



Town of South Kingstown

Department of Public Services
509 Commodore Perry Highway
Wakefield RI 02879
(401) 789-9331 Ext 2250

Determination of Applicability (REV B; 4/1/11)

Soil Erosion, Run Off and Sediment Control (SERSC) Ordinance

OWNER INFORMATION:

Current Property Owner: _____ Phone: _____

House #: 1800 Street: Kingstown Road

Plat: 40-1 Lot: 4 Location: Property is 12 Feet from Utility Pole # 159

APPLICANT INFORMATION (If Different from Above):

Name: _____ Company: _____

Address: _____ Phone: _____

BASIC PROJECT INFORMATION:

Description of Work: Construction of house (duplex), deck, drive, utilities + storm water BMPs.

Area of Disturbance: 150 Ft X 108 Ft = 16,200 Sq Ft

Depth of Excavation: 8 Ft Distance to Wetlands or Coastal Feature: N/A Ft
for foundation

Please describe the location, nature, character and time schedule of the proposed land disturbing activity in sufficient detail to allow the Town Official to determine the potential for soil erosion, surface water runoff and sedimentation resulting from the proposed project. (Continue on reverse side if more space is needed.)

see attached

Applicant Signature: _____

Date: _____

For Town Use Only

Town Determination:

SERSC Permit IS NOT required for described project.

SERSC Permit IS required for described project. Please submit to this office five (5) copies of both a SERSC Plan prepared by a Landscape Architect, Engineer, or Land Surveyor and a completed SERSC Permit Application.

Public Services Official Signature: _____

Date: _____

SERSC - PROPOSED PROJECT NARRATIVE

**Buyer: Thomas Gerald LLC (Assessor's Map 40-1, Lot 4)
1800 Kingstown Road, South Kingstown, RI**

General Site Description:

The project site is abutted by the South Kingstown police station to the south and southwest, Kingstown Road to the northeast, a residential apartment building to the north and northwest, and a combination of single-family homes and an apartment building on the opposite side of Kingstown Road. The site has been reviewed for wetlands and none were found on the site or within a distance as to require wetlands jurisdictional review (ref. wetland report by Natural Resource Services, Inc.). The site is located outside of a FEMA Flood zone, reference FEMA panel 44009C0184K effective April 3, 2020.

The location of the site is not within the OWTS Critical Resource Area. The parcel can be serviced by both water and sewer from Kingstown Road. The equipment to be used for construction on the site will be a backhoe or excavator to excavate/install the foundation, driveway/parking area, utilities, and stormwater drainage facilities.

The site is approximately 22,500 s.f. in size and 150' of frontage on Kingstown Road. Existing grades on the site vary from an elevation of 99 in the southeasterly corner of the lot to a low elevation of <93 in the northwesterly corner of the lot. The lot is undeveloped with access from Kingstown Road and no existing curbcut.

Primary purpose of the proposed project:

The primary purpose of the proposed project is to construct a duplex with two bedrooms in each unit along with driveway, stormwater drainage, decks, and utility connections. The stormwater drainage design for the site is based on the Web Soil Survey data. Stormwater will be managed through the use of a subsurface drywell for the roof runoff from the proposed house and a second drywell for the paved driveway/parking area within the subject lot limits. In the event of a storm in excess of the 10-year storm or system malfunction, the roof drainage will overflow at the downspout connection and flow out into the lawn area of the site. In the event of a storm in excess of the 10-year storm or system malfunction, the driveway drainage will flow overland from the parking area trench drain to the rear of the lot where the existing depression is located. Hydrocad calculations were run for the proposed impervious roof area and driveway area contained within the site to comply with the Town of South Kingstown requirements and are included with this SERSC application.

Erosion control as shown on the plan will be installed prior to construction and be maintained throughout the construction activities until the disturbed areas have been stabilized. The amount of land to be disturbed (16,200 +/- S.F.) has been minimized to the area required for the house, decks, drive, stormwater drainage and utilities. Grading is required for the proposed development and is shown on the attached SERSC plan.

