STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

FOR

HOMELAND TOWERS

GRANITE SPRINGS – NY578

PREPARED FOR:

HOMELAND TOWERS, LLC

TOWN OF YORKTOWN

WESTCHESTER COUNTY, NEW YORK

JULY, 2025

SUBMITTED TO:

TOWN OF YORKTOWN TOWN BOARD

PREPARED BY:

KSCJ CONSULTING

KELLARD SESSIONS CERMELE JOHANNESSEN

500 MAIN STREET

ARMONK, NEW YORK 10504

(914) 273-2323

WWW.KSCJCONSULTING.COM

STATE OF NEW YORK
JOSEPH MATTHEW CERMELE
076802
LICENSED PROFESSIONAL ENGINEER

PROJECT NO. YRHOMELAND900

THIS REPORT, IN CONJUNCTION WITH THE PROJECT PLANS,

IS CONSIDERED THE COMPLETE STORMWATER MANAGEMENT REPORT

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1.0 EXECUTIVE SUMMARY

This Erosion and Sediment Control (ESC) Plan and accompanying project plans have been prepared for the construction activities associated with the proposed construction activities required for the development of the Granite Springs NY578 in the Town of Yorktown, Westchester County, New York (See Site Location Map – Figure 1). The subject property is located at 62 Granite Springs Road in the Town of Yorktown, Westchester County, New York. The project site consists of two (2) lots identified as Tax Map Numbers 27.11-1-33 and 27.7-1-53 on Westchester County GIS. The property is approximately 4.17 acres in size and located in the Residential (R1-20) Zoning District. The proposed project includes the construction of a gravel access drive off of Granite Springs Road up to a cell tower compound.

Throughout the construction process, strict adherence to the erosion control plans and specifications will be maintained to ensure that all sediment is contained within the site in a controlled manner and that the untimely or unnecessary removal of existing vegetation is prevented. It is anticipated that the project will occur over a period of approximately 12 months, commencing in July 2025.

The project site lies within the Croton River Basin, part of the NYC Drinking Water Supply. Development of the site will involve disturbances to a total of ±0.65 acres (±28,479 s.f.). The project has been designed in accordance with Chapter 248 – Stormwater Management and Erosion and Sediment Control of the Code the Town of Yorktown. Although the project disturbance is less than an acre, the disturbance is greater than 5,000 square feet and within the NYCDEP East-Hudson watershed, the project requires coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit, GP-0-25-001, for Stormwater Discharges from Construction Activity ("General Permit") for a basic SWPPP (Erosion and Sediment Control only).

No known enforcement actions have commenced against the applicant for any alleged violations of law related to existing conditions or to the activity proposed.

At the time of this writing, it is understood that the following permits/approvals are required to implement the project:

TABLE 1-1: PROJECT PERMITS AND APPROVALS

AGENCY	PERMIT/APPROVAL	STATUS
Town of Yorktown Town Board	Lease Approval	Ongoing
	Town Wetland Permit	Pending
	Town Tree Removal Permit	Pending
Town of Yorktown Planning Board	Planning Board Referral	Pending
Town of Yorktown Stormwater Permit	Town Engineering Department	Pending
Town of Yorktown Building Department	Town Building Permit	Pending
Town of Yorktown Highway Department	Town Highway Permit	Pending
NYS Department of Environmental Conservation	Article 24 Freshwater Wetland Permit	Pending
NYS Department of Environmental Conservation	SPDES-GP-0-25-001	Pending
New York State Legislature	Alienation of Parkland	Approved

2.0 EXISTING SITE CONDITIONS

2.1 SITE DESCRIPTION

The ±4.17 acre project site is presently undeveloped and consisting of a flatter area off of Granite Spring Road that then rises in grade towards the north. The site is currently wooded throughout with wetlands in the flatter areas and to the west of the site.

2.2 SOILS

The United States Department of Agriculture (USDA) Natural Resource Conservation Service Web Soil Survey has been reviewed. The delineation of the soil boundaries for the study area are shown on Figure 2 – Soils Map.

The surficial soil conditions and the soil data is summarized in Table 2-1 below.

TABLE 2-1: ON-SITE SOIL DISTRIBUTION

MAP SYMBOL	SOIL NAME	HYDROLOGIC SOIL GROUP	ON-SITE ACREAGE	PERCENT OF SITE
WdA	Woodbridge loam, 0-3%	C/D	±0.43	±10.3
WdB	Woodbridge loam, 3-8%	C/D	±0.05	±1.2
PnB	Paxton fine sandy loam, 3-8%	C	±3.14	±75.3
RdB	Ridgebury complex, 3-8%	D	±0.53	±12.7
Uc	Udorthents, wet substratum	D	±0.02	±0.5
TOTAL			**±4.17 acres**	**100%**

Source: USDA Soil Conservation Service Soil Survey for Putnam and Westchester Counties, New York

The Soil Conservation Service defines the hydrologic soil groups as follows:

- **Type A Soils**: Soils having a high infiltration rate and low runoff potential when thoroughly wet. These soils consist mainly of deep, well-drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

- **Type B Soils**: Soils having a moderate infiltration rate when thoroughly wet. These soils consist mainly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately course textures. These soils have a moderate rate of water transmission.

- **Type C Soils**: Soils having a low infiltration rate when thoroughly wet. These soils consist mainly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine texture. These soils have a low rate of water transmission.

- **Type D Soils**: Soils having a very low infiltration rate and high runoff potential when thoroughly wet. These soils consist mainly of clays that have high shrink-swell potential, soils that have a permanent high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very low rate of water transmission.

2.3 GROUNDWATER, SURFACE WATERS AND WETLANDS

Groundwater

Aquifer mapping was reviewed to determine whether the site is over a sole source aquifer. According to the EPA "Sole Source Aquifers" map, the site is not over a sole source aquifer.

Surface Waters and Wetlands

Based upon available mapping and field reconnaissance performed by this office, it was determined that State regulated freshwater wetland A-13 (Class 1) is located on the project site and work shall occur within the local wetland buffer.

2.4 FLOODPLAIN

Upon review of FEMA Flood Insurance Rate Maps (FIRM) panel 36119C0042F, it is confirmed that the property is not located within any regulated special flood hazard areas (refer to Figure 4 – FEMA Flood Insurance Rate Map (FIRM)).

3.0 PROPOSED SITE CONDITIONS

The proposed project involves the construction of a cell tower, accompanying equipment pads to be built at a later date and an access drive.

The project will not result in an increase in impervious surfaces as proposed ground cover constructed shall be gravel. The total disturbance from the development is approximately 28,479 s.f. with approximately 15,627 s.f. occurring within the wetland buffer. Currently, there are no stormwater practices on site. As a result of the proposed change in land cover due to the gravel drive and compound area, there is a minor increase in stormwater runoff. The crushed stone compound area has been designed as a detention basin to mitigate this nominal increase, as described further in this report. The plan includes various stormwater collection, storage and conveyance systems and employs various temporary erosion and sediment control measures, during and construction, to minimize the potential adverse impacts from sediment transport to downgradient properties.

TABLE 3-1: LAND COVER SUMMARY

DESIGN LINE 1					
LAND COVER DESCRIPTION	EXISTING CONDITION				
	LAND AREA BY HYDROLOGIC SOIL GROUP (SF)				
	A	B	C	D	TOTAL
LAWN	0	0	0	0	**0**
WOODED	0	0	107,365	33,288	**140,653**
WATERBODY	0	0	0	0	**0**
GRAVEL/PERVIOUS	0	0	0	0	**0**
IMPERVIOUS (BUILDING, DRIVES, WALKS, ETC.)	0	0	0	0	**0**
TOTAL	**0**	**0**	107,365	33,288	**140,653**
LAND COVER DESCRIPTION	PROPOSED CONDITION				
	LAND AREA BY HYDROLOGIC SOIL GROUP (SF)				
	A	B	C	D	TOTAL
LAWN	0	0	10,552	3,565	**0**
WOODED	0	0	88,829	27,009	**0**
WATERBODY	0	0	0	0	**0**
GRAVEL/PERVIOUS	0	0	7,973	2,725	**0**
IMPERVIOUS (BUILDING, DRIVES, WALKS, ETC.)	0	0	0	0	**0**
TOTAL	**0**	**0**	**107,354**	**33,299**	**140,653**

As described in the following sections of this report, an erosion and sediment control plan has been prepared in accordance with the New York State Standards and Specifications for Erosion and Sediment Control to protect the existing project site, downgradient properties, waterbodies and drainage features during construction activities and in the post development condition.

4.0 STORMWATER MANAGEMENT PLAN

The proposed stormwater management system for the development has been designed to meet the applicable requirements of local, city, and state stormwater ordinances and guidelines, including but not limited to:

- Town Code of Yorktown Chapter 248 – Stormwater Management and Erosion and Sediment Control;
- New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001; and the

The subject development proposes a total disturbance of less than 1 acre but greater than 5,000 S.F. As such, coverage under the General Permit for a basic SWPPP is required. Post-construction stormwater management controls are not required and but will be provided for compliance with local regulations. In order to meet the requirements set forth by Chapter 248, post-construction stormwater management controls have been designed to mitigate runoff volumes and peak rate attenuation of the 1, 10 and 100-year, 24-hour design storm events.

4.1 STORMWATER MANAGEMENT OBJECTIVES

The goals of this Stormwater Management Plan are to:

- Reduce or eliminate erosion and sediment loading to downgradient properties and wetlands/water bodies during construction;
- Control the impact of stormwater runoff on the water quality of receiving waters;
- Control the volume and peak rate of runoff during and post-construction;
- Account for potential future increases to storm events due to climate change; and
- Maintain stormwater controls both during and after construction.

These goals will be achieved through site planning and implementing Best Management Practices (BMPS) for stormwater quality and quantity controls. Monitoring of temporary erosion controls throughout construction and pre- and post-construction monitoring, inspection and maintenance of BMPs will be conducted to ensure optimal performance of stormwater quality and quantity practices needed to meet these objectives.

The stormwater management system proposed to treat the stormwater runoff associated with the proposed development consists of diversion swales and gravel storage. In consideration for impacts to the receiving wetland and the NYSDEC Stormwater Design Manual Section 2.7, “Climate Change Resiliency Planning,” the proposed development has minimized the proposed limits of disturbance to the extent practicable, proposed pervious gabion retaining walls and propose pervious gravel coverages for the

newly installed surfaces. A planting plan utilizing local species has been developed to mitigate the impact of the proposed disturbances. It is the applicant's belief that this will be sufficient to account for potential increases to future storm events.

4.2 HYDROLOGIC ANALYSIS

The methodology, requirements and guidelines used in the analysis and the preparation of the stormwater management plan for the project include:

- Computer software entitled, "Hydrocad Version 10.0", developed by Hydrocad Software Solutions, LLC. This program is based on USDA Soil Conservation Service (SCS) Technical Release 20 (TR-20).
- New York State Stormwater Management Design Manual (latest edition).
- New York State Standards and Specifications for Erosion and Sediment Control, (latest edition).
- Town Code of Yorktown Chapter 248 – Stormwater Management and Erosion and Sediment Control

The study area consists of an overall watershed that encompasses approximately 3.29 acres and contains the entire project site. The overall watershed was broken down into smaller watersheds, or subcatchments to allow for analysis of runoff conditions at several design points throughout the study area to compare the effects of the proposed development. The analysis considered existing drainage patterns, soil types, ground cover, and topography. The time of concentrations for each of the subcatchments were calculated. If any of the calculated time of concentrations for any of the subcatchments were less than the required TR-55 minimum time of concentration of six minutes, then the TR-55 minimum time of concentration was used.

Stormwater management computations were based upon the Soil Conservation Service (SCS), TR-20 and TR-55 methodologies and recommendations included in the "New York Standards and Specifications for Erosion and Sediment Control". Pre- and post-development rates of stormwater have been computed for comparison for the 1 year, 10 year and 100 year storm event using Type III, 24-hour rainfall events. The computer software entitled "Hydrocad Version 10.0" by Hydrocad Software Solutions, LLC has been utilized to determine the runoff rates and detention requirements.

TR-20 and TR-55 model of the site in existing conditions was constructed to determine runoff rates for the 1 year, 10 year and 100-year design stormwater. These rates serve as maximum target discharge rates for the developed conditions. Having established the target rates in accordance with the NYSDEC Stormwater Management Design Manual, the TR-20 and TR-55 model of the proposed (developed) condition was similarly constructed to include the water quality facilities, the proposed detention system and the sub-areas contributing to them. The results of the computer modeling used to analyze the pre and post-development watershed conditions are presented in Appendix D and summarized below in Table 4-4, Summary of Hydrologic Analysis.

Rainfall frequency and duration data for the project location, for the 1 year, 10 year and 100 year design storms, has been extracted from the latest Northeast Regional Climate Data Center and converted to develop rainfall distribution curves. The values provided are for the 24-hour design storms in the Town of Yorktown.

TABLE 4-1: PRECIPITATION VALUES

DESIGN STORM (YEAR)	24-HOUR RAINFALL (INCHES)
1	2.77
10	5.08
100	9.19

Source: Northeast Regional Climate Data Center

4.2.1 PRE-DEVELOPMENT CONDITION

The existing conditions consist of one (1) drainage area and design line to analyze the existing conditions for the area of the project site in which development is proposed. This drainage area is illustrated on Figure 5 - Existing Conditions Hydrology Plan and include the entire area of proposed disturbance and off-site contributing drainage areas as required to calculate peak discharge rates at the design points/lines.

DRAINAGE AREA #1 (DA-EX):

DA-EX totals 3.29 acres and consists of woodland. DA-EX includes Hydrologic Soil Group (HSG) C and D soils. DA-EX drains west to the onsite state wetland A-13. The edge of this wetland is designated as Design Line #1 (DL-1). Flows to this design line will be analyzed for the pre/post construction comparison.

4.2.2 POST-DEVELOPMENT CONDITIONS

Under the post development condition, a grasscrete apron entering the site off of Granite Springs Road and a gravel access driveway shall be constructed upslope to a gravel compound area. The change in land cover will result in a nominal increase to peak rates of runoff. In order to mitigate this increase, the gravel compound area shall be constructed with a 1-foot deep drainage layer, set level, to serve as stormwater detention. Although this layer will allow for infiltration, conservatively this design does not take infiltration into account and only considers this to be storage for calculation purposes.

As illustrated on Figure 6 - Proposed Conditions Hydrology Plan, the subject property has been divided into five (5) drainage areas in the developed condition and the design line remains unchanged from the existing condition. The five (5) drainage areas are described below:

DRAINAGE AREA #1 (DA-PR 1):

This drainage area consists of mostly undisturbed areas that will drain from east to west into a drainage swale along the driveway. It will be collected in a drain inlet and pipe to discharge into the wetlands.

DRAINAGE AREA #2 (DA-PR 2):

This drainage area consists of the gravel compound and a small area to be lawn. This area shall drain into gravel layer beneath the compound. No infiltration was considered for calculations.

DRAINAGE AREA #3 (DA-PR 3):

This drainage area consists of areas uphill from the compound which shall be diverted by swales to flow around and discharge to downhill areas, eventually reaching the wetland.

DRAINAGE AREA #4 (DA-PR 4):

This drainage area consists of the section of the driveway that slopes up from the proposed low point to the compound area. This driveway shall be gravel. Any water that cannot infiltrate into the ground or be stored within the gravel layer shall sheet off the driveway and downhill to the design line. No infiltration was considered for calculations.

DRAINAGE AREA #5 (DA-PR 5):

This drainage area consists of the lower, flatter section of the driveway and a small uphill area along the neighboring property line. The driveway shall be gravel. Any water that cannot infiltrate into the ground or be stored within the gravel layer shall sheet off the driveway and downhill to the design line. No infiltration was considered for calculations.

TABLE 4-2: SUMMARY OF HYDROLOGIC ANALYSIS
PEAK DISCHARGE RATE AND HYDROLOGIC RUNOFF VOLUME

PEAK DISCHARGE RATE SUMMARY			
DESIGN LINE 1			
WATERSHED CONDITION	PEAK DISCHARGE RATES BY STORM RETURN FREQUENCY (cfs)		
	STORM RETURN FREQUENCY (year)		
	100	10	1
EXISTING CONDITION	10.33	4.43	1.28
PROPOSED CONDITION	10.13	4.18	1.24
NET CHANGE (%)	-1.9%	-5.6%	-3.1%

HYDROLOGIC RUNOFF VOLUME SUMMARY			
DESIGN POINT 1			
WATERSHED CONDITION	RUNOFF VOLUMES BY STORM RETURN FREQUENCY (ac-ft)		
	STORM FREQUENCY (year)		
	100	10	1
EXISTING CONDITION	1.385	0.536	0.155
PROPOSED CONDITION	1.381	0.528	0.159
NET CHANGE (%)	-0.3%	-1.5%	+2.6%

5.0 EROSION AND SEDIMENT CONTROL PLAN

All proposed soil erosion and sediment control practices have been designed in accordance with the following publications:

- New York Standards and Specifications for Erosion and Sediment Control, latest edition
- New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-25-001)
- Town Code of Yorktown Chapter 248 "Stormwater Management and Erosion and Sediment Control"

The primary aim of the soil erosion and sediment control plan is to reduce soil erosion from areas stripped of vegetation during construction and to prevent silt from reaching the drainage structures, wetland systems, watercourses, waterbodies and downstream properties. The stormwater storage systems will not be put into service until the contributing drainage areas to the system have been stabilized. As outlined in the construction sequencing notes below and on the Erosion and Sediment Control Plan, the Erosion and Sediment Control Plan is an integral component of the construction phasing and project sequencing and will be implemented to control sediment and re-establish vegetation as soon as practicable. The plan will be implemented prior to the commencement of any earthmoving activities and will be maintained though the duration of the project.

5.1 SUGGESTED CONSTRUCTION SEQUENCE AND PHASING

Outlined below is a brief listing of the suggested construction sequencing for the project.

Prior to any interior site activity, the owner, contractor, owner's engineer, and Town Engineer shall hold a pre-construction meeting.

Final stabilization, as defined by the NYSDEC SPDES General Permit, is the establishment of a uniform perennial vegetative cover with a density of eighty (80) percent over the pervious surface once all soil disturbance activities have ceased. Cover can be vegetative (e.g., grass, trees, seed and mulch, shrubs or turf) or non-vegetative (e.g., geotextiles, rip-rap or gabions, pavement, roofs, etc.).

The applicant shall notify the Town of Yorktown enforcement official at least 48 hours before any of the following as required by the Stormwater Management Officer:

- Start of construction.
- Installation of sediment and erosion control measures.
- Completion of site clearing.
- Installation of constructed stormwater improvements.
- Completion of rough grading.
- Completion of final grading.

- Close of the construction season.
- Completion of final landscaping.
- Successful establishment of landscaping.

GENERAL CONSTRUCTION SEQUENCING

- A preconstruction meeting with town representatives, contractor, owner, and engineer shall be scheduled at least 48-hours before the start of construction activities.
- All erosion and sediment control practices shall be inspected as indicated in the erosion and sediment control maintenance schedule. If deficiencies are identified, the contractor shall begin implementing corrective actions in one business day and shall complete the corrective actions in a reasonable time frame.
- Prior to any construction, stakeout property lines and conservation areas and limits of disturbance. Mark limits of disturbance in the field with orange construction fencing or flagging.
- Remove trees, strip and grub the site.
- Install retaining walls; Rough grade site
- Install concrete tower foundation
- Install gravel pad for compound area stormwater storage
- Install underground utilities
- Final grade site; Install gravel within compound area
- Install monopole tower and fencing/gates
- Install wetland mitigation, trees and landscaping
- Remove temporary erosion controls when site has achieved final stabilization

5.2 TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

The proposed soil erosion and sediment control devices include the planned erosion control practices outlined below. Maintenance procedures for each erosion control practice are also provided herein. The owner or operator must ensure that all erosion and sediment control practices identified herein are maintained in effective operating condition at all times.

In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of next business day or completed within seven (7) calendar days.

STABILIZED CONSTRUCTION ENTRANCE

A stabilized construction entrance shall be installed at the project entrance as indicated on the plans. The purpose of the stabilized construction entrance is to prevent vehicles leaving the site from tracking sediment, mud or any other construction-related materials from the site onto Granite Springs Road.

Maintenance/Inspection

Stabilized construction entrance shall be inspected a minimum of twice every seven (7) calendar days. The Contractor shall maintain the construction entrance in a manner which prevents or significantly reduces the tracking of sediment/soil onto Granite Springs Road. The Contractor shall inspect the construction entrance daily and after each rain event for displacement or loss of aggregate. The Contractor shall top-dress the construction entrance when displacement/loss of aggregate occurs, or if the aggregate becomes clogged or silted to the extent that the entrance can no longer perform its intended function. The Contractor shall inspect the vicinity of the construction entrance several times a day and immediately remove any sediment dropped or washed onto Granite Springs Road.

SILT FENCE

Silt fence (geotextile filter cloth) shall be placed in locations depicted on the approved plans. The purpose of the silt fence is to reduce the velocity of sediment-laden stormwater from small drainage areas and to intercept the transported sediment load. In general, silt fence shall be used at the down-gradient perimeter of disturbed areas, toe of slopes or intermediately within slopes where obvious channel concentration of stormwater is not present. Silt fence shall always be installed parallel to the contours in order to prevent concentrated flows from developing along the silt fence.

Maintenance/Inspection

Silt fencing shall be inspected a minimum of twice every seven (7) calendar days. Inspections shall include ensuring that the fence material is tightly secured to the wood posts. In addition, overlapping filter fabric shall be secure and the fabric shall be maintained a minimum of six (6) inches below grade. In the event that any "bulges" develop in the fence, that section of fence shall be replaced immediately with a new fence section. Any visible sediment build-up against the fence shall be removed immediately and deposited on-site a minimum of 100 feet outside of any regulated wetland area, watercourse or waterbody.

INLET PROTECTION

After the drain inlets have been installed and the site is completely stabilized, these drain inlets will receive stormwater from the driveway and overland watersheds. During construction, a filter fabric drop inlet barrier shall be placed around the drain inlets to allow stormwater to be filtered prior to the stormwater being discharged down gradient.

Maintenance/Inspection

Inlet protection devices shall be inspected a minimum of twice every seven (7) calendar days. Care shall be taken to ensure that all inlet protection devices are properly located and secure and do not become displaced. Upon stabilization of the drainage areas, remove all materials and sediment and dispose of properly. Any accumulated sediments shall be removed from the device and deposited not less than 100 feet from a regulated wetland area, watercourse or waterbody.

