VILLAGE OF MAMARONECK, NEW YORK

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Village of Mamaroneck
Municipal Drainage Improvements
Boston Post Road (US 1) and South Barry Avenue
(VOM Contract No. 2012-06)

July 11, 2013

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A. PROJECT INTRODUCTION

I. PROJECT DESCRIPTION

This report identifies and mitigates the potential stormwater impacts associated with the proposed Village of Mamaroneck "Municipal Drainage Improvements Boston Post Road (US 1) and South Barry Avenue Project" (VOM Contract No 2012-06). The East Boston Post Road (US 1) and South Barry Avenue Municipal Drainage work scope includes the installation of storm sewer within the New York State Department of Transportation (NYSDOT) and the Village of Mamaroneck Right- of-Ways. The proposed South Barry Avenue drainage system will be extended from East Boston Post Road and connected into the existing South Barry Avenue municipal stormwater system. The Boston Post Road (US 1) portion of the project includes the removal of approximately forty (40) deteriorated masonry brick and mortar catch basins. The project includes the installation of approximately forty (40) proposed standard NYSDOT catch basins within the New York State Department of Transportation (NYSDOT) Right-of-Way.

The project is located in the Village of Mamaroneck, Westchester County, New York. The project site (i.e. proposed disturbance area) is approximately 0.25 acres. The project contains frontage along East and West Boston Post Road and South Barry Avenue. The Boston Post Road portion of work extends from Richbell Road to Hornridge Road (the approximate east and west municipal boundaries). The East Boston Post Road and South Barry Avenue work is located immediately south of this intersection. The project area is located within the Lower Long Island Sound Watershed and generally drains to the south. The project lies within the NYSDOT (i.e. Boston Post Road work) and the Village Right-of-Way (i.e. South Barry Avenue work).

Stormwater runoff within the project limits generally flows in the east, west and south directions. Runoff from Boston Post Road and South Barry Avenue travels from the existing roadway and enters the NYSDOT and Village storm sewer system via catch basins and conveyance pipes. Stormwater travels through the existing storm sewer and eventually discharges at the following outfall locations: Delancey Cove, Larchmont Harbor, Mamaroneck Harbor and Guidon Creek. The ultimate receiving water body is the Long Island Sound (i.e. a tidal waterbody).

The subject sites are owned by the State of New York (i.e. Boston Post Road) and the Village of Mamaroneck (i.e. South Barry Avenue). The project area consists primarily of asphalt concrete pavement roadway, Portland Cement Concrete (PCC) curbing and sidewalk, overhead and underground utilities (i.e. storm and sanitary sewer, water, electric, gas, traffic signals and loops and communications) with some trees and lawn area.

The proposed East Boston Post Road and South Barry Avenue portion of the project includes the following site improvements:

- Maintenance and protection of traffic (MPT)

- Installation of temporary erosion and sediment controls
- Sawcutting of existing bituminous concrete pavement
- Demolition and disposal of existing asphalt pavement, and Portland Cement Concrete (PCC) curb and sidewalk
- Trench and culvert excavation (with excavation protection system (EPS) as required) and earthwork activities
- Installation of drainage infrastructure (approximately 70 linear feet (L.F.) of Reinforced Concrete Pipe (RCP), approximately 630 linear feet of HDPE storm conveyance pipes, three (3) precast concrete catch basins and six (6) manholes)
- Connection of storm sewer to drainage structures
- Bituminous concrete pavement, sub-base, select granular fill and controlled low strength material (CLSM) installation
- Installation of cast-in-place concrete curb and sidewalk
- Application of double yellow and crosswalk pavement markings
- Turf establishment and restoration (i.e. seeding and mulching)

The proposed Boston Post Road portion of the project (i.e. catch basin replacement) includes the following site improvements:

- Maintenance and protection of traffic (MPT)
- Installation of temporary erosion and sediment controls
- Sawcutting of existing bituminous concrete pavement
- Demolition and disposal of existing asphalt pavement, and Portland Cement Concrete (PCC) curb and sidewalk
- Trench and culvert excavation (with excavation protection system (EPS) as required) and earthwork activities
- Installation of drainage infrastructure (approximately forty (40) precast concrete catch basins and one (1) manhole)
- Connection of storm sewer to drainage structures
- Bituminous concrete pavement, and controlled low strength material (CLSM) installation
- Installation of cast-in-place concrete curb and sidewalk
- Application of crosswalk pavement markings
- Turf establishment and restoration (i.e. seeding and mulching)

The proposed land disturbance associated with the project is approximately 0.25 acres. Based on the Village of Mamaroneck Code, this project is classified as a “Land Disturbing Activity”. Chapter 294 “Stormwater Management and Erosion and Sediment Control”, §294-6 "Definitions" of the Village Code states the following:

"LAND DISTURBING ACTIVITY

Any change to land which may result in soil erosion from water or wind and the movement of soil into water or onto lands, alteration of a drainage system, or increased runoff of waters, including, but not limited to, clearing, grading, excavating, transporting and filling of land."

Chapter 294 “Stormwater Management and Erosion and Sediment Control”, §294-4 "Applicability" of the Village Code states the following:

"All land development activities subject to review and approval by any Village board of the Village of Mamaroneck under the Village's Code shall be reviewed subject to the standards contained in this chapter. The Village Engineer, the cost of which shall be reimbursed to the Village for such services, shall carry out such review."

§294-7 of the Village Code states the following:

"No person shall commence or carry out any development or land-disturbing activity on any lot in the Village of Mamaroneck without first obtaining a stormwater control permit from the Building Department, submitting a SWPPP and thereafter complying with the requirements of this chapter."

It shall be noted that since this project is located within the State and Village Right-of-Ways, the project therefore does not exist on a lot in the Village of Mamaroneck. A Section-Block-Lot is not assigned to the project area.

This SWPPP contains the required SWPPP elements outlined §294-8 "Stormwater Pollution Prevention Plans (SWPPP). This SWPPP has been prepared using the following criteria from Chapter 294 “Stormwater Management and Erosion and Sediment Control”, §294-8(C)(1)(2)(3) and (4) of the Village Code:

C. Exceptions. Construction and development activities as annotated above may be excepted from the on-site stormwater retention requirements only, if they meet all of the following criteria:

(1) Lots are located wholly within the one-hundred-year floodplain.

(2) The applicant can show, to the satisfaction of the Village Stormwater Management Officer (SMO) that, to the maximum extent practical, impervious surfaces have been limited on the site.

(3) In the opinion of the SMO, the retention of stormwater on such site would exacerbate flooding on the property and/or contribute to an increase in the one-hundred-year floodplain.

(4) If the applicant can show, to the satisfaction of the SMO, that the release of stormwater from the site, without said retention, will not have an adverse effect on any downstream properties.

This SWPPP has been prepared using the following criteria from Chapter 4 "Unified Sizing Criteria", Sections 4.4, 4.5 and 4.6 of the NYSDEC Stormwater Management Design Manual, last revised August 2010:

1. *Page 4-4 of Section 4.4 "Stream Channel Protection Requirements (Cpv)" – "The Cpv requirement does not apply in certain conditions, including: The site discharges directly to tidal waters…"*
2. *Page 4-9 of Section 4.5 "Overbank Flood Control (Qp)" – "The overbank flood control requirement (Qp) does not apply in certain conditions, including: The site discharges directly to tidal waters…"*
3. *Page 4-11 of Section 4.6 "Extreme Flood Control (Qf)" – "The extreme flood control requirement (Qf) does not apply in certain conditions, including: The site discharges directly to tidal waters…"*

§294-9(A)(1) and (2) of the Village Code states the following:

A. Technical standards. For the purpose of this chapter, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this chapter:

(1) The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual).

