DIVNEY • TUNG • SCHWALBE
Intelligent Land Use

37-41 CROTON DAM ROAD
OSSINING, NEW YORK

STORMWATER POLLUTION PREVENTION PLAN

Prepared for the Fulfillment of:

New York State Department of Environmental Conservation
SPDES General Permit for Stormwater Discharges from Construction Activities
Permit No. GP-0-15-002 and City of Rye, Chapter 174 Stormwater Management

Prepared by:

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May 2018

37-41 CROTON DAM ROAD
OSSINING, NEW YORK

STORMWATER POLLUTION PREVENTION PLAN

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TAB 1
BACKGROUND

1. BACKGROUND

a. Document Description

This document is a Stormwater Pollution Prevention Plan (SWPPP) prepared and maintained in compliance with the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Storm Water Discharges from Construction Activity (Permit Number GP-0-15-002) for the subdivision and development of properties located at 37 – 41 Croton Dam Road, Ossining, New York.

This SWPPP includes text (the documents bound in this notebook) and site plan drawings as listed in Section 2.h. that describe the existing developed condition of the site and the estimated redeveloped conditions during and after construction.

The following is a list and brief description of the sections of this text as identified in the Table of Contents:

Sections 1 and 2: Description of the existing developed site conditions and the conditions that are predicted to occur during and after the proposed project is constructed and the site redeveloped.

Section 3, Appendix A: The Stormwater Management Reports outline the improvements planned to control stormwater runoff in terms of quantity and quality according to the requirements of the NYSDEC SPDES GP-0-15-002.

Section 4, Appendix B: The certification forms to be completed by the project operator and the project contractors responsible for the implementation of this Plan.

Section 5, Appendix C: The Construction Activity Initiation and Completion Dates form to be completed by the contractor as the project is constructed.

Section 6, Appendix D: Blank Stormwater Pollution Prevention Plan Observation Report to be completed by the certified inspector after each inspection conducted and as described in Section 1. d. vi. (3) (a) of this text.

Section 7, Appendix E: A copy of the NYSDEC SPDES General Permit For Stormwater Discharges From Construction Activity (Permit Number GP-0-15-002). **The contractor is responsible for maintaining compliance with this permit.** A copy of the Stormwater Maintenance Agreement will be inserted into this section after it is executed.

Section 8, Appendix F: Applications and approvals related to the SWPPP will be inserted into this section as they are completed. These documents will include the Notice of Intent and the Notice of Termination.

Compliance with the NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activities (General Permit) includes, but is not limited to, completing the following activities:

i. Retaining a copy of this SWPPP including text, appendices, and drawings at the site until the date of final stabilization;

ii. Posting a copy of the NOI and a project description at the construction site for public viewing;

iii. Maintaining the SWPPP current;

iv. Submitting a certified Notice of Termination when the site has finally been stabilized and discharges from construction activities have been eliminated;

v. Maintaining a copy of this SWPPP by the operator for three years following the date of final stabilization.

The contractor shall refer to the NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activities (Appendix E) for a complete listing of permit requirements for compliance.

b. Project Location

The project site is located on lots 37 and 41 Croton Dam Road. The site is bounded to east by Croton Dam Road. Residential lots are adjacent to the project site on the other three sides.

c. Project Site Description

The project site is 5.1 acres and currently has two single family homes.

d. Project Description

The goal of the subdivision and redevelopment of the site is to minimize the additional disturbance of undeveloped property in order to preserve the remaining natural features of the developed site, while maintaining the general drainage patterns of the existing site. By utilizing a shared driveway, the impacts to the remaining natural features were minimized and the total impervious area was reduced

i. Stormwater Management Plan – The stormwater management plan has been developed and will be implemented so that the quantity and quality of runoff during and after development are not significantly altered from preconstruction conditions. Its primary objectives are to avoid causing downstream flooding and flood damage and to employ all means that are practicable to mitigate increases in stormwater pollutant (total

suspended solids, total nitrogen, total phosphorus, and biological oxygen demand) loads that may occur as a result of the project.

(1) Stormwater Quantity – A detailed analysis of the redevelopment project's pre- and post-stormwater quantity conditions is presented in Section 3, Stormwater Management Report, prepared by Divney Tung Schwalbe, LLP.

(2) Stormwater Quality – A detailed analysis of the redevelopment project's pre- and post-stormwater quality conditions is presented in Section 3, Stormwater Management Report, prepared by Divney Tung Schwalbe, LLP.

(3) Maintenance of Temporary and Permanent Structures and Practices

(a) Temporary – Temporary structures and practices, as described in the Erosion & Sediment Control Plan drawings, will be installed and maintained through the duration of the project's construction. As required by the General Permit, structures and practices located in disturbed areas of the site will be inspected by a qualified individual at least every seven days. Areas of the site that have been finally stabilized will be inspected at least every month until the entire site has been finally stabilized. Following each inspection, a certified inspection report will be completed. Based on the results of the inspections, appropriate revisions to the SWPPP and its implementation will be completed within seven calendar days following the inspection. Appendix D of this SWPPP includes a blank inspection report form to be used to complete the inspections and report. Completed reports will be added to Section 6 and retained as part of this SWPPP.

(b) Permanent – Permanent structures and measures implemented to control the project's quantity and/or the quality of the stormwater will require regular inspections and maintenance. These include permanent erosion control practices

(soil stabilization), water quality control practices (i.e. rain gardens), and related stormwater flow controlling structures (culverts, catch basins, etc.). Table 1 identifies the frequency with which inspections of stormwater management measures should occur and the extent of maintenance required. The propery owner's will be responsible for inspecting and maintaining permanent stormwater management structures and practices.

(c) In accordance with the NYSDEC requirements, regular maintenance of the site infrastructure will be performed by the property owner. Stormwater management inspections and maintenance of permanent structures will be performed on a regular basis as is outlined in the following table or as required after a significant storm event.

Table No. 1
Stormwater Management Inspections & Maintenance of Permanent Structures

Structure Or Practice	Minimum Inspection Frequency	Conditions to be Identified	Maintenance Required
Paved Areas	Semi-Annually	Pavement Damage	Repair or repave; Remove sand
Rain Gardens, Infiltration Basins	Monthly	Weeds, Sediment Accumulation	Mulch and weed with landscaping, replace dead plants. Remove sediment when storage capacity reduced by 10% or more
Vegetated Areas	Monthly	Erosion	Regrade & vegetate as necessary
Drainage Pipes	Monthly	Debris Accumulation	Remove debris when cross-sectional area of pipe is reduced by 10% or +
Catch Basins, Inlets & Manholes	Monthly	Sediment Accumulation	Remove sediment min. of 2x year or when storage reduced by 10% or +

ii. Project Permits and Approvals

Procedures and requirements specified for this project shall comply with all requirements applicable to protecting surface water and groundwater.

(1) Permits and Approvals Granted

(a) None

(2) Permits and Approvals Being Sought

(a) Town of Ossining

(i) Subdivision Approval

(ii) Site Plan Approval

(iii) SWPPP Approval

(iv) Tree Removal Permit

(b) New York State Department of Environmental Conservation

(i) General Stormwater SPDES Permit

TAB 2
CONSTRUCTION ACTIVITY DESCRIPTION

2. CONSTRUCTION ACTIVITY DESCRIPTION

a. Project Operator

The Project Operator is required to comply with all conditions of the NYSDEC General Permit GP 0-15-002. The Project Operator will be responsible for the maintenance of the permanent stormwater structures.

