COMMITMENT & INTEGRITY DRIVE RESULTS

Middlesex Corporate Center 213 Court Street | 4th Floor Middletown, Connecticut 06457 www.woodardcurran.com

Via Electronic Mail

June 23, 2020

Kacie Hand Town Planner Town of Wallingford Planning and Zoning Department 45 South Main Street Wallingford, CT 06492

Re: Soil Remediation Project at 21 Toelles Road, Wallingford, CT

Dear Ms. Hand:

Pfizer Inc. (Pfizer) is applying to the Town of Wallingford for a permit for the proposed remediation of wetland soils at a formerly owned industrial facility located at 21 Toelles Road in Wallingford, CT. On behalf of Pfizer, Woodard & Curran is providing the attached Application for Special Permit for Excavation and Filling and associated attachments.

The remediation project consists of the excavation and disposal of shallow wetland soil that is subject to cleanup under the state of Connecticut RSRs as administered by the Connecticut Department of Energy and Environmental Protection (CTDEEP). The remediation is intended to address historical impacts above a site-specific ecological cleanup goal accepted by CTDEEP. The area will be restored to existing grades following the excavation and replanted with native wetland plants resulting in improved environmental conditions within the wetland. A permit application has also been submitted to the Town of Wallingford Inland Wetlands and Watercourses Department.

We appreciate your review of this project. If upon your review you have any questions, please do not hesitate to call me at 781.613.0576 or kapigian@woodardcurran.com.

Sincerely,

WOODARD & CURRAN, INC.

Kyle Apigian, Ph.D.

Technical Manager

Cc: Samantha Somers, Pfizer Lucas Hellerich, W&C Jack Markey, W&C Tom Talbot, P&Z

Enclosure(s)

PN: 0232596.00





Planning and Zoning Excavation Permit Application

Soil Remediation Project Wallingford, CT

213 Court Street, 4th Floor Middletown, CT 06457 1-800-426-4262

Woodardcurran.com

232596.00 **Pfizer** June 2020



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1. TOWN OF WALLINGFORD PLANNING AND ZONING APPLICATION FOR SPECIAL PERMIT FOR EXCAVATION AND FILLING OF LAND

				XN	ew Application	(\$1,030.00 Fee)
					Renew	al (\$550.00 Fee)
AP	PLICAT	ION NO.:	[Residential (1 (Anything over	. 00–250 c.y \$ 250 c.y. all applic	250.00 Fee) able fees apply)
		APPLIC	CATION FOR			
		SPECIAL PERMIT FOR EXC	AVATION ANI) FILLING OF	FLAND	
Applica	ant: Pfi	zer Inc				
		(Name of Applicant o	or Agent, please pr	int)		
Mailing	g Address	Pfizer Inc, 235 East 42nd Street	et, MS: NYO-2	219-05-01		
	E	New York		New York		10017
		(City)	1. 1	(State)		(Zip)
Telephe	one:	(212) 338-1812	Antry	20 fla		Christopher J. Clark
****	*****	(Please include area code)	*********	Signature of App	olicant or Agent) Pfizer, Inc.
1.	I (We)	hereby petition the Planning and Zoning Con	mmission to:			
		Fill property as described below,				
	X	Remove top soil loam gravel clay stope of	r minerals			
		Checkmile and have in the last state				
	21 To	sockpile earth materials on land located in	i Wallingford at:			
	2110	Address of P	roject)			
****	*****	***************************************	******	******	******	****
IF KEI	NEWAL	OPERATION:		12		
2.	Initial p	permit for site granted on:				
3. Expiration date of existing permit:						
4.	Amoun	t of bond in place:				
All oper	rations m	ust comply with the requirements as defined	under Section 6.1	0 of the Wallingf	ford Zoning Reg	ulations.
Applica Fee Pai	ntion d:	Date:	Recording Fee Paid:		Date:	
*Pursu	ant to Sec	ction 8-3h of the Connecticut General Statu	tes no Special Der	mit is offective u		lad an aba Tara I

*Pursuant to Section 8-3b of the Connecticut General Statutes, no Special Permit is effective until a copy is filed on the Land Records. If this application is approved, a \$60.00 fee will be required to cover the filing of this Special Permit on the Land Records; checks should be made payable to "Town Clerk - Wallingford".

III THE APPLICANT, OR THEIR REPRESENTATIVE, MUST BE PRESENT AT EACH PZC MEETING AT WHICH THEIR APPLICATION WILL BE HEARD III

Revised: 12/01/17



2. PROJECT BACKGROUND

On behalf of Pfizer Inc. (Pfizer), Woodard & Curran has prepared this permit application in support of the proposed Wetland Soil Remediation Project (the Project), located at 21 Toelles Road in Wallingford, Connecticut (Subject Site). The project scope involves a defined area of impacted wetland soil that is subject to cleanup under the state of Connecticut Remediation Standard Regulations (RSRs) as administered by the Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Connecticut Transfer Act obligations as triggered by the property sale from Pfizer (former property owner) to AMETEK, Specialty Metal Products Division (current property owner). The project involves the remediation of soil to address historical impacts in the wetland area. Shallow soils within the wetland area exhibiting impacts above a site-specific ecological cleanup goal accepted by CTDEEP will be excavated and disposed off-site. The area will then be restored (backfilled and planted) in-kind to approximate existing conditions resulting in improved environmental conditions and an enhanced wetland habitat.

The Subject Site is located at 21 and 25 Toelles Road, in Wallingford, Connecticut, although the property is typically referred to as 21 Toelles Road. It is identified as Map 73, Block 10, Lot 5 according to the Town of Wallingford's Tax Assessor's office (Parcels 1 and 2 combined). It is currently owned and operated by AMETEK, Specialty Metal Products Division. The location of the Subject Site is depicted on **Attachment A**, **Drawing G-002**. The attached drawing set also includes the Key Map, existing conditions plans, construction drawings, and site restoration plans. The Subject Site encompasses a total area of approximately 14 acres, of which approximately 4.8 acres is wetlands. The anticipated area of wetland excavation is 2.23 acres. There are four buildings located on the site which were constructed between 1960 and 1999. Undeveloped forested wetlands (broad-leaved deciduous) are present on the southern portion of the site adjacent to Wharton Brook. Site features are depicted on **Attachment A**, **Drawing C-000**.

A multi-year, multi-phase environmental investigation was performed across the Subject Site under a Licensed Environmental Professional (LEP) with review by the CT DEEP's Remediation Division, to evaluate historical impacts at the Subject Site. In July 2015, the environmental investigation and remediation of all Site areas of concern were completed under the LEP program, and the CTDEEP issued a Letter of No Audit, with the exception of the wetland area and a smaller confined area interior to one of the property buildings which still require remedy implementation. Several environmental investigations were conducted at the wetland area which showed wetland soil/ sediment was the only media and nickel was the only contaminant shown to be a driver for remediation. The environmental investigation efforts also confirmed the extent of excavation needed to meet the site-specific ecological cleanup goal is confined to a 2.23 acre area and a depth of 6 inches to 2 feet. The remedy approach and remedial extents were reviewed with CTDEEP who provided concurrence that the remediation approach and extents were acceptable.

2.1 SITE DESCRIPTION

The Subject Site is improved with four distinct buildings that were constructed from 1960 to 1999 in various phases. Building 1, located in the northwestern portion of the Site, is 28,000 square feet in size and used as the Primary Manufacturing Facility. Building 2, designated as the Main Plant, is approximately 65,000 square feet in size and is located on the northeast portion of the Site Building 3, designated as the "Specialty Product Development" area, is approximately 7,200 square feet in size and was constructed as an extension of the southern end of Building 1. Building 4 is located in the southwestern portion of the Site and is approximately 44,000 square feet in size. Asphalt-paved parking areas are located in between all buildings.

Wetlands were identified, classified, and delineated at the Subject Site as part of a comprehensive wetland delineation completed by New England Environmental Services in December of 2019. Documentation detailing the results of this delineation is presented in **Attachment A**. The wetland type was classified under the Federal Geographic Data Committee Wetlands Classification Standard as "PFO1E" (Palustrine Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated). These wetlands are dominated by woody vegetation greater than 6 meters tall. The overstory is dominated by American sycamore, red maple, yellow birch, and tulip tree, and the shrub/sapling layer includes



spicebush, highbush blueberry, and sweet pepperbush. Incursions of invasive common reed (*Phragmites australis*) and Japanese knotweed (*Fallopia japonica*) are present at the Site. A list of vegetation observed in the site wetlands (during the delineation and recorded during other site visits) is presented as **Table 1**.

The wetlands are associated with the watercourse known as Wharton Brook, a perennial stream, which forms the southeastern property boundary and is located to the southeast of the proposed remediation area. Wharton Brook flows in a sinuous streambed from the northeast to the southwest, ultimately discharging to the Quinnipiac River approximately 0.3 miles to the west of the property.

Shallow soil (the upper six inches) within the wetlands consists of deposits of organic, brown to very dark gray, alluvial soils. Deeper soils (below six inches) are similar but exhibit red to yellowish matrix concentrations. This soil is best classified as fine sandy loam under USDA soil taxonomy guidelines. Typical Total Organic Carbon (TOC) content of this soil was observed to be between 4.5%-7%, based on surficial soil samples collected in the wetland area.

The wetland soils are typically saturated to the surface throughout the majority of the year. Groundwater within the palustrine forested wetlands has been observed as shallow as six inches below the ground surface. Groundwater elevations are assumed to be closely tied with the level of the adjacent stream. The excavation will take place within the 100-year flood zone, and portions of the wetland are within the floodway of Wharton Brook, and experience seasonal flooding.



3. DESCRIPTION OF ACTIVITY

Additional information associated with the Planning and Zoning Permit Application is provided in this section.

3.1 DESCRIPTION OF ACTIVITY

The project is a soil remediation project designed to address historical impacts in the wetland area on the Subject Site. Soil remediation work will take place entirely within approximately 2.23 acres of wetlands; however, upland areas adjacent to the work area will also be disturbed to allow for work area access. The project will include the excavation and removal of shallow impacted wetland soil at concentrations above a site-specific ecological cleanup criterion accepted by CTDEEP within the wetland area located on the southern portion of the property. The proposed excavation area encompasses an approximate 97,500 square foot area (2.23 acres). Approximately 70,000 square feet (1.61 acres) will be excavated to a depth of 6-inches below grade, and the remaining 27,000 square feet (0.62 acres) will be excavated to a depth of 2-feet below grade. The proposed excavation areas, and depth of excavated areas are presented in **Drawing C-001**. Prior to implementation, the selected remediation contractor will be required to submit for review (and approval by the Project Engineer) a Contractor's Work Plan that will detail the approach to be implemented in the field. The following paragraphs outline the general approach that will likely be utilized to conduct the remediation.

3.2 PROPOSED CONSTRUCTION ACTIVITIES

The construction activities will include site mobilization and preparation, excavation, and restoration phases. The activities will commence with a pre-construction survey, establishment of temporary facilities and controls, installation of access points from the adjacent parking area into the wetland, and installation of erosion and sedimentation controls. Brush and small diameter trees will be cut to the ground surface. Large diameter trees (greater than 15 inches diameter at breast height) will be preserved where possible, and minimal excavation will be completed in close proximity to these trees in order to protect root systems. Cut trees, branches, and brush from non-invasive species will be retained and re-used as brush piles during the restoration phase to help establish wildlife habitat. Stockpile staging and load-out areas will be established within the wetland area immediately adjacent to upland areas as depicted in **Attachment A**, **Drawing C-006**. Temporary haul roads extending into the wetlands will be established using mats. A proposed site sequencing plan detailing the sequence of the activities and proposed locations of these site features are depicted in **Attachment A**, **Drawing C-006**.

Excavation will be performed using low ground pressure (rubber tire or tracks) mechanized equipment. The Central third of the excavation area will have approximately two feet of soil removed while the East and West thirds will have approximately six inches of soil removed. All soil removed will be disposed of off-site.

The excavated area will be restored to pre-existing grades by placement of backfill, with the top twelve inches (six inches in the six-inch excavation area) being comprised of organic wetland topsoil. Backfill below 12 inches in depth will be bank run gravel. In accordance with approved wetlands permits, a wetland seed mix will then be applied across the disturbed area. Wetland plantings (native trees and shrubs) will be planted during the first growing season following the completion of excavation and backfilling activities. Temporary haul roads, soil staging areas, and other temporary features will also be removed during the restoration phase. Following construction, the restored wetlands will be monitored during the growing season to evaluate plant growth, soil conditions, and site stability. A restoration plan with proposed restored elevations and trees to remain in place are depicted in **Drawing C-005**.



3.3 SOIL EROSION AND SEDIMENT CONTROL PLAN

Installation of sedimentation and erosion controls will be completed following mobilization to the site, prior to any excavation activities and include a combination of silt fencing, straw wattles, anti-tracking pads and tire and track washing pads. Throughout excavation and backfilling activities, the selected contractor will inspect all sedimentation and erosion control measures to ensure they are in good repair, and in the event of deficiencies the contractor shall correct the deficiency as soon as possible. The details of these inspections and repairs will be reported to the Project Engineer on a weekly basis.

