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## **Exhibit H – Soil Scientists Report**

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## WETLANDS DELINEATION REPORT

**Date:** June 6, 2017

**Project No.:** 42256.00

**Prepared For:** Tobacco Valley Solar Project

**Site Location:** Hoskins Road, County Road, and Hopmeadow Street, Simsbury, CT

**Site Map:** Wetland Delineation GIS Figure, dated May 30, 2017

**Inspection Dates:** January 26, 2017 to April 19, 2017

**Field Conditions:** Weather: sunny, high 20's to 40's  
Snow Depth: 0-4 inches

General Soil Moisture: moist  
Frost Depth: 0-2 inches

### **Type of Wetlands Identified and Delineated:**

Connecticut Inland Wetlands and Watercourses

Tidal Wetlands

U.S. Army Corps of Engineers

**Local Regulated Upland Review Areas:** Wetlands: 100 feet Watercourses: 100 feet

**Field Numbering Sequence of Wetlands Boundary:** Connecticut - WF 1-100 to 1-203, WF 1-300 to 1-310, WF 1-400 to 1-480, WF 2-100 to 2-137, WF 3-100 to 3-107, WF 4-100 to 4-130, WF 5-100 to 5-110, WF 6-100 to 6-198, 6-200 to 6-223, 6-300 to 6-317, 6-400 to 6-414, 6-500 to 6-509, 6-600 to 6-611, 6-700 to 6-722, WF 7-100 to 7-107, WF 8-100 to 8-180, and WF 9-100 to 9-110. [as depicted on attached wetland delineation map]

*The classification systems of the National Cooperative Soil Survey, the U.S. Department of Agriculture, Natural Resources Conservation Service, County Soil Survey Identification Legend, and the Connecticut Department of Energy and Environmental Protection were used in this investigation.*

*All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.*

The wetlands delineation was conducted and reviewed by:

Jeffrey Peterson  
Certified Professional Soil Scientist

Enclosures

1 Cedar Street

Suite 400

Engineers | Scientists | Planners | Designers

Providence, RI 02903

P 401.272.8100

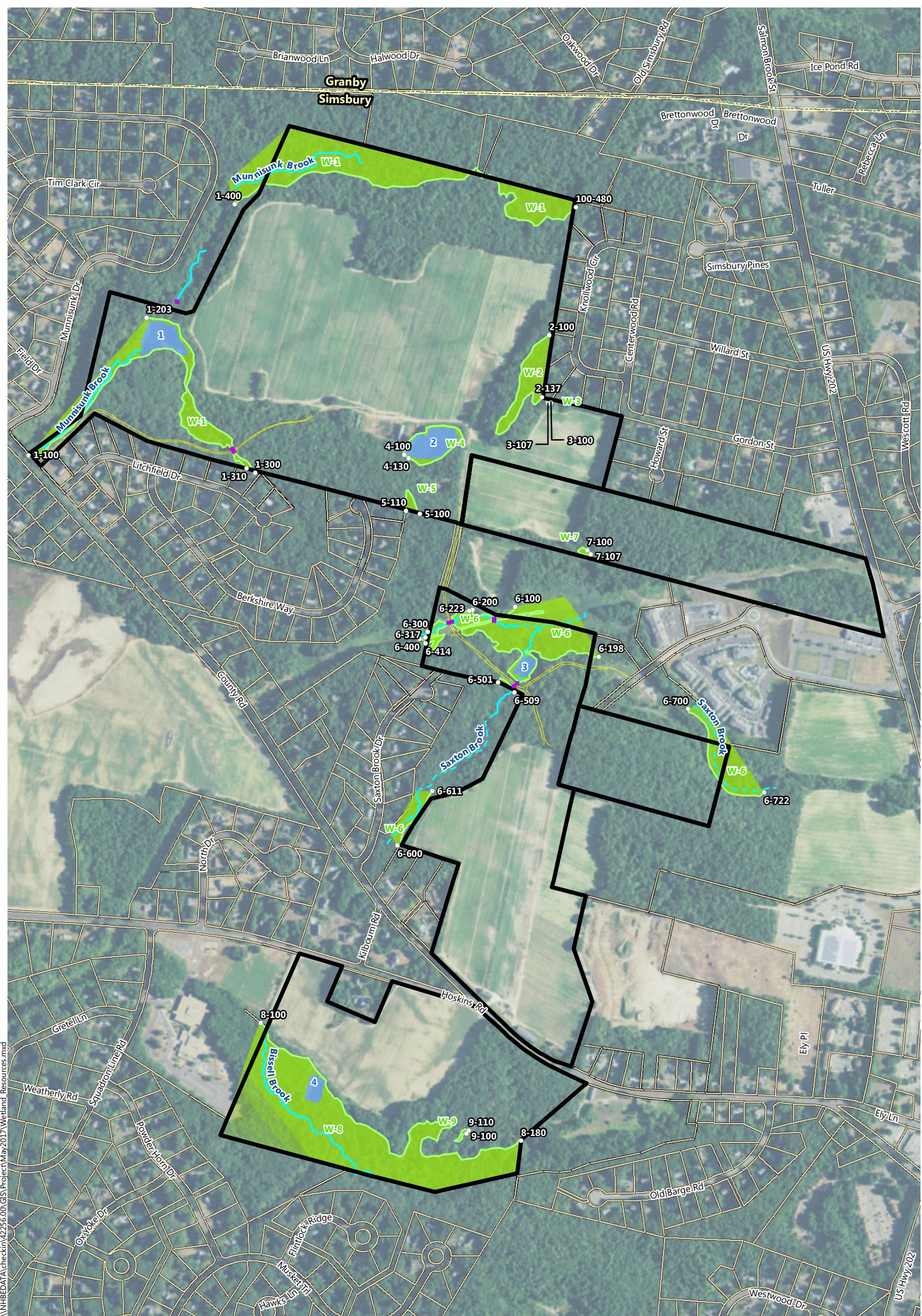
F 401.277.8400



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## Attachments

- › Wetland Delineation Map
- › Wetland Delineation Field Forms
- › NRCS Soil Reports and Soil Maps



### Tobacco Valley Solar

Simsbury, Connecticut

### Wetland Delineation

- Property Boundary
- Wetland Resource Area
- Farm Pond
- Delineated Wetland Edge
- Stream
- Approximate Stream
- Existing Gravel Road
- Wetland Flag
- Culvert
- Town Boundary
- Adjacent Parcels

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	1/26/17, 1/30/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 1		

Field Conditions:	Weather: Light rain 30s, Clear 30s	Snow Depth: 0 - 3 inches
	General Soil Moisture: moist	Frost Depth: 0 inches
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 1-100 to 1-203, 1-300 to 1-310, 1-400 to 1-480		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input checked="" type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Surficial geology primarily outwash. Steep escarpment along Munnisunk Brook.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input checked="" type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Narrow riverine corridor along Munnisunk Brook		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Open water is an artificially impounded irrigation pond constructed within Munnisunk Brook		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: Munnisunk Brook has a bedrock exposures within the stream bed along its lower reaches		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments:	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sudbury sandy loam, 0 to 5 percent slope (23A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3 & 3 to 8 percent slopes (34A & B)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Windsor loamy sand, 0 to 3, 3 to 8, & 8 to 15 percent slopes (36A, B, & C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Manchester gravelly sand, 3 to 15 & 15 to 45 percent slopes, very stony (37C & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 0 to 3, 3 to 15, & 15 to 45 percent slopes (38A, C, & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Arrowwood ( <i>Viburnum recognitum</i> )
American elm ( <i>Ulmus americana</i> )	Winterberry ( <i>Ilex verticillata</i> )
Eastern hemlock ( <i>Tsuga canadensis</i> )	Cinnamon fern ( <i>Osmundastrum cinnamomeum</i> )
Yellow birch ( <i>Betula alleghaniensis</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
White pine ( <i>Pinus strobus</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Evergreen wood fern ( <i>Dryopteris intermedia</i> )

### **WETLAND NARRATIVE:**

Munnisunk Brook and the on-site wetlands that drain to this stream have been delineated as Wetland 1. Baseline flow in Munnisunk Brook and hydrologic support of this wetland is driven by groundwater discharge from the outwash terrace in the adjacent uplands supplemented by runoff during storm events. The site access road from County Road crosses an intermittent tributary over a concrete pipe culvert. Soils examined in Wetland 1 included sloping phases of the Walpole sandy loam, a red parent material variant of the Walpole series, and very poorly drained soils similar to the Scarboro series. Small areas of recent alluvium are also present along Munnisunk Brook. The delineation included phases of poorly and very poorly drained soils that have been partially buried by sediment washed down the slopes.