Valerie Schemmer

b. Project Contractors

All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. The construction manager and designated subcontractor will be responsible for the installation and maintenance of all temporary stormwater and erosion control. They will be responsible for the installation of the permanent stormwater measures and the maintenance during construction.

i. Construction Manager

To be determined.

ii. Earthwork/Sitework

To be determined.

c. Project Engineers:

The Design Engineer is responsible for the development of the Stormwater Management Report and Stormwater Pollution Prevention Plan as required by the NYSDEC General Permit GP 0-15-002. The Field Engineer is responsible for conducting inspections and maintaining the SWPPP as required in the SWPPP and the NYSDEC General Permit GP 0-15-002.

Design Engineer:

Divney Tung Schwalbe, LLP

One North Broadway
White Plains, NY 10601

Field Engineer:
To be Determined

d. Construction Program

i. Project Construction Phasing

There will be two building lots for this project. The two lots will likely have different owners and be built on separate schedules. The shared driveway and associated stormwater measures will be required to be built for the first house.

ii. Construction Activities

Construction initiation and completion dates have yet to be established. Each lot will be completed in approximately 6 months, with the construction possibly occurring simultaneously or with a break in between building.

(1) Site Preparation, Erosion Control & Tree Removal

Prerequisite to begin activities: All approvals obtained to include NYSDEC SPDES coverage. Conduct a preconstruction meeting with owner's representative, site engineer, general contractor, and site contractor.

(a) Installation of perimeter erosion and sediment control devices
(b) Install stone construction entrance
(c) Clear and grub sediment basins
(d) Construct sediment traps/storm water basins

(2) Mass Grading

Prerequisite to begin activities: Stabilize construction staging area.

(a) Earthwork cut to fill.

(b) Grade driveways and place stone base.

(c) Excavate building foundations

(d) Stabilize steep slopes immediately upon completion

(3) Building Construction and Utilities

Prerequisite to begin activities: Complete mass grading.

(a) Continue building construction

(b) Commence with on-site utility installation

(d) Install retaining walls

(4) Paving and Landscaping

Prerequisite to begin activities: All utilities installed. Asphalt base course installed.

(a) Continue building interior

(b) Remove all silt and collected debris from temporary measures

(c) Install asphalt top coat

(d) De-compact soil as required

(e) Topsoil and seed all landscaped areas

(f) Plant water quality measures

(g) Temporary mulch and seed if planting cannot be done

(h) Install all plants and ground cover

(i) Project site work complete, final site stabilization achieved

(j) Remove erosion and sediment control barriers

Additional information regarding phasing of construction activities is provided on the Erosion and Sediment Control drawings.

e. Erosion and Sediment Control

Erosion and sedimentation related impacts will be minimized by controlling runoff and minimizing erosion, and by collecting suspended sediment before it leaves the site. Clean runoff will be diverted away from disturbed areas and sediment laden runoff will be directed to sediment traps. Only those areas under construction will be opened and exposed. Disturbed areas will be stabilized preceding storm events and/or immediately following construction activities in the area. Suspended sediment in runoff will be filtered and/or settled out via silt fence, sediment traps and other measures.

Erosion and sediment control for the redevelopment project shall be implemented as specified on the Erosion and Sediment Control Plan drawings.

f. Dust Control

Dust controls reduce the surface and air transport of dust, thereby preventing pollutants from infiltrating into stormwater runoff. Dust control measures for construction activities include windbreaks, minimization of soil disturbance, spray-on adhesives, tillage, chemical treatment, and water spraying. The contactor is responsible for maintaining dust control through the duration of the project. The measures to be utilized will be based on the construction activities, moisture levels, wind, and weather conditions.

g. Colloidal Soils

In the event that colloidal soils are encountered during construction that cannot be settled out through typical erosion control measures, the sediment trap outlets will be modified to allow manual operation. Stormwater runoff will be retained in the sediment traps to allow the colloidal soils to settle out. The stormwater will be released when the turbidity is below 25 nephlelometric turbidty units, NTU, or prior to forecasted storm events, the retained stormwater will be released at a controlled rate through a filter to provide capacity for the next storm. Flocculants may not be used without prior approval from the NYSDEC and the

Town of Ossining.

h. Construction Refuse Control

All contractors working on the site will provide adequate trash containment services for the construction site at the start of work to maintain a clean, debris-free work area. Typical facilities may be covered containers with openings three inches or smaller or approved equal, and will be emptied on a regular basis. Refuse will be removed from site via solid-waste contractor and be recycled or disposed per Federal, State and local requirements. Refuse will not be disposed on site.

i. Chemical Storage

Temporary storage of chemicals on the site requires covered secondary containment and protection for construction vehicles and vandalism.

j. Spill Prevention and Response Procedures

The contractor is responsible for implementing spill prevention and spill response procedures as well as maintaining required accessible spill response material on the project site.

k. List of Drawings

The following is a list of the site drawings that are made part of these documents.

SP-0.0 Preliminary Subdivision Plan
SP-1.0 Site Layout Plan
SP-2.0 Site Engineering Plan
SP-3.1 Landscape Plan
SP-4.1 Site Details
SP-4.2 Site Details
SP-5.0 Tree Removal Plan

SP-5.1 Erosion & Sediment Control Plan and Details
SP-6.0 Steep Slopes
SP-7.0 Road Profiles

TAB 3
STORMWATER MANAGEMENT REPORT

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37-41 CROTON DAM ROAD - SUBDIVISION
OSSINING, NEW YORK

STORMWATER MANAGEMENT REPORT

Prepared by:

Divney Tung Schwalbe, LLP
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White Plains, NY 10601

May 2018

37-41 CROTON DAM ROAD - SUBDIVISION
OSSINING, NEW YORK

STORMWATER MANAGEMENT REPORT

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III. PROPOSED CONDITIONS 5

IV. APPENDIX 13

A. Soils Report
B. Stormwater Calculations & Extreme Precipitation Tables
C. PondPack Modeling

Stormwater Management Report

I. Introduction

The following Stormwater Management Report has been prepared for a proposed subdivision of land at 37-41 Croton Dam Road in Ossining, New York. The project site currently has two (2) homes on one parcel and no homes on second parcel. Under the proposed plan the two parcels would be subdivided into (4) parcels. The two (2) existing homes would be on separate parcels, and two (2) new parcels would be established for two (2) future homes.

This Stormwater Management Report has been prepared in accordance with New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP 0-15-002. The stormwater management plan has been designed to meet the standards of the New York State Stormwater Management Design Manual, dated January 2015.

II. Existing Conditions

The 5.1-acre site is located in the Town of Ossining to the west of Croton Dam Road. The site is bordered on the other three (3) sides by residential lots. There are two (2) homes, a pool, cabana, detached garage, and driveways located on the site. The site generally slopes from north to south, with a high point of 407 feet at the north end of the site and a low point of 323 feet at the southeast corner of the site.

Paxton soils are found through-out the site, most sloping between 15 to 25 percent. A complete soil report for the project site produced by the United States Department of Agriculture – Natural Resources Conservation Service is provided in the appendix of this report.

There are currently no on-site stormwater detention and treatment systems. See Figure No. 1, Existing Drainage Conditions Plan and Table No. 1, Existing Drainage Conditions for additional information.