TREE PROTECTION

All significant trees to be preserved located within the limits of disturbance and on the perimeter of the disturbance limits shall be protected from harm by erecting a three (3) feet high (minimum) snow fence completely surrounding the tree. Snow fence should extend to the drip-line of the tree to be preserved. Trees designated to be protected/saved are illustrated on the construction drawings and will be identified in the field prior to construction.

Maintenance/Inspection

The snow fence shall remain at the drip-line of the tree to be preserved. The snow fence shall be inspected a minimum of twice every seven (7) calendar days. Any damaged portions of the fence shall be repaired or replaced. Care shall also be taken to ensure that no construction equipment is driven or parked within the drip-line of the tree to be preserved.

RIP-RAP OUTLET PROTECTION

The outlets of all stormwater discharge areas will be protected from erosion by the placement of stone rip-rap at the culvert outlet. The purpose of the stone outlet protection is to reduce the velocities of the discharged water such that flows will not erode the receiving area.

Maintenance/Inspection

Maintenance of the outlet protection devices shall be inspected twice every seven (7) calendar days to determine if any scouring beneath the rip-rap has occurred and/or if any rip-rap has been displaced. All displaced rip-rap shall be re-positioned or replaced with new rip-rap. In addition, all leaves, twigs and brush shall be removed in the vicinity of the culvert/swale outlet to ensure that stormwater is flowing unobstructed.

SOIL/MATERIAL STOCKPILING

All soil/material stripped from the construction area during grubbing and grading shall be stockpiled within the vicinity of the locations illustrated on the approved plans, or in practical locations on-site approved by the Town representative.

Maintenance/Inspection

All stockpiles shall be inspected a minimum of twice every seven (7) calendar days for signs of erosion or problems with seed establishment. Soil stockpiles shall be protected from erosion by vegetating the stockpile with a rapidly-germinating grass seed and surrounded with silt fence. If the project is ongoing during the non-growing season, the stockpiles shall be protected with a tarpaulin covering the entire stockpile.

DIVERSION SWALES

Diversion Swales will be constructed as shown on the approved plans to prevent runoff from flowing across the disturbed areas for driveway construction and compound area.

Maintenance/ Inspection

Inspection of the swales must be conducted at a minimum of every seven (7) days. The Contractor shall ensure that positive pitch within the swale is maintained and that all trees, brush, stumps, obstructions and any other objectionable material are removed immediately upon inspection. Once site construction has been completed, the swales shall be seeded and continue to be maintained as outlined above.

SURFACE STABILIZATION

All disturbed areas will be protected from erosion with the use of vegetative measures (e.g., grass seed mix, sod), hydromulch, hay or erosion control blankets.

Erosion control barriers consisting of silt fencing shall be placed around exposed areas during construction. Any areas stripped of vegetation during construction will be vegetated and/or mulched immediately to prevent erosion of the exposed soils. In areas where significant erosion potential exists (steep slopes) and/or where specifically directed, Curlex Excelsior erosion control blankets (manufactured by American Excelsior or approved equal) shall be installed.

Materials that may be used for mulching include straw, hay, salt hay, wood fiber, synthetic soil stabilizers, mulch netting, erosion control blankets or sod. A permanent vegetative cover will be established upon completion of construction of those areas which have been brought to finish grade and to remain undisturbed.

GENERAL LAND GRADING

The applicant/developer or their representatives shall be on-site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all sediment and erosion control practices. No more than five (5) acres of disturbed land will be exposed without stabilization at any one time.

The intent of the erosion controls is to control all disturbed areas, such that soils are protected from erosion by temporary methods and, ultimately by permanent vegetation.

DUST CONTROL

Where vegetative or mulch cover is not practical in disturbed areas of the site, dust shall be controlled by the use of water sprinkling. The surface shall be sprayed until wet. Dust control shall continue until such time as the entire site is adequately stabilized with permanent vegetative cover.

CRITICAL AREA SEEDING

This practice applies to all disturbed areas devoid of vegetation, except where specific seeding/planting recommendations exist in other standards and specifications for specific uses such as recreation.

Site preparation will include:

A. Seed bed preparation-scarify if compacted. Remove debris and obstacles such as rocks and stumps. A minimum of four (4) inches of topsoil shall be provided.

B. Soil Amendments:
   a. Lime to pH 6.0
   b. Fertilize with 600 lbs. of 5-10-10 or equivalent per acre (14 lbs/1,000 sq. ft.)

C. Seed Mixtures:
   Critical Area Seed Mixture @ 35 lbs. Per Acre (0.8 lb./1,000 sq. ft.)
   Seed mixture to consist of:
   Creeping Red Fescue (Festuca Rubra)
   Switchgrass (Panicum Virgatum)
   Timothy (Phleum Pratense)
   Big Bluestem (Andropogon Gerardii)
   Little Bluestem (Andropogon Scoparius)
   Add innoculant immediately prior to seeding.

D. Time of Seeding:
   Permanent seedings may be established at any time of the year if property mulched and adequate moisture is provided. Mid summer is not a good time to seed, but these seedings, if construction is complete and adequately irrigated, will facilitate covering the land. Temporary seedings should be made within 24 hours of construction or disturbance. If not, the soil must be scarified prior to seeding.

E. Method of Seeding:
   Hand-broadcasting, drilling with cultipack type seeder to hydroseeding are acceptable. Hydroseeding shall be performed in accordance with the current edition of the "NYSDOT's Standard Specifications - Construction and Materials", Section 610-3.02, Method No. 1. Good soil to seed contact is the key to successful seedings.

F. Mulching:
   Mulching is essential to obtain a uniform stand of plants and should be applied to prevent erosion while vegetation cover is established. The mulching specifications provided hereon apply to all exposed areas.

Mulch Material: Air-dried straw (cereal grain); free of undesirable seeds and coarse materials.

Application Rate: 90 - 100 lbs. per 1,000 sq. ft. or 2 tons per acre.

Recommended Surface Coverage: Approximately 90%

Mulch Anchoring Material: Biodegradable mulch netting or hydromulch 11 - 17 lbs. per 1,000 sq. ft. or 500 - 750 lbs. per acre.

Method of Anchoring Application: Staple much netting (light-weight paper, jute wood fiber, or plastic netting) to soil surface in accordance with netting manufacturer's recommendations.

Hydromulch to be applied through a hydroseeder immediately after mulching.

G. Irrigation:
Watering is essential to establish a new seeding. Weather conditions and the intended use of he area will dictate when to water. Irrigation is a specialized practice and care needs to be taken not to exceed the application rate/infiltration rate of a given soil. Each application must be uniformly applied and 1 to 2 inches of water should be applied per application set up.

WINTER STABILIZATION

This standard applies to all construction activities involved with ongoing land disturbance and exposure between November 15th to the following April 1st.

DESIGN CRITERIA:

1. Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.
2. Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.
3. A minimum 25 foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.
4. Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.
5. Sediment barriers must be installed at all appropriate perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.
6. Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.

7. If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre, making the application rate 4 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.
8. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:
   A. Work will resume within 24 hours in the same area and no precipitation is forecast or;
   B. The work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.
2. Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum 10 feet in width but wider as necessary to accommodate equipment.

Maintenance/ Inspection

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the "winter season", all bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.

5.3 PERMANENT EROSION AND SEDIMENT CONTROL MEASURES

Permanent erosion and sediment control will be accomplished by diverting stormwater runoff to controlled discharge locations, controlling/reducing stormwater runoff velocities and volumes, and vegetative and structural surface stabilization. All of the permanent facilities are relatively maintenance free and only require periodic inspections. The owner will provide maintenance for all the permanent erosion and sediment control facilities.

Riprap aprons will be used at the discharge end of all piped drainage systems. Runoff velocities will be reduced to levels that are non-erosive to the receiving waterbodies through use of these aprons.

Other than the gravel surfaces, disturbed areas will be stabilized with vegetation. The vegetation will control stormwater runoff by preventing soil erosion, reducing runoff volume and velocities, and providing a filter medium. Permanent seeding should optimally be undertaken in the spring from March through May and in late summer and fall from late August to October.

Soil Restoration is a required practice applied across areas of a development site where soils have been disturbed and will be vegetated in order to recover the original properties and porosity of the soil. Healthy soil is vital to a sustainable environment and landscape. A deep, well drained soil, rich in organic matter, absorbs rainwater, helps prevent flooding and soil erosion, filters out water pollutants, and promotes vigorous plant growth that requires less irrigation, pesticides, and fertilizer. Soil Restoration is applied in the cleanup, restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate, deep-rooted groundcover to help maintain the restored soil structure. Soil restoration

includes mechanical decompaction, compost amendment, or both. Soil restoration must be performed in the areas disturbed by the project. The soils must be restored in accordance with Table 4-1 below.

TABLE 5-1: SOIL RESTORATION

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT
No Soil Disturbance (e.g., preservation of natural features)	Restoration not permitted
Minimal Soil Disturbance (e.g., clearing and grubbing activities)	Restoration not required
Areas where top soil is stripped only (e.g., no change in grade)	Aerate and apply 6 inches of topsoil in Type C and D soils
Areas of cut or fill	Apply full soil restoration in Type C and D soils
Heavy traffic areas on-site (especially in 5 feet to 25 feet around buildings, but not within a 5 foot perimeter around foundation walls)	Apply full soil restoration
Areas where runoff reduction or infiltration practices are applied	Restoration may not be required, but may be applied to enhance the reduction specified for the appropriate practices.
Redevelopment projects	Soil restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.

Before applying full soil restoration, all construction activity, including construction equipment and material storage, site cleanup and trafficking, should be finished and the site closed to further disturbance. Full soil restoration is implemented in a two-phase process:

1. Deep rip the affected thickness of exposed subsoil material, aggressively fracturing it before the protected topsoil is reapplied on the site.

2. De-compact, simultaneously through the restored topsoil layer and upper half of the affected subsoil.

During periods of relatively low to moderate subsoil moisture, the disturbed soils are returned to rough grade and the following is applied:

1. Apply 3 inches of compost over the subsoil.

2. Till compost a minimum of 12 inches into the subsoil using a cat-mounted ripper, tractor-mounted disc, or tiller mixing and circulating air and compost into subsoils.

3. Rock-pick until uplifted stone/rock materials of 4 inches or larger size are cleaned off the site. All construction/foreign debris and existing root masses shall be removed from proposed planting areas.

4. Apply 6 inches of topsoil. Newly installed planting soils shall be mixed with existing soils where they meet in order to create a transitional gradient to allow for proper drainage.

5. Install plants and vegetation in accordance with the project plans.

5.4 POLLUTION PREVENTION MEASURES FOR CONSTRUCTION RELATED ACTIVITIES

Pollution prevention practices for preventing litter, construction chemicals (if applicable) and construction debris from becoming a pollutant source in stormwater discharge include daily pickup of construction debris, inspection, and physical controls such as silt fencing. Inspections will also be conducted to ensure that dust control measures are utilized as necessary. During construction, maintenance, construction and waste materials will be stored within suitable areas/dumpsters, as appropriate, to minimize the exposure of the materials to stormwater and spill prevention. All maintenance and construction waste will be disposed of in a safe manner in accordance with all applicable regulations.

The following measures must be implemented to control the possible exposure of harmful substances and materials to stormwater runoff:

1. Material resulting from the clearing and grubbing operation must be stockpiled away from storm drainage, water bodies or watercourses and surrounded with adequate erosion and sediment control measures. Soil stockpile locations must be exposed no longer than fourteen (14) calendar days before seeding.

2. Equipment maintenance areas must be protected from stormwater flows and must be supplied with appropriate waste receptacles for spent chemicals, solvents, oils, greases, gasoline, and any pollutants that might contaminate the surrounding habitat or water supply. Equipment wash-down zones must be within areas draining to sediment control devices.

3. The use of detergents for large-scale (i.e., vehicles, buildings, pavement surfaces, etc.) washing is prohibited.

4. Material storage locations and facilities (i.e., covered storage areas, storage sheds, etc.) must be on-site and must be stored according to the manufacturer's standards in a dedicated staging area. Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Runoff containing such materials must be collected, removed from the site, treated and disposed at an approved solid waste or chemical disposal facility.

5. Hazardous spills must be immediately contained to prevent pollutants from entering the surrounding habitat or water supply. Spill Kits must be provided on-site and must be displayed in a prominent location for ease of access and use. Spills greater than 5 gallons must be reported to the NYSDEC Response Unit at 1-800-457-7362. In addition, a record of the incidents or notifications must be documented and attached to the SWPPP.

6. Portable sanitary waste facilities must be provided on-site for workers and must be properly maintained.

7. Dumpsters or debris containers must be on-site and must be of adequate size to manage respective materials. Regular collection and disposal of wastes must occur as required.

8. Temporary concrete washout facilities must be a minimum of fifty (50) feet from storm drain inlets, open drainage facilities, and watercourses. Each facility should be away from construction traffic or access areas to prevent disturbance or tracking. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities. When temporary concrete washout facilities are no longer required for the work, the hardened concrete must be removed and disposed of. Materials used to construct the temporary concrete washout facilities must be removed and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities must be backfilled or repaired, seeded, and mulched for final stabilization. Wastewater discharges from washout of concrete is prohibited.

9. Non-stormwater components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or approved private well. Water used for construction that does not originate from an approved public supply must not discharge from the site.

10. Discharges from dewatering activities, including discharges from dewatering trenches and excavations, must be managed by appropriate control measures.

11. Wastewater discharges from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials is prohibited.

6.0 SWPPP IMPLEMENTATION

6.1 PRE-CONSTRUCTION MEETING

Before beginning construction, the owner or operator must set up a pre-construction meeting with the Town representative, owner's representative, and Trained Contractor. The primary purpose of the pre-construction meeting is to discuss the responsibilities of each party as they relate to the implementation of the SWPPP and clarify any questions.

A copy of the Contractor Certification Form is provided in Appendix C. This form will be signed by the contractor prior to the commencement of construction activity. Each contractor and subcontractor shall identify at least one (1) person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the Trained Contractor. The Trained Contractor shall be on site on a daily basis when soil disturbance activities are being performed. The Trained Contractor must receive four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. The Trained Contractor must receive four (4) hours of training every three (3) years.

6.2 TRAINED CONTRACTOR INSPECTIONS

The Trained Contractor must inspect the erosion and sediment control practices and pollution prevention measures to ensure that they are being maintained in effective operating condition at all times. The inspections must be conducted as follows:

- For construction-sites where soil disturbance activities are on-going, the Trained Contractor must inspect the measures within the active work area daily. If deficiencies are identified, the Contractor must begin implementing corrective actions within one business day and must complete the corrective actions by the end of the day.

- For construction-sites where soil disturbance activities have been temporarily suspended (e.g., winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the Trained Contractor can stop conducting the maintenance inspections. The Trained Contractor must resume conducting the daily maintenance inspections as soil disturbance activities resume.

- For construction-sites where soil disturbance activities have been shut down with partial project completion, the Trained Contractor can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post construction stormwater management practices required for the completed part of the project have been constructed in conformance with the SWPPP and are operational.

7.0 POST-CONSTRUCTION REQUIREMENTS

7.1 AS-BUILT PLANS AND CERTIFICATION

The owners/contractor is required to submit As-Built plans for any stormwater management practices located on site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a New York State licensed land surveyor or professional engineer.

7.2 LONG-TERM INSPECTION AND MAINTENANCE

7.2.1 INSPECTION REQUIREMENTS

The "Grading, Utility and Sediment & Erosion Control Plan" (ZD 6/11) and "Erosion & Sediment Control Details and Notes" (ZD-11/11) are integral components of the post-construction stormwater facility inspection and maintenance program. The owner, its successors and/or assigns shall completely familiarize themselves with the plans, details and notes.

The stormwater facilities consist of the drainage collection system, swales and their related appurtenances and shall be collectively referred to herein as the "stormwater facilities." The purpose of the inspection/maintenance program is to provide basic instructions to the site owner (and future owners) as to the proper inspection and maintenance of the stormwater facilities and related appurtenances and to help the owner identify if these facilities are not performing properly.

Post construction inspections and maintenance must be performed by Owner's qualified Representative as described below. Inspections and maintenance for the various site components and stormwater management facilities must be performed in accordance with the accompanying project plans and this SWPPP.

These stormwater facilities will be inspected weekly for the first three (3) months following the completion of construction. Thereafter, these facilities will be inspected at a minimum quarterly, and always immediately following a significant rain event. Upon inspection, facilities shall be immediately maintained and/or cleaned, as required. Any site areas exhibiting soil erosion of any kind shall be immediately restored and stabilized with vegetation, mulch or rip-rap stone, as appropriate. Upon each inspection, all visible debris including, but not limited to, twigs, leaf and forest litter shall be removed from swales, discharge points and frames and grates of drainage structures.

VEGETATED AREAS

Vegetated swales must be mowed periodically. Any debris, leaf and forest litter or fallen trees/limbs shall be removed from within the swales at the time of each mowing, unless such debris impedes the proper flow of water, in which case all debris shall be immediately removed upon inspection. All visible accumulated sediments shall be removed when sediments become clearly visible. Special care shall be taken when removing sediment so as not to disrupt the intended finished grades of the swales.

DRAIN INLETS

All drain inlets have been designed with sumps to trap sediment prior to its transport to the infiltration systems. These sumps will require periodic inspection and maintenance to ensure that adequate depth is maintained within the sumps. All sumps shall be inspected once per month for the first three (3) months (after drainage system has been put into service) and every four (4) months thereafter. The owner shall take measurements of the sump depth and shall remove the accumulated sediment when it reaches one-half the capacity of the sump. Sediments can be removed from the sumps with hand-labor or with a vacuum device.

7.2.2 RESPONSIBLE PARTY

The owner, its successors and/or assigns shall be responsible for the ongoing inspection and maintenance of the proposed stormwater facilities. The applicant must execute a maintenance easement agreement/deed restriction that shall be binding on all subsequent and future lot owners served by the stormwater management facilities. In the event that an owner is not fulfilling his/her inspection and maintenance obligations, the easement shall provide for access to the facility at reasonable times for periodic inspection by the Town of Yorktown to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by the Town. The easement shall be recorded by the grantor in the office of the Westchester County Clerk and Town Clerk after approval by the Town Attorney for the Town of Yorktown.

CONTACT PERSON

The entity responsible for implementing the inspection and maintenance program for all on-site stormwater facilities will be the Leasee, its successors and/or assigns. The current Leasee is the Homeland Towers, LLC, 9 Harmony Street, 2nd floor, Danbury Connecticut 06810.

8.0 CONCLUSION

This SWPPP identifies the measures to be implemented during construction to minimize soil erosion and control sediment transport off-site, and after construction to control the water quality and quantity of stormwater runoff from the developed site to minimize adverse effects to downstream conditions.

Considering the level of stormwater treatment and peak rate attenuation proposed in the post-development condition, the applicant believes that the project will not adversely impact the stormwater quantity or a degradation in the quality to any reservoir, watercourse or wetland. Based upon the results of the stormwater quantity analysis, the peak discharge rates and total stormwater runoff volumes will not have an adverse effect on any receiving wetlands, downstream watercourses or reservoirs.

This Stormwater Pollution Prevention Plan has been developed in accordance with the requirements of the Town of Yorktown Town Code, Chapter 248 – Stormwater Management and Erosion and Sediment Control. In the opinion of the SWPPP preparer, the proposed project will not adversely impact adjacent or downstream properties, or receiving surface waters or wetlands, if the erosion and sediment control measures and stormwater management facilities are properly constructed, and maintained in accordance with the requirements outlined herein.

https://kellardsessionsconsulti.sharepoint.com/sites/Kellard/Project Docs P/YRHOMELAND900/KSC Reports/SWPPP/2025-07_YRHOMELAND900_SWPPP.docx

FIGURES

FIGURE 1: SITE LOCATION MAP
FIGURE 2: SOILS MAP
FIGURE 3: WETLAND AND WATERBODY MAP
FIGURE 4: FEMA FLOOD INSURANCE RATE MAP (FIRM)
FIGURE 5: EXISTING CONDITIONS HYDROLOGY PLAN
FIGURE 6: PROPOSED CONDITIONS HYDROLOGY PLAN

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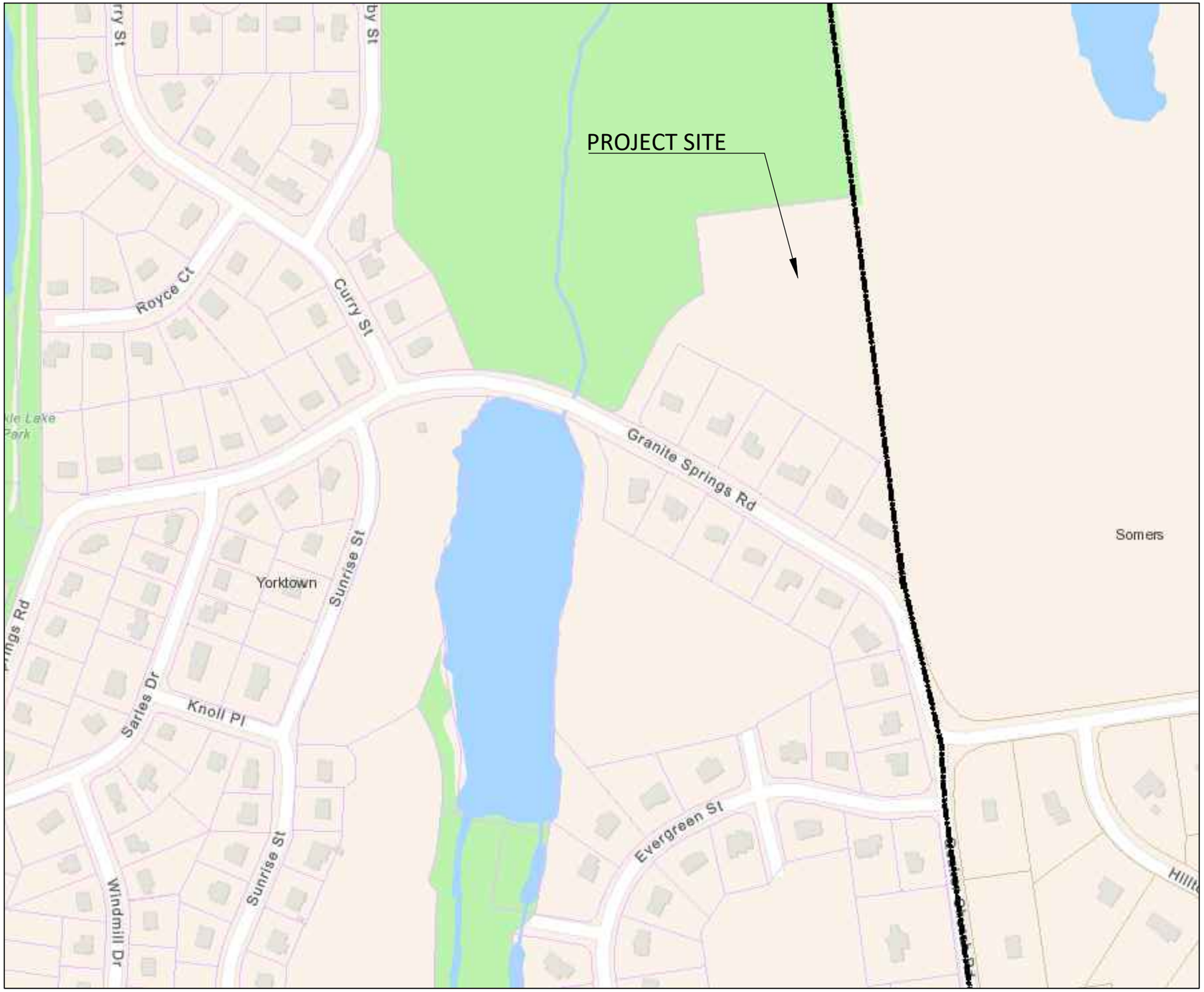