Schedule:

Construction is anticipated to begin in the winter of 2023 or spring of 2024 and be concluded within one year.

Summary:

In summary, all reasonable efforts have been expended to minimize the area to be disturbed while meeting the needs of the developer. The proposed four-bedroom duplex as designed, seeks to reduce the impact to the site parcel and surrounding parcels to the greatest extent practical by:

- Erosion control, as shown on the plan, will be installed prior to commencement of construction and will remain in place until the disturbed areas are stabilized.
- The limit of disturbance has been minimized to the area needed for the proposed development and is less than 1 acre in total area. The proposed site grading is required for the proposed development and will not significantly alter or impact existing drainage patterns.
- The proposed design utilizes two subsurface drywells, one for the roof of the proposed and an additional drywell to intercept stormwater from the driveway/parking area in order to mitigate the 10-year storm on site without any increase in peak discharge rate or volume. This will allow the maximum recharge of stormwater to the subsurface.
- The proposed house represents 1,360 s.f. of roof, while the paved driveway represents 2,688 s.f. of impervious area. Stormwater from the impervious area is mitigated by two drywells such that the additional stormwater drainage from the site to equal or less than the pre-existing condition.

Therefore, the proposed residential development as proposed is reasonable and will not adversely impact public health, safety or the environment.



Town of South Kingstown

Department of Public Services
509 Commodore Perry Highway
Wakefield RI 02879
(401) 789-9331 Ext 2250

Permit # _____

Date _____

Receipt # _____

Soil Erosion, Run Off and Sediment Control (SERSC) Permit Application (REV. C; 4/11/11)

OWNER INFORMATION:

Current Property Owner: _____ Phone: _____

House #: 1800 Street: Kingstown Road

Plat: 40-1 Lot: 4 Location: Property is 12 Feet from Utility Pole # 159

CONTACT INFORMATION FOR APPLICANT: (If different from above)

Name: _____ Company: _____ Phone: _____

CONTACT INFORMATION FOR LANDSCAPE ARCHITECT/ENGINEER/LAND SURVEYOR WHO DESIGNED SERSC PLAN:

Name: Carolyn J. Doyle Company: C.J. Doyle, P.E. Phone: 401-491-9530

CONTACT INFORMATION FOR EXCAVATING CONTRACTOR:

Name: _____ Company: _____ Phone: _____

BASIC PROJECT INFORMATION (Please check below the one that best describes the area of disturbance):

Single Family/Duplex Lot *

General Land Disturbance: *

New Subdivision Infrastructure: *

1 Lot

Up to 30,000 Sq. Ft.

2 - 4 Lots

> 30,000 Sq. Ft. - 2 acres

5 - 9 Lots

> 2 - 5 acres

Over 9 Lots (Please specify # of lots)

> 5- 10 acres

Over 10 acres (Please specify # of acres)

* If area of disturbance is over 1 acre, then a SWMPP is also required per RIDEM RIPDES requirements.

The undersigned contractor/owner/authorized agent hereby agrees to comply with all rules and regulations of the South Kingstown Stormwater Ordinance and all special requirements as indicated. It is the permittee's responsibility to ensure that all subcontractors are licensed and bonded with the Town, whenever working within the Town right-of-way. All applicable departments must be notified 2 business days prior to construction start. Dig Safe must also be notified in accordance with Dig Safe regulations. Please complete the following:

Five (5) copies of the SERSC Plan are attached.

SWMPP attached (if area of disturbance is greater than 1 acre).

A non-refundable application processing fee in the amount of \$ 100.00 is attached. I agree to pay the balance of the permit fee if the area of disturbance is greater than originally estimated.

Applicant Signature: _____ Date: _____

For Town Use Only

SERSC Permit Determination:

SERSC Permit and Plan IS NOT approved. See attached for explanation of denial.