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EXISTING DRAINAGE CONDITIONS
37 - 41 CROTON DAM ROAD
OSSINING, NEW YORK

FIG. NO. 1
MAY 29, 2018

TABLE NO. 1

41 Croton Dam Road
Ossining, New York

EXISTING DRAINAGE CONDITIONS

WATERSHED/ SUBBASIN ID	AREA (AC) [1]					(2) I (%)	(2) R_v	(3) CN	Ia	(4) Tc (HRS)	(4) Tt (HRS)	DESIGN POINT #
	IMPERVIOUS			PERVIOUS	TOTAL AREA							
	Roof	Pavement	IMP. TOTAL									
A	0.00	0.00	0.00	0.34	0.34	0.0	0.20	74	0.7	0.13	---	1
B	0.00	0.00	0.00	0.54	0.54	0.0	0.20	74	0.7	0.14	---	2
C	0.00	0.00	0.00	1.36	1.36	0.0	0.20	74	0.7	0.13	---	3
TOTAL AREA			0.00	2.23	**2.23**							

1. Area based on watershed evaluation, including areas upstream of project site. Area w/in PL (ac)= **2.23** ; Impervious area w/in PL (ac) = **0.0**
2. I=Percent Impervious, (Impervious Area/Total Area)*100%; $R_v = 0.05+0.009(I)$, Minimum Rv=0.2
3. CN=Curve Number, 98 Impervious, 74 Open Space - Good Condition, C Soils
4. Tc=Time of Concentration, Tt=Travel Time

III. Proposed Conditions

Under the proposed plan a shared driveway and two (2) single family homes will be added to the north side of the site. A series of rain gardens and infiltration basins will be used to facilitate infiltration, filter the runoff, and provide detention so that the peak discharge rates remain at or below existing conditions. See Figure No. 2, Existing Drainage Conditions Plan and Table No. 2, Existing Drainage Conditions for additional information.

DESIGN POINT #1

DESIGN POINT #2

DESIGN POINT #3

INFILTRATION BASIN - 2

INFILTRATION BASIN - 3

INFILTRATION BASIN - 4

INFILTRATION BASIN - 6

INFILTRATION BASIN - 7

INFILTRATION BASIN - 8

LEVEL SPREADER

RAIN GARDEN -1

RAIN GARDEN - 5

AA-EX

AA-1

BB-2

BB-3

CC-4

CC-5

CC-6

CC-7

CC-8

CC-EX

Tax Lot 89.08-1-32
Lot 6, FM 21754
N/F Richard & Cecilia Davis

Tax Lot 89.08-1-31
Lot 7, FM 21754
N/F Sandra & Alvaro Castagnino

Tax Lot 89.12-1-37
Lot 10, FM 16261
N/F Christopher & Carla Lovastik

Tax Lot 89.12-1-37
Lot 11, FM 16261
N/F George & Bertha Seitz

Tax Lot 89.12-1-38
Lot 12, FM 16261
N/F James & Laura Gwin

Tax Lot 89.12-1-39
Lot 13, FM 16261
N/F Sarah Garzia

N/F Kenneth Krugel

Tax Lot 89.08-1-38.9
Lot 9, FM 27227
N/F Jody Varanelli

Tax Lot 89.08-1-80.1
Lot 1, FM 27944
N/F Mario Conte

Tax Lot 89.08-1-80.3
Lot 3, FM 27944
N/F Mario Conte

1 Story Frame Building

In Ground Pool

Existing 1 Story Frame Residence

Frame Garage

Existing 2 Story Frame Residence

15' Wide Utility Easement Per FM 16261

CHERRY HILL CIRCLE

CROTON DAM ROAD

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0 30 60

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PROPOSED DRAINAGE CONDITIONS
37 - 41 CROTON DAM ROAD
OSSINING, NEW YORK

FIG. NO. 2
MAY 29, 2018

TABLE NO. 2

41 Croton Dam Road
Ossining, New York

DEVELOPED DRAINAGE CONDITIONS

WATERSHED/ SUBBASIN ID	AREA (AC) [1]					(2) I (%)	(2) R_v	(3) CN	Ia	(4) Tc (HRS)	(4) Tt (HRS)	DESIGN POINT #
	IMPERVIOUS			PERVIOUS	TOTAL AREA							
	Roof	Pavement	IMP. TOTAL									
AA-EX	0.00	0.00	0.00	0.13	0.13	0.0	0.20	74	0.7	0.09	---	1
AA-1	0.02	0.00	0.02	0.07	0.09	24.7	0.27	80	0.5	0.08	---	1
BB-EX	0.00	0.00	0.00	0.14	0.14	0.0	0.20	74	0.7	0.09	---	2
BB-2	0.03	0.03	0.06	0.13	0.19	31.6	0.33	82	0.5	0.08	---	2
BB-3	0.02	0.02	0.05	0.15	0.20	23.7	0.26	80	0.5	0.08	---	2
CC-4	0.00	0.06	0.06	0.23	0.29	21.4	0.24	79	0.5	0.08	---	3
CC-EX	0.00	0.02	0.02	0.41	0.43	5.5	0.20	75	0.7	0.10	---	3
CC-5	0.03	0.00	0.03	0.17	0.19	13.0	0.20	77	0.6	0.09	---	3
CC-6	0.05	0.05	0.10	0.01	0.11	90.3	0.86	96	0.1	0.08	---	3
CC-7	0.00	0.06	0.06	0.32	0.38	16.4	0.20	78	0.6	0.08	---	3
CC-8	0.00	0.07	0.07	0.00	0.07	96.5	0.92	97	0.1	0.08	---	3
TOTAL AREA			0.47	1.76	**2.23**							

1. Area w/in PL (ac)= **2.23** ; Impervious area w/in PL (ac) = **0.47**
2. I=Percent Impervious, (Impervious Area/Total Area)*100%; R_v = 0.05+0.009(I), Minimum Rv=0.2
3. CN=Curve Number, 98 Impervious, 74 Open Space - Good Condition, C Soils
4. Tc=Time of Concentration, Tt=Travel Time

The "Six Step Process for Stormwater Site Planning and Practice Selection" was utilized in the design development.

1. Site Planning

   Through careful site planning the project protects natural areas, minimizes grading, soil disturbance and added impervious coverage. The plan does this through the use of a shared driveway and retaining walls.

2. Determine Water Quality Treatment Volume (WQV)

   The WQV is the expected runoff that will occur in 90% of rainfall events, 1.5 inches of rain for this location

3. Apply Runoff Reduction Techniques to Reduce WQV

   Runoff Reduction techniques to include rain gardens and infiltration basins will reduce the runoff volume that needs to be treated by standards stormwater practices.

4. Determine Minimum RRV

   The goal is to treat 100% of the WQV with RRV techniques. That is often not feasible, so minimum RRV is calculated based on soil types. For Hydrologic Soil Group C at this site the minimum required RRV is 30% of the WQV

   Table No. 3, Stormwater Quality Management Measures, provides the calculations for the required Water Quality Volume and Runoff Reduction Volume, and the amount of runoff reduction provided by the green infrastructure techniques.

TABLE NO. 3

41 Croton Dam Road
Ossining, New York

STORMWATER QUALITY MANAGEMENT MEASURES

ON-SITE SUMMARY

SWM CALCS	EX LOD AREA	PROPOSED LOD AREA		I[3]	R_v[4]	S[7]	WQv				Runoff Reduction Volume RRv[9]			Adjusted WqV After RRv	
	IMP (ac)	IMP (ac)	TOTAL (ac)	(%)			Standard[8] (cft)	Redevelopment (cf) [10] Ex Imp	New Const	Required (cft)	New Const (cft)	Min Req'd (cft)	Provided (cft)	Required (cft)	Provided (cft)
TOTAL SITE &/or LOD	0.00	0.47	2.23	21	0.24	0.30	2,909	152	2,429	2,581	2,429	729	**2,904**	-323	**0**

REDEVELOPMENT SELECTION PRACTICES

STORMWATER MANAGEMENT MEASURE	S.A. (sf)	RRv (cf)	Add'l WQv (cf)
Green Infrastructure Measure:			
Tree Planting/Tree Pit	0	0	
Rain Garden	1,360	816	
Green Roof	0	0	
Stormwater Planter	0	0	
Porous Pavement	0	0	0
Standard SMP Practices:			
Infiltration Practice		2088	0
Bioretention Practice	0	0	0
Dry Swale		0	0
Alternative SWM Measures:			
Hydrodynamic Separator			0
TOTAL	1360	**2,904**	**0**

NOTES

1. Stormwater Quality based on redevelopment and new construction.
2. Design per New York State Stormwater Management Design Manual, August 2010.
3. I=Impervious Cover (%)
4. Rv = 0.05+0.009(I), Minimum Rv=0.2
5. P=90% Rainfall Event Number
6. P (in) = 1.5 (See Figure 4.1, NYSSMDM, January 2015)
7. S=Hydrologic Soil Group (HSG) Specific Reduction Factor
8. Standard WQv=[(P)(Rv)(A)]/12
9. Runoff Reduction Vol, RRv=[(P)(Rv*)(Ai)]/12; per NYSSMDM Chapter 9, meeting RRv is not required for redevelopment projects, but encouraged.
10. Redevelopment WQv: Redevelopment WQv: 25% Ex WQv using NYSDEC Standard Measures or GI RRv Measures or 75% Ex WQv using NYSDEC Alternative Measures + 100% WQv of Increased Impervious Area.