Munnisunk Brook is impounded to create a farm pond. Water from this pond is used to irrigate row crops.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	1/26/17, 1/30/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 2		

Field Conditions:	Weather: Light rain 30s, Clear 30s	Snow Depth: 0 - 3 inches
	General Soil Moisture: moist	Frost Depth: 0 inches
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/> ACOE <input type="checkbox"/> Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 2-100 to 2-139		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Seasonal GW discharge site. There may be a field drain in this wetland behind subdivision.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Sloping discharge wetland		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Mostly red maple.		

### **WATERCOURSE TYPE:**

Perennial	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: NA		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments:	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3 & 3 to 8 percent slopes (34A & B)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 0 to 3, 3 to 15, & 15 to 45 percent slopes (38A, C, & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Arrowwood ( <i>Viburnum recognitum</i> )
American elm ( <i>Ulmus americana</i> )	Winterberry ( <i>Ilex verticillata</i> )
White pine ( <i>Pinus strobus</i> )	Cinnamon fern ( <i>Osmundastrum cinnamomeum</i> )
Yellow birch ( <i>Betula alleghaniensis</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )

### **WETLAND NARRATIVE:**

This sloping wetland receives runoff and sediment from the fields south of this resource area. Any former surface outlet from this wetland has been obstructed by the development of Knollwood Circle. There may be a field drain in this wetland to replace the former surface outlet. No standing water was observed in this wetland when it was delineated in January 2017. The southern finger of this wetland is scoured by runoff from the farm fields.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	01/30/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 3		

Field Conditions:	Weather: Clear 30s	Snow Depth: 0 inches
	General Soil Moisture: moist	Frost Depth: 0 inches
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 3-100 to 3-107		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Small excavated depression near property line that fills with water in wet season.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Sloping discharge wetland		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Mostly red maple.		

### **WATERCOURSE TYPE:**

Perennial	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: NA		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: NA	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3 & 3 to 8 percent slopes (34A & B)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 0 to 3, 3 to 15, & 15 to 45 percent slopes (38A, C, & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Cinnamon fern ( <i>Onoclea sensibilis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Sensitive fern ( <i>Osmundastrum cinnamomeum</i> )
Arrowwood ( <i>Viburnum recognitum</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )
Winterberry ( <i>Ilex verticillata</i> )	

### **WETLAND NARRATIVE:**

This very small wetland depression appears to have been created by an excavation close to the property boundary.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	01/30/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 4		

Field Conditions:	Weather: Clear 30s	Snow Depth: 0 - 2 inches
	General Soil Moisture: moist	Frost Depth: 0 – 1 inches
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 4-100 to 4-136		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Excavated irrigation pond with fringe wetland. Water is pumped into and out of this pond.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Water is pumped into and out of pond. Appears to be excavated into the ground water level.		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Mostly red maple.		

### **WATERCOURSE TYPE:**

Perennial	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: Farm pond managed to irrigate crops		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>	
Comments: Fish observed in this farm pond. American toad breed at the north end of the pond.		

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Water (w)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Merrimac fine sandy loam, 0 to 3 percent slopes (34A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 3 to 15 percent slopes (38C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Multiflora rose ( <i>Rosa multiflora</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )
Arrowwood ( <i>Viburnum recognitum</i> )	Reed canary-grass ( <i>Phalaris arundiacea</i> )
Buttonbush ( <i>Cephalanthus occidentalis</i> )	

### **WETLAND NARRATIVE:**

Farm pond excavated in uplands. Soils spread along the south and eastern sides of the pond and are now wooded. The very poorly drained Scarboro unit mapped south of the pond is broken by a topographic saddle which separates two wetland units. There is no inlet or outlet to this pond. Water can be pumped into this pond from the impoundment on Munnisunk Brook. Water is also pumped from this pond to irrigate crops.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	01/30/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 5		

Field Conditions:	Weather: Clear 30s	Snow Depth: 0 - 4 inches
	General Soil Moisture: moist	Frost Depth: 0 – 1 inches
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 5-100 to 5-110		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Scarboro and Walpole soils in this unit		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Wetland 5 does not drain towards the farm pond (Wetland 4).		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Red maple and eastern hemlock.		

### **WATERCOURSE TYPE:**

Perennial	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: NA		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: NA	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Walpole sandy loam, 0 to 3 percent slopes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sudbury sandy loams, 0 to 5 percent slopes (23A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 3 to 8 percent slopes (34B)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 3 to 15 percent slopes (38C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Eastern hemlock ( <i>Tsuga canadensis</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )
Winterberry ( <i>Ilex verticillata</i> )	
Arrowwood ( <i>Viburnum recognitum</i> )	

### **WETLAND NARRATIVE:**

The portion of Wetland 5 delineated on the subject property extends from a larger system that continues off-site. Based on the examination of aerial photographs and evidence observed from within the property, Wetland 5 appears to be separate from Wetland 6.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	1/30/17 - 02/3/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 6		

Field Conditions:	Weather: Clear 20s	Snow Depth: 0 - 1 inch
	General Soil Moisture: moist	Frost Depth: 0 - 1 inch
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/> ACOE <input type="checkbox"/> Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 6-100 to 6-198, 6-200 to 6-223, 6-304 to 6-310, 6-500 to 6-509, 6-600 to 6-611, 6-700 to 6-713		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland 6 is the riparian wetland and swamp associated with Saxton Brook.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Sloping discharge wetland		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Most of the scrub-shrub is associated with the cleared Eversource ROW		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: Wetland 6 includes Saxton Brook and a intermittent tributaries		

### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: Farm pond constructed on Saxton Brook has fish.	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3, 3 to 8 & 8 to 15 percent slopes (34A, B, C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 0 to 3, 3 to 15, & 15 to 45 percent slopes (38A, C, & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Multiflora rose ( <i>Rosa multiflora</i> )
American elm ( <i>Ulmus americana</i> )	Skunk cabbage ( <i>Symplocarpus foetidus</i> )
White pine ( <i>Pinus strobus</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Yellow birch ( <i>Betula alleghaniensis</i> )	Cinnamon fern ( <i>Osmundastrum cinnamomeum</i> )
Eastern Hemlock ( <i>Tsuga canadensis</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )
Arrowwood ( <i>Viburnum recognitum</i> )	
Winterberry ( <i>Ilex verticillata</i> )	

### **WETLAND NARRATIVE:**

Wetland 6 includes Saxton Brook and its intermittent headwater tributaries. Baseline flow in Saxton Brook and hydrologic support of this wetland is driven by groundwater discharge from the outwash terrace which forms the adjacent uplands supplemented by runoff during storm events. There is a small farm pond constructed on Saxton Brook through a combination of excavation and impoundment. The constructed outlet for this pond has failed and flow out of the pond is through a breach in the berm. This pond is used as a source of irrigation water.