As depicted in **Attachment A, Drawing C-001** erosion and sediment controls will be utilized at the site where potential for erosion concerns may be possible. A silt fence lined with a straw wattle, or similar product, will be placed around the entirety of the excavation area, as detailed in **Attachment A, Drawing C-202**. In locations where the excavation area is in proximity to Wharton Brook, and the excavation bottom will be below the ordinary high-water mark, two rows of silt fence and wattles, facing opposite directions, will be used for additional erosion and sediment controls. For additional protection in the flood-prone areas, the contractor will be required to submit a Flood Mitigation Plan, which will include temporary water barriers (e.g. HydraBarrier, Aqua Barrier coffer dam, WIPP system, PortaDam), to be used if site and weather conditions require flood control. The details of the installation of the silt fence sedimentation barriers, and temporary water barriers are illustrated in **Attachment A, Drawings C-201 and C-202**. Additional stocks of erosion and sedimentation control materials will be maintained on-site and stored out of the floodway/work area.

During the course of the excavation activities, soil will be excavated and temporarily staged within the wetland area. Backfill materials will be tested¹ prior to importation to the Site and staged during backfilling activities. Silt fence and wattles will be placed, in a similar fashion as the wetland excavation area, around each of the soil staging areas and the material management area. Additionally, a minimum of 10-millimeter thick polyethylene sheeting will be placed underneath each of the soil staging areas prior to placing the materials. At the end of each workday the piles will be covered and secured with a minimum of 6-millimeter thick polyethylene sheeting.

Three proposed access areas will be used for trucks and equipment to gain access to the wetland remediation area. The entrance to each of these access areas will have anti-tracking pads. A separate truck soil loading and tire and track washdown pad will also be constructed at each of the areas. Physical removal of soil and sediment from truck tires and equipment prior to leaving the excavation area will be performed on the pad. The pad will be designed in a fashion to collect the soil and sediment following removal from the equipment, for proper storage and offsite disposal. The proposed locations for the features described above are depicted on **Attachment A**, **Drawing C-006**. The details of the construction of these pads are detailed in **Attachment A**, **Drawings C-201 and C-202**. All sediment and erosion control methods will remain in place until site restoration has been completed, with the exception of the erosion and sediment control surrounding the excavated wetland area which will remain in place until acceptable regrowth of the wetland area, as determined by the Project Engineer in accordance with federal, state and local permits, has been observed.

Following backfilling activities, restorative seeding and planting will be conducted within the wetland area to stabilize the soils and sediment. Disturbed and excavated areas not within the wetland will be restored to pre-construction conditions. Ruts will be leveled, and grassed areas will be established. In the event restoration activities commence during less than ideal growing conditions (e.g., cold weather) the area will be seeded, and biodegradable erosion blankets will be placed over the entirety of the backfilled area to act as temporary erosion and sediment control. Planting activities will then occur during the following spring. During the first growing season, the restored wetlands will be monitored on approximately a monthly basis, to ensure adequate regrowth and the stabilization of the soils. If sufficient

¹ Backfill material will be tested and results will be compared to Connecticut Remediation Standard Regulations.



regrowth is not observed by the Project Engineer, additional plantings and seeding will occur in the wetland and/or upland areas. Erosion and sediment control measures placed around the excavation area will only be removed when sufficient regrowth, as determined by the Project Engineer in accordance with federal, state and local permits, is observed within the remedial wetland area. Wetland restoration plans detailing the proposed elevations of restored area, as well as seeding and planting, are depicted on **Attachment A, Drawing C-005**.

3.4 STORMWATER MANAGEMENT

Stormwater from the existing outfall currently located at the upgradient side of the wetland area will be temporarily rerouted to outside of the excavation area during excavation and restoration activities. Following restoration of the wetland, the outfall riprap pad will be restored and the temporary outfall and associated temporary riprap pad and conveyance piping will be removed or repurposed.

A series of calculations were performed to confirm the sizing of the riprap pad. The velocity and flow from the onsite stormwater conveyance system was calculated using Hydroflow Express Connection for Autodesk® AutoCAD® Civil 3D® (2019 Version), both for the existing stormwater outfall as well as the temporary stormwater bypass to be used during construction activities. The locations of existing and proposed temporary stormwater conveyance systems are depicted on the Drawings. The calculations took into account the length, size, shape and slope of the pipe among other physical characteristics. The calculations assumed the highest flow scenario: the stormwater conveyance system at maximum capacity (i.e. piping and catch basins full to capacity with stormwater) and under headwater conditions. The calculated discharge flows were used to determine the specifications and dimensions of the energy dissipation riprap pad is designed to disperse the velocity of the single stormwater discharge point into a sheet flow over the entire area of the pad at a nominal velocity. In the event of ponding within the pad, the ponded water will aid in reducing the velocity of the stormwater discharge point. As an added protective measure, the pad will be surrounded by silt fencing with a strawbale barrier to further reduce velocity of the stormwater discharge and capture sediment or debris carried with the stormwater.

No net increase in flow is anticipated based on the temporary relocation of the outfall; therefore, no increased flooding to downstream properties or adjacent properties in North Haven are anticipated.

3.5 PROJECT SCHEDULE

Pending approval of permits, the proposed excavation and restoration project activities are anticipated to begin approximately in October 2020 and end approximately in January 2021. Excavation and restoration activities include mobilization to the site, excavation, backfilling, restoration and demobilization activities. During excavation and backfilling activities, excavated wetland soils, clean bank run gravel, as well as clean organic soil will be temporarily staged onsite. The proposed wetland excavation work is anticipated to occur in three phases, moving from the eastern to western to central (roughly third) portions of the wetland excavation area. During excavation of the eastern and western portions, an approximate volume of 650 yards of excavated soils will be generated from each phase and staged over a two to three-week period and transported offsite for disposal during one to two weeks following the excavation. For the central portion, an approximate 2,000 yards of excavated soils will be generated and staged over a two to three-week period and transported offsite for disposal during a two to three-week period. Following removal of the excavated soils from each of the phases, backfill materials will be imported to the site and placed into the excavation areas. In the eastern and western portions, an approximate volume of 650 yards of clean organic soil will be staged for approximately one to two weeks while the excavated areas are backfilled to the proposed grades. The central portion of the site will have an approximate volume of 1.000 vards of bank run gravel and 1.000 vards of clean organic soil stockpiled for approximately two to three weeks while the excavated areas are being backfilled. Wetlands seeding will be applied soon after the backfilling has been completed. Wetlands planting activities are anticipated to be performed in Spring 2021, followed by wetland maintenance activities.



3.6 CONTINGENCY MEASURES AND PLANNING

Mitigation measures will be implemented to limit the incursion of flood waters into the active excavation area during construction. Flood barriers (e.g., cofferdams) will be installed along the limit of work in low lying areas to limit the potential for flooding. Heavy equipment used in the wetlands during remediation, when not in use, will be staged on a lined washdown pad located adjacent to the upland area (outside of the floodway). If severe flooding is anticipated, heavy equipment will be moved to adjacent, paved, upland areas.

The weather forecast will be closely monitored to track potential significant precipitation events, and site activities may be adjusted or stopped if significant flooding of the nearby Wharton Brook is anticipated. Stormwater within the excavation will be managed through a combination of water diversion and construction sequencing in order to minimize the amount of disturbed/open excavation at any given time. Water diversion may include the use of cofferdams or similar measures installed between the excavation and the adjacent Wharton Brook. Construction procedures will include active excavation within small "cells" and rapid backfilling/stabilization to reduce the amount of erosion and pooling of water.

3.7 RESTORATION

The wetlands within the excavated area will be restored in-kind to approximate existing conditions (Attachment A, Drawings C-004, C-005). There will be no net fill at the Site, and no changes to hydraulic conditions. Existing grades will be substantially restored by placement of backfill, with the top twelve inches (six inches in the six-inch deep excavation areas) being composed of organic wetland topsoil. Backfill materials will be tested² prior to importation to the Site and staged during backfilling activities. wetland seed mix will then be sown across the restored area prior to installation of a biodegradable fiber blanket. Wetland plantings (herbaceous plugs, shrubs, and trees) will be installed during appropriate seasonal conditions. Temporary haul roads, stockpile areas, and other temporary features will also be removed during the restoration phase. Following construction, the restored wetlands will be monitored during the growing season to evaluate plant growth, soil conditions, and site stability. Invasive species will be controlled within the restoration area.

3.8 REMEDIATION ALTERNATIVES

The project scope involves a defined area of impacted wetland soil that is subject to cleanup under the state of Connecticut Remediation Standard Regulations (RSRs) as administered by the Connecticut Department of Energy and Environmental Protection (CTDEEP) and in accordance with the Connecticut Transfer Act. Cleanup of the wetland soils is being performed to meet a site-specific ecological cleanup goal accepted by CTDEEP resulting in improved environmental conditions and an enhanced wetland habitat.

The proposed project avoids or minimizes the impacts to sensitive site features including wetlands, streams, drainage ditches, sensitive ecological habitats, and other regulated resources to the extent practicable, mitigates temporary impacts whenever possible, and ultimately will restore the impacted wetlands to an improved condition (i.e., free of impacts and invasive species) compared to pre-remediation conditions in accordance with state and federal regulations and guidance. The proposed project scope, described in this application, minimized adverse impacts by incorporating results of additional soil delineation and sampling efforts. These additional efforts resulted in the square footage of wetland area affected by the remediation work to be reduced, and confirmed the limit of work did not overlap with the

² Backfill material will be tested and results will be compared to Connecticut Remediation Standard Regulations.



main flowing stream channel or stream bed of Wharton Brook, while still achieving the necessary removal of impacted soils in accordance with the state of Connecticut RSRs..

The additional delineation and sampling efforts also provided the necessary additional data to allow certain large trees (greater than 15 inches diameter at breast height) to be left standing throughout the proposed excavation area that would have alternatively been removed. Retention of large trees will provide habitat value within the wetlands, retain stratification of vegetation layers, aid in soil stabilization, provide shade to the replanted area, and provide a seed source for volunteer plants. The soil excavation around these large trees will only extend up to a radius around these trees approximately equal to the canopy drip line. Minimal scraping of soil using small equipment or hand tools may be completed within the tree dripline above the root zone. Work practices to be taken during construction to minimize impacts outside of the limits of work – including project sequencing, operation of heavy equipment, erosion control, and stabilization of backfill – are discussed above.

In-kind wetland mitigation across the entirety of the project area will be implemented, as discussed in a separate permit application to the Wallingford Inland Wetlands and Watercourses Commission. The application also includes an invasive species monitoring plan, other contingency measures, and a long-term monitoring plan.

Table 1: Existing Conditions Plant Species List 21 Toelles Road, Wallingford, CT - Soil Remediation Project

			wetland	
<u>Layer</u>	Common name	Scientific name	indicator status	invasive?
Herbaceous				
	aster sp.			
	garlic mustard	Alliaria petiolata	FACU	Y
	mugwort	Artemesia vulgaris	UPL	Y
	lakebank sedge	Carex lacustris	OBL	
	sweet woodreed	Cinna arundinacea	FACW	
	dodder	Cucsuta sp.	NA	
	Japanese knotweed	Fallopia japonica	FACU	Y
	lesser celandine	Ficaria verna	FACW	Y
	jewelweed	Impatiens capensis	FACW	
	soft rush	Juncus effusus	OBL	
	Japanese stiltgrass	Microstegium vimenium	FAC	Y
	sensitive fern	Onoclea sensibilis	FACW	
	cinnamon fern	Osmunda cinnamomea	FACW	
	New York fern (?)	Parathelypteris noveboracensis	FAC	
	common reed	Phragmites australis	FACW	Y
	canada clearweed	Pilea pumila	FACW	
	multiflora rose	Rosa multiflora	FACU	Y
	blackberry	Rubus semisetosus	FAC	
	green bulrush	Scirpus atrovirens	OBL	
	Canada goldenrod	Solidago canadensis	FACU	
	skunk cabbage	Symplocarpus foetidus	OBL	
	poison ivy	Toxicodendron radicans	FAC	
Shrub/sapling				
	sweet pepperbush	Clethra alnifolia	FAC	
	northern spicebush	Lindera benzoin	FACW	
	elderberry	Sambucus racemosa	FACU	
	highbush blueberry	Vaccinium corymbosum	FACW	
	smooth arrowwood	Viburnum recognitum	FAC	
Tree				
	boxelder	Acer negundo	FAC	
	red maple	Acer rubrum	FAC	
	tree of heaven	Ailanthus altissima	NA	Y
	speckled alder	Alnus incana	FACW	
	yellow birch	Betula alleghenensis	FAC	
	shagbark hickory	Carya ovata	FACU	
	green ash	Fraxinus pennsylvanica	FACW	
	tulip tree	Liriodendron tulipifera	FACU	
	blackgum	Nyssa sylvatica	FAC	
	American sycamore	Platanus occidentalis	FACW	
	red oak	Quercus rubra	FACU	
	sassatras	Sassafras albidum	FACU	
1/in a	American elm	Ulmus americana	FACW	
vine		Coloratoria da la c		
	ASIATIC DITTERSWEET			Ŷ
	fox grape			
	iox grape		FACU	

Includes plant species documented at the Site during the wetland delineation and Ecological Risk Assessment, as well as those observed during Site visits.