1. Rain Garden: Af=WQv x (df) / [k x (hf + df)(tf)]

Egr Soil:	k=(ft/d)	0.5		
	depth	2.5	Ponding Depth:	0.5
	porosity	0.2	Filter Time:	1.0
Gravel:	depth	0.67		
	porosity	0.4	Equivalent Depth:	1.3

SWM Measure	Surf Area (sf)	Stor Vol (cf)	WQv (cf)	*Equiv Imp Area (sf)*
RG-1	580	735	**348**	*2,931*
RG-5	780	988	**468**	*3,941*
RG-3	0	0	**0**	*0*
RG-4	0	0	**0**	*0*
	1,360		**816**	*6,872*

2. Infiltration Basin ***(SMP I-1)*** :

RRv Capacity for Std SMP *(Table 3.5) HSG A&B* : 100%
HSG C&D: 100%
Basin Depth: D= 2.50 ft

SWM Measure	Surf Area (sf)	Stor Vol (cf)	*Equiv Imp Area (sf)*	WQv (cf)	Equiv RRv (cf)	Add'l WQv (cf)
IB-2	1,050	**2,625**	3,387	402	**402**	**0**
IB-3	1,350	**3,375**	4,355	517	**517**	**0**
IB-4	1,300	**3,250**	4,194	498	**498**	**0**
IB-6	420	**1,050**	1,355	161	**161**	**0**
IB-7	1,000	**2,500**	3,226	383	**383**	**0**
IB-8	330	**825**	1,065	126	**126**	**0**
sf; *Note: Adjust with TR-55 runoff depth; 100-yr rainfall event a*	**5,450**	**13,625**	**17,581**	**2,088**	**2,088**	**0**

5. Apply Standard Stormwater Management Practices

   Additional standard stormwater management practices can be used to treat remaining WQV that has not been treated by the RRV techniques.

6. Apply Volume and Peak Rate Control Practices

   The size of the stormwater basins and the outlet controls have been designed such that there is no increase in the peak rate of discharge for up to the 100-year storm.

   The method used for estimating peak discharge shall be as per the document released by the Engineering Division of the U.S. Department of Agriculture Soil Conservation Service titled "Urban Hydrology for Small Watersheds", Technical Release No. 55, dated June 1986, Type III Storm Distribution. This criterion governs the data that is input into the software, namely the Bentley PondPack v10.1 computer program. A summary of the flows under existing and proposed conditions is provided. The complete input and output data is available upon request.

   See Figure No. 4, Design Flow Summary for additional information.

TABLE NO. 4

41 Croton Dam Road
Ossining, New York

DESIGN FLOW SUMMARY

DESIGN POINT NO.		1-YEAR	2-YEAR	10-YEAR	100-YEAR
		SW Flow (CFS)	SW Flow (CFS)	SW Flow (CFS)	SW Flow (CFS)
Northeast Regional Climate Center (IN) [1]		2.80	3.41	5.14	9.30
1	Existing	0.24	0.38	0.82	2.01
	Developed	0.10	0.15	0.54	1.40
	Delta	-0.14	-0.23	-0.28	-0.61
2	Existing	0.39	0.61	1.30	3.19
	Developed	0.11	0.17	0.36	2.08
	Delta	-0.28	-0.44	-0.94	-1.11
3	Existing	0.97	1.53	3.28	8.05
	Developed	0.34	0.53	2.42	8.04
	Delta	-0.63	-1.00	-0.86	-0.01

(1) Northeast Regional Climate Center, Extreme Precipitation Tables, 41 Croton Dam Road, Ossining, New York. 3/29/18.

The stormwater runoff from the building roofs will conveyed through roof leaders to rain gardens. The rain gardens manage and treat small volumes of stormwater runoff using conditioned planting soil be and planting materials to filter runoff stored within a shallow depression. For 90% of rainfall events it is expected that the runoff will infiltrate through the conditioned planting soil into the ground. For larger storm events the runoff will pond to a depth of 6-inches. After ponding to that depth, the stormwater will either enter the storm sewer, or overflow to a level spreader. The rain gardens will drain within 24 hours of the end of the storm event.

The stormwater runoff from the driveways will conveyed overland through grass swales infiltration basins. The infiltration basins store the water quality volume in a shallow depression before it is infiltrated into the ground. For 90% of rainfall events it is expected that all of the runoff will infiltrate into the ground. For larger storm events the runoff will pond up to a depth of approximately 18-inches. After ponding to that depth, the stormwater will either enter the storm sewer, or overflow to a level spreader. The infiltration basins will drain within 24 hours of the end of the storm event.

IV. Appendix

Appendix A
Soils Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Westchester County, New York

41 Croton Dam Road

March 29, 2018

Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

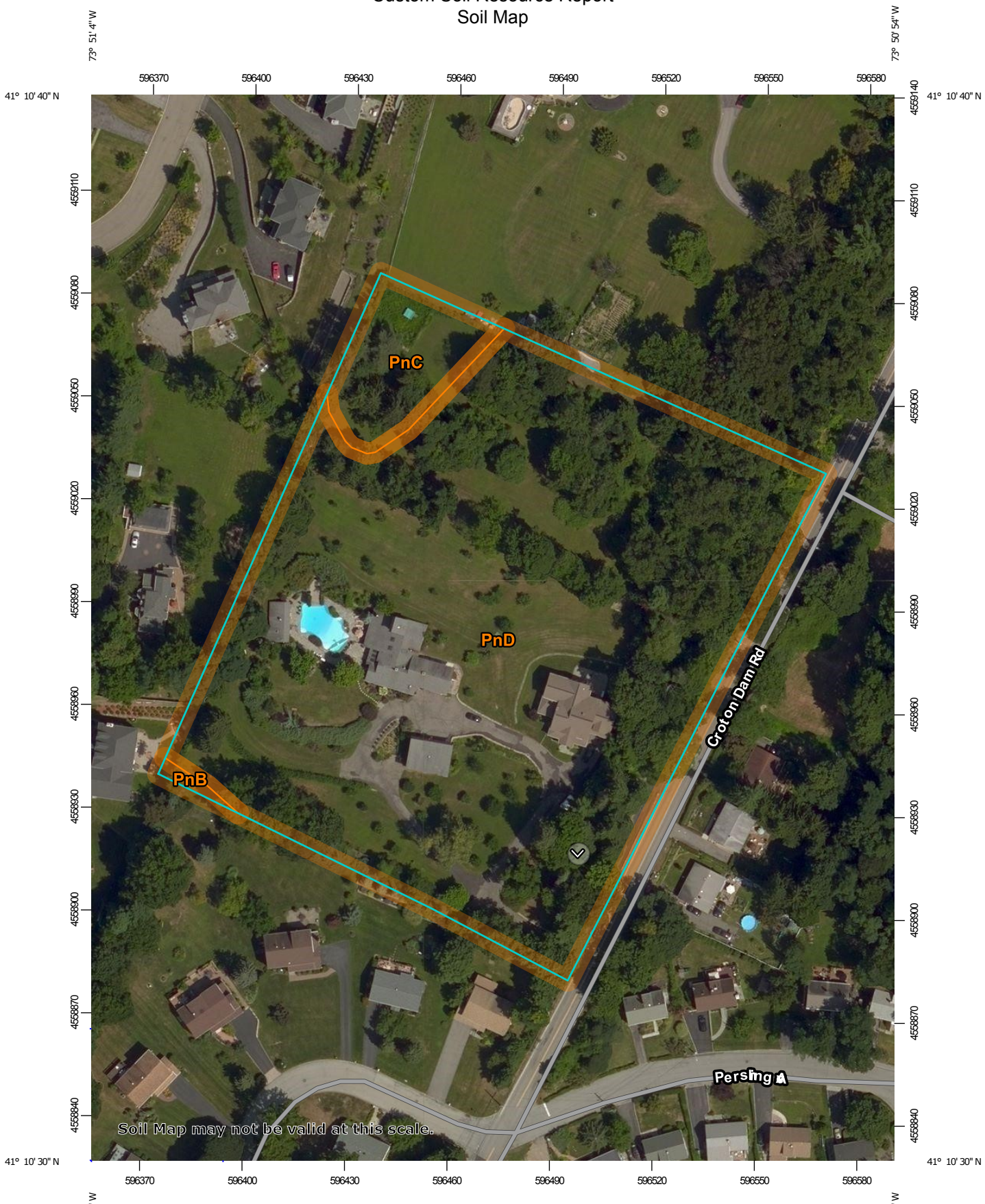
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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