(2) New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual)."

Based on the above criteria from Chapter 294 of the Village Code and Chapter 4 "Unified Sizing Criteria" of the NYSDEC Stormwater Management Design Manual, last revised August 2010, post-construction water quantity controls are not required for this project. Since the project area discharges to a tidal water body, the Village retention requirements and NYSDEC stormwater quantity requirements are waived.

Appendix B "Required SWPPP Components by Project Type", Table 1 "Construction Activities that Require the Preparation of a SWPPP that Only Includes Erosion and Sediment Controls" of the NYSDEC SPDES General Permit For Stormwater Discharges from

Construction Activity Permit No. GP-0-10-001 states the following (please refer to Appendix D of this SWPPP):

"Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains."

The proposed development does not require coverage under NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-10-001) since the proposed land disturbance does not exceed the one (1) acre threshold, and is not located within an East of Hudson (EOH) Watershed. However, the NYSDEC does not require the preparation of SWPPP's that include post-construction stormwater management practices for linear utility projects as described above. These projects only require SWPPP's that include erosion and sediment controls (i.e. exclusion of post-construction water quality and quantity controls).

The proposed project, Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control (E&S) Plan have been prepared in accordance with the following:

- Code of the Village of Mamaroneck, Chapter 294 "Stormwater Management and Erosion and Sediment Control" and other sections, as applicable.
- New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual, last revised August 2010.
- New York State Standards and Specifications for Urban Erosion and Sediment Control, dated August 2005.

II. EXISTING CONDITIONS

The project area consists primarily of asphalt concrete pavement roadway, Portland Cement Concrete (PCC) curbing and sidewalk, overhead and underground utilities (i.e. storm and sanitary sewer, water, electric, gas, traffic signals and loops and communications) with some trees and lawn area.

III. PROPOSED CONDITIONS

The proposed East Boston Post Road and South Barry Avenue portion of the project includes the following site improvements:

- Maintenance and protection of traffic (MPT),
- Installation of temporary erosion and sediment controls
- Sawcutting of existing bituminous concrete pavement
- Demolition and disposal of existing asphalt pavement, and Portland Cement Concrete (PCC) curb and sidewalk
- Trench and culvert excavation (with excavation protection system (EPS) as required) and earthwork activities

- Installation of drainage infrastructure (approximately 70 linear feet (L.F.) of Reinforced Concrete Pipe (RCP), approximately 630 linear feet of HDPE storm conveyance pipes, three (3) precast concrete catch basins and six (6) manholes)
- Connection of storm sewer to drainage structures
- Bituminous concrete pavement, sub-base, select granular fill and controlled low strength material (CLSM) installation
- Installation of cast-in-place concrete curb and sidewalk
- Application of double yellow and crosswalk pavement markings
- Turf establishment and restoration (i.e. seeding and mulching)

The proposed Boston Post Road portion of the project (i.e. catch basin replacement) includes the following site improvements:

- Maintenance and protection of traffic (MPT)
- Installation of temporary erosion and sediment controls
- Sawcutting of existing bituminous concrete pavement
- Demolition and disposal of existing asphalt pavement, and Portland Cement Concrete (PCC) curb and sidewalk
- Trench and culvert excavation (with excavation protection system (EPS) as required) and earthwork activities
- Installation of drainage infrastructure (approximately forty (40) precast concrete catch basins and one (1) manhole)
- Connection of storm sewer to drainage structures
- Bituminous concrete pavement, and controlled low strength material (CLSM) installation
- Installation of cast-in-place concrete curb and sidewalk
- Application of crosswalk pavement markings
- Turf establishment and restoration (i.e. seeding and mulching)

The drainage improvements associated with the project address the deteriorated condition of approximately forty (40) catch basins within the NYSDOT Right-of-Way. Many of the catch basins grates are severely depressed and/or the masonry brick and mortar structure walls are experiencing varying degrees of structural stress (i.e. cracking, shifting, etc.). The Boston Post Road portion of work (i.e. catch basin replacement) will include the installation of drainage structures (catch basins and manholes) designed in accordance with current NYSDOT standard specifications. The catch basin castings will include "bicycle safe" grates for cyclists. The catch basin casting backplate (curb piece) is a NJDOT type that prevents floatables, rodents, animals and children from entering the structure. The upgraded drainage

structures will also improve the hydraulic efficiency of the existing NYSDOT and Village storm sewers. The replacement of the catch basins will improve public safety and welfare.

The drainage improvements associated with the East Boston Post Road and South Barry Avenue work will alleviate flooding conditions resulting from improperly functioning storm pipes adjacent to this intersection. The proposed storm sewer network within South Barry Avenue will convey stormwater runoff from East Boston Post Road, down South Barry Avenue and discharge at Guidon Creek. Presently, there is a lack of drainage infrastructure (i.e. catch basins) on South Barry Avenue. The infrastructure will also serve as potential connection points for future public and private development. The proposed catch basin castings will include "bicycle safe" grates for cyclists. The catch basin casting backplate (curb piece) is the same NJDOT type described above. The additional and upgraded drainage structures will also improve the hydraulic efficiency of the existing NYSDOT and Village storm sewers.

B. ANALYSIS METHODS

For the proposed stormwater system design, the following design parameters were used:

1. A existing conditions map was developed from a topographical survey prepared by Richie Spinelli and the Munson Company last revised April 28, 2010. The drainage area map illustrates the existing features on the property and adjacent off–site areas.
2. Existing municipal and on–site drainage infrastructure was observed by Woodard & Curran and the Village Engineer to verify existing features of the watershed.
3. U.S.G.S. Quadrangle Map for Mt. Vernon, New York, last revised 1979.
4. USDA National Resource Conservation Service (NRCS) Web Soil Survey.
5. New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual, last revised August 2010.
6. New York State Standards and Specifications for Urban Erosion and Sediment Control, dated August 2005.
7. Village of Mamaroneck Code, as last amended or revised.
8. New York State Department of Transportation (NYSDOT) Standard Specifications last revised May 1, 2008.

C. PROJECT MAPS/DRAWINGS

Relevant project maps are attached in Appendices E and K and include the following:

1. Erosion and Sediment Control Plan (Drawings C-500)

A full set of project drawings prepared by Woodard & Curran will accompany the SWPPP.

D. EROSION AND SEDIMENT CONTROL

The plans provide for specific erosion and sediment controls to be employed during construction. It is the intent to provide effective erosion control by minimizing land disturbance at any given time, containing sediment from disturbed areas, treating runoff where possible, and stabilizing disturbed soils as soon as possible. Construction of the proposed development can potentially impact soils and by erosion and transport of sediment. An Erosion and Sediment Control Management Program has been established to mitigate these impacts, for the entire duration of the project, as outlined in the New York Guidelines for Urban Erosion & Sediment Control, dated August 2005. A continuing maintenance program will be implemented for the control of sediment transport and erosion control for the duration of the project as well as after construction.