HOMELAND TOWERS

HOMELAND TOWERS, LLC.
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
P: (203) 297-6345

FIGURE 1: SITE LOCATION MAP

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

MAY 23, 2025
TOWN OF YORKTOWN
WESTCHESTER COUNTY, NEW YORK

KSCJ CONSULTING
KELLARD SESSIONS CERMELE JOHANNESSEN
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LANDSCAPE ARCHITECTURE
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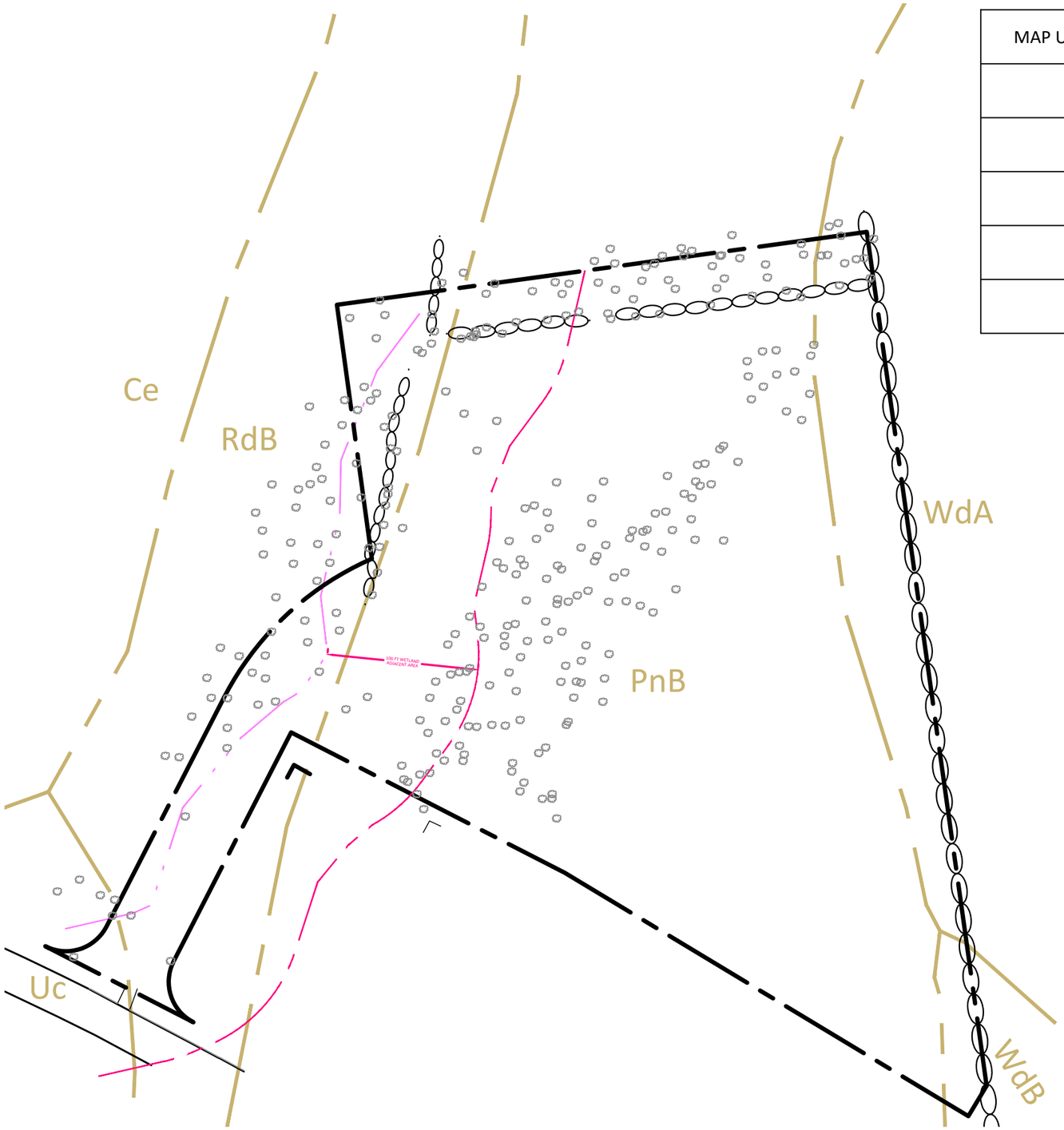

SOIL TABLE

MAP UNIT SYMBOL	NAME	HYDROLOGIC SOIL GROUP	DESCRIPTION
WdA	WOODBRIDGE LOAM, 0-3%	C / D	MOIST DENSE TILL UPLANDS
WdB	WOODBRIDGE LOAM, 3-8%	C / D	MOIST DENSE TILL UPLANDS
PnB	PAXTON FINE SANDY LOAM, 3-8%	C	WELL DRAINED DENSE TILL UPLANDS
RdB	RIDGEBURY COMPLEX, 3-8%	D	WET TILL DEPRESSIONS
Uc	UDORTHENTS, WET SUBSTRATUM	D	POORLY DRAINED GRAVELLY LOAM

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P: (203) 297-6345

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FIGURE 2: SOILS MAP

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

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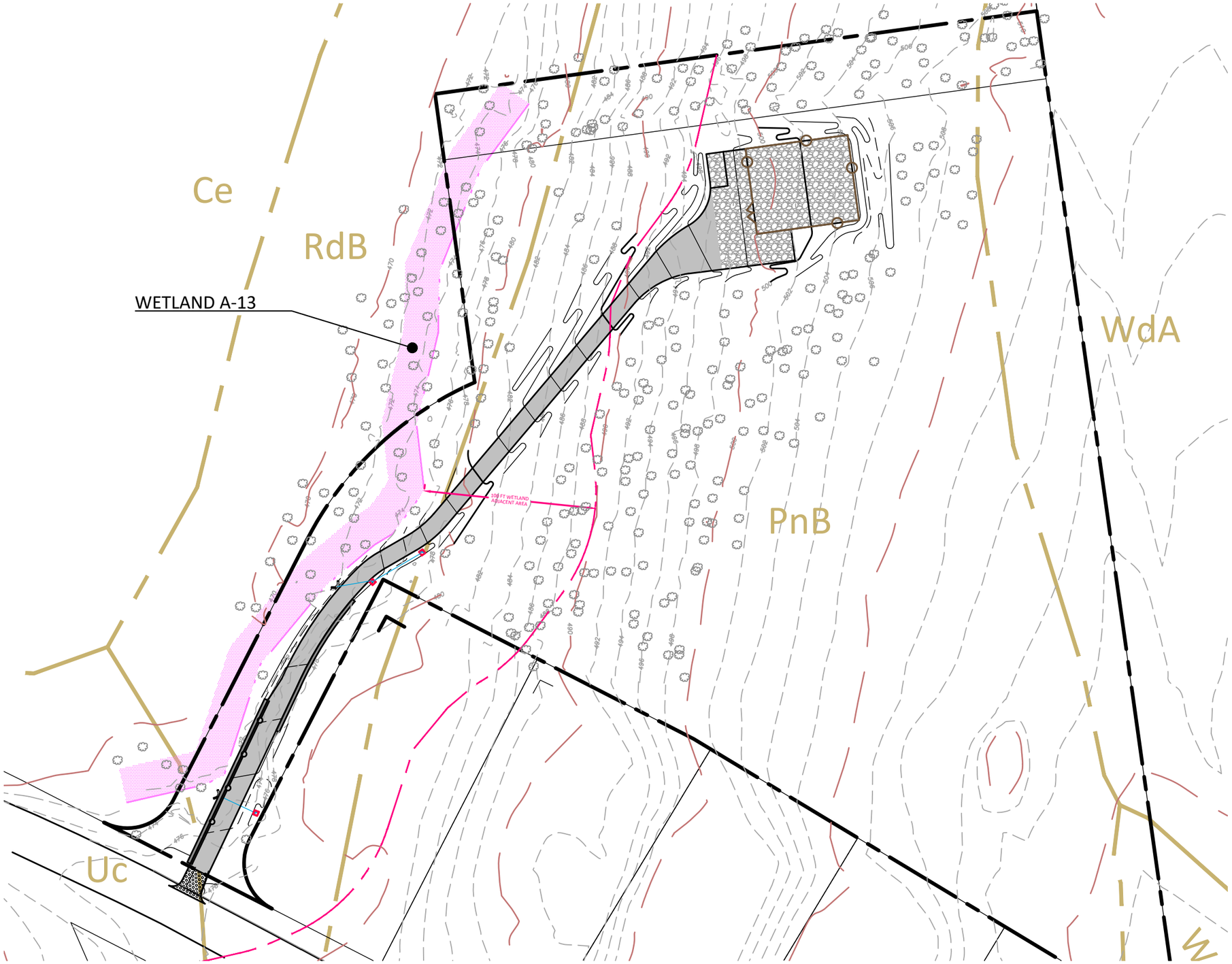

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HOMELAND TOWERS, LLC.
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
P: (203) 297-6345

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FIGURE 3: WETLAND AND WATERBODY MAP

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

MAY 23, 2025
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WESTCHESTER COUNTY, NEW YORK

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National Flood Hazard Layer FIRMette

FEMA

73°46'49"W 41°18'40"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

73°46'12"W 41°18'13"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/22/2025 at 5:54 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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HOMELAND TOWERS, LLC.
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
P: (203) 297-6345

FIGURE 4: FEMA FLOOD INSURANCE RATE MAP (FIRM)

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

MAY 23, 2025
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WESTCHESTER COUNTY, NEW YORK

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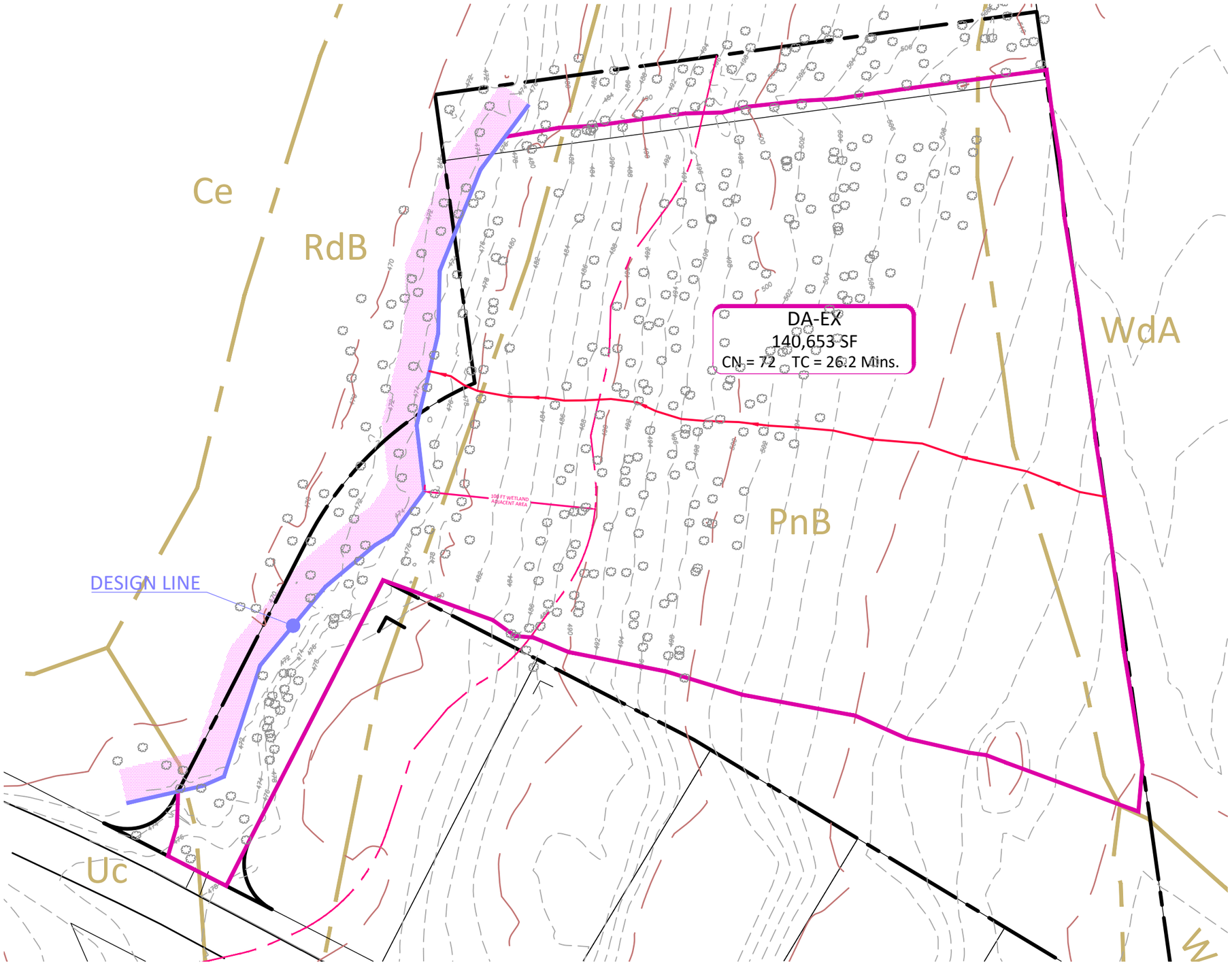

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FIGURE 5: EXISTING CONDITIONS HYDROLOGY PLAN

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

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LANDSCAPE ARCHITECTURE
SITE & ENVIRONMENTAL PLANNING

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UNAUTHORIZED ADDITIONS, MODIFICATIONS AND / OR ALTERATIONS TO THESE PLANS IS A VIOLATION OF SECTION 7209(2) OF THE NEW YORK STATE EDUCATION LAW

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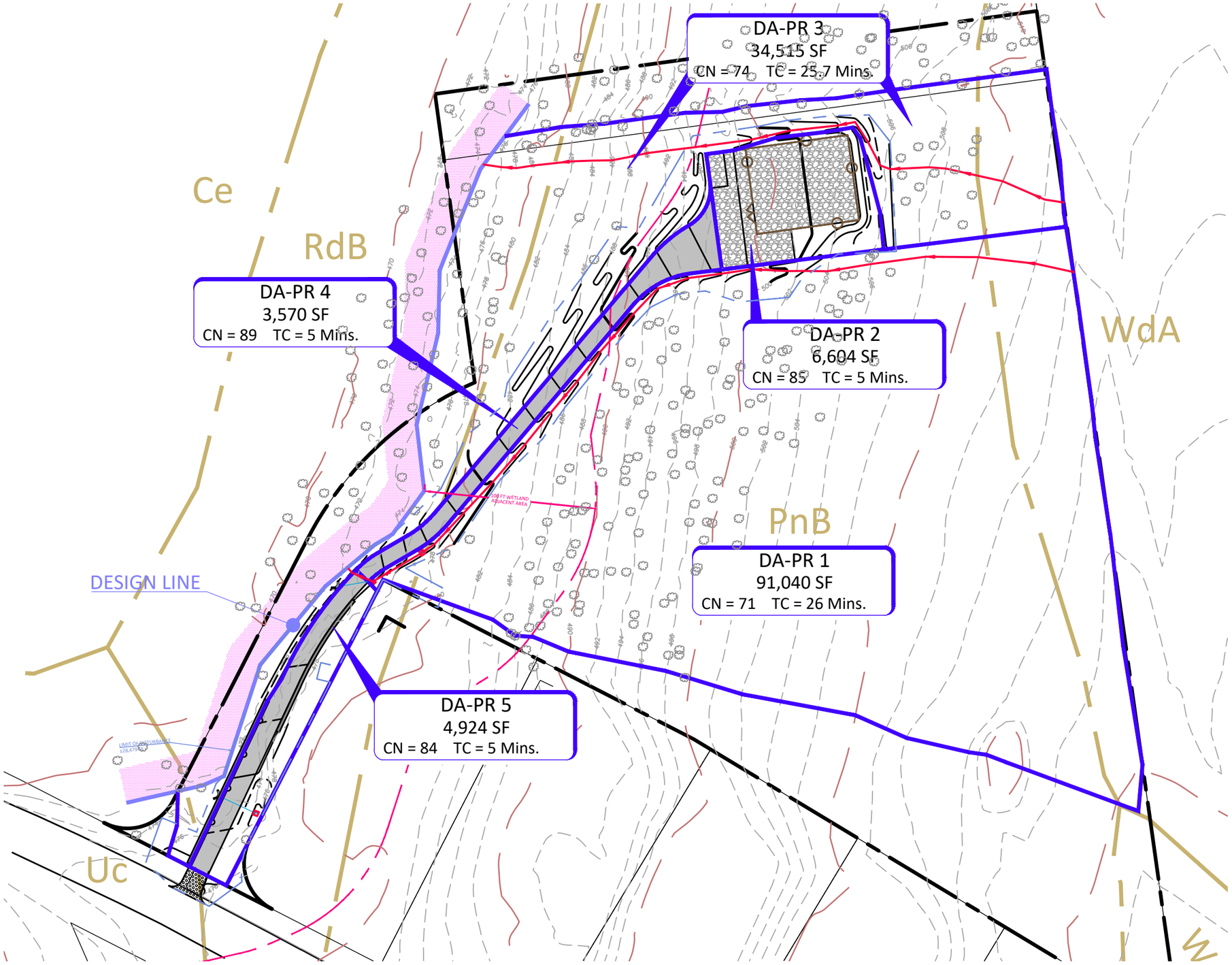

HOMELAND TOWERS

HOMELAND TOWERS, LLC.
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
P: (203) 297-6345

60 0 30 60 120
FEET

FIGURE 6: PROPOSED CONDITIONS HYDROLOGY PLAN

HOMELAND TOWERS SITE NY578 - GRANITE SPRINGS

MAY 20, 2025
TOWN OF YORKTOWN
WESTCHESTER COUNTY, NEW YORK

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APPENDICES

APPENDIX A. PERMITS AND APPLICATIONS

- NOTICE OF INTENT
- SWPPP PREPARER CERTIFICATION
- OWNER/OPERATOR CERTIFICATION
- MS4 SWPPP ACCEPTANCE FORM

Construction General Permit (CGP) Electronic Notice of Intent (eNOI) GP-0-25-001

version 1.11

(Submission #: HQC-S787-VME50, version 1)

Details

Originally Started By	Danielle Cinguina
Alternate Identifier	Homeland Towers - Granite Springs (NY578)—Region 3
Submission ID	HQC-S787-VME50
Status	Draft

Form Input

Eligibility

Disturbance Threshold

1. Will the construction activity involve soil disturbances listed in Part I.A.1 of GP-0-25-001?
Yes

1.a. Will any runoff from the site enter a sewer system classified as a combined sewer?
No

1.b. Is this a remediation project being done under a Department approved work plan (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) with a SWPPP which meets the substantive requirements of GP-0-25-001?
No

1.c. Is the construction activity related to a stormwater discharge that does not require a permit as described in 40 CFR 122.3(e), e.g. non-point source agriculture or silviculture activities?
No

Other SPDES Permits

2. Will the discharge from the construction activity meet all conditions listed in Part I.A.2 of GP-0-25-001?
Yes

Threatened and Endangered Species

3. Will the construction activity potentially adversely affect a species that is endangered or threatened per Part I.A.3.?
No

State Historic Preservation Act (SHPA)

4. Is the construction activity designated by the Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP), pursuant to 9 NYCRR §§428.12 or 428.13 as exempt from the SHPA review (see Attachment 2 of the Letter of Resolution between NYSDEC and OPRHP, dated January 9, 2015)?
No

4.a. Will the construction activity:

a) occur within an archeologically sensitive area indicated on the sensitivity map, or

b) have the potential to affect a property that is listed or determined to be eligible for listing on the Na or State Registers of Historic Places, or

c) include a new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old and OPRHP, a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determinec historically/archeologically significant building, structure, or object:

- 1-5 acres of disturbance—20 feet
- 5-20 acres of disturbance—50 feet
- 20+ acres of disturbance—100 feet?

No

4.b. Is there documentation at the construction site demonstrating:

a) that the construction activity is not within an archeologically sensitive area indicated on the sensiti map, and that the construction activity is not immediately adjacent to a property listed or determined t eligible for listing on the National or State Registers of Historic Places, and

b) that there is no new permanent building to be built on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that OPRHP, a Historic Preserva Commission of a Certified Local Government, or a qualified preservation professional has determinec the building, structure, or object more than 50 years old is not historically/archeologically significant:

- 1-5 acres of disturbance – 20 feet
- 5-20 acres of disturbance – 50 feet
- 20+ acres of disturbance – 100 feet?