Soil Map

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

Custom Soil Resource Report
Soil Map



Map Scale: 1:1,520 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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

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

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

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

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

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

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 13, Oct 8, 2017

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

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PnB	Paxton fine sandy loam, 3 to 8 percent slopes	0.0	0.3%
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	0.4	6.5%
PnD	Paxton fine sandy loam, 15 to 25 percent slopes	5.2	93.2%
Totals for Area of Interest		**5.6**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Westchester County, New York

PnB—Paxton fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t2qp
Elevation: 0 to 1,570 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Paxton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, crest, nose slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Woodbridge

Percent of map unit: 9 percent
Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Backslope, footslope, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 6 percent
Landform: Ground moraines, drainageways, hills, depressions
Landform position (two-dimensional): Backslope, footslope, toeslope
Landform position (three-dimensional): Head slope, base slope, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Charlton

Percent of map unit: 5 percent
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

PnC—Paxton fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w66y
Elevation: 0 to 1,320 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Paxton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear, convex
Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Woodbridge

Percent of map unit: 6 percent
Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Footslope, summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 2 percent
Landform: Depressions, drumlins, ground moraines, drainageways, hills
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

PnD—Paxton fine sandy loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2w67j
Elevation: 0 to 1,450 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Paxton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 8 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Woodbridge

Percent of map unit: 6 percent
Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 1 percent
Landform: Drumlins, ground moraines, drainageways, hills, depressions
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

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Appendix B
Stormwater Calculations/
Extreme Precipitation Tables

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.850 degrees West
Latitude	41.177 degrees North
Elevation	0 feet
Date/Time	Thu, 29 Mar 2018 14:16:15 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.34	0.51	0.64	0.84	1.05	1.30	**1yr**	0.90	1.24	1.50	1.84	2.26	2.78	3.16	**1yr**	2.46	3.04	3.54	4.24	4.88	**1yr**
2yr	0.40	0.62	0.77	1.02	1.28	1.60	**2yr**	1.10	1.49	1.84	2.27	2.78	3.41	3.83	**2yr**	3.02	3.69	4.25	5.01	5.69	**2yr**
5yr	0.47	0.73	0.91	1.22	1.57	1.98	**5yr**	1.35	1.83	2.29	2.84	3.50	4.31	4.88	**5yr**	3.81	4.69	5.44	6.27	7.05	**5yr**
10yr	0.52	0.82	1.03	1.40	1.82	2.33	**10yr**	1.57	2.14	2.70	3.37	4.18	5.14	5.86	**10yr**	4.55	5.63	6.55	7.44	8.30	**10yr**
25yr	0.60	0.95	1.21	1.68	2.24	2.90	**25yr**	1.93	2.65	3.38	4.25	5.28	6.50	7.47	**25yr**	5.75	7.18	8.39	9.31	10.29	**25yr**
50yr	0.68	1.08	1.39	1.95	2.62	3.42	**50yr**	2.26	3.10	4.01	5.05	6.29	7.77	8.98	**50yr**	6.87	8.63	10.12	11.04	12.12	**50yr**
100yr	0.76	1.23	1.59	2.25	3.07	4.04	**100yr**	2.65	3.64	4.76	6.02	7.52	9.30	10.80	**100yr**	8.23	10.38	12.22	13.10	14.27	**100yr**
200yr	0.87	1.41	1.83	2.61	3.60	4.78	**200yr**	3.11	4.27	5.64	7.17	8.98	11.14	13.00	**200yr**	9.86	12.50	14.76	15.54	16.82	**200yr**
500yr	1.03	1.69	2.20	3.19	4.46	5.97	**500yr**	3.85	5.29	7.08	9.05	11.39	14.16	16.63	**500yr**	12.53	15.99	18.95	19.48	20.90	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.27	0.42	0.51	0.69	0.85	1.15	**1yr**	0.73	1.13	1.35	1.72	2.15	2.39	2.87	**1yr**	2.11	2.76	3.29	3.83	4.39	**1yr**
2yr	0.39	0.60	0.74	1.00	1.23	1.48	**2yr**	1.06	1.44	1.69	2.16	2.70	3.28	3.70	**2yr**	2.90	3.56	4.09	4.82	5.50	**2yr**
5yr	0.44	0.67	0.84	1.15	1.46	1.73	**5yr**	1.26	1.70	1.98	2.52	3.14	4.05	4.46	**5yr**	3.59	4.29	4.94	5.76	6.44	**5yr**
10yr	0.48	0.74	0.91	1.28	1.65	1.94	**10yr**	1.42	1.90	2.23	2.81	3.53	4.49	5.13	**10yr**	3.97	4.93	5.69	6.47	7.06	**10yr**
25yr	0.54	0.82	1.03	1.47	1.93	2.25	**25yr**	1.66	2.20	2.61	3.26	4.11	5.39	6.19	**25yr**	4.77	5.95	7.24	7.64	8.02	**25yr**
50yr	0.60	0.91	1.13	1.63	2.19	2.53	**50yr**	1.89	2.48	2.95	3.65	4.63	6.20	7.13	**50yr**	5.49	6.85	8.45	8.67	8.81	**50yr**
100yr	0.67	1.01	1.26	1.82	2.50	2.86	**100yr**	2.15	2.80	3.34	4.09	5.22	7.16	8.23	**100yr**	6.34	7.91	9.88	9.83	9.65	**100yr**
200yr	0.74	1.11	1.41	2.04	2.85	3.22	**200yr**	2.46	3.15	3.80	4.61	5.90	8.31	9.51	**200yr**	7.35	9.15	11.57	11.12	10.56	**200yr**
500yr	0.86	1.28	1.64	2.39	3.40	3.79	**500yr**	2.93	3.71	4.52	5.40	6.97	10.13	11.55	**500yr**	8.97	11.10	14.27	13.12	11.82	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.38	0.58	0.71	0.95	1.17	1.42	**1yr**	1.01	1.39	1.64	2.12	2.52	2.99	3.40	**1yr**	2.65	3.27	3.82	4.68	5.33	**1yr**
2yr	0.42	0.65	0.80	1.08	1.33	1.60	**2yr**	1.15	1.56	1.81	2.35	2.92	3.56	4.01	**2yr**	3.15	3.86	4.43	5.25	6.00	**2yr**
5yr	0.50	0.78	0.96	1.32	1.68	2.01	**5yr**	1.45	1.96	2.33	3.03	3.81	4.59	5.33	**5yr**	4.06	5.13	5.96	6.81	7.61	**5yr**
10yr	0.59	0.91	1.12	1.57	2.03	2.41	**10yr**	1.75	2.35	2.80	3.68	4.66	5.85	6.65	**10yr**	5.18	6.40	7.49	8.48	9.36	**10yr**
25yr	0.73	1.11	1.38	1.97	2.59	3.06	**25yr**	2.24	2.99	3.58	4.80	6.09	7.75	8.91	**25yr**	6.86	8.56	9.58	11.19	12.14	**25yr**
50yr	0.85	1.30	1.62	2.33	3.13	3.69	**50yr**	2.70	3.61	4.31	5.87	7.44	9.59	11.09	**50yr**	8.48	10.66	11.90	13.81	14.79	**50yr**
100yr	1.01	1.53	1.92	2.77	3.80	4.44	**100yr**	3.28	4.34	5.19	7.20	9.09	11.86	13.83	**100yr**	10.49	13.30	14.77	17.05	18.02	**100yr**
200yr	1.19	1.80	2.28	3.30	4.60	5.33	**200yr**	3.97	5.22	6.25	8.79	11.11	14.67	17.24	**200yr**	12.98	16.58	18.35	21.02	21.98	**200yr**
500yr	1.51	2.24	2.89	4.19	5.96	6.82	**500yr**	5.14	6.67	7.98	11.52	14.47	19.42	23.07	**500yr**	17.19	22.18	24.44	27.82	28.65	**500yr**