In addition to the two wetland soil map units described above there are limited areas of recent alluvium along the stream course. The sediment load in this stream is much higher in its easternmost downstream segment.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	02/23/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 7		

Field Conditions:	Weather: Clear 20s	Snow Depth: 0 - 3 inches
	General Soil Moisture: moist	Frost Depth: 0 - 1 inch
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/> ACOE <input type="checkbox"/> Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 7-100 to 7-107 (loop)		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: The surface of Wetland 7 is partially buried by sediment. A depression was created by the construction of a road in a fill section south of the wetland.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Sloping discharge wetland		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

#### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: This wetland is isolated.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: NA	

## Wetland Delineation Field Form (Cont.)

### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sudbury sandy loam, 0 to 5 percent slopes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3 & 3 to 8 percent slopes (34A & B)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 0 to 3, 3 to 15, & 15 to 45 percent slopes (38A, C, & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Winterberry ( <i>Ilex verticillata</i> )
American elm ( <i>Ulmus americana</i> )	Cinnamon fern ( <i>Osmundastrum cinnamomeum</i> )
Yellow birch ( <i>Betula alleghaniensis</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Poison ivy ( <i>Toxicodendron radicans</i> )
Arrowwood ( <i>Viburnum recognitum</i> )	

### **WETLAND NARRATIVE:**

This small wetland depression is impounded by an existing access road constructed across the south side of this wetland unit. A small diameter pipe has been placed across this road but does not drain the lowest part of the wetland. Soils are very cobbly and have a mantle of sediment washed off the proximate farm fields.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	1/30/17, 4/19/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 8		

Field Conditions:	Weather: Clear 20s	Snow Depth: 0 - 1 inch
	General Soil Moisture: moist	Frost Depth: 0 - 1 inch
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 8-100 to 8-180		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated - seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland 8 includes forested riparian wetland along Bissell Brook, sloping forested wetland and an excavated/impounded farm pond. A sewer line appears to have altered slope hydrology.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input checked="" type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Wetland includes discharge slopes, a farm pond, and riparian wetlands along Bissell Brook.		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Most of the wetland is forested. .		

### **WATERCOURSE TYPE:**

Perennial <input checked="" type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: Bissell Brook is perennial. Intermittent tributaries are also present in the wetland.		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: Farm pond contained fish and a small raft of wood frog eggs.	

### Wetland Delineation Field Form (Cont.)

#### **MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Scarboro muck, 0 to 3 percent slopes (15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fluvaquents-Udifluvents complex, frequently flooded	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3, percent slopes (34A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 3 to 15, & 15 to 45 percent slopes (38C & E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### **DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Spicebush ( <i>Lindera benzoin</i> )
White pine ( <i>Pinus strobus</i> )	Multiflora rose ( <i>Rosa multiflora</i> )
Yellow birch ( <i>Betula alleghaniensis</i> )	Cinnamon fern ( <i>Osmunda cinnamomeum</i> )
Eastern Hemlock ( <i>Tsuga canadensis</i> )	Sensitive fern ( <i>Onoclea sensibilis</i> )
Highbush blueberry ( <i>Vaccinium corymbosum</i> )	Skunk cabbage ( <i>Symplocarpus foetidus</i> )
Arrowwood ( <i>Viburnum recognitum</i> )	Jewelweed ( <i>Impatiens capensis</i> )
Winterberry ( <i>Ilex verticillata</i> )	
Sweet pepperbush ( <i>Clethra alnifolia</i> )	

#### **WETLAND NARRATIVE:**

Wetland consists of a forested discharge slope, an excavated/impounded farm pond, the perennial Bissell Brook and intermittent tributaries. Baseline flow in Bissell Brook and hydrologic support of this wetland is driven by groundwater discharge from the outwash terrace north of the wetland supplemented by runoff during storm events. East of the farm pond, some of the wetland has developed in the spoils spread on the slope. Some of the wetland along Bissell Brook was ditched. In addition to the Walpole series, some of the soils along the wetland slopes are a red parent material variant of this series. Some of the poorly drained soils formed in red parent material do not have low chroma matrices typical of wetland soils.

## Wetland Delineation Field Form

Project Address:	County Road, Hoskins Road, and Hop Meadow Street, Simsbury, CT	Project Number:	42256
Inspection Date:	04/19/17	Inspector:	Jeffrey Peterson, CPSS
Wetland I.D.:	Wetland 8		

Field Conditions:	Weather: Clear 20s	Snow Depth: 0 - 1 inch
	General Soil Moisture: moist	Frost Depth: 0 - 1 inch
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 9-100 to 9-110 loop		

### **WETLAND HYDROLOGY:**

#### **NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Wetland 9 is a small hillside seep that dissipates as the slope form transitions from concave to convex.		

#### **TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: N/A		

### **WETLAND TYPE:**

#### **SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input checked="" type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments:		

#### **CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Several recent tree throws.		

### **WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: NA		

#### **SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>
Comments: NA	

### Wetland Delineation Field Form (Cont.)

**MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Walpole sandy loam, 0 to 3 percent slopes (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sudbury sandy loam, 0-5 percent slopes (23A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Merrimac fine sandy loam, 0 to 3, percent slopes (34A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hinckley loam sand, 3 to 15 percent slopes (38C)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**DOMINANT WETLAND PLANTS:**

Red maple ( <i>Acer rubrum</i> )	Highbush blueberry ( <i>Vaccinium corymbosum</i> )
White pine ( <i>Pinus strobus</i> )	Arrowwood ( <i>Viburnum recognitum</i> )
Eastern Hemlock ( <i>Tsuga canadensis</i> )	Sweet pepperbush ( <i>Clethra alnifolia</i> )
	Cinnamon fern ( <i>Osmundastrum cinnamomeum</i> )

**WETLAND NARRATIVE:**

This small seasonal hillside seep does not have an inlet or outlet. This wetland is difficult to differentiate from the surrounding wetlands.