SERSC Permit and Plan IS approved as presented.

SERSC Permit and Plan IS approved with special conditions noted on attached page.

Public Services Official Signature: _____ Date: _____

cc: Building Official (w/attachments)
Public Services (w/ attachments)
Planning Board Administrative Officer (w/attachments)
Applicant (w/ attachments- 2 copies for Applicant's records and Applicant's contractor)

TOWN OF SOUTH KINGSTOWN



Soil Erosion, Run Off and Sediment Control Ordinance

Plan Checklist (REV E;7/2014)

TO BE COMPLETED BY DESIGN ENGINEER/ LANDSCAPE ARCHITECT/LAND SURVEYOR AND SUBMITTED WITH SERSC PLAN

In accordance with the Town's Soil Erosion, Run Off and Sediment Control (SERSC) Ordinance, properties in Town subject to land disturbance are subject to this local regulation.

Affected Properties That Require a SERSC Plan (Sec. 20-52)

- Land development projects
• Private dwelling construction including additions and accessory structures with new or additional footprint greater than 1,000 sq. ft.
• Private dwelling construction including additions and accessory structures with new or additional footprint less than 1,000 sq. ft. but if building construction occurs less than 200 feet from a watercourse or coastal feature or the slopes in the area of land disturbance exceed ten percent
• Unacceptable agricultural management practices
• Other general excavations that displace more than 50 cubic yards of material, have slopes steeper than ten percent or have disturbed areas unprotected from soil erosion and sedimentation.
• Grading and filling for maintenance or landscaping purposes on an existing developed land parcel where any of the following apply:
o Aggregate area exceeds 2,000 square feet
o Change in elevation exceeds two feet at any point
o Slopes are steeper than ten percent
o Total grading involves a quantity of fill greater than 18 cubic yards

Applicant Checklist for SERSC Plan

Yes No

General Information

- X [] Narrative description of the proposed work
X [] Applicable stormwater calculations and drainage maps
[] X RIDEM Freshwater Wetlands Permit and approved site plan
[] X CRMC Assent and approved site plan
[] X RIDEM OWTS approval and site plan
X [] Town Water or appropriate water division approval letter
X [] Town Wastewater approval letter
X [] Plan(s) prepared by a landscape architect, engineer or land surveyor
X [] Area of disturbance (150 ft. x 108 ft. = 16,200 sq. ft.)
X [] Five original plan copies
X [] Appropriate filing fee

Proposed Land Disturbance

- X [] Building construction
[] X OWTS installation/ repair
X [] Utility installation/improvements
X [] Lawn installation; 6300 SFE seeded; _____ turf
X [] New or replacement driveway installation
[] X Agricultural field

Yes No

Minimum Plan Information

- Plan scale and north arrow provided
- Property lines depicted
- House #, Plat & Lot #'s of subject property and abutting properties
- Nearest utility pole number if vacant lot
- Two (2)- foot contours provided for existing and proposed topography
- Existing soil types and description per NCRS USDA soil survey
- Location and detail of existing and proposed storm drains on or adjacent to property
- Stormwater practices to mitigate post-development runoff per Sec. 20-67.(d)1,2
- BMP(s) for water quality treatment per Sec. 20-68.(a),(b)
- Operation and Maintenance design for applicable BMP(s) in accordance with RI Stormwater Design and Installation Manual
- BMP(s) in accordance with RI Stormwater Design and Installation Manual
- Existing and proposed vegetation/trees
- Delineation of freshwater wetland(s) or coastal feature(s), if applicable
- Limit of disturbance for construction area
- Provision for staging and stockpile area
- Description of soil stabilization, planting program, erosion and sedimentation control program
- Proposed type, location and detail of erosion control devices
- Proposed type, size, location and detail of construction access pad

Completed By: Carolyn J Doyle Date: 1/10/2024

RESIDENTIAL LOT DRAINAGE

Location: 1800 Kingstown Road, South Kingstown (Plat 40-1, Lot 4)

Buyer: Thomas Gerald LLC

Date: 12/4/2023, Rev. 4/30/2024

Area of roof 1360.00 s.f.