Yes

State Environmental Quality Review (SEQR)

5. Is the construction activity subject to SEQR (Part I.A.5.), or the equivalent environmental review from another NYS or federal agency (Part I.A.6.)?
Yes

5.a. Has the owner/operator obtained documentation that the project review pursuant to SEQR, or the equivalent, has been satisfied per Part I.A.5. or I.A.6. of GP-0-25-001?
Yes

Uniform Procedures Act (UPA) Permits

6. Has the owner/operator obtained all necessary UPA permits from NYSDEC, or the equivalent from another NYS or federal agency per Part I.A.7.a. of GP-0-25-001?
Yes

Steep Slope

7. Is the construction activity within the watershed of surface waters of the State classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website?
Yes

7.a. Will the construction activity disturb land with no existing impervious cover and on steep slope, as defined in Appendix A of GP-0-25-001?
No

Owner/Operator Information

8. Owner/Operator Name
Homeland Towers, LLC

9. Owner/Operator Contact Person Information

First and Last Name	Phone	E-mail
Manuel Vicente	2032976345	mv@homelandtowers.us

10. Owner/Operator Mailing Address

9 Harmony Street
Danbury, CT 06810
USA

11. Is the billing contact different from the Owner/Operator Contact?
No

12. What type of organization is the owner/operator?
Other: LLC

Site Information

13. Project/Site Name
Homeland Towers - Granite Springs (NY578)

14. Site Address

62 GRANITE SPRINGS RD
YORKTOWN HTS, NY 10598-3304
Westchester

DEC Region
3

15. Site Latitude & Longitude
41.30789587455498,-73.77541103914794

Project Details

16. This eNOI submission is for:
A construction activity not part of a common plan of development or sale in accordance with Part I.D.1.a.

17. Does the project type fall under Table 1 or Table 2 of Appendix B of GP-0-25-001? If any portion of the construction activity falls under Table 2, regardless of the size of the disturbance, select "Table 2".
Table 1

18. Consistent with Part III.B.1.c.i. of GP-0-25-001, provide a concise overview of the project. Describe existing and proposed conditions, and include any other relevant information.
The subject property is owned by the Town of Yorktown and is proposed to be developed with a 130-foot monopole tower, ancillary telecommunications equipment, gravel driveway and gravel compound area.

Enter the total project site acreage, the acreage to be disturbed, and the future impervious area (acreage) within the disturbed area, rounded to the nearest tenth of an acre.

19. Total Site Area (acres)
4.1

20. Total Area to be Disturbed (acres)
0.7

21. Existing Impervious Area to be Disturbed (acres)
0.0

22. Future Impervious Area Within Disturbed Area (acres)
0.1

Nature of the project:
New Construction

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

---

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

A (%)
0

B (%)
0

C (%)
50

D (%)
50

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

Start Date
10/01/2025

End Date
04/01/2026

26. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Wetland on-site

27. Type of waterbody identified in question 26?
Wetland/State Jurisdiction On Site

28. Has the surface waterbody in question 26 been identified as a 303(d) segment in Appendix D of GP-0-25-001?
No

29. Is this project located in one of the Watersheds identified in Appendix C of GP-0-25-001?
Yes

30. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
Yes

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

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

33. Is this property owned by a state authority, state agency, federal government or local government?
Yes

Required SWPPP Components

General SWPPP Requirements

34. Has a SWPPP been developed in conformance with the requirements in Part III. of GP-0-25-001?
Yes

35. Does the SWPPP demonstrate consideration of the future physical risks due to climate change pursuant to the CRRA, 6 NYCRR Part 490, and associated guidance per Part III.A.2. of GP-0-25-001?
Yes

36. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

SWPPP Preparer

39. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

40. Name of the person who prepared the SWPPP
Joseph M. Cermele

41. SWPPP Preparer Organization Name
KSCJ Consulting

42. SWPPP Preparer Contact Information

First and Last Name	Phone	E-mail
Joseph M. Cermele	9142732323	jcermele@kscjconsulting.com

43. SWPPP Preparer Address

500 Main Street
Armonk, New York 10504

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form
3) Upload the completed form
Download SWPPP Preparer Certification Form

44. Please upload the SWPPP Preparer Certification
NONE PROVIDED
Comment
NONE PROVIDED

44.a. Has the SWPPP Preparer Certification Form been signed by the SWPPP preparer in accordance with Part VII.J of GP-0-25-001?
Yes

Erosion & Sediment Control Criteria

45. Has a construction sequence schedule for the planned management practices been prepared?
Yes

Other Permits

56. Identify other permits, existing and new, that are required for this project/facility.
Freshwater Wetlands/Article 24
Other: Town of Yorktown Town Board (lease, tree removal, wetlands, and stormwater)

57. Is this NOI for a change in owner/operator per Part I.G.?
No

MS4 SWPPP Acceptance

59. Will the construction activities be within the municipal boundary(ies) of Traditional Land Use Control MS4 Operator(s) and discharge to the MS4(s)?
Yes

59.a. Which form is required per Part I.D.2.b.ii.?
MS4 SWPPP Acceptance Form

MS4 SWPPP Acceptance Form Download

Download the MS4 SWPPP Acceptance Form from the link below.
MS4 SWPPP Acceptance Form

60. MS4 Acceptance or No Jurisdiction Form Upload

> *NONE PROVIDED*
> **Comment**
> *NONE PROVIDED*

60.a. Has the form been signed by the principal executive officer or ranking elected official—or duly authorized representative of that person—in accordance with Part VII.J. and submitted along with this NOI?
Yes

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the Owner/Operator Certification Form by clicking the link below.
Owner/Operator Certification Form

61. Upload Owner/Operator Certification Form

> *NONE PROVIDED*
> **Comment**
> *NONE PROVIDED*

61.a. Has the Owner/Operator Certification Form from Appendix J been signed by the owner/operator, or a representative of the owner/operator in accordance with Part VII.J of GP-0-25-001 and uploaded to the eNOI?
Yes

Additional Project Information

62. Enter any additional pertinent project information in the text box below.
NONE PROVIDED

NEW YORK STATE | Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

Project/Site Name:	Homeland Towers - Granite Springs (NY578)
eNOI Submission ID:	HQC-S787-VME50
Owner/Operator Name:	Homeland Towers, LLC

Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of GP-0-25-001. I certify under penalty of law that the SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph	M	Cermele
SWPPP Preparer First Name	MI	SWPPP Preparer Last Name

Signature

7/2/25

Date

Revised: January 2025

Owner/Operator Certification Form

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b. or Part I.F.2. and 3., the completed form must be attached to the eNOI or the Request to Continue Coverage, and submitted to NYSDEC electronically.

Project/Site Name: Homeland Towers-Granite Springs (NY578)

eNOI Submission ID: HQC-S787-VME50

eNOI Submitted by: ☐ **Owner/Operator** ☑ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I hereby certify that I read, and will comply with, the GP-0-25-001 permit requirements. I understand that authorization to discharge under the permit for the project/site named above is dependent on receipt of a Letter of Authorization (LOA) or a Letter of Continued Coverage (LOCC) from the New York State Department of Environmental Conservation (NYSDEC) in accordance with CGP Part I.D.3.b. or Part I.F.4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Manuel		Vicente
Owner/Operator First Name	MI	Owner/Operator Last Name

Signature

7/2/25

Date

Revised: January 2025

MS4 SWPPP Acceptance Form

for construction activities seeking authorization under the

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Homeland Towers, LLC
2. Contact Person:	Manuel Vicente, President
3. Street Address:	9 Harmony Lane
4. City/State/Zip:	Danbury, CT 06810
II. Project Site Information	
5. Project/Site Name:	Homeland Towers - Granite Springs (NY578)
6. Street Address:	62 Granite Springs Road
7. City/State/Zip:	Yorktown Heights, NY 10598
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4 Operator:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Street Address:	
14. City/State/Zip:	
15. Telephone Number:	

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in section II. of this form has been reviewed and meets the substantive requirements in the SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP). Note: The MS4 Operator, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 Operator does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name[1]:

Title/Position:

Signature:

Date: 7/2/25

VI. Additional Information

[1] Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.

APPENDIX B. CONTRACTOR CERTIFICATION

- TRAINED CONTRACTOR CERTIFICATION

TRAINED CONTRACTOR CERTIFICATION

Each contractor and subcontractor identified in the Stormwater Pollution Prevention Plan (SWPPP) involved in soil disturbance and/or stormwater management practices shall sign and date a copy of the following certification statement prior to undertaking any land development activity.

Project Name: _____

Project Location: _____

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

_____ _____

Signature Date

Contractor Name: _____

Contractor Title: _____

Contracting Firm: _____

Firm Location: _____

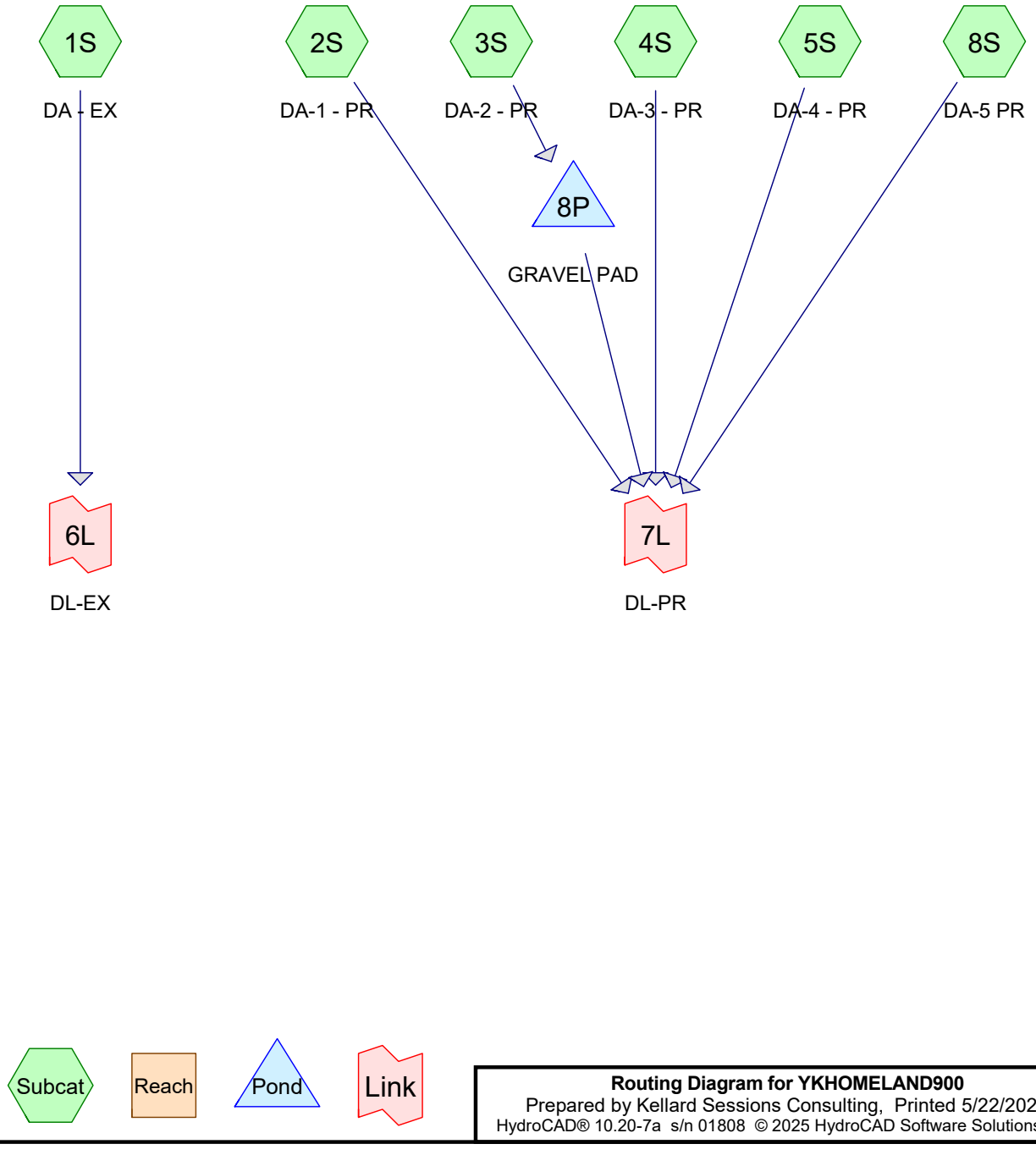
Firm Telephone Number: _____

Each contractor and subcontractor shall identify at least one (1) person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the Trained Contractor. The Trained Contractor shall be on site on a daily basis when soil disturbance activities are being performed. The Trained Contractor must receive four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. The Trained Contractor must receive four (4) hours of training every three (3) years.

Trained Contractor Name: _____

APPENDIX C. HYDROLOGIC AND HYDRAULIC CALCULATIONS

- **EXISTING AND PROPOSED CONDITIONS HYDROLOGIC ANALYSIS**



Routing Diagram for YKHOMELAND900
Prepared by Kellard Sessions Consulting, Printed 5/22/2025
HydroCAD® 10.20-7a s/n 01808 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	NY-YKHOMELAND900 24-hr S1	1-yr	Default	24.00	1	2.77	2
2	10-yr	NY-YKHOMELAND900 24-hr S1	10-yr	Default	24.00	1	5.08	2
3	100-yr	NY-YKHOMELAND900 24-hr S1	100-yr	Default	24.00	1	9.19	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.242	74	>75% Grass cover, Good, HSG C (2S, 3S, 4S)
0.082	80	>75% Grass cover, Good, HSG D (2S, 4S, 8S)
0.183	89	Gravel roads, HSG C (3S, 5S)
0.063	91	Gravel roads, HSG D (5S, 8S)
4.504	70	Woods, Good, HSG C (1S, 2S, 3S, 4S)
1.384	77	Woods, Good, HSG D (1S, 2S, 4S, 8S)
6.458	**73**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
4.929	HSG C	1S, 2S, 3S, 4S, 5S
1.529	HSG D	1S, 2S, 4S, 5S, 8S
0.000	Other	
6.458		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.242	0.082	0.000	0.324	>75% Grass cover, Good	2S, 3S, 4S, 8S
0.000	0.000	0.183	0.063	0.000	0.246	Gravel roads	3S, 5S, 8S
0.000	0.000	4.504	1.384	0.000	5.888	Woods, Good	1S, 2S, 3S, 4S, 8S
0.000	**0.000**	**4.929**	**1.529**	**0.000**	**6.458**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA - EX Runoff Area=140,653 sf 0.00% Impervious Runoff Depth>0.58"
Flow Length=404' Tc=26.2 min CN=72 Runoff=1.28 cfs 0.155 af

Subcatchment 2S: DA-1 - PR Runoff Area=91,040 sf 0.00% Impervious Runoff Depth>0.54"
Flow Length=502' Tc=26.0 min CN=71 Runoff=0.76 cfs 0.094 af

Subcatchment 3S: DA-2 - PR Runoff Area=6,604 sf 0.00% Impervious Runoff Depth>1.26"
Tc=6.0 min CN=85 Runoff=0.28 cfs 0.016 af

Subcatchment 4S: DA-3 - PR Runoff Area=34,515 sf 0.00% Impervious Runoff Depth>0.66"
Flow Length=358' Tc=25.7 min CN=74 Runoff=0.38 cfs 0.044 af

Subcatchment 5S: DA-4 - PR Runoff Area=3,570 sf 0.00% Impervious Runoff Depth>1.55"
Tc=6.0 min CN=89 Runoff=0.18 cfs 0.011 af

Subcatchment 8S: DA-5 PR Runoff Area=4,924 sf 0.00% Impervious Runoff Depth>1.20"
Tc=6.0 min CN=84 Runoff=0.20 cfs 0.011 af

Pond 8P: GRAVEL PAD Peak Elev=496.45' Storage=695 cf Inflow=0.28 cfs 0.016 af
Outflow=0.00 cfs 0.000 af

Link 6L: DL-EX Inflow=1.28 cfs 0.155 af
Primary=1.28 cfs 0.155 af

Link 7L: DL-PR Inflow=1.24 cfs 0.159 af
Primary=1.24 cfs 0.159 af

Total Runoff Area = 6.458 ac Runoff Volume = 0.331 af Average Runoff Depth = 0.61"
100.00% Pervious = 6.458 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DA - EX

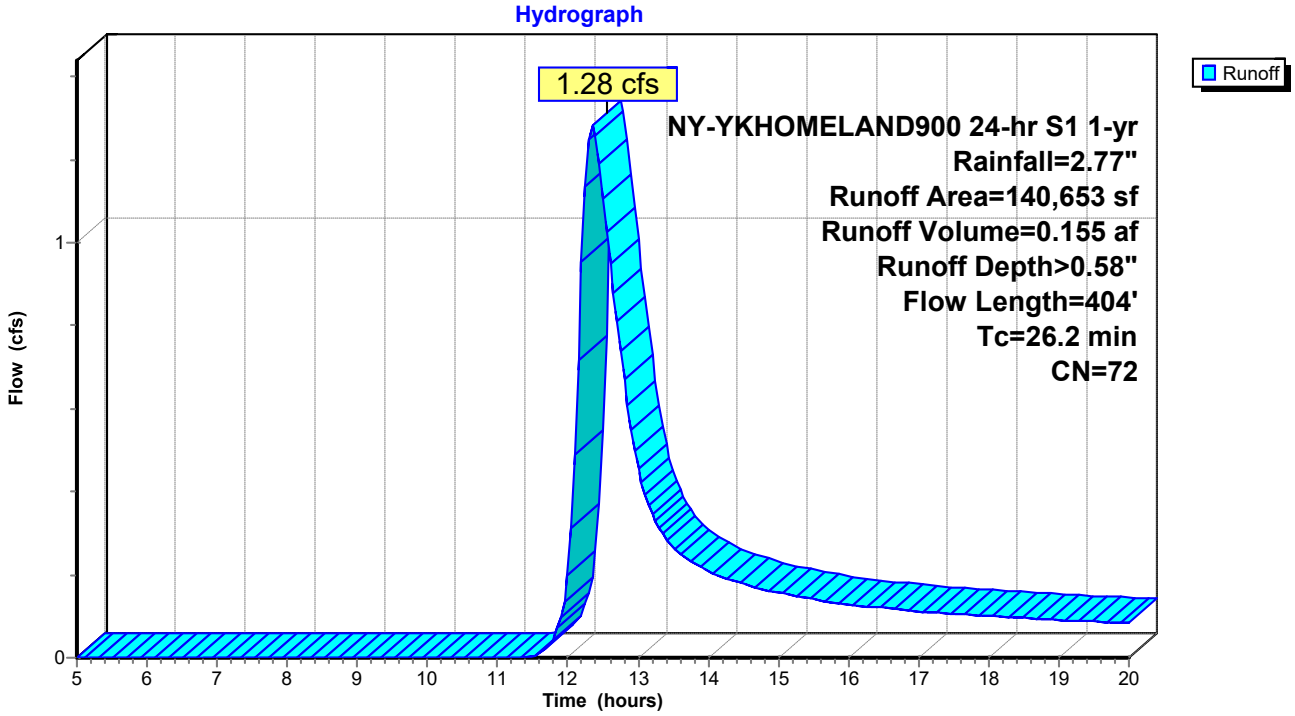
Runoff = 1.28 cfs @ 12.35 hrs, Volume= 0.155 af, Depth> 0.58"
Routed to Link 6L : DL-EX

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
107,365	70	Woods, Good, HSG C
33,288	77	Woods, Good, HSG D
140,653	72	Weighted Average
140,653		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.9	304	0.1217	1.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.2	404	Total			

Subcatchment 1S: DA - EX



Summary for Subcatchment 2S: DA-1 - PR

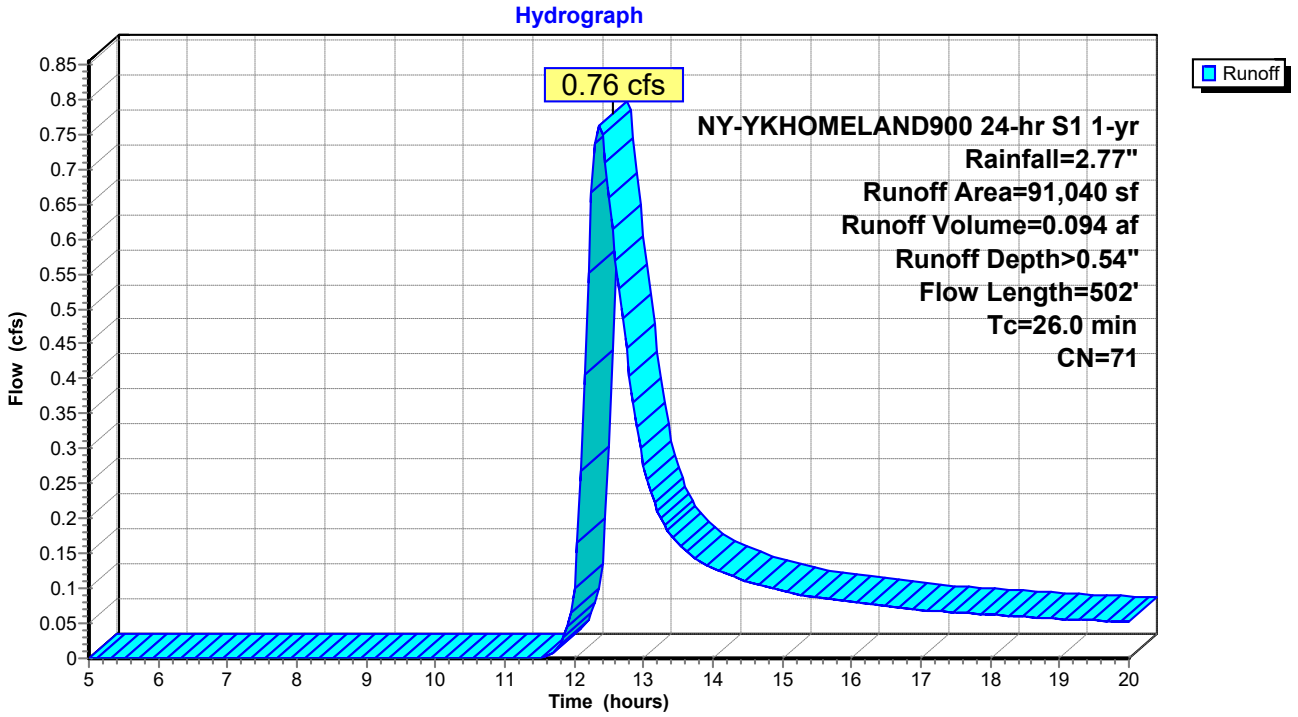
Runoff = 0.76 cfs @ 12.36 hrs, Volume= 0.094 af, Depth> 0.54"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
75,180	70	Woods, Good, HSG C
12,971	77	Woods, Good, HSG D
2,677	74	>75% Grass cover, Good, HSG C
212	80	>75% Grass cover, Good, HSG D
91,040	71	Weighted Average
91,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	100	0.0700	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
4.0	351	0.0855	1.46		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	47	0.0200	5.25	1.05	**Channel Flow,** Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.0	4	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.0	502	Total			