United States  
Department of  
Agriculture

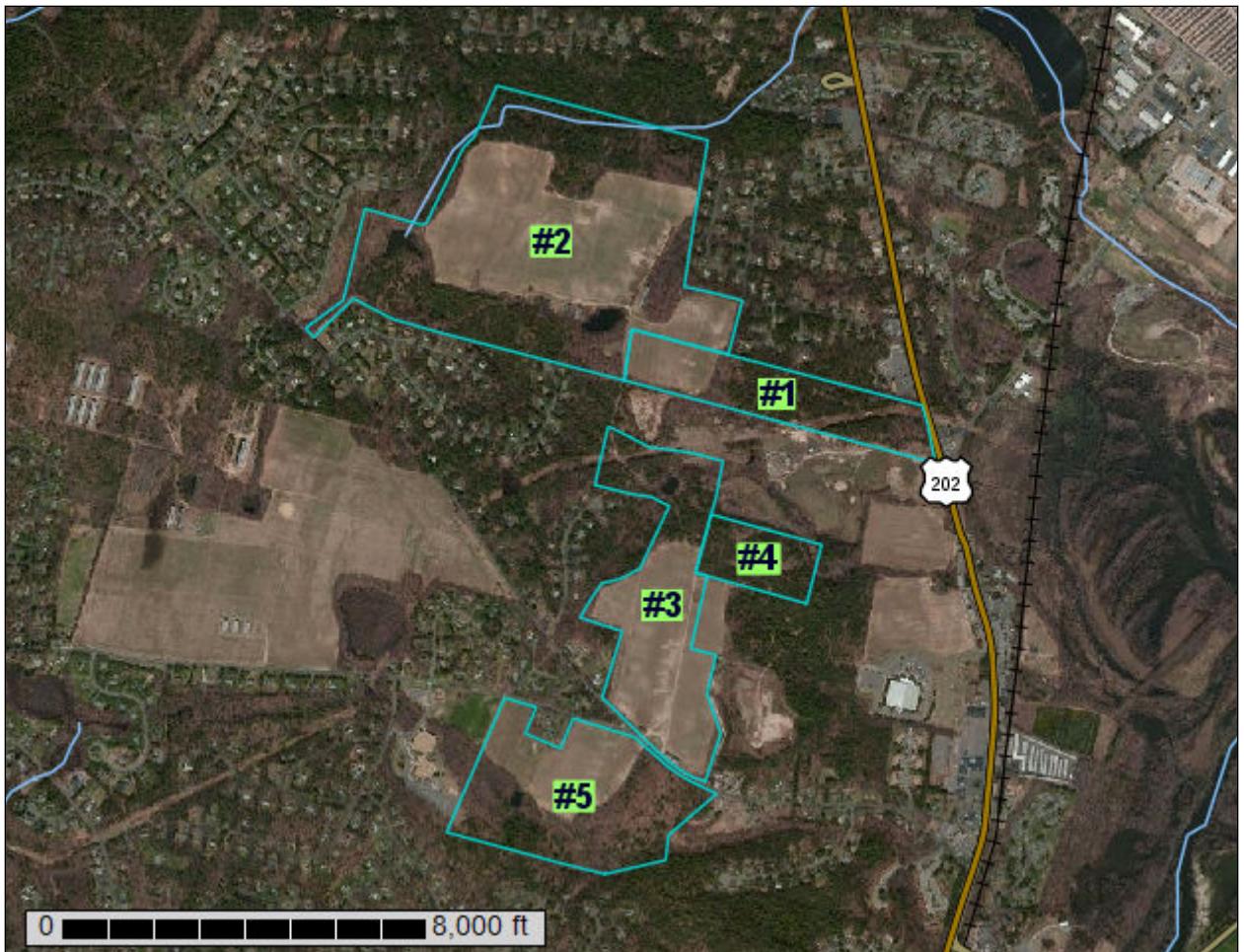
**NRCS**

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 State of Connecticut

**Tobacco Valley Solar, Simsbury, CT**



# Preface

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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](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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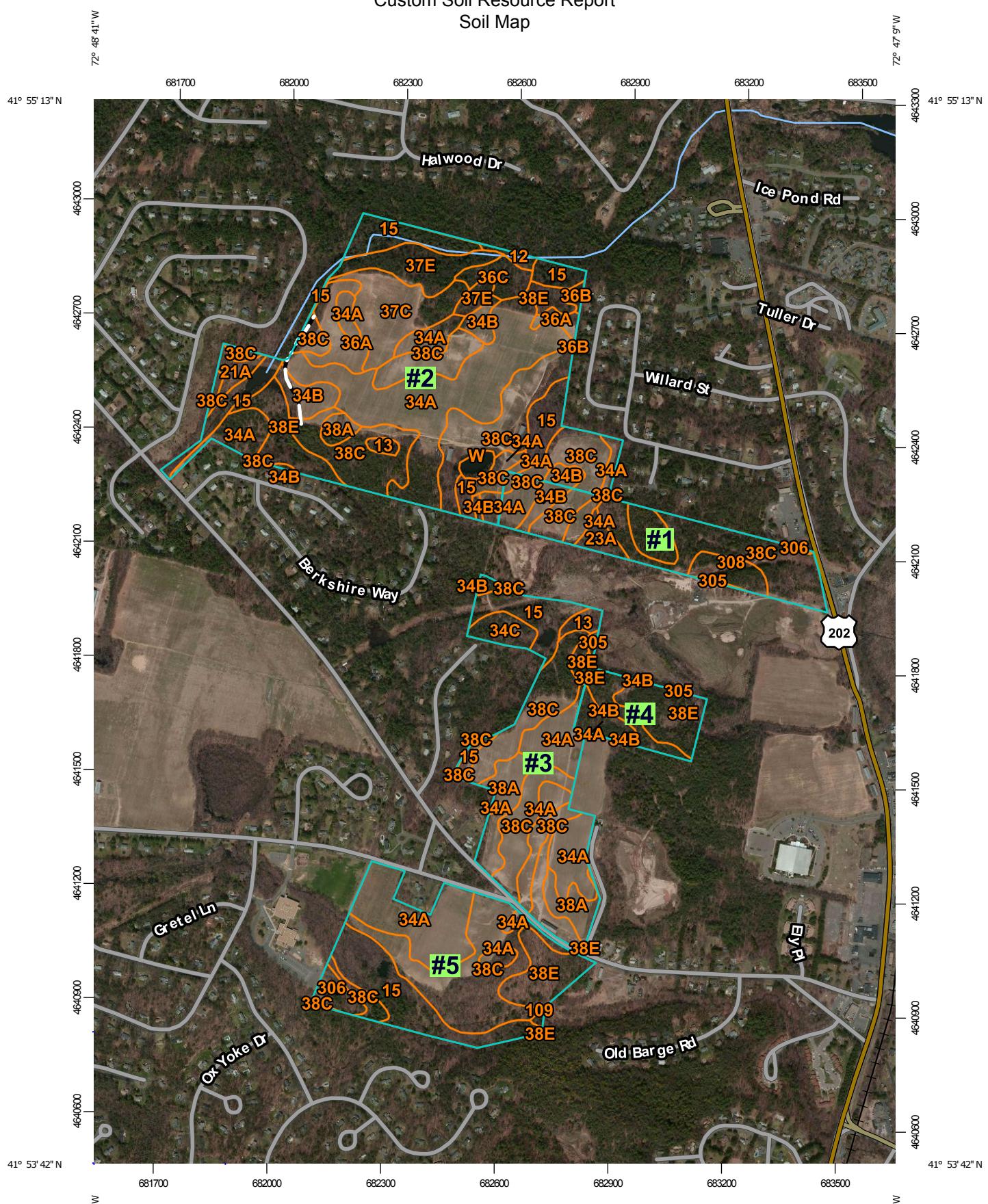
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# **Soil Map**

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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: 1:13,600 if printed on A portrait (8.5" x 11") sheet.

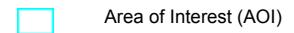
0 200 400 600 1200 Feet

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

## Custom Soil Resource Report

### MAP LEGEND

#### Area of Interest (AOI)



Area of Interest (AOI)

#### Soils



Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



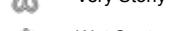
Sodic Spot

#### Spoil Area



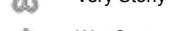
Spoil Area

#### Stony Spot



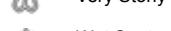
Stony Spot

#### Very Stony Spot



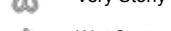
Very Stony Spot

#### Wet Spot



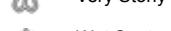
Wet Spot

#### Other



Other

#### Special Line Features



Special Line Features

#### Water Features



Streams and Canals

#### Transportation



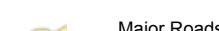
Rails



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.

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: State of Connecticut  
Survey Area Data: Version 15, Sep 28, 2016

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

Date(s) aerial images were photographed: Mar 28, 2011—Apr 18, 2011

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

#1, State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
23A	Sudbury sandy loam, 0 to 5 percent slopes	1.9	0.7%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	3.9	1.4%
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	1.6	0.5%
38C	Hinckley loamy sand, 3 to 15 percent slopes	16.8	5.8%
38E	Hinckley loamy sand, 15 to 45 percent slopes	3.3	1.1%
305	Udorthents-Pits complex, gravelly	0.1	0.0%
306	Udorthents-Urban land complex	0.1	0.0%
308	Udorthents, smoothed	3.4	1.2%
<b>Subtotals for #1</b>		<b>31.1</b>	<b>10.8%</b>
<b>Totals for Area of Interest</b>		<b>288.3</b>	<b>100.0%</b>

#2, State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
12	Raypol silt loam	0.8	0.3%
13	Walpole sandy loam, 0 to 3 percent slopes	0.7	0.3%
15	Scarboro muck, 0 to 3 percent slopes	15.4	5.3%
21A	Ninigret and Tisbury soils, 0 to 5 percent slopes	1.8	0.6%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	39.2	13.6%
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	6.4	2.2%
36A	Windsor loamy sand, 0 to 3 percent slopes	5.9	2.0%
36B	Windsor loamy sand, 3 to 8 percent slopes	0.7	0.2%
36C	Windsor loamy sand, 8 to 15 percent slopes	3.2	1.1%
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	10.7	3.7%
37E	Manchester gravelly sandy loam, 15 to 45 percent slopes	8.3	2.9%
38A	Hinckley loamy sand, 0 to 3 percent slopes	1.5	0.5%