Soils: sand**

**Based on USDA soil web survey, seasonal high water table = 80" or greater

USDA soil web survey shows NbB, Narragansett, very stony silt loam, over sand @ 28"

Depth to groundwater table: 80"

GWT = 95.00 - 6.67 = 88.33 @ proposed drywell

Dry Well - concrete diffusers

1360.00 s.f. in sand req'd = 156 s.f.***

***Based on Town of South Kingstown requirement to mitigate 10-year storm for roof

Required Size:

Dry well bottom dimensions = 6' x 26' = 156.0 s.f.

Three concrete diffuser units (1.5' high)

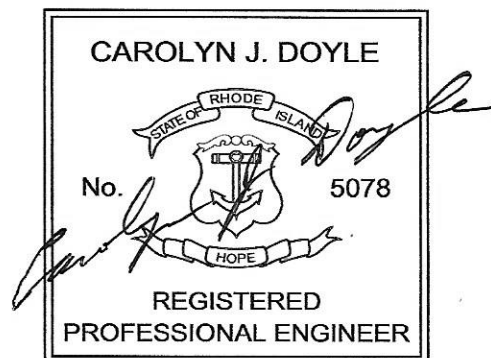
Required distance to foundation >10'

Required distance to septic system > 15'

Required distance to private drinking water well > 25'

Used for: proposed roof

Conclusion: Per attached Hydrocad calculations, proposed dry well mitigates the peak discharge rate of flow and volume discharge for a 10-year storm event to 0.00 cfs and 0.00 cf per the Town of South Kingstown for the proposed roof.



RESIDENTIAL LOT DRAINAGE

Location: 1800 Kingstown Road, South Kingstown (Plat 40-1, Lot 4)

Buyer: Thomas Gerald LLC

Date: 12/4/2023, Rev 1/15/2024

Area of paved driveway/parking 2688.00 s.f.

Soils: sand**

**Based on USDA soil web survey, seasonal high water table = 80" or greater

USDA soil web survey shows NbB, Narragansett, very stony silt loam, over sand @ 28"

Depth to groundwater table: 80"

GWT = 95.00 - 6.67 = 88.33 @ proposed drywell

Dry Well - concrete diffusers

2688.00 s.f. in sand req'd = 252 s.f.***

***Based on Town of South Kingstown requirement to mitigate 10-year storm for roof

Required Size:

Dry well bottom dimensions = 6' x 42' = 252.0 s.f.

Three concrete diffuser units (1.5' high)

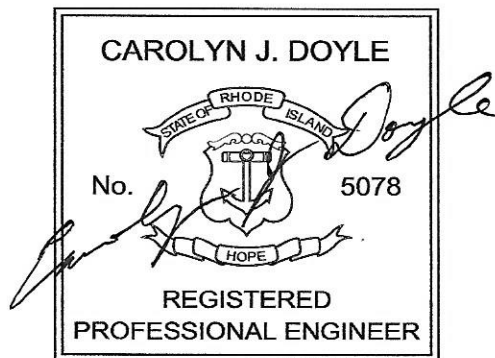
Required distance to foundation >10'

Required distance to septic system > 15'

Required distance to private drinking water well > 25'

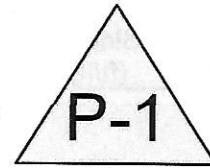
Used for: proposed driveway/parking

Conclusion: Per attached Hydrocad calculations, proposed dry well mitigates the peak discharge rate of flow and volume discharge for a 10-year storm event to 0.00 cfs and 0.00 cf per the Town of South Kingstown for the proposed roof.





