00	4.55	0.00	0.00	7.20	0.00	0.00
1.95	0.00	0.00	4.60	0.00	0.00	7.25	0.00	0.00
2.00	0.00	0.00	4.65	0.00	0.00	7.30	0.00	0.00
2.05	0.00	0.00	4.70	0.00	0.00	7.35	0.00	0.00
2.10	0.00	0.00	4.75	0.00	0.00	7.40	0.00	0.00
2.15	0.00	0.00	4.80	0.00	0.00	7.45	0.00	0.00
2.20	0.00	0.00	4.85	0.00	0.00	7.50	0.00	0.00
2.25	0.00	0.00	4.90	0.00	0.00	7.55	0.01	0.01
2.30	0.00	0.00	4.95	0.00	0.00	7.60	0.01	0.01
2.35	0.00	0.00	5.00	0.00	0.00	7.65	0.01	0.01
2.40	0.00	0.00	5.05	0.00	0.00	7.70	0.01	0.01
2.45	0.00	0.00	5.10	0.00	0.00	7.75	0.01	0.01
2.50	0.00	0.00	5.15	0.00	0.00	7.80	0.01	0.01
2.55	0.00	0.00	5.20	0.00	0.00	7.85	0.01	0.01
2.60	0.00	0.00	5.25	0.00	0.00	7.90	0.01	0.01

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Future Rainfall=11.75"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
7.95	0.01	0.01	10.60	0.01	0.01	13.25	0.01	0.01
8.00	0.01	0.01	10.65	0.01	0.01	13.30	0.01	0.01
8.05	0.01	0.01	10.70	0.01	0.01	13.35	0.01	0.01
8.10	0.01	0.01	10.75	0.01	0.01	13.40	0.01	0.01
8.15	0.01	0.01	10.80	0.02	0.02	13.45	0.01	0.01
8.20	0.01	0.01	10.85	0.02	0.02	13.50	0.01	0.01
8.25	0.01	0.01	10.90	0.02	0.02	13.55	0.01	0.01
8.30	0.01	0.01	10.95	0.02	0.02	13.60	0.01	0.01
8.35	0.01	0.01	11.00	0.02	0.02	13.65	0.01	0.01
8.40	0.01	0.01	11.05	0.02	0.02	13.70	0.01	0.01
8.45	0.01	0.01	11.10	0.02	0.02	13.75	0.01	0.01
8.50	0.01	0.01	11.15	0.02	0.02	13.80	0.01	0.01
8.55	0.01	0.01	11.20	0.02	0.02	13.85	0.01	0.01
8.60	0.01	0.01	11.25	0.02	0.02	13.90	0.01	0.01
8.65	0.01	0.01	11.30	0.02	0.02	13.95	0.01	0.01
8.70	0.01	0.01	11.35	0.03	0.03	14.00	0.01	0.01
8.75	0.01	0.01	11.40	0.03	0.03	14.05	0.01	0.01
8.80	0.01	0.01	11.45	0.03	0.03	14.10	0.01	0.01
8.85	0.01	0.01	11.50	0.03	0.03	14.15	0.01	0.01
8.90	0.01	0.01	11.55	0.04	0.04	14.20	0.01	0.01
8.95	0.01	0.01	11.60	0.04	0.04	14.25	0.01	0.01
9.00	0.01	0.01	11.65	0.04	0.04	14.30	0.01	0.01
9.05	0.01	0.01	11.70	0.04	0.04	14.35	0.01	0.01
9.10	0.01	0.01	11.75	0.05	0.05	14.40	0.01	0.01
9.15	0.01	0.01	11.80	0.06	0.06	14.45	0.01	0.01
9.20	0.01	0.01	11.85	0.07	0.07	14.50	0.01	0.01
9.25	0.01	0.01	11.90	0.09	0.09	14.55	0.01	0.01
9.30	0.01	0.01	11.95	0.13	0.13	14.60	0.01	0.01
9.35	0.01	0.01	12.00	0.15	0.15	14.65	0.01	0.01
9.40	0.01	0.01	12.05	0.21	0.21	14.70	0.01	0.01
9.45	0.01	0.01	12.10	0.19	0.19	14.75	0.01	0.01
9.50	0.01	0.01	12.15	0.08	0.08	14.80	0.01	0.01
9.55	0.01	0.01	12.20	0.07	0.07	14.85	0.01	0.01
9.60	0.01	0.01	12.25	0.05	0.05	14.90	0.01	0.01
9.65	0.01	0.01	12.30	0.05	0.05	14.95	0.01	0.01
9.70	0.01	0.01	12.35	0.04	0.04	15.00	0.01	0.01
9.75	0.01	0.01	12.40	0.04	0.04	15.05	0.01	0.01
9.80	0.01	0.01	12.45	0.04	0.04	15.10	0.01	0.01
9.85	0.01	0.01	12.50	0.04	0.04	15.15	0.01	0.01
9.90	0.01	0.01	12.55	0.03	0.03	15.20	0.01	0.01
9.95	0.01	0.01	12.60	0.03	0.03	15.25	0.01	0.01
10.00	0.01	0.01	12.65	0.03	0.03	15.30	0.01	0.01
10.05	0.01	0.01	12.70	0.03	0.03	15.35	0.01	0.01
10.10	0.01	0.01	12.75	0.02	0.02	15.40	0.01	0.01
10.15	0.01	0.01	12.80	0.02	0.02	15.45	0.01	0.01
10.20	0.01	0.01	12.85	0.02	0.02	15.50	0.01	0.01
10.25	0.01	0.01	12.90	0.02	0.02	15.55	0.01	0.01
10.30	0.01	0.01	12.95	0.02	0.02	15.60	0.01	0.01
10.35	0.01	0.01	13.00	0.02	0.02	15.65	0.01	0.01
10.40	0.01	0.01	13.05	0.02	0.02	15.70	0.01	0.01
10.45	0.01	0.01	13.10	0.02	0.02	15.75	0.01	0.01
10.50	0.01	0.01	13.15	0.02	0.02	15.80	0.01	0.01
10.55	0.01	0.01	13.20	0.02	0.02	15.85	0.01	0.01