Custom Soil Resource Report

<b>#2, State of Connecticut (CT600)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
38C	Hinckley loamy sand, 3 to 15 percent slopes	33.8	11.7%
38E	Hinckley loamy sand, 15 to 45 percent slopes	7.8	2.7%
W	Water	1.3	0.4%
<b>Subtotals for #2</b>		<b>137.5</b>	<b>47.7%</b>
<b>Totals for Area of Interest</b>		<b>288.3</b>	<b>100.0%</b>

<b>#3, State of Connecticut (CT600)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
13	Walpole sandy loam, 0 to 3 percent slopes	1.3	0.4%
15	Scarboro muck, 0 to 3 percent slopes	6.8	2.4%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	13.9	4.8%
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	0.7	0.2%
34C	Merrimac fine sandy loam, 8 to 15 percent slopes	2.9	1.0%
38A	Hinckley loamy sand, 0 to 3 percent slopes	8.2	2.8%
38C	Hinckley loamy sand, 3 to 15 percent slopes	18.2	6.3%
38E	Hinckley loamy sand, 15 to 45 percent slopes	1.0	0.3%
305	Udorthents-Pits complex, gravelly	0.3	0.1%
<b>Subtotals for #3</b>		<b>53.2</b>	<b>18.5%</b>
<b>Totals for Area of Interest</b>		<b>288.3</b>	<b>100.0%</b>

<b>#4, State of Connecticut (CT600)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	2.8	1.0%
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	3.8	1.3%
38E	Hinckley loamy sand, 15 to 45 percent slopes	6.8	2.4%
305	Udorthents-Pits complex, gravelly	0.0	0.0%
<b>Subtotals for #4</b>		<b>13.4</b>	<b>4.7%</b>
<b>Totals for Area of Interest</b>		<b>288.3</b>	<b>100.0%</b>

<b>#5, State of Connecticut (CT600)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
15	Scarboro muck, 0 to 3 percent slopes	11.6	4.0%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	13.5	4.7%
38C	Hinckley loamy sand, 3 to 15 percent slopes	19.1	6.6%
38E	Hinckley loamy sand, 15 to 45 percent slopes	6.4	2.2%
109	Fluvaquents-Udifluvents complex, frequently flooded	0.2	0.1%
306	Udorthents-Urban land complex	2.2	0.8%
<b>Subtotals for #5</b>		<b>53.0</b>	<b>18.4%</b>
<b>Totals for Area of Interest</b>		<b>288.3</b>	<b>100.0%</b>

## 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.

## State of Connecticut

### 12—Raypol silt loam

#### Map Unit Setting

*National map unit symbol:* 9ljx

*Elevation:* 0 to 1,200 feet

*Mean annual precipitation:* 43 to 54 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 140 to 185 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Raypol and similar soils:* 80 percent

*Minor components:* 20 percent

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

#### Description of Raypol

##### Setting

*Landform:* Depressions, drainageways

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Coarse-loamy eolian deposits over sandy and gravelly glaciofluvial deposits derived from granite and/or schist and/or gneiss

##### Typical profile

*Ap - 0 to 8 inches:* silt loam

*Bg1 - 8 to 12 inches:* very fine sandy loam

*Bg2 - 12 to 20 inches:* silt loam

*Bw1 - 20 to 26 inches:* silt loam

*Bw2 - 26 to 29 inches:* very fine sandy loam

*2C1 - 29 to 52 inches:* stratified very gravelly coarse sand to loamy fine sand

*2C2 - 52 to 65 inches:* stratified very gravelly coarse sand to loamy fine sand

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Low

*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:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 7.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Hydric soil rating:* Yes

### **Minor Components**

#### **Enfield**

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

#### **Haven**

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

#### **Ninigret**

*Percent of map unit:* 3 percent  
*Landform:* Outwash plains, terraces  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

#### **Scarboro**

*Percent of map unit:* 2 percent  
*Landform:* Depressions, terraces, drainageways  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### **Walpole**

*Percent of map unit:* 2 percent  
*Landform:* Depressions on terraces, drainageways on terraces  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### **Tisbury**

*Percent of map unit:* 2 percent  
*Landform:* Outwash plains, terraces  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### **Unnamed, loamy substratum**

*Percent of map unit:* 1 percent

### **13—Walpole sandy loam, 0 to 3 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2svkl

*Elevation:* 0 to 1,020 feet

*Mean annual precipitation:* 36 to 71 inches

*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 140 to 250 days

*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Walpole and similar soils:* 80 percent

*Minor components:* 20 percent

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

### **Description of Walpole**

#### **Setting**

*Landform:* Deltas, depressions, depressions, outwash plains, outwash terraces

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread, talus, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy glaciofluvial deposits derived from igneous, metamorphic and sedimentary rock

#### **Typical profile**

*Oe - 0 to 1 inches:* mucky peat

*A - 1 to 7 inches:* sandy loam

*Bg - 7 to 21 inches:* sandy loam

*BC - 21 to 25 inches:* gravelly sandy loam

*C - 25 to 65 inches:* very gravelly sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.14 to 14.17 in/hr)

*Depth to water table:* About 0 to 4 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* B/D

*Hydric soil rating:* Yes

### **Minor Components**

#### **Sudbury**

*Percent of map unit:* 10 percent

*Landform:* Deltas, outwash plains, terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### **Scarboro**

*Percent of map unit:* 10 percent

*Landform:* Deltas, outwash plains, outwash terraces

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## **15—Scarboro muck, 0 to 3 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2svkt

*Elevation:* 0 to 1,350 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**

*Scarboro and similar soils:* 80 percent

*Minor components:* 20 percent

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

### **Description of Scarboro**

#### **Setting**

*Landform:* Depressions, outwash terraces, drainageways, outwash deltas

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope, tread, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave, linear

*Parent material:* Sandy glaciofluvial deposits derived from schist and/or gneiss and/or granite

#### **Typical profile**

*Oa - 0 to 8 inches:* muck

*A - 8 to 14 inches:* mucky fine sandy loam

*Cg1 - 14 to 22 inches:* sand

*Cg2 - 22 to 65 inches:* gravelly sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (1.42 to 14.17 in/hr)

## Custom Soil Resource Report

*Depth to water table:* About 0 to 2 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* A/D  
*Hydric soil rating:* Yes

### Minor Components

#### Timakwa

*Percent of map unit:* 10 percent  
*Landform:* Swamps  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope, tread, dip  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Hydric soil rating:* Yes

#### Walpole

*Percent of map unit:* 8 percent  
*Landform:* Deltas, depressions, depressions, outwash plains, outwash terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread, talus, dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Deerfield

*Percent of map unit:* 2 percent  
*Landform:* Outwash plains, terraces  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

## 21A—Ninigret and Tisbury soils, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tx07  
*Elevation:* 0 to 1,260 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**

*Ninigret and similar soils:* 60 percent

*Tisbury and similar soils:* 25 percent

*Minor components:* 15 percent

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

### **Description of Ninigret**

#### **Setting**

*Landform:* Depressions, kames, kame terraces, outwash plains, outwash terraces, drainageways, moraines

*Landform position (two-dimensional):* Backslope, shoulder, footslope, summit

*Landform position (three-dimensional):* Side slope, crest, tread, dip, rise

*Down-slope shape:* Concave, convex, linear

*Across-slope shape:* Concave, convex

*Parent material:* Coarse-loamy eolian deposits over sandy and gravelly glaciofluvial deposits derived from gneiss, granite, schist, and/or phyllite

#### **Typical profile**

*Ap - 0 to 8 inches:* fine sandy loam

*Bw1 - 8 to 16 inches:* fine sandy loam

*Bw2 - 16 to 26 inches:* fine sandy loam

*2C - 26 to 65 inches:* stratified loamy sand to loamy fine sand

#### **Properties and qualities**

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* 18 to 38 inches to strongly contrasting textural stratification