ATTACHMENT A: DRAWINGS



21 TOELLES ROAD WALLINGFORD CT SOIL REMEDIATION PROJECT **PROJECT NO. 0232596.00 JUNE 2020** DRAFT

SHFET LIST TABLE

- COVER SHEET
- GENERAL NOTES, ABBREVIATIONS, LEGEND AND DRAWING INDEX LIST

- EXISTING CONDITIONS PLAN
- EROSION AND SEDIMENTATION CONTROLS
- SITE PREPARATION AND MATERIALS MANAGEMENT
- PROPOSED EXCAVATION LIMITS OF SOIL
- SITE RESTORATION PLAN
- WETLAND RESTORATION PLAN
- PROPOSED SITE SEQUENCING PLAN
- SITE DETAILS 1
- SITE DETAILS 2

213 Court Street, 4th Floor Middletown, Connecticut 06457 888.265.8969 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS



2

	EROSION CONTROL NOTES:
BASE PLAN COMPILED FROM PLAN BY ALFRED BENESCH & COMPANY ENTITLED, TOPOGRAPHIC SURVEY, 21 TOELLES ROAD, WALLINGFORD, CONNECTICUT" DATED DECEMBER 23, 2019.	1. PROVIDE EROSION CONTROL MEASURES AS SHOWN ON DRAWINGS. THESE ARE THE MINI TO BE EMPLOYED BY THE CONTRACTOR.
THE COORDINATES AND ELEVATIONS DEPICTED ON THE PLAN REPRESENT THE NAD '83 AND THE NAVD '88 DATUMS. COORDINATES WERE ESTABLISHED ON THE SITE BASED UPON GPS OBSERVATIONS TAKEN ON OCT 11, 2018 USING TRIMBLE GNSS RTK R10 RECEIVERS AND SOLUTIONS PROVIDED THROUGH THE KEYNET NETWORK.	 CONTRACTOR IS REQUIRED TO PERFORM ALL WORK AND SHALL PROVIDE EROSION AND CONTROL MEASURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PERMITS. ALL SOIL AND EROSION CONTROLS SHALL BE PLACED PRIOR TO ANY CONSTRUCTION ACCONTRACTOR TO NOTIFY THE ENGINEER AND THE OWNER AT LEAST 48 HOURS PRIOR T CONSTRUCTION ACTIVITIES
WETLANDS DELINEATION WAS CONDUCTED BY RICHARD SNARSKI OF NEW ENGLAND ENVIRONMENTAL SERVICES AND FIELD LOCATED BY ALFRED BENESCH AND COMPANY DATED DECEMBER 2019.	CONSTRUCTION ACTIVITIES. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL EROSION CONTROL N NECESSARY TO PREVENT OFF-SITE TRACKING OF FARTH SEDIMENT AND DEBRIS
THE CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING STRUCTURES TO REMAIN, UTILITIES, AND NEW SITE IMPROVEMENTS DURING THE COURSE OF THE WORK.	5. EROSION CONTROL BLANKETS OR SIMILAR EROSION CONTROL MEASURES WILL BE INSTAI PERMANENT SEEDING TIME FRAMES.
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR IMPACTS AND DAMAGE TO STRUCTURES DUE TO THEIR WORK, AND FOR CORRECTIVE ACTION OR REPAIRS NEEDED TO RESTORE THE STRUCTURE(S) TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.	6. TEMPORARY EROSION CONTROL MEASURES MUST BE INSTALLED IN ACCORDANCE WITH D MANUFACTURER'S RECOMMENDATIONS PRIOR TO COMMENCING SOIL DISTURBANCE ACTIVIT
THE CONTRACTOR SHALL MANAGE AND LEGALLY DISPOSE OFF-SITE ALL EXCESS EXCAVATED MATERIALS, INCLUDING, BUT NOT LIMITED TO, SOIL, ROCK, BOULDERS, WATER, DEMOLITION WASTE, AND	7. SILT FENCE AND SEDIMENT BARRIERS (I.E. SILTSOXX, SILT FENCE, ETC) SHALL BE PLAC EXCAVATED MATERIAL STOCKPILES UNLESS THE STOCKPILES ARE BEING ACTIVELY WORKE MATERIAL STOCKPILES TO AVOID CONCENTRATED STOPMWATER PLUNOEE
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL LINES, GRADES AND OTHER SURVEY CONTROL TO COMPLETE THE WORK AS SHOWN ON THE DRAWINGS.	8. ADDITIONAL EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION FOUND NECESSARY BY THE ENGINEER OR CONTRACTOR. ADDITIONAL EROSION CONTROL
E SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL THE ENGINEER SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED TE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF ODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS, AND	SHALL BE APPROVED BY THE ENGINEER. 9. THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTEN REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENS OPERATION THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR IS RESPON MAINTENANCE OF PERMANENT MEASURES LINTH CONSTRUCTION OF THE PROJECT IS CON
THE CONTRACTOR SHALL CALL "CALL BEFORE YOU DIG DIG" AT 811 AT LEAST 72 HOURS PRIOR TO	10. MAINTENANCE: INSPECT AND REPAIR SEDIMENT BARRIERS PRIOR TO AND AFTER EVERY STORM EVENT (>0.5 INCHES) AND AT LEAST WEEKLY. THE CONTRACTOR SHALL REPAIR
'ROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE 'ROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY A LICENSED LAND SURVEYOR ACCEPTABLE TO THE TOWN. PROPERTY MONUMENTS SHALL BE RESET IN ACCORDANCE TOWN OF DANBURY STANDARDS	CONTROLS AS NECESSARY. REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SEDIMEN ACCUMULATED TO A DEPTH OF SIX (6) INCHES OR LESS. DISTURBED AREAS SHALL BE FINAL GRADE AND STABILIZED IN PHASES TO MINIMIZE AREAS EXPOSED TO EROSION. 11. NO DUST WILL BE ALLOWED OUTSIDE THE LIMIT OF WORK. DUST SHALL BE MINIMIZED (
ONTRACTOR IS RESPONSIBLE FOR ALL SNOW REMOVAL AND WINTER MAINTENANCE OF ACCESS PATHS	SITE. CONTRACTOR MUST CONDUCT CONTINUOUS EFFORT TO CONTROL DUST. LACK OF COULD CAUSE THE PROJECT TO BE STOPPED UNTIL ISSUES ARE RESOLVED.
ONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS THAT CONFLICT WITH THE PROPOSED IPROVEMENTS SHOWN ON THE SITE DRAWINGS, INCLUDING BUT NOT LIMITED TO ALL UTILITIES, STORM	12. ALL EXCAVATED SOIL MUST BE EITHER PLACED IN COVERED ROLL-OFFS OR IF STOCKP ON AND COVERED BY A MINIMUM 6 MIL POLY SHEETING AT ALL TIMES UNLESS THE ST BEING ACTIVELY WORKED.
AND OUTSIDE THE PROPOSED LIMIT OF WORK SHALL NOT BE DISTURBED BY THE CONTRACTOR.	13. DUST SHALL BE CONTROLLED AS NECESSARY. ROADWAY SURFACES SHALL BE WETTED MECHANICALLY SWEPT AS NECESSARY TO CONTROL DUST ON AN ONGOING BASIS. THE CALCIUM CHLORIDE FOR DUST CONTROL IS NOT ALLOWED UNLESS OTHERWISE DIRECTED
IE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY CODES, GULATIONS, LEGAL REQUIREMENTS, PERMIT CONDITIONS, ETC. SAFETY IS THE RESPONSIBILITY OF THE INTRACTOR. PERFORM ALL WORK IN ACCORDANCE WITH SAFETY STANDARDS OF APPLICABLE LAWS, JILDING AND CONSTRUCTION CODES.	ENGINEER. 14. CONTRACTOR IS RESPONSIBLE FOR DIVERTING AND PREVENTING STORMWATER FROM ENT EXCAVATION AREAS. CONTRACTOR MUST DIVERT STORMWATER FROM OVERLAND FLOWS.
HE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKWAYS, STREETS, AVEMENTS, CURBING, TREES, PLANTINGS, LAWN, FENCING TO REMAIN ON OR OFF THE PREMISES, AND HALL REPAIR AND REPLACE AT HIS/HER OWN EXPENSE, AS DIRECTED BY THE ENGINEER, ANY ITEMS AMAGED AS A RESULT OF THE CONTRACTOR'S WORK.	
ORK WITHIN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH APPLICABLE FEDERAL TOWN OF ALLINGFORD AND STATE REQUIREMENTS.	CONSTRUCTION NOTES: 1. THE CONTRACTOR SHALL ARRANGE, SCHEDULE, AND PERFORM WORK IN SUCH A MANNE
IMPORTED FILL MATERIAL IS REQUIRED, IT SHALL BE CERTIFIED IN WRITING BY LICENSED DEPENDENT TESTING FIRM OR ENGINEER AS NON-CONTAMINATED, CLEAN FILL SUITABLE FOR THE TENDED USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING OF ENVIRONMENTAL ARAMETERS AS OUTLINED IN THE CONTRACT DOCUMENTS.	MINIMUM INTERFERENCE WITH THE OCCUPANTS AND SITE ABUTTERS TRAFFIC AND OPERA CONTRACTOR SHALL GIVE NOTICE TO THE ENGINEER AND ALLOW THE OCCUPANTS AND A TO PREPARE FOR UNAVOIDABLE TEMPORARY DISRUPTIONS OF THE OCCUPANTS AND ABU OPERATIONS.
STORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, AVEMENT, RIPRAP, GRASS, ETC.) UNLESS OTHERWISE NOTED ON PLANS. RESTORATION OF ALL AREAS AMAGED BY CONTRACTOR SHALL BE INCIDENTAL TO THE PROJECT.	 ADEQUATE PROTECTION FOR PERSONS AND PROPERTY SHALL BE PROVIDED AT ALL TIME IN THE VICINITY OF SITE ACCESS ROADS AND PARKING AREAS SHALL BE BARRICADED A AT NIGHT.
L MATERIAL SHALL BE FURNISHED BY CONTRACTOR UNLESS OTHERWISE NOTED.	 TRASH RECEPTACLES SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR. EQUIPMENT SHALL BE MAINTAINED TO PREVENT LEAKAGE OF VEHICLE FLUIDS.
ONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS PRIOR TO START OF ONSTRUCTION. ONTRACTOR ACKNOWLEDGES THAT THE SITE IS SUBJECT TO CHANGE AND THAT WORK TO COMPLETE IE PROJECT IS BASED ON ITS CONDITION AT THE TIME OF BIDDING.	5. THE CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE ALL RUBBISH AND DEBRIS I THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTE MATERIALS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE SPECIFICA APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR SHALL LEAVE THE PROJECT SI
.ITY LOCATIONS SHOWN ARE APPROXIMATE BOTH AS TO SIZE AND LOCATION. CONTRACTOR TO ESTIGATE EXISTING CONDITIONS AND FIELD VERIFY LOCATIONS OF UTILITIES AND SUB-SURFACE UCTURES PRIOR TO CONSTRUCTION, AS NEEDED. NOT ALL EXISTING UTILITIES ARE SHOWN ON THE WINGS. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.	AND CLEAN CONDITION UPON COMPLETION OF THE WORK. 6. MONITORING WELLS SHALL BE PROTECTED DURING SOIL EXCAVATION AND MANAGEMENT / MONITORING WELL ROAD BOXES SHALL BE RESET FLUSH WITH FINISH GRADE WHEN WO COMPLETE JE THE ENGINEER DETERMINES THAT A MONITORING WELL SPECIFIED FOR PR
OORDINATE DIRECTLY WITH UTILITY COMPANIES PER THE GENERAL REQUIREMENTS. NOTIFY UTILITY OMPANIES PRIOR TO COMMENCING WORK TO ALLOW SUFFICIENT TIME TO LOCATE AND MARK THE OCATION OF BURIED UTILITIES.	THE DRAWINGS IS DAMAGED BEYOND REPAIR, THE CONTRACT SHALL BE RESPONSIBLE FOR THE DECOMMISIONING OF THE DAMAGED WELL IN ACCORDANCE WITH THE STATE OF CONNECT ABANDONEMENT REGULATIONS AND INSTALLATION OF NEW REPLACEMENT WELL AT THE D THE ENGINEER.
IATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORM WATER POLLUTION SUCH AS GASOLINE, IESEL FUEL, HYDRAULIC OIL, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE RAILER OR COVERED LOCATION. ALL TYPES OF WASTES GENERATED AT THIS SITE SHALL BE DISPOSED IF IN A MANNER CONSISTENT WITH STATE LAW AND OR BEGUI ATIONS	7. THE CONTRACTOR SHALL MANAGE AND LEGALLY DISPOSE OFF-SITE ALL EXCESS EXCAN MATERIALS, INCLUDING, BUT NOT LIMITED TO, SOIL, ROCK, BOULDERS, WATER, TREE STU AND DEBRIS THAT CANNOT BE REUSED ON-SITE.
HE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO PERFORM THE WORK S INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN	8. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATE ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNING CODES AND REGULATIONS.
CORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL CODES.	9. SAWCUTS IN EXISTING PAVEMENT SHALL BE SMOOTH AND STRAIGHT. EXISTING PAVEMENT SAWCUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE
ANUFACTURER'S RECOMMENDATIONS AND AS DIRECTED BY THE ENGINEER. XISTING FACILITIES TO REMAIN (I.E. TRANSFORMERS, TREES, POLES, HYDRANTS, FENCING, CATCH ASINS, MONITORING WELLS, AND UTILITIES, ETC.) AS WELL AS SITE IMPROVEMENTS SHALL BE ROTECTED DURING CONSTRUCTION. IF THESE ITEMS ARE DAMAGED, THE COST IS BOURNE BY THE	10. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, F SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WO NO EXCAVATION SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS. E THE VICINITY OF SITE ACCESS ROADS AND PARKING AREAS SHALL BE BARRICADED AN DURING NON-WORKING HOURS.
WI RACTOR. HE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE PLANS ND SPECIFICATIONS. NO CHANGES ARE TO BE MADE UNLESS AUTHORIZED BY THE DESIGN ENGINEER.	11. WORK REQUIRED FOR DISCONTINUANCE OR INTERRUPTION OF ANY UTILITY SERVICES DU PROJECT WORK SHALL BE ARRANGED BY THE CONTRACTOR WITH THE UTILITY COMPANI
ONTRACTOR SHALL OBTAIN ALL LOCAL, UTILITY, ETC. PERMITS REQUIRED FOR THE COMPLETION OF ORK UNDER THIS CONTRACT AND NOT INCLUDED IN THE CONTRACT DOCUMENTS. ANY AND ALL FEES SOCIATED WITH THIS WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE	PRIOR APPROVAL OF THE ENGINEER. 12. THE CONTRACTOR SHALL PROVIDE ROUTINE INSPECTIONS OF ALL ON-SITE EQUIPMENT / TO PREVENT AND LEAKAGES AND/OR SPILLS FROM OCCURRING ON THE PROJECT SITE.
ED. LOCATIONS WHERE TREES ARE TO REMAIN, EXCAVATION OF SOILS UP TO A DEPTH OF	OF A SPILL OR LEAK, THE CONTRACTOR IS RESPONSIBLE AT THEIR OWN COST FOR IMN CLEANUP TO PREVENT FURTHER MIGRATION TO SITE DRAINAGE AREAS AND/OR FURTHER TRANSPORTATION OF THE SPILLED SUBSTANCE (VIA TRACKS, TIRES, ETC.) OVER THE PR
CAVATION AREA WILL BE PERFORMED UTILIZING HAND TOOLS AND SMALL EQUIPMENT.	13. IF AN EXISTING UTILITY IS ENCOUNTERED DURING EXCAVATION, THE LOCATION, ELEVATION THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR
DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED SEPTEMBER 2010, TITLE Q3 FLOOD ZONE DATA VALLINGFORD, CT.	14. FLOOD PROTECTION AND WATER DIVERSION MEASURES SHALL BE PROVIDED AS DESCRIE CONTRACT DOCUMENTS.