2024-10-11_Ridgewood, NJNOAA 24-hr D **100-Year Future Rainfall=11.75"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)	Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
15.90	0.01	0.01	18.55	0.00	0.00	21.20	0.00	0.00
15.95	0.01	0.01	18.60	0.00	0.00	21.25	0.00	0.00
16.00	0.01	0.01	18.65	0.00	0.00	21.30	0.00	0.00
16.05	0.01	0.01	18.70	0.00	0.00	21.35	0.00	0.00
16.10	0.01	0.01	18.75	0.00	0.00	21.40	0.00	0.00
16.15	0.01	0.01	18.80	0.00	0.00	21.45	0.00	0.00
16.20	0.01	0.01	18.85	0.00	0.00	21.50	0.00	0.00
16.25	0.01	0.01	18.90	0.00	0.00	21.55	0.00	0.00
16.30	0.01	0.01	18.95	0.00	0.00	21.60	0.00	0.00
16.35	0.01	0.01	19.00	0.00	0.00	21.65	0.00	0.00
16.40	0.01	0.01	19.05	0.00	0.00	21.70	0.00	0.00
16.45	0.01	0.01	19.10	0.00	0.00	21.75	0.00	0.00
16.50	0.01	0.01	19.15	0.00	0.00	21.80	0.00	0.00
16.55	0.01	0.01	19.20	0.00	0.00	21.85	0.00	0.00
16.60	0.00	0.00	19.25	0.00	0.00	21.90	0.00	0.00
16.65	0.00	0.00	19.30	0.00	0.00	21.95	0.00	0.00
16.70	0.00	0.00	19.35	0.00	0.00	22.00	0.00	0.00
16.75	0.00	0.00	19.40	0.00	0.00	22.05	0.00	0.00
16.80	0.00	0.00	19.45	0.00	0.00	22.10	0.00	0.00
16.85	0.00	0.00	19.50	0.00	0.00	22.15	0.00	0.00
16.90	0.00	0.00	19.55	0.00	0.00	22.20	0.00	0.00
16.95	0.00	0.00	19.60	0.00	0.00	22.25	0.00	0.00
17.00	0.00	0.00	19.65	0.00	0.00	22.30	0.00	0.00
17.05	0.00	0.00	19.70	0.00	0.00	22.35	0.00	0.00
17.10	0.00	0.00	19.75	0.00	0.00	22.40	0.00	0.00
17.15	0.00	0.00	19.80	0.00	0.00	22.45	0.00	0.00
17.20	0.00	0.00	19.85	0.00	0.00	22.50	0.00	0.00
17.25	0.00	0.00	19.90	0.00	0.00	22.55	0.00	0.00
17.30	0.00	0.00	19.95	0.00	0.00	22.60	0.00	0.00
17.35	0.00	0.00	20.00	0.00	0.00	22.65	0.00	0.00
17.40	0.00	0.00	20.05	0.00	0.00	22.70	0.00	0.00
17.45	0.00	0.00	20.10	0.00	0.00	22.75	0.00	0.00
17.50	0.00	0.00	20.15	0.00	0.00	22.80	0.00	0.00
17.55	0.00	0.00	20.20	0.00	0.00	22.85	0.00	0.00
17.60	0.00	0.00	20.25	0.00	0.00	22.90	0.00	0.00
17.65	0.00	0.00	20.30	0.00	0.00	22.95	0.00	0.00
17.70	0.00	0.00	20.35	0.00	0.00	23.00	0.00	0.00
17.75	0.00	0.00	20.40	0.00	0.00	23.05	0.00	0.00
17.80	0.00	0.00	20.45	0.00	0.00	23.10	0.00	0.00
17.85	0.00	0.00	20.50	0.00	0.00	23.15	0.00	0.00
17.90	0.00	0.00	20.55	0.00	0.00	23.20	0.00	0.00
17.95	0.00	0.00	20.60	0.00	0.00	23.25	0.00	0.00
18.00	0.00	0.00	20.65	0.00	0.00	23.30	0.00	0.00
18.05	0.00	0.00	20.70	0.00	0.00	23.35	0.00	0.00
18.10	0.00	0.00	20.75	0.00	0.00	23.40	0.00	0.00
18.15	0.00	0.00	20.80	0.00	0.00	23.45	0.00	0.00
18.20	0.00	0.00	20.85	0.00	0.00	23.50	0.00	0.00
18.25	0.00	0.00	20.90	0.00	0.00	23.55	0.00	0.00
18.30	0.00	0.00	20.95	0.00	0.00	23.60	0.00	0.00
18.35	0.00	0.00	21.00	0.00	0.00	23.65	0.00	0.00
18.40	0.00	0.00	21.05	0.00	0.00	23.70	0.00	0.00
18.45	0.00	0.00	21.10	0.00	0.00	23.75	0.00	0.00
18.50	0.00	0.00	21.15	0.00	0.00	23.80	0.00	0.00