*Natural drainage class:* Moderately well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.14 to 14.17 in/hr)

*Depth to water table:* About 17 to 39 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 3.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

### **Description of Tisbury**

#### **Setting**

*Landform:* Deltas, depressions, depressions, outwash plains, outwash terraces, valley trains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread, talus, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Coarse-silty eolian deposits over sandy and gravelly glaciofluvial deposits derived from granite, schist, and/or gneiss

**Typical profile**

*Ap - 0 to 8 inches:* silt loam  
*Bw1 - 8 to 18 inches:* silt loam  
*Bw2 - 18 to 26 inches:* silt loam  
*2C - 26 to 65 inches:* stratified extremely gravelly sand

**Properties and qualities**

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* 24 to 36 inches to strongly contrasting textural stratification  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.14 to 14.17 in/hr)  
*Depth to water table:* About 18 to 30 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.3 inches)

**Interpretive groups**

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

**Minor Components**

**Merrimac**

*Percent of map unit:* 5 percent  
*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, summit  
*Landform position (three-dimensional):* Side slope, crest, riser, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Agawam**

*Percent of map unit:* 5 percent  
*Landform:* Kames, kame terraces, outwash plains, outwash terraces, moraines  
*Landform position (two-dimensional):* Backslope, shoulder, footslope, summit  
*Landform position (three-dimensional):* Side slope, crest, tread, riser, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Haven**

*Percent of map unit:* 3 percent  
*Landform:* Kames, kame terraces, outwash plains, outwash terraces, moraines  
*Landform position (two-dimensional):* Shoulder, footslope, backslope, summit  
*Landform position (three-dimensional):* Side slope, crest, tread, riser, rise, dip  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Raypol**

*Percent of map unit:* 2 percent

*Landform:* Deltas, depressions, depressions, outwash plains, outwash terraces, valley trains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread, talus, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## **23A—Sudbury sandy loam, 0 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 9lkv

*Elevation:* 0 to 1,200 feet

*Mean annual precipitation:* 43 to 54 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 140 to 185 days

*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Sudbury and similar soils:* 80 percent

*Minor components:* 20 percent

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

### **Description of Sudbury**

#### **Setting**

*Landform:* Outwash plains, terraces

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Parent material:* Sandy and gravelly glaciofluvial deposits derived from granite and/or schist and/or gneiss

#### **Typical profile**

*Oe - 0 to 1 inches:* moderately decomposed plant material

*A - 1 to 5 inches:* sandy loam

*Bw1 - 5 to 17 inches:* gravelly sandy loam

*Bw2 - 17 to 25 inches:* sandy loam

*2C - 25 to 60 inches:* stratified gravel to sand

#### **Properties and qualities**

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very low

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

*Depth to water table:* About 18 to 36 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 4.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group:* B

*Hydric soil rating:* No

#### **Minor Components**

##### **Ninigret**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* No

##### **Agawam**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Merrimac**

*Percent of map unit:* 5 percent

*Landform:* Kames, outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Tisbury**

*Percent of map unit:* 3 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Walpole**

*Percent of map unit:* 2 percent

*Landform:* Depressions on terraces, drainageways on terraces

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### **34A—Merrimac fine sandy loam, 0 to 3 percent slopes**

##### **Map Unit Setting**

*National map unit symbol:* 2tyqr

*Elevation:* 0 to 1,100 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**

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

### **Description of Merrimac**

#### **Setting**

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, summit  
*Landform position (three-dimensional):* Side slope, crest, riser, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

#### **Typical profile**

*Ap - 0 to 10 inches:* fine sandy loam  
*Bw1 - 10 to 22 inches:* fine sandy loam  
*Bw2 - 22 to 26 inches:* stratified gravel to gravelly loamy sand  
*2C - 26 to 65 inches:* stratified gravel to very gravelly sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.4 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Low (about 4.6 inches)

#### **Interpretive groups**

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

### **Minor Components**

#### **Sudbury**

*Percent of map unit:* 5 percent  
*Landform:* Deltas, outwash plains, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### **Hinckley**

*Percent of map unit:* 5 percent

*Landform:* Deltas, eskers, kames, outwash plains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, rise

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

#### **Agawam**

*Percent of map unit:* 3 percent

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines, stream terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### **Windsor**

*Percent of map unit:* 2 percent

*Landform:* Deltas, dunes, outwash plains, outwash terraces

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Riser, tread

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear, convex

*Hydric soil rating:* No

### **34B—Merrimac fine sandy loam, 3 to 8 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2tyqs

*Elevation:* 0 to 1,290 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**

*Merrimac and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### **Description of Merrimac**

##### **Setting**

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines

*Landform position (two-dimensional):* Backslope, footslope, shoulder, summit

*Landform position (three-dimensional):* Side slope, crest, riser, tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

#### **Typical profile**

*Ap - 0 to 10 inches:* fine sandy loam

*Bw1 - 10 to 22 inches:* fine sandy loam

*Bw2 - 22 to 26 inches:* stratified gravel to gravelly loamy sand

*2C - 26 to 65 inches:* stratified gravel to very gravelly sand

#### **Properties and qualities**

*Slope:* 3 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 2 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 1.4 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Low (about 4.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2s

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

#### **Minor Components**

##### **Hinckley**

*Percent of map unit:* 5 percent

*Landform:* Deltas, eskers, kames, outwash plains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, rise

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

##### **Sudbury**

*Percent of map unit:* 5 percent

*Landform:* Deltas, outwash plains, terraces

*Landform position (two-dimensional):* Foothslope

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Windsor**

*Percent of map unit:* 3 percent

*Landform:* Deltas, dunes, outwash plains, outwash terraces  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Riser, tread  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

#### **Agawam**

*Percent of map unit:* 2 percent  
*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines, stream terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **34C—Merrimac fine sandy loam, 8 to 15 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2tyqt  
*Elevation:* 0 to 1,030 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**

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

#### **Description of Merrimac**

##### **Setting**

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines  
*Landform position (two-dimensional):* Backslope, footslope, shoulder, summit  
*Landform position (three-dimensional):* Side slope, crest, riser, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

##### **Typical profile**

*Ap - 0 to 10 inches:* fine sandy loam  
*Bw1 - 10 to 22 inches:* fine sandy loam  
*Bw2 - 22 to 26 inches:* stratified gravel to gravelly loamy sand  
*2C - 26 to 65 inches:* stratified gravel to very gravelly sand

##### **Properties and qualities**

*Slope:* 8 to 15 percent

*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 2 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.4 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Low (about 4.6 inches)

#### **Interpretive groups**

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

#### **Minor Components**

##### **Sudbury**

*Percent of map unit:* 5 percent  
*Landform:* Deltas, outwash plains, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

##### **Hinckley**

*Percent of map unit:* 5 percent  
*Landform:* Deltas, eskers, kames, outwash plains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

##### **Windsor**

*Percent of map unit:* 5 percent  
*Landform:* Deltas, dunes, outwash plains, outwash terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Riser, tread  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

## 36A—Windsor loamy sand, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svkg

*Elevation:* 0 to 990 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

*Windsor, loamy sand, and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Windsor, Loamy Sand

#### Setting

*Landform:* Deltas, dunes, outwash plains, outwash terraces

*Landform position (three-dimensional):* Riser, tread

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear, convex

*Parent material:* Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

#### Typical profile

*O - 0 to 1 inches:* moderately decomposed plant material

*A - 1 to 3 inches:* loamy sand

*Bw - 3 to 25 inches:* loamy sand

*C - 25 to 65 inches:* sand

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 3.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2s

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

#### **Minor Components**

##### **Deerfield, loamy sand**

*Percent of map unit:* 10 percent

*Landform:* Deltas, outwash plains, terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread, talus

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Hinckley, loamy sand**

*Percent of map unit:* 5 percent

*Landform:* Deltas, eskers, kames, outwash plains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, rise