GENERAL NOTES

PROPOSED

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CONTROL NOTES: SION CONTROL MEASURES AS SHOWN ON DRAWINGS. THESE ARE THE MINIMUM MEASURES YED BY THE CONTRACTOR.

S REQUIRED TO PERFORM ALL WORK AND SHALL PROVIDE EROSION AND SEDIMENT

EROSION CONTROLS SHALL BE PLACED PRIOR TO ANY CONSTRUCTION ACTIVITIES. TO NOTIFY THE ENGINEER AND THE OWNER AT LEAST 48 HOURS PRIOR TO ANY

TOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL EROSION CONTROL MEASURES PREVENT OFF-SITE TRACKING OF EARTH, SEDIMENT AND DEBRIS.

IROL BLANKETS OR SIMILAR EROSION CONTROL MEASURES WILL BE INSTALLED OUTSIDE EEDING TIME FRAMES.

ROSION CONTROL MEASURES MUST BE INSTALLED IN ACCORDANCE WITH DRAWINGS AND R'S RECOMMENDATIONS PRIOR TO COMMENCING SOIL DISTURBANCE ACTIVITIES.

ND SEDIMENT BARRIERS (I.E. SILTSOXX, SILT FENCE, ETC) SHALL BE PLACED AROUND ATERIAL STOCKPILES UNLESS THE STOCKPILES ARE BEING ACTIVELY WORKED. LOCATE KPILES TO AVOID CONCENTRATED STORMWATER RUNOFF.

OSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF SARY BY THE ENGINEER OR CONTRACTOR. ADDITIONAL EROSION CONTROL MEASURES PROVED BY THE ENGINEER.

TOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER ROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED.

INSPECT AND REPAIR SEDIMENT BARRIERS PRIOR TO AND AFTER EVERY SIGNIFICANT (>0.5 INCHES) AND AT LEAST WEEKLY. THE CONTRACTOR SHALL REPAIR OR REPLACE NECESSARY. REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SEDIMENT WHEN TO A DEPTH OF SIX (6) INCHES OR LESS. DISTURBED AREAS SHALL BE BROUGHT TO AND STABILIZED IN PHASES TO MINIMIZE AREAS EXPOSED TO EROSION.

BE ALLOWED OUTSIDE THE LIMIT OF WORK. DUST SHALL BE MINIMIZED ON THE WORK TOR MUST CONDUCT CONTINUOUS EFFORT TO CONTROL DUST. LACK OF DUST CONTROL THE PROJECT TO BE STOPPED UNTIL ISSUES ARE RESOLVED.

SOIL MUST BE EITHER PLACED IN COVERED ROLL-OFFS OR IF STOCKPILED, PLACED RED BY A MINIMUM 6 MIL POLY SHEETING AT ALL TIMES UNLESS THE STOCKPILES ARE

E CONTROLLED AS NECESSARY. ROADWAY SURFACES SHALL BE WETTED AND SWEPT AS NECESSARY TO CONTROL DUST ON AN ONGOING BASIS. THE USE OF DRIDE FOR DUST CONTROL IS NOT ALLOWED UNLESS OTHERWISE DIRECTED BY THE

S RESPONSIBLE FOR DIVERTING AND PREVENTING STORMWATER FROM ENTERING INTO REAS. CONTRACTOR MUST DIVERT STORMWATER FROM OVERLAND FLOWS.

TION NOTES:

OR SHALL ARRANGE, SCHEDULE, AND PERFORM WORK IN SUCH A MANNER AS TO CAUSE FERENCE WITH THE OCCUPANTS AND SITE ABUTTERS TRAFFIC AND OPERATIONS. THE HALL GIVE NOTICE TO THE ENGINEER AND ALLOW THE OCCUPANTS AND ABUTTERS TIME FOR UNAVOIDABLE TEMPORARY DISRUPTIONS OF THE OCCUPANTS AND ABUTTERS' NORMAL

TECTION FOR PERSONS AND PROPERTY SHALL BE PROVIDED AT ALL TIMES. EXCAVATIONS OF SITE ACCESS ROADS AND PARKING AREAS SHALL BE BARRICADED AND ILLUMINATED

OR SHALL REMOVE FROM THE PROJECT SITE ALL RUBBISH AND DEBRIS FOUND RAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. ALL LL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE SPECIFICATIONS AND ALL DDES AND REGULATIONS. THE CONTRACTOR SHALL LEAVE THE PROJECT SITE IN A SAFE ONDITION UPON COMPLETION OF THE WORK.

ELLS SHALL BE PROTECTED DURING SOIL EXCAVATION AND MANAGEMENT ACTIVITIES. ELL ROAD BOXES SHALL BE RESET FLUSH WITH FINISH GRADE WHEN WORK IS THE ENGINEER DETERMINES THAT A MONITORING WELL SPECIFIED FOR PROTECTION ON IS DAMAGED BEYOND REPAIR, THE CONTRACT SHALL BE RESPONSIBLE FOR THE PROPER G OF THE DAMAGED WELL IN ACCORDANCE WITH THE STATE OF CONNECTICUT WELL REGULATIONS AND INSTALLATION OF NEW REPLACEMENT WELL AT THE DIRECTION OF

TOR SHALL MANAGE AND LEGALLY DISPOSE OFF-SITE ALL EXCESS EXCAVATED CLUDING, BUT NOT LIMITED TO, SOIL, ROCK, BOULDERS, WATER, TREE STUMPS, WOOD, HAT CANNOT BE REUSED ON-SITE.

TOR SHALL PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATIONS IN WITH THE REQUIREMENTS OF ALL GOVERNING CODES AND REGULATIONS.

XISTING PAVEMENT SHALL BE SMOOTH AND STRAIGHT. EXISTING PAVEMENT SHALL BE BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED.

ESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. N SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE

OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS. EXCAVATIONS IN OF SITE ACCESS ROADS AND PARKING AREAS SHALL BE BARRICADED AND ILLUMINATED

D FOR DISCONTINUANCE OR INTERRUPTION OF ANY UTILITY SERVICES DUE TO THE SHALL BE ARRANGED BY THE CONTRACTOR WITH THE UTILITY COMPANIES WITH THE AL OF THE ENGINEER.

OR SHALL PROVIDE ROUTINE INSPECTIONS OF ALL ON-SITE EQUIPMENT AND MACHINERY ND LEAKAGES AND/OR SPILLS FROM OCCURRING ON THE PROJECT SITE. IN THE EVENT LEAK, THE CONTRACTOR IS RESPONSIBLE AT THEIR OWN COST FOR IMMEDIATE PREVENT FURTHER MIGRATION TO SITE DRAINAGE AREAS AND/OR FURTHER ON OF THE SPILLED SUBSTANCE (VIA TRACKS, TIRES, ETC.) OVER THE PROJECT SITE.

UTILITY IS ENCOUNTERED DURING EXCAVATION, THE LOCATION, ELEVATION, AND SIZE OF HALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE URNISHED TO THE ENGINEER.

TION AND WATER DIVERSION MEASURES SHALL BE PROVIDED AS DESCRIBED IN THE

CONTOUR PROPERTY LINE RIGHT OF WAY EASEMENT FENCE EDGE OF PAVEMENT EDGE OF GRAVEL SILT SACK ASPHALT CURBING SILT SOXX SILT FENCE LIMIT OF WORK LINE SANITARY SEWER MANHOLE DRAINAGE MANHOLE CATCH BASIN GATE VALVE & BOX UTILITY POLE LIGHTPOST HYDRANT SPOT ELEVATION RIPRAP GUARDRAIL WETLAND CONCRETE

BITUMINOUS PAVEMENT GAS LINE

WATER LINE

ELECTRIC LINE TEMPORARY STORM

BYPASS PIPE

BOLLARD LIMITS OF EXCAVATION

DRAFT	DATE: JUNE 2020 SCALE: AS NOTED SHEET: 2 OF 12 G-001	
	21 TOELLES ROAD WALLINGFORD CT WALLINGFORD CT SOIL REMEDIATION PROJECT	C
REF. REFERENCE LINE REQU'D REQUIRED S SLOPE S SLOPE S SEWER SD STORM DRAIN SMH SEWER MANHOLE SCH SCHEDULE SDR STANDARD DIMENSION RATIO SQ SQUARE SS STAINLESS STEEL STA. STATION TYP. TYPICAL TOS TOP OF STEPS M/ WITH WV WATER VALVE WMM WELDED WIRE MESH THESE ARE GENERAL ABBREVATIONS. NOT ALL APPEAR ON THESE DRAWINGS.	GENERAL NOTES, ABBREVIATIONS AND LEGEND	(
FTFOOT/FEETGALV.GALVANIZEDGALGALLONHDPEHIGH DENSITY POLYETHYLENEHORIZ.HORIZONTALHPHIGH POINTHTHEIGHTHWYHIGHWAYHYDHYDRANTNINCHNV.INVERTJFLINEAR FEETJPLOW POINTMAX.MAXIMUMMECHMECHANICALMHMANHOLEMIN.MINIMUMMJMECHANICAL JOINTMONMONUMENTNO.NUMBERN.T.S.NOT TO SCALEO.C.ON CENTERO.D.OUTSIDE DIAMETERODEOVERHEAD ELECTRICOHOVERHEAD LECTRICOHOVERHEAD ELECTRICOHOVERHEADELSPROFESSIONAL LAND SURVEYORPVCPOLYVINYL CHLORIDERCPREINFORCED CONCRETE PIPEPEINEORCEDPEINEORCED	DESCRIPTION DATE CHECKED BY: LH 23259600-6-001.dwg	E
BBREVIATIONS* & AND APPROX; ± APPROXIMATELY BOS BOTTOM OF STEPS CB CATCH BASIN Q CENTERLINE CLD CLEAR CLDI CEMENT-LINED DUCTILE IRON CMP CORRUGATED METAL PIPE CO CLEANOUT COMMUNICATION CONCRETE COND. CONDUIT CS CARBON STEEL CU COPPER OI DUCTILE IRON DIA DIAMETER DMH DRAIN MANHOLE DS DOWN-SPOUT E UNDERGROUND ELECTRICAL EL ELEVATION FFE FINISH FLOOR ELEVATION EX. FINISH FLG FLANGE FL FLOOR FM FORCE MAIN	213 Court Street, 4th Floor Middletown, Connecticut 06457 888.265.8969 www.woodardcurran.com 888.265.8969 www.woodardcurran.com 888.265.8969 www.woodardcurran.com Reproduction on the street of	Ļ