EXISTING TOPOGRAPHIC FEATURES OF SITE AREA

The existing topography is shown on Woodard & Curran Drawing C-100 "Existing Conditions Map", C–400 "Grading and Drainage Plan", and C–500 "Erosion and Sediment Control Plan" at a scale of 1"=20'. Two foot contour intervals are provided on the plans. The plans include the location of the project relative to identifiable land features such as roads, buildings, wooded areas, etc.

SOIL DESCRIPTION

Based on the information obtained from the USDA Soil Survey, the soil type located within the project area consists of Udordents, smoothed (Ub), Urban land (Uf) and Urban land – Charlton – Chatfield complex (UIC).

Please refer to Appendix B of this SWPPP for the USDA NRCS Custom Soil Reports for "Boston Post Road (US 1) Catch Basin Replacement" and "East Boston Post Road and South Barry Avenue".

I. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

Temporary Erosion & Sediment Control Measures will be used throughout the construction of the proposed improvements to control on-site erosion and sediment transfer. These measures include a stabilized construction entrance, silt fence, storm drain inlet protection, dust control, temporary seeding and mulching.

The temporary erosion & sediment controls that will be used during the development of the site include the following:

- Stabilized Construction Entrance – will be constructed at the entrance to the area of construction and will consist of AASHTO No. 1 rock. The rock entrance will be a minimum of 50 feet in length by 20 feet in width by 8 inches in depth.

- Silt Fence at downgradient slopes and around stockpile areas – is a temporary geotextile fabric used to intercept sediment laden runoff from small drainage areas.

- Storm Drain Inlet Protection – is a permeable barrier placed around the drain inlet to reduce the amount of sediment entering the storm drainage system.

- Dust Control – consisting of spraying the ground surface with water to prevent dust emissions from vehicular and construction traffic.

- Seeding – will be used to create a vegetative surface and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed. The temporary seeding will be placed within the proposed parking area only.

- Mulching – is used as an anchor for seeding and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed.

- Erosion & Sediment Control Notes – Construction sequencing is included on the Erosion and Sediment Control Plan to direct the Contractor how to proceed during construction to prevent and minimize erosion.

II. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES

The intent of the permanent erosion and sediment control measures is to permanently stabilize the ground surface via vegetative and structural practices, while controlling and reducing runoff velocities. Towards the completion of the development of the site, permanent erosion and sediment control measures will be developed for long term erosion protection. The Village of Mamaroneck will be the responsible party for the long term maintenance of the permanent control measures. The following permanent control measures will be developed for long term erosion protection:

- Seeding – at least 70% perennial vegetative cover will be used to produce a permanent uniform erosion resistant surface. The seeded areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Optimum times for planting are the early spring and fall; however plantings can be started in the summer provided adequate mulch and moisture is supplied.

- Landgrading – is the reshaping of the existing land surface in accordance with the Grading and Drainage Plan. Proper grading will ensure the intended drainage areas are directed to the Stormwater Management Practice (SMP). Landgrading also includes the removal of stockpile soils from the site which are in excess to project needs, and the removal of assorted brush designated in areas to be cleared.

- Sumps – will be used to remove some of the coarse sand and grit sediment before entering the proposed drainage system. The proposed drainage structures will be constructed with a twenty–four (24) inch deep sump.

- Permanent Surface Stabilization – is the placement of a stable ground surface (e.g. asphalt concrete pavement) used to eliminate soil erosion, movement, etc.

E. MAINTENANCE AND INSPECTION REQUIREMENTS

Maintenance and inspections are required in order to ensure the stormwater and erosion and sediment control practices are performing as designed. Temporary and permanent maintenance and inspection requirements are further discussed below. Proper maintenance and inspections will ensure the longevity and effectiveness of the SWPPP and Erosion and Sediment Control Plan.

I. SHORT AND LONG TERM MAINTENANCE AND INSPECTION REQUIREMENTS

Inspections during construction should be performed to verify all practices are functioning properly; correctly maintained, and accumulated sediment is removed from all structures. The Contractor will also examine the site for any evidence of soil erosion, the potential for pollutants to enter the storm drain system, turbid discharges at all outfalls, and the potential for soil and other materials to be transported on the public roadway at the site entrance. In addition to these guidelines, the project plans will provide more specific erosion control guidelines, as well as a construction sequence to serve as a general guide for the Contractor though the construction process. The Contractor shall be responsible for maintaining the temporary erosion and sediment control measures through out construction. This maintenance will include, but not be limited to, the following tasks:

a. SHORT TERM MAINTENANCE AND INSPECTION SCHEDULE AND REQUIREMENTS

- The construction entrance should be checked daily to ensure no sediment is being deposited onto the public roadway. Should sediment be observed, it should be immediately removed from the street, and the stone in the construction entrance replaced the same day.

- Inlet protection will be inspected daily to check for debris and sediment buildup and clogging. In the event debris and sediment buildup and clogging is observed, the wire mesh and crushed stone are to be cleaned and/or replaced in order to guarantee proper function of the drainage system.

- Inlets and outlets to subsurface drainage pipes are to remain clear at all times. An inspection is to be made daily to ensure that pipes are functioning and that stormwater flow is unrestricted. In the event material is found to have clogged subsurface pipes, all attempts should immediately be made to clear such debris. In the event material is out of reach, appropriate measures must be taken to ensure pipes are cleared and actions taken to prevent such incidents from reoccurring.

- Trenches are also to be inspected daily to ensure proper movement of stormwater. Any large debris or collections of sediment are to immediately be removed and properly disposed.
- For dust control purposes, moisten all exposed graded areas with water at least twice a day in those areas where soil is exposed and cannot be planted with a temporary cover due to construction operations or the season (December through March).
- Inspection of erosion and sediment control measures shall be performed at the end of each construction day and immediately following each rainfall event. All required repairs shall be immediately executed by the Contractor.
- Sediment deposits shall be removed when they reach approximately 1/3 the height of the silt fence. All such sediment shall be properly disposed of in fill areas on the site, as directed by the Village. Any damaged or torn fence shall be replaced. Fill shall be protected following disposal with mulch, temporary and/or permanent vegetation and be completely circumscribed on the downhill side by silt fence.
- Rake all exposed areas parallel to the slope during earthwork operations to minimize concentrated flow across unstabilized areas.
- Following final grading, the disturbed area shall be stabilized with a permanent surface treatment (i.e. grass, pavement, sidewalk, etc.). During rough grading, areas which are not to be disturbed for (7) seven or more days shall be stabilized with the temporary seed mixture, as defined on the plans.

F. ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES

During construction, specific pollution prevention measure will be implemented to control litter, construction chemical and construction debris from becoming a pollutant source in stormwater runoff. These pollution prevention measures are described below.

WASTE DISPOSAL

All liquid waste materials will be collected and stored in sealed metal containers approved by the Engineer. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The General Contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.

HAZARDOUS WASTE

All hazardous waste materials will be disposed of in a manner specified by local, state and regulations or by the manufacturer. Site personnel will be instructed in these practices, and

the individual designated as the Contractor's on-site representative will be responsible for seeing that these practices are followed.