Subcatchment 2S: DA-1 - PR



Summary for Subcatchment 3S: DA-2 - PR

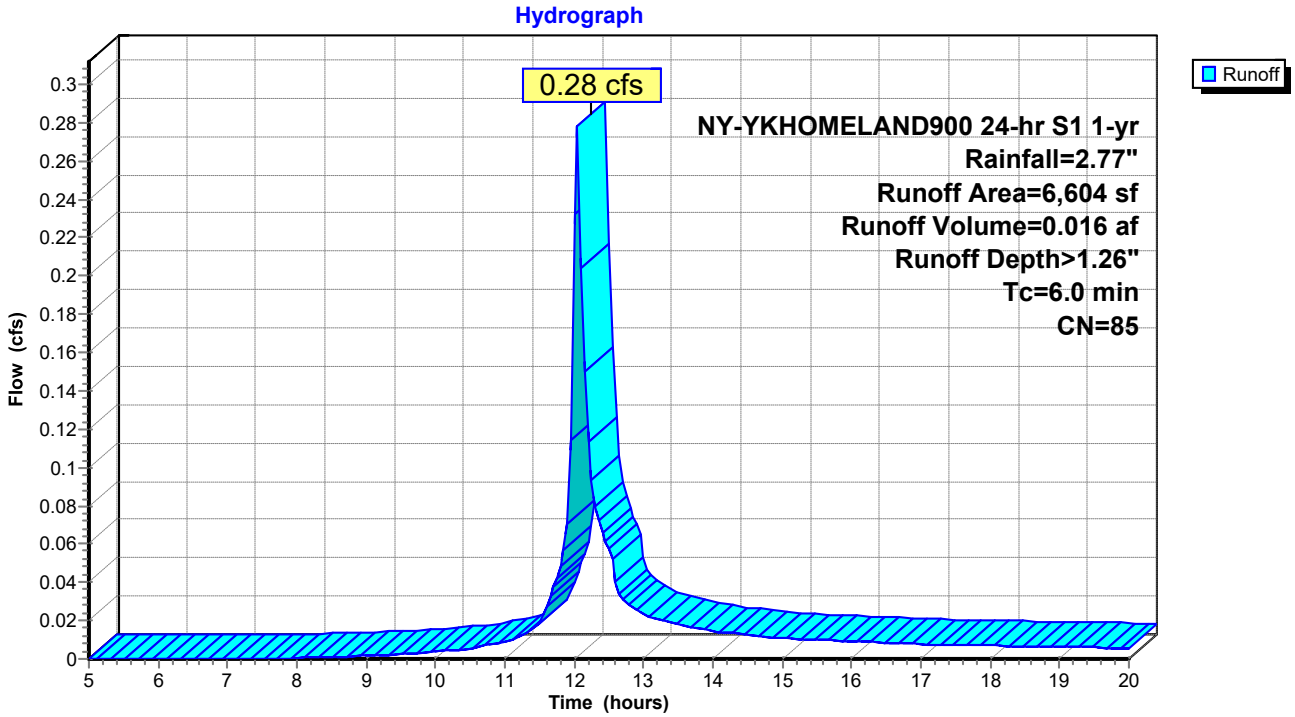
Runoff = 0.28 cfs @ 12.04 hrs, Volume= 0.016 af, Depth> 1.26"
Routed to Pond 8P : GRAVEL PAD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
285	70	Woods, Good, HSG C
1,395	74	>75% Grass cover, Good, HSG C
4,924	89	Gravel roads, HSG C
6,604	85	Weighted Average
6,604		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: DA-2 - PR



Summary for Subcatchment 4S: DA-3 - PR

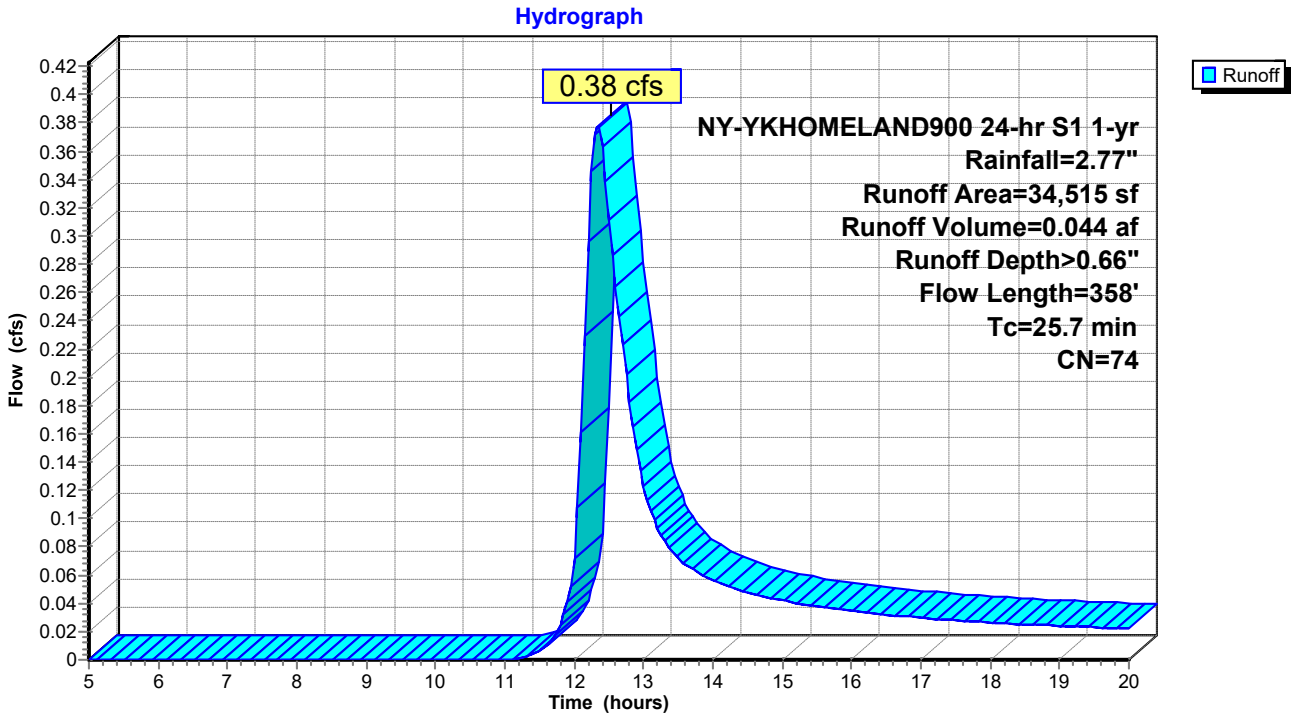
Runoff = 0.38 cfs @ 12.34 hrs, Volume= 0.044 af, Depth> 0.66"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
13,364	70	Woods, Good, HSG C
12,840	77	Woods, Good, HSG D
6,480	74	>75% Grass cover, Good, HSG C
1,831	80	>75% Grass cover, Good, HSG D
34,515	74	Weighted Average
34,515		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.4	258	0.1240	1.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
25.7	358	Total			

Subcatchment 4S: DA-3 - PR



Summary for Subcatchment 5S: DA-4 - PR

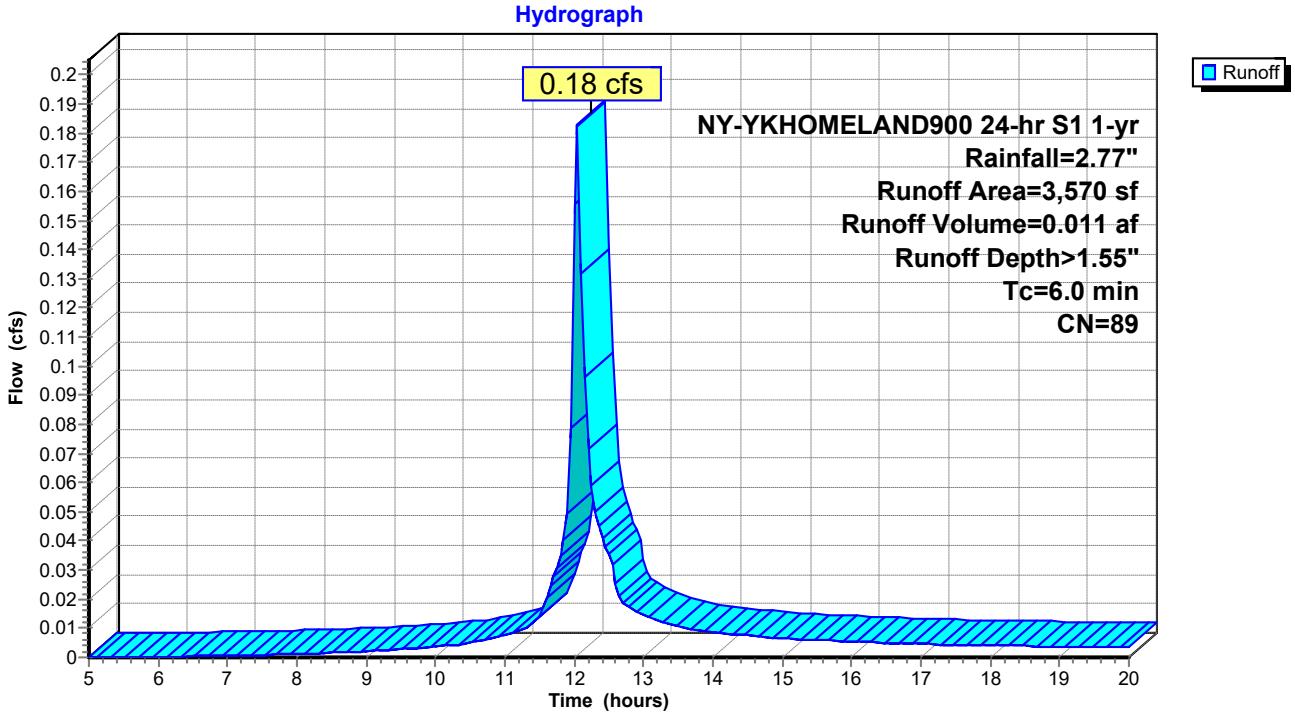
Runoff = 0.18 cfs @ 12.04 hrs, Volume= 0.011 af, Depth> 1.55"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
3,049	89	Gravel roads, HSG C
521	91	Gravel roads, HSG D
3,570	89	Weighted Average
3,570		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 5S: DA-4 - PR



Summary for Subcatchment 8S: DA-5 PR

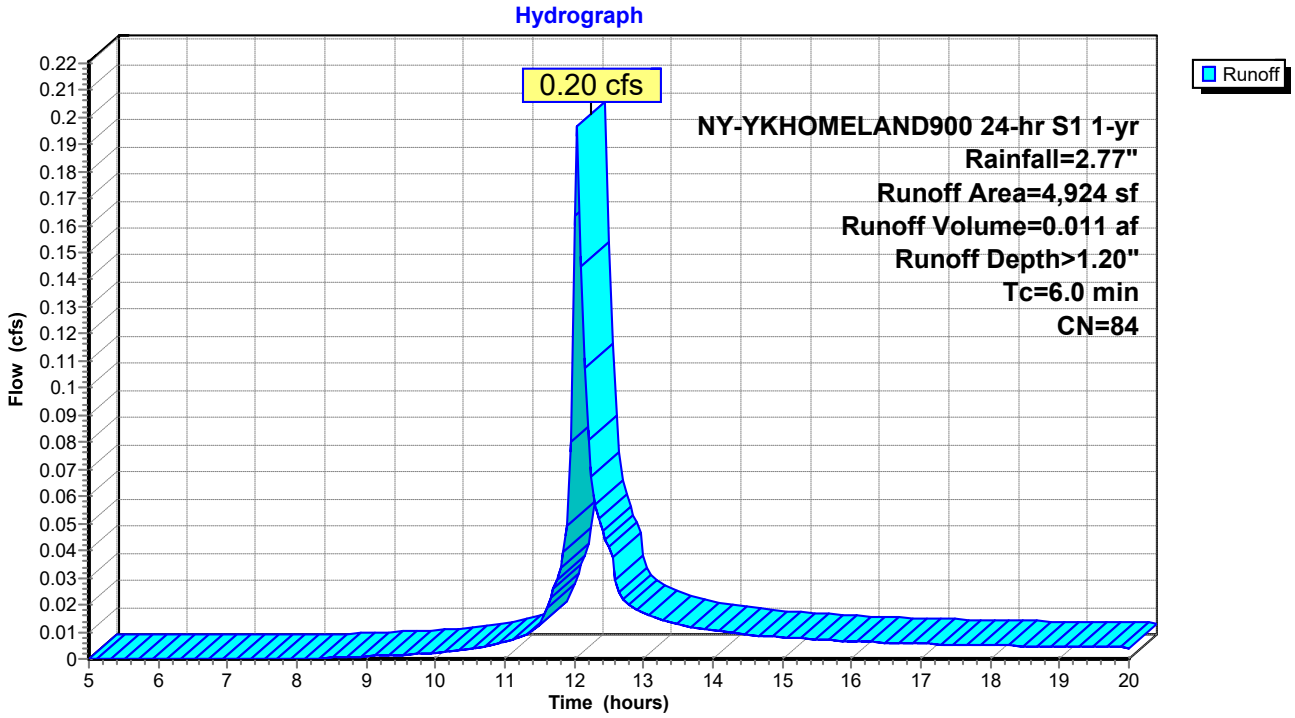
Runoff = 0.20 cfs @ 12.04 hrs, Volume= 0.011 af, Depth> 1.20"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 1-yr Rainfall=2.77"

Area (sf)	CN	Description
1,198	77	Woods, Good, HSG D
1,522	80	>75% Grass cover, Good, HSG D
2,204	91	Gravel roads, HSG D
4,924	84	Weighted Average
4,924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 8S: DA-5 PR



Summary for Pond 8P: GRAVEL PAD

Inflow Area = 0.152 ac, 0.00% Impervious, Inflow Depth > 1.26" for 1-yr event
Inflow = 0.28 cfs @ 12.04 hrs, Volume= 0.016 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 7L : DL-PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 496.45' @ 20.00 hrs Surf.Area= 4,925 sf Storage= 695 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

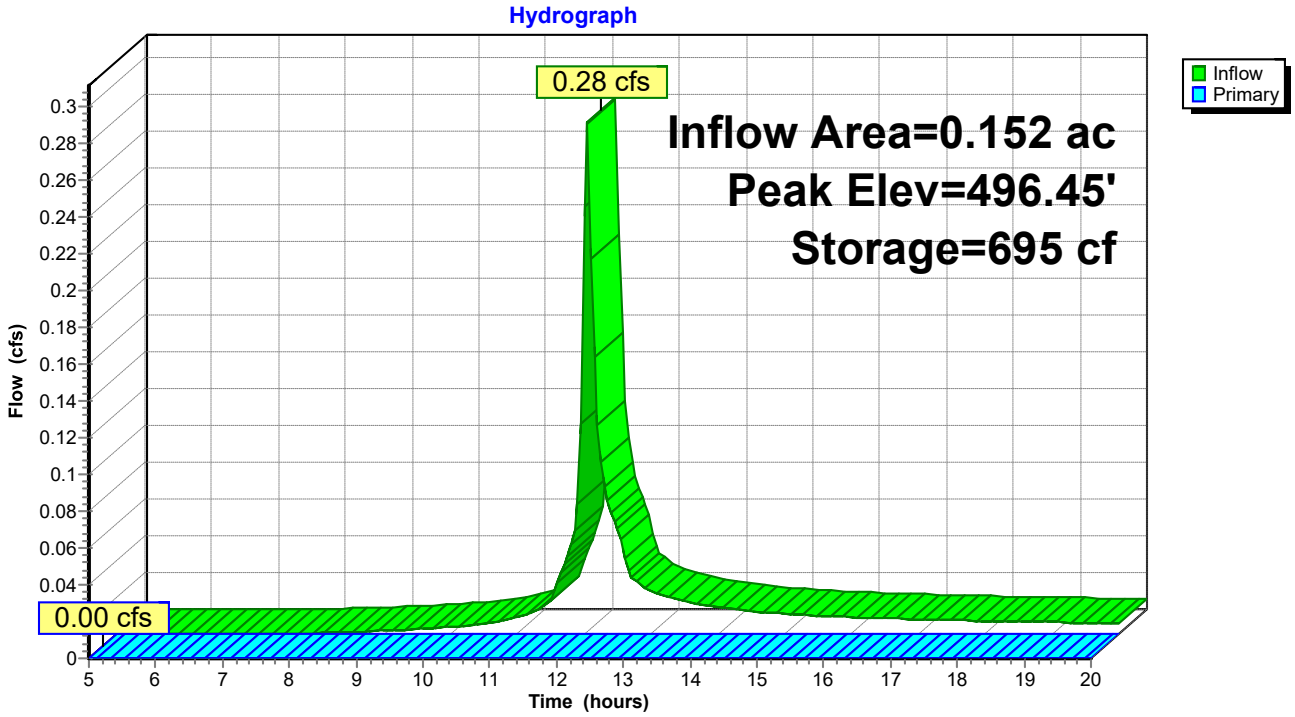
Volume	Invert	Avail.Storage	Storage Description
#1	496.10'	1,970 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 4,925 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
496.10	4,925	0	0
497.10	4,925	4,925	4,925

Device	Routing	Invert	Outlet Devices
#1	Primary	497.10'	**812.4" x 984.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=496.10' (Free Discharge)
└─**1=Orifice/Grate** (Controls 0.00 cfs)

Pond 8P: GRAVEL PAD

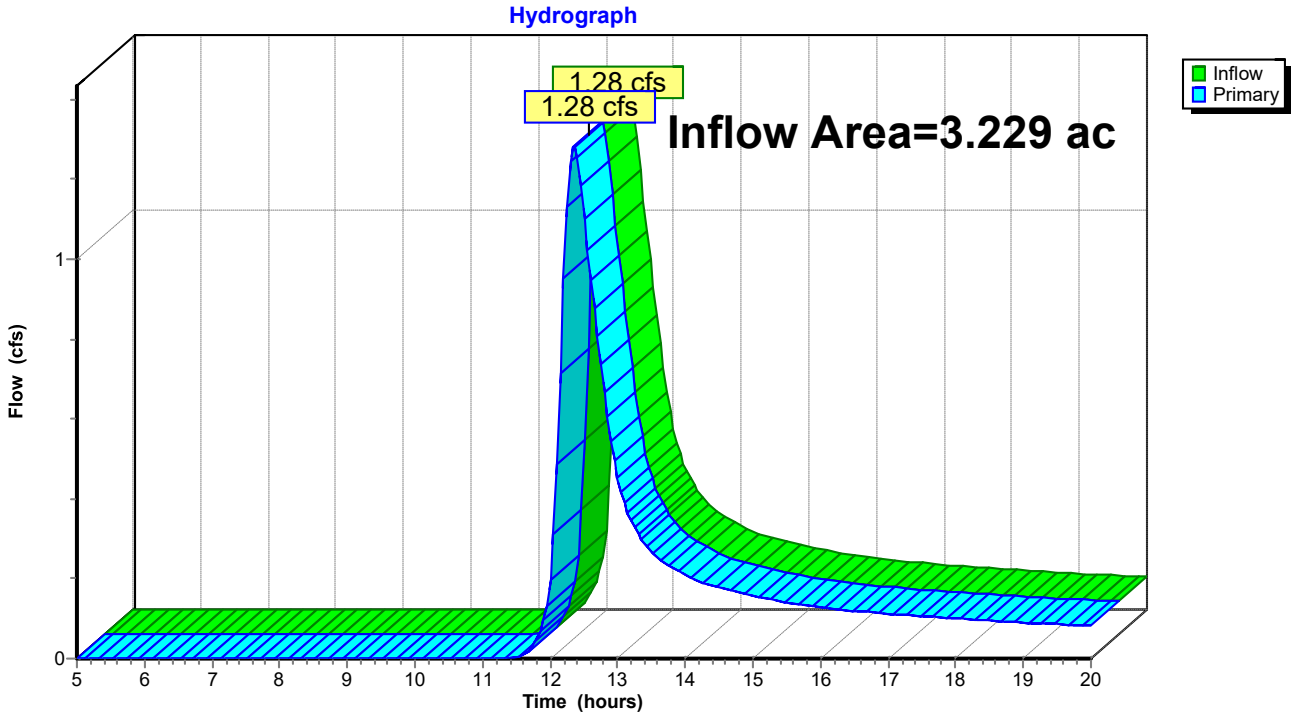


Summary for Link 6L: DL-EX

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 0.58" for 1-yr event
Inflow = 1.28 cfs @ 12.35 hrs, Volume= 0.155 af
Primary = 1.28 cfs @ 12.35 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 6L: DL-EX

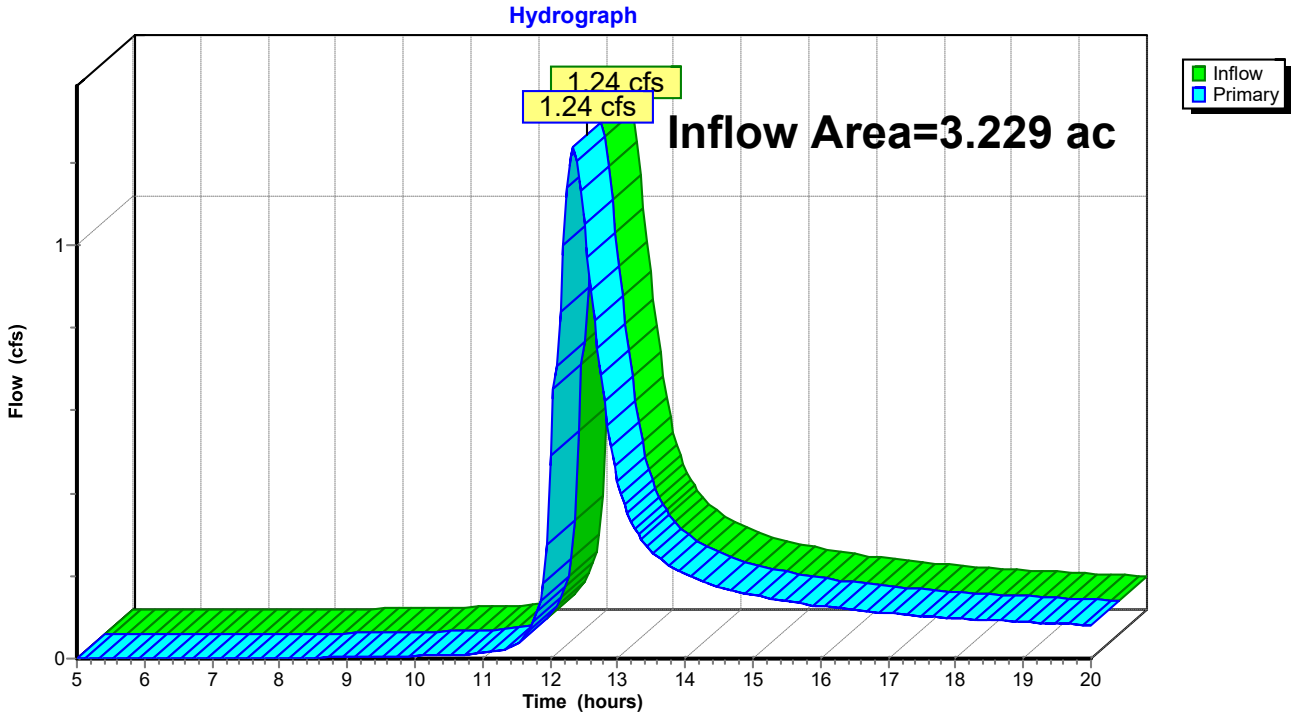


Summary for Link 7L: DL-PR

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 0.59" for 1-yr event
Inflow = 1.24 cfs @ 12.34 hrs, Volume= 0.159 af
Primary = 1.24 cfs @ 12.34 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 7L: DL-PR