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2 <u>LEGEND</u> EXCAVATION TO 6" (ANTICIPATED) EXCAVATION TO 24" (ANTICIPATED) PROPERTY LINE EDGE OF WATER EDGE OF PAVEMENT CONTOUR LINES FENCE LINE ____X _____X ____ WETLAND LINE ____ Α WETLAND FLAG X W.F.−29 TREE TO BE RETAINED AND ITS DRIP LINE (DIAMETER AT BREAST HEIGHT AT LEAST 15") TREE TO BE REMOVED (DIAMETER AT BREAST HEIGHT LESS THAN 15") LIMIT OF WORK _____LW____LW____ LIMIT OF 2' EXCAVATION \sim LIMIT OF 6" EXCAVATION ×× ORDINARY HIGH WATER LINE В the x the C D 2







Size	Container	Spacing	#	Notes
approx.	gc	3' center	500	
approx.	gc	3' center	500	Locate species
2"	plugs	1' center	500	in wetter or
2"	plugs	1' center	500	based on
2"	plugs	1' center	500	wetland
2"	plugs	1' center	500	indicator code
2"	plugs	1' center	500	
	seed	1 lb / 15,000 ft²	6	Sow throughout.
2' - 3'	rc	5' center	140	Locate shrubs
2' - 3'	rc	5' center	50	in wetter or
2' - 3'	rc	5' center	140	based on
2' - 3'	rc	5' center	140	wetland
2' - 3'	rc	5' center	140	indicator code
3' - 4'	rc	10' center	50	
3' - 4'	rc	10' center	100	Locate trees in
3' - 4'	rc	10' center	150	wetter or drier
3' - 4'	rc	10' center	150	areas based on
3' - 4'	rc	10' center	100	wetland
		4.01 1		1 indicator code

ACCESS	ROUTE	PLANTING	TABL

Habitat	Area	Stratum	Common name	Scientific name	Wetland Indicator Code	Size	Container	Spacing	#	Notes		
		Herbaceous	New England Conservation Wildlife Mix ¹ (or similar)		-		seed	1 lb / 1750 ft ²	TBD	Sow throughout.		
			smooth arrowwood	Viburnum recognitum	FAC	2' - 3'	rc	5' center	1			
Upland Access	per 1,000	Shrubs	elderberry	Sambucus racemosa	FACU	2' - 3'	rc	5' center	1			
Route s ³	SF		sweet pepperbush	Clethra alnifolia	FAC	2' - 3'	rc	5' center	2			
			tuliptree	Liriodendron tulipifera	FACU	3' - 4'	rc	10' center	3			
		Trees	red maple	Acer rubrum	FAC	3' - 4'	rc	10' center	2			
			red oak	Quercus rubra	FACU	3' - 4'	rc	10' center	2			
			boxelder	Acer negundo	FAC	3' - 4'	rc	10' center	3			
Wetland Access Routes	per 1,000 SF			Herbaceous	Wetland Forest Seed Mix ² (or similar)				seed	1 lb / 15,000 ft ²	TBD	Sow throughout.
				sweet pepperbush	Clethra alnifolia	FAC	2' - 3'	rc	5' center	1		
		er 1,000 Shrubs SF	highbush blueberry	Vaccinium corymbosum	FACW	2' - 3'	rc	5' center	1			
			spicebush	Lindera benzoin	FACW	2' - 3'	rc	5' center	2			
			boxelder	Acer negundo	FAC	3' - 4'	rc	10' center	3			
		Troos	American sycamore	Platanus occidentalis	FACW	3' - 4'	rc	10' center	2			
		11663	speckled alder	Alnus incana	FACW	3' - 4'	rc	10' center	2			
				American elm	Ulmus americana	FACW	3' - 4'	rc	10' center	3		

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LIMIT OF WETLAND RESTORATION PROPERTY LINE EDGE OF WATER EDGE OF PAVEMENT CONTOUR LINES (EXISTING) FENCE LINE WETLAND LINE WETLAND FLAG CONTOUR LINES (PROPOSED) TREE TO BE RETAINED AND ITS DRIP LINE (DIAMETER AT BREAST HEIGHT AT LEAST 15") ORDINARY HIGH WATER LINE

-×	<u>35</u> -X
	X W.F29

<u>GENERAL NOTES</u>

- EROSION AND SEDIMENTATION CONTROLS WILL BE INSTALLED AROUND ALL EXCAVATION AREAS PRIOR TO GROUND DISTURBANCE AND WILL REMAIN IN PLACE UNTIL THE GROUND IS STABILIZED FOLLOWING RESTORATION AS DIRECTED BY ENGINEER.
- 2. ALL EXCAVATION AREAS WILL BE BACKFILLED AND RESTORED WITH WETLAND SOIL AND PLANTINGS.
- 3. THE ESTIMATED OVERALL RESTORATION AREA IS 97,527 SF (2.23 AC) (INCLUDES WETLAND AND UPLAND AREAS).

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213 Court Street, 4th Floor Middletown, Connecticut 06457 888.265.8969 www.woodardcurran.com			TUE DOCIMENTIS THE BODEBTY OF WOODAAD & CLEDANING AND ITS CLIENT	REPRODUCTION OR MODIFICATION WITHOUT WRITTEN PERMISSION IS PROHIBITED.	,
		DATE			
		RIPTION	CHECKED BY: LM	23259600-C-005.dwg	E
		REV DESC	DESIGNED BY: JM	DRAWN BY: CB	
	WEILAND RESIORATION PLAN				(
21 TOELLES ROAD WALLINGFORD CT		SOIL REMEDIATION PROJECT			
JOB NO: 232596 DATE: JUNE : SCALE: AS NO SHEET: 9	6.00 2020 DTED D OF	12			
C-()()5			



- SILT FENCE -STRAW WATTLE 1. STOCKPILES SHALL BE SURROUNDED BY SILT FENCE AND/OR SEDIMENT CONTROLS (I.E. SILTSOXX) 2. STOCKPILES SHALL HAVE A MAXIMUM 2:1 (H:V) SIDE SLOPE. 3. REPAIR OR REPLACE DAMAGED SILT FENCE AND/OR SEDIMENT CONTROLS DUE TO CONSTRUCTION ACTIVITIES OR STOCKPILE MITIGATION. 4. STOCKPILE SHALL BE LOCATED IN AREAS AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER. 5. 6 MIL POLY SHEETING TO BE PLACED BELOW THE SOIL STOCKPILE.

NOTES:

6

6. 6 MIL SHEETING TO BE PLACED OVER THE SOIL STOCKPILES WHEN STAGING AREA IS NOT BEING ACTIVELY USED.

TEMPORARY SOIL STAGING AREA NOT TO SCALE

JOB NO: 232596.00 DATE: JUNE 2020

SCALE: AS NOTED

SHEET: 11 OF 12

C-201

22x34 SHEET

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DRAFT

PROTECTION SILT SACK DETAIL NOT TO SCALE

COMPACTED SUBGRADE -

ATTACHMENT B: WETLAND DELINEATION DOCUMENTATION

NEW ENGLAND ENVIRONMENTAL SERVICES

BLACKLEDGE RIVER NURSERY

Wetland Narrative

Pfizer 21 Toelles Road Wallingford, Connecticut

The vegetation growing in the wetland was inventoried on December 16, 2019 (See Table 1). The wetland is dominantly forested. The majority of the wetland occurs in the flood plain of Wharton Brook. Wharton Brook is 15 to 25 feet in width. The substrate is sand.

The dominate exotic invasive plant species in the wetland includes Japanese Knotweed, Multiflora Rose, Common Reed and Asian Bittersweet. The wildlife observed in the wetland on December 16, 2019 was the cottontail rabbit, blue jay and cardinal. Raccoon tracks were observed along Wharton Book.

Prepared By:

frell

R. Richard Snarski Professional Wetlands Scientist #1391 Registered Professional Soil Scientist #1975

February 7, 2020

RRS/srh

Table 1

Complete List of Vascular Plant Species Observed in Wetland

Pfizer 21 Toelles Road, Wallingford, Connecticut Survey Date: December 16, 2019

Scientific Name

Lindera benzoin Sassafras albidum Betula alleghaniensis Quercus rubra Acer rubrum *Liriodendron tulipifera* Alnus incana Carya ovata Vaccinium corymbosum Rosa multiflora Sambucus racemosa *Clethra alnifolia Viburnum recognitum* Rubus semisetosus *Symplocarpus foetidus* Cinna arundinacea Carex lacustris Osmunda cinnamomea Onoclea sensibilis *Phragmites australis* Toxicodendron radicans Vitis labrusca Celastrus orbiculatus Scirpus atrovirens Impatiens capensis Fallopia japonica Nyssa sylvatica

Common Name

Spicebush Sassafras Yellow Birch Red Oak Red Maple Tulip Speckled Alder Shagbark Hickory Highbush Blueberry Multiflora Rose Elderberry Pepperbush Arrowwood Blackberry Skunk Cabbage Sweet Woodreed Lakebank Sedge Cinnamon Fern Sensitive Fern Common Reed Poison Ivy Fox Grape Asian Bittersweet Green Bulrush Jewelweed Japanese Knotweed Blackgum

	Wetlan	nd Function-Valu	le Evaluation Form	
otal area of wetland Human made? N	o Is wetland p	part of a wildlife corridor? Y	.s or a "habitat island"? No	Wetland I.D. W. D. L 41. 427255 - 73.840068 Latitude
djacent land use Parking lot, Build	ing S Toal	Distance to nearest roadwar	y or other development I.S. freet	Richard Survers Ki 12/16/2011 Prepared by: Date 12/16/2011 Wetland Imnact:
ominant wetland systems present P F0 1 E ,	Pow H	Contiguous undeveloped b	uffer zone present NO	TypeArea
s the wetland a separate hydraulic system? \frown	d If not, w	vhere does the wetland lie in the	drainage basin? الله العظرار	Evaluation based on:
م How many tributaries contribute to the wetland? <u>ح</u>	he on itt Wild	dlife & vegetation diversity/abu	ndance (see attached list)	Corps manual wetland delineation
Function/Value	Suitability Y N	Rationale Prin (Reference #)* Fur	ncipal nction(s)/Value(s) C	completed? I N
Groundwater Recharge/Discharge		2, 2, 4, 5, 6, 7, 8, 9 1, 15,	Groved water Seepe a majority of the w	re avident a long the etland boundary
Floodflow Alteration		5, 16, 17, 18 5, 8, 9, 10, 11, 13, 14	The majority of the l flood plain of whart	ational is part of the
Fish and Shellfish Habitat	X	11, 14, 16, 17	No fithered war	م المحدد م.
Sediment/Toxicant Retention	X	8, 4, 6, 8, 9, 10, 12	Kediment is deposited nickel contamination	accurs in wethand
Mutrient Removal	۲ م	13,4,5,7,8,10,11	The wetland has potr from upstream sou	that for hutericit temoual read
Production Export	Ž	,2' 4' 2' 10'	outflow is culute to the intervention of the interventin of the intervention of the intervention of the in	ist pail road these as
Sediment/Shoreline Stabilization	 ×	3' 4' 6' 6' 13 184	Trees and shruks sta whar ton Brook	rivat the bank of
🕳 Wildlife Habitat	×	3, 11, 13, 15, 16, 17, 18	UT ban durale procent () and tail read bouder me	an King 1.1 buiking
A Recreation	X		There is ho public acc. link fence occurs on 1	ss to wetland. A chain be houth side of wetland
Educational/Scientific Value	X		No Known a ducation. No public access	220 J
Vniqueness/Heritage	X	, 2, 2d,	No Known archaelogic. havtary unigue attr	l sotus wetland does hot] butes
Visual Quality/Aesthetics	X		No publica ccess to with the majority of up and	+ lard Arount withand is developed
ES Endangered Species Habitat	X		NO Endanderedo	r stite Listed Specific found
Other			-	
Motoo.			* Refer to b	ickup list of numbered considerations.