SANITARY WASTE

Portable sanitary facilities may be provided on the construction site. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management Contractor, and as required by any local, state and federal regulations.

G. CONSTRUCTION MATERIALS STORAGE AND SPILL PREVENTION RESPONSE (SPR)

During construction, building and waste materials are expected to be stored on site. A description of the controls to reduce pollutants from these materials, and storage practices to minimize exposure of materials and spill prevention response (SPR) are discussed below.

1. NON-STORM WATER DISCHARGES

The following non-storm water discharges are anticipated during the course of this project:

- Discharges from storm line flushing.
- Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- Uncontaminated ground water (if encountered) associated with dewatering activities.

2. MATERIALS INVENTORY

The following materials or substances are expected to be present (but may not be) on the site during the construction period. These materials will be handled and stored appropriately, and in accordance with local, state and federal regulations.

- Crushed Stone and Portland Cement Concrete
- Detergents
- Paints (for traffic markings)
- Metals
- Bituminous Materials
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Epoxy Based Mortars, Grouts, etc.

3. SPILL PREVENTION

HOUSE KEEPING

- Only needed products will be stored on-site by the Contractor.
- Except for bulk materials, the Contractor will store all materials under cover and in appropriate containers.
- Products must be stored in original containers and labeled.
- Material mixing will be conducted in accordance with the manufacturer's recommendations.
- When possible, all products will be completely used before properly disposing of the container off site.
- The manufacturer's directions for disposal of materials and containers will be followed.
- The Contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
- Dust generated will be controlled in an environmentally safe manner.
- Vegetation areas not essential to the construction project will be preserved and maintained as noted on the drawings.

HAZARDOUS MATERIALS (AS APPLICABLE)

- Products will be kept in original containers unless the container is not resealable.
- Original labels and material safety data sheets will be retained in a safe place to relay important product information.
- If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
- Wheel wash water will be collected (as required/necessary) and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
- Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, and mixer washout waters will be collected on site.

PRODUCT SPECIFIC PRACTICES

Petroleum Products

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

Paints

All containers will be tightly sealed and stored when not required for use (if present on the site). The excess will be disposed of according to the manufacturer's instructions and applicable state and local regulations.

SPILL CONTROL PRACTICES

In addition to the housekeeping and material management practices, the following practices will be followed for spill prevention and cleanup (if needed):

- For all hazardous materials stored on site, the manufacturer's recommended methods for spill clean up will be clearly posted. Site personnel will be made aware of the procedures, and the locations of the information and cleanup supplies.
- Appropriate cleanup materials and equipment will be maintained by the Contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as booms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for clean up purposes.
- All spills will be cleaned immediately after discovery and the materials disposed of properly.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- After a spill, a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
- The Contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator. The Contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

4. SPILL RESPONSE

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

- The Contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
- Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the Contractor at the site.
- If oil sheen is observed on surface water, action will be taken immediately to remove the material causing the sheen. The Contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
- If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to the contacts listed below.
- Personnel with primary responsibility for spill response and clean up will receive training by the Contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

5. SPILL NOTIFICATION

In the event of a spill, the Contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A reportable spill is a quantity of five (5) gallons or more or any spill of oil which: (1) violates water quality standards, (2) produces a "sheen" on a surface water, or (3) causes a sludge or emulsion. This spill must be reported immediately to the agencies listed below.

- Any spill of oil or hazardous substance to waters of the state must be reported immediately by telephone to the following agencies:

  - 911 – Police, Fire and EMS
  - Village of Mamaroneck Fire Department Headquarters
    146 Palmer Avenue, Mamaroneck NY, 10543
    Emergency Line: (914) 698-0200
    Non-Emergency Line: (914) 825-8777
  - NYS Department of Environmental Conservation (NYSDEC)
    Spill Reporting Hotline
    (1800) 457–7362
  - National Response Center: (1800) 424-8802
  - Local Emergency Planning Committee (LEPC)
    Westchester County Office of Emergency Management
    200 Bradhurst Avenue
    Hawthorne, NY 10532
    (914) 864–5450
  - Westchester County Department of Health (WCDOH)
    Spill Reporting Hotline
    (914) 813-5000
  - U.S. Environmental Protection Agency (USEPA)
    EPCRA Information Hotline
    (1800) 535–0202
  - U.S. Department of Labor and Occupational Safety and Health Administration (OSHA)
    Tarrytown, NY
    (914) 524–7510

6. CONSTRUCTION CHANGES

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SWPPP and supporting drawings will be modified to reflect the changes. Copies of the revised SWPPP will be submitted to the Village of Mamaroneck and the Contractor. The SWPPP will be retained in a designated on–site area for review for the duration of the project.

H. CONCLUSION

The Stormwater Pollution Prevention Plan (SWPPP) is prepared in accordance with the Village of Mamaroneck Code requirements, and the New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual, last revised August 2010 and New York State Standards and Specifications for Urban Erosion and Sediment Control, dated August 2005.

The proposed SWPPP and a properly implemented maintenance program and spill prevention response will effectively mitigate any potential adverse impacts of stormwater runoff from the proposed improvements. Downstream areas (on-site and off–site), and adjacent properties, are not expected to be adversely affected by the project with the implementation of the proposed Stormwater Pollution Prevention Plan (SWPPP).

Sincerely,

Anthony Robert Carr, PE, CFM
LTJG, CEC, USN
Village Engineer
Village Of Mamaroneck

APPENDIX A
EROSION AND SEDIMENT CONTROL PLAN

APPENDIX B
USDA SOIL SURVEY MAPS AND INFORMATION

APPENDIX A
EROSION AND SEDIMENT CONTROL PLAN

PROPOSED INLET PROTECTION (NYSDOT ITEM NO. 209.1701) — 4 / C-800

PROPOSED TEMPORARY STAGING AREA SURROUNDED BY CONSTRUCTION FENCE (TYPICAL) (ITEM NO. 619.01VOM) — 1 / C-800

1,2 / C-803 PROPOSED DRAINAGE MANHOLE (DMH A–3)
(NYSDOT ITEM NO. 206.04, 552.16, 604.4098, 623.12 AND 655.010102)
RIM=60.61
INV=50.44

1,2 / C-803 PROPOSED DRAINAGE MANHOLE (DMH A–2)
(NYSDOT ITEM NO. 206.04, 552.16, 604.4098 623.12 AND 655.010102)
RIM=47.78
INV=44.84 (15"ø NW)
INV=43.38 *(EX. 8"ø)*
INV=40.53 (15"ø N)

1,2 / C-803 PROPOSED DRAINAGE MANHOLE (DMH A–1)
(NYSDOT ITEM NO. 206.04, 623.12 AND 655.010102)
RIM=±23.50
INV=±20.10 *(EX. 12"ø)*
INV=19.52 (15"ø)
(CONTRACTOR TO FIELD VERIFY EXISTING MANHOLE RIM AND INVERT ELEVATIONS)

4 / C-800 PROPOSED INLET PROTECTION (NYSDOT ITEM NO. 209.1701)

1,2 / C-803 PROPOSED DRAINAGE MANHOLE (DMH A–4)
(NYSDOT ITEM NO. 206.04, 552.16, 604.4098, 623.12 AND 655.010102)
RIM=64.50
INV=51.25