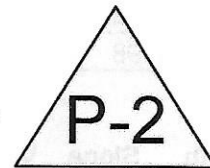
Roof 1360 sf



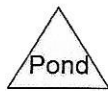
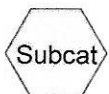
Drywell



PAVING 2688 sf



Drywell



Zarrella Proposed Infil

Type III 24-hr 10 yr New Rainfall=4.90"

Prepared by CJ DOYLE, P.E.

Printed 5/2/2024

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Summary for Subcatchment PSC1: Roof 1360 sf

Runoff = 0.16 cfs @ 12.07 hrs, Volume= 529 cf, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 yr New Rainfall=4.90"

Area (sf)	CN	Description
1,360	98	Roofs, HSG B
1,360		100.00% Impervious Area

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

Summary for Subcatchment PSC2: PAVING 2688 sf

Runoff = 0.31 cfs @ 12.07 hrs, Volume= 1,045 cf, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 yr New Rainfall=4.90"

Area (sf)	CN	Description
2,688	98	Paved parking, HSG B
2,688		100.00% Impervious Area

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

Summary for Pond P-1: Drywell

Inflow Area = 1,360 sf, 100.00% Impervious, Inflow Depth = 4.66" for 10 yr New event

Inflow = 0.16 cfs @ 12.07 hrs, Volume= 529 cf

Outflow = 0.03 cfs @ 11.78 hrs, Volume= 529 cf, Atten= 81%, Lag= 0.0 min

Discarded = 0.03 cfs @ 11.78 hrs, Volume= 529 cf

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 93.18' @ 12.49 hrs Surf.Area= 156 sf Storage= 119 cf

Plug-Flow detention time= 19.2 min calculated for 528 cf (100% of inflow)

Center-of-Mass det. time= 19.2 min (766.6 - 747.4)

Zarrella Proposed Infil

Prepared by CJ DOYLE, P.E.

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Type III 24-hr 10 yr New Rainfall=4.90"

Printed 5/2/2024

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Volume	Invert	Avail.Storage	Storage Description
#1A	91.50'	81 cf	6.00'W x 26.00'L x 2.50'H Field A 390 cf Overall - 144 cf Embedded = 246 cf x 33.0% Voids
#2A	92.50'	97 cf	Concrete Galley 4x8x1.5 x 3 Inside #1 Inside= 42.0"W x 15.0"H => 4.29 sf x 7.50'L = 32.2 cf Outside= 48.0"W x 18.0"H => 6.00 sf x 8.00'L = 48.0 cf
#3	93.50'	0 cf	0.33'D x 5.00'H Vertical Cone/Cylinder -Impervious
		178 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.50'	8.270 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	97.90'	4.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.03 cfs @ 11.78 hrs HW=91.57' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=91.50' (Free Discharge)

↑2=Orifice/Grate (Controls 0.00 cfs)

Summary for Pond P-2: Drywell

Inflow Area = 2,688 sf, 100.00% Impervious, Inflow Depth = 4.66" for 10 yr New event
 Inflow = 0.31 cfs @ 12.07 hrs, Volume= 1,045 cf
 Outflow = 0.05 cfs @ 11.73 hrs, Volume= 1,045 cf, Atten= 84%, Lag= 0.0 min
 Discarded = 0.05 cfs @ 11.73 hrs, Volume= 1,045 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 93.65' @ 12.53 hrs Surf.Area= 252 sf Storage= 268 cf

Plug-Flow detention time= 29.3 min calculated for 1,044 cf (100% of inflow)

Center-of-Mass det. time= 29.3 min (776.7 - 747.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	91.50'	129 cf	6.00'W x 42.00'L x 2.50'H Field A 630 cf Overall - 240 cf Embedded = 390 cf x 33.0% Voids
#2A	92.50'	161 cf	Concrete Galley 4x8x1.5 x 5 Inside #1 Inside= 42.0"W x 15.0"H => 4.29 sf x 7.50'L = 32.2 cf Outside= 48.0"W x 18.0"H => 6.00 sf x 8.00'L = 48.0 cf
#3	93.50'	0 cf	0.33'D x 5.00'H Vertical Cone/Cylinder -Impervious
		290 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.50'	8.270 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	97.90'	4.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Zarella Proposed Infil

Type III 24-hr 10 yr New Rainfall=4.90"

Prepared by CJ DOYLE, P.E.