Notes:

vestigator(s): <u>Richard</u> S andform (hillslope, terrace, etc.):	is de slupe	Local reli	ief (concave, com 0068	/ex, none): Datum:	None WGS-198
lope (%):6 Lat: oll Map Unit Name:0 0 0 0	by thent	rear? Yes VN	N (lf no, e	WI classification:	hohe
re climatic / hydrologic conditions on the vegetation \underline{N} , soil \underline{N} , or	Hydrology significant	ly disturbed? A	re "Normal Circur	nstances" present?	Yes <u>- </u>
re Vegetation, Soil or	Hydrology naturally p	roblematic? (ⁿ	r locations, t	ransects, impo	rtant features, etc
UMMARY OF FINDINGS - A	Yes <u>No</u> <u>Yes</u>	Is the Samp	led Area tland?	Ves No	
Hydric Soil Present?	Yes No V	- If yes, option	nal Wetland Site I	D:	
Wetland Hydrology Present?	lures here or in a separate re	port.)			
Кетакя, (Екрал анслицио россия					м
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he.					
HYDROLOGY			Sor	vodary indicators (m	inimum of two required)
Wetland Hydrology Indicators:			000	Surface Soil Cracks	; (B6)
Primary Indicators (minimum of one	is required; check all that app	<u>V)</u>		Drainage Patierns ((810)
Surface Water (A1)	Water-Stain	ed Leaves (B9)		Moss Trim Lines (B	16)
High Water Table (A2)	Aquatic Fau	ma (B13)		Dry-Season Water	Table (C2)
Saturation (A3)	Mari Depos	is (B15) · with Odor (C1)		Grayfish Burrows ((C8)
Water Marks (B1)	Hydrogen S	izosoheres on Living	Roots (C3)	Saturation Visible o	n Aerial Imagery (C9)
Sediment Deposits (B2)	Presence 0	F Reduced Iron (C4)		Stunted or Stresser	d Plants (D1)
Drift Deposits (B3)	Recent Iror	Reduction in Tilled S	oiis (C6)	Geomorphic Positio	on (U2) β
Algal Mat or Crust (B4)	Thin Muck	Surface (C7)		Shallow Aquitard (I	U3) Dollof (D4)
iron Deposits (B5)	Other (Exp	ain in Remarks)		Microtopographic r	
Inundation Visible on Aenai Inte	agely (D1) Clark (FAC-Neutral Test	(00)
Sparsely Vegetated Concave S					× 1
Field Observations:	No V Depth (int	nes):			7
Surface Water Present? Yes	No V Depth (in	thes):		In and Banconto 1	$V_{PS} = N_0 $
Water Table Present:	No V Depth (inc	ches):	Wetland Hydi	blogy Flesenki	
Saturation Present?		hotos previous inspe	ctions), if availab	e:	
Describe Recorded Data (stream g	lande' wen' server l	, pre-			
Remarks:					
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Northcentral and Northeast Region - Interim Version

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Sampling Point _____

VEGETATION - Use scientific names of plants.

VEGETATION - Use sciences of planta					-
J AV	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Phot size:)	% Cover	Species?	Saus	Number of Flominant Sheries	1
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				Demonstrat Demoisson	
4.			· ······	Percent of Dominant Species	8)
5.					<i>U</i>)
6				Prevalence index worksheet:	
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LE THE AND ALL				FACW species x2=	
(PUT SIZE /- A)	- +				
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E				Prevalence Index = B/A =	
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Luce EX				Prevalence index is <3.01	
Herb Stratum (Plot size:)				Manufactured & doubte Count of the state	•
1 Solidness Canadensis	38	N/	FACD	morphological Adaptations" (Provide supporting	
			- MCV	data in Memarks of on a separate sheet)	
2				Problematic Hydrophytic Vegetation ¹ (Explain)	
2					
3				Budfandam of budding to an a stand a	
4.				moleators of myoric sou and welland hydrology must	
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5				Definitions of Vendetlen States	
6				Destriponts of Achershou 20305	
			-	Tree - Woody plants 3 in (7.6 cm) or more in discost	
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0				Sanling/shigh - Whody plants lass than 3 in DELL	
9				and creater then 3.28 ft (1 m) tail	
14	-			Herb - All herbaceous (non-woody) niants renamiles	æ
17				of size, and woody plants less than 3 28 ft tall	N.
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US Army Corps of Engineers

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Type:	5.23 7.5×R5/4			m-c 5	G (fil)
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Costed Sand Grains. *Locators PL=Porte Listing, M=Matrix. Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Costed Sand Grains. *Locators PL=Porte Listing, M=Matrix. Matcol (A1) Polynoluse Bolow Surface (S8) (LRR R, MLRA 1499) Descrives and Matrix (A10) (LRR K, L, BLRA 1499) Back Helto (R3) Thin Dark Surface (S9) (LRR R, MLRA 1499) Descrives (R4) Statilist (R4) Loamy Matry Minsred (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Bolow Dark Surface (R1) Depleted Matrix (R3) Thin Dark Surface (S9) (LRR K, L) Statilist (Layser (A3) Loamy Matry Minsred (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Statilist (M4) Loamy Matry Minsred (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Statilist (M4) Loamy Matry Minsred (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Statilist (M4) Depleted Dark Surface (F7) Helmont Floodytain Sufface (F10) (LRR K, 148, 144, 146, 146, 146, 172) Staty Matry Matrix (B3) Polytelwa Bolow Dark Surface (F12) Note Parent Matrix (F12) Staty Matrix (B3) Depleted Dark Surface (F12) Note Parent Matrix (F12) Staty Matrix (B3) Dark Surface (S1) (LRR R, BLRA 1498) Referent Matrix (F12)			·		
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Type: C=Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains Location: PL=Pore Lining, M=Matrix, Medicatus for Problematic Hydric Solil - Histocol (A1) Polyvalue Below Surface (S3) (LRR R, MLRA 1498) Coast Prains Redox (A10) (LRR K, L. MLRA 1498) - Black Histic (A3) Thin Dark Surface (S3) (LRR R, MLRA 1498) Coast Prains Redox (A10) (LRR K, L. MLRA 1498) - Hydrogen Sulfde (A4) Loamy Mudoy Minerel (F1) (LRR K, L. M) Dark Surface (S7) (LRR K, L.) - Straffiel Layers (A5) Loamy Gieyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L.) - Sandy Mudoy Minerel (F1) Depleted Matrix (F3) Thin Dark Surface (S7) (LRR K, K. L.) - Sandy Mudoy Minerel (F3) Depleted Matrix (F3) Hose Hydroc (S9) (LRR K, L.) - Sandy Mudoy Minerel (S1) Depleted Matrix (S4) Meak Surface (F7) - Sandy Mudoy Minerel (S5) Depleted Matrix (S6) Weak Surface (F7) - Dark Surface (S7) (LRR R, MLRA 1498) Other (Explain in Remarke) ndicators of hydrophytic vegetation and welliand hydrology must be present, unless disturbed or problematic. - Safetste Layer (If observed): Type: - Deplet (Grift bark Surface (S7) (LRR R, MLRA 1498) Other (Explain in Remarke) ndicators of hydrophytic vegetation and welliand hydrology must be present, unless disturbed or problemat					
Type: C=Concentration, D=Depletion, FM=Reduced Matrix, CS=Covered or Costed Sand Grains. *Location: PL=Pore Lining, M=Matrix, Variations (Sa) (LRR R, Histor String Problematic Hydrix Solis): Histos (A1)					
ryore soon interactors:	Type: C=Concentration, D=Depletion, I	RM=Reduced Matrix, CS=	Covered or Coated San	d Grains. ² Locatio	on: PL=Pore Lining, M=Matrix.
Hydrogen Sulfice (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gayed Matrix (F2) Polyalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Pichanont Floodplain Sole (F12) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 10 Sandy Gleyed Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 10 Sandy Gleyed Matrix (S6) Redox Depressions (F8) Other (Explain in Remarks) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. astrictive Layer (if observed): Yes Type: Depth (Inches): Depth (Inches): Hydric Soil Present? Yes amarks: No	lydric Soil Indicators: Histosol (A1) Histic Epipedon <u>(</u> A2) Black Histic (A3)	Polyvalue Below MLRA 149B) Thin Dark Surface	Surface (S8) (LRR R, e (S9) (LRR R, MLRA 14	Indicators for 2 cm Muni Coast Prai 198) 5 cm Muni	Problematic Hydric Solis ³ : k (A10) (LRR K, L, MLRA 1498) irie Redox (A16) (LRR K, L, R) ky Peat or Peat (S3) (LRR K, L
Depleted Network (A11) Depleted Network (F4) Think Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pledmont Floodplain Solis (F12) (LRR K, L) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 10 Sandy Redox (S5) Wery Statistice (TF12) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 10 Sindy Redox (S5) Wery Statistice (TF12) Other (Explain in Remarks) Very Statisce (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. astrictive Layer (if observed): Type:	_ Hydrogen Sulfide (A4) _ Stratified Layers (A5)	Loamy Mucky Min	neral (F1) (LRR K, L) atrix (F2)	Dark Surfa Polyvalue	Book (S7) (LRR K, L) Below Surface (S8) (LRR K, L)
	_ Depleted Below Dark Surface (A11) _ Thick Dark Surface (A12) Sandy Mucha Mineral (S1)	Depleted Matrix (Redox Dark Surfa	F3) 802 (F6) 1500 (F7)	Thin Dark Iron-Mang	Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L,
	_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5)	Redox Depression	ns (F8)	Mesic Spo Red Paren	Hoodplain Soils (F19) (MLRA 1 dic (TA5) (MLRA 144A, 145, 14 It Material (TF2)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. setrictive Layer (if observed): Type: Depth (inches): Hydric Soll Present? Yes No emarks:	_ Stripped Matrix (S6) _ Dark Surface (S7) (LRR R, MLRA 1)	49B)		Very Shall Other (Exp	ow Dark Surface (TF12) Ilain in Remarks)
Type:	ndicators of hydrophytic vegetation and estrictive Layer (If observed):	weliand hydrology must t	e present, uniess disturi	bed or problematic.	
Depth (inches):	Туре:				
	Depth (inches);			Hydric Soll Pre	sent? Yes No
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plicant/Owner: woodward/Curran/Pfizer	Tore (W)
picano within	State: Sampling Point:
section, rowned shares NJ section, rowned by range.	
is fillelana torres etc.): hase of slopt Local relief (corr	cave, convex, none): <u><u> </u></u>
norom (naissope, inface, ew.) 41. 427255 Long: -72. 8400	068 Datum: WG3-1981
walbok	NWI classification:
In the other wards No No	(If no, explain in Remarks.)
We contract of the second	mai Circumstances" present? Yes <u>V</u> No
e vegetation out or Hydrology naturally problematic? (If needer	d, explain any answers in Remarks.)
e Vegetation 300, of hydrougy about a compliant point local	tions, transects, important features, etc.
UMMARY OF FINDINGS - Attach site map snowing sampling point room	
Hydrophytic Vegetation Present? Yes No is the Sampled Area	Yes No
Hydric Soil Present? Yes V No	and Site ID:
Netiand Hydrology Present? Yes V NO I I yes, chubhar Weat	
Remarks: (Explain alternative procedures nere of an a separate report)	
YDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check as that approved leaves (B9)	Drainage Patterns (B10)
Surface Water (A1) Americ: Fauna (B13)	Moss Trim Lines (B16)
V High Water Table (A2) Mail Deposits (B15).	Dry-Season Water Table (C2)
V Saturation (AS) Hydrogen Sutide Odor (C1)	Crayfish Burrows (C8)
Visiting Roots (C) V Sediment Deposits (82) Oxidized Rhizospheres on Living Roots (C)	(3) Saturation Visual of Academic (D1)
Drift Deposits (B3) Presence of Reduced from (C4)	Geomorphic Position (D2)
Algal Mat or Crust (B4) Recent from Realization in name of the Crust (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Cuter (FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (CO)	
Field Observations: Ves No V Depth (inches):	•
Surface Water Present? Yes V No Depth (inches):	Vac V
Watter Table Treasant? Yes V No Depth (inches): Wetta	and Hydrology Presentr 165
Saturation resource	if available:

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VEGETATION -- Use scientific names of plants.

Sampling Point: \underline{IW}

VFGETATION - Use sublimit frames of planta				1
2014	Absolute	Dominant	Statur	Dominance Test worksheet:
Tree Stratum (Plot size:)	76 COVER	Sharasi		Number of Dominant Species
1. Acer rubrum	38	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2 Betula alleghantenes	QU:	<u>v</u>	FAC	Total Number of Dominant
3	<u>`</u> -	, 		Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
	58	= Total Co	ver	OBL species x1=
Sonling Sharth Stratum (Dint size: 1 5 X)		-		FACW species x2=
1 1 b de par b a b a da b	20	N/ *	FACH	FAC species x3=
1. CINCER DED DET		- <u>v</u>	1/104	FACU species x4=
2				UPL species x5=
3		*		Column Totals: (A) (B)
4	-	-		(-)
5			·	Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
· · · · · · · · · · · · · · · · · · ·	30			Dominance Test is >50%
SX SX	<u></u>		67	Prevalence index is <3.0 ¹
1 m Statim (Porsze:)	.		1)	Morphological Adeptations ¹ (Provide supporting
1. Symplocarpus	00	<u></u>	001	data in Remarks or on a separate sheet)
2 Rhubus Semisetosus	20	V	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
		~		be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6		-		
7				at breast height (DBH), regardless of height,
8	**			Sacian/simah - Woody plants last than 3 in DSU
9		-		and greater than 3.26 ft (1 m) tal.
10				Herb - All herbaceous (non-woody) plants, regardless
	-			or size, and woody plants less than 3.28 it tell.
12		-		Woody vines - All woody vines greater than 3.28 ft in
	40	= Total Co	er 🛛	instruction
Woody Vine Stratum (Plot size:)				
1				
2	-			
3.		•		1
A		·		Hydrophytic
				Present? Yes V No
Downlaw disclose to the second		= Total Cov	er	
Remains: (include photo numbers here or on a separate a	sheet.)			
Sample Point IN 15	1000	ted 1	3' do	whyra dient
fill flack 1	2			
or we thand I to a	<u>ب</u>			
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Sampling Point 1W