2024-10-11_Ridgewood, NJ

NOAA 24-hr D **100-Year Future Rainfall=11.75"**

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Primary Comparison (continued)

Time (hours)	Subcat E-2 (cfs)	Subcat P-2 (cfs)
23.85	0.00	0.00
23.90	0.00	0.00
23.95	0.00	0.00
24.00	0.00	0.00

APPENDIX E
HYDROCAD DATA & ANALYSIS RESULTS



Existing Runoff to
Chestnut Street



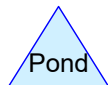
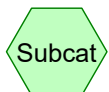
Proposed Runoff to
Chestnut Street



Existing Runoff to North
Broad Street



Proposed Runoff to
North Broad Street



Routing Diagram for 2024-10-11_Ridgewood, NJ

Prepared by Stonefield Engineering & Design, Printed 10/11/2024
HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

2024-10-11_Ridgewood, NJ

Prepared by Stonefield Engineering & Design

Printed 10/11/2024

HydroCAD® 10.20-3c s/n 06682 © 2023 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year Current	NOAA 24-hr	D	Default	24.00	1	3.40	2
2	2-Year Future	NOAA 24-hr	D	Default	24.00	1	4.11	2
3	10-Year Current	NOAA 24-hr	D	Default	24.00	1	5.28	2
4	10-Year Future	NOAA 24-hr	D	Default	24.00	1	6.31	2
5	100-Year Current	NOAA 24-hr	D	Default	24.00	1	9.09	2
6	100-Year Future	NOAA 24-hr	D	Default	24.00	1	11.75	2
7	WQ	NOAA 24-hr	D	Scale	2.00	1	1.25	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
3,861	80	>75% Grass cover, Good, HSG D (E-1, P-1)
761	98	Impervious (E-2)
3,310	98	Impervious Area (E-1, P-2)
2,083	98	Impervious Surface (P-1)
23,665	98	Motor Vehicle Surface (E-1, P-1, P-2)
3,344	98	Roof Area (P-1)
37,024	96	TOTAL AREA