Printed 5/2/2024

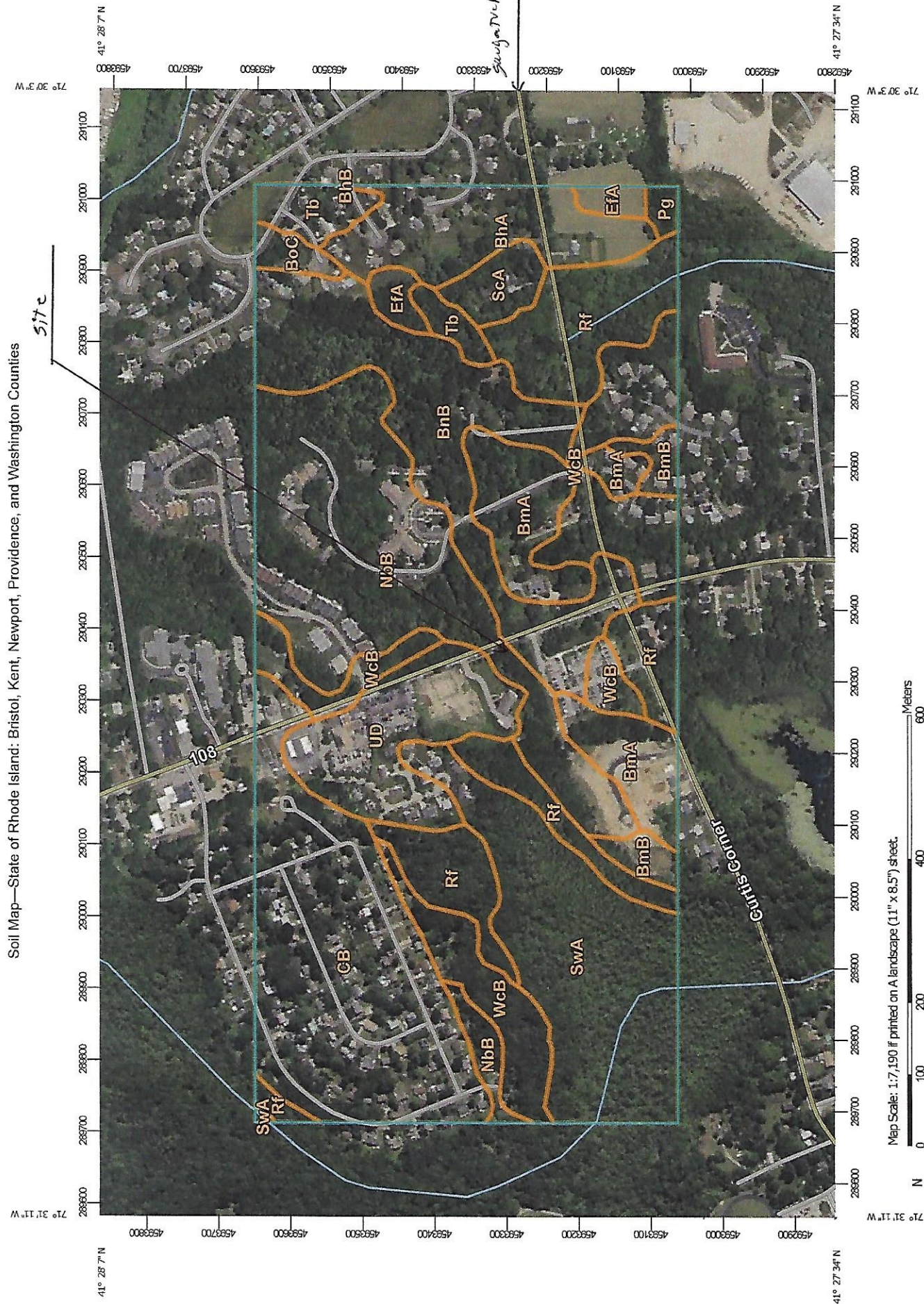
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Page 4