3 / C-801, 1,2 / C-802 PROPOSED CATCH BASIN (CB A–5)
(NYSDOT ITEM NO. 204.02, 206.04, 552.16, 604.321072, 623.12 AND 655.010101)
RIM=64.68
INV=56.58 *(EX. 12"ø)*
INV=56.50 (15"ø FUTURE HDPE)
INV=56.00 *(EX. 18"ø)*
INV=54.75 (15"ø RCP)

PROPOSED TEMPORARY STAGING AREA SURROUNDED BY CONSTRUCTION FENCE (TYPICAL) (ITEM NO. 619.01VOM) — 1 / C-800

3 / C-801, 1,2 / C-802 PROPOSED CATCH BASIN (CB A–2–1)
(NYSDOT ITEM NO. 204.02, 206.04, 604.321072 AND 655.010101)
RIM=49.00
INV=45.88

PROPOSED SILT FENCE (TYPICAL) (NYSDOT ITEM NO. 209.13) — 2 / C-800

PROPOSED CONSTRUCTION FENCE (TYPICAL) (ITEM NO. 619.01VOM) — 1 / C-800

PROPOSED TEMPORARY STAGING AREA (TYPICAL) (ITEM NO. 619.01VOM) — 1 / C-800

Stuart Avenue

South Barry Avenue

East Boston Post Road

EXISTING BUILDING

Existing Brick Building

Existing Masonry Building

Existing 2 Story Frame Dwelling

Now or Formerly FGP West Street LLC / Aegon USA Realty Advisors

Now or Formerly Roberto & Egon Hamlet

Now or Formerly Joseph & Gene Bambino

Now or Formerly Marie & Luis Serodio

Now or Formerly Mamaroneck Properties In

8" Sanitary Sewer Main

8" Storm Drain

Concrete Walk

Bluestop Pavement

Bluestop Driveway

EXISTING SMH (66344) RIM=48.29 INV=30.00

EXISTING DMH (WJ 55) RIM=±24.00 INV=±20.10

EXISTING SMH (66318) RIM=±26.28 INV=±3.71

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

WOODARD & CURRAN ENGINEERING PA PC
709 Westchester Avenue Suite L2
White Plains, NY 10604
914.448.2266 | www.woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

STATE OF NEW YORK — JEFFREY M. CAMP — 092691 — LICENSED PROFESSIONAL ENGINEER

REV	DESCRIPTION	DATE
DESIGNED BY: ARC, PE	CHECKED BY: ARC, PE/HG, PE	21962_Site (South Barry Ave).dwg
DRAWN BY: ARC, PE		

EROSION AND SEDIMENT CONTROL PLAN

VILLAGE OF MAMARONECK
123 MAMARONECK AVENUE
VILLAGE OF MAMARONECK, NEW YORK 10543

MUNICIPAL DRAINAGE IMPROVEMENTS
BOSTON POST ROAD (US 1) AND SOUTH BARRY AVENUE
VILLAGE OF MAMARONECK, NEW YORK 10543

JOB NO.: 213962
DATE: May 15, 2012
SCALE: 1"=20'
SHEET: 7 OF 23

C-500

APPENDIX B
USDA SOIL SURVEY MAPS AND INFORMATION

United States Department of Agriculture

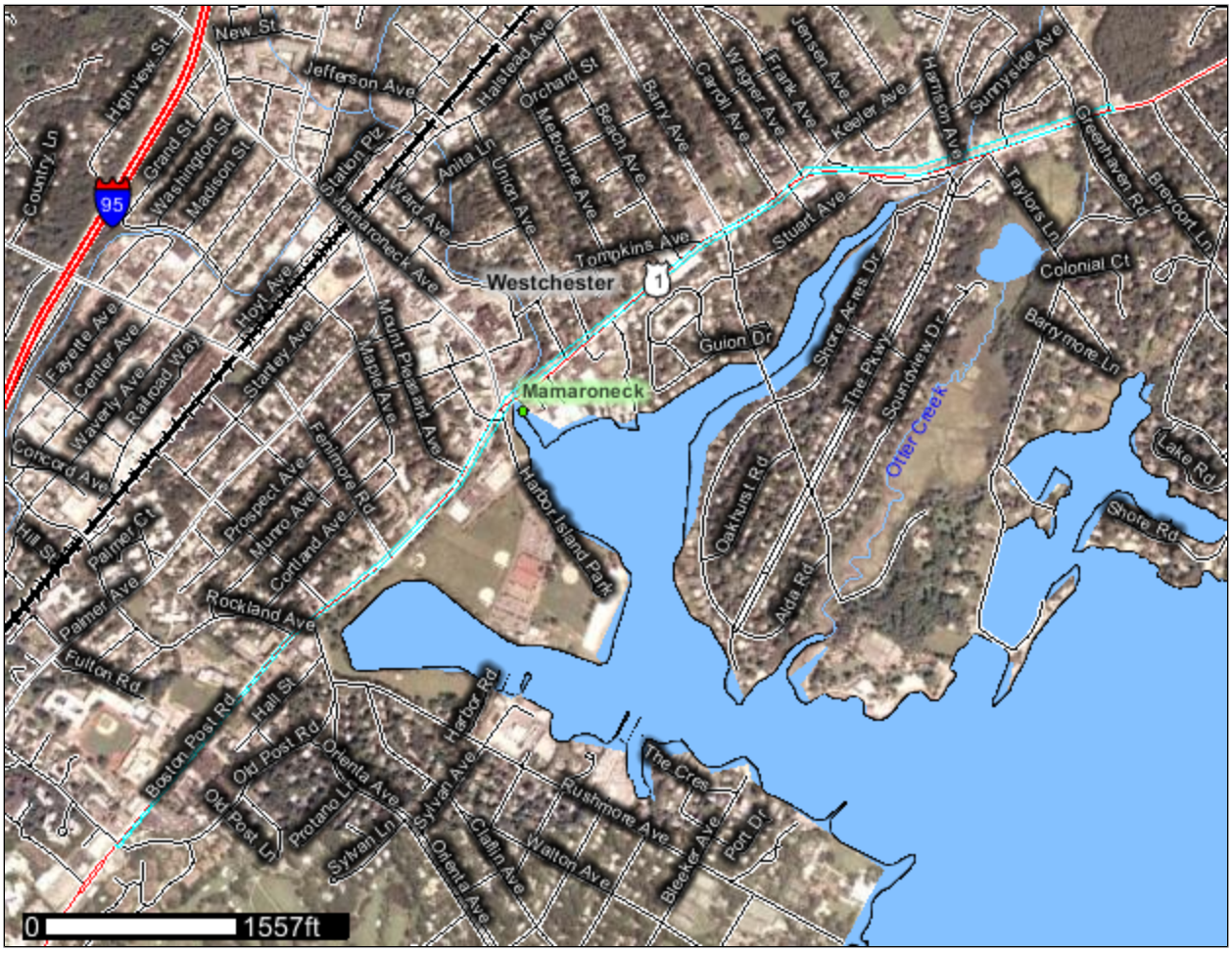
NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Westchester County, New York

Boston Post Road (US 1) Catch Basin Replacement



July 15, 2013

Preface

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

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

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

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

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

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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Contents