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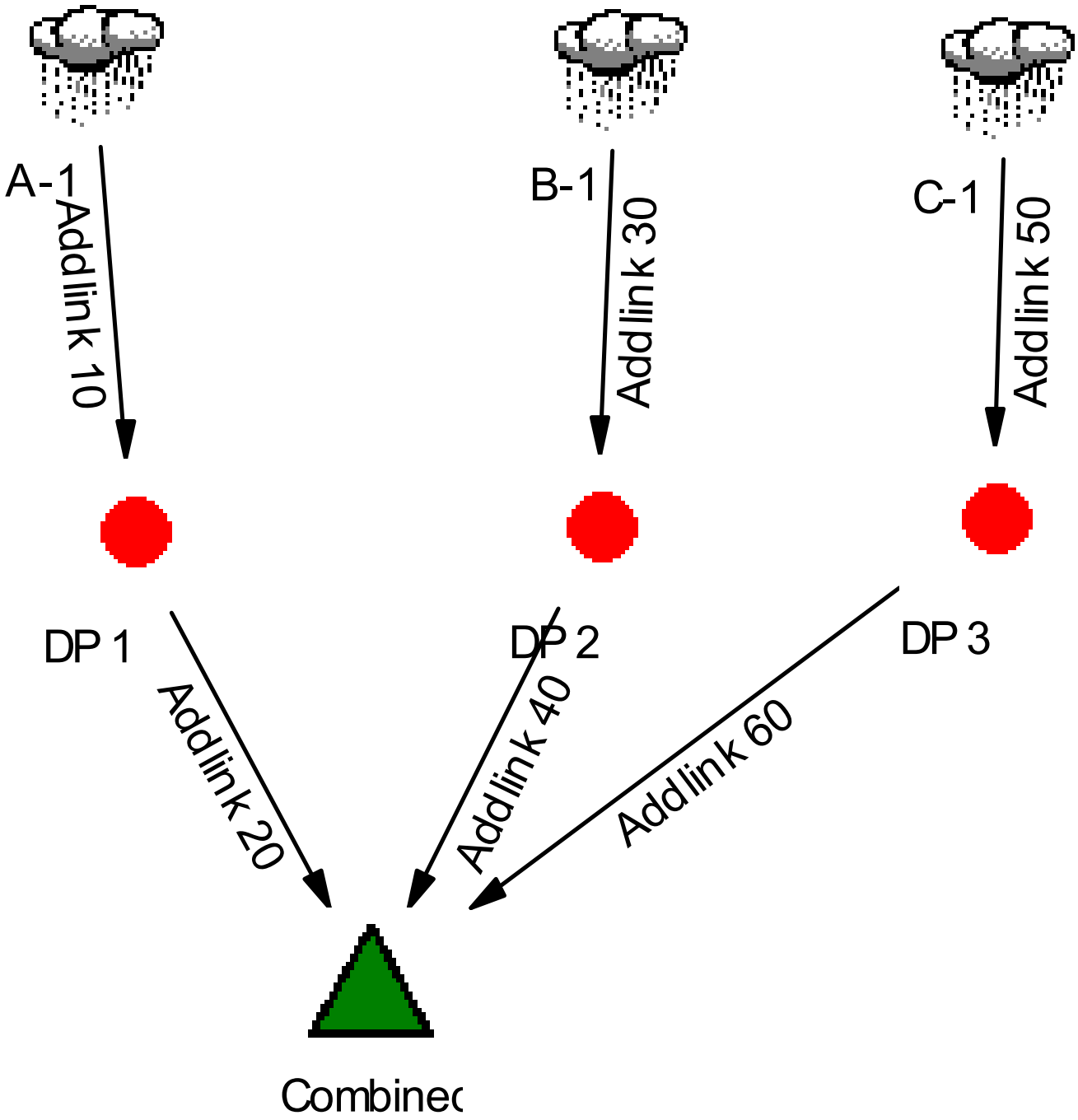
Northeast Regional Climate Center

Appendix C-1
PondPack Modeling – Existing Conditions


A-1
Addlink 10
B-1
Addlink 30
C-1
Addlink 50
DP 1
DP 2
DP 3
Addlink 20
Addlink 40
Addlink 60
Combinec

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Ossining 2018

Return Event	Total Depth in	Rainfall Type	RNF ID
1	2.7800	Synthetic Curve	TypeIII 24hr
2	3.4100	Synthetic Curve	TypeIII 24hr
10	5.1400	Synthetic Curve	TypeIII 24hr
100	9.3000	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