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA - EX Runoff Area=140,653 sf 0.00% Impervious Runoff Depth>1.99"
Flow Length=404' Tc=26.2 min CN=72 Runoff=4.43 cfs 0.536 af

Subcatchment 2S: DA-1 - PR Runoff Area=91,040 sf 0.00% Impervious Runoff Depth>1.91"
Flow Length=502' Tc=26.0 min CN=71 Runoff=2.77 cfs 0.333 af

Subcatchment 3S: DA-2 - PR Runoff Area=6,604 sf 0.00% Impervious Runoff Depth>3.14"
Tc=6.0 min CN=85 Runoff=0.58 cfs 0.040 af

Subcatchment 4S: DA-3 - PR Runoff Area=34,515 sf 0.00% Impervious Runoff Depth>2.15"
Flow Length=358' Tc=25.7 min CN=74 Runoff=1.19 cfs 0.142 af

Subcatchment 5S: DA-4 - PR Runoff Area=3,570 sf 0.00% Impervious Runoff Depth>3.52"
Tc=6.0 min CN=89 Runoff=0.35 cfs 0.024 af

Subcatchment 8S: DA-5 PR Runoff Area=4,924 sf 0.00% Impervious Runoff Depth>3.05"
Tc=6.0 min CN=84 Runoff=0.42 cfs 0.029 af

Pond 8P: GRAVEL PAD Peak Elev=496.98' Storage=1,729 cf Inflow=0.58 cfs 0.040 af
Outflow=0.00 cfs 0.000 af

Link 6L: DL-EX Inflow=4.43 cfs 0.536 af
Primary=4.43 cfs 0.536 af

Link 7L: DL-PR Inflow=4.18 cfs 0.528 af
Primary=4.18 cfs 0.528 af

Total Runoff Area = 6.458 ac Runoff Volume = 1.104 af Average Runoff Depth = 2.05"
100.00% Pervious = 6.458 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DA - EX

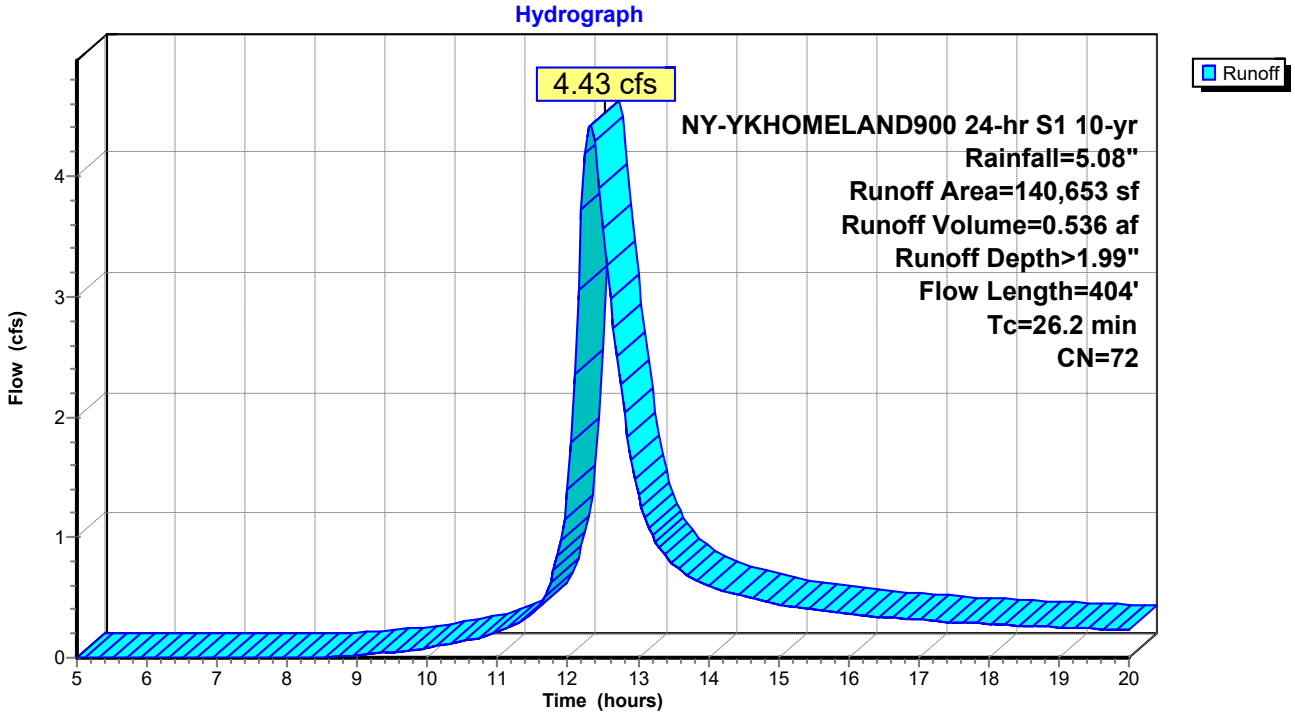
Runoff = 4.43 cfs @ 12.32 hrs, Volume= 0.536 af, Depth> 1.99"
Routed to Link 6L : DL-EX

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
107,365	70	Woods, Good, HSG C
33,288	77	Woods, Good, HSG D
140,653	72	Weighted Average
140,653		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.9	304	0.1217	1.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.2	404	Total			

Subcatchment 1S: DA - EX



Summary for Subcatchment 2S: DA-1 - PR

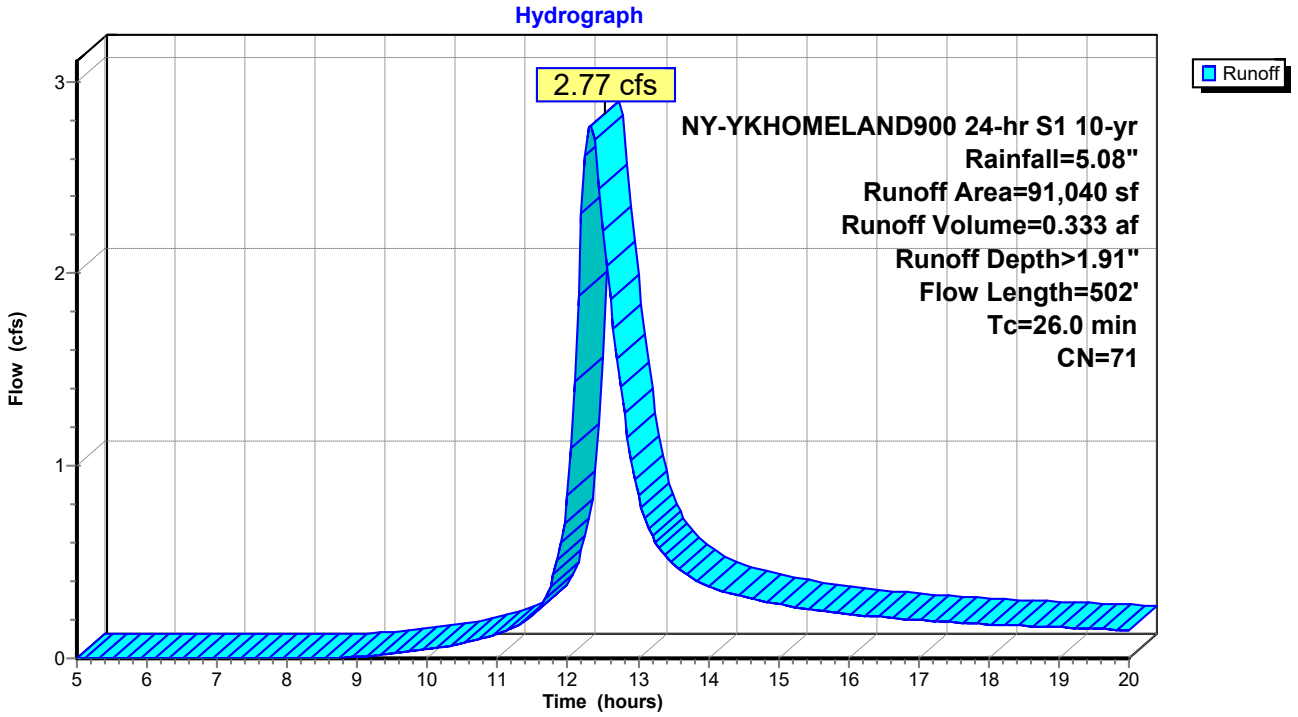
Runoff = 2.77 cfs @ 12.32 hrs, Volume= 0.333 af, Depth> 1.91"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
75,180	70	Woods, Good, HSG C
12,971	77	Woods, Good, HSG D
2,677	74	>75% Grass cover, Good, HSG C
212	80	>75% Grass cover, Good, HSG D
91,040	71	Weighted Average
91,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	100	0.0700	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
4.0	351	0.0855	1.46		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	47	0.0200	5.25	1.05	**Channel Flow,** Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.0	4	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.0	502	Total			

Subcatchment 2S: DA-1 - PR



Summary for Subcatchment 3S: DA-2 - PR

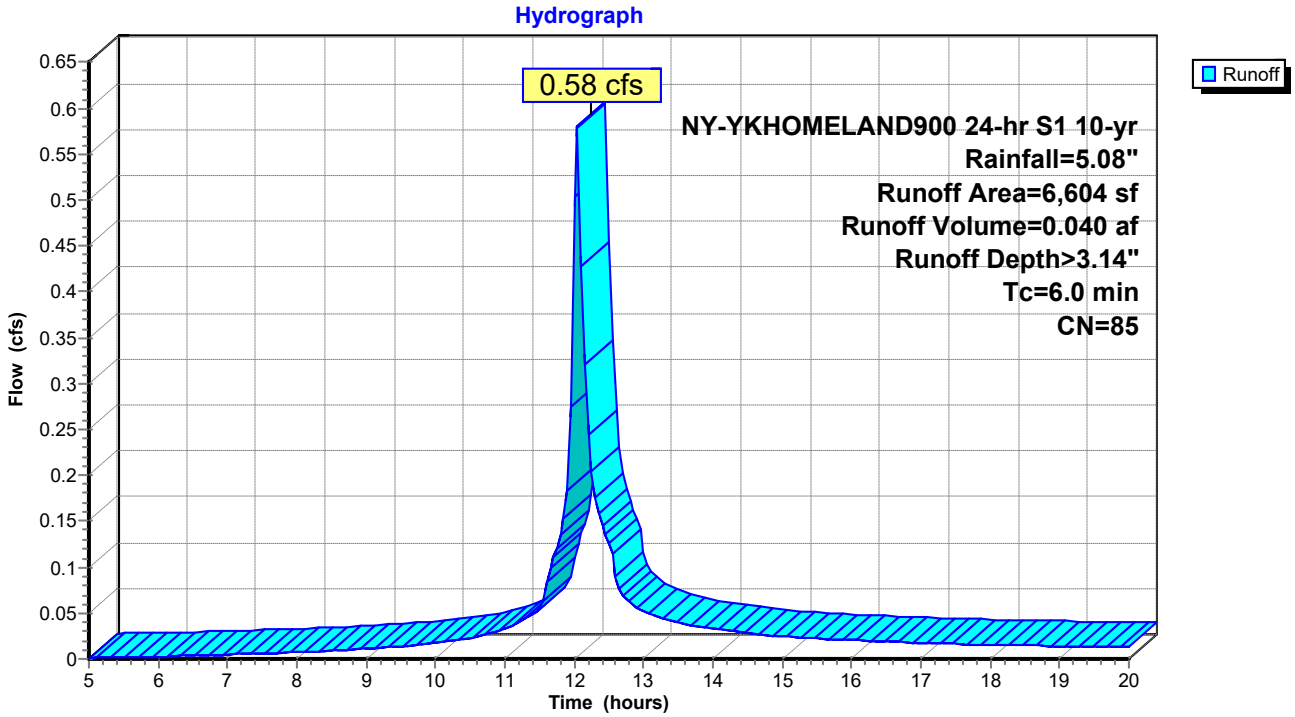
Runoff = 0.58 cfs @ 12.04 hrs, Volume= 0.040 af, Depth> 3.14"
Routed to Pond 8P : GRAVEL PAD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
285	70	Woods, Good, HSG C
1,395	74	>75% Grass cover, Good, HSG C
4,924	89	Gravel roads, HSG C
6,604	85	Weighted Average
6,604		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: DA-2 - PR



Summary for Subcatchment 4S: DA-3 - PR

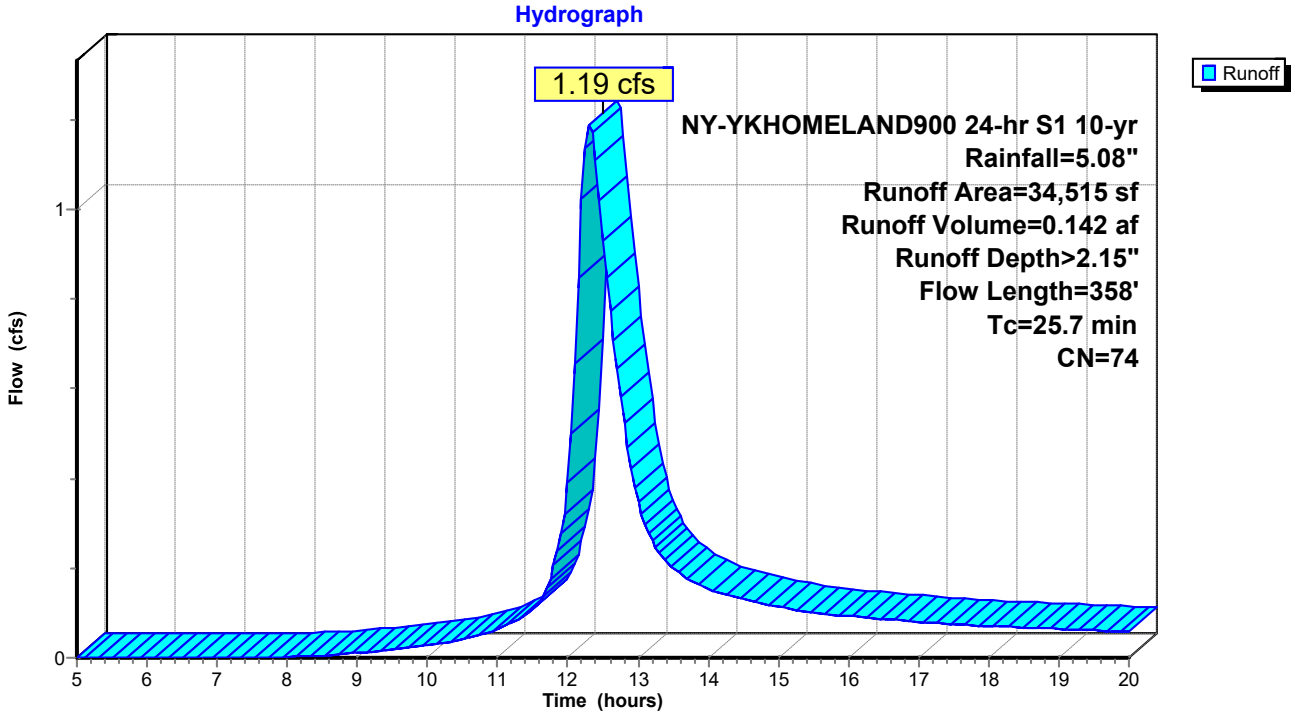
Runoff = 1.19 cfs @ 12.31 hrs, Volume= 0.142 af, Depth> 2.15"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
13,364	70	Woods, Good, HSG C
12,840	77	Woods, Good, HSG D
6,480	74	>75% Grass cover, Good, HSG C
1,831	80	>75% Grass cover, Good, HSG D
34,515	74	Weighted Average
34,515		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.4	258	0.1240	1.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
25.7	358	Total			

Subcatchment 4S: DA-3 - PR



Summary for Subcatchment 5S: DA-4 - PR

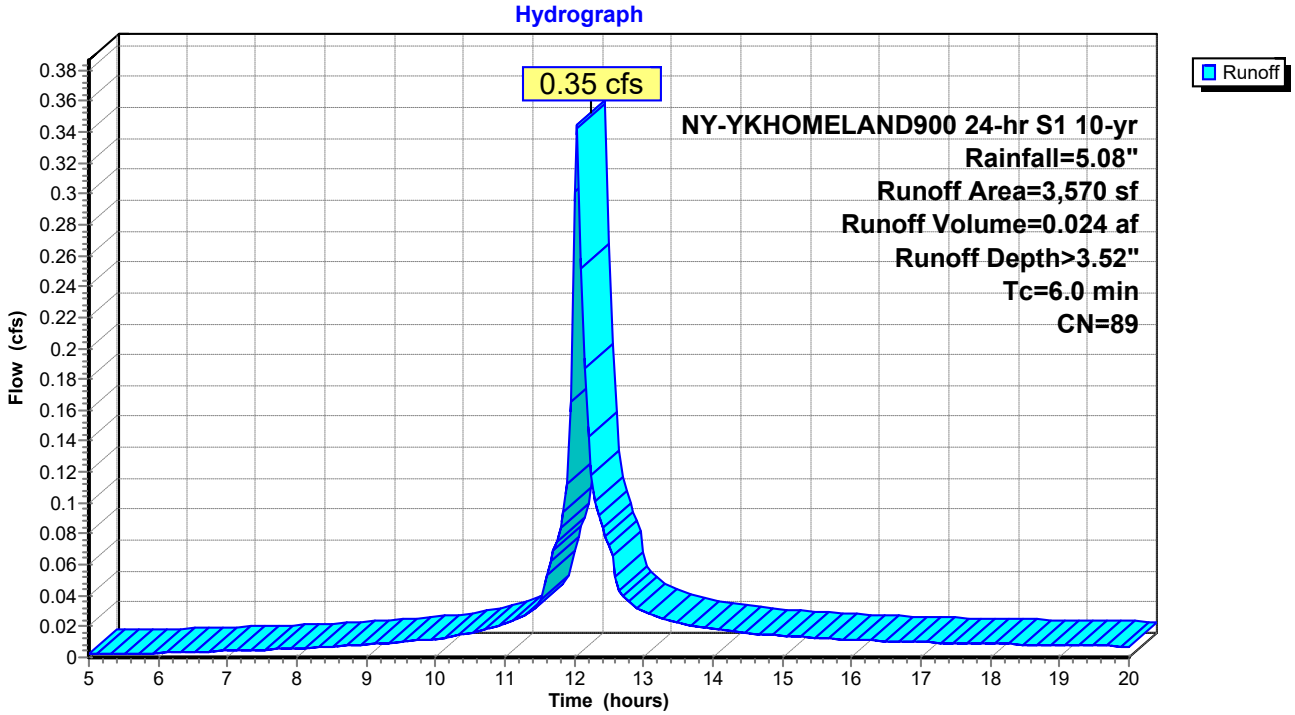
Runoff = 0.35 cfs @ 12.04 hrs, Volume= 0.024 af, Depth> 3.52"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
3,049	89	Gravel roads, HSG C
521	91	Gravel roads, HSG D
3,570	89	Weighted Average
3,570		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 5S: DA-4 - PR



Summary for Subcatchment 8S: DA-5 PR

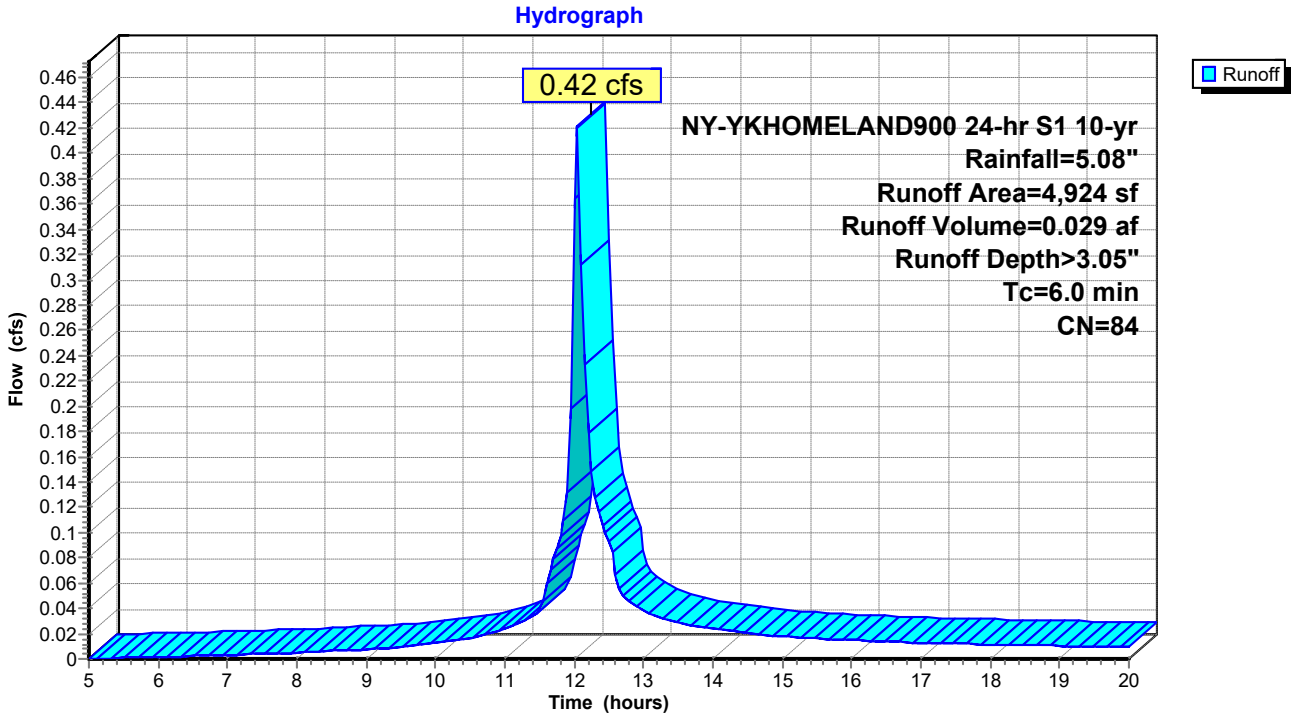
Runoff = 0.42 cfs @ 12.04 hrs, Volume= 0.029 af, Depth> 3.05"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 10-yr Rainfall=5.08"