How Soil Surveys Are Made

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

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

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

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

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

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

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

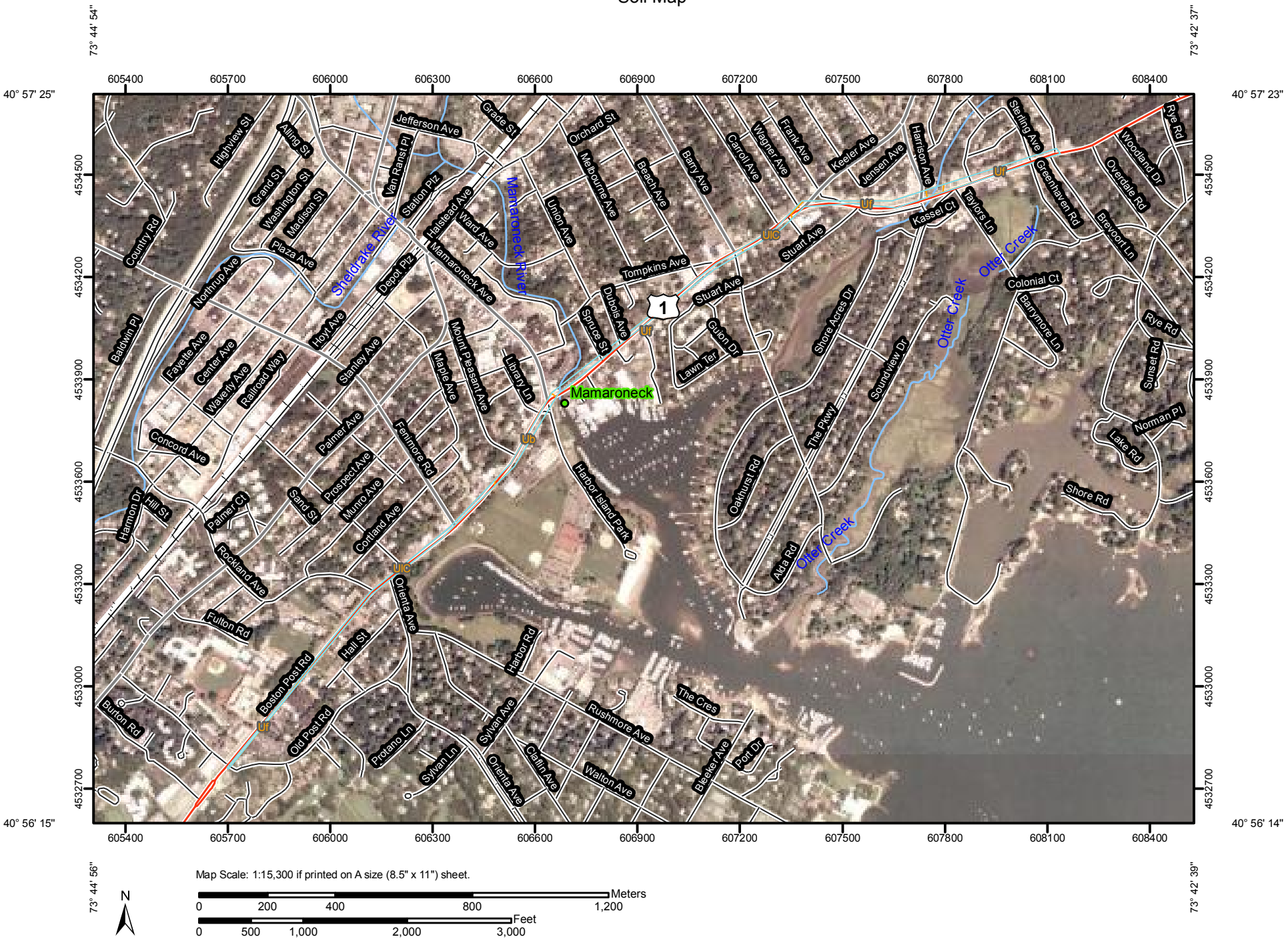
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report
Soil Map



MAP LEGEND

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

Soils
- Soil Map Units

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

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

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

MAP INFORMATION

Map Scale: 1:15,300 if printed on A size (8.5" × 11") sheet.

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

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

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 8, Sep 18, 2012

Date(s) aerial images were photographed: 7/31/2006

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

Map Unit Legend

Westchester County, New York (NY119)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Ub	Udorthents, smoothed	1.2	12.1%
Uf	Urban land	5.7	60.0%
UlC	Urban land-Charlton-Chatfield complex, rolling, very rocky	2.7	27.9%
Totals for Area of Interest		**9.6**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Westchester County, New York

Ub—Udorthents, smoothed

Map Unit Setting

Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition

Udorthents, smoothed, and similar soils: 80 percent
Minor components: 20 percent

Description of Udorthents, Smoothed

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 18 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Low (about 4.6 inches)

Typical profile

0 to 4 inches: Gravelly loam
4 to 70 inches: Very gravelly loam

Minor Components

Udorthents, wet substratum

Percent of map unit: 5 percent

Urban land

Percent of map unit: 5 percent

Leicester

Percent of map unit: 2 percent

Hollis

Percent of map unit: 2 percent

Charlton

Percent of map unit: 2 percent

Riverhead

Percent of map unit: 2 percent

Sun

Percent of map unit: 2 percent
Landform: Depressions

Uf—Urban land

Map Unit Setting

Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent

Minor Components

Udorthents

Percent of map unit: 5 percent

Udorthents, wet substratum

Percent of map unit: 2 percent

Unadilla

Percent of map unit: 2 percent

Chatfield

Percent of map unit: 2 percent

Sutton

Percent of map unit: 2 percent

Riverhead

Percent of map unit: 2 percent

UlC—Urban land-Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting

Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition

Urban land: 40 percent
Charlton and similar soils: 20 percent
Chatfield and similar soils: 15 percent
Minor components: 25 percent

Description of Charlton

Setting

Landform: Hills, ridges, till plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.5 inches)

Typical profile

0 to 8 inches: Loam
8 to 24 inches: Sandy loam
24 to 60 inches: Sandy loam

Description of Chatfield

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 3.2 inches)

Typical profile

0 to 7 inches: Loam
7 to 24 inches: Flaggy silt loam
24 to 28 inches: Unweathered bedrock

Minor Components

Rock outcrop

Percent of map unit: 5 percent

Leicester

Percent of map unit: 5 percent
Landform: Depressions

Sutton

Percent of map unit: 5 percent

Udorthents

Percent of map unit: 5 percent

Hollis

Percent of map unit: 2 percent

Sun

Percent of map unit: 2 percent
Landform: Depressions

Palms

Percent of map unit: 1 percent
Landform: Marshes, swamps

References

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United States Department of Agriculture