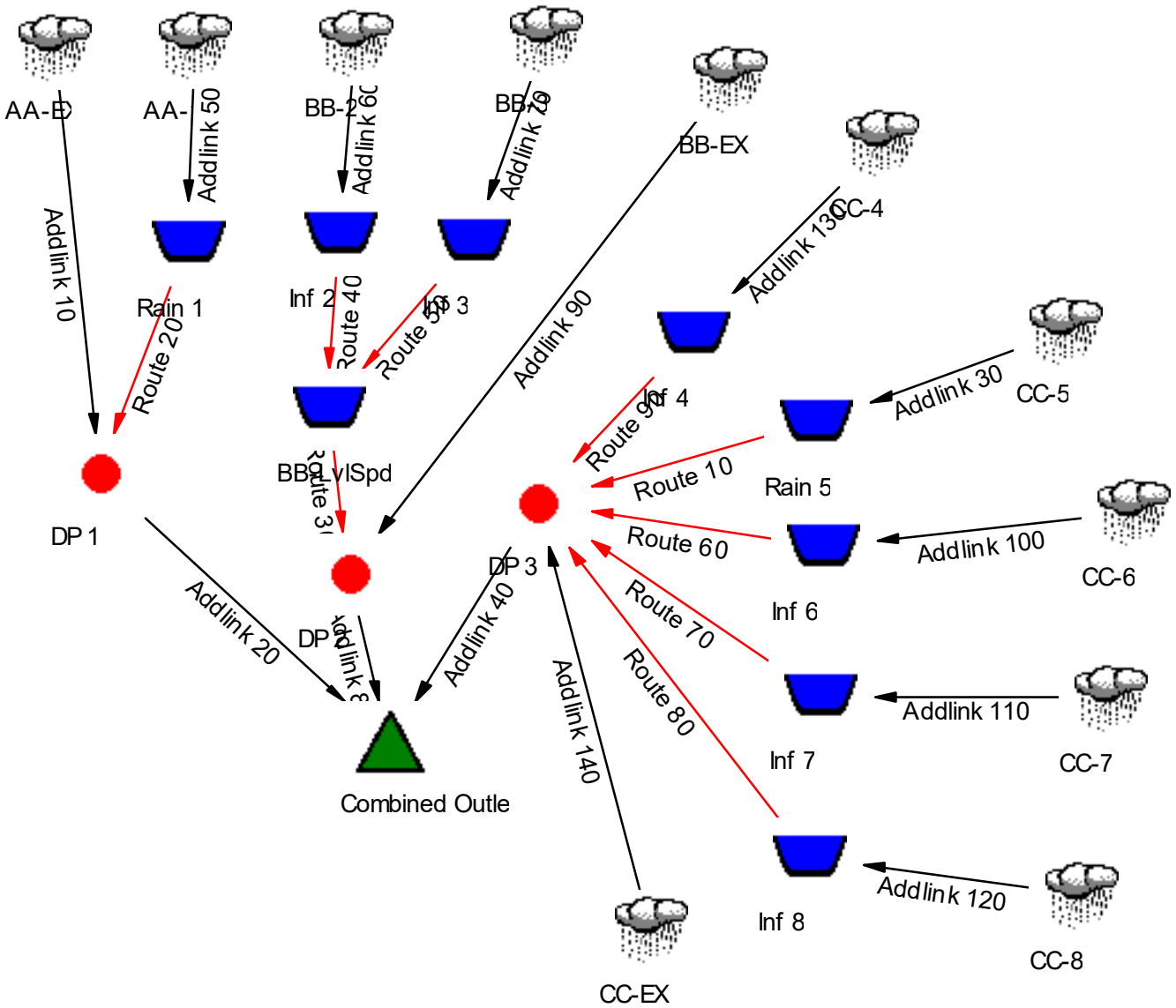
Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
A-1	AREA	1	.022		12.1500	.24		
A-1	AREA	2	.033		12.1500	.38		
A-1	AREA	10	.070		12.1000	.82		
A-1	AREA	100	.173		12.1000	2.01		
B-1	AREA	1	.035		12.1500	.39		
B-1	AREA	2	.053		12.1500	.61		
B-1	AREA	10	.111		12.1000	1.30		
B-1	AREA	100	.275		12.1000	3.19		
C-1	AREA	1	.087		12.1500	.97		
C-1	AREA	2	.134		12.1500	1.53		
C-1	AREA	10	.281		12.1000	3.28		
C-1	AREA	100	.692		12.1000	8.05		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*COMBINED	JCT	1	.144		12.1500	1.60		
*COMBINED	JCT	2	.220		12.1500	2.51		
*COMBINED	JCT	10	.462		12.1000	5.40		
*COMBINED	JCT	100	1.139		12.1000	13.25		
DP 1	JCT	1	.022		12.1500	.24		
DP 1	JCT	2	.033		12.1500	.38		
DP 1	JCT	10	.070		12.1000	.82		
DP 1	JCT	100	.173		12.1000	2.01		
DP 2	JCT	1	.035		12.1500	.39		
DP 2	JCT	2	.053		12.1500	.61		
DP 2	JCT	10	.111		12.1000	1.30		
DP 2	JCT	100	.275		12.1000	3.19		
DP 3	JCT	1	.087		12.1500	.97		
DP 3	JCT	2	.134		12.1500	1.53		
DP 3	JCT	10	.281		12.1000	3.28		
DP 3	JCT	100	.692		12.1000	8.05		

Appendix C-2
PondPack Modeling – Proposed Conditions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AA-
BB-2
BB-
BB-EX
CC-4
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Addlink 50
Addlink 60
Addlink 70
Addlink 90
Addlink 130
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Inf 2
Inf 3
Inf 4
Route 20
Route 40
Route 50
Route 90
Addlink 30
CC-5
BB_LvlSpd
DP 1
DP 2
DP 3
Route 10
Rain 5
Route 60
Addlink 100
CC-6
Addlink 20
Addlink 30
Addlink 40
Route 70
Inf 6
Addlink 110
CC-7
Addlink 140
Route 80
Inf 7
Combined Outle
Addlink 120
Inf 8
CC-8
CC-EX