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

## **36B—Windsor loamy sand, 3 to 8 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2svkf

*Elevation:* 0 to 1,210 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**

*Windsor, loamy sand, and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### **Description of Windsor, Loamy Sand**

##### **Setting**

*Landform:* Deltas, dunes, outwash plains, outwash terraces

*Landform position (three-dimensional):* Riser, tread

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear, convex

*Parent material:* Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

##### **Typical profile**

*0 - 0 to 1 inches:* moderately decomposed plant material

*A - 1 to 3 inches:* loamy sand  
*Bw - 3 to 25 inches:* loamy sand  
*C - 25 to 65 inches:* sand

**Properties and qualities**

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.5 inches)

**Interpretive groups**

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

**Minor Components**

**Hinckley, loamy sand**

*Percent of map unit:* 10 percent  
*Landform:* Deltas, eskers, kames, outwash plains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Head slope, nose slope, side slope, crest, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

**Deerfield, loamy sand**

*Percent of map unit:* 5 percent  
*Landform:* Deltas, outwash plains, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## 36C—Windsor loamy sand, 8 to 15 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2svkq  
*Elevation:* 0 to 1,260 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**

*Windsor and similar soils:* 85 percent

*Minor components:* 15 percent

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

### **Description of Windsor**

#### **Setting**

*Landform:* — error in exists on —

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Side slope, riser

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Parent material:* Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

#### **Typical profile**

*Oe - 0 to 1 inches:* moderately decomposed plant material

*Ap - 1 to 11 inches:* loamy sand

*Bw - 11 to 31 inches:* loamy sand

*C - 31 to 65 inches:* sand

#### **Properties and qualities**

*Slope:* 8 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 4.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

### **Minor Components**

#### **Hinckley**

*Percent of map unit:* 10 percent

*Landform:* Deltas, eskers, kames, outwash plains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, rise

*Down-slope shape:* Convex

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

**Deerfield**

*Percent of map unit:* 5 percent

*Landform:* Deltas, outwash plains, terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread, talus

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

## **37C—Manchester gravelly sandy loam, 3 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 9ln6

*Elevation:* 0 to 1,200 feet

*Mean annual precipitation:* 43 to 54 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 140 to 185 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Manchester and similar soils:* 80 percent

*Minor components:* 20 percent

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

**Description of Manchester**

**Setting**

*Landform:* Eskers, kames, outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy and gravelly glaciofluvial deposits derived from sandstone and shale and/or basalt

**Typical profile**

*Ap - 0 to 9 inches:* gravelly sandy loam

*Bw - 9 to 18 inches:* gravelly loamy sand

*C - 18 to 65 inches:* stratified extremely gravelly coarse sand to very gravelly loamy sand

**Properties and qualities**

*Slope:* 3 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

**Minor Components**

**Penwood**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Hartford**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Branford**

*Percent of map unit:* 3 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Ellington**

*Percent of map unit:* 3 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Unnamed, nongravelly surface**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

**Unnamed, gravelly loamy sand surface**

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

## **37E—Manchester gravelly sandy loam, 15 to 45 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 9In7

*Elevation:* 0 to 1,200 feet

*Mean annual precipitation:* 43 to 54 inches

*Mean annual air temperature:* 45 to 55 degrees F

*Frost-free period:* 140 to 185 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Manchester and similar soils:* 80 percent

*Minor components:* 20 percent

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

### **Description of Manchester**

#### **Setting**

*Landform:* Eskers, kames, outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy and gravelly glaciofluvial deposits derived from sandstone and shale and/or basalt

#### **Typical profile**

*Ap - 0 to 9 inches:* gravelly sandy loam

*Bw - 9 to 18 inches:* gravelly loamy sand

*C - 18 to 65 inches:* stratified extremely gravelly coarse sand to very gravelly loamy sand

#### **Properties and qualities**

*Slope:* 15 to 45 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

### **Minor Components**

#### **Penwood**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### **Hartford**

*Percent of map unit:* 5 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Branford**

*Percent of map unit:* 5 percent  
*Landform:* Outwash plains, terraces  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Walpole**

*Percent of map unit:* 3 percent  
*Landform:* Depressions on terraces, drainageways on terraces  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

**Scitico**

*Percent of map unit:* 2 percent  
*Landform:* Depressions, terraces, drainageways  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## 38A—Hinckley loamy sand, 0 to 3 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2svm7  
*Elevation:* 0 to 1,420 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**

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

**Description of Hinckley**

**Setting**

*Landform:* Kame terraces, outwash plains, outwash terraces, outwash deltas  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave, linear, convex  
*Across-slope shape:* Linear, concave, convex  
*Parent material:* Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

**Typical profile**

*Oe - 0 to 1 inches:* moderately decomposed plant material  
*A - 1 to 8 inches:* loamy sand  
*Bw1 - 8 to 11 inches:* gravelly loamy sand

*Bw2 - 11 to 16 inches:* gravelly loamy sand  
*BC - 16 to 19 inches:* very gravelly loamy sand  
*C - 19 to 65 inches:* very gravelly sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 3.1 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Hydric soil rating:* No

#### **Minor Components**

##### **Windsor**

*Percent of map unit:* 5 percent  
*Landform:* Kame terraces, outwash terraces, outwash deltas  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex, concave, linear  
*Across-slope shape:* Linear, convex, concave  
*Hydric soil rating:* No

##### **Sudbury**

*Percent of map unit:* 5 percent  
*Landform:* Kame terraces, outwash terraces, outwash deltas  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex, concave, linear  
*Across-slope shape:* Linear, convex, concave  
*Hydric soil rating:* No

##### **Merrimac**

*Percent of map unit:* 5 percent  
*Landform:* Kame terraces, outwash terraces, outwash deltas  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex, concave, linear  
*Across-slope shape:* Linear, convex, concave  
*Hydric soil rating:* No

## 38C—Hinckley loamy sand, 3 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svmb

*Elevation:* 0 to 1,290 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

*Hinckley and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Hinckley

#### Setting

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Foothslope, toeslope, shoulder, backslope, summit

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, riser, tread

*Down-slope shape:* Convex, concave, linear

*Across-slope shape:* Concave, linear, convex

*Parent material:* Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

#### Typical profile

*Oe - 0 to 1 inches:* moderately decomposed plant material

*A - 1 to 8 inches:* loamy sand

*Bw1 - 8 to 11 inches:* gravelly loamy sand

*Bw2 - 11 to 16 inches:* gravelly loamy sand

*BC - 16 to 19 inches:* very gravelly loamy sand

*C - 19 to 65 inches:* very gravelly sand

#### Properties and qualities

*Slope:* 3 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 3.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

**Minor Components**

**Windsor**

*Percent of map unit:* 5 percent

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Shoulder, backslope, footslope, toeslope, summit

*Landform position (three-dimensional):* Crest, head slope, nose slope, side slope, riser, tread

*Down-slope shape:* Convex, concave, linear

*Across-slope shape:* Concave, linear, convex

*Hydric soil rating:* No

**Merrimac**

*Percent of map unit:* 5 percent

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines

*Landform position (two-dimensional):* Shoulder, toeslope, backslope, footslope, summit

*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest, riser, tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Agawam**

*Percent of map unit:* 3 percent

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Shoulder, backslope, toeslope, summit, footslope

*Landform position (three-dimensional):* Crest, head slope, nose slope, side slope, tread, riser

*Down-slope shape:* Linear, convex, concave

*Across-slope shape:* Convex, linear, concave

*Hydric soil rating:* No

**Sudbury**

*Percent of map unit:* 2 percent

*Landform:* Kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Backslope, footslope

*Landform position (three-dimensional):* Base slope, tread

*Down-slope shape:* Concave, linear

*Across-slope shape:* Linear, concave

*Hydric soil rating:* No

## 38E—Hinckley loamy sand, 15 to 45 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svmj  
*Elevation:* 0 to 1,280 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