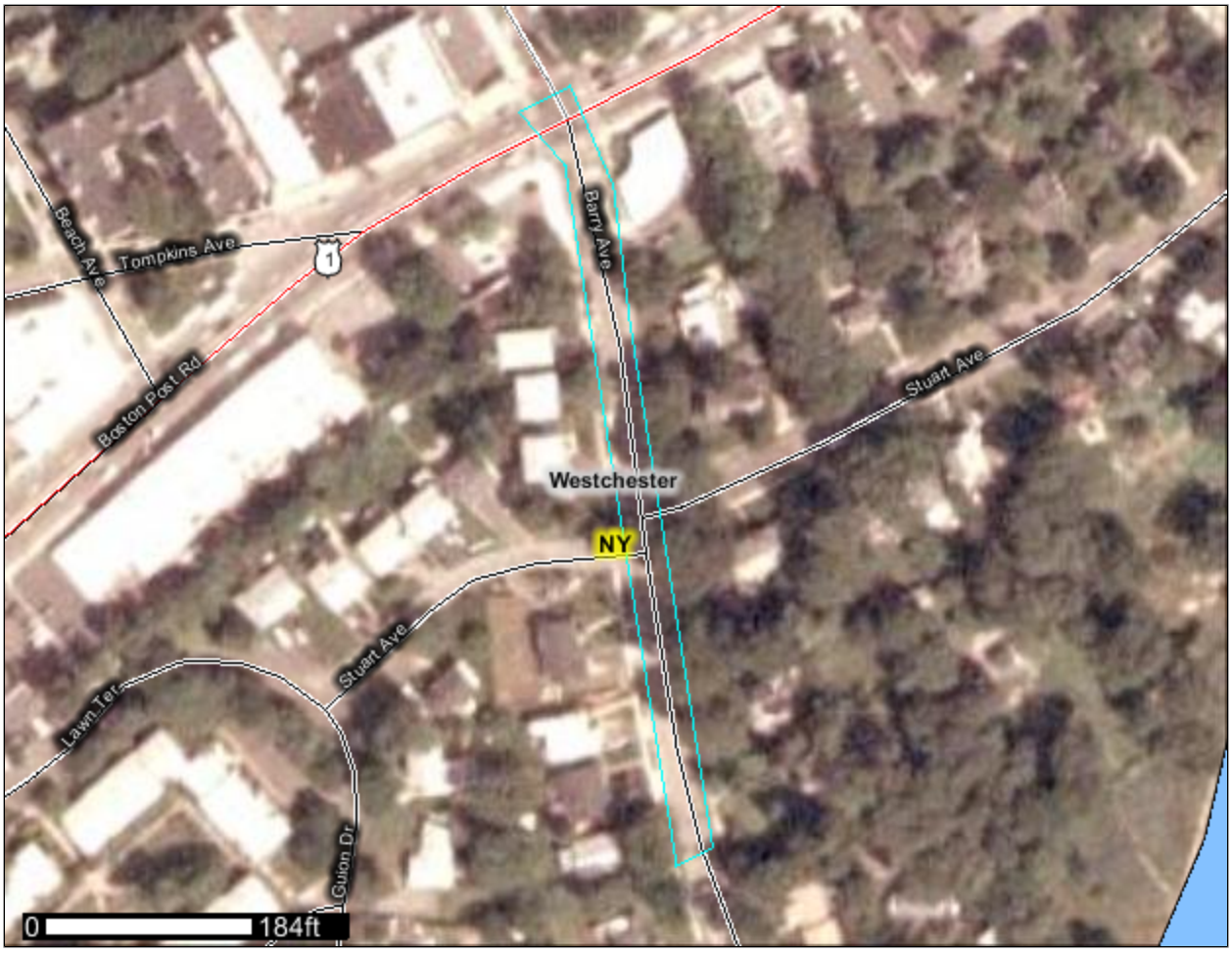
NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Westchester County, New York

East Boston Post Road & South Barry Avenue



July 15, 2013

Preface

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

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

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

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

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

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

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Contents

How Soil Surveys Are Made

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

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

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

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

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

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

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

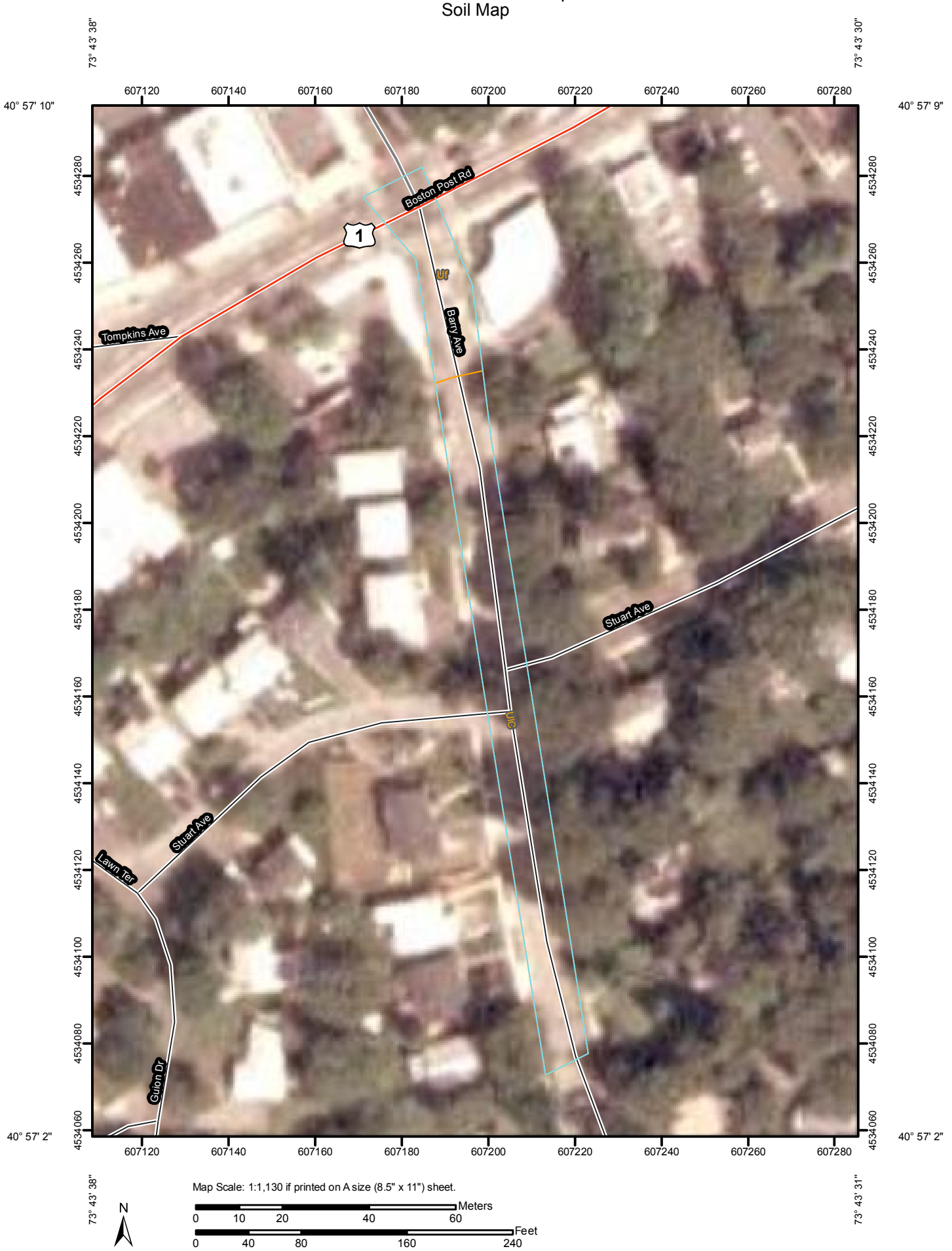
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report
Soil Map



MAP LEGEND

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

Soils
- Soil Map Units

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

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

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

MAP INFORMATION

Map Scale: 1:1,130 if printed on A size (8.5" × 11") sheet.