Area (sf)	CN	Description
1,198	77	Woods, Good, HSG D
1,522	80	>75% Grass cover, Good, HSG D
2,204	91	Gravel roads, HSG D
4,924	84	Weighted Average
4,924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 8S: DA-5 PR



Summary for Pond 8P: GRAVEL PAD

Inflow Area = 0.152 ac, 0.00% Impervious, Inflow Depth > 3.14" for 10-yr event
Inflow = 0.58 cfs @ 12.04 hrs, Volume= 0.040 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 7L : DL-PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 496.98' @ 20.00 hrs Surf.Area= 4,925 sf Storage= 1,729 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

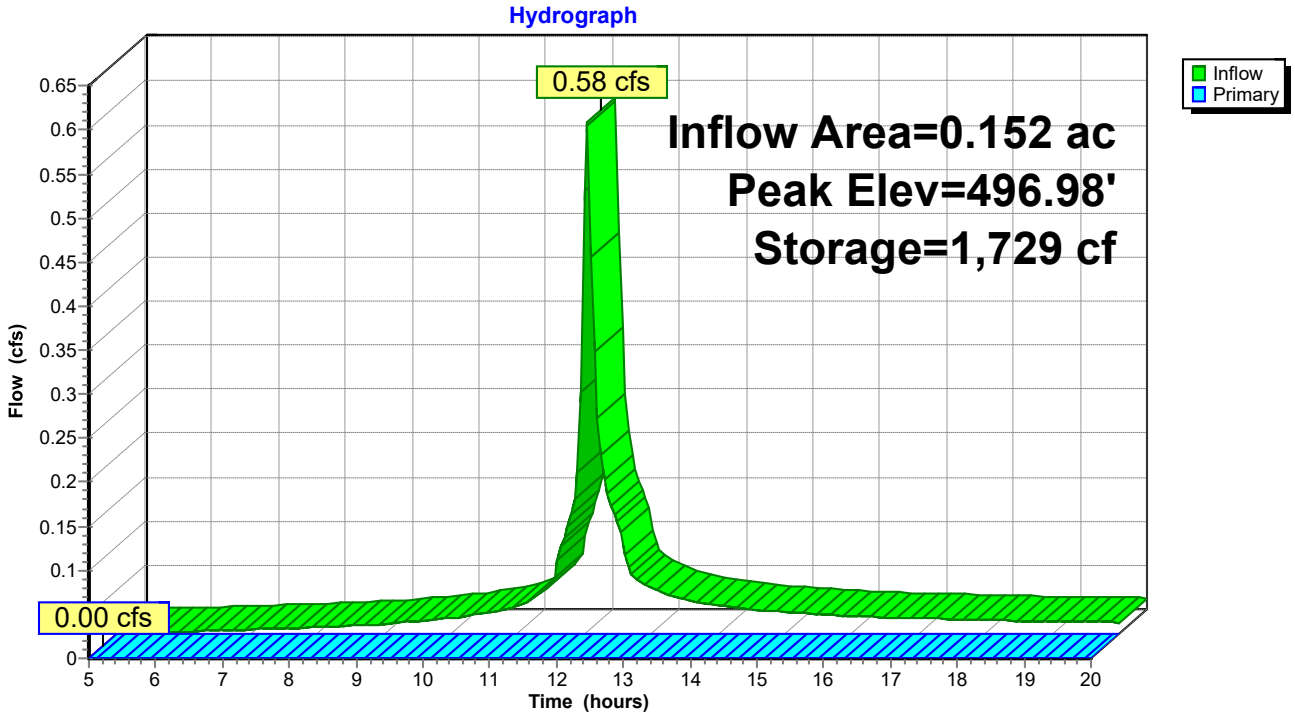
Volume	Invert	Avail.Storage	Storage Description
#1	496.10'	1,970 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 4,925 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
496.10	4,925	0	0
497.10	4,925	4,925	4,925

Device	Routing	Invert	Outlet Devices
#1	Primary	497.10'	**812.4" x 984.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=496.10' (Free Discharge)
└**1=Orifice/Grate** (Controls 0.00 cfs)

Pond 8P: GRAVEL PAD

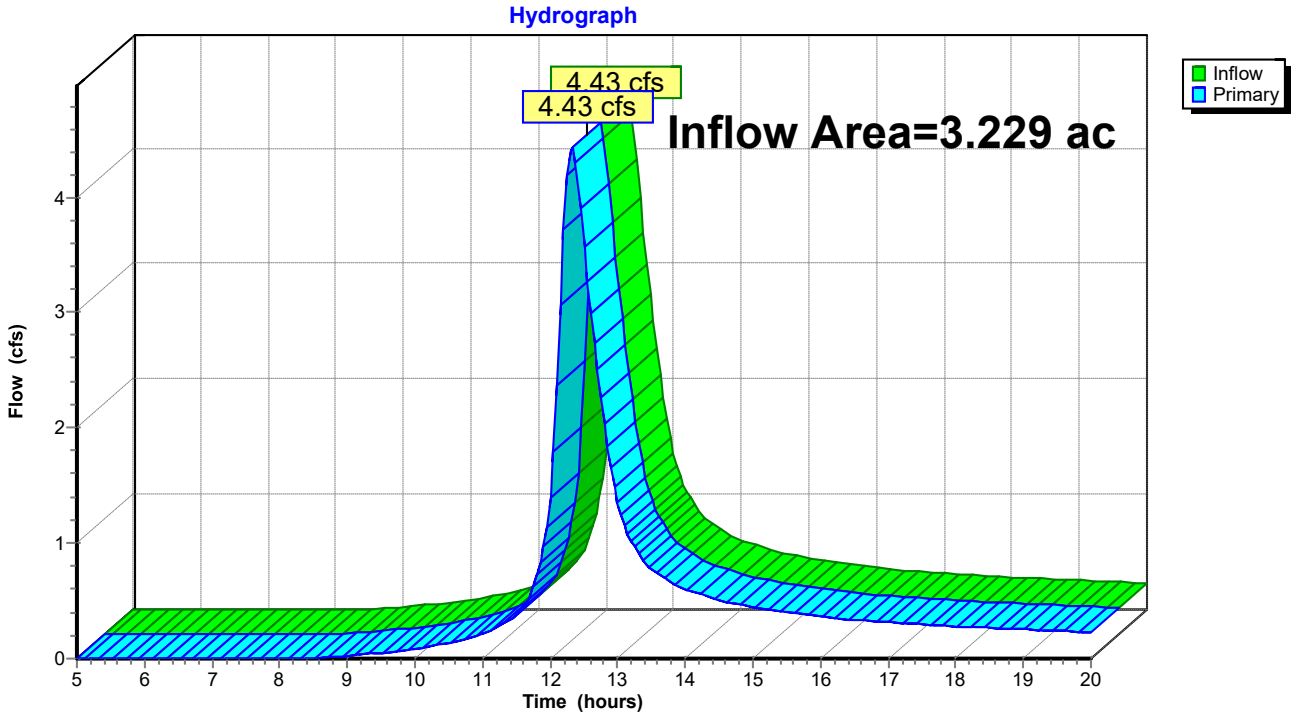


Summary for Link 6L: DL-EX

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 1.99" for 10-yr event
Inflow = 4.43 cfs @ 12.32 hrs, Volume= 0.536 af
Primary = 4.43 cfs @ 12.32 hrs, Volume= 0.536 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 6L: DL-EX

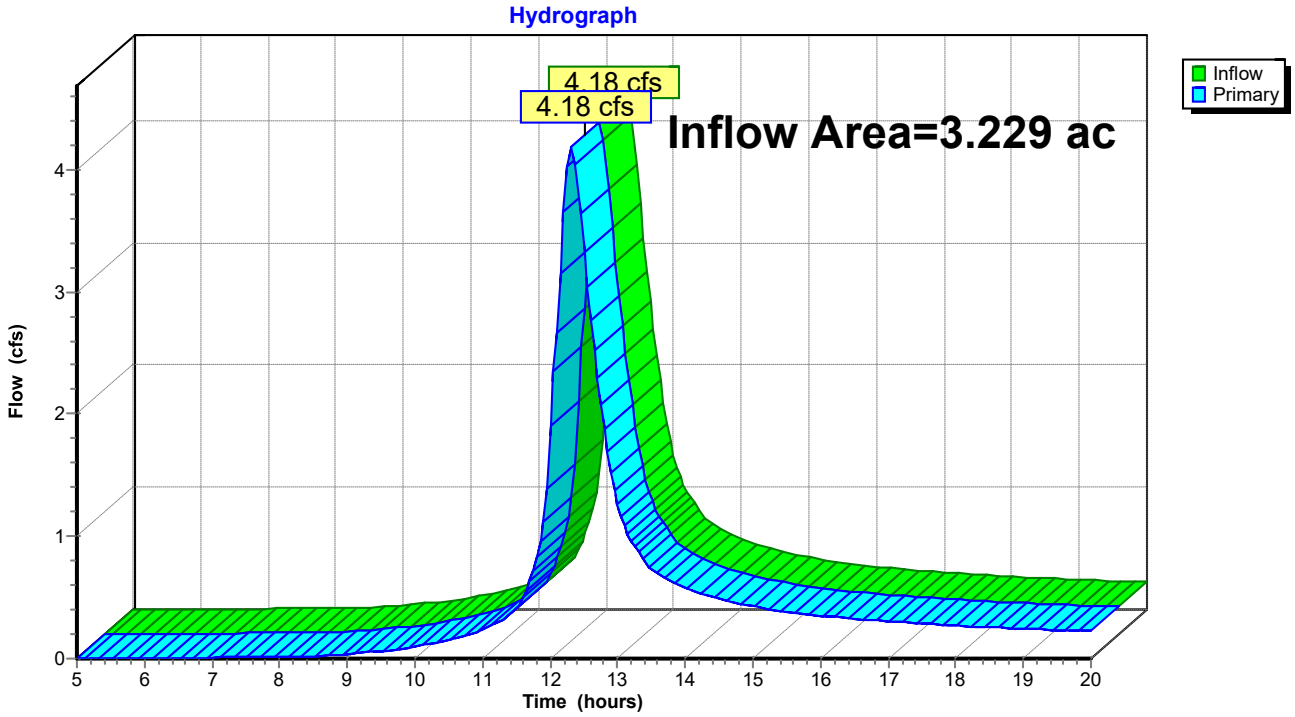


Summary for Link 7L: DL-PR

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 1.96" for 10-yr event
Inflow = 4.18 cfs @ 12.32 hrs, Volume= 0.528 af
Primary = 4.18 cfs @ 12.32 hrs, Volume= 0.528 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 7L: DL-PR



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA - EX Runoff Area=140,653 sf 0.00% Impervious Runoff Depth>5.15"
Flow Length=404' Tc=26.2 min CN=72 Runoff=10.33 cfs 1.385 af

Subcatchment 2S: DA-1 - PR Runoff Area=91,040 sf 0.00% Impervious Runoff Depth>5.03"
Flow Length=502' Tc=26.0 min CN=71 Runoff=6.59 cfs 0.876 af

Subcatchment 3S: DA-2 - PR Runoff Area=6,604 sf 0.00% Impervious Runoff Depth>6.68"
Tc=6.0 min CN=85 Runoff=1.04 cfs 0.084 af

Subcatchment 4S: DA-3 - PR Runoff Area=34,515 sf 0.00% Impervious Runoff Depth>5.39"
Flow Length=358' Tc=25.7 min CN=74 Runoff=2.66 cfs 0.356 af

Subcatchment 5S: DA-4 - PR Runoff Area=3,570 sf 0.00% Impervious Runoff Depth>7.09"
Tc=6.0 min CN=89 Runoff=0.59 cfs 0.048 af

Subcatchment 8S: DA-5 PR Runoff Area=4,924 sf 0.00% Impervious Runoff Depth>6.57"
Tc=6.0 min CN=84 Runoff=0.77 cfs 0.062 af

Pond 8P: GRAVEL PAD Peak Elev=497.11' Storage=1,970 cf Inflow=1.04 cfs 0.084 af
Outflow=0.71 cfs 0.039 af

Link 6L: DL-EX Inflow=10.33 cfs 1.385 af
Primary=10.33 cfs 1.385 af

Link 7L: DL-PR Inflow=10.13 cfs 1.381 af
Primary=10.13 cfs 1.381 af

Total Runoff Area = 6.458 ac Runoff Volume = 2.811 af Average Runoff Depth = 5.22"
100.00% Pervious = 6.458 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DA - EX

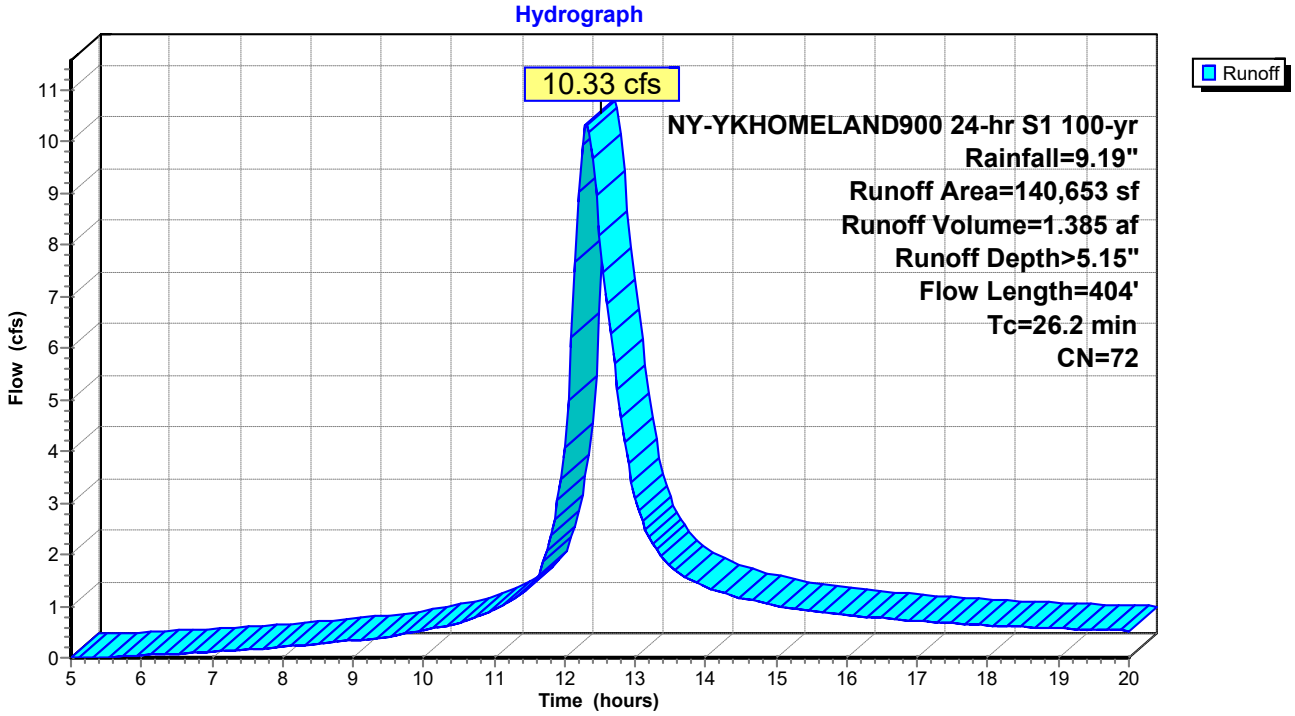
Runoff = 10.33 cfs @ 12.31 hrs, Volume= 1.385 af, Depth> 5.15"
Routed to Link 6L : DL-EX

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
107,365	70	Woods, Good, HSG C
33,288	77	Woods, Good, HSG D
140,653	72	Weighted Average
140,653		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.9	304	0.1217	1.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.2	404	Total			

Subcatchment 1S: DA - EX



Summary for Subcatchment 2S: DA-1 - PR

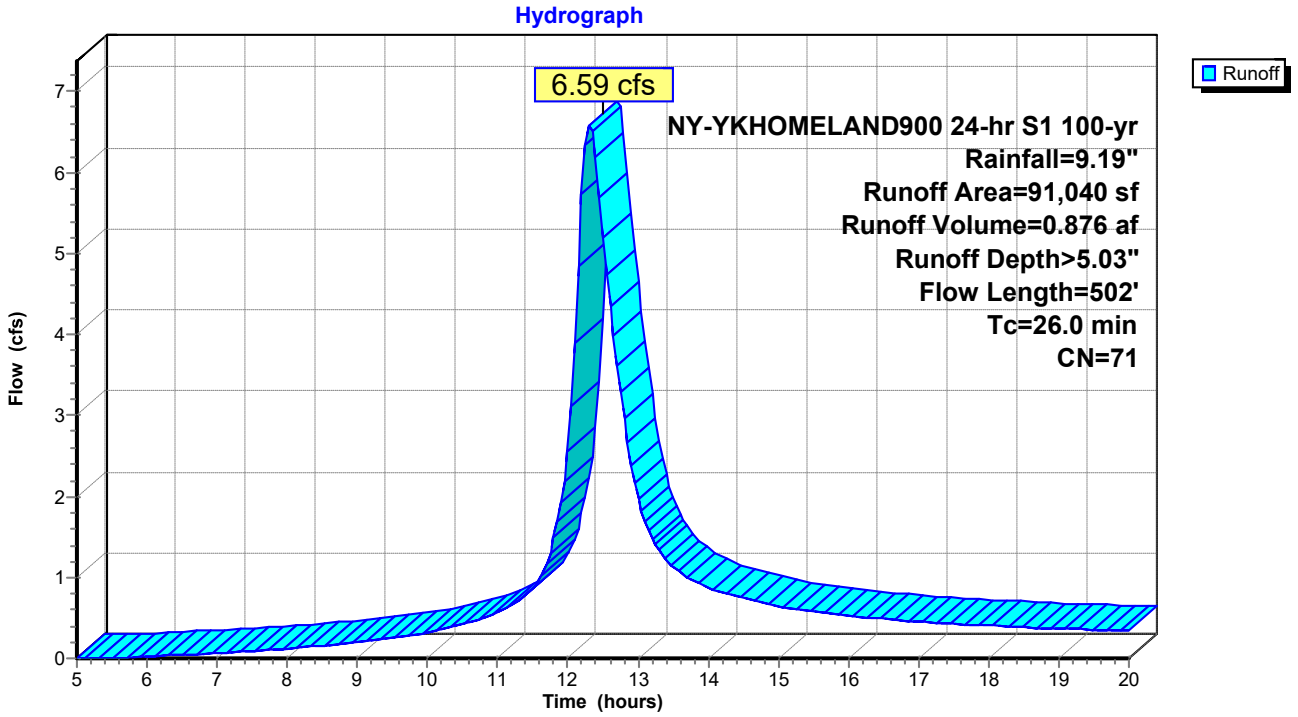
Runoff = 6.59 cfs @ 12.31 hrs, Volume= 0.876 af, Depth> 5.03"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
75,180	70	Woods, Good, HSG C
12,971	77	Woods, Good, HSG D
2,677	74	>75% Grass cover, Good, HSG C
212	80	>75% Grass cover, Good, HSG D
91,040	71	Weighted Average
91,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	100	0.0700	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
4.0	351	0.0855	1.46		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	47	0.0200	5.25	1.05	**Channel Flow,** Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.0	4	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.0	502	Total			

Subcatchment 2S: DA-1 - PR



Summary for Subcatchment 3S: DA-2 - PR

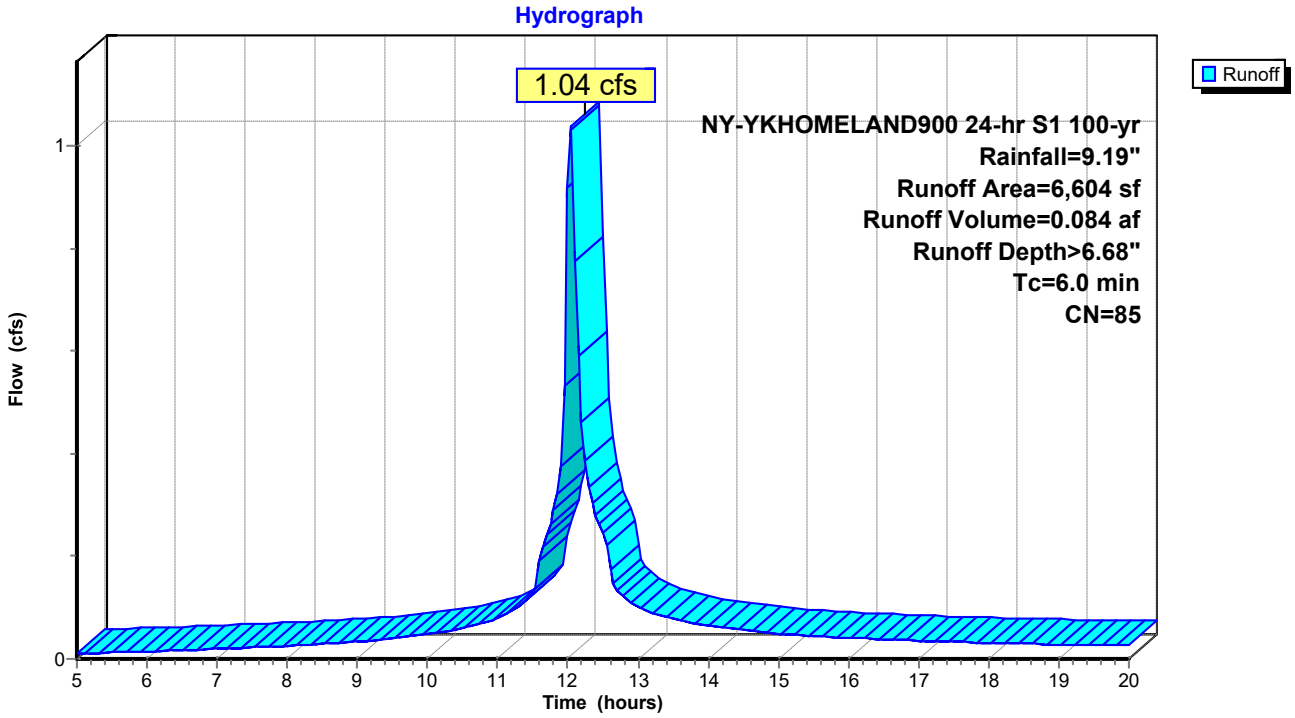
Runoff = 1.04 cfs @ 12.04 hrs, Volume= 0.084 af, Depth> 6.68"
Routed to Pond 8P : GRAVEL PAD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
285	70	Woods, Good, HSG C
1,395	74	>75% Grass cover, Good, HSG C
4,924	89	Gravel roads, HSG C
6,604	85	Weighted Average
6,604		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: DA-2 - PR