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

### Description of Hinckley

#### Setting

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, riser  
*Down-slope shape:* Linear, convex, concave  
*Across-slope shape:* Linear, concave, convex  
*Parent material:* Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

#### Typical profile

*Oe - 0 to 1 inches:* moderately decomposed plant material  
*A - 1 to 8 inches:* loamy sand  
*Bw1 - 8 to 11 inches:* gravelly loamy sand  
*Bw2 - 11 to 16 inches:* gravelly loamy sand  
*BC - 16 to 19 inches:* very gravelly loamy sand  
*C - 19 to 65 inches:* very gravelly sand

#### Properties and qualities

*Slope:* 15 to 45 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 3.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

### Minor Components

#### Windsor

*Percent of map unit:* 5 percent

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, riser

*Down-slope shape:* Concave, convex, linear

*Across-slope shape:* Linear, concave, convex

*Hydric soil rating:* No

#### Merrimac

*Percent of map unit:* 5 percent

*Landform:* Eskers, kames, outwash plains, outwash terraces, moraines

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest, riser

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Agawam

*Percent of map unit:* 3 percent

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Nose slope, side slope, crest, head slope, riser

*Down-slope shape:* Linear, convex, concave

*Across-slope shape:* Convex, linear, concave

*Hydric soil rating:* No

#### Sudbury

*Percent of map unit:* 2 percent

*Landform:* Eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, outwash deltas

*Landform position (two-dimensional):* Backslope, footslope

*Landform position (three-dimensional):* Base slope, tread

*Down-slope shape:* Linear, concave

*Across-slope shape:* Linear, concave

*Hydric soil rating:* No

## 109—Fluvaquents-Udifluvents complex, frequently flooded

### Map Unit Setting

*National map unit symbol:* 9ljw  
*Elevation:* 0 to 2,000 feet  
*Mean annual precipitation:* 43 to 54 inches  
*Mean annual air temperature:* 45 to 55 degrees F  
*Frost-free period:* 120 to 185 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Fluvaquents, frequently flooded, and similar soils:* 50 percent  
*Udifluvents, frequently flooded, and similar soils:* 35 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Fluvaquents, Frequently Flooded

#### Setting

*Landform:* Flood plains  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Alluvium

#### Typical profile

*A - 0 to 4 inches:* silt loam  
*Cg1 - 4 to 14 inches:* fine sand  
*Cg2 - 14 to 21 inches:* very fine sand  
*Ab1 - 21 to 38 inches:* silt loam  
*Ab2 - 38 to 45 inches:* fine sandy loam  
*C'g3 - 45 to 55 inches:* sand  
*A'b3 - 55 to 60 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*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:* About 0 to 12 inches  
*Frequency of flooding:* Frequent  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 7.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* B/D  
*Hydric soil rating:* Yes

### Description of Udifluvents, Frequently Flooded

#### Setting

*Landform:* Flood plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium

#### Typical profile

*A - 0 to 2 inches:* fine sandy loam

*C - 2 to 4 inches:* loamy fine sand

*Ap - 4 to 12 inches:* fine sandy loam

*AC - 12 to 18 inches:* fine sandy loam

*C1 - 18 to 35 inches:* loamy sand

*C2 - 35 to 38 inches:* very gravelly loamy sand

*C3 - 38 to 60 inches:* very gravelly coarse sand

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to very high (0.57 to 35.99 in/hr)

*Depth to water table:* About 72 inches

*Frequency of flooding:* Frequent

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 4.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6w

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

### Minor Components

#### Riverwash

*Percent of map unit:* 5 percent

*Landform:* Flood plains

*Hydric soil rating:* Yes

#### Saco

*Percent of map unit:* 3 percent

*Landform:* Flood plains

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### Rippowam

*Percent of map unit:* 3 percent

*Landform:* Flood plains

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

**Pootatuck**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

**Occum**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## **305—Udorthents-Pits complex, gravelly**

**Map Unit Setting**

*National map unit symbol:* 9lmf  
*Elevation:* 0 to 2,000 feet  
*Mean annual precipitation:* 43 to 54 inches  
*Mean annual air temperature:* 45 to 55 degrees F  
*Frost-free period:* 120 to 185 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Udorthents and similar soils:* 65 percent  
*Pits:* 25 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Udorthents**

**Setting**

*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Gravelly outwash

**Typical profile**

*A - 0 to 5 inches:* loam  
*C1 - 5 to 21 inches:* gravelly loam  
*C2 - 21 to 80 inches:* very gravelly sandy loam

**Properties and qualities**

*Slope:* 0 to 35 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to high (0.00 to 1.98 in/hr)

*Depth to water table:* About 24 to 54 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 6.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

#### **Description of Pits**

##### **Typical profile**

*C - 0 to 65 inches:* very gravelly sand

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* Unranked

#### **Minor Components**

##### **Hinckley**

*Percent of map unit:* 2 percent

*Landform:* Eskers, kames, outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

##### **Windsor**

*Percent of map unit:* 2 percent

*Landform:* Kames, outwash plains, terraces

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

##### **Merrimac**

*Percent of map unit:* 2 percent

*Landform:* Kames, outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

##### **Gloucester**

*Percent of map unit:* 2 percent

*Landform:* Hills

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

##### **Ninigret**

*Percent of map unit:* 1 percent

*Landform:* Outwash plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* No

### **Sudbury**

*Percent of map unit:* 1 percent  
*Landform:* Outwash plains, terraces  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## **306—Udorthents-Urban land complex**

### **Map Unit Setting**

*National map unit symbol:* 91mg  
*Elevation:* 0 to 2,000 feet  
*Mean annual precipitation:* 43 to 56 inches  
*Mean annual air temperature:* 45 to 55 degrees F  
*Frost-free period:* 120 to 185 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Udorthents and similar soils:* 50 percent  
*Urban land:* 35 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Udorthents**

#### **Setting**

*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Drift

#### **Typical profile**

*A - 0 to 5 inches:* loam  
*C1 - 5 to 21 inches:* gravelly loam  
*C2 - 21 to 80 inches:* very gravelly sandy loam

#### **Properties and qualities**

*Slope:* 0 to 25 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to high (0.00 to 1.98 in/hr)  
*Depth to water table:* About 54 to 72 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 6.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated): 3e*  
*Hydrologic Soil Group: B*  
*Hydric soil rating: No*

#### **Description of Urban Land**

##### **Typical profile**

*H - 0 to 6 inches: material*

##### **Interpretive groups**

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 8*  
*Hydrologic Soil Group: D*  
*Hydric soil rating: Unranked*

#### **Minor Components**

##### **Unnamed, undisturbed soils**

*Percent of map unit: 8 percent*  
*Hydric soil rating: No*

##### **Udorthents, wet substratum**

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

##### **Rock outcrop**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

## **308—Udorthents, smoothed**

#### **Map Unit Setting**

*National map unit symbol: 9lmj*  
*Elevation: 0 to 2,000 feet*  
*Mean annual precipitation: 43 to 56 inches*  
*Mean annual air temperature: 45 to 55 degrees F*  
*Frost-free period: 120 to 185 days*  
*Farmland classification: Not prime farmland*

#### **Map Unit Composition**

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

#### **Description of Udorthents**

##### **Setting**

*Down-slope shape: Convex*  
*Across-slope shape: Linear*

**Typical profile**

*A - 0 to 5 inches:* loam  
*C1 - 5 to 21 inches:* gravelly loam  
*C2 - 21 to 80 inches:* very gravelly sandy loam

**Properties and qualities**

*Slope:* 0 to 35 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to high (0.00 to 1.98 in/hr)  
*Depth to water table:* About 24 to 54 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 6.8 inches)

**Interpretive groups**

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

**Minor Components**

**Udorthents, wet substratum**

*Percent of map unit:* 7 percent  
*Hydric soil rating:* No

**Unnamed, undisturbed soils**

*Percent of map unit:* 7 percent  
*Hydric soil rating:* No

**Urban land**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**W—Water**

**Map Unit Composition**

*Water:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

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