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

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

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 8, Sep 18, 2012

Date(s) aerial images were photographed: 7/31/2006

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

Map Unit Legend

Westchester County, New York (NY119)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Uf	Urban land	0.1	25.0%
UlC	Urban land-Charlton-Chatfield complex, rolling, very rocky	0.4	75.0%
Totals for Area of Interest		**0.6**	**100.0%**

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Westchester County, New York

Uf—Urban land

Map Unit Setting
Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition
Urban land: 85 percent
Minor components: 15 percent

Minor Components

Udorthents
Percent of map unit: 5 percent

Udorthents, wet substratum
Percent of map unit: 2 percent

Unadilla
Percent of map unit: 2 percent

Chatfield
Percent of map unit: 2 percent

Sutton
Percent of map unit: 2 percent

Riverhead
Percent of map unit: 2 percent

UlC—Urban land-Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting
Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition
Urban land: 40 percent
Charlton and similar soils: 20 percent
Chatfield and similar soils: 15 percent
Minor components: 25 percent

Description of Charlton

Setting
Landform: Hills, ridges, till plains
Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.5 inches)

Typical profile

0 to 8 inches: Loam
8 to 24 inches: Sandy loam
24 to 60 inches: Sandy loam

Description of Chatfield

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 3.2 inches)

Typical profile

0 to 7 inches: Loam
7 to 24 inches: Flaggy silt loam
24 to 28 inches: Unweathered bedrock

Minor Components

Rock outcrop

Percent of map unit: 5 percent

Leicester

Percent of map unit: 5 percent
Landform: Depressions

Sutton
Percent of map unit: 5 percent

Udorthents
Percent of map unit: 5 percent

Hollis
Percent of map unit: 2 percent

Sun
Percent of map unit: 2 percent
Landform: Depressions

Palms
Percent of map unit: 1 percent
Landform: Marshes, swamps

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APPENDIX C

NYSDEC CONTRACTOR CERTIFICATION STATEMENT

NYS Department of Conservation
SPDES General Permit for
Stormwater Discharges from
CONSTRUCTION ACTIVITY
Municipal Separate Storm Sewer Systems (MS4) Permit
Permit No. GP-0-10-002

CONTRACTOR CERTIFICATION STATEMENT

Project Address: _____

_____

_____

Date: _____

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Signature: _____

Name (Print): _____

Title: _____

Contracting Firm: _____

Address: _____

_____

_____

Telephone: _____

APPENDIX D

NYSDEC SPDES GP-0-10-001 APPENDIX B TABLES 1 AND 2

APPENDIX B

Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Bike paths and trails
- Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that *alter hydrology from pre to post development* conditions
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of less than five acres and construction activities that include the construction or reconstruction of impervious area

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

- All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project , wind-power project, cell tower project, oil or gas well drilling project or other linear utility project
- All other construction activities that include the construction or reconstruction of *impervious area* and *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX E
NYSDEC MS4 SWPPP ACCEPTANCE FORM

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information
1. Owner/Operator Name: Village of Mamaroneck
2. Contact Person: Mr. Richard Slingerland Phone: (914) 777-7706
3. Street Address: East and West Boston Post Road and South Barry Avenue
4. City/State/Zip: Village of Mamaroneck, NY 10543
II. Project Site Information
5. Project/Site Name: Boston Post Road and South Barry Avenue Municipal Drainage Improvements
6. Street Address: East and West Boston Post Road and South Barry Avenue
7. City/State/Zip: Village of Mamaroneck, NY 10543
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information
8. SWPPP Reviewed by: Mr. Anthony Robert Carr, PE, CFM
9. Title/Position: Village Engineer
10. Date Final SWPPP Reviewed and Accepted: July 11, 2013
IV. Regulated MS4 Information
11. Name of MS4: Village of Mamaroneck
12. MS4 SPDES Permit Identification Number: NYR20A 233
13. Contact Person: Mr. Richard Slingerland, Village Manager and Mr. Daniel Sarnoff, Assistant Village Manager
14. Street Address: Village Hall at the Regatta, 123 Mamaroneck Avenue
15. City/State/Zip: Village of Mamaroneck, NY 10543
16. Telephone Number: (914) 777-7703

(NYS DEC - MS4 SWPPP Acceptance Form - January 2010)

MS4 SWPPP Acceptance Form - continued

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

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).
Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name: Mr. Anthony Robert Carr, PE, CFM

Title/Position: Village Engineer

Signature: 

Date: July 11, 2013

VI. Additional Information

Upon completion of construction, an as-built drawing/construction certification shall be submitted in PDF format to the Village Engineer at: engineer@vomny.org. In addition, two (2) signed and sealed hardcopies of the as-built drawing shall be delivered to the Building Department.

The as-built drawing shall be prepared in accordance with the "Code of Practice for Land Surveys" adopted by the New York State Association of Professional Land Surveyors (NYSAPLS). The vertical datum shall be NAVD 1988 or NGVD 1929. If an arbitrary datum is used, the PLS shall provide a certification for the conversion between the arbitrary and NAVD 1988 or NGVD 1929 datums. The horizontal datum shall be NAD 83. The drawing shall include, but not be limited to, the following site features: location of property lines, buildings, structures, property line setbacks, fences, areas and edges of pavement, striping, signs, sidewalks, utility and light poles, guy wires, walls and topography. The topographic information shall include the following: one-foot contour intervals, spot elevations along the site perimeter and interior and top and bottom of wall and curb elevations. Subsurface utilities shall include rim and invert elevations of sanitary and storm sewer structures, storm and sanitary pipe alignment and invert elevations, stormwater management areas, gas, water, electric service lines, etc. Please refer to §294–11(A) of the Village Code. The as-built shall indicate grass areas and 8" trees (DBH) and larger including size and species.

Notes:

1. For proposed building additions, perimeter spot grades and finished floor elevations (FFE) are required.
2. As-built topography is required only in areas of proposed site improvements and/or land disturbance.
3. For projects utilizing existing utilities (e.g. sanitary laterals and water service), the Contractor or Surveyor can approximate the horizontal location and depth from where the utility enters the structure from the roadway.
4. For single lot residential projects that include the installation of proposed subsurface utilities, the Contractor shall accurately field record the horizontal alignment and depth of the utilities (i.e. Stormwater Management Facility footprint and invert elevation, sanitary sewer, water, gas and electric) that will not be visible to the surveyor preparing the as-built drawing. This information shall be provided to the surveyor for inclusion into the as-built drawing. The surveyor or a private utility locating company are not required to locate the above items.
5. For subdivisions and commercial projects that include the installation of proposed subsurface utilities, the surveyor shall record the horizontal alignment and depth of the utilities (i.e. Stormwater Management Facility footprint and invert elevation, sanitary sewer, water, gas and electric) that will not be visible at the surface. The surveyor shall include this information in the as-built drawing.