Summary for Subcatchment 4S: DA-3 - PR

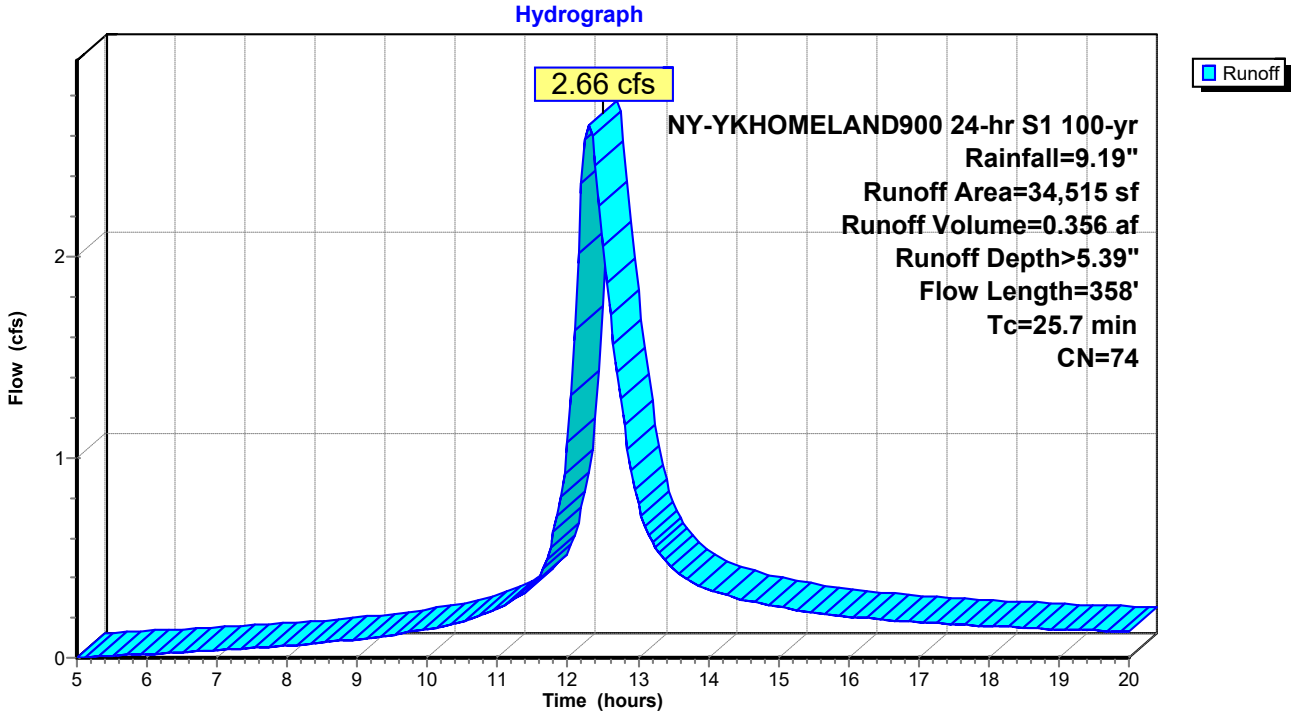
Runoff = 2.66 cfs @ 12.30 hrs, Volume= 0.356 af, Depth> 5.39"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
13,364	70	Woods, Good, HSG C
12,840	77	Woods, Good, HSG D
6,480	74	>75% Grass cover, Good, HSG C
1,831	80	>75% Grass cover, Good, HSG D
34,515	74	Weighted Average
34,515		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0600	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.43"
2.4	258	0.1240	1.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
25.7	358	Total			

Subcatchment 4S: DA-3 - PR



Summary for Subcatchment 5S: DA-4 - PR

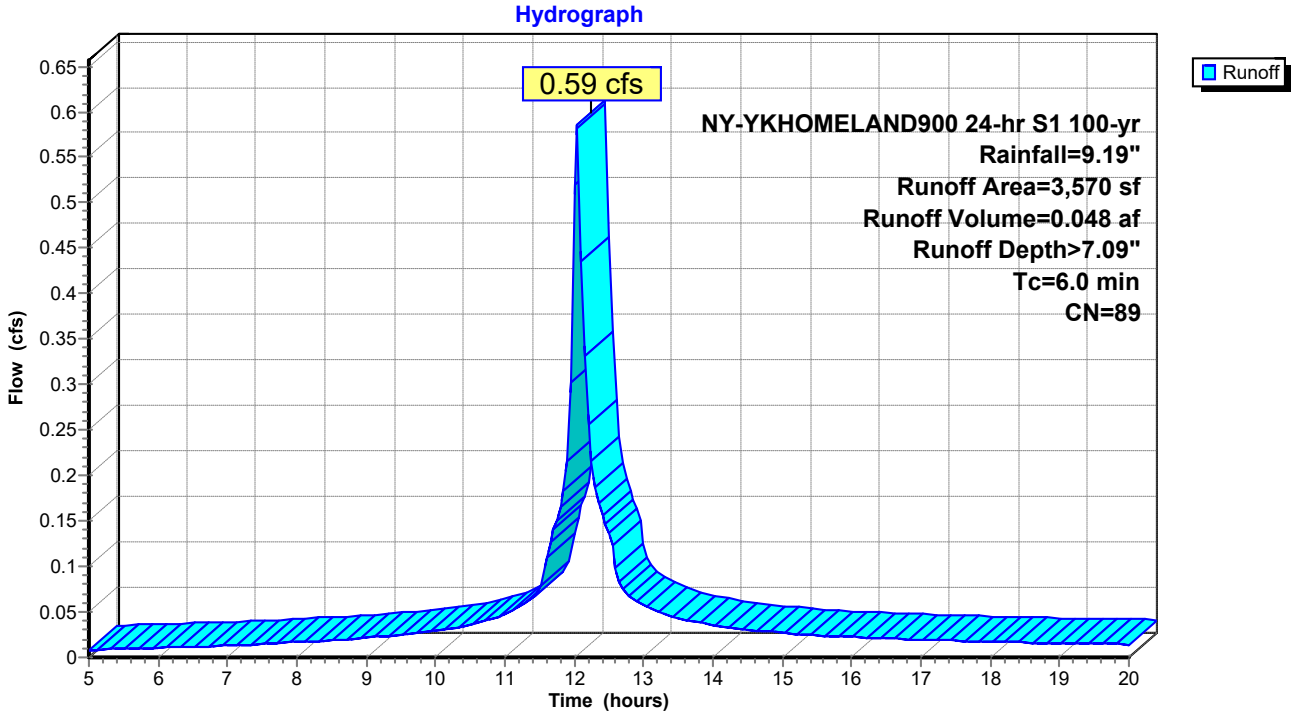
Runoff = 0.59 cfs @ 12.04 hrs, Volume= 0.048 af, Depth> 7.09"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
3,049	89	Gravel roads, HSG C
521	91	Gravel roads, HSG D
3,570	89	Weighted Average
3,570		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 5S: DA-4 - PR



Summary for Subcatchment 8S: DA-5 PR

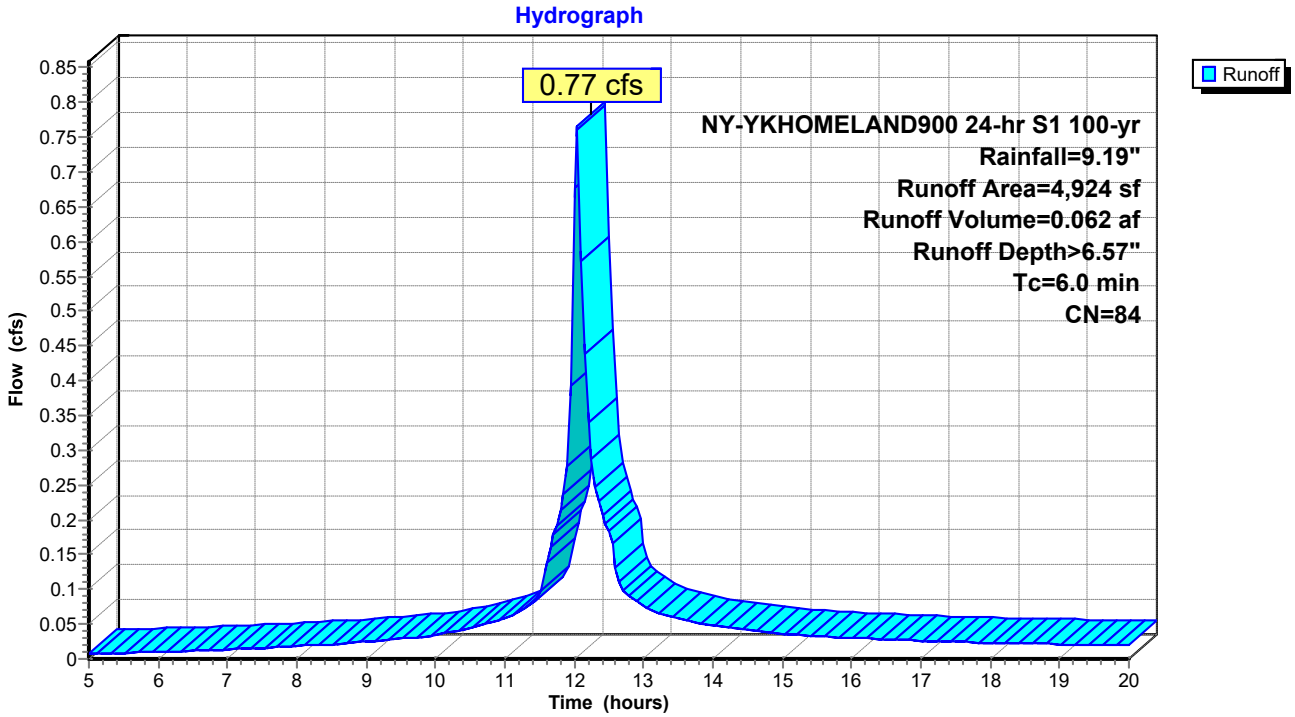
Runoff = 0.77 cfs @ 12.04 hrs, Volume= 0.062 af, Depth> 6.57"
Routed to Link 7L : DL-PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-YKHOMELAND900 24-hr S1 100-yr Rainfall=9.19"

Area (sf)	CN	Description
1,198	77	Woods, Good, HSG D
1,522	80	>75% Grass cover, Good, HSG D
2,204	91	Gravel roads, HSG D
4,924	84	Weighted Average
4,924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 8S: DA-5 PR



Summary for Pond 8P: GRAVEL PAD

Inflow Area = 0.152 ac, 0.00% Impervious, Inflow Depth > 6.68" for 100-yr event
Inflow = 1.04 cfs @ 12.04 hrs, Volume= 0.084 af
Outflow = 0.71 cfs @ 12.25 hrs, Volume= 0.039 af, Atten= 32%, Lag= 12.6 min
Primary = 0.71 cfs @ 12.25 hrs, Volume= 0.039 af
Routed to Link 7L : DL-PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 497.11' @ 12.25 hrs Surf.Area= 4,925 sf Storage= 1,970 cf

Plug-Flow detention time= 237.1 min calculated for 0.039 af (46% of inflow)
Center-of-Mass det. time= 120.8 min (877.8 - 757.1)

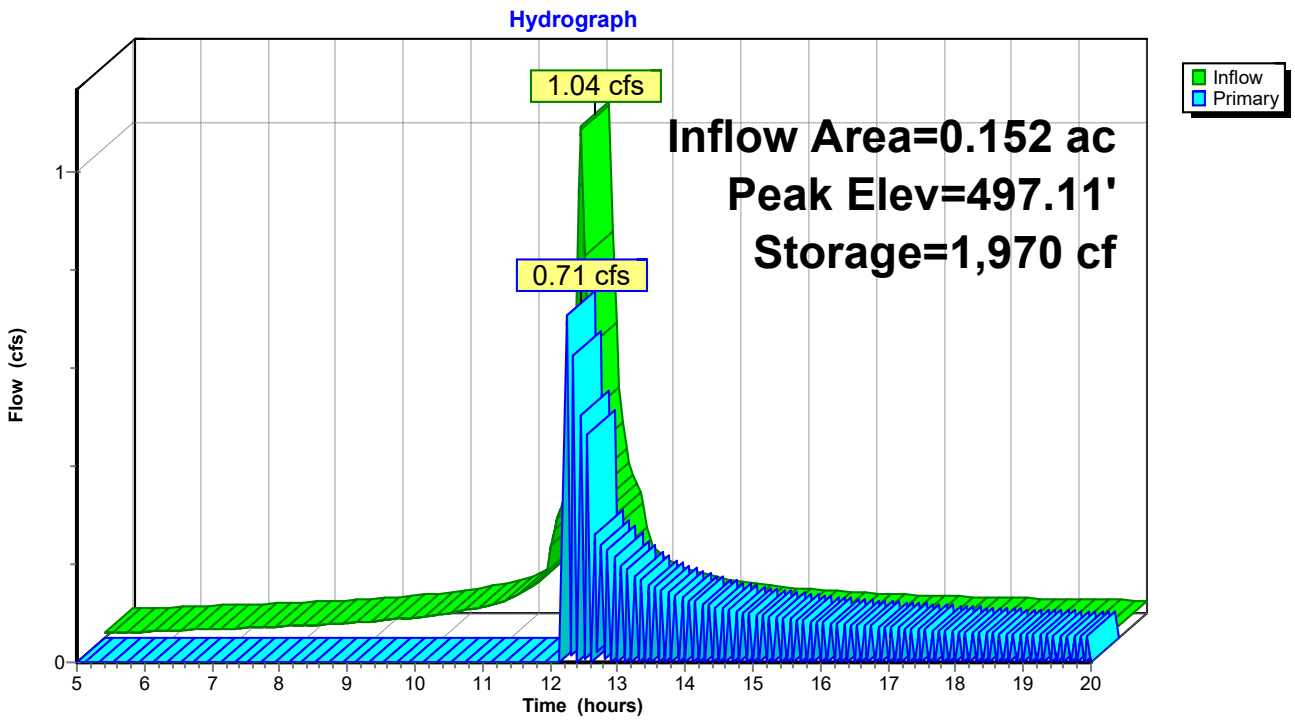
Volume	Invert	Avail.Storage	Storage Description
#1	496.10'	1,970 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 4,925 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
496.10	4,925	0	0
497.10	4,925	4,925	4,925

Device	Routing	Invert	Outlet Devices
#1	Primary	497.10'	**812.4" x 984.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.60 cfs @ 12.25 hrs HW=497.11' (Free Discharge)
└**1=Orifice/Grate** (Weir Controls 0.60 cfs @ 0.28 fps)

Pond 8P: GRAVEL PAD

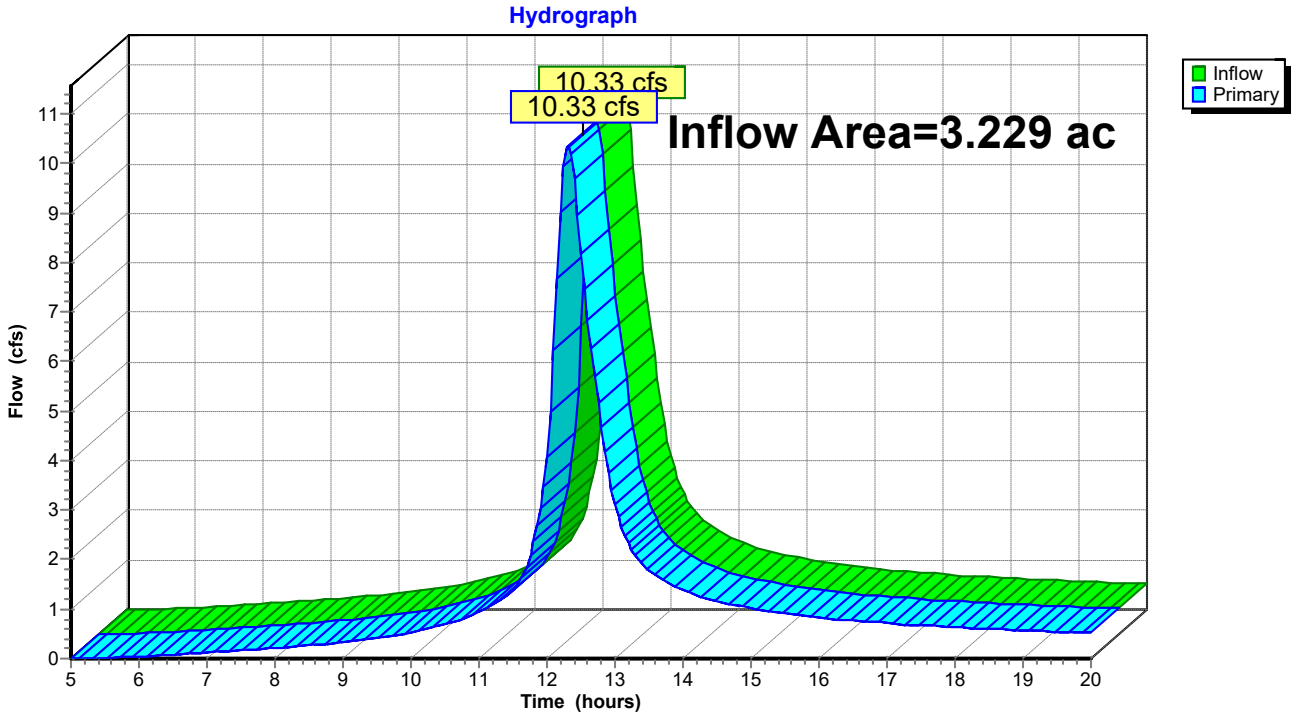


Summary for Link 6L: DL-EX

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 5.15" for 100-yr event
Inflow = 10.33 cfs @ 12.31 hrs, Volume= 1.385 af
Primary = 10.33 cfs @ 12.31 hrs, Volume= 1.385 af, Atten= 0%, Lag= 0.0 min

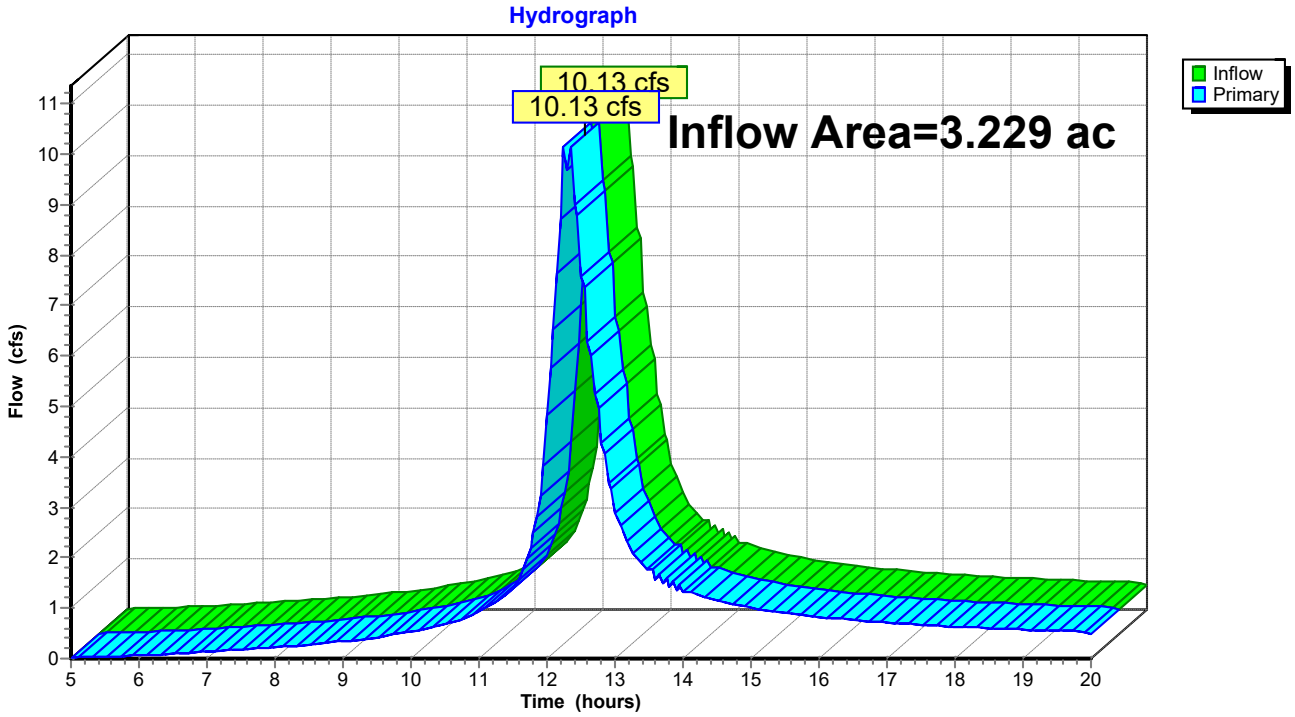
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 6L: DL-EX



Summary for Link 7L: DL-PR

Inflow Area = 3.229 ac, 0.00% Impervious, Inflow Depth > 5.13" for 100-yr event
Inflow = 10.13 cfs @ 12.35 hrs, Volume= 1.381 af
Primary = 10.13 cfs @ 12.35 hrs, Volume= 1.381 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 7L: DL-PR