MASTER DESIGN STORM SUMMARY

Network Storm Collection: Ossining 2018

Return Event	Total Depth in	Rainfall Type	RNF ID
1	2.7800	Synthetic Curve	TypeIII 24hr
2	3.4100	Synthetic Curve	TypeIII 24hr
10	5.1400	Synthetic Curve	TypeIII 24hr
100	9.3000	Synthetic Curve	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
AA-1	AREA	1	.008		12.1000	.10		
AA-1	AREA	2	.012		12.1000	.15		
AA-1	AREA	10	.023		12.1000	.28		
AA-1	AREA	100	.051		12.1000	.61		
AA-EX	AREA	1	.008		12.1000	.10		
AA-EX	AREA	2	.013		12.1000	.15		
AA-EX	AREA	10	.027		12.1000	.33		
AA-EX	AREA	100	.066		12.1000	.80		
BB-2	AREA	1	.018		12.1000	.23		
BB-2	AREA	2	.026		12.1000	.32		
BB-2	AREA	10	.048		12.1000	.59		
BB-2	AREA	100	.107		12.1000	1.26		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
BB-3	AREA	1	.018		12.1000	.23		
BB-3	AREA	2	.026		12.1000	.33		
BB-3	AREA	10	.050		12.1000	.62		
BB-3	AREA	100	.114		12.1000	1.36		
BB-EX	AREA	1	.009		12.1000	.11		
BB-EX	AREA	2	.014		12.1000	.17		
BB-EX	AREA	10	.029		12.1000	.36		
BB-EX	AREA	100	.071		12.1000	.87		
BB-LVLSPDR IN	POND	1	.000		.0500	.00		
BB-LVLSPDR IN	POND	2	.000		.0500	.00		
BB-LVLSPDR IN	POND	10	.002		21.0500	.01		
BB-LVLSPDR IN	POND	100	.094		12.2000	1.76		
BB-LVLSPDR OUT	POND	1	.000		.0500	.00	382.50	.000
BB-LVLSPDR OUT	POND	2	.000		.0500	.00	382.50	.000
BB-LVLSPDR OUT	POND	10	.001		22.6500	.01	384.00	.001
BB-LVLSPDR OUT	POND	100	.093		12.2500	1.59	384.04	.001
CC-4	AREA	1	.025		12.1000	.31		
CC-4	AREA	2	.036		12.1000	.45		
CC-4	AREA	10	.071		12.1000	.88		
CC-4	AREA	100	.163		12.1000	1.95		
CC-5	AREA	1	.015		12.1000	.18		
CC-5	AREA	2	.022		12.1000	.27		
CC-5	AREA	10	.043		12.1000	.54		
CC-5	AREA	100	.103		12.1000	1.23		
CC-6	AREA	1	.021		12.1000	.24		
CC-6	AREA	2	.027		12.1000	.30		
CC-6	AREA	10	.043		12.1000	.47		
CC-6	AREA	100	.081		12.1000	.86		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
CC-7	AREA	1	.031		12.1000	.38		
CC-7	AREA	2	.045		12.1000	.56		
CC-7	AREA	10	.090		12.1000	1.12		
CC-7	AREA	100	.209		12.1000	2.52		
CC-8	AREA	1	.014		12.0500	.16		
CC-8	AREA	2	.018		12.1000	.20		
CC-8	AREA	10	.028		12.1000	.30		
CC-8	AREA	100	.052		12.1000	.55		
CC-EX	AREA	1	.029		12.1000	.34		
CC-EX	AREA	2	.044		12.1000	.53		
CC-EX	AREA	10	.092		12.1000	1.12		
CC-EX	AREA	100	.223		12.1000	2.68		
*COMBINED OUTLET	JCT	1	.047		12.1000	.55		
*COMBINED OUTLET	JCT	2	.094		12.1000	.86		
*COMBINED OUTLET	JCT	10	.282		12.1500	3.26		
*COMBINED OUTLET	JCT	100	.909		12.1500	10.40		
DP 1	JCT	1	.008		12.1000	.10		
DP 1	JCT	2	.013		12.1000	.15		
DP 1	JCT	10	.034		12.1500	.54		
DP 1	JCT	100	.097		12.1000	1.40		
DP 2	JCT	1	.009		12.1000	.11		
DP 2	JCT	2	.014		12.1000	.17		
DP 2	JCT	10	.030		12.1000	.36		
DP 2	JCT	100	.164		12.2000	2.08		
DP 3	JCT	1	.029		12.1000	.34		
DP 3	JCT	2	.068		12.1000	.53		
DP 3	JCT	10	.218		12.1500	2.42		
DP 3	JCT	100	.648		12.1000	8.04		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
INF 2	IN POND	1	.018		12.1000	.23		
INF 2	IN POND	2	.026		12.1000	.32		
INF 2	IN POND	10	.048		12.1000	.59		
INF 2	IN POND	100	.107		12.1000	1.26		
INF 2	OUT POND	1	.000		9.8000	.00	386.48	.007
INF 2	OUT POND	2	.000		9.0500	.00	386.72	.011
INF 2	OUT POND	10	.000		7.3500	.00	387.42	.023
INF 2	OUT POND	100	.028		12.2000	.82	388.10	.039
INF 3	IN POND	1	.018		12.1000	.23		
INF 3	IN POND	2	.026		12.1000	.33		
INF 3	IN POND	10	.050		12.1000	.62		
INF 3	IN POND	100	.114		12.1000	1.36		
INF 3	OUT POND	1	.000		10.2000	.00	388.90	.018
INF 3	OUT POND	2	.000		9.4500	.00	389.23	.026
INF 3	OUT POND	10	.002		21.0500	.01	390.00	.048
INF 3	OUT POND	100	.066		12.2000	.94	390.11	.051
INF 4	IN POND	1	.025		12.1000	.31		
INF 4	IN POND	2	.036		12.1000	.45		
INF 4	IN POND	10	.071		12.1000	.88		
INF 4	IN POND	100	.163		12.1000	1.95		
INF 4	OUT POND	1	.000		10.3500	.00	361.16	.025
INF 4	OUT POND	2	.009		16.2500	.01	361.32	.029
INF 4	OUT POND	10	.043		12.4500	.23	361.54	.035
INF 4	OUT POND	100	.135		12.1500	1.46	362.10	.051
INF 6	IN POND	1	.021		12.1000	.24		
INF 6	IN POND	2	.027		12.1000	.30		
INF 6	IN POND	10	.043		12.1000	.47		
INF 6	IN POND	100	.081		12.1000	.86		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
INF 6	OUT POND	1	.000		4.7000	.00	369.80	.011
INF 6	OUT POND	2	.004		12.4500	.06	369.96	.012
INF 6	OUT POND	10	.015		12.1500	.36	370.18	.014
INF 6	OUT POND	100	.046		12.1000	.78	370.36	.016
INF 7	IN POND	1	.031		12.1000	.38		
INF 7	IN POND	2	.045		12.1000	.56		
INF 7	IN POND	10	.090		12.1000	1.12		
INF 7	IN POND	100	.209		12.1000	2.52		
INF 7	OUT POND	1	.000		10.5000	.00	339.03	.014
INF 7	OUT POND	2	.005		12.8000	.04	339.36	.019
INF 7	OUT POND	10	.038		12.2000	.60	339.73	.027
INF 7	OUT POND	100	.143		12.1500	1.83	340.36	.042
INF 8	IN POND	1	.014		12.0500	.16		
INF 8	IN POND	2	.018		12.1000	.20		
INF 8	IN POND	10	.028		12.1000	.30		
INF 8	IN POND	100	.052		12.1000	.55		
INF 8	OUT POND	1	.000		4.7000	.00	333.75	.007
INF 8	OUT POND	2	.002		12.4000	.04	333.88	.008
INF 8	OUT POND	10	.009		12.1500	.22	334.07	.009
INF 8	OUT POND	100	.028		12.1000	.47	334.25	.011
RAIN 1	IN POND	1	.008		12.1000	.10		
RAIN 1	IN POND	2	.012		12.1000	.15		
RAIN 1	IN POND	10	.023		12.1000	.28		
RAIN 1	IN POND	100	.051		12.1000	.61		
RAIN 1	OUT POND	1	.000		10.5000	.00	397.78	.003
RAIN 1	OUT POND	2	.000		9.8000	.00	397.96	.005
RAIN 1	OUT POND	10	.007		12.1500	.25	398.04	.006
RAIN 1	OUT POND	100	.031		12.1000	.60	398.08	.007

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
RAIN 5	IN	POND 1	.015		12.1000	.18		
RAIN 5	IN	POND 2	.022		12.1000	.27		
RAIN 5	IN	POND 10	.043		12.1000	.54		
RAIN 5	IN	POND 100	.103		12.1000	1.23		
RAIN 5	OUT	POND 1	.000		10.8000	.00	381.90	.006
RAIN 5	OUT	POND 2	.004		12.5000	.05	382.00	.008
RAIN 5	OUT	POND 10	.021		12.2000	.34	382.18	.011
RAIN 5	OUT	POND 100	.073		12.1500	1.03	382.45	.017

TAB 4
CONTRACTOR CERTIFICATIONS

37 – 41 Croton Dam Road
Ossining, New York

CONTRACTOR CERTIFICATION STATEMENT

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 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.

CONTRACTOR

Company: _____

Address: _____

_____

Telephone: _____

CERTIFICATION

Signature: _____

Name: _____

Title: _____

Date: _____

TRAINED INDIVIDUAL

Name: _____

Title: _____

CONSTRUCTION/SWPPP ACTIVITY RESPONSIBILITY:

_____

_____

_____

TAB 5
CONSTRUCTION SCHEDULES

37 - 41 CROTON DAM ROAD
TOWN OF OSSINING
WESTCHESTER COUNTY, NEW YORK

CONSTRUCTION ACTIVITY INITIATION AND COMPLETION DATES

AREA		SEDIMENT CONTROL MEASURES	CLEARING AND GRUBBING OF VEGETATION	STRIPPING & STOCKPILING OF TOPSOIL	ROUGH GRADING	TEMP. STABILIZE	FINISH GRADING & TOPSOIL SPREADING	PAVING	PERM. STABILIZE
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								
	BEGIN								
	END								

Note: Attach a map for delineation of area.

TAB 6
SWPPP OBSERVATION REPORTS

Erosion Control Inspection Reports to be inserted here and maintained at the project site for the duration of the project.

TAB 7
LEGAL REQUIREMENTS

A copy of SPDES General Permit GP-0-15-002 will be maintained with the record SWPPP at the construction Site.

Insert Maintenance Agreement here after filing

TAB 8
AGENCY CORRESPONDENCE

The completed NOI, MS4 Acceptance, and Notice of Intent to be inserted here.

All correspondence with the MS4 Officer, NYSDEC, and EPA related to the SWPPP to be inserted here and maintained at the project site.