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Profile Description: (Describe to the de	opth needed to docum	ient the L	ndicator	or confin	m the absence	of indicators.)	
Depth Matrix	Reda	(Features	<u>s</u>		·		
$(inches)$ <u>Color (moist)</u> $\frac{\%}{100}$	Color (motst)	%	Ivpe'	_Loc_	<u>Texture</u>	Remarks	
4-12 7 5HBW/A	2 19 4/2				<u>T37</u>		<u> </u>
	<u>a.s y •/2</u>	20		<u>m</u>	<u>יזרע</u>	<u> </u>	
13.00 1.34113/06	10YR %	10	<u> </u>	m	ms	<u>د</u>	
	-	. <u> </u>		<u></u>			
	-						
					• •••••••••••••••••••••••••••••••••••••		
							
			******		·		aller - Cherneter
Type: C=Concentration, D=Depletion, RI Hydric Soil Indicators:	M-Reduced Matrix, CS	=Covered	or Coate	d Sand G	rains. ² Loca	ation: PL=Pore Lining, M=Matrix.	
Histosol (A1)	Polyvalue Below	Surface ((S8) (LRF	R	2 cm M	of Proofemale Hydric Sons :	
Histic Epipedon (A2)	MIRA 1498)		() (Coast P	rairie Redox (A16) (LRR K, L, R)	ļ
Black Histic (A3)	Thin Dark Surface	2e (S9) (L	RR R, MI	.RA 1498) 5 cm M	ucky Peat or Peat (S3) (LRR K, L,	R)
Strafified Lavers (A5)	Loamy Mucky M	inerai (F7) Iatrix (F2)) (LRR K	, L)	Dark Su Potenti	INTROS (S7) (LRR K, L)	
Depleted Below Dark Surface (A11)	V Depleted Matrix	160 (r 2) (F3)			Polyvali Thin Da	te delow Sunace (S8) (LRR K, L) tk Surface (S9) /I BR K, L)	
1 ick Dark Surface (A12)	Redox Dark Surf	lace (F6)			Iron-Ma	nganese Masses (F12) (LRR K, L	R)
Sandy Mucky Mineral (S1)	Depleted Dark S	urface (Fi	7)		Piedmor	nt Floodplain Soils (F19) (MILRA 14	(8B)
Sandy Gleyeu Manut (54) Sandy Redox (55)	Hedax Depresse	XAS (F8)			Mesic S	podic (TA6) (MILRA 144A, 145, 14	9B)
, Stripped Matrix (S6)					Very Sh	allow Dark Surface (TF12)	
N Dark Surface (S7) (LRR R, MERA 149) 8)				Other (E	Explain in Remarks)	
³ indicators of hydrophytic vegetation and w	refiend involvology must	be preser	ti. uniess	disturbed	ormoblematic		
Restrictive Layer (if observed):	,						
Туре:						,	
Depth (inches):					Hydric Soll P	resent? Yes 🔽 No	
Remarks:				·····	······		
. · ·						· ·	
						•	
					•		
			•				
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WETLAND	DETERMINA	TION DATA FO	RM — North	central	and Northeast R	egion	,
ofine al	Trelles	Boad City/C	ounty: WAN	134 f	ord Sa	mpling Date: 12/10	1201
Project/Site:	(CUFFAD	1 pf1 201	۲		State: <u></u>	_ Sampling Point _2	2
Applicant/Owner. Was ware	Shaket	S Sertie	n Township, I	Range:			-
Investigator(s): KICMARC	Star Star	of	i ocal feli	ef (concav	e, convex, none):	FILLSJOK	
Landform (hillslope, terrace, etc.):	U172 C		-72-8	4006	8 Da	um: WES-1	984
Slope (%): 15 Lat 71.	70100	<u> </u>	·		NWI classificatio	n: hone	
Soil ap Unit Name: V_O	orthe		ing V No	. (If no. explain in Rema	arks.)	
Are climatic / hydrologic conditions or	the site typical fo	or this time of year ? T			Cimmistances" Dies	ent? Yes 🖌 No	
Are Vegetation Sofi	or Hydrology	significantly distur		e Manua	valois any answers it	Remarks.)	
Are Vegetation, Soil	or Hydrology	naturally problem	80C? (N	neeueu, e		1 . t.E	4 0
SUMMARY OF FINDINGS -	Attach site m	ap showing san	npling poin	t locatio	ns, transects, in	nportant reatures, e	IC.
SOMMARY OF FILEDINGS			Is the Samp	led Area			
Hydrophytic Vegetation Present?	Yes		within a We	land?	Yes	No	
Hydric Soil Present?	Yes	No V	If yes, option	al Wetland	Site ID:		=
Wetland Hydrology Present?	adures here or in	a separate report.)					
Remarks: (Exprain ane name three		•					
	7						
		`					
]
							-14
HYDROLOGI					Secondary Indicator	s (minimum of two require	a)
Wetland Hydrology Indicators.	s is remitted: CDBC	ck all that apply)			Surface Soil Cri	ucks (86)	
Primary indicators (mininum of or	B B ICLUICAL	Water-Stained Leav	es (B9)		Drainage Patie	ns (B10)	
Surface Water (A1)		Aquatic Fauna (B13)		Moss Trim Line	s (810)	
Saturation (A3)	, an	Mari Deposits (B15)			Uny-Season wa		
Water Marks (B1)		Hydrogen Sulfide O	dor (C1) mag en 1 juins F	Roots (C3)	Saturation Visit	ie on Aerial Imagery (C9)	
Sediment Deposits (B2)		_ Oxfore of Berbic	ed tran (C4)		Stumted or Stre	ssed Plants (D1)	
Drift Deposits (B3)		Recent iron Reduct	ion in Tilled So	ãs (C6)	Geomorphic Po	isition (D2)	1
Algal Mat or Crust (B4)		Thin Muck Surface	(C7)		Shallow Aquita	nd (D3) >= D=E=E (D4)	
iron Deposits (B5)	 	Other (Explain in R	emarks)		Microtopograp	HC Keiler (D4)	
Inundation Visible of Aeria a	Surface (B6)	-			FAC-Neural I	SI (UD)	
Sparsey Vegalater Contant							
Surface Wister Present? Ye	s No	Depth (inches):					
Water Table Present? Ye	≈ №	Depth (inches):		Wattand	Hudrology Present	Yes No	
Saturation Present? Ye	≈ No	Depth (inches):		Trocker to		· · · · · · · · · · · · · · · · · · ·	
(includes capitary finge)	sauge, monitoring	g well, aerial photos, p	previous inspec	tions), if an	vallable:		
Describe Recuirdes Data (accent	3	-					
Remarks:							1
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						and the second	

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Sampling Point 2 V

VEGETATION - Use scientific names of plants.

VEGETATION - Use scientific trancs of premise					
	Absolute	Dominant	Indicator	Tominance Test worksheet:	
Tree Strahm (Pint size:	% Cover	Species?	Status		
		1	モカノソ	Number of Dominant Species	0
1. Atlanthus 917135 (10 30		FACY	That Are OBL, FACW, or FAC:	(A)
	-			1	
2	_ <u></u>			Total Number of Dominant	11
				Species Across All Strata:	7 (B)
3				opcour in course	
		-			
1 *. <u></u>			· ······	Percent of Dominant Species	
5				That Are OBL, FACW, or FAC	: (AVB)
6				Prevalence index worksheet	=
-					-
1				Total % Cover of:	Multiply by:
	38	= Total Cr	1405	ORI species	x1=
					<u> </u>
Seoling/Shub Stratum (Plot size:)				FACW species	x2=
All while a litel SCI has	• 7 :	123	6. 1	EAC marine	¥3=
1. ATIANTHO AITINING	<u>_ ~ 0</u>	<u> </u>	<u>racv</u>		×J ⁻
a Basel id. Slava	10	V		FACU species	x4=
2 nosa multi Flora				I THE coorder	¥5=
3				UTL Species	x5
***		•		Column Totals:	(A) (B)
4				1	
		-	-	Deputitions Index - D/A	-
5		-		FIGWARENCE BRA	
8				Libertreeningtic Manufacture in the	
V				I samplear Addemont was	
7.				Rapid Test for Hydrophyti	c Vegetation
	2 -1			Daminana Test in SDB	-
	30	= Total Co	wer		
Hart Martin (Mathematica)		-		Prevalence index is <3.0 ¹	
(MOLSZE:)		,	-	Mambalaniani AdaptaCan	1
1 Solidago Canadensis	スハ	\sim	rAcu		r. (Human erabbarand
·				data in Remarks or on	a separate sheet)
2				Problematic Hydronhytic V	<i>lecelation¹ (Evaluin</i>)
			·		regeneration (Legense)
3	_		-		
				I Indicators of hydric soil and w	eliand hydrology must
4	-	-		be present, unless disturbed a	r problematic.
5					
		•		Definitions of Vegetation Str	afa:
6				-	
7				Tree - Woody plants 3 in. (7.6	cm) or more in diameter
·····	-	-		at breast height (DBH), regard	less of height
8					
		- 		Seniing/shrab - Woody plants	sless than 3 in DRH
) r				and greater than 3.28 ft (1 m) t	
40					
10		·	_	Herh - All herhacenus (non-an	and an an an an an
11				of size and woody plants loss	free 2 20 ft toll
· · · ·				A ANT A ANT A A A A A A A A A A A A A A	unari J.20 II (20).
12.				Winner store All months store	
				height	ञ भ्रान्स्यस्य प्रायग ३.२४ म् म
	au	= Total Co	ver	1	
Woody Vine Stratum /Dist cine					
(Law State)					·
1					
	-				
2				j .	
3				I	
V				Instantatio	
4.	•			Vanatation	. .
				Descent? Ves	
		= Total Cos	-	riesenti ies	NO
Remarks: (include photo muchans how or on a second					
Comment in the commence work of on a separate t	9 1993.)				
	. /	1-1		1. 1.4	
SAMDIC POINT IS 100	on te é	151	04.91	-A Clantor	
U I	رىي -	•			1
Inco then I flad have	hatt	16			
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Sampling Point 20

I LEARN TELEVISIONE INCLUSE IN THE ON	upta nessee 10 cocum	nent die frakterdt (or confirm	the absence of ind	icators.)	
Depth <u>Matrix</u>	Redo	r Features				
(inches) <u>Color (moisi)</u> %	Color (maist)	<u>% Type'</u>	_Loc ⁴ _		Remarks	
0-2 7. 45.74					<u>A</u>	
2-21 5YR 9/9			-	115	C (f)	
	-		·			
	-					
	-		•	······································		
	· ····					
¹ Type: C=Concentration D=Deniation RI	- Docharod Matrix CC			24		
Hydric Soil Indicators:	- NEULIDEU HIELIA, US	-covision of costo	1 Sano Gra	Indicators for Pro	PL=Pore Lining, M=A	<u>katrix.</u> He ^p e
Histosol (A1)	Polyvatus Bekow	· Surface (S8) (LRR	R,	2 cm Murck (A	10) (LRR K. I. 16) R	14021 14021
Histic Epipedon (A2)	MLRA 1498)		-	Coast Prairie I	Redox (A16) (LRR K	, L, R)
	I nen Dark Surfac	08 (59) (LRR R, ML)	RA 1498)	5 cm Mucky P	eet or Peat (S3) (LR	r K, L, R)
Stratified Layers (A5)	Loamy Gleved A	Aatrix (F2)	L)	Delk Sunace ((S7) (LRR K, L) W Surface (S2) (I BI	
Depleted Below Dark Surface (A11)	Depleted Matrix	(F3)		Thin Dark Sur	ace (S9) (LRR K. L)	τ η , Lj
Thick Dark Surface (A12)	Redox Dark Sur	face (F6)		Iron-Manganes	e Masses (F12) (LR	R K, L, R)
Sandy Mucky Mineral (S1)	Depleted Dark S Redox Depressi	kuface (F7) ors (E9)		Piedmont Floo	dplain Soils (F19) (N	LRA 1498)
Sandy Redax (\$5)				Wesic Spould (Red Parent Ma	(185) (MELKA 144A, ' derial (TF2)	145, 149B)
Stripped Matrix (S6)				Very Shallow E	Dark Surface (TF12)	
Dark Suitace (S7) (LRR R, MERA 149	8)			Other (Explain	in Remarks)	
³ indicators of hydrophylic vegetation and y	aniand hydrology must	he mesoni unices	dicturbed o	mahlanefa		
Restrictive Layer (if observed):		be prederit, andess	lisurbed 0	prometikanc.		
			1			
Туре:			1			-
Type: Depth (inches):				Hydric Soll Present	12 Yes 1	ia V
Type: Depth (inches): Remarks:				Hydric Soll Present	1? Yes I	io_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes I	io_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes I	ia_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ia <u>V</u> .
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ia <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ic_ <u>V_</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes H	io_ <u>V_</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	io_ <u>V</u>
Type: Depth (inches): Remarks:			1	Hydric Soll Present	17 Yes F	ic <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ic_ <u>V_</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes H	io_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes I	io_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ic <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes F	ic <u>V</u> .
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes H	io_ <u>V</u>
Type: Depth (inches): Remarks:				Hydric Soll Present	17 Yes I	io_ <u>V</u>