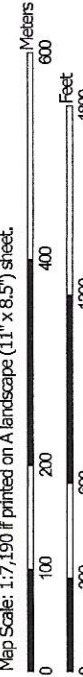
Discarded OutFlow Max=0.05 cfs @ 11.73 hrs HW=91.57' (Free Discharge)
↳1=Exfiltration (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=91.50' (Free Discharge)
↳2=Orifice/Grate (Controls 0.00 cfs)

Soil Map—State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties



Map Scale: 1:7,190 if printed on A landscape (11" x 8.5") sheet.
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

NbB—Narragansett very stony silt loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9lw0
Elevation: 0 to 810 feet
Mean annual precipitation: 44 to 50 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 115 to 190 days
Farmland classification: Not prime farmland

Map Unit Composition

Narragansett and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Narragansett

Setting

Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy eolian deposits over sandy and gravelly melt-out till derived from gneiss and/or schist and/or granite

Typical profile

Ap - 0 to 6 inches: silt loam
Bw1 - 6 to 15 inches: silt loam
Bw2 - 15 to 24 inches: silt loam
Bw3 - 24 to 28 inches: gravelly silt loam
2C - 28 to 60 inches: very gravelly loamy coarse sand

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Bridgehampton

Percent of map unit: 4 percent

Landform: Outwash plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Canton

Percent of map unit: 2 percent

Landform: Hills

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Scio

Percent of map unit: 1 percent

Landform: Terraces, lakebeds

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

Woodbridge

Percent of map unit: 1 percent

Landform: Drumlins

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

Wapping

Percent of map unit: 1 percent

Landform: Till plains, hills

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Charlton

Percent of map unit: 1 percent

Landform: Hills

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence,
and Washington Counties

Survey Area Data: Version 23, Sep 8, 2023

State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

BnB—Bridgehampton-Charlton complex, very stony, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9ltn
Elevation: 0 to 810 feet
Mean annual precipitation: 44 to 50 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 115 to 190 days
Farmland classification: Not prime farmland

Map Unit Composition

Bridgehampton and similar soils: 60 percent
Charlton and similar soils: 25 percent
Minor components: 15 percent
*Estimates are based on observations, descriptions, and transects of
the mapunit.*

Description of Bridgehampton

Setting

Landform: Ground moraines
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-silty loess over sandy and silty melt-out till
derived from granite and gneiss

Typical profile

Ap - 0 to 8 inches: silt loam
B - 8 to 41 inches: silt loam
2C - 41 to 60 inches: gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
*Capacity of the most limiting layer to transmit water
(Ksat):* Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B
Ecological site: F144AY024NY - Well Drained Eolian Outwash
Hydric soil rating: No

Description of Charlton

Setting

Landform: Hills
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy melt-out till derived from granite and/or schist and/or gneiss

Typical profile

Ap - 0 to 4 inches: fine sandy loam
Bw1 - 4 to 7 inches: fine sandy loam
Bw2 - 7 to 19 inches: fine sandy loam
Bw3 - 19 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Narragansett

Percent of map unit: 5 percent
Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Canton

Percent of map unit: 4 percent
Landform: Hills
Down-slope shape: Convex
Across-slope shape: Convex

Hydric soil rating: No

Scio

Percent of map unit: 3 percent

Landform: Terraces, lakebeds

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

Wapping

Percent of map unit: 3 percent

Landform: Till plains, hills

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence,
and Washington Counties

Survey Area Data: Version 23, Sep 8, 2023