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Project/Site: Pf(2cx, a) 1 Doc1/cS Pood City/County: Wa) Samping Dom: 12/10 Applicant/Owner: Wed Yuxet / / Currens / P-ff(2cr State: CT Samping Point: 41/10 Investigator(a): Richards Shan X: SK Section, Township, Range: Description Descr	ral and Northeast Region
Projection Convert. Yes Yes State: CT	stord Sampling Date: 12/10/201
Applicant/Owner: 1200 Aug. Society Section, Township, Range: 1000 Aug. Society Investigator(s): 1200 Aug. Society Local field (concave, convex, none) 100 N.G. Salop (%): 3 Lat 4/1.4 4.2 7.8 50 Long: Total Aug. Society None Society Soli Map Unit Name: P1.9 p.0 U.vAbp. NWI classification NWI classification None Society Soli Map Unit Name: P1.1 p.0 U.vAbp. NWI classification NWI classification None Are Vegetation Soli Ori Hydrology a startificatify disturbed? Are Normatic Crumekanese present? Yes V No Are Vegetation Soli or Hydrology naturally problematic? (ff noeded, explain ary answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, e within a Westand? No If yee, optional West	State: Sampling Point:
Investigator(s): KIC MARCS Struct Vision Month (Mission: Intrace, etc.): Mi	
and.um (Nilsiope, terrace, etc):	none: hond
Stop (%):	868 Detum: W65-1984
Soil Map Unit Name: Yit p p d UANS No (If no, explain in Remarks.) ver dimatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) ver Vegetation Soil	NOAL desilication Now
ver climetic / hydrologic conditions on the aite typical for this time of year? Yes_V_No	(If a ambin in Dematry)
re VegetationSoit	
re VegetationSoil or Hydrology naturally problematic? (if needed, explain any answers in Hemanks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, e Hydrophytic Vegetation Present? Yes No Hydrophytic Vegetation Present? Yes No It is the Samplate Area within a Wethand? Yes No Wetland Hydrology Present? Yes No Premarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators Intrinuum of one is required; check all that apoh/	mai Circumstances present? Tes no
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important reatures, e Hydrophytic Vogetation Present? Yes No is the Sampled Area Wetiand Hydrology Present? Yes No if yes, optional Wetiand Site ID: Remarks: (Explain alternative procedures here or in a separate report.) Secondary Indicators: Secondary Indicators: Primary Indicators: Secondary Indicators: Surface Soil Cracks (Bo) Surface Water (A1) V Water-Stained Leaves (B3) Do Surface Soil Cracks (Bo) Y High Water Table (A2) Aquadic Fearma (B13) Moss Trim Lines (B10) Y High Water Table (A2) Ment Deposits (B19) Cracks (B6) Y Water Marks (B1) Hydrogen Suttle Odor (C1) Cracks Haurows (C3) Y Water Marks (B2) Odd Record Ritizopheres on Living Roots (C3) Saturation Visities on Aerial Imagery (C2) J Mage Marks (B2) Odd Ritizopheres on Living Roots (C3) Saturation Netable on Aerial Imagery (C2) J Mage Marks (B2) Odd Ritizopheres on Living Roots (C3) Saturation Netable on Aerial Imagery (C2) J Mage Marks (B2) Odd Ritizopheres on Living Roots (C3) Saturation Netable on Aerial Imagery (C2) J Mage Marks (B3) Record Iron Reducution in Titied Sois (C5) Secondery Des	ad, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No	ations, transects, important features, etc.
Hydric Sci Present? Yes No	
Wetsamd Hydrology Present? Yes No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators: Secondary Indicators (Inhinum of one is required; check all that expl/) Surface Soi Cracks (B5) Primary Indicators (Inhinum of one is required; check all that expl/)	
Note: The second and the proceedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators: (minimum of one is required; check all that apply) Surface Water (A1)	land Site ID:
HYDROLOGY Secondary Indicators: Primary Indicators: (minimum of one is required; check all that apply)	
HYDROLOGY Wetland Hydrology Indicators: Surface Soil Cracks (B6) Orainage Patterns (B10) Surface Water (A1) / Water-Stained Leaves (B9) Drainage Patterns (B10) Orainage Patterns (B10)	
HYDROLOGY Secondary Indicators: Primary Indicators (Infriturum of one is required; check all that apply) Surface Soil Cracks (B5) Surface Water (A1) Aquatic Fauna (B13) Moss Trin Lines (B16) Y High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Y Water Table (A2) Mari Deposits (B15). DraySeason Water Table (C2) Y Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aarial Imagery (C9) If Deposits (B3) Presence of Reduced from (C4) Stanted or Stressed Plants (D1) Orith Deposits (B5) Presence of Reduced from (C4) Stanted or Stressed Plants (D1) In the Deposits (B5) Presence of Reduced from (C4) Stanted or Stressed Plants (D1) In Deposits (B5) Presence of Reduced from (C4) Stanted or Stressed Plants (D1) In the Deposits (B5) Thin Muck Surface (C7). Stallow Aquitard (D3) In the Deposits (B5) Thin Muck Surface (C7). Microtopographic Resit (D4) Spansely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Microtopographic Resit (D4) Stantation Present? Yes No Depth (inches): <u>S</u> Weetand Hydrology Present? Yes <u>No</u> No Veater Table Present? Yes <u>No</u> Dep	
HYDROLOGY Secondary Indicators (minimum of two requires primary (minimum of two requires primary indicators (minimum of two requires primary indicators (minimum of two requires primary indicators (minimum of two requires primary indicatory resent? Press Pressecondes primary indicator	
HYDROLOGY Secondary Indicators: Primary Indicators (minimum of one is required; check all that apply)	
HYDROLOGY Secondary Indicators (minimum of one is required; check all that apply)	
Wetfand Hydrolegy Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B5) Surface Water (A1) V Water-Stained Leaves (B9) Drainage Patiens (B10) V High Water Table (A2) Aquatic Feuma (B13) Moss Trian Lines (B16) V Water Marks (B1) Hydrogen Suthice Odor (C1) Crayfish Burrows' (C3) V Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation (Visite on Aerial Imagery (C9) If Deposits (B3) Presence of Reduced Iron (C4) Stanted or Stressed Plants (D1) Oxidized Rhizospheres on Living Roots (C3) Stanted or Stressed Plants (D1) Print Deposits (B3) Presence of Reduced Iron (C4) Stanted or Stressed Plants (D1) Maid or Crust (B4) Thim Muck Surface (C7) Stalkew Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Satration Present? Yes No Depth (inches): Microtopographic Relief (D4) Includes cantillary finge) Depth (inches): Wetand Hydrology Present? Yes No Statace Water Present? Yes No	and a second sec
Primary Indicators (minimum of one is required; check all that apply)	Secondary indicators (mananum or two required)
Primary intercapes (hautgain of the periods) V Water-Stained Leaves (B9) Drainage Patterns (B10) Surface Water (A1) Aquatic Feurna (B13) Moss Trim Lines (B16) V High Water Table (A2) Aquatic Feurna (B13) Dry-Season Water Table (C2) V Saturation (A3) Hydrogen Sutide Odor (C1) Crayfish Burrows (C3) V Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C3) Drift Deposits (B3) Presence of Reduced iron (C4) Stanted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Titled Soits (C5) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Depth (inches): Water Table Present? Yes No Saturation Present? Yes No Depth (inches): Water Table Present? No Depth (inches): No Saturation Present? Yes No Depth (inches): Water Marks (Market Departs) No No Preserit? Yes	
Surface Water (A1)	Drainage Patierns (B10)
✓ High Water Table (A2)	Moss Trim Lines (B16)
V Saturation (V3)	Dry-Season Water Table (C2)
✓ Water Mans (51)	Crayfish Burrows (C8)
Diff Deposits (B3)	(C3) Samuration visible di Alexan mogel y (~~)
Algal Mat or Crust (B4)	- Standard of Saleston (D2)
Iron Deposits (B5)	Shallow Amitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Cincludes capillary finge) Open monitoring well, aerial photos, previous inspections), if available: No Remarks: Remarks: Remarks: Remarks:	Microtosographic Rejef (D4)
	FAC_Neutral Test (D5)
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Water Table Present? Yes V No Depth (inches): Wetland Hydrology Present? Yes V No Saturation Present? Yes V No Depth (inches): Wetland Hydrology Present? Yes V No (includes capillary/inge) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	
Saturation Present? Yes_VNoDepth (inches): Depth (inches): <thdepth (inches):<="" th=""> Depth (inches)</thdepth>	Ho
(includes capillary filinge) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	
Remarks:	if available:
Remarks:	
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Northcentral and Northeast Region - Interim Version

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Sampling Point $\overline{\mathcal{ZW}}$

VEGETATION -- Use scientific names of plants.

VEGETATION - COC CLICALLO TALICO OF FILME	Abeninio	Dominant	Indicator	The strength Tout manha hands
Tree Stratum (Piot size:)	% Cover	Species?	Status	Dominance lest worksheet
1 NYSSASYlvatica.	20	V	FAC	That Are OBL_FACW, or FAC:
	20.	V	FBC	
2	VI U			Total Number of Dominant
3	• 	•		Species Across All Stranat (D)
4	- ·			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Total & Ogene of Addition by
·	41			
		_= 1069 CO	Net	
Sapling/Shrub Stratum (Plot size:)	~ *	. (.		
1. GINdrid ben 2010		<u> </u>	FAR	
2 SQSSATTAL QIDIdum	20	<u> </u>	FACY	160 cmoin x4-
3				
4				(A)(B)
5	-	-		Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				Rapid Test for Hydrophytic Vegetation
· · · · · · · · · · · · · · · · · · ·	42	- Takal Ca		Dominance Test is >50%
Hoth Stantum (Clat since	-40		ACI	Prevalence index is <3.0 ¹
Phrashing (russing)	(12	1	These	Morphological Adaptations ¹ (Provide supporting
1. 1 Jing MJ & Walthin		- <u> </u>	FACW	data in Remarks or on a separate sheet)
2 39 M DJOCALDUS FORTIdus	<u> 40</u>	<u> </u>	051	Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4	_			indicators of hydric soil and welland hydrology must
5				te hearn, anssousier a productient.
6	•	·		Definitions of Vegetation Strata:
7				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
0			· —	at breast height (DBH), regardless of height.
0			·	Septing/shrub - Woody plants less than 3 in. DBH
10				and greater than 3.28 ft (1 m) tail.
10				Herb - All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tail.
12				Woody vines - All woody vines greater than 3.28 ft in
· · ·	83	= Total Co	ver	height.
Woody Vine Stratum (Plot size:)				
1				
2				
3.				
4				Hydrophytic
				Present? Yes / No
Boundary Analysis at a		= Total Cov	er	
remans: (maude proto numbers here or on a separate s	heet.)			
Samule looint 2 wis	10c	atid	17'	down and levil
occupie porch of the			. J e-	eowngra eren
of we tland flag ?	×16			
0			í	·

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Sampling Point 2W

Profile Desk	ription: (Describe t	to the dep	th needed to docur	ment the	indicator (or confir	m the absence o	f indicat	10/7S.)	
Depth (inchos)	Matrix	94	Redo	n Feature	S Type ¹	1052	Terhye		Domarks	
0-7	7.5×8 2/1		Count (Mansa)				<u>s I</u>		A	
7-20	10×R4/2	80	1045= 150	10	S	Ь	m-c5		C	
	anne internet and a second				-	می بدغار بالدی م			**************************************	
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				-			·			وي من المحكمة و
17uma			Dodumed Hertin							
Hydric Soil	indicators:	COOR, RUN-	Reduced Mainx, Co	Covere	d or Coate	d Sand G	indicators fo	tion: PL= or Proble	Pore Lining, M Instic Hydric	K=Matrix. Solis ³ :
Histosol	(A1)		Polyvalue Belov	v Surface	(S8) (LRR	R,	2 cm Mu	ck (A10)	(LRR K, L, M	LRA 149B)
Black Hi	stic (A3)		Thin Dark Surfa) Ice (59) (1	RRR. ML	RA 1498	Coast Properties Coast Province In the Coast	airie Red cky Pent	lox (A16) (LRF or Peat (S3) (K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky N	fineral (F	I) (LRR K,	L)	Dark Sur	face (\$7) (LRR K, L)	
	i Layers (Ab) I Below Dark Surface	(A11)	Loamy Gleyed I Depleted Matrix	Matrix (F2 / (F3)	3		Polyvalui Thin Derl	e Below : k Surface	Surface (S8) (1 > /SO) /I PE K	LRR K, L)
Thick Da	rk Surface (A12)		Redox Dark Su	nface (F6)			Iron-Man	ganese I	- (38) (LNK K, Masses (F12) (. L) (LRR K, L, R)
Sandy M Sandy G	lucky Mineral (S1) leved Matrix (S4)	•	Depleted Dark \$ Redox Depressi	Surface (F ions (F8)	7)		Piedmoni	t Floodpl	ain Soils (F19)	(MLRA 149B)
Sandy R	ediax (S5)						Red Pare	ant Mater	ial (TF2)	m, 143, 1430)
Stripped Dark Sur	Matrix (S6) face (S7) (LIRR R. 16	LRA 1498	3				Very Sha	ullow Dari	k Surface (TF1	2)
<u>.</u>								vîncert et i	(destad 6,5)	
"indicators of Restrictive I	hydrophytic vegetation	on and we	land hydrology mus	t be prese	ni, uniess	disturbed	l or problematic.			
Type:									,	
Depth (inc	fies):						Hydric Soll Pr	esent?	Yes_V	No
Remarks:										
										•
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